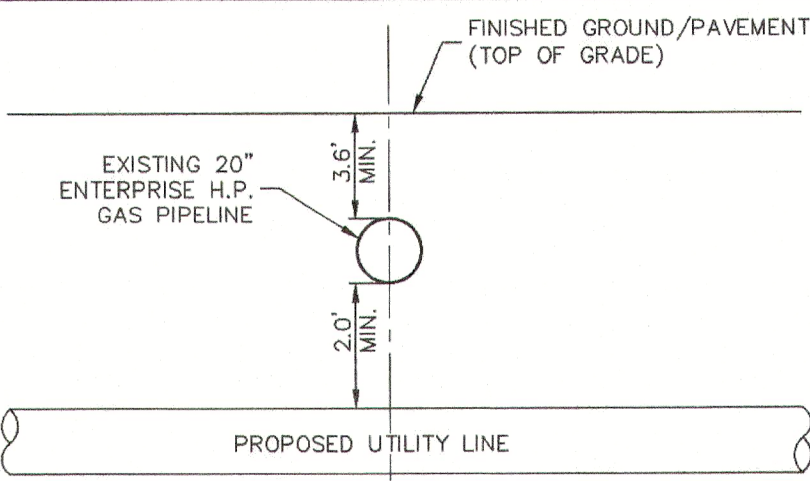


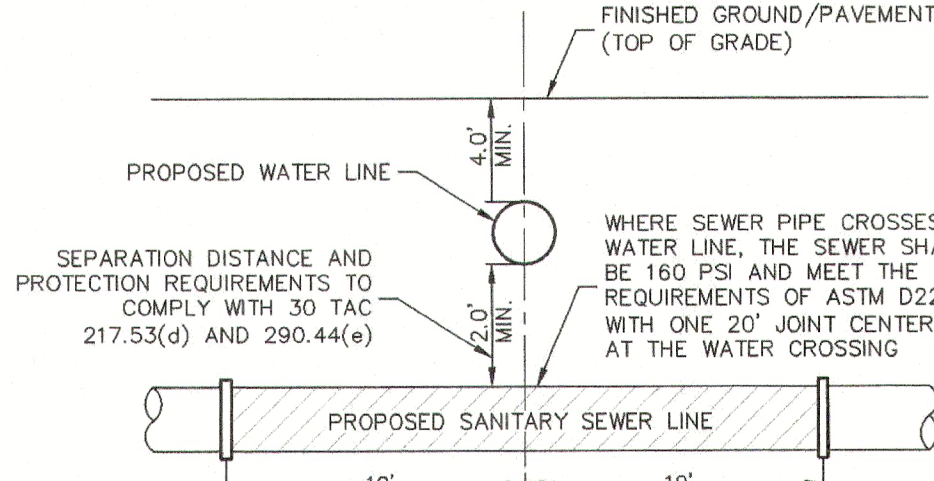


TYPICAL UTILITY/ ENTERPRISE
GAS CROSSING DETAIL

WARNING !!!
HIGH PRESSURE PIPELINE EVACUATION AND/OR CONSTRUCTION PROHIBITED WITHOUT WRITTEN PERMISSION FROM ENTERPRISE.

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- JUSTIN THOMAS (210)827-7201 MOB.
- SAN ANTONIO (210)528-2782 OFF.

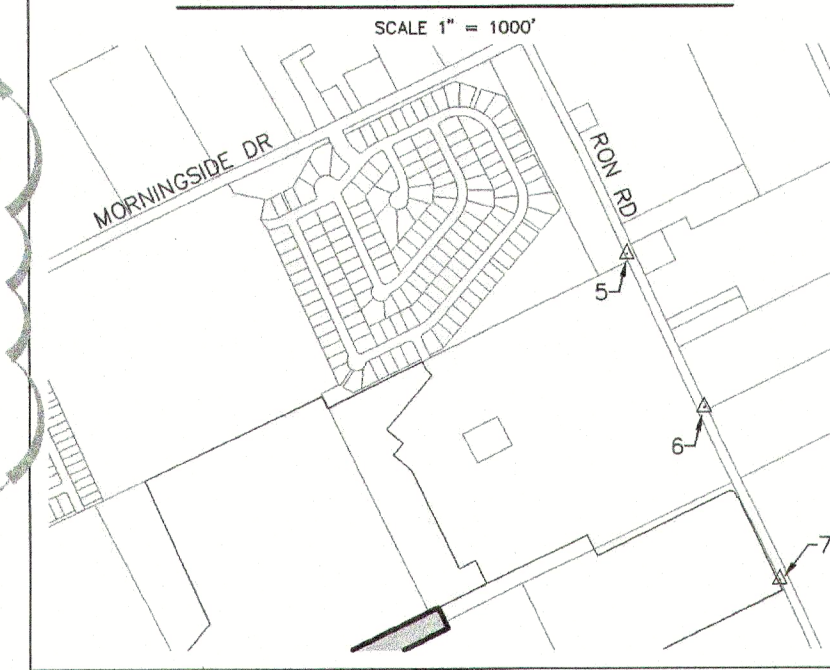


TYPICAL SANITARY
SEWER/WATER CROSSING DETAIL

WASTEWATER (NBU JOB NO. WW-209399)

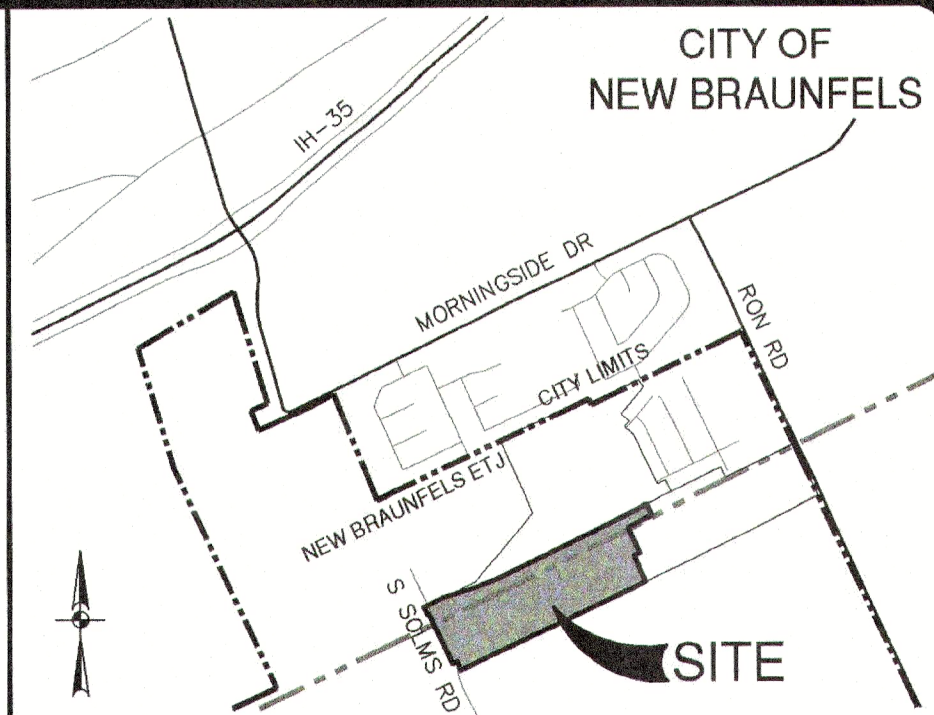
ITEM	UNIT	QUANTITY
8" SANITARY SEWER PIPE	LF	4,691
10" SANITARY SEWER PIPE	LF	691
LUES	EA	213
6" WASTEWATER SERVICE	EA	209
48" MANHOLES	EA	15
CAPS	EA	-

BENCHMARK LOCATION MAP

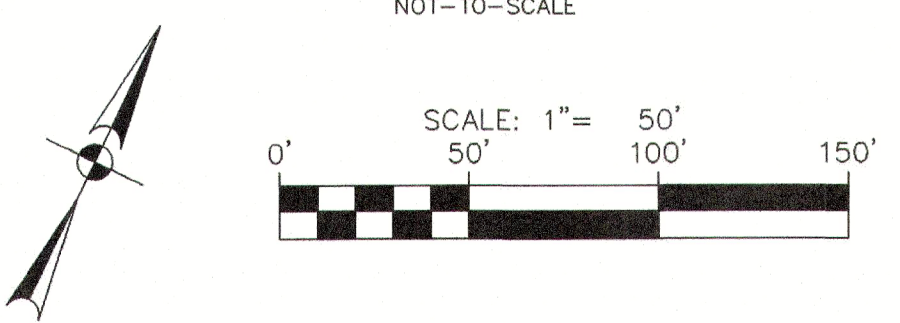


HORIZONTAL AND VERTICAL CONTROL POINTS

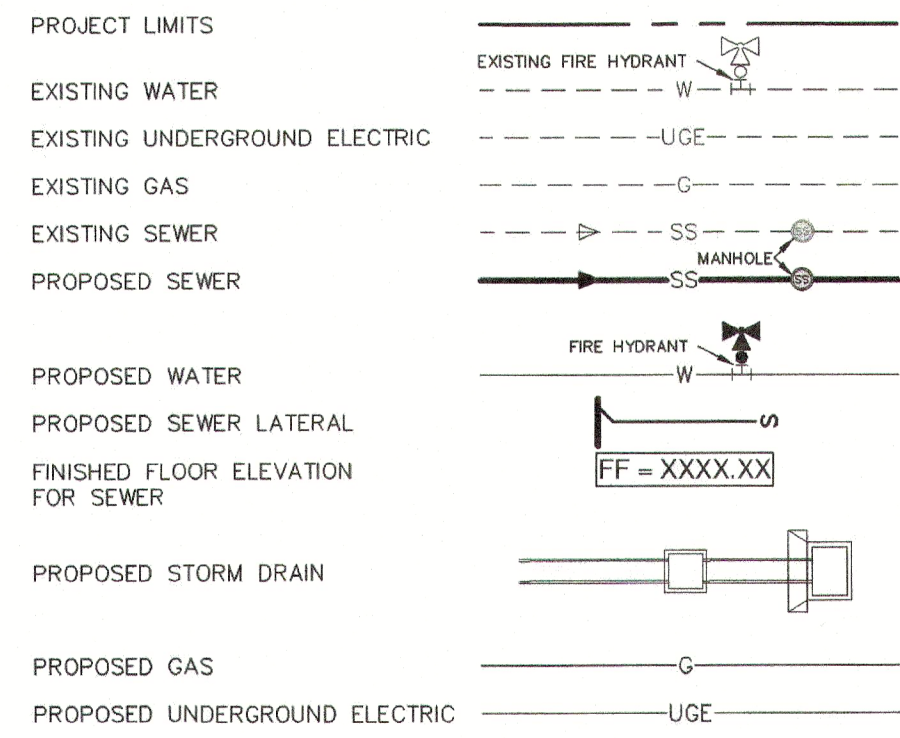
Point #	Northing	Easting	Elevation	Full Description
5	13,790,938.63	2,237,803.08	739.28	SET L.R. REDCAP (TRAV)
6	13,790,126.56	2,238,209.12	729.52	SET L.R. REDCAP (TRAV)
7	13,789,219.89	2,238,601.76	727.47	SET L.R. REDCAP (TRAV)



LOCATION MAP



SEWER LEGEND



CONDUIT NOTES:

- CONTRACTOR SHALL INSTALL PERMANENT MARKERS IN PROPOSED CURB WHERE CONDUITS CROSS THE ROADWAY (BOTH SIDES).
- CONDUITS SHALL BE PVC WITH MINIMUM BURY OF 30 INCHES, SCHEDULE 80 TO BE USED FOR GPS CONDUITS. ALL OTHER CONDUITS ARE SCHEDULE 40.
- ALL CONDUITS SHALL BE EXTENDED BEHIND CURBS OR PROPOSED SIDEWALKS A MINIMUM OF 3 FEET AND CAPPED FOR FUTURE USE.

CITY OF NEW BRAUNFELS NOTES

- NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.
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- THIS PROJECT INCLUDES UTILITY INSTALLATIONS GREATER THAN 5-FEET IN DEPTH. DEEP TRENCHES POSE COMPACTION TESTING AND CONSTRUCTION CHALLENGES AND CITY METHODS FOR TESTING AND COMPACTION MAY NOT BE ACHIEVABLE. A UTILITY COMPACTION PLAN WILL BE REQUIRED AND MUST BE SUBMITTED FOR APPROVAL TO CITY PRIOR TO UTILITY INSTALLATION.
- UTILITY TRENCH COMPACTION - ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT/SIDEWALK SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEOTECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. DETERMINE THE MAXIMUM LIFT THICKNESS BASED ON THE ABILITY OF THE COMPACTING OPERATION AND EQUIPMENT USED TO MEET THE REQUIRED DENSITY. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE CITY OF NEW BRAUNFELS STREET INSPECTOR. AT A MINIMUM, TESTS SHALL BE TAKEN EVERY 200 LF FOR EACH LIFT AND EVERY OTHER SERVICE LINE. UPON COMPLETION OF TESTING THE GEOTECHNICAL ENGINEER SHALL PROVIDE THE CITY OF NEW BRAUNFELS STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. ADDITIONAL DENSITY TESTS MAY BE REQUESTED BY THE CITY OF NEW BRAUNFELS INSPECTOR.

CAUTION!!

CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT "TEXAS 811" A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

FLOODPLAIN NOTE

- NO PORTION OF ANY LOT ON THIS PROJECT IS WITHIN AN INDICATED SPECIAL FLOOD HAZARD ZONE ACCORDING TO THE FEMA FIRM MAP NO. 48091C0445F EFFECTIVE DATE 9/2/2009 AND FEMA FIRM MAP NO. 48187C0095F EFFECTIVE DATE 11/2/2007.

J. Stapp 9-10-25

CALL 37.8 AC
THE HAGGARD COMPANY
(VOL. 1293, PG. 769 DRGC)

Date: Jun 20, 2024, 9:50am User ID: Mleuckie
File P:\300\3A\07\Design\Civil\SSOA-3003\07.dwg

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**PAPE-DAWSON
ENGINEERS**

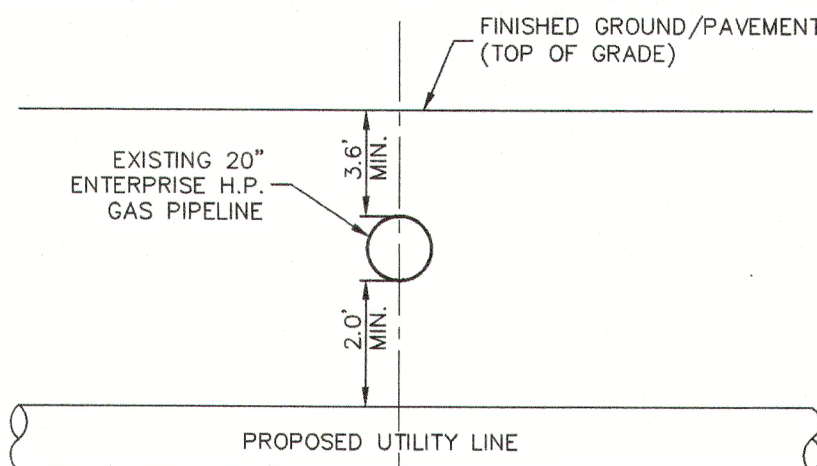
NEW BRAUNFELS | SAN ANTONIO | AUSTIN | HOUSTON | FT. WORTH | DALLAS
1672 INDEPENDENCE DR. STE. 102 | NEW BRAUNFELS, TX 78124 | 830.682.9553
TEXAS ENGINEERING FIRM #470 | TEXAS SURVEYING FIRM #10038800

**STEELWOOD TRAIL UNIT 4
NEW BRAUNFELS, TEXAS**

OVERALL SANITARY SEWER

PLAT NO. _____
JOB NO. 30034-07
DATE MAY 2022
DESIGNER HF
CHECKED HF DRAWN BH
SHEET C5.00

FOR PERMIT

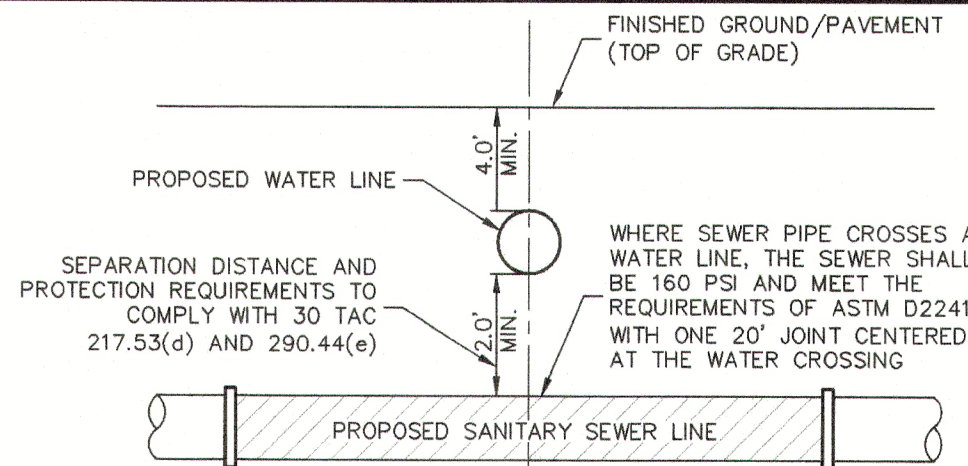


TYPICAL UTILITY/ ENTERPRISE
GAS CROSSING DETAIL
NOT-TO-SCALE

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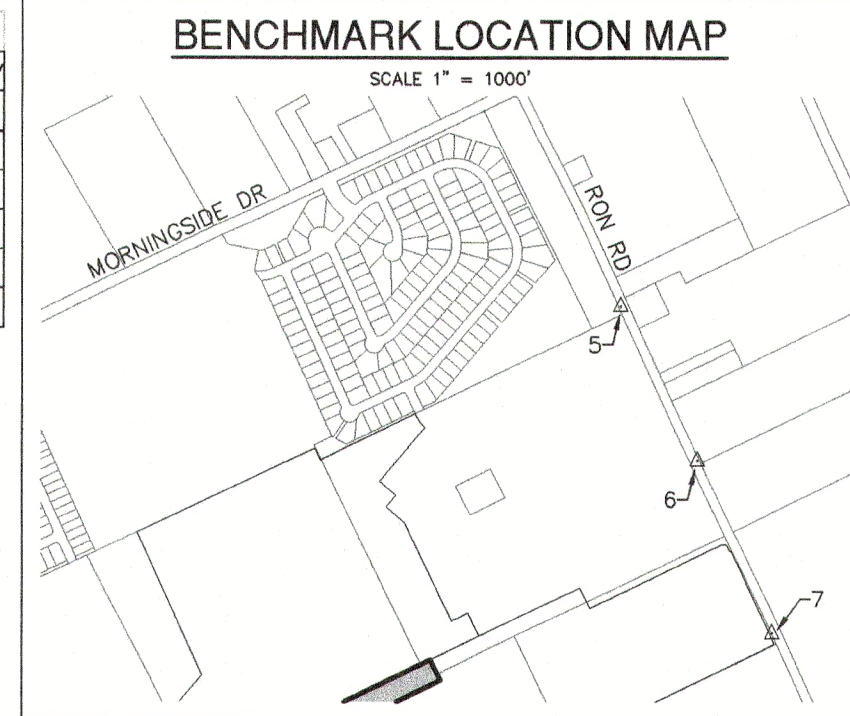
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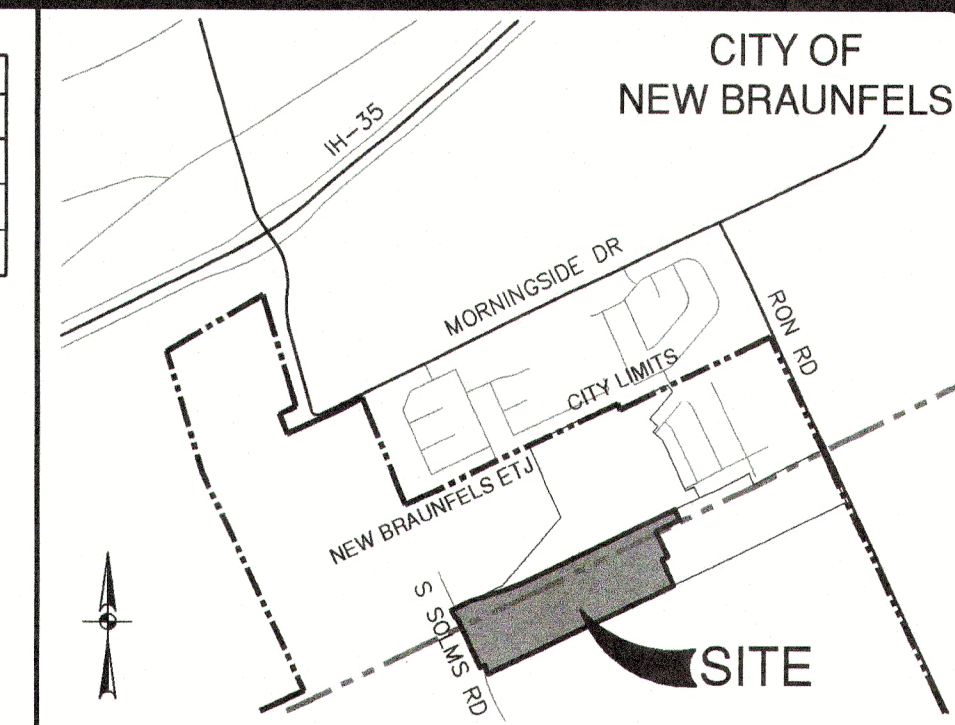


TYPICAL SANITARY
SEWER/WATER CROSSING DETAIL
NOT-TO-SCALE

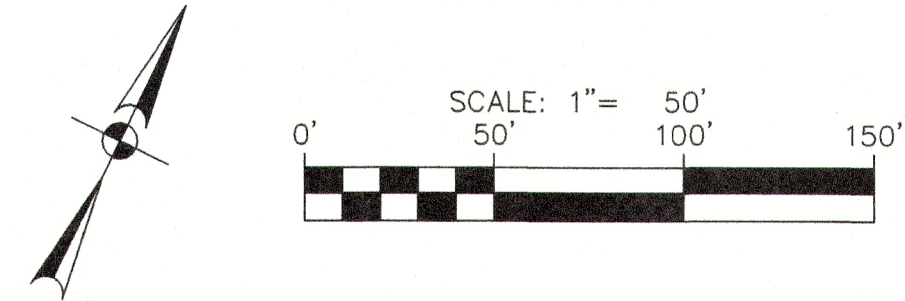
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LOCATION MAP
NOT-TO-SCALE



SEWER LEGEND

PROJECT LIMITS	
EXISTING WATER	---
EXISTING UNDERGROUND ELECTRIC	--- UGE ---
EXISTING GAS	---
EXISTING SEWER	---
PROPOSED SEWER	---
PROPOSED WATER	---
PROPOSED SEWER LATERAL	---
FINISHED FLOOR ELEVATION FOR SEWER	FF = XXXX.XX
PROPOSED STORM DRAIN	---
PROPOSED GAS	---
PROPOSED UNDERGROUND ELECTRIC	--- UGE ---

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**PAPE-DAWSON
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**STEELWOOD TRAIL UNIT 4
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OVERALL SANITARY SEWER

PLAT NO.	
JOB NO.	30034-07
DATE	MAY 2022
DESIGNER	HF
CHECKED	HF
DRAWN	BH
SHEET	C5.01

FOR PERMIT