

HUBER DRIVE WATERMAIN REPLACEMENT CITY OF HILLSBORO 447 SOUTH MAIN STREET MONTGOMERY COUNTY, ILLINOIS 62049



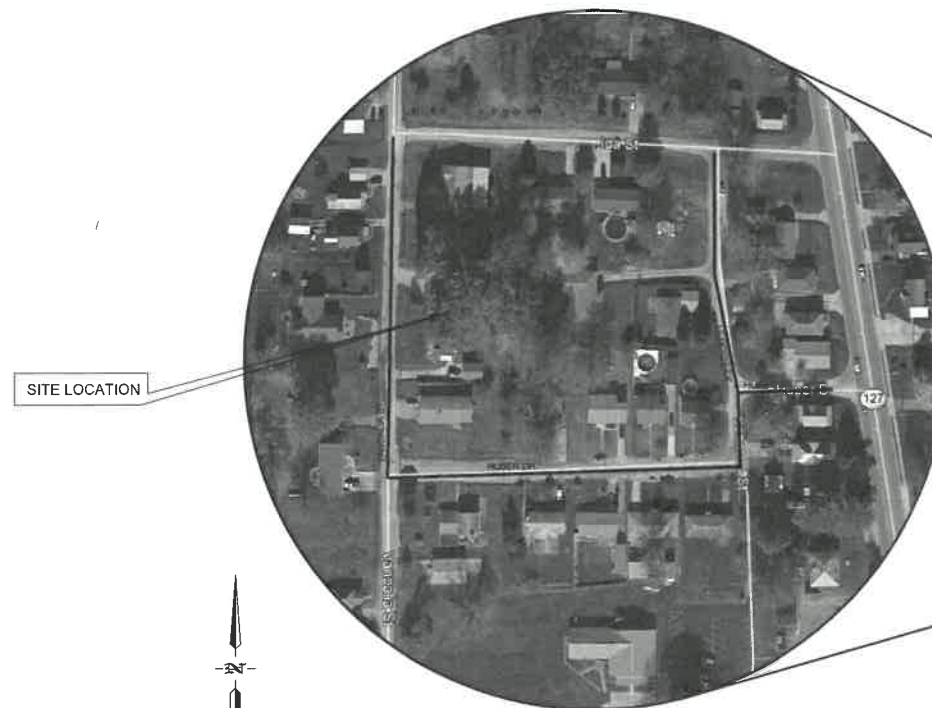
HURST-ROSCHE, INC.
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JEREMY J. CONNOR - ENGINEER
I.# PE-062-057938
SIGNATURE _____
DATE 06-13-2022
DATE 11-30-2023
LICENSE EXPIRES _____

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AREA LOCATION MAP



HUBER DRIVE WATERMAIN REPLACEMENT
CITY OF HILLSBORO
447 S. MAIN STREET
HILLSBORO, MONTGOMERY COUNTY, ILLINOIS 62049

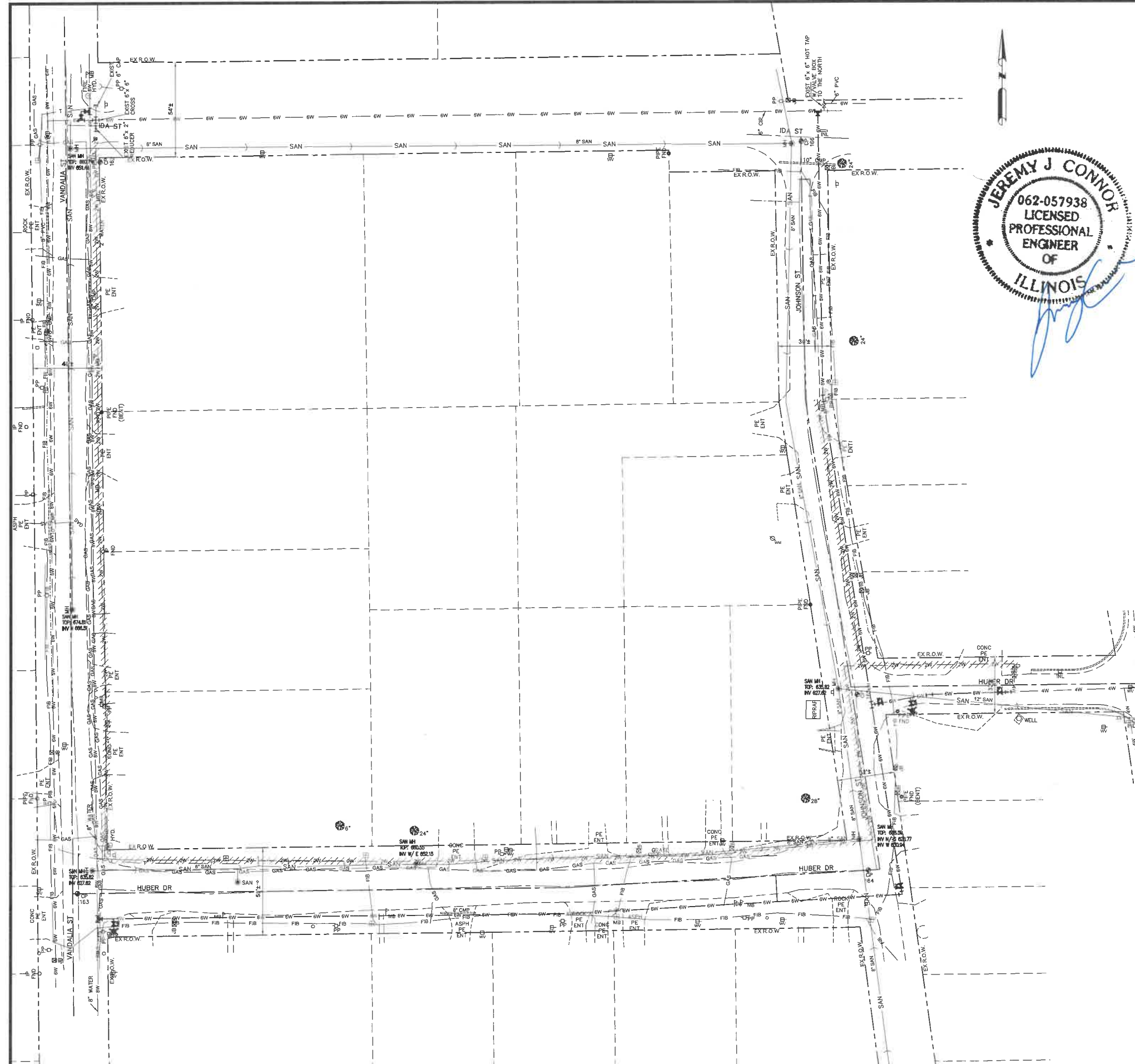
MARK	DATE	DESCRIPTION

DATE: JUNE 2022
PROJECT NO: 170-1030
DESIGN: ZAY DRAWN: UJ CHECK: JJC

TITLE SHEET

G-001

01 OF 06



UTILITY INSTALLATION GENERAL NOTES:

- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PLANS AND THE "STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS, CURRENT EDITION", THE SPECIAL PROVISIONS AND ALL LOCAL AND STATE CODES GOVERNING THE CONSTRUCTION OF THE PROPOSED FACILITIES.
- UNLESS OTHERWISE INDICATED ON THE DRAWINGS, TOP OF WATER MAINS ARE TO BE SET IN THE FIELD AND SHALL HAVE A MINIMUM OF 3.5' OF COVER. ADJUST DEPTHS OF WATER MAINS TO AVOID EXISTING UTILITIES AND TO PROVIDE 18" MINIMUM VERTICAL CLEARANCE BETWEEN WATER MAINS AND SEWER MAINS.
- EXISTING WATER LINES SHOWN ON DRAWINGS TO BE ABANDONED AND CONNECTIONS TO EXISTING WATER SERVICE LINES SHALL BE DONE ONLY AFTER PROPOSED WATER LINES HAVE BEEN INSTALLED, PRESSURE TESTED, DISINFECTED AND PUT IN SERVICE.
- RIGHT-OF-WAYS, PROPERTY LINES, AND TOPOGRAPHY SHOWN HEREON HAVE BEEN TAKEN FROM THE BEST AVAILABLE RECORDS AND MUST BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION.
- TEMPORARY EROSION CONTROL MEASURES WILL BE USED TO CORRECT CONDITIONS THAT DEVELOPED DURING CONSTRUCTION THAT WERE UNFORESEEN DURING THE DESIGN STAGE OR THAT ARE NEEDED TEMPORARILY TO CONTROL EROSION THAT DEVELOPS DURING NORMAL CONSTRUCTION PRACTICES.
- THE CONTRACTOR SHALL LIMIT THE AMOUNT OF TRENCH TO BE OPEN AT ANY ONE TIME TO A MAXIMUM OF FORTY (40) LINEAR FEET AS MEASURED ALONG THE CENTERLINE OF THE PROPOSED PIPE. ALL OPEN TRENCHES SHALL BE BACKFILLED AT THE END OF EACH DAY'S WORK AND IMMEDIATE MEASURES TAKEN TO STABILIZE THE DISTURBED AREA.
- THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION BEFORE AND DURING CONSTRUCTION. THE ENGINEER AND THE OWNER DO NOT WARRANT OR GUARANTEE THE COMPLETENESS OR THE CORRECTNESS OF THE INFORMATION GIVEN.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL ARRANGE TO HAVE ALL UNDERGROUND UTILITIES INCLUDING WATER, GAS, ELECTRIC, STORM SEWER, TELEPHONE AND CABLE TV LOCATED AND SUITABLY MARKED. SHOULD A UTILITY BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED AT ONCE. SHOULD A UTILITY BE LOCATED PARALLEL TO THE PROPOSED PIPELINE AND WITHIN THE MAXIMUM TRENCH WIDTH AS DEFINED IN THE STANDARD SPECIFICATIONS, OR IN DIRECT GRADE CONFLICT WITH THE GRADE OF THE PROPOSED PIPE, ARRANGEMENTS SHALL BE MADE FOR THE UTILITY TO BE PROTECTED OR IF PROTECTION IS NOT FEASIBLE TO ARRANGE FOR THE UTILITY TO BE RELOCATED. SHOULD THE PROPOSED ALIGNMENT BE ALTERED IN THE FIELD, THE CONTRACTOR SHALL BE PAID FOR THE QUANTITIES OF WORK PERFORMED IN ACCORDANCE WITH THESE SPECIFICATIONS AND NO ADDITIONAL PAYMENT SHALL BE MADE. SHOULD A UTILITY OUTSIDE OF THE TRENCH WIDTH AND NOT IN DIRECT CONFLICT WITH THE PROPOSED WATER LINE BE ENCOUNTERED, THE CONTRACTOR SHALL PROTECT IT OR HAVE IT RELOCATED AT HIS OWN EXPENSE. LIKEWISE, WATER, SEWER, GAS AND OTHER LINES SHALL BE PROTECTED AT NO ADDITIONAL EXPENSE TO THE OWNER AND WITHOUT CLAIM BY THE CONTRACTOR FOR DELAYS DUE TO SERVICE LINES ENCOUNTERED.
- NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SERVICES AND MAINS, AND ANY DAMAGE TO THEM DUE TO HIS NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE LOCAL POWER COMPANY AND THE TELEPHONE COMPANY SEVEN (7) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS. SOME, BUT NOT ALL, OF THE UTILITIES OF THIS PROJECT CAN BE CONTACTED PRIOR TO CONSTRUCTION BY CALLING THE JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS (JULIE), PHONE 800-892-0123.
- THE CITY OF HILLSBORO WILL LOCATE EXISTING WATER AND SEWER MAINS. HOWEVER, THE CONTRACTOR WILL BEAR THE EXPENSE OF REPAIRING ALL WATER, SANITARY, AND STORM SEWERS WHICH ARE DAMAGED. THE CONTRACTOR SHALL NOTIFY THE CITY TO LOCATE THE EXISTING UTILITIES 7 DAYS IN ADVANCE OF EXCAVATION IN THE AREA OF THE PROPOSED WATER LINES.
- AFTER TRENCH HAS BEEN BACKFILLED, GROUND WILL BE RETURNED TO EXISTING OR PROPOSED GRADE AND NO EXCESS EXCAVATED MATERIAL WILL BE SPREAD IN THIS AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND REPLACING EXISTING FENCES, DRIVEWAYS, SIDEWALKS, ETC. DAMAGED OR REMOVED DURING CONSTRUCTION. ALL DISTURBED AREAS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION. ALL TREES SHALL BE PROTECTED BY THE CONTRACTOR UNLESS THE TREES LIE DIRECTLY IN THE PATH OF THE PROPOSED FACILITIES.
- THE CONTRACTOR HAS NO AUTHORITY TO PERMIT THE USE OF ANY PORTION OF THE SITE BY ANYONE EXCEPT FOR BUSINESS CONNECTED WITH THE CONSTRUCTION IN WHICH THIS CONTRACT IS CONCERNED.
- THE CONTRACTOR SHALL PERFORM EXPLORATORY EXCAVATION FAR ENOUGH IN ADVANCE OF THE WORK TO LOCATE EXISTING UTILITIES AND OBSTRUCTIONS SO THAT CORRECTIONS IN PROPOSED PIPE GRADE AND ALIGNMENT CAN BE MADE WITHOUT REMOVING PIPE ALREADY INSTALLED AND IN PLACE. ANY CORRECTION REQUIRED TO PIPE OR FACILITIES ALREADY INSTALLED DUE TO THE CONTRACTOR'S FAILURE TO LOCATE EXISTING UTILITIES AND OBSTRUCTIONS SHALL BE REMOVED AND REINSTALLED AT NO ADDITIONAL CONTRACT COST.
- CONTRACTOR SHALL COORDINATE WITH THE CITY OF HILLSBORO BEFORE OPERATING ANY WATER VALVES IN THE SYSTEM. NO VALVES SHALL BE OPERATED NOR ANY WATER MAINS SHUTDOWN WITHOUT PRIOR APPROVAL FROM THE CITY.
- SHORT TUNNELS MAY BE REQUIRED BY THE ENGINEER AT SOME LOCATIONS WHILE CONSTRUCTING THE PROPOSED PIPELINES IN ORDER TO SAVE OBSTRUCTIONS SUCH AS TREES OR EXISTING PIPES WHICH ARE IN THE TRENCH WIDTH. THE COST OF SHORT TUNNELS SHALL BE INCIDENTAL TO THE SPECIFIC PIPELINE CONSTRUCTION.
- NO CONNECTION TO THE EXISTING SYSTEMS SHALL BE MADE UNTIL THE SUBJECT WATER, SEWER, FORCE MAIN, OR PUMPING STATION HAVE BEEN INSPECTED, TESTED, AND ACCEPTED TO BE PLACED IN SERVICE.
- ANY DAMAGE TO EXISTING ROAD SURFACES BY CONTRACTOR'S EQUIPMENT SHALL BE REPAIRED TO ORIGINAL CONDITION OR BETTER, AND THE REPAIR SHALL BE ACCEPTABLE TO THE CITY OF HILLSBORO. COST OF SUCH REPAIR OUTSIDE OF TRENCH WIDTH PAY LIMITS SHALL BE INCIDENTAL TO COST OF CONSTRUCTION.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL NOT CAUSE SEWAGE TO BE DISCHARGED ON THE GROUND, IN WATERWAYS OR INTO THE GROUND NOR SHALL HE CAUSE BACKUP OF SEWAGE INTO BUILDINGS. SEWAGE SHALL BE DIVERTED BY PUMPING AND/OR PIPING AROUND ANY PORTIONS OF THE SEWER SYSTEM WHICH ARE TAKEN OUT OF SERVICE. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
- PERMITS AND LICENSES OF A TEMPORARY NATURE NECESSARY FOR THE PROCESSION OF THE WORK SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR.
- THE INTENT IS FOR THE CONTRACTOR TO START AT IDA STREET, THEN DOWN JOHNSON STREET AND HUBER DRIVE TO VANDALIA STREET AND TIE-IN TO EXISTING WATER LINE. ONCE THIS PHASE IS COMPLETED, THE WATER SERVICES SHALL BE MOVED OVER TO THE NEW WATER LINE, AND THEN THE CONTRACTOR SHALL INSTALL THE REMAINING WATER LINE ALONG HUBER DRIVE AND TIE-IN TO EXISTING WATER LINE BY HIGHWAY 127, AND ABANDON THE EXISTING 2" Ø WATER LINES.
- ALL WATER SERVICE TRANSFERS WILL HAVE METER PIT INSTALLED, AS OPPOSED TO CONNECTING TO EXISTING CURB STOPS, THESE ARE TO BE REMOVED BY THE CONTRACTOR. THE CITY OF HILLSBORO SHALL PROVIDE THE METER PIT, LID/RING, YOKE AND WATER METER FOR INSTALLATION. FOR THIS PROJECT, THE CITY OF HILLSBORO AND CONTRACTOR WILL NOT CONNECT TO A PRIVATE LEAD SERVICE WITHOUT THE PROPER WAIVER IN PLACE WITH THE HOMEOWNER.

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JEREMY J. CONNOR - ENGINEER
 I.L.P. PE 062-057938

SIGNATURE	06-13-2022
DATE	11-30-2023
LICENSE EXPIRES	

HUBER DRIVE WATERMAIN REPLACEMENT
 CITY OF HILLSBORO
 447 S. MAIN STREET
 HILLSBORO, MONTGOMERY COUNTY, ILLINOIS 62049

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 DESIGN: ZAY DRAWN: UJ CHECK: JJC

SITE MAP AND GENERAL NOTES

C-001
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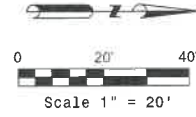
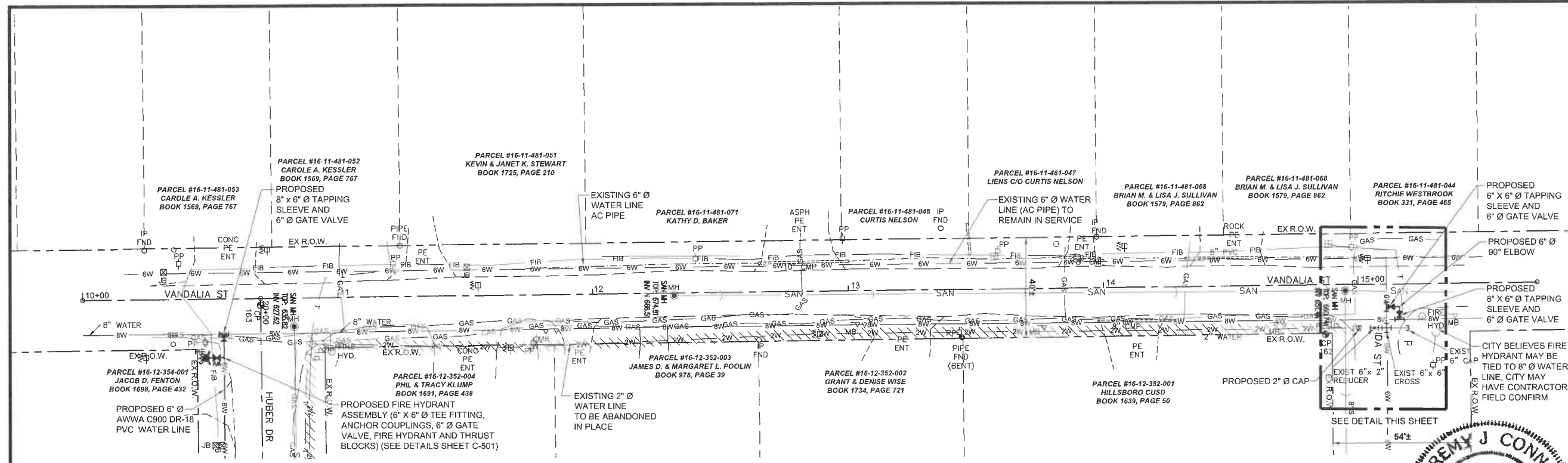
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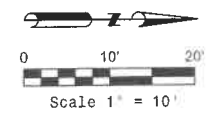
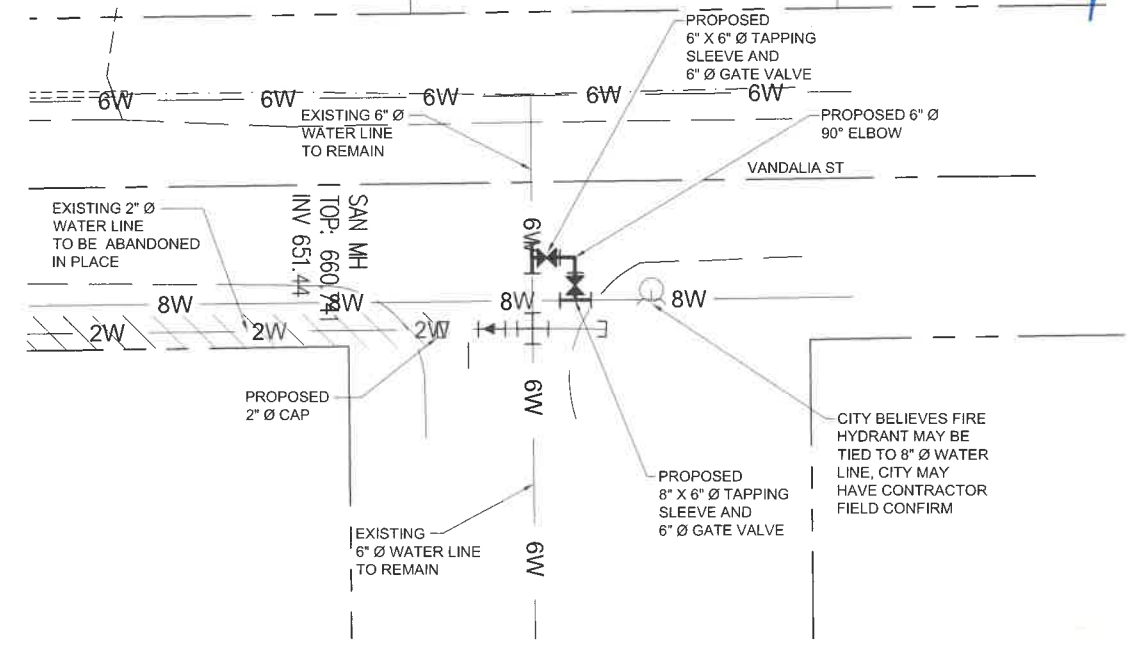
JEREMY J. CONNOR - ENGINEER
L# PE-062-057938
SIGNATURE
DATE 06-13-2022
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HUBER DRIVE WATERMAIN REPLACEMENT
CITY OF HILLSBORO
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HILLSBORO, MONTGOMERY COUNTY, ILLINOIS 62049

LEGEND

- EXISTING R.O.W. LINE
- PROPERTY LINE
- 6W 6W 6W WATER LINE (TO REMAIN IN SERVICE)
- 6W 6W 6W WATER LINE (TO BE ABANDONED IN PLACE)
- SAN --- EXISTING SANITARY SEWER LINE
- FIB FIB EXISTING FIBEROPTIC
- GAS GAS EXISTING GAS LINE
- T T EXISTING TELEPHONE LINE
- 6W 6W 6W PROPOSED 6" C-900 PVC WATER LINE
- WS WS WS PROPOSED WATER SERVICE LINE
- CONTROL POINT
- EXISTING MANHOLE
- EXISTING JUNCTION BOX
- EXISTING POWER POLE
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING FIRE HYDRANT
- EXISTING SIGN
- EXISTING TREE
- EXISTING MANHOLE
- PROPOSED WATER VALVE
- PROPOSED TEE FITTING
- PROPOSED TAPPING SLEEVE W/ VALVE
- PROPOSED REDUCER FITTING
- PROPOSED 90° BEND
- PROPOSED CAP



DETAIL

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DATE: JUNE 2022
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DESIGN: ZAY DRAWN: UJ CHECK: JUC

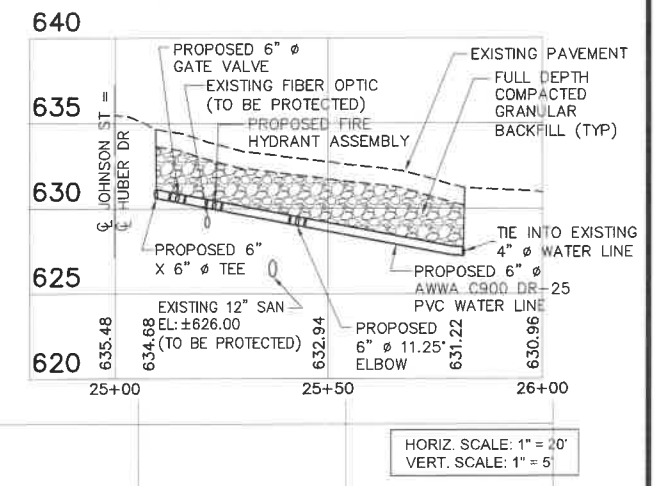
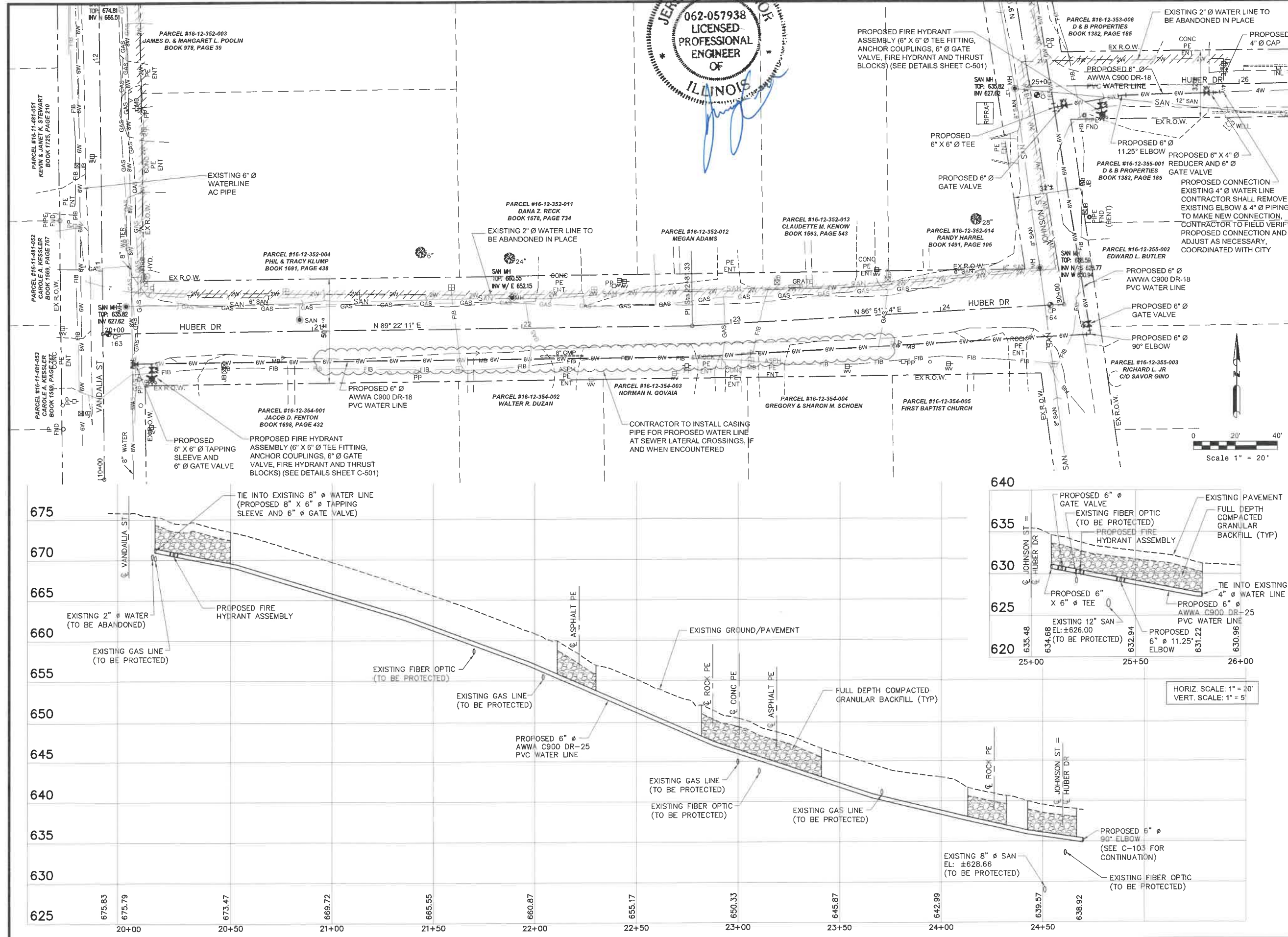
WATERMAIN -
VANDALIA STREET

C-101
03 OF 06



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WATERMAIN - HUBER DRIVE

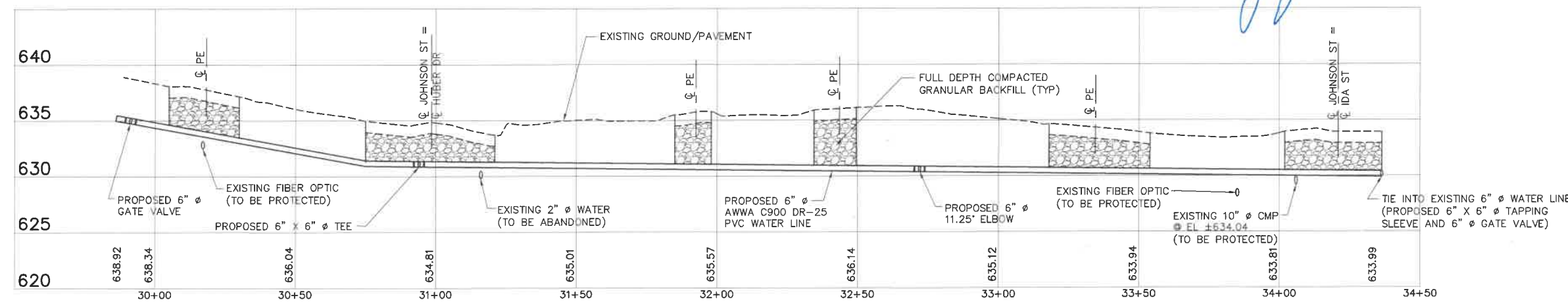
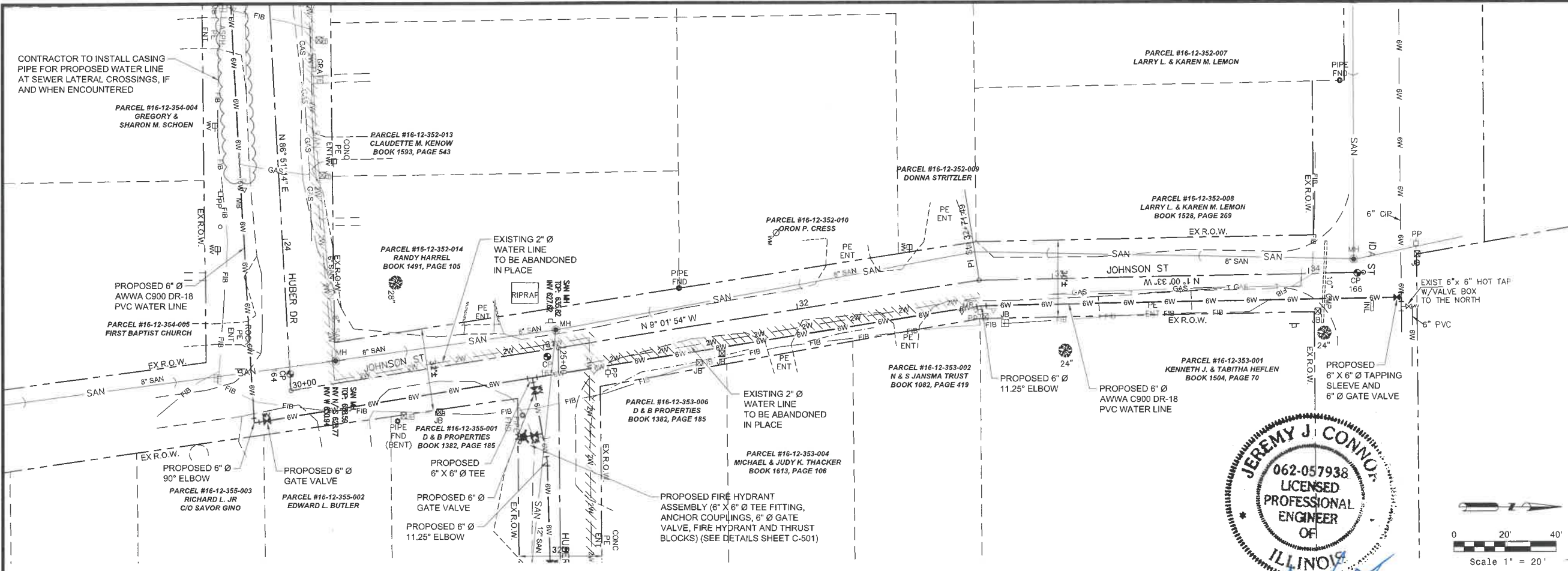
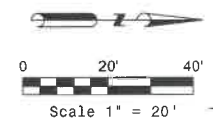
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SIGNATURE
DATE 06-13-2022
11-30-2023
LICENSE EXPIRES



HORIZ. SCALE: 1" = 20'
VERT. SCALE: 1" = 5'

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447 S. MAIN STREET
HILLSBORO, MONTGOMERY COUNTY, ILLINOIS 62049

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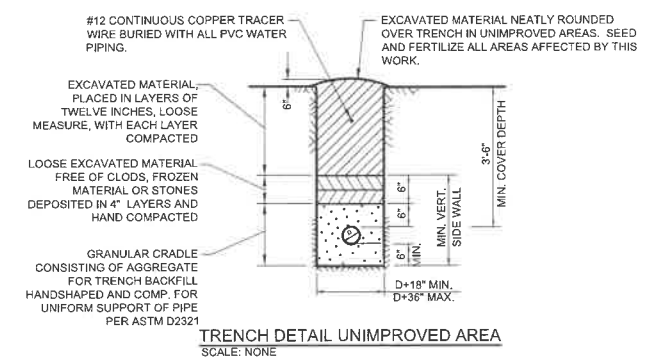
WATERMAIN - JOHNSON STREET

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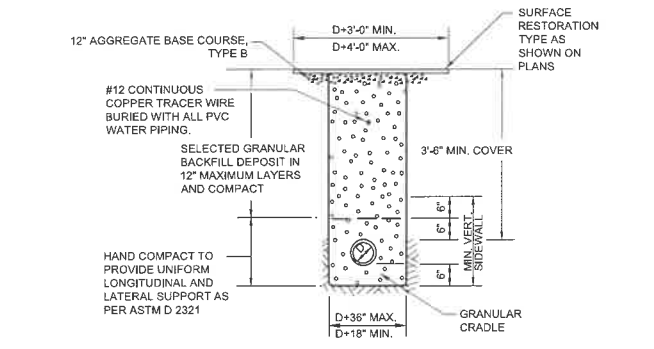


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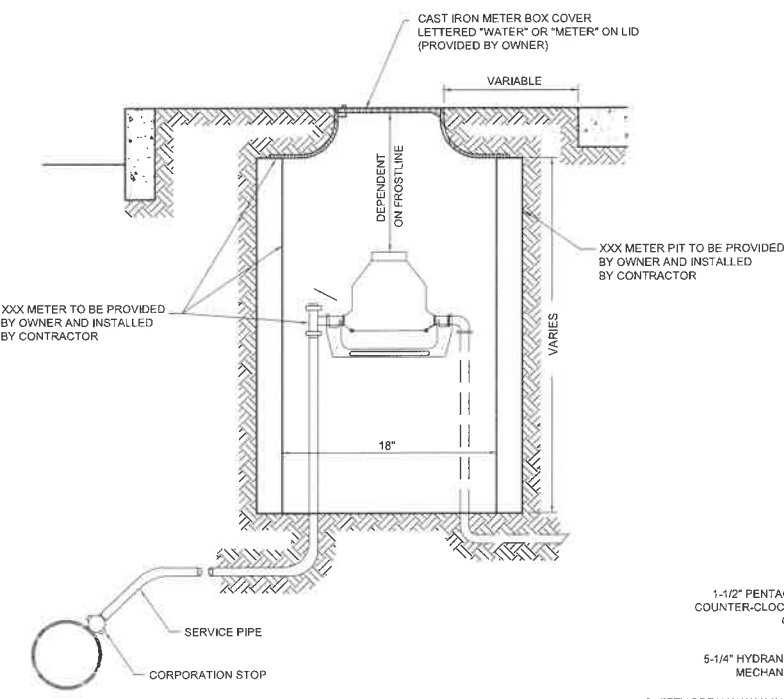
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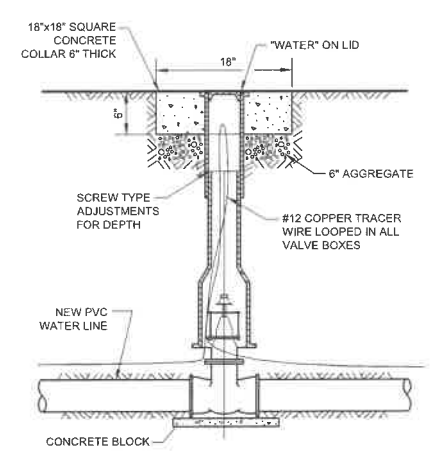
TRENCH DETAIL UNIMPROVED AREA
 SCALE: NONE



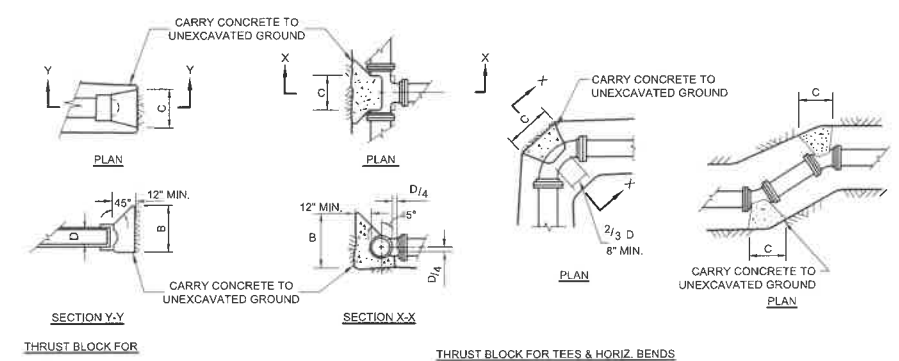
TRENCH DETAIL IMPROVED AREA
 SCALE: NONE



TYPICAL SINGLE METER BOX INSTALLATION
 SCALE: NONE



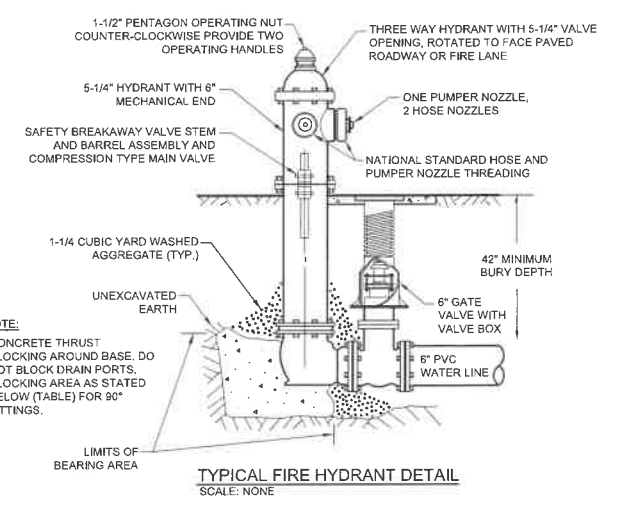
TYPICAL VALVE BOX INSTALLATION
 SCALE: NONE



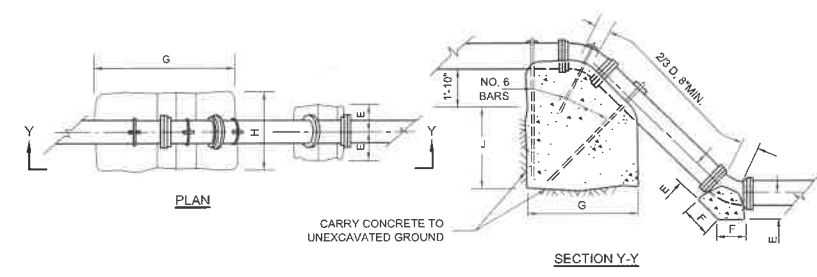
THRUST BLOCK DETAILS
 SCALE: NONE

SIZE OF PIPE (IN)	HORIZONTAL BENDS								TEE OR DEAD END		VERTICAL BENDS							
	11.25°		22.5°		45°		90°		B	C	E	F	G	H	J			
4	1.0'	1.0'	1.0'	1.0'	1.0'	1.5'	1.5'	1.8'	1.0'	1.8'	0.5'	0.75'	2.2'	3.0'	1.0'			
6	1.0'	1.0'	1.0'	1.7'	1.8'	1.8'	2.0'	3.0'	2.0'	2.2'	0.9'	3.4'	3.0'	1.5'				
8	1.0'	1.5'	1.5'	2.0'	2.0'	3.0'	2.5'	4.5'	2.5'	3.0'	1.0'	1.5'	3.8'	3.5'	2.0'			
10	1.5'	1.5'	1.5'	3.0'	2.5'	3.6'	3.0'	5.6'	2.5'	4.7'	1.25'	1.8'	5.0'	3.7'	2.25'			
12	1.5'	2.2'	2.0'	3.3'	3.0'	4.3'	3.5'	7.0'	3.0'	5.7'	1.5'	2.2'	6.0'	4.0'	2.5'			

- NOTES:
 1. ALL DIMENSIONS ARE IN FEET.
 2. DIMENSIONS ARE BASED ON 100 PSI DESIGN PRESSURE, 1.5 SAFETY FACTOR, AND 1000 LB./SQ. FT. BEARING CAPACITY OF SOIL.
 3. JOINTS AND BOLTS SHALL BE ACCESSIBLE FOR REPAIRS.
 4. ALL FITTINGS SHALL BE WRAPPED WITH 4 MIL POLYETHYLENE TO PREVENT CONCRETE FROM ADHERING TO BOLTS OR PIPE.
 5. CONCRETE SHALL BEAR ON UNDISTURBED SOIL. IF UNDISTURBED SOIL DOES NOT EXIST AT THE BLOCKING AREA, ALL SOIL WITHIN THE BEARING AREA SHALL BE COMPACTED TO 90% STANDARD PROCTOR DENSITY.



TYPICAL FIRE HYDRANT DETAIL
 SCALE: NONE



THRUST BLOCK FOR VERT. 1/8 & 1/16 BENDS
 SCALE: NONE

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WATERMAIN DETAILS

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