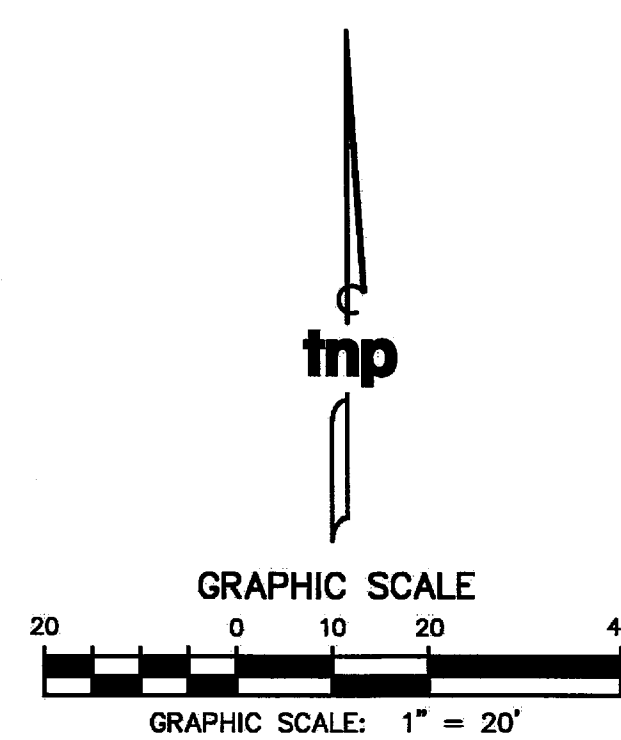


- GRADING NOTES:**
1. THE GRADING OF THE DIFFERENT AREAS SHOWN ON THE SITE SHALL BE COMPACTED IN STRICT ACCORDANCE WITH THE SPECIFICATIONS WHICH SHALL BE CONSIDERED AS PART OF THESE DRAWINGS.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING TO THE SUBGRADE OF ALL PAVED AREAS TO ALLOW FOR THE PAVEMENT SECTIONS. CONTRACTOR SHALL GRADE AND COMPACT ALL AREAS UNDER PAVEMENT TO ALLOW FOR THE RESPECTIVE PAVING SECTIONS AND SHALL MAINTAIN THESE FINISHED GRADES AS SHOWN UNTIL FINAL ACCEPTANCE.
 3. CONTRACTOR IS REQUIRED TO INSTALL AND MAINTAIN EROSION CONTROL AT ALL TIMES THROUGHOUT THE PROJECT.
 4. THE SPREADING AND COMPACTION OF ANY WASTE OR EXCESS MATERIAL NOT SUITABLE FOR FILLING, SUCH AS LARGE ROCK, CONCRETE, TREES, TRASH AND VEGETATION, SHALL BE DISPOSED OFFSITE AT THE CONTRACTOR'S EXPENSE ONLY IN THOSE AREAS APPROVED FOR DISPOSING OF WASTE MATERIAL. THE CONTRACTOR SHALL NOT DISPOSE OF ANY WASTE MATERIAL ON ADJACENT PROPERTY OWNER'S OR OTHER AREAS WHICH ARE NOT LEGALLY ACCEPTED BY THE CITY. NO BURNING OF ANY MATERIAL AT ANY TIME SHALL BE ALLOWED ON THIS SITE UNLESS PERMITTED BY CITY ORDINANCES.
 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL SAFETY LAWS IN ACCORDANCE WITH THE CITY, STATE AND FEDERAL LAWS WHICH GOVERN CONSTRUCTION.
 6. ALL AREAS TO BE FILLED SHALL BE FILLED IN STRICT ACCORDANCE WITH THE SPECIFICATIONS. ALL VEGETATION, TREES, ROCKS AND OBJECTIONABLE MATERIALS SHALL BE REMOVED BY THE CONTRACTOR FROM THE SURFACE OF WHICH THE FILL IS PLACED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE, SPREAD, WATER AND COMPACT THE FILL IN STRICT ACCORDANCE WITH THE SPECIFICATIONS FOR THIS PROJECT.
 7. ALL DRIVE, PARKING AREAS, CUT AND FILL SLOPES, BUILDING PADS AND OPEN SPACE AREAS SHALL BE TRIMMED AND COMPACTED TO THE FINISHED GRADE TO PRODUCE SMOOTH SURFACES AND UNIFORM CROSS-SECTIONS. THE SLOPES OF ALL EXCAVATIONS AND EMBANKMENTS SHALL BE LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, TREES, AND OTHER WASTE MATERIAL SHALL BE REMOVED AND DISPOSED OFF SITE. ALL Voids SHALL BE FILLED AND ANY SOFT SPOTS OCCURRING ON THIS SITE SHALL BE RECOMPACTED PER THE SPECIFICATIONS. VERIFY ALL GRADES TO AVOID PONDING OF WATER.
 8. NO ADJUSTMENT OF GRADES WILL BE PERMITTED TO ANY STRUCTURES, PAVEMENT OR WALK SURFACES. SHOULD THE CONTRACTOR DETERMINE THERE IS A DEFICIENCY OF MATERIAL, THEN ALLOWANCE WILL MADE IN THE CONTRACT TO IMPORT A CLEAN MATERIAL SUITABLE FOR FILLING. THE OWNER'S LABORATORY WILL BE ALLOWED TO TEST AND INSPECT THE BORROW SITE PRIOR TO BEGINNING HIS FILLING OPERATIONS. EXCESS EXCAVATED MATERIAL SHALL BE DISPOSED OFFSITE AS REQUIRED.
 9. THERE ARE TREES AND BRUSH WITHIN THE LIMITS OF THIS SITE. THE CONTRACTOR SHALL VISIT THE SITE TO DETERMINE THE EXACT SCOPE OF WORK. THE CONTRACTOR SHALL REMOVE ALL BRUSH, TREES AND VEGETATION FROM THE LIMITS OF THE PROPOSED IMPROVEMENTS. ALL TREES OUTSIDE THE LIMITS OF CONSTRUCTION SHALL REMAIN UNLESS NOTED ON THE PLANS TO BE REMOVED OR APPROVED BY THE OWNER. EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION.
 10. REFERENCE LANDSCAPE PLANS FOR LIMITS OF LANDSCAPING AND SEEDING/SODDING. IN THE EVENT AN AREA IS DISTURBED DUE TO CONSTRUCTION OR GRADING AND IS NOT CALLED OUT FOR TREATMENT UNDER THE LANDSCAPE PLAN, THEN THE MINIMUM REQUIRED TREATMENT SHALL BE HYDRO MULCH SEEDING. IN SOME INSTANCES THE PLANS WILL REQUIRE BLOCK SODDING TO STABILIZE SLOPES.
 11. ALL WALKS SHALL NOT EXCEED THE MAXIMUM SLOPES ALLOWED BY THE TEXAS ACCESSIBILITY STANDARDS (TAS). UNLESS INDICATED, THE MAXIMUM CROSS SLOPE IS 2% AND THE MAXIMUM DIRECTIONAL SLOPE IS 5%.
 12. ALL SPOT GRADES ARE FOR PROPOSED EDGE OF PAVEMENT OR GUTTER ELEVATIONS, UNLESS INDICATED OTHERWISE.
 13. ALL AREAS SHALL BE TRIMMED AND COMPACTED TO THE FINISHED GRADE TO PRODUCE SMOOTH SURFACES AND UNIFORM CROSS-SECTIONS. THE SLOPES OF ALL EXCAVATIONS AND EMBANKMENTS SHALL BE LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, TREES, AND OTHER WASTE MATERIAL SHALL BE REMOVED AND DISPOSED OFF SITE. ALL Voids SHALL BE FILLED AND ANY SOFT SPOTS OCCURRING ON THIS SITE SHALL BE RECOMPACTED PER THE SPECIFICATIONS. VERIFY ALL GRADES TO AVOID PONDING OF WATER.
 14. EXISTING DEPRESSED AREA, WHICH HOLDS SURFACE WATER, SHALL BE PUMPED DRY. EXISTING SOGGY MATERIALS SHALL BE EXCAVATED AND REMOVED UNTIL A STABLE DRY MATERIAL IS AVAILABLE. THIS EXPOSED MATERIAL SHALL BE COMPACTED TO 95% STD PROCTOR. ON SITE MATERIAL SHALL BE PLACED IN 8" MAX LIFTS AND COMPACTED TO MAX 95% STD PROCTOR AT OPTIMUM MOISTURE CONTENT.


GRADING PLAN

GRADING LEGEND	
(79.20)	EXISTING SPOT ELEVATION
79.20	PROPOSED SPOT ELEVATION
5%	PROPOSED PERCENT OF GRADE
---	PROPOSED CONTOUR
---	GRADE BREAK/RIDGE LINE
---	PROPOSED SWALE LINE
---	PROPOSED DAYLIGHT LINE
5:1	PROPOSED SLOPE RATIO
x 79.20	EXISTING SPOT GRADE
---	EXISTING CONTOURS



no.	revision	by	date

scale	
horiz	1"=20'
vert	N/A
date	
JUL 2017	



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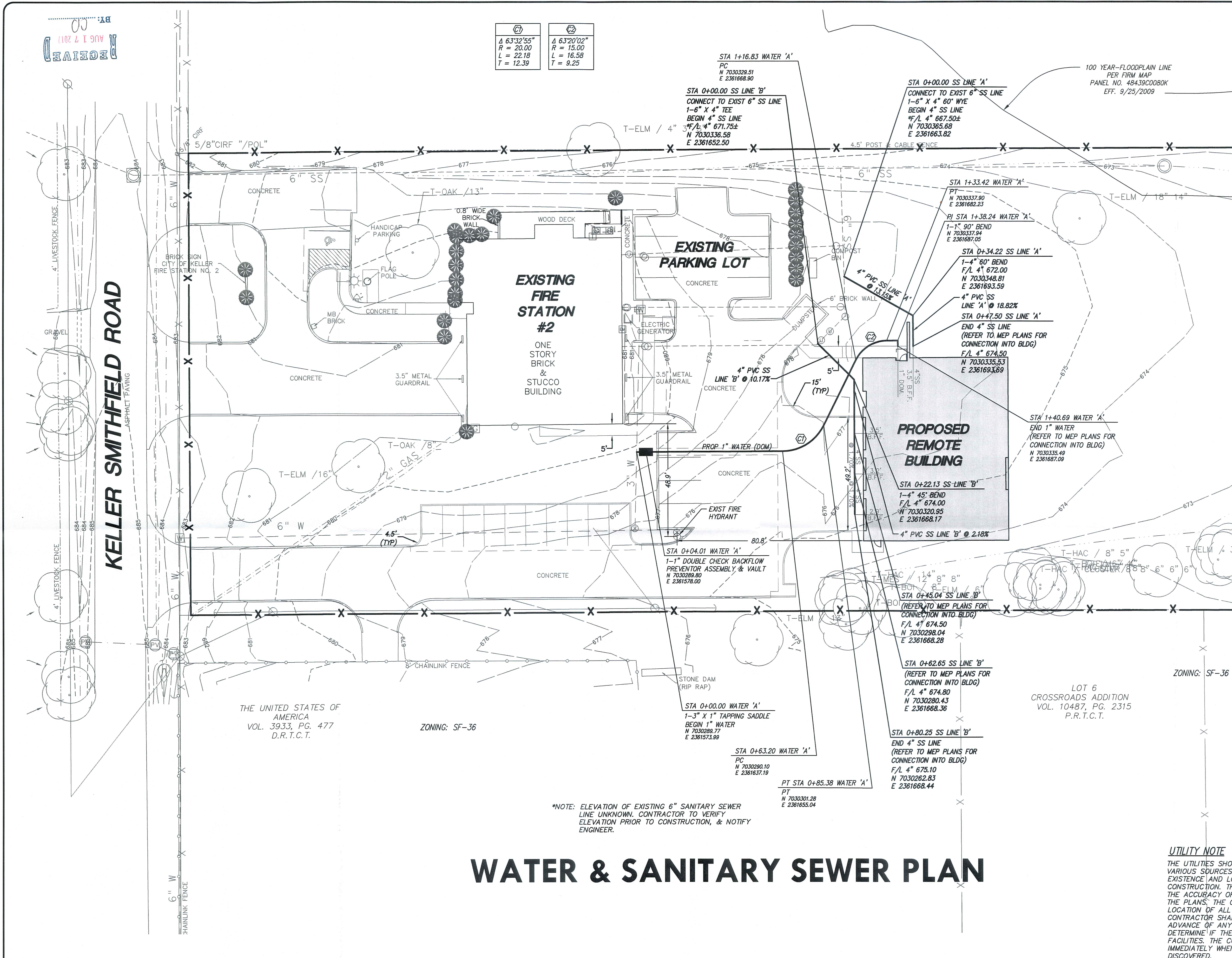
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SCOTT A. GIBSON P.E. Date: JULY 2017

Tx. Reg. # 89290

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GRADING PLAN	

JUL 27 2017



- SANITARY SEWER NOTES**
1. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL UNCOVER EXISTING SANITARY SEWER SERVICE AND PROVIDE ENGINEER WITH SIZE, LOCATION AND ELEVATION OF EXISTING SEWER SERVICE BEFORE PROCEEDING WITH CONSTRUCTION.
 3. THE CITY RESERVES THE RIGHT TO TV INSPECT THE SEWER PIPE.
 4. THE SEWER PIPE WILL BE TESTED TO 5 PSI FOR 10 MINUTES WITH NO PRESSURE LOSS.
 5. CONTRACTOR SHALL UTILIZE NECESSARY MEASURES INCLUDING TEMPORARY PUMPING AND COLLECTION UNTIL THE PUBLIC SEWER IMPROVEMENTS ARE INSTALLED & OPERATIONAL.
 6. PROVIDE TRAFFIC CONTROL, BACKFILL EMBEDMENT, PAVEMENT REPAIR AND OTHER INSTALLATION REQUIREMENTS PER CITIES STANDARDS.
 7. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO CONSTRUCTION.
 8. THE CONTRACTOR SHALL CONSTRUCT THE PROPOSED WORK UTILIZING A TRENCH SAFETY PLAN, PREPARED BY A PROFESSIONAL ENGINEER FOR THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY.
 9. CONTRACTOR SHALL VERIFY THAT ALL CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE FOR SANITARY SEWER ONLY.
 10. CONTRACTOR SHALL INSTALL 1 JOINT (18' MIN. JOINT LENGTH) OF DUCTILE IRON PIPE AT LOCATIONS WHERE PROPOSED SEWER SERVICES CROSS EXISTING OR PROPOSED WATER LINES, EXCEPT WHERE OTHERWISE AUTHORIZED BY ENGINEER.
 11. CONNECTION TO THE SANITARY SEWER LATERAL SHALL BE 5' FROM FACE OF THE PROPOSED BUILDING. REFER TO THE MEP PLANS FOR THE CONTINUATION OF THE SANITARY SEWER LATERAL UNDER THE BUILDING AND FOR THE CONNECTION TO THE EXISTING LINE.
 12. CONTRACTOR SHALL ADJUST EXISTING CLEANOUTS AND SSMH RIMS TO MATCH PROPOSED GRADES.

- WATER NOTES:**
1. ALL 8" WATERLINES (FIRE) SHALL BE PVC (DR-14). 4" WATERLINE (DOM) SHALL BE PVC (DR-18).
 2. CONTRACTOR TO VERIFY THE LOCATION OF EXISTING WATER LINES PRIOR TO CONSTRUCTION.
 3. INSTALL ALL VALVES IN BOXES WITH RIMS FOR ACCESS AND OPERATION.
 4. THRUST BLOCKS SHALL BE PROVIDED ON ALL FITTINGS, BENDS AND DEFLECTIONS.
 5. ALL DUCTILE IRON FITTINGS SHALL BE WRAPPED WITH MINIMUM 8 MIL POLYETHYLENE.
 6. FIRE AND DOMESTIC WATERLINES SHALL BE INSTALLED BY A UTILITY CONTRACTOR PRE-QUALIFIED WITH THE CITY OF FORT WORTH.
 7. PROVIDE TRAFFIC CONTROL, FLOWABLE FILL BACKFILL, PAVEMENT REPAIR AND OTHER INSTALLATION REQUIREMENTS PER CITIES STANDARDS.
 8. IN THE EVENT A STREET IS TO BE CLOSED AND/OR TRAFFIC IS TO BE REROUTED DURING CONSTRUCTION OF THE PROJECT, THE CONTRACTOR WILL HAVE THE SOLE RESPONSIBILITY OF SUBMITTING A TRAFFIC CONTROL PLAN DIRECTLY TO THE CITY TRAFFIC ENGINEER FOR APPROVAL.
 9. CONTRACTOR TO COORDINATE WITH THE CITY, IMPROVEMENTS WITHIN THE PUBLIC R.O.W. CITY TO CONSTRUCT ALL PUBLIC TAPS, LINES AND METERS.

UTILITY NOTE

THE UTILITIES SHOWN ON THE PLANS WERE COMPILED FROM VARIOUS SOURCES AND ARE INTENDED TO SHOW THE GENERAL EXISTENCE AND LOCATION OF UTILITIES IN THE AREA OF CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE UTILITY INFORMATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES IN ORDER TO DETERMINE IF THERE IS ANY CONFLICT WITH THE PROPOSED FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS WITH EXISTING UTILITIES ARE DISCOVERED.

GRAPHIC SCALE

1" = 20'

0 10 20 40

AUG 17 2017

BY: *[Signature]*

WATER & SANITARY SEWER PLAN

no.	revision	by	date

scale	horiz	vert
1"=20'	N/A	N/A
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City of Keller, Texas

Improvements for

Keller Fire Station #2

WATER & SANITARY SEWER PLAN

tnp project

BRK17145

sheet

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