I. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE CITY OF ROCKWALL, WHICH ADOPTED THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 3RD EDITION, NORTH CENTRAL TEXAS, (COG), WITH CITY AMENDMENTS. COPIES MAY BE OBTAINED FROM THE "NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS", 616 SIX FLAGS DR., P.O.

BOX 5888, ARLINGTON, TEXAS 76005-5888.

PH (817) 640-3300.

- 2. THESE PLANS, PREPARED BY AECOM, DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL(S) OF AECOM'S REGISTERED PROFESSIONAL ENGINEER(S) HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THE WORK. THE CONSTRUCTION CONTRACTOR IS TO PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS, INCLUDING THE PLANS AND SPECIFICATIONS.
- 3. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE LOCAL, STATE, AND FEDERAL LAWS GOVERNING EXCAVATION. TRENCH SIDE SLOPES SHALL MEET OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS THAT ARE IN EFFECT AT THE TIME OF CONSTRUCTION. SHEETING, SHORING, AND BRACING WILL BE REQUIRED WHEN SIDE SLOPE STANDARDS ARE NOT MET. A TRENCH PULL BOX, MEETING OSHA STANDARDS, WILL BE ACCEPTABLE. THE APPARENT LOW BIDDER WILL SUBMIT DETAILED PLANS AND SPECIFICATIONS FOR TRENCH SAFETY SYSTEMS WHEN TRENCH EXCAVATION WILL EXCEED A DEPTH OF FIVE (5) FEET THAT MEET OSHA STANDARDS THAT ARE IN EFFECT AT THE TIME OF CONSTRUCTION.
- 4. ALL CONSTRUCTION OPERATIONS ARE TO BE ACCOM-PLISHED IN ACCORDANCE WITH APPLICABLE REGU-LATIONS OF THE OSHA. COPIES OF OSHA STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM OSHA. 903 SAN JACINTO. AUSTIN. TEXAS.
- 5. THE CONTRACTOR SHALL OBTAIN ALL CONSTRUCTION PERMITS REQUIRED FROM THE CITY OF ROCKWALL PRIOR TO COMMENCEMENT OF WORK. NO EXTRA PAY ITEM.
- THE CITY OF ROCKWALL (972-771-7746) AND TXDOT (972-962-3617) ARE TO BE NOTIFIED BY TELEPHONE AT LEAST 48 HOURS IN ADVANCE OF ALL CONSTRUCTION, FOLLOWED BY A LETTER OF CONFIRMATION. TO THE CITY.
- 7. THE CONTRACTOR SHALL GIVE NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES AFFECTED BY THESE OPERATIONS PRIOR TO COMMENCEMENT OF WORK. NO EXTRA PAY ITEM.
- 8. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE JOB SITE AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY OMISSIONS, DISCREPANCIES, OR DIMENSIONAL ERRORS PRIOR TO BEGINNING OR FABRICATING ANY WORK OR MATERIALS. OTHERWISE THE CORRECTIONS (AND ASSOCIATED COST) WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO EXTRA PAY ITEM.
- 9. THE CONTRACTOR IS TO TAKE ALL DUE PRECAUTIONS TO PROTECT EXISTING FACILITIES FROM DAMAGE. ANY DAMAGE TO EXISTING FACILITIES INCURRED AS A RESULT OF THESE CONSTRUCTION OPERATIONS ARE TO BE REPAIRED IMMEDIATELY BY THE CONTRACTOR TO AT LEAST THE PRE-EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
- IO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RE-PAIRING ANY DAMAGE CAUSED BY THESE CONSTRUC-TION OPERATIONS OUTSIDE THE DESIGNATED WORK AREA WITH EQUAL OR BETTER QUALITY MATERIAL AT THE CONTRACTOR'S EXPENSE.
- II. ALL EXISTING MONUMENTS, PROPERTY PINS, OR IRON RODS SHALL BE PRESERVED BY THE CONTRACTOR. IF ANY OF THESE ITEMS NEEDS TO BE REMOVED OR DISRUPTED TO ACCOMMODATE CONSTRUCTION, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR REPLACING IT BACK TO ITS ORIGINAL LOCATION AND/OR ELEVATION AT THE CONTRACTOR'S EXPENSE.

- 12. NO TREES SHALL BE CUT OR REMOVED EXCEPT ON SPECIFIC APPROVAL BY THE CITY OF ROCKWALL. ANY TREES THAT ARE APPROVED FOR REMOVAL MUST BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES THAT ARE TO BE PRESERVED. NO EXTRA PAY ITEM.
- 13. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF STUMPS, ROOTS, AND VEGETATION FROM THE PROJECT SITE. NO EXTRA PAY ITEM.
- 14. ALL TREES, BUSHES, AND BRUSH THAT MUST BE REMOVED IN ORDER TO PROCEED WITH CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NOT MEASURED SEPARATELY FOR PAYMENT.
- 15. VEGETATION MUST BE PRUNED TO PROVIDE CLEAR-ANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.). ALL FINISHED PRUNING IS TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFER TO THE "NA-TIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES"). NO EXTRA PAY ITEM.
- 16. THE CONTRACTOR IS TO COMPLY WITH ALL APPLICA-BLE LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING EXCESS AND WASTE MATERIAL. INCLUDING METHODS OF HANDLING AND DISPOSAL.
- 17. THE LOCATION FOR THE DISPOSAL OF CONSTRUCTION MATERIAL SHALL BE APPROVED BY THE CITY OF ROCKWALL DEPARTMENT OF ENGINEERING AND PUBLIC WORKS PRIOR TO THE START OF CONSTRUCTION.
- 18. MATERIAL MAY NOT BE STOCKPILED WITHIN THE 100-YEAR FLOODPLAIN.
- 19. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CON-TAMINATED SOIL RESULTING FROM AN ACCIDENTAL SPILL IS TO BE REMOVED AND DISPOSED OF PROPERLY AT THE CONTRACTOR'S EXPENSE.

- I. THE CONTRACTOR SHALL NOTIFY THE CITY OF ROCKWALL DEPARTMENT OF ENGINEERING (972-771-7746) AND PUBLIC WORKS BY TELEPHONE (972-771-7730) AT LEAST 48 HOURS IN ADVANCE FOR ALL WATER OR WASTEWATER MODIFICATIONS, LOCATES, OR TURNOFFS.
- 2. ONLY THE CITY OF ROCKWALL WATER DEPARTMENT SHALL OPERATE EXISTING WATER VALVES. CONTACT THE WATER DEPARTMENT AT 972-771-7730 FOR ASSISTANCE AT LEAST 24 HOURS IN ADVANCE (EXCEPT IN THE CASE OF AN EMERGENCY).
- 3. FIELD ADJUSTMENTS MAY BE NECESSARY AND SHALL BE CARRIED OUT AS DIRECTED BY THE ENGINEER AT NO EXTRA PAY.
- 4. A MINIMUM OF 48 INCHES OF COVER, OR AS OTHERWISE NOTED ON THE PLANS, IS REQUIRED OVER ALL UTILITY LINES. NO EXTRA PAY ITEM.
- 5. COMPACTION OF BACKFILL MATERIAL BY FLOODING OR JETTING WILL NOT BE PERMITTED.
- 6. THE CONTRACTOR MUST OBTAIN A CONSTRUCTION METER THROUGH THE CITY OF ROCKWALL AND PAY FOR THE WATER USED. NO EXTRA PAY ITEM.
- 7. DURING CONSTRUCTION AND AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL ENSURE THAT DRAINAGE OF STORM RUNOFF IS NOT BLOCKED. THE CONTRACTOR SHALL LEVEL WASHES, RUTS, MOUNDS AND DEPRESSIONS TO GIVE THE AREA A SMOOTH FINISH. ROADWAY DITCHS AND OTHER DRAINAGE WAYS DISTURBED BY THE CONSTRUCTION SHALL BE GRADED TO ORIGINAL GRADES AND SHAPE. NO EXTRA PAY ITEM.
- 8. THE CONTRACTOR IS TO MAINTAIN ACCESS TO PUBLIC AND PRIVATE FACILITIES DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES ARE TO BE COORDINATED WITH THE OWNER, OWNER'S REPRESENTATIVE, AND THE CITY OF ROCKWALL. NO EXTRA PAY ITEM.
- 9. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING IRRIGATION SYSTEMS WITH NEW MATERIALS. IRRIGATION HEADS, VALVES, AND METERS MAY BE TEMPORARILY REMOVED TO ALLOW FOR CONSTRUCTION OF THE PROJECT. IRRIGATION HEADS, VALVES, AND METERS SHALL BE REPLACED IN THE SAME LOCATION AND IN WORKING ORDER. NO EXTRA PAY ITEM.

- 10. THE CONTRACTOR MUST NOTIFY EACH PROPERTY OWNER 24 HOURS PRIOR TO SHUTTING OFF WATER FOR CONNECTION TO NEW MAIN.
- II. THE CONTRACTOR SHALL MAINTAIN IN SERVICE THE EXISTING WATER MAINS AND SERVICE CONNECTIONS DURING ALL PHASES OF CONSTRUCTION AT NO EXTRA PAY. LEAKS CAUSED BY THE CONTRACTOR SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

GENERAL NOTES

- 12. EXISTING 16" WATER LINE TO REMAIN IN SERVICE UNTIL THE PROPOSED 16" WATER LINE IS ACCEPTED BY THE CITY.
- 13. ALL SALVAGEABLE MATERIALS (VALVES, FIRE HYDRANTS, VALVE BOXES, ETC.) SHALL BE DELIVERED TO THE CITY OF ROCKWALL PUBLIC WORKS YARD. ALL NON-SALVAGEABLE MATERIALS TO BECOME PROPERTY OF THE CONTRACTOR AND TO BE DISPOSED OF OFFSITE.
- 14. FOR EACH OPEN CUT DRIVEWAY, CONTRACTOR SHALL REPAIR DRIVEWAY WITH SIMILAR TYPE AND QUALITY MATERIALS AND MATCHING EXISTING GRADE, IN ACCORDANCE WITH THE DRIVEWAY CULVERT DETAIL ON SHEET 24. UNLESS OTHERWISE NOTED.
- 15. SITE RESTORATION INCLUDES FINAL GRADING OF ALL AREAS DISTURBED BY THE CONSTRUCTION AND THE ESTABLISHMENT OF A PERMANENT VEGETATIVE COVER ON THOSE AREAS. BROADCAST SEEDING SHALL BE PERFORMED IN CONFORMANCE WITH TXDOT SPECIFICATIONS ITEM NO. 164. THE FERTILIZER USED SHALL HAVE AN ANALYSIS OF 10-20-10 AND SHALL BE APPLIED AT A RATE OF 500 LBS PER ACRE. THE ESTABLISHMENT OF A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70 PERCENT OF THE ADJACENT UNDISTURBED AREAS WILL BE REQUIRED FOR FINAL ACCEPTANCE OF THE WORK.
- 16. THE MAXIMUM DEFLECTION OF PIPE JOINTS SHALL NOT EXCEED THAT RECOMMENDED BY THE PIPE MANUFACTURER. IF IT IS NECESSARY TO DEFLECT THE PIPE GREATER THAN THE RECOMMENDED AMOUNT, THE CONTRACTOR SHALL PROVIDE FITTINGS. THERE SHALL BE NO ADDITIONAL COMPENSATION ALLOWED.
- 17. THE CONTRACTOR SHALL INSTALL BLUE ELECTRONIC MARKER SYSTEM (EMS) LOCATOR PADS ALONG THE WATER LINE EVERY 250', AT VALVES, AT CHANGES IN DIRECTION, AND AT SERVICES. NO EXTRA PAY ITEM.
- 18. ALL PIPE FITTINGS SHALL BE DUCTILE IRON AND SHALL BE MECHANICAL JOINT FITTINGS UNLESS OTHERWISE NOTED IN THE PLANS. ALL FITTINGS SHALL BE WRAPPED WITH MINIMUM 8 MIL POLYWRAP PER AWWA C 105. COMPACT FITTINGS WILL BE ALLOWED. ALL FITTINGS MUST BE AMERICAN MADE. MAXIMUM ALLOWABLE WEIGHT TO BE PAID PER FITTING IS LISTED IN THE TABLE ON THE QUANTITY SHEET.

- I. THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THERE MAY BE OTHER UNKNOWN UTILITIES EXISTING NOT SHOWN ON THE PLANS THAT SHOULD BE VERIFIED AND PROTECTED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION. NO EXTRA PAY ITEM.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRO-TECTING ALL UTILITIES ENCOUNTERED DURING CON-STRUCTION OPERATIONS. ANY DAMAGE TO UTILITIES DONE BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE UTILITY OWNER AND THE CITY OF ROCKWALL AT THE ENTIRE EXPENSE OF THE CONTRACTOR.
- 3. THE CONTRACTOR SHALL COORDINATE INTERRUPTIONS OF ALL UTILITIES AND SERVICES WITH THE APPLI-CABLE UTILITY COMPANIES AND/OR AGENCIES. ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE RE-QUIREMENTS OF THE APPLICABLE UTILITY COMPANY OR AGENCY INVOLVED. THE CONTRACTOR SHALL CONTACT THE TEXAS ONE-CALL SYSTEM FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN PUBLIC EASEMENTS OR RIGHT-OF-WAY AT 1-800 545-6005.

ATMOS GAS ONCOR COMCAST VERIZON COMMUNICATIONS

800-344-8377 972-888-1302 214-320-7546 972-434-0622 214-745-8200

- 4. WHEN AN UNLOCATED OR INCORRECTLY LOCATED UNDERGROUND UTILITY OR A BREAK IN A UTILITY IS ENCOUNTERED DURING SITE WORK OPERATIONS, THE CONTRACTOR IS TO NOTIFY THE APPLICABLE UTILITY COMPANY IMMEDIATELY TO OBTAIN PROCEDURE DIRECTIONS. NO EXTRA PAY ITEM.
- 5. THE CONTRACTOR SHALL BE REQUIRED TO ARRANGE TEMPORARY/PERMANENT RELOCATION, SUPPORT AND/OR PROTECT ALL POWER, ELECTRIC, TELEPHONE, OR LIGHT POLES THAT MAY INTERFERE WITH CONSTRUCTION. COORDINATION WITH THE VARIOUS UTILITY COMPANIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. NO EXTRA PAY ITEM.
- 6. CONTRACTOR IS RESPONSIBLE FOR PERSONNEL SAFETY IN PROXIMITY OF OVERHEAD POWER UTILITIES. CONTRACTOR SHALL ARRANGE FOR POLE RELOCATIONS OR DEENERGIZING LINES AS NEEDED. NO EXTRA PAY ITEM.

TRAFFIC CONTROL

- I. THE CONTRACTOR IS RESPONSIBLE FOR PLACEMENT AND MAINTENANCE OF ALL NECESSARY BARRICADES AS REQUIRED BY THE CITY OF ROCKWALL AND TXDOT. CONTRACTOR SHALL PROVIDE, INSTALL, AND MAINTAIN TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH THE 2006 TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) TEXAS DEPARTMENT OF TRANSPORTATION. SEE SHEET 27 OF THESE PLANS FOR TRAFFIC CONTROL DETAILS.
- 2. NO STOP OR YIELD SIGN IS TO BE RELOCATED OR REMOVED WITHOUT PRIOR APPROVAL BY THE CITY AND TxDOT. THE CONTRACTOR MUST CALL TxDOT (972-962-3617) AND OBTAIN PERMISSION FOR ANY CHANGES IN THESE SIGNS.
- 3. NORMAL TRAFFIC CONDITIONS MUST BE MAINTAINED AT ALL TIMES ON THIS PROJECT UNLESS SPECIFIED OTHERWISE IN THE PLANS AND SPECIFICATIONS. THE TRAVELWAY WIDTH SHALL NOT BE LESS THAN 10 FEET, FOR EACH LANE.
- 4. ACCESS TO ABUTTING PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT MUST BE MAINTAINED FOR EMERGENCY AND LOCAL TRAFFIC AT ALL TIMES.

STORM WATER POLLUTION PREVENTION

- I. UNLESS OTHERWISE NOTED, ALL STORM WATER POLLUTION PREVENTION MEASURES SHALL CONFORM TO THE CITY OF ROCKWALL STANDARDS OR TO APPLICABLE GUIDELINES OF THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, STORM WATER QUALITY BEST MANAGEMENT PRACTICES FOR CONSTRUCTION ACTIVITIES, LATEST EDITION OR AMENDMENTS, FOR COMPLIANCE WITH NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM REQUIREMENTS.
- 2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SURFACE DRAINAGE AND EROSION CONTROL FACILITIES ON SITE DURING CONSTRUCTION.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS AND SIDEWALKS ADJACENT TO THE PROJECT FREE OF MUD AND DEBRIS FROM THE CONSTRUCTION AT ALL TIMES.
- 4. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLETING ANY APPLICABLE LOCAL. STATE, OR FEDERAL PERMITTING REQUIREMENTS WHICH MAY APPLY. NO EXTRA PAY ITEM.

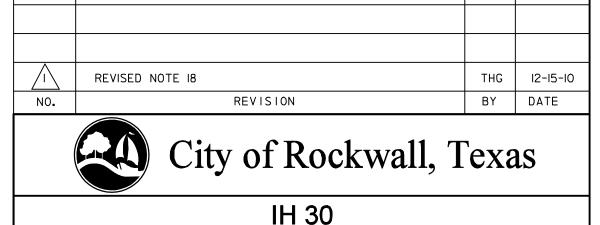
THRUST BLOCKING & JOINT RESTRAINTS

- I. ALL PIPE FITTINGS SHALL BE RESTRAINED WITH MEGA-LUG SERIES 2000PV MECHANICAL JOINT RESTRAINT GLANDS OR APPROVED EQUAL AND THRUST BLOCKED AT ALL HORIZONTAL AND VERTICAL CHANGES IN PIPE DIRECTION. NO EXTRA PAY ITEM FOR MEGA-LUG OR APPROVED EQUAL RESTRAINED JOINTS. OR FOR THRUST BLOCKING.
- 2. ALL VALVES SHALL HAVE CONCRETE SUPPORT BLOCKING. NO EXTRA PAY ITEM.

RECORD DRAWING

This drawing is a compilation of the original sealed engineering drawing and modifications by addenda, change orders and information furnished by the contractor. Information shown that was provided by the contractor and others not associated with the design engineer cannot be verified for accuracy or completeness. Original sealed drawing is on file at the office of AECOM TECHNICAL SERVICES, Inc., TBPE REG. NO. F-3580

ORIGINAL DRAWING SEALED & SIGNED BY T.H. Gaertner, P.E. TX NO. 37124 ON 1-4-11



GENERAL NOTES

WATER LINE IMPROVEMENTS

AECOM DAL			ОМ	
Unit AECOM Wate	ن ما سن	AS SHOWN	Date	1/4/11
Designed JR/RH	Checked	JR/TG	Project No.	60072620
Drawn RH/FG	Approved	GH	Sheet	2 of 28