

CONSTRUCTION NOTES

WASTEWATER LINE NOTES

- ALL ABANDONMENT IN PLACE OF UTILITY LINES AND APPURTENANCES SHALL BE AS PER STANDARD DRAWING AS DIRECTED BY CITY OF ROCKWALL. NO SEPARATE PAYMENT FOR THIS ITEM.
- THE CONTRACTOR SHALL MAINTAIN EXISTING WASTEWATER SERVICE AT ALL TIMES DURING CONSTRUCTION.
- PROPOSED WASTEWATER LINE EMBEDMENT SHALL BE NCTCOG CLASS "B-2" AS AMENDED BY THE CITY OF ROCKWALL'S PUBLIC WORKS STANDARD DESIGN AND CONSTRUCTION MANUAL.
- GREEN EMS PADS SHALL BE INSTALLED AT EVERY MANHOLE, CLEAN OUT AND SERVICE LATERAL ON PROPOSED WASTEWATER LINES.
- 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.
- 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).
- 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 ENGINEERING, 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 (20TH) MONTH OF THE MAINTENANCE PERIOD.
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT NO OVERFLOWS OR SPILLAGE OF SEWAGE OCCURS. SHOULD THIS OCCUR, THE CONTRACTOR SHALL:
 - IDENTIFY THE SOURCE OF THE SPILL AND ATTEMPT TO ELIMINATE ANY ADDITIONAL SPILLAGE. NOTIFY THE CITY OF ROCKWALL AT 972-771-7730
 - CONTAIN THE SPILL IN PLACE AND PREVENT CONTAMINATION OF THE STREAMS.
 - CLEAN UP THE SPILL AND DISPOSE OF CONTAMINATED MATERIALS.
 - DISINFECT THE AREA OF THE SPILL WITH A MIXTURE OF HTH CHLORINE AND WATER.
 - IDENTIFY AND TRAIN PERSONNEL RESPONSIBLE FOR SPILLAGE PREVENTION AND CONTROL.

NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK. ALL WORK SHALL BE DONE ACCORDING TO THE GUIDELINES SET BY THE TCEQ AND THE CITY OF ROCKWALL.
- WHERE NEW SEWER LINES CROSS WATERLINES AND ARE INSTALLED WITH A SEPARATE DISTANCE OF LESS THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC 217.53 (D) (PIPE DESIGN) AND 290.44 (E) (WATER DISTRIBUTION)
- THE CONTRACTOR SHALL PERFORM FLOW MANAGEMENT AND BYPASS PUMPING IN ACCORDANCE WITH THE REQUIREMENTS OUTLINED IN THESE PLANS AND SPECIFICATIONS.
- THE LOCATIONS AND DEPTH OF EXISTING UTILITIES, INCLUDING SERVICE LATERALS, SHOWN ON THE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE FIELD VERIFIED BY THE CONTRACTOR 48 HOURS PRIOR TO CONSTRUCTION AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND TO PROTECT THEM DURING CONSTRUCTION AT NO COST TO THE CITY OF ROCKWALL.
- PRIOR TO TIE-INS, ANY SHUTDOWNS OF EXISTING MAINS OF ANY SIZE MUST BE COORDINATED WITH THE CITY OF ROCKWALL WASTEWATER DEPARTMENT AT LEAST TWO WEEKS IN ADVANCE OF THE SHUTDOWN. THE CONTRACTOR MUST ALSO PROVIDE A SEQUENCE OF WORK AS RELATED TO THE TIE-INS; THIS IS AT NO ADDITIONAL COST TO THE CITY OF ROCKWALL AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK ACCORDINGLY.
- ALL MANHOLES (INCLUDING EXISTING MANHOLE TIE-INS) ARE TO BE LINED WITH RAVEN 405 OR APPROVED EQUAL RAVEN APPLICATOR MUST BE LICENSED/CERTIFIED BY RAVEN. COST OF RAVEN 405 SHALL BE SUBSIDIARY TO THE MANHOLE PAY ITEM. CONSHIELD CAN BE USED IN LIEU OF RAVEN 405 LINER FOR MANHOLES.

WATER LINE NOTES

- THE CONTRACTOR SHALL MAINTAIN EXISTING WATER SERVICE AT ALL TIMES DURING CONSTRUCTION.
- PROPOSED WATER LINES SHALL BE AWWA C-900 PVC, DR 14 PC 305 (BLUE IN COLOR) UNLESS OTHERWISE SHOWN ON WATER PLAN AND PROFILES SHEETS. PROPOSED WATER LINES SHALL BE CONSTRUCTED WITH MINIMUM COVER OF 4 FEET. 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.
- CONTRACTOR SHALL COORDINATE THE SHUTTING DOWN OF ALL WATER LINES WITH THE CITY OF ROCKWALL, PUBLIC WORKS, WATER DIVISION. ALL EXISTING WATER LINES SHOWN TO BE ABANDONED SHALL BE CUT, PLUGGED, AND ABANDONED IN PLACE. COST OF ABANDONMENT SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT AND REFLECTED IN THE UNIT BID PROCESS. THE CITY SHALL OPERATE ALL WATER VALVES.
- ELEVATION ADJUSTMENTS AT CONNECTIONS MAY BE MADE WITH BENDS, OFFSETS, OR JOINT DEFLECTIONS. ALL NONSTANDARD BENDS SHALL BE MADE WITH THE CLOSEST STANDARD MJ FITTINGS WITH THE ALLOWED JOINT DEFLECTIONS. ANY ADDITIONAL BENDS, OFFSETS, OR JOINT DEFLECTIONS NOT SPECIFICALLY SHOWN IN THE PLANS BUT NEEDED TO MAKE ELEVATION ADJUSTMENTS SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR THE VARIOUS BID ITEMS LIST D IN THE PROPOSAL.
- CONTRACTOR SHALL NOT EXCEED 80% OF THE MANUFACTURER'S MAXIMUM ALLOWABLE ANGULAR DEFLECTION AT ANY JOINT LOCATION. IF THE PLANS INDICATE DEFLECTION IN EXCESS OF THIS REQUIREMENT, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ACHIEVE THIS DEFLECTION OVER MULTIPLE JOINTS IN ORDER TO MEET THE MANUFACTURER'S REQUIREMENTS AS WELL AS THE GENERAL INTENT OF PROPOSED HORIZONTAL AND VERTICAL PIPE ALIGNMENT. LONGITUDINAL BENDING OF THE PIPE WILL NOT BE ALLOWED.
- CONCRETE THRUST BLOCKING SHALL BE USED AT HORIZONTAL BENDS, TEES, AND WYES FOR 6" DIAMETER AND LARGER WATER LINES. THIS DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THRUST RESTRAINT AS REQUIRED BY THE PLANS AND SPECIFICATIONS.
- ALL FITTINGS SHALL BE MECHANICALLY RESTRAINED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE WATER LINE CONNECTIONS AS SPECIFIED IN THE PLANS. ANY ADDITIONAL PIPE, FITTINGS, OR MATERIALS NOT SPECIFICALLY SHOWN IN THE PLANS BUT NEEDED TO MAKE THE CONNECTIONS SHALL BE CONSIDERED SUBSIDIARY TO THE PROJECT COST AND REFLECTED IN THE UNIT BID PRICES FOR THE VARIOUS BID ITEMS LISTED IN THE PROPOSAL.
- THE CONTRACTOR SHALL MAINTAIN 24-INCHES OF CLEARANCE FROM ALL UTILITIES UNLESS OTHERWISE SHOWN.
- CONTRACTOR SHALL FURNISH AND INSTALL GASKETS ON WATER LINES BETWEEN ALL DISSIMILAR METALS AND AT VALVES (BOTH EXISTING AND PROPOSED).
- ALL FIRE HYDRANTS AND VALVES REMOVED AND SALVAGED SHALL BE RETURNED TO THE CITY OF ROCKWALL MUNICIPAL SERVICE CENTER.
- BLUE EMS PADS SHALL BE INSTALLED AT EVERY CHANGE IN DIRECTION, VALVE AND SERVICE TAP ON THE PROPOSED WATER LINE AND EVERY 250'.
- CONTRACTOR TO INSTALL NEW METER BOXES AT ALL RESIDENCES UNLESS OTHERWISE NOTED. EXISTING WATER METERS WILL BE SALVAGED AND RELOCATED TO PROPOSED LOCATIONS. LIMIT OF RECONSTRUCTION WILL CONNECT PROPOSED BOX LOCATION BACK TO EXISTING LOCATION.
- 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.
- ALL WATER VALVE EXTENSIONS, BOLTS, NUTS, AND WASHERS SHALL BE 316 STAINLESS STEEL.

UTILITY

- REASONABLE EFFORT HAS BEEN MADE TO SHOW THE LOCATION 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.
- 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.
- CONTRACTOR SHALL ADJUST ALL CITY OF ROCKWALL UTILITIES TO THE FINAL GRADES.
- 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.
- 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 CONTRACTOR'S FIELD VERIFIED EXISTING UTILITY LOCATION AND PROPOSED LOCATION OF UTILITIES FOR THE PROJECT.
- 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.
- 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.
- CONTRACTOR SHALL COORDINATE WITH THE CITY OF ROCKWALL WATER AND WASTEWATER DEPARTMENT A MINIMUM OF 72 HOURS PRIOR TO CUTTING OR CONNECTING TO EXISTING UTILITY LINES. CONTRACTOR SHALL PROVIDE MINIMUM OF 48 HOURS NOTICE TO RESIDENTS FOR WATER TURN OFFS.
- THE CONTRACTOR MAY NOT ADJUST ANY LINE, GRADE OR LOCATION OF ANY PROPOSED STORM DRAIN OR WASTEWATER MAIN IN THE FIELD WITHOUT THE EXPRESS WRITTEN PERMISSION OF CITY OF ROCKWALL, EVEN IF NO CONFLICT IS APPARENT.
- THE CONTRACTOR SHALL ENSURE THAT FIRE HYDRANTS REMAIN ACCESSIBLE TO FIRE TRUCKS AT ALL TIMES.
- THE CONTRACTOR SHALL PROTECT ALL PUBLIC UTILITIES DURING CONSTRUCTION OPERATIONS TO ENSURE THAT THERE IS NO INTERRUPTION IN SERVICE. TEMPORARY RE-ROUTES OF SERVICE MAY BE REQUIRED.

OVERALL SEQUENCE OF CONSTRUCTION

THE FOLLOWING SEQUENCE IS NOT INTENDED TO DIRECT OR CONTROL THE CONTRACTOR'S MEANS OR METHODS, BUT IS FOR THE INTENT OF PROVIDING FOR A WORKABLE SEQUENCE OF CONSTRUCTION WHICH MAINTAINS SERVICE TO CUSTOMERS AND MAINTAINS THE TRAFFIC FLOW. THE SEQUENCE DESCRIBED BELOW IS GENERAL IN NATURE, AND NOT INTENDED TO INCLUDE DETAILS OR ALL WORK NECESSARY TO COMPLETE THE PROJECT. CONTRACTOR SHALL INCORPORATE ANY REQUIRED ITEMS NOT SPECIFICALLY DESCRIBED BELOW INTO THE CONTRACTOR'S SEQUENCE OF CONSTRUCTION. CONTRACTOR SHALL REVIEW GENERAL SEQUENCE OF CONSTRUCTION, AND SUBMIT REQUEST FOR ANY DEVIATION PRIOR TO COMMENCING WORK.

- LOCATE EXISTING UTILITIES AS NECESSARY.
- VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING WASTEWATER LINES AND LATERAL/SERVICES, STORM SEWER, POTABLE WATER, AND OTHER FACILITIES.
- PROVIDE TRAFFIC CONTROL PLAN AS NECESSARY.
- PROVIDE EROSION AND SEDIMENT CONTROL BMPs AS NECESSARY.
- INSTALL PROPOSED WASTEWATER LINES INCLUDING MANHOLES AND CLEANOUTS. CONTRACTOR SHALL MAINTAIN SERVICE TO EXISTING HOMES ALL TIMES DURING CONSTRUCTION.
- PERFORM TESTING ON WASTEWATER LINES AND MANHOLES AS REQUIRED BY CITY OF ROCKWALL.
- INSTALL NEW WASTEWATER SERVICES AND MOVE SERVICES OVER FROM OLD LINES.
- UPON ENSURING THAT ALL SERVICES HAVE BEEN MOVED OVER TO NEW MAINS, PLUG AND ABANDON OLD WASTEWATER LINES AS SHOWN ON THE PLANS. CONTRACTOR SHALL EXCAVATE AND REMOVE OLD LINE WHERE THE NEW LINE IS AT THE SAME LOCATION AS EXISTING.
- AFTER ABANDONMENT/REMOVAL OF OLD WW LINES, INSTALL PROPOSED WATER MAIN.
- PERFORM TESTING ON NEW WATER MAINS AS REQUIRED BY CITY OF ROCKWALL.
- INSTALL NEW WATER SERVICES/MOVE SERVICES OVER TO NEW WATER MAIN.
- AFTER COMPLETION OF WASTEWATER AND WATER LINES, DEMOLISH EXISTING PAVEMENT AS SHOWN ON SUGGESTED TRAFFIC CONTROL AND CONSTRUCTION PHASING PLANS.
- PERFORM SUBGRADE PREPARATION.
- COMPLETE PAVEMENT REPLACEMENT AS DIRECTED IN PLANS.
- AFTER COMPLETION OF PAVING OPERATION, RESTORE ALL DISTURBED AREAS BY SOD.
- AFTER SITE HAS BEEN STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL DEVICES AND TRAFFIC CONTROL DEVICES, AND RETURN TRAFFIC TO NORMAL FLOW.

EXISTING SYMBOL/LINE LEGEND			
	AIR CONDITIONER UNIT		SPRINKLER HEAD
	BOLLARD		SAN SEWER CLEANOUT
	CONTROL POINT		SAN SEWER MANHOLE
	TEMPORARY BENCH MARK		POWER POLE
	CONTROL POINT & BENCH MARK		LIGHT POLE
	ELECTRIC HANDBOX		MAIL BOX
	ELECTRIC MANHOLE		GUY WIRE
	FIRE HYDRANT		LANDSCAPE LIGHTING
	WATER METER		FIBER OPTIC PEDESTAL
	WATER VALVE		GAS METER
	SPRINKLER VALVE		TELEPHONE PEDESTAL
	STORM DRAIN MANHOLE		TELEVISION PEDESTAL
	STORM DRAIN OUTFALL		SIGN
	STORM DRAIN PVC PIPE		TELEPHONE BOX
	STORM DRAIN RCP		TELEPHONE HANDBOX
	ROOF DRAIN		SHRUB
	SQUARE INLET		TREE
	GAS		EXISTING GAS LINE (ATMOS)
	OHE		EXISTING OVERHEAD ELECTRIC (ONCOR)
	UGE		EXISTING UNDERGROUND ELECTRIC (ONCOR)
	TEL		EXISTING UNDERGROUND TELEPHONE (AT&T)
	W		EXISTING WATER LINE (COR)
	SS		EXISTING WASTEWATER LINE (COR)

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City of Rockwall
The New Horizon

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SEP 2019

RECORD DOCUMENTS
THESE PLANS ARE FOR THE OWNER'S USE AS RECORD SET OF THE CONSTRUCTED PROJECT, AND REFLECT REVISIONS AND CONSTRUCTION RELATED CHANGES AS RECORDED BY THE CONTRACTOR. CHANGES MADE FROM THE ORIGINAL CONSTRUCTION DOCUMENTS DO NOT DEPORT ENGINEERING AND ARE NOT THE RESPONSIBILITY OF TEAGUE NALL & PERKINS, INC. OR THE ENGINEER OF RECORD ON THE ORIGINAL DOCUMENTS. ORIGINAL PLANS RELEASED FOR CONSTRUCTION WERE SEALED BY GYANENDRA POKHREL, P.E. NO. 118159 ON 09/28/2018.

CITY OF ROCKWALL, TEXAS
HIGHLAND DRIVE RECONSTRUCTION, PHASE I
(DRIFTWOOD STREET TO BEDFORD FALLS LANE)
GENERAL NOTES AND LEGEND

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