

**Commissioners Court October 27, 2020  
NOTICE OF A MEETING OF THE  
COMMISSIONERS COURT OF HAYS COUNTY, TEXAS**



This Notice is posted pursuant to the Texas Open Meetings Act. (VERNONS TEXAS CODES ANN. GOV. CODE CH.551). The Hays County Commissioners Court will hold a meeting at **9:00 A.M.** on the **27<sup>th</sup> day of October 2020**, in the Hays County Courthouse, Room 301, San Marcos, Texas. An Open Meeting will be held concerning the following subjects:

**CALL TO ORDER**

**INVOCATION**

**PLEDGE OF ALLEGIANCE - Pledge of Allegiance to the American Flag & Pledge of Allegiance to the Texas Flag**

**ROLL CALL**

**PUBLIC COMMENTS**

At this time **3-MINUTE** comments will be taken from the audience on Non-Agenda related topics. To address the Court, please submit a Public Participation/ Witness Form to the County Clerk. Please Complete the Public Participation/ Witness Form in its Entirety.  
NO ACTION MAY BE TAKEN BY THE COURT DURING PUBLIC COMMENTS.

**PRESENTATIONS & PROCLAMATIONS**

|   |   |                                                                                                                                                         |
|---|---|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 3 | Update from the County Judge and staff regarding the Local Disaster Declaration and COVID-19. Possible discussion and action may follow. <b>BECERRA</b> |
| 2 | 4 | Recognition of organizers and volunteers for the countywide law enforcement and community barbecue events held in August of 2020. <b>JONES/PETERSON</b> |

**CONSENT ITEMS**

The following may be acted upon in one motion.  
A Commissioner, the County Judge, or a Citizen may request items be pulled for separate discussion and/or action.

|    |        |                                                                                                                                                                                                                                                                          |
|----|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3  | 5      | Approve payments of County invoices. <b>VILLARREAL-ALONZO</b>                                                                                                                                                                                                            |
| 4  | 6      | Approve the payment of United Healthcare claims. <b>VILLARREAL-ALONZO</b>                                                                                                                                                                                                |
| 5  | 7-13   | Approve Commissioners Court Minutes of October 20, 2020. <b>BECERRA/CARDENAS</b>                                                                                                                                                                                         |
| 6  | 14     | Approve the payment of the October 31, 2020 payroll disbursements in an amount not to exceed \$3,930,000.00 effective October 30, 2020 and post totals for wages, withholdings, deductions and benefits on the Hays County website once finalized. <b>BECERRA/RICHEY</b> |
| 7  | 15     | Authorize On-Site Sewage Facility Permit for two mobile homes located at 3075 FM 2001, Buda Texas 78610. <b>JONES/STRICKLAND</b>                                                                                                                                         |
| 8  | 16-17  | Authorize the Justice of the Peace Precinct 3 Office to install a security access point for Courtroom entrance utilizing the Justice Court Technology Fund and amend the budget accordingly. <b>SHELL/CABLE</b>                                                          |
| 9  | 18-20  | Authorize the acceptance of a grant award from the Office of the Governor, Homeland Security Grants Division (HSGD) for the Hays County HazMat Team Monitor Maintenance in the amount of \$20,000 and amend the budget accordingly. <b>BECERRA/JONES</b>                 |
| 10 | 21-23  | Authorize the acceptance of a grant award from the Office of the Governor, Criminal Justice Division (CJD) for the Victim Assistance for the Family Justice Center in the amount of \$45,534 and amend the budget accordingly. <b>INGALSBE/MAU</b>                       |
| 11 | 24-25  | Ratify the purchase of five (5) Glock 17 9mm Handguns with accessories for the Sheriff's Office Law Enforcement Division. <b>INGALSBE/SHELL/CUTLER</b>                                                                                                                   |
| 12 | 26-455 | Approve specifications for IFB 2021-B02 Dacy Lane Road Improvements and authorize Purchasing to solicit for proposals and advertise. <b>INGALSBE/BORCHERDING</b>                                                                                                         |

**ACTION ITEMS**

**ROADS**

|    |         |                                                                                                                                                                                                                                                           |
|----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13 | 456-458 | Discussion and possible action to call for a public hearing on November 10, 2020 to establish a "No Parking" zone on Garrison Road just outside of the City of Buda limits. <b>JONES/BORCHERDING</b>                                                      |
| 14 | 459-460 | Discussion and possible action to call for a public hearing on November 10, 2020 to establish "Yield" signs on the four legs of a roundabout at the intersection of Mesa Verde Drive and Prescott Drive in Belterra subdivision. <b>SMITH/BORCHERDING</b> |

## SUBDIVISIONS

|    |         |                                                                                                                                                                        |
|----|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 15 | 461-464 | PLN-1398-PC; Call for a Public Hearing on November 17th, 2020 to discuss final plat approval of the Replat of Lot 35, Lea Acres Subdivision. <b>SHELL/MACHACEK</b>     |
| 16 | 465-469 | PLN-1470-PC; Hold a public hearing with possible action to approve the final plat of the Replat of Lot 7, Rolling Oaks, Section Four Subdivision. <b>SHELL/PACHECO</b> |

## MISCELLANEOUS

|    |         |                                                                                                                                                                                                               |
|----|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17 | 470-475 | Discussion and possible action to approve a Funding Agreement to assist Independent School Districts within Hays County related to COVID-19 response and recovery efforts. <b>JONES/MIKE JONES/T. CRUMLEY</b> |
| 18 | 476     | Discussion and possible action to authorize the Transportation Department to hire the Construction Inspector, slot 1045-003 at the 25th percentile effective November 2, 2020. <b>JONES/BORCHERDING</b>       |

## EXECUTIVE SESSIONS

The Commissioners Court will announce it will go into Executive Session, if necessary, pursuant to Chapter 551 of the Texas Government Code, to receive advice from Legal Counsel to discuss matters of land acquisition, litigation, and personnel matters as specifically listed on this agenda. The Commissioners Court may also announce it will go into Executive Session, if necessary, to receive advice from Legal Counsel regarding any other item on this agenda.

|    |     |                                                                                                                                                                                                                                                                                          |
|----|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 19 | 477 | Executive Session pursuant to Sections 551.071 and 551.087 of the Texas Government Code: consultation with counsel and deliberation regarding economic development negotiations associated with Project Recoil. Possible discussion and/or action may follow in open Court. <b>SHELL</b> |
|----|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## STANDING AGENDA ITEMS

The Commissioners Court utilizes Standing Agenda Items to address issues that are frequently or periodically discussed in court. This section allows the Court to open the item when a need for discussion arises.

|    |                                                                                                                                                                                                           |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20 | Discussion and possible action related to the burn ban and/or disaster declaration. <b>BECERRA</b>                                                                                                        |
| 21 | Discussion related to the Hays County inmate population, to include current population counts and costs. <b>BECERRA</b>                                                                                   |
| 22 | Discussion of issues related to the Hays County Jail, and the planning of projects pertaining to the public safety facilities needs within the County. Possible action may follow. <b>INGALSBE/CUTLER</b> |
| 23 | Discussion of issues related to Electro Purification including updates on the filed application. Possible action may follow. <b>SHELL</b>                                                                 |

## ADJOURNMENT

Posted by 5:00 o'clock P.M. on the 23<sup>rd</sup> day of October, 2020

**COMMISSIONERS COURT, HAYS COUNTY, TEXAS**

\_\_\_\_\_  
**CLERK OF THE COURT**

Hays County encourages compliance with the Americans with Disabilities Act (ADA) in the conduct of all public meetings. To that end, persons with disabilities who plan to attend this meeting and who may need auxiliary aids such as an interpreter for a person who is hearing impaired are requested to contact the Hays County Judge's Office at (512) 393-2205 as soon as the meeting is posted (72 hours before the meeting) or as soon as practical so that appropriate arrangements can be made. While it would be helpful to receive as much advance notice as possible, Hays County will make every reasonable effort to accommodate any valid request regardless of when it is received. Braille is not available.

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Update from the County Judge and staff regarding the Local Disaster Declaration and COVID-19. Possible discussion and action may follow.

**ITEM TYPE**

PROCLAMATIONS/PRESENTATIONS

**MEETING DATE**

October 27, 2020

**AMOUNT REQUIRED**

**LINE ITEM NUMBER**

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

**REQUESTED BY**

**SPONSOR**

**CO-SPONSOR**

BECERRA

N/A

**SUMMARY**

Information will be presented during Court.

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Recognition of organizers and volunteers for the countywide law enforcement and community barbecue events held in August of 2020.

| ITEM TYPE                   | MEETING DATE     | AMOUNT REQUIRED |
|-----------------------------|------------------|-----------------|
| PROCLAMATIONS/PRESENTATIONS | October 27, 2020 | N/A             |

**LINE ITEM NUMBER**

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

| REQUESTED BY                                     | SPONSOR | CO-SPONSOR |
|--------------------------------------------------|---------|------------|
| Commissioner Mark Jones/Constable David Peterson | JONES   | N/A        |

**SUMMARY**

More information will be provided in Court.



**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Approve payment of County invoices.

**ITEM TYPE**

CONSENT

**MEETING DATE**

October 27, 2020

**AMOUNT REQUIRED**

**LINE ITEM NUMBER**

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A

**AUDITOR APPROVAL:** N/A

**REQUESTED BY**

Auditor's Office

**SPONSOR**

VILLARREAL-  
ALONZO

**CO-SPONSOR**

N/A

**SUMMARY**

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Approve the payment of United Healthcare claims.

**ITEM TYPE**

CONSENT

**MEETING DATE**

October 27, 2020

**AMOUNT REQUIRED**

**LINE ITEM NUMBER**

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A

**AUDITOR APPROVAL:** N/A

**REQUESTED BY**

Auditor's Office

**SPONSOR**

VILLARREAL-  
ALONZO

**CO-SPONSOR**

N/A

**SUMMARY**

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Approve Commissioners Court Minutes of October 20, 2020.

**ITEM TYPE**

CONSENT

**MEETING DATE**

October 27, 2020

**AMOUNT REQUIRED**

**LINE ITEM NUMBER**

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

**REQUESTED BY**

CARDENAS

**SPONSOR**

BECERRA

**CO-SPONSOR**

N/A

**SUMMARY**



STATE OF TEXAS \*  
 COUNTY OF HAYS \*

ON THIS THE 20<sup>th</sup> DAY OF OCTOBER A.D., 2020, IN THE HAYS COUNTY COURTHOUSE, 111 E. SAN ANTONIO ST., SUITE 301, SAN MARCOS, TEXAS, THE COMMISSIONERS' COURT OF HAYS COUNTY, TEXAS, MET IN REGULAR MEETING. THE FOLLOWING MEMBERS WERE PRESENT, TO-WIT:

|                          |                      |
|--------------------------|----------------------|
| RUBEN BECERRA            | COUNTY JUDGE         |
| DEBBIE GONZALES INGALSBE | COMMISSIONER, PCT. 1 |
| MARK JONES               | COMMISSIONER, PCT. 2 |
| LON A. SHELL             | COMMISSIONER, PCT. 3 |
| WALT SMITH               | COMMISSIONER, PCT. 4 |
| ELAINE H. CÁRDENAS       | COUNTY CLERK         |

**Clerk's Note: For complete transcript go to Hays County Website**  
<https://hayscountytexas.com/commissioners-court/court-video/>  
 Transcript can be translated into any language through Google.com.

**THE FOLLOWING PROCEEDINGS WERE HAD, THAT IS:**

Chaplain Javier Maldonado from Christus Hospice Central Texas gave the invocation. Judge Becerra led the court in the Pledge of Allegiance to the United States and Texas flags. Judge Becerra called the meeting to order.

**PUBLIC COMMENTS**

Dan Lyon made public comment against the Parks bond.

**UPDATE FROM THE COUNTY JUDGE AND STAFF REGARDING THE LOCAL DISASTER DECLARATION AND COVID-19. POSSIBLE DISCUSSION AND ACTION MAY FOLLOW.**

Alex Villalobos, Chief of Staff and Emergency Management Coordinator, gave the court an update. Mike Jones, Emergency Services Director, spoke to the court regarding testing locations. Commissioner Ingalsbe inquired about available testing in San Marcos. Tammy Crumley, Countywide Operations, announced positive curative tests are counted as positive tests for the county. Commissioner Smith requested numbers for testing and turnaround time for test results specific to each court member's area. No action was taken.

**35732 ADOPT A PROCLAMATION DECLARING OCTOBER 30, 2020 AS WEATHERIZATION DAY.**

A motion was made by Commissioner Ingalsbe, seconded by Commissioner Shell to adopt a Proclamation declaring October 30, 2020 as Weatherization Day. All present voted "Aye." MOTION PASSED.

**PRESENTATION BY SUSAN DAWSON WITH AUSTIN AREA RESEARCH ORGANIZATION (AARO) REGARDING HAYS COUNTY BREAST CANCER INITIATIVE.**

Susan Dawson, Dr. Denise Smart, Daniel Guerrero, and Dr. Rosina Valle presented to the court regarding the breast cancer initiative for Hays County. They requested the court members champion this initiative to bring better health care to the county. Judge Becerra, Commissioner Ingalsbe and Commissioner Shell stated they are supportive of this initiative. No action was taken.

**35733 APPROVE PAYMENTS OF COUNTY INVOICES.**

A motion was made by Commissioner Ingalsbe, seconded by Commissioner Shell to approve payments of County invoices. All present voted "Aye." MOTION PASSED.

**35734 APPROVE THE PAYMENT OF UNITED HEALTHCARE CLAIMS.**

A motion was made by Commissioner Ingalsbe, seconded by Commissioner Shell to approve the payment of United Healthcare claims. All present voted "Aye." MOTION PASSED.



\*\*\*\*\*

OCTOBER 20, 2020

**35735 APPROVE COMMISSIONERS COURT MINUTES OF OCTOBER 13, 2020.**

A motion was made by Commissioner Ingalsbe, seconded by Commissioner Shell to approve Commissioners Court Minutes of October 13, 2020. All present voted "Aye." MOTION PASSED.

**35736 AUTHORIZE THE EXECUTION OF AMENDMENT NO. 2 TO THE GENERAL LAND OFFICE (GLO) CONTRACT NO. 18-421-000-B130 COMMUNITY DEVELOPMENT BLOCK GRANT DISASTER RECOVERY PROGRAM HOUSING PROJECTS NON-RESEARCH & DEVELOPMENT 2015 FLOOD ALLOCATION.**

A motion was made by Commissioner Ingalsbe, seconded by Commissioner Shell to authorize the execution of Amendment No. 2 to the General Land Office (GLO) Contract No. 18-421-000-B130 Community Development Block Grant Disaster Recovery Program Housing Projects Non-Research & Development 2015 Flood Allocation. All present voted "Aye." MOTION PASSED.

**35737 APPROVE AMENDMENT TO THE HAYS COUNTY PURCHASING POLICY, SECTION 4.5-CATEGORY 5, TO FORMALIZE FEDERAL REQUIREMENTS 2 CFR 200 ARE INCLUDED IN ALL FORMAL SOLICITATIONS.**

Marisol Villarreal-Alonzo, Auditor, announced this item is a policy change to include CFRs documentation in any contracts the county enters where federal dollars are involved. Mark Kennedy, General Counsel, gave details regarding the Purchasing Policy. A motion was made by Commissioner Shell, seconded by Commissioner Ingalsbe to approve amendment to the Hays County Purchasing Policy, Section 4.5-Category 5, to formalize Federal Requirements 2 CFR 200 are included in all formal solicitations. All present voted "Aye." MOTION PASSED.

**35738 AUTHORIZE THE EXECUTION OF A QUOTE WITH AXON ENTERPRISES, INC. RELATED TO THE SHERIFF'S OFFICE IN-CAR & BODY-WORN CAMERA PROGRAM FOR ADDITIONAL EQUIPMENT APPROVED IN THE FY 2021 BUDGET.**

A motion was made by Commissioner Jones, seconded by Commissioner Shell to authorize the execution of a Quote with Axon Enterprises, Inc. related to the Sheriff's Office In-Car & Body-Worn Camera Program for additional equipment approved in the FY 2021 Budget. Commissioner Ingalsbe, Commissioner Jones, Commissioner Shell, and Commissioner Smith voted "Aye." MOTION PASSED. Judge Becerra voted "No." MOTION PASSED.

**35739 APPROVE THE REAPPOINTMENT OF WALT SMITH TO THE BOARD OF DIRECTORS OF THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (THE "WTCPUA"), TERM ENDING SEPTEMBER 30, 2024.**

Commissioner Smith announced he appreciates the ability to serve on the board. A motion was made by Commissioner Jones, seconded by Commissioner Shell to approve the reappointment of Walt Smith to the Board of Directors of the West Travis County Public Utility Agency (the "WTCPUA"), term ending September 30, 2024. Commissioner Ingalsbe, Commissioner Jones, Commissioner Shell, and Commissioner Smith voted "Aye." MOTION PASSED. Judge Becerra voted "No." MOTION PASSED.

**Clerk's Note Agenda Item #11 RE:** *AUTHORIZE THE JUVENILE DETENTION CENTER TO PURCHASE A REPLACEMENT 130KW GENERATOR WITH TRANSFER SWITCH AND AMEND THE BUDGET ACCORDINGLY. – WAS PULLED.*

**35740 AUTHORIZE THE COUNTY JUDGE TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT BETWEEN HAYS COUNTY AND BINKLEY & BARFIELD, INC TO PERFORM UTILITY COORDINATION FOR THE WINDY HILL ROAD RECONSTRUCTION PROJECT AND AMEND THE BUDGET ACCORDINGLY.**

Commissioner Jones gave the court on update on this project. A motion was made by Commissioner Jones, seconded by Commissioner Ingalsbe to authorize the County Judge to execute a Professional Services Agreement between Hays County and Binkley & Barfield, Inc. to perform Utility Coordination for the Windy Hill Road reconstruction project and amend the budget accordingly. All present voted "Aye." MOTION PASSED.



\*\*\*\*\*

OCTOBER 20, 2020

**35741 AUTHORIZE THE COUNTY JUDGE TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT BETWEEN HAYS COUNTY AND COBB FENDLEY, INC TO PERFORM ROW ACQUISITION SERVICES FOR THE WINDY HILL ROAD RECONSTRUCTION PROJECT; AUTHORIZE A DISCRETIONARY EXEMPTION PURSUANT TO TEXAS LOCAL GOVERNMENT CODE 262.024(A)(4).**

Commissioner Jones noted this project will include improvements due to growth in the area. A motion was made by Commissioner Jones, seconded by Commissioner Ingalsbe to authorize the County Judge to execute a Professional Services Agreement between Hays County and Cobb Fendley, Inc to perform ROW Acquisition Services for the Windy Hill Road reconstruction project; authorize a discretionary exemption pursuant to Texas Local Government Code 262.024(a)(4). All present voted "Aye." MOTION PASSED.

**35742 AUTHORIZE THE EXECUTION OF SUPPLEMENTAL AGREEMENT NO. 7 TO THE PROFESSIONAL SERVICES AGREEMENT BETWEEN HAYS COUNTY AND HNTB CORPORATION FOR THE PASS-THROUGH FINANCE PROGRAM MANAGEMENT EFFORT IN HAYS COUNTY, INCREASING THE COMPENSATION CAP BY \$100,000.00 FROM \$7,615,500.00 TO \$7,715,500.00 AND EXTENDING THE TERMINATION DATE OF THE CONTRACT TO SEPTEMBER 30, 2021; AUTHORIZE A DISCRETIONARY EXEMPTION PURSUANT TO TEXAS LOCAL GOVERNMENT CODE SECTION 262.024(A)(4).**

Commissioner Jones stated this item is an extension on the contract. Mike Weaver, HNTB, noted this is a one-year renewal to wrap up the project. A motion was made by Commissioner Jones, seconded by Commissioner Ingalsbe to authorize the execution of Supplemental Agreement No. 7 to the Professional Services Agreement between Hays County and HNTB Corporation for the Pass-Through Finance Program Management effort in Hays County, increasing the Compensation Cap by \$100,000.00 from \$7,615,500.00 to \$7,715,500.00 and extending the termination date of the contract to September 30, 2021; authorize a discretionary exemption pursuant to Texas Local Government Code Section 262.024(a)(4). All present voted "Aye." MOTION PASSED.

**35743 AUTHORIZE THE EXECUTION OF SUPPLEMENTAL NO. 7 TO A PROFESSIONAL SERVICES AGREEMENT (PSA) BETWEEN HAYS COUNTY AND HNTB CORPORATION FOR \$520,000.00 TO CONTINUE PROVIDING GENERAL ENGINEERING CONSULTANT (GEC)/PROGRAM MANAGEMENT SERVICES FOR THE HAYS COUNTY/TXDOT PARTNERSHIP PROGRAM PROJECTS; AUTHORIZE A DISCRETIONARY EXEMPTION PURSUANT TO TEXAS LOCAL GOVERNMENT CODE SECTION 262.024(A)(4).**

A motion was made by Commissioner Jones, seconded by Commissioner Ingalsbe to authorize the execution of Supplemental No. 7 to a Professional Services Agreement (PSA) between Hays County and HNTB Corporation for \$520,000.00 to continue providing General Engineering Consultant (GEC)/Program Management services for the Hays County/TxDOT Partnership Program projects; authorize a discretionary exemption pursuant to Texas Local Government Code Section 262.024(a)(4). All present voted "Aye." MOTION PASSED.

**35744 AUTHORIZE THE COUNTY JUDGE TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT BETWEEN HAYS COUNTY AND LJA ENGINEERING, INC. TO PROVIDE RIGHT-OF-WAY ACQUISITION SERVICES FOR DARDEN HILL/SAWYER RANCH ROAD INTERSECTION ROUND-ABOUT PROJECT IN PRECINCT 4 AS PART OF THE ROAD BOND PROGRAM; AUTHORIZE A DISCRETIONARY EXEMPTION PURSUANT TO TEXAS LOCAL GOVERNMENT CODE SECTION 262.024(A)(4) AND AMEND THE BUDGET ACCORDINGLY.**

Dan Lyon made public comment regarding transparency for this process. Mark Kennedy, General Counsel, explained the selection process. Judge Becerra announced he would like to have a procurement workshop for the public added to the agenda for an upcoming Commissioners Court meeting. Mark Kennedy, General Counsel, recommended that the court submit questions to the staff members that deal with the procurement process prior to the meeting, so that the staff members involved can prepare and provide a presentation. Marisol Villarreal-Alonzo, Auditor, requested the court limit the scope for the procurement workshop.



\*\*\*\*\*

OCTOBER 20, 2020

A motion was made by Commissioner Smith, seconded by Commissioner Jones to authorize the County Judge to execute a Professional Services Agreement between Hays County and LJA Engineering, Inc. to provide Right-of-Way Acquisition services for Darden Hill/Sawyer Ranch Road Intersection Round-About project in Precinct 4 as part of the Road Bond Program; authorize a discretionary exemption pursuant to Texas Local Government Code Section 262.024(a)(4) and amend the budget accordingly. All present voted "Aye." MOTION PASSED.

**35745 APPROVE AN ADVANCE FUNDING AGREEMENT FOR VOLUNTARY LOCAL GOVERNMENT CONTRIBUTIONS TO TRANSPORTATION IMPROVEMENT PROJECTS (SH 21 AT FM 1966) WITH NO REQUIRED MATCH ON-SYSTEM AND AUTHORIZE THE COUNTY JUDGE TO EXECUTE THE ADVANCE FUNDING AGREEMENT ON BEHALF OF HAYS COUNTY.**

A motion was made by Commissioner Ingalsbe, seconded by Commissioner Jones to approve an Advance Funding Agreement for Voluntary Local Government Contributions to Transportation Improvement Projects (SH 21 at FM 1966) with No Required Match On-System and authorize the County Judge to execute the Advance Funding Agreement on behalf of Hays County. All present voted "Aye." MOTION PASSED.

**35746 AWARD CONTRACT FOR IFB 2020-B15 RM 150 CENTER TURN LANE GAP PROJECT TO COX COMMERCIAL CONSTRUCTION.**

A motion was made by Commissioner Ingalsbe, seconded by Commissioner Jones to award contract for IFB 2020-B15 RM 150 Center Turn Lane Gap Project to Cox Commercial Construction. All present voted "Aye." MOTION PASSED.

**35747 APPROVE CHANGES TO THE FY 2021 HEALTHCARE PLAN AS RECOMMENDED BY THE INSURANCE COMMITTEE.**

Shari Miller, Director of Human Resources, explained the changes to insurance coverage for Hays County employees. Aaron Pratt, Frost Insurance, and Scott Yarbrough, Yarbrough Agency, both benefit consultants for Hays County were present to address any questions or concerns by the court. Judge Becerra raised some concerns regarding the removal of medications from the insurances' approved list. Commissioner Ingalsbe thanked Mercedes Hinojosa, Benefits specialist, for her work with the county employees. A motion was made by Commissioner Ingalsbe, seconded by Commissioner Jones to approve changes to the FY 2021 healthcare plan as recommended by the Insurance Committee. All present voted "Aye." MOTION PASSED.

**35748 AUTHORIZE BECKWITH ELECTRONIC SYSTEMS, LLC TO REPLACE THE 3-SERIES CONTROL SYSTEM FOR GOVERNMENT CENTER COURTROOM #1 AND ALLOW A DISCRETIONARY EXEMPTION PURSUANT TO TEXAS LOCAL GOVERNMENT CODE 262.024A (7)(D) AND AMEND THE BUDGET ACCORDINGLY.**

Tammy Crumley, Countywide Operations, stated this piece of equipment controls the microphones and tablets for the court room. The system needs to be repaired as the court rooms will be in use. A motion was made by Commissioner Ingalsbe, seconded by Commissioner Jones to authorize Beckwith Electronic Systems, LLC to replace the 3-Series Control System for Government Center courtroom #1 and allow a discretionary exemption pursuant to Texas Local Government Code 262.024A (7)(D) and amend the budget accordingly. All present voted "Aye." MOTION PASSED.

**Clerk's Note:** Judge Becerra called for a break that began at 11:01 a.m. and resumed back into open court at 11:09 a.m.

**35749 EXECUTE A CONTRACT WITH THE COMMUNITY SUPERVISION AND CORRECTIONS DEPARTMENT (CSCD) RELATED TO THE HAYS COUNTY PRETRIAL BOND PROGRAM.**

Lisa Pacheco, Deputy Director of Adult Probation, and Chief Hartman, Director of Caldwell, Comal, and Hays Counties CSCD, spoke to the court. This item will formalize an agreement for a third pretrial bond officer. This is a recommendation put forth by the subcommittee via the Hays County Criminal Justice Commission. A motion was made by Commissioner Ingalsbe, seconded by Commissioner Shell to execute a contract with the Community Supervision and Corrections Department (CSCD) related to the Hays County Pretrial Bond Program. All present voted "Aye." MOTION PASSED.



\*\*\*\*\*

OCTOBER 20, 2020

**35750 EXECUTE AN INTERLOCAL PURCHASING AGREEMENT BETWEEN HAYS COUNTY AND THE CITY OF SAN MARCOS RELATED TO COOPERATIVE PURCHASING AS AUTHORIZED PER TEXAS LOCAL GOVERNMENT CODE SUBCHAPTER F, CH. 271.**

Mark Kennedy, General Counsel, stated this agreement will allow the City of San Marcos and county to use each other's procurement activities to create a localized cooperative program. **A motion was made by Commissioner Ingalsbe, seconded by Commissioner Jones to execute an Interlocal Purchasing Agreement between Hays County and the City of San Marcos related to Cooperative Purchasing as authorized per Texas Local Government Code Subchapter F, Ch. 271. All present voted "Aye." MOTION PASSED.**

**35751 ADOPT AN ORDER AUTHORIZING THE ISSUANCE OF THE "HAYS COUNTY, TEXAS, SPECIAL ASSESSMENT REVENUE BONDS, SERIES 2020 (LA CIMA PUBLIC IMPROVEMENT DISTRICT NEIGHBORHOOD IMPROVEMENT AREAS #1-2 PROJECT)"; APPROVING AND AUTHORIZING AN INDENTURE OF TRUST, A BOND PURCHASE AGREEMENT, A LIMITED OFFERING MEMORANDUM, A CONTINUING DISCLOSURE AGREEMENT, AN AMENDED AND RESTATED SERVICE AND ASSESSMENT PLAN, AND OTHER DOCUMENTS IN CONNECTION THEREWITH; MAKING FINDINGS WITH RESPECT TO THE ISSUANCE OF THE BONDS; AND PROVIDING AN EFFECTIVE DATE.**

Dan Wegmiller, Specialized Public Finance Inc. and Financial Advisory for Hays County spoke to the court regarding recently sold bonds. Julie Houston, Bond counsel, submitted a presentation for backup materials. Commissioner Shell announced Mark Kennedy, General Counsel, has recused himself from this item. **A motion was made by Commissioner Shell, seconded by Commissioner Jones to adopt an order authorizing the issuance of the "Hays County, Texas, Special Assessment Revenue Bonds, Series 2020 (La Cima Public Improvement District Neighborhood Improvement Areas #1-2 Project)"; approving and authorizing an indenture of trust, a bond purchase agreement, a limited offering memorandum, a continuing disclosure agreement, an amended and restated service and assessment plan, and other documents in connection therewith; making findings with respect to the issuance of the Bonds; and providing an effective date. All present voted "Aye." MOTION PASSED.**

**Clerk's Note:** Executive Session began at 11:15 a.m. and resumed back into open court at 12:13 a.m.

**EXECUTIVE SESSION PURSUANT TO SECTIONS 551.071 AND 551.074 OF THE TEXAS GOVERNMENT CODE: CONSULTATION WITH COUNSEL AND DELIBERATION REGARDING ALL INDIVIDUAL POSITIONS IN THE INVESTIGATIONS DIVISION OF THE HAYS COUNTY CRIMINAL DISTRICT ATTORNEY'S OFFICE. POSSIBLE DISCUSSION AND/OR ACTION MAY FOLLOW IN OPEN COURT.**

No action was taken.

**Clerk's Note Agenda Item #25 RE:** EXECUTIVE SESSION PURSUANT TO SECTION 551.071 OF THE TEXAS GOVERNMENT CODE: CONSULTATION WITH COUNSEL REGARDING PENDING AND/OR CONTEMPLATED LITIGATION INVOLVING HAYS COUNTY. POSSIBLE ACTION MAY FOLLOW IN OPEN COURT. – **WAS PULLED.**

**35752 AUTHORIZE A BURN BAN AND/OR DISASTER DECLARATION.**

Nathan Mendenhall, Fire Marshall, recommended a burn ban due to dry conditions in the area. He noted there are some allowances where a burn can take place with a permit through the Fire Department. **A motion was made by Judge Becerra, seconded by Commissioner Ingalsbe to authorize a burn ban as recommended by the Fire Marshall. All present voted "Aye." MOTION PASSED.**

**DISCUSSION RELATED TO THE HAYS COUNTY INMATE POPULATION, TO INCLUDE CURRENT POPULATION COUNTS AND COSTS.**

Judge Becerra read the Sheriff's update of the inmate population. The estimated cost for outsourcing was \$50,475 for the week of October 11 – October 17, 2020. The number of outsourced males was 141 inmates and females were 0 inmates. No action taken.





\*\*\*\*\*

OCTOBER 20, 2020

**Clerk's Note Agenda Item #28 RE:** *DISCUSSION OF ISSUES RELATED TO THE HAYS COUNTY CENSUS PROGRAM INCLUDING UPDATES FROM JESSICA MEJIA. - WAS PULLED.*

**Clerk's Note Agenda Item #29 RE:** *DISCUSSION OF ISSUES RELATED TO THE HAYS COUNTY JAIL, AND THE PLANNING OF PROJECTS PERTAINING TO THE PUBLIC SAFETY FACILITIES NEEDS WITHIN THE COUNTY. POSSIBLE ACTION MAY FOLLOW. - WAS PULLED.*

**Clerk's Note Agenda Item #30 RE:** *DISCUSSION OF ISSUES RELATED TO ELECTRO PURIFICATION INCLUDING UPDATES ON THE FILED APPLICATION. POSSIBLE ACTION MAY FOLLOW. - WAS PULLED.*

**ADJOURNMENT**

A motion was made by Judge Becerra, seconded by Commissioner Jones to adjourn court at 12:20 p.m.

I, ELAINE H. CÁRDENAS, COUNTY CLERK and EXOFFICIO CLERK OF THE COMMISSIONERS' COURT, do hereby certify that the foregoing contains a true and accurate record of the proceedings had by the Hays County Commissioners' Court on October 20, 2020.



\_\_\_\_\_  
ELAINE H. CÁRDENAS, COUNTY CLERK AND EXOFFICIO  
CLERK OF THE COMMISSIONERS' COURT OF  
HAYS COUNTY, TEXAS



**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Approve the payment of the October 31, 2020 payroll disbursements in an amount not to exceed \$3,930,000.00 effective October 30, 2020 and post totals for wages, withholdings, deductions and benefits on the Hays County website once finalized.

| ITEM TYPE | MEETING DATE     | AMOUNT REQUIRED |
|-----------|------------------|-----------------|
| CONSENT   | October 27, 2020 | N/A             |

**LINE ITEM NUMBER**

N/A

AUDITOR USE ONLY

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

| REQUESTED BY                          | SPONSOR | CO-SPONSOR |
|---------------------------------------|---------|------------|
| Britney Richey, Hays County Treasurer | BECERRA | N/A        |

**SUMMARY**

Approve the October end of month payroll disbursements not to exceed \$3,930,000.00.

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Authorize On-Site Sewage Facility Permit for two mobile homes located at 3075 FM 2001, Buda Texas 78610.

| ITEM TYPE | MEETING DATE     | AMOUNT REQUIRED |
|-----------|------------------|-----------------|
| CONSENT   | October 27, 2020 |                 |

**LINE ITEM NUMBER**

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

| REQUESTED BY                                         | SPONSOR | CO-SPONSOR |
|------------------------------------------------------|---------|------------|
| Caitlyn Strickland, Director of Development Services | JONES   | N/A        |

**SUMMARY**

Porfirio & Antonia Diaz are proposing an OSSF to serve two mobile homes. This 22.34-acre tract of land will be served by a public water supply. The system designer Jim Conner R.S., has designed a standard treatment system. After treatment, the effluent will be dispersed into evapotranspiration beds for a maximum daily rate of 420 gallons.

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Authorize the Justice of the Peace Precinct 3 Office to install a security access point for Courtroom entrance utilizing the Justice Court Technology Fund and amend the budget accordingly.

| ITEM TYPE | MEETING DATE     | AMOUNT REQUIRED |
|-----------|------------------|-----------------|
| CONSENT   | October 27, 2020 | \$3,791         |

**LINE ITEM NUMBER**

110-628-00.5741\_400

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** YES      **AUDITOR REVIEW:** MARISOL VILLARREAL-ALONZO

| REQUESTED BY     | SPONSOR | CO-SPONSOR |
|------------------|---------|------------|
| Judge Andy Cable | SHELL   | N/A        |

**SUMMARY**

The JP3 would like to install a security access point for the courtroom entrance. This purchase will assist with the protocols established by the District Court for courtroom security related to COVID-19. The new established procedures require that all doors remain locked and entry is only allowed via an escorted court officer. This security access would allow the officer to quickly access the courtroom with little disruption to the administrative staff, and to more efficiently perform COVID-19 protocol as required (temperature check and questionnaire). Funds are available within the Justice Court Building Security Fund for this purchase.

Attachment: Sullivan Contracting Services  
Choice Partners Contract #18/029JN-13

Budget Amendment:  
Decrease General Supplies 110-000-00.5201  
Increase Misc. Capital Improvements\_Ops 110-628-00-5741\_400



## PROPOSAL

Choice Partners Contract #: 18/029JN-13

---

|                                                                                                           |                                                                                                                       |                   |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------|
| <b>Send to:</b> Hays County<br>712 Stagecoach Rd.<br>San Marcos, TX 78666<br><b>Attn:</b> Chris Deichmann | Phone: 512.393.7659<br>Job #: 620113<br>Email: chris.deichmann@co.hays.tx.us<br>Job Name: JP3 Door Access Button - CP | <b>10/22/2020</b> |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------|

---

### Labor and materials to complete the following project:

#### Job Description

- Install conduit from existing electrical panel to above ceiling at door location.
- Install conduit from above door, to in wall near reception desk for push button.
- Provide and install Von Duprin electric strike, desk push button, and power supply.
- Clean mess generated by construction.

*Exclude: After Hours, Structural Design/Fees, HVAC, Plumbing, Fire Sprinkler /Alarm, Permitting, Testing, any items not listed above*

*\*\*Price excludes any owner mandated COVID-19 Testing, Procedures, and/or changes to normal work practices not covered above.\*\**

|                   |            |
|-------------------|------------|
| CostWorks Base    | \$4,350.50 |
| 85% Coeff         | \$3,697.93 |
| Owner Contingency | \$0.00     |
| Sub Total         | \$3,697.93 |
| Bond              | \$92.45    |

---

**PROJECT TOTAL**                      **\$3,790.37** *Plus applicable sales tax*

Respectfully submitted,

Shayne Henricksen

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Authorize the acceptance of a grant award from the Office of the Governor, Homeland Security Grants Division (HSGD) for the Hays County HazMat Team Monitor Maintenance in the amount of \$20,000 and amend the budget accordingly.

| ITEM TYPE | MEETING DATE     | AMOUNT REQUIRED |
|-----------|------------------|-----------------|
| CONSENT   | October 27, 2020 | N/A             |

**LINE ITEM NUMBER**

001-656-99-119]

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** MARISOL VILLARREAL-ALONZO

| REQUESTED BY | SPONSOR | CO-SPONSOR |
|--------------|---------|------------|
| Mike Jones   | BECERRA | N/A        |

**SUMMARY**

The Commissioners' Court authorized the submittal of the grant application on January 21, 2020. Funds will be used to provide maintenance of the HazMat Team monitors, which will increase the life of the specialized equipment and allow the team to respond with sustainable equipment.

Grant Number: 3529703

Grant Period: 10/1/2020 - 9/30/2021

**Budget Amendment:**

Increase Intergovernmental Revenue .4301 - (\$20,000)

Increase Equipment Maintenance and Repair .5411 - \$20,000

**Attachment:**

Hays County HazMat Team Monitor Maintenance Statement of Grant Award

**Statement of Grant Award (SOGA)**

The Statement of Grant Award is the official notice of award from the Office of the Governor (OOG). This Grant Agreement and all terms, conditions, provisions and obligations set forth herein shall be binding upon and shall inure to the benefit of the Parties and their respective successors and assigns and all other State of Texas agencies and any other agencies, departments, divisions, governmental entities, public corporations, and other entities which shall be successors to each of the Parties or which shall succeed to or become obligated to perform or become bound by any of the covenants, agreements or obligations hereunder of each of the Parties hereto.

The approved project narrative and budget for this award are reflected in eGrants on the 'Narrative' and 'Budget/Details' tabs. By accepting the Grant Award in eGrants, the Grantee agrees to strictly comply with the requirements and obligations of this Grant Agreement including any and all applicable federal and state statutes, regulations, policies, guidelines and requirements. In instances where conflicting requirements apply to a Grantee, the more restrictive requirement applies.

The Grant Agreement includes the Statement of Grant Award; the OOG Grantee Conditions and Responsibilities; the Grant Application in eGrants; and the other identified documents in the Grant Application and Grant Award, including but not limited to: 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards; Chapter 783 of the Texas Government Code, Title 34, Part 1, Chapter 20, Subchapter E, Division 4 of the Texas Administrative Code, and the Uniform Grant Management Standards (UGMS) developed by the Comptroller of Public Accounts; the state Funding Announcement or Solicitation under which the grant application was made, and for federal funding, the Funding Announcement or Solicitation under which the OOG was awarded funds; and any applicable documents referenced in the documents listed above. For grants awarded from the U.S. Department of Justice, the current applicable version of the Department of Justice Grants Financial Guide and any applicable provisions in Title 28 of the CFR apply. For grants awarded from the Federal Emergency Management Agency (FEMA), all Information Bulletins and Policies published by the FEMA Grants Program Directorate apply. The OOG reserves the right to add additional responsibilities and requirements, with or without advance notice to the Grantee.

By clicking on the 'Accept' button within the 'Accept Award' tab, the Grantee accepts the responsibility for the grant project, agrees and certifies compliance with the requirements outlined in the Grant Agreement, including all provisions incorporated herein, and agrees with the following conditions of grant funding. The grantee's funds will not be released until the grantee has satisfied the requirements of the following Condition(s) of Funding and Other Fund-Specific Requirement(s), if any, cited below:

|                          |                                             |                               |             |
|--------------------------|---------------------------------------------|-------------------------------|-------------|
| <b>Grant Number:</b>     | 3529703                                     | <b>Award Amount:</b>          | \$20,000.00 |
| <b>Date Awarded:</b>     | 10/16/2020                                  | <b>Grantee Cash Match:</b>    | \$0.00      |
| <b>Grant Period:</b>     | 10/01/2020 - 09/30/2021                     | <b>Grantee In Kind Match:</b> | \$0.00      |
| <b>Liquidation Date:</b> | 12/29/2021                                  | <b>Total Project Cost:</b>    | \$20,000.00 |
| <b>Program Fund:</b>     | HS-Homeland Security Grant Program (HSGP)   |                               |             |
| <b>Grantee Name:</b>     | Hays County                                 |                               |             |
| <b>Project Title:</b>    | Hays County HazMat Team Monitor Maintenance |                               |             |
| <b>Grant Manager:</b>    | Dorothy Caston                              |                               |             |
| <b>DUNS Number:</b>      | 097494884                                   |                               |             |

|                                        |                                                                           |  |  |
|----------------------------------------|---------------------------------------------------------------------------|--|--|
| <b>CFDA:</b>                           | 97.067 - Homeland Security Grant Program (HSGP)                           |  |  |
| <b>Federal Awarding Agency:</b>        | U.S. Department of Homeland Security, Federal Emergency Management Agency |  |  |
| <b>Federal Award Date:</b>             | 9/4/2020                                                                  |  |  |
| <b>Federal/State Award ID Number:</b>  | EMW-2020-SS-00054                                                         |  |  |
| <b>Total Federal Award/State Funds</b> | \$98,320,229.00                                                           |  |  |
| <b>Appropriated:</b>                   |                                                                           |  |  |
| <b>Pass Thru Entity Name:</b>          | Texas Office of the Governor – Homeland Security Grants Division (HSGD)   |  |  |

**Is the Award R&D:** No

**Federal/State Award Description:**

The purpose of the HSGP is to support state and local efforts to prevent terrorism and other catastrophic events and to prepare the Nation for the threats and hazards that pose the greatest risk to the security of the United States. The HSGP provides funding to implement investments that build, sustain, and deliver the 31 core capabilities essential to achieving the National Preparedness Goal (the Goal) of a secure and resilient Nation. The building, sustainment, and delivery of these core capabilities are not exclusive to any single level of government, organization, or community, but rather, require the combined effort of the whole community.



**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Authorize the acceptance of a grant award from the Office of the Governor, Criminal Justice Division (CJD) for the Victim Assistance for the Family Justice Center in the amount of \$45,534 and amend the budget accordingly.

| ITEM TYPE | MEETING DATE     | AMOUNT REQUIRED |
|-----------|------------------|-----------------|
| CONSENT   | October 27, 2020 | N/A             |

**LINE ITEM NUMBER**

001-607-99-143]

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** MARISOL VILLARREAL-ALONZO

| REQUESTED BY | SPONSOR  | CO-SPONSOR |
|--------------|----------|------------|
| Wes Mau      | INGALSBE | N/A        |

**SUMMARY**

The Commissioners' Court authorized the submittal of the grant application on February 18, 2020. Funds will provide support for the salary and benefits for a Victim Assistance Coordinator who will provide services and assistance directly to victims of crime and their families to speed their recovery and aid them through the criminal justice process.

Grant Number: 4028001  
Grant Period: 10/1/2020 - 9/30/2021

Budget Amendment:  
Increase Intergovernmental Revenue .4301 - (\$45,534)  
Increase Staff Salaries .5021 - \$30,428  
Increase FICA .5101\_100 - \$1,887  
Increase Medicare .5101\_200 - \$442  
Increase Retirement .5101\_300 - \$4,111  
Increase Medical .5160\_400 - \$8,255  
Increase Dental .5160\_500 - \$355  
Increase Life .5160\_600 - \$56

Attachment:  
Victim Assistance for the Family Justice Center Statement of Grant Award

**Statement of Grant Award (SOGA)**

The Statement of Grant Award is the official notice of award from the Office of the Governor (OOG). This Grant Agreement and all terms, conditions, provisions and obligations set forth herein shall be binding upon and shall inure to the benefit of the Parties and their respective successors and assigns and all other State of Texas agencies and any other agencies, departments, divisions, governmental entities, public corporations, and other entities which shall be successors to each of the Parties or which shall succeed to or become obligated to perform or become bound by any of the covenants, agreements or obligations hereunder of each of the Parties hereto.

The approved project narrative and budget for this award are reflected in eGrants on the 'Narrative' and 'Budget/Details' tabs. By accepting the Grant Award in eGrants, the Grantee agrees to strictly comply with the requirements and obligations of this Grant Agreement including any and all applicable federal and state statutes, regulations, policies, guidelines and requirements. In instances where conflicting requirements apply to a Grantee, the more restrictive requirement applies.

The Grant Agreement includes the Statement of Grant Award; the OOG Grantee Conditions and Responsibilities; the Grant Application in eGrants; and the other identified documents in the Grant Application and Grant Award, including but not limited to: 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards; Chapter 783 of the Texas Government Code, Title 34, Part 1, Chapter 20, Subchapter E, Division 4 of the Texas Administrative Code, and the Uniform Grant Management Standards (UGMS) developed by the Comptroller of Public Accounts; the state Funding Announcement or Solicitation under which the grant application was made, and for federal funding, the Funding Announcement or Solicitation under which the OOG was awarded funds; and any applicable documents referenced in the documents listed above. For grants awarded from the U.S. Department of Justice, the current applicable version of the Department of Justice Grants Financial Guide and any applicable provisions in Title 28 of the CFR apply. For grants awarded from the Federal Emergency Management Agency (FEMA), all Information Bulletins and Policies published by the FEMA Grants Program Directorate apply. The OOG reserves the right to add additional responsibilities and requirements, with or without advance notice to the Grantee.

By clicking on the 'Accept' button within the 'Accept Award' tab, the Grantee accepts the responsibility for the grant project, agrees and certifies compliance with the requirements outlined in the Grant Agreement, including all provisions incorporated herein, and agrees with the following conditions of grant funding. The grantee's funds will not be released until the grantee has satisfied the requirements of the following Condition(s) of Funding and Other Fund-Specific Requirement(s), if any, cited below:

|                          |                                                 |                               |             |
|--------------------------|-------------------------------------------------|-------------------------------|-------------|
| <b>Grant Number:</b>     | 4028001                                         | <b>Award Amount:</b>          | \$45,533.24 |
| <b>Date Awarded:</b>     | 10/16/2020                                      | <b>Grantee Cash Match:</b>    | \$0.00      |
| <b>Grant Period:</b>     | 10/01/2020 - 09/30/2021                         | <b>Grantee In Kind Match:</b> | \$0.00      |
| <b>Liquidation Date:</b> | 12/29/2021                                      | <b>Total Project Cost:</b>    | \$45,533.24 |
| <b>Program Fund:</b>     | VA-Victims of Crime Act Formula Grant Program   |                               |             |
| <b>Grantee Name:</b>     | Hays County                                     |                               |             |
| <b>Project Title:</b>    | Victim Assistance for the Family Justice Center |                               |             |
| <b>Grant Manager:</b>    | Adela Saenz                                     |                               |             |
| <b>DUNS Number:</b>      | 097494884                                       |                               |             |

|                                                      |                                                                                     |  |  |
|------------------------------------------------------|-------------------------------------------------------------------------------------|--|--|
| <b>CFDA:</b>                                         | 16.575 - Victims of Crime Act Formula Grant Program                                 |  |  |
| <b>Federal Awarding Agency:</b>                      | U.S. Department of Justice, Office of Justice Programs, Office for Victims of Crime |  |  |
| <b>Federal Award Date:</b>                           | 9/13/2019                                                                           |  |  |
| <b>Federal/State Award ID Number:</b>                | 2019-V2-GX-0011                                                                     |  |  |
| <b>Total Federal Award/State Funds Appropriated:</b> | \$193,635,780.00                                                                    |  |  |
| <b>Pass Thru Entity Name:</b>                        | Texas Office of the Governor – Criminal Justice Division (CJD)                      |  |  |

|                                         |                                                                                                                                                                                                                                                                                               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Is the Award R&amp;D:</b>            | No                                                                                                                                                                                                                                                                                            |
| <b>Federal/State Award Description:</b> | This grant award provides funds from the Crime Victims Fund to enhance crime victim services in the State. Victims of Crime Act (VOCA) assistance funds are typically competitively awarded by the State to local community-based organizations that provide direct services to crime victims |

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Ratify the purchase of five (5) Glock 17 9mm Handguns with accessories for the Sheriff's Office Law Enforcement Division.

| ITEM TYPE | MEETING DATE     | AMOUNT REQUIRED |
|-----------|------------------|-----------------|
| CONSENT   | October 27, 2020 | \$2,942         |

**LINE ITEM NUMBER**

001-618-00.5206

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** YES      **AUDITOR REVIEW:** MARISOL VILLARREAL-ALONZO

| REQUESTED BY        | SPONSOR  | CO-SPONSOR |
|---------------------|----------|------------|
| Sheriff Gary Cutler | INGALSBE | SHELL      |

**SUMMARY**

Due to recent events, the Sheriff was in need of purchasing additional handguns for officer safety. Funds are available within their operating budget for this purchase.

Attachment: GT Distributors Quote #QTE0129319  
BuyBoard Contract #603-20



GT Distributors - Austin  
 P.O. Box 16080  
 Austin TX 78761  
 (512) 451-8298 Ext. 0000

|       |            |
|-------|------------|
| Quote | QTE0129319 |
| Date  | 10/21/2020 |
| Page: | 1          |

**Bill To:**

**Ship To:**

Hays County Sheriffs Office (TX)  
 712 South Stagecoach Trail  
 Ste 1071  
 San Marcos TX 78666

Hays County Sheriffs Office (TX)  
 1307 Uhland Road  
 San Marcos TX 78666

| Purchase Order No. | Customer ID | Salesperson ID | Shipping Method | Payment Terms | Req Ship Date | Master No. |
|--------------------|-------------|----------------|-----------------|---------------|---------------|------------|
| GLOCK 102120       | 000262      | BF             | FEDEX-2ND-NON   | NET 15        | 0/0/0000      | 2,251,658  |

| Quantity                                                                                                                       | Item Number       | Description                                    | UOM | Unit Price | Ext. Price |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------------------------------|-----|------------|------------|
| 5                                                                                                                              | GLOCK-PA175S302AB | Glock 17 Gen 5 FS 9mm Amglo Bold 5.5LB         | EA  | \$428.50   | \$2,142.50 |
| 5                                                                                                                              | SAF-6360-83-131   | Safariland ALS Level III Holster G1k 17-22 STX | EA  | \$114.25   | \$571.25   |
| 5                                                                                                                              | SAF-77-83-13PBL   | Safariland Dble Mag Pouch STX Tac G17/22       | EA  | \$33.50    | \$167.50   |
| Quotation reflects BuyBoard Contract 603-20.<br>Contract period 04/01/20-03/31/21.<br>Email BuyBoard PO's to info@buyboard.com |                   |                                                |     |            |            |

All returns must be authorized by GT Distributors. Interest charges on past due invoices at the maximum rate allowed by law.

Thank you, your salesman was Adam Balak

|              |                   |
|--------------|-------------------|
| Subtotal     | \$2,881.25        |
| Misc         | \$0.00            |
| Tax          | \$0.00            |
| Freight      | \$60.00           |
| <b>Total</b> | <b>\$2,941.25</b> |

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Approve specifications for IFB 2021-B02 Dacy Lane Road Improvements and authorize Purchasing to solicit for proposals and advertise.

| ITEM TYPE | MEETING DATE     | AMOUNT REQUIRED |
|-----------|------------------|-----------------|
| CONSENT   | October 27, 2020 |                 |

**LINE ITEM NUMBER**

|  |
|--|
|  |
|--|

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

| REQUESTED BY      | SPONSOR  | CO-SPONSOR |
|-------------------|----------|------------|
| Jerry Borcharding | INGALSBE | N/A        |

**SUMMARY**

The IFB 2021-B02 Dacy Lane Road Improvements project will reconstruct the existing road at Bebee Road to Hillside Terrace. The project consists of, but is not limited to, construction of pavement, earthwork, drainage structures, signals, pavement markings, pedestrian facilities, waterline, and erosion control facilities.

Attached:  
IFB 2021-B02 Dacy Lane Roadway Improvements  
Attachment A: IFB 2021-B02 Bid Form (within Project Packet)

Due to size the following will be sent separately to the Court:  
Attachment B: IFB 2021-B02 Construction Plans  
Attachment C: IFB 2021-B02 Geotechnical Report  
Attachment D: IFB 2021-B02 Utility Sheets



**HAYS COUNTY**  
**PROJECT CONSTRUCTION MANUAL**

**FOR**  
**DACY LANE ROADWAY IMPROVEMENTS**

**Bid No. IFB 2021-B02**

**Bid Date: November 19,  
2020 Bid Time: 3:00 PM  
CST**

**Hays County, Texas  
Purchasing Department  
712 South Stagecoach Trail, Suite 1071  
San Marcos, TX 78667**

**October 29, 2020**

## Table of Contents

| Contents                                                         | Section         |
|------------------------------------------------------------------|-----------------|
| <hr style="border: 2px solid black;"/>                           |                 |
| IFB Submittal Checklist.....                                     | 1               |
| Invitation to Bid.....                                           | 2               |
| Bid Instructions/Bid Requirements.....                           | 3               |
| Forms .....                                                      | 4               |
| Bid Form .....                                                   | 4               |
| Vendor/Bidder's Affirmation .....                                | 4               |
| Bid Form: Schedule of Rates & Prices .....                       | 4               |
| Conflict of Interest Questionnaire.....                          | 4               |
| Certificate of Interested Parties.....                           | 4               |
| Code of Ethics for Hays County .....                             | 4               |
| HUB Practices.....                                               | 4               |
| House Bill 89 Verification.....                                  | 4               |
| Senate Bill 252 Certification.....                               | 4               |
| Related Parties Disclosure Form.....                             | 4               |
| Standard Form of Contract .....                                  | 5               |
| Wage Rates .....                                                 | 6               |
| Performance Bond .....                                           | 7               |
| Payment Bond.....                                                | 8               |
| Certificate of Insurance.....                                    | 9               |
| General Conditions .....                                         | 10              |
| Special Conditions .....                                         | 11              |
| General Notes .....                                              | 12              |
| Technical Specifications .....                                   | 13              |
| Plan Drawings.....                                               | Bond Separately |
| Geotechnical Report.....                                         | Bond Separately |
| Appendices                                                       |                 |
| Appendix A – Quality Assurance Program for Construction Projects |                 |
| Appendix B – Guide Schedule of Sampling and Testing              |                 |
| Appendix C – AASHTO Accredited Laboratories                      |                 |



**SECTION 1**  
**IFB SUBMITTAL CHECKLIST**

## **IFB Submittal Checklist**

This checklist is provided for the Vendor's convenience and identifies documents that must be submitted with the bid/proposal in order to be considered responsive. Any bids/proposals received without these requisite documents may be deemed nonresponsive and may not be considered for contract award.

### **A COMPLETE SOLICITATION RESPONSE PACKAGE SHALL INCLUDE:**

- 1. Completed Bid Form
- 2. Bid Bond for 5% of total bid amount
- 3. Vendor Reference Form
- 4. Form 1295 filed online with the Texas Ethics Commission and signed
- 5. Conflict of Interest Questionnaire completed and signed
- 6. Code of Ethics signed
- 7. HUB Practices signed
- 8. House Bill 89 Verification signed and notarized
- 9. Senate Bill 252 Certification
- 10. Debarment & Licensing Certification signed and notarized
- 11. Vendor/Bidder's Affirmation completed and signed
- 12. Related Party Disclosure Form
- 13. Any addenda applicable to this solicitation
- 14. Electronic Submission of Bid Packet or
- 15. One original proposal and a digital copy on a thumb drive are in a sealed envelope with the Solicitation Number and Respondent's Name on the outermost envelope, addressed to:  
Hays County Purchasing  
712 S Stagecoach Trail, Suite 1071  
San Marcos, TX 78666

**SECTION 2**  
**INVITATION FOR BIDS**

**PUBLIC NOTICE  
HAYS COUNTY  
INVITATION FOR  
BIDS**

Hays County will be accepting sealed Bids for:

**Dacy Lane Roadway Improvements, Bid No. IFB 2021-B02**

Sealed Bids will be received either electronically through BidNet Direct or in the Hays County, Purchasing Office, Hays County Government Center, 712 South Stagecoach Trail, Suite 1071, San Marcos, TX 78666 until 3:00 PM local time on THURSDAY, NOVEMBER 19, 2020 at which time and place the bids will be publicly opened and read. Bids received after the time and date set for submission will be returned unopened.

**DETAIL SUMMARY**

- 1. Issuing Office:** Hays County Auditor  
Purchasing Office  
712 S. Stagecoach Trail, Suite 1071  
San Marcos, TX 78666
- 2. Responses to Solicitation:** Sealed bids marked with Solicitation Number and Respondent Name on the outermost envelope  
One (1) original and one (1) digital copy on a thumb drive  
Electronic Bid Packets can be submitted through BidNet Direct
- 3. Deadline for Responses:** In issuing office or submitted to BidNet Direct no later than:  
**Thursday November 19, 2020; 3:00 p.m. Central Time (CT)**
- 4. Pre-Bid Meeting:** Recommended  
Wednesday, November 4, 2020; 10:00 a.m. Central Time (CT)  
Online at [Join Microsoft Teams Meeting](#)
- 5. Bonding Requirements:** Bid Bond: 5% of total bid amount due at bid submittal  
Performance and Payment Bonds: 100% of Contract Price within 10 days of award
- 6. Initial Contract Term:** 450 standard workweek days
- 7. Optional Contract Terms:** None
- 8. Designated Contact:** Hays County Purchasing  
Email: [purchasing@co.hays.tx.us](mailto:purchasing@co.hays.tx.us)
- 9. Questions & Answers:** Questions regarding this solicitation must be made in writing and submitted to the designated contact above no later than November 12, 2020; 5:00 p.m. CT. Telephone inquiries will not be accepted. Questions may be submitted by email to the purchasing address above. Answers to questions will be provided in the form of an addendum after the question deadline has passed. All addenda will be posted on CivicPlus, BidNet Direct and ESBD websites.
- 10. Addenda** <sup>32</sup> Any interpretations, corrections or changes to this IFB and

specifications will be made by addenda. Sole issuing authority of addenda shall be vested in the Hays County Purchasing Office. It is the Respondent's responsibility to acknowledge receipt of all addenda with bid submission.

**11. Contact with County Staff:**

Upon issuance of this solicitation, employees and representatives of Hays County, other than the Purchasing Office staff identified as the Designated Contact above, will not discuss the contents of this solicitation with any Respondent or its representatives. Failure of a Respondent or any of its representatives to observe this restriction may result in disqualification of any related offer. This restriction does not preclude discussions between affected parties for the purpose of conducting business unrelated to this procurement.

**Anticipated Schedule of Events**

|                          |                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------|
| <b>October 29, 2020</b>  | <b>Issuance of IFB</b>                                                                  |
| <b>November 4, 2020</b>  | <b>Pre-Bid Meeting Online (10:00 AM, CT)</b>                                            |
| <b>November 12, 2020</b> | <b>Deadline for Submission of Questions (5:00 PM, CT)</b>                               |
| <b>November 19, 2020</b> | <b>Deadline for Submission of Bids (3:00 PM, CT)<br/>Late bids will not be accepted</b> |
| <b>December 15, 2020</b> | <b>Anticipated Contract Award Date</b>                                                  |

**SECTION 3**  
**BID INSTRUCTIONS / REQUIREMENTS**

## **BID INSTRUCTIONS/REQUIREMENTS**

### **A. Scope of Work**

The proposed project will reconstruct the existing road at Bebee Road to Hillside Terrace. The project consists of, but is not limited to, construction of pavement, earthwork, drainage structures, signals, pavement markings, pedestrian facilities, waterline, and erosion control facilities.

The appendices and following attachments to this IFB provide specific detail regarding this project and should be thoroughly reviewed prior to bid submittal:

Attachment A: IFB 2021-B02 Bid Form

Attachment B: IFB 2021-B02 Construction Plans

Attachment C: IFB 2021-B02 Geotechnical Report

Attachment D: IFB 2021-B02 Utility Sheets

There is one (1) Bid Alternate pertaining to the joint bid GoForth Water Line. Bidders shall bid on either the GoForth Water Line **OR** the GoForth Water Line Bid Alternate. Bidders shall not bid on both.

There is one (1) Add Alternate pertaining to the construction of Lois Lane. Bidders shall bid on the Add Alternate to have a complete bid.

Low bid will be the Total of the Base Bid, plus the Add Alternate (Lois Lane), plus the GoForth Water Line Base Bid **OR** the GoForth Waterline Bid Alternate

### **B. Qualifications**

Prospective bidder shall, on Wednesday November 18, 2020, meet the following requirements:

1. Be registered with the State of Texas; and
2. Provide suitable evidence of prior experience for similar work and be able to provide written documentation of successfully complete similar contracts.

**RESPONSIBILITY:** A prospective bidder must affirmatively demonstrate bidder's responsibility. A prospective bidder must meet the following requirements:

- Have adequate financial resources, or the above ability to obtain such resources as required
- Be able to comply with required or proposed delivery schedule
- Have a satisfactory record of performance
- Be otherwise qualified and eligible to receive an award

**COMPLIANCE WITH LAWS:** The successful bidder shall comply with all applicable federal, state and local laws and regulations pertaining to the practice of the profession and the execution of the duties under the bid.

INSURANCE: The successful bidder will be required to furnish proof of insurance for Workers' Compensation, Auto Liability and General Liability before any work may begin. It is the practice of Hays County to encourage local participation and to promote and encourage contracting and subcontracting opportunities for locally owned businesses and labor in all contracts.

The County of Hays does not discriminate on the basis of race, color, national origin, sex, religion, age and disability in employment or the provision of services.

### **C. Mandatory Bid Form**

Respondent must provide its total bid amount by completing the mandatory bid form included as Attachment A: IFB 2021-B02 Bid Form. Refer to section 13 Technical Specifications for descriptions of the reference numbers contained in the Bid Form.

Hays County is exempt from federal excise and state sales tax; therefore, tax must not be included in this bid.

ESTIMATED QUANTITIES: Hays County is not obligated to purchase any minimum amount, and the County may purchase any reasonable amount greater than the estimate for the same unit price. Any limit on quantities available must be stated expressly in the bid.

### **D. Submittal Requirements**

Respondent must deliver the following to the Issuing Office by the specified deadline or upload the proposal electronically to BidNet Direct:

Mailed or Dropped off Proposals:

- One (1) original proposals with required forms manually signed by Respondent with original signatures
- One (1) digital copy of the full proposal with all required forms on a thumb drive

Electronic Proposals:

- Upload proposal with required forms manually signed by Respondent

**LATE SUBMITTALS WILL NOT BE ACCEPTED.**

ALTERING BIDS: Any interlineations, alteration, or erasure made before receiving time must be initialed by the signer of the bid, guaranteeing authenticity.

WITHDRAWING OF BID: A bid may be withdrawn at any time prior to the official opening. After the official opening, bids may not be amended, altered or withdrawn without the recommendation of the County Purchasing Manager and the approval of Commissioners Court.

It is understood that Hays County reserves the right to accept or reject any and all submittals as it shall deem to be in the best interest of Hays County.



FORMS: All bids must be submitted on the forms provided in this bid document. Changes to bid forms made by bidders shall disqualify the bid.

REFERENCES: Hays County requires respondent to supply a list of at least three (3) references (See Section IV for Vendor Reference Form) where like services have been supplied by their company. Include name of company, address, telephone number and name of representative.

#### **E. Award of Contract**

**BASIS OF AWARD:** The County reserves the right to award a contract for named project to a bidder on the basis of total low bid and/or the best value for the County. Bidders must bid on all items in order to be considered responsive. The County reserves the right to accept in part or in whole any bids submitted and waive any technicalities for the best interest of the County.

The bid award shall be based on but not necessarily limited to, the following factors:

- Total price
- Special needs and requirements of Hays County
- Vendors past performance record with Hays County
- Hays County's evaluation of vendor's ability
- Vendor's references

**CONTRACT:** This bid, when properly accepted by Hays County shall constitute a contract equally binding between the successful bidder and Hays County. No negotiations, decisions, or actions shall be initiated or executed by any vendor as a result of any discussions with any County employee. Only those communications that are in writing from the Purchasing Manager shall be considered as a duly authorized expression on behalf of the County. No oral agreements either expressed or implied will be considered in fulfilling this contract. No additional terms will become part of this contract with the exception of Commissioners Court approved change orders.

**BIDDER AGREES,** if this bid is accepted, to furnish any and all services upon which prices are offered, at the price(s) and upon the terms and conditions contained in the specifications. The period for acceptance of the bid will be sixty (60) calendar days.

The County reserves the right to accept in part or in whole any bids submitted and waive any technicalities for the best interest of the County.

If the bid is accepted and approved by Commissioners Court, this document shall be made part of the contract. No negotiations, decisions, or actions shall be initiated or executed by any vendor as a result of any discussions with any County employee. No oral agreements either expressed or implied will be considered in fulfilling this contract.

**CONTRACT TERM:** The term of this contract will begin on the effective date of this contract and remain in effect until successful project completion. Contract may be extended by the Commissioners Court of Hays County.

## **F. Bond Requirements**

**BID BOND:** A Bid Bond shall be submitted with your offer. It shall be in the amount of 5% of the total bid amount and in the form of a certified or cashier's check or bid bond issued by a surety company authorized to do business in Texas. Within Ten (10) days of award, it may be returned to you, if you are the unsuccessful offer. If you are the awardee, it shall be held until a Performance Bond is received as explained below.

**PERFORMANCE & PAYMENT BONDS:** Contractor shall furnish Performance and Payment Bonds to the County Purchasing Manager within ten (10) calendar days of notification of contract award. Each shall be in the amount at least equal to the contract price, as security for the faithful performance and payment of all of contractor's obligations under the contract documents. Even though a contract may be awarded, no contract is deemed to exist until the proper Performance Bond has been received. The bonds are to be issued from a surety company holding a license from the State of Texas to act as a surety. These bonds shall remain in effect until final acceptance by the Engineer and until a Maintenance Bond, which will run for a period of two (2) years after the successful completion of all work under the contract and acceptance of Hays County, is obtained and provided to the county. A Maintenance Bond guarantees all work under the contract to be free from faulty materials and free from improper workmanship, and against injury from proper and usual wear, and guarantees to replace or to reexecute, without cost to Hays County, such work as may be found to be improper or imperfect, and to make good all damage caused to the other work of materials, due to such required replacement or reexecution. At your request, the Performance Bond shall be returned by the County upon completion of the contract and final acceptance of all items in the contract. Neither the final certificate, nor payment, nor any provision in the contract documents shall relieve the contractor of responsibility for neglect or faulty materials or workmanship during the period covered by the Maintenance Bond. If the awardee fails to perform any of the services required by the contract within ten (10) days of receipt of written demand for performance from County or if the awardee fails to correct or replace defective goods or products within ten (10) days from receipt of written demand, the contract is deemed BREACHED and is cause for termination of the contract. A contract terminated for cause results in retention of the Bond by County for liquidated damages.

## **G. Warranty of Performance**

The successful respondent expressly warrants that all services specified in the IFB will be performed with care and diligence and in accordance with all specifications of the IFB. The successful bidder agrees to correct any deficiencies in performance of services upon notification by the County and without additional expense to the County.

CONTINUING NON-PERFORMANCE of the bidder, in terms of specifications, shall be basis for the termination of the contract by the County. The County shall not pay for merchandise/services that are unsatisfactory. Failure to perform any provision will constitute a default of contract, in which case, corrective action shall take place within ten (10) days from the date of written notice citing the nature of breach. Failure to take corrective action or to provide a satisfactory written reply excusing such failure within the prescribed ten (10) days will authorize the County to terminate this agreement by written notice.

COMPLIANCE WITH LAWS: The successful Respondents shall comply with all applicable federal, state and local laws and regulations pertaining to the practice of the profession and the execution of the duties under the solicitation. Any contract executed as a result of this IFB shall be governed by the laws of the State of Texas.

LIQUIDATED DAMAGES FOR DELAYS: If the work is not substantially complete within the contract time, the Contractor shall pay to the County as fixed, agreed, and liquidated damages (it being impossible to determine the actual damages occasioned by the delay) the amount of \$750 (seven hundred fifty dollars) for each calendar day of delay, until the work is completed. The Contractor and Contractor's sureties shall be liable to the County for the amount thereof.

EXCUSABLE DELAYS: The right of the Contractor to proceed shall not be terminated nor shall the Contractor be charged with liquidated damages for any delays in the completion of the work due to:

1. Any acts of the Government, including controls or restrictions upon or requisitioning of materials, equipment, tools, or labor by reason of war, national defense, or any other national emergency;
2. Any acts of the County;
3. Causes not reasonably foreseeable by the parties to this Contract at the time of execution which are beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, terrorism, war, acts of another Contractor in the performance of some other contract with the County, fires, floods, epidemics, quarantine, restrictions, strikes, freight embargoes, and weather of unusual severity such as hurricanes, tornadoes, cyclones and other extreme weather conditions;

Provided, however, that the Contractor promptly notifies the City/County within ten (10) days in writing of the cause of the delay. Upon receipt of such notification, the City/County shall ascertain the facts and the cause and extent of delay. If, upon the basis of the facts and the terms of this contract, the delay is properly excusable, the County shall extend the time for completing the work for a period of time commensurate with the period of excusable delay.

**SECTION 4**  
**BID FORM**  
**VENDOR/BIDDER'S AFFIRMATION**  
**BID FORM: SCHEDULE OF RATES AND PRICES**  
**CONFLICT OF INTEREST QUESTIONNAIRE**  
**CERTIFICATION OF INTERESTED PARTIES**  
**CODE OF ETHICS FOR HAYS COUNTY**  
**HAYS COUNTY PRACTICES RELATED TO HISTORICALLY**  
**UNDERUTILIZED BUSINESSES**  
**HOUSE BILL 89 VERIFICATION**  
**SENATE BILL 252 CERTIFICATION**  
**VENDOR REFERENCES**  
**RELATED PARTY DISCLOSURE FORM**

# BID FORM

## PROJECT IDENTIFICATION

Project No. IFB 2021-B02 Dacy Lane Roadway Improvements

## THIS BID IS SUBMITTED TO:

**Electronically: BidNet Direct: [www.bidnetdirect.com/hayscounty](http://www.bidnetdirect.com/hayscounty)**

### **Manually:**

Hays County Purchasing Department Attn:  
Stephanie Hunt  
712 South Stagecoach Trail, Suite 1071 San  
Marcos, Texas 78666

The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with COUNTY in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Bid Price and within the Bid Times indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

All Bids will be considered non-responsive if the following forms are not signed and submitted with the Bid

BIDDER accepts all of the terms and conditions of the Notice to Bidders and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the day of Bid opening. BIDDER will sign and deliver the required number of counterparts of the Agreement with the Bonds and other documents required by the Bidding Requirements within 10 working days after the date of COUNTY's Notice of Award.

This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization, or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm, or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other Bidder or over COUNTY.

BIDDER will complete the work in accordance with the Contract Documents and the accompanying Schedule of Rates and Prices, and will pay not less than the Prevailing Wage Rates for Hays County, Texas. The work will be completed within **450 standard workweek days** from the date for commencing work as set forth in the "Notice to Proceed" to be issued by the COUNTY.

Communications concerning this Bid shall be addressed to the address of BIDDER indicated below:

---

---

---

Terms used in this Bid which are defined in the General Provisions or Instructions will have the meanings indicated in the General Provisions or Instructions.

SUBMITTED ON \_\_\_\_\_, 20 \_\_\_\_.

State Contractor License Number \_\_\_\_\_

IF BIDDER is:

An Individual

By \_\_\_\_\_ (SEAL)

(Individual's Name)

---

(Signature)

doing business as \_\_\_\_\_

Business address: \_\_\_\_\_

---

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Email: \_\_\_\_\_

A Partnership

By \_\_\_\_\_ (SEAL)

(Firm Name)

\_\_\_\_\_

(General Partner)

\_\_\_\_\_

(Signature)

Business address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_

Email: \_\_\_\_\_

A Corporation

By \_\_\_\_\_ (SEAL)  
(Corporate Name)

\_\_\_\_\_  
(State of Incorporation)

By \_\_\_\_\_ (SEAL)  
(Name of Person Authorized to Sign)

\_\_\_\_\_  
(Signature)

(Corporate Seal)

Attest: \_\_\_\_\_  
(Secretary)

Business Address

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone Number: \_\_\_\_\_ Fax Number: \_\_\_\_\_  
Email: \_\_\_\_\_

Date of Qualification to Do Business is \_\_\_\_\_



A Joint Venture

By \_\_\_\_\_(SEAL)

(Name)

\_\_\_\_\_

(Address)

\_\_\_\_\_

(Signature)

By \_\_\_\_\_

(Name)

\_\_\_\_\_

(Address)

\_\_\_\_\_

(Signature)

Phone & Fax Numbers, Email & mailing addresses for receipt of official communications:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(Each joint venturer must sign. The manner for signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner above.)

## Vendor/Bidder's Affirmation

1. Vendor/Bidder affirms that they are duly authorized to execute this Contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder, and that the contents of this bid as to price, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other person engaged in this type of business prior to the official opening of this bid.
2. Vendor/Bidder hereby assigns to Purchaser any and all claims for overcharges associated with this Contract which arise under the antitrust laws of the United States, 15 USCA Section 1 et seq., and which arise under the antitrust laws of the State of Texas, Tex. Bus. & Com. Code, Section 15.01, et seq.
3. Pursuant to 262.0276 (a) of the Texas Local Government Code, Vendor/Bidder, hereby affirms that Vendor/Bidder:

\_\_\_\_\_ Does not own taxable property in Hays County, or;

\_\_\_\_\_ Does not owe any ad valorem taxes to Hays County or is not otherwise indebted to Hays County

\_\_\_\_\_  
Name of Contracting Company

If taxable property is owned in Hays County, list property ID numbers:

\_\_\_\_\_

\_\_\_\_\_  
Signature of Company Official Authorizing Bid/Offer

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
Phone

**ATTACHMENT A - BID FORM**  
**SCHEDULE OF RATES AND PRICES**  
**HAYS COUNTY, TEXAS**

PROJECT #: IFB 2021-B02

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM #                          | TECH SPEC  | ITEM DESCRIPTION                        | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|-------------------------------------|------------|-----------------------------------------|--------------|--------------|----------------|------------------|
| <b>BASE BID - DACY LANE ROADWAY</b> |            |                                         |              |              |                |                  |
| 1                                   | 100 - 6002 | PREPARING ROW                           | 183          | STA          |                | \$ -             |
| 2                                   | 105 - 6015 | REMOVING STAB BASE & ASPH PAV (8"-10")  | 17,759       | SY           |                | \$ -             |
| 3                                   | 110 - 6001 | EXCAVATION (ROADWAY)                    | 94,932       | CY           |                | \$ -             |
| 4                                   | 110 - 6003 | EXCAVATION (SPECIAL)                    | 6,661        | CY           |                | \$ -             |
| 5                                   | 132 - 6003 | EMBANKMENT (FINAL)(ORD COMP)(TY B)      | 18,701       | CY           |                | \$ -             |
| 6                                   | 132 - 6005 | EMBANKMENT (FINAL)(ORD COMP)(TY C)      | 28,045       | CY           |                | \$ -             |
| 7                                   | 160 - 6003 | FURNISHING AND PLACING TOPSOIL (4")     | 119,955      | SY           |                | \$ -             |
| 8                                   | 164 - 6003 | BROADCAST SEED (PERM) (RURAL) (CLAY)    | 119,955      | SY           |                | \$ -             |
| 9                                   | 164 - 6009 | BROADCAST SEED (TEMP) (WARM)            | 29,989       | SY           |                | \$ -             |
| 10                                  | 164 - 6011 | BROADCAST SEED (TEMP) (COOL)            | 29,989       | SY           |                | \$ -             |
| 11                                  | 166 - 6002 | FERTILIZER                              | 0.74         | TON          |                | \$ -             |
| 12                                  | 168 - 6001 | VEGETATIVE WATERING                     | 1,205        | MG           |                | \$ -             |
| 13                                  | 247 - 6366 | FL BS (CMP IN PLC)(TY A GR 5)(FNAL POS) | 24,507       | CY           |                | \$ -             |
| 14                                  | 260 - 6002 | LIME (HYDRATED LIME (SLURRY))           | 2,810        | TON          |                | \$ -             |
| 15                                  | 260 - 6009 | LIME TRT (EXST MATL)(10")               | 106,665      | SY           |                | \$ -             |
| 16                                  | 310 - 6001 | PRIME COAT (MULTI OPTION)               | 19,145       | GAL          |                | \$ -             |
| 17                                  | 341 - 6008 | D-GR HMA TY-B PG64-22                   | 20,949       | TON          |                | \$ -             |
| 18                                  | 341 - 6028 | D-GR HMA TY-C PG70-22                   | 10,423       | TON          |                | \$ -             |
| 19                                  | 400 - 6005 | CEM STABIL BKFL                         | 25           | CY           |                | \$ -             |
| 20                                  | 400 - 6006 | CUT & RESTORING PAV                     | 38           | SY           |                | \$ -             |
| 21                                  | 402 - 6001 | TRENCH EXCAVATION PROTECTION            | 4,879        | LF           |                | \$ -             |
| 22                                  | 416 - 6030 | DRILL SHAFT (TRF SIG POLE) (24 IN)      | 54           | LF           |                | \$ -             |
| 23                                  | 416 - 6032 | DRILL SHAFT (TRF SIG POLE) (36 IN)      | 114          | LF           |                | \$ -             |
| 24                                  | 432 - 6002 | RIPRAP (CONC)(5 IN)                     | 311          | CY           |                | \$ -             |
| 25                                  | 432 - 6024 | RIPRAP (STONE COMMON)(DRY)(12 IN)       | 3,184        | CY           |                | \$ -             |
| 26                                  | 432 - 6045 | RIPRAP (MOW STRIP)(4 IN)                | 24           | CY           |                | \$ -             |
| 27                                  | 450 - 6006 | RAIL (TY T223)                          | 369          | LF           |                | \$ -             |
| 28                                  | 450 - 6032 | RAIL (TY C223)                          | 405          | LF           |                | \$ -             |
| 29                                  | 450 - 6052 | RAIL (HANDRAIL)(TY F)                   | 616          | LF           |                | \$ -             |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM # | TECH SPEC  | ITEM DESCRIPTION                        | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|------------|------------|-----------------------------------------|--------------|--------------|----------------|------------------|
| 30         | 460 - 6002 | CMP (GAL STL 18 IN)                     | 10           | LF           |                | \$ -             |
| 31         | 462 - 6003 | CONC BOX CULV (4 FT X 2 FT)             | 202          | LF           |                | \$ -             |
| 32         | 462 - 6005 | CONC BOX CULV (4 FT X 4 FT)             | 158          | LF           |                | \$ -             |
| 33         | 462 - 6006 | CONC BOX CULV (5 FT X 2 FT)             | 65           | LF           |                | \$ -             |
| 34         | 462 - 6010 | CONC BOX CULV (6 FT X 3 FT)             | 192          | LF           |                | \$ -             |
| 35         | 462 - 6015 | CONC BOX CULV (7 FT X 4 FT)             | 77           | LF           |                | \$ -             |
| 36         | 462 - 6032 | CONC BOX CULV (10 FT X 8 FT)            | 657          | LF           |                | \$ -             |
| 37         | 462 - 6041 | CONC BOX CULV (12 FT X 6 FT)            | 580          | LF           |                | \$ -             |
| 38         | 464 - 6001 | RC PIPE (CL III)(12 IN)                 | 66           | LF           |                | \$ -             |
| 39         | 464 - 6003 | RC PIPE (CL III)(18 IN)                 | 10,832       | LF           |                | \$ -             |
| 40         | 464 - 6005 | RC PIPE (CL III)(24 IN)                 | 3,306        | LF           |                | \$ -             |
| 41         | 464 - 6007 | RC PIPE (CL III)(30 IN)                 | 657          | LF           |                | \$ -             |
| 42         | 464 - 6008 | RC PIPE (CL III)(36 IN)                 | 1,717        | LF           |                | \$ -             |
| 43         | 464 - 6009 | RC PIPE (CL III)(42 IN)                 | 48           | LF           |                | \$ -             |
| 44         | 464 - 6011 | RC PIPE (CL III)(54 IN)                 | 20           | LF           |                | \$ -             |
| 45         | 465 - 6002 | MANH (COMPL)(PRM)(48IN)                 | 4            | EA           |                | \$ -             |
| 46         | 465 - 6005 | JCTBOX(COMPL)(PJB)(3FTX3FT)             | 1            | EA           |                | \$ -             |
| 47         | 465 - 6010 | JCTBOX(COMPL)(PJB)(5FTX6FT)             | 1            | EA           |                | \$ -             |
| 48         | 465 - 6013 | INLET (COMPL)(PCO)(3FT)(NONE)           | 34           | EA           |                | \$ -             |
| 49         | 465 - 6014 | INLET (COMPL)(PCO)(3FT)(LEFT)           | 40           | EA           |                | \$ -             |
| 50         | 465 - 6015 | INLET (COMPL)(PCO)(3FT)(RIGHT)          | 28           | EA           |                | \$ -             |
| 51         | 465 - 6016 | INLET (COMPL)(PCO)(3FT)(BOTH)           | 10           | EA           |                | \$ -             |
| 52         | 465 - 6017 | INLET (COMPL)(PCO)(4FT)(NONE)           | 7            | EA           |                | \$ -             |
| 53         | 465 - 6018 | INLET (COMPL)(PCO)(4FT)(LEFT)           | 4            | EA           |                | \$ -             |
| 54         | 465 - 6019 | INLET (COMPL)(PCO)(4FT)(RIGHT)          | 1            | EA           |                | \$ -             |
| 55         | 465 - 6020 | INLET (COMPL)(PCO)(4FT)(BOTH)           | 1            | EA           |                | \$ -             |
| 56         | 465 - 6126 | INLET (COMPL)(PSL)(FG)(3FTX3FT-3FTX3FT) | 15           | EA           |                | \$ -             |
| 57         | 465 - 6158 | INLET(COMPL)(PAZD)(FG)(3FTX3FT-3FTX3FT) | 7            | EA           |                | \$ -             |
| 58         | 465 - 6160 | INLET(COMPL)(PAZD)(FG)(4FTX4FT-4FTX4FT) | 1            | EA           |                | \$ -             |
| 59         | 465 - 6162 | INLET(COMPL)(PAZD)(FG)(5FTX5FT-4FTX4FT) | 2            | EA           |                | \$ -             |
| 60         | 466 - 6159 | WINGWALL (FW - S) (HW=12 FT)            | 1            | EA           |                | \$ -             |
| 61         | 466 - 6169 | WINGWALL (FW - S) (HW=8 FT)             | 1            | EA           |                | \$ -             |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM # | TECH SPEC  | ITEM DESCRIPTION                       | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|------------|------------|----------------------------------------|--------------|--------------|----------------|------------------|
| 62         | 466 - 6170 | WINGWALL (FW - S) (HW=9 FT)            | 1            | EA           |                | \$ -             |
| 63         | 466 - 6171 | WINGWALL (PW - 1) (HW=10 FT)           | 1            | EA           |                | \$ -             |
| 64         | 466 - 6172 | WINGWALL (PW - 1) (HW=11 FT)           | 1            | EA           |                | \$ -             |
| 65         | 466 - 6173 | WINGWALL (PW - 1) (HW=12 FT)           | 2            | EA           |                | \$ -             |
| 66         | 466 - 6180 | WINGWALL (PW - 1) (HW=5 FT)            | 2            | EA           |                | \$ -             |
| 67         | 466 - 6182 | WINGWALL (PW - 1) (HW=7 FT)            | 1            | EA           |                | \$ -             |
| 68         | 466 - 6183 | WINGWALL (PW - 1) (HW=8 FT)            | 1            | EA           |                | \$ -             |
| 69         | 467 - 6139 | SET (TY I)(S= 4 FT)(HW= 3 FT)(4:1) (C) | 2            | EA           |                | \$ -             |
| 70         | 467 - 6179 | SET (TY I)(S= 5 FT)(HW= 4 FT)(6:1) (C) | 2            | EA           |                | \$ -             |
| 71         | 467 - 6224 | SET (TY I)(S= 6 FT)(HW= 6 FT)(4:1) (C) | 3            | EA           |                | \$ -             |
| 72         | 467 - 6357 | SET (TY II) (18 IN) (RCP) (3: 1) (P)   | 5            | EA           |                | \$ -             |
| 73         | 467 - 6363 | SET (TY II) (18 IN) (RCP) (6: 1) (P)   | 30           | EA           |                | \$ -             |
| 74         | 467 - 6394 | SET (TY II) (24 IN) (RCP) (6: 1) (C)   | 1            | EA           |                | \$ -             |
| 75         | 467 - 6395 | SET (TY II) (24 IN) (RCP) (6: 1) (P)   | 37           | EA           |                | \$ -             |
| 76         | 467 - 6423 | SET (TY II) (30 IN) (RCP) (6: 1) (P)   | 10           | EA           |                | \$ -             |
| 77         | 467 - 6449 | SET (TY II) (36 IN) (RCP) (3: 1) (P)   | 1            | EA           |                | \$ -             |
| 78         | 467 - 6453 | SET (TY II) (36 IN) (RCP) (6: 1) (C)   | 1            | EA           |                | \$ -             |
| 79         | 467 - 6454 | SET (TY II) (36 IN) (RCP) (6: 1) (P)   | 4            | EA           |                | \$ -             |
| 80         | 467 - 6462 | SET (TY II) (42 IN) (RCP) (3: 1) (P)   | 2            | EA           |                | \$ -             |
| 81         | 467 - 6486 | SET (TY II) (54 IN) (RCP) (3: 1) (P)   | 1            | EA           |                | \$ -             |
| 82         | 479 - 6006 | ADJUSTING INLET (CAP)                  | 1            | EA           |                | \$ -             |
| 83         | 502 - 6001 | BARRICADES, SIGNS AND TRAFFIC HANDLING | 30           | MO           |                | \$ -             |
| 84         | 506 - 6002 | ROCK FILTER DAMS (INSTALL) (TY 2)      | 1,200        | LF           |                | \$ -             |
| 85         | 506 - 6003 | ROCK FILTER DAMS (INSTALL) (TY 3)      | 958          | LF           |                | \$ -             |
| 86         | 506 - 6011 | ROCK FILTER DAMS (REMOVE)              | 2,158        | LF           |                | \$ -             |
| 87         | 506 - 6020 | CONSTRUCTION EXITS (INSTALL) (TY 1)    | 200          | SY           |                | \$ -             |
| 88         | 506 - 6024 | CONSTRUCTION EXITS (REMOVE)            | 200          | SY           |                | \$ -             |
| 89         | 506 - 6038 | TEMP SEDMT CONT FENCE (INSTALL)        | 22,064       | LF           |                | \$ -             |
| 90         | 506 - 6039 | TEMP SEDMT CONT FENCE (REMOVE)         | 22,064       | LF           |                | \$ -             |
| 91         | 508 - 6004 | CONSTRUCTING DETOURS (TY 2)            | 3,198        | SY           |                | \$ -             |
| 92         | 512 - 6009 | PORT CTB (FUR & INST)(LOW PROF)(TY 1)  | 300          | LF           |                | \$ -             |
| 93         | 512 - 6010 | PORT CTB (FUR & INST)(LOW PROF)(TY 2)  | 40           | LF           |                | \$ -             |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM # | TECH SPEC  | ITEM DESCRIPTION                       | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|------------|------------|----------------------------------------|--------------|--------------|----------------|------------------|
| 94         | 512 - 6057 | PORT CTB (REMOVE)(LOW PROF)(TY 1)      | 300          | LF           |                | \$ -             |
| 95         | 512 - 6058 | PORT CTB (REMOVE)(LOW PROF)(TY 2)      | 40.00        | LF           |                | \$ -             |
| 96         | 529 - 6008 | CONC CURB & GUTTER (TY II)             | 22,187       | LF           |                | \$ -             |
| 97         | 530 - 6004 | DRIVEWAYS (CONC)                       | 3,081        | SY           |                | \$ -             |
| 98         | 530 - 6005 | DRIVEWAYS (ACP)                        | 6,256        | SY           |                | \$ -             |
| 99         | 530 - 6008 | TURNOUTS (ACP)                         | 155          | SY           |                | \$ -             |
| 100        | 531 - 6002 | CONC SIDEWALKS (5")                    | 4,161        | SY           |                | \$ -             |
| 101        | 531 - 6004 | CURB RAMPS (TY 1)                      | 18           | EA           |                | \$ -             |
| 102        | 531 - 6005 | CURB RAMPS (TY 2)                      | 1            | EA           |                | \$ -             |
| 103        | 531 - 6008 | CURB RAMPS (TY 5)                      | 1            | EA           |                | \$ -             |
| 104        | 531 - 6010 | CURB RAMPS (TY 7)                      | 2            | EA           |                | \$ -             |
| 105        | 531 - 6013 | CURB RAMPS (TY 10)                     | 3            | EA           |                | \$ -             |
| 106        | 540 - 6001 | MTL W-BEAM GD FEN (TIM POST)           | 160          | LF           |                | \$ -             |
| 107        | 540 - 6007 | MTL BEAM GD FEN TRANS (TL2)            | 4            | EA           |                | \$ -             |
| 108        | 544 - 6001 | GUARDRAIL END TREATMENT (INSTALL)      | 5            | EA           |                | \$ -             |
| 109        | 560 - 6007 | MAILBOX INSTALL-S (WC-POST) TY 3       | 49           | EA           |                | \$ -             |
| 110        | 560 - 6008 | MAILBOX INSTALL-D (WC-POST) TY 3       | 8            | EA           |                | \$ -             |
| 111        | 618 - 6023 | CONDT (PVC) (SCH 40) (2")              | 875          | LF           |                | \$ -             |
| 112        | 618 - 6029 | CONDT (PVC) (SCH 40) (3")              | 1,035        | LF           |                | \$ -             |
| 113        | 618 - 6047 | CONDT (PVC) (SCH 80) (2") (BORE)       | 225          | LF           |                | \$ -             |
| 114        | 618 - 6054 | CONDT (PVC) (SCH 80) (3") (BORE)       | 450          | LF           |                | \$ -             |
| 115        | 620 - 6009 | ELEC CONDR (NO.6) BARE                 | 2,585        | LF           |                | \$ -             |
| 116        | 620 - 6010 | ELEC CONDR (NO.6) INSULATED            | 70           | LF           |                | \$ -             |
| 117        | 621 - 6005 | TRAY CABLE (4 CONDR) (12 AWG)          | 1,545        | LF           |                | \$ -             |
| 118        | 624 - 6010 | GROUND BOX TY D (162922)W/APRON        | 9            | EA           |                | \$ -             |
| 119        | 628 - 6008 | ELC SRV TY A 120/240 060(NS)SS(E)PS(U) | 2            | EA           |                | \$ -             |
| 120        | 636 - 6001 | ALUMINUM SIGNS (TY A)                  | 12           | SF           |                | \$ -             |
| 121        | 644 - 6001 | IN SM RD SN SUP&AM TY10BWG(1)SA(P)     | 49           | EA           |                | \$ -             |
| 122        | 644 - 6004 | IN SM RD SN SUP&AM TY10BWG(1)SA(T)     | 6            | EA           |                | \$ -             |
| 123        | 644 - 6068 | RELOCATE SM RD SN SUP&AM TY 10BWG      | 3            | EA           |                | \$ -             |
| 124        | 644 - 6076 | REMOVE SM RD SN SUP&AM                 | 4            | EA           |                | \$ -             |
| 125        | 658 - 6001 | INSTL DEL ASSM (D-SW)SZ 1(FX)GND       | 15           | EA           |                | \$ -             |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM # | TECH SPEC  | ITEM DESCRIPTION                        | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|------------|------------|-----------------------------------------|--------------|--------------|----------------|------------------|
| 126        | 658 - 6013 | INSTL DEL ASSM (D-SW)SZ (BR)CTB         | 12           | EA           |                | \$ -             |
| 127        | 658 - 6053 | INSTL OM ASSM (OM-3L)(TWT)GND           | 4            | EA           |                | \$ -             |
| 128        | 658 - 6057 | INSTL OM ASSM (OM-3R)(TWT)GND           | 4            | EA           |                | \$ -             |
| 129        | 658 - 6061 | INSTL DEL ASSM (D-SW)SZ 1(BRF)GF2       | 2            | EA           |                | \$ -             |
| 130        | 662 - 6004 | WK ZN PAV MRK NON-REMOV (W)4"(SLD)      | 41,171       | LF           |                | \$ -             |
| 131        | 662 - 6012 | WK ZN PAV MRK NON-REMOV (W)8"(SLD)      | 543          | LF           |                | \$ -             |
| 132        | 662 - 6016 | WK ZN PAV MRK NON-REMOV (W)24"(SLD)     | 134          | LF           |                | \$ -             |
| 133        | 662 - 6034 | WK ZN PAV MRK NON-REMOV (Y)4"(SLD)      | 41,352       | LF           |                | \$ -             |
| 134        | 662 - 6075 | WK ZN PAV MRK REMOV (W)24"(SLD)         | 24           | LF           |                | \$ -             |
| 135        | 666 - 6002 | REFL PAV MRK TY I (W)4"(BRK)(090MIL)    | 2,148        | LF           |                | \$ -             |
| 136        | 666 - 6005 | REFL PAV MRK TY I (W)4"(DOT)(090MIL)    | 84           | LF           |                | \$ -             |
| 137        | 666 - 6011 | REFL PAV MRK TY I (W)4"(SLD)(090MIL)    | 30,374       | LF           |                | \$ -             |
| 138        | 666 - 6035 | REFL PAV MRK TY I (W)8"(SLD)(090MIL)    | 948          | LF           |                | \$ -             |
| 139        | 666 - 6041 | REFL PAV MRK TY I (W)12"(SLD)(090MIL)   | 1,002        | LF           |                | \$ -             |
| 140        | 666 - 6047 | REFL PAV MRK TY I (W)24"(SLD)(090MIL)   | 533          | LF           |                | \$ -             |
| 141        | 666 - 6053 | REFL PAV MRK TY I (W)(ARROW)(090MIL)    | 12           | EA           |                | \$ -             |
| 142        | 666 - 6077 | REFL PAV MRK TY I (W)(WORD)(090MIL)     | 7            | EA           |                | \$ -             |
| 143        | 666 - 6110 | REFL PAV MRK TY I(W)(BIKE SYML)(090MIL) | 2            | EA           |                | \$ -             |
| 144        | 666 - 6119 | REFL PAV MRK TY I (Y)4"(BRK)(090MIL)    | 7,788        | LF           |                | \$ -             |
| 145        | 666 - 6125 | REFL PAV MRK TY I (Y)4"(SLD)(090MIL)    | 37,786       | LF           |                | \$ -             |
| 146        | 672 - 6007 | REFL PAV MRKR TY I-C                    | 48           | EA           |                | \$ -             |
| 147        | 672 - 6009 | REFL PAV MRKR TY II-A-A                 | 273          | EA           |                | \$ -             |
| 148        | 677 - 6001 | ELIM EXT PAV MRK & MRKS (4")            | 19,061       | LF           |                | \$ -             |
| 149        | 677 - 6003 | ELIM EXT PAV MRK & MRKS (8")            | 181          | LF           |                | \$ -             |
| 150        | 677 - 6005 | ELIM EXT PAV MRK & MRKS (12")           | 243          | LF           |                | \$ -             |
| 151        | 677 - 6007 | ELIM EXT PAV MRK & MRKS (24")           | 1,404        | LF           |                | \$ -             |
| 152        | 678 - 6001 | PAV SURF PREP FOR MRK (4")              | 78,180       | LF           |                | \$ -             |
| 153        | 678 - 6004 | PAV SURF PREP FOR MRK (8")              | 948          | LF           |                | \$ -             |
| 154        | 678 - 6006 | PAV SURF PREP FOR MRK (12")             | 1,002        | LF           |                | \$ -             |
| 155        | 678 - 6008 | PAV SURF PREP FOR MRK (24")             | 533          | LF           |                | \$ -             |
| 156        | 678 - 6009 | PAV SURF PREP FOR MRK (ARROW)           | 12           | EA           |                | \$ -             |
| 157        | 678 - 6016 | PAV SURF PREP FOR MRK (WORD)            | 7            | EA           |                | \$ -             |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM #                                    | TECH SPEC   | ITEM DESCRIPTION                      | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|-----------------------------------------------|-------------|---------------------------------------|--------------|--------------|----------------|------------------|
| 158                                           | 680 - 6002  | INSTALL HWY TRF SIG (ISOLATED)        | 2            | EA           |                | \$ -             |
| 159                                           | 682 - 6001  | VEH SIG SEC (12")LED(GRN)             | 19           | EA           |                | \$ -             |
| 160                                           | 682 - 6002  | VEH SIG SEC (12")LED(GRN ARW)         | 8            | EA           |                | \$ -             |
| 161                                           | 682 - 6003  | VEH SIG SEC (12")LED(YEL)             | 19           | EA           |                | \$ -             |
| 162                                           | 682 - 6004  | VEH SIG SEC (12")LED(YEL ARW)         | 14           | EA           |                | \$ -             |
| 163                                           | 682 - 6005  | VEH SIG SEC (12")LED(RED)             | 19           | EA           |                | \$ -             |
| 164                                           | 682 - 6006  | VEH SIG SEC (12")LED(RED ARW)         | 6            | EA           |                | \$ -             |
| 165                                           | 682 - 6018  | PED SIG SEC (LED)(COUNTDOWN)          | 16           | EA           |                | \$ -             |
| 166                                           | 682 - 6023  | BACK PLATE (12")(3 SEC)               | 17           | EA           |                | \$ -             |
| 167                                           | 682 - 6024  | BACK PLATE (12")(4 SEC)               | 6            | EA           |                | \$ -             |
| 168                                           | 682 - 6025  | BACK PLATE (12")(5 SEC)               | 2            | EA           |                | \$ -             |
| 169                                           | 684 - 6028  | TRF SIG CBL (TY A)(14 AWG)(2 CONDR)   | 2,530        | LF           |                | \$ -             |
| 170                                           | 684 - 6031  | TRF SIG CBL (TY A)(14 AWG)(5 CONDR)   | 4,487        | LF           |                | \$ -             |
| 171                                           | 684 - 6033  | TRF SIG CBL (TY A)(14 AWG)(7 CONDR)   | 1,669        | LF           |                | \$ -             |
| 172                                           | 684 - 6049  | TRF SIG CBL (TY A)(16 AWG)(3 CONDR)   | 1,630        | LF           |                | \$ -             |
| 173                                           | 685 - 6002  | RELOCATE RDSD FLASH BEACON ASSEMBLY   | 2            | EA           |                | \$ -             |
| 174                                           | 685 - 6004  | INSTL RDSD FLSH BCN ASSM (SOLAR PWRD) | 4            | EA           |                | \$ -             |
| 175                                           | 685 - 6005  | RELOCT RDSD FLSH BCN AM (SOLAR PWRD)  | 2            | EA           |                | \$ -             |
| 176                                           | 686 - 6039  | INS TRF SIG PL AM(S)1 ARM(36')LUM     | 5            | EA           |                | \$ -             |
| 177                                           | 686 - 6043  | INS TRF SIG PL AM(S)1 ARM(40')LUM     | 1            | EA           |                | \$ -             |
| 178                                           | 686 - 6047  | INS TRF SIG PL AM(S)1 ARM(44')LUM     | 2            | EA           |                | \$ -             |
| 179                                           | 687 - 6001  | PED POLE ASSEMBLY                     | 9            | EA           |                | \$ -             |
| 180                                           | 688 - 6002  | PED DETECT PUSH BUTTON (STANDARD)     | 16           | EA           |                | \$ -             |
| 181                                           | 690 - 6029  | INSTALL OF SIGNAL RELATED SIGNS       | 16           | EA           |                | \$ -             |
| 182                                           | 6002 - 6001 | VIVDS PROCESSOR SYSTEM                | 2            | EA           |                | \$ -             |
| 183                                           | 6002 - 6002 | VIVDS CAMERA ASSEMBLY                 | 8            | EA           |                | \$ -             |
| 184                                           | 6002 - 6003 | VIVDS SET-UP SYSTEM                   | 2            | EA           |                | \$ -             |
| 185                                           | 6002 - 6004 | VIVDS CENTRAL CONTROL                 | 2            | EA           |                | \$ -             |
| 186                                           | 6002 - 6005 | VIVDS COMMUNICATION CABLE (COAXIAL)   | 1,653        | LF           |                | \$ -             |
| 187                                           | 6058 - 6001 | BBU SYSTEM (EXTERNAL BATT CABINET)    | 2            | EA           |                | \$ -             |
| 188                                           | 500-6001    | MOBILIZATION                          | 1            | LS           | \$ -           | \$ -             |
| <b>BASE BID - DACY LANE ROADWAY Sub Total</b> |             |                                       |              |              |                | <b>\$ -</b>      |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.



PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM #                               | TECH SPEC  | ITEM DESCRIPTION                        | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|------------------------------------------|------------|-----------------------------------------|--------------|--------------|----------------|------------------|
| <b>ADD ALTERNATE - LOIS LANE ROADWAY</b> |            |                                         |              |              |                |                  |
| A-1                                      | 100 - 6002 | PREPARING ROW                           | 22           | STA          |                | \$ -             |
| A-2                                      | 110 - 6001 | EXCAVATION (ROADWAY)                    | 3,944        | CY           |                | \$ -             |
| A-3                                      | 132 - 6003 | EMBANKMENT (FINAL)(ORD COMP)(TY B)      | 7,858        | CY           |                | \$ -             |
| A-4                                      | 132 - 6005 | EMBANKMENT (FINAL)(ORD COMP)(TY C)      | 11,787       | CY           |                | \$ -             |
| A-5                                      | 247 - 6366 | FL BS (CMP IN PLC)(TY A GR 5)(FNAL POS) | 1,966        | CY           |                | \$ -             |
| A-6                                      | 260 - 6002 | LIME (HYDRATED LIME (SLURRY))           | 276          | TON          |                | \$ -             |
| A-7                                      | 260 - 6009 | LIME TRT (EXST MATL)(10")               | 10,494       | SY           |                | \$ -             |
| A-8                                      | 310 - 6001 | PRIME COAT (MULTI OPTION)               | 1,914        | GAL          |                | \$ -             |
| A-9                                      | 341 - 6008 | D-GR HMA TY-B PG64-22                   | 2,066        | TON          |                | \$ -             |
| A-10                                     | 341 - 6028 | D-GR HMA TY-C PG70-22                   | 1,005        | TON          |                | \$ -             |
| A-11                                     | 432 - 6024 | RIPRAP (STONE COMMON)(DRY)(12 IN)       | 696          | CY           |                | \$ -             |
| A-12                                     | 450 - 6032 | RAIL (TY C223)                          | 442          | LF           |                | \$ -             |
| A-13                                     | 462 - 6042 | CONC BOX CULV (12 FT X 8 FT)            | 728          | LF           |                | \$ -             |
| A-14                                     | 466 - 6159 | WINGWALL (FW - S) (HW=12 FT)            | 1            | EA           |                | \$ -             |
| A-15                                     | 466 - 6173 | WINGWALL (PW - 1) (HW=12 FT)            | 1            | EA           |                | \$ -             |
| A-16                                     | 529 - 6008 | CONC CURB & GUTTER (TY II)              | 428          | LF           |                | \$ -             |
| A-17                                     | 531 - 6002 | CONC SIDEWALKS (5")                     | 133          | SY           |                | \$ -             |
| A-18                                     | 531 - 6004 | CURB RAMPS (TY 1)                       | 2            | EA           |                | \$ -             |
| A-19                                     | 666 - 6012 | REFL PAV MRK TY I (W)4"(SLD)(100MIL)    | 4,044        | LF           |                | \$ -             |
| A-20                                     | 666 - 6036 | REFL PAV MRK TY I (W)8"(SLD)(100MIL)    | 161          | LF           |                | \$ -             |
| A-21                                     | 666 - 6042 | REFL PAV MRK TY I (W)12"(SLD)(100MIL)   | 154          | LF           |                | \$ -             |
| A-22                                     | 666 - 6048 | REFL PAV MRK TY I (W)24"(SLD)(100MIL)   | 36           | LF           |                | \$ -             |
| A-23                                     | 666 - 6054 | REFL PAV MRK TY I (W)(ARROW)(100MIL)    | 2            | EA           |                | \$ -             |
| A-24                                     | 666 - 6078 | REFL PAV MRK TY I (W)(WORD)(100MIL)     | 2            | EA           |                | \$ -             |
| A-25                                     | 666 - 6126 | REFL PAV MRK TY I (Y)4"(SLD)(100MIL)    | 4,181        | LF           |                | \$ -             |
| A-26                                     | 672 - 6009 | REFL PAV MRKR TY II-A-A                 | 84           | EA           |                | \$ -             |
| A-27                                     | 678 - 6001 | PAV SURF PREP FOR MRK (4")              | 8,225        | LF           |                | \$ -             |
| A-28                                     | 678 - 6004 | PAV SURF PREP FOR MRK (8")              | 161          | LF           |                | \$ -             |
| A-29                                     | 678 - 6006 | PAV SURF PREP FOR MRK (12")             | 154          | LF           |                | \$ -             |
| A-30                                     | 678 - 6008 | PAV SURF PREP FOR MRK (24")             | 36           | LF           |                | \$ -             |
| A-31                                     | 678 - 6009 | PAV SURF PREP FOR MRK (ARROW)           | 2            | EA           |                | \$ -             |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM #                                 | TECH SPEC  | ITEM DESCRIPTION                     | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|--------------------------------------------|------------|--------------------------------------|--------------|--------------|----------------|------------------|
| A-32                                       | 678 - 6016 | PAV SURF PREP FOR MRK (WORD)         | 2            | EA           |                | \$ -             |
| A-33                                       | 160 - 6003 | FURNISHING AND PLACING TOPSOIL (4")  | 16,853       | SY           |                | \$ -             |
| A-34                                       | 164 - 6003 | BROADCAST SEED (PERM) (RURAL) (CLAY) | 16,853       | SY           |                | \$ -             |
| A-35                                       | 164 - 6009 | BROADCAST SEED (TEMP) (WARM)         | 4,213        | SY           |                | \$ -             |
| A-36                                       | 164 - 6011 | BROADCAST SEED (TEMP) (COOL)         | 4,213        | SY           |                | \$ -             |
| A-37                                       | 166 - 6002 | FERTILIZER                           | 0.1          | TON          |                | \$ -             |
| A-38                                       | 168 - 6001 | VEGETATIVE WATERING                  | 169          | MG           |                | \$ -             |
| A-39                                       | 506 - 6002 | ROCK FILTER DAMS (INSTALL) (TY 2)    | 120          | LF           |                | \$ -             |
| A-40                                       | 506 - 6003 | ROCK FILTER DAMS (INSTALL) (TY 3)    | 83           | LF           |                | \$ -             |
| A-41                                       | 506 - 6011 | ROCK FILTER DAMS (REMOVE)            | 203          | LF           |                | \$ -             |
| A-42                                       | 506 - 6020 | CONSTRUCTION EXITS (INSTALL) (TY 1)  | 200          | SY           |                | \$ -             |
| A-43                                       | 506 - 6024 | CONSTRUCTION EXITS (REMOVE)          | 200          | SY           |                | \$ -             |
| A-44                                       | 644 - 6001 | IN SM RD SN SUP&AM TY10BWG(1)SA(P)   | 3            | EA           |                | \$ -             |
| A-45                                       | 500-6001   | MOBILIZATION                         | 1            | LS           | \$ -           | \$ -             |
| <b>ADD ALTERNATE - LOIS LANE Sub Total</b> |            |                                      |              |              |                | <b>\$ -</b>      |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM #                          | TECH SPEC | ITEM DESCRIPTION                                          | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|-------------------------------------|-----------|-----------------------------------------------------------|--------------|--------------|----------------|------------------|
| <b>BASE BID - GOFORTH WATERLINE</b> |           |                                                           |              |              |                |                  |
| WL-1                                | 15200     | 16" PVC C900 AWWA DR 18 Water Line w/ Bedding             | 15,335       | LF           |                | \$ -             |
| WL-2                                | 15200     | 12" PVC C900 AWWA DR 18 Water Line w/ Bedding             | 2,730        | LF           |                | \$ -             |
| WL-3                                | 15200     | 8" PVC C900 AWWA DR 18 Water Line w/ Bedding              | 303          | LF           |                | \$ -             |
| WL-4                                | 15200     | 6" PVC C900 AWWA DR 18 Water Line w/ Bedding              | 1,535        | LF           |                | \$ -             |
| WL-5                                | 15200     | 4" PVC C900 AWWA DR 18 Water Line w/ Bedding              | 400          | LF           |                | \$ -             |
| WL-6                                | 15200     | 3" PVC ASTM D2241 SDR 21 Water Line w/ Bedding            | 100          | LF           |                | \$ -             |
| WL-7                                | 15200     | 2" PVC ASTM D2241 SDR 21 Water Line w/ Bedding            | 35           | LF           |                | \$ -             |
| WL-8                                | 15230     | 1" Poly Tubing Water Service Line                         | 2,170        | LF           |                | \$ -             |
| WL-9                                | 15150     | 30" Bored Steel Casing                                    | 376          | LF           |                | \$ -             |
| WL-10                               | 15150     | 24" Bored Steel Casing                                    | 125          | LF           |                | \$ -             |
| WL-11                               | 15150     | 16" Bored Steel Casing                                    | 35           | LF           |                | \$ -             |
| WL-12                               | 15240     | 24" HDPE Casing (Open Cut)                                | 20           | LF           |                | \$ -             |
| WL-13                               | 15150     | 30" Steel Casing (Open Cut)                               | 378          | LF           |                | \$ -             |
| WL-14                               | 15150     | 24" Steel Casing (Open Cut)                               | 275          | LF           |                | \$ -             |
| WL-15                               | 15150     | 16" Steel Casing (Open Cut)                               | 169          | LF           |                | \$ -             |
| WL-16                               | 15150     | 8" Steel Casing (Open Cut)                                | 75           | LF           |                | \$ -             |
| WL-17                               | 15200     | 2" PVC Schedule 40 or HDPE (DR 13.5) Casing (Open Cut)    | 1,895        | LF           |                | \$ -             |
| WL-18                               | 15150     | 24" Steel Casing Over Existing 12" Water Line             | 75           | LF           |                | \$ -             |
| WL-19                               | 15150     | 14" Steel Casing Over Existing 6" Water Line              | 75           | LF           |                | \$ -             |
| WL-20                               | 15200     | Bore for 16" Pipe (No Casing)                             | 340          | LF           |                | \$ -             |
| WL-21                               | 15405     | 16" Butterfly Valve                                       | 17           | EA           |                | \$ -             |
| WL-22                               | 15405     | 12" Butterfly Valve                                       | 9            | EA           |                | \$ -             |
| WL-23                               | 15400     | 8" Gate Valve                                             | 6            | EA           |                | \$ -             |
| WL-24                               | 15400     | 6" Gate Valve                                             | 2            | EA           |                | \$ -             |
| WL-25                               | 15400     | 4" Gate Valve                                             | 2            | EA           |                | \$ -             |
| WL-26                               | 15400     | 3" Gate Valve                                             | 1            | EA           |                | \$ -             |
| WL-27                               | 15500     | Fire Hydrant Assembly                                     | 17           | EA           |                | \$ -             |
| WL-28                               | 15225     | Flush Valve Assembly                                      | 5            | EA           |                | \$ -             |
| WL-29                               | 15420     | 2" Combination Air Release and Vacuum Valve Assembly      | 5            | EA           |                | \$ -             |
| WL-30                               | 15225     | Reconnection of Existing 5/8" x 3/4" Standard Water Meter | 26           | EA           |                | \$ -             |
| WL-31                               | 15225     | Reconnection of Existing 1-1/2" Water Meter               | 1            | EA           |                | \$ -             |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM #                                    | TECH SPEC | ITEM DESCRIPTION                                                                      | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|-----------------------------------------------|-----------|---------------------------------------------------------------------------------------|--------------|--------------|----------------|------------------|
| WL-32                                         | 15225     | Relocate and Reinstall of Existing Standard 5/8" x 3/4" Water Meter                   | 33           | EA           |                | \$ -             |
| WL-33                                         | 15000     | Labor and Equipment for Tie-In to Existing 2" Water Line                              | 1            | EA           |                | \$ -             |
| WL-34                                         | 15000     | Labor and Equipment for Tie-In to Existing 3" Water Line                              | 1            | EA           |                | \$ -             |
| WL-35                                         | 15000     | Labor and Equipment for Tie-In to Existing 4" Water Line                              | 3            | EA           |                | \$ -             |
| WL-36                                         | 15000     | Labor and Equipment for Tie-In to Existing 8" Water Line                              | 2            | EA           |                | \$ -             |
| WL-37                                         | 15000     | Labor and Equipment for Tie-In to Existing 12" Water Line                             | 1            | EA           |                | \$ -             |
| WL-38                                         | 15000     | Labor & Equipment to Relocate & Reinstall 1-1/2" Water Meter, 1-1/2" RPZ, and 6" RPDA | 1            | LS           |                | \$ -             |
| WL-39                                         | 15200     | 16" Mechancial Joint (Meg-a-Lug) Restraint                                            | 94           | EA           |                | \$ -             |
| WL-40                                         | 15200     | 12" Mechancial Joint (Meg-a-Lug) Restraint                                            | 39           | EA           |                | \$ -             |
| WL-41                                         | 15200     | 8" Mechancial Joint (Meg-a-Lug) Restraint                                             | 11           | EA           |                | \$ -             |
| WL-42                                         | 15200     | 6" Mechancial Joint (Meg-a-Lug) Restraint                                             | 6            | EA           |                | \$ -             |
| WL-43                                         | 15200     | 4" Mechancial Joint (Meg-a-Lug) Restraint                                             | 14           | EA           |                | \$ -             |
| WL-44                                         | 15200     | 16" Bell Restraint Harness                                                            | 48           | EA           |                | \$ -             |
| WL-45                                         | 15200     | 12" Bell Restraint Harness                                                            | 27           | EA           |                | \$ -             |
| WL-46                                         | 15200     | 8" Bell Restraint Harness                                                             | 13           | EA           |                | \$ -             |
| WL-47                                         | 15200     | 6" Bell Restraint Harness                                                             | 4            | EA           |                | \$ -             |
| WL-48                                         | 15200     | 3" Bell Restraint Harness                                                             | 4            | EA           |                | \$ -             |
| WL-49                                         | 15000     | 12" x 12" Hot Tap Assembly with 12" Gate Valve                                        | 1            | EA           |                | \$ -             |
| WL-50                                         | 15000     | 8" x 8" Hot Tap Assembly with 8" Gate Valve                                           | 1            | EA           |                | \$ -             |
| WL-51                                         | 15000     | 12" x 2" Saddle Tap with 2" Gate Valve                                                | 1            | EA           |                | \$ -             |
| WL-52                                         | 2610      | Base Repair for Gravel and Dirt Driveways                                             | 745          | LF           |                | \$ -             |
| WL-53                                         | 2510      | Asphalt Repair for Asphalt Driveways                                                  | 210          | LF           |                | \$ -             |
| WL-54                                         | 2050      | Equipment and Labor to Clear Easement ROW by Mulching Brush                           | 360          | LF           |                | \$ -             |
| WL-55                                         | 15100     | Miscellaneous Ductile Iron Fittings                                                   | 5.3          | TON          |                | \$ -             |
| WL-56                                         | 13300     | Trench Safety Protection System                                                       | 19,000       | LF           |                | \$ -             |
| WL-57                                         | 2700      | Seeding for Erosion Control (Revegetation)                                            | 2,000        | SY           |                | \$ -             |
| WL-58                                         | 15100     | 16" Foster Adapter                                                                    | 23           | EA           |                | \$ -             |
| WL-59                                         | 15100     | 12" Foster Adapter                                                                    | 10           | EA           |                | \$ -             |
| WL-60                                         | 15100     | 8" Foster Adapter                                                                     | 9            | EA           |                | \$ -             |
| WL-61                                         | 15100     | 6" Foster Adapter                                                                     | 2            | EA           |                | \$ -             |
| WL-62                                         | 15300     | Chlorination                                                                          | 1            | LS           |                | \$ -             |
| <b>BASE BID - GOFORTH WATERLINE Sub Total</b> |           |                                                                                       |              |              |                | <b>\$ -</b>      |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM #                               | TECH SPEC | ITEM DESCRIPTION                                               | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|------------------------------------------|-----------|----------------------------------------------------------------|--------------|--------------|----------------|------------------|
| <b>ALTERNATE BID - GOFORTH WATERLINE</b> |           |                                                                |              |              |                |                  |
| WL-1A                                    | 15200     | 16" PVC C900 AWWA DR 18 Water Line w/ Bedding                  | 13,955       | LF           |                | \$ -             |
| WL-2A                                    | 15200     | 12" PVC C900 AWWA DR 18 Water Line w/ Bedding                  | 2,160        | LF           |                | \$ -             |
| WL-3A                                    | 15200     | 8" PVC C900 AWWA DR 18 Water Line w/ Bedding                   | 33           | LF           |                | \$ -             |
| WL-4A                                    | 15200     | 6" PVC C900 AWWA DR 18 Water Line w/ Bedding                   | 1,535        | LF           |                | \$ -             |
| WL-5A                                    | 15200     | 4" PVC C900 AWWA DR 18 Water Line w/ Bedding                   | 400          | LF           |                | \$ -             |
| WL-6A                                    | 15200     | 2" PVC ASTM D2241 SDR 21 Water Line w/ Bedding                 | 35           | LF           |                | \$ -             |
| WL-7A                                    | 15230     | 1" Poly Tubing Water Service Line                              | 2,170        | LF           |                | \$ -             |
| WL-8A                                    | 15200     | 16" PVC C900 AWWA DR 18 RJ (Ceralok) Water Line w/ Bedding     | 880          | LF           |                | \$ -             |
| WL-9A                                    | 15200     | 12" PVC C900 AWWA DR 18 RJ (Ceralok) Water Line w/ Bedding     | 570          | LF           |                | \$ -             |
| WL-10A                                   | 15200     | 8" PVC C900 AWWA DR 18 RJ (Ceralok) Water Line w/ Bedding      | 270          | LF           |                | \$ -             |
| WL-11A                                   | 15200     | 3" PVC ASTM D2241 SDR 21 RJ (Yellowmine) Water Line w/ Bedding | 100          | LF           |                | \$ -             |
| WL-12A                                   | 15150     | 24" Bored Steel Casing                                         | 376          | LF           |                | \$ -             |
| WL-13A                                   | 15150     | 20" Bored Steel Casing                                         | 125          | LF           |                | \$ -             |
| WL-14A                                   | 15150     | 16" Bored Steel Casing                                         | 35           | LF           |                | \$ -             |
| WL-15A                                   | 15240     | 24" HDPE Casing (Open Cut)                                     | 20           | LF           |                | \$ -             |
| WL-16A                                   | 15150     | 24" Steel Casing (Open Cut)                                    | 355          | LF           |                | \$ -             |
| WL-17A                                   | 15150     | 20" Steel Casing (Open Cut)                                    | 275          | LF           |                | \$ -             |
| WL-18A                                   | 15240     | 16" Steel Casing (Open Cut)                                    | 169          | LF           |                | \$ -             |
| WL-19A                                   | 15150     | 6" Steel Casing (Open Cut)                                     | 75           | LF           |                | \$ -             |
| WL-20A                                   | 15200     | 2" PVC Schedule 40 or HDPE (DR 13.5) Casing (Open Cut)         | 1,395        | LF           |                | \$ -             |
| WL-21A                                   | 15240     | 2" Bored HDPE (DR 13.5) Casing                                 | 500          | LF           |                | \$ -             |
| WL-22A                                   | 15150     | 24" Steel Casing Over Existing 12" Water Line                  | 75           | LF           |                | \$ -             |
| WL-23A                                   | 15150     | 14" Steel Casing Over Existing 6" Water Line                   | 75           | LF           |                | \$ -             |
| WL-24A                                   | 15200     | Bore for 16" Pipe (No Casing)                                  | 340          | LF           |                | \$ -             |
| WL-25A                                   | 15405     | 16" Butterfly Valve                                            | 17           | EA           |                | \$ -             |
| WL-26A                                   | 15405     | 12" Butterfly Valve                                            | 9            | EA           |                | \$ -             |
| WL-27A                                   | 15400     | 8" Gate Valve                                                  | 6            | EA           |                | \$ -             |
| WL-28A                                   | 15400     | 6" Gate Valve                                                  | 2            | EA           |                | \$ -             |
| WL-29A                                   | 15400     | 4" Gate Valve                                                  | 2            | EA           |                | \$ -             |
| WL-30A                                   | 15400     | 3" Gate Valve                                                  | 1            | EA           |                | \$ -             |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM # | TECH SPEC | ITEM DESCRIPTION                                                                      | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|------------|-----------|---------------------------------------------------------------------------------------|--------------|--------------|----------------|------------------|
| WL-31A     | 15500     | Fire Hydrant Assembly                                                                 | 17           | EA           |                | \$ -             |
| WL-32A     | 15225     | Flush Valve Assembly                                                                  | 5            | EA           |                | \$ -             |
| WL-33A     | 15420     | 2" Combination Air Release and Vacuum Valve Assembly                                  | 5            | EA           |                | \$ -             |
| WL-34A     | 15225     | Reconnection of Existing 5/8" x 3/4" Standard Water Meter                             | 26           | EA           |                | \$ -             |
| WL-35A     | 15225     | Reconnection of Existing 1-1/2" Water Meter                                           | 1            | EA           |                | \$ -             |
| WL-36A     | 15225     | Relocate and Reinstall of Existing Standard 5/8" x 3/4" Water Meter                   | 33           | EA           |                | \$ -             |
| WL-37A     | 15000     | Labor and Equipment for Tie-In to Existing 2" Water Line                              | 1            | EA           |                | \$ -             |
| WL-38A     | 15000     | Labor and Equipment for Tie-In to Existing 3" Water Line                              | 1            | EA           |                | \$ -             |
| WL-39A     | 15000     | Labor and Equipment for Tie-In to Existing 4" Water Line                              | 3            | EA           |                | \$ -             |
| WL-40A     | 15000     | Labor and Equipment for Tie-In to Existing 8" Water Line                              | 2            | EA           |                | \$ -             |
| WL-41A     | 15000     | Labor and Equipment for Tie-In to Existing 12" Water Line                             | 1            | EA           |                | \$ -             |
| WL-42A     | 15000     | Labor & Equipment to Relocate & Reinstall 1-1/2" Water Meter, 1-1/2" RPZ, and 6" RPDA | 1            | LS           |                | \$ -             |
| WL-43A     | 15200     | 16" Mechancial Joint (Meg-a-Lug) Restraint                                            | 94           | EA           |                | \$ -             |
| WL-44A     | 15200     | 12" Mechancial Joint (Meg-a-Lug) Restraint                                            | 39           | EA           |                | \$ -             |
| WL-45A     | 15200     | 8" Mechancial Joint (Meg-a-Lug) Restraint                                             | 11           | EA           |                | \$ -             |
| WL-46A     | 15200     | 6" Mechancial Joint (Meg-a-Lug) Restraint                                             | 6            | EA           |                | \$ -             |
| WL-47A     | 15200     | 4" Mechancial Joint (Meg-a-Lug) Restraint                                             | 14           | EA           |                | \$ -             |
| WL-48A     | 15200     | 12" Bell Restraint Harness                                                            | 4            | EA           |                | \$ -             |
| WL-49A     | 15200     | 6" Bell Restraint Harness                                                             | 4            | EA           |                | \$ -             |
| WL-50A     | 15000     | 12" x 12" Hot Tap Assembly with 12" Gate Valve                                        | 1            | EA           |                | \$ -             |
| WL-51A     | 15000     | 8" x 8" Hot Tap Assembly with 8" Gate Valve                                           | 1            | EA           |                | \$ -             |
| WL-52A     | 15000     | 12" x 2" Saddle Tap with 2" Gate Valve                                                | 1            | EA           |                | \$ -             |
| WL-53A     | 2610      | Base Repair for Gravel and Dirt Driveways                                             | 745          | LF           |                | \$ -             |
| WL-54A     | 2510      | Asphalt Repair for Asphalt Driveways                                                  | 210          | LF           |                | \$ -             |
| WL-55A     | 2050      | Equipment and Labor to Clear Easement ROW by Mulching Brush                           | 360          | LF           |                | \$ -             |
| WL-56A     | 15100     | Miscellaneous Ductile Iron Fittings                                                   | 5.3          | TON          |                | \$ -             |
| WL-57A     | 13300     | Trench Safety Protection System                                                       | 19,000       | LF           |                | \$ -             |
| WL-58A     | 2700      | Seeding for Erosion Control (Revegetation)                                            | 2,000        | SY           |                | \$ -             |
| WL-59A     | 15100     | 16" Foster Adapter                                                                    | 23           | EA           |                | \$ -             |
| WL-60A     | 15100     | 12" Foster Adapter                                                                    | 10           | EA           |                | \$ -             |

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

PROJECT: Dacy Lane Roadway Improvements

BIDDER:

Full compensation for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract will be considered as included in the unit prices for the work set forth below, and no separate payment will be made for compliance with each and every provision of the Request for Bids, the Bid, the Specifications, and the Contract, unless separate payment is expressly provided for therein.

| BID ITEM #                                                                                                 | TECH SPEC | ITEM DESCRIPTION                                   | BID QUANTITY | UNIT MEASURE | UNIT COST (\$) | TOTAL AMOUNT BID |
|------------------------------------------------------------------------------------------------------------|-----------|----------------------------------------------------|--------------|--------------|----------------|------------------|
| WL-61A                                                                                                     | 15100     | 8" Foster Adapter                                  | 9            | EA           |                | \$ -             |
| WL-62A                                                                                                     | 15100     | 6" Foster Adapter                                  | 2            | EA           |                | \$ -             |
| WL-63A                                                                                                     | 15100     | 16" Ductile Iron Pipe CL 250 Water Line w/ Bedding | 100          | LF           |                | \$ -             |
| WL-64A                                                                                                     | 15240     | 18" HDPE (DR 11 DIPS) Directional Bore             | 400          | LF           |                | \$ -             |
| WL-65A                                                                                                     | 15300     | Chlorination                                       | 1            | LS           |                | \$ -             |
| <b>ALTERNATE BID - GOFORTH WATERLINE Sub Total</b>                                                         |           |                                                    |              |              |                | <b>\$ -</b>      |
| <b>BASE BID - DACY LANE ROADWAY Sub Total</b>                                                              |           |                                                    |              |              |                | <b>\$ -</b>      |
| <b>ADD ALTERNATE - LOIS LANE Sub Total</b>                                                                 |           |                                                    |              |              |                | <b>\$ -</b>      |
| <b>BASE BID - GOFORTH WATERLINE Sub Total *</b>                                                            |           |                                                    |              |              |                | <b>\$ -</b>      |
| <b>ALTERNATE BID - GOFORTH WATERLINE Sub Total *</b>                                                       |           |                                                    |              |              |                | <b>\$ -</b>      |
| * Bidder should only have a bid for either GOFORTH WATER BASE BID or GOFORTH WATER ALTERNATE BID, not both |           |                                                    |              |              |                |                  |
| <b>DACY LANE ROADWAY IMPROVEMENTS TOTAL BID</b>                                                            |           |                                                    |              |              |                | <b>\$ -</b>      |

NOTE: THE COURT MAY EITHER REJECT ALL BIDS OR AWARD A CONTRACT TO THE LOWEST AND BEST BID.

<sup>1</sup>Refer to the Technical Specifications section for a description of the specific reference number.

# CONFLICT OF INTEREST QUESTIONNAIRE

## FORM CIQ

For vendor doing business with local governmental entity

**This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.**

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

### OFFICE USE ONLY

Date Received

**1 Name of vendor who has a business relationship with local governmental entity.**

**2**  **Check this box if you are filing an update to a previously filed questionnaire.** (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

**3 Name of local government officer about whom the information is being disclosed.**

\_\_\_\_\_  
Name of Officer

**4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.**

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

Yes       No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

Yes       No

**5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.**

**6**  Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

**7**

\_\_\_\_\_  
Signature of vendor doing business with the governmental entity

\_\_\_\_\_  
Date



**CONFLICT OF INTEREST QUESTIONNAIRE**  
**For vendor doing business with local governmental entity**

A complete copy of Chapter 176 of the Local Government Code may be found at <http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm>. For easy reference, below are some of the sections cited on this form.

**Local Government Code § 176.001(1-a)**: "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

**Local Government Code § 176.003(a)(2)(A) and (B)**:

(a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:

\*\*\*

(2) the vendor:

- (A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that
  - (i) a contract between the local governmental entity and vendor has been executed;
  - or
  - (ii) the local governmental entity is considering entering into a contract with the vendor;
- (B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:
  - (i) a contract between the local governmental entity and vendor has been executed; or
  - (ii) the local governmental entity is considering entering into a contract with the vendor.

**Local Government Code § 176.006(a) and (a-1)**

(a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:

- (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
- (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
- (3) has a family relationship with a local government officer of that local governmental entity.

(a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:

- (1) the date that the vendor:
  - (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
  - (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or
- (2) the date the vendor becomes aware:
  - (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
  - (B) that the vendor has given one or more gifts described by Subsection (a); or
  - (C) of a family relationship with a local government officer.

## **Certificate of Interested Parties**

In 2015, the Texas Legislature adopted **House Bill 1295**, which added 2252.908 to the Texas Government Code and applies to all contracts entered into on or after January 1, 2016. Section 2252.908 (b)(1)(2) applies only to a contract of a governmental entity or state agency that requires an action or vote by the governing body of the entity or agency before the contract may be signed or that has a value of at least \$1 million. In addition, pursuant to Section 2252.908 (d), a governmental entity or state agency may not enter into a contract described by Subsection (b) with a business entity unless the business entity, in accordance with this section and rules adopted under this section, submits a disclosure of interested parties to the governmental entity or state agency at the time the business entity submits the signed contract to the governmental entity or state agency.

With regard to Hays County purchases, a vendor that is awarded a contract or purchase approved by Hays County Commissioner's Court is required to electronically complete a Form 1295 through the Texas Ethics Commission website ([https://www.ethics.state.tx.us/whatsnew/elf\\_info\\_form1295.htm](https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm)) and submit a signed and notarized copy of the form to the County. A contract, including County issued purchase order (if applicable), will not be enforceable or legally binding until the County receives and acknowledges receipt of the properly completed Form 1295 from the awarded vendor.

## CODE OF ETHICS FOR HAYS COUNTY

Public employment is a public trust. It is the policy of Hays County to promote and balance the objective of protecting government integrity and the objective of facilitating the recruitment and retention of personnel needed by Hays County. Such a policy implemented by prescribing essential standards of ethical conduct without creating unnecessary obstacles to entering public services.

Public servants must discharge their duties impartially so as to assure fair competitive access to governmental procurement by responsible contractors. Moreover, they should conduct themselves in such a manner as to foster public confidence in the integrity of the Hays County procurement organization.

To achieve the purpose of this article, it is essential that those doing business with Hays County also observe the ethical standards prescribed here.

It shall be a breach of ethics to attempt to influence any public employee, elected official or department head to breach the standards of ethical conduct set forth in this code.

It shall be a breach of ethics for any employee of Hays County or a vendor doing business with the county to participate directly or indirectly in a procurement when the employee or vendor knows that:

The employee or any member of the employee's immediate family, or household has a substantial financial interest pertaining to the procurement. This means ownership of 10% or more of the company involved and/or ownership of stock or other interest or such valued at \$2500.00 or more.

A business or organization in which the employee, or any member of the employee's immediate family, has a financial interest pertaining to the procurement.

Gratuities: It shall be a breach of ethics to offer, give or agree to give any employee of Hays County or for any employee to solicit, demand, accept or agree to accept from a vendor, a gratuity of consequence or any offer of employment in connection with any decision approval, disapproval, recommendation, preparation or any part of a program requirement or purchase request influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or controversy, any particular matter pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore pending before this government.

Kickbacks: It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for Hays County as an inducement for the award of a contract or order.

Contract Clause: The prohibition against gratuities and kickbacks prescribed above shall be conspicuously set forth in every contract and solicitation therefore.

Any effort to influence any employee, elected official, or department head to violate the standards of the code is grounds to void the contract. Please certify, by your signature below, that you understand the ethics policy of Hays County and in no way will attempt to violate the code.

SIGNATURE: \_\_\_\_\_

PRINT NAME & TITLE: \_\_\_\_\_

COMPANY NAME: \_\_\_\_\_

# Hays County Practices Related to Historically Underutilized Businesses

## 1. STATEMENT OF PRACTICES

Hays County will strive to ensure that all businesses, regardless of size, economic, social or ethnic status have an equal opportunity to participate in the County's procurement processes. The County is committed to promote full and equal business opportunity for all businesses to supply the goods and services needed to support the mission and operations of county government, and seeks to encourage the use of certified historically underutilized businesses (HUB's) through the use of race, ethnic and gender neutral means. It is the practice of Hays County to involve certified HUBs to the greatest extent feasible in the County's procurement of goods, equipment, services and construction projects while maintaining competition and quality of work standards. The County affirms the good faith efforts who recognize and practice similar business standards.

## 2. DEFINITIONS

Historically underutilized businesses (HUBs), also known as a disadvantaged business enterprise (DBE), are generally business enterprises at least 51% of which is owned and the management and daily business operations are controlled by one or more persons who is/are socially and economically disadvantaged because of his/her identification as a member of certain groups, including women, Black Americans, Mexican Americans, and other Americans of Hispanic origin, Asian Americans and American Indians.

Businesses include firms, corporations, sole proprietorships, vendors, suppliers, contractors, subcontractors, professionals and other similar references when referring to a business that provides goods and/or services regardless of the commodity category.

Certified HUB's include business enterprises that meet the definition of a HUB and who meet the certification requirements of certification agencies recognized by Hays County, as expressed below.

Statutory bid limit refers to the Texas Local Government Code provision that requires competitive bidding for many items valued at greater than \$50,000.

## 3. GUIDELINES

- a. Hays County, its contractors, their subcontractors and suppliers, as well as all vendors of goods, equipment and services, shall not discriminate on the basis of race, color, creed, gender, age, religion, national origin, citizenship, mental or physical disability, veteran's status or political affiliation in the award and/or performance of contracts. All entities doing business or anticipating doing business with the County shall support, encourage and implement affirmative steps toward a common goal of establishing equal opportunity for all citizens and businesses of the County.
- b. Vendors and/or contractors desiring to participate in the HUB program must successfully complete the certification process with the State of Texas or Texas Unified Certification Program. The vendor or contractor is also required to hold a current valid certification (title) from either of these entities.
- c. Vendors and/or contractors must be registered with the State Comptroller's web-based HUB directory and with the Comptroller's Centralized Master Bidder's List (CMBL). Hays

County will solicit bids from certified HUB's for state purchasing and public works contracts.

4. Hays County will actively seek and encourage HUBs to participate in all facets of the procurement process by:
  - a. Continuing to increase and monitor a database of certified HUB vendors, professionals and contractors. The database will be expanded to include products, areas of expertise and capabilities of each HUB firm.
  - b. Continuing to seek new communication links with HUB vendors, professionals and contractors to involve them in the procurement process.
  - c. Continuing to advertise bids on the County's website and in the newspapers including newspapers that target socially and economically disadvantaged communities.
5. As prescribed by law, the purchase of one or more items costing in excess of the statutory bid limit must comply with the competitive bid process. Where possible, those bids will be structured to include and encourage the participation of HUB firms in the procurement process by:
  - a. Division of proposed requisitions into reasonable lots in keeping with industry standards and competitive bid requirements.
  - b. Where feasible, assessment of bond and insurance requirements and the designing of such requirements to reasonably permit more than one business to perform the work.
  - c. Specifications of reasonable, realistic delivery schedules consistent with the County's actual requirements.
  - d. Specifications, terms and conditions reflecting the County's actual requirements are clearly stated, and do not impose unreasonable or unnecessary contract requirements.
6. A HUB practice statement shall be included in all specifications. The County will consider the bidder's responsiveness to the HUB Practices in the evaluation of bids and proposals. Failure to demonstrate a good faith effort to comply with the County's HUB practices may result in a bid or proposal being considered non-responsive to specifications.
7. Nothing in this practice statement shall be construed to require the County to award a contract other than to the lowest responsive bidder as required by law. This practice is narrowly tailored in accordance with applicable law.

Please sign for acknowledgement of the Hays County HUB Practices:

---

Signature

---

Date

# Hays County House Bill 89 Verification

I, \_\_\_\_\_ (Person name), the undersigned representative of \_\_\_\_\_ (Company or Business name, hereafter referred to as Company) being an adult over the age of eighteen (18) years of age, after being duly sworn by the undersigned notary, do hereby depose and verify under oath that the company named above, under the provisions of Subtitle F, Title 10, Government Code Chapter 2270:

1. Does not boycott Israel currently; and
2. Will not boycott Israel during the term of the contract.

*Pursuant to Section 2270.001, Texas Government Code:*

1. *“Boycott Israel” means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes; and*
2. *“Company” means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or any limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business associations that exist to make a profit.*

\_\_\_\_\_

\_\_\_\_\_

Signature of Company Representative

Date

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, personally appeared \_\_\_\_\_, the above-named person, who after by me being duly sworn, did swear and confirm that the above is true and correct.

NOTARY SEAL

\_\_\_\_\_

Notary Signature

\_\_\_\_\_

Date

# Hays County Purchasing Department Senate Bill 252 Certification

On this day, I, \_\_\_\_\_, the Purchasing Representative for Hays County in San Marcos, Texas, pursuant to Texas Government Code, Chapter 2252, Section 2252.152 and Section 2252.153, certify that I did review the website of the Comptroller of the State of Texas concerning the listing of companies that is identified under Section 806.051, Section 807.051 or Section 2253.253 and I have ascertained that the below-named company is not contained on said listing of companies which do business with Iran, Sudan or any Foreign Terrorist Organization.

\_\_\_\_\_

Company Name

\_\_\_\_\_

IFB or Vendor number

CERTIFICATION CHECK PERFORMED BY:

\_\_\_\_\_

Purchasing Representative

\_\_\_\_\_

Date

## Vendor References

List three (3) references of current customers who can verify the quality of service your company provides. The County prefers customers of similar size and scope of work to this proposal/bid. **This form must be returned with your bid/proposal.**

|               |
|---------------|
| REFERENCE ONE |
|---------------|

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Person and Title: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Scope & Duration of Contract: \_\_\_\_\_

|               |
|---------------|
| REFERENCE TWO |
|---------------|

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Person and Title: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Scope & Duration of Contract: \_\_\_\_\_

|                 |
|-----------------|
| REFERENCE THREE |
|-----------------|

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Person and Title: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Scope & Duration of Contract: \_\_\_\_\_



# Related Party Disclosure Form



Hays County strives to provide financial transparency to its taxpayers. Completion of this form will allow for added transparency into the procurement process by disclosing Vendor relationships with current or former Hays County employees. The existence of a relationship may not present a legal or ethical conflict for a Vendor. However, disclosure will allow for consideration of potential conflicts and/or ways to eliminate conflicts.

A Vendor who Employs any of the following is required to disclose the relationship on this form:

- Current Hays County employee (including elected or appointed official)(Complete Section A)
- Former Hays County employee who has been separated from Hays County for no less than four (4) years (including elected or appointed official) (Complete Section B)
- Person related within the 2<sup>nd</sup> degree of consanguinity or affinity to either of the above<sup>(1)</sup> (Complete Section C)

If no known relationships exist, complete Section D.

**This form is required to be completed in full and submitted with the proposal package.** A submitted proposal package that does not

incl  
ude  
this  
co  
mpl  
ete  
d  
for

Section A: Current Hays County Employee

---

m will be considered non-responsive and will not be eligible for an award.

Section B: Former Hays County Employee

---

Section C: Person Related to Current or Former Hays County Employee

Section D: No Known Relationships

If no relationships in accordance with the above exist or are known to exist, provide a written explanation below:

---

---

Em

Attach additional pages if necessary.

I, the undersigned, hereby certify that the information provided is true and complete to the best of my knowledge.

\_\_\_\_\_  
Name of Vendor

\_\_\_\_\_  
Signature of Certifying Official

\_\_\_\_\_  
Title of Certifying Official

\_\_\_\_\_  
Printed Name of Certifying Official

\_\_\_\_\_  
Date

<sup>(1)</sup>A degree of relationship is determined under Texas Government Code Chapter 573. (as outlined below)

| Relationship of Consanguinity                                                                                                                               |                 |                                                |                                                                           |                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                             | 1st Degree      | 2nd Degree                                     | 3rd Degree*                                                               | 4th Degree*                                                                                                                         |
| <b>Person</b>                                                                                                                                               | child or parent | grandchild, sister,<br>brother or grand-parent | great-grandchild, niece,<br>nephew, aunt,* uncle*<br>or great-grandparent | great-great-grandchild,<br>grandniece,<br>grandnephew, first<br>cousin, great aunt,*<br>great uncle* or great-<br>great-grandparent |
| * An aunt, uncle, great aunt or great uncle is related to a person by consanguinity only if he or she is the sibling of the person's parent or grandparent. |                 |                                                |                                                                           |                                                                                                                                     |

| Relationship of Affinity |            |            |
|--------------------------|------------|------------|
|                          | 1st Degree | 2nd Degree |
|                          |            |            |

|               |                                                                                                                          |                                                                                                                              |
|---------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Person</b> | spouse, mother-in-law, father-in-law, son-in-law,<br>daughter-in-law, stepson, stepdaughter,<br>stepmother or stepfather | brother-in-law, sister-in-law, spouse's grandparent,<br>spouse's grandchild, grandchild's spouse or spouse<br>of grandparent |
|---------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|

“Vendor” shall mean any individuals or entity that seeks to enter into a contract with Hays County.

“Employs” shall mean any relationship wherein Vendor has made arrangements to compensate an individual, directly or by way of a business organization in which the individual has a sharehold or ownership interest, even if that arrangement is contractual and/or on an hourly-charge basis.

**SECTION 5**  
**STANDARD FORM OF CONTRACT**

# STANDARD FORM OF CONTRACT

STATE OF TEXAS  
HAYS COUNTY

**THIS STANDARD FORM OF CONTRACT** (the “Contract”) is by and between HAYS COUNTY, TEXAS, a political subdivision of the State of Texas (hereinafter called “County”) and \_\_\_\_\_ called “Contractor”).

The County and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

## Article 1. Work

Contractor shall complete all Work as specified or indicated in the Contract Documents. The “Project” is generally described as follows:

Project No. IFB 2020-B17 – Dacy Lane Roadway Improvements

(Project Name)

## Article 2. Engineer of Record

The Project has been designed by LJA Engineering, INC, who is hereinafter called the “Engineer of Record” and who is to act as the County’s design professional.

## Article 3. Contract Time

The Work shall be Substantially Completed in 450 **standard workweek** days (the “Contract Time”). Following Substantial Completion, the Contractor shall proceed expeditiously with adequate forces and shall achieve Final Completion within the time specified in the Special Conditions.

## Article 4. Contract Price

County shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to paragraph 4.1 below (the “Contract Price”):

- 4.1 For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in the Bid Form Schedule of Rates and Prices, and as totaled below:

TOTAL OF ALL UNIT PRICES

\_\_\_\_\_ \$ \_\_\_\_\_ (dollars)  
(insert words)

As provided in the Standard Specifications, estimated quantities are not guaranteed, and determinations of actual quantities and classification are to be made by the Engineer of Record.

**Article 5. Contractor’s Representations**

In order to induce County to enter into this Contract, Contractor makes the following representations:

- 51 Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents including the “technical data”.
- 52 Contractor has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.
- 53 Contractor is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, performance and furnishing of the Work.
- 54 Contractor has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site which have been identified. Contractor acknowledges that such reports and drawings are not Contract Documents and may not be complete for Contractor’s purposes. Contractor acknowledges that the County and Engineer of Record do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to Underground Facilities at or contiguous to the site.
- 55 Contractor has correlated the information known to Contractor, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.

- 56 Contractor has given Engineer of Record written notice of all conflicts, errors, ambiguities or discrepancies that Contractor has discovered in the Contract Documents and the written resolution thereof by Engineer of Record is acceptable to Contractor, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 57 Contractor represents and agrees that there are no obligations, commitments, or impediments of any kind that will limit or prevent performance of its obligations under the Contract Documents.
- 58 Contractor warrants, represents, and agrees that if (i) it is a corporation or limited liability company, then it is a corporation duly organized, validly existing and in good standing under the laws of the State of Texas, or a foreign corporation or limited liability company duly authorized and in good standing to conduct business in the State of Texas, that it has all necessary corporate power and has received all necessary corporate approvals to execute and deliver this Contract, and the individual executing the Contract on behalf of Contractor has been duly authorized to act for and bind Contractor; or (ii) if it is a partnership, limited partnership, or limited liability partnership, then it has all necessary partnership power and has secured all necessary approvals to execute and deliver this Contract and perform all its obligations under the Contract Documents; and the individual executing this Contract on behalf of Contractor has been duly authorized to act for and bind Contractor.
- 59 Neither the execution and delivery of this Contract by Contractor nor the performance of its obligations under the Contract Documents will result in the violation of any provision, if a corporation, of its articles of incorporation or by-laws, if a limited liability company, of its articles of organization or regulations, or if a partnership, by any partnership agreement by which Contractor is bound, or any agreement by which Contractor is bound or to the best of the Contractor's knowledge and belief, will conflict with any order or decree of any court or governmental instrumentality relating to Contractor.
- 5.10 Except for the obligation of the County to pay Contractor the Contract Price pursuant to the terms of the Contract Documents, and to perform certain other obligations pursuant to the terms and conditions explicitly set forth in the Contract Documents, County shall have no liability to Contractor or to anyone claiming through or under Contractor by reason of the execution or performance of this Contract. Notwithstanding any obligation or liability of County to Contractor, no present or future partner or affiliate of County or any agent, officer, director, or employee of County, or of the various departments comprising Hays County, or anyone claiming under County has or shall have any personal liability to

Contractor or to anyone claiming through or under Contractor by reason of the execution or performance of this Contract.

**Article 6. Contract Documents**

The “Contract Documents,” which comprise the entire agreement between the County and Contractor concerning the Work, consist of the following:

- 6.1 This Standard Form of Contract
- 6.2 Performance Bond
- 6.3 Payment Bond
- 6.4 Maintenance Bond
- 6.5 Certificate of Insurance
- 6.6 Wage Rates
- 6.7 Standard Specifications
- 6.8 Special Provisions
- 6.9 Special Conditions
- 6.10 Technical Specifications
- 6.11 Plan Drawings
- 6.12 Addenda numbers            to           , inclusive
- 6.13 Contractor’s Bid Form
- 6.14 Documentation submitted by Contractor prior to Notice of Award.



- 6.15 The following which may be delivered or issued after the Effective Date of the Contract and are not attached hereto: All Written Amendments and other documents amending, modifying or supplementing the Contract Documents pursuant to applicable sections in the Standard Specifications.

The documents listed in paragraphs 6.2 et seq. above are attached to this Contract (except as expressly noted otherwise above).

There are no Contract Documents other than those listed above in this Article 6. The Contract Documents may only be amended, modified or supplemented as provided in the Standard Specifications.

#### **Article 7. Miscellaneous**

- 7.1 Terms used in this Contract which are defined in the Standard Specifications will have the meanings indicated in the Standard Specifications.
- 7.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 7.3 The County and Contractor each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.
- 7.4 Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the County and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken position.
- 7.5 Each party to this Contract hereby agrees and acknowledges that venue and jurisdiction of any suit, right, or cause of action arising out of or in connection with this Contract shall lie exclusively in Hays County, Texas. Furthermore, this

Contract shall be governed by and construed in accordance with the laws of the State of Texas, excluding, however, its choice of law rules.

- 7.6 The parties to this Contract agree that during the performance of the services under this Contract they will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The parties to this Contract will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; termination; rates of pay or other forms of compensation, and selection for training, including apprenticeship.
- 7.7 This Contract is for the sole and exclusive benefit of the parties hereto, and nothing in this Contract, express or implied, is intended to confer or shall be construed as conferring upon any other person any rights, remedies or any other type or types of benefits.
- 7.8 Each party to this Contract acknowledges that it and its counsel have reviewed this Contract and that the normal rules of construction are not applicable and there will be no presumption that any ambiguities will be resolved against the drafting party in the interpretation of this Contract.
- 7.9 Each party to this Contract, in the performance of this Contract, shall act in an individual capacity and not as agents, employees, partners, joint ventures or associates of one another. The employees or agents of one party shall not be deemed or construed to be the employees or agents of the other party for any purposes whatsoever.
- 7.10 Nothing in this Contract shall be deemed to waive, modify or amend any legal defense available at law or in equity to County, its past or present officers, employees, or agents or employees, nor to create any legal rights or claim on behalf of any third party. County does not waive, modify, or alter to any extent whatsoever the availability of the defense of governmental immunity under the laws of the State of Texas and of the United States.
- 7.11 To the extent, if any, that any provision in this Contract is in conflict with Tex. Gov't Code 552.001 et seq., as amended (the "Public Information Act"), the same shall be of no force or effect. Furthermore, it is expressly understood and agreed that County, its officers and employees may request advice, decisions and opinions of the Attorney General of the State of Texas in regard to the application

of the Public Information Act to any items or data furnished to County as to whether or not the same are available to the public. It is further understood that County's officers and employees shall have the right to rely on the advice, decisions and opinions of the Attorney General, and that County, its officers and employees shall have no liability or obligation to any party hereto for the disclosure to the public, or to any person or persons, of any items or data furnished to County by a party hereto, in reliance of any advice, decision or opinion of the Attorney General of the State of Texas.

7.12 County and Contractor have signed this Contract in triplicate. One counterpart each has been delivered to the County, Contractor and Engineer of Record. All portions of the Contract Documents have been signed, initialed or identified by County and Contractor or identified by Engineer of Record on their behalf.

7.13 This Contract and the Contract Documents represent the entire and integrated agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either oral or written. This Contract may be amended only by written instrument signed by each party to this Contract. NO OFFICIAL, EMPLOYEE, AGENT, OR REPRESENTATIVE OF THE COUNTY HAS ANY AUTHORITY, EITHER EXPRESS OR IMPLIED, TO AMEND THIS CONTRACT, EXCEPT PURSUANT TO SUCH EXPRESS AUTHORITY AS MAY BE GRANTED BY THE HAYS COUNTY COMMISSIONERS COURT.

This Contract will be effective on \_\_\_\_\_, 20\_\_\_\_\_(which is the "Effective Date" of the Contract).

COUNTY\_\_\_\_\_ CONTRACTOR\_\_\_\_\_

By: \_\_\_\_\_  
Ruben Becerra,  
Hays County Judge

By: \_\_\_\_\_  
Title: \_\_\_\_\_

[CORPORATE SEAL]

Attest \_\_\_\_\_

Attest \_\_\_\_\_

**SECTION 6  
WAGE RATES**

"General Decision Number: TX20200007 01/03/2020

Superseded General Decision Number: TX20190007

State: Texas

Construction Types: Heavy and Highway

Counties: Atascosa, Bandera, Bastrop, Bell, Bexar, Brazos, Burleson, Caldwell, Comal, Coryell, Guadalupe, Hays, Kendall, Lampasas, McLennan, Medina, Robertson, Travis, Williamson and Wilson Counties in Texas.

HEAVY (excluding tunnels and dams, not to be used for work on Sewage or Water Treatment Plants or Lift / Pump Stations in Bell, Coryell, McClennon and Williamson Counties) and HIGHWAY Construction Projects

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that

this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

|                     |                  |
|---------------------|------------------|
| Modification Number | Publication Date |
| 0                   | 01/03/2020       |

\* SUTX2011-006 08/03/2011

|                                       | Rates    | Fringes |
|---------------------------------------|----------|---------|
| CEMENT MASON/CONCRETE                 |          |         |
| FINISHER (Paving and Structures)..... | \$ 12.56 |         |
| ELECTRICIAN.....                      | \$ 26.35 |         |
| FORM BUILDER/FORM SETTER              |          |         |
| Paving & Curb.....                    | \$ 12.94 |         |
| Structures.....                       | \$ 12.87 |         |
| LABORER                               |          |         |
| Asphalt Raker.....                    | \$ 12.12 |         |
| Flagger.....                          | \$ 9.45  |         |
| Laborer, Common.....                  | \$ 10.50 |         |
| Laborer, Utility.....                 | \$ 12.27 |         |
| Pipelayer.....                        | \$ 12.79 |         |
| Work Zone Barricade Servicer.....     | \$ 11.85 |         |

PAINTER (Structures).....\$ 18.34

POWER EQUIPMENT OPERATOR:

Agricultural Tractor.....\$ 12.69  
Asphalt Distributor.....\$ 15.55  
Asphalt Paving Machine.....\$ 14.36  
Boom Truck.....\$ 18.36  
Broom or Sweeper.....\$ 11.04  
Concrete Pavement  
Finishing Machine.....\$ 15.48  
Crane, Hydraulic 80 tons  
or less.....\$ 18.36  
Crane, Lattice Boom 80  
tons or less.....\$ 15.87  
Crane, Lattice Boom over  
80 tons.....\$ 19.38  
Crawler Tractor.....\$ 15.67  
Directional Drilling  
Locator.....\$ 11.67  
Directional Drilling  
Operator.....\$ 17.24  
Excavator 50,000 lbs or  
Less.....\$ 12.88  
Excavator over 50,000 lbs...\$ 17.71  
Foundation Drill, Truck  
Mounted.....\$ 16.93  
Front End Loader, 3 CY or  
Less.....\$ 13.04  
Front End Loader, Over 3 CY.\$ 13.21  
Loader/Backhoe.....\$ 14.12  
Mechanic.....\$ 17.10  
Milling Machine.....\$ 14.18  
Motor Grader, Fine Grade....\$ 18.51  
Motor Grader, Rough.....\$ 14.63  
Pavement Marking Machine....\$ 19.17  
Reclaimer/Pulverizer.....\$ 12.88  
Roller, Asphalt.....\$ 12.78  
Roller, Other.....\$ 10.50

Scraper.....\$ 12.27  
 Spreader Box.....\$ 14.04  
 Trenching Machine, Heavy....\$ 18.48  
  
 Servicer.....\$ 14.51  
  
 Steel Worker  
     Reinforcing.....\$ 14.00  
     Structural.....\$ 19.29  
  
 TRAFFIC SIGNAL INSTALLER  
     Traffic Signal/Light Pole  
     Worker.....\$ 16.00  
  
 TRUCK DRIVER  
     Lowboy-Float.....\$ 15.66  
     Off Road Hauler.....\$ 11.88  
     Single Axle.....\$ 11.79  
     Single or Tandem Axle Dump  
     Truck.....\$ 11.68  
     Tandem Axle Tractor w/Semi  
     Trailer.....\$ 12.81  
  
 WELDER.....\$ 15.97

---

WELDERS - Receive rate prescribed for craft performing  
 operation to which welding is incidental.

=====  
  
 Note: Executive Order (EO) 13706, Establishing Paid Sick Leave  
 for Federal Contractors applies to all contracts subject to the  
 Davis-Bacon Act for which the contract is awarded (and any  
 solicitation was issued) on or after January 1, 2017. If this  
 contract is covered by the EO, the contractor must provide  
 employees with 1 hour of paid sick leave for every 30 hours  
 they work, up to 56 hours of paid sick leave each year.



Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

-----

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example:  
PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198

indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union

average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

---

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor

200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

"

SECTION 7  
PERFORMANCE BOND

# PERFORMANCE BOND

STATE OF TEXAS

COUNTY OF \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_

\_\_\_\_\_ of the City of \_\_\_\_\_

County of \_\_\_\_\_, and State of \_\_\_\_\_, as principal, and

authorized under the laws of the State of Texas to act as surety on bonds for principals, are held and firmly bound unto Hays County (County), in the penal sum of

\_\_\_\_\_ Dollars

(\$ \_\_\_\_\_) for the payment whereof, the said Principal and Surety bind themselves, their heirs, administrators, executors, successors, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written Agreement with the County, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_ (the "Agreement"), to which the said Agreement, along with the Contract Documents referenced therein are hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall faithfully perform said Agreement and shall in all respects duly and faithfully observe and perform all and singular the covenants, conditions and agreements in and by the Agreement agreed and covenanted by the Principal to be observed and performed, and according to the true intent and meaning of said Agreement and the Contract Documents hereto annexed, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code, as amended and all liabilities on this bond shall be determined in accordance with the provisions of said Chapter to the same extent as if it were copied at length herein.

SURETY, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Agreement or to the work performed thereunder, or to the Contract Documents referenced therein, shall in anyway affect the obligations on this bond, and it does hereby waive notice of such change, extension of time, alteration or addition to the terms on the Agreement, or to the work to be performed thereunder.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this \_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
PRINCIPAL

\_\_\_\_\_  
SURETY

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
NAME & TITLE

\_\_\_\_\_  
NAME & TITLE

\_\_\_\_\_  
ADDRESS

\_\_\_\_\_  
ADDRESS

(\_\_\_\_\_) \_\_\_\_\_  
PHONE NUMBER

(\_\_\_\_\_) \_\_\_\_\_  
PHONE NUMBER

The name and address of the Resident Agency of Surety is:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(\_\_\_\_\_) \_\_\_\_\_

\_\_\_\_\_

PHONE NUMBER

SIGNATURE OF LICENSED LOCAL  
RECORDING AGENT appointed to countersign on  
behalf of Surety (Required by Art. 21.09 of the  
Insurance Code)

\*\*\*\*\*

I, \_\_\_\_\_, having executed Bonds  
SIGNATURE

for \_\_\_\_\_ do hereby affirm I have  
NAME OF SURETY

verified that said Surety is now certified with Authority from either: (a) the Secretary of the Treasury of the United States if the project funding includes Federal monies; or (b) the State of Texas if none of the project funding is from Federal sources; and further, said Surety is in no way limited or restricted from furnishing Bond in the State of Texas for the amount and under conditions stated herein.



**SECTION 8  
PAYMENT BOND**

# PAYMENT BOND

STATE OF TEXAS

COUNTY OF \_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS: That \_\_\_\_\_

\_\_\_\_\_ of the City of \_\_\_\_\_

County of \_\_\_\_\_, and State of \_\_\_\_\_, as Principal (hereinafter referred to as the "Principal"), and

\_\_\_\_\_ authorized under the laws of the State of Texas to act as Surety on bonds for principals (hereinafter referred to as the "Surety"), are held and firmly bound unto Hays County, (hereinafter referred to as the "County"), in the penal sum of

\_\_\_\_\_ Dollars

(\$ \_\_\_\_\_) for the payment whereof, the said Principal and Surety bind themselves, their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

WHEREAS, the Principal has entered into a certain written agreement with the County, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, to \_\_\_\_\_

\_\_\_\_\_ (hereinafter referred to as the "Agreement"), which said Agreement and the Contract Documents incorporated therein are hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the said Principal shall pay all claimants supplying labor and material to him or a subcontractor in the prosecution of the Work provided for in said Agreement, then, this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, HOWEVER, that this bond is executed pursuant to the provisions of Chapter 2253 of the Texas Government Code, as amended and all liabilities on this bond shall be determined in accordance with the provisions of said Chapter to the same extent as if it were copied at length herein.

SURETY, for value received, stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Agreement or to the Work performed thereunder, or to the other Contract Documents accompanying the same, shall in anyway affect its obligation on this bond, and it does hereby waive notice of such change, extension of time, alteration or addition to the terms of the Agreement, or to the work to be performed thereunder or to the other Contract Documents accompanying the same.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this \_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_

PRINCIPAL

\_\_\_\_\_

SURETY

\_\_\_\_\_

SIGNATURE

\_\_\_\_\_

SIGNATURE

\_\_\_\_\_

NAME & TITLE

\_\_\_\_\_

NAME & TITLE

\_\_\_\_\_

ADDRESS

\_\_\_\_\_

ADDRESS

\_\_\_\_\_

( ) \_\_\_\_\_

PHONE NUMBER

( ) \_\_\_\_\_

PHONE NUMBER

The name and address of the Resident Agency of Surety is:

\_\_\_\_\_

\_\_\_\_\_

( ) \_\_\_\_\_

PHONE NUMBER

\_\_\_\_\_

SIGNATURE OF LICENSED LOCAL RECORDING AGENT appointed to countersign on behalf of Surety (Required by Art. 21.09 of the Insurance Code)

**SECTION 9  
CERTIFICATE OF INSURANCE**

### CERTIFICATE OF INSURANCE

TO: Hays County  
712 South Stagecoach Trail, Suite 1070  
San Marcos, TX 78667  
 (ADDRESS)

DATE: \_\_\_\_\_  
 Project No.: IFB 2021-B02  
 Project: Dacy Lane Roadway Improvements

THIS IS TO CERTIFY THAT \_\_\_\_\_  
 (Name and address of insured)

is, at the date of this certificate, insured by this Company with respect to the business operations hereinafter described for the types of Insurance and in accordance with the provisions of the standard policies used by this Company, and further hereinafter described. Exceptions to the standard policy noted on reverse side hereof.

|                        | TYPE OF INSURANCE |            |                     |
|------------------------|-------------------|------------|---------------------|
| POLICY NO.             | EFFECTIVE         | EXPIRES    | LIMITS OF LIABILITY |
| Workmen's Compensation |                   | 1 Person   | \$ _____            |
| Public Liability       |                   | 1 Accident | \$ _____            |
| Contingent Liability   |                   | 1 Person   | \$ _____            |
|                        |                   | 1 Accident | \$ _____            |
| Property Damage        |                   |            |                     |
| Builder's Risk         |                   |            |                     |
| Automobile             |                   |            |                     |
| Other                  |                   |            |                     |

The foregoing Policies (do) (do not) cover all sub-contractors.

Locations Covered: \_\_\_\_\_

Descriptions of Operations Covered: \_\_\_\_\_

The above policies either in the body thereof or by appropriate endorsement provide that they may not be changed or canceled by the insurer in less than five days after the insured has received written notice of such change or cancellation.

Where applicable local laws or regulations require more than five days actual notice of change or cancellation to the assured, the above policies contain such special requirements, either in the body thereof or by appropriate endorsement thereto attached.

\_\_\_\_\_  
 (Name of Insurer)

By: \_\_\_\_\_

Phone No. ( ) \_\_\_\_\_

Title: \_\_\_\_\_

**SECTION 10**  
**GENERAL CONDITIONS**

## General Conditions

THE CONTRACT GENERAL CONDITIONS SHALL BE AS SET FORTH IN THE STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS AND BRIDGES, ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION NOVEMBER 1, 2014, INCLUSIVE OF ITEMS 1 - 9 GENERAL REQUIRMENTS AND COVENANTS, AND APPLICABLE SPECIAL PROVISIONS (See Section 13 "Technical Specifications").

**SECTION 11**  
**SPECIAL CONDITIONS**



# Table of Contents

|                 |                                                           |
|-----------------|-----------------------------------------------------------|
| <b>I.</b>       | <b>County</b>                                             |
| <b>II.</b>      | <b>Program Manager</b>                                    |
| <b>III.</b>     | <b>The Construction Inspector</b>                         |
| <b>IV.</b>      | <b>Engineer of Record</b>                                 |
| <b>V.</b>       | <b>Insurance</b>                                          |
| <b>VI.</b>      | <b>Record ("As-Built") Drawings</b>                       |
| <b>VII.</b>     | <b>Limit of Financial Resources</b>                       |
| <b>VIII.</b>    | <b>Limits of Work and Payment</b>                         |
| <b>IX.</b>      | <b>State Sales Tax</b>                                    |
| <b>X.</b>       | <b>Completion of Work on Time</b>                         |
| <b>XI.</b>      | <b>Layout and Construction Stakes</b>                     |
| <b>XII.</b>     | <b>Safety</b>                                             |
| <b>XIII.</b>    | <b>Safety Restrictions - Work Near High Voltage Lines</b> |
| <b>XIV.</b>     | <b>Erosion Control</b>                                    |
| <b>XV.</b>      | <b>Discovery of Hazardous Materials</b>                   |
| <b>XVI.</b>     | <b>Submittals – Certificate of Compliance</b>             |
| <b>XVII.</b>    | <b>Unavailability of Materials</b>                        |
| <b>XVIII.</b>   | <b>Traffic Control</b>                                    |
| <b>XIX.</b>     | <b>Temporary Traffic Handling Devices</b>                 |
| <b>XX.</b>      | <b>Roadway Signs</b>                                      |
| <b>XXI.</b>     | <b>Project Signs</b>                                      |
| <b>XXII.</b>    | <b>Permits</b>                                            |
| <b>XXIII.</b>   | <b>Landscape Restoration</b>                              |
| <b>XXIV.</b>    | <b>Existing Fencing</b>                                   |
| <b>XXV.</b>     | <b>Easements</b>                                          |
| <b>XXVI.</b>    | <b>Limits of Contractor's Operation</b>                   |
| <b>XXVII.</b>   | <b>Maintenance of Pedestrian Walkways</b>                 |
| <b>XXVIII.</b>  | <b>Spoil</b>                                              |
| <b>XXIX.</b>    | <b>Materials Testing</b>                                  |
| <b>XXX.</b>     | <b>Pre-Construction Conference</b>                        |
| <b>XXXI.</b>    | <b>Weight Tickets</b>                                     |
| <b>XXXII.</b>   | <b>Confined Space Entry Program</b>                       |
| <b>XXXIII.</b>  | <b>Tree and Plant Protection</b>                          |
| <b>XXXIV.</b>   | <b>Prosecution and Progress</b>                           |
| <b>XXXV.</b>    | <b>Sanitary Provisions</b>                                |
| <b>XXXVI.</b>   | <b>Work Near Railroads</b>                                |
| <b>XXXVII.</b>  | <b>Clearance of Right of Way and Utilities</b>            |
| <b>XXXVIII.</b> | <b>GoForth Water Line</b>                                 |

**SPECIAL CONDITIONS**

**I. County**

Hays County, a political subdivision of the State of Texas, acting through its County Judge, or his designee, agents or employees, whom Contractor has entered into the Agreement and for whom the Work is to be performed, is referred to as "County". The County shall be contacted through its Purchasing Department for contract related subjects and through the County Engineer's office for design and construction related subjects:

Purchasing Department  
Hays County  
712 South Stagecoach Trl, Ste 1071  
San Marcos, TX 78666

County Engineer  
Hays County  
2171 Yarrington Road  
San Marcos, TX 78667

**II. The Construction Inspector**

**[COMPANY NAME]** is the "Construction Inspector" referred to herein and in the Contract Documents. The Construction Inspector will be responsible for performing construction engineering and inspection services on the Project.

**III. Engineer of Record**

**LJA ENGINEERING, INC** is the County's design professional, who shall provide professional engineering services as defined in the Texas Government Code Chapter 2254, Subchapter A, and referred to as the " Engineer of Record" in Article 2 of the "Standard Form of Contract" contained in the Contract Documents. Nothing contained in the Contract Documents shall create any contractual or agency relationship between the Engineer of Record and the Contractor.

**IV. Insurance**

The Contractor will carry Workmen's Compensation Insurance, Public Liability and Property Damage Insurance, and Automobile Insurance sufficient to provide adequate protection against damage claims which may arise from operations under the Contract Documents, in compliance with the following:

Contractors Insurance: Without limiting any of the other obligations or liabilities of the Contractor, during the term of the Agreement and prior to Final Completion, the Contractor and each subcontractor, at their own expense, shall purchase and maintain the herein stipulated minimum insurance with companies duly approved to do business in the State of Texas and satisfactory to the County. Certificates of each policy shall be delivered to the County before any work is started, along with a written statement from the issuing company stating that said policy shall not be canceled, non-renewed or materially changed without 30 days advance written notice being given to the County. Prior to the effective date of cancellation, Contractor must deliver to the County a replacement certificate of insurance or proof of reinstatement. A model Certificate of Insurance is illustrated herein. Coverage shall be of the following types and not less than the specified amounts:

- (a) workers' compensation as required by Texas law, with the policy endorsed to provide a waiver of subrogation as to the County; employer's liability insurance of not less than \$500,000 for each accident, \$500,000 disease--each employee, \$500,000 disease-policy limit.
  
- (b) commercial general liability insurance, including independent contractor's liability, completed operations and contractual liability covering, but not limited to, the liability assumed under the indemnification provisions of the Contract Documents, fully insuring Contractor's (or subcontractor's) liability for injury to or death of County's employees and third parties, extended to include personal injury liability coverage with damage to property of third parties, with minimum limits as set forth below:

|                                  |             |
|----------------------------------|-------------|
| General Aggregate                | \$1,000,000 |
| Operations Aggregate             | \$1,000,000 |
| Personal and Advertising Injury  | \$600,000   |
| Each Occurrence                  | \$600,000   |
| Fire Damage (any one fire)       | \$50,000    |
| Medical Expense (any one person) | \$5,000     |

The policy shall include coverage extended to apply to completed operations, asbestos hazards (if this project involves work with asbestos) and XCU (explosion, collapse and underground) hazards. The completed operations coverage must be maintained for a minimum of one year after Final Completion and acceptance of the Work, with evidence of same filed with County.

- (c) comprehensive automobile and truck liability insurance, covering owned, hired and non-owned vehicles, with a combined bodily injury and property damage minimum limit of \$600,000 per occurrence; or separate limits of \$250,000 for bodily injury (per person), \$500,000 bodily injury (per accident) and \$100,000 for property damage. Such insurance shall include coverage for loading and unloading hazards.

"Umbrella" Liability Insurance: The Contractor shall obtain, pay for and maintain umbrella liability insurance during the contract term, insuring Contractor for an amount of not less than \$1,000,000 per occurrence combined limit for bodily injury and property damage that follows form and applies in excess of the primary liability coverages required herein above. The policy shall provide "drop down" coverage where underlying primary insurance coverage limits are insufficient or exhausted. County and Project Engineer shall be named as additional insured.

#### Policy Endorsements and Special Conditions

- (a) Each insurance policy to be furnished by Contractor shall include the following conditions by endorsement to the policy:
  - (1) name the County, the Program Manager/GEC, the County's Representatives, the Construction Inspector and the Engineer of Record as an additional insureds to all applicable coverage;
  - (2) each policy shall require that 30 days prior to the cancellation, non-renewal or any material change in coverage, a notice thereof shall be given to County by certified mail.
  - (3) the term "County" shall include all authorities, boards, bureaus, commissions, divisions, departments and offices of the County and individual members, employees and agents thereof in their official capacities, and/or while acting on behalf of the County;
  - (4) the "Program Manager" represents and assists the County in the planning, design, review, and coordination of the design and construction phases of the project.
  - (5) the policy phrase "other insurance" shall not apply to the County where the County is an additional insured on the policy; and
  - (6) all provisions of the Contract Documents concerning liability, duty and standard of care together with the indemnification provision, shall be underwritten by contractual liability coverage sufficient to include such obligations within applicable policies.
- (b) Insurance furnished by the Contractor shall also be in accordance with the following requirements:
  - (1) any policy submitted shall not be subject to limitations, conditions or restrictions deemed inconsistent with the intent of the insurance requirements to be fulfilled by Contractor. The County's decision thereon shall be final;
  - (2) all policies are to be written through companies duly licensed to transact that class of insurance in the State of Texas; and
  - (3) all liability policies required herein shall be written with an "occurrence" basis coverage trigger.

- (c) Contractor agrees to the following:
- (1) Contractor hereby waives subrogation rights for loss or damage to the extent same are covered by insurance. Insurers shall have no right of recovery or subrogation against the County, it being the intention that the insurance (1) policies shall protect all parties to the Agreement and be primary coverage for all losses covered by the policies;
  - (2) companies issuing the insurance policies and Contractor shall have no recourse against the County for payment of any premiums or assessments for any deductibles, as all such premiums and deductibles are the sole responsibility and risk of the Contractor;
  - (3) approval, disapproval or failure to act by the County regarding any insurance supplied by the Contractor (or any subcontractors) shall not relieve the Contractor of full responsibility or liability for damages and accidents as set forth in the contract documents. Neither shall the bankruptcy, insolvency or denial of liability by the insurance company exonerate the Contractor from liability; and
  - (4) no special payments shall be made for any insurance that the Contractor and subcontractors are required to carry; all are included in the contract price and the contract unit prices.

Any of such insurance policies required under the Contract Documents may be written in combination with any of the others, where legally permitted, but none of the specified limits may be lowered thereby.

The Contractor shall furnish the County with satisfactory proof that it has provided adequate insurance coverage in amounts and by approved carriers as required by the Contract Documents.

#### **V. Record ("As-Built") Drawings**

The Contractor shall mark all changes and revisions on all of its copies of the working drawings during the course of the Project as they occur. Upon completion of the Project and prior to Final Acceptance and Payment, the Contractor shall submit to the Construction Inspector one set of its working drawings, dated and signed by the Contractor and its project superintendent and labeled as "As-Built", that shows all changes and revisions outlined above and that shows field locations of all above ground appurtenances including, but not limited to valves, fire hydrants and manholes. These as-built drawings shall be forwarded to the GEC and then to the County and become the property of the County. Each appurtenance shall be located by at least two (2) horizontal distances measured from existing, easily identifiable, immovable appurtenances such as fire hydrants or valves. Property pins can be used for as-builts tie-ins provided no existing utilities as previously described are available. Costs for delivering as-built drawings shall be subsidiary to other bid items.

#### **VI. Limit of Financial Resources**

The County has a limited amount of financial resources committed to this Project; therefore, it shall be understood by Contractor that the County may be required to change and/or delete any items which it may feel is necessary to accomplish all or part of the scope of work within its limit of financial resources. Contractor shall be entitled to no claim for damages or anticipated profits on any portion of work that may be omitted. At any time during the duration of the Project, the County reserves the right to omit any work from the Contract Documents. Unit prices for all items previously approved in the Contract Documents shall be used to delete or add work per change order.

## **VII. Limits of Work and Payment**

It shall be the obligation of the Contractor to complete all work included in the Contract Documents, so authorized by the County, as described in the Contract Documents and Technical Specifications. Any question arising as to the limits of work shall be left up to the interpretation of the Engineer and/or Inspector.

## **VIII. State Sales Tax**

On a contract awarded by a governmental entity for the construction of a publicly-owned improvement in a street right-of-way or other easement which has been dedicated to the public and to the Organization which qualifies for exemption pursuant to the provisions of Article 20.04 (F) of the Texas Limited Sales, Excise and Use Tax Act, the Contractor can probably be exempted in the following manner:

The Contractor may buy tax-free any materials incorporated into the project by issuing a resale certificate in lieu of paying the sales tax at the time of purchase. The Contractor may then accept an exemption certificate from the City for the materials.

Even with a separated contract, the rental of equipment and the purchase of items which do not ultimately become part of the physical structure will still be subject to state and local sales taxes.

## **IX. Completion of Work on Time**

The Contractor agrees that time is of the essence and that the definite value of damages which would result from delay would be incapable of ascertainment and uncertain, so that for each day of delay beyond the number of days herein agreed upon for the Substantial Completion of the Work specified in the Contract Documents and contracted for, after due allowance for such extension of time as is provided for under the provisions of the Contract, the County may withhold permanently from the Contractor's total compensation, not as penalty but as liquidated damages, the sum as specified in Special Specification 000-HC01 per calendar day.

Furthermore, it is agreed by the Contractor that the time period between Substantial Completion and Final Completion shall be no longer than **30** working days. This separate

time period shall be for completion of the Punch List, as set forth in Special Provision 005-HC01 Article 5.12.2.2.b of the Contract, Final Completion and Acceptance. In the event that Contractor fails to attain Final Completion on or before the expiration of the above said time period, the Contractor shall be subject to the remedies set forth in the Contract Documents. More specifically, the Contractor shall be subject to the terms set forth in Special Provision 008-HC01 under Article 8.7, Default of Contract. In addition to exercising its rights and remedies under the Contract Documents, the County may also exercise any remedy that may be available to it under the law or in equity.

**X. Layout and Construction Stakes**

All construction staking shall be performed by the Contractor at the Contractor's expense.

The Contractor shall coordinate with design engineer to identify all necessary elements for station development as well as identify the trees, shrubs, and grass areas designated to remain within the construction limits to prevent damage to these items.

**XI. Safety**

The Contractor must use methods of construction that meet or exceed Occupational Safety and Health Administration Standards and any other local, state or federal regulations for safety that are in effect. The Contractor will have a trench safety plan prepared and sealed by Contractor's registered professional engineer.

**XII. Maintenance Bond Term & Amount - OMITTED**

No Maintenance Bond is required.

**XIII. Safety Restrictions - Work Near High Voltage Lines**

The following procedures shall be followed for work near high voltage lines on the Project.

- (a) A warning sign not less than five (5) inches by seven (7) inches, painted yellow with black letters that are legible at twelve (12) feet shall be placed inside and outside vehicles such as cranes, derricks, power shovels, drilling rigs, pile drivers, hoisting equipment or similar apparatus. The warning sign shall read as follows: "Warning-Unlawful to Operate This Equipment Within Six Feet of High Voltage Lines".
- (b) Equipment that may be operated with ten (10) feet of high voltage lines shall have an insulating cage guard around the boom or arm (except backhoes or dippers), and insulator links on the lift hook connections.
- (c) When necessary to work within six (6) feet of high voltage electrical lines, notify the power company. The electric company will erect temporary mechanical barriers, de-energize the line, or raise or lower the line. All such

work done by the power company shall be at the expense of the contractor. The contractor shall maintain an accurate log of all such calls to the electric company.

- (d) No person shall work within six (6) feet of high voltage lines without protection measures having been taken as outlined in Paragraph C.

#### **XIV. Erosion Control**

Contractor shall comply with all laws prohibiting the pollution of any lake, stream, river, or wetland by the dumping of any refuse, rubbish, dredge material, or debris therein.

The Contractor will file the Notice of Intent (NOI) and the Notice of Termination (NOT) as the Project's operator. All required Permits and Notices shall be posted by the Contractor at the Project site.

Contractor shall apply temporary and/or permanent erosion and sedimentation controls, as specified in the plans or directed to disturbed roadside areas, fifteen feet and beyond from road pavement, prior to initiating road base operations. Following asphalt paving of road pavement, apply temporary and/or permanent erosion and sedimentation controls to remaining disturbed areas, as specified in the plans or as directed.

Contractor shall be responsible for the maintenance of all temporary and permanent water quality and erosion control measures proposed under the Storm Water Pollution Prevention Plan (SWPPP) or the Water Pollution Abatement Plan (WPAP) for the duration of the Project construction. Upon completion of construction and before the Construction Inspector issues the Certificate of Completion, Contractor shall be responsible for the removal of all temporary measures and the cleaning and resetting of all permanent measures. All costs associated with this work shall be considered subsidiary to other bid items and no additional compensation shall be allowed.

Contractor shall take special precautions during all periods of heavy rainfall and at all locations where storm water, groundwater and/or mud and debris may enter the sewer systems. All mud, stones, and debris that enter the sewer systems due to Contractor's operations, or Contractor's neglect, shall be cleaned from the system by Contractor. It shall be Contractor's responsibility to see that such storm water, groundwater and debris do not enter the sewer system. All costs for such work shall be merged in the unit prices bid and no additional compensation shall be allowed.

If it is necessary in the prosecution of the Work to interrupt existing surface drainage, sewers, or under drainage, temporary drainage shall be provided until permanent drainage work is completed. The construction of all temporary drainage installations shall be considered as incidental to the construction of the Work. Drainage ways shall be kept clear or other satisfactory provisions made for drainage.

Contractor shall be responsible for and shall take all reasonable and necessary precautions to preserve and protect all existing tile drains, sewers, and other subsurface drains, or parts thereof, which may be continued in service without change. Contractor shall repair, at its own expense, any and all damage to such facilities resulting from negligence or carelessness on the part of its operations.



The Construction Inspector shall be responsible for the monitoring and inspection of the erosion control measures by completion of the Construction Pollution Prevention Plan Inspection and Maintenance Report, as required for coverage under the Texas Pollutant Discharge Elimination System (TPDES) General Construction Permit (TXR150000).

**XV. Discovery of Hazardous Materials**

If, during the course of the Work, the existence of hazardous material, including asbestos containing material, is observed in the work area, the Contractor shall immediately notify the County in writing. The Contractor shall not perform any work pertinent to the hazardous material prior to receipt of special instructions from the County. Asbestos containing material includes transit pipe.

**XVI. Submittals – Certificate of Compliance**

The Contractor shall submit to the Construction Inspector a Certificate of Compliance from the manufacturer and/or supplier of each and every specified material or manufactured equipment item. The said certificate shall state that the material or the item of equipment to be furnished has been manufactured with materials in accordance with the applicable sections of all required codes, specifications, and standards as required by the specifications.

**XVII. Unavailability of Materials**

If the Contractor is unable to furnish or use any of the materials or equipment specified because of any order by a governmental agency limiting the manufacture or use, or because of the supply situation in the general market for such material or equipment, the Contractor shall offer substitutes therefor. The substitutes shall be suitable for the purpose, considering the factors of quality, serviceability, appearance, and maintenance. No substitute shall be used until the Engineer has approved it.

No consideration will be given to the use of substitutes on account of market conditions unless the Contractor demonstrates that, for the item in question, the Contractor placed its order without delay, that it has shown due diligence in attempting to locate the item as specified, and that the unavailability is due to market conditions in general throughout the particular industry.

If substitutes are used in the Work, the compensation to be paid to the Contractor shall be subject to review and adjustment. As a general principle, if the Engineer shall determine that the substitute will be less satisfactory, the Contractor shall allow a credit to the County; only under unusual circumstances shall there be an increase in compensation to the Contractor on account of substitution. The basis upon which the amount of price and adjustments will be founded shall be the cost of the appropriate items at the time the bids for the Project were opened.

**XVIII. Traffic Control**

Access shall be provided for residents and emergency vehicles at all times. When it becomes necessary to restrict access, the Contractor shall notify all applicable agencies (i.e. Fire Department, E.M.S., Public Works, etc.) a minimum of five (5) working days in advance of the proposed restrictions. At the end of each day, two lanes of traffic shall be opened to the public, unless otherwise stated in the Contract Documents.

The Contractor shall coordinate with other contractors working in the area.

**XIX. Temporary Traffic Handling Devices**

The Contractor shall furnish, erect and maintain all necessary barricades, lights, warning signs and temporary pavement markings as shown on the Plans and/or in accordance with the Texas Manual on Uniform Traffic Control Devices and with the Specifications in the Contract Documents. In addition, the Contractor shall provide flag-persons and take necessary precautionary measures for the protection of persons, property and the Work, when deemed necessary by the County or the Construction Inspector.

The Construction Inspector shall be responsible for the monitoring and inspection of the traffic control measures by completion of the Traffic Control Devices Inspection Report (TCDIR), and the Contractor shall be responsible for compliance with the terms of the TCDIR procedures.

**XX. Roadway Signs**

All permanent and temporary roadway signage designated in the Contract Documents shall be in accordance with the Texas Manual on Uniform Traffic Control Devices.

**XXI. Project Signs**

The Contractor shall erect at the site of construction, and maintain during construction, signs satisfactory to the County identifying the Project and indicating that the government is participating in the development of the Project. Two project signs will be required for the Project. The two said signs shall be 8' X 4' and made out of white 10 mm corrugated plastic with pressure sensitive vinyl lettering to include: Hays County / TxDOT Partnership Program with the Hays County Seal, the Project's name, and a brief description relating to the estimated date of completion, contact phone number, website address and the appropriate Hays County Commissioner's name and precinct number. Furnishing, installing and maintaining these signs shall be considered subsidiary to Item 502, "Barricades, Signs and Traffic Handling". Proofs of sign shall be submitted to the Inspector for approval prior to fabrication.

**XXII. Permits**

The Contractor shall be responsible for obtaining any and all required construction permits. Contractor agrees to comply with all conditions of the permits and to maintain copies of the permits at the site at all times while the Work is in progress. The County shall be responsible for obtaining Section 404 permits from the U.S. Army Corps of Engineers as part of the Project design. When Contractor-initiated changes in the construction method changes the impacts to waters of the U.S., Contractor shall be responsible for obtaining new or revised Section 404 permits.

**XXIII. Landscape Restoration**

If not designated as a specific pay item in bid package, the Contractor shall take the means necessary to protect all trees, shrubbery and sod. Protection, removal and replacement of existing landscaping will be in accordance with the Contract Documents.

**XXIV. Existing Fencing**

All fences encountered during construction within the right-of-way (ROW) shall be removed by the Contractor under "Preparing Right-of-Way." Permanent fencing, designating the ROW, will be provided by others, unless otherwise shown in the Contract Documents. The Contractor will be required to coordinate preparing ROW operations and fence removal and installations with the landowners as needed.

**XXV. Easements**

Any easements, both temporary and permanent, required for the Project will be provided by the County as shown in the Contract Documents. Other easements required or desirable by the Contractor shall be arranged by the Contractor at its sole expense. The easements shall be cleaned after use and restored to their original conditions, or better by the Contractor. In the event additional work is required by the Contractor, it shall be the Contractor's responsibility to obtain written permission from the property owners involved for the use of additional property required. No additional payment will be allowed for this item.

**XXVI. Limits of Contractor's Operation**

The Contractor shall limit construction operations to within the ROW or the easement unless otherwise directed by the County or its authorized representative.

**XXVII. Maintenance of Pedestrian Walkways**

The Contractor will be required to maintain clear walkways for pedestrians during construction in a manner to provide access in the most convenient and safest manner consistent with essential construction operations. Specifically, the following will be enforced.

Pedestrian traffic may be blocked at a location where work is actually in progress. Signs, barricades, and warning devices must be placed at nearest crosswalks approaching the

construction site from every direction advising pedestrians of the blockage and advising them to use alternate routes.

Access to doorways and pedestrian entrances must be maintained at all times during hours that access is needed by business. Paving by sections or providing temporary access may be required.

No more than one corner of any intersection may be under construction at any one time. Work must be completed and opened for use by pedestrians before starting work on any other corner of an intersection.

The Contractor will be expected to diligently pursue construction from start to completion at every location to avoid prolonged and unnecessary disruptions to pedestrian traffic.

This work shall be considered incidental and not a separate pay item, unless provided otherwise in the Contract Documents.

#### **XXVIII. Spoil**

All excavated material unfit for backfill, waste material accumulated on the job, and any material surplus to that needed in the prosecution of the Work shall be removed from the site by the Contractor and properly and legally disposed of at its expense, unless otherwise directed by the Inspector. **THE CONTRACTOR SHALL INDEMNIFY AND SAVE HARMLESS THE COUNTY, ALL OF ITS OFFICERS, AGENTS, AND EMPLOYEES FROM ALL SUITS, ACTIONS, OR CLAIMS OF ANY CHARACTER RESULTING FROM ITS ARRANGEMENTS FOR THE DISPOSAL OF SPOIL.** This shall be incidental and not a separate pay item.

#### **XXIX. Materials Testing**

Quality Control testing of all materials, construction items or products incorporated in the work shall be performed by the Contractor at the Contractor's expense.

Quality Assurance sampling and testing for acceptance will be performed by the Inspector in accordance with the Quality Control (QC) / Quality Assurance (QA) program outlined in Appendix A. The cost of such tests will be incurred by the County and coordinated by the Construction Inspector through funds made available to the Construction Inspector under his/her agreement with the County for the professional services related to construction engineering and inspection on the Project.

The Inspector shall furnish for review by the GEC, not later than 10 days after receipt of notice to proceed, a Quality Control Plan consisting of plans, procedures, and organization necessary to produce an end product which complies with the contract

documents. The Inspector will be allowed the latitude to develop standards of control subject to approval by the County. As a minimum, the plan shall include description of the type and frequency of inspection staffing, materials handling and construction procedures, calibration and maintenance of equipment, production process control, and testing deemed necessary to assure quality as specified by the Contract Documents.

**XXX. Pre-Construction Conference**

Before the Project work order is issued, a pre-construction conference shall be held with representatives of the County and the Contractor. The Contractor shall plan to submit a schedule of operations at the pre-construction conference, unless otherwise notified. See Section XXXVI-Prosecution and Progress for additional construction schedule requirements.

**XXXI. Weight Tickets**

The Contractor will be responsible for providing asphalt and aggregate tickets for quantity verifications on all asphaltic concrete used for the Project.

**XXXII. Confined Space Entry Program**

It shall be the responsibility of the Contractor to implement and maintain a variable “Confined Space Entry Program” which must meet OSHA requirements for all its employees and subcontractors at all times during construction. OSHA defines all active sewer manholes, regardless of depth, as “permit required confined spaces”. Contractors shall submit an acceptable “Confined Space Entry Program” for all applicable manholes and maintain an active file for these manholes. The cost of complying with this program shall be subsidiary to the pay items involving work in confined spaces.

**XXXIII. Tree and Plant Protection**

Scope: Provide complete protection and maintenance of existing trees, shrubs, and grass areas designated to remain within construction limits and/or right-of-way.

Coordination: Coordinate protection of existing trees, shrubs and grass areas with other trades so as to prevent damage to these items.

Payment for Damages: If existing trees, shrubs or grass areas are destroyed, killed or badly damaged as a result of construction observations, Contract sum will be reduced by the amount of assessed damages. Damages will be evaluated by the Construction Inspector, using the following:

Trees: International Shade Tree Conference Standards and following formula – measurement of a cross section of tree trunk will be made at a point 2 feet above existing grade level to determine cross section area in square inches. Assessment for damage will be \$27.00 per square inch.

Shrubs and Grass Areas: An initial fine of \$1,000 shall be imposed for any unauthorized disturbance within the boundaries of the shrub and grass areas to remain within the right-of-way and outside the limits of disturbance. This disturbance includes but is not limited to: parking or intrusion of equipment or vehicles; storage of any materials, and any unauthorized damage and/or removal of vegetation. In addition to the initial fine, a base fine of \$8.00 for every square foot of area of damaged vegetation within any areas designated to remain on the plans shall be imposed. The areas covered under this section include but are not limited to: areas designated to remain or no-work areas. In determining the amount of fine, the Construction Inspector shall consider the degree and extent of harm caused by the violation, the cost of rectifying the damage, and whether the violation was committed willfully.

Materials: Tree Protection lumber dimensions shall be 4X4 and 2X4 sizes.

Protection: The Contractor shall protect existing trees, shrubs, and grass areas within construction limits from the following damage:

- (1) Compaction of root area by equipment, vehicles or material storage;
- (2) Trunk damage by moving equipment material storage, nailing or bolting;
- (3) Strangling by tying ropes or guy wires to trunks or large branches;
- (4) Poisoning by pouring solvents, gas, paint or other chemicals on or around trees and roots;
- (5) Cutting of roots by excavating or ditching;
- (6) Damage of branches by improper pruning;
- (7) Drought from failure to water or by cutting or changing normal drainage pattern past roots;
- (8) Changes of soil pH factor by disposal of lime base materials such as concrete or plaster;
- (9) Do not cut roots 1-1/2" in diameter or over. Excavation and earthwork within drip line of trees shall be done by hand.

Install barricade protection around trees and shrubs, constructed of 4X4 posts and 2X4 stringers top and bottom. Install protection prior to demolition or excavation operations. Leave protection until construction operations are essentially complete.

Maintenance:

- (1) Water trees and shrubs within construction limits as required to maintain their health during course of construction operations.
- (2) Pruning will be performed by County.

#### **XXXIV. Prosecution and Progress**

At the pre-construction meeting, the Contractor shall submit for acceptance a schedule of all planned work activities and sequences that is intended to be followed in order to both substantially and fully complete the Work within the allotted time periods (the "Project Schedule"). The purpose of the County requiring the Project Schedule shall be to:

- (1) Ensure adequate planning during the prosecution and progress of the work in accordance with the allowable number of working/ calendar days and all milestones;
- (2) Assure coordination of the efforts of the Contractor, County, Program Manager/GEC, Construction Inspector, utilities and others that may be involved in the Project;
- (3) Assist the Contractor, County, Program Manager/GEC and Construction Inspector in monitoring the progress of the Work and evaluating proposed changes to the Contract Documents; and
- (4) Assist the County, Program Manager/GEC and Construction Inspector in administering the time requirements set forth in the Contract Documents.

A Type B Schedule will be required on all projects. Following is the schedule requirements:

##### Type B Schedule:

The Contractor shall create and maintain a Critical Path Method (CPM) Project Schedule showing the manner of prosecution of work that it intends to follow in order to both substantially and fully complete the Work within the allotted time periods. The Project Schedule shall employ computerized CPM for the planning, scheduling and reporting of the work as described in this specification. The CPM Project Schedule shall be prepared using the Precedence Diagram Method (PDM). The Contractor shall create and maintain the schedule using the latest version, at the time of the award of the Project, of Primavera System, Inc. Primavera Project Planner or Suretrak Project Scheduler computer scheduling software, except when a general note requires otherwise. Microsoft Project will not be acceptable. No direct compensation will be allowed for fulfilling these requirements, as such work is considered subsidiary to the various bid items of the Project.

- (1) Personnel. The Contractor shall provide an individual, referred to hereinafter as

the Scheduler, to create and maintain the CPM schedule. He or she shall be proficient in CPM analysis and shall be able to perform required tasks on the specified software. The Scheduler shall be made available for discussion or meetings when requested by the County, Construction Inspector or Program Manager/GEC.

- (2) Schedule. The Project Schedule shall show the sequence and interdependence of activities required for complete performance of the work. The Contractor shall be responsible for assuring all work sequences are logical and show a coordinated plan of the Work.

Each activity on the schedule shall be described by: An activity number utilizing an alphanumeric designation system tied to the traffic control plans, and that is agreeable to the County, Program Manager/GEC, or Construction Inspector; concise description of the Work represented by the activity; and activity durations in whole working days with a maximum of twenty (20) working days. Durations greater than twenty (20) working days may be used for non-construction activities (mobilization, submittal preparation, curing, etc.), and other activities mutually agreeable between the Contractor and County, Program Manager/GEC or Construction Inspector. The Contractor shall provide a legend for all abbreviations. The activities shall be coded so that organized plots of the schedule may be produced. Typical activity coding includes: Traffic control phase, location and work type. If allowed and if the Contractor chooses to use Suretrak Project Manager to create the schedule, the Contractor shall not use the independent activity type. This would cause the schedule to be incompatible with Primavera Project Planner.

The activity durations shall be based on the quantity for the individual work activity divided by a production rate. An estimated production rate for each activity shall also be shown.

The Contractor shall plan and incorporate major resources into the schedule. Major resources are defined as crews and equipment that constrain the Contractor from pursuing available work. The resources shall accurately represent the Contractor's planned equipment and manpower to achieve the productivity rates specified above.

Seasonal weather conditions shall be considered and included in the CPM schedule for all work influenced by temperature and/or precipitation. Seasonal weather conditions shall be determined by an assessment of average historical climatic conditions. Average historical weather data is available through the National Oceanic and Atmospheric Administration (NOAA). These effects will be simulated through the use of work calendars for each major work type (i.e., earthwork, concrete paving, structures, asphalt, drainage, etc.) Project and work



calendars should be updated each month to show days actually able to work on the various work activities.

“Total float” is defined as the amount of time between the early start date and the late start date, or the early finish date and the late finish date, for each and every activity in the schedule. Float time in the schedule is a shared commodity between the County and the Contractor.

Only responsible delays in activities that affect milestone dates or the Project’s completion date, as determined by CPM analysis, will be considered for a time extension.

The schedule shall show the sequence and interdependence of activities required for complete performance of the work. The schedule shall be prepared and maintained in accordance with the scheduling requirements stated in this Section and shall include two (2) organized plots with the activities logically grouped using the activity coding. The Contractor shall also provide an electronic copy of the schedule on diskette or CD-ROM.

The schedule shall encompass the time from the start of the Contract Time to the Project’s Final Completion. The longest path through the schedule shall be readily discernable on the plot of the schedule.

- (3) Joint Review, Revision and Acceptance. Within twenty (20) calendar days of receipt of the Contractor's proposed schedule, the County or its authorized agents shall evaluate the schedule for compliance with this specification, and notify the Contractor of the findings. If the County or its authorized personnel request a revision or justification, the Contractor shall provide a satisfactory revision or adequate justification to the satisfaction of the Construction Inspector or County authorized personnel within seven (7) calendar days.

If the Contractor submits a CPM schedule for acceptance which is based on a sequence of work not in the Contract Documents, then the Contractor shall notify the County or its authorized entities in writing, separate from the schedule submittal.

The County's review and acceptance of the Contractor's Project Schedule is for conformance to the requirements of the Contract Documents only. Review and acceptance by the County or other authorized personnel of the Contractor's Project Schedule does not relieve the Contractor of any of its responsibility for the Project Schedule, or of the Contractor's ability to meet interim milestone dates (if specified) and the Final Completion date, nor does such review and acceptance expressly or by implication warrant, acknowledge or admit the reasonableness of

the logic, durations, manpower or equipment loading of the Contractor's Project Schedule. In the event the Contractor fails to define any element of work, activity or logic and the County's review does not detect this omission or error, such omission or error, when discovered by the Contractor or County and its authorized personnel, shall be corrected by the Contractor at the next monthly schedule update and shall not affect the project completion date.

(4) Updates. The Project Schedule shall be updated on a monthly basis and shall be required as a basis for the pay application approval. The Project Schedule update shall be submitted on the first working day of each month. The Contractor shall meet with the Construction Inspector or County authorized personnel each month at a scheduled update meeting to review actual progress made through the data date of the schedule update. The review of progress will include dates activities actually started and/or completed, and the percentage of work completed or remaining duration on each activity started and/or completed. The percentage of work complete shall be calculated by utilizing the quantity and productivity rate information. The Project Schedule update shall include one (1) copy of the following information:

- a) Electronic copy of the updated schedule including revisions and changes on diskette or CD-ROM or other storage media.
- b) One (1) logically organized plot of the schedule update if requested by the County or its authorized personnel.

(5) Project Schedule Revisions. If the Contractor desires to make major changes in the Project Schedule, the Contractor shall notify the County or Construction Inspector in writing. The written notification shall include the reason for the proposed revision, what the revision is comprised of, and how the revision was incorporated into the schedule. In addition to the written notification of the revision, the Contractor shall provide an electronic copy and one logically organized plot of the schedule including the revision if requested by the County or Construction Inspector.

Major changes are hereby defined as those that may affect compliance with the requirements of the Contract Documents or those that change the critical path. All other changes may be accomplished through the monthly updating process.

(6) Time Impact Analysis. The Contractor shall notify the County or Construction Inspector when an impact may justify an extension of Contract Time or adjustment of milestone dates. This notice shall be made in writing as soon as possible, but no later than the end of the next estimate period after the commencement of an impact or the notice for a change is given to the Contractor. Not providing notice to the County or Construction Inspector by the end of the next estimate period will indicate the Contractor's approval of the time charges as shown on that time statement. Future consideration of that statement will not be

permitted and the Contractor forfeits its right to subsequently request a time extension or time suspension unless the circumstances are such that the Contractor could not reasonably have knowledge of the impact by the end of the next estimate period.

When changes are initiated or impacts are experienced, the Contractor shall submit to the County or Construction Inspector a written time impact analysis describing the influence of each change or impact.

A time impact analysis is an evaluation of the effects of changes in the construction sequence, contract, plans, or site conditions on the Contractor's plan for constructing the Project, as represented by the Project Schedule. The purpose of the time impact analysis is to determine if the overall Project has been delayed, and if necessary, to provide the Contractor and the County a basis for making adjustments to the time allotted for Substantial Completion and Final Completion.

A time impact analysis shall consist of one or all of the steps listed below.

Step 1. Establish the status of the Project before the impact using the most recent Project Schedule update prior to the impact occurrence.

Step 2. Predict the effect of the impact on the most recent Project Schedule update prior to the impact occurrence. This requires estimating the duration of the impact and inserting the impact into the schedule update. The Contractor shall demonstrate how the impact was inserted into the schedule showing the added or modified activities and the added or modified relationships. Any other changes made to the schedule including modifications to the calendars or constraints shall be noted.

Step 3. Track the effects of the impact on the schedule during its occurrence. Note any changes in sequencing, and mitigation efforts.

Step 4. Compare the status of the Work prior to the impact (Step 1) to the prediction of the effect of the impact (Step 2), and to the status of the work during and after the effects of the impact are over (Step 3). Note that if an impact causes a lack of access to a portion of the Project, the effects of the impact may extend to include a reasonable period for remobilization.

The time impact analysis shall include an electronic copy of the complete schedule prepared in Step 2. If the Project Schedule is revised after the submittal of a time impact analysis but prior to its approval, the Contractor shall promptly indicate in writing to the County or Construction Inspector the need for any modification to its time impact analysis.

Only one (1) copy of each time impact analysis shall be submitted within fourteen (14) calendar days after the completion of an impact. The County or Construction Inspector may require Step 1 and Step 2 of the time impact analysis be submitted at the commencement of the impact, if needed to make a decision regarding the suspension of Contract Time.

Approval or rejection of each time impact analysis by the County, Construction Inspector or Program Manager/GEC shall be made within fourteen (14) calendar days after receipt unless subsequent meetings and negotiations are necessary.

The time impact analysis shall be incorporated into and attached to any relevant change order(s) and/or supplemental agreement(s).

**XXXV. Sanitary Provisions**

Provide and maintain adequate, neat, and sanitary toilet accommodations for employees, including County employees and representatives, in compliance with the requirements and regulations of the Texas Department of Health or other authorities having jurisdiction.

**XXXVI. Work Near Railroads**

(A) General.

If the work crosses or is in close proximity to a railroad, do not interfere with the use or operation of the railroad company's trains or other property. Assign responsible supervisory personnel to ensure that tracks and adjacent areas are clear of debris, road materials, and equipment. It is the Contractor's responsibility to contact the railroad to determine the railroad's requirements for work within the railroad right of way and to comply with the requirements. The County will not reimburse the Contractor for any cost associated with these requirements. If the work requires construction within 25 ft. horizontally of the near rail or if the tracks may be subject to obstruction due to construction operations, notify the Engineer and the Railroad Company at least 3 days before performing work. The railroad company will provide flaggers during this work. If railroad flaggers will be needed longer than 2 consecutive days, request them at least 30 days before performing work within the railroad right of way. Flaggers provided by the railroad company will be paid for by the County. Do not store material or equipment in the Railroad's right of way within 15 ft. of the centerline of any track. Do not place any forms or temporary falsework within 8.5 ft. horizontally from the centerline or 22 ft. vertically above the top of rails of any track, unless otherwise shown in the Contract Documents.

(B) Temporary Crossings.

If a temporary crossing is needed, obtain permission from the railroad company before crossing the tracks. Execute the “Agreement for Contractor’s Temporary Crossing” if required by the Railroad Company. The Contractor shall ensure that the tracks are left clear of equipment and debris that would endanger the safe operation of railroad traffic. Provide a crossing guard on each side of the crossing to direct equipment when hauling across the tracks. The Contractor shall stop construction traffic a safe distance away from the crossing upon the approach of railroad traffic. Work for temporary crossings will not be paid for directly, but shall be subsidiary to items of the Work subject of the Contract Documents. Work performed by the Railroad Company for the temporary crossing, except flaggers, will be at the Contractor’s expense.

**XXXVII. Clearance of Right of Way and Utilities**

The Contractor shall be aware there is potential that at the time of Notice to Proceed not all Right of Way and Utilities will be cleared. The table below identifies specific locations and dates of anticipated clearing. The Plans indicate work areas and it is anticipated that work shall proceed without delay until the dates in the table expire.

**RIGHT OF WAY MITIGATION TABLE**

| <b>Parcel ID</b> | <b>Station Range</b> | <b>Anticipated Clear Date</b> | <b>Potential TCP Phase Impact</b> |
|------------------|----------------------|-------------------------------|-----------------------------------|
| Parcel 21        | 124+50 to 126+50     | May 28, 2021                  | Phase 2-3                         |
| Parcel 34        | 158+00 to 159+50     | February 28, 2021             | Phase 1-2                         |
| Parcel 48        | 171+00 to 173+00     | January 31, 2021              | Phase 3-1                         |
| Parcel 55        | 174+50 to 175+50     | December 31, 2020             | Phase 2-3                         |
| Parcel 70        | 243+50 to 246+50     | May 28, 2021                  | Phase 1-2 (end)                   |

## UTILITY MITIGATION TABLE

| Utility Owner   | Station Range    | Anticipated Clear Date | Potential TCP Phase Impact |
|-----------------|------------------|------------------------|----------------------------|
| PEC Electric    | 94+00            | January 1, 2021        | Phase 1-1                  |
| Centerpoint Gas | 227+75 to 251+00 | July 1, 2021           | Phase 1-2 (end)            |
| Monarch Water   | 113+00 to 126+00 | August 1, 2021         | Phase 2-3                  |

### XXXVIII. GoForth Water Line

#### (a) DEFINITIONS

Whenever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

(1) The term "OPERATOR" means GOFORTH SPECIAL UTILITY DISTRICT, 8900 Niederwald Strasse, Kyle, Texas 78640.

(2) The term "ENGINEER" means SOUTHWEST ENGINEERS, INC., 307 St.

Lawrence Street, Gonzales, Texas 78629, Engineer in charge, serving the Owner with engineering services, their successor, or any other person or persons, employed by said Owner for the purpose of directing or having in charge the work embraced in this Contract, the said Engineer having general charge of the work or through any assistant having immediate charge of a portion hereof limited by the particular duties entrusted to them.

(3) The term "CONTRACTOR" means the person, firm or corporation entering into the Contract with the Owner. Contractor referred to in masculine form shall designate male and/or female Contractors.

(4) The term "Project Area" means the area within the specified contract limits of the improvements contemplated to be constructed in whole or in part under this contract.

(5) The term "Drawing" or "Plan" means the drawing included in the Contract Documents.

(6) The term "Technical Specifications" means that part of the Contract Documents which describes, outlines and stipulates: the quality of the materials to be furnished; the quality of the workmanship required; and the methods to be used in carrying out the construction work to be performed under this contract.

(7) The term "Addendum" or "Addenda" means any changes, revisions or

clarifications of the Contract Documents which have been duly issued to prospective Bidders prior to the time of receiving proposals.

**(b) SITE CONDITIONS**

(1) Accuracy of Drawing. The construction drawing has been prepared from USGS topographic maps, subdivision plats, record drawings of the existing facilities and/or from field observations. The locations shown for existing facilities are approximate only. There may be some existing facilities which are not shown on the Drawing.

(2) Unknown Conditions. Except as may be necessary due to extraordinary unknown conditions, the Contractor shall make adjustments to the proposed work to account for minor unknowns. In the event that an unknown condition exists which causes a significant change in the scope of the work, the Contractor shall notify the ENGINEER and the ENGINEER shall make modifications to the design as necessary.

**(c) SHOP DRAWINGS**

(1) All required shop drawings, machinery details, layout drawings, etc. shall be submitted to the Engineer in (5) five copies for approval sufficiently in advance of requirements to afford ample time for checking, including time for correcting, resubmitting and rechecking if necessary. The Contractor may proceed, only at its own risk, with manufacture or installation of any equipment or work covered by said shop drawings, etc. until they are approved and no claim, by the Contractor, for extension of the contract time shall be granted by reason of his failure in this respect.

(2) Any drawings submitted without the Contractor's stamp of approval will not be considered and will be returned to him for proper resubmission. If any drawings show variations from the requirements of the Contract because of standard shop practice or other reason, the Contractor shall make specific mention of such variation in his letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment of contract price and/or time, otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Contract even though the drawings have been approved.

(3) If a shop drawing is in accordance with the contract or involves only a minor adjustment in the interest of the Operator not involving a change in contract price or time; the Engineer may approve the drawing. The approval shall not relieve the Contractor from his responsibility for adherence to the contract or for any error in the drawing.

**(d) SANITATION**

The proposed project will be for use as a potable water supply. The Contractor shall maintain the improvements in a sanitary state at all times.

The Contractor shall conduct all operations so as to minimize contamination of the improvements by bacteria and deleterious foreign substances. All construction tools and

equipment shall be clean and free of harmful bacteria and substances. Only clean potable water shall be used.

**(e) SAMPLES, CERTIFICATES AND TESTS**

(1) The Contractor shall submit all material or equipment samples, certificates, affidavits, etc., as called for in the contract documents or required by the Engineer, promptly after award of the contract and acceptance of the Contractor's bond. No such material or equipment shall be manufactured or delivered to the site, except at the Contractor's own risk, until the required samples or certificates have been approved in writing by the Engineer. Any delay in the work caused by late or improper submission of samples or certificates for approval shall not be considered just cause for an extension of the contract time.

(2) Each sample submitted by the Contractor shall carry a label giving the name of the Contractor, the project for which it is intended, and the name of the producer. The accompanying certificate or letter from the Contractor shall state that the sample complies with contract requirements, shall give the name and brand of the product, its place of origin, the name and address of the producer and all specifications or other detailed information which will assist the Engineer in making a prompt decision regarding the acceptability of the sample. It shall also include the statement that all materials or equipment furnished for use in the project will comply with the samples and/or certified statements.

(3) Approval of any materials shall be general only and shall not constitute a waiver of the Owner's right to demand full compliance with Contract requirements. After actual deliveries, the Engineer will have such check tests made as he deems necessary in each instance and may reject materials and equipment and accessories for cause, even though such materials and articles have been given general approval. If materials, equipment or accessories which fail to meet check tests have been incorporated in the work, the Engineer will have the right to cause their removal and replacement by proper materials or to demand and secure such reparation by the Contractor as is equitable.

(4) Except as otherwise specifically stated in the Contract, the costs of sampling and testing will be divided as follows:

(I) The Contractor shall furnish without extra cost, including packing and delivery charges, all samples required for testing purposes, except those samples taken on the project by the Engineer;

(II) The Contractor shall assume all costs of re-testing materials which fail to meet contract requirements;

(III) The Contractor shall assume all costs of testing materials offered in substitution for those found deficient;

(IV) The Operator will pay all other expenses.

**(f) CONSTRUCTION OBSERVATION**



The ENGINEER shall make periodic observations of all materials and construction operations for this project as deemed necessary. Officials of the Texas Commission on Environmental Quality, OPERATOR and other regulatory agencies having jurisdiction of the facilities shall also be permitted to make observations of the work. The Contractor shall assist with all such authorized observations.

The site shall be accessible for inspection by the OPERATOR, the Agent, the ENGINEER, the testing laboratory and by representatives from Federal and State regulatory agencies.

The Contractor shall assist with such inspections by scheduling his work to permit required tests, making areas accessible and making other necessary and reasonable accommodations.

**(g) INSPECTION**

(1) All materials and workmanship shall be subject to inspection, examination, or test by the Operator and Engineer at any and all times during manufacture or construction and at any and all places where such manufacture or construction occurs. The Operator shall have the right to reject defective material and workmanship or require its correction. Unacceptable workmanship shall be satisfactory corrected. Rejected material shall be promptly segregated and removed from the Project Area and replaced with material of specified quality without charge. If the Contractor fails to proceed at once with the correction of rejected workmanship or defective material, the Operator may by contract or otherwise have the defects remedied or rejected materials removed from the Project Area and charge the cost of the same against any monies which may be due the Contractor, without prejudice to any other rights or remedies of the Operator.

(2) The Contractor shall furnish promptly all materials reasonably necessary for any tests which may be required. All tests by the Operator will be performed in such manner as not to delay the work unnecessarily and will be made in accordance with any provisions shown on the Drawing.

(3) The Contractor shall notify the Operator sufficiently in advance of backfilling or concealing any facilities to permit proper inspection. If any facilities are concealed without approval or consent of the Operator, the Contractor shall uncover for inspection and recover such facilities at his own expense, when so requested by the Operator.

(4) Should it be considered necessary or advisable by the Operator at any time before final acceptance of the entire work to make an examination of work already completed by uncovering the same, the Contractor shall on request promptly furnish all necessary facilities, labor, and material. If such work is found to be defective in any important or essential respect, due to fault of the Contractor or his subcontractors, the Contractor shall defray all the expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the actual cost of labor and material necessarily involved in the examination and replacement, shall be allowed the Contractor and he shall, in addition, if completion of the work of the entire Contract has been delayed thereby, be granted a suitable

extension of time on account of the additional work involved.

(5) Inspection of materials and appurtenances to be incorporated in the improvements included in this Contract may be made at the place of production, manufacture or shipment, whenever the quantity justifies it, and such inspection and acceptance, shall be final, except as regards (1) latent defects, (2) departures from specific requirements of the Contract, (3) damage or loss in transit, or (4) fraud of such gross mistakes as amount to fraud.

Subject to the requirements contained in the preceding sentence, the inspection of materials as a whole or in part will be made at the Project Site.

(6) Neither inspection, testing, approval nor acceptance of the work in whole or in part, by the Operator or its agents shall relieve the Contractor or his sureties of full responsibility for materials furnished or work performed not in strict accordance with the Contract.

**(h) REVIEW BY OPERATOR**

The Operator and its authorized representatives and agents shall have access to and be permitted to observe and review all work, materials, equipment, payrolls, personnel records, employment conditions, material invoices, and other relevant data and records pertaining to this Contract, provided, however that all instructions and approval with respect to the work will be given to the Contractor only by the Operator through its authorized representatives or agents.

**(i) PAYMENTS TO CONTRACTOR**

(1) Partial Payments.

(I) The Contractor shall prepare his requisition for partial payment as of the last day of the month and submit it, with the required number of copies, to the Engineer for his approval.

The amount of the payment due the Contractor shall be determined by adding to the total value of work completed to date, the value of materials properly stored on the site and deducting (1) ten percent (10%) of the total amount, to be retained until final payment and (2) the amount of all previous payments. The total value of work completed to date shall be based on the estimated quantities of work completed and on the unit prices contained in the Contract. The value of materials properly stored on the site shall be based upon the estimated quantities of such materials and the invoice prices. Copies of all invoices shall be available for inspection of the Engineer.

(II) Monthly or partial payments made by the Operator to the Contractor are moneys advanced for the purpose of assisting the Contractor to expedite the work of construction. The Contractor shall be responsible for the care and protection of all materials and work upon which payments have been made until final acceptance of such work and materials by the Operator. Such payments shall not constitute a waiver of the right of the Operator to require the fulfillment of all terms of the Contract and the delivery of

all improvements embraced in this Contract complete and satisfactory to the Operator in all details.

(2) Final Payments.

(I) After final inspection and acceptance by the Operator of all work under the Contract, the Contractor shall prepare his requisition for final payment which shall be based upon the careful inspection of each item of work at the applicable unit prices stipulated in the Contract. The total amount of the final payment due the Contractor under this contract shall be the amount computed as described above less all previous payments.

(II) The Operator, before paying the final estimate, shall require the Contractor to furnish releases or receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the Project) and services to the Contractor, if the Operator deems it necessary in order to protect its interest. The Operator may, if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payments made shall in no way impair the obligations of any surety or sureties furnished under this Contract.

(III) Any amount due the Owner under Liquidated Damages shall be deducted from the final payment due the contractor.

(3) Payments Subject to Submission of Certificates.

Each payment to the Contractor by the Operator shall be made subject to submission by the Contractor of all written certifications required of him and his subcontractors.

(4) Withholding Payments.

The Operator may withhold from any payment due the Contractor whatever is deemed necessary to protect the Operator, and if so elects, may also withhold any amounts due from the Contractor to any subcontractors or material dealers, for work performed or material furnished by them. The foregoing provisions shall be construed solely for the benefit of the Operator and will not require the Operator to determine or adjust any claims or disputes between the Contractor and his subcontractors or material dealers, or to withhold any moneys for their protection unless the Operator elects to do so.

The failure or refusal of the Operator to withhold any moneys from the Contractor shall in no way impair the obligations of any surety or sureties under any bond or bonds furnished under this contract.

**(j) FINAL INSPECTION**

When the Improvements included in this Contract are substantially completed, the Contractor shall notify the Operator in writing that the work will be ready for final inspection on a definite date which shall be stated in the notice. The Operator will make

the arrangements necessary to have final inspection commenced on the date stated in the notice, or as soon thereafter as is practicable.

**(k) CONSTRUCTION WARRANTY PERIOD**

The Contractor shall deliver to the ENGINEER upon completion of all work provided herein, a written guarantee, made out to the Operator and in a form satisfactory to the OPERATOR and ENGINEER, guaranteeing (and the Contractor does hereby guarantee) all work performed under this Contract is new and free from faulty materials in every particular, and free from faulty workmanship, and agreeing (and the Contractor does hereby agree) to replace or re-execute without additional cost to the OPERATOR such work as may be found to be unsatisfactory, and to make good all damage to his, or work by others, as a result of improper workmanship and materials or due to such required replacement or re-execution.

This guarantee shall be made to cover (and does cover) a period of one (1) year from the date of acceptance of all work performed under this contract. Upon completion of the project for final acceptance, the Contractor shall submit a written guarantee as indicated above with the final estimate of payment to the ENGINEER for approval and acceptance.

The guarantee and final estimate will be approved when the construction is completed as indicated and to the Operator's satisfaction. A "FINAL CERTIFICATE" will be issued by the ENGINEER as evidence.

Neither the "FINAL CERTIFICATE", nor payment, nor any provisions in the Contract Documents shall relieve the Contractor of the guarantee's provisions, or his responsibility for neglect of the replacement of faulty materials, or workmanship, or any other items of defect during the period of time covered by the guarantee.

**(l) WARRANTY OF TITLE**

No material, supplies, or equipment to be installed or furnished under this Contract shall be purchased subject any chattel mortgage or under a conditional sale, lease-purchase or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Operator free from any claims, liens, or charges.

Neither the Contractor, nor any person, firm, nor corporation furnishing any material or labor for any work covered by this Contract, shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any law permitting such persons to look to funds due the Contractor in the hands of the Operator. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

**(m) WARRANTY OF WORKMANSHIP AND MATERIALS**

Neither the final certificate of payment nor any provision in the Contract nor partial or entire use of the improvements included in this Contract by the Operator or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and shall pay for any damage to other work resulting therefrom which shall appear within a period of 12 months from the date of the final acceptance of the work.

**(n) APPLICABLE CODES**

All construction shall conform to the requirements of all local codes. The Contractor shall obtain all permits required for construction of the project.

All materials and construction shall conform to the federal and state codes and regulations for construction of potable water supply facilities. Chapter 290 - Water Hygiene of the Rules and Regulations of the Texas Commission on Environmental Quality, AWWA Standard A-100 and National Water Well Driller's Association shall be applicable to this project. All materials in direct contact with the water shall comply with Standard 61 of the NATIONAL SANITATION FOUNDATION.

**(o) NATIONAL SANITATION FOUNDATION STANDARD 61**

All materials used for construction of the project which will be in direct contact with the water shall be approved for use in potable water systems in accordance with National Sanitation Foundation Standard 61.

**(p) LEAD BAN**

Materials used for construction of the project which will be in direct contact with the water shall not contain lead in excess of 0.25% by weight.

**GoForth Special Utility District Facilities Construction must be completed by an approved vendor. Approved vendors are listed below:**

**Herschap Backhoe & Ditching, Inc.**

P. O. Box 489  
Bastrop, Texas 78602  
(512) 303-3834

**Nighthawk Construction**

212 Quarry Springs Rd.  
San Marcos, Texas 78666  
(512) 213-5391

**Lowden Excavating, Inc.**

P.O. Box 1769  
Wimberley, Texas 78676

(512) 842-1307

**Travis Hobbs Construction**

1817 FM 619  
Elgin, Texas 78621  
(512) 273-1183

**DNT Construction**

2300 Picadilly Drive  
Round Rock, Texas 78664  
P. O. Box 6210  
Round Rock, Texas 78683  
(512) 670-5277

**Austin Engineering Co., Inc.**

3317 Ranch Rd., 620 North  
P. O. Box 342349  
Austin, Texas 78734-2349  
(512) 327-1464

**Capital Excavation**

3901 S. Lamar Suite 260  
Austin, Texas 78704  
(512) 440-1717

**SECTION 12**  
**GENERAL NOTES**

**GENERAL NOTES: Version: December 20, 2019**

| <b>Item</b> | <b>Description</b>                                                                                                  | <b>**Rate</b>                                               |
|-------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| **204       | <b>Sprinkling</b><br>(Dust)<br>(Item 132)<br>(Item 247)                                                             | 30 GAL/CY<br>30 GAL/CY<br>30 GAL/CY                         |
| **210       | <b>Rolling (Flat Wheel)</b><br>(Item 247)<br>(Item 316)                                                             | 1 HR/200 TON<br>1 HR/6000 SY                                |
| **210       | <b>Rolling (Tamping and Heavy Tamping)</b>                                                                          | 1 HR/200 CY                                                 |
| **210       | <b>Rolling (Lt Pneumatic Tire)</b><br>(Item 132)<br>(Item 247)<br>(Item 316 - Seal Coat)<br>(Item 316 - Two Course) | 1 HR/500 CY<br>1 HR/200 TON<br>1 HR/6000 SY<br>1 HR/3000 SY |
| 247         | <b>Flexible Base (CMP IN PLC)</b>                                                                                   | 132 LB/CF                                                   |
| 310         | <b>Prime Coat</b>                                                                                                   | 0.20 GAL/SY                                                 |
| 260         | <b>Lime (Assumed at 7%)</b>                                                                                         | 46 LB/SY                                                    |
| 341         | <b>Dense-Graded Hot-Mix Asphalt</b>                                                                                 | 110 LB/SY/IN                                                |
|             | <b>Tack Coat</b>                                                                                                    | 0.08 GAL/SY                                                 |

\*\* For Informational Purposes Only

**The following standard detail sheet or sheets have been modified:**

**Modified Standards**

*None - TBD*

**GENERAL**

Contractor questions on this project are to be addressed to the following individual(s):

[Jerry Borcharding 512-738-2080 jerry@co.hays.tx.us](mailto:jerry@co.hays.tx.us)

Contractor questions will be accepted through email, phone, and in person by the above individuals.

References to manufacturer's trade name or catalog numbers are for the purpose of identification only. Similar materials from other manufacturers are permitted if they are of equal quality, comply with the specifications for this project, and are approved.

If work is performed at Contractor's option, when inclement weather is impending, and the work is damaged by subsequent precipitation, the Contractor is responsible for all costs associated with replacing the work, if required.



The roadbed will be free of organic material prior to placing any section of the pavement structure.

Equip all construction equipment used in roadway work with highly visible omnidirectional flashing warning lights.

Provide a smooth, clean sawcut along the existing asphalt pavement structure, as directed. Consider subsidiary to the pertinent Items.

Construct all manholes/valves to final pavement elevations prior to the placement of final surface. If the manholes/valves are going to be exposed to traffic, place temporary asphalt around the manhole/valve to provide a 50:1 taper. The asphalt taper is subsidiary to the ACP work.

Supply litter barrels in enough numbers at locations as directed to control litter within the project. Consider subsidiary to pertinent Items.

Use a self-contained vacuum broom to sweep the roadway and keep it free of sediment as directed. The contractor will be responsible for any sweeping above and beyond the normal maintenance required to keep fugitive sediment off the roadway as directed by the County Representative.

Damage to existing pipes and SET's due to Contractor operations will be repaired at Contractor's expense.

All locations used for storing construction equipment, materials, and stockpiles of any type, within the right of way, will be as directed. Use of right of way for these purposes will be restricted to those locations where driver sight distance to businesses and side street intersections is not obstructed and at other locations where an unsightly appearance will not exist. The Contractor will not have exclusive use of right of way but will cooperate in the use of the right of way with the city/county and various public utility companies as required.

Perform roadside mowing along the Roadway for the length of the project and spot mowing, as directed. This is considered subsidiary to the Work.

Complete Litter Removal Cycles along the Roadway for the length of the project, as directed. Complete Litter Removal Cycles prior to any mowing cycles. Remove all litter on the right of way, within project limits. This is considered subsidiary to the Work.

Complete cleaning and sweeping cycles at the intervals, as directed. Complete one cycle at the end of construction and prior to final acceptance by the County. This is considered subsidiary to the Work.

Follow Item 752.4 Work Methods and Item 752 general notes when removing or working on or near trees and brush even if Item 752 is not included as a pay item.

Flailing equipment is not allowed. Burning brush is not allowed in urban areas or on ROW. Use hand methods or other means of removal if doing work by mechanical methods is impractical. Prior to begin tree pruning, send email confirmation to the County Representative that training and demonstration of work methods has been provided to the employees. This work is subsidiary.

Shredded vegetation may be blended, at a rate not to exceed 15 percent by volume, with Item 160 if the maximum dimension is not greater than 2 in.

#### **ITEM 5 – CONTROL OF THE WORK**

Place construction or silt fence 2 ft. inside The County ROW. This work is subsidiary.

Place construction stakes at intervals of no more than 100 ft. This work is subsidiary.

As-built shall include GPS coordinates of manholes and junction boxes. Include final version of RFI's and revised plan sheets.

#### **Cooperating with Joint Bid Utilities**

The County Representative will designate a utility inspector at the pre-construction meeting. All durations exclude utility owner holidays.

Provide a complete package of information for all resubmittals. Submit each item and individual components of that item under separate cover.

Prior to submitting a RFI, meet and discuss with the County and the utility inspector. Include a proposed solution, existing and proposed line elevations, and redline of proposed changes with the RFI. Make note of adjacent utilities in the RFI if it includes relocation of a line. Submit RFIs via email to the County the County and the utility inspector.

Complete pre-testing and have the utility inspector verify prior to formal testing and inspection. Submit email to the County and the utility inspector requesting a formal test and inspection 14 calendar days before the test date. Pay retest fees directly to utility owner at current rates.

Submit an email to the utility inspector identifying the lines, valves, location, and date of shut offs or limited service 21 calendar days before for all lines and 60 calendar days before for water lines 24 in. or greater. The utility owner will conduct a test shut off before actual shut off. Do not shut off power or water lines 24 in. or greater between June 1<sup>st</sup> and August 31<sup>st</sup>. Provide a verbal notification 7 calendar days and written notification 72 hours before impact to service to all customers.

Provide an electronic pdf of as-builts within 28 calendar days of a line becoming active. Include GPS coordinates of items not installed per original plans including meters, manholes, valves, bends, and fire hydrant locations in the as-builts. Include limits of encasements such as steel and flowable fill. Include final version of RFI's and revised plan sheets.

#### **ITEM 6 - CONTROL OF MATERIALS**

Give a minimum of 1 business day notice for materials, which require inspection at the Plant.

For removal, tie, or tap of asbestos concrete (AC) pipe, contact The County and the local utility company 60 days prior to performing the work. Expose the AC pipe to provide a minimum of 1

ft. of clearance around the top and sides. A minimal amount of soil may remain around the AC pipe to avoid disturbance. The local utility company will be responsible for the demo notice to DSHS and removal of the AC pipe. Tie or tap into existing AC pipe may require removing an entire section of pipe from collar to collar and replacement of pipe with new pipe using existing bid items.

#### **ITEM 7 – LEGAL RELATIONS AND RESPONSIBILITIES**

The County will coordinate with TDLR regarding pedestrian elements and sidewalks. The contractor will procure and provide all permits, licenses, and inspections; pay all charges, fees, and taxes regarding TDLR rules governing industrialized housing and buildings.

No significant traffic generator events identified.

Refer to the Environmental Permits, Issues and Commitments (EPIC) plan sheets for additional requirements and permits.

When any abandoned well is encountered, cease construction operations in this area and notify the County Representative who will coordinate the proper plugging procedures. A water well driller licensed in the State of Texas must be used to plug a well.

Erosion control and stabilization measures must be initiated immediately in portions of the site where construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days. Track all exposed soil, stockpiles, and slopes. Tracking consists of operating a tracked vehicle or equipment up and down the slope, leaving track marks perpendicular to the direction of the slope. Re-track slopes and stockpiles after each rain event or every 14 days, whichever occurs first. This work is subsidiary.

Perform maintenance of vehicles or equipment at designated maintenance sites. Keep a spill kit on-site during fueling and maintenance. This work is subsidiary.

Maintain positive drainage for permanent and temporary work for the duration of the project. Be responsible for any items associated with the temporary or interim drainage and all related maintenance. This work is subsidiary.

Suspend all activities near any significant recharge features, such as sinkholes, caves, or any other subterranean openings that are discovered during construction or core sampling. Do not proceed until the designated Geologist or TCEQ representative is present to evaluate and approve remedial action.

Locate aboveground storage tanks kept on-site for construction purposes in a contained area as to not allow any exposure to soils. The containment will be sized to capture 150% of the total capacity of the storage tanks.

#### **PSL in USACE Jurisdictional Area.**

Do not initiate activities in a PSL associated with a U.S. Army Corps of Engineers (USACE) jurisdictional area that have not been previously evaluated by the USACE as part of the permit review of this project. Such activities include, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here means materials are delivered

to or from the PSL. The jurisdictional area includes all waters of the U.S. including wetlands or associated wetlands affected by activities associated with this project. Special restrictions may be required for such work. Consult with the USACE regarding activities, including PSLs that have not been previously evaluated by the USACE. Provide the County with a copy of all USACE coordination and approvals before initiating activities.

Proceed with activities in PSLs that do not affect a USACE jurisdictional area if self-determination has been made that the PSL is non-jurisdictional or proper clearances have been obtained in USACE jurisdictional areas or have been previously evaluated by the USACE as part of the permit review of this project. Document any determinations that PSL activities do not affect a USACE jurisdictional area. Maintain copies of PSL determinations for review by the County or any regulatory agency. The Contractor must document and coordinate with the USACE, if required, before any excavation material hauled from or embankment material hauled into a USACE jurisdictional area by either (1) or (2) below.

1. **Restricted Use of Materials for the Previously Evaluated Permit Areas.** When an area within the project limits has been evaluated by the USACE as part of the permit process for this project:
  - a. suitable excavation of required material in the areas shown on the plans and cross sections as specified in Standard Specification Item 110, Excavation is used for permanent or temporary fill within a USACE jurisdictional area;
  - b. suitable embankment from within the USACE jurisdictional area is used as fill within a USACE evaluated area;
  - c. Unsuitable excavation or excess excavation that is disposed of at an approved location within a USACE evaluated area.
  
2. **Contractor Materials from Areas Other than Previously Evaluated Areas.** Provide the County with a copy of all USACE coordination and approvals before initiating any activities in a jurisdictional area within the project limits that has not been evaluated by the USACE or for any off right of way locations used for the following, but not limited to, haul roads, equipment staging areas, borrow and disposal sites:
  - a. Standard Specification Item 132, Embankment is used for temporary or permanent fill within a USACE jurisdictional area;
  - b. Unsuitable excavation or excess excavation that is disposed of outside a USACE evaluated area.

**Work over or near Bodies of Water (Lakes, Rivers, Ponds, Creeks, etc.).**

Keep on site a universal spill kit adequate for the body of water and the work being performed. Debris is not allowed to fall into the ordinary high water level (OHWL). Debris that falls into the OHWL must be removed at the end of each work day. Debris that falls into the floodway must be removed at the end of each work week or prior to a rain event. Install and maintain traffic control devices to maintain a navigable corridor for water traffic, except during bridge demo and beam placement. This work is subsidiary.

**Migratory Birds and Bats.**

Migratory birds and bats may be nesting within the project limits and concentrated on roadway structures such as bridges and culverts. Remove all old and unoccupied migratory bird nests

from any structures, trees, etc. between September 16 and February 28. Prevent migratory birds from re-nesting between March 1 and September 15. Prevention shall include all areas within 25 ft. of proposed work. All methods used for the removal of old nesting areas and the prevention of re-nesting must be submitted to The County 30 business days prior to begin work. This work is subsidiary.

If active nests are encountered on-site during construction, all construction activity within 25 ft. of the nest must stop. Contact the County Representative to determine how to proceed.

**Tree and Brush Trimming and Removal.**

Work will be conducted September 16 thru February 28. Work conducted outside this timeframe will require a bird survey. Submit a survey request to The County 30 business days prior to begin work.

No extension of time or compensation will be granted for a delay or suspension due to the above bird, bat and tree/brush requirements.

**Law Enforcement Personnel.**

Submit charge summary and invoices using the County forms.

Patrol vehicles must be clearly marked to correspond with the officer's agency and equipped with appropriate lights to identify them as law enforcement. For patrol vehicles not owned by a law enforcement agency, markings will be retroreflective and legible from 100 ft. from both sides and the rear of the vehicle. Lights will be high intensity and visible from all angles.

No payment will be made for law enforcement personnel needed for moving equipment or payment for drive time to/from the event site.

If the Contractor has a field office, provide an office location for a supervisory officer when event requires a supervising officer. This work is subsidiary.

A maximum combined rate of \$70 per hour for the law enforcement personnel and the patrol vehicle will be allowed. Any scheduling fee is subsidiary per Standard Specification 502.4.2.

Cancel law enforcement personnel when the event is canceled. Cancellation, minimums or "show up" fees will not be paid when cancellation is made 12 hours prior to beginning of the event. Failure to cancel within 12 hours will not be cause for payment for cancellation, minimums, or "show up" time. Payment of actual "show up" time to the event site due to cancellation will be on a case by case basis at a maximum of 2 hours per officer.

Alterations to the cancellation and maximum rate must be approved by the County Representative or pre-determined by official policy of the officers governing authority.

**Back Up Alarm.**

For hours 9 P to 5 A, utilize a non-intrusive, self-adjusting noise level reverse signal alarm. This is not applicable to hotmix or seal coat operations. This is subsidiary.

**ITEM 8 – PROSECUTION AND PROGRESS**

Electronic versions of schedules will be saved in Primavera P6 format.

Working days will be charged in accordance with 8.3.1.4, "Standard Workweek."

Special Provision 008-1 has been included to amend Standard Article 8.1 to extend the begin work date due to 90 days after the written authorization to begin work

A CPM schedule in Primavera format .

#### **ITEM 100 - PREPARING RIGHT OF WAY**

Prep ROW must not begin until accessible trees designated for preservation have been protected, items listed in the EPIC have been addressed, and SW3P controls installed in accessible areas.

Backfill material will be Type B Embankment using ordinary compaction.

Follow Item 752.4 Work Methods and Item 752 general notes when removing or working on or near trees and brush.

Unless shown otherwise in the plans or a designated non-mow area, perform trimming or removal for areas within 30 ft. of edge of pavement under construction. Trim or remove to provide minimum of 5 ft. of horizontal clearance and 7 ft. of vertical clearance for the following: sidewalks, paths, guard fence, rails, signs, object markers, and structures. Trim to provide a minimum of 14 ft. vertical clearance under all trees. This work is subsidiary.

Prep ROW includes the removal of all items not specifically identified in the plans as to remain. This work is subsidiary.

#### **ITEM 110 – EXCAVATION**

The County Representative will define unsuitable material.

#### **ITEM 132 – ALL EMBANKMENT**

The County Representative will define unsuitable material. Material which the Contractor might deem to be unsuitable due to moisture content will not be considered unsuitable material.

Prior to begin embankment of existing area, correct or replace unstable material to a depth of 6 in. below existing grade. Embankment areas will be inspected prior to beginning work.

Rock or broken concrete produced by the project is allowed in earth embankments. The size of the rock or broken concrete will not exceed the layer thickness requirements in Section 132.3.4., "Compaction Methods." The material will not be placed vertically within 5 ft. of the finished subgrade elevation.

Embankment placed vertically within 5 ft. of the finished subgrade elevation or within the edges of the subgrade and treated with lime, cement, or other calcium based additives must have a sulfate content less than 3000 ppm. Allow 5 business days for testing. Treatment of sulfate material 3000 ppm to 7000 ppm requires 7 days of mellowing and continuous water curing, in accordance The County guidelines for

Treatment of Sulfate-Rich Soils and Bases in Pavement Structures (9/2005). Material over 7000 ppm is not allowed.

**ITEM 132 – EMBANKMENT TY C**

Do not furnish shale clays. The County Representative must approve the embankment material before use on the project. Existing material from within the project limits or approved by the County Representative may be used vertically beyond 5 ft. of the finished subgrade elevation or beyond the edge of the subgrade.

Furnish embankment with sulfate content less than 3000 ppm if treated with calcium-based chemicals or within 5 ft. of the finished subgrade elevation.

**TY C Requirements**

| <b>Percent Passing</b> | <b>LL</b>  | <b>PI</b>  | <b>PI</b>  |
|------------------------|------------|------------|------------|
| <b>3"</b>              | <b>Max</b> | <b>Max</b> | <b>Min</b> |
| 100                    | 55         | 20         | 6          |

**ITEM 160 - TOPSOIL**

Off-site topsoil will have a minimum PI of 25.

No Sandy Loam allowed.

Obtain approval of the actual depth of the topsoil sources for both on-site and off-site sources.

Construct topsoil stockpiles of no more than five (5) feet in height.

It is permissible to use topsoil dikes for erosion control berms within the right of way, as directed.

Seed or track slopes within 14 days of placement.

Salvage topsoil from sites of excavation and embankment. Maximum salvage depth is 6 inches.

Windrowing of topsoil obtained from the Right of Way (ROW) is not allowed.

**ITEM 168 – VEGETATIVE WATERING**

Water all areas of project to be seeded or sodded.

Maintain the seedbed in a condition favorable for the growth of grass. Watering can be postponed immediately after a rainfall on the site of ½ inch or greater, but will be resumed before the soil dries out. Continue watering until final acceptance.

Vegetative watering rates and quantities are based on ¼ inch of watering per week over a 3-month watering cycle. The actual rates used and paid for will be as directed and will be based on prevailing weather conditions to maintain the seedbed.

Obtain water at a source that is metered (furnish a current certification of the meter being used) or furnish the manufacturer’s specifications showing the tank capacity for each truck used.

Notify the County Representative, each day that watering takes place, before watering, so that meter readings or truck counts can be verified.

**ITEM 204 – SPRINKLING**

Apply water for dust control as directed. When dust control is not being maintained, cease operations until dust control is maintained. Consider subsidiary to the pertinent Items.

**ITEM 216 - PROOF ROLLING**

Correct and perform “Proof Rolling” retest at the Contractor’s expense, to the satisfaction of the County Representative, when initial “Proof Rolling” yields a failing result.

**ITEM 247 - FLEXIBLE BASE**

The lift thickness will be 4” to 6” unless shown in the plans. When compacted in multiple lifts, the density of the bottom and middle lifts will be 95% and 98% of the maximum dry density, respectively.

Correction of subgrade soft spots is subsidiary.

Complete all subgrade, ditches, slopes, and place all drainage structures to conform to required lines, grades, and cross-sections, as shown and directed, prior to the placement of Flex Base. Do not use a vibratory roller to compact the material directly over a box culvert.

**ITEM 260 thru 276**

Use ordinary compaction for subgrade treatment.

Three weeks prior to treatment, provide a sample of soil or flexible base to be treated.

**ITEM 260 - LIME TREATMENT (ROAD-MIXED)**

Apply 46 pounds per square yard.

For sulfate content greater than 3000 ppm, mix in an additional 4.0% points above optimum moisture after initial mixing and prior to mellow.

If the sulfate content is greater than 7000 ppm, do not treat. Undercut the unsuitable material to the depth per bid item for lime treatment and replace unsuitable material in accordance with Item 110. Payment will be made in accordance with Item 110.

**ITEM 300s – SURFACE COURSES AND PAVEMENTS**

Asphalt season is May 1 thru September 15. Emulsified Asphalt season is April 1 thru October 15. The latest work start date for asphalt season is August 1.

If an under seal is not provided, furnish a tack coat. Apply tack coat at 0.08 GAL/SY (residual). Apply non-tracking tack coat using manufacturer recommend rates.

**ITEM 310 – PRIME COAT**

Apply blotter material to all driveways and intersections. This work is subsidiary.



When Multi Option is allowed, provide MC 30, EC 30 or AE-P. MC 30 is not allowed in Travis County.

Rolling to ensure penetration is required.

### **ITEM 320 - EQUIPMENT FOR ASPHALT CONCRETE PAVEMENT**

Use of motor grader is allowed for placement of mixtures greater than 10 inches from the riding surface, when hotmix is used in lieu of flexbase, or as allowed.

### **ITEM 341 – DENSE GRADED HOT-MIX ASPHALT PAVEMENT**

Core holes may be filled with an Asphaltic patching material meeting the requirements of DMS-9203 or with SCM meeting requirements of DMS-9202.

Install transverse butt joints with 50 ft. H: 1 in. V transition from the new ACP to the existing surface. Install a butt joint with 24 in. H: 1 in. V transition from the new ACP to a driveway, pullout or intersection. Saw cut the existing pavement at the butt joints. This work is subsidiary.

Use a device to create a maximum 3H:1V notched wedge joint on all longitudinal joints of 2 in. or greater. This work is subsidiary.

Prior to milling, core the existing pavement to verify thickness. This work is subsidiary.

Ensure placement sequence to avoid excess distance of longitudinal joint lap back not to exceed one day's production rates.

Submit any proposed adjustments or changes to a JMF before production of the new JMF.

Tack every layer. Do not dilute tack coat. Apply it evenly through a distributor spray bar. Provide a minimum transition of 10' for intersections, 10' for commercial driveways, and 6' for residential driveways unless otherwise shown on the plans.

Irregularities will require the replacement of a full lane width using an asphalt paver. Replace the entire subplot if the irregularities are greater than 40% of the subplot area.

Lime or an approved anti-stripping agent must be used when crushed gravel is utilized to meet a SAC "A" requirement.

RAS is not allowed on this project.

When using RAP, include the management methods of processing, stockpiling, and testing the material in the QCP submitted for the project. If RAP is used in the same mix, the QCP must document that both of these materials have dedicated feeder bins for each recycled material.

Asphalt content and binder properties of RAP stockpiles must be documented when recycled asphalt content greater than 20% is utilized.

No RAS is allowed in surface courses.

Department approved warm-mix additives is required for all surface mix application when RAP is used. Dosage rates will be approved during JMF approval.

Use the SGC for design and production testing of all mixtures.

When using substitute binders, mold specimens for mix design and production at the temperature required for the substitute binder used to produce the HMA.

The Hamburg Wheel Test will have a minimum rut depth of 3mm.

The Hamburg Wheel minimum number of passes for PG 64 or lower is reduced to 7,000.

The County Representative may accept Hamburg Wheel test results for production and placement if no more than 1 of the 5 most recent tests is below the specified number of passes and the failing test is no more than 2,000 passes below the specified number of passes.

#### **ITEM 416 - DRILLED SHAFT FOUNDATIONS**

Stake all Foundations, for approval, before beginning drilling operations.

Calculate the vertical signal head clearance before placing any signal pole foundation.

For mast-arm signal and strain pole anchor bolts, set two in tension and two in compression.

Obtain approval of placement prior to placing concrete.

Remove spoils from a flood plain at the end of each work day.

#### **ITEM 432 - RIPRAP**

Mow strip riprap will be 4 in. and all other riprap will be 5 in. unless otherwise shown on the plans or in the pay items. Mow strip for cable barrier may be placed monolithically with the barrier foundations if using concrete in accordance with Item 543. Fiber reinforcement is not allowed except in mow strip for cable barrier if foundation and mow strip are placed monolithically.

Saw-cut existing riprap then epoxy 12 in. long No. 3 or No. 4 bars 6 in. deep at a maximum spacing of 18 in. in each direction to tie new riprap to existing riprap. This work is subsidiary.

For cement-stabilized riprap, provide Type A Grade 5 flexible base. Compressive strengths for Item 247 are waived.

SGT approach taper, paid using mow strip item, shall be installed using concrete, flexible base coated with SS-1 at a rate of 0.12 GAL/SY, or HMA Type B/C/D. Placement shall be ordinary compaction and does not require placement using an asphalt paver.

#### **ITEM 450 - RAILING**

Use the elliptical tube option for rails T401, T402, and C402.

### **ITEM 465 – JUNCTION BOXES, MANHOLES, AND INLETS**

Maintain drainage at curb inlets until the final roadway surface is placed.

Backfill shall use cohesionless material per Item 400 or flowable fill if width between structure and extent of excavation is 2 ft. or less. This is subsidiary.

### **ITEM 466 - HEADWALLS AND WINGWALLS**

Remove all loose formwork and materials from the waterway at the end of each work week or prior to a rain event. Debris that falls into the waterway must be removed at the end of each work day. Upon completion of the structure, stencil the National Bridge Inventory (NBI) number (structure number) using black paint and 4 in. tall numbers at 4 locations designated by The County. This work is subsidiary.

### **ITEM 467 - SAFETY END TREATMENT**

Field adjust pipe end to maintain the necessary slope. Field cutting of pipe end is allowed. Coat all metal field cuts or exposed reinforcement with asphalt paint.

### **ITEM 502 - BARRICADES, SIGNS, AND TRAFFIC HANDLING**

For roadways without defined allowable closure times, nighttime lane closures will be allowed from 7 P to 6 A. Unless stated, daytime or Friday night lane closures will not be allowed and one lane in each direction will remain open at all times for all roadways.

No closures will be allowed on the weekends, working day prior, and working day after the National Holidays defined in the Standard Specifications, Good Friday, and Easter weekend.

To account for directional traffic volumes, begin and end times of closures may be shifted equally by the County Representative. The closure duration will remain. Added compensation is not allowed.

Submit an emailed request for a lane closure (LCN) to The County. The email will be submitted in the format provided. Receive concurrence prior to implementation. Submit a cancellation of lane closures a minimum of 18 hours prior to implementation. Blanket requests for extended periods are not allowed. Max duration of a request is 2 weeks prior to requiring resubmittal. Provide 2 hour notice prior to implementation and immediately upon removal of the closure. Submit the request a minimum of 48 hours prior to the closure and by the following deadline immediately prior to the closure: 11A on Tuesday or 11A on Friday.

For all roadways: Submit request for traffic detours and full roadway closures 168 hours prior to implementation. Submit request for nighttime work 96 hours to implementation date. Cancellations of accepted closures (not applicable to full closures or detours) due to weather will not require resubmission in accordance with the above restrictions if the work is completed during the next allowable closure time.

Closures that conflict with adjacent contractor will be prioritized according to critical path work per latest schedule. Conflicting critical path or non-critical work will be approved for first LCN

submitted. Denial of a closure due to prioritization or other reasons will not be reason for time suspension, delay, overhead, etc.

Cover, relocate or remove existing signs that conflict with traffic control. Install all permanent signs, delineation, and object markers required for the operation of the roadway before opening to traffic. Use of temporary mounts is allowed or may be required until the permanent mounts are installed or not impacted by construction. Maintain the temporary mounts. This work is subsidiary.

Meet with the County Representative prior to lane closures to ensure that sufficient equipment, materials, devices, and workers will be used. Take immediate action to modify traffic control, if at any time the queue becomes greater than 20 minutes. Have a contingency plan of how modification will occur. Consider inclement weather prior to implementing the lane closures. Do not set up traffic control when the pavement is wet.

Place a 28 inch cone, meeting requirements of BC (10), on top of foundations that have protruding studs. This work is subsidiary.

Edge condition treatment types must be in accordance with the The County standard. Installation and removal of a safety slope is subsidiary.

Work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage will potentially be required. These enhancements will be mutually agreed upon by the County Representative and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The County Representative may choose to use existing bid items if it does not slow the implementation of enhancement.

#### **ITEM 506 - TEMPORARY EROSION, SEDIMENTATION, AND ENV CONTROLS**

Install, maintain, remove erosion, sedimentation and environmental control measures in areas of the right of way utilized by the contractor that are outside the limits of disturbance required for construction. Permanently stabilize the area. This work is subsidiary.

#### **ITEM 508 – CONSTRUCTING DETOURS**

Detour typical section must match the adjacent roadway section, unless shown on the plans. Flexible base will be Type A Grade 5 placed using ordinary compaction. Base compressive strengths are waived for roadways not listed in Item 502, Table 1.

#### **ITEM 512 – PORTABLE TRAFFIC BARRIER**

Any increase in temporary barrier quantities that occur due to Contractor changes in the sequence of work or the traffic control plan will not be paid.

#### **ITEM 528, 531, & 536 – MISCELLANEOUS CONSTRUCTION**

Reinforcement will be in accordance with Item 432.3.1 unless shown on the plans. Fiber reinforcement is not allowed. Class A and B Concrete are allowed to use Coarse Aggregate Grades 1-8. Expansion joints will be placed every 40 ft. Expansion joints must be 1" wide

asphalt board and flush with the surface. The bottom of the joint shall be at half the depth of the concrete. Sidewalk cross slope must not exceed 1.5%.

Unless shown on the plans or in the pay items, all concrete will be 5 in. thick and have 2 in. sand, base, or RAP bedding. Furnish base meeting the requirement for any type or grade in accordance with Item 247. Base compressive strengths are waived. RAP must be 100% passing a 1 in. sieve. Bedding must be placed using ordinary compaction.

If roots are encountered verify with the County Representative prior to accommodating or removing 2 in. diameter or larger roots. Root removal must be in accordance with Item 752.4.2. Roots may remain in the bedding or base. For improvements within 6 in. of a root, the concrete thickness may be reduced by 1 in. and the bedding increased by 1 in. to minimize impacts to the roots. Adjust bedding and surface profile to provide a 1 in. bedding cushion around the roots. The surface profile may be adjusted to the extent allowed by ADA. This work is subsidiary.

### **ITEM 530 – INTERSECTIONS, DRIVEWAYS, AND TURNOUTS**

Notify property owners a minimum of 48 hr. in advance of beginning work on their driveway. Provide a list of each notification and contact prior to each closure. Only close driveways for reconstruction if duration and alternate access are approved. Install and maintain material across a work zone as temporary access. Temporary access must not have grade breaks that exceed 8%. This work is subsidiary.

Grade breaks must not exceed 8%. Sidewalk crossing slope will be 1.5% and 5 ft. wide with width reduction in approved locations.

For ACP or SURF TREAT, the pavement structure will match the adjacent roadway unless detailed on the plans. HMA, including surface, may use a maximum allowable amount of 40% RAP and 5% RAS for private driveways, public driveways for 2-lane roadways or smaller, and turnouts. Blending of 2 or more sources is allowed. Furnish base meeting the requirement for any type or grade in accordance with Item 247. Compressive strengths for flexible base are waived. Base must be placed using ordinary compaction.

For CONC, the pavement structure will be 6 in. thick and have 3 in. base bedding unless detailed on the plans. Furnish base meeting ACP or SURF TREAT requirements. Class A concrete is required and may use Coarse Aggregate Grades 1-8. Expansion joints will be placed every 20 ft. Expansion joints will be constructed as detailed in the latest The County Concrete Curb and Curb and Gutter Standard. Reinforcement will be in accordance with concrete riprap for Item 432.3.1., unless specified on the plans.

### **ITEM 540, 542, & 544 - METAL BEAM GUARD FENCE AND GUARDRAIL END TREATMENTS**

Furnish round timber posts for guard fence. Steel posts for low fill culverts are subsidiary. Stake the locations for approval prior to installation. Adjust the limits of the fence to meet field conditions. Install delineators before opening the road to traffic.

Retain all materials. Contractor may reuse all existing materials that are structurally sound and dent free. All reused material shall be from this project and in compliance with current standards. Structurally sound rust spots with the largest dimension of 4 in. may be cleaned and

repaired in accordance with 540.3.5. Contractor may punch or field drill holes in the metal rail element to accommodate post spacing. Additional holes for splice or connections are not allowed. The holes shall be spaced in accordance with the latest standard and shall not be closer than the minimum spacing shown on the standard.

### **ITEM 600s & 6000s – ITS, LIGHTING, SIGNING, MARKINGS, AND SIGNALS**

Meet the requirements of the NEC, Texas MUTCD, TxDOT standards, and TxDOT Standard Specifications. Notify the County Representative if existing elements to remain do not meet code or specification.

Contractor shall provide all service, equipment and material required to provide a functional item and interface with existing equipment and software.

Provide a 7 day advance email notice to the County Representative to request illumination or traffic signal punch list inspection.

Provide a 14 day advance email notice to the County Representative with signal technician contact information and signal locations prior to working or assuming operations of illumination or traffic signal.

Provide a 60 day advance email notice to the County Representative to request signal timing if timing is not provided in the plans.

Provide a 180 day advance email notice to the County Representative for equipment to be provided by The County.

Prior to relief of maintenance, a Test Period is required for signals and ITS equipment in accordance with Item 680.3.1.8. Response time to reported trouble calls shall be less than 2 hours. Complete repairs within 24 hours. Notify the County Representative and maintain a logbook in the controller cabinet of each trouble call. Do not clear the error log in the conflict monitor without approval.

Maintain the existing ITS equipment and HUB buildings operational during construction. ITS downtime is allowed from 12A to 4A. Downtime is restricted to one time per HUB or equipment.

Definitions of abbreviations used to designate ITS equipment, material, etc. can be provided by the Engineer.

### **ITEM 618 - CONDUIT**

Fit PVC and HDPE conduit terminations with bell ends.

Shift the locations of conduit and ground boxes to accommodate field conditions.

Install conduit not exceeding 2 feet in any direction from a straight line. Install conduit at a minimum depth of 2 ft. below finished grade. Installation of the conduit by jacking or boring method will be at a depth of at least 1 ft. below subgrade.

Install a high tension, non-metallic pull rope in all conduit runs. Cap all empty conduit using standard weather tight conduit caps. This work is subsidiary.

Use a coring device when drilling holes through concrete structures.

Structurally mounted junction boxes will be as shown on the plans. When used for traffic signal installations, these boxes will be 12" x 12" x 8". This work is subsidiary.

When using existing conduit, ensure that all conduits have bushings and cleaned of dirt, mud, grease, and other debris. Re-strap existing or relocated conduit per the specification. This work is subsidiary. Abandon existing underground conduit that is unusable is allowed if all conductors are removed. Replacement conduit will be paid using the existing bid items.

#### **ITEM 620 - ELECTRICAL CONDUCTORS**

Provide 10 amp time delay fuses.

For Flashing Beacons (Item 685) and Pedestal Poles (Item 687), provide single-pole breakaway disconnects.

Install a minimum size 8 AWG equipment grounding conductor (EGC) in all conduits including loop detectors and traffic signal cables. Payment and the size of the EGC will be in accordance with standard ED (3)-14 note 12.

Permanently mark "illumination" on the luminaire conductors installed inside a traffic signal pole. Make the marks easily visible from the hand hole.

#### **ITEM 624 – GROUND BOXES**

Aggregate for fill under the box will be crushed, have a maximum size of 2 in., minimum size of ½ in., and requirements per Item 302 are waived.

#### **ITEM 628 – ELECTRICAL SERVICES**

Contact the utility company upon execution of contract and prior to the pre-construction meeting to make arrangements for all work and materials provided by the utility company. Accounts shall be placed in the name of The County.

#### **ITEM 644 – SMALL ROADSIDE SIGN ASSEMBLIES**

Triangular slip base that use set screws to secure the post will require 1 of the set screws to penetrate the post by drilling a hole in the post at the location of the screw. All set screws shall be treated with anti-seize compound.

#### **ITEM 658 – DELINEATOR AND OBJECT MARKER ASSEMBLIES**

Installation and maintenance of portable CTB reflectors will be subsidiary to the barrier.

#### **ITEM 662 - WORK ZONE PAVEMENT MARKINGS**

Notify the County Representative at least 24 hours in advance of work for this item.

Maintain removable and short term markings daily. Remove within 48 hours after permanent striping has been completed.

Item 668 is not allowed for use as Item 662.

### **ITEM 666 - RETROREFLECTORIZED PAVEMENT MARKINGS**

Notify the County Representative at least 24 hr. before beginning work.

Use of temporary flexible reflective roadway marker tabs is subsidiary and at the Contractor's option. Replace missing or damaged tabs nightly. If using tabs, place longitudinal markings weekly by 5 AM Friday for all weekday work and by 5 AM Monday for all weekend work. Failure to maintain tabs or place longitudinal markings by deadline will require nightly placement of longitudinal markings.

When the raised portion of a profile marking is placed as a separate operation from the pavement marking, the raised portion must be placed first then covered with TY I.

When using black shadow to cover existing stripe apply a non-retroreflective angular abrasive bead drop. The marking color shall be adjusted to resemble the pavement color. If Item 677 is not used prior to placement of black shadow, scrape the top of the marking with a blade or large piece of equipment unless surface is a seal coat. The scraping of the marking is subsidiary.

### **ITEM 677 - ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS**

Dispose of removed materials and debris at locations off the right of way.

Elimination using a pavement marking will not be allowed in lieu of methods listed in specification.

Remove pavement markings on concrete surfaces by a blasting method. Flail milling will be allowed when total quantity of removal on concrete surfaces is less than 1000 ft.

Strip seal is only method allowed on seal coat surface unless project includes placement of a new surface. If total quantity of removal on a seal coat surface is less than 2000 ft., elimination using a pavement marking is allowed if a test section is approved by the County Representative. Test section shall demonstrate the thermo marking color matches the existing pavement color.

Remove pavement markings outside the limits of the new surface by a blasting method.

Use a TRAIL or a non-retroreflective paint to cover stripe remnants that remain after elimination. The test requirements for these materials are waived. The paint color shall be adjusted to resemble the existing pavement color. Installation and maintenance is subsidiary.

### **ITEM 680 - HIGHWAY TRAFFIC SIGNALS**

Luminaire arms shall be aligned with the signal head support. If multiple signal head supports, the luminaire arm shall be aligned with the support over the higher volume roadway.

Install 250W EQ LED illumination fixtures as shown in the plans. Test in accordance with Item 616. This work is subsidiary

Furnish all materials and install signs mounted on the traffic signal wire, traffic signal poles, mast arms, and pedestal pole assemblies. Remove all conflicting signs and sign foundations when signal is placed into operation. This work is subsidiary.



Use a Vulcan swinger sign mounting bracket or equivalent for all signs mounted on span wires.

Place the traffic signal into operation after the traffic signal and stripe have been completed. The signal shop will be present to program the controller and assist with detection setup. Have a qualified technician and a representative from the controller supplier on the project site to place the traffic signals in operation.

If shown on the plans, install the Emergency Response Detection equipment supplied by the City.

For city operated signals, the city may assist in determining how the detector loop lead-in cables are to be connected, and will also program the controller for operation, the video detection, hook up the conflict monitor, detector units and other equipment, and turn on the controller.

#### **ITEM 682 – VEHICLE AND PEDESTRIAN SIGNAL HEADS**

Install signal head attachments so the wiring to each passes from the signal pole through the attachment hardware to the signal head. Use UV rated tie wraps.

Traffic signal heads will be aluminum unless otherwise shown on the plans. Back plates will be black aluminum.

Provide louvers, which have five vanes with a black finish on inside surfaces when required. Fasten a hardware cloth screen, securely, with  $\frac{5}{8}$ " or smaller mesh size to the front face of each louver to prevent bird nesting.

Use the four point mounting system (TY A) for signal heads, except in cases of skewed or vertical heads when (TY B) will be used.

#### **ITEM 684 – TRAFFIC SIGNAL CABLES**

For each cable run, coil an extra 2 ft. of cable in each steel pole and 5 ft. in the controller cabinet. Provide a separate multi-conductor signal cable (14 AWG) inside pedestal poles and mast-arm signal poles from the terminal strip to each signal head as shown on the plans.

#### **ITEM 685 – ROADSIDE FLASHING BEACON ASSEMBLIES**

Installation includes all components in the assembly, signs, signal heads, and conductors in the foundation and within 6 in. of the foundation to provide a fully operational assembly.

Test period for the assembly shall be in accordance with item 680.3.1.8.

#### **ITEM 686 - TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)**

Provide and install damping plates on all mast arms 40 ft. or greater. For mast arms less than 40 ft., refer to SMA and DMA vibration notes for guidance. This work is subsidiary.

When luminaires are installed on mast arm poles, install a separate terminal strip in the signal pole access compartment. Provide a 10-amp time-delay fuse for traffic signal poles with luminaires.

**ITEM 687 – PEDESTAL POLE ASSEMBLIES**

Verify the required pole height prior to ordering material.

**ITEM 688 - PEDESTRIAN DETECTORS AND VEHICLE LOOP DETECTORS**

Test all loops in accordance with the FHWA loop detector handbook.

Install vehicle loops prior to placement of roadway surface.

For replacement of existing loops, replacement of damaged or missing conduit from the vehicle loop detector to the ground box will be measured and paid by overrun of loop detector bid item.

Removal of damaged ground boxes at end of lead in cable is subsidiary to the new ground box.

Test period for the pedestrian detectors shall be in accordance with item 680.3.1.8.

Pedestrian push buttons will be mounted at 42 in. above the walking surface and have permanent type signs within the detector unit (9 in. x 12 in. sign and push button station on signal poles and 5 in. x 7 in. sign and push button station on pedestrian poles), which explains their purpose and indicates which crosswalk signal is actuated. Provide speech walk message as shown in the plans or per County Representative.

**ITEM 6001 – PORTABLE CHANGEABLE MESSAGE SIGN**

Provide 2 PCMS. Provide a replacement within 12 hours. PCMS will be available for traffic control, event notices, roadway conditions, service announcements, etc.

Place PCMS 10 calendar days prior to begin work stating “Road Work Begin Soon, Contact 832-7000 For Info”.

Place PCMS at time of LCN request. Place the PCMS at the expected end of queue caused by the closure. When the closure is active, revise the message to reflect the actual condition during the closure, such as “RIGHT LN CLOSED XXX FT”.

**ITEM 6002 - VIDEO IMAGING VEHICLE DETECTION SYSTEM (VIVDS)**

Install the VIVDS cameras onto the mast arms with the attachment mechanisms provided with the camera system. Place the traffic signal cable (TY A) (3-conductor) (16 AWG) and the VIVDS communication cable coaxial in continuous and separate runs from each VIVDS camera to the controller. Consider the costs associated with the above work subsidiary to the pertinent Items.

Aim and adjust the cameras, install the cables and VIVDS cards into the controller cabinet and complete any other necessary work to bring the traffic signal into operation.

Provide the traffic signal cable and coaxial cable above and any incidentals necessary to install them.

Provide a Video Processor System (VPS) that can provide up to thirty-two (32) detector outputs to the controller from up to eight (8) camera/video processor units (C/VPU). Route the detector outputs through the Bus Interface Unit (BIU) or approved product, which replaces the functions

of the BIU. Field of view for each C/VPU will provide a minimum of thirty-two (32) virtual detection zones for vehicle detection.

Provide a set-up system. Load required set-up software onto all of the District Signal Shop's notebook computers and provide all necessary licensing. Computers will not be provided by the Contractor as part of the set-up system.

Provide and install all cables necessary to provide complete VIVDS operation. Provide a minimum of 10 cables to direct connect the notebook to the VIVDS port.

Phase red and green load switch outputs from up to sixteen (16) phases of a NEMA TS2 Type 2 controller will be provided as inputs to the VPU for use with internal detector extend/delay timing functions. The C/VPU will be able to condition the detector outputs and detection zones based on the state of the associated phase number and color.

The serial communication port on the front of the VPU will be a DB-9 RS-232 connector. Supply a package that will operate with Windows XP and NT and provide the functionality defined in both sections 7.0 and 8.0 in both a direct connect and remote communications mode. The software resident in the VPU and the personal computer will be capable of transmitting and receiving all information needed for zone set up, monitoring vehicle detection by viewing flashing detection zone overlays, and uploading/downloading and interrogating all stored data within the VPU. Remote communications with the VCU will be possible with the addition of external communication devices (modem, Codec, etc.) using the RS-232 and video output ports on the front of the VPU.

The VPU operational software will be stored internally in flash memory and be capable of being updated without the removal and replacement of memory devices.

Provide surge protection in the controller cabinet protecting the camera video and power inputs/outputs. All surge protection will be dinrail mounted.

Install the VIVDS detection zones as directed. Have qualified personnel on site at the time of the signal turn-on to assist with the installation of detection zones.

If the camera locations shown in the plans do not allow for proper sight of the proposed detection zones, relocate the cameras as needed and as directed. This labor and material cost will not be paid separately, but is subsidiary to this Item.

The video output from the C/VPU will be in color or black/white with active detection zones overlaid on full motion video.

**SECTION 13**  
**TECHNICAL SPECIFICATIONS**

## GOVERNING SPECIFICATIONS

(STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, AND SPECIAL SPECIFICATIONS)

WHERE DISCREPANCIES OCCUR BETWEEN THE TECHNICAL SPECIFICATIONS, THE FOLLOWING DESCENDING ORDER OF PRIORITY SHALL GOVERN: (1) SPECIAL CONDITIONS, (2) SPECIAL PROVISIONS TO SPECIAL SPECIFICATIONS, (3) SPECIAL SPECIFICATIONS, (4) SPECIAL PROVISIONS, AND (5) STANDARD SPECIFICATIONS.

ALL SPECIFICATIONS AND SPECIAL PROVISIONS APPLICABLE TO THIS PROJECT ARE IDENTIFIED AS FOLLOWS:

STANDARD SPECIFICATIONS: ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION NOVEMBER 1, 2014. STANDARD SPECIFICATIONS ARE INCORPORATED INTO THE CONTRACT BY REFERENCE.

|             |                                                              |
|-------------|--------------------------------------------------------------|
| ITEMS 1 - 9 | GENERAL REQUIRMENTS AND COVENANTS                            |
| ITEM 100    | PREPARING RIGHT OF WAY                                       |
| ITEM 105    | REMOVING TREATED AND UNTREATED BASE AND ASPHALT PAVEMENT     |
| ITEM 110    | EXCAVATION                                                   |
| ITEM 132    | EMBANKMENT                                                   |
| ITEM 160    | TOPSOIL                                                      |
| ITEM 164    | SEEDING FOR EROSION CONTROL                                  |
| ITEM 168    | VEGETATIVE WATERING                                          |
| ITEM 247    | FLEXIBLE BASE                                                |
| ITEM 260    | LIME TREATMENT (ROAD-MIXED)                                  |
| ITEM 310    | PRIME COAT                                                   |
| ITEM 341    | DENSE-GRADED HOT-MIX ASPHALT                                 |
| ITEM 416    | DRILLED SHAFT FOUNDATIONS                                    |
| ITEM 432    | RIPRAP                                                       |
| ITEM 450    | RAILING                                                      |
| ITEM 462    | CONCRETE BOX CULVERTS AND DRAINS                             |
| ITEM 464    | REINFORCED CONCRETE PIPE                                     |
| ITEM 465    | JUNCTION BOXES, MANHOLES, AND INLETS                         |
| ITEM 466    | HEADWALLS AND WINGWALLS                                      |
| ITEM 467    | SAFETY END TREATMENT                                         |
| ITEM 500    | MOBILIZATION                                                 |
| ITEM 502    | BARRICADES, SIGNS AND TRAFFIC HANDLING                       |
| ITEM 506    | TEMPORARY EROSION, SEDIMENTATION, AND ENVIRONMENTAL CONTROLS |
| ITEM 508    | CONSTRUCTING DETOURS                                         |

|          |                                                     |
|----------|-----------------------------------------------------|
| ITEM 529 | CONCRETE CURB, GUTTER, AND COMBINED CURB AND GUTTER |
| ITEM 530 | INTERSECTIONS, DRIVEWAYS, AND TURNOUTS              |
| ITEM 531 | SIDEWALKS                                           |
| ITEM 540 | METAL BEAM GUARD FENCE                              |
| ITEM 560 | MAILBOX ASSEMBLIES                                  |
| ITEM 618 | CONDUIT                                             |
| ITEM 620 | ELECTRICAL CONDUCTORS                               |
| ITEM 621 | TRAY CABLE                                          |
| ITEM 624 | GROUND BOXES                                        |
| ITEM 628 | ELECTRICAL SERVICES                                 |
| ITEM 644 | SMALL ROADSIDE SIGN ASSEMBLIES                      |
| ITEM 658 | DELINEATOR AND OBJECT MARKER ASSEMBLIES             |
| ITEM 662 | WORKZONE PAVEMENT MARKINGS                          |
| ITEM 666 | REFLECTORIZED PAVEMENT MARKINGS                     |
| ITEM 672 | RAISED PAVEMENT MARKERS                             |
| ITEM 677 | ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS  |
| ITEM 678 | PAVEMENT SURFACE PREPARATION FOR MARKINGS           |
| ITEM 680 | HIGHWAY TRAFFIC SIGNALS                             |
| ITEM 682 | VEHICLE AND PEDESTRIAN SIGNAL HEADS                 |
| ITEM 684 | TRAFFIC SIGNAL CABLES                               |
| ITEM 685 | ROADSIDE FLASHING BEACON ASSEMBLIES                 |
| ITEM 686 | TRAFFIC SIGNAL POLE ASSEMBLIES (STEEL)              |
| ITEM 687 | PEDESTAL POLE ASSEMBLIES                            |
| ITEM 688 | PEDESTRIAN DETECTORS AND VEHICLE LOOP DETECTORS     |
| ITEM 690 | MAINTENANCE OF TRAFFIC SIGNALS                      |

SPECIAL SPECIFICATIONS:

|           |                                            |
|-----------|--------------------------------------------|
| ITEM 6002 | VIDEO IMAGING VEHICLE DETECTION SYSTEM     |
| ITEM 6058 | BATTERY BACK-UP SYSTEM FOR SIGNAL CABINETS |

(WATERLINE SPECIFICATIONS ARE LISTED ON THE NEXT PAGE)

SPECIAL PROVISIONS:

WAGE RATES (See Section 8)

GENERAL: THE ABOVE-LISTED SPECIFICATION ITEMS ARE THOSE UNDER WHICH PAYMENT IS TO BE MADE. THESE, TOGETHER WITH SUCH OTHER PERTINENT ITEMS, IF ANY, AS MAY BE REFERRED TO IN THE ABOVE-LISTED SPECIFICATION ITEMS, AND INCLUDING THE SPECIAL PROVISIONS AND SPECIAL SPECIFICATIONS LISTED ABOVE, CONSTITUTE THE COMPLETE SPECIFICATIONS FOR THIS PROJECT.

## GOFORTH WATER LINE SPECIFICATIONS

GENERAL: THE BELOW LISTED SPECIFICATIONS REFER TO THE CONSTRUCTION OF THE GOFORTH WATERLINE. SHOULD DECREPENCIES BETWEEN THE WATERLINE SPECIFICATIONS AND THE ROADWAY SPECIFICATIONS EXIST, THE ROADWAY SPECIFICATIONS SHALL GOVERN BUT WILL REQUIRE APPROVAL OF THE ENGINEER.

## TECHNICAL TABLE OF CONTENTS

### DIVISION 01 - GENERAL REQUIREMENTS

| <u>SECTION</u> | <u>TITLE</u>                              |
|----------------|-------------------------------------------|
| 01001          | Summary of Work                           |
| 01010          | Definitions, Standards, and Abbreviations |
| 01100          | Submittal Data                            |
| 01200          | Construction Operations                   |
| 01250          | Project Safety and Safety Devices         |
| 01300          | Measurement and Payment                   |
| 01400          | Inspection                                |
| 01500          | Warranties and Guarantees                 |

### DIVISION 02 – SITE WORK

| <u>SECTION</u> | <u>TITLE</u>                                            |
|----------------|---------------------------------------------------------|
| 02000          | General                                                 |
| 02050          | Preparing the Right-of-Way                              |
| 02510          | Roadway Replacement – Asphalt Driveways and Roadways    |
| 02610          | Flexible Base – Gravel/Dirt Driveway and Roadway Repair |
| 02700          | Seeding for Erosion Control                             |
| 02710          | Silt Fence                                              |

### DIVISION 13 - UTILITIES

| <u>SECTION</u> | <u>TITLE</u>                                 |
|----------------|----------------------------------------------|
| 13000          | General                                      |
| 13100          | Trench Removal and Replacement – Water Lines |
| 13300          | Trench Safety                                |

### DIVISION 15 - MECHANICAL

| <u>SECTION</u> | <u>TITLE</u>                                       |
|----------------|----------------------------------------------------|
| 15000          | General                                            |
| 15100          | Ductile Iron Pipe and Fittings                     |
| 15150          | Steel Casing Pipe - Water                          |
| 15200          | Polyvinyl Chloride (PVC) Pipe and Fittings – Water |
| 15220          | Copper and Brass Pipe and Fittings                 |
| 15225          | Brass Goods                                        |
| 15230          | Polyethylene Pipe, Tubing and Fittings             |
| 15235          | Detectable Marking Tape                            |
| 15240          | High Density Polyethylene Pipe (HDPE) and Fittings |
| 15255          | Casing Spacers and End Seals                       |
| 15300          | Testing and Disinfection – Water                   |
| 15400          | Gate Valves                                        |
| 15405          | Butterfly Valves                                   |
| 15420          | Combination Air Release and Vacuum Valves – Water  |
| 15500          | Fire Hydrants                                      |



This page intentionally left blank.

## Section 01001 - Summary of Work

### 1.0 General

#### A. Scope

The Work to be performed under the provisions of these Contract Documents consists of furnishing all materials, equipment, tools, transportation, services, labor and supervision necessary for construction of facilities and installation of any and all equipment together with appurtenances for:

Water Lines (16” through 2”), Roadway Bores, Brush Mulching, Driveway Crossings, Water Meter Reconnections, Tie-ins, Hydrants, Valves, Fittings and Restraints.

Project name is **Dacy Lane Widening Water Line Relocations** as shown on Contract Documents as prepared by Southwest Engineers, Inc. This section provides a general description of the project and the work that the Contractor is to complete. The description is limited and not intended to cover all of the Contractor’s tasks.

The Contractor shall conduct preparatory operations prior to commencing installation of the pipe. Prior to any work at the site, the Contractor shall have all utilities located (i.e. buried telephone cable, gas lines, fiber optic cable, existing water lines, existing waste water lines, etc.) along the route of the proposed water line (Dacy Lane and intersecting roads). If these locations vary significantly from the locations shown on the Drawings, the Contractor shall report the actual locations to the Engineer for any modifications necessary to the design. The Contractor shall make a diligent search for evidence of other buried pipes, structures, or features that may conflict with the proposed construction and shall report their presence to the Engineer.

The Contractor shall take all necessary safety precautions as the work will be performed along a fairly busy, and narrow, county road. The Contractor shall utilize proper signage and barricades as required by the most current “Texas Manual on Uniform Traffic Control Devices.”

The project includes the installation of nearly 4 miles of PVC water line ranging from 16” (15,335 linear feet (LF)) to 12” (2,730 LF) to 8” (260 LF) to 6” (1,535 LF) to 4” (400 LF) and 2” (35 LF). Hays County is widening and re-routing Dacy Lane (Hays C.R. 205) from Bebee Road (Hays C.R. 122) to Hillside Terrace Drive (Hays C.R. 133) from a 30’-40’ ROW to on average 100’ ROW. Majority of Goforth SUD’s water lines will be impacted and have to be

abandoned once new lines are installed. A few lines will be left in service; however, majority will not. Water line assignment will vary inside and out of proposed ROW and private easement depending on existing conditions. Numerous steel casings by way of bore or open cut will be required across existing roadways, waterways or other utilities.

Existing water meters shall be tied into the new water lines. Some water meters will have to be relocated to the new proposed ROW while others remain at their current location.

The Contractor must exercise extreme caution when trenching so that the existing water and service lines are not damaged. The project shall be completed with minimal interruption in service to the Goforth SUD customers.

The Contractor will be responsible for trimming/removing the small trees and brush as required along the route/easements and shall coordinate with the landowners on removal/placement of the brush/mulch.

The Contractor shall bed the proposed water line 6-inches below, around, and on top with approved embedment material - pea gravel (3/8" diameter or smaller) or manufactured sand. Typical depth of cover will be 48" on the proposed water lines.

The Contractor shall meet all requirements associated with permits, and shall contact the appropriate parties prior to construction. The Contractor shall conduct his operations along Dacy Lane according to the directions and requirements of Hays County and the permit(s) issued by that agency. The Contractor shall repair all areas and features disturbed or damaged by construction.

The Contractor shall install fire hydrants and gate valves at the locations shown on the plans, unless directed otherwise by the Owner. The gate valves shall have a concrete pad poured around them. The Contractor shall install an air release valve assembly at the highest points along Dacy Lane as shown on the Plans. The air valve will be placed directly on top of the proposed water line, connected with brass nipples. The Contractor shall restrain all fittings and valves with mechanical joint (meg-a-lug) restraints and provide adequate concrete blocking. The Contractor shall use foster adapters between all ductile iron fittings and valves.

The Contractor shall place the proposed line in service and shall conduct his operations so as to maintain the existing lines in service. The Contractor shall disinfect and test the new water lines, valves and fittings.

The Contractor shall repair all other damage to existing driveways caused by construction activities. Backfill of trenches under driveways shall be placed in 8-inch maximum lifts and compacted to 95% density at optimum moisture content. Gravel driveways shall be repaired with a minimum 8-inch thick layer of flexible base material compacted to 95% density at optimum moisture content. Finished surface of driveways shall match existing grade and slope.

The Contractor shall repair and restore any and all damage to public and private property, resulting from construction of these facilities, regardless of whether or not such damage results directly from his operations. The Contractor shall dress all areas disturbed during construction, including storage areas. The Contractor shall evenly grade areas to pre-construction levels. All rubbish, trash and debris shall be removed and properly disposed.

The Contractor shall backfill trenches and soon as possible and close all ditches up at the end of the day as the landowner has cattle that will be around the construction activities.

The Contractor shall conduct his operations to avoid and prevent erosion and sedimentation of spoil. The Contractor shall erect and maintain silt fences where shown on the Drawings, to slow surface flow of storm water and to trap waterborne solids. The Contractor shall remove those silt fences once vegetation has covered the construction site. The Contractor shall employ reasonable and practical methods, safeguards, etc. to prevent pollution and contamination. He shall immediately clean-up, remedy and restore any pollution or contamination that may occur. The Contractor shall perform the operations and duties required by the Storm Water Pollution Prevention Plan.

Except as otherwise designated herein as the responsibility of the Owner, the Contractor shall provide all materials, equipment, tools, labor, superintendence, etc. necessary to complete the project and place it in operation.

## B. Materials

The Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities that are required to execute, complete, and deliver the work within the specified Contract time, except as otherwise specifically stated in the Contract Documents.

Any work necessary to be performed after regular working hours, on Sundays or legal holidays shall be performed without additional expense to the Owner and subject to approval in advance by the Owner.

Compliance with job safety requirements and health standards as published by the Occupational Safety and Health Administration, United States Department of Labor, shall be provided without additional expense to the Owner.

## C. Nature and Intent of Specifications and Plans

The Specifications and Plans are intended to supplement but not necessarily duplicate one another. Any work exhibited in one and not in the other shall be executed as if it had been set forth in both.

Should the requirements appear to be in conflict or the Contractor have questions on the Work, the Contractor shall secure written instructions from the Engineer before proceeding with the construction affected thereby. The intent is that the Work shall be performed according to the Contract Documents.

All products specified by manufacturer's name shall be installed in accordance with manufacturer's printed instructions.

When equipment or material furnished by the Contractor cannot be installed as specified or as shown on the Plans, the Contractor shall, without extra cost to the Owner, make all modifications required to properly install the equipment or material. Such modifications shall be subject to the approval of the Owner and the Engineer.

Dimensions and elevations shown on the Plans shall be accurately followed even though they may differ from scaled measurements. Proposed work shown on the Plans, in which the dimensions are not clearly indicated, shall be postponed until necessary dimensions have been obtained from the Engineer.

The general arrangement of the Work shall be as indicated on the Plans. Detail drawings or proposed departures due to actual field condition or other causes shall be submitted to the Engineer for approval.

No attempt has been made in the Contract Documents to segregate work to be performed by any trade or subcontract. Any segregation between the trades or crafts will be solely a matter for agreement between the Contractor and his employees and/or his subcontractors.

The Contract Documents as a whole shall govern the construction of the entire Work. The applicable provisions thereof shall govern work to be performed under each section.

The Contractor shall check all dimensions, elevations, and quantities shown on the Plans and schedules provided by the Engineer and shall notify the Engineer of any discrepancy between the Plans and the conditions on the ground or of any error or omission in Plans or in the layout or instructions which he may discover in the course of the Work. Full instructions shall be furnished by the Engineer should such error or omission be discovered, and the Contractor shall carry out such instructions as if originally specified.

#### D. Quality of Materials and Equipment

Unless specifically provided otherwise in each case, all materials and equipment furnished for permanent installation in the Work shall conform to applicable standard specifications and shall be new, unused, and undamaged when installed or otherwise incorporated in the Work.

Contractor shall submit for approval a list of makes and types of all equipment and materials he proposes to use prior to placing orders for same. This shall be done promptly upon award of contract to avoid delays in delivery and completion.

Any materials or equipment installed without the Engineer's prior approval shall, if so directed by the Engineer, be removed and replaced with approved material or equipment at the Contractor's expense.

E. Items of Work

All work within the scope of this project shall be completed in accordance with the intent of the Contract Documents. Major items of work are included but are not limited to items listed in the Contract Documents.

**2.0 Scheduling**

- A. The Contractor shall coordinate all construction activities and scheduling through the Owner as other construction activities may be in progress.
- B. All material and pertinent equipment must be on site prior to commencing construction.
- C. All required traffic and safety control devices must be in place and inspected prior to the commencing of construction.
- D. Location of all underground utility lines shall be made prior to the commencing of construction to insure in-field verification of location.
- E. The Contractor shall report to the Engineer any conflict between existing utilities or other structures with the proposed improvements. The Owner and the Engineer shall have sufficient time to resolve any conflict.
- F. Down Time for Utility Tie-Ins
  - 1. All tie-ins that require disruption of service shall be completed with less than four (4) hours per tie-in.
  - 2. All tie-ins shall be coordinated with the Owner a minimum of 48 hours in advance. The amount of downtime is very limited, therefore the Contractor shall have all pipe exposed and necessary equipment and supplies on site prior to the actual tie-in.
- G. Public Access
  - 1. The Contractor shall make every effort to complete construction and to allow immediate access to all driveway entrances. Adequate barricades shall be used to route traffic (vehicular and pedestrian) during construction, if necessary.

2. The Contractor shall complete each day's work in sufficient detail to allow the public access to their property. Temporary backfill or trench covering, if necessary, shall be required to accomplish this access.

### **3.0 Services Provided By Others**

#### **A. Material Testing**

1. The Contractor shall be responsible for reimbursing the Material Testing Firm directly for all testing and re-testing.
2. The Owner shall not be responsible for testing of any construction materials. Testing would only be required to confirm suitability of any construction material, proposed for use on the project, deemed questionable by the Engineer and/or Owner.
3. All testing shall be in accordance with the Specifications herein.
4. The Contractor shall be responsible for the coordination of all testing.

#### **B. Water for Construction**

1. Water for flushing and/or testing is available from the Owner.
2. Water for trench backfill, road construction, washing and other associated needs is available from the Owner.
3. Due to the volume of water that may be required, coordination shall be made with the Owner prior to use.
4. The Contractor shall coordinate with the Engineer and Owner prior to discharge of any water used in the construction of the Work to adequately allow for drainage of this water. Drainage provisions must be acceptable to the adjoining property and right-of-way owners. Drainage onto public and/or private roadways is prohibited.
5. The Contractor shall utilize designated fire hydrants and/or flush lines for any water used in the construction of the Work.
6. Water available from the Owner that is not provided as part of the Contract, will be available at the Owner's then current rates.



Water will be charged on a monthly basis and shall be paid per the Owner's requirements.

C. Bacteriological Testing

The Contractor shall be responsible for all sampling required until approved by the Health Department.

#### **4.0 Construction**

A. Layout and Staking

The Contractor shall stake the project for construction. The Contractor shall lay out the Work according to the lines, grades, elevations, dimensions and general arrangement as shown on the Plans or specified herein. The pipe shall be installed so as to avoid conflicts with existing utility and service lines. The pipe shall be installed so as to avoid the occurrence of high points along the line, except for those shown on the drawings.

Except as otherwise required, all buried pipe shall have a minimum cover of 48 inches.

B. Spoil and Debris Removal

All excavated earth material in excess of material required for the project shall be the property of the Contractor. All demolition debris, trash, rubbish, etc. found at the site shall be the property of the Contractor. The Contractor shall remove from the site and properly dispose all excess spoil, demolition debris, trash, and rubbish.

#### **5.0 Record Drawings**

The Contractor shall keep detailed records of the horizontal and vertical location of the pipe and appurtenances and shall deliver those to the Owner at completion of the projection. These records shall be completely discernable and legible. These records shall include dimensions to all buried valves, fittings, and other components as well as reference dimensions to permanent surface fixtures, preferably property corners.

**END OF SECTION**

## Section 01010 - Definitions, Standards, and Abbreviations

### 1.0 General

The work covered by this Section includes the Definitions, Standards, and Abbreviations found within these Contract Documents.

### 2.0 Definitions

**General Explanation:** Certain terms used in Contract Documents are defined in this article. Definitions and explanations contained in this Section are not necessarily complete, but are general for the work to the extent that they are not stated more explicitly in another element of the Contract Documents.

**General Requirements:** The provisions or requirements of other Division Sections apply to entire work of the Contract and, where so indicated, to other elements which are included in the Work.

**Indicated:** The term, “indicated”, is a cross-reference to graphic representations, notes or schedules on the drawings, to other paragraphs or schedules in the Specifications, and to similar means of recording requirements in Contract Documents. Where terms such as “shown”, “noted”, “scheduled”, and “specified” are used in lieu of “indicated”, it is for the purpose of helping the reader locate the cross-reference, and no limitation of location is intended except as specifically noted.

**Directed, Requested, Etc.:** Where not otherwise explained, terms such as “directed”, “requested”, “authorized”, “selected”, “approved”, “required”, “accepted”, and “permitted” mean “directed by the Engineer”, “requested by the Engineer”, and similar phrases. However, no such implied meaning will be interpreted to extend the Engineer’s responsibility into the Contractor’s area of construction supervision.

**Approve:** Where used in conjunction with the Engineer’s response to submittals, requests, applications, inquiries, reports and claims by the Contractor, the meaning of the term “approved” will be held to limitations of the Engineer’s responsibilities and duties as specified in the General and Supplementary Conditions. In no case shall the Engineer’s approval be interpreted as a release of the Contractor from responsibilities to fulfill requirements of the Contract Documents.

**Project Site:** The term, “project site”, is defined as the space available to the Contractor for performance of the Work, either exclusively or in conjunction with others performing other work as part of the project. The extent of the project site is shown on the drawings, and may or may not be identical with the description of the land upon which the project is to be constructed.

**Furnish:** The term “furnish” is used to mean “supply and deliver to the project site, ready for unloading, unpacking, assembly, installation, and similar operations.”

**Install:** The term “install” is used to describe operations at project site including the actual “unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing protecting, cleaning, installing and similar operations.”

**Provide:** The term “provide” means “to furnish and install, complete and ready for intended use.”

**Installer:** The “installer” is “the entity” (person or firm) engaged by the Contractor, its subcontractor or sub-subcontractor for performance of a particular element of construction at the project site, including installation, erection, application and similar required operations. It is a requirement that installers are experienced in the operations they are engaged to perform.

**Testing Laboratories:** A “testing laboratory” is an independent entity engaged to perform specific inspections or tests of the work, either at the project site or elsewhere, and to report, and (if required) interpret results of those inspections or tests.

### 3.0 Specification Standards

#### A. General

This article is provided to help the user of these specifications more readily understand the format, language, implied requirements and similar conventions of content. None of the following explanations shall be interpreted to modify the substance of contract requirements.

## B. Specification Format

1. These specifications are organized based upon the Construction Specifications Institute's 16 Division format. The organization of these specifications into Division, Sections and/or Trade Headings conforms to generally recognized industry practices.
2. Divisions are grouping of related or similar sections. The divisions are recognized as the construction industry consensus method of uniform specification organization.
3. Sections are considered as the basic units of work. The section title is descriptive only and not intended to limit the meaning or content of a section or to be completely descriptive of requirements specified therein.
4. Section numbering is used to facilitate cross-references in the Contract Documents. Sections are placed in the Specifications in numeric sequence; however, the numeric sequence is not complete and the listing of the sections in the "Table of Contents" at the beginning of the Technical Specifications must be consulted to determine the numbers and names of specification sections in the Contract Documents.
5. Pages are numbered independently for each section, and are recorded in the listing of sections (Table of Contents) at the beginning of the Technical Specifications. The section number is shown together with the page number at the bottom of each page to facilitate the location of text in the Technical Specifications
6. This project specification has been produced employing certain conventions in the use of language as well as conventions regarding the intended meaning of certain terms, words, and phrases when used in particular situations or circumstances. These conventions are explained as follows:
  - a. In certain circumstances, the language of the Specifications and other Contract Documents is of the abbreviated type. It implies words and meanings that should be appropriately interpreted. Singular words shall be interpreted as plural and plural words should be interpreted as singular where applicable and where the full context of the Contract Documents so indicates.
  - b. Imperative language is used generally in the specifications. Requirements expressed imperatively shall be performed by the Contractor. At certain locations in the text, for clarity,

contrasting subjective language is used to describe responsibilities which must be fulfilled indirectly by the Contractor, or by others when so noted.

- c. The techniques or methods of specifying requirements varies throughout the text. The method used for specifying on an element of the Work has no bearing on requirements for another element of the Work.
- d. In certain circumstances, the specification text requires or implies that specific elements of the Work shall be assigned to specialists who must be engaged to perform that element of the Work. Such assignments are special requirements over which the Contractor shall have no choice or option. Such assignments are intended to establish which party or entity involved in a specific element of the Work is considered as being sufficiently experienced in the indicated construction processes or operations to be recognized as “expert” in those processes or operations. The ultimate responsibility for fulfilling all contract requirements remains with the Contractor.

These requirements should not be interpreted to conflict with the enforcement of building codes and similar regulations governing the work.

- e. The use of certain titles such as “carpentry” in the specification text, is not intended to imply that the Work must be performed by accredited or unionized individuals of a corresponding generic name, such as “carpenter”. It also is not intended to imply that the requirements specified apply exclusively to work by tradespersons of that corresponding generic name.

## 4.0 Industry Standards

### A. Applicability of Standards

Except where more explicit or stringent requirements are written into the Contract Documents, applicable construction industry standards have the same force and effect as if bound into or copied directly into the Contract Documents. Such industry standards are made a part of the Contract Documents by reference. Individual specification sections indicate which codes and standards the Contractor must keep available at the project site for reference. Latest revision of each standard, at time of the bid opening, shall prevail.

1. Referenced standards (standards referenced directly in the Contract Documents) take precedence over non-referenced standards that are recognized in the industry for applicability to the Work.
2. Except as otherwise limited by the Contract Documents, non-referenced standards recognized in the construction industry are defined as having direct applicability to the Work and shall be enforced for the performance of the Work. The decision as to whether an industry code or standard is applicable to the Work, or as to which of several standards are applicable, is the sole responsibility of the Engineer.

#### B. Conflicting Requirements

Where compliance with two (2) or more standards is specified, and where these standards establish different or conflicting requirements for minimum quantities or quality levels, the most stringent requirement will be enforced, unless the Contract Documents specifically indicate otherwise. Refer requirements that are different, but apparently equal, and uncertainties as to which quality level is more stringent to the Engineer for a decision prior to proceeding.

#### C. Copies of Standards

The Contract Documents require that each entity performing work be experienced in that part of the Work being performed. Each entity shall also be required to be familiar with industry standards applicable to that part of the Work. Copies of applicable standards are not bound with the Contract Documents.

Where copies of standards are needed for proper performance of the Work, the Contractor is required to obtain such copies directly from the publication source.

Although certain copies of standards needed for enforcement of the requirements may be required submittals, the Engineer reserves the right to require the Contractor to submit additional copies of these standards as necessary for enforcement of requirements.

## 5.0 Abbreviations

### A. Trade Associations

Trade association names and titles of general standards are frequently abbreviated. The following acronyms or abbreviations as referenced in Contract Documents are defined to mean the associated names. Names are subject to change, and are believed to be, but are not assured to be, accurate and up-to-date as of the date of the Contract Documents.

|        |   |                                                                            |
|--------|---|----------------------------------------------------------------------------|
| AAMA   | - | American Architectural Manufacturer's Association                          |
| AASHTO | - | American Association of State Highway and Transportation Officials         |
| ACI    | - | American Concrete Institute                                                |
| ACPA   | - | American Concrete Pipe Association                                         |
| AGA    | - | American Gas Association                                                   |
| AI     | - | Asphalt Institute                                                          |
| AIA    | - | American Institute of Architects                                           |
| AISC   | - | American Institute of Steel Construction                                   |
| AISI   | - | American Iron and Steel Institute                                          |
| ANSI   | - | American National Standards Institute                                      |
| API    | - | American Petroleum Institute                                               |
| ASC    | - | Adhesive and Sealant Council                                               |
| ASCE   | - | American Society of Civil Engineers                                        |
| ASHRAE | - | American Society of Heating, Refrigerating, And Air Conditioning Engineers |
| ASME   | - | American Society of Mechanical Engineers                                   |
| ASPE   | - | American Society of Plumbing Engineers                                     |
| ASSE   | - | American Society of Sanitary Engineering                                   |
| ASTM   | - | American Society for Testing and Materials                                 |
| AWS    | - | American Welding Society                                                   |
| AWWA   | - | American Water Works Association                                           |
| BHMA   | - | Builders Hardware Manufacturers Association                                |
| CRSI   | - | Concrete Reinforcing Steel Institute                                       |
| CSI    | - | Construction Specifications Institute                                      |
| IEEE   | - | Institute of Electrical and Electronic Engineers                           |
| IES    | - | Illuminating Engineering Society of North America                          |
| ISA    | - | Instrument Society of America                                              |
| LPI    | - | Lightning Protection Institute                                             |
| MBMA   | - | Metal Building Manufacturer's Association                                  |
| NAAMM  | - | National Association of Architectural Metal Manufacturers                  |
| NAPF   | - | National Association of Plastic Fabricators                                |
| NEC    | - | National Electric Code                                                     |
| NEMA   | - | National Electrical Manufacturers Association                              |

|      |   |                                      |
|------|---|--------------------------------------|
| NFPA | - | National Fire Protection Association |
| NSF  | - | National Sanitation Foundation       |
| SDI  | - | Steel Deck Institute                 |
| UL   | - | Underwriters Laboratories            |
| WRI  | - | Wire Reinforcement Institute         |
| WSC  | - | Water Systems Council                |

## B. Government Agencies and Programs

The names and titles of government agencies and programs are frequently abbreviated. The following acronyms or abbreviations as referenced in the Contract Documents indicate the names of agencies of the government. Names are subject to change but are believed to be, but are not assured to be, accurate and up-to-date as of the date of the Contract Documents.

|       |   |                                                      |
|-------|---|------------------------------------------------------|
| CE    | - | Corps of Engineers                                   |
| CFR   | - | Code of Federal Regulations                          |
| DOC   | - | Department of Commerce                               |
| DOT   | - | Department of Transportation                         |
| EDAP  | - | Economically Disadvantaged Areas Program             |
| EPA   | - | Environmental Protection Agency                      |
| FAA   | - | Federal Aviation Administration                      |
| FCC   | - | Federal Communications Commission                    |
| FS    | - | Federal Specification                                |
| GSA   | - | General Services Administration                      |
| MIL   | - | Military Standardization Documents                   |
| ORCA  | - | Office of Rural Community Affairs                    |
| OSHA  | - | Occupational Safety and Health Administration        |
| REA   | - | Rural Electrification Administration                 |
| RD    | - | Rural Development                                    |
| RUS   | - | Rural Utility Services                               |
| RWAF  | - | Rural Water Assistance Fund                          |
| TCDP  | - | Texas Community Development Program                  |
| TDHCA | - | Texas Department of Housing and<br>Community Affairs |
| TWDB  | - | Texas Water Development Board                        |
| USDA  | - | United States Department of Agriculture              |



## 6.0 Governing Regulations/Authorities

### A. General

The procedure followed by the Engineer has been to contact governing authorities where necessary to obtain information needed for the purpose of preparing Contract Documents; recognizing that such information may or may not be of significance in relation to the Contractor's responsibilities for performing the Work. The Contractor should contact governing authorities directly for necessary information and decisions having a bearing on performance of the Work.

The Contractor shall be responsible for obtaining copies of pertinent regulations, and educating Contractor's employees and sub-contractors of said regulations.

### B. Jurisdictional Regulations

The Contractor shall maintain, and shall require prime sub-contractors to maintain, complete current information on jurisdictional matters, regulations, actions and pending actions, as applicable to the Work. The Contractor shall discuss with employees and/or subcontractors any new developments at appropriate project meetings at the earliest feasible dates. The Contractor shall record information of relevance along with the actions agreed upon. The manner in which Contract Documents have been organized and subdivided is not intended to be an indication of jurisdictional agreements. The Contractor shall assign and sub-contract the work, and employ tradesmen and laborers, in a manner which shall not unduly risk jurisdictional disputes of a kind which could result in conflicts, delays, claims and losses in the performance of the Work.

**END OF SECTION**

**Section 01100 - Submittal Data****1.0 General****A. Scope**

This Section specifies administrative and procedural requirements for submittal data required for performance of the Work, including, but not limited to;

1. Contractor's construction schedule
2. Submittal schedule
3. Daily construction reports
4. Shop drawings
5. Product data
6. Materials, equipment and components
7. Field and/or pre-fabricated items
8. Operation and maintenance data
9. List of subcontractors

**B. Payment**

No separate payment shall be made for preparation of information required within this Section. All costs shall be included in the prices provided in the Bid Proposal.

**C. Limitations**

Review is only for general conformance with design concepts of project and general compliance with the Contract Documents. Contractor is responsible for confirming and correlating dimensions at job site; for information which pertains to fabrication process or construction techniques; and for coordination of work of all trades. Review of shop drawings shall not relieve Contractor, and/or subcontractor, and/or material supplier of responsibility for deviation from requirements of Contract Documents nor for errors or omissions in shop drawings; or the safe and satisfactory performance of the Work.

## 2.0 Procedures

### A. Coordination

Coordinate preparation and processing of submittals with performance of construction activities. Contractor shall transmit each submittal in advance of performance of related construction activities so as to grant Engineer sufficient time for review and approval to avoid delays.

Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.

Coordinate transmittal of different types of submittals for related elements of the Work so processing shall not be delayed by the need to review submittals concurrently for coordination.

The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

### B. Processing

Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for re-submittals.

Allow two (2) weeks for initial review. Allow additional time if processing must be delayed, to permit coordination with subsequent submittals. The Engineer shall promptly advise the Contractor when a submittal being processed must be delayed for coordination.

Allow two (2) weeks for reprocessing each submittal.

No extension of Contract Time shall be authorized because of failure to transmit submittals for the Engineer sufficiently in advance of the Work to permit processing.

### C. Submittal Preparation

Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block.

Provide a space approximately 4" x 5" on the label or beside the title block on Shop Drawings to record the Contractor's review and approval markings and the action taken.

Include the following information on the label for processing and recording action taken.

- a. Project name
- b. Date
- c. Name and address of Engineer
- d. Name and address of Contractor
- e. Name and address of Subcontractor
- f. Name and address of Supplier
- g. Name of Manufacturer
- h. Number and title of appropriate Specification Section
- i. Drawing number and detail references, as appropriate.

### D. Submittal Transmittal

Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Engineer using a transmittal form. Submittals received from sources other than the Contractor shall be returned without action.

On the transmittal, record relevant information and requests for data. On the form, or separate sheets, record deviations from Contract Document requirements, including minor variations and limitations. Include Contractor's certification that information complies with Contract Document requirements.

Indicate completion in advance of the date established for Substantial Completion. Indicate Substantial Completion on the schedule to allow time for the Engineer's procedures necessary for certification of Substantial Completion.

### 3.0 Contractor's Construction Schedule

#### A. Schedule

Prepare a fully developed construction schedule. Submit within 15 days of the date established for "Commencement of the Work".

Provide a separate timeline for each significant construction activity. Provide information identifying the first working day of each week. Indicate estimated completion percentage in ten (10) percent increments. As Work progresses, indicate Actual Completion.

Prepare the schedule on a reproducible media, of sufficient width that show data for the entire construction period.

Indicate completion in advance of the date established for Substantial Completion. Indicate Substantial Completion on the schedule to allow time for the Engineer's procedures necessary for certification of Substantial Completion.

#### B. Distribution

Following response to the initial submittal, print and distribute copies to the Engineer, Owner, subcontractors, and other parties required to comply with scheduled dates. Post copies in the temporary field office as applicable.

When revisions are made, distribute to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in construction activities.

#### C. Updating

Revise the schedule after each meeting or activity, where revisions have been recognized or made. Issue the updated schedule concurrently with report of each meeting.

### 4.0 Submittal Schedule

After development and acceptance of the Contractor's construction schedule, prepare a complete schedule of submittals. Submit the schedule within ten (10) days of the date required for establishment of the Contractor's construction schedule.

## 5.0 Daily Construction Reports

Prepare a daily construction report, recording the following information concerning events at the site; and submit duplicate copies to the Engineer at weekly intervals:

1. List of subcontractors at the site
2. Approximate count of personnel at the site
3. High and low temperatures, general weather conditions
4. Accidents and unusual events
5. Meetings and significant decisions
6. Stoppages, delays, shortages, losses
7. Meter readings and similar recordings
8. Emergency procedures
9. Orders and requests of governing authorities
10. Change Orders received, implemented
11. Services connected, disconnected
12. Equipment or system tests and start-ups
13. Partial Completions, occupancies
14. Substantial Completions authorized

## 6.0 Shop Drawings

### A. General

Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.

Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings. Include the following information:

- a. Dimensions
- b. Identification of products and materials included
- c. Compliance with specified standards
- d. Notation of coordination requirements
- e. Notation of dimensions established by field measurement

**B. Sheet Size**

Except for templates, patterns and similar full-size Drawings, submit Shop Drawings on sheets at least 8 ½” x 11” but not larger than 36” x 48”.

**C. Initial Submittal**

Submit one (1) correctable, reproducible print and one (1) copy for the Engineer’s review. The reproducible print will be returned.

**D. Final Submittal**

Submit three (3) copies typically, or five (5) copies where required for maintenance manuals. Two (2) copies will be retained typically, with the remainder to be returned.

One (1) of the copies to be returned shall be marked-up and maintained as a “Record Document”.

Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction.

**E. Coordination Drawings**

Coordination drawings are a special type of Shop Drawing that show the relationship and integration of different construction elements that require careful coordination during fabrication or installation to fit in the space provided or function as intended.

Preparation of coordination drawings may include components previously shown in detail on Shop Drawings or Product Data.

**7.0 Operation and Maintenance Data**

The Contractor shall provide the owner with detailed data and related information appropriate to allow the Owner to maintain and operate the equipment to be supplied. The data shall consist of, but not be limited to:

1. Description of equipment and component parts showing the function, normal operating characteristics, limiting conditions, performance curves, engineering data and tests, and complete nomenclature and commercial number of all replaceable parts.

2. Operating procedures for start-up, break-in, routine and normal operating instruction, regulation, control, stopping, shut-downs, emergency instructions, seasonal operating instruction, and special operating instructions.
3. Maintenance procedures for routine operations, guide to “trouble-shooting”, disassembly repair and re-assembly, alignment, adjusting and checking.
4. Service and lubrication schedule with list of lubricants required.
5. Manufacturer’s printed operating and maintenance instruction.
6. Description of sequence of operation by control manufacturer.
7. Original manufacturer’s parts list, bill of materials, illustrations, assembly drawings, and diagrams required for maintenance.
8. As installed control and electrical diagrams by controls manufacturer.
9. Lists of recommended original manufacturer’s spare parts, quantities to be maintained in storage and current prices.
10. Additional data as may be helpful to the Owner for instruction of Owner’s personnel.
11. Sufficient data to allow a contractor to install equipment.

## **8.0 Samples**

When samples are required of the Contractor, not less than two (2) units shall be furnished. At the Engineer’s request, samples for materials may be taken from stockpiles at the job site or other location and furnished directly to the materials laboratory chosen by the Owner.

The Contractor shall provide all equipment and supplies and assistance in securing samples at no additional expense to the Owner.



**9.0 Engineer's Action**

Except for submittals for record, information or similar purposes, where action and return is required or requested, the Engineer will review each submittal, mark to indicate action taken, and return promptly.

Compliance with all specified characteristics is the Contractor's responsibility.

**END OF SECTION**

## **Section 01200 - Construction Operations**

### **1.0 General**

This Section specifies administrative and procedural requirements for operations of the Contractor during the performance of the Work, including, but not limited to;

- A. Land for construction purposes
- B. Use of premises and removal of construction related debris
- C. Clean up during construction
- D. Maintenance of improvements related to the Work
- E. Protection of existing facilities, objects, etc.
- F. Underground utility crossings
- G. Crossing of roadways, driveways, etc.
- H. Maintenance of vegetation
- I. Control of dust
- J. Pollution of water
- K. Excess spoil
- L. Unclassified excavation
- M. Damage to existing property
- N. Post construction clean up
- O. Workmanship

### **2.0 Land for Construction Purposes**

The Contractor shall be permitted to use available space belonging to the Owner for construction and storage purposes only as designated and shown on the Plans, or as directed in writing by the Owner or Engineer.

The Contractor shall be solely responsible for obtaining and shall pay all costs in connection with any additional storage or work area sites which may be required for proper completion of the Work.

The Contractor shall have the responsibility for the protection and safekeeping of equipment and materials on the site and that no claim shall be made against the Owner by reason of any act of an employee or trespasser. Also, should any occasion arise necessitating access to the sites occupied by these stored materials and equipment, the Contractor owning or responsible for the stored materials or equipment shall immediately move same. No materials or equipment may be placed upon the property of the

Owner until the Owner has approved the location within the designated storage area.

### **3.0 Use of Premises and Removal of Construction Related Debris**

The Contractor shall at his own expense:

- A. Take every precaution against injuries to persons or damage to property.
- B. Store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the Work as shall not unduly interfere with the progress of the Work or the Work of any other Contractors.
- C. Place upon the Work or any part thereof only such loads as are consistent with the safety of that portion of the Work.
- D. Remove all surplus material, false work, temporary structures, including foundations thereof, plant of any description and any other construction related materials from his operations prior to final payment.
- E. Effect all cutting, fitting or patching of the Work required to make the same to conform to the Plans and Specifications and, except with the consent of the Engineer, not to cut or otherwise alter the work of any other Contractor.

### **4.0 Clean Up During Construction**

- A. The Contractor shall keep all work areas free of litter and unnecessary trash. Trash barrels shall be supplied for eating areas and emptied as necessary at the Contractor's expense.
- B. The Contractor shall, at all times, keep the job site free from all materials, debris and rubbish as is practicable and shall remove same from any portion of the job site when it becomes objectionable or interferes with the progress of the project in the opinion of the Engineer.
- C. The premises, material, tools, and equipment shall be maintained so as to minimize contamination to the premises, adjacent properties, etc.

- D. The Contractor shall maintain at the construction site portable toilet facilities throughout construction.

### **5.0 Project Maintenance**

- A. The Contractor shall maintain and keep in good repair the improvements covered by these Contract Documents during the life of the contract.
- B. The Contractor shall maintain and keep in good repair all facilities used by the Contractor in the process of performing the Work.
- C. The Contractor shall make timely and suitable repairs to the approval of the Owner of any facility which is damaged as a result of the Contractor's activities.
- D. Where existing facilities are to be relocated or otherwise modified, the Contractor shall coordinate his activities with the Owner of the existing facility.

### **6.0 Underground Utility Crossings**

- A. The Contractor shall use utmost caution in the construction and/or installation of all materials, equipment and components around and/or across any underground utility. An attempt has been made to show the location of all of these foreign utilities in the Construction Plans. The location of those shown is not guaranteed to be accurate or complete. The Contractor shall, at his own expense, locate and protect these lines, and if they are damaged, he shall replace them at no charge to the Utility Owner and to the satisfaction of the Engineer and/or Utility Owner. Should the Utility Owner require that their forces repair any damage, the Contractor shall reimburse the Utility Owner for expenses.
- B. An affected Utility shall be given a minimum of 48 hours notice prior to crossing or paralleling any underground utility lines so that an accurate location can be made of the buried utility.

## **7.0 Roadway Crossings**

- A. The Contractor shall be responsible for maintaining access to all roadways and private entrances. If such roadway must be crossed and left open overnight, the Contractor shall cover the crossing with a 1-inch minimum thick steel plate.
- B. Any crossing temporarily left in this manner must be constructed to safely allow vehicular passage.

## **8.0 Maintenance of Vegetation**

- A. The Contractor shall notify the Owner, private landowner and/or governmental jurisdiction in possession of public right-of-way prior to removing vegetation that may be necessary due to construction. Specifications may be required from these entities for the extent and methods to govern in trimming, topping, tree balance, type of cuts, painting cuts and clean-up. These Specifications are intended to reduce damage due to trimming and/or removal of vegetation to the areas of the Work.

## **9.0 Dust Control**

- A. The Contractor shall use all means necessary to prevent spread of dust during and between performances of construction. The Contractor shall prevent dust from being a nuisance or hazard to the public and adjoining landowners.

## **10.0 Water Pollution**

- A. The Contractor shall conduct operations so as to avoid water pollution and contamination of storm water, surface waters and ground water. All equipment, fuels and lubricants, construction materials and other substances shall be stored so as to avoid or minimize leaks and exposure. The Contractor shall erect and maintain appropriate barriers to prevent, minimize and mitigate erosion and sedimentation resulting from construction.
- B. The Contractor shall respond quickly and effectively to any events that may occur so as to halt, control and mitigate any pollution that does occur and restore the affected area as soon as possible. Any instances of pollution shall be reported immediately to the appropriate regulatory agency by the Contractor.

### **11.0 Excess Spoil**

Material from the various excavations shall be temporarily stored on the site at locations approved by the Owner. Excess material to be disposed shall be disposed of in accordance with all applicable federal, state, and local rules and regulations and with approval of the Engineer.

### **12.0 Unclassified Excavation**

All excavation will be unclassified. It shall be the responsibility of the bidder to perform all subsurface investigations the bidder deems necessary to determine the nature and extent of material to be excavated.

### **13.0 Sanitary Conditions**

- A. The proposed facilities shall be maintained in a sanitary condition at all times.
- B. Water used for the construction operations, that is in contact with existing or proposed potable water facilities, shall be obtained from an approved potable water supply. All pipe, fittings, tanks, etc. used to transport or handle the water shall be potable.
- C. In the construction of public water well, the Contractor shall add sufficient chlorine, chlorine compounds or other disinfectant to the drilling fluid so as to maintain sanitary conditions of the well to the satisfaction of the Engineer. This shall include the adding of a disinfectant at least at the start of drilling each day.

### **14.0 Protection of and Damage to Existing Property**

Where excavation or demolition endangers adjacent structures and utilities, the Contractor shall at his own expense carefully support and protect all such structures and/or utilities so that there will be no failure or settlement. Where it is necessary to move services, poles, guy wires, pipelines, or other obstructions, the Contractor shall notify and cooperate with the utility owner. In case damage to an existing structure or utility occurs, whether failure or settlement, the Contractor shall restore the structure or utility to its original condition and position without compensation from the Owner.

The Contractor shall be responsible for all damage to pipes, conduit, electrical wiring, streets, roads, curbs, sidewalks, highways, shoulders, sprinkle systems, yard landscaping, ditches, embankments, culverts, bridges, or other public or private property which may be caused by the Contractor as it relates to the performance of the Work.

The Contractor shall make satisfactory and acceptable arrangements with the person or agency having ownership or jurisdiction over the damaged property concerning its repair or replacement. The Contractor shall repair or replace damaged property with material and/or workmanship of equal or greater quality than the property that was damaged.

The Contractor shall agree to immediately repair or replace any property that has been damaged when such repair or replacement is determined to be an emergency, or such damaged property provides a financial hardship on the property owner.

#### **15.0 Post Construction Clean Up**

- A. Prior to final inspection by the Engineer, Owner, and funding agency in some circumstances, the Contractor shall have the entire work area cleaned of all trash and debris resulting from the project construction, and all such trash and debris shall be disposed of at the Contractor's expense.

#### **16.0 Workmanship**

The Specifications are intended to be so written that only first class workmanship and finish of the best grade and quality will result. The fact that these Specifications may fail to be so complete as to cover all details will not relieve the Contractor of full responsibility for providing a completed project of high quality, first class finish and appearance and satisfactory operation, all within the apparent intent of the Plans and Specifications.

**17.0 Payment**

No separate payment will be made for items required by the Specifications or shown on the Plans. Any additional facilities needed for construction operations that become necessary within the process of completing the construction of this Contract shall be furnished or replaced by the Contractor at no additional expense to the Owner.

**END OF SECTION**



This page intentionally left blank.

## **Section 01250 - Project Safety and Safety Devices**

### **1.0 General**

This Section specifies administrative and procedural requirements for project safety and project safety devices required for performance of the Work.

### **2.0 Worker and Public Safety**

- A. The Contractor shall take all necessary precautions for the safety of employees and any other affected parties. The Contractor shall comply with all applicable laws, ordinances, rules, codes, regulations and order of any governing body having jurisdiction for the safety of human life and/or property to protect them from damage, injury or loss.
- B. The Contractor shall assure that all safety regulations are adhered to, specifically in regards to the wearing of protective garments and devices required to protect workers from injury.
- C. The Contractor shall be fully aware of all safety provisions required in accordance with the OSHA Safety and Health Standards.

### **3.0 Safety Devices**

- A. The Contractor shall supply and use ample and proper barricades, lights, handlines, and other equipment designed to protect the workmen and public during the prosecution of the work. The Contractor shall refer to the current “Texas Manual on Uniform Traffic Control Devices” for proper utilization of safety devices. Upon completion of the job, the safety devices shall be removed and each site restored to its original condition.
- B. All excavation at depths greater than 5 feet shall be in compliance with Section 13300 - Trench Safety.
- C. The construction set-up procedures shall be carefully planned using adequate blocking and leveling of the ground.

- D. Construction personnel should wear the appropriate safety equipment including, but not limited to heavy steel-toed work boots, hard hats and gloves. Loose clothing should be avoided.
- E. The Contractor shall observe safe operating procedures during equipment start-up, use and shut-down. Proper maintenance and inspection of all equipment and machinery shall be on-going.

#### **4.0 Aerial Utility Safety**

The Contractor shall maintain the following minimum safe clearance in all directions between equipment, personnel and/or public and aerial utilities.

- A. Power Lines - 22 feet
- B. Communication Lines - 18 feet

The Contractor, prior to commencing construction, shall coordinate with and adhere to any safe minimum distance as specified by any adjoining Utility if greater than those stated within this Section.

**END OF SECTION**

This page intentionally left blank.

## **Section 01300 - Measurement and Payment**

### **1.0 General**

This section describes the scope of work covered by each bid item, explains how each bid item is measured and determines how payment shall be made for each bid item. Unit costs presented in the Proposal shall include all mobilization, demobilization, bonds, insurance, labor, materials, coordination, incidentals and construction necessary to complete the item. All materials and work for which a unit pay item is not specifically provided shall be considered subsidiary to the other items for which they form a component part.

### **2.0 Measurement and Payment**

This description is not intended to be a detailed itemization of all work tasks involved, and any work item not specifically mentioned herein is intended to be included in other work items. All work shall conform to the standards and specifications of Goforth Special Utility District.

#### **A. Base Items**

Bid Item 1. 16" PVC AWWA C900 DR 18 Water Line. This item shall cover furnishing and installing new C900 DR18 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 2. 12" PVC AWWA C900 DR 18 Water Line. This item shall cover furnishing and installing new C900 DR18 PVC water line including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus

material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 3. 8" PVC AWWA C900 DR 18 Water Line. This item shall cover furnishing and installing new C900 DR18 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 4. 6" PVC AWWA C900 DR 18 Water Line. This item shall cover furnishing and installing new C900 DR18 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 5. 4" PVC AWWA C900 DR 18 Water Line. This item shall cover furnishing and installing new C900 DR18 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and

unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 6. 3" PVC ASTM D2241 SDR 21 Water Line. This item shall cover furnishing and installing new ASTM D2241 SDR 21 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 7. 2" PVC ASTM D2241 SDR 21 Water Line. This item shall cover furnishing and installing new ASTM D2241 SDR 21 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 8. 1" Poly Tubing Service Line. This item shall cover furnishing and installing new AWWA C901 DR 9 poly tubing water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 9. 30" Bored Steel Casing. This item shall cover furnishing and installing new or used 30" steel casing pipe with a minimum 0.375" wall thickness by way of bore, including all labor, materials, tools, parts, equipment and supervision necessary to bore under roadways and provide a finished product without any damage or interference to the object(s) being bored. Used pipe must be round, free of dents and barbs and acceptable to GSUD and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation of pits, boring equipment, backfill and compaction of pits, installation of the carrier pipe inside the encasement pipe, casing spacers, end seals and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 1).

Measurement of the bored steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the bored steel casing shall be made at the unit price bid per horizontal linear foot of bore, as shown on the plans, for the type and size specified and installed by this method, at all depths. However, the bore shall be paid for one time on a linear foot basis and no extra compensation will be paid for failures and subsequent re-boring attempt(s).

Bid Item 10. 24" Bored Steel Casing. This item shall cover furnishing and installing new or used 24" steel casing pipe with a minimum 0.375" wall thickness by way of bore, including all labor, materials, tools, parts, equipment and supervision necessary to bore under roadways and provide a finished product without any damage or interference to the object(s) being bored. Used pipe must be round, free of dents and barbs and acceptable to GSUD and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation of pits, boring equipment, backfill and compaction of pits, installation of the carrier pipe inside the encasement pipe, casing spacers, end seals and all other work and incidentals as specified herein and shown on the



Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 2).

Measurement of the bored steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the bored steel casing shall be made at the unit price bid per horizontal linear foot of bore, as shown on the plans, for the type and size specified and installed by this method, at all depths. However, the bore shall be paid for one time on a linear foot basis and no extra compensation will be paid for failures and subsequent re-boring attempt(s).

Bid Item 11. 16" Bored Steel Casing. This item shall cover furnishing and installing new or used 16" steel casing pipe with a minimum 0.375" wall thickness by way of bore, including all labor, materials, tools, parts, equipment and supervision necessary to bore under roadways and provide a finished product without any damage or interference to the object(s) being bored. Used pipe must be round, free of dents and barbs and acceptable to GSUD and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation of pits, boring equipment, backfill and compaction of pits, installation of the carrier pipe inside the encasement pipe, casing spacers, end seals and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 3).

Measurement of the bored steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the bored steel casing shall be made at the unit price bid per horizontal linear foot of bore, as shown on the plans, for the type and size specified and installed by this method, at all depths. However, the bore shall be paid for one time on a linear foot basis and no extra compensation will be paid for failures and subsequent re-boring attempt(s).

Bid Item 12. 24" HDPE DR 13.5 Casing. This item shall cover furnishing and installing new or used 24" PE 4710 HDPE DR13.5 by way of open cut trench, including all labor, materials, tools, parts, equipment and supervision necessary to bore under roadways and provide a finished product without any damage or interference to the object(s) being bored. Used pipe must be round, free of dents and barbs and acceptable to GSUD and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of HDPE pipe, installation of the carrier pipe inside the encasement pipe, casing spacers, end seals and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 1).

Measurement of the HDPE casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the HDPE casing shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 13. 30" Steel Casing (Open Cut). This item shall cover furnishing and installing new or used 30" steel casing pipe with a minimum 0.375" wall thickness across the roadways, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 1).

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 14. 24" Steel Casing (Open Cut). This item shall cover furnishing and installing new or used 24" steel casing pipe with a minimum 0.375" wall thickness across the roadways, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 2).

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 15. 16" Steel Casing (Open Cut). This item shall cover furnishing and installing new or used 16" steel casing pipe with a minimum 0.375" wall thickness across the roadways, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 3).

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit

price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 16. 8" Steel Casing (Open Cut). This item shall cover furnishing and installing new or used 8" steel casing pipe with a minimum 0.322" wall thickness across the roadways, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 6).

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 17. 2" PVC or HDPE (DR 13.5) Casing (Open Cut). This item shall cover furnishing and installing new or used 2" PVC casing pipe, minimum Schedule 40, or 2" PE 4710 HDPE DR13.5 across the roadways as service line casing, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of PVC or HDPE casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 8).

Measurement of the PVC or HDPE casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the PVC or HDPE casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 18. 24" Steel Casing over Existing 12" Water Line. This item shall cover furnishing and installing new or used 24" steel casing pipe with a minimum 0.375" wall thickness over the existing 12" water line, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. New 12" C900 DR 18 water line can be used or the existing pipe can be reused. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 19. 14" Steel Casing over Existing 6" Water Line. This item shall cover furnishing and installing new or used 14" steel casing pipe with a minimum 0.375" wall thickness over the existing 6" water line, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. New 6" C900 DR 18 water line can be used or the existing pipe can be reused. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. This Item will also include relocation of an existing 6" Gate Valve to outside of the casing limits.

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 20. 16" Slick Bore Without Casing. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to bore under driveways, culverts, trees, etc. and provide a finished product without any damage or interference to the object being bored. The water line will be paid for in Item 1.

Measurement of the slick bore shall be measured by the horizontal linear distance along the centerline of the pipe. Payment for the slick bore shall be made at the unit price bid per horizontal linear foot of slick bore, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 21. 16" Butterfly Valve. This item shall cover furnishing and installing a butterfly valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the butterfly valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the butterfly valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 22. 12" Butterfly Valve. This item shall cover furnishing and installing a butterfly valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the butterfly valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the butterfly valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 23. 8" Gate Valve. This item shall cover furnishing and installing a resilient wedge gate valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the gate valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the gate valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 24. 6" Gate Valve. This item shall cover furnishing and installing a resilient wedge gate valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the gate valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the gate valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 25. 4" Gate Valve. This item shall cover furnishing and installing a resilient wedge gate valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the gate valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the gate valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 26. 3” Gate Valve. This item shall cover furnishing and installing a resilient wedge gate valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the gate valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the gate valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 27. Fire Hydrant Assembly. This item shall cover furnishing and installing a standard fire hydrant assembly of the size and type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to the following items: fire hydrant, anchor tee, gate valve, valve box and lid, restraints, polyethylene wrap, concrete support pad, ductile iron lead pipe, primer and paint, blocking, excavation, embedment, backfill, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the fire hydrant assembly shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the fire hydrant assembly shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 28. Flush Valve Assembly. This item shall cover furnishing and installing a flush valve assembly of the size and type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: anchor tee or tap, gate valve, tapped plug, valve box, lid and marker, restraints, polyethylene wrap, galvanized riser pipe and associated fittings, blocking, excavation, embedment, backfill, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the flush valve assembly shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the flush valve assembly shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 29. 2” Combination Air Release/Vacuum Valve. This item shall cover furnishing and installing a combination air release/vacuum valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and

supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve/meter box, cover and marker, excavation, embedment, backfill, tie-in, tapping saddle, corporation stop, angle stop, fittings, stainless steel inserts, piping and tubing, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the combination air release/vacuum valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 30. Reconnection of Existing 5/8"x3/4" Standard Water Meters. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water meters. This shall include, but not be limited to: tapping saddles, corporation stops, bushings, polyethylene service line, stainless steel inserts, angle stops, plugging existing service line, location, excavation, embedment, backfill, compaction, testing, and all other work and incidentals as specified herein and shown on the plans.

Measurement of this item shall be measured by the unit of one each fully assembled and installed meter reconnection. Payment for this item shall be made at the unit price bid per each meter reconnection.

Bid Item 31. Reconnection of Existing 1½" Water Meter. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water meters. This shall include, but not be limited to: tapping saddles, corporation stops, bushings, polyethylene service line, stainless steel inserts, angle stops, plugging existing service line, location, excavation, embedment, backfill, compaction, testing, and all other work and incidentals as specified herein and shown on the plans.

Measurement of this item shall be measured by the unit of one each fully assembled and installed meter reconnection. Payment for this item shall be made at the unit price bid per each meter reconnection.

Bid Item 32. Relocation and Reinstall of Existing 5/8"x3/4" Water Meters. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to relocate the existing water meter and connect to the proposed water line. This shall include, but not be limited to: tapping saddles, corporation stops, bushings, polyethylene service line, stainless steel inserts, angle stops, plugging existing service line, location, excavation, embedment, backfill, compaction, testing, and all other work and incidentals as specified herein and shown on the plans.

Measurement of this item shall be measured by the unit of one each fully reassembled and installed meter reconnection. Payment for this item shall be made at the unit price bid per each meter reconnection.

Bid Item 33. Tie-in to Existing 2” Water Line. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water line(s). This shall include location, excavation, pumping out water, removal of fittings, valves and hydrants, removal of concrete thrust blocking, any necessary cutting, removal of mechanical joint restraint systems and removal of plugs, caps, or blind flanges from the existing water lines as shown on the plans. The water line will be paid for in Item 7.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each tie-in connection.

Bid Item 34. Tie-in to Existing 3” Water Line. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water line(s). This shall include location, excavation, pumping out water, removal of fittings, valves and hydrants, removal of concrete thrust blocking, any necessary cutting, removal of mechanical joint restraint systems and removal of plugs, caps, or blind flanges from the existing water lines as shown on the plans. The water line will be paid for in Item 6.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each tie-in connection.

Bid Item 35. Tie-in to Existing 4” Water Line. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water line(s). This shall include location, excavation, pumping out water, removal of fittings, valves and hydrants, removal of concrete thrust blocking, any necessary cutting, removal of mechanical joint restraint systems and removal of plugs, caps, or blind flanges from the existing water lines as shown on the plans. The water line will be paid for in Item 5.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each tie-in connection.

Bid Item 36. Tie-in to Existing 8” Water Line. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water line(s). This shall include location, excavation, pumping out water, removal of fittings, valves and hydrants, removal of concrete thrust blocking, any necessary cutting, removal of mechanical joint restraint systems and removal of plugs, caps, or blind flanges from the existing water lines as shown on the plans. The water line will be paid for in Item 3.



Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each tie-in connection.

Bid Item 37. Tie-in to Existing 12" HCISD Water Line. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water line(s). This shall include location, excavation, pumping out water, removal of fittings, valves and hydrants, removal of concrete thrust blocking, any necessary cutting, removal of mechanical joint restraint systems and removal of plugs, caps, or blind flanges from the existing water lines as shown on the plans. The water line will be paid for in Item 2.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each tie-in connection.

Bid Item 38. Relocation of Existing 1 1/2" Water Meter, 1 1/2"RPZ and 6" RPDA. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to relocate the existing 1 1/2"water meter, 1 1/2" RPZ and 6" RPDA and connect to the proposed water line This shall include, but not be limited to: fittings, valves, water line (D.I.P., brass, PVC), tapping saddles, corporation stops, bushings, polyethylene service line, stainless steel inserts, angle stops, plugging existing service line, location, excavation, embedment, backfill, compaction, testing, and all other work and incidentals as specified herein and shown on the plans.

Measurement of this item shall be measured by the unit of one (total) fully reassembled and installed reconnection of the equipment listed in this Item. Payment for this item shall be made at the lump sum price bid price.

Bid Item 39. 16" Mechanical Joint (Meg-a-Lug) Restraints. This item shall cover furnishing and installing mechanical joint restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term "mechanical joint restraint" shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed mechanical joint restraint. Payment for this item shall be made at the unit price bid per each mechanical joint restraint.

Bid Item 40. 12" Mechanical Joint (Meg-a-Lug) Restraints. This item shall cover furnishing and installing mechanical joint restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term "mechanical joint restraint" shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed mechanical joint restraint. Payment for this item shall be made at the unit price bid per each mechanical joint restraint.

Bid Item 41. 8” Mechanical Joint (Meg-a-Lug) Restraints. This item shall cover furnishing and installing mechanical joint restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “mechanical joint restraint” shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed mechanical joint restraint. Payment for this item shall be made at the unit price bid per each mechanical joint restraint.

Bid Item 42. 6” Mechanical Joint (Meg-a-Lug) Restraints. This item shall cover furnishing and installing mechanical joint restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “mechanical joint restraint” shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed mechanical joint restraint. Payment for this item shall be made at the unit price bid per each mechanical joint restraint.

Bid Item 43. 4” Mechanical Joint (Meg-a-Lug) Restraints. This item shall cover furnishing and installing mechanical joint restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “mechanical joint restraint” shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed mechanical joint restraint. Payment for this item shall be made at the unit price bid per each mechanical joint restraint.

Bid Item 44. 16” Bell Restraint Harness. This item shall cover furnishing and installing bell restraint harnesses of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “bell restraint harness” shall include, but is not limited to: split serrated rings, tie bolts, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed bell restraint harness. Payment for this item shall be made at the unit price bid per each bell restraint harness.

Bid Item 45. 12” Bell Restraint Harness. This item shall cover furnishing and installing bell restraint harnesses of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “bell restraint harness” shall include, but is not limited to: split serrated rings, tie bolts, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed bell restraint harness. Payment for this item shall be made at the unit price bid per each bell restraint harness.

Bid Item 46. 8” Bell Restraint Harness. This item shall cover furnishing and installing bell restraint harnesses of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “bell restraint harness” shall include, but is not limited to: split serrated rings, tie bolts, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed bell restraint harness. Payment for this item shall be made at the unit price bid per each bell restraint harness.

Bid Item 47. 6” Bell Restraint Harness. This item shall cover furnishing and installing bell restraint harnesses of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “bell restraint harness” shall include, but is not limited to: split serrated rings, tie bolts, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed bell restraint harness. Payment for this item shall be made at the unit price bid per each bell restraint harness.

Bid Item 48. 3” Bell Restraint Harness. This item shall cover furnishing and installing bell restraint harnesses of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “bell restraint harness” shall include, but is not limited to: split serrated rings, tie bolts, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed bell restraint harness. Payment for this item shall be made at the unit price bid per each bell restraint harness.

Bid Item 49. 12"x12" Hot Tap w/ 12" Gate Valve. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water lines to the existing water lines without interrupting service. This shall include location, excavation, pumping out water, tapping sleeve, gate valve, polyethylene wrap, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each Hot Tap connection.

Bid Item 50. 8"x8" Hot Tap w/ 8" Gate Valve. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water lines to the existing water lines without interrupting service. This shall include location, excavation, pumping out water, tapping sleeve, gate valve, polyethylene wrap, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each Hot Tap connection.

Bid Item 51. 12"x2" Tap with 2" Gate Valve. This item shall cover furnishing and installing a tapping saddle and gate valve of the size and type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system.

Measurement of the service saddle shall be measured by the unit of each tapping saddle and gate valve of the size and type shown on the plans. Payment for the service tapping saddle and gate valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 52. Base Repair for Gravel Driveways. This item shall cover furnishing and installing a flexible base course to a minimum compacted thickness across gravel or dirt driveways where the proposed water line will be installed, including all materials, tools, equipment, labor and supervision necessary to complete the job and prevent future settling. This item shall include, but not be limited to: acquisition, transportation, unloading and installation of the flexible base material, disposal of surplus material, proper placement and compaction, density testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of gravel driveway repair and material, complete in place, shall be measured along the centerline of the water line across the driveway. Payment shall be made at the unit price bid per horizontal linear foot.

Bid Item 53. Asphalt Repair for Asphalt Roads and Driveways. This item shall cover furnishing and installing all materials, tools, equipment, labor and supervision necessary to repair asphalt driveways to original or better state once cut during construction of the water line. This item shall include, but not be limited to: acquisition, transportation, unloading and installation of the flexible base material, disposal of surplus material, proper placement and compaction, density testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of asphalt driveway repair and material, complete in place, shall be measured along the centerline of the water line across the driveway. Payment shall be made at the unit price bid per horizontal linear foot.

Bid Item 54. Tree/Brush Trimming/Pruning and Removal. This item shall cover furnishing all materials, tools, parts, labor and equipment necessary to clear the proposed water line easement of all trees and brush and provide a clear, obstruction-free right-of-way installation of the water line, including removal of stumps, roots or other obstructions along the ditch line and other areas where excavation is necessary. This shall include, but not be limited to: bulldozing, sawing, excavating, mulching, hauling off from the project, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of this item shall be measured by the linear foot. Payment for this item shall be made at the unit price bid per linear foot.

Bid Item 55. Miscellaneous Ductile Iron Fittings. This item shall cover furnishing and installing ductile iron fittings of the size and type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. The term “miscellaneous ductile iron fittings” shall include, but is not limited to: concrete blocking, bends, fittings, reducers, anchor couplings, gaskets, lubrication, polyethylene wrap, excavation, embedment, backfill, compaction, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the ductile iron fittings shall be measured by the ton of fittings installed. Payment for the ductile iron fittings shall be made at the unit price bid per ton of installed fittings.

Bid Item 56. Trench Safety Protection System. This item shall cover a system to protect the workmen from collapse of trenches and excavations, falling objects and hazards associated with excavations. The quantity for payment shall be the length of trenches or other excavations that are five feet deep or deeper and that workmen must enter. Payment of all work prescribed under this item shall be full compensation for the Trench

Protection Systems including any additional excavation, backfill or pavement replacement required, for furnishing, placing, maintaining and removing all shoring, sheeting or bracing; for dewatering or diversion of water; for all jacking and jack removal; and for all other labor, materials, tools, equipment and incidentals necessary to complete the work.

Measurement of the trench safety protection system shall be measured along the centerline of the water line. Payment shall be made at the unit price bid per horizontal linear foot, regardless of depth of trench.

Bid Item 57. Seeding for Site Restoration. This item shall cover restoration of disturbed areas as a result of construction, but within the limits of construction, including: stockpiling and replacing and/or providing topsoil, preparing the disturbed ground, furnishing and placing seed mix, establishing the cover, and all other incidentals necessary to complete the work.

Measurement of revegetation, complete in place, shall be measured by the square yard of disturbed areas. Payment shall be made at the unit price bid per square yard of restored areas.

Bid Item 58. 16" Foster Adapter. This item shall cover furnishing and installing Foster Adapter restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term "Foster Adapter" shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed Foster Adapter. Payment for this item shall be made at the unit price bid per each Foster Adapter.

Bid Item 59. 12" Foster Adapter. This item shall cover furnishing and installing Foster Adapter restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term "Foster Adapter" shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed Foster Adapter. Payment for this item shall be made at the unit price bid per each Foster Adapter.

Bid Item 60. 8" Foster Adapter. This item shall cover furnishing and installing Foster Adapter restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term "Foster Adapter" shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed Foster Adapter. Payment for this item shall be made at the unit price bid per each Foster Adapter.

Bid Item 61. 6” Foster Adapter. This item shall cover furnishing and installing Foster Adapter restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “Foster Adapter” shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed Foster Adapter. Payment for this item shall be made at the unit price bid per each Foster Adapter.

Bid Item 62. Disinfection/Chlorination. This item shall consist of disinfection/chlorination of new water mains, valves, fittings and appurtenances with Calcium Hypochlorite (HTH), manually or by machine injection, in accordance with the Goforth Special Utility District standards and specifications and in accordance with TCEQ and AWWA. The Contractor shall provide all materials, equipment, incidental appurtenances and labor necessary to satisfactorily disinfect all new water mains under this contract.

Measurements of this item shall be considered complete after all the required test results have proved successful. Failed tests will be repeated at the Contractor’s expense until test has been proven successful and are accepted by Goforth SUD. Payment of this item shall be made at by the lump sum for successful testing.

## **B. Alternate Items**

Bid Item 1A. 16” PVC AWWA C900 DR 18 Water Line. This item shall cover furnishing and installing new C900 DR18 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 2A. 12" PVC AWWA C900 DR 18 Water Line. This item shall cover furnishing and installing new C900 DR18 PVC water line including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 3A. 8" PVC AWWA C900 DR 18 Water Line. This item shall cover furnishing and installing new C900 DR18 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 4A. 6" PVC AWWA C900 DR 18 Water Line. This item shall cover furnishing and installing new C900 DR18 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid



per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 5A. 4" PVC AWWA C900 DR 18 Water Line. This item shall cover furnishing and installing new C900 DR18 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 6A. 2" PVC ASTM D2241 SDR 21 Water Line. This item shall cover furnishing and installing new ASTM D2241 SDR 21 PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 7A. 1" Poly Tubing Service Line. This item shall cover furnishing and installing new AWWA C901 DR 9 poly tubing water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line

of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 8A. 16" PVC AWWA C900 DR 18 RJ Water Line (Cortalok). This item shall cover furnishing and installing new C900 DR18 RJ (Cortalok) PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 9A. 12" PVC AWWA C900 DR 18 RJ Water Line (Cortalok). This item shall cover furnishing and installing new C900 DR18 RJ (Cortalok) PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 10A. 8" PVC AWWA C900 DR 18 RJ Water Line (Cortalok). This item shall cover furnishing and installing new C900 DR18 RJ (Cortalok) PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 11A. 3" PVC ASTM D2241 SDR 21 RJ Water Line (Yellowmine). This item shall cover furnishing and installing new ASTM D2241 SDR 21 RJ (Yellowmine) PVC water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 12A. 24" Bored Steel Casing. This item shall cover furnishing and installing new or used 24" steel casing pipe with a minimum 0.375" wall thickness by way of bore, including all labor, materials, tools, parts, equipment and supervision necessary to bore under roadways and provide a finished product without any damage or interference to the object(s) being bored. Used pipe must be round, free of dents and barbs and acceptable to GSUD and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation of pits, boring equipment, backfill and compaction of pits, installation of the carrier pipe inside the encasement pipe, casing spacers, end seals and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 8A).

Measurement of the bored steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the bored steel casing shall be made at the unit price bid per horizontal linear foot of bore, as shown on the plans, for the type and size specified and installed by this method, at all depths. However, the bore shall be paid for one time on a linear foot basis and no extra compensation will be paid for failures and subsequent re-boring attempt(s).

Bid Item 13A. 20" Bored Steel Casing. This item shall cover furnishing and installing new or used 20" steel casing pipe with a minimum 0.375" wall thickness by way of bore, including all labor, materials, tools, parts, equipment and supervision necessary to bore

under roadways and provide a finished product without any damage or interference to the object(s) being bored. Used pipe must be round, free of dents and barbs and acceptable to GSUD and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation of pits, boring equipment, backfill and compaction of pits, installation of the carrier pipe inside the encasement pipe, casing spacers, end seals and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 9A).

Measurement of the bored steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the bored steel casing shall be made at the unit price bid per horizontal linear foot of bore, as shown on the plans, for the type and size specified and installed by this method, at all depths. However, the bore shall be paid for one time on a linear foot basis and no extra compensation will be paid for failures and subsequent re-boring attempt(s).

Bid Item 14A. 16" Bored Steel Casing. This item shall cover furnishing and installing new or used 16" steel casing pipe with a minimum 0.375" wall thickness by way of bore, including all labor, materials, tools, parts, equipment and supervision necessary to bore under roadways and provide a finished product without any damage or interference to the object(s) being bored. Used pipe must be round, free of dents and barbs and acceptable to GSUD and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation of pits, boring equipment, backfill and compaction of pits, installation of the carrier pipe inside the encasement pipe, casing spacers, end seals and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 10A).

Measurement of the bored steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the bored steel casing shall be made at the unit price bid per horizontal linear foot of bore, as shown on the plans, for the type and size specified and installed by this method, at all depths. However, the bore shall be paid for one time on a linear foot basis and no extra compensation will be paid for failures and subsequent re-boring attempt(s).

Bid Item 15A. 24" HDPE DR 13.5 Casing. This item shall cover furnishing and installing new or used 24" PE 4710 HDPE DR13.5 by way of open cut trench, including all labor, materials, tools, parts, equipment and supervision necessary to bore under roadways and provide a finished product without any damage or interference to the object(s) being bored. Used pipe must be round, free of dents and barbs and acceptable to GSUD and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of HDPE pipe, installation of the carrier pipe inside the encasement pipe, casing spacers, end seals and all other work and incidentals as specified herein and shown

on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 1).

Measurement of the HDPE casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the HDPE casing shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 16A. 24" Steel Casing (Open Cut). This item shall cover furnishing and installing new or used 24" steel casing pipe with a minimum 0.375" wall thickness across the roadways, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 8A).

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 17A. 20" Steel Casing (Open Cut). This item shall cover furnishing and installing new or used 20" steel casing pipe with a minimum 0.375" wall thickness across the roadways, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 9A).

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 18A. 16" Steel Casing (Open Cut). This item shall cover furnishing and installing new or used 16" steel casing pipe with a minimum 0.375" wall thickness across the roadways, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation,

embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 10A).

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 19A. 6" Steel Casing (Open Cut). This item shall cover furnishing and installing new or used 6" steel casing pipe with a minimum 0.280" wall thickness across the roadways, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 11A).

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 20A. 2" PVC or HDPE (DR 13.5) Casing (Open Cut). This item shall cover furnishing and installing new or used 2" PVC casing pipe, minimum Schedule 40, or 2" PE 4710 HDPE DR13.5 across the roadways as service line casing, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of PVC or HDPE casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 7A).

Measurement of the PVC or HDPE casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the PVC or HDPE casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 21A. 2" Bored HDPE Casing. This item shall cover furnishing and installing new or used 2" HDPE(DR 13.5) casing pipe with a minimum 0.176" wall thickness by way of bore, including all labor, materials, tools, parts, equipment and supervision

necessary to bore under roadways and provide a finished product without any damage or interference to the object(s) being bored. Used pipe must be round, free of dents and barbs and acceptable to GSUD and Hays County. Casing ends must be cut true, ground smooth and free of barbs. This item shall include, but not be limited to: acquisition, transportation and unloading of HDPE casing pipe, excavation of pits, boring equipment, backfill and compaction of pits, installation of the carrier pipe inside the encasement pipe, casing spacers, end seals and all other work and incidentals as specified herein and shown on the Plans. NOTE: This unit bid price is in addition to the unit bid prices for the water line (Item 7A).

Measurement of the bored HDPE casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the bored HDPE casing shall be made at the unit price bid per horizontal linear foot of bore, as shown on the plans, for the type and size specified and installed by this method, at all depths. However, the bore shall be paid for one time on a linear foot basis and no extra compensation will be paid for failures and subsequent re-boring attempt(s).

Bid Item 22A. 24" Steel Casing over Existing 12" Water Line. This item shall cover furnishing and installing new or used 24" steel casing pipe with a minimum 0.375" wall thickness over the existing 12" water line, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. New 12" C900 DR 18 water line can be used or the existing pipe can be reused. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 23A. 14" Steel Casing over Existing 6" Water Line. This item shall cover furnishing and installing new or used 14" steel casing pipe with a minimum 0.375" wall thickness over the existing 6" water line, including all materials, tools, equipment, labor and supervision necessary to provide a finished product acceptable to Goforth and Hays County. Casing ends must be cut true, ground smooth and free of barbs. New 6" C900 DR 18 water line can be used or the existing pipe can be reused. This item shall include, but not be limited to: acquisition, transportation and unloading of steel casing pipe, excavation, embedment, backfill, compaction, casing spacers, end seals, installation of the carrier pipe inside the encasement pipe and all other work and incidentals as specified herein and shown on the Plans. This Item will also include relocation of an existing 6" Gate Valve to outside of the casing limits.

Measurement of the steel casing shall be measured by the horizontal linear distance along the centerline of the casing pipe. Payment for the steel casing shall be made at the unit price bid per horizontal linear foot of casing, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 24A. 16" Slick Bore Without Casing. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to bore under driveways, culverts, trees, etc. and provide a finished product without any damage or interference to the object being bored. The water line will be paid for in Item 1.

Measurement of the slick bore shall be measured by the horizontal linear distance along the centerline of the pipe. Payment for the slick bore shall be made at the unit price bid per horizontal linear foot of slick bore, as shown on the plans, for the type and size specified and installed by this method, at all depths.

Bid Item 25A. 16" Butterfly Valve. This item shall cover furnishing and installing a butterfly valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the butterfly valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the butterfly valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 26A. 12" Butterfly Valve. This item shall cover furnishing and installing a butterfly valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the butterfly valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the butterfly valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 27A. 8" Gate Valve. This item shall cover furnishing and installing a resilient wedge gate valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.



Measurement of the gate valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the gate valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 28A. 6" Gate Valve. This item shall cover furnishing and installing a resilient wedge gate valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the gate valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the gate valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 29A. 4" Gate Valve. This item shall cover furnishing and installing a resilient wedge gate valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the gate valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the gate valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 30A. 3" Gate Valve. This item shall cover furnishing and installing a resilient wedge gate valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve box, lid and marker, polyethylene wrap, excavation, embedment, backfill, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the gate valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the gate valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 31A. Fire Hydrant Assembly. This item shall cover furnishing and installing a standard fire hydrant assembly of the size and type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to the following items:

fire hydrant, anchor tee, gate valve, valve box and lid, restraints, polyethylene wrap, concrete support pad, ductile iron lead pipe, primer and paint, blocking, excavation, embedment, backfill, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the fire hydrant assembly shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the fire hydrant assembly shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 32A. Flush Valve Assembly. This item shall cover furnishing and installing a flush valve assembly of the size and type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: anchor tee or tap, gate valve, tapped plug, valve box, lid and marker, restraints, polyethylene wrap, galvanized riser pipe and associated fittings, blocking, excavation, embedment, backfill, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the flush valve assembly shall be measured by the unit of each assembly of the size and type shown on the plans. Payment for the flush valve assembly shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 33A. 2" Combination Air Release/Vacuum Valve. This item shall cover furnishing and installing a combination air release/vacuum valve of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. This item shall include, but not be limited to: valve, valve/meter box, cover and marker, excavation, embedment, backfill, tie-in, tapping saddle, corporation stop, angle stop, fittings, stainless steel inserts, piping and tubing, concrete, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the combination air release/vacuum valve shall be measured by the unit of each assembly of the size and type shown on the plans. Payment shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 34A. Reconnection of Existing 5/8"x3/4" Standard Water Meters. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water meters. This shall include, but not be limited to: tapping saddles, corporation stops, bushings, polyethylene service line, stainless steel inserts, angle stops, plugging existing service line, location, excavation, embedment, backfill, compaction, testing, and all other work and incidentals as specified herein and shown on the plans.

Measurement of this item shall be measured by the unit of one each fully assembled and installed meter reconnection. Payment for this item shall be made at the unit price bid per each meter reconnection.

Bid Item 35A. Reconnection of Existing 1½”Water Meter. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water meters. This shall include, but not be limited to: tapping saddles, corporation stops, bushings, polyethylene service line, stainless steel inserts, angle stops, plugging existing service line, location, excavation, embedment, backfill, compaction, testing, and all other work and incidentals as specified herein and shown on the plans.

Measurement of this item shall be measured by the unit of one each fully assembled and installed meter reconnection. Payment for this item shall be made at the unit price bid per each meter reconnection.

Bid Item 36A. Relocation and Reinstall of Existing 5/8”x3/4” Water Meters. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to relocate the existing water meter and connect to the proposed water line. This shall include, but not be limited to: tapping saddles, corporation stops, bushings, polyethylene service line, stainless steel inserts, angle stops, plugging existing service line, location, excavation, embedment, backfill, compaction, testing, and all other work and incidentals as specified herein and shown on the plans.

Measurement of this item shall be measured by the unit of one each fully reassembled and installed meter reconnection. Payment for this item shall be made at the unit price bid per each meter reconnection.

Bid Item 37A. Tie-in to Existing 2” Water Line. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water line(s). This shall include location, excavation, pumping out water, removal of fittings, valves and hydrants, removal of concrete thrust blocking, any necessary cutting, removal of mechanical joint restraint systems and removal of plugs, caps, or blind flanges from the existing water lines as shown on the plans. The water line will be paid for in Item 7.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each tie-in connection.

Bid Item 38A. Tie-in to Existing 3” Water Line. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water line(s). This shall include location, excavation, pumping out water, removal of fittings, valves and hydrants, removal of concrete thrust blocking, any necessary cutting, removal of mechanical joint restraint systems and removal of

plugs, caps, or blind flanges from the existing water lines as shown on the plans. The water line will be paid for in Item 6.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each tie-in connection.

Bid Item 39A. Tie-in to Existing 4" Water Line. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water line(s). This shall include location, excavation, pumping out water, removal of fittings, valves and hydrants, removal of concrete thrust blocking, any necessary cutting, removal of mechanical joint restraint systems and removal of plugs, caps, or blind flanges from the existing water lines as shown on the plans. The water line will be paid for in Item 5.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each tie-in connection.

Bid Item 40A. Tie-in to Existing 8" Water Line. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water line(s). This shall include location, excavation, pumping out water, removal of fittings, valves and hydrants, removal of concrete thrust blocking, any necessary cutting, removal of mechanical joint restraint systems and removal of plugs, caps, or blind flanges from the existing water lines as shown on the plans. The water line will be paid for in Item 3.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each tie-in connection.

Bid Item 41A. Tie-in to Existing 12" HCISD Water Line. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water line to the existing water line(s). This shall include location, excavation, pumping out water, removal of fittings, valves and hydrants, removal of concrete thrust blocking, any necessary cutting, removal of mechanical joint restraint systems and removal of plugs, caps, or blind flanges from the existing water lines as shown on the plans. The water line will be paid for in Item 2.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each tie-in connection.

Bid Item 42A. Relocation of Existing 1 ½" Water Meter, 1 ½"RPZ and 6" RPDA. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to relocate the existing 1 ½"water meter, 1 ½" RPZ and 6" RPDA and connect to the

proposed water line This shall include, but not be limited to: fittings, valves, water line (D.I.P., brass, PVC), tapping saddles, corporation stops, bushings, polyethylene service line, stainless steel inserts, angle stops, plugging existing service line, location, excavation, embedment, backfill, compaction, testing, and all other work and incidentals as specified herein and shown on the plans.

Measurement of this item shall be measured by the unit of one (total) fully reassembled and installed reconnection of the equipment listed in this Item. Payment for this item shall be made at the lump sum price bid price.

Bid Item 43A. 16” Mechanical Joint (Meg-a-Lug) Restraints. This item shall cover furnishing and installing mechanical joint restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “mechanical joint restraint” shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed mechanical joint restraint. Payment for this item shall be made at the unit price bid per each mechanical joint restraint.

Bid Item 44A. 12” Mechanical Joint (Meg-a-Lug) Restraints. This item shall cover furnishing and installing mechanical joint restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “mechanical joint restraint” shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed mechanical joint restraint. Payment for this item shall be made at the unit price bid per each mechanical joint restraint.

Bid Item 45A. 8” Mechanical Joint (Meg-a-Lug) Restraints. This item shall cover furnishing and installing mechanical joint restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “mechanical joint restraint” shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed mechanical joint restraint. Payment for this item shall be made at the unit price bid per each mechanical joint restraint.

Bid Item 46A. 6” Mechanical Joint (Meg-a-Lug) Restraints. This item shall cover furnishing and installing mechanical joint restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision

necessary to provide a properly restrained piping system. The term “mechanical joint restraint” shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed mechanical joint restraint. Payment for this item shall be made at the unit price bid per each mechanical joint restraint.

Bid Item 47A. 4” Mechanical Joint (Meg-a-Lug) Restraints. This item shall cover furnishing and installing mechanical joint restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “mechanical joint restraint” shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed mechanical joint restraint. Payment for this item shall be made at the unit price bid per each mechanical joint restraint.

Bid Item 48A. 12” Bell Restraint Harness. This item shall cover furnishing and installing bell restraint harnesses of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “bell restraint harness” shall include, but is not limited to: split serrated rings, tie bolts, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed bell restraint harness. Payment for this item shall be made at the unit price bid per each bell restraint harness.

Bid Item 49A. 6” Bell Restraint Harness. This item shall cover furnishing and installing bell restraint harnesses of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “bell restraint harness” shall include, but is not limited to: split serrated rings, tie bolts, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed bell restraint harness. Payment for this item shall be made at the unit price bid per each bell restraint harness.

Bid Item 50A. 12”x12” Hot Tap w/ 12” Gate Valve. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water lines to the existing water lines without interrupting service. This shall include location, excavation, pumping out water, tapping sleeve, gate valve, polyethylene wrap,

embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each Hot Tap connection.

Bid Item 51A. 8"x8" Hot Tap w/ 8" Gate Valve. This item shall cover all labor, materials, tools, parts, equipment and supervision necessary to connect the proposed water lines to the existing water lines without interrupting service. This shall include location, excavation, pumping out water, tapping sleeve, gate valve, polyethylene wrap, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of this item shall be measured by the unit of one each fully assembled and installed connection. Payment for this item shall be made at the unit price bid per each Hot Tap connection.

Bid Item 52A. 12"x2" Tap with 2" Gate Valve. This item shall cover furnishing and installing a tapping saddle and gate valve of the size and type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system.

Measurement of the service saddle shall be measured by the unit of each tapping saddle and gate valve of the size and type shown on the plans. Payment for the service tapping saddle and gate valve shall be paid for at the unit bid price per each for the size and type specified.

Bid Item 53A. Base Repair for Gravel Driveways. This item shall cover furnishing and installing a flexible base course to a minimum compacted thickness across gravel or dirt driveways where the proposed water line will be installed, including all materials, tools, equipment, labor and supervision necessary to complete the job and prevent future settling. This item shall include, but not be limited to: acquisition, transportation, unloading and installation of the flexible base material, disposal of surplus material, proper placement and compaction, density testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of gravel driveway repair and material, complete in place, shall be measured along the centerline of the water line across the driveway. Payment shall be made at the unit price bid per horizontal linear foot.

Bid Item 54A. Asphalt Repair for Asphalt Roads and Driveways. This item shall cover furnishing and installing all materials, tools, equipment, labor and supervision necessary to repair asphalt driveways to original or better state once cut during construction of the water line. This item shall include, but not be limited to: acquisition, transportation,

unloading and installation of the flexible base material, disposal of surplus material, proper placement and compaction, density testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of asphalt driveway repair and material, complete in place, shall be measured along the centerline of the water line across the driveway. Payment shall be made at the unit price bid per horizontal linear foot.

Bid Item 55A. Tree/Brush Trimming/Pruning and Removal. This item shall cover furnishing all materials, tools, parts, labor and equipment necessary to clear the proposed water line easement of all trees and brush and provide a clear, obstruction-free right-of-way installation of the water line, including removal of stumps, roots or other obstructions along the ditch line and other areas where excavation is necessary. This shall include, but not be limited to: bulldozing, sawing, excavating, mulching, hauling off from the project, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of this item shall be measured by the linear foot. Payment for this item shall be made at the unit price bid per linear foot.

Bid Item 56A. Miscellaneous Ductile Iron Fittings. This item shall cover furnishing and installing ductile iron fittings of the size and type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a complete installation capable of supporting the operation of the water distribution system. The term “miscellaneous ductile iron fittings” shall include, but is not limited to: concrete blocking, bends, fittings, reducers, anchor couplings, gaskets, lubrication, polyethylene wrap, excavation, embedment, backfill, compaction, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the ductile iron fittings shall be measured by the ton of fittings installed. Payment for the ductile iron fittings shall be made at the unit price bid per ton of installed fittings.

Bid Item 57A. Trench Safety Protection System. This item shall cover a system to protect the workmen from collapse of trenches and excavations, falling objects and hazards associated with excavations. The quantity for payment shall be the length of trenches or other excavations that are five feet deep or deeper and that workmen must enter. Payment of all work prescribed under this item shall be full compensation for the Trench Protection Systems including any additional excavation, backfill or pavement replacement required, for furnishing, placing, maintaining and removing all shoring, sheeting or bracing; for dewatering or diversion of water; for all jacking and jack removal; and for all other labor, materials, tools, equipment and incidentals necessary to complete the work.



Measurement of the trench safety protection system shall be measured along the centerline of the water line. Payment shall be made at the unit price bid per horizontal linear foot, regardless of depth of trench.

Bid Item 58A. Seeding for Site Restoration. This item shall cover restoration of disturbed areas as a result of construction, but within the limits of construction, including: stockpiling and replacing and/or providing topsoil, preparing the disturbed ground, furnishing and placing seed mix, establishing the cover, and all other incidentals necessary to complete the work.

Measurement of revegetation, complete in place, shall be measured by the square yard of disturbed areas. Payment shall be made at the unit price bid per square yard of restored areas.

Bid Item 59A. 16" Foster Adapter. This item shall cover furnishing and installing Foster Adapter restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term "Foster Adapter" shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed Foster Adapter. Payment for this item shall be made at the unit price bid per each Foster Adapter.

Bid Item 60A. 12" Foster Adapter. This item shall cover furnishing and installing Foster Adapter restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term "Foster Adapter" shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed Foster Adapter. Payment for this item shall be made at the unit price bid per each Foster Adapter.

Bid Item 61A. 8" Foster Adapter. This item shall cover furnishing and installing Foster Adapter restraints of the type shown on the plans or in the specifications, including all materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term "Foster Adapter" shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed Foster Adapter. Payment for this item shall be made at the unit price bid per each Foster Adapter.

Bid Item 62A. 6" Foster Adapter. This item shall cover furnishing and installing Foster Adapter restraints of the type shown on the plans or in the specifications, including all

materials, tools, equipment, labor and supervision necessary to provide a properly restrained piping system. The term “Foster Adapter” shall include, but is not limited to: gaskets, lubrication, polyethylene wrap, bolts, nuts and hardware devices.

Measurement of this item shall be measured by the unit of one each fully assembled and installed Foster Adapter. Payment for this item shall be made at the unit price bid per each Foster Adapter.

Bid Item 63A. 16” Ductile Iron Pipe, Pressure Class 250. This item shall cover furnishing and installing new Ductile Iron Pipe water line, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe, including pipe within casing. The measurement of each line of pipe shall be continuous and shall include the horizontal plan lengths of all fittings and valves between the ends. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the open cut method, at all depths.

Bid Item 64A. 18” HDPE DR11 DIPS Water Line. This item shall cover furnishing and installing new 18”HDPE DR11 DIPS water line by way of directional bore, including all materials, tools, equipment, labor and supervision necessary to provide a complete and operable water distribution system. This item shall include, but not be limited to: acquisition, transportation, and unloading of the pipe, clearing, brush and tree removal or trimming, grubbing, topsoil stockpiling, excavation, embedment, backfilling, compaction, disposal of surplus material, redressing, testing, and all other work and incidentals as specified herein and shown on the Plans.

Measurement of the water line shall be measured by the horizontal linear distance along the centerline of the pipe. Payment for the water line shall be made at the unit price bid per horizontal linear foot of pipe, as shown on the plans, for the type and size specified and installed by the directional bore method, at all depths.

Bid Item 65A. Disinfection/Chlorination. This item shall consist of disinfection/chlorination of new water mains, valves, fittings and appurtenances with Calcium Hypochlorite (HTH), manually or by machine injection, in accordance with the Goforth Special Utility District standards and specifications and in accordance with TCEQ and AWWA. The Contractor shall provide all materials, equipment, incidental appurtenances and labor necessary to satisfactorily disinfect all new water mains under this contract.

Measurements of this item shall be considered complete after all the required test results have proved successful. Failed tests will be repeated at the Contractor's expense until test has been proven successful and are accepted by Goforth SUD. Payment of this item shall be made at by the lump sum for successful testing.

### **3.0 Payment**

Payment shall be made for at the contract price specified in the description of each of those items. Bidders may include portions of bid items in requests for partial payments.

Payment shall be complete compensation for all materials, equipment and other components, installation, labor, tools, superintendence and incidentals necessary to complete the work, including temporary installations, and place it operation.

**END OF SECTION**

This page intentionally left blank.

This page intentionally left blank.

## **Section 01400 - Inspection**

### **1.0 General**

- A. This Section specifies the rights and intentions of the Engineer, Owner, Regulatory Agency, and/or Funding Agency in relation to the inspection of the construction of the Work.
- B. All construction and materials under this contract shall be subject to inspection by the Engineer, Owner, Regulatory Agency, and/or Funding Agency at any time deemed necessary. The Contractor shall provide access to the work, cooperate and assist with such inspections.
- C. The Engineer shall observe and periodically inspect the construction in sufficient detail to become satisfied that the work is proceeding in general accordance with the Contract Documents, but shall not guarantee the Contractor's performance.
- D. All material, equipment, and/or components delivered to the construction site are subject to inspection by the Engineer, or his designated representative, to assure that it meets specifications. Any material found not to meet the required specification must be removed from the site and replaced with material in compliance with the required specifications.
- E. The Contractor shall give the Owner and Engineer sufficient advance notice of any and all required testing.

### **2.0 Concrete**

The Contractor shall take concrete cylinders for testing at seven (7) day and twenty-eight (28) day breaks. One (1) set of test cylinders shall be made for each 50 cubic yards of concrete poured.

### **3.0 Painting**

Any and all painting may be checked by the Engineer and/or an independent laboratory at the discretion of the Owner in accordance with AWWA standards.

#### **4.0 Piping**

Each load of pipe delivered to the job site shall be checked by the Engineer, or his representative, to assure that it meets specifications. If a load of pipe is found to have inadequate wall thickness or tolerances greater than specified, randomly selected samples of pipe shall be immediately sent to the National Sanitation Foundation of Ann Arbor, Michigan or other approved commercial laboratory. The NSF shall determine whether selected samples meet NSF Specifications, and other specifications for the specific contract. Should the NSF, or other commercial laboratory selected, concur that the pipe does not meet specifications, it is to be understood that all of the pipe delivered to the site shall be immediately removed and replaced by the Contractor at no cost to the Owner. The Engineer and Owner assume no responsibility for the pipe. The Engineer and Owner shall not be responsible for the pipe or its installation.

**END OF SECTION**

## **Section 01500 - Warranties and Guarantees**

### **1.0 General**

The Contractor shall warranty that the Work is properly constructed in accordance with the design, all applicable state and federal regulations and proper construction techniques.

The warranty period shall be one (1) year from the date of acceptance of the Work. In the event that a defect is discovered during the warranty period, the period shall be extended indefinitely until the defect is corrected.

### **2.0 Special Warranty**

For any specially warranted equipment, the Manufacturer shall jointly warrant the equipment to both the Contractor and the Owner against all defects in materials and workmanship; and shall guarantee that the equipment will meet the requirements of the Specifications, for a period of not less than one (1) year from the date of Final Acceptance of the Work. In addition, the equipment furnished by the Contractor shall be free from defects in design.

Should the equipment not meet the requirements of the Specifications, the Equipment Manufacturer shall correct or service the equipment at no additional cost to meet the specified requirements, where any such deficiencies are the responsibility of the Equipment Manufacturer. In the event the equipment is unable to meet the specified requirements within the warranty period, the Equipment Manufacturer shall refund an amount equal to the purchase price of new equipment which will meet the specified requirements.

The Manufacturer's warranty shall clearly state accuracy, operational limitations, tolerances, etc., which may affect performance of the equipment as well as a description of what performance capabilities can be expected from the equipment. In the event that these statements are ambiguous or are not in conformity with the specified requirements, the equipment shall not be accepted.

The Contractor shall be responsible to insure that the Manufacturer's special equipment warranty is not voided by acceptance of the terms of purchase agreements between Contractor and Manufacturer. In all events, the Contractor shall be held ultimately responsible for enforcement of the requirements of this warranty at his expense.

Within the warranty period and upon notification of the Contractor by the Owner, the Contractor shall promptly make needed adjustments, repairs, or replacements arising out of defects which, in the judgement of the Engineer or the Owner, become necessary during such period.

The cost of all materials, parts, labor, transportation, supervision, special tools, and supplies required for replacement of parts, repair of parts, or correction of abnormalities shall be paid by the Contractor or by his surety under the terms of the Performance Bond.

The Contractor also extends the terms of this guarantee to cover repaired parts and all replacement parts furnished under the guarantee provisions for a period of one (1) year from the date of their installation.

If within ten (10) days after the Owner or Engineer gives the Contractor notice of a defect, failure, or abnormality of the Work the Contractor neglects to make, or undertake with due diligence to make, the necessary repairs or adjustments, the Owner is hereby authorized to make the repairs or adjustments himself or order the work to be done by a third party, and the cost of said Work shall be paid by the Contractor.

In the event of an emergency where, in the judgement of the Owner, delay would cause serious loss or damage, repairs or adjustments may be made by the Owner or a third party chosen by the Owner without giving notice to the Contractor, and the cost of the Work shall be paid by the Contractor or by his surety under the terms of the Performance Bond.

## **END OF SECTION**



## **Section 02000 – General**

### **1.0 Description**

This division shall consist of construction of site work for construction of proposed improvements, including, but not limited to right-of-way preparation, gravel and asphalt driveway replacement, revegetation and erosion control.

### **2.0 Construction Methods**

- A. Clearing. The Contractor shall clear, remove and dispose of brush and debris from the project area if not already completed by the Owner. The Contractor shall coordinate with the Owner and landowner when removing or pruning trees.

### **3.0 Applicable Publications**

The following publications for the issues listed below, but referred to thereafter by basic designation only, form a part of this Specification to the extent indicated by the referred thereto:

- A. AWWA STANDARDS, Current Published, American Water Works Association (AWWA).
- B. FEDERAL REGISTER, Volume 52, Page 2, Wednesday, April 15, 1987, Proposed Amended Change for OSHA Standards, 29 CFR, Part 1926, Subpart P.
- C. EXCAVATION AND TRENCHING OPERATION, OSHA 2226, U.S. Department of Labor, 1985 (Revised) or any current changes or revisions.
- D. CONSTRUCTION INDUSTRY, OSHA Safety and Health Standards (24 CFR 1926/1910), OSHA 2207, 1985 with any current changes and revisions.

#### **4.0 Weather Conditions**

Construction shall be performed only above the minimum conditions set forth in each item of this division and work shall be halted at any time that in the judgment of the Operator and/or Engineer conditions are such that quality of construction is being or could be compromised by present or impending weather conditions.

**END OF SECTION**

## Section 02050 – Preparing Right-of-Way

### 1.0 Description

The work covered by this item consists of preparing the right-of-way for construction operations by protecting existing trees, fences, gates and other improvements to remain and removing and disposing of all obstructions from the right-of-way and from designated easements, where removal of such obstructions is not otherwise provided for in the plans and specifications.

Such obstructions shall be considered to include, but not limited to, remains of houses not completely removed by others, foundations, floor slabs, concrete, brick, lumber, plaster, cisterns, septic tanks, basements, abandoned utility pipes or conduits, underground service station tanks, equipment or other foundations, fences, retaining walls, outhouses, shacks and all other debris as well as buried concrete slabs, curbs, driveways and sidewalks.

As directed by the Engineer, this item shall include the demolition and removal of structures within the right-of-way either partially or completely.

It is the intent of this specification to provide for the removal and disposal of all obstructions to the new construction together with other objectionable materials not specifically provided for elsewhere by the plans and specifications.

Unless shown otherwise on the plans, all fences, gates and all other improvements along the right-of-way which are damaged, or relocated and removed temporarily by the Contractor shall be replaced by the Contractor as directed by the Engineer to an equal or better condition as detailed in the Plans at no additional cost to the Owner.

Precautions to assure protection for adjacent landowners must be taken by the Contractor at the Contractor's expense. Any and all fencing, whether or not identified on the plans, must be maintained at all times. Where the nature of the work requires fence removed, the Contractor, at his expense, shall replace said fencing to equal or better condition as detailed in the plans and as approved by the Engineer.

## **2.0 Products**

- A. Materials.
  - 1. Materials and equipment will be as selected by the Contractor, except as indicated.

## **3.0 Execution**

- A. Site Preparation
  - 1. Existing Utilities. Protect all pipes, conduits and wires encountered, procure and pay for any necessary permits or certificates required to complete work specified. Make any and all required notifications and comply with all applicable federal, state and local ordinances.
  
- B. Disposal of Waste Materials.
  - 1. Stockpile, haul from site and legally dispose of waste materials. Accumulation is not permitted.
  - 2. Maintain disposal routes clear, clean and free of debris.
  
- C. Cleaning. Upon completion of site preparation work, clean areas within the contract limits, remove tools and equipment. Provide site clear, clean and free of materials and debris and suitable for site work operations.

**END OF SECTION**

**Section 02510 – Roadway Replacement – for Asphalt Driveway and Roadway Repairs****1.0 General**

- A. Existing pavement surface type of gravel, asphalt or concrete shall be replaced where cut for line trenching, tie-ins, etc.
- B. Pavement replacement sections shall be the same surface material type as removed, unless otherwise indicated on the Plans, as follows:
  - 1. Existing gravel roadways cut during construction shall be replaced with 8" minimum flexible base backfill.
  - 2. Existing asphalt cut during construction shall be permanently replaced with 1½" minimum HMAC and primed 8" minimum base backfill.
  - 3. Pavement replacement of "cold-mix" may be used at the option of the Contractor unless indicated on the Plans.

**2.0 Material**

- A. Flexible Base Backfill.
  - 1. TxDOT approved crushed limestone shall be used in driveways and county roads to repair pipeline trenches.
  - 2. Shall be added in 2 - 4" maximum lifts and compacted to 95% of optimum density and within plus or minus 2% of optimum moisture.
  - 3. Shall be placed at the same time the subgrade backfill is placed and compacted in the trench. Additional base material may be required to compensate for trench line settling.
- B. Cold Mix.
  - 1. Shall conform to one of the following TxDOT, 1993 Specifications for "Cold Mix" materials.

- a. Item 330, Class A, Type D, Cold Mix Limestone Rock Asphalt.
  - b. Item 334, Type D, Hot Mix, Cold-Laid Asphaltic Concrete.
2. Shall be compacted to TxDOT Specifications, Item 216, Rolling (Proof).
- C. HMAC Pavement.
1. Shall conform to TxDOT 1993 Specifications for TxDOT Item 340 Type D HMAC Pavement or prior approved equal by the Engineer.
  2. Shall be hot-mixed and hot laid.
  3. Shall be compacted within 95% of the maximum laboratory optimum density as determined by TxDOT METHOD TEX-113-E. using a compaction effort of 13-26 ft-lbs/cu.in.

### 3.0 Execution

- A. General. Subgrade and base backfill shall be completed within 24 hours of excavation and preferable not left overnight, except for road crossings, driveways and other crossings impeding traffic flow and public safety which shall be immediately replaced to former conditions.
- B. Base Backfill. Shall be placed and compacted above the compacted subgrade to following levels:
1. Gravel Replacement; + $\frac{1}{2}$ " min. above existing pavement level to provide for settlement.
  2. Asphalt Replacement; 1 $\frac{1}{2}$ " plus or minus  $\frac{1}{4}$ " below existing pavement level.
- C. Cold Mix.
1. Base shall be tack coated prior to placement of "Cold Mix.
  2. Existing pavement edge joint shall be tack coated.

D. HMAC Pavement.

1. Shall be accomplished only after sufficient settling has occurred – usually 45-60 days. The work shall be started only after the temperature and season of the year is deemed acceptable by the Engineer.
2. Prior to placement, the existing pavement shall be saw or wheel cut to the dimensions indicated on the Plans. It shall be cut in such a manner as to produce a neat, straight line.
3. Existing pavement and temporary "cold mix", if specified, shall be removed in such a manner as to maintain the appearance of the cut joint.
4. The base shall be surfaced to a minimum of 1 ½” plus or minus ¼” below existing pavement grade. Base shall be recompact, if necessary, in sections deemed necessary by the Engineer.
5. Base shall be prime coated prior to placement of HMAC.
6. Existing pavement edge joints shall be tack coated.
7. Minimum of 1½” of HMAC shall be placed and compacted smooth to match the existing surface level to + 1/4" and smooth with joint.

**END OF SECTION**

This page intentionally left blank.



## Section 02610 – Flexible Base – for Gravel / Dirt Driveway and Roadway Repair

### 1.0 General

#### A. Description.

1. Scope. This item shall consist of furnishing and placing a flexible base course to a minimum compacted thickness. Work shall be in accordance with lines, grades and typical sections indicated on the Plans.
2. Applicable Publications. Construction and materials shall conform with TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges, 1993, which shall be included as applicable to these Specifications.

- B. Materials. The material shall conform with TxDOT Item 247, Flexible Base, Type A, Grade 2, Class 2. The material shall consist of processed or crushed argillaceous limestone. The material source shall be approved by the Engineer. Samples for testing the material shall be taken prior to the compaction operations.

The crushed limestone base material shall meet the following requirements:

|                           |           |
|---------------------------|-----------|
| Retained on 1¾ inch sieve | 0 to 10%  |
| Retained on No. 4 sieve   | 45 to 75% |
| Retained on No. 40 sieve  | 50 to 85% |

Material passing the No. 40 sieve shall be known as “Soil Binder” and shall meet the following requirements when prepared in accordance with Test Method Tex-101-E procedure:

|                                       |    |
|---------------------------------------|----|
| The liquid limit shall not exceed     | 40 |
| The plasticity index shall not exceed | 12 |

## 2.0 Construction Methods

Crushed Limestone Base shall consist of a foundation course for surface course or for other base courses; shall be composed of crushed limestone materials; and shall be constructed as herein specified in one or more courses in conformity with the typical sections shown on the plans and the lines and grades as established by the Engineer.

- A. Placement and Compaction.
1. The material shall be delivered and placed in approved vehicles.
  2. The material shall not be placed adjoining concrete curb and gutter until a minimum of two (2) consecutive days cure time have accrued.
  3. Material deposited shall be spread and shaped the same day of delivery unless otherwise approved by the Engineer.
  4. The material shall be bladed to position for compaction in a maximum of four inch (4”) lifts.
  5. Each lift of material shall be moistened to achieve optimum moisture content.
  6. Each lift of material shall be rolled and compacted to achieve a minimum of 100% optimum density.
  7. Throughout the entire operation, the course shall be maintained by blading.
  8. All areas and “nests” of segregated course or fine material shall be corrected or removed and replaced with well-graded material, as directed by the Engineer. If additional binder is considered desirable or necessary after the material is spread and shaped, it shall be finished and applied in the amount directed by the Engineer. Such binder material shall be carefully and evenly incorporated with the material in place by scarifying, harrowing, brooming or by other approved methods.

9. The surface upon completion shall be smooth and in conformity with the typical section shown on the Plans and to the established lines and grades. The base course shall be covered by new pavement surface within 24 hours of completion of compaction. Otherwise, the surface shall be left approximately 0.1 ft. high until such time as paving operations are to begin. The contractor shall fine-blade the surface to final grade and prepare the surface to receive the pavement in accordance with these specifications.
10. All irregularities, depressions or weak spots which may develop shall be corrected immediately by scarifying the areas affected, adding suitable material as required, reshaping and recompacting by moistening and rolling.
11. Should the preceding lifts or final section due to any reason or cause, lose the required stability, density and finish before the succeeding lift or surfacing is complete, it shall be recompacted and refinished at the Contractor's expense.

B. Density.

1. In-place density shall be tested upon completion of compaction, moistening and shaping of material to final grade.
2. Total specified depth(s) specified shall be compacted to a minimum of 100% of optimum density and moistened to a minimum 90% of optimum moisture content.
3. In-place testing shall be accomplished by an independent testing firm and the random locations and spacing as directed by the Engineer. The Owner shall pay for the first testing for each location. The Contractor shall pay for each retake of in-field density per location if necessary at the rate per test established by the independent testing firm.
4. Field density determination shall be made in accordance with TEST METHOD TEX-115-E as outlined in TEST METHOD TEX-114-E.

### 3.0 Equipment

Equipment necessary for proper prosecution of the work shall be of sufficient size and power to complete all work required by these specifications and documents. Equipment shall be on the project and approved by the Engineer prior to the beginning of construction operations. All equipment used shall be maintained in a satisfactory working condition. The Contractor shall employ adequate methods in performing the work and shall conduct his operations in a satisfactory and workmanlike manner.

### 4.0 Maintenance

- A. The Contractor shall be required within the limits of this contract to maintain the site in good condition, until all work has been completed and accepted. Maintenance shall include repair of any defects that may occur. This work shall be done by the Contractor at his entire expense, and shall be repeated as often as may be necessary to keep the area continuously intact.
- B. The Contractor shall not start or continue work without the expressed approval of the Engineer.
- C. The Engineer shall inspect the overall operation, sample the material and perform field density tests at his operation during the work. Material for testing and all rework for compliance shall be provided at the Contractor's expense. All additional testing and control shall be at the Contractor's expense.
- D. If the construction is deficient, the deficient area, as determined by the Engineer, shall be torn out and properly replaced entirely at the Contractor's expense.

**END OF SECTION**

## Section 02700 – Seeding for Erosion Control

### 1.0 General

- A. Description. This item shall govern for preparing ground, providing for sowing of seeds, mulching with straw, hay or cellulose fiber and other management practices on areas shown on the Plans and in accordance with this Item.

It includes seeding for permanent erosion control and seeding for temporary erosion control during the initial winter season.

- B. Materials.

1. Seed. All seed must meet the requirements of the Texas Seed Law including the labeling requirements for showing pure live seed (PLS = purity x germination), name and type of seed. Seed furnished shall be of the previous season's crop and the date of analysis shown on each bag shall be within nine months of the time of use on the project. Each variety of seed shall be furnished and delivered in separate bags or containers. A sample of each variety of seed shall be furnished for analysis and testing when directed by the Engineer. Buffalograss shall be treated with a dormancy method approved by the Engineer. The species and varieties of seed shall be from among the types specified in Tables 1A and 1B.

Table 1A. List of Selected Grass Species with Their Scientific and Common Names

| Scientific Name                   | Common Name<br>(Acceptable Varieties)                               | Season<br>Warm/Cool | Native/<br>Introduced |
|-----------------------------------|---------------------------------------------------------------------|---------------------|-----------------------|
| <u>Agropyron smithii</u>          | Western Wheatgrass                                                  | C                   | N                     |
| <u>Andropogon hallii</u>          | Sand Bluestem                                                       | W                   | N                     |
| <u>Avena sativa</u>               | Oats                                                                | C                   | I                     |
| <u>Bothriochloa<br/>ischaemum</u> | K-R Bluestem                                                        | W                   | I                     |
| <u>Bouteloua<br/>curtipendula</u> | Sideoats Grama<br>(see seed mix table for<br>appropriate varieties) | W                   | N                     |
| <u>Bouteloua eriopoda</u>         | Black Grama                                                         | W                   | N                     |
| <u>Bouteloua gracilis</u>         | Blue Grama<br>(see seed mix table for<br>appropriate varieties)     | W                   | N                     |
| <u>Buchloe dactyloides</u>        | Buffalograss                                                        | W                   | N                     |
| <u>Cenchrus ciliaris</u>          | Buffelgrass                                                         | W                   | I                     |
| <u>Chloris Guyana</u>             | Rhodesgrass                                                         | W                   | I                     |
| <u>Cynodon dactylon</u>           | Bermudagrass                                                        | W                   | I                     |
| <u>Eragrostis trichodes</u>       | Sand Lovegrass<br>(see seed mix table for<br>appropriate varieties) | W                   | N                     |
| <u>Festuca arundinaceae</u>       | Tall Fescue                                                         | C                   | N                     |
| <u>Hordeum vulgare</u>            | Barley                                                              | C                   | I                     |
| <u>Leptochloa dubia</u>           | Green Sprangletop                                                   | W                   | N                     |
| <u>Panicum virgatum</u>           | Switchgrass<br>(see seed mix table for<br>appropriate varieties)    | W                   | N                     |
| <u>Paspalum notatum</u>           | Bahiagrass<br>(Penascola variety)                                   | W                   | I                     |

|                          |                                                               |   |   |
|--------------------------|---------------------------------------------------------------|---|---|
| Schizachyrium scorparium | Little Bluestem<br>(Texas origin only)                        | W | N |
| Setaria italica          | Foxtail Millet                                                | W | I |
| Setaria macrostachya     | Plains Bristlegrass                                           | W | N |
| Sorghastrum Avanaceum    | Indiangrass<br>(see seed mix table for appropriate varieties) | W | N |
| Sporobolus Cryptandrum   | Sand Dropseed                                                 | W | N |
| Triticum aestivum        | Wheat (Red, Winter)                                           | C | I |

Table 1B. List of Selected Legumes Species with Their Scientific and Common Names

| Scientific Name       | Common Name        | Season Warm/Cool | Native/ Introduced |
|-----------------------|--------------------|------------------|--------------------|
| Trifolium incarnatum  | Crimson Clover     | C                | I                  |
| Melilotus officinalis | Yellow Sweetclover | C                | I                  |
| Vicia villosa         | Hairy Vetch        | C                | I                  |

2. Fertilizer. Fertilizer shall conform to the requirements of TxDOT Item 166 “Fertilizer”. The fertilizer used shall have the analysis as shown on the Plans.
3. Water. Water shall conform to the requirements of TxDOT Item 168 “Vegetative Watering”.

4. Mulch.
  - a. Straw Mulch or Hay Mulch. Straw mulch shall be oat, wheat or rice straw. Hay mulch shall be prairie grass, bermudagrass or other hay as approved by the Engineer. The straw mulch or hay mulch shall be free of Johnson grass or other noxious weeds and foreign materials. It shall be kept in a dry condition and shall not be molded or rotted.
  - b. Cellulose Fiber Mulch. It shall meet the requirements of and be approved by the Director of Maintenance and Operations. A list of pre-tested and approved materials will be maintained and can be obtained by writing the Director of Maintenance, 125 East 11<sup>th</sup> Street, Austin, Texas 78701-2483.

The mulch shall be designed for use in conventional mechanical planting, hydraulic planting of seed or hydraulic mulching of grass seed, either alone or with fertilizers and other additives. The mulch shall be such that, when applied, the material shall form a strong, moisture-retaining mat without the need of an asphalt binder. It shall be kept in a dry condition until applied and shall not be molded or rotted.

5. Soil Retention Blanket. Soil retention blanket shall meet the requirements of TxDOT Item 169, “Soil Retention Blanket”.
6. Tacking Agents. Tacking agents for straw or hay mulch shall be SS-1, unless otherwise shown on the Plans. A biodegradable tacking agent may be used in lieu of the SS-1 tacking agent when approved by the Engineer. Asphaltic material shall conform to the requirements of TxDOT Item 300, “Asphalts, Oils and Emulsions”.



C. Construction Methods.

After designated areas have been completed to the lines, grades and cross sections shown on the Plans and as provided for in other items of this contract, seeding shall be performed in accordance with the requirements hereinafter described. Unless otherwise approved by the Engineer, all areas to be seeded shall be cultivated to a depth of at least four (4) inches, except where seeding is to be done using a seed drill suitable for seeding into untilled soil. The seedbeds shall be cultivated sufficiently to reduce the soil to a state of good tilth when the soil particles on the surface are small enough and lie closely enough together to prevent the seed from being covered too deeply for optimum germination. Cultivation of the seedbed will not be required in loose sand where depth of sand is four (4) inches or more.

The cross section previously established shall be maintained throughout the process of cultivation. Any necessary reshaping shall be done prior to any planting of seed.

1. Planting Season and Seed Mixes. All planting shall be done between the dates specified for each highway district except as specifically authorized in writing by the Engineer.

The pure live seed planted per acre shall be of the type specified in Table 2 for rural areas (warm season), Table 3 for urban areas (warm season), Tables 4A and 4B for temporary erosion control (cool season) and Table 5 for temporary erosion control (warm season), with the mixture, rates and planting dates except as shown on the Plans.

Table 2  
 Rural Area Species-Specific Warm Season  
 Seeding Mixtures in Pounds of Pure  
 Live Seed Per Acre

| District and Planting Dates*                    | Mixture for Use in Clay or Tight Soils    | Mixture for Use in Sand or Sandy Soils |
|-------------------------------------------------|-------------------------------------------|----------------------------------------|
| 15 (East of U.S. 281)                           | (West of U.S. 281)                        | (All Sections)                         |
| (San Antonio)                                   |                                           |                                        |
| Feb 1 – Green Sprangletop 0.6                   | Green Sprangletop 0.6                     | Green Sprangletop 0.9                  |
| May 1 Sideoats Grama 1.8<br>(Haskell or Uvalde) | Sideoats Grama 1.8<br>(Haskell or Uvalde) | Bermudagrass 1.2                       |
| Little Bluestem 1.1                             | Buffalograss 5.3                          | Buffelgrass 2.0                        |
| Bermudagrass 0.8                                | Plains Bristlegr. 1.0                     | K-R Bluestem 1.0                       |
| Buffalograss 5.3                                | K-R Bluestem 0.7                          |                                        |
| Buffalograss 5.3                                | Bermudagrass 0.8                          |                                        |
| K-R Bluestem 0.7                                |                                           |                                        |

Table 3  
 Urban Area Species-Specific Warm Season  
 Seeding Mixtures in Pounds of Pure  
 Live Seed Per Acre, By District

| District and Planting Dates*  | Mixture for Use in Clay or Tight Soils    | Mixture for Use in Sand or Sandy Soils    |
|-------------------------------|-------------------------------------------|-------------------------------------------|
| 15 (East of U.S. 281)         | (West of U.S. 281)                        | (All Sections)                            |
| (San Antonio)                 |                                           |                                           |
| Feb 1 – Green Sprangletop 1.1 | Green Sprangletop 0.9                     | Green Sprangletop 1.1                     |
| May 1 Buffalograss 10.7       | Sideoats Grass 2.8<br>(Haskell or Uvalde) | Bermudagrass 1.5                          |
| Bermudagrass 1.5              | Buffalograss 8.0                          | Sideoats Grass 3.7<br>(Haskell or Uvalde) |

2. Broadcast Seeding. The seed or seed mixture, in the quantity specified, shall be uniformly distributed over the areas shown on the Plans or where directed by the Engineer. If the sowing of seed is by hand, rather than by mechanical methods, the seed shall be sown in two directions at right angles to each other. If mechanical equipment is used, all varieties of seed as well as fertilizer, may be distributed simultaneously provided that each component is uniformly applied at the specified rate. When seed and fertilizer are to be distributed as a water slurry, the mixture shall be applied to the area to be seeded within 30 minutes after components are placed in the equipment. After planting, the planted area shall be rolled with a light corrugated drum roller or another type of roller approved by the Engineer. All rolling of the sloped areas shall be along the contour of the slopes.
  
3. Straw or Hay Mulch Seeding. The seed or seed mixture, in the quantity specified, shall be uniformly distributed over the areas shown on the Plans or where directed by the Engineer. If the sowing of seed is by hand, rather than by mechanical methods, the seed shall be sown in two directions at right angles to each other. If mechanical equipment is used, all varieties of seed, as well as fertilizer, may be distributed simultaneously provided that each component is uniformly applied at the specified rate. When seed and fertilizer are to be distributed as a water slurry, the mixture shall be applied to the area to be seeded within 30 minutes after all components are placed in the equipment.

Immediately upon completion of planting of the seed, straw or hay mulch shall be spread uniformly over the seeded area at the rate of approximately 1.5 to 2.0 tons of hay mulch or 2.0 to 2.5 tons of straw mulch per acre. When a mulching machine equipped to inject a tacking agent into the straw or hay mulch uniformly as it leaves the equipment at a rate of 0.05 to 0.10 gallon of tacking agent per square yard of mulched area. When the tacking agent is placed by hand, then the rate of application for the tacking agent shall be approximately 0.15 gallon per square yard.

4. Cellulose Fiber Mulch Seeding. The seed or seed mixture, in the quantity specified, shall be uniformly distributed over the areas shown on the Plans or where directed by the Engineer. If the sowing of seed is by hand, rather than by mechanical methods, the seed shall be shown in two directions at right angles to each other. If mechanical equipment is used all varieties of seed, as well as fertilizer, may be distributed simultaneously. When seed and fertilizer are to be distributed as a water slurry, the mixture shall be applied to that area to be seeded within 30 minutes after all components are placed in the equipment.

Immediately upon completion of planting of the seed, cellulose fiber mulch shall be spread uniformly over the seeded area at the following rates:

Sandy soils with 3:1 slope or less – min. 2000 lbs./acre  
Sandy soils with greater than 3:1 slope – min. 2300 lbs./acre  
Clay soils with 3:1 slope or less – min. 2500 lbs./acre  
Clay soils with greater than 3:1 slope – min. 3000 lbs./acre

Cellulose fiber mulch rates are based on dry weight of mulch per acre. When used, a mulching machine, approved by the Engineer, shall be equipped to eject the thoroughly wet mulch material at a uniform rate to provide the mulch coverage specified.

5. Drill Seeding. The seed or seed mixture, in the quantity specified, shall be uniformly distributed over the areas shown on the Plans or where directed by the Engineer. All varieties of seed, as well as fertilizer, may be distributed simultaneously provided that each component is uniformly applied at the specified rate. Seed shall be drilled at a depth of from ¼ inch to 3/8 inch utilizing a pasture or rangeland type drill. All drilling shall be along the contour of the slope. After planting, the area shall be rolled with a roller integral to the seed drill, or a light corrugated drum roller or with another type of roller approved by the Engineer. All rolling of sloped areas shall be on the contour of the slopes.
6. Straw or Hay Mulching. Mulch shall be spread uniformly over the area indicated on the Plans or as designated by the Engineer at the rate of approximately 1.5 to 2.0 tons of hay mulch or 2.0 to 2.5 tons of straw mulch per acre. When used, a mulching machine approved by the Engineer shall be equipped to inject a tacking agent into the straw or hay mulch uniformly as it leaves the

equipment at a rate of 0.05 to 0.10 gallon of tacking agent per square yard of mulched area. If the straw or hay mulch and tacking agent are placed by hand, then the rate of application for the tacking agent shall be approximately 0.15 gallon per square yard.

7. Soil Retention Blanket. If specified on the Plans, a soil retention blanket shall be applied in accordance with TxDOT Item 169, “Soil Retention Blanket”.
8. Watering. Watering of the seeded area shall be conducted when, in the judgment of the Engineer, sufficient seeding survival is threatened by insufficient natural precipitation and shall be in accordance with TxDOT Item 168, “Vegetative Watering”.
9. Fertilizer. Fertilizer, when required, shall be applied in accordance with TxDOT Item 166, “Fertilizer”.

D. Seeding for Cool Season Temporary Erosion Control

1. Standard Seeding. When specified on the Plans or directed by the Engineer, temporary erosion control measures shall be performed. These measures shall consist of the sowing of seed mixture appropriate for the season and the work and materials as required in TxDOT Article 164.3. These measures shall be performed over the areas shown on the Plans or where directed by the Engineer. Temporary erosion control measures shall be performed in addition to other “Seeding for Erosion Control” as herein specified. The pure live seed, of the cool season plants, planted per acre shall be of the type specified, with the mixture, rate and planting dates as follows in Tables 4A and 4B, except as shown on the Plans.

Table 4A. Cool Season Grass Seeding Mixtures  
for Temporary Erosion Control,  
in Pounds of Pure Live Seed per Acre,  
by District.

| Districts & Optimum<br>Planting Dates             | Common Name         | Rate  |
|---------------------------------------------------|---------------------|-------|
| 15 (San Antonio)<br><br>September 1 – November 30 | Tall Fescue         | 4.0   |
|                                                   | Oats                | 21.0* |
|                                                   | Wheat (Red, Winter) | 30.0  |

\*May substitute barley at 72.0 lb/ac divided by the number of species in the mix.

2. Legume Seeding. When specified on the Plans or directed by the Engineer, the following regionally adapted legumes shall be planted.

Table 4B. Cool Season Legume Seeding  
for Temporary Erosion Control,  
in Pounds of Pure Live Seed per Acre,  
by District.

| Districts & Optimum<br>Planting Dates | Common Name | Rate |
|---------------------------------------|-------------|------|
| 15 ( San Antonio)                     | Hairy Vetch | 8.0  |

E. Seeding for Warm Season Temporary Erosion Control

1. Standard Seeding. When specified on the Plans or directed by the Engineer, temporary erosion control measures shall be performed. This measure shall consist of the sowing of seed appropriate for the season and the work and materials as required by TxDOT Article 164.3. These measures shall be performed over the areas shown on the Plans or where directed by the Engineer. Temporary erosion control measures shall be performed in addition to other “Seeding for Erosion Control” as herein specified. The pure live seed planted per acre shall be of the type specified, rate and seed planting date as follows in Table 5 except as shown on the Plans.

Table 5.  
Warm Season Seeding for Temporary Erosion Control,  
in Pounds of Pure Live Seed per Acre, by District.

| District and Optimum<br>Planting Dates | Common Name    | Rate |
|----------------------------------------|----------------|------|
| 15 (San Antonio)<br>May 1 – August 31  | Foxtail Millet | 30.0 |

**END OF SECTION**

This page intentionally left blank.



## Section 02710 – Silt Fence

### 1.0 Description

This item shall govern the provisions and placement of a filter fabric fence including maintenance of the fence, removal of accumulated silt and removal of the silt fence upon completion of the project.

### 2.0 Submittals

The submittal requirements for this specification item shall include:

- A. Source, manufacturer, characteristics and test data for the filter fabric.
- B. Manufacturer, characteristics and test data for the posts and wire fence.

### 3.0 Materials

- A. Fabric.
  - 1. General. The filter fabric shall be of non-woven polypropylene, polyethylene or polyamide thermoplastic fibers with non-raveling edges. The fabric shall be non-biodegradable, inert to most soil chemicals, ultraviolet resistant, unaffected by moisture or other weather conditions, and permeable to water while retaining sediment. The filter fabric shall be supplied in rolls a minimum of 36 inches wide.
  - 2. Physical Requirements. The fabric shall meet the requirements presented in Table 1, when sampled and tested in accordance with the methods indicated herein and/or on the Drawings.
- B. Posts. Posts shall be painted or galvanized steel Tee or Y-posts with anchor plates, not less than 5 feet in length with a minimum weight of 1.3 pounds per foot with a minimum Brinell Hardness of 143. Hangers shall be adequate to secure fence and fabric to posts. Posts and anchor plates shall conform to ASTM A-702.
- C. Wire Fence. Wire fence shall be welded wire fabric 2 x 4 – W1.0 x W1.0.

Table 1 – Filter Fabric Requirements

| Physical Properties                            | Method                  | Requirements |
|------------------------------------------------|-------------------------|--------------|
| Fabric Weight in ounces per square yard        | TEX-616J <sup>1</sup>   | 4.5 minimum  |
| Water Flow Rate in gallons/sq. foot/minute     | TEX-616J <sup>1</sup>   | 40 maximum   |
| Equivalent Sieve Opening Size: U.S. Standard   | CW-02215 <sup>2</sup>   | 40 to 100    |
| Mullen Burst Strength: lbs. per sq. inch (psi) | ASTM-D3786 <sup>3</sup> | 300 minimum  |
| Ultraviolet Resistance; % Strength Retention   | ASTM-D1682 <sup>4</sup> | 70 minimum   |

<sup>1</sup>TxDOT Test Method Tex-616-J, “Testing of Construction Fabrics”.

<sup>2</sup>US Army Corps of Engineers Civil Works Construction Guide Specification CW-02215, “Plastic Filter Fabric”.

<sup>3</sup>ASTM D-3786, “Test Method for Hydraulic Bursting Strength of Knitting Goods and Non-Woven Fabrics, “Diaphragm Bursting Strength Tester Method”.

<sup>4</sup>ASTM D-1682, “Test Methods for Breaking Load and Elongation of Textile Fabrics”.

#### 4.0 Construction Methods

The silt fence fabric shall be securely attached to the posts and the wire support fence with the bottom 12 inches of the filter material buried in a trench a minimum of 6 inches deep and 6 inches wide to prevent sediment from passing under the fence. When the silt fence is constructed on impervious material, a 12-inch flap of fabric shall extend upstream from the bottom of the silt fence and weighted to limit particulate loss. No horizontal joints will be allowed in the filter fabric. Vertical joints shall be overlapped a minimum of 12 inches with the ends sewn or otherwise securely tied.

The silt fence shall be a minimum of 24 inches high. Posts shall be embedded a minimum of 24 inches high. Posts shall be embedded a minimum of 12 inches in the ground, placed a maximum of 6 feet apart and set on a slight angle toward the anticipated runoff source. When directed by the Engineer or designated representative, posts shall be set at specified intervals to support concentrated loads.

The silt fence shall be repaired, replaced and/or relocated when necessary or as directed by the Engineer or designated representative. Accumulated silt shall be removed when it reaches a depth of 6 inches.

**END OF SECTION**

## Section 13000 – General

### 1.0 General

This division shall consist of utility work for the construction and placement of water system improvements. Utility work shall consist of, but is not limited to, site preparation, trench excavation, pipe installation, embedment, trench backfill, and site dressing.

### 2.0. Applicable Publications

The following publications for the issues listed below, but referred to thereafter by basic designation only, form a part of this specification to the extent indicated by the referenced thereto:

- A. Rules and Regulations for Public Water Systems. Current Texas Commission on Environmental Quality Standards.
- B. AWWA Standards, Current Published, American Water Works Association (AWWA).
- C. Article 6053-1 and Article 6053-2, Vernon's Texas Civil Statutes, Trench Safety.
- D. Excavation and Trenching Operation, OSHA 2226, U.S. Department of Labor, 1985 (Revised) or any current changes or revisions.
- E. Construction Industry, OSHA Safety and Health Standards (29 CFR 1926/1910), OSHA 2207, 1985 with any current changes and revisions.
- F. Federal Register, Volume 52, Page 2, Wednesday, April 15, 1987, Proposed Amended Change to OSHA Standards, 29 CFR, Part 1926, Subpart P.

### 3.0 During Construction

- A. The Contractor shall keep work areas free of litter and unnecessary trash. Trash barrels shall be supplied for eating areas and emptied as necessary at the Contractor's expense.

- B. Excavated material shall be stockpiled in neat windrows or mounds and not allowed to be scattered. Excavated material not to be used shall be removed as it is excavated and disposed of at the Contractor's expense at a site(s) designated by the Owner.

#### **4.0 Weather Conditions**

Construction shall be performed only above the minimum conditions set forth in each item of this division and work shall be halted at any time that in the judgment of the Owner and/or Engineer conditions are such that quality of constructions being or could be compromised by present or impending weather conditions.

**END OF SECTION**

**Section 13100 – Trench Removal and Replacement – Water Lines**

**1.0 Material**

A. Materials Excavated from Trench

1. Top Soil. Shall be excavated material excavated from natural ground level to below root level and shall be used for final trench backfill, if free from large clods of soil, stones, injurious foreign material or other objectionable materials.
2. Select Subgrade Backfill. Shall be material excavated from below root level. Consisting of soil, loam, sandy clay, sand and gravel, soft shale, or other approved materials, free from large clods of soil, stones, injurious foreign material, or other objectionable materials.

B. Supplied Materials

1. Select Granular Material. Shall be a fine aggregate consisting of durable particles, free from injurious foreign matter. Shall be gravel, stone screenings or other source approved by the Engineer.

Plasticity Index 6 max.  
 Portion passing the No. 40 sieve

Shall meet the following grading requirements unless otherwise shown on the Plans.

|                           |     |
|---------------------------|-----|
| PERCENT BY WEIGHT         |     |
| Passing the 3/8" sieve    | 100 |
| Passing the No. 200 sieve | 0   |

2. Base

Shall meet TxDOT, Item 247, Crushed Limestone Base, Type A, Grade 2.

## 2.0 Site Preparation

### A. General

1. Prior to the beginning of construction, the pipeline route shall be cleared to adequate width, length and height as not to impede progress of construction and/or as required by the Engineer and/or Owner. All cleared materials shall be disposed of properly by and at the expense of the Contractor.
2. Prior coordination with and location of any paralleling, adjoining, crossing buried or aerial utility(s) shall be made by the Contractor with the affected utility(s) prior to any construction activities in any section or area of the project.

### B. Unpaved Section

1. The Contractor shall remove and/or prune and dispose of all trees, shrubs, etc. along route as necessary. Extreme care shall be taken not to unnecessarily damage or remove trees, shrubs, etc. outside the width of the pipeline route. Unnecessarily damaged vegetation shall be replaced by and at the expense of the Contractor.
2. The Contractor shall excavate and separately stockpile all top soil to a depth below root level along pipeline route. Top soil shall not be used as a final trench backfill cover unless otherwise directed and/or approved by the Engineer.

### C. Paved Sections

1. The Contractor shall saw or wheel (if found acceptable by the Engineer) cut existing pavement prior to removal to a depth of at least equal to existing pavement to be removed and to the width as indicated on the Plans.
2. All pavement shall be removed in such a manner as to maintain a neat, straight line. All removed pavement shall be disposed of at a location(s) directed by the Owner and at the expense of the Contractor.

### 3.0 Excavation

#### A. General

1. All required excavation shall be done at the time that the proposed pipe is to be installed. Excavation shall not exceed what can be successfully backfilled within 24 hours of excavation.
2. Grading shall be done as may be necessary to prevent surface water from flowing into the trench of other excavation, and any water accumulating therein shall be removed by pumping or by other approved methods.
3. Unless otherwise indicated, excavation shall be by open cut, except that short section of a trench may be tunneled, if, in the opinion of the Engineer, the pipe or structure can be safely and properly installed or constructed and backfill can be properly tamped in such tunnel section.

#### B. Safety

1. Trenches left open overnight shall be adequately barricaded. All highways, intersections, and driveways left open to traffic, overnight, shall be covered with a 1" minimum steel plate.
2. During Excavation. Material suitable for backfilling shall be stockpiled in an orderly manner a sufficient distance from the banks of the trench to avoid overloading and to prevent slides or cave-ins.

#### C. Excavated Material

1. Trench Section(s) Utilizing Existing Material. That material suitable for select subgrade backfill shall be stockpiled as required for subsequent backfilling. Material deemed as unsuitable shall be immediately removed and disposed of by the Contractor. Surplus material not utilized as backfill shall be removed and disposed of by the Contractor.

2. Trench Section(s) Utilizing Supplied Materials. Where partial or complete trench backfill shall consist of supplied material. Surplus excavated material and excavated material deemed unsuitable shall be immediately removed and disposed of by the Contractor.

D. Rock Excavation

1. The excavated material shall be considered unsuitable and shall be immediately removed and disposed of by the Contractor.
2. Blasting of any type shall not be allowed to aid in excavation of rock. Conventional excavation methods shall be used to excavate rock.

#### 4.0 Excavation at Depths Greater Than 5 Feet

Refer to Section 13300 – Trench Safety.

#### 5.0 Trenching

A. Depth and Grade

1. The depth of the cut shall be as shown on the Typical Section of the Plans unless otherwise directed by the Engineer.
2. It shall be understood that the depth of cut may be more or less than the actual excavated depth due to existing ground conditions, adjoining and crossing utilities and any other obstacles encountered during construction.
3. The bottom of the trenches shall be accurately graded to provide uniform bearing and support for each section of pipeline backfill on the undisturbed soil at every point along its entire length, except for the portions of pipe sections where it is necessary to excavate for fittings, valves, etc.
4. Depressions for fittings, valves, etc. shall be dug after the trench bottom has been graded and in order that the pipeline backfill is upon the prepared bottom for as nearly its full length as practicable.



5. Where bedding is required, the trench shall be excavated to the depth below the bottom of the pipe indicated on the details.
6. Whenever over-excavation occurs, the under-cut trench shall be restored to grade, to the satisfaction of the Inspector, by replacement of excavated material compacted to the same density as the surrounding natural ground.
7. Whenever wet, otherwise unstable soil that is incapable of properly supporting the pipe, as determined by the Engineer, is encountered in the bottom of the trench, such unacceptable bedding conditions shall be removed to the depth and the trench backfilled to the proper grade as specified in Sub-Section 6.0.

B. Width and Geometry

1. Trench walls shall be vertical and the practice of undercutting at the bottom or flaring at the top will not be permitted unless at the Engineer's direction. In special cases, where trench flaring is permitted and directed by the Engineer, the trench walls shall remain vertical to a depth of at least one foot (1') above the top of the pipe.
2. The width of the trench shall be at least the outside diameter of the pipe plus additional width for proper installation of the pipe.
3. Where sheathing and bracing are used, a maximum of twelve inches (12") working space, measured from the pipe to the face of the sheathing will be allowed. If allowable trench widths are exceeded through overshooting of rock, caving of earth trenches, or over-excavation, the Contractor shall employ corrective measures or alternative designs as approved by the Engineer.

## 6.0 Backfilling

A. General

1. Trenches and excavations shall be backfilled and the pavement repaired according to the details and specifications given on the Drawings and provisions given herein.

2. The trench excavation shall not be backfilled until the construction of structures and/or appurtenances as installed conform to the requirements specified.
3. In all roadways, backfill shall be thoroughly compacted at the time of backfilling to prevent settling of the trench.

The Contractor shall be responsible for the maintaining of the right-of-way and roadways during the period of construction, and shall keep, at all times, a work force prepared to respond to any request by the Owner, especially during wet conditions, to repair the right-of-way and roadway that may have settled. General pipeline backfill shall be left mounded to allow for consolidation.

4. Any excavation improperly backfilled, or where settlement occurs, shall be refilled and compacted with the surface restored to the required grade.

#### B. Pipeline Backfill

1. Pipeline backfill shall be that section of the backfill, as indicated on the Plans, from the bottom of the trench excavation to 6" above the top of the pipe.
2. The pipeline shall be backfilled with the specified embedment material and compacted to at least 85 percent of its maximum density. Embedment material shall be angular coarse aggregate conforming to ASTM C33, Size 67.
3. In rock excavation, additional adequate bedding shall be placed under the pipe as directed by the Engineer.
4. Where pipe is specially coated and/or wrapped for protection against corrosion, care shall be taken not to damage the coating and/or wrapping.

#### C. Trench Backfill

1. Definition of section by area of line route.
  - a. Unpaved Area. Shall be that section of the backfill, as indicated on the Plans, from 6" above the top of the pipe to the top of the trench excavation. The

section shall be backfilled with Select Subgrade Backfill.

- b. Paved Area. As indicated on the Typical Section(s) of the Plans as follows:

2. Pavement, Base and Backfill

- a. Backfill shall be that section, as indicated on the Plans, from 6" above the top of the pipe to the bottom grade of base. Select subgrade backfill material may be utilized unless otherwise indicated on the plans.
- b. Base shall be that section of backfill, as indicated on the plans, from the top of the backfill to the bottom grade of pavement.
- c. Pavement shall be that section of the backfill, as indicated on the plans from the top of the base to the top grade of trench.

## **7.0 Disposal of Excavated Materials**

The excess, excavated material, not utilized after all backfill requirements have been met, shall become the property of the Owner and the Contractor shall dispose of it by hauling and disposing as coordinated and directed by the Owner.

**END OF SECTION**

This page intentionally left blank.

**Section 13300 – Trench Safety****1.0 Description**

- A. This item shall govern all trench excavation greater than five (5) feet in depth, if anticipated by indication on the Plans or required due to encountered field conditions.
- B. A "trench" shall be defined as an excavation greater in depth than in width.

**2.0 General**

- A. Any trench greater than five (5) feet of depth shall have sloping areas in accordance with current OSHA regulations or be supported by an adequate trench protective system prepared by an experienced qualified person or qualified engineer. Payment for pavement replacement shall be limited to the width as indicated on the Plans.
- B. A soils investigation was not conducted. Before submitting a bid, each Contractor may, at his own expense, make such investigations and tests as the Contractor may deem necessary to determine a bid for performance of the work in accordance with the Contract Documents. Access for such investigations and tests must be coordinated with the Owner.
- C. Indemnification: The Contractor shall indemnify and hold harmless the Owner and Engineer, its employees and agents, from any and all damages, costs (including, without limitation, legal fees, court costs, and the cost of investigation), judgments or claims by anyone for injury or death of persons resulting from the collapse or failure of trenches constructed under this contract.

The Contractor acknowledges and agrees that this indemnity provision provides indemnity for the Owner and Engineer in the case the Owner and/or Engineer is negligent either by act or omission in providing for trench safety, including, but not limited to inspections, failure to issue stop work orders, and the awarding of bid to the Contractor.

### 3.0 Construction Methods

#### A. General

1. Trench safety systems shall be accomplished in accordance with the detailed specifications set out in the provisions of EXCAVATIONS, TRENCHING AND SHORING, FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS, 29 CFR, PART 1926, SUBPART P, as amended, including Proposed Rules published in the FEDERAL REGISTER (Volume 52, Page 72) on Wednesday, April 15, 1987. The sections that are incorporated into these Specifications by reference include SECTIONS 1926-650 through 1926-653. Legislation that has been enacted by the TEXAS LEGISLATURE (H.B. No. 665) with regard to Trench Safety Systems is hereby incorporated, by reference, into these Specifications.
2. The Contractor is responsible for obtaining a copy of all sections of the FEDERAL REGISTER, OSHA regulations and STATE OF TEXAS requirements as current and applicable to trench protective system safety.

#### B. Angle of Repose: Side Sloping Method

1. Shall be allowed in lieu of trench protective systems only in areas, if any, indicated on the Plans and/or approved by the Engineer.
2. Sloping sides shall be in accordance with current OSHA requirements and shall vary as soil classifications along the excavation vary.
3. The Contractor shall be responsible for expense of additional pavement repair, if applicable, proportional to slope of the excavation.

#### C. Trench Protection System: Shoring

1. A trench protective system requires "DESIGN BY A QUALIFIED PERSON OR A QUALIFIED ENGINEER". (For example, see 1926.652(b)(3) and 1926.652(c)(4).
2. The Contractor shall provide for inclusion in the Contract Documents in the above mentioned designed.

#### **4.0 Safety Program**

The Contractor shall provide to the Engineer and Owner a safety program specifically for the construction of trench excavation. The trench safety program shall be in accordance with OSHA STANDARDS governing the presence and activities of individuals working in and around the trench excavation.

#### **5.0 Inspection**

- A. The Contractor shall make daily inspections of the Trench Safety Systems to ensure that the system meets OSHA requirements. Daily inspections are to be made by a "competent person" provided by the Contractor.
- B. If evidence of possible cave-ins, or slides, is apparent, all work in the trench shall cease until the necessary precautions have been taken by the Contractor to safeguard personnel entering the trench. It is the sole duty, responsibility and prerogative of the Contractor, not the Owner or the Engineer, to determine the specific applicability of the designed trench safety systems to each field condition encountered on the project.
- C. The Contractor shall maintain a permanent record of daily inspections.

**END OF SECTION**

This page intentionally left blank.



## Section 15000 - General

### 1.0 Description

This division shall consist of, but is not limited to furnishing, fabrication and/or installation of the following:

1. Ductile Iron Pipe and Fittings.
2. Steel Casing.
3. Polyvinyl Chloride Pipe and Fittings – Water.
4. Copper and Brass Pipe and Fittings.
5. Brass Goods.
6. Polyethylene Pipe, Tubing and Fittings.
7. High Density Polyethylene Pipe and Fittings.
8. Casing Spacers and End Seals.
9. Testing and Disinfection.
10. Gate Valves.
11. Butterfly Valves
12. Combination Air Release / Vacuum Valves.
13. Fire Hydrants.

### 2.0 Applicable Publications

The most recent issue of the following standard specifications, references or publications shall be a part of these specifications. The Contractor shall construct the project in general accordance with these standards with the additions, exceptions or other modifications indicated on the Drawings or specified herein.

- A. AWWA STANDARDS, Current Published, American Water Works Association (AWWA) and/or American National Standards.
- B. Chapter 290 Subchapter D RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS, Current Texas Commission on Environmental Quality Standards.

**END OF SECTION**

This page intentionally left blank.

**Section 15100 – Ductile Iron Pipe and Fittings****1.0 General****A. SCOPE.**

This specification shall cover furnishing and installation of ductile iron pipe and fittings where shown on the Plans.

**B. APPLICABLE PUBLICATIONS.**

The most recent issue of the following standard specifications or publication shall be a part of this specification.

AWWA STANDARDS, Current Published, American Water Works Association (AWWA) and/or American National Standards as follows:

1. C104/A21.4 Cement-Mortar Lining for Ductile Iron Pipe and Fittings for Water.
2. C105/A21.5 Polyethylene Encasement for Ductile Iron Piping for Water.
3. C110/A21.10 Ductile Iron and Gray Iron Fittings 3 inches through 48 inches.
4. C111/A21.11 Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings.
5. C115/A21.15 Flanged Ductile Iron Pipe with Threaded Flanges.
6. C150/A21.50 Thickness Design of Ductile Iron Pipe.
7. C151/A21.51 Ductile Iron Pipe, Centrifugally Cast in Metal Molds or Sand-Lined Molds for Water.
8. C153/A21.53 Ductile Iron Compact Fittings 3 inches through 16 inches for Water.
9. C600 Installation of Ductile Iron Water Mains and their Appurtenances.
10. C800 Underground Service Valves and Fittings.

## 2.0 Materials

- A. Ductile iron pipe shall be manufactured in accordance with ANSI A21.51.
- B. Except where otherwise required, all ductile iron pipe shall be Pressure Class 350. Where ductile iron pipe is to be fabricated to accept threaded flanges, the pipe shall be Thickness Class 53.
- C. All ductile iron pipe shall have a centrifugally applied cement-mortar interior lining conforming to ANSI A21.4.
- D. Except where otherwise required, the exterior of all ductile iron pipe shall have an asphaltic coating. Where ductile iron pipe is to be painted, the asphaltic coating shall be eliminated and the pipe shall be shop primed, or the asphaltic coating shall be completely removed by blast cleaning or other suitable means and a prime coat shall be applied.

## 3.0 Fittings

- A. Shall be ductile iron fittings which meet the requirements of ANSI A21.10 or shall be compact ductile fittings conforming to ANSI A21.53.
- B. Pipe fittings shall have a minimum internal working pressure of 350 psi.
- C. Except where otherwise specified all ductile iron fittings shall have an interior and exterior asphaltic coating. Where ductile iron fittings are to be painted, the asphaltic coating shall be eliminated and the fittings shall be shop primed, or the asphaltic coating shall be completely removed by blast cleaning or other suitable means and a prime coat shall be applied.

## 4.0 Joints

- A. GENERAL.

Joints for ductile iron pipe and fittings shall be of the type shown on the Drawings or as specified herein. All buried joints shall be bell and spigot or mechanical with restrained type gaskets. All ductile iron fittings shall be blocked, supported or otherwise restrained to resist the internal pressures which will be applied.

**B. BELL AND SPIGOT JOINTS AND MECHANICAL JOINTS.**

Shall be in accordance with ANSI A21.11. Glands for mechanical joints shall be manufactured restrained type from ductile iron. Gaskets shall be manufactured from new synthetic rubber materials.

**C. FLANGES.**

1. Except as otherwise provided, shall conform to the requirements ANSI A21.15 and ANSI B16.1, 125 pound. Gaskets shall be manufactured from new synthetic rubber materials.
2. Except where otherwise stipulated, flanged pipe shall be fabricated with threaded flanges conforming to AWWA C115. Unless otherwise required, threaded flanges may be manufactured from grey iron or ductile iron.

**D. RESTRAINED JOINTS.**

1. All restrained joints shall be of a type acceptable to the Engineer. Restrained joints shall resist tension along the pipe equal to the force created by the internal pressure acting on the area of a circle with a diameter equal to the outside diameter of the pipe. For 16-inch and smaller pipe, the internal pressure shall be 350 psi and for 18-inch and larger pipe, the pressure shall be at least 250 psi. Where joints which score or bite into the barrel of the pipe are used, the Engineer may require Pressure Class 350 pipe. All fittings shall be restrained with EBAA IRON, Inc. Series 1100 Mechanical Joint Restraints, or approved equal.

**5.0 Installation**

- A. All ductile iron pipe, fittings and appurtenances shall be installed in strict accordance with the Manufacturer's recommendations, recommendations of American Water Works Association and the and the requirements shown on the Drawings and specified herein.

- B. All ductile iron pipe shall be blocked, supported and otherwise restrained to carry the weight of the piping, prevent movement and prevent joint separation.
- C. All buried ductile iron pipe and fittings shall be wrapped with 8-mil polyethylene and sealed in accordance with AWWA C105. The polyethylene wrap shall be secured with suitable tape.

## **6.0 Painting**

- A. All exposed ductile iron pipe and fittings shall be painted in accordance with the Plans and/or Division 09 of these Specifications, whichever is applicable.
- B. All surfaces that are to be painted shall be prepared and coated in accordance with the stipulations given in Division 09 of these Specifications and with the Paint Manufacturer's recommendations.
- C. Material. All paint shall be manufactured by TNEMEC or unless otherwise approved by the Engineer.

**END OF SECTION**

## Section 15150 - Steel Casing Pipe - Water

### 1.0 Scope

This Section covers steel pipe used for the casing for carrier pipes across roadways and other locations designated on the Drawings.

### 2.0 Applicable Publications

The following publications for the issues listed below, but referred to thereafter by basic designation only, form a part of this Specification to the extent indicated by the referenced thereto:

AWWA Standards, Current published (AWWA and/or ASTM) as follows:

1. ASTM A-53 Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
2. API 5A Sharp Thread Casing and Tubing.
3. API 5L Specification for Line Pipe.
4. NSF Standard 61 Drinking Water System Components – Health Effects.

### 3.0 Materials

#### A. Raw Materials

1. All steel pipe used for this project shall be in good condition, free of dents, excessive corrosion, or other damage to defects. Casing pipe may be used material, provided it is acceptable to the Owner, the Engineer, State, and County. Casing pipe shall not contain residue of toxic, hazardous or other materials that could damage or penetrate the polyvinyl chloride pipe.
2. Unless otherwise approved by the Engineer, all steel pipe shall be standard mill pipe manufactured in accordance with ASTM A-53, Type E, Grade B.
3. Steel pipe shall be produced from steel having a yield stress of at least 36,000 psi. The full circumference of all resistance welded steel pipe shall be normalized after welding.

4. Except where otherwise required, steel pipe shall have beveled ends for welded connections. Where necessary for special connections, steel pipe shall have threaded or other suitable ends.
5. The materials used for manufacture of the pipe and fittings shall meet the NSF Standard No. 61 for potable water use.
6. Welding. Welded joints for steel pipe shall be full penetration butt welds. All welds shall be made in accordance with American Welding Society Specifications so that the tensile strength of the joints shall equal or exceed the tensile strength of the pipe. All welds shall be made by qualified welders using suitable equipment, electrodes compatible with the materials, full penetration welds, avoidance of slag intrusion, and complete filling of the joint. Each joint shall be carefully aligned prior to welding. All intermediate passes shall be power tool ground to remove slag.

The ends of all steel pipe to be welded shall be square cut and beveled. A suitable bevel torch machine shall be used for all field cuts.

All welds shall be allowed to air cool at least fifteen minutes.

7. Where flanges are required for steel pipe, they shall be AWWA Class B flanges.

#### **END OF SECTION**



## Section 15200 - Polyvinyl Chloride Pipe and Fittings – Water

### 1.0 Scope

This Section covers polyvinyl chloride (PVC) pipe and fittings where shown on the drawings or specified herein.

### 2.0 Applicable Publications

The most recent issue of the following standard specifications, references or publications shall be a part of these specifications. The Contractor shall construct the project in general accordance with these standards with the additions, exceptions or other modifications indicated on the Drawings or specified herein.

AWWA Standards, Current published (AWWA and/or ASTM) as follows:

1. AWWA C-900 PVC Pipe, 4 inches through 12 inches.
2. AWWA C-905 PVC Pipe, Nominal Diameters 14 inches through 48 inches.
3. AWWA C-909 PVC Pipe, 6 inches through 16 inches.
4. ASTM D-1784 Standard Specification for PVC Compounds and Chlorinated PVC Compounds.
5. ASTM D-3139 Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals.
6. ASTM F-477 Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.
7. ASTM F-1483 Standard Specification for Oriented PVC Pressure Pipe.
8. ASTM D-2241 Performance Requirements – Standard Specification for PVC Pressure Rated Pipe (SDR Series), 2 inches through 12 inches.
9. ASTM D-2274 Standard Practice for Underground Installation of Thermoplastic Pressure Piping.
10. ASTM D-2855 Standard Practice for Making Solvent Cemented Joints with PVC Pipe and Fittings
11. ASTM D-1785 Standard Specification for PVC Pipe, Schedules 40, 80, and 120.
12. NSF Standard 14 Plastic Piping Components and Related Materials
13. NSF Standard 61 Drinking Water System Components – Health Effects
14. UNI-B-8 Recommended Practice for the Direct Tapping of PVC Pressure Water Pipe, 6 inches through 12 inches

### 3.0 Materials

#### A. Raw Materials

1. All PVC pipe shall be made of compounds conforming to ASTM D-1784 with a cell classification of PVC 12454.
2. Pipe for water use shall be blue in color. All pipe and fittings shall be manufactured in the United States.

#### B. Rework Material

Not more than 10 percent rework material produced at the same manufacturing plant may be used to produce the pipe and fittings, provided the rework material is clean, or the specified cell classification, and the pipe and fitting produced from this material meet all the requirements of this Specification.

#### C. Potable Water Use

The materials used for manufacture of the pipe and fittings shall meet the NSF Standard No. 61 of potable water use and the health effects portion of NSF Standard No. 14.

#### D. Pipe Quality

Extrusion quality shall be determined by the reaction of a pipe specimen to immersion in a hydrous acetone for twenty minutes. The specimens shall exhibit no visible surface flaking upon completion of the test. Three (3) specimens of the pipe, 2-inches in length, shall be flattened between two (2) parallel plates until the distance between the plates is forty percent of the O.D. of the pipe specimens. The rate of loading shall be uniform and such that the compression is completed within two (2) to five (5) minutes. There shall be no evidence of splitting, cracking or breaking after removal of the load.

Only new PVC pipe, manufactured not more than six (6) months prior to installation, shall be used for construction of the Work.

#### E. Workmanship

The pipe shall be homogenous throughout and free from visible cracks, holes, foreign inclusions or other defects.

#### F. Pipe Lengths

Nominal lengths of pipe shall be at least 18-feet.

#### G. Joints

Except as otherwise provided, polyvinyl chloride pipe shall have integral bell and spigot joints that seal with an elastomeric gasket. The joints shall conform to ASTM D3139, and the gaskets shall conform to ASTM F477.

Polyethylene pipe used for conduits may have integral bell and spigot joints for solvent welding, conforming to ASTM D2672.

Where required to resist movement of the pipe to thrust, pipe joints shall be restrained with mechanical devices specified herein or other approved devices. Where polyvinyl chloride pipe is connected to mechanical joints for ductile iron pipe and fittings, valves or other fixture, the joint shall be restrained with EBAA IRON, Inc. Series 2000PV mechanical joint restraints (Megalugs).

Where polyvinyl chloride pipe is connected with bell and spigot joints, the joint shall be restrained with EBAA IRON, Inc. Series 1500, Series 2800 or Series 6500 split serrated bell harness restraints. All metal restraint devices shall be protected from corrosion with standard 8-mil polyethylene wrap and suitable tape, per AWWA C105.

#### H. Fittings

Except as otherwise provided, cast iron fittings shall be used for changes in line or grade and for connections for polyvinyl chloride pipe. Fittings shall be compact ductile iron fittings conforming to ANSI A21.53 or full body ductile iron fittings conforming to ANSI A21.11.

Unless otherwise required, fittings shall have an interior lining of Portland cement mortar and an exterior bituminous coating.

Unless otherwise required herein or indicated on the Drawings, cast iron fittings shall have mechanical joints.

Buried cast iron fittings shall be protected from corrosion with standard 8-mil polyethylene wrap and suitable tape, per AWWA

C105. Such fittings shall be blocked with concrete or otherwise restrained against movement due to thrust.

Fittings for polyvinyl chloride pipe used for conduits shall be polyvinyl chloride fittings with solvent welded bell and spigot joints. All bends for conduit shall be long radius sweep elbows.

#### I. Pipe Marking

All pipes shall be marked at intervals of no greater than 5-feet. The marking for pressure pipe shall be:

1. Manufacturer
2. Nominal pipe size
3. PVC Specification Number
4. Water Pipe
5. SDR/DR Number
6. Working Pressure (psi)
7. Month, Day, and Year of Manufacture

#### J. Affidavit of Compliance.

The Manufacturer shall provide an affidavit that all materials delivered comply with the requirements of this standard and the additional requirements specified herein or call for on the Drawings.

### **4.0 Storage and Installation**

The storage and installation of the PVC pipe shall be in strict accordance with AWWA M23 specifications and manufacturer's procedures and recommendations. Installation shall also conform to all local plumbing, building, and fire code requirements

Pipe shall be bundled in pallets for ease of handling and storage. Pipe bundles (units) shall be packaged to provide structural support to insure that the weight of upper units shall not cause deformation to pipe in lower units. No pipe bundles shall be accepted which show evidence of ultraviolet radiation "sunburn" on exposed pipe as may be caused from extended unprotected storage conditions.

Taps are to be made using saddles that fully support around the circumference of the pipe as recommended in publication UNIBELL 8-90 "Tapping Guide for PVC Pressure Pipe". Direct threaded taps shall not be allowed.

Unless specifically directed by the Engineer, solvent weld connections are expressly prohibited and shall not be allowed on PVC pressure pipe.

The Work shall be protected from chemical agents, fire stopping materials, thread sealant, plasticized vinyl products, or other aggressive chemical agents not compatible with PVC compounds.

At all times when the work of installing pipe is not in progress, all openings into the pipe and the ends of the pipe in the trenches or structure shall be kept tightly closed to prevent the entrance of animals and foreign materials until its acceptance.

Where closure sections are required by the contractor's installation operations, the sections shall be installed in accordance with the applicable sections of these specifications.

The pipe sections shall be laid in the trench to true alignment and grade in accordance with the Plans. Where the grade is not shown, pipe shall have a minimum cover as designated in the Plans. Curved alignments shall be achieved only by deflecting the pipe joints; the pipe shall not be bent. Joints deflection shall not exceed the manufacturer's recommendation. Where necessary, the Contractor shall shorten the pipe lengths to achieve shorter curve radii.

The pipe shall not be laid along curves at a radius greater than indicated on the Plans.

Trenching, backfilling, and compacting shall be in accordance with Section 13300 and as specified herein.

Proper care shall be used to prevent damage in handling, moving, and placing the pipe. Tools and equipment satisfactory to the Owner's representative shall be provided and used by the Contractor.

The Contractor shall take all necessary precautions to prevent the pipe from floating due to water entering the trench from any source; shall assume full responsibility for any damage due to this cause; and shall pay for and perform the work to restore and replace the pipe to its specified condition and grade if any displacement occurs due to floating.

Excavate bell holes at each joint to permit proper assembly and inspection of the entire joint.

Pipe shall be cut by a method recommended in the pipe manufacturer's installation guide, as approved by the Owner's representative. When pipe is cut and is to be joined to a ductile iron fitting or another piece of pipe,

the end shall be beveled in the field or place of manufacture to create a beveled end equal in quality to the machined ends of the pipe as furnished by the manufacturer. Such machining shall not result in undercutting the wall thickness and must be approved by the Owner's representative prior to installation.

All connecting parts of pipe, rings, couplings, and castings shall be cleaned prior to assembly. After bearing has been obtained, couplings shall be assembled in a proper manner (as determined by the Owner's representative). The use of excessive lubricant will not be permitted, and the assembly of the couplings and rings shall be in accordance with the manufacturer's recommendations. The pipe manufacturer shall supply lubricant and rubber rings. All fittings and valves shall have joints that match the type of adjoining pipe.

All fittings and valves shall be supported so that the pipe is not subjected to the weight of these appurtenances.

**END OF SECTION**

## Section 15220 - Copper and Brass Pipe and Fittings

### 1.0 Scope

This Section covers copper, brass, and bronze pipe and fittings constructed as shown on the Plans or specified herein. Copper, brass, and bronze pipe and fittings used for the Project shall conform to the standards set forth herein.

The Contractor shall furnish and install the necessary copper and brass fittings for the installation of the combination air and vacuum release valves.

### 2.0 Applicable Publications

The following publications for the issues listed below, but referred to thereafter by basic designation only, form a part of this Specification to the extent indicated by the referenced thereto:

AWWA Standards, Current published (AWWA and/or ASTM) as follows:

1. ASTM B32 Standard Specification for Zinc and Zinc-Aluminum (ZA) Alloy Foundry and Die Castings.
2. ASTM B43 Standard Specification for Seamless Red Brass Pipe, Standard Sizes.
3. ASTM B75 Standard Specification for Seamless Copper Tube.
4. ASTM B88 Standard Specification for Seamless Copper Water Tube.
5. ANSI B2.1 Standard for Welding Procedure and Performance Qualification.
6. ASME B16.22 Wrought Copper and Copper Alloy Solder Joint Pressure Fittings.
7. NSF Standard 14 Plastic Piping Components and Related Materials.
8. NSF Standard 61 Drinking Water System Components – Health Effects.

### 3.0 Materials

#### A. Copper

1. Copper tubing shall conform to the requirements of ASTM B88 for seamless copper water tube. Piping located above ground or suspended within vaults shall be Type L. Buried piping shall be Type K. Copper pipe shall be of domestic manufacture.
2. Fittings shall be copper conforming to ASTM B75 and ASME B16.22, with solder end joints. Fittings 3/8-inch and smaller may have flared end connections or compression joint connections.
3. Solder shall be silver solder conforming to ASTM B32, Grade 95TA. Colored solder shall not be used.
4. All copper lines shall be encased with an 8-mil polyethylene sleeve.

#### B. Brass Pipe, Nipples, and Fittings

Short threaded nipples, brass pipe and fittings shall conform to ASTM B43, regular wall thickness, except that nipples and pipe of sizes 1-inch and smaller shall be extra strong. Threads shall conform to ANSI B2.1

- #### C. The materials used for manufacture of the pipe and fittings shall meet the NSF Standard No. 61 of potable water use and the health effects portion of NSF Standard No. 14.

### 4.0 Installation

The installation of copper and brass pipe and fittings shall be in strict accordance with the manufacturer's procedures and recommendations. Installation shall also conform to all local plumbing, building, and fire code requirements

At all times when the work of installing pipe is not in progress, all openings into the pipe and the ends of the pipe in the trenches or structure shall be kept tightly closed to prevent the entrance of animals and foreign materials until its acceptance.

Trenching, backfilling, and compacting shall be in accordance with Section 13300 and as specified herein.



Proper care shall be used to prevent damage in handling, moving, and placing the pipe. Tools and equipment satisfactory to the Owner's representative shall be provided and used by the Contractor.

Pipe shall be cut by a method recommended in the pipe manufacturer's installation guide, as approved by the Owner's representative.

**END OF SECTION**

This page intentionally left blank.

## Section 15225 – Brass Goods

### 1.0 Scope

This specification shall cover corporation stops, curb stops, bronze ball valves and brass pipe and fittings necessary where shown on the Drawings or specified herein.

### 2.0 Applicable Publications

The most recent issue of the following standard specifications, references or publications shall be a part of these specifications. The Contractor shall construct the project in general accordance with these standards with the additions, exceptions or other modifications indicated on the Drawings or specified herein.

- A. AWWA C800 Underground Service Line Valves and Fittings.
- B. ANSI B16 Standards of Pipes and Fittings.
- C. ASTM B32 Standard Specification for Zinc and Zinc-Aluminum (ZA) Alloy Foundry and Die Castings.
- D. ASTM B62 Specification for Composition Bronze or Ounce Metal Castings.
- E. ASTM B43 Standard Specification for Seamless Red Brass Pipe, Standard Sizes.
- F. ASTM B88 Standard Specification for Seamless Copper Water Tube.
- G. NSF Standard 61 Drinking Water System Components – Health Effects.

### 3.0 Corporation Stops

Corporation stops shall be of the ball type design conforming to AWWA C800. Corporation stops shall have a working pressure rating of 150 psi, or greater.

Corporation stops shall have full ports openings and shall open and close with one-quarter turn. Corporation stops shall have drip tight closure.

Corporation stops shall have male NPT inlet ends and outlet ends appropriate for the fixture.

Corporation stops shall be installed with double strap service saddles with female NPT connections. The water main shall be drilled to the nominal diameter of the corporation stop.

#### **4.0 Curb Stops**

Curb stops shall be of the ball type design conforming to AWWA C800. Curb stops shall have a working pressure rating of 150 psi, or greater.

Curb stops shall have full ports openings and shall open and close with one-quarter turn. Curb stops shall have drip tight closure.

Curb stops shall have inlet and outlet ends appropriate for the fixture.

#### **5.0 Bronze Ball Valves**

Ball valves shall have two part bodies forged from bronze with stainless steel trim. The valves shall have blowout proof stainless steel balls and stems with RTFE seals. The valves shall be rated for 600 psi cold water pressure.

The valves shall have full ports openings and shall open and close with one-quarter turn. Curb stops shall have drip tight closure.

Curb stops shall have female NPT ends.

#### **6.0 Brass Pipe and Fittings**

Brass pipe and nipples shall be standard weight conforming to the standards of ASTM B43 and shall have male NPT ends.

Copper tubing shall conform to the requirements of ASTM B88, Type K.

Threaded brass fittings shall be standard weight produced from ASTM B62, bronze 85-5-5-5, with NPT ends.

**END OF SECTION**

## Section 15230 - Polyethylene Pipe, Tubing, and Fittings

### 1.0 Scope

This Section covers polyethylene (PE) pipe, tubing, and fittings constructed as shown on the Plans. PE pipe, tubing, and fittings used for the Project shall conform to the standards set forth herein.

The Contractor shall install high density polyethylene tubing where called for on the plans. The tubing and fittings shall be iron pipe size conforming to AWWA C901, SDR 9, Pressure Class 250 psi.

### 2.0 Applicable Publications

The most recent issue of the following standard specifications, references or publications shall be a part of these specifications. The Contractor shall construct the project in general accordance with these standards with the additions, exceptions or other modifications indicated on the Drawings or specified herein.

AWWA Standards, Current published (AWWA and/or ASTM) as follows:

1. AWWA M55 Manual for the Design and Installation of PE Pipe in Water Applications.
2. AWWA C-901 Standard for PE Pressure Pipe and Tubing, ½-inch through 3-inch for Water Service.
3. AWWA C-906 Standard for PE Pressure Pipe and Fittings, 4-inch through 63-inch for Water Distribution and Transmission.
4. ASTM D2657 Standard Practice for Heat Joining Polyolefin Pipe and Fittings.
5. ASTM D2737 Standard for PE Plastic Tubing
6. ASTM D3261 Standard Specification for Butt Heat Fusion PE Plastic Fittings for PE Plastic Pipe and Tubing.
7. ASTM D3350 Standard Specification for PE Plastic Pipe and Fittings Materials.
8. NSF Standard 14 Plastic Piping Components and Related Materials
9. NSF Standard 61 Drinking Water System Components – Health Effects.
10. CSA B137.1 PE Pipe, Tubing, and Fittings for Cold Water Pressure Services.

### 3.0 Materials

- A. All polyethylene pipe, tubing, and fittings furnished under this specification shall conform to all applicable provisions and requirements of the latest revision of AWWA C901 or CSA B137.1 and, by inclusion, all appropriate standards referenced therein.
- B. Polyethylene compounds utilized in the manufacture of pipe and fittings for this project shall have a cell classification of PE 345464C in accordance with ASTM D3350 and shall be designated as PE 3608 by the Plastic Pipe Institute.
- C. All materials, which come in contact with water, including lubricants, shall be evaluated, tested, and certified for conformance with NSF/ANSI Standard 61.
- D. Not more than 10 percent rework material produced at the same manufacturing plant may be used to produce the pipe and fittings, provided the rework material is clean, of the specified cell classification, and the pipe and fittings produced from this material meet all the requirements of this specification.
- E. Fittings. Polyethylene fittings furnished for this project may be either molded or fabricated butt fusion fittings produced in accordance with ASTM D3261. Polyethylene fittings shall be at least one pressure class higher or one thickness class thicker than the pipe to which it is used.

Alternately, ductile iron fittings conforming to requirements of ANSI A21.53 or ANSI A21.10 shall be used with polyethylene pipe. Ductile iron fittings shall have mechanical joints, and the connection shall be made with polyethylene mechanical joint adapter. The fittings shall be wrapped with 8-mil polyethylene in accordance with AWWA C105 and secured to the pipe with suitable tape.

- F. Jointing. Except as otherwise provided, all polyethylene pipe and fittings shall be joined by thermal butt fusion. Joints shall equal or exceed the material properties and strength characteristics of the pipe and fittings. The Manufacturer shall provide his recommended fusion parameters and documentation that those parameters have been validated by appropriate tests to produce the specified joint requirements. The Contractor shall join the pipe and fittings in accordance with the Manufacturer's recommendations.

### G. Pressure Class

The pressure class of the PE pipe and fittings shall be specified on the basis of the WPR of the water system as defined in AWWA C906. Recurring positive pressure surges of up to one half of the pipe's nominal pressure class and occasional pressure surges of up to 100-percent of the pipe's nominal pressure class may be ignored due to the fatigue endurance of the PE materials. Non-PE fittings shall be specified and used in accordance with the surge tolerance of the particular appurtenance in use.

| <b>DR</b> | <b>WPR<br/>(psi)</b> | <b>WPR + Surge<br/>(psi)</b> | <b>Hydrotest<br/>(psi)</b> | <b>Nominal 60-second<br/>Burst (psi)</b> |
|-----------|----------------------|------------------------------|----------------------------|------------------------------------------|
| 32.5      | 51                   | 76                           | 76                         | 200                                      |
| 26.0      | 64                   | 96                           | 96                         | 256                                      |
| 21.0      | 80                   | 120                          | 120                        | 320                                      |
| 17.0      | 100                  | 150                          | 150                        | 400                                      |
| 15.5      | 110                  | 165                          | 165                        | 440                                      |
| 13.5      | 128                  | 192                          | 192                        | 512                                      |
| 11.0      | 160                  | 240                          | 240                        | 640                                      |
| 9.0       | 200                  | 300                          | 300                        | 800                                      |
| 7.0       | 266                  | 400                          | 400                        | 1064                                     |

### H. Marking

1. Pipe and tubing shall be marked in accordance with AWWA C901, AWWA C906, or CSA B137.1 which ever applies. Marking shall be legible and shall remain legible under normal handling and installation practices. Indent marking may be utilized provided (1) the marking does not reduce the wall thickness to less than the minimum value for the pipe or tubing, (2) it has been demonstrated that these marks have no effect on the long term strength of the pipe or tubing, and (3) the marks do not provide leakage channels when elastomeric gasket compression fittings are used to make the joints.
2. Fittings shall be marked on the body or hub. Marking shall be in accordance with ASTM D2683, ASTM D3261, AWWA C906, or ASTM F1055, depending on fitting type and the standard that applies. Mechanical fittings shall be marked with size, body material designation code, pressure rating and manufacturer's name or trademark.

- I. Affidavit of Compliance. The Manufacturer shall provide an affidavit that all materials delivered comply with the requirements of this standard and the additional requirements specified herein or call for on the Drawings.

#### **4.0 Installation**

The installation of PE pipe, tubing, and fittings shall be in strict accordance with these specifications and manufacturer's procedures and recommendations. Installation shall also conform to all local plumbing, building, and fire code requirements

The Work shall be protected from chemical agents, fire stopping materials, thread sealant, plasticized vinyl products, or other aggressive chemical agents not compatible with PE compounds.

At all times when the work of installing pipe is not in progress, all openings into the pipe and the ends of the pipe in the trenches or structure shall be kept tightly closed to prevent the entrance of animals and foreign materials until its acceptance.

Trenching, backfilling, and compacting shall be in accordance with Section 13300 and as specified herein.

Proper care shall be used to prevent damage in handling, moving, and placing the pipe. Tools and equipment satisfactory to the Owner's representative shall be provided and used by the Contractor.

Pipe shall be cut by a method recommended in the pipe manufacturer's installation guide, as approved by the Owner's representative.

**END OF SECTION**



## **Section 15235 - Detectable Marker Tape**

### **1.0 Scope**

This specification shall cover furnishing and installation of detectable marker tape for buried pipelines where indicated on the Drawings or specified herein.

### **2.0 Construction**

The detectable marker tape shall be 12 inches in width and at least 0.005 inches thick. The tape shall consist of a metallic foil strip that is encapsulated and bonded between two 0.0025 inch thick strips of polyethylene.

The tape shall be blue and shall have the following words printed in two inch, or larger, black letters at three foot intervals, or closer.

"CAUTION WATER LINE BELOW"

It shall be possible to detect the marker tape, when buried twelve inches, using utility locating equipment which does not rely on a physical connection between the tape and the locating equipment.

### **3.0 Installation**

Unless otherwise directed, the Contractor shall install the marker tape after compacting the spoil backfill material and before placing the flexible base material.

**END OF SECTION**

This page intentionally left blank.

## **Section 15240 – High Density Polyethylene Pipe and Fittings**

### **1.0 Scope**

This specification shall cover furnishing and installation of high density polyethylene pipe (HDPE), accessories and appurtenances where called for on the Plans or specified herein.

### **2.0 Standard Specification**

Except as otherwise called for on the Drawings or specified herein, high density polyethylene pipe shall conform in all regards to AWWA C906 and ASTM F714.

### **3.0 Material**

High density polyethylene pipe and fittings shall be manufactured from PE 4710 which has an ASTM D3350 cell classification of PE 445574C (formerly PE 3408 meeting 345464C per ASTM D3350-02). The pipe shall have a long-term hydrostatic design basis of 1,600 psi at 73.4° F. All fittings shall be manufactured by injection molding. The material shall be listed and approved for potable water in accordance with NSF 61.

### **4.0 Joining**

Except as otherwise required, high density polyethylene pipe and fittings shall be joined by thermal butt fusion. Joining shall be accomplished by personnel trained and experienced in making such joints.

Where the carrier pipe will be installed in a boring or inside or passed through encasement pipe, the exterior bead formed during joining shall be removed.

Where polyethylene is installed inside casing pipe, the Contractor shall furnish and install suitable seals at each end of encasement pipes to seal the annular space between the carrier pipe and the encasement pipe. The seals shall be water-tight. The seal shall be removable to permit extraction of the carrier pipe without damage to either the carrier pipe or the encasement pipe.

## **5.0 Installation**

Polyethylene pipe shall be shipped, stored and handled in accordance with the Manufacturer's recommendations. The pipe shall not have scrapes, cuts, dents or other damage, blemishes or defects which may in the opinion of the Engineer reduce the strength of the pipe. Any damaged or defective pipe shall be removed from the site and replaced with new pipe.

Where installed in an open trench, polyethylene pipe shall be embedded with a suitable clean, angular, coarse material from 6 inches below the bottom of the pipe to 6 inches above the top of the pipe. Embedment material shall conform to ASTM C 33, Size 7.

**END OF SECTION**

## **Section 15255 - Casing Spacers and End Seals**

### **1.0 Scope**

This specification covers casing spacers and end seals for carrier pipes installed inside casing pipes.

### **2.0 Casing Spacers**

Casing spacers shall be spaced not more than 7 feet apart, and a spacer shall be installed not more than 2 feet from the ends of each carrier pipe joint. Casing spacers shall not exceed the spacing recommended by the Manufacturer.

Casing spacers shall be selected to support the carrier pipe so that its centerline is not more than 1 inch below the centerline of the casing pipe.

Casing spacers shall have sufficient strength to support the carrier pipe when it is full of water without deformation so as to cause the vertical deflection of the carrier pipe between the spacers to exceed 0.5 inch when the temperature is 120°F.

Casing spacers shall be manufactured from stainless steel material acceptable to the Owner and the Engineer. Any metallic fasteners required for assembly and installation shall be stainless steel.

### **3.0 End Seals**

End seals shall be produced from synthetic rubber not less than 0.125 inches thick. The seals shall be manufactured to fit snugly to the outside of the casing pipe and the carrier pipe and secured in place with stainless steel bands.

**END OF SECTION**

This page intentionally left blank.

## Section 15300 - Testing and Disinfection – Water

### 1.0 Scope

This Section covers the testing and disinfection of water lines and their appurtenances constructed as shown on the Plans. Testing and disinfection used for the water lines and their appurtenances shall conform to the standards set forth herein.

Prior to connecting the proposed water line to the existing water lines, the Contractor shall subject the line to a successful hydrostatic pressure test and shall disinfect the line.

### 2.0 Applicable Publications

The most recent issue of the following standard specifications, references or publications shall be a part of these specifications. The Contractor shall construct the project in general accordance with these standards with the additions, exceptions or other modifications indicated on the Drawings or specified herein.

TCEQ Standards, Current published, Chapter 290, Subchapter D – Rules and Regulations for Public Water Systems, and  
AWWA Standards, Current published (AWWA and/or ASTM) as follows:

1. AWWA C651 Disinfecting Water Mains.
2. NSF Standard 14 Plastic Piping Components and Related Materials.
3. NSF Standard 61 Drinking Water System Components – Health Effects.
4. AWWA C605 Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water.

**3.0 Hydrostatic Testing**

All lines and their appurtenances constructed for water service within the Project must be hydrostatically tested as specified herein prior to being accepted by the Owner.

- A. The pipeline shall be filled at a rate such that the average velocity of flow is less than 1-fps. At no time shall the maximum velocity of flow exceed 2-fps. The following table has been provided to relate the velocity filling rate to an equivalent volume flow rate, based on 1-fps.

| <b>Line Size (inches)</b> | <b>Flow Rate (gpm)</b> |
|---------------------------|------------------------|
| 30"                       | 2,203                  |
| 24"                       | 1,410                  |
| 20"                       | 979                    |
| 18"                       | 793                    |
| 16"                       | 624                    |
| 14"                       | 480                    |
| 12"                       | 353                    |
| 8"                        | 158                    |
| 6"                        | 88                     |
| 4"                        | 38                     |

- B. The pipeline shall receive the approximate quantities of water per 100-feet of length:

| <b>Line Size (inches)</b> | <b>Quantity (gallons)</b> |
|---------------------------|---------------------------|
| 30"                       | 3,670                     |
| 24"                       | 2,350                     |
| 20"                       | 1,630                     |
| 18"                       | 1,320                     |
| 16"                       | 1,000                     |
| 14"                       | 800                       |
| 12"                       | 590                       |
| 10"                       | 410                       |
| 8"                        | 260                       |
| 6"                        | 150                       |
| 4"                        | 65                        |
| 3"                        | 37                        |
| 2"                        | 17                        |



- C. Raise the pressure to the rated working strength of the pipe by using a test pump, pumping from a container. The pressure for 160 psi and 200 psi pipe shall be 160 psi and 200 psi respectively at the low point of the system. Pipes rated at other pressures shall be tested to their respective pressure rating.
- D. All air should be purged from the pipeline before checking for leaks or performing pressure or acceptance tests on the system. To accomplish this, if air valves or hydrants or other outlets are not available, taps shall be made at the high points to expel the air, and these taps shall be tightly plugged afterwards.
- E. After the working pressure has been attained in the lines, refill the container and maintain the working pressure for a four (4) hour period.
- F. At the end of the four (4) hour test period, measure the water required to refill the container to the pre-test level. The leakage allowable shall not exceed the calculated quantity based on the following equation:

$$L = \frac{ND P^{1/2}}{7,400}$$

- L = Allowable leakage in gallons per hour
- N = Number of joints in the length of pipe being tested
- D = Nominal diameter of pipe in inches
- P = Average test pressure during the leakage test in psi gauge

or

| <b>Line Size<br/>(inches)</b> | <b>Quantity<br/>(gallons/mile)</b> |
|-------------------------------|------------------------------------|
| 24"                           | 10.5                               |
| 18"                           | 8.0                                |
| 16"                           | 7.0                                |
| 12"                           | 5.2                                |
| 10"                           | 4.4                                |
| 8"                            | 3.5                                |
| 6"                            | 2.6                                |
| 4"                            | 1.7                                |
| 3"                            | 1.3                                |
| 2'                            | 1.0                                |

- G. Any noticeable leak shall be stopped and all defective pipes, fittings, valves, and other appurtenances discovered in consequence of the test shall be removed and replaced by the Contractor with sound material, and the test shall be repeated until the total leakage during a test of four (4) hours duration does not exceed the rate specified herein.
- H. After successful testing, all lines shall be flushed to remove any foreign matter that may be in the line.
- I. All testing shall be supervised by and conducted in the presence of the Owner's representative. The Owner's representative shall furnish a signed certificate stating that the pressure test has been performed in accordance with the Specifications. The certificate shall contain the following:
  - 1. Date tests were performed.
  - 2. Name of people in attendance.
  - 3. Brand name of pipe and pressure rating.
  - 4. Test pressure.
  - 5. Number of leaks found during testing.
  - 6. Comments.
- J. Water for testing shall be available from the Owner at their currently prescribed rates.

#### **4.0 Disinfection**

##### **A. Method**

##### **1. Liquid Chlorine**

Liquid chlorine shall contain 100-percent available chlorine packaged in steel cylinders in net weights of 150-pounds or one (1) ton.

Liquid chlorine shall be used with appropriate gas flow chlorinators, heaters, and injectors to provide a controlled high concentration solution feed. The chlorinators and injectors shall be vacuum operated type.

##### **2. Chlorine Gas**

Chlorine gas shall be supplied and converted from its liquid form to a gas as detailed in AWWA C651.

### 3. Calcium Hypochlorite Tablets

Calcium hypochlorite tablets shall have an average weight of 0.009-pounds each and shall contain not less than 70-percent of available chlorine.

- B. All lines shall be thoroughly flushed prior to disinfection. Only the direct chlorine gas fuel method shall be used if contaminating material has entered the lines.
- C. Disinfection of completed water lines and their appurtenances shall be in accordance with the requirements of AWWA C651 and the requirements of the TCEQ, Chapter 290, Subchapter D. At the conclusion of the hydrostatic pressure test on the completed water line, potable water shall be introduced into the line slowly. A sufficient quantity of chlorination agent shall be added to the incoming water to produce at least 50-ppm and not more than 100-ppm of chlorine.
- D. Treated water shall be retained in the system for a minimum of 24 hours and shall contain a chlorine residual of not less than 25-ppm at the end of the retention period in all sections being disinfected.
- E. After chlorination, the water shall be flushed from the line, in accordance with the requirements of AWWA C651, at its extremities until the replacement water tests are equal chemically and bacteriologically to those of the permanent source of supply. The chlorinated water may be used later for testing other lines, or if not so used, shall be disposed of by the Contractor as required by AWWA C651. The Contractor shall be responsible for all costs to de-chlorinate the water before it enters any storm drain or watercourse. The Owner shall not be responsible for loss or damage resulting from such disposal.
- F. In order to obtain sufficient scouring and cleaning of the lines, proper water velocity during the flushing operation is necessary. The minimum water velocity during flushing shall be 2 ½-fps to 3-fps.
- G. The Contractor shall then take samples of the water from the new main at selected points, and submit to the Texas Department of Health (or other approved laboratory) for bacteriological examination. If the results are satisfactory to the Engineer, then the line disinfecting procedure will have been completed and accepted.

If the results of the examination are unsatisfactory, then the disinfection procedure shall be repeated until a satisfactory test is secured.

- H. A minimum of one (1) sample for each 1,000-feet of completed main will be required or at the next available sampling point beyond 1,000-feet as directed by the Engineer.

**END OF SECTION**

## Section 15400 - Gate Valves

### 1.0 Scope

This Section covers gate valves constructed as shown on the Plans. Gate valves shown on the Plans shall conform to the standards set forth herein.

### 2.0 Applicable Publications

The most recent issue of the following standard specifications, references or publications shall be a part of these specifications. The Contractor shall construct the project in general accordance with these standards with the additions, exceptions or other modifications indicated on the Drawings or specified herein.

Current published standards of the; AWWA, ASTM, ANSI, and/or NSF.

1. AWWA C509 Resilient Seated Gate Valves for Water and Sewerage Systems.
2. AWWA C550 Protective Interior Coatings for Valves and Hydrants.
3. AWWA C600 Installation of Ductile Iron Water Mains and Their Appurtenances.
4. AWWA C800 Underground Service Line Valves and Fittings.
5. AWWA C110 Standard for Ductile Iron and Gray Iron Fittings, 3-inch – 48-inch, for Water and Other Liquids.
6. AWWA C111 (ANSI C21.11) Rubber Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
7. ANSI B16 Standards of Pipes and Fittings.
8. ASTM F593 Stainless Steel Bolts, Hex Cap Screws, and Studs.
9. ASTM D429 Rubber Property Adhesion to Rigid Substrates.
10. ASTM B62 Standard Specification for Composition Bronze or Ounce Metal Castings.
11. ASTM B584 Standard Specification for Copper Alloy Sand Castings for General Applications.
12. NSF Standard 14 Plastic Piping Components and Related Materials.
13. NSF Standard 61 Drinking Water System Components – Health Effects.

### 3.0 Materials

#### 3.1 General

- A. Except as otherwise provided, 3-inch through 12-inch gate valves shall be resilient seated valves conforming to AWWA C509 standards and as specified herein.
- B. All gate valves shall have joints of the type indicated on the Plans or specified herein. Unless otherwise required, buried valves shall have mechanical joint bell ends conforming to the ANSI C21.11 and AWWA C110/111 standards and above grade valves shall have flanged ends conforming to ANSI B16.1, Class 125 standards.
- C. All internal and external exposed gate valve ferrous surfaces shall be coated with a fusion bonded powder epoxy coating with a thickness of ten (10) mils nominal. The coating shall comply with AWWA C550 standards and shall be certified NSF 61. Coating shall be non-toxic and shall impart no taste to water.
- D. Unless otherwise provided, gate valves shall have non-rising stems, and shall open by turning counter clockwise. The stem shall be manufactured from bronze and shall be provided with at least three O-ring seals, two above the thrust collar and one below. It shall be possible to replace the top two seals with the valve fully opened and under pressure.
- E. The cast iron wedge shall be fully encapsulated in resilient rubber that shall be bonded to the cast iron. The valves shall provide a complete drip-tight seal when closed.
- F. The bonnet and stuffing box shall be secured with stainless steel fasteners.
- G. All body bolts shall be Type 304 or 316 stainless steel conforming to ASTM F593. Stem nuts shall be independent of the wedge and shall be low zinc bronze.
- H. Valves must contain the best workmanship and finish, and close freely and easily. In closing, the gates or wedges must move without friction to their position opposite their ports. When valves are in full open position, the disc or wedge shall be raised clear of the waterway and provide an opening equal to the full and normal diameter of the valve.

- I. Buried valves shall be of the inside screw type and shall be designed for repacking under line pressure. All buried valves shall be furnished with 2-inch square operating nuts. Above ground valves shall have hand wheel operators.
- J. Valves 14-inch and larger installed in horizontal pipes with horizontal stems shall be fitted with bronze slides, tracks, rollers, and scrapers to assist the travel of the gate assembly.
- K. Valves shall have manufacturer's name, year manufactured, and working pressure cast in raised letters on the valve body.
- L. All valves to be installed must have been manufactured within the last five (5) years.

#### **4.0 Installation**

- A. Gate valves shall be of the kind, size and number as shown on the Plans. They shall be installed as shown on the Plans and according to the manufacturer's recommendations.
- B. The Owner shall inspect all gate valves before they are installed and shall reject any valves found to be damaged or defective to a degree that would affect the function of the Work. Rejected valves shall be immediately removed from the site of the work.
- C. All buried valves and appurtenances shall be wrapped with standard 8-mil polyethylene wrap in accordance with AWWA C-105 and Section 15100.
- D. Stem extensions shall be provided for buried gate valves and installed such that the operating nut is within 12-inches of the finished grade.
- E. Valve boxes.
  - 1. Valve box bases shall not rest directly upon the valve or pipe. The Contractor shall block underneath the valve box base to support the box above the pipe.
  - 2. All underground valves shall be set with the square cast iron operating nut so that a solid piece of 6" ductile iron pipe serving as the valve box and a cast iron cover can be placed over each valve.

3. All valve boxes shall be a minimum of two (2) separate bodies with the 6” ductile iron pipe specifically cut to be level with ground or pavement level.
4. When specified, the lid shall be a “lock type”, if not it shall be standard in design.
5. All gate valve locations shall be identified by installing a valve marker post and sign at each location. The markers shall be as shown on the Plans.

F. Extension Stems and Stem Guides

1. Extension stems shall be at least as large as the valve stem it operates.
2. Provide intermediate stem guide for extensions.
3. 2-inch square operating nuts shall be included with each extension stem.

**5.0 Manufacturer**

All gate valves shall be manufactured by MUELLER or CLOW.

**END OF SECTION**



## Section 15405 - Butterfly Valves

### 1.0 Scope

This Section covers butterfly valves constructed as shown on the Plans. Butterfly valves shown on the Plans shall conform to the standards set forth herein.

All valves 12-inch and larger shall be butterfly valves.

### 2.0 Applicable Publications

The following publications for the issues listed below, but referred to thereafter by basic designation only, form a part of this Specification to the extent indicated by the referenced thereto:

Current published standards of the; AWWA, ASTM, ANSI, and/or NSF.

1. AWWA C504 Standard for Rubber Seated Butterfly Valves.
2. AWWA C550 Protective Interior Coatings for Valves and Hydrants.
3. AWWA C600 Installation of Ductile Iron Water Mains and Their Appurtenances.
4. AWWA C800 Underground Service Line Valves and Fittings.
5. ANSI B16.1 Pipe Flanges and Flanged Fittings, Class 25, 125 and 250.
6. ANSI B16.5 Pipe Flanges and Flanged Fittings, Steel Nickel Alloy and Other Special.
7. ANSI A21.11 Rubber Gasket Joints for Ductile Iron Pressure Pipe and Fittings
8. NSF Standard 14 Plastic Piping Components and Related Materials
9. NSF Standard 61 Drinking Water System Components – Health Effects

### 3.0 Materials and Construction

#### 3.1 General

- A. Butterfly valves shall conform to AWWA C504 and shall be of the class and size indicated.

- B. All butterfly valves shall have cast iron bodies and disks. A stainless steel shaft shall be supported by corrosion resistant bearings at each end and shall be sealed by multiple rubber seals. The disks shall be fitted with replaceable rubber rings which shall seal against a stainless steel body seat ring. All internal fittings and fasteners shall be stainless steel.
- C. Valves shall have push-on, mechanical joint, flanged, or any other combination of ends as required or specified on the Plans. Hubs and mechanical joints shall be sized for PVC or DI pipe, as applicable.
- D. Above grade butterfly valves shall be provided with flanged joints conforming to ANSI B16.1, 125 pound or 250 pound where so indicated.
- E. Class 150B butterfly valves with AWWA Class D or E flanges (125 psi drilling per ANSI B16.1) shall be used with all Class 150 pipe.
- F. Class 250B butterfly valves with AWWA Class F flanges (250 psi drilling per ANSI B16.1) shall be used with all Class 200 and above rated pipe.
- G. Buried butterfly valves shall be provided with mechanical joints conforming to ANSI A21.11.
- H. All cast iron components of the butterfly valves shall be finished with an epoxy bonded to the metal.
- I. Butterfly valves shall be hydrostatically tested per AWWA C504 in both directions and as specified herein.
- J. Butterfly valves shall be equipped with a traveling nut or worm gear mechanical advantaged operator.
- K. Except as otherwise required, buried butterfly valves shall be provided with 2-inch square operating nuts. Above grade butterfly valves shall be hand-wheel operated for 8-inch and larger or lever-operated for 6-inch and smaller.
- L. The butterfly valves shall open by rotating the operator in the counter-clockwise direction.
- M. Valves must be of the latest manufactured type which meet requirements as specified herein and which shall have replacement parts available for a minimum ten (10) year period.

- N. Valves shall be satisfactory for frequent operation after long periods of inactivity. Valve discs shall rotate 90 degrees from the full open position to the tight shut position.
- O. Shaft seals shall be designed for use with standard split-V type packing or other approved seals, and the interior passage shall not have any excessive obstructions or stops.
- P. Cartridge type valve seats, or valves employing snap rings to retain the rubber seats, will not be acceptable. The rubber seat shall be mounted in the valve body.
- Q. On valves 30 inches and larger, the valve port diameter shall not be reduced more than 1 ½ inches of the nominal pipe diameter.
- R. All bolts, nuts and studs shall conform to ASTM A307, Grade B; or ASTM A354.
- S. Bolts and nuts shall have hexagon heads and nuts.
- T. Gasket material and installation shall conform to manufacturer's recommendations.
- U. Valves shall have manufacturer's name, year manufactured, and working pressure cast in raised letters on valve body.
- V. Materials shall be stored to permit easy access for identification and inspection purposes.
- W. Valves shall be kept off ground using pallets, platforms, or other supports.
- X. Valves and packaged materials shall be protected from corrosion, deterioration and sun damage.
- Y. All butterfly valve locations shall be identified by installing a valve marker post and sign at each location outside of a plant site. The markers shall be as shown on the Plans.

### 3.2 Rubber Seated Butterfly Valves

#### A. General

1. All butterfly valves shall conform to the requirements of AWWA C504 in all respects, except as may be specifically modified herein. Both workmanship and material shall be of the very best quality and shall be entirely suitable for the service conditions specified.
2. Butterfly valves shall be tested in accordance with AWWA C504 and the requirements specified below.
  - a. Each butterfly valve shall be subjected to the performance, leakage, and hydrostatic tests required in Section 5.3 and 5.4 of AWWA C504.
  - b. The pressure differential specified in Section 5.3 of AWWA C504 shall be applied in both directions.
  - c. Each valve shall be completely assembled prior to testing.

#### B. Construction

1. Type: Tight closing rubber seated. Valves shall be manually operated and shall be opened by rotating the operating nut or hand wheel in a counterclockwise direction. Valves shall have an AWWA C504 Class B designation, suitable for a maximum velocity of 16 feet per second in the upstream pipe section.
2. Bodies: Bodies shall be fabricated from cast iron conforming to ASTM A126, Class B, or ductile iron conforming to ASTM A536, Grade 65-45-12, with integrally cast hubs for shaft bearings. Valve bodies shall be cast hubs for shaft bearings. All valves shall be short body. Valve bodies shall be designed for the shutoff pressure specified with a factor of safety of not less than five (5).
3. Discs: Ductile iron ASTM A536, Grade 65-45-12, cast iron ASTM A48, Class 40, or ASTM A126, Class B. The disc edge shall have a corrosion resistant edge for mating with the rubber seat and shall be machined or ground through 360 degrees of the seat. All keys and pins used to secure the valve disc to the shaft shall be of stainless steel or monel construction. All other

pins and fasteners employed in the disc assembly shall be of austenitic stainless steel.

4. Shafts: Turned, ground, polished and fabricated from Type 304, stainless steel or monel. The shafts shall be of one or two piece construction and designed for a factor of safety of not less than five for the rated shutoff pressure and the maximum torque required. Connection of the valve disc to the shaft shall be suitable for the service conditions specified. The outboard end of the shafts shall be permanently marked to show the disc position in relation to the shaft.
5. Seats: Natural or synthetic rubber mounted in the valve body and which, together with the mating surface, shall be designed to provide tight closure at the shutoff pressures specified herein. Seats which form, or are incorporated in the flange gasketing shall not be acceptable. The mating surfaces or valve seats shall be Type 316 stainless steel. Rubber seats shall be field adjustable around the full 360 degree circumference and shall be replaceable without dismantling the operator, disc or shaft and without removing the valve from the pipeline. Adjusting segments and retainer screws, if used, shall be Type 316 stainless steel. If retaining segments are used, the bolts used to attach the retainer to the body shall not penetrate the rubber seat. The seats shall be retained by both cementing and vulcanizing and an additional approved positive means of retention. The positive retention shall be by means of corrosive resistant device such as wedge action segmented retainers or heavy stainless steel rings, epoxy filled hollow rubber seats inserted in an inverted wedge shaped recess, or other approved means. Design of the seats shall permit the valve to remain in a closed position with full unbalanced pressure on either side of the disc and adjoining pipeline flange on the other side removed without bulge or water penetration under the seat.
6. Bearings: Self lubricating sleeve type. Thrust bearings shall be provided to keep the disc centered regardless of valve position.
7. Shaft seals: Valves shall be furnished with stuffing boxed. The packing shall be split self adjusting “V” type of conventional type. Gland assemblies for conventional packing shall be of cast bronze with Type 316 stainless steel studs and nuts.

### 3.3 Manual Operators

- A. Operators shall conform to AWWA C504.
- B. Except as otherwise indicated, manually operated butterfly valves shall be equipped with a 2-inch squatter operating nut and position indicator.
- C. Actuators for valves located above ground or in vaults and structures shall have handwheels. The minimum hand wheel diameter shall be 12-inches. The actuator shall be equipped with a dial indicator which shows the position of the valve disc.
- D. Valves 30-inches and larger, and submerged or buried valves, shall be equipped with worm-gear operators, lubricated and sealed to prevent entry of dirt or water into the operator at a water pressure of 40-feet of head.
- E. Screw type operators shall not be installed for valves 35-inches in diameter or larger.
- F. Operators shall require a minimum of 40 turns to rotate the disc from fully open to fully closed position.
- G. Manual valve operators shall turn clockwise to close unless otherwise specified. Valves shall indicate the direction of operation.
- H. Enclosed worm gear operators shall have a gear ration designed not to exceed 80-pounds pull to meet the required operator torque.
- I. Gears shall be permanently lubricated and totally enclosed.
- J. Operators shall be designed to hold the valve disc in any intermediate position without creeping or fluttering.
- K. Adjustable stops shall be provided to prevent over travel in either position, to withstand a pull of 300-pounds.
- L. The valve manufacturer shall be responsible for mounting the actuator to the valve, at the valve manufacturer's facility.

### 3.4 Valve Appurtenances

#### A. Extension Stems and Stem Guides

1. Extension stems shall be at least as large as the valve stem it operates.
2. Provide intermediate stem guide for extensions more than 7-feet long.
3. 2-inch square operating nuts shall be included with each extension stem.

#### B. Valve Boxes

1. All underground valves shall be set with the square cast iron operating nut so that a solid piece of 6” ductile iron pipe serving as the valve box and a cast iron cover can be placed over each valve operator.
2. All valve boxes shall be a minimum of two (2) separate bodies with the 6” ductile iron pipe specifically cut to be level with ground or pavement level.
3. When specified, the lid shall be a “lock type”, if not it shall be standard in design.

### 4.0 Installation

- A. The Owner shall inspect all butterfly valves before they are installed and shall reject any butterfly valves found to be damaged or defective to a degree that would affect the function of the Work. Rejected butterfly valves shall be immediately removed from the site of the work.
- B. Valve box bases shall not rest directly upon the butterfly valve or pipe. The Contractor shall block underneath the valve box base to support the box above the pipe.
- C. Where possible, butterfly valves shall be installed such that the valve shaft is in a horizontal position. Butterfly valves shall be oriented so as to provide the most convenient operation and to avoid conflict with the piping, supports and other features which may interfere with the operations.
- D. Stem extensions shall be provided for buried butterfly valves and installed such that the operating nut is not more than 36-inches, nor less than 24-inches below the finish grade.

**5.0 Manufacturer**

Butterfly valves shall be manufactured by CLOW.

**END OF SECTION**



## Section 15420 - Combination Air Release and Vacuum Valves - Water

### 1.0 Scope

This specification covers combination air release and air vacuum valves where called for on the Drawings or specified herein.

### 2.0 Applicable Publications

The most recent issue of the following standard specifications, references or publications shall be a part of these specifications. The Contractor shall construct the project in general accordance with these standards with the additions, exceptions or other modifications indicated on the Drawings or specified herein.

AWWA Standards, Current published (AWWA and/or ASTM)

1. AWWA C512 Standard for Air Release, Air/Vacuum, and Combination Air Valves for Waterworks Services.
2. AWWA C550 Protective Interior Coatings for Valves and Hydrants.
3. AWWA C600 Installation of Ductile Iron Water Mains and Their Appurtenances.
4. AWWA C800 Underground Service Line Valves and Fittings.
5. NSF Standard 61 Drinking Water System Components – Health Effects

### 3.0 Operation

- A. Combination air and vacuum release valves shall be of the single housing style that combines the operating features of an air release and air vacuum valve and shall meet all the requirements of AWWA C512.
- B. The Air Vacuum portion shall automatically exhaust large quantities of air through a large orifice during the filling of the pipeline and automatically allows air to re-enter the pipeline when the internal pressure of the pipeline approaches a negative value due to column separation, draining of the pipeline, power outage, pipeline break, etc.

- C. The Air Release portion shall automatically release small pockets of air from the pipeline while the pipeline is in operation and under pressure.
- D. Once the line is filled, a float shall raise a plug to close the large orifice. The large orifice shall remain closed unless the valve body is vacated of water and negative pressure occurs inside the line. When those conditions occur, the plug shall recede to its open position allowing large volumes of air to enter the pipe. When air enters the valve body from the pipe while operating under pressure, the float shall descend and open a small orifice allowing release of that air to the atmosphere.
- E. When closed, the valve shall be completely drip-tight.

#### 4.0 Materials

- A. Ductile iron body valves shall meet the material requirements as follows:

| <b>Item</b>       | <b>Material</b> | <b>Specification</b>           |
|-------------------|-----------------|--------------------------------|
| Body and Cover    | Ductile Iron    | ASTM A536, Gr. 65-45-12        |
| Float             | Stainless Steel | ASTM A240                      |
| Needle and Seat   | Rubber          | Buna-N<br>(Chlorine Resistant) |
| Drain Plug        | Stainless Steel | ASTM A276                      |
| Lever Frame       | Delrin          | ASTM D4181                     |
| Casing bolts/nuts | Stainless Steel | ANSI Type 316                  |

- B. Valve exterior to be painted with universal metal primer paint.
- C. All valves 2-inch and smaller shall have threaded inlets. All valves 3-inch and larger shall have flanged or mechanical joint inlets.
- D. Valve Boxes
  - 1. All valve boxes shall be a minimum of two (2) separate bodies for height adjustment and a minimum height adequate to be level with ground or pavement level.
  - 2. When specified, the lid shall be a “lock type”, if not it shall be standard in design.
- E. All valve locations shall be identified by installing a valve marker post and sign at each location. The markers shall be as shown on the Plans.

## 5.0 Installation

- A. Valves shall be of the kind, size and number as shown on the Plans. They shall be installed as shown on the Plans, specified herein and in accordance with the manufacturer's recommendations.
- B. The Owner shall inspect all valves prior to installation and shall reject any valves found to be damaged or defective to a degree that would affect the function of the Work. Rejected valves shall be immediately removed from the site of the work.
- C. The valve shall be isolated from the pipe with a bronze ball valve and brass nipples and fittings. The outlet shall be fitted with brass nipples and fittings to vent the discharge away from personnel.
- D. Valves shall be installed at high points on the main line or as shown on the Plans. If the profile changes during construction from that shown on the drawings, valve assemblies shall be installed at the high points in lines as constructed.
- E. The tap for the valves shall be made in a level section of pipe no closer than 18-inch from a bell, coupling, joint, or fitting.
- F. Valves shall be hydro-tested in conjunction with the connecting pipelines.

## 6.0 Manufacturer

Automatic combination air and vacuum release valves shall be APCO Combination Air Valves, Model 143C.

**END OF SECTION**

This page intentionally left blank.

## Section 15500 - Fire Hydrants

### 1.0 Scope

This Section covers fire hydrants to be constructed as shown on the Plans. Fire hydrants shown on the Plans shall conform to the standards set forth herein.

### 2.0 Applicable Publications

The following publications for the issues listed below, but referred to thereafter by basic designation only, form a part of this Specification to the extent indicated by the referenced thereto:

AWWA Standards, Current published (AWWA and/or ASTM)

1. AWWA C502 Standard for Dry-Barrel Fire Hydrants.
2. AWWA C503 Standard for Wet-Barrel Fire Hydrants.
3. AWWA C550 Protective Interior Coatings for Valves and Hydrants.
4. AWWA C600 Installation of Ductile Iron Water Mains and Their Appurtenances.
5. AWWA C110 Standard for Ductile Iron and Gray Iron Fittings, 3-inch – 48-inch, for Water and Other Liquids.
6. AWWA C111 (ANSI C21.11) Rubber Gasket Joints for Ductile Iron Pressure Pipe and Fittings.
7. ASTM B62 Standard Specification for Composition Bronze or Ounce Metal Castings.
8. NFPA 1963 Standard for Fire Hose Connections.
9. NFPA 291 Recommended Practice for Fire Flow Testing and Marking of Hydrants.
10. NSF Standard 14 Plastic Piping Components and Related Materials.
11. NSF Standard 61 Drinking Water System Components – Health Effects.

### 3.0 Materials and Construction

#### 3.1 General

- A. All hydrants shall conform to AWWA C502 for Dry-Barrel Fire Hydrants and/or AWWA C503 for Wet-Barrel Fire Hydrants.

- B. All hydrants shall be of the model indicated on the Plans.
- C. All foundry and machine work shall be performed in accordance with good standard practice for the class of work involved and in conformance with accepted drawings, if required. When assembled, hydrants manufactured in accordance with this specification shall be well fitted and shall operate smoothly. The body and shaft shall be watertight.
- D. All parts shall conform to the required dimensions and shall be free from defects that could prevent proper functioning of the hydrant.
- E. All castings shall be clean and sound without defects that will weaken their structure or impair their service.
- F. All hydrants shall meet NFPA 291 requirements for color coding unless otherwise stated in the Plans. Body color shall be chrome yellow for a municipal system, red for a private system, and violet (light purple) for a non-potable system. The bonnets and caps shall be color-coded to indicate the hydrant’s available flow at 20 psi.

| <b>Class</b> | <b>Flow Rate</b>  | <b>Color</b> |
|--------------|-------------------|--------------|
| C            | < 500 gpm         | Red          |
| B            | 500 – 999 gpm     | Orange       |
| A            | 1,000 – 1,499 gpm | Green        |
| AA           | > 1,500 gpm       | Light Blue   |

- G. All hydrants shall be field painted with two (2) coats of fire hydrant alkyd enamel paint.
- H. Hydrants shall typically have a 3-foot minimum bury, with the painting and casting in accordance with AWWA C502 or C503 standards.
- I. Hydrants shall be furnished and installed at the locations shown on the Plans.
- J. Each hydrant shall be isolated by an individual buried gate valve.
- K. Hydrants shall be three-way, having two (2) 2 ½-inch hose nozzles with standard threads and one (1) 4 ½-inch pumper nozzle with threads.

- L. All outlets shall have threads conforming to the requirements of the NFPA 1963.
- M. Outer end of all hose coupling threads shall be terminated by the blunt start or “Higbee Cut” on full thread, to avoid cross threading.
- N. Brass hose caps with brass chains shall be provided for all outlets.
- O. All interior and exterior surfaces shall be coated in accordance with AWWA C550.
- P. Each hydrant shall be designed for a minimum working pressure of 200 psig.
- Q. The hydrant shoe shall be provided with a flange connection to fit the connecting pipe.
- R. All hydrants shall open left (counterclockwise).
- S. All parts of the hydrant shall be designed to withstand, without being functionally impaired or structurally damaged, a hydrostatic test of not less than 400 psig or twice the rated working pressure, whichever is greater, with the hydrant completely assembled and pressurized as follows:
  - 1. With the nozzle caps in place, the main valve open, the hydrant inlet capped, and the test pressure applied to the interior of the hydrant.
  - 2. With the main valve closed, the hydrant inlet capped, and the test pressure applied at the hydrant inlet.
  - 3. The design safety factor of the operating mechanism shall not be less than five (5) and shall be based on the foot-pounds of torque required for the closing and opening of the hydrant at a working pressure of 200 psig. Hydrants shall be functional and capable of being opened or closed without difficulty following an application of an operating torque of 200lbf-ft at the operating nut in the opening direction with the hydrant fully opened and the closing direction with the hydrant fully closed. The torque requirements apply only to hydrants of 5-feet bury or less.

### 3.2 Dry-Barrel Fire Hydrants

- A. Fire hydrants shall conform to and/or exceed the requirements and pass tests set forth in AWWA C502 standards.
- B. Fire hydrants shall have a safety flange or breakaway flange at the ground line as required by AWWA C502.
- C. Fire hydrant nozzle cap chains shall be required and shall be attached permanently to the fire hydrant as required in AWWA C502.

### 3.3 Wet-Barrel Fire Hydrants

- A. Fire hydrants shall conform to and/or exceed the requirements and pass tests set forth in AWWA C503 standards.
- B. Hydrants shall have the buried section of ductile iron or steel and a break away flange connected to the hydrant head.
- C. Hydrant bodies and caps shall be solid bronze.
- D. The hydrant top section shall be manufactured of bronze conforming to ASTM B62.

### 4.0 Installation

- A. Hydrants shall be installed with 6-inch ductile iron lead pipe meeting the requirements of Section 15100, a 6-inch resilient wedge gate valve meeting the requirements of Section 15400, and a ductile iron anchor tee with restraints meeting the requirements of Section 15100 of these Specifications.
- B. All hydrants shall be installed in strict accordance with the manufacturer's published recommendations, AWWA standards, and all applicable codes, and the applicable provisions.
- C. A restraint system as indicated on the Plans shall be included comprised of one (1) or more of the following:
  - 1. Field lock type joints.
  - 2. Tie-rod restraint system.
  - 3. Reserve control movement joint restraints.
  - 4. Anchor type tee.



- D. Adequate concrete blocking shall be installed as provided on the Plans.
- E. Care shall be taken to avoid damage to the exterior coating of the hydrant during installation. Any damage to the exterior coating shall be repaired to manufacturer recommendation and to the satisfaction of the Engineer and/or Owner.
- F. Special attention shall be made to the placement of hydrants as to their location in relation to traffic, accessibility, and clearance to operate and maintain the hydrant.
- G. All hydrant locations shall be marked with a “blue dot” road marker.

### **5.0 Manufacturer**

Fire hydrants shall be manufactured by MUELLER or CLOW.

**END OF SECTION**

---

**Special Provision to Item 000**  
**Schedule of Liquidated**

---



The Dollar Amount of Daily Contract Administration Liquidated Damage per Working Day is \$750.00/Day.

---

## Special Provision to Item 2 Instructions to Bidders

---



Item 2, Instructions to Bidders of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Article 2.3 Issuing Proposal forms.** The second sentence is voided and replaced by the following: Hays County will issue a proposal form to a prequalified Bidder meeting the requirements of the proposal form on request if the estimated cost of the proposed Contract is within that bidder's Available bidding capacity.

**Article 2.6 Preparing the Proposal is supplemented by** the following: Bids MUST be legible and of a quality that can be reproduced.

**Article 2.8 Electronic Bid is deleted and not replaced.**

**Article 2.9.1 Guaranty Check.** The first sentence is deleted and replaced by: Make the check payable to Hays County.

**Article 2.9.2 Bid Bond is supplemented by:** A bid bond in the amount of not less than five percent (5%) of the total bid price that the bidder is submitting, from a reliable surety company, as a guarantee that the bidder will enter into a contract and execute performance and payment bonds, as stipulated above, within ten (10) days after notice of award of contract to the bidder. Bid guarantees must be submitted in the same sealed envelope with the bid. Bids submitted without check or bid bonds will not be considered.

**Article 2.9.3 Submittal of Bid is supplemented by:** TWO (2) ORIGINAL AND ONE (1) DIGITAL COPY ON A THUMB DRIVE OF ALL BIDS MUST BE SUBMITTED (this includes Two (2) Original and One (1) digital copies of all documentation submitted with the bid). BIDS MUST BE MARKED ORIGINAL OR COPY.

ALL BIDS MUST BE RETURNED IN A SEALED ENVELOPE, MARKED WITH THE BID NAME, BID NUMBER, AND BID OPENING DATE & TIME. IF AN OVERNIGHT DELIVERY SERVICE IS GOING TO DELIVER THE BID, THE BID NAME, BID NUMBER, AND BID OPENING DATE & TIME MUST ALSO APPEAR ON THE OUTSIDE OF THE DELIVERY SERVICE ENVELOPE.

FACSIMILE AND ELECTRONIC MAIL TRANSMITTALS SHALL NOT BE ACCEPTED.

Article 2 is further supplemented by:

**Article 2.14 Per Unit basis.** This price must be good from the date of Bid opening through the completion of the Project. Bids which do not state a fixed price will not be considered.

**Article 2.15 Sales Tax:** Hays County is by statute, exempt from the State Sales Tax and Federal Excise Tax.

**Article 2.16 Conflict of Interest:** No public official shall have interest in a contract, in accordance with Vernon's Texas Codes Annotated, Local Government Code Title 5, Subtitle C, Chapter 171. As of January 1, 2006 Vendors are responsible for

complying with Local Government Code Title 5, Subtitle C, Chapter 176. Additional information may be obtained from the County website at the following link: [http://www.wilcogov.org/interest\\_conflict/index.html](http://www.wilcogov.org/interest_conflict/index.html). The Hays County Conflict of Interest Statement is located in Section 7 of this manual. This form must be completed, signed, and submitted with your bid.

**Article 2.17 References:** Hays County REQUIRES bidder to supply with this Bid, a list of at least three (3) references where like services have been supplied by their firm. Include name of firm, address, telephone number and name of representative.

**Article 2.18 Silence of Specifications:** The apparent silence of these specifications as to any detail or to the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

**Article 2.19 Bid Forms.** Bid forms that are included in the Bid package shall be used. CHANGES to Bid forms made by bidders shall DISQUALIFY THE BID.

---

## Special Provision to Item 3

### Award and Execution of

---



Item 3, Award and Execution of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Article 3.4.2 Bonds is supplemented by** the following: Unless otherwise specified, the cost of the premium for the performance and payment bonds shall be included in the price bid by the Contractor for the Work subject of the Contract Documents, and no extra payment for such bonds will be made by the County.

Chapter 262.032 and Chapter 2253.021 of the Texas Government Code governs the requirements for performance bonds and payment bonds for government entities making public work contracts. A performance bond is required if the contract is in excess of \$50,000 and is to be made for the full amount of the contract. The bonds are to be executed within ten (10) days after receipt of written notification of award of contract prior to beginning work on the project and must be executed by a corporate surety or sureties in accordance with the Texas Insurance Code. In the event the bond exceeds \$100,000.00, the surety must also (1) hold a certificate of authority from the United States secretary of the treasury to qualify as a surety on obligations permitted or required under federal law; or (2) have obtained reinsurance for any liability in excess of \$100,000.00 from a reinsurer that is authorized and admitted as are insurer in this state and is the holder of a certificate of authority from the United States secretary of the treasury to qualify as a surety or reinsurer on obligations permitted or required under federal law.

In determining whether the surety or reinsurer holds a valid certificate of authority the County may rely on the list of companies holding certificates of authority as published in the Federal Register covering the date on which the bond is to be executed. If the public works contract is less than \$50,000 the performance bond will not be required as long as the contract provides that payment is not due until the work is completed and accepted by the county. The purpose of a performance bond is for the protection of the government entity and is conditioned on the faithful performance of the work being done in accordance with the plans, specifications and Contract Documents. The payment bond is for the protection of persons supplying labor and materials to the contractor to ensure payment.

**Article 3.4.5 List of Quoting Suppliers and Subcontractors is supplemented by:** The Inspector shall promptly notify the Contractor, in writing, if the County, after due investigation, has objection to any Subcontractor on such list and does not accept such Subcontractor.

The Contractor shall not contract with any Subcontractor or any person or organization (including those who are to furnish materials or equipment fabricated to a special design) proposed for portions of the Work designated in the Contract Documents or in the Instructions to Bidders or, if none is so designated, with any Subcontractor proposed for the principal portions of the Work who has been rejected by the County. The Contractor will not be

required to contract with any Subcontractor or person or organization against whom the Contractor has a reasonable objection.

If the County refuses to accept any Subcontractor or person or organization on a list submitted by the Contractor in response to the requirements of the Contract Documents or the Instructions to Bidders, the Contractor shall submit an acceptable substitute and the Contract Price shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate change order shall be issued; however, no increase in the Contract Price shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting for acceptance any list or lists of names as required by the Contract Documents or the Instructions to Bidders.

If the County requires a change of any proposed Subcontractor or person or organization previously accepted by them, the Contract Price shall be increased or decreased by the difference in cost occasioned by such change and an appropriate change order shall be issued.

The Contractor shall not make any substitution for any Subcontractor or person or organization that has been accepted by the County, unless the substitution is acceptable to the County.

Item 3 is further supplemented by the following:

**Article 3.11 Indemnification.** THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE COUNTY, THE INSPECTOR, THE GEC AND THE ENGINEER OF RECORD AND THEIR RESPECTIVE OFFICERS, AGENTS AND EMPLOYEES, FROM AND AGAINST ALL DAMAGES, CLAIMS, LOSSES, DEMANDS, SUITS, JUDGMENTS AND COSTS, INCLUDING REASONABLE ATTORNEYS' FEES AND EXPENSES, ARISING OUT OF OR RESULTING FROM THE PERFORMANCE OF THE WORK, PROVIDED THAT ANY SUCH DAMAGE, CLAIM, LOSS, DEMAND, SUIT, JUDGMENT, COST OR EXPENSE:

- IS ATTRIBUTABLE TO BODILY INJURY, SICKNESS, DISEASE OR DEATH OF ANY PERSON INCLUDING CONTRACTOR'S EMPLOYEES AND ANY SUBCONTRACTOR'S EMPLOYEES AND ANY SUB-SUBCONTRACTOR'S EMPLOYEES, OR TO INJURY TO OR DESTRUCTION OF TANGIBLE PROPERTY INCLUDING CONTRACTOR'S PROPERTY (OTHER THAN THE WORK ITSELF) AND THE PROPERTY OF ANY SUBCONTRACTOR OF SUB-SUBCONTRACTOR INCLUDING THE LOSS OF USE RESULTING THEREFROM; AND,
- IS CAUSED IN WHOLE OR IN PART BY ANY INTENTIONAL OR NEGLIGENT ACT OR OMISSION OF THE CONTRACTOR, ANY SUBCONTRACTOR, ANY SUB-SUBCONTRACTOR OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY ONE OF THEM OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE.

THE OBLIGATION OF THE CONTRACTOR UNDER THIS PARAGRAPH SHALL NOT EXTEND TO THE LIABILITY OF THE INSPECTOR, THE ENGINEER, THE GEC, THE ENGINEER OF RECORD THEIR AGENTS OR EMPLOYEES ARISING OUT OF THE PREPARATION OF MAPS, PLANS, REPORTS, SURVEYS, CHANGE ORDERS, DESIGNS OR SPECIFICATIONS, OR THE APPROVAL OF MAPS, PLANS, REPORTS, SURVEYS, CHANGE ORDERS, DESIGNS OR SPECIFICATIONS OR THE ISSUANCE OF OR THE FAILURE TO GIVE DIRECTIONS OR INSTRUCTIONS BY THE INSPECTOR, ITS AGENTS OR EMPLOYEES, PROVIDED SUCH IS THE SOLE CAUSE OF THE INJURY OR DAMAGE.

IN ANY AND ALL CLAIMS AGAINST THE COUNTY, THE INSPECTOR THE GEC OR THE ENGINEER OF RECORD OR ANY OF THEIR AGENTS OR EMPLOYEES BY ANY EMPLOYEE OF THE CONTRACTOR, ANY SUBCONTRACTOR, ANY SUB-SUBCONTRACTOR, ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE FOR WHOSE ACTS ANY OF THEM MAY BE LIABLE, THE INDEMNIFICATION OBLIGATIONS UNDER THE CONTRACT DOCUMENTS SHALL NOT BE LIMITED IN ANY WAY BY ANY LIMITATION ON THE AMOUNT OR TYPE OF DAMAGES, COMPENSATION OR BENEFITS PAYABLE BY OR FOR THE CONTRACTOR OR ANY SUBCONTRACTOR OR SUB-SUBCONTRACTOR UNDER WORKERS' COMPENSATION ACTS, DISABILITY BENEFIT ACTS OR OTHER EMPLOYEE BENEFIT ACTS.

**Article 3.12 Ownership of Documents.** All drawings, specifications and copies thereof furnished by the Engineer of Record shall not be reused on other work, and, with the exception of the signed contract sets, are to be returned to the Engineer of Record on request, at the completion of the work. All models, drawings, specifications and copies thereof are the property of the County.

**Article 3.13 Adequacy of Design.** It is understood that the County believes it has employed competent engineers and designers. It is therefore agreed that the County and Engineer shall be responsible for the adequacy of the design, sufficiency of the Contract Documents, the safety of the structure and the practicability of the operations of the completed project provided that the Contractor has complied with the requirements of the said Contract



Documents, all approved modifications thereof, and additions and alterations thereto approved in writing by the County. The burden of proof of such compliance shall be upon the Contractor to show that it has complied with the said requirements of the Contract Documents, approved modifications thereof, and all approved additions and alterations thereto.

The paper copies of the Contract Documents are considered to be the official contract documents. Any request by the Contractor and use thereof of electronic or digital information, including engineering design and survey files, shall be at the sole risk and legal responsibility of the Contractor. Neither the County nor the Engineer of Record makes any warranty or representation as to the compatibility of the files provided with other software programs, nor shall they be held responsible for subsequent uses of the data by the Contractor or anyone who may obtain the data from the Contractor. THE CONTRACTOR SHALL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD THE COUNTY ITS AGENTS, EMPLOYEES, OR REPRESENTATIVES AND THE ENGINEER OF RECORD HARMLESS FROM ANY AND ALL CLAIMS, SUITS, LIABILITY,

DEMANDS OR COSTS ARISING OUT OF OR RESULTING FROM SUCH USE. Because data stored on electronic media can deteriorate undetected or be modified undetected, neither the County nor the Engineer of Record can be held liable for the completeness or correctness of the electronic data once in possession of the Contractor.

**Article 3.14 Inspection and Audit.** Contractor's records shall be subject to audit and such records shall include, but not be limited to accounting records, written policies and procedures; subcontract files (including proposals of successful and unsuccessful bidders, bid recaps, etc.); original estimates; estimating work sheets; correspondence; change order files (including documentation covering negotiated settlements); back charge logs and supporting documentation; general ledger entries detailing cash and trade discounts earned, insurance rebates and dividends; and any other Contractor records which may have a bearing on matters of interest to the County in connection with the contractor's work for the County. All of the foregoing, hereinafter referred to as "records," shall be open to inspection and subject to audit and/or reproduction by County or its authorized representative to the extent necessary to adequately permit evaluation and verification of:

- Contractor compliance with the Contract Documents,
- compliance with County's business ethics policies,
- compliance by other contractors or subcontractors with contracts with County or Contractor, and
- compliance with provisions for pricing change orders, invoices or claims submitted by the Contractor or any of its payees.

Other specific records subject to audit include all information, materials and data of every kind and character such as documents, subscriptions, recordings, computerized information, agreements, purchase orders, leases, contracts, commitments, arrangements, notes, daily diaries, superintendent reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information that may, in County's judgment, have any bearing on or pertain to any matters, rights, duties or obligations under or covered by the Contract Documents. Such records subject to audit shall also include those records necessary to evaluate and verify direct and indirect costs, (including overhead allocations) as they may apply to costs associated with this Project. In those situations where Contractor's records have been generated from computerized data (whether mainframe, mini-computer, or PC based computer systems), Contractor agrees to provide County's representatives with extracts of data files in computer readable format on data disks or suitable alternative computer data exchange formats.

The County or its designee shall be entitled to audit all of the Contractor's records for a period of three (3) years after final payment or a longer period if required by law.

Contractor shall require all payees (including those entering into lump sum subcontracts and lump sum major material purchase orders), to comply with the provisions of this article by insertion of the requirements hereof in a written contract agreement between Contractor and payee. Requirements to include flow-down audit provisions in contracts with payees will apply to Subcontractors, Sub-Subcontractors, material suppliers, etc. when working under any type of contract including lump sum agreement, unit price agreements, time and material agreements, cost plus agreements, or other agreements. Contractor will cooperate fully and will cause all payees to cooperate fully in furnishing or in making available to County from time to time whenever requested in an expeditious manner any and all such information, materials and data required by this article.

County's agent or its authorized representative shall have access to the Contractor's facilities, shall be allowed to interview all current or former employees to discuss matters pertinent to the performance of the Work, shall have access to all necessary records, and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with this article.

**Article 4.3., "Insurance"** is replaced by Section VI. "Insurance" under the Special Conditions of this contract.

**Article 4.7., "Certificate of Interested Parties (Form 1295)", is added:**

Contractors must comply with the Certificate of Interested Parties (Form 1295) adopted by the Texas Legislature as House Bill 1295, which added section 2252.908 of the Government Code, available for review at the Texas Ethics Commission website: <https://www.ethics.state.tx.us/tec/1295-Info.htm>

The Contractor, upon award and request by the Mobility Authority, is required to complete and submit Form 1295 if the Contractor has either of the following contracts with a governmental entity or state agency starting as of January 1, 2016:

- 1) Requires an actions or vote by the governing body of the entity or agency before the contract may be signed; or
- 2) Has a value of at least \$1 million.

---

## Special Provision to Item

### 4 Scope of Work

---



Item 4, Scope of Work of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Article 4.7 Dispute and Claims Procedure is deleted and replaced**, in its entirety, by the following.

The dispute resolution policy promotes a cooperative attitude between the Engineer and Contractor. Emphasis is placed on resolving issues while they are still current, at the area office or the district office, and in an informal manner. Open sharing of information is encouraged by all parties involved so the information provided completely and accurately reflects the issues and facts. If information is not shared, decisions may be limited to relying on the documentation that is available for review.

The Inspector initially shall determine all claims, disputes and other matters in question between the Contractor and the County relating to execution or progress of the Work or interpretation of the Contract Documents. The Inspector's decision shall be rendered in writing to the GEC for review within a reasonable time, which shall not be construed to be less than ten (10) days.

In the event the issue cannot be resolved in the timeframe established by the County or renders any decision which, in the opinion of either party hereto, is not in accordance with the meaning and intent of the Contract Documents, either party may file with the Inspector its written objection to the decision within thirty (30) days of such decision by the Inspector, and by such action may reserve the right to submit the question so raised to litigation as hereinafter provided.

The Contractor shall continue performance of the Work during all disputes or disagreements with the County. The production or delivery of goods, the furnishing of services and the construction of projects or facilities shall not be delayed, prejudiced or postponed pending resolution of any disputes or disagreements, except as the County may otherwise agree in writing.

File a claim after completion of the Contract or when required for orderly performance of the Contract. For a claim resulting from enforcement of a warranty period, file the claim no later than one year after expiration of the warranty period. For all other claims, file the claim no later than the date the County issues notice to the Contractor that they are in default, the date the County terminates the Contract, or one year after the date of final acceptance of the Contract. It is the Contractor's responsibility to submit requests in a timely manner.

---

## Special Provision to Item 5 Control of the Work

---



Item 5, Control of the Work of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

### Article 5.2 Plans and Working Drawings is supplemented by the following:

The Contractor shall submit to the Inspector, with such promptness as to cause no delay in its own work or in that of any other contractor, a minimum of six (6) stamped/reviewed copies, unless otherwise specified, of all shop and/or setting drawings and schedules required for the work of the various trades, and the Engineer of Record shall pass upon them with reasonable promptness, making desired corrections. Note: A single copy of the reviewed drawings shall be retained by the reviewer, the County, the County's Representative and Inspector for their records. The Contractor may not submit more than four different shop drawing plans for review in any one week. The Engineer of Record shall return the shop drawings to the Contractor, via the GEC, within three (3) weeks of its having received them, with appropriate comments. The Contractor shall make any corrections required by the Engineer of Record, file with it two (2) corrected copies and furnish such other copies as may be needed. The Engineer of Record's approval of such drawings or schedules shall not relieve the Contractor from responsibility for deviations from drawings or specifications, unless the Contractor has in writing called the Engineer of Record's attention to such deviations at the time of submission, nor shall it relieve Contractor from responsibility for errors of any sort in shop drawings or schedules.

It shall be the Contractor's responsibility to fully and completely review all shop drawings to ascertain their effect on its ability to perform the required work in accordance with the Contract Documents and within the time for completion thereof. Any shop drawings which are required for temporary supports must be signed and sealed by an Engineer registered in the State of Texas.

Such review by the Engineer of Record shall be for the sole purpose of determining the sufficiency of said shop drawings or schedules to result in finished improvements in conformity with the plans and specifications, and shall not relieve the Contractor of its duties and obligations, as an independent contractor, set forth in the Contract Documents. It is hereby expressly understood and agreed that the Engineer of Record does not assume any duty to pass upon the propriety or adequacy of such drawings or schedules, or any means or methods reflected thereby, in relation to the safety of either person or property during the Contractor's performance hereunder.

**Article 5.4 Coordination of Plans, Specifications, and Special Provisions.** The second paragraph of this article shall be replaced, in its entirety, by the following paragraph:

Numerical dimensions govern over scaled dimensions. In the event of any conflict between the terms set forth in the Contract, Standard Specifications, Special Provisions and Special Conditions, the following shall serve as a guide in determining which of said documents shall control over the other (listed in descending order of most controlling to least controlling): Special Conditions, Special Provisions, Standard Specifications/General Requirements and Covenants and the Contract. Job-specific plan sheets govern over standard plan sheets.

**Article 5.10 Inspection is supplemented by** the following:

**5.10.1 County-Inspector Relationship.** The Inspector will be the County's contracted consultant during construction. The duties, responsibilities and limitations of authority of the Inspector as the County's representative during construction are as set forth in the Contract Documents and/or the Agreement for Construction Engineering and Inspection Services and shall not be extended or limited without written consent of the County or the Inspector. The Inspector will advise and consult with the County and the GEC, and all of the County's instructions to the Contractor shall be issued through the Inspector.

The Contractor is and at all times shall remain an independent contractor, solely responsible for the manner and method of completing its work under the Contract Documents, with full power and authority to select the means, method and manner of performing such work, so long as such methods do not adversely affect the completed improvements, the County and the Inspector being interested only in the result obtained and conformity of such completed improvements with the Contract Documents.

Likewise, the Contractor shall be solely responsible for the safety of itself, its employees and other persons, as well as for the protection and safety of the improvements being erected and its property or any other person's property, as a result of its operations under the Contract Documents. Engineering construction drawings and specifications, as well as any additional information concerning the Work to be performed passing from or through the Inspector, shall not be interpreted as requiring or allowing the Contractor to deviate from the Contract documents, the plans and specifications; the intent of such drawings, specifications and any other such information being to define with specificity the agreement of the parties as to the Work the Contractor is to perform.

**5.10.2. Professional Inspection by the Construction Inspector.** The Inspector shall be on the jobsite when work is being performed to provide construction engineering inspections of the Work performed by the Contractor. In addition to performing material testing on behalf of the County, the Inspector shall review the progress of the executed Work and to determine if such Work meets the essential performance and design features and the technical and functional engineering requirements of the Contract Documents; provided and except, however, that the Inspector shall not be responsible, directly or indirectly, for the Contractor's construction means, methods, techniques, sequences, quality, procedures, programs, safety precautions or lack of same incident thereto or in connection therewith. Notwithstanding any other provision of the Contract Documents, the Engineer and the Inspector shall not be responsible or liable for any acts, errors, omissions or negligence of the Contractor, any Subcontractor or any of the Contractor's or Subcontractor's agents, servants or employees or any other person, firm or corporation performing or attempting to perform any of the Work.

**Article 5.11 Final Cleanup.** This article is supplemented by the following: In the event the Contractor fails or refuses to clean and remove surplus materials and debris as provided above, the County or the Inspector may do

so, or cause same to be done, at the Contractor's expense, and the reasonable cost thereof shall be deducted from any amounts that are owing to the Contractor.

**5.12.2.2. Final Inspection.** Replace this section with the following:

**5.8.12.2.a Punch List.** The Contractor shall notify the Inspector in writing when, in the Contractor's opinion, the Work has been "Substantially Completed" and when so notifying the Inspector, the Contractor shall furnish to the Inspector, in writing, a detailed list of unfinished work, also known as the Punch List. The Inspector, in cooperation with TxDOT, will review the Punch List and will add any items that the Contractor failed to include on said list. The fact that a structure or facility has been "Substantially Completed" shall not excuse the Contractor from performing all of the Work undertaken, whether such work is of a minor or major nature. Furthermore, the Contractor shall remain obligated to fully complete the Work and perform its obligations under the Contract Documents after the Work has been Substantially Completed.

**5.12.2.2.b Final Completion and Acceptance.** The Contractor shall have a specified time period for completion of the Punch List items, as set forth in Section XI of the Special Conditions, "Completion of Work on Time." Within ten (10) days after the Contractor has given the Inspector written notice that the Punch List has been completed, the Inspector shall inspect the Work and within said time, if the Work is found to be completed in accordance with the Contract Documents, the Inspector, with the concurrence of TxDOT, shall issue to the Contractor its Certificate of Completion. In the event the Punch List has not been completed, the Inspector shall advise the Contractor, in writing, of the Inspector's basis for deeming the Punch List incomplete. Following the Contractor's receipt of the Inspector's notice that the Punch List is incomplete, the Contractor shall complete the remaining items prior to the expiration of the above referenced specified time period for completion of the Punch List items. Upon satisfactory completion of the Punch List and the issuance of the Certificate of Completion, it shall be the Contractor's responsibility to submit the contract close-out documents, which shall include the record drawings, Form FHWA-47 and Affidavit of All Bills Paid, and thereupon it shall be the duty of the County to issue a Certificate of Acceptance (Final Acceptance) to the Contractor.

---

## Special Provision to Item 8 Prosecution and

---



Item 8, Prosecution and Progress of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Article 8.1 Prosecution of Work.** The first and second sentences of the first paragraph are voided and replaced by the following:

Working day charges will begin **90** calendar days after the date of the written authorization to begin work, or on the first day that all utility relocations are complete, if this occurs during the **90** day period.

Prosecute the work continuously to completion within the working days specified except for as follows: The County may suspend work under this contract due to utility relocations and/or adjustments for a maximum of 90 calendar days. The suspension may be used at one time or broken into no more than 4 suspensions totaling a maximum of 90 calendar days. The Engineer and the Contractor may mutually agree, in writing, to increase or decrease this maximum number of days. The Contractor shall not be entitled to additional compensation due to delays within these 90 calendar days.

**Article 8.2 Subcontracting is supplemented by the following.** Do not sublet any portion of a construction Contract without the Engineer's written approval. A subcontract does not relieve any responsibility under the Contract and bonds. Ensure that all subcontracted work complies with all governing labor provisions. All work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate written agreement between the Contractor and the Subcontractor (and where appropriate between Subcontractors and Sub-subcontractors) which shall contain provisions that:

- preserve and protect the rights of the County, the Inspector, and the Engineer of Record under the contract with respect to the Work to be performed under the subcontract so that the subcontracting thereof will not prejudice such rights;
- require that such work be performed in accordance with the requirements of the Contract Documents;
- require submission to the Contractor of the applications for payment under each subcontract to which the Contractor is a party, in reasonable time to enable the Contractor to apply for payment in accordance with the Contract Documents;



- require that all claims for additional costs, extensions of time, damages for delays or otherwise with respect to subcontracted portions of the Work shall be submitted to the Contractor (via any Subcontractor or Sub-subcontractor where appropriate) in sufficient time so that the Contractor may comply in the manner provided in the Contract Documents for like claims by the Contractor upon the County;
- obligate each subcontractor specifically to consent to the provisions of this article.

A copy of all such signed subcontract agreements shall be filed by the Contractor with the Inspector before the Subcontractor shall be allowed to commence work.

#### Article 8.3.1.4 Standard Workweek is supplemented by:

Should the Contractor be delayed in the completion of the Work by any act or neglect of the County, the Inspector or the Engineer of Record, or of any employee of either, or by other contractors employed by the County, or by changes ordered in the Work, or by strikes, lockouts, fires, and unusual delays by common carriers, or unavoidable cause or causes beyond the Contractor's control, or by any cause which the Inspector shall decide justifies the delay, then an extension of time shall be allowed for completing the Work, sufficient to compensate for the delay, the amount of the extension to be determined by the Inspector; provided, however, before the Inspector may decide whether or not to allow such an extension of time, the Contractor must tender a prompt written request for an extension of time wherein the Contractor shall give the Inspector a written description of the cause of such delay.

No claims shall be made by the Contractor for damages resulting from hindrances or delays from any cause (except where the Work is stopped by order of and for the convenience of the County) during the progress of any portion of the Work embraced in the Contract Documents. In case said work shall be stopped by the act of the County, then such expense, as in the sole judgment of the Inspector is caused by such stoppage of said work, shall be paid by the County to the Contractor.

**Article 8.7 Default of Contract.** The paragraph entitled "Contracts with Performance Bonds" is supplemented by the following:

In case the surety should fail to commence compliance within ten (10) days after service of the herein above provided notice of abandonment and notice for completion, then the County may provide for completion of the Work in either of the following elective manners:

- The County may thereupon employ such force of men and use such machinery, equipment, tools, materials and supplies as the County may deem necessary to complete the Work and charge the expense of such labor, machinery, equipment, tools, materials and supplies to the Contractor, and expense so charged shall be deducted and paid by the County out of such monies as may be due, or that may thereafter at any time become due to the Contractor under and by virtue of the Contract Documents. In case such expense is less than the sum which would have been payable under the Contract Documents if the same had been completed by the Contractor, the County will be entitled to retain the difference. In case such expense is greater than the sum which would have been payable under the Contract Documents if the same had been completed by the Contractor, then the Contractor and/or its surety shall pay the amount of such excess to the County, or

- The County, under sealed bids, after twenty-one (21) days notice published one or more times in a newspaper having general circulation in the area of the location of the Project, may let a contract for the completion of the Work under substantially the same terms and conditions which are provided in the Contract Documents. In case there is any increase in cost to the County under the new contract as compared to what would have been the cost under the Contract Documents, such increase shall be charged to the Contractor and the surety shall be and remain bound therefor. However, should the cost to complete any such contract prove to be less than what would have been the cost to complete under the Contract Documents, the County shall be entitled to retain the difference.

When the Work shall have reached Final Completion, the Contractor and its surety shall be so notified and Certificates of Completion and Acceptance, as provided in Section 5.12.2.2.b. herein above, shall be issued. A complete itemized statement of the contract accounts, certified by the Inspector as being correct, shall then be prepared and delivered to the Contractor and its surety, whereupon the Contractor and/or its surety, or the County as the case may be, shall pay the balance due as reflected by said statement within fifteen (15) days after the date of such Certificate of Completion.

In the event the statement of accounts shows that the cost to complete the Work is less than that which would have been the cost to the County had the Work been completed by the Contractor under the terms of the Contract Documents, or when the Contractor and/or its surety shall pay the balance shown to be due by them to the County, then all machinery, equipment, tools, materials or supplies left on the site of the Project shall be turned over to the Contractor and/or its surety.

Should the cost to complete the Work exceed the amount the County would have been obligated to pay the Contractor had the Work been completed by the Contractor under the terms of the Contract Documents, and should the Contractor and/or its surety fail to pay the amount due the County within the time designated hereinabove, and should there remain any machinery, equipment, tools, materials or supplies on the site of the Project, notice thereof, together with an itemized list of such equipment and materials, shall be mailed to the Contractor and its surety at the respective addresses designated in the Contract Documents. After properly tendering such notice, such property shall be held at the risk of the Contractor and its surety subject only to the duty of the County to exercise ordinary care to protect such property. After fifteen (15) days from the date of said notice, the County may sell such machinery, equipment, tools, materials or supplies and apply the net sum derived from such sale to the credit of the Contractor and its surety. Such sale may be made at either public or private sale, with or without notice, as the County may elect. The County shall release, to their proper owners, any machinery, equipment, tools, materials, or supplies, which remain on the Project and which belong to persons other than the Contractor or its surety. The books on all operations provided herein shall be opened to the Contractor and its surety.

**Article 8.8 Termination of Contract.** The following section shall be added to Article 8.8:

**8.8.3. Termination for Convenience.** In connection with the Work outlined in the Contract Documents, it is agreed and fully understood by Contractor, that the County may cancel or indefinitely suspend further work hereunder or terminate the Contract for the convenience of the County, upon fifteen (15) days written notice to Contractor. In the event the County terminates the Contract for convenience, it is hereby understood and acknowledged by the Contractor that immediately upon receipt of the County's notice of termination, all work and labor being performed under the Contract Documents shall cease. Contractor shall invoice the County for all work

satisfactorily completed and shall be compensated in accordance with the terms of the Contractor Documents for work accomplished prior to the receipt of said notice. No amount shall be due for lost or anticipated profits. However, no cost incurred after the effective date of the notice of termination shall be treated as reimbursable costs unless it relates to carrying out the un-terminated portion or taking closeout measures.

Article 8 is supplemented by the following:

**Article 8.9 Workers and Equipment.** Furnish suitable machinery, equipment, and construction forces for the proper prosecution of the work. Provide adequate lighting to address quality requirements and inspection of nighttime work. At the written request of the Engineer, immediately remove from the work locations any employee or representative of the Contractor or a subcontractor who, in the opinion of the Engineer, does not perform work in a proper and skillful manner or who is disrespectful, intemperate, disorderly, uncooperative, or otherwise objectionable. Do not reinstate these individuals without the written consent of the Engineer. The Engineer may suspend the work without suspending working day charges until the Contractor complies with these requests. No illegal alien may be employed by any Contractor for work on this Project, and a penalty of \$500.00 per day will be assessed for each day and for each illegal alien who works for the Contractor at this Project.

---

## Special Provision to Item 9 Measurement and

---



Item 9, Measurement and Payment of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

**Article 9.5 Progress Payments.** The first sentence is replaced by: On or before the first Wednesday of each month, the Contractor shall submit to the Inspector a statement showing the total value of the Work performed up to and including the last day of the preceding month. The statement shall also include the value of all sound materials delivered on the job site and to be included in the Work and all partially completed work whether bid as a lump sum or a unit item which, in the opinion of the Inspector, is acceptable. The Inspector shall either examine and approve by signature or modify and approve such modified statement.

The Inspector shall review the Contractor's applications for payment and supporting data, determine the amount owed to the Contractor and recommend, in writing to the GEC for review, payment to the Contractor in such amounts; such recommendation of payment to the Contractor constitutes a representation to the County of the Inspector's professional judgment that the Work has progressed to the point indicated to the best of its knowledge, information and belief, but such recommendation of an application for payment to the Contractor shall not be deemed as a representation by the Inspector that the Inspector has made any examination to determine how or for what purpose the Contractor has used the monies paid on account of the Contract Price.

The County shall then pay the Contractor, within 30 days of the statement submittal, the total amount of the approved statement, and further less all previous payments and all further sums that may be retained by the County under the terms of the Contract Documents and/or under state or federal law. It is understood, however, that in case the whole work be near completion and some unexpected and unusual delay occurs due to no fault or neglect on the part of the Contractor, then the County may, upon written recommendation of the Inspector, pay a reasonable and equitable portion of the retained percentage to the Contractor, if any; or the Contractor, at the County's option, may be relieved of the obligation to fully complete the Work and, thereupon, the Contractor shall receive payment of the balance due Contractor under the contract subject to the conditions stated under Article 9.8.

As a minimum, invoices shall be on the form provided by the County and include: (1) Name, address, and telephone number of Contractor and similar information in the event the payment is to be made to a different address, (2) County contract number, (3) Identification of items or service as outlined in the Contract Documents, (4) Quantity or quantities, applicable unit prices, total prices, and total amount and (5) Any additional payment information which may be called for by the Contract Documents.

Payment inquiries should be directed to the GEC.

**Article 9.9 Payment Provisions for Subcontractors is further supplemented** as follows: THE CONTRACTOR AGREES THAT IT WILL INDEMNIFY, DEFEND AND SAVE HARMLESS THE COUNTY, THE INSPECTOR, THE GEC AND THE ENGINEER OF RECORD, AS WELL AS ANY OF THEIR AGENTS, REPRESENTATIVES, OFFICERS OR EMPLOYEES FROM ALL CLAIMS GROWING OUT THE LAWFUL DEMANDS OF SUBCONTRACTORS, LABORERS, WORKERS, MECHANICS, MATERIALMEN AND FURNISHERS OF MACHINERY, MACHINERY PARTS, EQUIPMENT, POWER TOOLS, AND ALL SUPPLIES, INCLUDING COMMISSARY, INCURRED IN THE FURTHERANCE OF THE PERFORMANCE OF THE WORK SUBJECT OF THE CONTRACT DOCUMENTS. When so desired by the County, the Contractor shall furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged or waived. If the Contractor fails to furnish such evidence to County's complete satisfaction, then the County may either pay directly any unpaid bills of which the County has written notice of, or may withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to liquidate any and all such lawful claims. When satisfactory evidence is furnished that all liabilities have been fully discharged, payments to the Contractor shall be resumed in full in accordance with the terms of the Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligation upon the County by either the Contractor or its surety.

**Article 9.10. Final Payment is supplemented by:** At the County's sole discretion, this payment may include payment for work remaining to be performed in association with the removal of temporary erosion controls or the establishment of permanent stabilization measures. On or after the 30th day, and before the 35th day after the date of the Certificate of Acceptance, the balance due the Contractor under the terms of the Contract Documents shall be paid. Neither the Certificate of Acceptance nor the Final Payment, nor any provision in the Contract Documents, shall relieve the Contractor of the obligation for fulfillment of any warranty which may be required.

The County may, on account of subsequently discovered evidence, withhold or nullify the whole or part of any certificate to such extent as may be necessary to protect itself from loss on account of:

- Defective work not remedied or other obligations hereunder not completed.
- Claims filed or reasonable evidence indicating the probable or potential filing of claims.
- Failure of the Contractor to make payments properly to Subcontractors or for material or labor.
- Damage to the County or another contractor's work, material or equipment.
- Reasonable doubt that the Work can be completed for the unpaid balance of the contract amount or Contract Price.
- Reasonable indication that the Work will not be completed within the contract time.

- Other causes affecting the performance of the Work subject of the Contract Documents.

When the above grounds are removed or the Contractor provides a surety bond satisfactory to the County, which will protect the County in the amount withheld, payment shall be made for amounts withheld because of them.

Should the County fail to make payment to the Contractor of the sum named in any partial or final statement, when such payment is due, then the County shall pay to the Contractor, in addition to the sum shown as due by such statement, interest thereon in accordance with Texas Government Code Section 2251.025. More specifically, the rate of interest that shall accrue on a late payment is the rate in effect on September 1 of County's fiscal year in which the payment becomes due. The said rate in effect on September 1 shall be equal to the sum of one percent (1%); and (2) the prime rate published in the Wall Street Journal on the first day of July of the preceding fiscal year that does not fall on a Saturday or Sunday. County's payment of the amount due plus said interest shall fully liquidate any injury to the Contractor growing out of such delay in payment. It is expressly agreed that delay by the County in making payment to the Contractor of the sum named in any partial or final statement shall not constitute, on the part of the County, a breach under the Contract Documents, nor shall it serve as an abandonment by the County. Furthermore, any delay by the County in making payment to the Contractor of the sum named in any partial or final statement shall not, to any extent or for any time, relieve the Contractor of its obligations to fully and completely perform pursuant to the terms of the Contract Documents.

APPENDIX A  
**QUALITY ASSURANCE PROGRAM  
FOR CONSTRUCTION PROJECTS**



# Quality Assurance Program for Design-Bid-Build Projects

---



© 2018 by Texas Department of Transportation  
512/506-5802  
All Rights Reserved

## TABLE OF CONTENTS

|                                                                                      |           |
|--------------------------------------------------------------------------------------|-----------|
| <b>SECTION 1 - INTRODUCTION .....</b>                                                | <b>4</b>  |
| 1.1 Overview .....                                                                   | 4         |
| 1.2 Support .....                                                                    | 4         |
| <b>SECTION 2 - ACCEPTANCE PROGRAM .....</b>                                          | <b>5</b>  |
| 2.1 Overview .....                                                                   | 5         |
| 2.2 Sampling and Testing Frequency and Location.....                                 | 5         |
| 2.3 Quality Control Sampling and Testing.....                                        | 5         |
| 2.4 Dispute Resolution.....                                                          | 5         |
| <b>SECTION 3 - INDEPENDENT ASSURANCE PROGRAM .....</b>                               | <b>6</b>  |
| 3.1 Overview .....                                                                   | 6         |
| 3.2 Required Frequencies and Activities .....                                        | 6         |
| 3.3 Testing Equipment .....                                                          | 7         |
| 3.4 Testing Personnel .....                                                          | 7         |
| 3.5 Comparing Test Results.....                                                      | 8         |
| 3.6 Annual Report of IA Program Results .....                                        | 8         |
| <b>SECTION 4 - MATERIALS CERTIFICATION .....</b>                                     | <b>9</b>  |
| 4.1 Overview .....                                                                   | 9         |
| <b>SECTION 5 - CONFLICT OF INTEREST .....</b>                                        | <b>10</b> |
| 5.1 Overview .....                                                                   | 10        |
| <b>SECTION 6 - TECHNICIAN QUALIFICATION PROGRAM.....</b>                             | <b>11</b> |
| 6.1 Purpose.....                                                                     | 11        |
| 6.2 Technician Qualification .....                                                   | 11        |
| 6.3 Who Must Be Qualified? .....                                                     | 11        |
| 6.4 Who Can Qualify Sampling and Testing Personnel?.....                             | 11        |
| 6.5 Required Certifications for Commercial Laboratory and Contractor Personnel ..... | 12        |
| 6.6 Qualification Procedure .....                                                    | 12        |
| 6.7 Provisional Certifications.....                                                  | 13        |

|                                                          |                                                                     |           |
|----------------------------------------------------------|---------------------------------------------------------------------|-----------|
| 6.8                                                      | Documentation.....                                                  | 13        |
| 6.9                                                      | Disqualification .....                                              | 14        |
| <b>SECTION 7 - LABORATORY QUALIFICATION PROGRAM.....</b> |                                                                     | <b>16</b> |
| 7.1                                                      | Purpose.....                                                        | 16        |
| 7.2                                                      | Laboratories to be Qualified .....                                  | 16        |
| 7.3                                                      | Laboratory Qualification Responsibility .....                       | 16        |
| 7.4                                                      | Qualification Process .....                                         | 16        |
| 7.5                                                      | Calibration Standards and Frequencies for Laboratory Equipment..... | 17        |
| 7.6                                                      | Non-Compliance.....                                                 | 17        |
| 7.7                                                      | Documentation.....                                                  | 18        |
| 7.8                                                      | Dispute Resolution.....                                             | 18        |

**Appendix A – Acronyms and Definitions**

**Appendix B – Split Sample Tolerance Limits**

**Appendix C – IA Annual Report**

**Appendix D – Material Certification Example Letter for Projects with Federal Oversight**

**Appendix E – Material Certification Example Letter for Projects with Non-Federal**

**Oversight**

**Appendix F – Archived Versions**

## SECTION 1 - INTRODUCTION

### **1.1** Overview

The Texas Department of Transportation (TxDOT) established the Quality Assurance Program (QAP) for Design-Bid-Build (D-B-B) Projects to ensure that materials and workmanship incorporated into highway construction projects are in reasonable conformity with the requirements of the approved plans and specifications, including any approved changes.

This program conforms to the criteria in 23 CFR 637 B. It consists of an "Acceptance Program" and "Independent Assurance (IA) Program" based on test results obtained by qualified persons and equipment.

The QAP allows for the use of validated Contractor-performed quality control (QC) test results as part of an acceptance decision. It also allows for the use of test results obtained by commercial laboratories in acceptance decisions. The acceptance of all materials and workmanship is the responsibility of the Engineer.

### **1.2** Support

For more information regarding the information and procedures in the program, contact the Construction Division's Materials and Pavements Section (CST/M&P) Administration at 512/506-5808.

## SECTION 2 - ACCEPTANCE PROGRAM

### 2.1 Overview

Materials incorporated into any highway construction project are subject to verification sampling and testing, as well as quality control (QC) sampling and testing when required by the specifications.

### 2.2 Sampling and Testing Frequency and Location

Verification sampling and testing will be performed at the location and frequency established in the Department's [Guide Schedule of Sampling and Testing for Design-Bid-Build \(DBB\) Projects](#) (DBB Guide Schedule) or specifications specific to each project.

### 2.3 Quality Control Sampling and Testing

Contractor-performed QC sampling and testing may be used as part of an acceptance decision when required or allowed by specification.

QC sampling and testing personnel, laboratories, and equipment will be qualified in accordance with [Section 6](#) – Technician Qualification Program and [Section 7](#) – Laboratory Qualification Program and will be evaluated under the Independent Assurance Program, as described in [Section 3](#) of this document.

QC test results will be validated by verification test results obtained from independently taken samples. Qualified TxDOT personnel or their designated agents will perform verification sampling and testing.

### 2.4 Dispute Resolution

When QC test results are used in the acceptance decision, the CST/M&P central laboratory or an accredited independent laboratory approved by CST/M&P will perform the referee testing. The referee laboratory decision will be final.

## SECTION 3 - INDEPENDENT ASSURANCE PROGRAM

### 3.1 Overview

The Independent Assurance (IA) program evaluates all sampling and testing procedures, personnel, and equipment used as part of an acceptance decision.

The IA program evaluates the qualified sampling and testing personnel and testing equipment and is established using the system approach. The system approach bases frequency of IA activities on time—regardless of the number of tests, quantities of materials, or numbers of projects tested by the individual being evaluated.

### 3.2 Required Frequencies and Activities

Table 3 gives the frequencies and activities required for evaluating sampling and testing personnel and equipment under the system approach to IA.

*Table 1: Frequencies and Activities Required Under IA System Approach*

| Time                                                                                                                                           | Activity                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Prior to performing acceptance sampling and testing                                                                                            | Qualification required under <a href="#">Section 6</a> and <a href="#">Section 7</a> of this OAP.                                              |
| Within 12 months after Observation and Qualification, not to exceed 15 months                                                                  | Within 48 months after Observation and Qualification, not to exceed 51 months. (Only required for ACI, which has a 5-year certification cycle) |
| Within 24 months after Observation and Qualification, not to exceed 27 months                                                                  |                                                                                                                                                |
| Within 36 months of Qualification. (Only required for certifications issued by TxDOT or TXAPA with a 3-year cycle)                             |                                                                                                                                                |
| Within 36 months after Observation and Qualification, not to exceed 39 months. (Only required for ACI, which has a 5-year certification cycle) |                                                                                                                                                |

Each qualified technician is required to participate in the first available proficiency or split sample for each test method requiring IA. Results must compare to the IA test results to within the established tolerance.

Each qualified technician is required to participate in one proficiency or split sample test for each test method requiring IA. Results must compare to the IA test results to within the established tolerance.

Qualification is again required under Section 6 and Section 7 of this QAP.

Each qualified technician is required to participate in one proficiency or split sample test for each test method requiring IA. Results must compare to the IA test results to within the established tolerance

Each qualified technician is required to participate in one proficiency or split sample test for each test method requiring IA. Results must compare to the IA test results to within the established

tolerance. Within 60 months of qualification (Only required for certifications issued by ACI with a 5-year cycle)

Qualification is again required under Section 6 and Section 7 of this QAP

Maintaining technician qualification under the IA system approach requires continuation of the above cycle of qualification and successful split or proficiency sample testing.

### **3.3 Testing Equipment**

CST/M&P will qualify district laboratory testing equipment used for acceptance sampling and testing, in accordance with Section 7 – Laboratory Qualification Program. Any non-TxDOT commercial laboratory used for acceptance sampling and testing must be accredited in accordance with Section 7.3 – Laboratory Qualification Responsibility.

CST/M&P may designate the district laboratory to qualify commercial laboratory testing equipment, used for acceptance sampling and testing, in accordance with corresponding calibration test procedures. CST/M&P or TxDOT district laboratory may hire a third-party entity to perform calibration/verification in accordance with corresponding calibration test procedures.

The qualifying authority will qualify testing equipment in accordance with the following guidelines.

- A. Frequency for qualifying sampling and testing equipment must not exceed 1 year.
- B. Calibration/verification is required whenever the laboratory or equipment is moved.

The qualifying authority will evaluate any equipment used to perform verification and/or QC sampling and testing in making an acceptance decision. This evaluation includes calibration checks and split or proficiency sample tests. The Department test procedures referenced in Section 7.5 – Calibration Standards and Frequencies for Laboratory Equipment give the requirements for, and frequency of, equipment calibrations.

### **3.4 Testing Personnel**

CST/M&P will qualify district and commercial laboratory personnel performing IA activities, in accordance with Section 6 – Technician Qualification Program.

CST/M&P may designate a district laboratory to qualify other Department personnel and accredited commercial laboratory personnel performing IA activities. When a district qualifies commercial laboratory personnel, they must notify CST/M&P in writing.

Individuals performing IA activities will be other than those performing verification or QC testing.



IA personnel will evaluate any individual performing verification or QC sampling and testing. This evaluation includes observations and split or proficiency sample testing.

### **3.5 Comparing Test Results**

Comparison of the split sample test results can be used in the event equipment and procedures issues are suspected. [Appendix B](#) gives the acceptable tolerance limits for comparing test results from split and proficiency samples.

If the comparisons of the test results do not comply with the tolerances, an engineering review of the test procedures and equipment will be performed immediately to determine the source of the discrepancy.

### **3.6 Annual Report of IA Program Results**

CST/M&P will compose and submit an annual report to the Federal Highway Administration (FHWA) summarizing the results of TxDOT's systems approach IA program. See [Appendix C](#) for the annual report form.

This report identifies:

- A. Number of sampling and testing personnel evaluated by the systems approach IA testing;
- B. Number of IA evaluations found to meet tolerances in [Appendix B](#);
- C. Number of IA evaluations found to not meet tolerances in [Appendix B](#); and
- D. Summary of any significant system-wide corrective actions taken.

## SECTION 4 - MATERIALS CERTIFICATION

### 4.1 Overview

The TxDOT District Area Engineer or Director of Construction will submit a materials certification letter, conforming in substance to the examples shown in Appendix D or E, as applicable.

For projects with federal oversight, submit the materials certification letter (Appendix D) to the FHWA division administrator, with a copy to CST/M&P.

For non-federal oversight projects, submit the material certification letter (Appendix E) to the TxDOT District Engineer, with a copy to CST/M&P.

Either letter must be submitted at final acceptance of the project.

## SECTION 5 - CONFLICT OF INTEREST

### 5.1 Overview

To avoid an appearance of a conflict of interest, any qualified non-TxDOT laboratory will perform only one of the following functions on the same project:

- A. Verification sampling and testing;
- B. QC sampling and testing;
- C. IA testing; or
- D. Referee testing.

## SECTION 6 - TECHNICIAN QUALIFICATION PROGRAM

### 6.1 Purpose

This program provides uniform statewide procedures for technician qualification to ensure that tests required by the specifications are performed according to the prescribed sampling and testing methods.

### 6.2 Technician Qualification

Sampling and testing personnel will be qualified to perform sampling and testing for the acceptance of materials in the areas of soils, bituminous, aggregate, and concrete materials.

The test methods for which individuals can be qualified are included in the following series of the [TxDOT Test Procedures](#).

- [100-E Series \(Soils\)](#)
- [200-F Series \(Bituminous\)](#)
- [400-A Series \(Aggregates and Concrete\)](#)
- [500-C Series \(Asphalt – Tex-500-C and Tex-530-C\)](#)

### 6.3 Who Must Be Qualified?

Any individual who performs sampling and testing on the materials listed in [Section 6.2](#), for acceptance, must be qualified in each test procedure they perform.

NOTE: Reciprocity may be granted to individuals who have been successfully qualified under another state's program. These situations will be considered on a case-by-case basis and must meet the approval of the Construction Division, Materials and Pavements (CST/M&P) Section Director.

### 6.4 Who Can Qualify Sampling and Testing Personnel?

The following personnel may qualify an individual to perform the required sampling and testing of materials:

- A. CST/M&P personnel;
- B. Qualified district materials engineer/laboratory supervisor (except as noted below);

- C. Qualified district laboratory personnel who have been authorized by the district materials engineer/laboratory supervisor to qualify others; and
- D. Department-approved entities such as the Texas Asphalt Pavement Association (TXAPA) and the American Concrete Institute (ACI). Certifications received from these institutions may be used to satisfy the written exam and observation part of the Technician Qualification Program.

NOTE: Each district laboratory will maintain a minimum of one individual qualified by CST/M&P or its designated agent, for each test procedure performed within the district. In order to perform testing and qualify district personnel for TxDOT concrete test methods, at least one individual from the district laboratory must have the corresponding ACI Field and Strength certifications issued by CST/M&P.

## 6.5 Required Certifications for Commercial Laboratory and Contractor Personnel

Non-TxDOT laboratory personnel performing sampling and testing for TxDOT, or as required by specification, must obtain and keep current the following certifications pertinent to their scope of testing:

- A. [ACI Concrete Field Testing Technician – Grade I](#);
- B. [ACI Concrete Strength Testing Technician](#);
- C. [TXAPA HMA Level 1A – Plant Production Specialist](#);
- D. [TXAPA HMA Level 1B – Roadway Specialist](#);
- E. [TXAPA HMA Level 2 – Mix Design Specialist](#);
- F. [TXAPA SB 101 – Property Specialist](#);
- G. [TXAPA SB 102 – Field Specialist](#);
- H. [TXAPA SB 103 – Materials Analysis Specialist](#);
- I. [TXAPA SB 201 – Strength Specialist](#);
- J. [TXAPA SB 202 – Compressive Strength Specialist](#).

For testing procedures not covered by the above certifications, the following personnel may qualify an individual to perform the required sampling and testing of materials:

- A. District laboratory personnel who have been authorized by CST/M&P to perform technician qualifications; and
- B. CST/M&P personnel.

## 6.6 Qualification Procedure

To qualify, an authorized evaluator must witness an individual successfully perform the specific test and the necessary calculations required to determine specification compliance. Successful performance is defined as demonstrating the ability to properly perform the key elements for each test method. If the individual fails to demonstrate the ability to perform a test, the individual will be allowed one retest per test method at the evaluator's convenience.

In addition to successful performance of a test method, the individual must pass a written examination (minimum score of 80%) administered by an authorized evaluator. An individual



failing the written examination may request a retest. The retest must be scheduled and administered within 30 days of notification of failure.

Under unique circumstances, the qualification authority may grant a verbal examination upon request. The reason(s) for requesting a verbal examination must be presented and documented prior to the individual being allowed to take the examination. Should the technician fail the retest examination, the technician will not be allowed to test again unless a written notification is received from the technician's employer/supervisor stating that the technician has received additional training. CST/M&P or its representative will determine the adequacy of the additional training. Failure to pass the third written examination will be considered as failing the entire qualification.

Successful qualification is defined as passing both the written and performance examinations.

In addition, the individual must participate in split/proficiency samples administered by the qualifying authority to validate the qualification. CST/M&P determines the qualifying authority for the split/proficiency sample.

Unless otherwise stated, qualification of an individual is valid for not more than 3 years, after which the individual must be re-qualified. Under the IA system approach, annual split/proficiency evaluations will be required as specified in Section 3.2 – Required Frequencies and Activities. Failure to satisfactorily complete annual split or proficiency testing may result in certification revocation.

## **6.7 Provisional Certifications**

In the event the required certifications listed in the Section 6.5 cannot be readily obtained due to course availability, schedule conflicts, or other extenuating circumstances, provisional certifications administered by CST/M&P or TxDOT's district laboratory will be allowed, per the following stipulations:

- A. Provisional certifications must be approved by CST/M&P or TxDOT district laboratory supervisor;
- B. Provisional certifications will be valid for one month after the TXAPA and ACI examination dates; and
- C. The candidate must show evidence of having enrolled in the required ACI or TXAPA course.

## **6.8 Documentation**

CST/M&P and the district materials engineer/laboratory supervisor are responsible for maintaining documentation of all individuals qualified under their authority who perform required tests for acceptance of materials. TxDOT's SiteManager will be the official system of record for qualified/certified TxDOT and commercial laboratory personnel. Issuance of qualification certificates by the TxDOT qualifying authority is not required. A qualification summary listing all tests for which an individual is qualified is available in SiteManager and

may be printed/signed at the district’s discretion. Documentation to be maintained in SiteManager, as an attachment, for all qualified personnel includes:

- A. Copies of certificates issued by ACI and TXAPA; or
- B. Copies of certificates issued by CST/M&P or TxDOT district laboratory, if issued; and
- C. Quality Assurance Test (QAT) report with clear identification of technician’s name, qualifier’s name, score, and date taken; and
- D. Original performance examinations for test procedures administered to each technician by the TxDOT qualifying authority, with clear identification of technician’s name, qualifier’s name, qualification status, and date;

Documentation retention will be for the life of the qualification, as detailed in the State of Texas Records Retention Schedule.

Results of annual proficiency testing administered by CST/M&P or TXAPA will be stored in their respective central repositories. Annual split sample evaluations should be stored in SiteManager.

## 6.9 Disqualification

Accusations of misconduct by testing technicians are made to the responsible TxDOT district representative and reported to CST/M&P. Table 2 defines the 3 levels of misconduct: neglect, abuse, and breach of trust.

*Table 2 – Levels of Misconduct*

| Term            | Definition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Neglect         | Unintentional deviations from testing procedures or specifications                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Abuse           | Careless or deliberate deviation from testing                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Breach of Trust | Violation of the trust placed in the certified technician including, but not limited to, acts such as: <ul style="list-style-type: none"> <li>• Falsification of records;</li> <li>• Being aware of improprieties in sampling, testing, and/or production by others and not reporting them to appropriate supervisors involved in the project;</li> <li>• Re-sampling and/or retesting without awareness and consent of appropriate supervisors involved in the project; and/or</li> </ul> |

procedures or specifications

CST/M&P will investigate accusations of misconduct with the assistance of the responsible district. CST/M&P may impose penalties ranging from a written reprimand to a permanent revocation of the certification, contingent upon the findings of the investigation.

Any technician found guilty of breach of trust will have his/her certification permanently revoked. Any technician with a revoked certification will be removed from the project and will not be allowed to be employed on any TxDOT project statewide.

## SECTION 7 - LABORATORY QUALIFICATION PROGRAM

### 7.1 Purpose

This program provides uniform statewide procedures to ensure that laboratory facilities and equipment are qualified for the performance of required sampling and testing methods.

### 7.2 Laboratories to be Qualified

All laboratories performing sampling and testing for TxDOT require qualification. These include, but are not limited to the following:

- A. Construction Division, Materials & Pavements (CST/M&P) central laboratory;
- B. District laboratories;
- C. Area/project laboratories (including field laboratories at hot mix and concrete plants);
- D. CST/M&P field laboratories; and
- E. Commercial laboratories.

### 7.3 Laboratory Qualification Responsibility

CST/M&P central laboratory will be accredited under the AASHTO Accreditation Program (AAP).

CST/M&P is responsible for overseeing the statewide laboratory qualification program and for accrediting district laboratories. At the district level, the district laboratory will be the qualifying authority for area office and commercial laboratories, only in the areas for which the district laboratory is accredited. When a district qualifies a commercial laboratory, they must notify CST/M&P in writing and submit a copy of the laboratory qualification certificate. A directory of all TxDOT-qualified laboratories is available at <https://www.txdot.gov/inside-txdot/division/construction/laboratory-directory.html>.

### 7.4 Qualification Process

The laboratory qualifying authority will use Form 2682, "Quality System Inspection – Commercial Laboratory," to document the following:

- A. Identify the scope of testing to be performed;
- B. Verify that test methods used to perform tests are available and current;

- C. Document that the laboratory has the required equipment to perform the tests;
- D. Check the calibration/verification records for each piece of equipment, to include:
  - 1. Description of equipment;
  - 2. Identification of any traceable standard used;

3. Frequency of calibration;
  4. Date of calibration;
  5. Date of last calibration;
  6. Date of next calibration;
  7. Calibrating technician;
  8. Procedure used to calibrate/verify equipment; and
  9. Detailed results of calibration; and
- E. Verify that the laboratory has qualified/certified technicians to perform required testing.

In addition, all equipment may be subject to calibration verification or other inspection by the qualifying authority. Laboratories performing acceptance sampling and testing should use results from TxDOT's MPL, and perform materials sampling and testing in accordance with TxDOT's DBB Guide Schedule. Materials that are not monitored or not pre-approved by TxDOT are subject to sampling and testing as part of the acceptance program, except as noted in the DBB Guide Schedule remarks.

NOTE: Project/field laboratories performing Tex-113-E, Tex-117-E, and Tex-242-F tests must be an approved laboratory from TxDOT's MPL.

Laboratories are qualified every 3 years, at a minimum, although accreditation is an ongoing process. Calibration/verification is required whenever laboratory or equipment is moved.

Random audits of laboratory calibration records may be performed at the sole discretion of the qualifying authority.

## 7.5 Calibration Standards and Frequencies for Laboratory Equipment

The standards for calibration and the frequencies for laboratory equipment calibrations are shown in:

- [Tex-198-E](#), "Minimum Standards for Acceptance of a Laboratory for Soils and Flexible Base Testing,"
- [Tex-237-F](#), "Minimum Standards for Acceptance of a Laboratory for Hot Mix Testing,"
- [Tex-498-A](#), "Minimum Standards for Acceptance of a Laboratory for Concrete and Aggregate Testing," and
- [Tex-900-K Series](#), procedures for calibrating, verifying, and certifying equipment and devices.



## **7.6 Non-Compliance**

A laboratory that does not meet all of the above requirements is subject to disqualification. Any equipment in a qualified laboratory failing to meet specified equipment requirements for

a specific test method will not be used for that test method. CST/M&P or the TxDOT district laboratory responsible for the certification/audit will immediately notify all applicable Area Offices of non-conformance for those test methods.

## **7.7 Documentation**

The qualifying authority is responsible for verifying that laboratories are qualified to perform sampling and testing. Documentation will be required to be kept by the qualifying authority and the qualified laboratory. Calibration records will be maintained for a minimum of 10 years. Upon satisfactory completion of the laboratory qualification process, the qualifying authority will issue a certificate within 14 days covering the scope of testing in which the laboratory has been qualified, with a copy to CST/M&P.

Laboratory qualification documentation to be maintained by the qualifying authority includes:

- A. Availability and calibration/verification records for each piece of equipment,
- B. Personnel qualified/certified to perform required testing, and
- C. Copy of laboratory qualification certificate issued.

## **7.8 Dispute Resolution**

The next higher qualification authority will resolve disputes concerning calibration and verification of equipment. For disputes that cannot be resolved at the district level, CST/M&P will be the final authority.

## Appendix A Acronyms and Definitions

The following terms and definitions are referenced in this document and have the meanings set forth below.

|                    |                                                                |
|--------------------|----------------------------------------------------------------|
| <b>AAP</b>         | AASHTO Accreditation Program (AASHTO re:source and CCRL)       |
| <b>AASHTO</b>      | American Association of State Highway Transportation Officials |
| <b>ACI</b>         | American Concrete Institute                                    |
| <b>AQMP</b>        | Aggregate Quality Monitoring Program                           |
| <b>CCRL</b>        | Concrete and Cement Reference Laboratory                       |
| <b>CE&amp;I</b>    | Construction Engineering and Inspection                        |
| <b>CFR</b>         | Code of Federal Regulations                                    |
| <b>CST/M&amp;P</b> | Construction Division, Materials and Pavements Section         |
| <b>CMEC</b>        | Construction Materials Engineering Council                     |
| <b>FHWA</b>        | Federal Highway Administration                                 |
| <b>HMA</b>         | Hot-Mix Asphalt                                                |
| <b>IA</b>          | Independent Assurance                                          |
| <b>L-A-B</b>       | Laboratory Accreditation Bureau                                |
| <b>MPL</b>         | Material Producer List                                         |
| <b>QAP</b>         | Quality Assurance Program                                      |
| <b>QAT</b>         | Quality Assurance Test                                         |
| <b>QC</b>          | Quality Control                                                |
|                    | Texas Asphalt Pavement Association                             |
| <b>TxDOT</b>       | Texas Department of Transportation                             |

**Abuse**—Careless or deliberate deviation from testing procedures or specifications.

**Acceptance Program**—All factors that comprise TxDOT’s program to determine the quality of the product as specified in the contract requirements. These factors include verification sampling, testing, and inspection and may include results of QC sampling and testing.

**Accredited Laboratories**—Laboratories that are recognized by a formal accrediting body as meeting quality system requirements including demonstrated competence to perform standard test procedures.

**Breach of Trust**—Violation of the trust placed in the certified technician including, but not limited to, acts such as: falsification of records; being aware of improprieties in sampling,

testing, and/or production by others and not reporting them to appropriate supervisors involved in the project; re-sampling and/or retesting without awareness and consent of appropriate supervisors involved in the project; and/or manipulating compensation and/or production.

**Certified Technician**—A technician certified by some agency as proficient in performing certain duties.

**Independent Assurance (IA) Program**—Activities that are an unbiased and independent evaluation of all the sampling and testing procedures, equipment and personnel qualifications used in the acceptance program.

**Material Producer List (MPL)**—TxDOT-approved products and materials from various manufacturers and producers are located at:

<http://www.txdot.gov/business/resources/producer-list.html>

**Neglect**—Unintentional deviations from testing procedures or specifications.

**Proficiency Samples**—Homogenous samples that are distributed and tested by 2 or more laboratories and/or personnel. The test results are compared to assure that the laboratories and/or personnel are obtaining the same results.

**Qualified Laboratories**—Laboratories that are capable as defined by appropriate programs established by TxDOT. As a minimum, the qualification program must include provisions for checking testing equipment, and the laboratory must keep records of calibration checks.

**Qualified Sampling and Testing Personnel**—Personnel who are capable as defined by appropriate programs established by TxDOT.

**Quality Assurance (QA)**—All planned and systematic actions necessary to provide confidence that a product or service will satisfy given requirements for quality.

**Quality Control (QC)**—All Contractor operational techniques and activities performed or conducted to fulfill the Contract requirements.

**TxDOT Standard Specifications**—the *Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges* adopted by the Texas Department of Transportation, including all revisions thereto applicable on the effective date of the Contract Documents.

**Verification Sampling and Testing**—Sampling and testing performed to verify the quality of the product.

## Appendix B

### Split Sample Tolerance Limits

*Laboratory Testing Procedures and Tolerance Limits*

| Test Procedure | Description                                                          | Tolerance                                                     |
|----------------|----------------------------------------------------------------------|---------------------------------------------------------------|
| Tex-104-E      | Liquid Limit of Soils                                                | 15% of mean <sup>1</sup>                                      |
| Tex-105-E      | Plastic Limit of Soils                                               | 15% of mean <sup>1</sup>                                      |
| Tex-106-E      | Plasticity Index of Soils                                            | 20% of mean <sup>1</sup>                                      |
| Tex-107-E      | Bar Linear Shrinkage of Soils                                        | ± 2%                                                          |
| Tex-110-E      | Particle Size Analysis of Soils, Part I                              | > No. 4 sieve: ± 5% points                                    |
|                |                                                                      | ≤ No. 4 sieve: ± 3% points                                    |
| Tex-113-E      | Moisture-Density Relationship of Base Materials                      | Density ± 2.0 PCF                                             |
|                |                                                                      | Moisture Content ± 0.5%                                       |
| Tex-117-E      | Triaxial Compression for Disturbed Soils and Base Materials, Part II | Strength ± 15 psi                                             |
|                |                                                                      | Moisture Content ± 0.5%                                       |
| Tex-200-F      | Asphaltic Concrete Combined Aggregate                                | >5/8" sieve: ± 5.0% points<br>(individual % retained)         |
|                |                                                                      | ≤5/8" sieve-No. 200: ± 3.0%<br>(individual % retained)        |
|                |                                                                      | Passing No. 200: ± 1.6%<br>points                             |
| Tex-206-F      | Compacting Test Specimens of Bituminous Mixtures                     | ± 1.0% laboratory-molded density in accordance with Tex-207-F |
| Tex-207-F      | Determining Density of Compacted Bituminous Mixtures                 | Laboratory-Molded Density:<br>± 1.0%                          |
|                |                                                                      | Laboratory-Molded Bulk Specific Gravity: ± 0.020              |
|                |                                                                      | In-place air voids (cores):<br>± 1.0%                         |
| Tex-227-F      | Theoretical Maximum Specific Gravity of Bituminous Mixtures          | ± 0.020                                                       |

|           |                                                                   |             |
|-----------|-------------------------------------------------------------------|-------------|
| Tex-236-F | Asphalt Content of Asphalt Paving Mixtures by the Ignition Method | $\pm 0.3\%$ |
|-----------|-------------------------------------------------------------------|-------------|



| Test Procedure | Description                                            | Tolerance                                   |
|----------------|--------------------------------------------------------|---------------------------------------------|
| Tex-418-A      | Compressive Strength of Cylindrical Concrete Specimens | 17% of mean <sup>1</sup> (4 × 8" specimen)  |
|                |                                                        | 14% of mean <sup>1</sup> (6 × 12" specimen) |

1. The difference between compared test results must not exceed the indicated percentage of the mean of the compared test results, where the mean is the average of the two test results.

EXAMPLE: Plasticity Index

Tolerance = 20% of the mean

|                          |    |
|--------------------------|----|
| Technician test value    | 18 |
| IA technician test value | 22 |
| Mean                     | 20 |
| 20% difference           | 4  |

Both values are within 20% of the mean.

# IA Annual Report

{Date}

Thomas L. Smith  
Independent Assurance Program Manager  
Construction (CST) Division  
Texas Department of Transportation  
125 East 11th Street  
Austin, TX 78701

RE: Annual Report of Independent Assurance (IA) Program Results – {Project Name} Dear Mr.

Smith:

In accordance with the requirements set forth in the TxDOT Quality Assurance Program for Design-Bid- Build Projects, the information below summarizes the results of system approach independent assurance (IA) testing conducted by our firm on the {Project Name} project for calendar year {XXXX}.

| Independent Assurance Program Results – {Year}         |                |
|--------------------------------------------------------|----------------|
| IA Activities                                          | {Project Name} |
| 1. Number of personnel evaluated under system approach |                |
| 2. Number of IA evaluations meeting tolerance          |                |
| 3. Number of IA evaluations not meeting tolerance      |                |
| 4. <u>Corrective actions:</u>                          |                |
|                                                        |                |

cc: Brett Haggerty, P.E.  
Materials and Pavements Section Director  
TxDOT – Construction Division

# Materials Certification Example Letter for Projects with Federal Oversight

{Date}

Al Alonzi

FHWA Texas Division Administration  
FHWA Texas Division Office  
300 East 8th Street  
Austin, TX 78701

RE: Materials Certification Letter

Project: SH Contract No.:  
CSJ:  
HWY:  
County:  
Federal-Aid Project No.:

Dear Mr. Alonzi:

This letter is to certify:

The results of the tests used in the acceptance program indicate that the materials incorporated in the construction work, and in the construction operations controlled by sampling and testing, were in conformity with the approved plans and specifications.

Both the Acceptance and Verification results were evaluated by an independent assurance sampling and testing program, the results of which were submitted to FHWA by the department in the Annual Report of Independent Assurance Program Results and independent of this materials certification.

- Exceptions to the plans and specifications are explained on the back hereof (or on attached sheet).
- There are no exceptions to the plans and specifications on this project.

Sincerely,

{TxDOT District Area Engineer or Director of Construction}, P.E.

{Title}

cc: Brett Haggerty, P.E.

Materials and Pavements Section Director  
TxDOT, Construction Division

# Materials Certification Example Letter for Projects with Non-Federal Oversight

{Date}

{TxDOT District Engineer}

{Title}

RE: Materials Certification Letter

Project: SH Contract No.:  
CSJ:  
HWY:  
County:

Dear Mr. {District Engineer}:

This letter is to certify:

The results of the tests used in the acceptance program indicate that the materials incorporated in the construction work, and in the construction operations controlled by sampling and testing, were in conformity with the approved plans and specifications.

Both the Acceptance and Verification results were evaluated by an independent assurance sampling and testing program, the results of which were submitted to CST in the Annual Report of Independent Assurance Program Results and independent of this materials certification.

- Exceptions to the plans and specifications are explained on the back hereof (or on attached sheet).
- There are no exceptions to the plans and specifications on this project.

Sincerely,

{TxDOT District Area Engineer or Director of Construction}, P.E.

{Title}

cc: Brett Haggerty, P.E.  
Materials and Pavements Section Director  
TxDOT, Construction Division.

## Archived Versions

The following archived versions of this document are available.

- Effective January 2016–April 2018:  
[ftp://ftp.dot.state.tx.us/pub/txdot-info/cst/qap\\_dbb\\_0116.pdf](ftp://ftp.dot.state.tx.us/pub/txdot-info/cst/qap_dbb_0116.pdf)



**APPENDIX B**  
**GUIDE SCHEDULE OF SAMPLING AND TESTING**

# **GUIDE SCHEDULE OF SAMPLING & TESTING FOR DESIGN-BID-BUILD (DBB) PROJECTS**

---

**MAY 2016**



## Using the Guide Schedule

Research of sampling and testing rates listed for project tests in the following Guide Schedule show that the Department's and the Contractor's risk of either rejecting "good" material or accepting "bad" material range from 20% to 40%.

To reduce this risk, we recommend that the sampling rate be increased during initial production. A four-fold increase in testing frequency will generally reduce risk to approximately 5%. The intent of increasing testing at the start of production is to insure that the Contractor's processes are in control and to establish acceptability requirements early.

There is a need to increase the frequency of testing for high-variability materials and when testing results do not meet specifications. The Engineer may require the Contractor to reimburse the Department for costs resulting from failing test results, in accordance with the specifications.

Materials incorporated in TxDOT projects are subjected to various quality assurance procedures such as testing (as outlined in this document), certification, quality monitoring, approved lists, etc. The Engineer and testing staff should familiarize themselves with materials to be used before work begins by reviewing the specifications and this document. Discuss material testing requirements with the Contractor.

Other testing required by the specifications, but not shown in the Guide Schedule, should be performed at a frequency necessary to provide adequate confidence that materials meet specifications.

NOTE: For projects subject to FHWA construction oversight activities, use the "[Letter of Certification of Materials Used](#)" to document reasons for material acceptance when a test fails. For all other projects, document the justification and explanation for acceptance of materials that fail project tests in the project file.

Assuring the quality of the product and proper incorporation of materials into the project begins with proper sampling practices. Sampling, testing, and construction inspection must be performed collaboratively to assure the specific attributes of the finished product reflect quality workmanship. Sampling guidance for hot-mixed asphalt is contained in Tex-225-F, "Random Selection of Bituminous Mixture Samples," and the respective specification for that material. All remaining materials are covered by method and materials specifications, to which the following applies.

For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows:

- Soils/flexible base: Vary sampling between stockpiling operations, completed stockpile, windrow, and project site. Vary the time of day sampling is performed.
- Aggregates: Sample aggregates nearest the point of incorporation into the work. Vary sampling between stockpiling operations, completed stockpile, belt sampling, and if deemed necessary, railroad cars/trucks. Vary the time of day sampling is performed.

- Concrete (structural and miscellaneous): Always sample as near as practicable to the point of placement. For strength testing, vary the time of day or the number of truck from which the concrete is sampled. Tests for slump, air, and temperature should be done often to ensure the consistent control of the concrete production (not applicable to miscellaneous concrete).

***This Guide Schedule is applicable to all contracts associated with the 2014 Standard Specifications.***

**TABLE I – EMBANKMENTS, SUBGRADES, BACKFILL, AND BASE COURSES**

|                                         |                                                   |             | PROJECT TESTS                                                                       |                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------------------|---------------------------------------------------|-------------|-------------------------------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT                     | TEST FOR                                          | TEST NUMBER | LOCATION OR TIME OF SAMPLING (D)                                                    | FREQUENCY OF SAMPLING (F)                         | REMARKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| EMBANKMENT<br>(CUTS & FILLS)            | Liquid Limit<br>(A)                               | Tex-104-E   | During stockpiling operations, from completed stockpile, or project site<br><br>(B) | Materials with PI ≤ 15: 10,000 CY                 | For Type A embankment or when required by the plans. This test may be waived for embankment cuts as directed by the Engineer. Determine a new liquid limit and plasticity index for each different material or notable change in material.<br><br>Sample in accordance with Tex-100-E.                                                                                                                                                                                                                                                                                     |
|                                         | Plasticity Index<br>(A)                           | Tex-106-E   |                                                                                     | Materials with PI > 15: 5,000 CY                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                         | Gradation                                         | Tex-110-E   |                                                                                     | Each 10,000 CY                                    | When shown on plans. This test may be waived for embankment cuts, as directed by the Engineer.<br><br>Sample in accordance with Tex-100-E.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                         | Moisture/Density                                  | Tex-114-E   |                                                                                     | As directed by the Engineer                       | Not required for ordinary compaction. Determine a new optimum moisture and maximum density for each different material or notable change in material.<br><br>Sample in accordance with Tex-100-E.                                                                                                                                                                                                                                                                                                                                                                          |
|                                         | In-place Density<br>(A)                           | Tex-115-E   | As designated by the Engineer                                                       | Fill: each 5,000 CY min. 1 per lift.              | Not required for ordinary compaction. Determine a new optimum moisture and maximum density according to Tex-114-E for each different material or notable change in material.<br><br>Correct the moisture contents measured by nuclear density gauge in Tex-115-E with the moisture contents determined in accordance with Tex-103-E, as necessary for control, for each different material or notable change in material and adjust the density accordingly. Materials such as RAP, gypsum, lime, cement, and iron ore tend to bias the counts for nuclear density gauges. |
| Cut: each 6,000 LF                      |                                                   |             |                                                                                     |                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| RETAINING WALL<br>(NON-SELECT BACKFILL) | As shown above for Embankment<br>(Cuts and Fills) |             | As shown above for Embankment<br>(Cuts and Fills)                                   | As shown above for Embankment<br>(Cuts and Fills) | Sample in accordance with Tex-100-E.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

|                                     |                           |           |                                                                                        |               |                                                                                                                                                                         |
|-------------------------------------|---------------------------|-----------|----------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RETAINING WALL<br>(SELECT BACKFILL) | Gradation                 | Tex-110-E | During stockpiling operations, from completed stockpile, or project site<br><b>(B)</b> | Each 5,000 CY | Sample in accordance with Tex-400-A.                                                                                                                                    |
|                                     | Resistivity<br><b>(A)</b> | Tex-129-E | During stockpiling operations, from completed stockpile, or project site<br><b>(B)</b> | Each 5,000 CY | For material with resistivity between 1,500 and 3,000 ohm-cm, determine chloride and sulfate content, as specified in Item 423.<br>Sample in accordance with Tex-400-A. |
|                                     | pH<br><b>(A)</b>          | Tex-128-E | During stockpiling operations, from completed stockpile, or project site<br><b>(B)</b> | Each 5,000 CY | Sample in accordance with Tex-400-A.                                                                                                                                    |

**TABLE I - EMBANKMENTS, SUBGRADES, BACKFILL, AND BASE COURSES**

|                                                        |                                |             | PROJECT TESTS                                                                         |                               |                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------|--------------------------------|-------------|---------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT                                    | TEST FOR                       | TEST NUMBER | LOCATION OR TIME OF SAMPLING (D)                                                      | FREQUENCY OF SAMPLING (F)     | REMARKS                                                                                                                                                                                                                                                                                                                                                                                          |
| RETAINING WALL<br>(SELECT BACKFILL)<br><br>(continued) | Soundness                      | Tex-411-A   | During stockpiling operations, or from completed stockpile                            | 1 per source, per project     | Test when backfill sources appear to contain particles such as shale, caliche, or other soft, poor-durability particles.<br><br>Sample in accordance with Tex-400-A.                                                                                                                                                                                                                             |
|                                                        | In-place Density<br><b>(A)</b> | Tex-115-E   | As designated by the Engineer.                                                        | 1 per backfill lift, per wall | Not required for rock backfill. For walls greater than 500 ft. in length, perform one test per lift for every 500 ft. in length. <b>(F)</b><br><br>Correct the moisture contents measured by nuclear density gauge in Tex-115-E with the moisture contents determined in accordance with Tex-103-E for each different material or notable change in material and adjust the density accordingly. |
| UNTREATED BASE COURSES                                 | Liquid Limit<br><b>(A)</b>     | Tex-104-E   | During stockpiling operations, from completed stockpile, or windrow<br><br><b>(B)</b> | Each 5,000 CY                 | Sample in accordance with Tex-400-A.                                                                                                                                                                                                                                                                                                                                                             |
|                                                        | Plasticity Index<br><b>(A)</b> | Tex-106-E   | During stockpiling operations, from completed stockpile, or windrow<br><br><b>(B)</b> | Each 5,000 CY                 |                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                        | Gradation<br><b>(A)</b>        | Tex-110-E   | During stockpiling operations, from completed stockpile, or windrow<br><br><b>(B)</b> | Each 5,000 CY                 | Sample in accordance with Tex-400-A.                                                                                                                                                                                                                                                                                                                                                             |
|                                                        | Moisture/Density               | Tex-113-E   | From completed stockpile at the source<br><b>(E)</b>                                  | Each 20,000 CY                | Not required for ordinary compaction.<br>Sample in accordance with Tex-400-A.                                                                                                                                                                                                                                                                                                                    |
|                                                        | Wet Ball Mill<br><b>(A)</b>    | Tex-116-E   | From completed stockpile at the source<br><b>(E)</b>                                  | Each 20,000 CY                | As required by the plans.<br>Sample in accordance with Tex-400-A.                                                                                                                                                                                                                                                                                                                                |



|  |                 |           |                                                  |                |                                                                                                                                                                                                                                                                                                                                                                                |
|--|-----------------|-----------|--------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | Strength<br>(A) | Tex-117-E | From completed<br>stockpile at the source<br>(E) | Each 20,000 CY | As required by the plans. When base material is from a source where the District has a record of satisfactory triaxial results, the frequency of testing may be reduced to one per 30,000 CY. If any one test falls below the minimum value required, the frequency of testing will return to the original frequency of 20,000 CY.<br><br>Sample in accordance with Tex-400-A. |
|--|-----------------|-----------|--------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**TABLE I – EMBANKMENTS, SUBGRADES, BACKFILL, AND BASE COURSES**

|                                   |                                |                                | PROJECT TESTS                    |                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                        |
|-----------------------------------|--------------------------------|--------------------------------|----------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT               | TEST FOR                       | TEST NUMBER                    | LOCATION OR TIME OF SAMPLING (D) | FREQUENCY OF SAMPLING (F)                                                         | REMARKS                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                        |
| UNTREATED BASE COURSES            | In-place Density<br><b>(A)</b> | Tex-115-E                      | As designated by the Engineer    | Each 3,000 CY,<br>min. 1 per lift                                                 | Correct the moisture contents measured by nuclear density gauge in Tex-115-E with the moisture contents determined in accordance with Tex-103-E, as necessary for control, for each different material or notable change in material and adjust the density accordingly. Materials such as RAP, gypsum, lime, cement, and iron ore tend to bias the counts for nuclear density gauges. |                                                                                                                                                                                                        |
|                                   | Thickness<br><b>(A)</b>        | Tex-140-E                      | As designated by the Engineer    | Each 3,000 CY                                                                     | Not required where survey grade control documents compliance.                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                        |
| TREATED SUBGRADE AND BASE COURSES | SUBGRADE BEFORE TREATMENT      | Organic Content                | Tex-148-E                        | As designated by the Engineer                                                     | 1 per 500 linear feet or 5,000 CY                                                                                                                                                                                                                                                                                                                                                      | Required for existing subgrade material and material imported from a borrow source. Soil survey and geologic maps may be used to determine sampling locations.<br>Sample in accordance with Tex-100-E. |
|                                   |                                | Sulfate Content                | Tex-145-E                        | As designated by the Engineer                                                     | 1 per 500 linear feet or 5,000 CY                                                                                                                                                                                                                                                                                                                                                      | Required for existing subgrade material and material imported from a borrow source. Soil survey and geologic maps may be used to determine sampling locations.<br>Sample in accordance with Tex-100-E. |
|                                   |                                | Liquid Limit<br><b>(A)</b>     | Tex-104-E                        | During stockpiling operations, from completed stockpile, or windrow<br><b>(B)</b> | Each 5,000 CY                                                                                                                                                                                                                                                                                                                                                                          | When central mix site or plant is used, windrow sampling may be waived.<br>Sample in accordance with Tex-400-A.                                                                                        |
|                                   |                                | Plasticity Index<br><b>(A)</b> | Tex-106-E                        | During stockpiling operations, from completed stockpile, or windrow<br><b>(B)</b> | Each 5,000 CY                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                        |

|                   |                             |           |                                                                                   |                |                                                                   |
|-------------------|-----------------------------|-----------|-----------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------|
| NEW BASE MATERIAL | Gradation<br><b>(A)</b>     | Tex-110-E | During stockpiling operations, from completed stockpile, or windrow<br><b>(B)</b> | Each 5,000 CY  | Sample in accordance with Tex-400-A.                              |
|                   | Wet Ball Mill<br><b>(A)</b> | Tex-116-E | From completed stockpile at the source<br><b>(E)</b>                              | Each 20,000 CY | As required by the plans.<br>Sample in accordance with Tex-400-A. |

**TABLE I – EMBANKMENTS, SUBGRADES, BACKFILL, AND BASE COURSES**

|                                         |                   |                          | PROJECT TESTS                    |                                                        |                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------|-------------------|--------------------------|----------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT                     | TEST FOR          | TEST NUMBER              | LOCATION OR TIME OF SAMPLING (D) | FREQUENCY OF SAMPLING (F)                              | REMARKS                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| TREATED<br>SUBGRADE AND<br>BASE COURSES | NEW BASE MATERIAL | Strength<br><b>(A)</b>   | Tex-117-E                        | From completed stockpile at the source<br><b>(E)</b>   | Each 20,000 CY                                                                              | As required by the plans. When base material is from a source where the District has a record of satisfactory triaxial results, the frequency of testing may be reduced to one per 30,000 CY. If any one test falls below the minimum value required, the frequency of testing will return to the original frequency of 20,000 CY.                                                                                                                                   |
|                                         | LIME              | Compliance with DMS-6350 | Tex-600-J                        | During delivery to project                             | Commercial Lime Slurry: each 200 tons of lime<br>Carbide Lime Slurry: each 100 tons of lime | Sample in accordance with Tex-400-A. Verify the source is listed on the current Material Producer List for <b>Lime</b> . Only materials appearing on the Material Producer List will be accepted. Sample frequency for Carbide Lime Slurry may be increased as directed by the Engineer.<br><br>For Hydrated Lime and Quick Lime project testing is not required but it is encouraged to sample and test the material at a rate of 1 per project as a best practice. |
|                                         | CEMENT            | Compliance with DMS-4600 |                                  | Railroad car, truck, or cement bins                    |                                                                                             | Verify the source is listed on the current Material Producer List for Cement. If not, sample and test in accordance with DMS-4600. <b>(C)</b>                                                                                                                                                                                                                                                                                                                        |
|                                         | FLY ASH MATERIAL  | Compliance with DMS-4615 |                                  | Project samples at location designated by the Engineer |                                                                                             | Verify the source is listed on the current Material Producer List for <b>Fly Ash</b> . Only materials from CST/M&P approved sources appearing on the Material Producer List for Fly Ash will be accepted. Project testing is not required but it is encouraged to sample and test the material at a rate of 1 per project as a best practice. <b>(C)</b>                                                                                                             |
|                                         |                   | Pulverization Gradation  | Tex-101-E<br>Part III            | Roadway, after pulverization and mixing                | As necessary for control                                                                    | At the beginning of the project, one test must be made for each 4,500 CY or 6,000 tons until the Engineer is satisfied that acceptable pulverization results are being obtained.<br><br>Sample in accordance with Tex-100-E.                                                                                                                                                                                                                                         |

|  |                  |                                          |                                              |                                                       |                |                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--|------------------|------------------------------------------|----------------------------------------------|-------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | COMPLETE MIXTURE | Soil-Cement Testing<br>Soil-Lime Testing | Tex-120-E, Part II, or<br>Tex-121-E, Part II | From roadway windrow<br>after treatment<br><b>(E)</b> | Each 20,000 CY | Not required for ordinary compaction. Determine a new moisture/density curve for each different or notable change in material. Perform Tex-120-E, Part II, for Cement Treated Material, and Tex-121-E, Part II, for Lime, Lime-Fly Ash, or Fly Ash Treated Material. If Tex-120-E, Part I, Tex-121-E, Part I, or Tex-127-E is performed prior to the project, this test may be waived.<br><br>Sample in accordance with Tex-100-E. |
|--|------------------|------------------------------------------|----------------------------------------------|-------------------------------------------------------|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**TABLE I – EMBANKMENTS, SUBGRADES, BACKFILL, AND BASE COURSES**

| MATERIAL OR PRODUCT                                                        |                      | TEST FOR                                 | TEST NUMBER                                                         | PROJECT TESTS                           |                                                                                                                                                         | REMARKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------|----------------------|------------------------------------------|---------------------------------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                            |                      |                                          |                                                                     | LOCATION OR TIME OF SAMPLING (D)        | FREQUENCY OF SAMPLING (F)                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| TREATED SUBGRADE AND BASE COURSES                                          | COMPLETE MIXTURE     | Soil-Cement Testing<br>Soil-Lime Testing | Tex-120-E, Part I,<br>Tex-121-E, Part I, or<br>Tex-127-E            | From roadway windrow<br>after treatment | As necessary for<br>control                                                                                                                             | Perform Tex-120-E, Part I, on cement treated material, and Tex-121-E, Part I, for lime-fly ash or fly ash treated material. Verifies the field strength by comparing results from the mix design. Performed at the discretion of Engineer.<br><br>Sample in accordance with Tex-100-E.                                                                                                                                                                                                               |
|                                                                            |                      | In-place Density<br><b>(A)</b>           | Tex-115-E                                                           | As designated by the<br>Engineer        | Each 3,000 CY,<br>min 1 per lift                                                                                                                        | Determine the appropriate moisture/density curve for each different material or notable change in material. Correct the moisture contents measured by nuclear density gauge in Tex-115-E with the moisture contents determined in accordance with Tex-103-E, as necessary for control, for each different material or notable change in material and adjust the density accordingly. Stabilizers and materials such as RAP, gypsum, and iron ore tend to bias the counts for nuclear density gauges. |
|                                                                            |                      | Thickness<br><b>(A)</b>                  | Tex-140-E                                                           | As designated by the<br>Engineer        | Each 3,000 CY                                                                                                                                           | Not required where survey grade control documents are used for compliance                                                                                                                                                                                                                                                                                                                                                                                                                            |
| RECLAIMED ASPHALT PAVEMENT (RAP), CRUSHED CONCRETE, and RECYCLED MATERIALS | Sulfate Content      | Tex-145-E                                | During stockpiling operations, from completed stockpile, or windrow | Each 5,000 CY                           | Required only for contractor furnished recycled material, including crushed concrete. Not required for RAP.<br><br>Sample in accordance with Tex-400-A. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                            | Deleterious Material | Tex-413-A                                |                                                                     |                                         | Required only for contractor furnished recycled material, including crushed concrete.<br><br>Sample in accordance with Tex-400-A.                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                            | Decantation          | Tex-406-A                                | During stockpiling operations, from completed stockpile, or windrow | Each 5,000 CY                           | Required only for contractor furnished RAP.<br>Sample in accordance with Tex-400-A.                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

**TABLE I – FOOTNOTES**

|          |                                                                                                                                                                                 |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|          |                                                                                                                                                                                                                                                                                                                                                    |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | Remarks field.                                                                                                                                                                                                                                                                                                                                     |
| <b>B</b> | Engineer will select any of these locations or any combinations thereof with the provision that the initial sample will be obtained from the completed stockpile at the source and at least one out of ten consecutive samples will be taken at the project site (from the windrow for treated and untreated bases and embankments when possible). |
| <b>C</b> | Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.                                                                                                                                                                                                                             |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| D | <p>For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows:</p> <ul style="list-style-type: none"> <li>• Soils/Flexible Base: For gradation, liquid limit, and plastic limit, vary sampling between stockpiling operations, completed stockpile, windrow, and project site. Vary the time of day sampling is performed.</li> <li>• Aggregates: Sample aggregates nearest the point of incorporation into the work. Vary sampling between stockpiling operations, completed stockpile, belt sampling, and if deemed necessary, railroad cars/trucks. Vary the time of day sampling is performed.</li> </ul> |
| E | The Engineer will sample from the completed stockpile at the source and test prior to placement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| F | Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |



**TABLE IA – ASPHALT STABILIZED BASE (Plant Mix)**

|                     |                                               |                        | PROJECT TESTS                                                               |                                                                                                                                                                        |                                                                                                                                                                                                                                                          |
|---------------------|-----------------------------------------------|------------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                                      | TEST NUMBER            | LOCATION OR TIME OF SAMPLING (C)                                            | FREQUENCY OF SAMPLING (D)                                                                                                                                              | REMARKS                                                                                                                                                                                                                                                  |
| AGGREGATE           | Gradation<br><b>(A)</b>                       | Tex-200-F,<br>Part I   | During stockpiling operations, from completed stockpile, or prior to mixing | Each 5,000 CY                                                                                                                                                          | Sample in accordance with Tex-400-A.                                                                                                                                                                                                                     |
|                     | Liquid Limit<br><b>(A)</b>                    | Tex-104-E              | During stockpiling operations, from completed stockpile, or prior to mixing | Each 5,000 CY                                                                                                                                                          | Sample in accordance with Tex-400-A.                                                                                                                                                                                                                     |
|                     | Plasticity Index<br><b>(A)</b>                | Tex-106-E              | During stockpiling operations, from completed stockpile, or prior to mixing | Each 5,000 CY                                                                                                                                                          |                                                                                                                                                                                                                                                          |
|                     | Wet Ball Mill or L. A. Abrasion<br><b>(A)</b> | Tex-116-E or Tex-410-A | During stockpiling operations, from completed stockpile, or prior to mixing | Each 20,000 CY                                                                                                                                                         | When L. A. Abrasion is specified, tests are not required when the published value of the source, as listed on the current Material Producer List for <b>BRSQC</b> , meets the project specifications.<br>Sample in accordance with Tex-400-A. <b>(B)</b> |
|                     | Coarse Aggregate Angularity<br><b>(A)</b>     | Tex-460-A,<br>Part I   | During stockpiling operations, from completed stockpile, or prior to mixing | 1 per project, per source                                                                                                                                              | Not required for crushed stone sources.<br>Sample in accordance with Tex-400-A.                                                                                                                                                                          |
|                     | Sand Equivalent                               | Tex-203-F              | Hot aggregate bins, feeder belt, or stockpile                               | 1 per project, per source                                                                                                                                              | When designated by the Engineer, test may be run on combined aggregates when multiple sources are used.<br>Sample in accordance with Tex-400-A.                                                                                                          |
| LIME                | Compliance with DMS-6350                      |                        | During delivery to the project                                              | Hydrated Lime: 1 per project<br>Commercial Lime Slurry: each 200 tons of lime <b>(D)</b><br>Carbide Lime Slurry: each 100 tons of lime <b>(D)</b><br>Quick Lime: 1 per | On projects requiring less than 50 tons, material from CST/M&P approved sources may be accepted on the basis of Producer's Certification without sampling.                                                                                               |

|                                                          |             |                    |                                                                             |                |                                      |
|----------------------------------------------------------|-------------|--------------------|-----------------------------------------------------------------------------|----------------|--------------------------------------|
|                                                          |             |                    |                                                                             | project        |                                      |
| RECLAIMED ASPHALT PAVEMENT (RAP), and RECYCLED AGGREGATE | Decantation | Tex-217-F, Part II | During stockpiling operations, from completed stockpile, or prior to mixing | Each 10,000 CY | Sample in accordance with Tex-400-A. |

**TABLE IA – ASPHALT STABILIZED BASE (Plant Mix)**

|                                 |                                                 |                        | PROJECT TESTS                                                                                     |                                                                    |                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|-------------------------------------------------|------------------------|---------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT             | TEST FOR                                        | TEST NUMBER            | LOCATION OR TIME OF SAMPLING (C)                                                                  | FREQUENCY OF SAMPLING (D)                                          | REMARKS                                                                                                                                                                                                                                                                                                                   |
| RECYCLED ASPHALT SHINGLES (RAS) | Decantation                                     | Tex-217-F,<br>Part III | During stockpiling operations, from completed stockpile, or prior to mixing                       | Each 10,000 CY                                                     | Sample in accordance with Tex-400-A.                                                                                                                                                                                                                                                                                      |
| ASPHALT BINDER                  | Compliance with Item 300 – Binder and Tack Coat |                        | Sampled, tested and preapproved by CST/M&P. Take project samples when designated by the Engineer. | 1 each for binder and tack coat per project, per grade, per source | Test at least one sample taken from the project. Sample tack coat at the distributor on the roadway in accordance with Tex-500-C, Part III. Sample binder at hot mix plant in accordance with Tex-500-C, Part II.<br><br>Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use. |
| COMPLETE MIXTURE                | Laboratory Density (A)                          | Tex-126-E              | Plant Mix (C)                                                                                     | 20,000 CY (25,000 tons)                                            | Sample in accordance with Tex-222-F.                                                                                                                                                                                                                                                                                      |
|                                 | Percent Asphalt (A)                             | Tex-236-F              | Plant Mix (C)                                                                                     | Each 1,500 CY (2,000 tons) or days production                      | Determine asphalt content correlation factors for ignition oven at a minimum of one per project. Sample in accordance with Tex-222-F.                                                                                                                                                                                     |
|                                 | Indirect Tensile Strength – Dry                 | Tex-226-F              | Plant Mix                                                                                         | 1 per project, per design                                          | Sample in accordance with Tex-222-F.                                                                                                                                                                                                                                                                                      |
|                                 | Moisture Susceptibility                         | Tex-530-C              | As designated by the Engineer                                                                     | 1 per project, per design                                          | This test may be waived, when shown on the plans. Sample in accordance with Tex-222-F.                                                                                                                                                                                                                                    |
| ROADWAY                         | In-Place Air Voids (A)                          | Tex-207-F              | Roadway cores, as designated by the Engineer (C, D)                                               | Each 2,500 CY (3,000 tons) or days production                      | Not required for ordinary compaction or when air void requirements are waived. Sample in accordance with Tex-222-F.                                                                                                                                                                                                       |

**TABLE IA – FOOTNOTES**

|          |                                                                                                                                                                                                |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field. |
| <b>B</b> | Engineer will select any of these locations or any combinations thereof with the provision that at least one out of ten consecutive samples will be taken at the project site (from the        |

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|          | windrow for treated and untreated bases and embankments when possible).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>C</b> | <p>For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows:</p> <ul style="list-style-type: none"> <li>• Soils/flexible base: Vary sampling between stockpiling operations, completed stockpile, windrow, and project site. Vary the time of day sampling is performed.</li> <li>• Aggregates: Sample aggregates nearest the point of incorporation into the work. Vary sampling between stockpiling operations, completed stockpile, belt sampling, and if deemed necessary, railroad cars/trucks. Vary the time of day sampling is performed.</li> </ul> |
| <b>D</b> | Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

**TABLE II – SEAL COAT**

|                     |                                                |                         | PROJECT TESTS                                 |                           |                                                                                                                                                                                                                                                            |
|---------------------|------------------------------------------------|-------------------------|-----------------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                                       | TEST NUMBER             | LOCATION OR TIME OF SAMPLING (C)              | FREQUENCY OF SAMPLING (D) | REMARKS                                                                                                                                                                                                                                                    |
| AGGREGATE           | Gradation<br><b>(A)</b>                        | Tex-200-F, Part I       | Stockpile (At source or at point of delivery) | One each 1,000 CY         | Rate may be reduced to one each 2,000 CY if the Engineer approves a contractor quality control plan.<br>Sample in accordance with Tex-221-F.                                                                                                               |
|                     | L. A. Abrasion<br><b>(A)</b>                   | Tex-410-A               | Stockpile                                     | 1 per 20,000 CY           | Verify the published value of the source, as listed on the current Material Producer List for <b>BRSQC</b> , meets the project specifications. If not, sample and test at 1 per 20,000 CY prior to use.<br>Sample in accordance with Tex-221-F. <b>(B)</b> |
|                     | Magnesium Soundness<br><b>(A)</b>              | Tex-411-A               | Stockpile                                     | 1 per 20,000 CY           | Verify the published value of the source, as listed on the current Material Producer List for <b>BRSQC</b> , meets the project specifications. If not, sample and test at 1 per 20,000 CY prior to use.<br>Sample in accordance with Tex-221-F. <b>(B)</b> |
|                     | Surface Aggregate Classification<br><b>(A)</b> | Tex-612-J,<br>Tex-411-A | Stockpile                                     | 1 per 20,000 CY           | Verify the published value of the source, as listed on the current Material Producer List for <b>BRSQC</b> , meets the project specifications. If not, sample and test at 1 per 20,000 CY prior to use.<br>Sample in accordance with Tex-221-F. <b>(B)</b> |
|                     | Pressure Slake<br><b>(A)</b>                   | Tex-431-A               | Stockpile                                     | 1 per 20,000 CY           | Same as above. Required only for lightweight aggregate.<br>Sample in accordance with Tex-221-F.                                                                                                                                                            |
|                     | Freeze Thaw<br><b>(A)</b>                      | Tex-432-A               | Stockpile                                     | 1 per 20,000 CY           | Same as above. Required only for lightweight aggregate.<br>Sample in accordance with Tex-221-F.                                                                                                                                                            |
|                     | Unit Weight                                    | Tex-404-A               | Stockpile                                     | 1 per 20,000 CY           | Same as above. Required only for lightweight aggregate.<br>Sample in accordance with Tex-221-F.                                                                                                                                                            |
|                     | 24 hr Water Absorption<br><b>(A)</b>           | Tex-433-A               | Stockpile                                     | 1 per 20,000 CY           | Same as above. Required only for lightweight aggregate.<br>Sample in accordance with Tex-221-F.                                                                                                                                                            |

|                             |                      |           |                                       |                                                                                 |
|-----------------------------|----------------------|-----------|---------------------------------------|---------------------------------------------------------------------------------|
| Coarse Aggregate Angularity | Tex-460-A            | Stockpile | 1 per 20,000 CY                       | Only required for crushed gravel.<br>Sample in accordance with Tex-221-F.       |
| Deleterious Material<br>(A) | Tex-217-F,<br>Part I | Stockpile | 1 per 10,000 CY                       | Not required for lightweight aggregate.<br>Sample in accordance with Tex-221-F. |
| Decantation<br>(A)          | Tex-406-A            | Stockpile | 1 per 10,000 CY                       | Sample in accordance with Tex-221-F.                                            |
| Flakiness Index             | Tex-224-F            | Stockpile | Frequency as directed by the Engineer | Sample in accordance with Tex-221-F.                                            |

**TABLE II – SEAL COAT**

| PROJECT TESTS       |                                       |             |                                                                                                                                      |                                                                        |                                                                                                                                                                                                                                                                                                |
|---------------------|---------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                              | TEST NUMBER | LOCATION OR TIME OF SAMPLING (C)                                                                                                     | FREQUENCY OF SAMPLING (D)                                              | REMARKS                                                                                                                                                                                                                                                                                        |
|                     | Micro Deval                           | Tex-461-A   | Stockpile                                                                                                                            | 1 per project or as necessary for control                              | Compare result to published value listed on the current Material Producer List for <b>BRSQC</b> . Submit sample to CST/M&P for Soundness and L.A. Abrasion testing when results differ by more than 3% points, unless otherwise directed by the Engineer. Sample in accordance with Tex-221-F. |
|                     | White Rock Count                      | Tex-220-F   | Stockpile                                                                                                                            |                                                                        | Required only for Limestone Rock Asphalt. Not required when CST/M&P provides inspection at the plant. Sample in accordance with Tex-221-F.                                                                                                                                                     |
|                     | Naturally Impregnated Bitumen Content | Tex-236-F   | Stockpile                                                                                                                            |                                                                        | Required only for Limestone Rock Asphalt. Not required when CST/M&P provides inspection at the plant. Sample in accordance with Tex-221-F.                                                                                                                                                     |
| PRECOATED AGGREGATE | Asphalt Content                       | Tex-236-F   | Stockpile                                                                                                                            | Frequency as directed by the Engineer when a target value is specified | Sample in accordance with Tex-221-F.                                                                                                                                                                                                                                                           |
| ASPHALT             | Compliance with Item 300              |             | Sampled, tested, and preapproved by CST/M&P. Take project samples when designated by the Engineer from the distributor or transport. | 1 per project, per grade, per source                                   | Sample in accordance with Tex-500-C. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use.                                                                                                                                                          |

**TABLE II – FOOTNOTES**

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field.                                                                                                                                                                                                                                                                                                                                                                     |
| <b>B</b> | Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>C</b> | For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows: <ul style="list-style-type: none"> <li>Aggregates: Sample aggregates nearest the point of incorporation into the work. Vary sampling between stockpiling operations, completed stockpile, belt sampling, and if deemed necessary, railroad cars/trucks. Vary the time of day sampling is performed.</li> </ul> |

|          |                                                                                                                                  |
|----------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>D</b> | Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests. |
|----------|----------------------------------------------------------------------------------------------------------------------------------|



**TABLE III – HYDRAULIC CEMENT CONCRETE – STRUCTURAL (Classes: C, F, H, S, CO, K, LMC, or SS)**

|                     |                  |                                                       | PROJECT TESTS                    |                                  |                                           |                                                                                                                                                                                                                                                                                     |
|---------------------|------------------|-------------------------------------------------------|----------------------------------|----------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR         | TEST NUMBER                                           | LOCATION OR TIME OF SAMPLING (D) | FREQUENCY OF SAMPLING (E)        | REMARKS                                   |                                                                                                                                                                                                                                                                                     |
| MINERAL AGGREGATE   | COARSE AGGREGATE | Decantation<br><b>(B)</b>                             | Tex-406-A                        | From stockpile at concrete plant | Each 20,000 CY of concrete (each source)  | Sample in accordance with Tex-400-A.                                                                                                                                                                                                                                                |
|                     |                  | Sieve Analysis<br><b>(A) (B)</b>                      | Tex-401-A                        |                                  | Each 1,000 CY of concrete (each source)   | Sample in accordance with Tex-400-A.<br>Test combined aggregate when used.                                                                                                                                                                                                          |
|                     |                  | Deleterious Materials<br><b>(B)</b>                   | Tex-413-A                        |                                  | 1 per project or as necessary for control | Sample in accordance with Tex-400-A.                                                                                                                                                                                                                                                |
|                     |                  | Los Angeles Abrasion<br><b>(A) (B)</b>                | Tex-410-A                        |                                  | Two, each source                          | Verify the value of the source, as listed on the current Material Producer list for <b>CRSQC</b> , meets the project specifications. If not, sample and submit to CST/M&P for testing prior to use in accordance with Tex-499-A.<br>Sample in accordance with Tex-400-A. <b>(C)</b> |
|                     |                  | 5-cycle Magnesium Sulfate Soundness<br><b>(A) (B)</b> | Tex-411-A                        |                                  | Two, each source                          | Verify the value of the source, as listed on the current <b>CRSQC</b> , meets the project specifications. <b>(C)</b>                                                                                                                                                                |
|                     | FINE AGGREGATE   | Sand Equivalent<br><b>(B)</b>                         | Tex-203-F                        | From stockpile at concrete plant | 1 per project or as necessary for control | Sample in accordance with Tex-400-A.<br>Test combined aggregate when used.                                                                                                                                                                                                          |
|                     |                  | Organic Impurities<br><b>(B)</b>                      | Tex-408-A                        |                                  | 1 per project, per source                 | Sample in accordance with Tex-400-A.                                                                                                                                                                                                                                                |
|                     |                  | Sieve Analysis<br><b>(A) (B)</b>                      | Tex-401-A                        |                                  | Each 1,000 CY of concrete (each source)   | Sample in accordance with Tex-400-A.                                                                                                                                                                                                                                                |
|                     |                  | Fineness Modulus<br><b>(B)</b>                        | Tex-402-A                        |                                  | 1 per project or as necessary for control | Sample in accordance with Tex-400-A.<br>Test combined aggregate when used. Test to confirm material variability when strength values are in question.                                                                                                                               |
|                     |                  | Deleterious Material<br><b>(B)</b>                    | Tex-413-A                        |                                  | 1 per project or as necessary for control | Sample in accordance with Tex-400-A.<br>Test to confirm material variability when strength values are in question.                                                                                                                                                                  |

|             |  |                                           |           |                                       |                                                                         |                                                                                                                                                                                                                                                                                                           |
|-------------|--|-------------------------------------------|-----------|---------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |  | Acid Insoluble Residue<br><b>(A) (B)</b>  | Tex-612-J |                                       | Two, each source                                                        | Only for concrete subject to direct traffic. Verify the value of the source, as listed on the current <b>CRSQC</b> , meets the project specifications. If not, sample and submit to CST/M&P for testing prior to use in accordance with Tex-499-A.<br><br>Sample in accordance with Tex-400-A. <b>(C)</b> |
| SILICA FUME |  | Compliance with<br>DMS-4630<br><b>(A)</b> |           | Railroad car, truck, bags<br>or silos | 1 per project, per<br>class of concrete<br>(For each type and<br>brand) | Sample in accordance with Tex-320-D.                                                                                                                                                                                                                                                                      |

**TABLE III – HYDRAULIC CEMENT CONCRETE – STRUCTURAL (Classes: C, F, H, S, CO, K, LMC, or SS)**

|                        |                                                            |              | PROJECT TESTS                                       |                                                                            |                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------|------------------------------------------------------------|--------------|-----------------------------------------------------|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT    | TEST FOR                                                   | TEST NUMBER  | LOCATION OR TIME OF SAMPLING (D)                    | FREQUENCY OF SAMPLING (E)                                                  | REMARKS                                                                                                                                                                                                                                                                                                                                                                       |
| METAKAOLIN             | Compliance with DMS-4635<br><b>(A)</b>                     |              | Railroad car, truck or silos                        | 1 per project, per class of concrete<br>(For each type and brand)          |                                                                                                                                                                                                                                                                                                                                                                               |
| MIX DESIGN             | Compliance with Standard Specification Item 421.4.A        |              | At source (if not approved)                         | Min. 1 design per class, per source                                        | Verify if cement, fly ash, slag cement, and chemical admixture sources are listed on the Material Producer Lists. If not, sample and submit to CST/M&P for testing. Water testing is contracted by the concrete supplier (commercial lab report to be reviewed by TxDOT).<br><br>Sample in accordance with Tex-300-D for cement and in accordance with Tex-733-I for fly ash. |
| JOINT MATERIAL         | Compliance with DMS-6300                                   |              |                                                     |                                                                            | Sample in accordance with Tex-500-C.<br><br>Verify the source is listed on the Material Producer List for <b>Joint Sealers</b> . If not, sample and test prior to use in accordance with DMS-6310. <b>(C)</b>                                                                                                                                                                 |
| CURING COMPOUND        | Compliance with DMS-4650                                   |              | Sampled at jobsite; tested by CST/M&P. See remarks. | When requested by CST                                                      | Only products listed on the Material Producer List for <b>Concrete Curing Compounds</b> will be allowed. When sample is requested by CST, sample in accordance with Tex-718-I. Ensure container has been agitated and mixed prior to sampling. <b>(C)</b>                                                                                                                     |
| EVAPORATION RETARDANTS | Compliance with DMS-4650                                   |              |                                                     |                                                                            | Only products listed on the Material Producer list for <b>Evaporation Retardants</b> will be allowed. <b>(C)</b>                                                                                                                                                                                                                                                              |
| REINFORCING STEEL      | Compliance with the Std. Specifications & Spec. Provisions | As Specified |                                                     |                                                                            | Only materials from CST/M&P approved sources listed on the Material Producer Lists for <b>Reinforcing Steel Mills</b> and <b>Seven Wire Steel Strand</b> will be allowed. <b>(C)</b>                                                                                                                                                                                          |
| MECHANICAL COUPLERS    | Compliance with DMS-4510                                   | Tex-743-I    | Sampled at jobsite; Tested by CST/M&P               | 3 couplers per lot (500 couplers) for each type, model, bar size and grade | Only materials from CST/M&P approved sources listed on the Material Producer List for <b>Mechanical Couplers</b> will be allowed. <b>(C)</b>                                                                                                                                                                                                                                  |
| LATEX                  | Compliance with DMS-4640 for concrete chemical admixtures  |              | Sampled at jobsite.                                 | Min. of 1 test per project                                                 | Sample in accordance with Tex-321-E.                                                                                                                                                                                                                                                                                                                                          |

|       |                                                      |  |                                                    |                         |                                                                                                                                                                                                                   |
|-------|------------------------------------------------------|--|----------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPOXY | Compliance with DMS-6100, unless otherwise specified |  | Sampled at jobsite if not pre-approved by CST/M&P. | 1 per batch or shipment | Verify the source is listed on the Material Producer List for <b>Epoxyes and Adhesives</b> . If not, sample and test prior to use in accordance with DMS-6100.<br>Sample in accordance with Tex-734-I. <b>(C)</b> |
|-------|------------------------------------------------------|--|----------------------------------------------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**TABLE III – HYDRAULIC CEMENT CONCRETE – STRUCTURAL (Classes: C, F, H, S, CO, K, LMC, or SS)**

|                     |                                           |                        | PROJECT TESTS                                                                           |                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------|-------------------------------------------|------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                                  | TEST NUMBER            | LOCATION OR TIME OF SAMPLING (D)                                                        | FREQUENCY OF SAMPLING (E)                                                                                                                                                    | REMARKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| CONCRETE            | Compressive Strength<br><b>(A)</b>        | Tex-418-A              | At point of concrete placement                                                          | 4 cylinders for each 60 CY per class, per day<br><br>(For bridge railing and traffic railing, testing may be reduced to 4 cylinders per 180 CY per class regardless of days) | Sampling must be in accordance with Tex-407-A.<br><br>Test two cylinders at 7 days, and if the average value is below the design strength as defined in Item 421 Table 8, test the remaining 2 cylinders at 28 days. If the average value of the 2 cylinders tested at 7 days meets the minimum design strength listed in Item 421 Table 8, the 2 remaining cylinders are not required to be tested.                                                                   |
| CONCRETE            | Slump                                     | Tex-415-A              |                                                                                         | 1 test per 4 strength specimens                                                                                                                                              | Sample in accordance with Tex-407-A.<br><br>Perform slump and temperature tests on the same load from which strength test specimens are made.<br><br>Perform entrained air test only when entrained air concrete is specified in the plans.<br><br>Check temperature of every load for bridge slabs and mass concrete placements.<br><br>Contractor's required testing will be in accordance with specification requirements for the appropriate specification Item #. |
|                     | Entrained Air<br><b>(A)</b>               | Tex-416-A or Tex-414-A |                                                                                         |                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                     | Temperature of Concrete<br><b>(A)</b>     | Tex-422-A              |                                                                                         |                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                     | Slab Thickness and Depth of Reinforcement | Tex-423-A, Part II     | During dry run and during concrete placement (Bridge decks and direct traffic culverts) | 1 per span                                                                                                                                                                   | Min 6–Max 18 locations per span                                                                                                                                                                                                                                                                                                                                                                                                                                        |

**TABLE III – FOOTNOTES**

|          |                                                                                                                                                                                                |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field. |
| <b>B</b> | These Project Tests may be used for one or more projects being furnished concrete from the same plant during the same period.                                                                  |
| <b>C</b> | Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.                                                                         |

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>D</b> | <p>For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows:</p> <ul style="list-style-type: none"><li>• <b>Aggregates:</b> Sample aggregates nearest the point of incorporation into the work. Vary sampling between stockpiling operations, completed stockpile, and if deemed necessary, railroad cars/trucks. Vary the time of day sampling is performed.</li><li>• <b>Concrete (structural):</b> Always sample as near as practicable to the point of placement. For strength testing, vary the time of day or the number of truck from which the concrete is sampled. Test often for slump, air, and temperature to ensure the consistent control of the concrete production.</li></ul> |
| <b>E</b> | Each test performed that is based on a quantity of material is considered "or fraction thereof" for calculating number of tests.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

**TABLE IV – HYDRAULIC CEMENT CONCRETE – NON-STRUCTURAL CONCRETE (Classes: A, B, or E)**

|                     |                                            |             | PROJECT TESTS                      |                                                            |                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------|--------------------------------------------|-------------|------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                                   | TEST NUMBER | LOCATION OR TIME OF SAMPLING (B)   | FREQUENCY OF SAMPLING (C)                                  | REMARKS                                                                                                                                                                                                                                                                                                                                                                |
| CONCRETE            | Compressive Strength<br><b>(A)</b>         | Tex-418-A   | At point of concrete placement     | 2 cylinders per 180 CY, per class                          | Sampling must be in accordance with Tex-407-A. Strength will be determined by 7-day specimens.                                                                                                                                                                                                                                                                         |
| MIX DESIGN          | Compliance with the Standard Specification |             | At source if not approved.         | Min. 1 design per class, per source                        | Verify if cement, fly ash, slag cement, and chemical admixture sources are listed on the Material Producer Lists. If not, sample and submit to CST/M&P for testing. Sample in accordance with Tex-300-D for cement and in accordance with Tex-733-I for fly ash. Water testing is contracted by the concrete supplier (commercial lab report to be reviewed by TxDOT). |
| SILICA FUME         | Compliance with DMS-4630                   |             | Railroad car, truck, bags or silos | 1 test per project, per class<br>(for each type and brand) | Sample in accordance with Tex-320-D.                                                                                                                                                                                                                                                                                                                                   |
| METAKAOLIN          | Compliance with DMS-4635                   |             | Railroad car, truck or silos       | 1 test per project, per class<br>(for each type and brand) |                                                                                                                                                                                                                                                                                                                                                                        |

**TABLE IV – FOOTNOTES**

|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the Site Manager Remarks field.                                                                                                                                                                                                                                                                                                       |
| <b>B</b> | For acceptance testing, especially that which directly determines payment for the Contractor, sampling personnel should provide randomness in sampling by avoiding patterned sampling routines. Examples of such sampling practices are as follows: <ul style="list-style-type: none"> <li>Concrete (miscellaneous): Always sample as near as practicable to the point of placement. For strength testing, vary the time of day or the number of truck from which the concrete is sampled.</li> </ul> |
| <b>C</b> | Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.                                                                                                                                                                                                                                                                                                                                                                      |

**TABLE V – HYDRAULIC CEMENT CONCRETE PAVEMENT (Classes: P or HES)**

|                     |                  |                                         | PROJECT TESTS                |                                  |                                                                   |                                                                                                                                                                                                                                           |
|---------------------|------------------|-----------------------------------------|------------------------------|----------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR         | TEST NUMBER                             | LOCATION OR TIME OF SAMPLING | FREQUENCY OF SAMPLING (D)        | REMARKS                                                           |                                                                                                                                                                                                                                           |
| MINERAL AGGREGATE   | COARSE AGGREGATE | Decantation                             | Tex-406-A                    | From stockpile at concrete plant | Each 20,000 CY of concrete (each source)                          | Sample in accordance with Tex-400-A.                                                                                                                                                                                                      |
|                     |                  | Sieve Analysis (A)                      | Tex-401-A                    |                                  | As necessary for control                                          | Sample in accordance with Tex-400-A.<br>Test combined aggregate when used.                                                                                                                                                                |
|                     |                  | Deleterious Materials                   | Tex-413-A                    |                                  | Each 20,000 CY of concrete (each source)                          | Sample in accordance with Tex-400-A.                                                                                                                                                                                                      |
|                     |                  | L.A. Abrasion (A)                       | Tex-410-A                    |                                  | Two, each source                                                  | Verify the value of the source, as listed on the current CRSQC, meets the project specifications. If not, sample and submit to CST/M&P for testing prior to use in accordance with Tex-499-A.<br>Sample in accordance with Tex-400-A. (C) |
|                     |                  | 5-Cycle Magnesium Sulfate Soundness (A) | Tex-411-A                    |                                  |                                                                   |                                                                                                                                                                                                                                           |
|                     | FINE AGGREGATE   | Sand Equivalent                         | Tex-203-F                    | From stockpile at concrete plant | Each 3,000 CY of concrete (Each source or combination of sources) | Sample in accordance with Tex-400-A.<br>Test combined aggregate when used. No less than one per week's production.                                                                                                                        |
|                     |                  | Organic Impurities                      | Tex-408-A                    |                                  | 1 per project, per source                                         | Sample in accordance with Tex-400-A.                                                                                                                                                                                                      |
|                     |                  | Sieve Analysis (A)                      | Tex-401-A                    |                                  | As necessary for control                                          | Sample in accordance with Tex-400-A.<br>Test combined aggregate when used.                                                                                                                                                                |
|                     |                  | Fineness Modulus (B)                    | Tex-402-A                    |                                  |                                                                   |                                                                                                                                                                                                                                           |
|                     |                  | Deleterious Material (B)                | Tex-413-A                    |                                  | Each 20,000 CY of concrete (each source)                          | Sample in accordance with Tex-400-A.                                                                                                                                                                                                      |
|                     |                  | Acid Insoluble (A)                      | Tex-612-J                    |                                  | 1 per project, per source                                         | Verify the value of the source, as listed on the current CRSQC, meets the project specifications. If not, sample and submit to CST/M&P for testing prior to use in accordance with Tex-499-A.<br>Sample in accordance with Tex-400-A. (C) |



|            |                                                          |  |                            |                                      |                                                                                                                                                                                                                                                                                                                                                                                       |
|------------|----------------------------------------------------------|--|----------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MIX DESIGN | Compliance with the Standard Specifications Item 421.4.A |  | At source, if not approved | Min. 1 design, per class, per source | Verify if cement, fly ash, ground granulated blast furnace slag, and admixture sources are listed on the Material Producer List. If not, sample and submit to CST/M&P for testing. Sample in accordance with Tex-300-D for cement and in accordance with Tex-733-I for fly ash. Water testing is contracted by the concrete supplier (commercial lab report to be reviewed by TxDOT). |
|------------|----------------------------------------------------------|--|----------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**TABLE V – HYDRAULIC CEMENT CONCRETE PAVEMENT (Classes: P or HES)**

|                         |                                                            |              | PROJECT TESTS                                                                           |                                                                  |                                                                                                                                                                                                                                                    |
|-------------------------|------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT     | TEST FOR                                                   | TEST NUMBER  | LOCATION OR TIME OF SAMPLING                                                            | FREQUENCY OF SAMPLING (D)                                        | REMARKS                                                                                                                                                                                                                                            |
| SILICA FUME             | Compliance with DMS-4630                                   |              | Railroad car, truck, bags or silos                                                      | 1 per project per class of concrete<br>(For each type and brand) | Sample in accordance with Tex-320-D.                                                                                                                                                                                                               |
| METAKAOLIN              | Compliance with DMS-4635                                   |              | Railroad car, truck or silos                                                            | 1 per project per class of concrete<br>(For each type and brand) | Sample in accordance with Tex-320-D.                                                                                                                                                                                                               |
| JOINT MATERIAL          | Compliance with DMS-6310                                   |              | Sampled at jobsite if not sampled at source by CST/M&P; tested by CST/M&P. See remarks. | 1 per batch or shipment                                          | Sample in accordance with Tex-500-C.<br>Sampling may be waived when the source is listed on the Material Producer List for <b>Joint Sealers</b> . (C)                                                                                              |
| CURING COMPOUND         | Compliance with DMS-4650                                   |              | Sampled at jobsite; tested by CST/M&P. See remarks.                                     | When requested by CST                                            | Only products listed on the Material Producer List for <b>Concrete Curing Compounds</b> will be allowed. When sample is requested by CST, sample in accordance with Tex-718-I. Ensure container has been agitated and mixed prior to sampling. (C) |
| EVAPORATION RETARDANTS  | Compliance with DMS-4650                                   |              |                                                                                         |                                                                  | Only products listed on the Material Producer List for <b>Evaporation Retardants</b> will be allowed. (C)                                                                                                                                          |
| REINFORCING STEEL       | Compliance with the Std. Specifications & Spec. Provisions | As Specified |                                                                                         |                                                                  | Only materials from CST/M&P approved sources listed on the Material Producer List for <b>Reinforcing Steel Mills</b> and <b>Seven Wire Steel Strand</b> will be accepted. (C)                                                                      |
| MULTIPLE PIECE TIE BARS | Compliance with DMS-4515                                   | Tex-712-I    | Sampled at jobsite if not sampled at source by CST/M&P; tested by CST/M&P. See remarks. | Refer to Tex-711-I for sampling rates                            | Only materials from CST/M&P approved sources listed on the Material Producer List for <b>Multiple Piece Tie-bars for Concrete Pavements</b> will be allowed. Sample in accordance with Tex-734-I.                                                  |

|       |                          |  |                                                                 |                      |                                                                                                                                                                                                                |
|-------|--------------------------|--|-----------------------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPOXY | Compliance with DMS-6100 |  | Sampled at jobsite if not pre-approved by CST/M&P. See remarks. | 1 batch per shipment | Verify the source is listed on the Material Producer List for <b>Epoxies and Adhesives</b> . If not, sample and test prior to use in accordance with DMS-6100. Sample in accordance with Tex-734-I. <b>(C)</b> |
|-------|--------------------------|--|-----------------------------------------------------------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**TABLE V – HYDRAULIC CEMENT CONCRETE PAVEMENT (Classes: P or HES)**

| TABLE V – HYDRAULIC CEMENT CONCRETE PAVEMENT (Classes: P or HES) |                             |                           |                                                        |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------|-----------------------------|---------------------------|--------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                  |                             |                           | PROJECT TESTS                                          |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| MATERIAL OR PRODUCT                                              | TEST FOR                    | TEST NUMBER               | LOCATION OR TIME OF SAMPLING                           | FREQUENCY OF SAMPLING (D)                                   | REMARKS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CONCRETE                                                         | Strength<br><b>(A) (B)</b>  | Tex-448-A or<br>Tex-418-A | At point of concrete<br>placement                      | 2 cylinders for every<br>10 contractor job<br>control tests | <p>Sample in accordance with Tex-407-A.</p> <p>When the contract requires the project testing to be by the Engineer, the frequency and job control testing will be in accordance with the item of work.</p> <p>Split sample verification testing used when contractor performs job control testing.</p> <p>When job control testing by the contractor is waived by the plans, the frequency of sampling will be one test (2 specimens) for each 3,000 SY of concrete or fraction thereof or per day and split sample verification testing will be waived.</p> <p>Contractor's required testing will be in accordance with specification requirements for the appropriate specification Item #.</p> |
|                                                                  | Slump                       | Tex-415-A                 | At time and location<br>strength specimens<br>are made | 1 test for every<br>10 contractor job<br>control tests.     | <p>Sample in accordance with Tex-407-A.</p> <p>Slump is not required for slip-formed pavement.</p> <p>Perform slump and temperature tests on the same load from which the strength specimens are made.</p> <p>Perform entrained air test only when entrained air concrete is specified in the plans.</p> <p>Contractor's required testing will be in accordance with specification requirements for the appropriate specification Item #.</p>                                                                                                                                                                                                                                                      |
|                                                                  | Entrained Air<br><b>(A)</b> | Tex-416-A or<br>Tex-414-A |                                                        |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                  | Temperature                 | Tex-422-A                 |                                                        |                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                  | Thickness                   | Tex-423-A                 | Center of paving<br>machine                            | Every 500 feet                                              | <p>Methods other than Tex-423-A may be shown on the plans.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|  |                                                                |                   |                                                 |                                                                                                                                                                                                                                                                                      |
|--|----------------------------------------------------------------|-------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>Ride Quality<br/>Surface Test<br/>Type B<br/><b>(A)</b></p> | <p>Tex-1001-S</p> | <p>Final riding surface of<br/>travel lanes</p> | <p>Engineer may verify contractor's results for surface test Type B. For traditional design-bid-build TxDOT projects, CST has contracted with TTI to perform random ride verification at 10% frequency.</p> <p>Results from surface test Type A are not required to be reported.</p> |
|--|----------------------------------------------------------------|-------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**TABLE V – FOOTNOTES**

|          |                                                                                                                                                                                                |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field. |
| <b>B</b> | When a project test does not meet the specified strength requirements and a reduced pay factor is assigned, document the analysis on the Letter of Certification of Materials Used.            |
| <b>C</b> | Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.                                                                         |
| <b>D</b> | Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.                                                               |

**TABLE VI – ASPHALT CONCRETE PAVEMENT (Items 341, 342, 344, 346, 347 and 348)**

(All testing as noted in Table VI may be waived for exempt production as defined by specification.)

|                     |                                                              |             | PROJECT TESTS                                                                                                  |                                                                    |                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------|--------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                                                     | TEST NUMBER | LOCATION<br>(Per Design)                                                                                       | FREQUENCY OF<br>SAMPLING (E)                                       | REMARKS                                                                                                                                                                                                                                                                                                                                                                |
| COARSE AGGREGATE    | L. A. Abrasion<br><b>(A)</b>                                 | Tex-410-A   | Stockpile<br><b>(B)</b>                                                                                        | 1 per project, per<br>source                                       | Verify the published value of the source, as listed on the current Material Producer list for <b>BRSQC</b> , meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CST/M&P for testing prior to use in accordance with Tex-499-A. <b>(C)</b>                                                                                     |
|                     | Magnesium Sulfate<br>Soundness<br><b>(A)</b>                 | Tex-411-A   |                                                                                                                |                                                                    |                                                                                                                                                                                                                                                                                                                                                                        |
|                     | Surface Aggregate<br>Classification<br><b>(A)</b>            | Tex-499-A   |                                                                                                                | 1 per project, per<br>source                                       |                                                                                                                                                                                                                                                                                                                                                                        |
|                     | Micro Deval                                                  | Tex-461-A   |                                                                                                                | 1 per project, per<br>aggregate source                             |                                                                                                                                                                                                                                                                                                                                                                        |
| COMBINED AGGREGATE  | Sand Equivalent                                              | Tex-203-F   | Stockpiles, hot bins or feeder belts                                                                           | 1 per project, per source, per design                              | Does not apply to Item 342.<br>Sample in accordance with Tex-221-F. The timing of when the test is performed is at the discretion of the Engineer.                                                                                                                                                                                                                     |
| ASPHALT BINDER      | Compliance with Item 300<br>Binder & Tack Coat<br><b>(A)</b> |             | Sampled, tested and pre-approved by CST/M&P. Project test sampled at the Plant for Binder & Road for Tack Coat | 1 each for binder and tack coat per project, per grade, per source | Test a minimum of one sample taken from the project. Sample tack coat at the distributor on the roadway in accordance with Tex-500C, Part III. Sample binder at hot mix plant in accordance with Tex-500-C, Part II. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use.                                                  |
| MIX DESIGN          | Compliance with applicable specification                     | Tex-204-F   | At source (if not approved)                                                                                    | Min 1 design per Mix Type and Asphalt Grade                        | Verify that aggregates, recycled asphalt pavement, recycled asphalt shingles, mineral filler, asphalt binder, anti-stripping additives, and warm mix systems are on the Material Producer List where applicable and that they meet project specification requirements. Project sampling and testing may be conducted on individual materials as necessary for control. |

**TABLE VI – ASPHALT CONCRETE PAVEMENT (Items 341, 342, 344, 346, 347 and 348)**

(All testing as noted in Table VI may be waived for exempt production as defined by specification.)

|                     |                                   |                    | PROJECT TESTS                   |                                        | PROJECT INDEPENDENT ASSURANCE TESTS |                                                                   |                                                                                                                                                                                                                                   |
|---------------------|-----------------------------------|--------------------|---------------------------------|----------------------------------------|-------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                          | TEST NUMBER        | LOCATION                        | FREQUENCY (Per Design)                 | LOCATION                            | FREQUENCY                                                         | REMARKS                                                                                                                                                                                                                           |
| COMPLETE MIXTURE    | Asphalt Content (%) (A)           | Tex-236-F          | Engineer Truck Sample (D)       | Minimum 1 per Lot                      |                                     |                                                                   | Sample in accordance with Tex-222-F.<br>Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.                                                                                          |
|                     | Voids in Mineral Aggregates (VMA) | Tex-207-F          | Truck Sample Plant Produced (D) | 1 per Sublot                           | Truck                               | 1 per 10 Lots only if compactor is shared by Contractor and State | Sample in accordance with Tex-222-F.<br>Does not apply to Item 342, "Permeable Friction Course."<br>Contractor's required testing will be in accordance with specification requirements for the appropriate specification Item #. |
|                     | Gradation (A)                     | Tex-236-F          | Engineer Truck Sample (D)       | Minimum 1 per 12 Sublots (E)           |                                     |                                                                   | Sample in accordance with Tex-222-F.<br>Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.                                                                                          |
|                     | Boil Test                         | Tex-530-C          | Truck Sample                    | 1 per project                          |                                     |                                                                   | Sample in accordance with Tex-222-F.<br>Unless waived by the Engineer.                                                                                                                                                            |
|                     | Indirect Tensile Strength – Dry   | Tex-226-F          |                                 |                                        |                                     |                                                                   | Sample in accordance with Tex-222-F.<br>Unless waived by the Engineer.<br>Does not apply to Items 342, 346, and 348.                                                                                                              |
|                     | Moisture Content                  | Tex-212-F, Part II | Engineer Truck Sample           |                                        |                                     |                                                                   | Sample in accordance with Tex-222-F.                                                                                                                                                                                              |
|                     | Lab Molded Density (A)            | Tex-207-F          | Truck Sample (D)                | 1 per Sublot<br>1 per Lot for Item 347 | Truck                               | 1 per 10 Lots only if compactor is shared by Contractor and State | Sample in accordance with Tex-222-F.<br>Contractor's required testing will be in accordance with specification requirements for the appropriate specification Item #.                                                             |



|                                  |           |                          |                                            |  |  |                                                                                                  |
|----------------------------------|-----------|--------------------------|--------------------------------------------|--|--|--------------------------------------------------------------------------------------------------|
| Drain Down Test<br><b>(A)</b>    | Tex-235-F | Engineer Truck<br>Sample | 1 per project<br>1 per Lot for Item<br>342 |  |  | Sample in accordance with Tex-222-F.<br>Not required for Item 341 and Item 344.                  |
| Hamburg Wheel Test<br><b>(A)</b> | Tex-242-F | Engineer Truck<br>Sample | 1 per project                              |  |  | Sample in accordance with Tex-222-F. Sample<br>during production.<br>Does not apply to Item 348. |
| Overlay Test                     | Tex-248-F | Engineer Truck<br>Sample | 1 per project                              |  |  | Sample in accordance with Tex-222-F.<br>Does not apply to Items 341, 344, and 348.               |

**TABLE VI – ASPHALT CONCRETE PAVEMENT (Items 341, 342, 344, 346, 347, and 348)**

(All testing as noted in Table VI may be waived for exempt production as defined by specification.)

|                     |                                        |                        | PROJECT TESTS                            |                           |                                                                                                                                                                                                                                                                          |
|---------------------|----------------------------------------|------------------------|------------------------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                               | TEST NUMBER            | LOCATION                                 | FREQUENCY<br>(Per Design) | REMARKS                                                                                                                                                                                                                                                                  |
| ROADWAY             | In-Place Air Voids<br><b>(A)</b>       | Tex-207-F              | Roadway<br><b>(D)</b>                    | 2 cores per Sublot        | Two cores taken per Sublot and averaged. Sample in accordance with Tex-222-F.<br>Does not apply to Items 342, 347, and 348.                                                                                                                                              |
| ROADWAY             | Segregation Profile<br><b>(A)</b>      | Tex-207-F,<br>Part V   | Roadway                                  | 1 per project             | Not required when Contractor uses thermal imaging system. Does not apply to Items 342, 347, and 348.                                                                                                                                                                     |
|                     | Joint Density<br><b>(A)</b>            | Tex-207-F,<br>Part VII | Roadway                                  | 1 per project             |                                                                                                                                                                                                                                                                          |
|                     | Thermal Profile                        | Tex-244-F              | Immediately behind paver                 | 1 per project             | Not required when Contractor uses thermal imaging system.                                                                                                                                                                                                                |
|                     | Ride Quality Test Type B<br><b>(A)</b> | Tex-1001-S             | Final riding surface of travel lanes     | 1 per project             | Engineer may verify Contractor's results for surface test Type B. For traditional design-bid-build TxDOT projects, CST has contracted with TTI to perform random ride verification at 10% frequency.<br>Results for surface test Type A are not required to be reported. |
|                     | Permeability                           | Tex-246-F              | Roadway                                  | 1 per project             | Only applies to Items 342, 347, and 348.                                                                                                                                                                                                                                 |
| FABRIC UNDERSEAL    | Compliance with DMS-6220               |                        | Sampled, tested, and approved by CST/M&P |                           | Sampling must be in accordance with Tex-735-I.<br>Verify the source is listed on the current Material Producer List for <b>Silt Fence, Filter Fabric, and Fabric Underseals</b> . If not, sample and test prior to use in accordance with DMS-6220.                      |

**TABLE VI – FOOTNOTES**

|          |                                                                                                                                                                                                                                                                                                                                                        |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field. This letter is required only for Asphalt Content and/or Gradation when production of complete mixture is suspended as required by QC/QA specifications. |
| <b>B</b> | Sampling may be performed at the plant, quarry, or both. Aggregate properties may be re-tested at any time during the project. These project tests may be used for one or more projects furnishing hot mix with the same aggregate source.                                                                                                             |
| <b>C</b> | Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.                                                                                                                                                                                                                                 |

|          |                                                                                                                                  |
|----------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>D</b> | Perform random sampling as specified in Tex-225-F, "Random Selection of Bituminous Mixture Samples."                             |
| <b>E</b> | Each test performed that is based on a quantity of material is considered "or fraction thereof" for calculating number of tests. |

**TABLE VII – ASPHALT CONCRETE PAVEMENT (Items 334)**

(Refer to DMS-9210, “Limestone Rock Asphalt (LRA),” for testing requirements for Item 330.)

|                     |                                                                  |                                                | PROJECT TESTS                                                                                                  |                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------|------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                                                         | TEST NUMBER                                    | LOCATION                                                                                                       | FREQUENCY<br>(Per Design) (F)                                      | REMARKS                                                                                                                                                                                                                                                                                                                                                                                                             |
| COARSE AGGREGATE    | L. A. Abrasion<br><b>(A)</b>                                     | Tex-410-A                                      | Stockpile<br><b>(B)</b>                                                                                        | 1 per project,<br>per source                                       | Verify the published value of the source, as listed on the current Material Producer List for <b>BRSQC</b> , meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CST/M&P for testing prior to use in accordance with Tex-499-A. <b>(D)</b><br><br>Sample in accordance with Tex-221-F. Testing frequency may be reduced or eliminated based on a satisfactory test history. |
|                     | Magnesium Sulfate Soundness<br><b>(A)</b>                        | Tex-411-A                                      |                                                                                                                |                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                     | Micro Deval                                                      | Tex-461-A                                      |                                                                                                                |                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                     |                                                                  | Surface Aggregate Classification<br><b>(A)</b> | Tex-499-A                                                                                                      | Stockpile<br><b>(B)</b>                                            | 1 per project, per source                                                                                                                                                                                                                                                                                                                                                                                           |
| COMBINED AGGREGATE  | Sand Equivalent                                                  | Tex-203-F                                      | Stockpiles, hot bins or feeder belts                                                                           | 1 per project, per source                                          | Sample in accordance with Tex-221-F. The timing of when the test is performed is at the discretion of the Engineer.                                                                                                                                                                                                                                                                                                 |
| ASPHALT BINDER      | Compliance with Item 300<br>Binder & Tack Coat<br><b>(A) (C)</b> |                                                | Sampled, tested and pre-approved by CST/M&P. Project test sampled at the Plant for Binder & Road for Tack Coat | 1 each for binder and tack coat per project, per grade, per source | Test a minimum of one sample from production. Sample tack coat at the distributor on the roadway in accordance with Tex-500-C, Part III. Sample binder at hot mix plant in accordance with Tex-500-C, Part II. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use.                                                                                                     |
| MIX DESIGN          | Compliance with applicable specification                         | Tex-204-F                                      | At source (if not approved)                                                                                    | Min 1 design per Mix Type and Asphalt Grade                        | Verify that aggregates, recycled asphalt pavement, recycled asphalt shingles, mineral filler, asphalt binder, anti-stripping additives, and warm mix systems are on the Material Producer List where applicable and that they meet project specification requirements. Project sampling and testing may be conducted in individual materials as necessary for control.                                              |
|                     | Asphalt Content (%)<br><b>(A)</b>                                | Tex-236-F                                      | Engineer Truck Sample<br><b>(E)</b>                                                                            | Minimum of 1 per 5,000 tons                                        | Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.                                                                                                                                                                                                                                                                               |

|                  |                                   |           |                                 |                          |                                                                                                                                       |
|------------------|-----------------------------------|-----------|---------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| COMPLETE MIXTURE | Voids in Mineral Aggregates (VMA) | Tex-207-F | Truck Sample Plant Produced (E) | 1 per 5,000 tons         | Sample in accordance with Tex-222-F.                                                                                                  |
|                  | Gradation (A)                     | Tex-236-F | Truck Sample                    | Minimum 1 per 5,000 tons | Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project. |
|                  | Boil Test                         | Tex-530-C |                                 | 1 per project            | Sample in accordance with Tex-222-F. The timing of when the test is performed is at the discretion of the Engineer.                   |

**TABLE VII – ASPHALT CONCRETE PAVEMENT (Items 334)**

(Refer to DMS-9210, “Limestone Rock Asphalt (LRA),” for testing requirements for Item 330.)

|                     |                                 |                       | PROJECT TESTS                        |                               |                                                                                                                                                                                                                                                                        |
|---------------------|---------------------------------|-----------------------|--------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                        | TEST NUMBER           | LOCATION                             | FREQUENCY<br>(Per Design) (F) | REMARKS                                                                                                                                                                                                                                                                |
| COMPLETE MIXTURE    | Moisture Content                | Tex-212-F,<br>Part II | Truck Sample                         | 1 per 5,000 tons              | Sample in accordance with Tex-222-F. Performed by CST/M&P at the point of production for payment calculations.                                                                                                                                                         |
|                     | Hydrocarbon-Volatile Content    | Tex-213-F             |                                      | 1 per 5,000 tons              | Sample in accordance with Tex-222-F. The timing of when the test is performed is at the discretion of the Engineer.                                                                                                                                                    |
|                     | Lab Molded Density<br>(A)       | Tex-207-F             |                                      | 1 per 5,000 tons              | Sample in accordance with Tex-222-F.                                                                                                                                                                                                                                   |
|                     | Hveem Stability<br>(A)          | Tex-208-F             |                                      | 1 per 5,000 tons              | Sample in accordance with Tex-222-F. The timing of when the test is performed is at the discretion of the Engineer.                                                                                                                                                    |
| ROADWAY             | Ride Quality Test Type B<br>(A) | Tex-1001-S            | Final riding surface of travel lanes |                               | Engineer may verify Contractor’s results for surface test Type B. For traditional design-bid-build TxDOT projects, CST has contracted with TTI to perform random ride verification at 10% frequency. Results from surface test Type A are not required to be reported. |

**TABLE VII – FOOTNOTES**

|          |                                                                                                                                                                                                |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field. |
| <b>B</b> | Sampling may be performed at the plant, quarry, or both. Aggregate properties may be re-tested at any time during the project.                                                                 |
| <b>C</b> | Or as called for in the Specifications.                                                                                                                                                        |
| <b>D</b> | Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.                                                                         |
| <b>E</b> | Perform random sampling as specified in Tex-225-F, “Random Selection of Bituminous Mixture Samples.”                                                                                           |
| <b>F</b> | Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.                                                               |

**TABLE VIII – ASPHALT CONCRETE PAVEMENT (Item 340)**

|                     |                                                           |             | PROJECT TESTS                                                                      |                                                                    |                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------|-----------------------------------------------------------|-------------|------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                                                  | TEST NUMBER | LOCATION                                                                           | FREQUENCY                                                          | REMARKS                                                                                                                                                                                                                                                                                                                                                                |
| COARSE AGGREGATE    | L. A. Abrasion<br><b>(A)</b>                              | Tex-410-A   | Stockpile<br><b>(B)</b>                                                            | 1 per project,<br>per source                                       | Verify the published value of the source, as listed on the current Material Producer List for <b>BRSQC</b> , meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CST/M&P for testing prior to use in accordance with Tex-499-A. <b>(C)</b>                                                                                     |
|                     | Magnesium Sulfate Soundness<br><b>(A)</b>                 | Tex-411-A   |                                                                                    |                                                                    |                                                                                                                                                                                                                                                                                                                                                                        |
|                     | Micro Deval                                               | Tex-461-A   | Stockpile<br><b>(B)</b>                                                            | 1 per project, per source                                          | Sample in accordance with Tex-221-F. Testing frequency may be reduced or eliminated based on a satisfactory test history.                                                                                                                                                                                                                                              |
|                     | Surface Aggregate Classification<br><b>(A)</b>            | Tex-499-A   | Stockpile<br><b>(B)</b>                                                            | 1 per project, per source                                          | Verify the published value of the source, as listed on the current Material Producer list for <b>BRSQC</b> , meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CST/M&P for testing prior to use in accordance with Tex-499-A. <b>(C)</b>                                                                                     |
| COMBINED AGGREGATE  | Sand Equivalent                                           | Tex-203-F   | Stockpiles, hot bins or feeder belts                                               | 1 per project, per design                                          | Sample in accordance with Tex-221-F.                                                                                                                                                                                                                                                                                                                                   |
| ASPHALT BINDER      | Compliance with Item 300 Binder & Tack Coat<br><b>(A)</b> |             | Sampled, tested and pre-approved by CST/M&P. Plant for Binder & Road for Tack Coat | 1 each for binder and tack coat per project, per grade, per source | Test a minimum of 1 sample taken from the project. Sample tack coat at the distributor on the roadway in accordance with Tex-500-C, Part III. Sample binder at hot mix plant in accordance with Tex-500-C, Part II. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use.                                                   |
| MIX DESIGN          | Compliance with applicable specification                  | Tex-204-F   | At source (if not approved)                                                        | Min. 1 design per Mix Type and Asphalt Grade                       | Verify that aggregates, recycled asphalt pavement, recycled asphalt shingles, mineral filler, asphalt binder, anti-stripping additives, and warm mix systems are on the Material Producer List where applicable and that they meet project specification requirements. Project sampling and testing may be conducted in individual materials as necessary for control. |
|                     | Asphalt Content (%)                                       | Tex-236-F   | Truck Sample<br><b>(D)</b>                                                         | Minimum of 1 per day                                               | Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.                                                                                                                                                                                                                                  |
|                     | Voids in Mineral Aggregates (VMA)                         | Tex-207-F   | Truck Sample Plant Produced<br><b>(D)</b>                                          | 1 per day                                                          | Sample in accordance with Tex-222-F.                                                                                                                                                                                                                                                                                                                                   |

|                  |                                 |           |              |                           |                                                                                                                                       |
|------------------|---------------------------------|-----------|--------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| COMPLETE MIXTURE | Gradation<br><b>(A)</b>         | Tex-236-F | Truck Sample | Minimum 1 per day         | Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project. |
|                  | Boil Test                       | Tex-530-C |              | 1 per project             | Sample in accordance with Tex-222-F. Unless waived by the Engineer.                                                                   |
|                  | Indirect Tensile Strength - Dry | Tex-226-F |              | 1 per project, per design | Sample in accordance with Tex-222-F. Unless waived by the Engineer.                                                                   |



**TABLE VIII – ASPHALT CONCRETE PAVEMENT (Item 340)**

| PROJECT TESTS       |                                        |             |                                          |                        |                                                                                                                                                                                                                                                                               |
|---------------------|----------------------------------------|-------------|------------------------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                               | TEST NUMBER | LOCATION                                 | FREQUENCY              | REMARKS                                                                                                                                                                                                                                                                       |
| COMPLETE MIXTURE    | Lab Molded Density<br><b>(A)</b>       | Tex-207-F   | Truck Sample                             | 1 per day              | Sample in accordance with Tex-222-F.                                                                                                                                                                                                                                          |
|                     | Hamburg Wheel Tracker<br><b>(A)</b>    | Tex-242-F   |                                          | 1 per project          | Sample in accordance with Tex-222-F. Sample during production.                                                                                                                                                                                                                |
| ROADWAY             | Air Voids<br><b>(A)</b>                | Tex-207-F   | Selected by the Engineer<br><b>(D)</b>   | 1 per day<br>(2 Cores) | Sample in accordance with Tex-222-F.                                                                                                                                                                                                                                          |
|                     | Ride Quality Test Type B<br><b>(A)</b> | Tex-1001-S  | Final riding surface of travel lanes     |                        | Engineer may verify Contractor's results for surface test Type B. For traditional design-bid-build TxDOT projects, CST has contracted with TTI to perform random ride verification at 10% frequency.<br><br>Results from surface test Type A are not required to be reported. |
| FABRIC UNDERSEAL    | Compliance with DMS-6220               |             | Sampled, tested, and approved by CST/M&P |                        | Sample in accordance with Tex-735-I.<br><br>Verify the source is listed on the current Material Producer List for <b>Silt Fence, Filter Fabric, and Fabric Underseals</b> . If not sample and submit to CST/M&P for testing prior to use in accordance with DMS-6220.         |

**TABLE VIII – FOOTNOTES**

|          |                                                                                                                                                                                                                                                                                                                                                        |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field. This letter is required only for Asphalt Content and/or Gradation when production of complete mixture is suspended as required by QC/QA specifications. |
| <b>B</b> | Sampling may be performed at the plant, quarry, or both. Aggregate properties may be re-tested at any time during the project. These project tests may be used for one or more projects furnishing hot mix with the same aggregate source.                                                                                                             |
| <b>C</b> | Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.                                                                                                                                                                                                                                 |
| <b>D</b> | Perform random sampling as specified in Tex-225-F, "Random Selection of Bituminous Mixture Samples."                                                                                                                                                                                                                                                   |

**TABLE IX – MICROSURFACING (Item 350)**

|                     |                                                           |                       | PROJECT TESTS                                                                                                   |                                                                    |                                                                                                                                                                                                                                                                                                                             |
|---------------------|-----------------------------------------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MATERIAL OR PRODUCT | TEST FOR                                                  | TEST NUMBER           | LOCATION OF SAMPLING                                                                                            | FREQUENCY<br>(Per Design)                                          | REMARKS                                                                                                                                                                                                                                                                                                                     |
| AGGREGATE           | 5-Cycle Magnesium Sulfate Soundness<br><b>(A)</b>         | Tex-411-A             | Stockpile<br><b>(B)</b>                                                                                         | 1 per project, per source                                          | Verify the published value of the source, as listed on the current Material Producer list for <b>BRSQC</b> meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CST/M&P for testing at 1 per project, per source. <b>(C)</b>                                                         |
|                     | Gradation                                                 | Tex-200-F,<br>Part II |                                                                                                                 | 1 per project, per source                                          | Sample in accordance with Tex-221-F.                                                                                                                                                                                                                                                                                        |
|                     | Crushed Face Count                                        | Tex-460-A             |                                                                                                                 | 1 per project, per source                                          | Sample in accordance with Tex-221-F.                                                                                                                                                                                                                                                                                        |
|                     | Acid Insoluble<br><b>(A)</b>                              | Tex-612-J             |                                                                                                                 | 1 per project, per source                                          | Verify the value of the source, as listed on the current <b>BRSQC</b> , meets the project specifications. If not, sample and submit to CST/M&P for testing prior to use in accordance with Tex-499-A. Sample in accordance with Tex-221-F. <b>(C)</b>                                                                       |
|                     | Surface Aggregate Classification                          | Tex-499-A             | Stockpile, or BRSQC<br><b>(B)</b>                                                                               | 1 per project, per source                                          | Verify the published value of the source, as listed on the current Material Producer list for <b>BRSQC</b> meets the project specifications. If not, sample in accordance with Tex-221-F and submit to CST/M&P for testing at 1 per project, per source. <b>(C)</b>                                                         |
| COMBINED BLEND      | Sand Equivalent                                           | Tex-203-F             | Stockpile<br><b>(B)</b>                                                                                         | 1 per project, per source                                          | Sample in accordance with Tex-221-F.                                                                                                                                                                                                                                                                                        |
| ASPHALT BINDER      | Compliance with Item 300 Binder & Tack Coat<br><b>(A)</b> |                       | Sampled, tested, and pre-approved by CST/M&P. Project test sampled at the Plant for Binder & Road for Tack Coat | 1 each for binder and tack coat per project, per grade, per source | Test a minimum of one sample during production. Sample tack coat at the distributor on the roadway in accordance with Tex-500-C, Part III. Sample binder at microsurfacing machine in accordance with Tex-500-C, Part III. Binder should arrive on the project pre-approved. If not pre-approved, sample binder before use. |
| CEMENT              | Compliance with DMS-4600                                  |                       |                                                                                                                 |                                                                    | Verify the source is listed on the current Material Producer List for <b>Cement</b> . If not, sample and submit to CST/M&P for testing prior to use in accordance with DMS-4600.                                                                                                                                            |
|                     | Asphalt Content                                           | Tex-236-F             |                                                                                                                 |                                                                    | Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven using Tex-236-F at a minimum of one per project.                                                                                                                                                                                       |

|              |           |                                 |                   |           |                                                                                                                           |
|--------------|-----------|---------------------------------|-------------------|-----------|---------------------------------------------------------------------------------------------------------------------------|
| COMPLETE MIX | Gradation | Tex-200-F, Part II<br>Tex-236-F | During production | 1 per day | Sample in accordance with Tex-222-F. Determine correlation factors for ignition oven use at a minimum of one per project. |
|--------------|-----------|---------------------------------|-------------------|-----------|---------------------------------------------------------------------------------------------------------------------------|

**TABLE IX – FOOTNOTES**

|          |                                                                                                                                                                                                                                                                                                                                                        |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | When this project acceptance test fails but the product is accepted, document the reasons for acceptance on the Letter of Certification of Materials Used or in the SiteManager Remarks field. This letter is required only for Asphalt Content and/or Gradation when production of complete mixture is suspended as required by QC/QA specifications. |
| <b>B</b> | Sampling may be performed at the plant, quarry, or both. Aggregate properties may be re-tested at any time during the project. These project tests may be used for one or more projects furnishing hot mix with the same aggregate source.                                                                                                             |
| <b>C</b> | Attach the corresponding QM test report for SiteManager projects to satisfy project sampling and testing requirements.                                                                                                                                                                                                                                 |
| <b>D</b> | Each test performed that is based on a quantity of material is considered “or fraction thereof” for calculating number of tests.                                                                                                                                                                                                                       |

**APPENDIX C**  
**AASHTO ACCREDITED LABORATORIES**

## AASHTO Accredited CMT Laboratories in Texas

\* Directory of accredited laboratories and scope of testing is maintained on the AASHTO Materials Reference Laboratory website at: <http://www.amrl.net>. Laboratory must be accredited for each specific test performed.

1 of 1

**APPENDIX D**  
**HAYS COUNTY HUB PROGRAM**



**HAYS COUNTY  
PRACTICES RELATED TO  
HISTORICALLY UNDERUTILIZED BUSINESSES**

**1. STATEMENT OF PRACTICES**

Hays County will strive to ensure that all businesses, regardless of size, economic, social or ethnic status have an equal opportunity to participate in the County's procurement processes. The County is committed to promote full and equal business opportunity for all businesses to supply the goods and services needed to support the mission and operations of county government, and seeks to encourage the use of certified historically underutilized businesses (HUB's) through the use of race, ethnic and gender neutral means. It is the practice of Hays County to involve certified HUBs to the greatest extent feasible in the County's procurement of goods, equipment, services and construction projects while maintaining competition and quality of work standards. The County affirms the good faith efforts who recognize and practice similar business standards.

**2. DEFINITIONS**

*Historically underutilized businesses (HUBs)*, also known as a disadvantaged business enterprise (DBE), are generally business enterprises at least 51% of which is owned and the management and daily business operations are controlled by one or more persons who is/are socially and economically disadvantaged because of his/her identification as a member of certain groups, including women, Black Americans, Mexican Americans, and other Americans of Hispanic origin, Asian Americans and American Indians.

*Businesses* include firms, corporations, sole proprietorships, vendors, suppliers, contractors, subcontractors, professionals and other similar references when referring to a business that provides goods and/or services regardless of the commodity category.

*Certified HUB's* include business enterprises that meet the definition of a HUB and who meet the certification requirements of certification agencies recognized by Hays County, as expressed below.

*Statutory bid limit* refers to the Texas Local Government Code provision that requires competitive bidding for many items valued at greater than \$50,000.

**3. GUIDELINES**

- A. Hays County, its contractors, their subcontractors and suppliers, as well as all vendors of goods, equipment and services, shall not discriminate on the basis of race, color, creed, gender, age, religion, national origin, citizenship, mental or physical disability, veteran's status or political affiliation in the award and/or performance of contracts. All entities doing business or anticipating doing business with the County shall support, encourage and implement affirmative steps toward a common goal of establishing equal opportunity for all citizens and businesses of the County.
  - B. Vendors and/or contractors desiring to participate in the HUB program must successfully complete the certification process with the State of Texas or Texas Unified Certification Program. The vendor or contractor is also required to hold a current valid certification (title) from either of these entities.
  - C. Vendors and/or contractors must be registered with the State Comptroller's web-based HUB directory and with the Comptroller's Centralized Master Bidder's List (CMBL). Hays County will solicit bids from certified HUB's for state purchasing and public works contracts.
4. Hays County will actively seek and encourage HUBs to participate in all facets of the procurement process by:
- A. Continuing to increase and monitor a database of certified HUB vendors, professionals and contractors. The database will be expanded to include products, areas of expertise and capabilities of each HUB firm.
  - B. Continuing to seek new communication links with HUB vendors, professionals and contractors to involve them in the procurement process.
  - C. Continuing to advertise bids on the County's website and in the newspapers including newspapers that target socially and economically disadvantaged communities.
5. As prescribed by law, the purchase of one or more items costing in excess of the statutory bid limit must comply with the competitive bid process. Where possible, those bids will be structured to include and encourage the participation of HUB firms in the procurement process by:
- 1. Division of proposed requisitions into reasonable lots in keeping with industry standards and competitive bid requirements.
  - 2. Where feasible, assessment of bond and insurance requirements and the designing of such requirements to reasonably permit more than one business to perform the work.
  - 3. Specifications of reasonable, realistic delivery schedules consistent with the County's actual requirements.
  - 4. Specifications, terms and conditions reflecting the County's actual requirements are clearly stated, and do not impose unreasonable or unnecessary contract requirements.
6. A HUB practice statement shall be included in all specifications. The County will consider the bidder's responsiveness to the HUB Practices in the evaluation of bids and proposals. Failure to demonstrate a good faith effort to comply with the County's HUB practices may result in a bid or proposal being considered non-responsive to specifications.

7. Nothing in this practice statement shall be construed to require the County to award a contract other than to the lowest responsive bidder as required by law. This practice is narrowly tailored in accordance with applicable law.

**Please sign for acknowledgment of the Hays County HUB Practices:**

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Discussion and possible action to call for a public hearing on November 10, 2020 to establish a "No Parking" zone on Garrison Road just outside of the City of Buda limits.

| ITEM TYPE    | MEETING DATE     | AMOUNT REQUIRED |
|--------------|------------------|-----------------|
| ACTION-ROADS | October 27, 2020 |                 |

**LINE ITEM NUMBER**

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

| REQUESTED BY      | SPONSOR | CO-SPONSOR |
|-------------------|---------|------------|
| Jerry Borcharding | JONES   | N/A        |

**SUMMARY**

This action would establish a "No Parking" zone along Garrison Road to keep the road and right-of-way clear from parked vehicles near a City of Buda park entrance.



# Garrison Road

Proposed "No Parking" zone.

Legend



Google Earth

457

5.95 ft





# Garrison Rd - No Parking zone

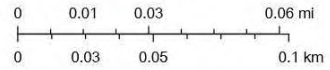


Garrison Rd - No Parking zone limits.

10/19/2020, 1:37:05 PM

Parcels City Limits Lot Lines

1:2,257



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS,

Hays County Appraisal District, BIS Consulting - [www.bisconsulting.com](http://www.bisconsulting.com)

Disclaimer: This product is for informational purposes only and has not been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of boundaries.

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Discussion and possible action to call for a public hearing on November 10, 2020 to establish "Yield" signs on the four legs of a roundabout at the intersection of Mesa Verde Drive and Prescott Drive in Belterra subdivision.

| ITEM TYPE    | MEETING DATE     | AMOUNT REQUIRED |
|--------------|------------------|-----------------|
| ACTION-ROADS | October 27, 2020 |                 |

**LINE ITEM NUMBER**

|  |
|--|
|  |
|--|

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

| REQUESTED BY      | SPONSOR | CO-SPONSOR |
|-------------------|---------|------------|
| Jerry Borcharding | SMITH   | N/A        |

**SUMMARY**

Currently at this roundabout, there are no posted signs for the two Mesa Verde Drive intersections, and two existing stop signs (Prescott Drive & the Amenities Center). There is a request from the neighborhood management group to help regulate traffic flow awareness and safety. This action would allow the installation of "Yield" signs on all four legs of that intersection in Belterra subdivision. The two existing Stop signs would then be removed and replaced with Yield signs, per State standards. Roundabout ahead signs will be installed on all four legs, and "One-Way" signs will also be installed on the circular median to help traffic flow in a counter-clockwise direction through the roundabout.



# Roundabout signage - Belterra subd.

Yield signs, roundabout ahead signs, and one-way signs needed for all 4 legs.

Legend

Existing Stop sign to be replaced.

Prescott Drive

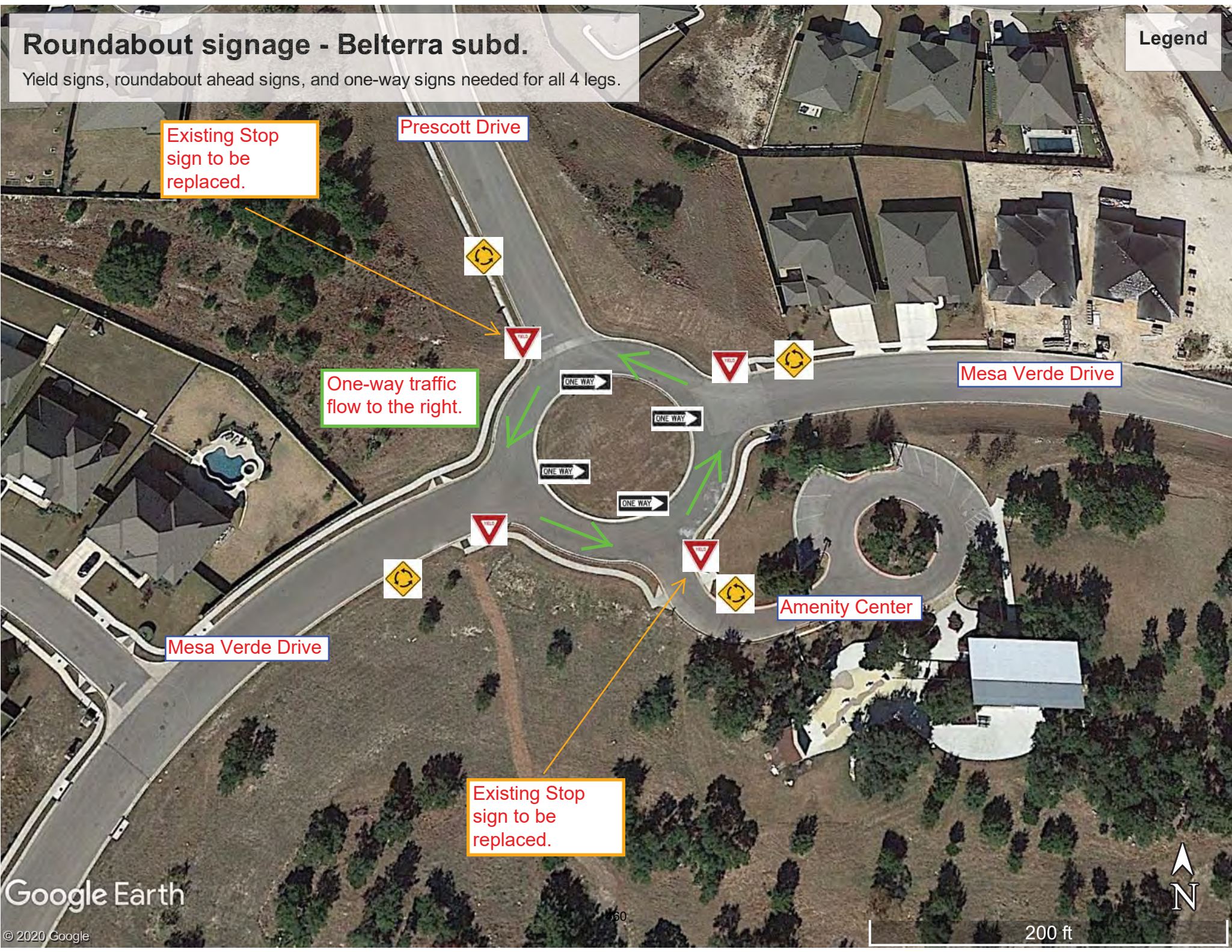
Mesa Verde Drive

One-way traffic flow to the right.

Mesa Verde Drive

Amenity Center

Existing Stop sign to be replaced.





**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

PLN-1398-PC; Call for a Public Hearing on November 17th, 2020 to discuss final plat approval of the Replat of Lot 35, Lea Acres Subdivision.

| ITEM TYPE           | MEETING DATE     | AMOUNT REQUIRED |
|---------------------|------------------|-----------------|
| ACTION-SUBDIVISIONS | October 27, 2020 |                 |

**LINE ITEM NUMBER**

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

| REQUESTED BY | SPONSOR | CO-SPONSOR |
|--------------|---------|------------|
| MACHACEK     | SHELL   | N/A        |

**SUMMARY**

Lea Acres is a recorded subdivision located off of Carney Lane in Precinct 3.

The proposed re-plat will divide the 6.095 acre lot 35 into 3 lots, Lot 35A, Lot 35B, and Lot 35C. Water service will be provided by Private Well and/or Rainwater Collection. Wastewater treatment will be accomplished by advanced on-site sewage facilities.



## Hays County Commissioners Court Agenda Request

**Meeting Date:** October 27th, 2020

**Requested By:** Colby Machacek, County Planner

**Prepared By:** Colby Machacek, County Planner

**Department Director:** Caitlyn Strickland, Development Services Director

**Sponsoring Court Member:** Commissioner Lon Shell, Precinct 3

### **AGENDA ITEM LANGUAGE:**

Call for a public hearing on November 17th, 2020 to discuss final plat approval of the Replat of Lot 35, Lea Acres Subdivision.

### **BACKGROUND/SUMMARY OF REQUEST:**

- A) Lea Acres is a recorded subdivision located off of Carney Lane, a Hays County regulated roadway. The recorded Lot 35 is a 6.095 acre lot. The proposed replat will divide Lot 35 into three lots, 35A, 35B, and 35C.

Water service will be accomplished by Private Well and/or Rainwater Collection and Wastewater treatment will be accomplished by Individual On-Site Sewage Facilities. The property is located within Commissioner Precinct 3 and the City of Wimberley's extraterritorial jurisdiction. Though the City of Wimberley and Hays County Development Services have entered a 1445 Interlocal Cooperation Agreement concerning plat/plan applications, the City of Wimberley has deferred plat review and approval for this replat to Hays County Development Services.

- B) Per Texas Local Government Code requirements, a public hearing for this proposed resubdivision of Lot 35 will take place on November 10th, 2020 at 9:00 AM in our Commissioners Court. At that time, consideration for final action regarding the approval of the replat will take place.

### **STAFF COMMENTS:**

Staff has completed Administrative Review for the Replat of Lot 35, Lea Acres Subdivision and has provided a letter to the applicant filing the application for Technical Review. The items remaining are the completion of Technical Review, holding the public hearing for the replat, and action on the approval of the replat.

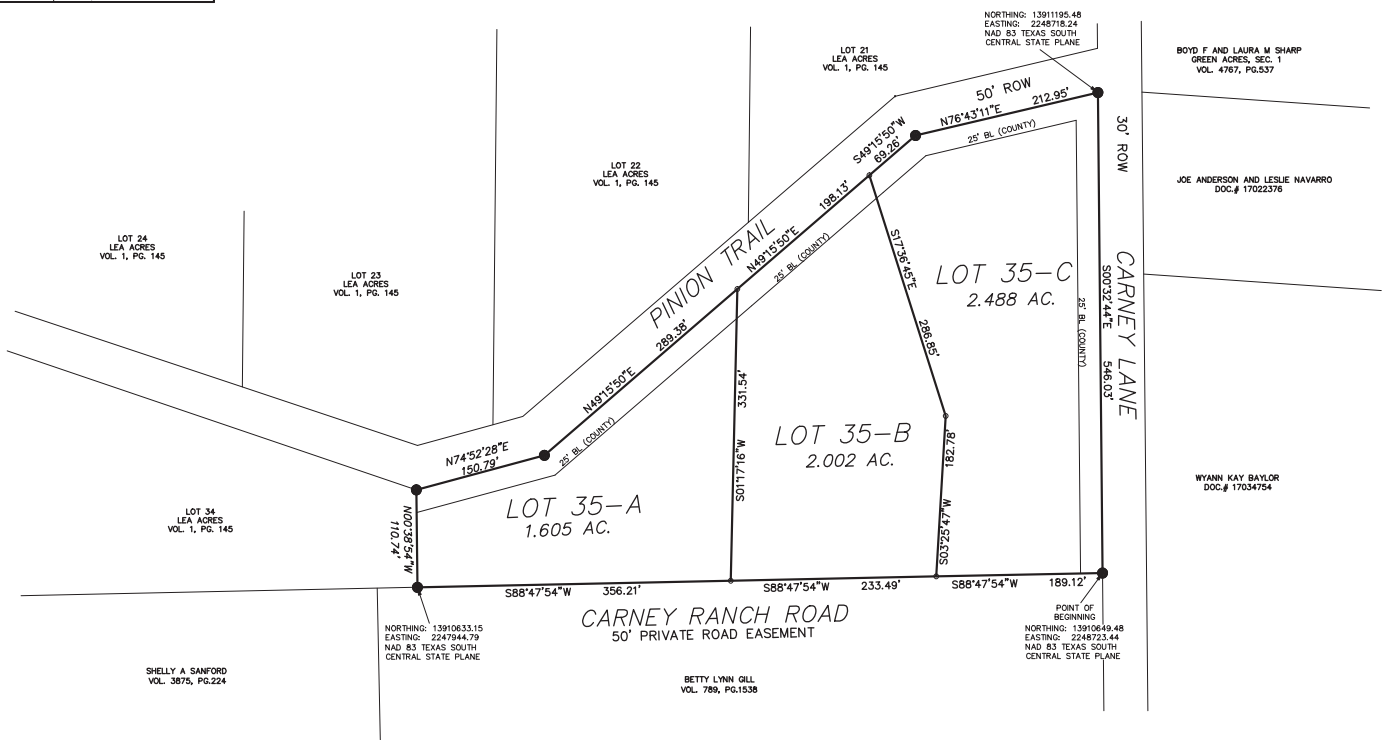
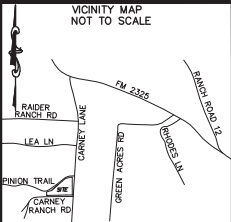
### **ATTACHMENTS/EXHIBITS:**

Property Location Map

Subdivision Plat

# REPLAT OF LEA ACRES LOT 35

SCALE  
1" = 100'



**LOT SIZE CATEGORIES**

TOTAL AREA = 6.095 ACRES  
 TOTAL NUMBER OF LOTS = 3  
 AVERAGE LOT SIZE = 2.031 ACRES  
 NUMBER OF LOTS OVER 10 ACRES = 0  
 NUMBER OF LOTS 5 - 10 ACRES = 0  
 NUMBER OF LOTS 2 - 5 ACRES = 2  
 NUMBER OF LOTS 1 - 2 ACRES = 1  
 NUMBER OF LOTS LESS THAN 1 ACRE = 0

**UTILITIES:**

ELECTRIC--PEDERNALES ELECTRIC COOP.

**WATER--PRIVATE:**

LOT 35-A WILL USE A RAIN WATER COLLECTION SYSTEM.  
 LOT 35-B AND 35-C WILL USE PRIVATE WATER WELLS.

**SEWER--** ALL LOTS REQUIRE ADVANCED INDIVIDUAL ON-SITE SEWAGE FACILITY.

**DRIVEWAY PERMIT STATEMENT:**

DRIVEWAYS SHALL COMPLY WITH CHAPTER 7210F HAYS COUNTY DEVELOPMENT REGULATIONS, AND BE PERMITTED THROUGH THE TRANSPORTATION DEPARTMENT OF HAYS COUNTY UNDER CHAPTER 751.

**SURVEYOR'S CERTIFICATION:**

I, GEORGE LUCAS, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF SURVEYING AND HEREBY CERTIFY THAT THIS PLAT COMPLIES WITH ALL APPLICABLE HAYS COUNTY DEVELOPMENT REGULATIONS IS TRUE AND CORRECT; AND WAS PREPARED FROM AN ACTUAL ON-THE-GROUND SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION.

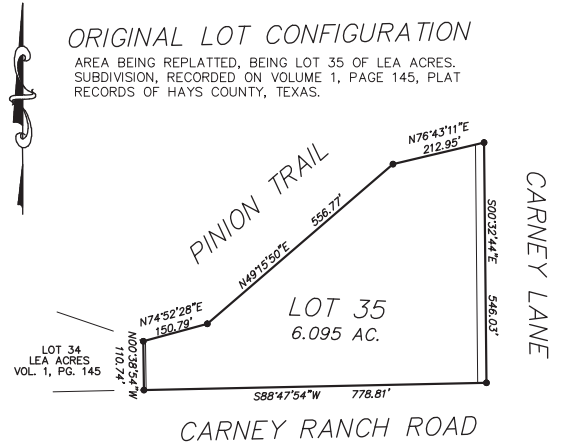


MARCH 20, 2020

GEORGE LUCAS R.L.P.S. No. 4160 DATE  
 CELCO SURVEYING  
 651 SOUTH WALNUT AVENUE, SUITE D-215  
 NEW BRAUNFELS, TEXAS  
 830-214-5109

**ORIGINAL LOT CONFIGURATION**

AREA BEING REPLATTED, BEING LOT 35 OF LEA ACRES, SUBDIVISION, RECORDED ON VOLUME 1, PAGE 145, PLAT RECORDS OF HAYS COUNTY, TEXAS.



**LEGEND**

- = MONUMENT
- = IRON ROD FOUND
- = IRON ROD SET
- ( ) = RECORD PER DEED
- PUE = PUBLIC UTILITY EASEMENT
- BL = BUILDING SETBACK

**CELCO SURVEYING**

651 SOUTH WALNUT AVENUE, SUITE D-215  
 NEW BRAUNFELS, TEXAS 78130  
 TEL: 830-214-5109 FAX: 866-571-8323

# REPLAT OF LEA ACRES LOT 35

STATE OF TEXAS  
COUNTY OF HAYS

THE MEGAN AND MORGAN ROMANO REVOCABLE TRUST, OWNER OF A CERTAIN TRACT OF LAND SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN VOLUME 5142, PAGE 768, THE OFFICIAL PUBLIC RECORDS OF HAYS COUNTY, TEXAS, AND BOTH TRACTS BEING PORTIONS OF LOT 35, LEA ACRES, A SUBDIVISION RECORDED IN VOLUME 1, PAGE 145, PLAT RECORDS OF HAYS COUNTY, TEXAS, DO HEREBY SUBDIVIDE SAID LOT AS SHOWN HEREON, AND DO HEREBY CONSENT TO ALL PLAT NOTE REQUIREMENTS SHOWN HEREON, SUBJECT TO ANY AND ALL EASEMENTS AND RESTRICTIONS HERETOFORE GRANTED. THIS SUBDIVISION IS TO BE KNOWN AS A REPLAT OF LEA ACRES, LOT 35, ESTABLISHING LOT 35-A, 35-B AND 35-C, CITY OF WIMBERLEY ETJ, HAYS COUNTY, TEXAS.

..... DATE  
DONNIE ROMANO  
PO BOX 607, WIMBERLEY, TEXAS 78676  
TRUSTEE

STATE OF TEXAS  
COUNTY OF HAYS

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED DONNIE ROMANO KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSE AND CONSIDERATION THEREIN EXPRESSED, AND IN THE CAPACITY THEREIN STATED, GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS ..... DAY OF ..... A.D., 2020

STATE OF TEXAS  
COUNTY OF HAYS

NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO AN INDIVIDUAL WATER SUPPLY OR A STATE APPROVED COMMUNITY WATER SYSTEM. DUE TO DECLINING WATER SUPPLIES AND DIMINISHING WATER QUALITY, PROSPECTIVE PROPERTY OWNERS ARE CAUTIONED BY HAYS COUNTY TO QUESTION THE SELLER CONCERNING GROUNDWATER AVAILABILITY, RAINWATER COLLECTION IS ENCOURAGED AND IN SOME AREAS MAY OFFER THE BEST RENEWABLE WATER RESOURCE.

NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO A PUBLIC SEWER SYSTEM OR TO AN ON-SITE WASTEWATER SYSTEM WHICH HAS BEEN APPROVED AND PERMITTED BY HAYS COUNTY DEVELOPMENT SERVICES.

NO CONSTRUCTION OR OTHER DEVELOPMENT WITHIN THIS SUBDIVISION MAY BEGIN UNTIL ALL HAYS COUNTY DEVELOPMENT PERMIT REQUIREMENTS HAVE BEEN MET.

..... DATE  
TOM POPE, R.S., C.F.M.  
HAYS COUNTY FLOODPLAIN  
ADMINISTRATOR

..... DATE  
CAITLYN STRICKLAND, DIRECTOR  
HAYS COUNTY DEVELOPMENT SERVICES

THE CITY OF WIMBERLEY HAS DEFERRED REVIEW OF THIS SUBDIVISION TO HAYS COUNTY.

.....  
PAULL PARKER  
CITY ADMINISTRATOR

STATE OF TEXAS  
COUNTY OF HAYS

I, ELAINE H. CARDENAS, COUNTY CLERK OF HAYS COUNTY, TEXAS, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING, WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY

OFFICE ON THE THE ..... DAY OF ..... 2020 AT .....  
..... D'CLOCK ..... IN

THE PLAT RECORDS OF HAYS COUNTY, TEXAS IN INSTRUMENT NO. ....  
... TO CERTIFY WHICH,

WITNESS MY HAND AND SEAL OF OFFICE OF COUNTY CLERK, THIS ..... DAY OF .....  
.....  
2020

.....  
ELAINE H. CARDENAS, COUNTY CLERK,  
HAYS COUNTY, TEXAS

STATE OF TEXAS  
COUNTY OF HAYS

I, ELAINE H. CARDENAS, COUNTY CLERK OF HAYS COUNTY, TEXAS DO HEREBY CERTIFY THAT ON THE ..... DAY OF ..... 2020, THE COMMISSIONERS COURT OF HAYS COUNTY, TEXAS, PASSED AN ORDER AUTHORIZING THE FILING FOR RECORD OF THIS PLAT, AND SAID ORDER HAS BEEN DULY ENTERED IN THE MINUTES OF SAID COURT INSTRUMENT NUMBER .....

WITNESS MY HAND AND SEAL OF OFFICE, THIS THE ..... DAY OF .....  
.....  
2020

.....  
RUBEN BECERRA  
COUNTY JUDGE  
HAYS COUNTY, TEXAS

.....  
ELAINE H. CARDENAS, COUNTY CLERK,  
HAYS COUNTY, TEXAS

## GENERAL NOTES

- 1: THIS SUBDIVISION LIES WITHIN THE BOUNDARIES OF THE EDWARD AQUIFER CONTRIBUTING ZONE. NO PORTION OF THIS SUBDIVISION LIES WITHIN THE BOUNDARIES OF THE EDWARDS AQUIFER RECHARGE ZONE.
- 2: THIS SUBDIVISION LIES WITHIN THE FOLLOWING JURISDICTIONS: WIMBERLEY ISD ESD #4 & ESD #7
- 3: COORDINATES SHOWN ARE BASED UPON THE NORTH AMERICAN DATUM OF 1983 (CORS 1996), TEXAS STATE PLANE, SOUTH CENTRAL ZONE, GRID VALUES.
- 4: DIMENSIONS ARE SHOWN IN US SURVEY FEET, SURFACE.
- 5: THIS PROPERTY IS LOCATED WITHIN THE EXTRA-TERRITORIAL JURISDICTION OF THE CITY OF WIMBERLEY, TEXAS.
- 6: SUBJECT PROPERTY APPEARS TO BE SITUATED WITHIN THE FLOOD ZONE AREAS "X" (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) AS INDICATED ON THE FOLLOWING FLOOD INSURANCE RATE MAP: 48209C0355F, EFFECTIVE DATE: SEPTEMBER 2, 2005, BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FOR HAYS COUNTY, TEXAS. (SURVEYOR DOES NOT GUARANTEE OR WARRANT THE ACCURACY OR CORRECTNESS OF THE F.E.M.A. MAPS.)
- 7: A 10' UTILITY EASEMENT IS DEDICATED TO RUN, CENTERED ON ANY EXISTING ELECTRIC FACILITIES WITHIN LOTS 35-A, 35-B AND 35-C.
- 8: DRIVEWAYS SHALL COMPLY WITH CHAPTER 721 OF HAYS COUNTY DEVELOPMENT REGULATIONS, AND BE PERMITTED THROUGH THE TRANSPORTATION DEPARTMENT OF HAYS COUNTY UNDER CHAPTER 751.
- 9: ALL CULVERTS, WHEN REQUIRED SHALL COMPLY WITH THE CURRENT HAYS COUNTY STANDARDS PER HAYS COUNTY DEVELOPMENT REGULATIONS, CHAPTER 705, SUBCHAPTER 8.03.
- 10: MAIL BOX PLACED WITHIN THE ROW, SHALL BE OF AN APPROVED TXDOT OF FHWA DESIGN, PER HAYS COUNTY DEVELOPMENT REGULATIONS, CHAPTER 721, SUBCHAPTER 2.01.
- 11: NO OBJECT, INCLUDED BUILDINGS, FENCE OR LANDSCAPING WHICH WOULD INTERFERE WITH CONVEYANCE OR STORM WATER, SHALL BE PLACED OR ERECTED WITHIN A DRAINAGE EASEMENT. THE OWNER(S) OF ANY LOT(S) UPON WHICH DRAINAGE FACILITIES ARE LOCATED, INCLUDING DETENTION, SHALL BE RESPONSIBLE FOR MAINTENANCE AND UPKEEP OF SUCH FACILITIES.
- 12: UNDER DEPARTMENT REGULATIONS, THIS SUBDIVISION IS EXEMPT FROM THE REQUIREMENTS TO DEMONSTRATE THE AVAILABILITY OF WATER SERVICE. FURTHER SUBDIVISION IS PROHIBITED FOR A DURATION OF FIVE (5) YEARS, FOLLOWING THE FILING OF THE PLAT.
- 13: THIS PROPERTY IS LOCATED WITHIN THE HAYS TRINITY GROUNDWATER CONSERVATION DISTRICT.
- 14: BASIS OF BEARING, NORTH AMERICA DATUM 1983, TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE (4204).

**CELCO SURVEYING**  
651 SOUTH WALNUT AVENUE, SUITE D-215  
NEW BRAUNFELS, TEXAS 78130  
TEL: 830-214-5109 FAX: 866-571-8323



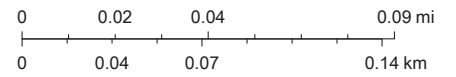
# Lea Acres, Lot 35, Replat



8/4/2020, 9:58:33 AM

- Abstracts
- Parcels
- ..... Lot Lines

1:2,257



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

PLN-1470-PC; Hold a public hearing with possible action to approve the final plat of the Replat of Lot 7, Rolling Oaks, Section Four Subdivision.

| ITEM TYPE           | MEETING DATE     | AMOUNT REQUIRED |
|---------------------|------------------|-----------------|
| ACTION-SUBDIVISIONS | October 27, 2020 |                 |

**LINE ITEM NUMBER**

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

| REQUESTED BY | SPONSOR | CO-SPONSOR |
|--------------|---------|------------|
| PACHECO      | SHELL   | N/A        |

**SUMMARY**

Rolling Oaks Section Four Subdivision is a recorded subdivision located off of FM 3237 in Precinct 3.

The proposed re-plat will divide the 5.485 acre lot 7 into 5 lots, all equaling 1.097 acres each. Water service will be provided by rainwater collection. Wastewater treatment will be accomplished by advanced subsurface disposal on-site sewage facilities.



## Hays County Commissioners Court Agenda Request

**Meeting Date:** October 27th, 2020

**Requested By:** Marcus Pacheco, County Planner

**Prepared By:** Marcus Pacheco, County Planner

**Department Director:** Caitlyn Strickland, Development Services Director

**Sponsoring Court Member:** Commissioner Lon Shell, Precinct 3

### **AGENDA ITEM LANGUAGE:**

Hold a public hearing with possible action to approve the final plat of the Replat of Lot 7, Rolling Oaks, Section Four Subdivision.

### **BACKGROUND/SUMMARY OF REQUEST:**

- A) Rolling Oaks, Section Four is a recorded subdivision located off of FM 3237, a public maintained road. The recorded Lot 7 is a 5.485 acre lot. The proposed replat will divide Lot 7 into five lots, all equaling 1.097 acres each.

Water service will be accomplished by Rainwater Collection and Wastewater treatment will be accomplished by Advanced Subsurface Disposal On-Site Sewage Facilities. The property is located within Hays County Commissioner Precinct 3.

- B) Per Texas Local Government Code requirements, a public hearing for this proposed resubdivision of Lot 7 will take place on October 27th, 2020 at 9:00 AM in our Commissioners Court. At that time, consideration for final action regarding the approval of the replat will take place.

### **STAFF COMMENTS:**

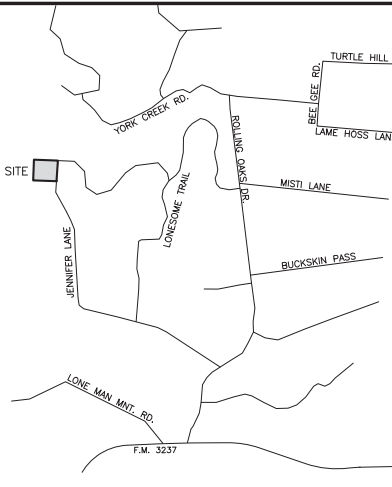
Staff has completed Technical Review for the Replat of Lot 7, Rolling Oaks, Section Four. The items remaining are to hold the public hearing for the replat, and action on the approval of the replat.

There are no variance requested and at the time this item has full staff recommendation.

### **ATTACHMENTS/EXHIBITS:**

Property Location Map

Subdivision Plat



VICINITY MAP - 1"=2000'

**SURVEYORS NOTES**

1. FENCES MEANDER.
2. BEARINGS, DISTANCES AND AREAS IN PARENTHESES ARE FROM RECORD INFORMATION.
3. ACCORDING TO SCALING FROM THE CURRENT F.E.M.A. FLOOD INSURANCE RATE MAP NO. 48209C0235F, DATED 9/2/2005, THIS TRACT LIES WITHIN ZONE X, (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN).
4. THIS SURVEY WAS DONE WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT AND THIS SURVEYOR DID NOT RESEARCH THE DEED RECORDS FOR PREVIOUS CONFLICTS IN TITLE OR EASEMENT, THEREFORE, CERTAIN EASEMENTS MAY HAVE BEEN GRANTED WHICH ARE NOT REFLECTED HEREON.
5. THE BEARING BASIS FOR THIS SURVEY PLAT WAS DETERMINED FROM GPS OBSERVATIONS AND REFERS TO GRID NORTH OF THE TEXAS STATE PLANE COORDINATE SYSTEM, NAD 83, SOUTH CENTRAL ZONE.
6. ACCORDING TO SCALING FROM TCEQ MAPS NO PORTION OF THIS SUBDIVISION LIES WITHIN THE BOUNDARIES OF THE EDWARDS AQUIFER RECHARGE ZONE AND ALL OF THIS SUBDIVISION LIES WITHIN THE BOUNDARIES OF THE EDWARDS AQUIFER CONTRIBUTING ZONE.
7. THIS SUBDIVISION LIES WITHIN THE BOUNDARIES OF THE WIMBERLEY INDEPENDENT SCHOOL DISTRICT.
8. NO PORTION OF THIS TRACT LIES WITHIN THE BOUNDARIES OF ANY MUNICIPALITIES CORPORATE CITY LIMITS OR AREA OF EXTRA TERRITORIAL JURISDICTION.
9. THIS SUBDIVISION LIES WITHIN HAYS COUNTY EMERGENCY SERVICES DISTRICTS 4 AND 7.
10. THIS SUBDIVISION LIES WITHIN THE EDWARDS AQUIFER AUTHORITY GROUNDWATER DISTRICT.
11. MAIL BOXES PLACED WITHIN THE ROW, SHALL BE OF AN APPROVED XYDOT OR FHWA DESIGN, PER COUNTY DEVELOPMENT REGULATIONS, CHAPTER 721, SUBCHAPTER 2.01.
12. ALL CULVERTS, WHEN REQUIRED SHALL COMPLY WITH THE CURRENT HAYS COUNTY STANDARD, PER HAYS COUNTY DEVELOPMENT REGULATIONS, CHAPTER 705, SUBCHAPTER 8.03.
13. THIS LOT IS SUBJECT TO THAT BLANKET TYPE ELECTRIC EASEMENT RECORDED IN VOLUME 233, PAGE 277 OF THE HAYS COUNTY DEED RECORDS.
14. UNDER DEPARTMENT REGULATIONS, THIS SUBDIVISION IS EXEMPT FROM THE REQUIREMENTS TO DEMONSTRATE THE AVAILABILITY OF WATER SERVICE, FURTHER SUBDIVISION IS PROHIBITED FOR THE DURATION OF FIVE (5) YEARS FOLLOWING THE RECORDING OF THIS PLAT.
15. ALL LOTS IN THIS RESUBDIVISION ARE RESTRICTED TO ADVANCED SUBSURFACE DISPOSAL ON-SITE SEWAGE FACILITIES ONLY.
16. THESE LOTS WILL NOT INSTALL OR UTILIZE GROUNDWATER WELLS, UNTIL AN UPDATED WATER AVAILABILITY DEMONSTRATION IS APPROVED DOCUMENTING SUFFICIENT GROUNDWATER IS AVAILABLE.
17. THE FILER OF THIS PLAT HAS SUBMITTED TO THE DEPARTMENT A WATER AND WASTEWATER SERVICE PLAN DESCRIBING HOW WATER AND WASTEWATER SERVICE WILL BE PROVIDED TO THIS SUBDIVISION.

STATE OF TEXAS\*  
COUNTY OF HAYS\*

KNOW ALL MEN BY THESE PRESENTS, THAT WE, ADAM PIERCE AND LINDSEY PIERCE, OWNERS OF LOT 7, ROLLING OAKS, SECTION FOUR, HAYS COUNTY, TEXAS AS CONVEYED TO US BY DEED DATED 1/13/2020, AND RECORDED IN HAYS COUNTY INSTRUMENT NUMBER 20001765, HAYS COUNTY OFFICIAL PUBLIC RECORDS, DO HEREBY REPEAT THIS PROPERTY TO BE KNOWN AS RESUBDIVISION PLAT OF LOT 7, ROLLING OAKS, SECTION FOUR, IN ACCORDANCE WITH THE PLAT SHOWN HEREON, SUBJECT TO ANY AND ALL EASEMENTS OR RESTRICTIONS HERETOFORE GRANTED, AND DO HEREBY DEDICATE TO THE PUBLIC THE USE OF THE STREETS AND EASEMENTS SHOWN HEREON.

ADAM PIERCE, OWNER

LINDSEY PIERCE, OWNER

STATE OF TEXAS\*  
COUNTY OF HAYS\*

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED ADAM PIERCE AND LINDSEY PIERCE, KNOWN TO ME TO BE THE PERSONS WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS THE \_\_\_\_ DAY OF \_\_\_\_\_, A.D., 20\_\_\_\_.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

STATE OF TEXAS \*  
COUNTY OF HAYS \*

I, ELAINE H. CARDENAS, COUNTY CLERK OF HAYS COUNTY, TEXAS, DO HEREBY CERTIFY THAT THIS PLAT WAS FILED FOR RECORD IN MY OFFICE ON THE \_\_\_\_ DAY OF \_\_\_\_\_, 2020, AT \_\_\_\_ O'CLOCK \_\_\_\_ M., AND DULY RECORDED ON THE \_\_\_\_ DAY OF \_\_\_\_\_, 2020 AT \_\_\_\_ O'CLOCK \_\_\_\_ M., IN THE PLAT RECORDS OF HAYS COUNTY, TEXAS IN DOCUMENT NUMBER \_\_\_\_\_.

ELAINE H. CARDENAS, COUNTY CLERK  
HAYS COUNTY, TEXAS

STATE OF TEXAS \*  
COUNTY OF HAYS \*

I, ELAINE H. CARDENAS, COUNTY CLERK OF HAYS COUNTY, TEXAS, DO HEREBY CERTIFY THAT ON THE \_\_\_\_ DAY OF \_\_\_\_\_, A.D. 2020, THE COMMISSIONERS COURT OF HAYS COUNTY, TEXAS, PASSED AN ORDER AUTHORIZING THE FILING FOR RECORD OF THIS PLAT, AND SAID ORDER HAS BEEN DULY ENTERED IN THE MINUTES OF THE SAID COURT INSTRUMENT NUMBER \_\_\_\_\_.

WITNESS MY HAND AND SEAL OF OFFICE, THIS THE \_\_\_\_ DAY OF \_\_\_\_\_, A.D. 2020

RUBEN BECERRA  
COUNTY JUDGE  
HAYS COUNTY, TEXAS

ELAINE H. CARDENAS  
COUNTY CLERK  
HAYS COUNTY, TEXAS

NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO AN INDIVIDUAL WATER SUPPLY OR A STATE APPROVED COMMUNITY WATER SYSTEM. DUE TO DECLINING WATER SUPPLIES AND DIMINISHING WATER QUALITY, PROSPECTIVE PROPERTY OWNERS ARE CAUTIONED BY HAYS COUNTY TO QUESTION THE SELLER CONCERNING GROUND WATER AVAILABILITY. RAIN WATER COLLECTION IS ENCOURAGED AND IN SOME AREAS MAY OFFER THE BEST RENEWABLE WATER RESOURCE.

NO STRUCTURE IN THIS SUBDIVISION SHALL BE OCCUPIED UNTIL CONNECTED TO A PUBLIC SEWER SYSTEM OR TO AN ON-SITE WASTEWATER SYSTEM WHICH HAS BEEN APPROVED AND PERMITTED BY HAYS COUNTY DEVELOPMENT SERVICES.

NO CONSTRUCTION OR OTHER DEVELOPMENT WITHIN THIS SUBDIVISION MAY BEGIN UNTIL ALL HAYS COUNTY DEVELOPMENT PERMIT REQUIREMENTS HAVE BEEN MET.

TOM POPE, R.S., C.F.M.  
HAYS COUNTY FLOODPLAIN ADMINISTRATOR

DATE

CATLYN STRICKLAND, DIRECTOR HAYS  
COUNTY DEVELOPMENT SERVICES

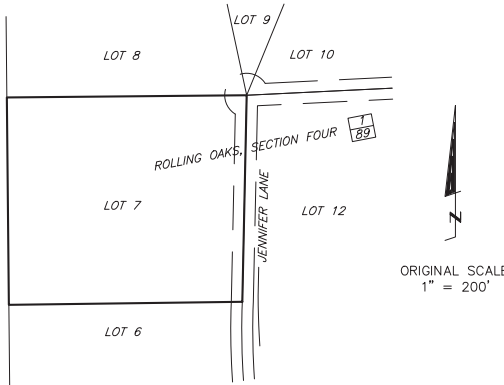
DATE

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, HEREBY STATE THAT TO THE BEST OF MY SKILL AND KNOWLEDGE THIS PLAT IS TRUE AND CORRECTLY MADE AND IS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE UNDER MY SUPERVISION ON THE GROUND AND THAT THE CORNER MONUMENTS WERE PROPERLY PLACED UNDER MY SUPERVISION.

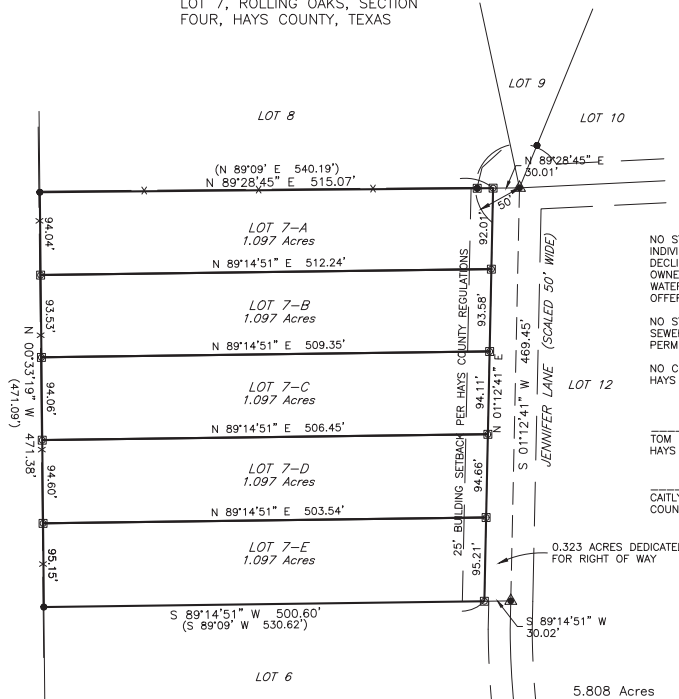
PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE.  
REGISTERED PROFESSIONAL LAND SURVEYOR  
KYLE SMITH, R.P.L.S. NO. 5307

RESUBDIVISION PLAT OF LOT 7,  
ROLLING OAKS, SECTION 4  
HAYS COUNTY, TEXAS

- LEGEND**
- HAYS COUNTY DEED, REAL PROPERTY OR OFFICIAL PUBLIC RECORDS
  - HAYS COUNTY PLAT RECORDS
  - 1/2" IRON ROD SET WITH PLASTIC CAP STAMPED "BYRN SURVEY"
  - 1/2" IRON ROD FOUND OR DIAMETER NOTED
  - 1 1/4" IRON PIPE FOUND OR DIAMETER NOTED
  - CALCULATED POINT
  - WIRE FENCE
  - UTILITY LINE, POLE AND GUY



ORIGINAL LOT CONFIGURATION  
LOT 7, ROLLING OAKS, SECTION  
FOUR, HAYS COUNTY, TEXAS



RESUBDIVISION PLAT OF LOT  
7, ROLLING OAKS, SECTION  
FOUR, HAYS COUNTY, TEXAS

**LOT SIZE CATEGORIES**

- TOTAL AREA = 5.485 Ac.
- TOTAL NUMBER OF LOTS = 5
- AVERAGE LOT SIZE = 1.097 Ac.
- NUMBER OF LOTS OVER 10 ACRES = 0
- NUMBER OF LOTS 5 - 10 ACRES = 0
- NUMBER OF LOTS 2 - 5 ACRES = 0
- NUMBER OF LOTS 1 - 2 ACRES = 5
- NUMBER OF LOTS LESS THAN 1 ACRE = 0

UTILITIES:  
ELECTRIC-PEDERNALES ELECTRIC COOPERATIVE  
WATER-RAIN WATER COLLECTION  
SEWER-ADVANCED ON-SITE SEWAGE FACILITIES

DRIVEWAY PERMIT STATEMENT:  
DRIVEWAYS SHALL COMPLY WITH CHAPTER 721 OF THE HAYS COUNTY DEVELOPMENT REGULATIONS, AND BE PERMITTED THROUGH THE TRANSPORTATION DEPARTMENT OF HAYS COUNTY UNDER CHAPTER 721.

CLIENT: PIERCE, ADAM  
DATE: 2/14/20  
OFFICE: K. SMITH  
CREW: K. SMITH, PRADO  
FB/PG: 781/1  
PLAT NO. 27755-20-c



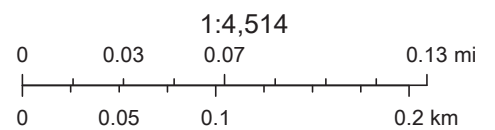
# Rolling Oaks, Section Four, Lot 7, Replat - Property Location Map



10/8/2020, 4:08:43 PM

 Parcels

 Lot Lines



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

## AGENDA ITEM REQUEST FORM

### Hays County Commissioners Court

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Discussion and possible action to approve a Funding Agreement to assist Independent School Districts within Hays County related to COVID-19 response and recovery efforts.

| ITEM TYPE            | MEETING DATE     | AMOUNT REQUIRED     |
|----------------------|------------------|---------------------|
| ACTION-MISCELLANEOUS | October 27, 2020 | \$500,000 CRF Funds |

**LINE ITEM NUMBER**

Fund 009

**AUDITOR USE ONLY**

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** MARISOL VILLARREAL-ALONZO

| REQUESTED BY             | SPONSOR | CO-SPONSOR |
|--------------------------|---------|------------|
| Mike Jones/Tammy Crumley | JONES   | N/A        |

**SUMMARY**

On October 13, 2020 the Commissioners Court identified CARES Funding to assist school districts in their COVID-19 response and recovery efforts. The OES & CWOPS's Directors have been in discussions with the Hays Consolidated Independent School District, San Marcos Consolidated Independent School District, Wimberley Independent School District and Dripping Springs Independent School District regarding their needs. The draft funding agreement will outline the funding and federal reporting requirements that will be required. The funding allocation was calculated based on student population as follows:

| COVID-19 Funding for Hays County School Districts                |                     |                               |                   |
|------------------------------------------------------------------|---------------------|-------------------------------|-------------------|
|                                                                  | *Student Population | % of Total Student Population | Funding Amount    |
| Wimberley ISD                                                    | 2,490               | 7%                            | \$ 33,397         |
| Dripping Springs ISD                                             | 6,844               | 18%                           | \$ 91,794         |
| San Marcos CISD                                                  | 8,086               | 22%                           | \$ 108,452        |
| Hays CISD                                                        | <u>19,859</u>       | 53%                           | <u>\$ 266,356</u> |
|                                                                  | 37,279              |                               | \$ 500,000        |
| <i>*Student population based on 2019 SNAP report (pre-COVID)</i> |                     |                               |                   |
|                                                                  |                     |                               |                   |
|                                                                  |                     |                               |                   |

If approved, the School Districts will be asked to submit a written spending plan to ensure all funds used follow requirements pursuant to section 601 of the Social Security Act, as added by section 5001 of the Coronavirus Aid, Relief, and Economic Security Act, Pub. L. No. 116-136, div. A, Title V (Mar. 27, 2020).

Attachment: Funding Agreement

**FUNDING AGREEMENT RELATED TO COVID-19 RELIEF**

**STATE OF TEXAS**           §  
                                          §  
**COUNTY OF HAYS**       §

***SECTION I. PARTIES TO THE CONTRACT***

This contract is made and entered into by and between the County of Hays ("County") and \_\_\_\_\_ ("School District"). The parties hereto have severally and collectively agreed and by execution hereof are bound to the mutual obligations and to the performances and accomplishment of the tasks hereinafter described.

***SECTION II. CONTRACTOR PERFORMANCE***

In consideration of County’s obligations contained herein, School District shall perform the following activities in support of COVID-19 relief within Hays County:

- 1) School District shall develop and operate a spending plan to assist with the daily operations to protect students, teachers and staff as a result of the COVID-19 Pandemic.
- 2) School District’s programs shall serve a public purpose for Hays County, a political subdivision of the State of Texas, in compliance with the requirements of Article III, Section 52 of the Texas Constitution.
- 3) Prior to instituting the spending plan, School District shall provide for approval/consent by the Hays County Commissioner’s Court a written plan for implementation that sufficiently describes the specific purpose and framework for operations. The Commissioners Court’s approval of the plan may stipulate certain standards for compliance with United States Code of Federal Regulations, Title 2, Section 200 (2 CFR 200), as appropriate.

***SECTION III. CONTRACT PERIOD***

The initial period for performance of this contract shall commence on the date last executed by the Parties (the “Effective Date”) and shall terminate December 30, 2020.

***SECTION IV. COUNTY OBLIGATION***

Notwithstanding any other provision of this contract, the total amount paid by the County to the School District under this contract shall not exceed the annual lump sum payment of \_\_\_\_\_ Dollars (\$\_\_\_\_\_ USD) in current funds, paid within fifteen (15) days of the Effective Date.

***SECTION V. REPORTS***

The parties acknowledge that the funds expended under this contract are public funds that must be carefully monitored to ensure proper distribution in compliance with the terms of this Agreement. The County is legally obligated pursuant to the Texas Constitution to serve a public purpose and to accurately report the manner in which the public funds are expended. School District agrees to provide monthly reports of expenditures made pursuant to this Agreement, with sufficient financial and subject-matter detail to allow the Hays County Auditor and Accounts Payable to assess legal compliance in distribution of the funds.

***SECTION VI. COUNTY MONITORING***

The School District shall permit County to inspect and shall make available to the County for inspection any or all pertinent records, files, information or other written material maintained by the School District or any person or other entity with whom any portion of the performance hereunder has been subcontracted. The School District shall permit County free access to all premises under its control or under the control of any person or entity with whom any portion of the performance hereunder has been subcontracted.

***SECTION VII. SUBCONTRACTS***

The School District, in subcontracting any of the performances hereunder, shall legally bind subcontractors to perform subject to all the duties, requirements, and obligations specified of School District herein with respect to such performance or any portions thereof.

In no event shall any provision of this section, specifically including the requirement that the School District obtain the prior approval of the County on the School District subcontracts, be construed as relieving School District of the responsibility for ensuring that the performance rendered under all subcontracts are rendered so as to comply with all the terms and provisions of this contract as if the performance rendered were rendered by School District hereunder.

***SECTION VIII. POLITICAL ACTIVITY***

None of the performance rendered hereunder shall involve, and no portion of the funds received by the School District hereunder shall be used for, any partisan political activity (including, but not limited to, an activity to further the election or defeat of any candidate for public office). This Section shall not be construed to prohibit the Parties from collaborating to address policy-related economic development issues with state and/or federal legislators, as may be needed from time to time.

### ***SECTION IX. CONFLICT OF INTEREST***

No official or employee of the County, no employee of the School District, no member of the School District governing board or body, and no person who exercises any functions or responsibilities in the review or approval of the undertaking or carrying out of this contract shall participate in any decision relating to this contract which affects his or her personal pecuniary interest, nor shall any official of the County benefit, directly or indirectly, from the distribution of funds under this Agreement.

### ***SECTION X. COMPLIANCE WITH LAWS***

The School District shall comply with all applicable laws, ordinances, codes and regulations of the state, local and federal governments.

### ***SECTION XI. INDEPENDENT CONTRACTOR***

It is expressly understood and agreed by both parties hereto that the County is contracting with the School District as an Independent Contractor and that the Contractor, as such, AGREES TO HOLD THE COUNTY HARMLESS AND TO INDEMNIFY IT FROM AND AGAINST ANY AND ALL CLAIMS, DEMANDS AND CAUSES OF ACTION OF EVERY KIND AND CHARACTER WHICH MAY BE ASSERTED BY ANY THIRD PARTY OCCURRING OR IN ANY WAY INCIDENT TO, ARISING OUT OF, OR IN CONNECTION WITH THE SERVICES TO BE PERFORMED BY THE CONTRACTOR UNDER THIS CONTRACT.

### ***SECTION XII. EQUAL OPPORTUNITY***

#### **A. Nondiscrimination**

The School District assures that no person shall, on the ground of race, creed, color, handicap, national origin, sex, political affiliation or beliefs, be excluded from, be denied the benefits of, or be subject to discrimination under any program or activity funded in whole or in part under this agreement or otherwise under the School District's control.

#### **B. Employment**

- 1) The School District will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin. The School District will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, sex or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The School District agrees to post, in conspicuous places available to employees and applicants for employment, notices setting forth requirements of these nondiscrimination provisions.

- 2) The School District will comply with all applicable equal opportunity laws, rules, regulations and orders.

### ***SECTION XIII. ORAL AND WRITTEN AGREEMENTS***

Any and all oral or written agreements, relating to the subject matter of this contract and which were made prior to the date of commencement specified in Section IV, between the School District and the County have been reduced to writing and are contained herein.

### ***SECTION XIV. AMENDMENTS***

Any alterations, additions, or deletions to the terms of this contract shall be in writing and executed by both parties hereto except as may be expressly provided for in some other manner by the terms of this contract.

### ***SECTION XV. LEGAL AUTHORITY***

- A. The School District assures and guarantees that it possesses the legal authority to enter into this contract and to perform the service School District has obligated itself to perform under this contract.
- B. The person or persons signing this contract on behalf of the School District warrant and guarantee to having been duly authorized by the School District to execute with contract on behalf of the School District to validly and legally bind School District to all terms, performances and provisions herein set forth.
- C. The County shall have the right, at its option, to either temporarily suspend or permanently terminate this contract if there is any dispute as to the legal authority of either the School District or the person signing this contract to enter into this contract. School District is liable to County for money it has received from the County for performance of the provisions of this contract, if the County has suspended or terminated this contract for the reasons stated in this Section.

### ***SECTION XVI. AUDIT***

Hays County shall, upon five (5) days' written notice to School District, have a right to inspect all receipts, invoices, proofs of purchase, records of employee activity, records of expenditures, and other relevant data related to the School District. Unless otherwise requested by School District, County's inspection shall be performed between the hours of 8 a.m. and 5 p.m., Monday through Friday. School District shall ensure that any subcontract executed by School District in furtherance of this School District includes an obligation by subcontractor to turn over, upon written request by School District, all receipts, invoices, proofs of purchase, records of employee activity, and records of expenditures related to this Contract. County shall have the same right under this Section to inspect subcontractor materials as it does School District materials. This Section shall survive termination of this School District, and shall remain in effect for five (5) years from the commencement of this Contract.



**SECTION XVII. GEOGRAPHIC AND CLIENT COVERAGE**

The School Districts shall provide performances under this contract to benefit the of Hays County.

**SECTION XVIII. EARLY TERMINATION**

- A.** Either of the parties hereto shall have the right, in such party's sole discretion and at such party's sole option, to terminate and bring to an end all performances to be rendered under the terms hereof by notifying the other party hereto in writing of such termination at least thirty days prior to the automatic renewal date of this contract. Should neither party exercise their right to terminate, this contract shall terminate December 30, 2020.
- B.** Upon termination or receipt of notice to terminate whichever occurs first, the School District shall cancel, withdraw or otherwise terminate, any outstanding activities which relate to the performance of this contract and shall otherwise cease to incur costs hereunder.
- C.** Upon termination or expiration of this Agreement, any monies not distributed or spent, and which remain in the possession of School District, shall be returned to the County in full, within fifteen (15) days of that termination or expiration.

Accepted and Agreed this the \_\_\_\_ day of May 2020.

COUNTY

SCHOOL DISTRICT

\_\_\_\_\_  
 Ruben Becerra  
 Hays County Judge  
 On Behalf of Hays County, Texas

BY: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
 Dr. Elaine Cardenas, MBA, PhD  
 Hays County Clerk

**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Discussion and possible action to authorize the Transportation Department to hire the Construction Inspector, slot 1045-003 at the 25th percentile effective November 2, 2020.

| ITEM TYPE            | MEETING DATE     | AMOUNT REQUIRED |
|----------------------|------------------|-----------------|
| ACTION-MISCELLANEOUS | October 27, 2020 | \$5,841         |

**LINE ITEM NUMBER**

020-710-00]

AUDITOR USE ONLY

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

| REQUESTED BY      | SPONSOR | CO-SPONSOR |
|-------------------|---------|------------|
| Jerry Borcharding | JONES   | N/A        |

**SUMMARY**

The Transportation Director would like to hire the vacant Inspector position, grade 112 at the 25th percentile. The candidate has over six years of experience in materials inspections and has acquired national-level certifications that will be beneficial in this role. Savings within vacant positions are available to fund this request.

| Inspector - Grade 112 |                 |
|-----------------------|-----------------|
| 42,075                | Minimum         |
| 47,334                | 25th Percentile |
| 5,259                 | Difference      |
| 1,113                 | Fringe          |
| 6,372                 | Annualized      |
| 5,841                 | FY21 Impact     |



**AGENDA ITEM REQUEST FORM**

**Hays County Commissioners Court**

Tuesdays at 9:00 AM

Request forms are due in Microsoft Word Format via email by 2:00 p.m. on Wednesday.

**AGENDA ITEM**

Executive Session pursuant to Sections 551.071 and 551.087 of the Texas Government Code: consultation with counsel and deliberation regarding economic development negotiations associated with Project Recoil. Possible discussion and/or action may follow in open Court.

| ITEM TYPE         | MEETING DATE     | AMOUNT REQUIRED |
|-------------------|------------------|-----------------|
| EXECUTIVE SESSION | October 27, 2020 |                 |

**LINE ITEM NUMBER**

AUDITOR USE ONLY

**AUDITOR COMMENTS:**

**PURCHASING GUIDELINES FOLLOWED:** N/A      **AUDITOR REVIEW:** N/A

| REQUESTED BY | SPONSOR | CO-SPONSOR |
|--------------|---------|------------|
|              | SHELL   | N/A        |

**SUMMARY**

Summary to be provided in Executive Session.