#### GENERAL ITEMS

- All construction shall conform to the requirements of the "Standard Specifications for Public Works Construction" by the North Texas Central Council of Governments, 5th edition amended by the City of Rockwall. The CONTRACTOR shall reference the latest City of Rockwall standard details provided in the Rockwall Public Works Department, Engineering Divisions "Standards of Design and Construction" manual for details not provided in these plans. The CONTRACTOR shall possess one set of the NCTCOG Standard Specifications and Details and the City of Rockwall's "Standards of Design and Construction" manual on the project site at all times
- 2. The CONTRACTOR shall protect existing property monumentation and primary control. Any such points which the CONTRACTOR believes will be destroyed shall have offset points established by the CONTRACTOR prior to construction. Any monumentation destroyed by the CONTRACTOR shall be re-established at CONTRACTOR's expense by a registered professional land surveyor.
- destroyed by the CONTRACTOR shall be re-established at CONTRACTOR's expense by a registered professional land surveyor.
  Upon the CITIES request the CONTRACTOR shall provide survey Northings, Eastings and Elevations by registered professional land surveyor for: any existing utilities that may be in
- installation to verify it has been installed per plan. (no separate pay)

  4. Any item called out for on the plans that does not have a specific bid item shall be subsidiary

conflict with the proposed improvements of the construction plans, and any proposed

- to the project and no separate pay shall be given.

  The CONTRACTOR is solely responsible for performing all construction layouts from the site layout control points, and from the dimensions and centerlines shown. The CONTRACTOR must notify the engineer of any discrepancies before proceeding with the
- 6. CONTRACTOR shall take all available precautions to control dust. CONTRACTOR shall control dust by sprinkling water (no separate pay), or as approved by the City and engineer.
- 7. CONTRACTOR shall video record and provide a copy to the construction inspector of the entire job site before construction starts. Video record of the site will be used to dispute discrepancies of any preexisting conditions of the project site before construction begins.
- . It is the CONTRACTOR's responsibility to maintain a neat and accurate redline record of construction for the City's records. The CONTRACTOR shall provide the City full size reproducible markups that record all construction deviating from the plans. These redline construction plan records shall be submitted to the City at the end of the job and sign by the CONTRACTOR. These records must be received or the City will not release final retainage or acceptance on the job.

#### **EROSION CONTROL & VEGETATION**

- 1. The CONTRACTOR or developer shall be responsible, as the entity exercising operational control, for all permitting as required by the Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ). This includes, but is not limited to, preparation of the Storm Water Pollution Prevention Plan (SWPPP), the Construction Site Notice (CSN), the Notice of Intent (NOI), the Notice of Termination (NOT) and any Notice of Change (NOC) and is required to pay all associated fees
- 2. Erosion control devices as shown on the erosion control plan for the project shall be installed prior to the start of land disturbing activities.
- 3. All erosion control devices are to be installed in accordance with the approved plans, specifications and Storm Water Pollution Prevention Plan (SWPPP) for the project. Erosion control devices shall be placed and in working order prior to start of construction. Changes are to be reviewed by the design engineer and the City of Rockwall prior to implementation.
- 4. If the Erosion Control Plans and Storm Water Pollution Prevention Plan (SWPPP) as approved cannot appropriately control erosion and off-site sedimentation from the project, the erosion control plan and/or the SWPPP is required to be revised and any changes reported to the Texas Commission on Environmental Quality (TCEQ), when applicable.
- 5. All erosion control devices shall be inspected weekly by the CONTRACTOR and after all major rain events, or more frequently as dictated in the project Storm Water Pollution Prevention Plan (SWPPP). CONTRACTOR shall provide copies of inspection's reports to the engineering inspection after each inspection.
- 6. The CONTRACTOR shall not dispose of waste and any materials into streams, waterways or floodplains. The CONTRACTOR shall secure all excavation at the end of each day and dispose of all excess materials. Disposal site shall be documented and provided to the City.
- 7. CONTRACTOR shall grade ground and ditches disturbed by construction to prevent ponding of storm water runoff. Grading shall be subsidiary to the appropriate bid item for unclassified street and unclassified channel excavation. Topsoil shall be stockpiled and replaced to a minimum depth of 6-inches and disc harrowed to a minimum depth of 4-inches (no pay item). CONTRACTOR shall replace grass areas disturbed by construction activities with solid sod. Sodded areas shall be watered and maintained until established.
- 8. The CONTRACTOR shall provide 4 inches of top soil in all parkways that are to be sodded. Top soil shall be approved by the City in writing. Topsoil shall be subsidiary to placement of grass/sod.
- 9. All areas outside pavement disturbed by construction activities shall have grass sod established immediately. Sod shall match existing yard type. Payment shall be made under the appropriate bid schedule item. Areas disturbed outside the R.O.W. or limits of construction shall have grass sod established immediately at the CONTRACTOR's expense.

## FRANCHISE UTILITY NOTES

- 1. Reasonable effort has been made to show the location of all known underground franchise utilities and service lines. However, the owner assumes no responsibility for failure to show any or all existing subsurface franchise utilities or utility line, or to show them in their exact location. The CONTRACTOR shall be responsible for the protection of all existing utilities, service lines or the like, which are exposed by the construction operation.
- 2. Existing franchise utilities shown in these plans reflect approximate locations prior to relocations. Some relocations have occurred with utility pole, gas, phone and cable utilities. The CONTRACTOR shall contact 811/Dig-Tess to locate existing and new utilities not shown in these plans.
- 3. CONTRACTOR shall support utilities where crossing with proposed storm sewer, water lines and sanitary sewers. Method of support shall be provided to the owner 24 hours prior to crossing.
- The location off all Atmos gas lines, AT&T, Charter/Spectrum and TXU/Oncor electric underground phone lines in these plans are approximate. The CONTRACTOR shall contact Atmos, TXU/Oncor, AT&T and Charter/Spectrum to verify location and depth of all existing gas, electric and phone lines prior to construction.

- CONTRACTOR shall have and pay for TXU/Oncor, AT&T and/or Charter/Spectrum support and protect all power, guy wires or cable and/or light poles in the work area.
- Any damage incurred to existing franchise utilities, appurtenances, utility poles, light standards, etc. By construction related activities shall be the sole responsibility of the CONTRACTOR

### TRAFFIC CONTROL

- 1. A suggested traffic control sequence plan is provided in the plan set. At a minimum the CONTRACTOR will be required to use the suggested sequence plan. If the CONTRACTOR chooses to change the traffic control sequencing, a traffic control sequencing plan and traffic control sheets of each phase will have to be provided for review and approval by the City. All shall be signed and sealed by a Registered Professional Engineer with the State of Texas.
- 2. All new Detouring or Traffic Control Plans submitted by the City for review and approval a minimum of 21 calendar days prior to planned day of implementation.
- 3. CONTRACTOR shall notify the City 14 Calendar days prior to changing Detouring and Traffic Control for each Phase and Segment. This is to give time for Contractor to place Message Boards for warning of Detour Change and for City Notification to other departments, emergency services, mail delivery, school district, and trash services.
- 4. Pedestrian and vehicular traffic flow, safety and access shall be maintained during all phases of construction. Barricading and traffic control during construction shall be the responsibility of the CONTRACTOR and shall conform to the "Texas Manual on Uniform Traffic Control Devices", latest edition, Part IV in particular. Traffic flow and access shall be maintained during all phases of construction unless otherwise noted on the traffic control plan. The CONTRACTOR is responsible for providing traffic safety measures for work on the project. The CONTRACTOR shall assume full responsibility for public safety in the construction area during the duration of construction activities.
- . The CONTRACTOR shall furnish, install, maintain and remove all necessary traffic control devices in conformance with the Texas Manual on Uniform Traffic Control Devices (Part 6). The CONTRACTOR shall provide access to properties at all times during each phase of construction to all local residents, businesses, mail service, trash pick-up and emergency services
- 6. No traffic signs shall be taken down without permission from the City. CONTRACTOR needing to move and replace traffic sign for construction purposes should be paid for under traffic control bid item.
- CONTRACTOR will furnish and install all signage in accordance with TMUTCD guidelines. Prior to installation of signage, CONTRACTOR shall stake locations and receive approval from City on locations. All signage that is removed by the CONTRACTOR shall be saved and delivered to municipal service center, streets division. All replaced signs shall be new. See City requirements for sign materials

#### MAILBOXES, MAIL SERVICE AND TRASH SERVICE NOTES

- 1. Existing mailboxes in conflict with construction shall be temporarily taken out of service. Were possible the CONTRACTOR shall attempt to move and reset the same mailbox. When not possible to reuse the old mailbox, the mailbox shall be removed and replace to the same or better condition and placed in a location approved by the city/property owner. Photographs of the mailbox shall be taken with the address shown, shall be provided to the city prior to being removed.
- 2. Payment for removal and replacement of existing mailbox will be paid for under the appropriate bid item. Brick mailbox shall match existing brick.
- 3. Temporary mailbox shall be provided and maintained throughout the project where existing mail boxes are being removed. Addresses shall be provided on all temporary mail boxes. (No Separate Pay)
- 4. Trash service shall be maintained throughout the duration of construction. On collection days the contractor shall move trash and recycling receptacles to location along street to be collected and moved back to original location at the end of the day. (No Separate Pay)

## FENCES, TREES, LANDSCAPING, AND IRRIGATION NOTES

- 1. The removal, replacement or reconstruction of any fence for the convenience of construction shall be at the CONTRACTOR's expense (no separate pay). New materials shall match existing fences. All wood fences shall be replaced with new cedar with the post matching
- 2. Temporary fencing shall be required where there is evidence of livestock and where damaged or removed fences are not to be replaced by the end of the same work day.
- 3. The removal and replacement of all shrubs, plants, trees, etc. For the convenience of construction shall be at the CONTRACTOR's expense (no separate pay). New shrubs, tree, etc. shall be equal to or better than existing ones.
- 4. All shrubs, plants, trees, etc. must be approved by the City before removal.
- The CONTRACTOR shall locate and record existing irrigation systems prior to construction. If irrigations systems are damaged during construction the CONTRACTOR shall repair to same or better condition. An irrigator licensed in the state of Texas shall repair all damaged caused by construction. CONTRACTOR shall coordinate any irrigation work with the City of Rockwall and property owner's representatives. (No Separate Pay).
- 6. CONTRACTOR shall replace any trees removed or destroyed that are not shown in these plans to be removed or shall pay fair market value to the owner as determined by the owner. (No Separate Pay).

## **UTILITY NOTES**

- 1. Reasonable effort has been made to show the location and type of all known City of Rockwall underground wet utilities and service lines. However, the City of Rockwall assumes no responsibility for failure to show any or all existing City of Rockwall underground wet utilities and service lines, or to show them in their exact location. The CONTRACTOR shall be responsible for the protection of all existing utilities, service lines or the like, which are exposed by the construction operation.
- 2. Bidders shall make any investigation of existing subsurface conditions as deemed necessary at no expense to the City of Rockwall. Neither the City of Rockwall nor the engineer will be responsible in any way for additional compensation for excavation work performed under this contract due to the CONTRACTOR's assumptions.
- 3. CONTRACTOR shall adjust all City of Rockwall utilities to the final grades.
- 4. CONTRACTOR shall be responsible for the protection of all existing service lines crossed or exposed by construction operations. Where existing service lines are cut, broken or

- damaged, the CONTRACTOR shall immediately replace the service line with same type of original construction or better.
- 5. The CONTRACTOR shall excavate and field locate the horizontal and vertical location of existing utility crossing locations utilizing provided project control. The CONTRACTOR shall immediately notify the engineer of any discrepancies identified between the CONTRACTORs field verified existing utility location and proposed location of utilities for
- 6. The CONTRACTOR shall abide by all applicable federal, state, and local laws governing excavation. The CONTRACTOR shall provide detailed plans and specifications for trench safety systems that comply with applicable laws governing excavation. These plans shall be sealed by an engineer experienced in the design of trench safety systems, registered in the state of Texas. The CONTRACTOR shall submit completed trench safety plan to the engineer and City prior to commencing work. The CONTRACTOR shall be solely responsible for all aspects of work related to excavations.
- 7. Dewatering of utility trenches, bores pits, and any other excavations shall be no separate pay and shall be subsidiary to the other pay items on the project.

### WATER LINE NOTES

- 1. The CONTRACTOR shall maintain existing water service at all times during construction.
- Proposed water lines shall be AWWA C900-16 PVC Pipe (blue in color) for all sizes, DR 14 (PC 305) for pipeline sizes 12-inch and smaller, and DR 18 (PC 235) for 14-inch and larger water pipelines unless otherwise shown on water plan and profiles sheets. Proposed water lines shall be constructed with minimum cover of 4 feet for 6-inch through 8-inch, 5 feet for 12-inch through 18-inch and 6 feet for 20-inch and larger.
- 3. Proposed water line embedment shall be NCTCOG Class 'B-3' as amended by the City of Rockwall's public works standards of design and construction manual.
- 4. CONTRACTOR shall coordinate the shutting down of all water lines with the City of Rockwall, Public Works, Water Division. The City shall operate all water valves.
- 5. CONTRACTOR shall furnish and install gasket on water lines between all dissimilar metals and at valves (both existing and proposed).
- 6. All fire hydrants and valves removed and salvaged shall be returned to the City of Rockwall municipal service center.
- 7. Blue EMS pads shall be installed at every change in direction, valve, curb stop and service tap on the proposed water line and every 250'.
- 8. CONTRACTOR to install new meter boxes, all fittings and new meters per each service complete including connection to the main line. CONTACTOR shall be responsible to coordinate with Utility Billing 972-771-7736 in getting new meters for the project.
- 9. Existing meter and meter boxes, and valve stem and covers not specifically called to be relocated shall be adjusted to match final grades (no pay item). Any meter in pavement shall have a traffic rated lid.
- 10. All water valve extensions, bolts, nuts and washers shall be 316 Stainless Steel.
- 11. All fire hydrants bolts, nuts and washers that are buried shall be 316 Stainless Steel.12. Abandoned water lines to remain in place shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product. Valves to be abandoned in place shall have any extensions and the valve box

### WASTEWATER LINE NOTES

removed and shall be capped in concrete

- 1. The CONTRACTOR shall maintain existing wastewater service at all times during
- 2. Wastewater line for 4-inch through 15-inch shall be Green PVC SDR 35 (ASTM D3034) [less 10 ft cover] and SDR 26 (ASTM D3034) [10 ft or more cover]. For 18-inch and lager wastewater line shall be Green PVC PS 46 (ASTM F679) [less 10 ft cover] and PS 115 (ASTM F679) [10 ft or more cover].
- 3. Proposed wastewater line embedment shall be NCTCOG Class 'H' as amended by the City of Rockwall's public works standard design and construction manual.
- 4. Green EMS pads shall be installed at every 250', manhole, clean out and service lateral on proposed wastewater lines.
- 5. All existing wastewater services shall be transferred from wastewater lines being abandoned to proposed wastewater lines. Transferring wastewater services shall include double clean outs at the property lines, caps, tees, wyes, plugs and connection. Payment for transferring wastewater services shall be paid per each, under the appropriate bid schedule item.
- 6. CONTRACTOR shall CCTV all existing wastewater lines that are to be abandoned to ensure that all laterals are accounted for and transferred to proposed wastewater lines. (no separate pay)
- All abandoned wastewater and force main lines shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product.
- 8. Existing manholes and cleanouts not specifically called to be relocated shall be adjusted to match final grades (no pay item).

  All wastewater pipes and public services shall be inspected by photographic means
- (television and DVD) prior to final acceptance. The contractor shall furnish a DVD to the Engineering Division Construction Inspector for review. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the contractor at the contractor's expense. A television survey will be performed as part of the final testing in the twentieth (20<sup>th</sup>) month of the maintenance period.
- All manholes (public or private) shall be fitted with inflow prevention. The inflow prevention shall conform to the measures called out in standard detail R-5031.

  All new or existing manholes being modified shall have corrosion protection being Rayen.
- All new or existing manholes being modified shall have corrosion protection being Raven Liner 405 epoxy coating, ConShield, or approved equal. Consheild must have terracotta color dye mixed in the precast and cast-in-place concrete. Where connections to existing manholes are made the contractor shall rehab manhole as necessary and install a 125 mil thick coating of Raven Liner 405 or approved equal.

This Record Drawing is a compilation of the sealed engineering drawing for this project as modified by addenda, change orders, and information furnished by the Owner and/or Contractor (Pittard Construction Company). The information shown on the record drawing that was provided by the Contractor or others not associated with the Engineer, cannot be verified for accuracy or completeness. The original sealed engineering drawings are on

BW2 Engineers, Inc. 1919 S. Shiloh Road, Suite 500 Garland, Texas 75042 (972) 864—8200 RECORD DRAWINGS PREPARED ON: 06/01/20

### DEMOLITION, REMOVAL, DISPOSAL AND EXCAVATION NOTES

- 1. CONTRACTOR shall remove and properly dispose of all existing concrete and HMAC pavement outside of the City limits as required for construction of the project. All cost shall be included in the appropriate item in the bid schedule.
- 2. Payments for removal and replacement of street, driveway and sidewalk pavement shall be based on plan quantity and no adjustments will be made unless approved in writing by the City engineer
- 3. All pavements to be removed and replaced shall be saw cut to full depth along neat lines shown in the plans. Proposed concrete pavement shall be constructed with longitudinal butt construction joints at all connections to existing concrete pavement. Concrete Pavement to be removed and replaced shall be full panel replacement.
- 4. The CONTRACTOR shall remove from the project area all surplus material. This work shall be incidental and not a separate pay item. Surplus materials from excavation include dirt, trash, rock measuring greater than 6" in the largest dimension, etc. Shall be properly disposed of at a site acceptable to the City of Rockwall if within the City limits. No excess excavated material shall be deposited in low areas or along natural drainage ways without written permission from the affected property owner and the City of Rockwall. If the CONTRACTOR places excess materials in these areas without written permission, he will be responsible for all damages resulting from such fill and he shall remove the material at his own cost
- 5. All excavation on the project is unclassified. If soil borings were conducted they are provided in the bid/contract documents.

### **PAVING**

- 1. All paving roadway sections thickness, strength, reinforcement, joint type, joint spacing and subgrade treatment shall match the typical sections and details called out in the plans. If not called out on the plans all concrete paving shall conform to the minimum requirements in the Standards of Design and Construction.
- 2. Reinforcing steel shall be tied (100%). Reinforcing steel shall be set on plastic chairs. Bar laps shall be minimum 30 diameters. Sawed transverse dummy joints shall be spaced every 15 feet or 1.25 time longitudinal butt joint spacing whichever is less. Sawing shall occur within 5 to 12 hours after the pour, including sealing. Otherwise, the section shall be removed and longitudinal butt joint constructed.
- All proposed HMAC street pavement shall consist of 4 inches of Type B (Base) with 2 inches of Type D (Surface) on top of 6" flex base (if not specified in the plans)
- 4. No sand shall be allowed under any paving.
- 5. Concrete mix design shall be submitted to the City for review and approval prior to placement.
- 6. Fly ash may be used in concrete pavement locations provided that the maximum cement reduction does not exceed 20% by weight per C.Y. of concrete. The fly ash replacement shall be 1.25 lbs per 1.0 lb cement reduction.
- 7. All curb and gutter shall be integral (monolithic) with the pavement.
- 8. All fill shall be compacted by sheep's foot roller to a minimum 95% standard proctor. Maximum loose lift for compaction shall be 8 inches. All lifts shall be tested for density by an independent laboratory approved by the City.
- 9. All proposed sidewalks shall include barrier free ramps at intersecting streets, alleys, etc. Barrier free ramps shall meet current City and ADA requirements and be approved by the Texas Department of Licensing and Regulation (TDLR).
- 10. Sidewalks shall be doweled into pavement where it abuts curbs and driveways. Expansion joint material shall be used at these locations (no pay item).
- 11. All connection of proposed concrete pavement to existing concrete pavement shall include a longitudinal butt joint as the load transfer device. Concrete saw cuts for all driveways and sidewalks shall be subsidiary to the appropriate bid item for driveway and sidewalk replacement. All longitudinal butt joints shall be clean, straight and smooth (not jagged in
- appearance)
  12. There shall be no separate payment for subgrade preparation under driveway and sidewalk areas and all cost shall be included in the appropriate items of the bid schedule.
- 13. Cracks formed in concrete pavement shall be repaired or removed by the CONTRACTOR at the City's discretion.

## DRAINAGE / STORM SEWER NOTES

- 1. The CONTRACTOR shall maintain drainage at all times during construction. Ponding of water in streets, drives, trenches, etc. will not be allowed. Existing drainage ways shall not be blocked or removed unless explicitly stated in the plans or written approval is given by the City.
- All structural concrete shall be 4200 psi compressive strength at 28 days minimum 7.0 sack, air entrained, unless noted otherwise.
   Proposed storm sewer embedment shall be NCTCOG Class 'B' as amended by the City of
- Rockwall's Public Works, Engineering Division Standards of Design and Construction Manual.
- 4. All storm pipe shall be reinforced concrete pipe (RCP), Class III, unless otherwise noted.



# GENERAL CONSTRUCTION NOTES

September 2019

CITY OF ROCKWALL
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

385 S. Goliad Rockwall, Texas 75087 P (972) 771-7746 F (972) 771-7748

DATE	REVISION	REVIEWED
	DATE	DATE REVISION

DRAWN: \_\_\_\_\_\_\_BW2

DESIGN: \_\_\_\_\_\_MRB

REVIEWED: \_\_\_\_\_JFW

SCALE: \_\_\_\_\_NO\_SCALE

DATE: \_\_\_\_\_OCTOBER\_2019

DWG. NAME: \_\_\_\_1933GENNOTE-COR



BW2 ENGINEERS, INC.

1919 S. Shiloh Road Suite 500, L.B. 27 Garland, Texas 75042 (972) 864-8200 (T) (972) 864-8220 (F) Firm Registration No. F-5290 THE SEAL THAT ORIGINALLY
APPEARED ON THIS DOCUMENT WAS
AUTHORIZED BY
MICHAEL R. BURGE,
TEXAS P.E. 41290
ON 10/11/19.
ALTERATION OF A SEALED DOCUMENT
WITHOUT PROPER NOTIFICATION OF
THE RESPONSIBLE ENGINEER IS AN
OFFENSE UNDER THE TEXAS
ENGINEERING PRACTICE ACT.

WATER LINE AND WASTEWATER LINE RIZED BY
R. BURGE,
P.E. 41290
/11/19.

WATER LINE AND WASTEWATER LINE
REPLACEMENT PROJECT
(ST. MARY STREET, BOST STREET, AND SHERMAN STREET)

C.O.R. - GENERAL CONSTRUCTION NOTES

CITY OF ROCKWALL

F 29 SHEETS

JOB NO. 19-1933

SHEET NO.