

Section 01110

SUMMARY OF WORK

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Summary of the Work including work by the City, City-furnished Products, work sequence, future work, Contractor use of Premises, special conditions for substantial completion and City occupancy.

1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work of the Contract is for construction of Neighborhood Sewer System Improvements, AS069, WBS No. R-002011-0089-3, as shown on the contract drawings.
- B. Work on the contract is for construction of sanitary sewer and appurtenances, construction of storm sewer system and appurtenances, construction of proposed water lines and appurtenances, construction of all pavement, installation street lighting, and installation of permanent signage and pavement markings. The work also includes tree protection, storm water pollution prevention, traffic control plan, and site restoration. The work includes obtaining necessary permits from City of Houston and other jurisdictional entities, governmental and non-governmental.
- C. Demolition and removal work includes but is not limited to removal of existing concrete and asphalt pavements, curbs and gutters, driveways and sidewalks, inlets, storm sewer, sanitary sewer, trees, landscaping, miscellaneous signs and foundations, and other items to facilitate construction of project. The work includes the removal and disposal of miscellaneous abandoned utility lines (all sizes), cables, and other existing facilities encountered during demolition or excavation activities. Contractor should note that existing sidewalks and driveways with materials other than concrete (pavers, stamped concrete, and similar decorative improvements) will be replaced with concrete and not restored to the original enhanced material conditions. Historical markers exist at multiple locations within the project limits as indicated in the project plans. These markers shall be salvaged and reinstalled on the proposed curb at the same locations.
- D. Water line construction includes the replacement of existing 8-inch water line along Hazard Street between Westheimer and Indiana (1,500 linear feet) with a new 8-inch water line. The existing 20-inch CI water line along Driscoll Street between Westheimer Road and Indiana shall be abandoned and replaced with new 24-inch water line with a parallel 8-inch water line for local supply service.
- E. Sanitary sewer construction includes installation of a 24" sanitary sewer on Fairview between Shepherd Drive and Dickey Place. The 24" trunk proceeds south to San Saba Street. The 24" trunk extends westerly on San Saba Street and connects to the existing sanitary system at Kirby Drive. The project provides installation of approximately 30,500 linear feet of 6-inch to 24-inch sanitary sewer, and abandonment of 8-inch to 24-inch existing sanitary sewer. Existing sanitary sewer lines within back lot easements will be replaced with lines located in street right-of-way. The project includes the installation of 6" service laterals as shown on the plans. The service interconnections will occur on a separate contract through the City's Substitute

Services program. The existing system will be abandoned at those locations shown on the plans and existing flows diverted to the proposed system. For existing sanitary sewers that are shown on the drawings to be capped, the contractor shall verify that there is no flow in the sewer prior to capping and plugging. New sewers must be tested and approved by the City's representative prior to operation.

- F. Storm sewer construction includes abandonment in place, removal and replacement of existing storm sewer, inlets, manholes and leads with proposed storm sewer inlets, manholes, and leads, and construction of new storm sewer including replacement of the existing 54-inch monolithic concrete storm sewer along Fairview Dr. with a new 72" storm sewer between Dickey Street and Shepherd Drive. Storm sewer improvements include new 48" and 36" storm sewer along Reba Drive, Dickey Place, Ella Lee Lane, Argonne Street, and Mimosa Drive. In addition, new 24" storm sewers will be constructed as shown on the plans, and existing storm sewer lines less than 24" will be replaced and upgraded to a minimum of 24" at the locations shown on the drawings. Site reconnaissance identified existing 3" and 4" private drainage conduits at multiple locations throughout the project to convey drainage flow through the curb to the gutter. Contractor shall restore existing drains through new curb (4" maximum conduit) constructed for street reconstruction.
- G. Roadway improvements include demolition and removal of existing pavement and full depth pavement reconstruction as shown on the drawings for Avalon Place, Brun Street, Devonshire Street, Dickey Place, Driscoll Street, Dunraven Lane, Ella Lee Lane, Fairview Street, Hazard Street, Huldly Street, Kingston Street from Dunraven Lane to Avalon Place, Locke Lane, Mimosa Street, Reba Drive, Revere Street, Salisbury Street, San Saba Street, Spann Street, Welch Street, and Westgate Street from Dunraven Lane to Avalon Place. to (list of streets). Roadway improvements include pavement replacement for construction of new storm sewer and sanitary sewer in compliance with the street-cut ordinance as shown on the drawings for Argonne Street, Brazoria Street, Dickey Place from Westheimer Road to Fairview Street, Kingston Street from Westheimer Road to Dunraven Lane, Peckham Street from Fairview Street to Avalon Place, Persa Street from Fairview Street to Welch Street, San Felipe Street, and Westgate Street from Westheimer Road to Dunraven Lane. Approximately 95,000 square yards of existing pavement shall be removed and replaced.
- H. Access to driveways shall be maintained at all times unless Contractor notifies adjacent property owner(s) a minimum of seven days in advance of when access to driveways will be denied due to construction. Contractor shall provide access to driveways in accordance with City of Houston standard specification 02714 – Flexible Base Course for Temporary Driveways . Business identification signage shall be provided at commercial establishment driveways. Drives for businesses, commercial properties, and multi-family residential shall use high early strength concrete and cement stabilized sand in lieu of lime stabilization to reduce the duration of closure.
- I. Sidewalk work includes construction of concrete sidewalks ranging from 2'-6" wide to 5' wide by 4 ½ inch thick as shown on the drawings, and other pedestrian elements in accordance with City of Houston requirements, the Americans with Disabilities Act and Texas Accessibility Standards. TDLR Permit (EABPRJ No_____) is pending acceptance of the Work based on final inspection by a Registered Accessibility Specialist. TDLR final inspection will be arranged by Engineer and will be completed at the request of the Contractor prior to acceptance of project.
- J. Contractor shall maintain operational pedestrian signal heads as part of temporary signal installations and operations.

- K. Tree protection work includes clearance pruning, tree protection fencing, root pruning, tree removal, tree replacement, and other work as shown on the Tree Protection Plan drawings and as required to comply with the City's Street Tree Ordinance.
- L. Traffic signing and pavement marking as shown on the plans. The contractor shall prepare inventory of existing signs before construction and shall be responsible for safe-guarding existing signs so that they remain visible and upright. The contractor to salvage and re-install the existing street name signs indicated by an asterisk on the pavement marking and signage plan sheets. The ground mounted corner signs will be re-installed at the proposed locations using the poz-loc slip base and drilled footing as shown on the Miscellaneous Details. The contractor shall be responsible for replacing remaining proposed signs including the poles and anchors as shown on the plans and according to COH Spec 01554.
- M. Street lighting work includes installation and pull boxes (boxes supplied by CenterPoint Energy) and coordination with City of Houston Street Lighting Section (contact Leaneice Brown 832-395-3003) prior to beginning work on this item. The cost and materials provided under this contract are subject to the approval of CenterPoint and City of Houston-Traffic and Transportation Division for items provided and specifically listed in the Document 00410 (e.g. meter boxes, conduits, etc).
- N. Traffic control measures including channelizing devices, advanced signing, temporary signing and temporary striping during construction.
- O. Storm Water Pollution Prevention Plan
(Insert summary from SWPPP report)
- P. Contractor shall provide uniformed police officer to direct traffic when one or more lanes are obstructed or stopped to facilitate construction activities per City of Houston Specification 01555. Contractor shall notify local police department, fire department, City of Houston and METRO a minimum of ten days before road closures or detours.
- Q. Geotechnical Investigation
For bidding and construction purposes, Bidder shall take full responsibility for interpretation and use of information contained in:
- Geotechnical Report No. HG1216342, prepared by the firm of HVJ Associates, Inc., entitled Geotechnical Investigation Neighborhood Sewer System Improvements(AS 069), dated September 22, 2016. An electronic version of this report is included on a CD-Rom affixed to the inside cover of the project manual.
- R. Environmental Site Investigation
For bidding and construction purposes, Bidder shall take full responsibility for interpretation and use of information contained in:
- Report No. HE1216340, entitled Phase I Environmental Site Assessment, Neighborhood Sewer System Improvements (AS 069) WBS No. R-002011-0089-3, Houston, Harris County prepared by the firm of HVJ Associates, Inc., dated July 22, 2016. Assessment has revealed evidence of various types of recognized environmental conditions in connection with the subject project alignment at 28 locations. HVJ Associates recommended further environmental assessment.
 - The Phase II ESA was designed to determine the nature of possible environmental contamination associated with sites with recognized environmental conditions

(REC) sites adjoining the Subject Project Alignments and their impact to the design, construction and operation of the proposed facilities. This assessment was performed in general accordance with proposal HE1216341 dated August 15, 2016 (revised August 29, 2016) and the current ASTM Standard Practice E-1903 - 97 (2002) "Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process" as modified by the City of Houston (COH) Department of Public Works and Engineering Infrastructure Design Manual "Geotechnical and Environmental Requirements".

A Final Conclusion was made as follows:

One Potential Petroleum Contaminated Area (PPCA) location is present along the Subject Project Alignments. This PPCA extends from the beginning of the Subject Project Alignment at the intersection Westheimer Road and Dickey at approximate Station 0+20 to the location of boring EB2 at approximate Station 2+75.

HVJ Associates recommended as follows:

"Based on a comparison of analytical results detailed in this report with TCEQ PCLs and other information, we recommend no further environmental assessment along the Subject Project Alignments. We recommend no additional worker protection since no contamination was found other than lead slightly above the Texas-Specific Background Concentration. We recommend no special gaskets or other design considerations for this project due to the lead metal issue."

- S. Field Office
Refer to 01502S-Mobilization and 01520-Temporary Field Office. A field office is required for this project.
- T. Project Identification Sign
Refer to 01580-Project Identification Signs. Project Identification Signs are required for this project located within the right-of-way, at locations designated. The fabrication, installation and removal of each sign are incidental to the work.
- U. Restoration of all landscaping, grass materials, positive drainage (swales, ditches, pipe drains and appurtenances) shall be the sole responsibility of the Contractor(s) and done at their expense.

1.03 CASH ALLOWANCES

- A. Include the following specific Cash Allowances in Contract Price under provision of General Conditions Paragraph 3.11:
 - 1. Street Lighting (CenterPoint Energy). This allowance is for the Contractor to pay CenterPoint Electric to remove and install street lights. CenterPoint will also provide pull boxes for the Contractor to install.
 - 2. Street Cut Permit Fees. This is an allowance for Contractor to pay the City of Houston for Street Cut Permits which the Contractor is responsible for obtaining.

1.04 ALTERNATES

- A. From the following list of Alternates, amount included in Contract Price for only those Alternates accepted by the City and listed in the fully executed Document 00520 – Agreement, Paragraph 3.2:

1. N/A

1.05 CITY-FURNISHED PRODUCTS

A. Items Furnished by the City for Installation and final connection by Contractor:

1. N/A

B. Contractor's Responsibilities:

1. Arrange and pay for Product delivery to the site.
2. Receive and unload Products at the site; jointly with the City, inspect for completeness or damage.
3. Handle, store, Install, and finish Products.
4. Repair or replace damaged items.

1.06 WORK SEQUENCE

A. Construct the Work in Phases in accordance with the following sequence and coordinate construction schedule and operations with the City. The work of the project shall be performed in phases as described below to reduce disruption and impact to the neighborhood and to adjacent commercial and residential areas for the duration of the project. The work described in each phase will be conducted in "block to block" segments as shown in the Traffic Control Plans. Construction will be limited to a rolling three (3) block operation to accomplish demolition, underground work, and pavement reconstruction. All work within Phase I and each successive phase shall be in "substantially complete condition" prior to beginning the construction of next phase unless Contractor receives consent from the City of Houston representative to begin a new phase of construction before another phase is completed. Street light conduit and other facilities are present in the right of way. Contractor shall use caution while working near such facilities. Repair or replacement of facilities damaged by construction activities will be the contractor's responsibility and will be at no cost to the City.

1. Place advance signing on cross streets and the work zone street's approaches. Place detour signing appropriate to the work zone. Place traffic control measures including barricades, vertical panels, drums, concrete barriers, flashing arrow, signing, striping, flaggers, and other measures as needed appropriate for the phase of the work, in accordance with the contract documents, and in compliance with the requirements of the Texas Manual of Uniform Traffic Control Devices latest edition. Install tree protection and SW3P measures before demolition and new construction is started.
2. Project shall be constructed in seven (7) construction phases. Phases 1 through 5 are located west of Shepherd Drive. Phases 6 and 7 are located east of Shepherd Drive. Two (2) work crews working simultaneously will be required for the project. Crew #1 will work west of Shepherd Drive and Crew #2 will work east of Shepherd Drive. When Crew #2 completes work east of Shepherd (Phases 6 and 7), Crew #2 will move to the west side of Shepherd Drive to construct Phases 4 and 5. Contractor may construct storm sewers, sanitary sewers, and water lines by open-cut or trenchless methods, except at locations where trenchless methods are specifically designated as shown on the construction drawings. Refer to Traffic Control Plan.

3. Phase 1 - Phase 1 provides construction of the main 72-inch storm sewer on Fairview Street, removal of the existing 54-inch monolithic storm sewer on Fairview Street, and construction of the main 24-inch sanitary sewer from Kirby Drive at San Saba Street along San Saba Street, Dickey Place, and Fairview Street. Construction of new storm sewer (72-inch) and new sanitary sewer (24-inch) will be from downstream to upstream. Construct one-half of street at a time (comply with "block to block" construction work zone as described in Paragraph A) while maintaining one lane continuously open for local access and mobility. Construct intersections one quarter of the intersection at a time while maintaining one-lane of traffic as shown on the traffic control plan. Intersections shall be constructed using high early strength concrete and cement stabilized sand in lieu of lime stabilization to reduce closure duration.
 - a. Phase 1A – construct the 72-inch and 48-inch storm sewers along Fairview Street and Reba Drive from east to west (north lane). Construct a temporary connection of the new 72-inch storm sewer to the existing 54-inch monolithic storm sewer. Provide temporary drainage to south side of Fairview by auger of new laterals and construction of temporary inlets on south side of street. Construct proposed 8-inch sanitary sewer north of curb from proposed MH 10 to proposed MH 15.
 - b. Phase 1B – construct the 24-inch sanitary sewer from Kirby Drive at San Saba, along San Saba Street, Dickey Place, and Fairview Street from west to east (south lane).
 - c. Phase 1C – On Fairview Street construct proposed storm sewer MH 5 (Station 14+57.29) and extend the 72-inch storm sewer to proposed outfall MH 6 (Station 15+68.60). Remove the existing 24-inch Camp Logan sanitary sewer and provide temporary bypass pumping of flow to existing sanitary sewer MH (Station 14+62) in Fairview Street. Construct proposed sanitary sewer MH's 16 (Station 14+28.09), and 17 (Station 14+59.79), and proposed 8-inch sanitary sewer extending from MH 15 to MH 17.
 - d. Phase 1D – On Fairview Street extend the 8-inch sanitary sewer to proposed MH 13 (Station 15+03.04). Transfer the temporary Camp Logan sanitary flow to proposed sanitary MH 17 (Station 14+59.79). Remove existing 24-inch Camp Logan sewer within street to existing sanitary MH at Station 15+03.
4. Phase 2 – Phase 2 extends storm sewers and sanitary sewers from the main lines constructed in Phase 1 to the secondary storm and sanitary sewers shown on the drawings along Dickey Place, Ella Lee Lane, Avalon Place from Kirby Drive to Dickey Place, Argonne Street from Avalon Place to Brazoria, Brazoria/Welch from Argonne street to Persa Street, Revere Street from Welch Street to Mimosa Street, and Spann Street from Welch Street to Mimosa Street. Construct sanitary sewer, storm sewer, and roadway improvements in a similar sequence to Paragraph A.3. above. Pavement construction for Avalon Place from Kirby Drive to Dickey Place shall use high early strength concrete and cement stabilized sand in lieu of lime stabilization to reduce the duration of street closure.
5. Phase 3 - Phase 3 extends storm sewers and sanitary sewers from the secondary lines constructed in Phase 2 to the storm and sanitary sewers shown on the drawings along Westgate Street from Fairview Street to Avalon Place, Kingston Street from

- Fairview Street to Avalon Place, Salisbury Street, Devonshire Street, Avalon Place from Dickey Place to Persa Street, and Mimosa Drive from Argonne Street to end. Construct sanitary sewer, storm sewer, and roadway improvements in a similar sequence to Paragraph 1.06.A. - A.3. above.
6. Phase 4 - Phase 4 extends storm sewers and sanitary sewers from the lines constructed in Phase 3 to the storm and sanitary sewers shown on the drawings along Westgate Street from Fairview Street to Westheimer Road, Kingston Street from Fairview Street to Westheimer Road, Persa Street from Fairview Street to Avalon Place, and Peckham Street from Fairview Street to Avalon Place. Construct sanitary sewer, storm sewer, and roadway improvements in a similar sequence to Paragraph 1.06.A. - A.3. above.
 7. Phase 5 - Phase 5 extends storm sewers and sanitary sewers from the lines constructed in Phase 4 to the storm and sanitary sewers shown on the drawings along Avalon Place from Persa Street to Shepherd Drive, Persa Street from Avalon Place to Welch Street, Welch Street from Persa Street to Shepherd Drive, Argonne Street from Brazoria Street to San Felipe Street, Revere Street from Welch Street to San Felipe Street, Spann Street from Welch Street to San Felipe Street, and San Felipe Street from Spann Street east to Shepherd Drive and west from Spann Street to Chilton Street. Construct sanitary sewer, storm sewer, and roadway improvements in a similar sequence to Paragraph 1.06.A. -A.3. above.
 8. Phase 6 – Phase 6 constructs storm sewers and roadway improvements as shown on the drawings on Fairview Street from Shepherd Drive to McDuffie Street, Huldy Street from Fairview Street to Westheimer Road, and Brun Street from Fairview Street to Westheimer Road. Construct storm sewer and roadway improvements in a similar sequence to Paragraph 1.06A. - A.3. above.
 9. Phase 7 - Phase 7 constructs storm sewers, sanitary sewers, new 8-inch water line, new 24-inch water line, and abandonment of existing 20-inch water line as shown on the drawings along Fairview Street from McDuffie Street to Driscoll Street, Hazard Street from Indiana Street to Westheimer Road, and Driscoll Street from Indiana Street to Westheimer Road. Construct storm sewer and roadway improvements in a similar sequence to Paragraph 1.06.A. -A.3. above.
- B. Contractor shall perform construction of storm sewer system and sanitary sewer system working from downstream to upstream. Proper drainage of existing and proposed storm sewer system is to be maintained throughout construction.
 - C. Contractor shall install relevant temporary signage, striping, and devices (barricades, low profile barriers, drums, etc.) prior to moving traffic as shown on plans. These installations shall be removed or moved as necessary for each phase.
 - D. Construction of proposed improvements that impact access to St. Anne elementary school and River Oaks elementary school will be constructed in summer months to preclude impacts to student drop-off and pick-up during the school year. Contractor to coordinate the scheduling for this work with the Houston Public Works, Traffic Operations Group, School Coordinator - Ms. Kathryn Parker; email: ????@houstontx.gov; telephone: ???-???-????.
 - E. School and Church contact information:

River Oaks Elementary School
2008 Kirby Dr

Houston, TX 77019
(713) 942-1460
Dr. Keri Fovargue , Principal

St. Anne Catholic Community
2140 Westheimer Rd
Houston, TX 77098
(713) 526-3276
Gwen Rossel, Parish Secretary

First Cumberland Presbyterian Church
2119 Avalon Pl,
Houston, TX 77019
(713) 522-7821
Rev. Geoff Knight, Pastor

Third Baptist Church Sbc
Houston, TX 77019

Sojourn Montrose
1846 Westheimer Rd
Houston, TX 77098
Marshall Dallas, Staff Member

- F. Coordination of the Work: Refer to Section 01312 - Coordination and Meetings.

1.07 CONTRACTOR USE OF PREMISES

- A. Comply with procedures for access to the site and Contractor's use of rights-of-way as specified in Section 01145 - Use of Premises.
- B. Construction Operations: Limited to the City's rights-of-way provided by the City and areas shown or described in the Contract documents.
- C. Utility Outages and Shutdown: Provide a minimum of 48 hours notice to the City and private utility companies (when applicable), excluding weekends and holidays, in advance of required utility shutdown. Coordinate all work as required.

1.08 STREET CUT ORDINANCE

- A. Excavations on or under pavement in the City's right-of-way must have a permit. Comply with City of Houston, Texas Ordinance No. 2000-1115, an ordinance amending Chapter 40 of the Code of Ordinances, Houston, Texas, relating to excavating in the Public right-of-way.
- B. Comply with the latest edition of street cut New Pavement Repair and Pavement Replacement details.
- C. Quantities are included for street cut pavement repair and replacement in applicable Specification sections for Unit Price contracts.
- D. Include payment for street cut pavement repair and replacement in lump sum bid for

Stipulated Price contracts.

1.09 WARRANTY

- A. Comply with warranty requirements in accordance with Document 00700 - General Conditions.

1.10 ADDITIONAL CONDITIONS FOR SUBSTANTIAL COMPLETION

- A. In addition to requirements outlined in Document 00700 – General Conditions, for Contractor to be substantially complete with the Work and call for inspection by Project Manager to confirm, the following conditions must be met or completed:

1. All yards and sprinkler systems have to be restored or repaired to pre-construction condition.
2. All traffic control devices and signage that have been salvaged and stored have been installed.
3. All pay items complete report.
4. The Contractor is to have completed and passed Texas Department of Licensing and Regulation Post Construction Inspection of sidewalks and wheelchair ramps per Texas Accessibility Standards.
5. Finished grading.
6. All Safety related work including pavement stripping, signing and signalization
7. Construction and/or restoration of driveways, parking lots and sidewalks.
8. Construction and/or replacement of street pavement and curbing.
9. Landscaping features (site restoration).
10. Pavement markings.
11. Seeding (hydromulch) and sodding.
12. Successful hydrostatic testing and disinfection.
13. Transfer services.

- B. No additional condition described in Paragraph 1.10 may be included in Contractor's punch list.

PART 2 PRODUCTS - Not Used

PART 3 EXECUTION - Not Used

END OF SECTION

