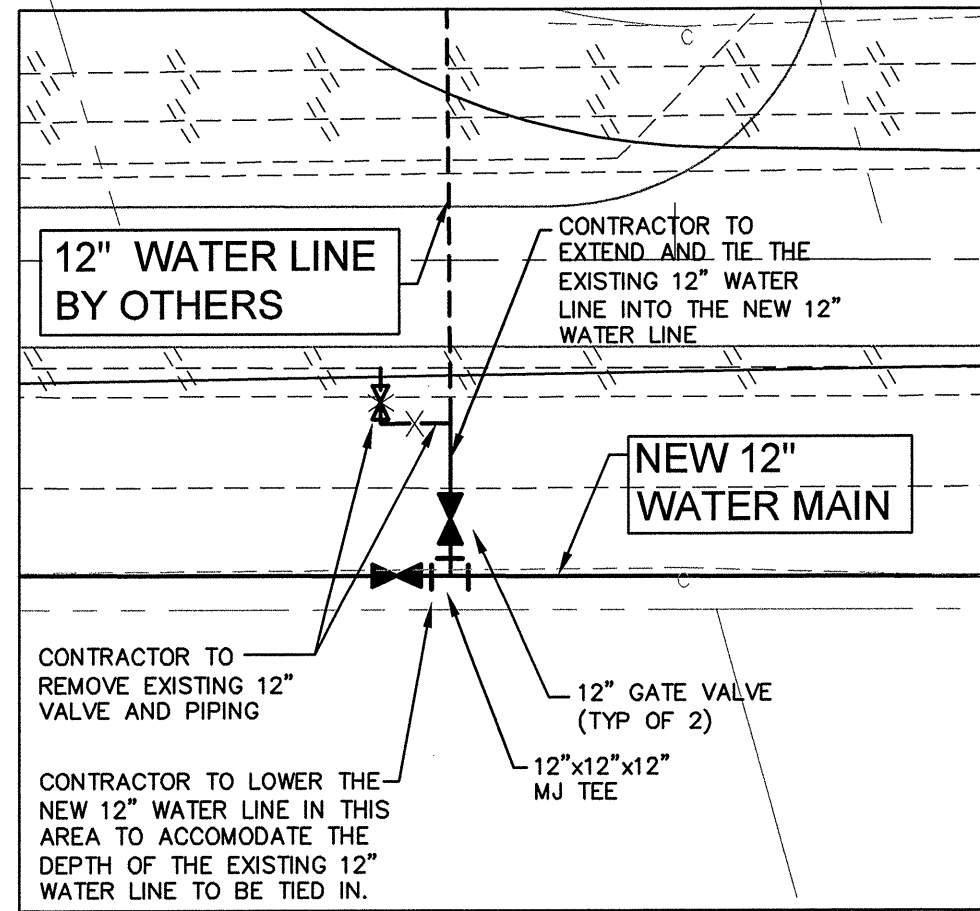
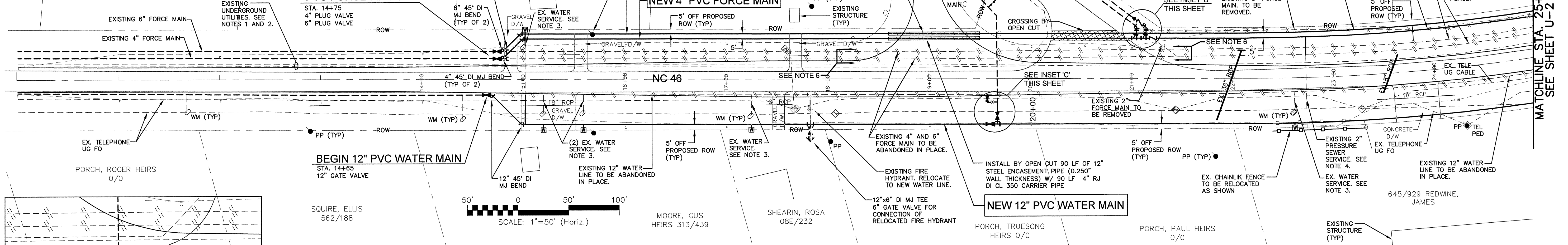
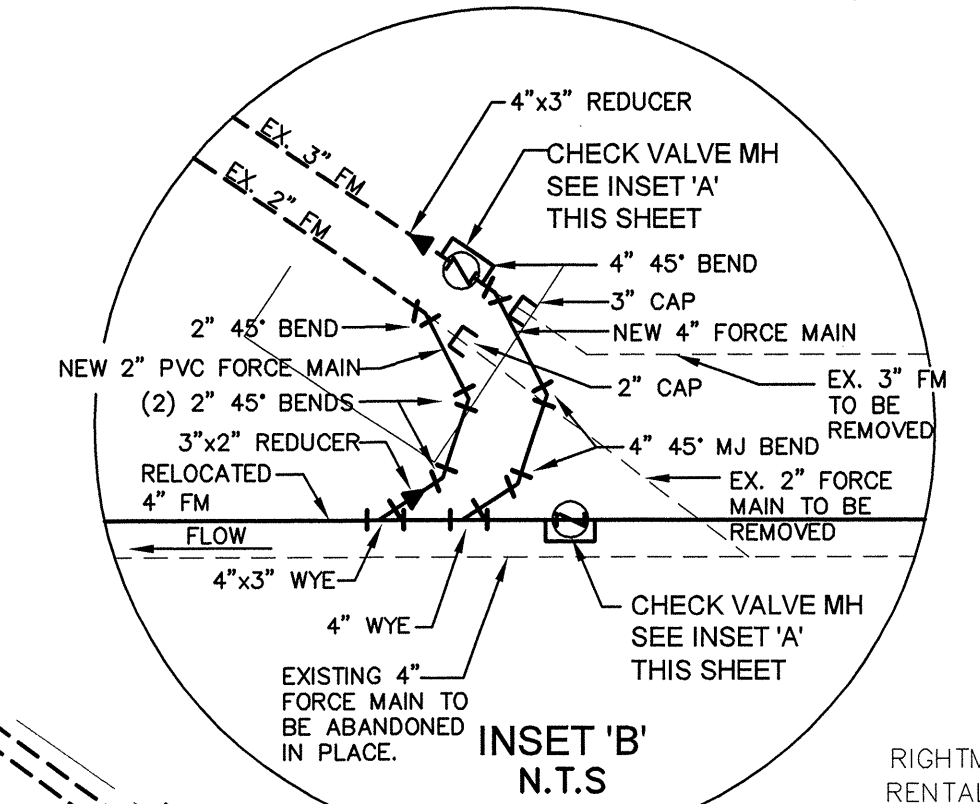
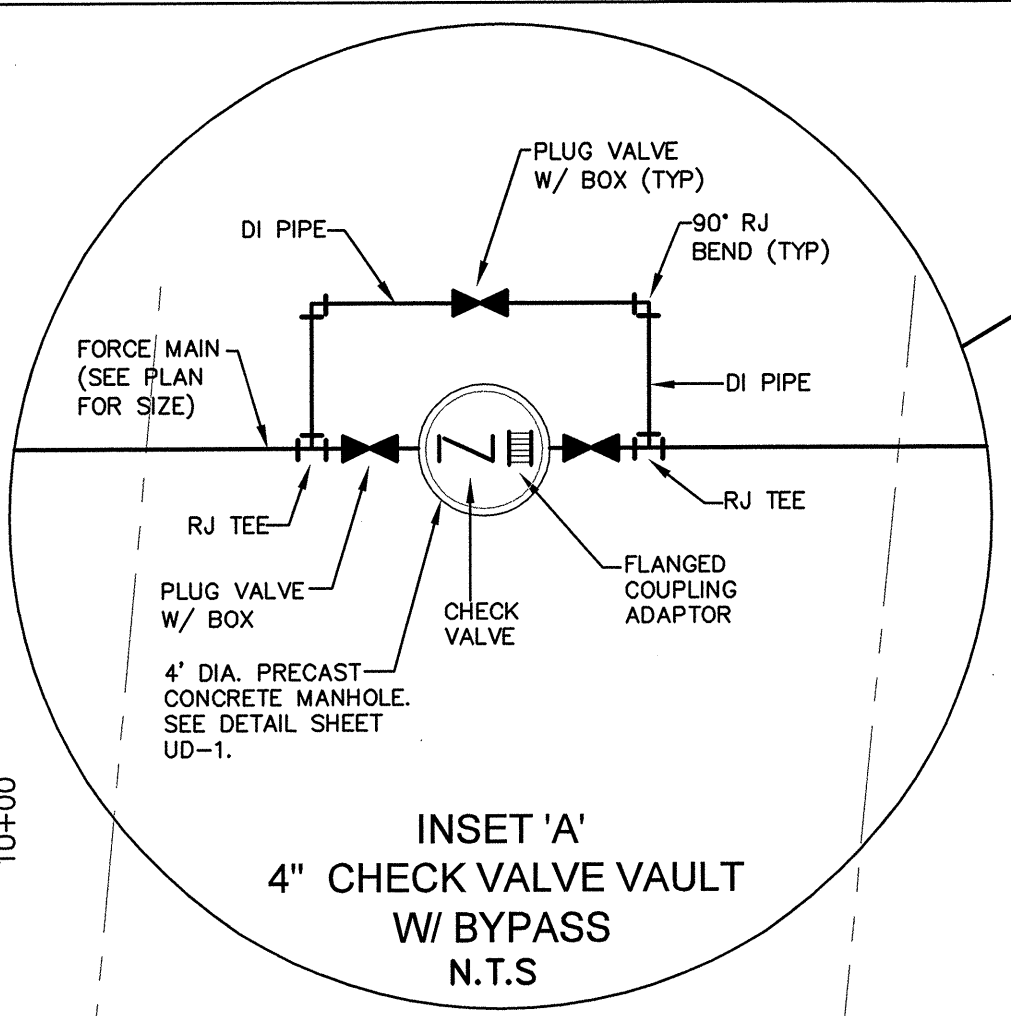
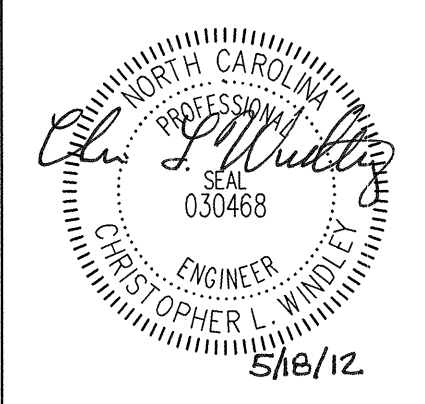


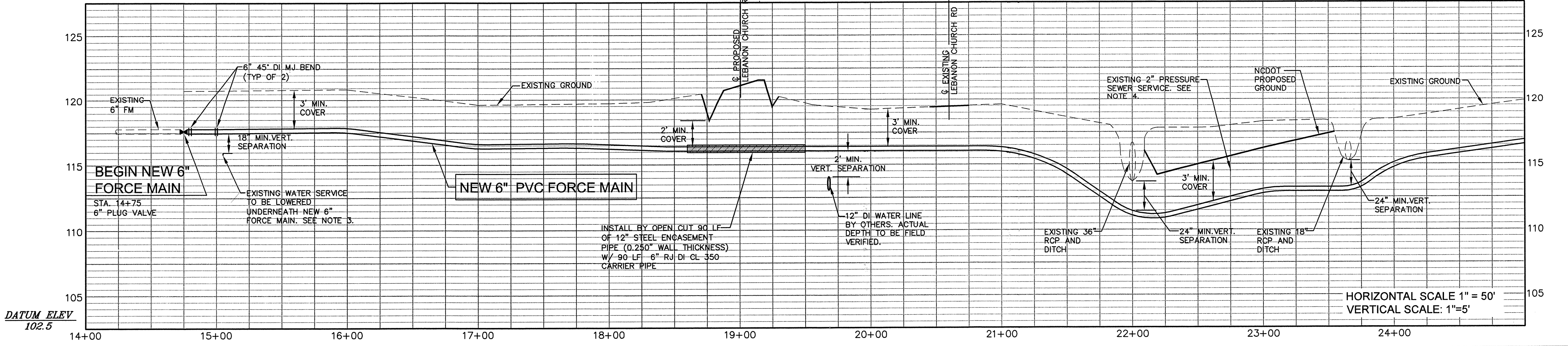
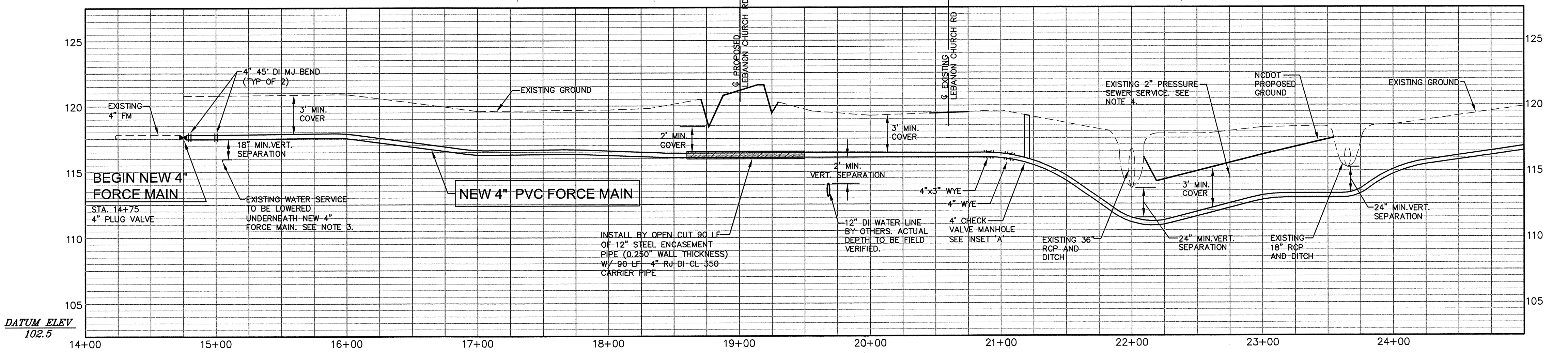
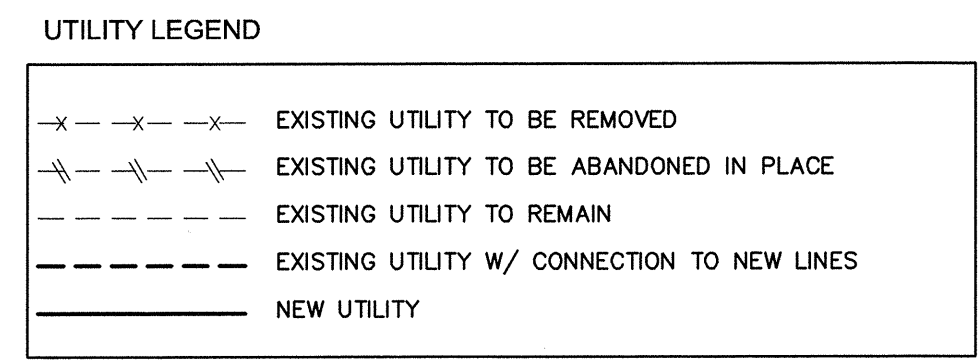


1730 VARSITY DRIVE, SUITE 500
RALEIGH, NORTH CAROLINA 27606
PHONE: (919) 233-8091, FAX: (919) 233-8031
LICENSE: F-1222

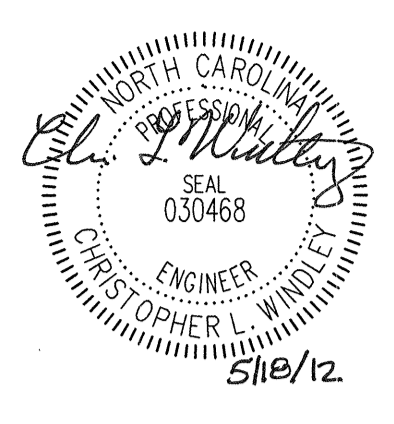
OWNER INFORMATION
WAYNE JENKINS - NORTH HAMPTON COUNTY MANAGER
252-534-2501
CHRIS WHEELER - PUBLIC WORKS BUILDINGS AND GROUNDS SUPERVISOR
252-534-6341



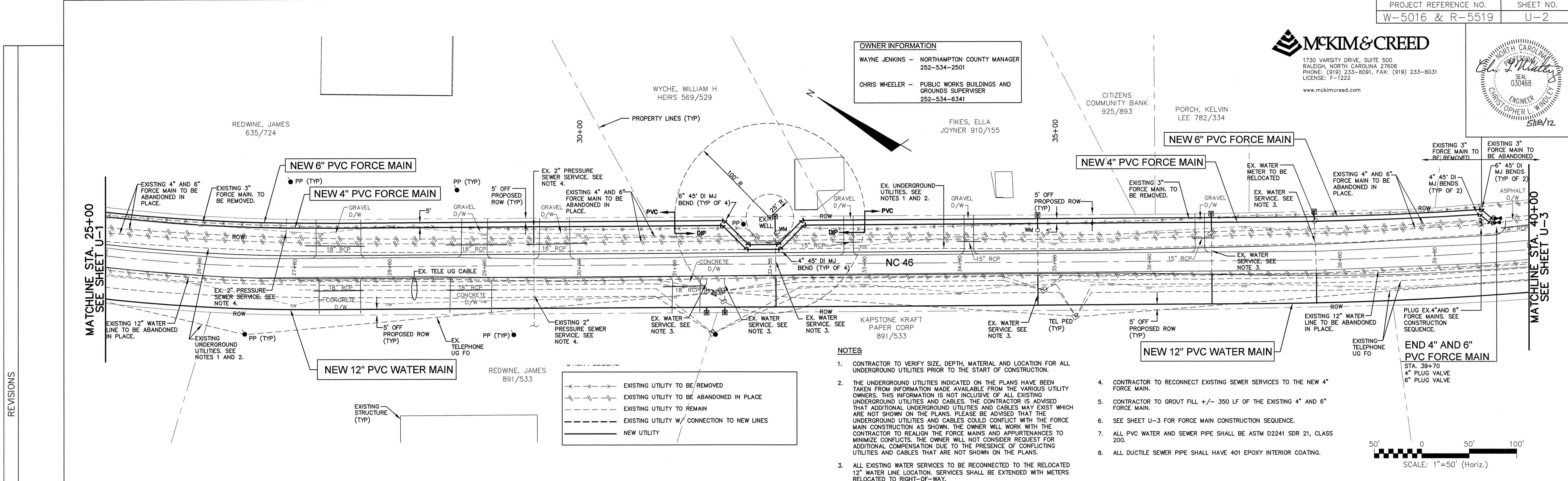
- NOTES:**
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 - ALL EXISTING WATER SERVICES TO BE RECONNECTED TO THE RELOCATED 12\"/>



HORIZONTAL SCALE 1" = 50'
VERTICAL SCALE 1" = 5'

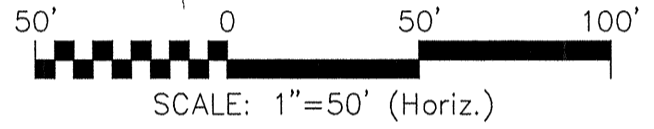
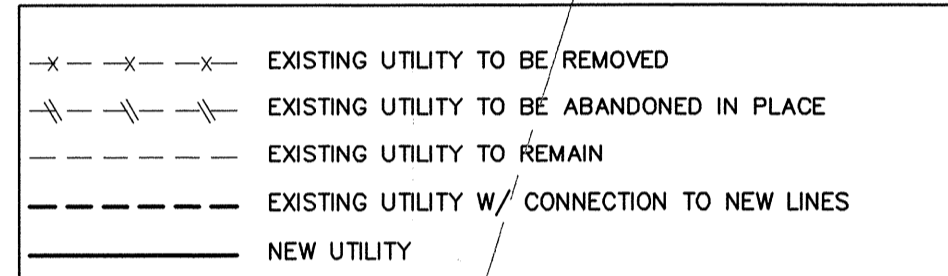


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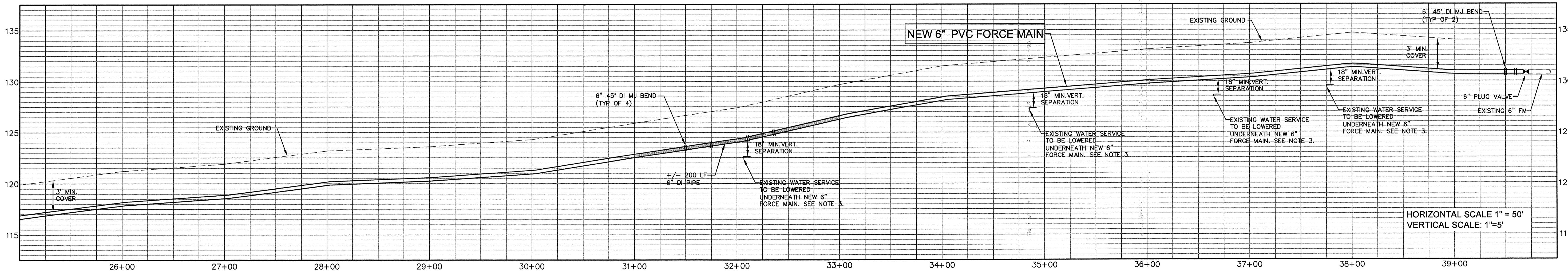
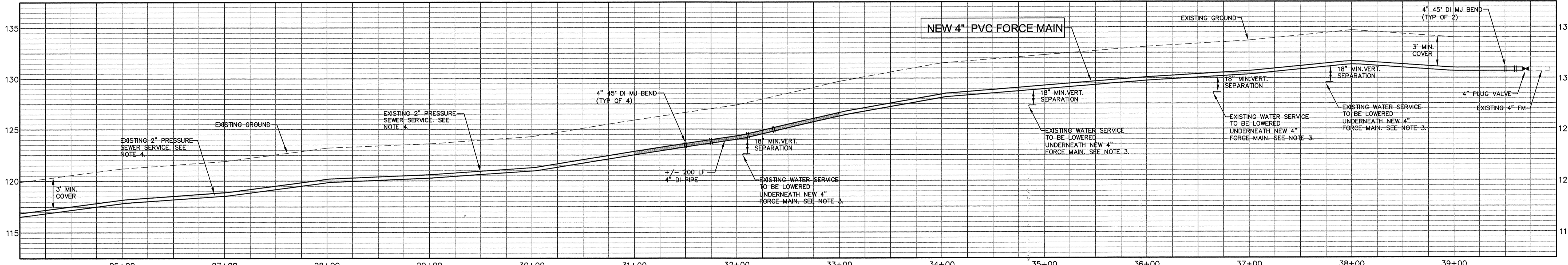


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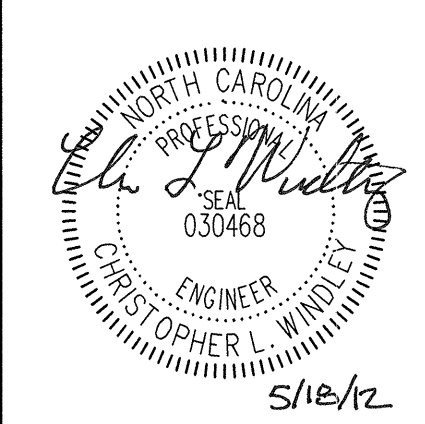
REVISIONS



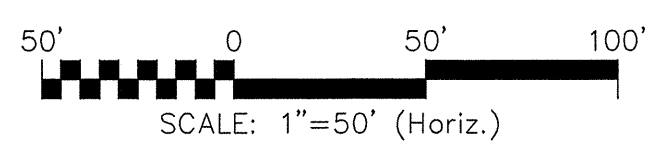
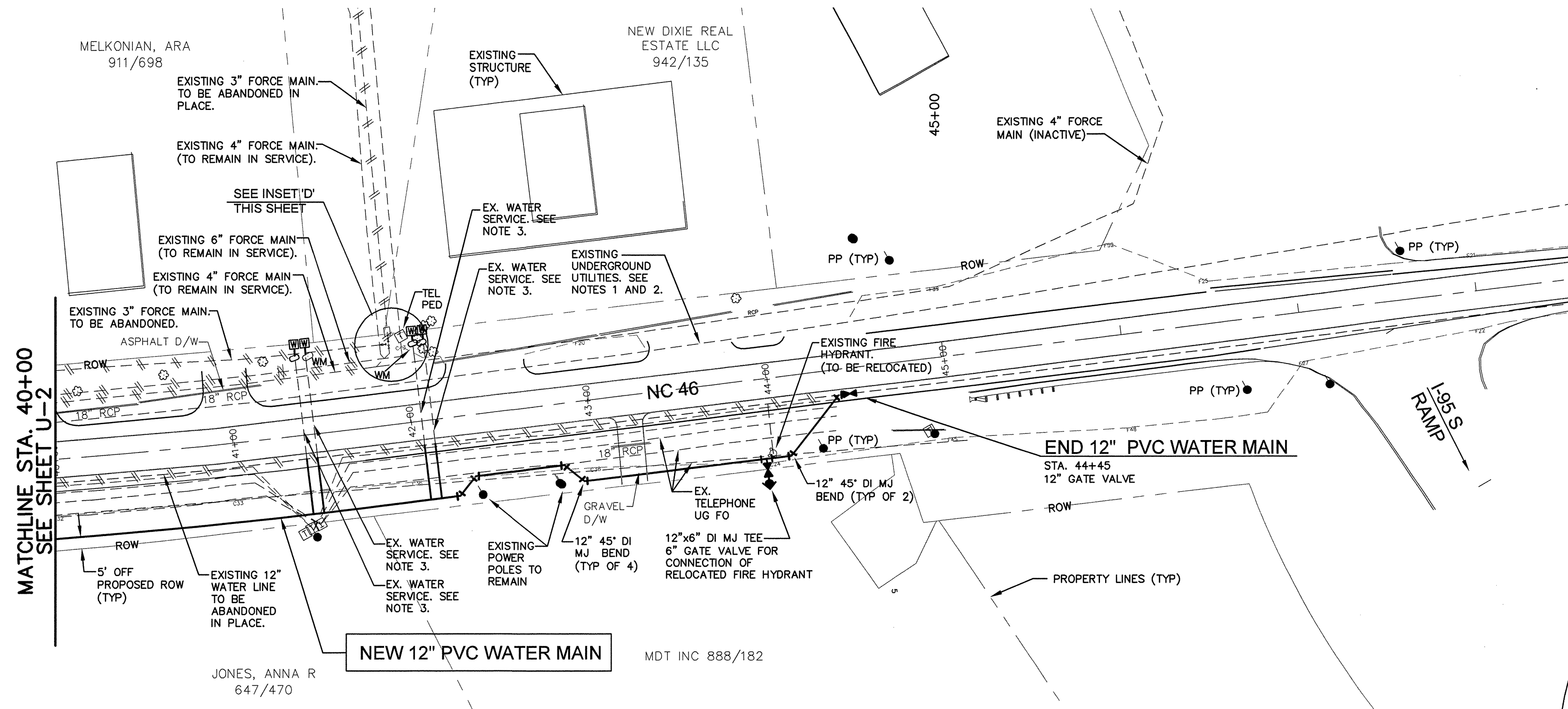
HORIZONTAL SCALE: 1"=50'
 VERTICAL SCALE: 1"=5'



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GROUND SUPERVISER
252-534-6341



NOTES

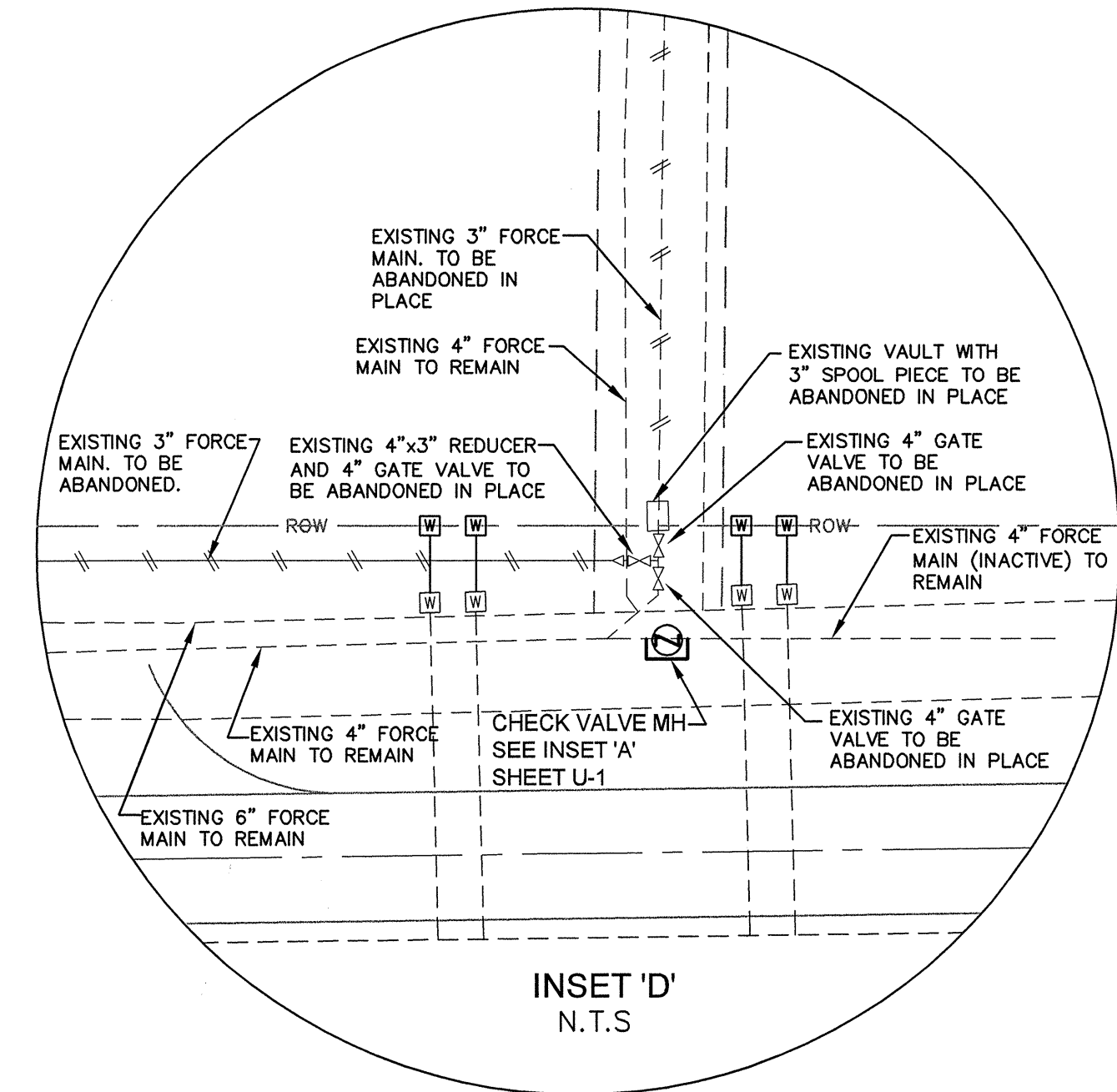
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- ALL EXISTING WATER SERVICES TO BE RECONNECTED TO THE RELOCATED 12" WATER LINE LOCATION. SERVICES SHALL BE EXTENDED WITH METERS RELOCATED TO RIGHT-OF-WAY.
- CONTRACTOR TO RECONNECT EXISTING SEWER SERVICES TO THE NEW 4" FORCE MAIN.
- CONTRACTOR TO GROUT FILL +/- 350 LF OF THE EXISTING 4" AND 6" FORCE MAIN.
- SEE SHEET U-3 FOR FORCE MAIN CONSTRUCTION SEQUENCE.
- ALL PVC WATER AND SEWER PIPE SHALL BE ASTM D2241 SDR 21, CLASS 200.
- ALL DUCTILE SEWER PIPE SHALL HAVE 401 EPOXY INTERIOR COATING.

UTILITY LEGEND

-x-x-x-x-	EXISTING UTILITY TO BE REMOVED
-x-x-x-x-	EXISTING UTILITY TO BE ABANDONED IN PLACE
- - - - -	EXISTING UTILITY TO REMAIN
- - - - -	EXISTING UTILITY W/ CONNECTION TO NEW LINES
—————	NEW UTILITY

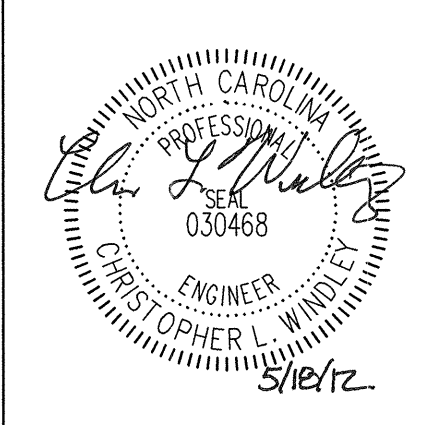
FORCE MAIN CONSTRUCTION SEQUENCE:

- INSTALL THE NEW CHECK VALVE VAULT AS SHOWN IN INSET 'D'. TEST AND PLACE IN SERVICE WITH OWNER APPROVAL.
- INSTALL NEW 4" FORCE MAIN FROM STA. 14+75 TO APPROXIMATE STA. 21+20 AND INSTALL NEW 4" CHECK VALVE MANHOLE WHILE EXISTING 2", 3" AND 4" FORCE MAIN REMAIN IN SERVICE.
- TEST NEW 4" FORCE MAIN AND CHECK VALVE MANHOLE AND ONCE APPROVED BY THE OWNER, CONSTRUCT THE NEW 2" AND 3" FORCE MAIN CONNECTIONS AS SHOWN IN INSET 'B'.
- ONCE THE NEW 2" AND 3" FORCE MAIN CONNECTIONS HAVE BEEN TESTED AND APPROVED, MAKE THE CONNECTIONS TO THE 4" FORCE MAIN AND MAKE THE 2", 3" AND 4" FORCE MAINS OPERATIONAL.
- CONSTRUCT THE REMAINING 4" FORCE MAIN AND CONNECT TO THE EXISTING 4" FORCE MAIN AND EXISTING SERVICES AFTER TESTING AND RECEIVING OWNER APPROVAL.
- ABANDON EXISTING 4" FORCE MAIN IN PLACE WITH EXCEPTION TO LOCATIONS WHERE THE EXISTING 4" FORCE MAIN IS TO BE REMOVED PER THE DRAWINGS.
- REMOVE THE EXISTING 3" FORCE MAIN ALONG NC 46 AS SHOWN ON THE DRAWINGS.
- INSTALL THE NEW 6" FORCE MAIN AND CONNECT TO THE EXISTING 6" FORCE MAIN ON BOTH ENDS AFTER TESTING AND RECEIVING OWNER APPROVAL.



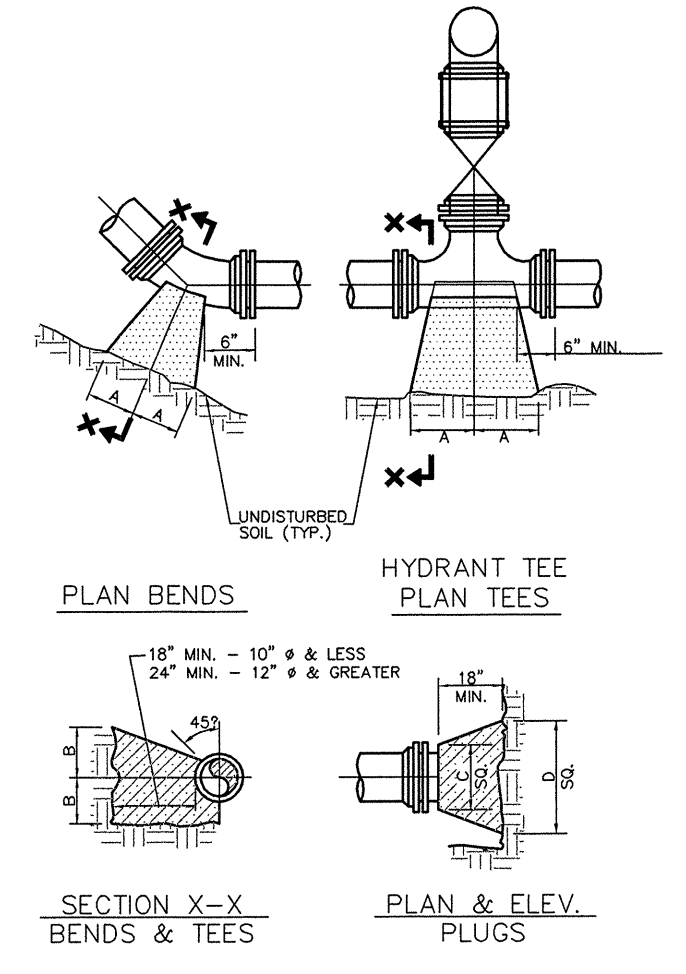
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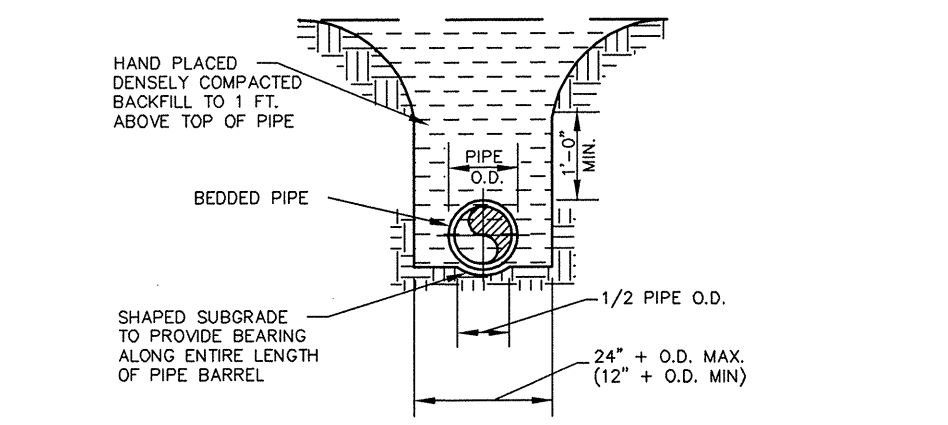
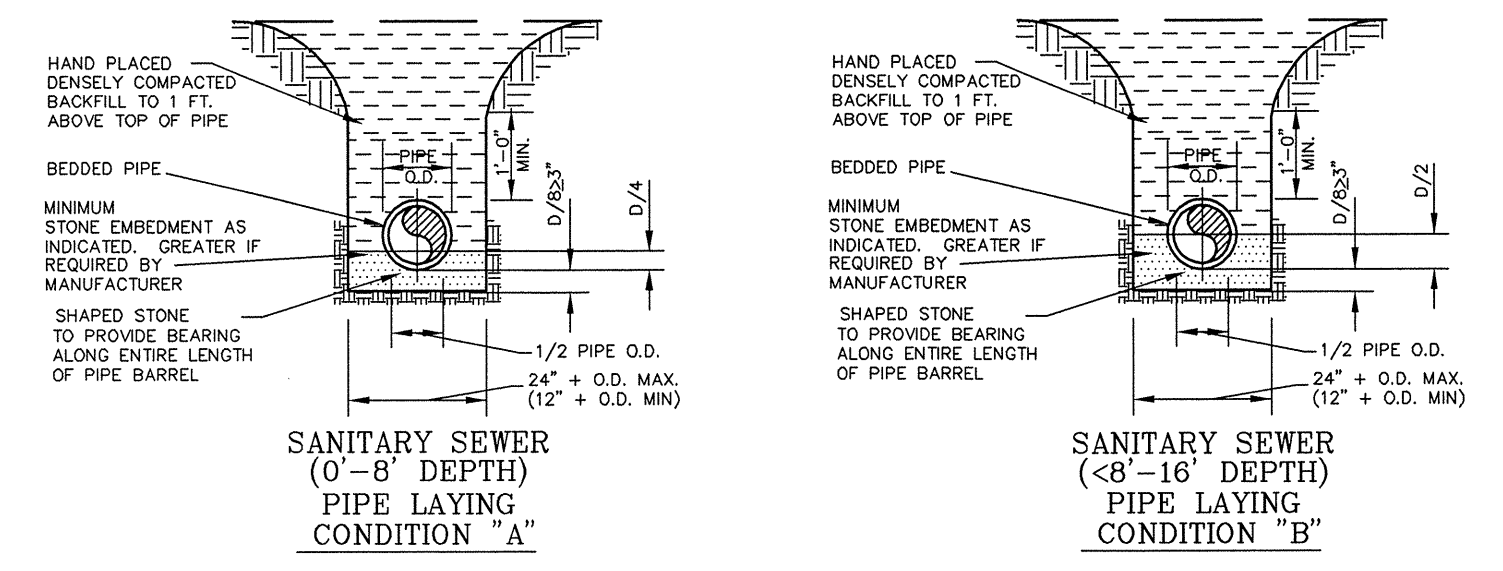


- NOTES:**
1. CONCRETE SHALL BE 3,000 PSI MIN.
 2. CONCRETE FOR THRUST BLOCKING SHALL BE KEPT FAIRLY DRY, THUS MAKING THE CONCRETE WEDGE SHAPE MORE EASILY FORMED WITH THE WIDEST PART (BLOCKING AREA) AGAINST UNDISTURBED SOIL.
 3. NO CONCRETE SHALL COVER ANY BOLTS OR GLANDS.
 4. ALL FITTING AND ACCESSORIES TO BE WRAPPED WITH 10 MIL POLYETHYLENE PRIOR TO POURING BLOCKING.
 5. VOLUME OF THRUST BLOCKING SHALL BE AS SHOWN ON THE THRUST BLOCKING SCHEDULE.

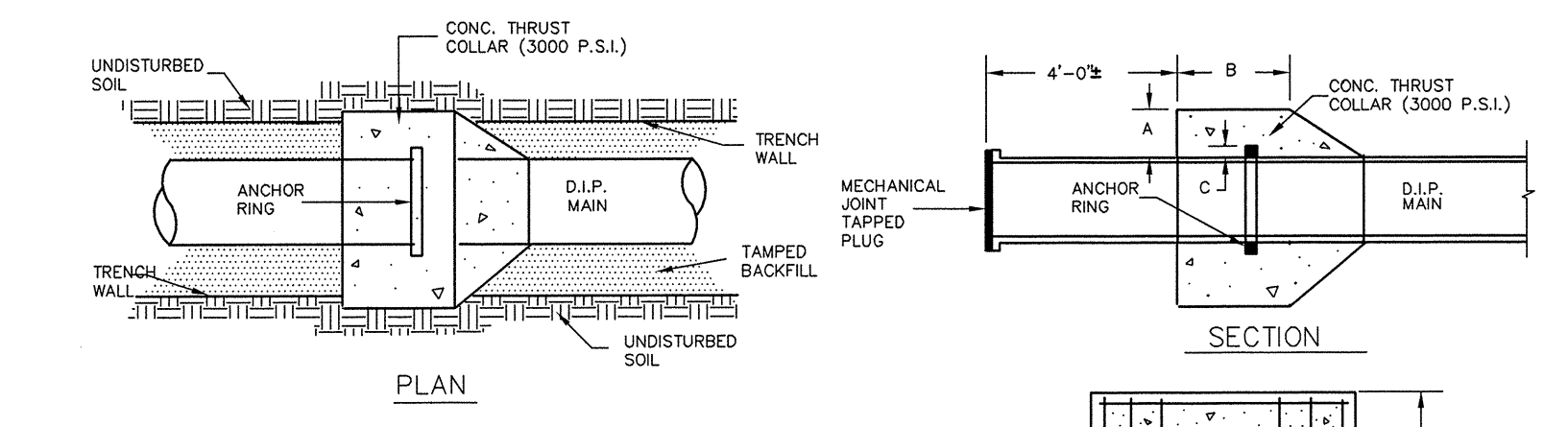
PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE		PLUG
	A	B	A	B	A	B	A	B	A	B	
4"	8"	12"	8"	8"	8"	8"	8"	8"	8"	8"	10"
6"	10"	12"	8"	10"	8"	8"	8"	8"	10"	10"	12"
8"	15"	13"	10"	10"	8"	8"	8"	8"	10"	12"	24"
10"	16"	14"	10"	12"	8"	10"	6"	10"	11"	14"	14"
12"	20"	16"	12"	14"	8"	12"	8"	12"	14"	16"	30"
14"	22"	18"	14"	16"	10"	14"	10"	14"	16"	18"	34"
16"	26"	20"	16"	18"	12"	16"	12"	16"	18"	20"	36"
20"	32"	26"	20"	22"	18"	20"	18"	20"	32"	26"	40"
24"	40"	28"	22"	24"	18"	22"	18"	22"	40"	28"	44"



THRUST BLOCK DETAIL
NOT TO SCALE

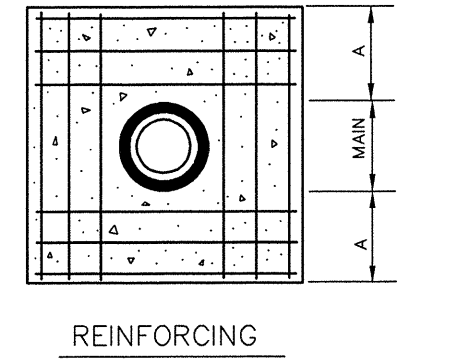


PIPE LAYING CONDITIONS
NOT TO SCALE

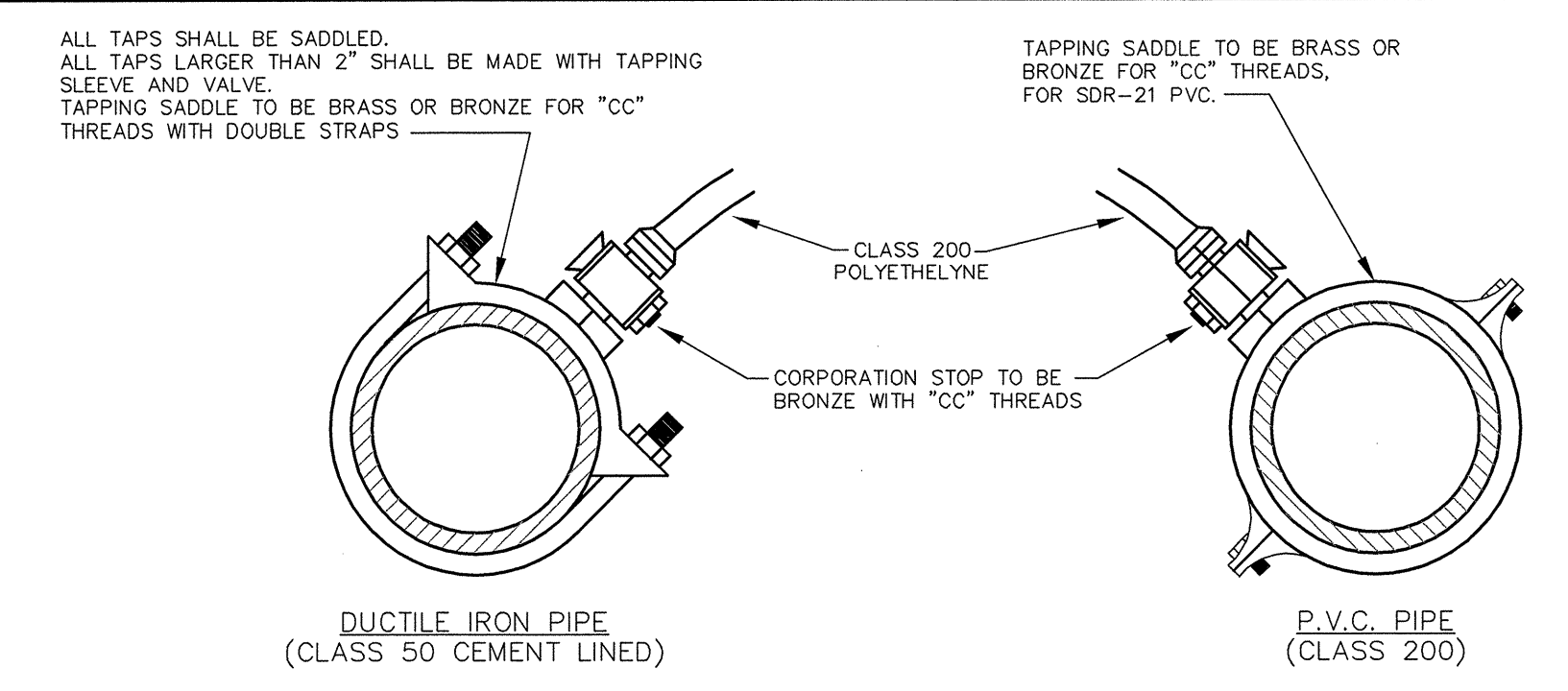


SCHEDULE

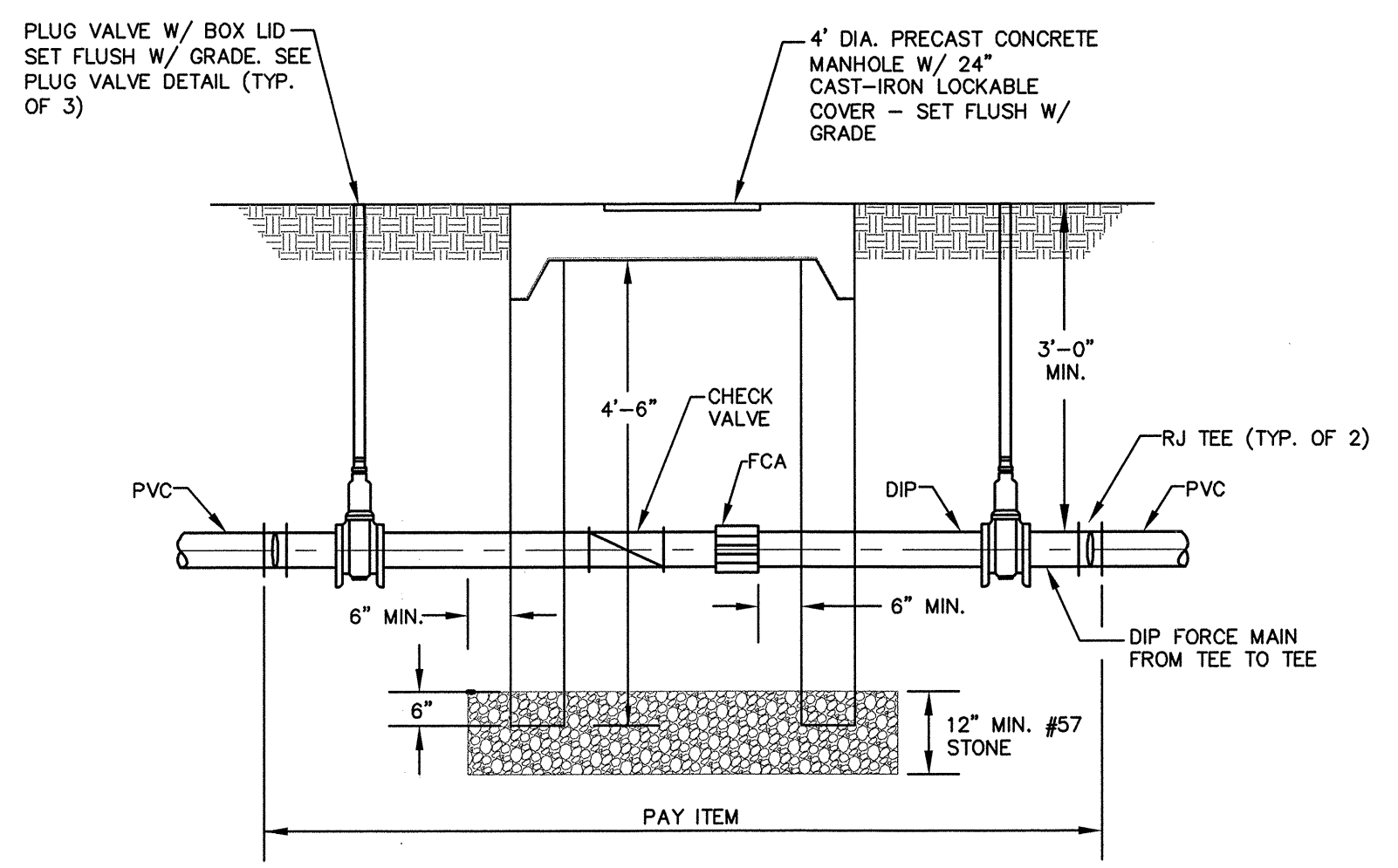
PIPE DIAMETER	CONCRETE THRUST COLLAR	ANCHOR COLLAR	RINGS REQUIRED
6", 8", 12"	A	B	C
16"	1'-0"	1'-0"	2"
20"	1'-4"	1'-0"	ONE
24"	1'-4"	1'-0"	ONE
30"	1'-4"	1'-2"	TWO
36"	1'-4"	1'-4"	TWO



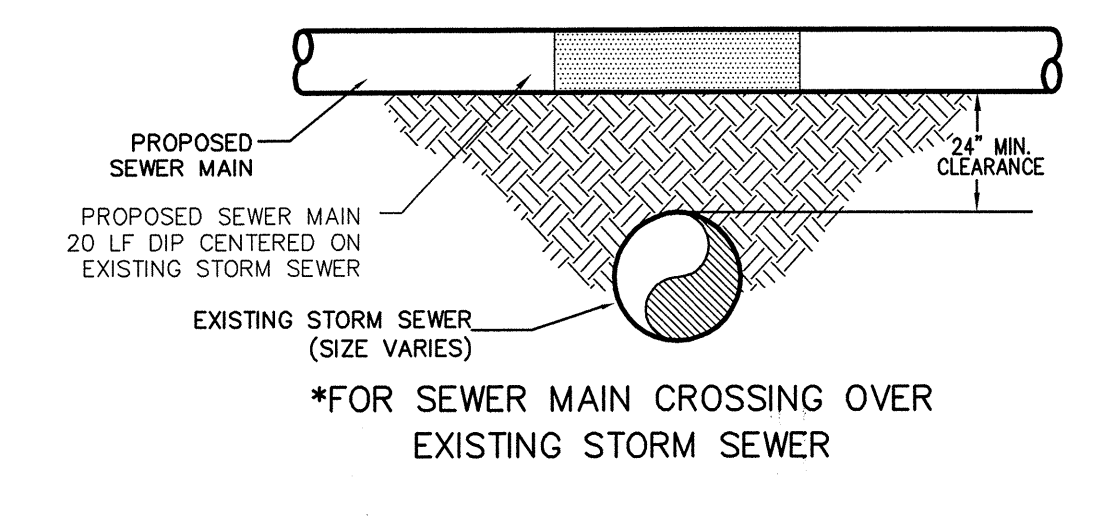
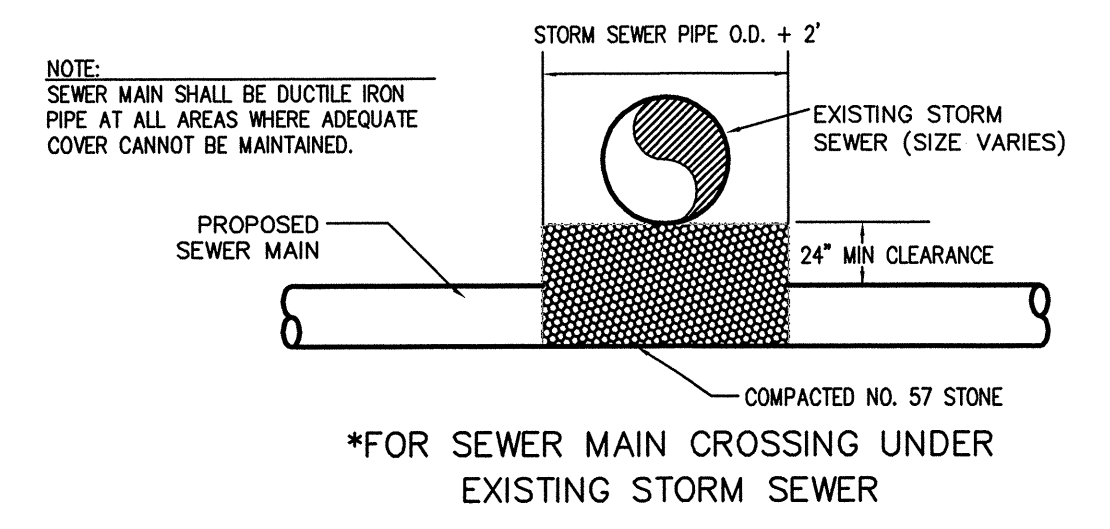
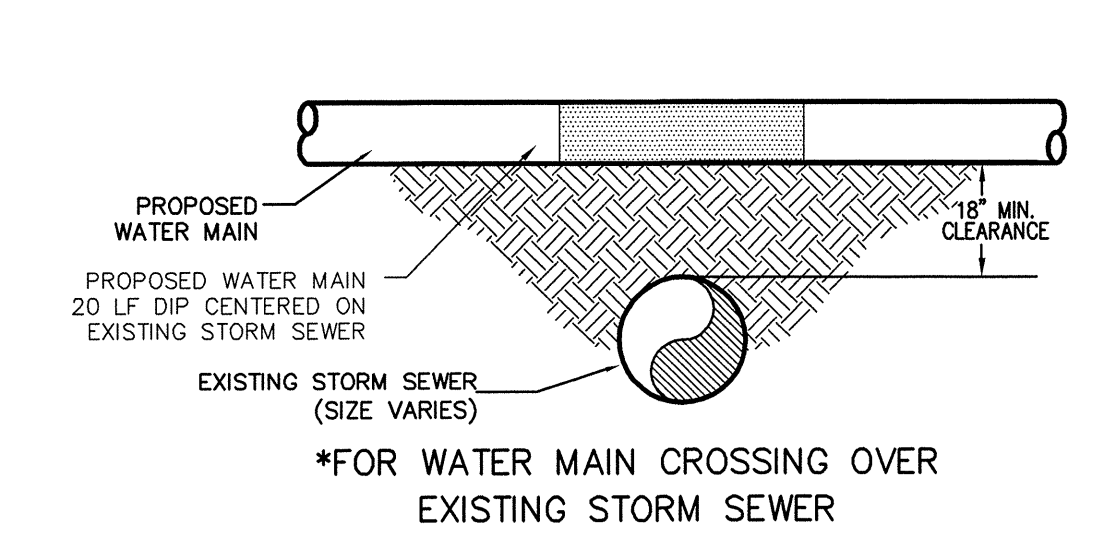
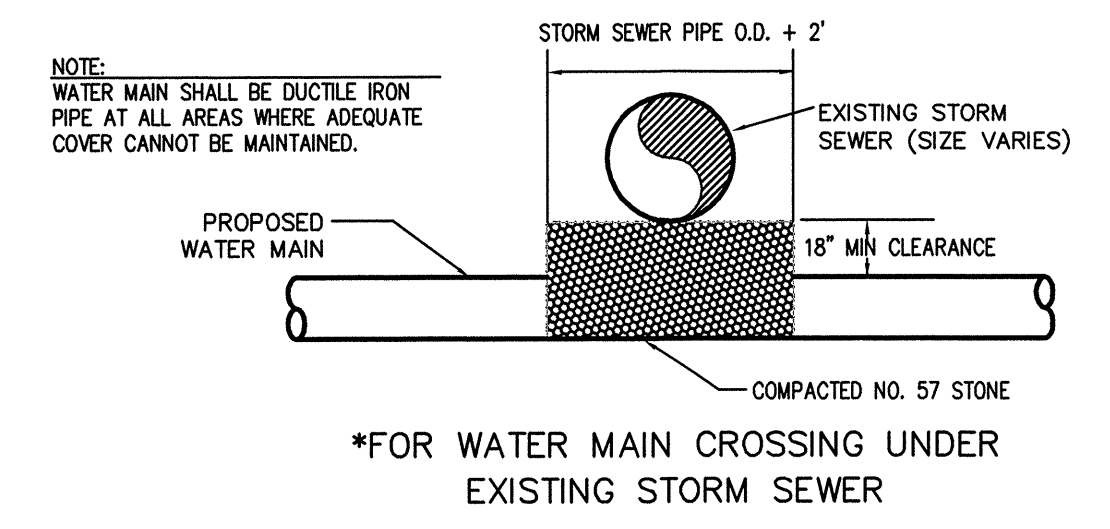
THRUST COLLAR INSTALLATION
NOT TO SCALE



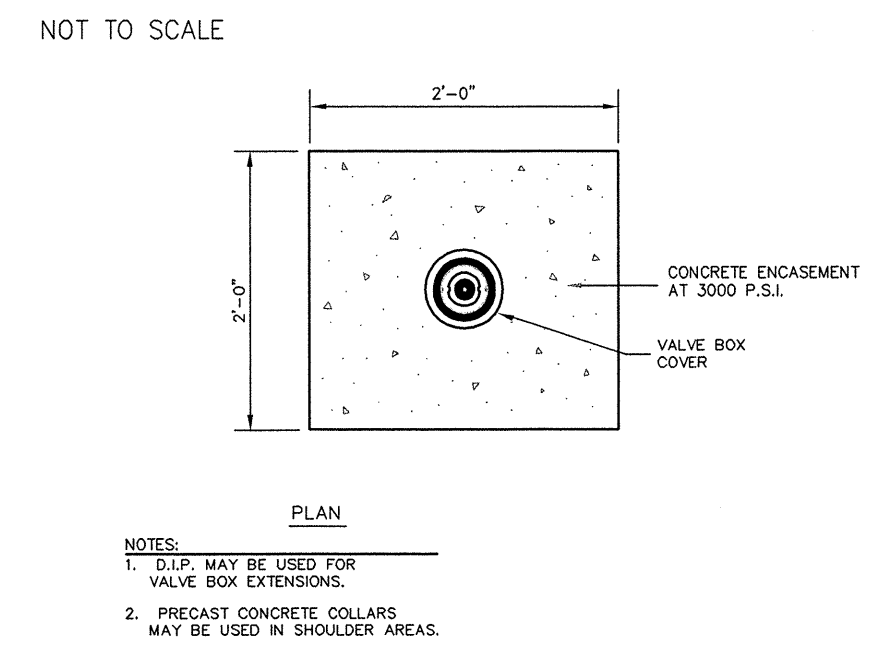
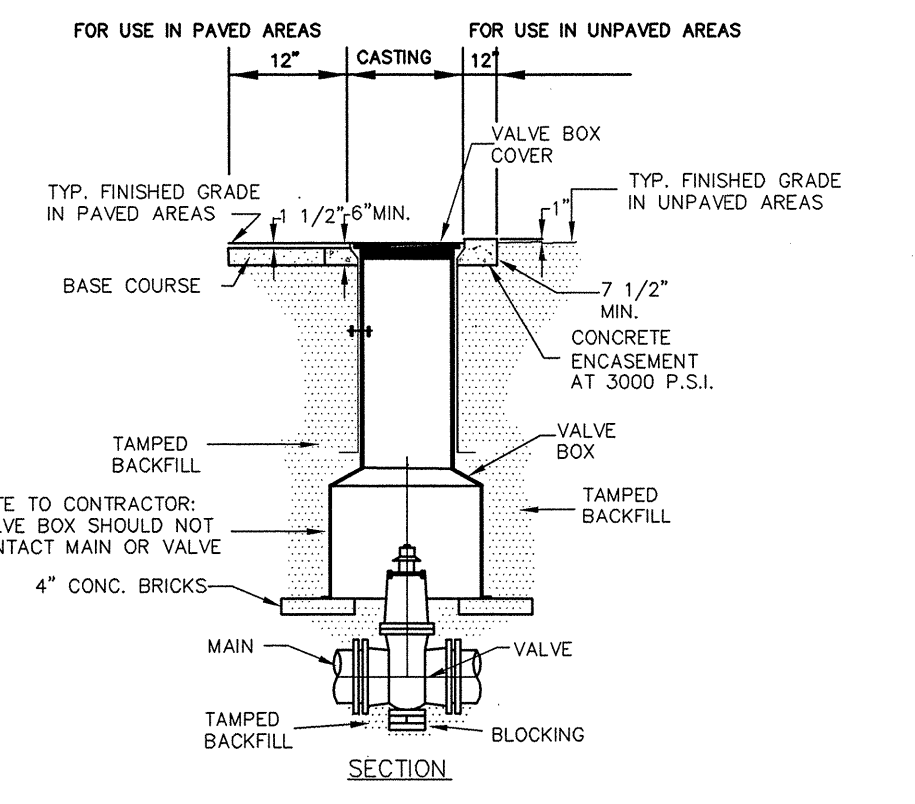
STANDARD WATER TAP DETAIL
NOT TO SCALE



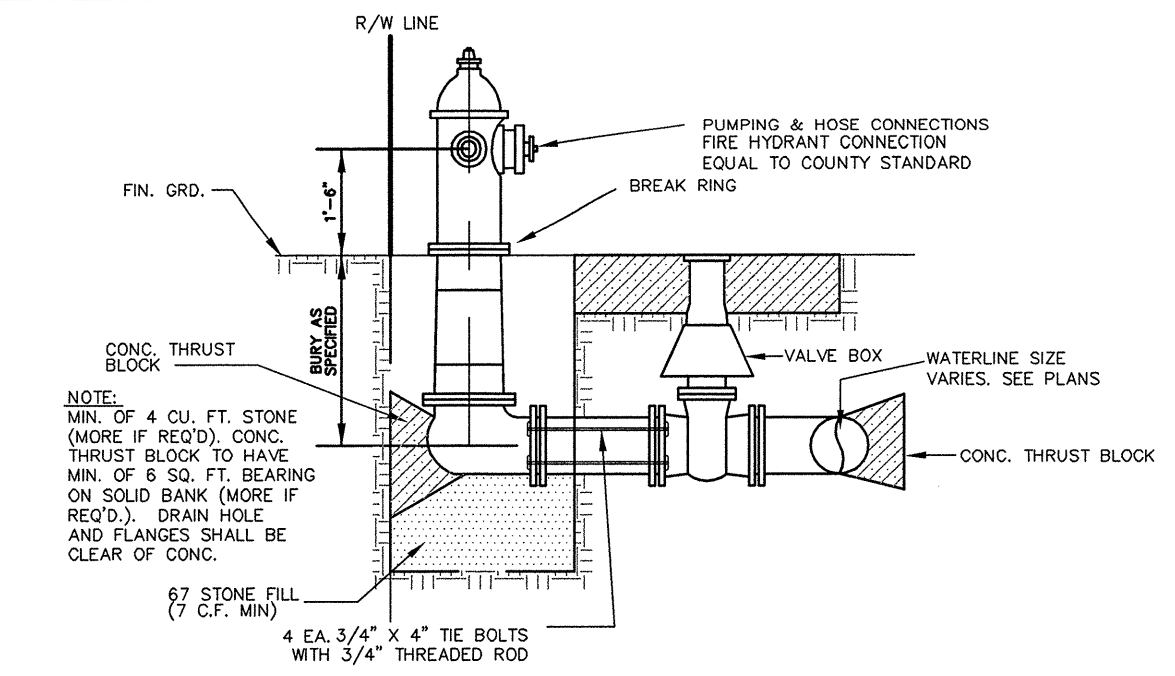
CHECK VALVE VAULT DETAIL
NOT TO SCALE



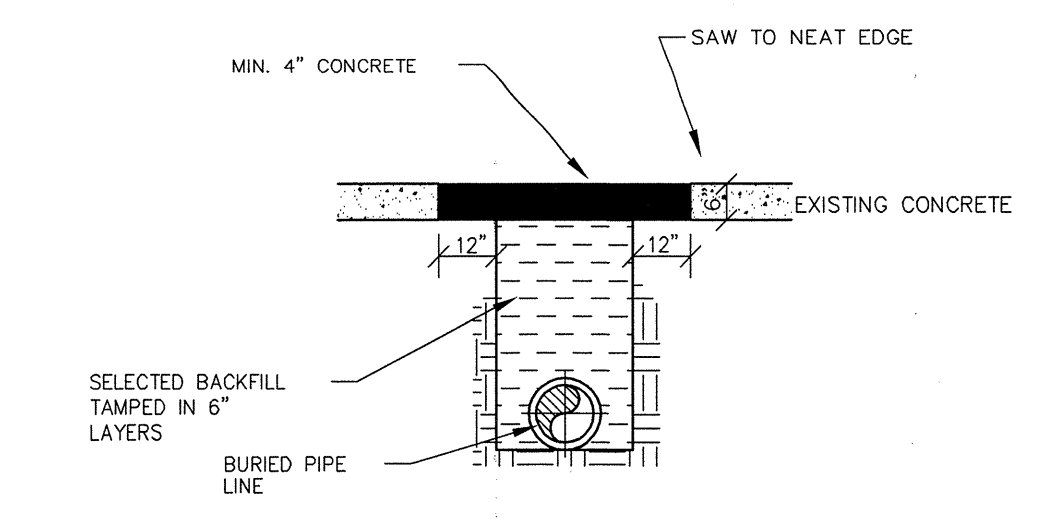
STORM SEWER PIPE CROSSING DETAIL
NOT TO SCALE



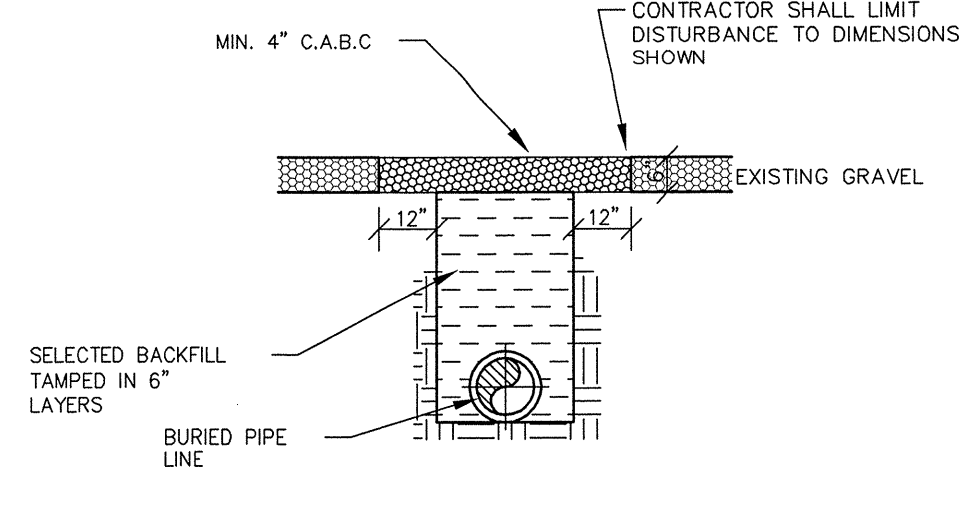
VALVE AND VALVE BOX INSTALLATION
NOT TO SCALE



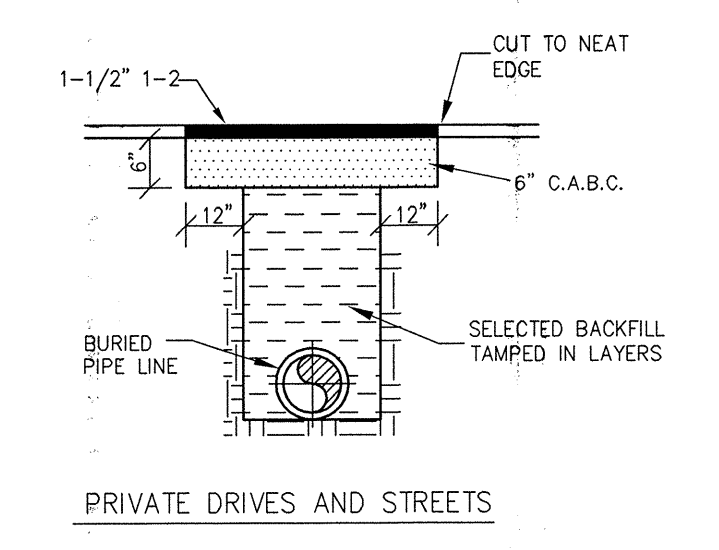
FIRE HYDRANT ASSEMBLY
NOT TO SCALE



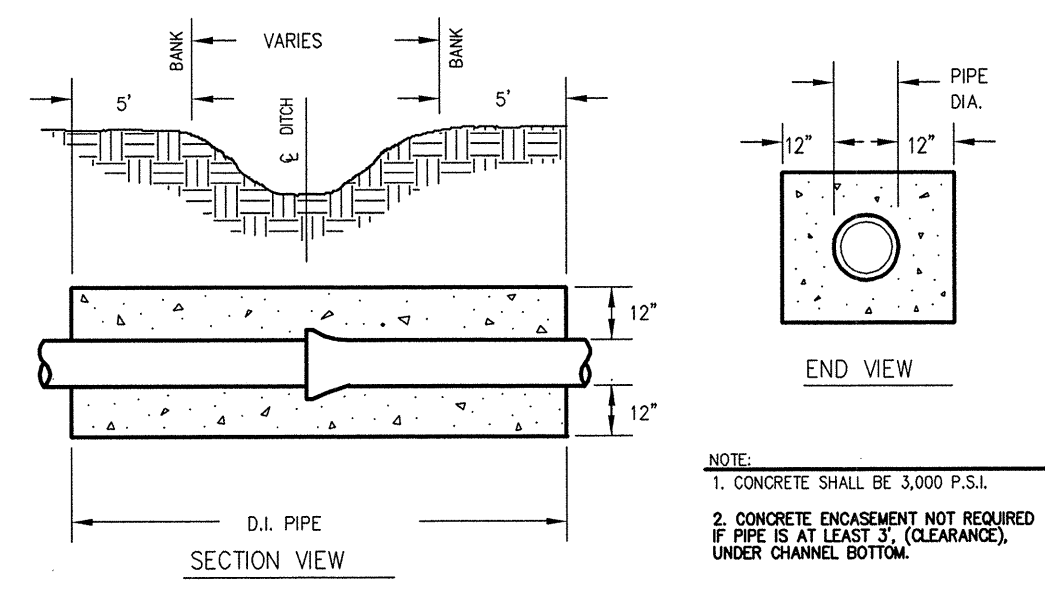
DETAIL FOR CUTTING AND REPLACING CONCRETE DRIVES
NOT TO SCALE



DETAIL FOR REPAIRING GRAVEL DRIVES
NOT TO SCALE



DETAILS FOR CUTTING AND REPLACING PAVEMENT



STANDARD CONCRETE ENCASUREMENT
NOT TO SCALE