

CONSTRUCTION NOTES

GENERAL

- ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED, BY CONTRACTOR, PRIOR TO CONSTRUCTION.
- EXISTING DRIVEWAYS ARE DESIGNATED IN THE FOLLOWING MANNER:
A -- ASPHALT
G -- GRAVEL
C -- CONCRETE
D -- DIRT
- PROPOSED DRIVEWAY APPROACH TO BE REPLACED IN-KIND UNLESS EXISTING APPROACH IS DIRT OR GRAVEL; IN WHICH CASE, AN ASPHALT APPROACH IS TO BE USED.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE TO ALL AFFECTED RESIDENTS FOR ALL PLANNED WATER AND/OR SEWER SERVICE OUTAGES.
- ALL ASPHALT REPAIRS/REPLACEMENT SHALL BE SAWCUT TO MATCH EXISTING PAVEMENT AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
- ALL EXISTING ASPHALT AND GRAVEL DRIVEWAY APRONS THAT ARE REQUIRED TO BE RECONSTRUCTED SHALL BE REPLACED WITH 8" OF CRUSHED AGGREGATE BASE COURSE AND 3" OF ASPHALT. ALL EXISTING CONCRETE DRIVEWAY APRONS THAT ARE REQUIRED TO BE RECONSTRUCTED SHALL BE REPLACED WITH 6" CONCRETE.

WATER MAIN

- EXISTING WATER MAIN LOCATIONS, SIZES, AND TYPES SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO MAKING ANY CONNECTIONS.
- UNLESS OTHERWISE INDICATED BY DESIGN GRADE, MAINTAIN A 7.0' MINIMUM DEPTH OF COVER OVER PROPOSED WATER MAIN AND WATER MAIN LATERALS.
- UNLESS OTHERWISE INDICATED FOR WATER MAIN CROSSINGS BELOW STORM SEWER & SANITARY SEWER PIPES CONTRACTOR SHALL MAINTAIN A MINIMUM 18" OF SEPARATION FROM EDGE OF PIPE TO EDGE OF PIPE.
- LATERALS SHALL BE 1" COPPER UNLESS OTHERWISE INDICATED.
- REPLACE ALL WATER LATERALS FROM THE CURB STOP TO THE NEW WATER MAIN. CURB STOPS TO BE REMOVED AND REPLACED.

SANITARY SEWER & FORCEMAIN

- EXISTING SANITARY SEWER LOCATIONS, SIZES, AND TYPES SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO MAKING ANY CONNECTIONS.
- EXISTING FORCEMAIN LOCATIONS ARE SHOWN APPROXIMATE AND SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO MAKING ANY CONNECTIONS.
- NOT ALL SEWER LATERALS ARE SHOWN. ALL PARCELS TO HAVE SANITARY SEWER SERVICE LATERAL REPLACED EVEN IF NOT SHOWN. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL SANITARY SEWER SERVICE LATERALS.
- REPLACE SEWER LATERALS FROM RIGHT OF WAY TO NEW SANITARY MAIN AND INSTALL A TRACER WIRE TERMINAL BOX AT THE STREET RIGHT-OF-WAY.
- LATERALS SHALL BE 6" OR 4" PVC UNLESS OTHERWISE INDICATED.
- PROVIDE 7.0' MINIMUM DEPTH OF COVER OVER PROPOSED FORCEMAIN.
- SANITARY SEWER PIPE LENGTHS ARE SHOWN MEASURED FROM INSIDE OF STRUCTURE TO INSIDE OF STRUCTURE.
- ALL LATERAL CONNECTIONS TO NEW MAIN SHALL BE MADE WITH WYE CONNECTIONS.

STORM SEWER

- STORM SEWER PIPE LENGTHS ARE SHOWN MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

GRADING & EROSION CONTROL NOTES

- ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO CONSTRUCTION.
- SILT FENCE, TEMPORARY SEDIMENT BASIN, & ROCK CONSTRUCTION ENTRANCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES, INCLUDING CLEARING & GRUBBING.
- ALL STORM SEWER INLETS SHALL HAVE INLET PROTECTION TYPE-D INSTALLED UPON INLET INSTALLATION.
- CONTRACTOR IS RESPONSIBLE FOR WEEKLY DNR INSPECTION REPORTS IN ACCORDANCE WITH NR 216.46(9).
- ADDITIONAL EROSION CONTROL MEASURES MAY BE ADDED ON AN AS-NEEDED BASIS.
- THE POND SHALL BE CONSTRUCTED PRIOR TO MASS LAND DISTURBANCE.
- ANY AREAS WHERE GRADING IS COMPLETE SHALL BE STABILIZED WITH FERTILIZER, SEED, & MULCH AS SOON AS POSSIBLE.
- ALL BEST MANAGEMENT PRACTICES WILL BE INSTALLED BY THE TIME THE CONSTRUCTION SITE IS CONSIDERED STABILIZED.
- A COPY OF THIS EROSION CONTROL PLAN SHALL BE KEPT ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
- STOCKPILES LEFT INACTIVE FOR 7 DAYS SHALL BE SEEDED AND SURROUNDED BY SILT FENCE.
- ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, OR OTHER CONSTRUCTION MATERIALS) SHALL BE PROPERLY DISPOSED OF AND NOT ALLOWED TO BE CARRIED BY RUNOFF INTO RECEIVING CHANNEL.
- ALL VEHICLE TRAFFIC IS PROHIBITED WITHIN THE UNDISTURBED LAND BUFFER WHENEVER PRACTICAL.
- EROSION CONTROL MAT CLASS I, TYPE A WILL BE USED IN NON-CHANNEL AREAS AND CLASS I, TYPE B WILL BE USED IN CHANNEL AREAS.
- ALL DEWATERING PERMITTING, IF REQUIRED, IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH DNR TECHNICAL STANDARD 1061.
- POST DEVELOPMENT STORM WATER WITHIN WETLAND BUFFER AREAS WILL NOT BE DIRECTLY CONNECTED TO WETLAND.
- WHEN WORKING WITHIN 50' OF THE WETLAND, SPECIAL CARE NEEDS TO BE TAKEN AS TO NOT DISTURB ANY WETLAND FEATURES.
- TRACKED EQUIPMENT ONLY SHALL BE USED IN THE BUFFER AREAS AS TO MINIMIZE COMPACTION.
- STREETS SHALL BE SWEEPED AT THE END OF EACH WORK DAY OR AS DIRECTED BY THE MUNICIPALITY.
- TRACKING PADS SHALL BE USED AT THE CONSTRUCTION ENTRANCE AND EXITS.
- ALTHOUGH ROCK CONSTRUCTION TRACKING PADS MAY NOT BE SHOWN ON THE PLANS, THE CONTRACTOR SHALL INSTALL THEM AS NECESSARY OR AS DIRECTED BY THE ENGINEER TO MINIMIZE TRACKING ONTO ADJACENT STREETS. THESE PADS ARE CONSIDERED INCIDENTAL TO THE WORK AND WILL NOT BE MEASURED OR PAID FOR SEPARATELY.
- CONTRACTOR WILL BE RESPONSIBLE FOR ALL DUST CONTROL.
- ALL BANK AREAS DISTURBED SHALL BE STABILIZED WITH EROSION CONTROL MAT IMMEDIATELY.
- POSITIVE DRAINAGE AWAY FROM THE BUILDING WILL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE CONFIRMED BY THE ENGINEER.
- DOWN SPOUTS SHALL BE DIRECTED IN A SAFE MANNER AND COMPLY WITH ALL LOCAL AND STATE REGULATIONS.
- ALL FILL PLACED UNDER BUILDING AND PAVED AREAS SHALL BE STRUCTURALLY SOUND.
- SEDIMENT WILL BE REMOVED FROM BEHIND SEDIMENT FENCES AND BARRIERS BEFORE IT REACHES A DEPTH THAT IS EQUAL TO HALF THE BARRIER'S HEIGHT.
- BREAKS AND GAPS IN SEDIMENT FENCES AND BARRIERS WILL BE REPAIRED IMMEDIATELY. DECOMPOSING STRAW BALES WILL BE REPLACED (TYPICAL BALE LIFE IS THREE MONTHS).
- ALL SEDIMENT THAT MOVES OFF-SITE DUE TO CONSTRUCTION ACTIVITY OR STORM EVENTS WILL BE CLEANED UP BEFORE THE END OF THE SAME WORKDAY.
- ALL INSTALLED EROSION CONTROL PRACTICES WILL BE MAINTAINED UNTIL THE DISTURBED AREAS THEY PROTECT ARE STABILIZED.
- ALL EROSION CONTROL MAT SHALL BE INSTALLED WITHIN 24 HOURS OF FINAL GRADES BEING ESTABLISHED.

EXISTING LINETYPES LEGEND

—San—	SANITARY SEWER
—ST—	STORM SEWER
—WM—	WATER MAIN
—FM—	FORCE MAIN
—E—	ELECTRIC
—OE—	OVERHEAD ELECTRIC
—GAS—	GAS
—FO—	FIBER OPTIC
—T—	TELEPHONE
—TV—	TV
—X—X—X—X—	FENCE
—o—o—o—o—	GUARD RAIL
—GL—GL—GL—	GRADING LIMITS
—SF—SF—SF—	SILT FENCE
—DB—DB—DB—	DOUBLE SEDIMENT BARRIER
	TRAIN TRACKS
~~~~~	TREELINE

ABBREVIATION LIST

B-B = BACK TO BACK  
BOC = BACK OF CURB  
BOP = BOTTOM OF PIPE  
BOW = BOTTOM OF WALL  
C-C = CENTER TO CENTER  
CL = CENTERLINE  
CP = CONTROL POINT  
DIA = DIAMETER  
ELEV = ELEVATION  
EOG = EDGE OF GRAVEL  
EOP = EDGE OF PAVEMENT  
EX = EXISTING  
FL = FLOW LINE  
FM = FORCE MAIN  
HC = HORIZONTAL CURVE  
HP = HIGH POINT  
IE = INVERT ELEVATION  
INL = INLET  
INV = INVERT  
IOS = INSIDE OF STRUCTURE  
L = LENGTH  
LN = LINE  
LP = LOW POINT  
MH = MANHOLE  
MIN = MINIMUM  
MP = MIDPOINT  
PC = POINT OF CURVE  
PI = POINT OF INTERSECTION  
PRO = PROPOSED  
PT = POINT OF TANGENT  
PVC = POINT OF VERTICAL CURVE  
PVI = POINT OF VERTICAL INTERSECTION  
PVMT = PAVEMENT  
PVT = POINT OF VERTICAL TANGENT  
R = RADIUS  
ROW = RIGHT OF WAY  
S = SANITARY SEWER SERVICE LATERAL  
SAN = SANITARY SEWER  
SE = SPOT ELEVATION  
ST = STORM SEWER  
STA = STATION  
STD = STANDARD  
TC = TOP OF CURB  
TOP = TOP OF PIPE  
TOW = TOP OF WALL  
TYP = TYPICAL  
UOS = UNLESS OTHERWISE SPECIFIED  
VC = VERTICAL CURVE  
W = WATER MAIN SERVICE LATERAL  
WM = WATER MAIN

SYMBOLS LEGEND

	EXISTING MANHOLE
	PROPOSED MANHOLE
	EXISTING HYDRANT
	PROPOSED HYDRANT
	VALVE
	CURB STOP
	TRACER WIRE TERMINAL BOX
	WELL
	PROPERTY CORNER
	LIGHT POLE
	POWER / TELEPHONE POLE
	GUY WIRE
	UTILITY PEDESTAL
	SIGN
	SOIL BORING
	MONITORING WELL
	MAILBOX
	POTENTIAL HAZARD
	BENCHMARK
	CONTROL POINT
	DECIDUOUS TREE
	CONIFEROUS TREE
	HANDICAP SYMBOL

DIGGERS HOTLINE NOTE



OWNER

VILLAGE OF NORWALK  
208 CHURCH STREET  
NORWALK, WI 54648  
PHONE: (608) 823-7760

UTILITIES

CONTACT THE VILLAGE OF NORWALK FOR UTILITY PROVIDERS



General Engineering Company

P.O. Box 340 • 916 Silver Lake Dr. • Portage, WI 53901  
608-742-2169 (Office) • 608-742-2592 (Fax)

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LEGEND & NOTES (CIVIL)  
NORWALK FIRE STATION  
NORWALK AREA FIRE DEPARTMENT

VILLAGE OF NORWALK  
MONROE COUNTY, WI

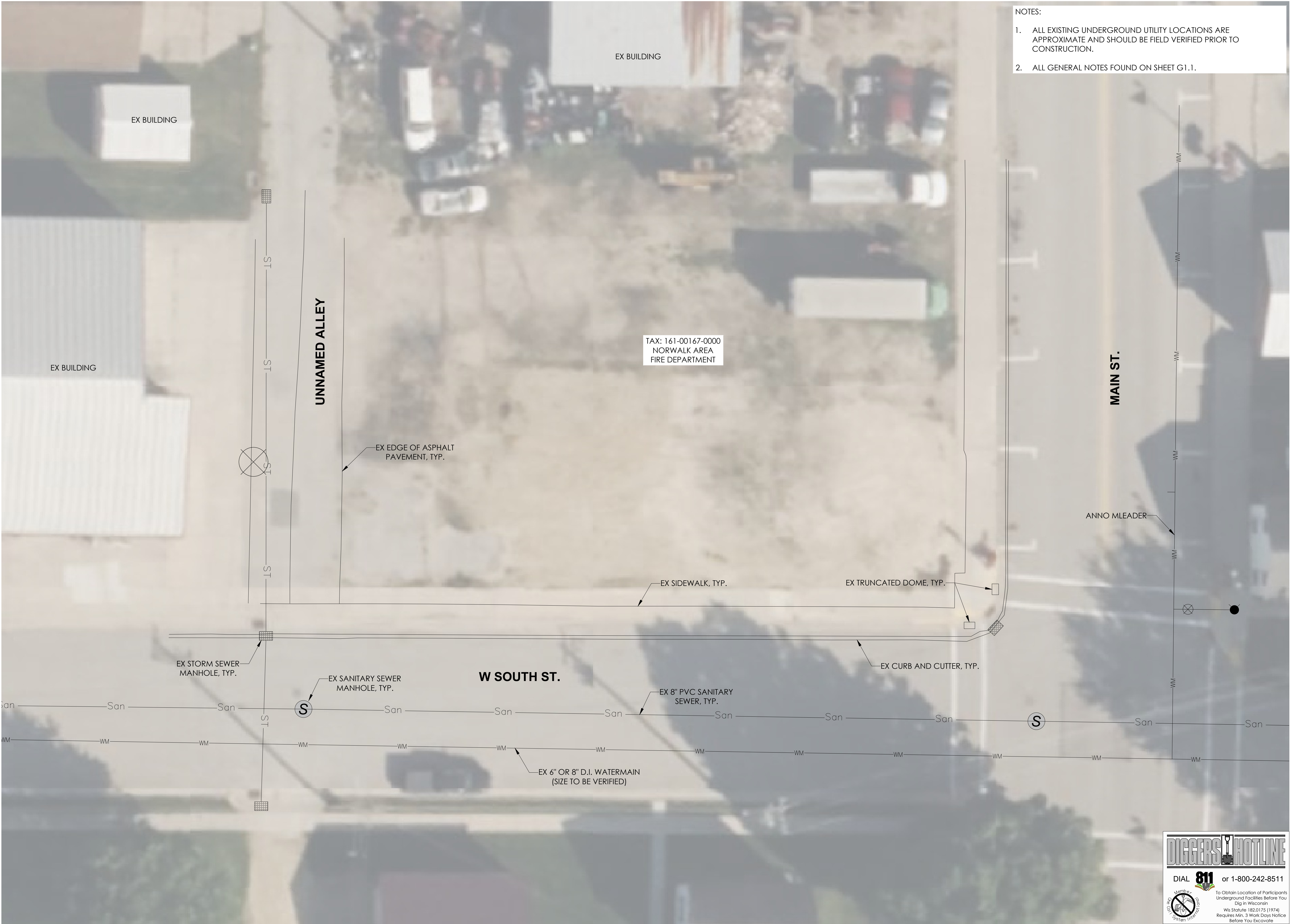
DATE	BY	NO.	REVISIONS

SCALE


DRAWN BY	CPP
REVIEWED BY	LAL
ISSUE DATE	1/19/2026
GEC FILE NO.	2-1024-466C
SHEET NO.	

C0.0





- NOTES:
1. ALL EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
  2. ALL GENERAL NOTES FOUND ON SHEET G1.1.



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**EXISTING SITE PLAN (CIVIL)**

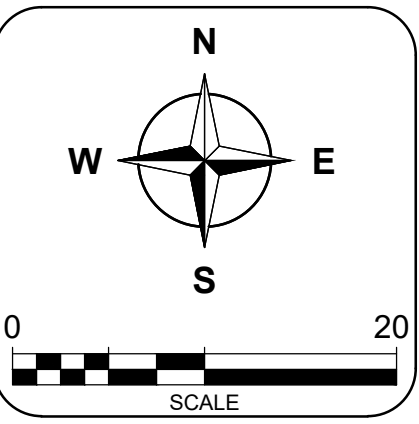
**NORWALK FIRE STATION**

**NORWALK AREA FIRE DEPARTMENT**

**VILLAGE OF NORWALK**

**MONROE COUNTY, WI**

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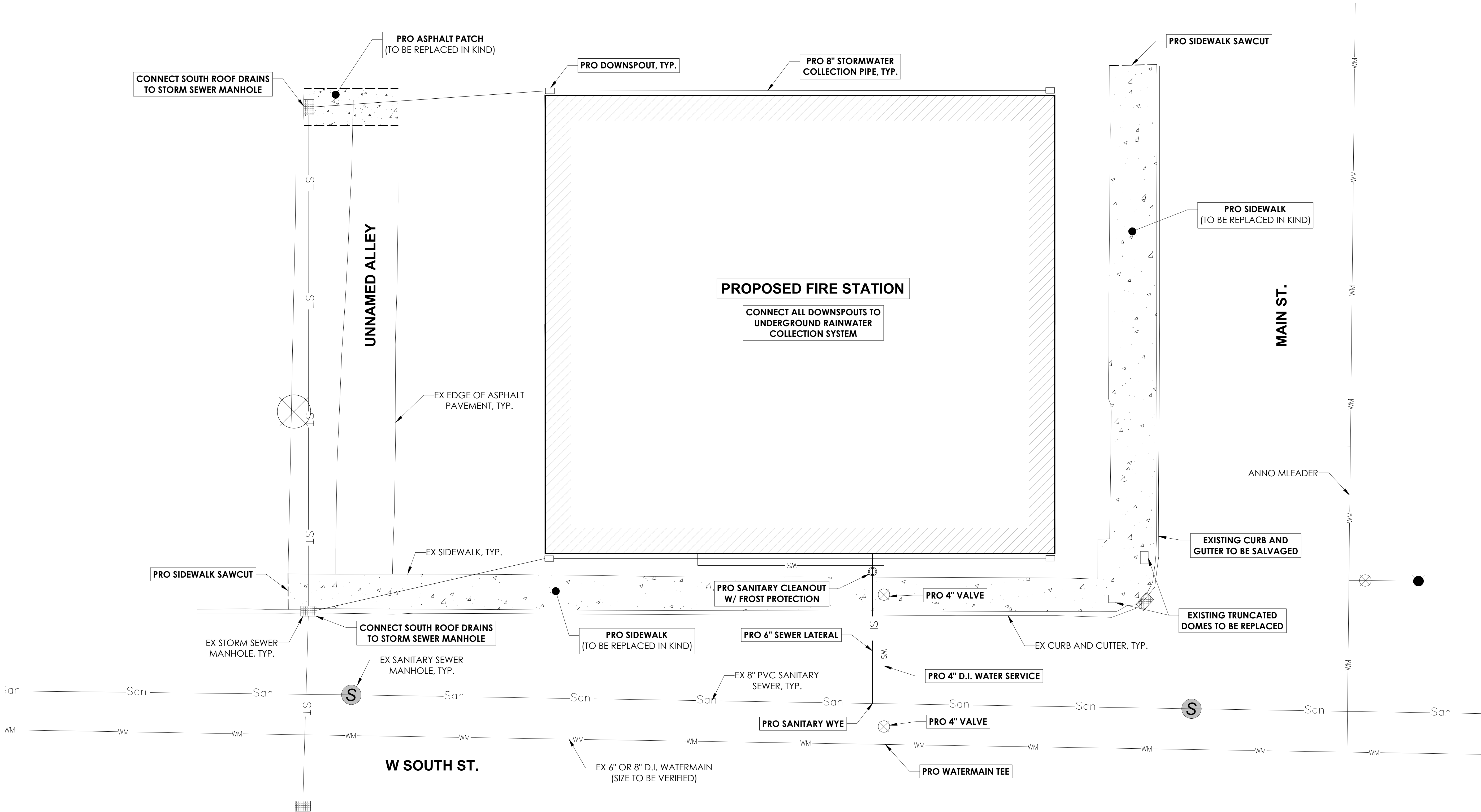
**DIGGERS HOTLINE**

DIAL **811** or 1-800-242-8511

To Obtain Location of Participants Underground Facilities Before You Dig in Wisconsin  
Wis Statute 182.0175 (1974)  
Requires Min. 3 Work Days Notice Before You Excavate

NOTES:

1. ALL EXISTING UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
2. ALL GENERAL NOTES FOUND ON SHEET G1.1.



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**PROPOSED SITE PLAN (CIVIL)**

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**NORWALK AREA FIRE DEPARTMENT**

**VILLAGE OF NORWALK**

**MONROE COUNTY, WI**

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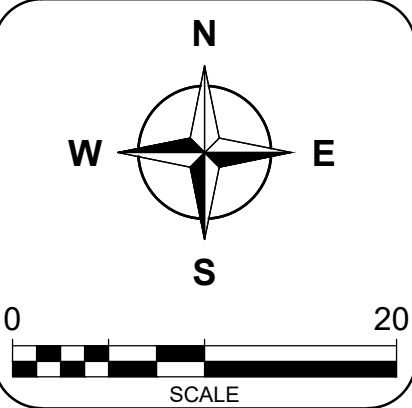
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EROSION CONTROL PLAN (CIVIL)  
NORWALK FIRE STATION  
NORWALK AREA FIRE DEPARTMENT

VILLAGE OF NORWALK  
MONROE COUNTY, WI

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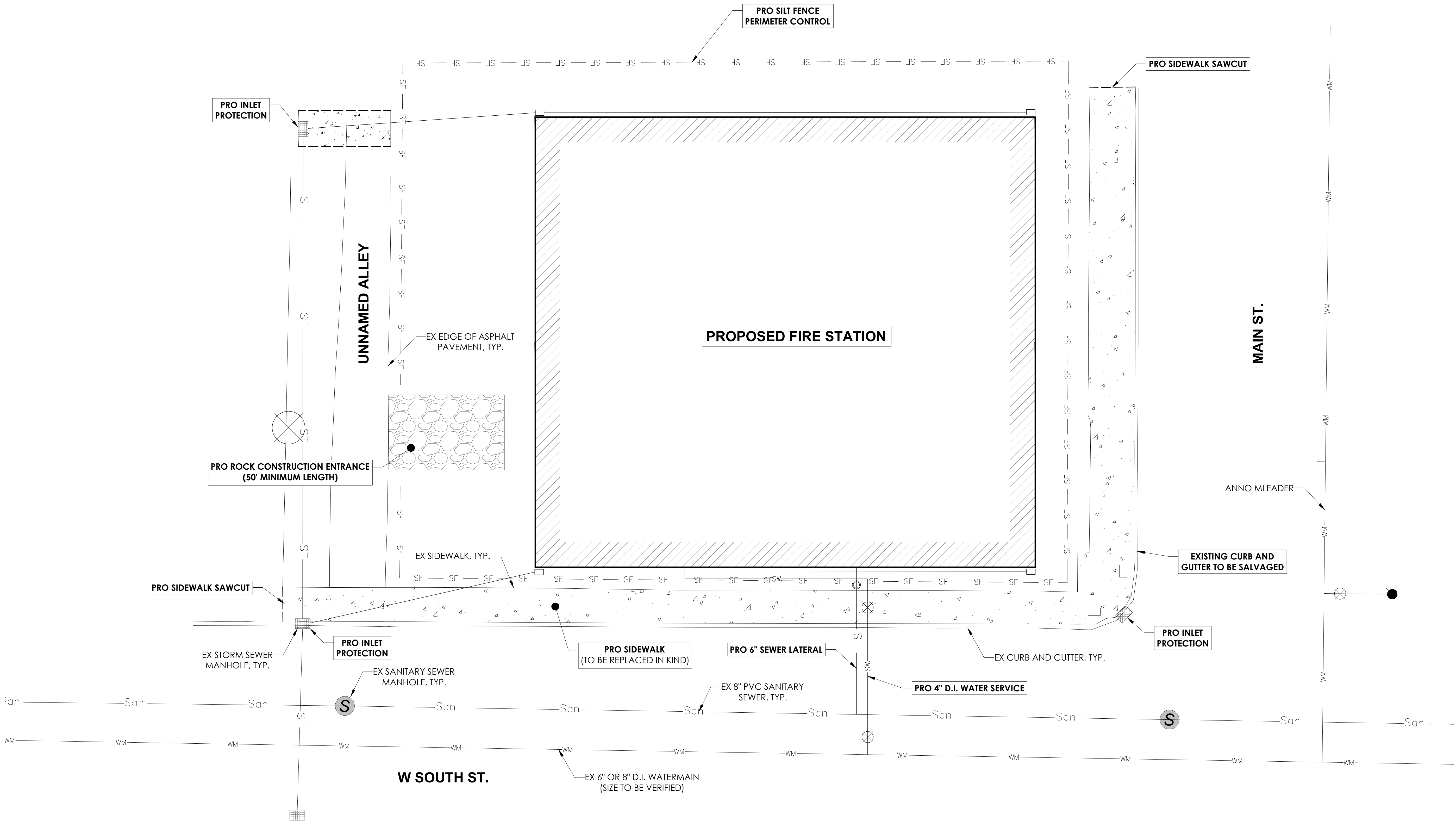


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**EROSION CONTROL SPECIFICATIONS (CIVIL)**  
**NORWALK FIRE STATION**  
**NORWALK AREA FIRE DEPARTMENT**

VILLAGE OF NORWALK  
MONROE COUNTY, WI

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EROSION CONTROL DETAILS (CIVIL)  
NORWALK FIRE STATION  
NORWALK AREA FIRE DEPARTMENT

VILLAGE OF NORWALK  
MONROE COUNTY, WI

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INSTALLATION NOTES:

TYPE B & C

- TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
- THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

- DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.
- THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

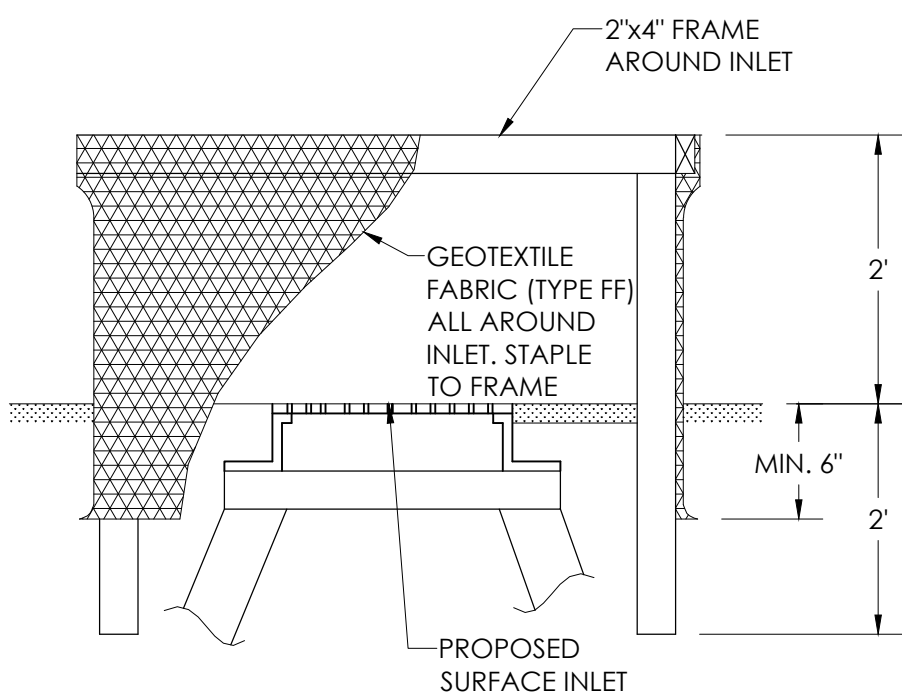
GENERAL NOTES:

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON WIS DOT PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

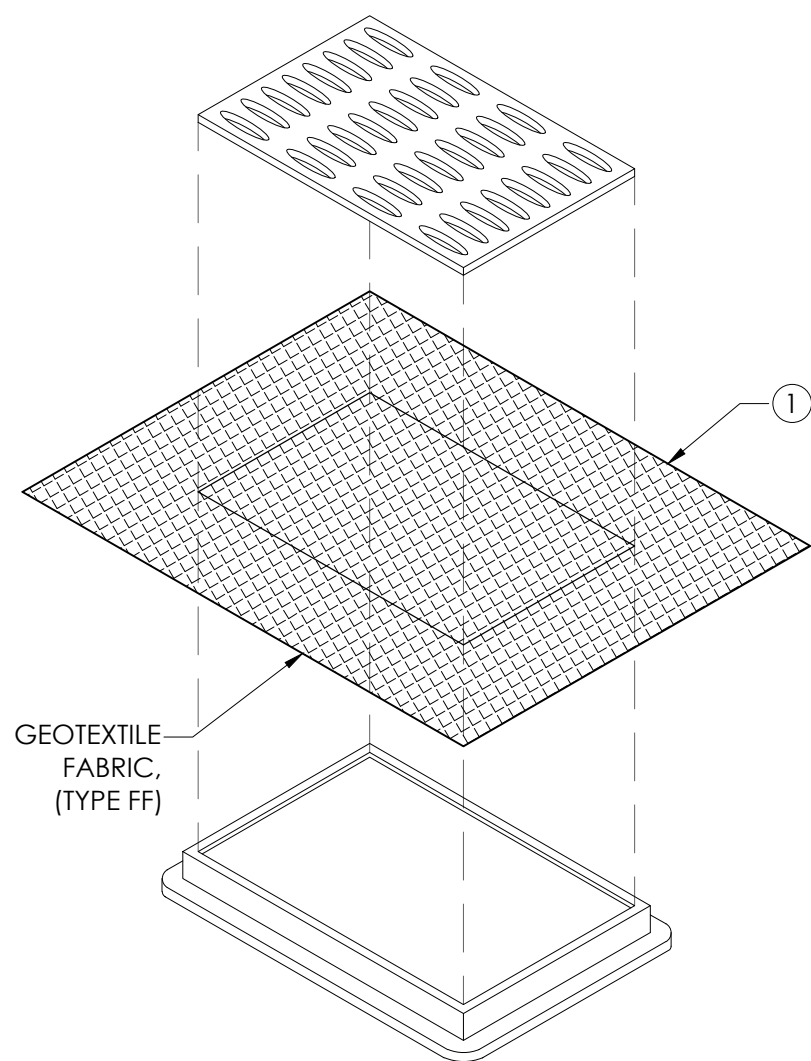
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- FLAP POCKET SHALL BE LARGE ENOUGH TO ACCEPT A WOOD 2" x 4".
- USE REBAR OR STEEL ROD FOR REMOVAL **OR** FOR INLETS WITH CURB CASTING; USE A WOOD 2"x4" EXTENDED 10" BEYOND SIDES OF GRATE. CONNECT 2"x4" TO GRATE WITH WIRE OR PLASTIC TIES.

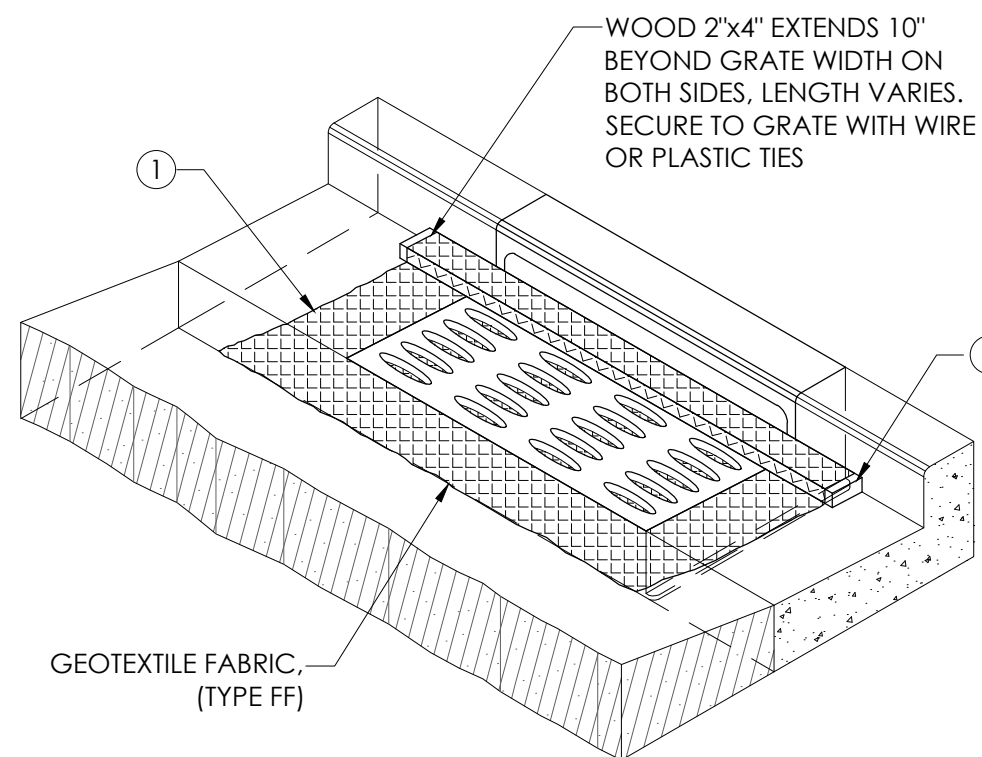
NOTES



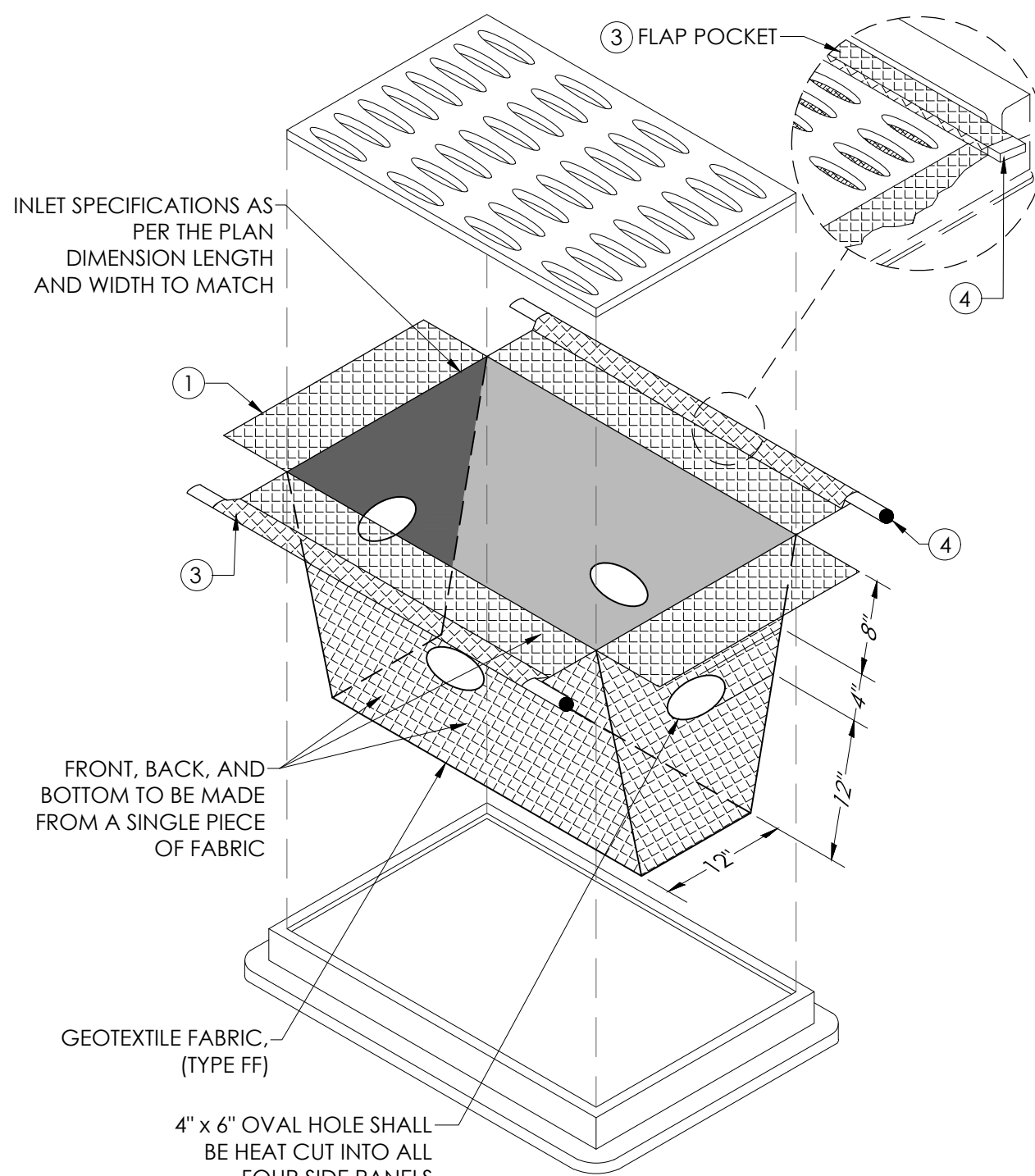
TYPE A



TYPE B (w/o CURB BOX)  
(CAN BE INSTALLED IN ANY INLET w/o A CURB BOX)

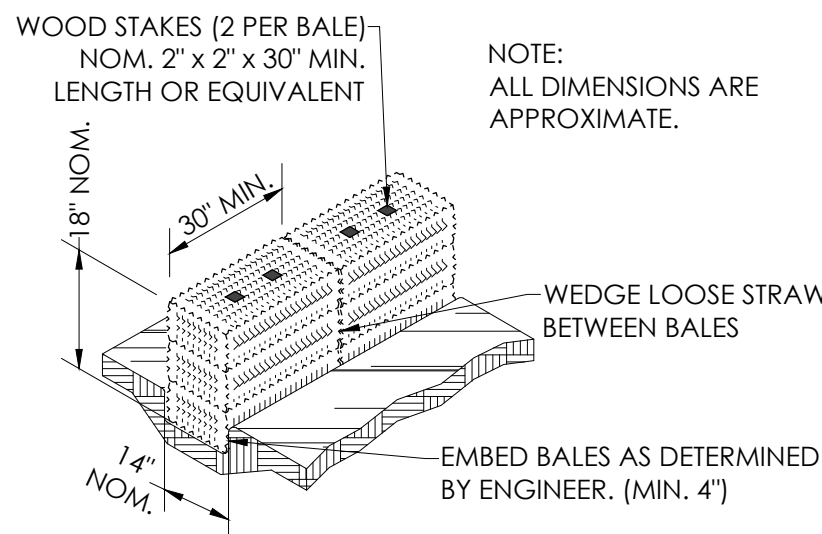


TYPE C  
(WITH CURB BOX)

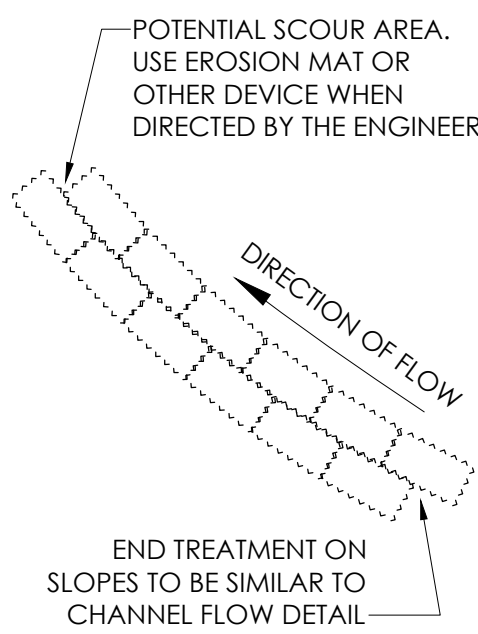


TYPE D

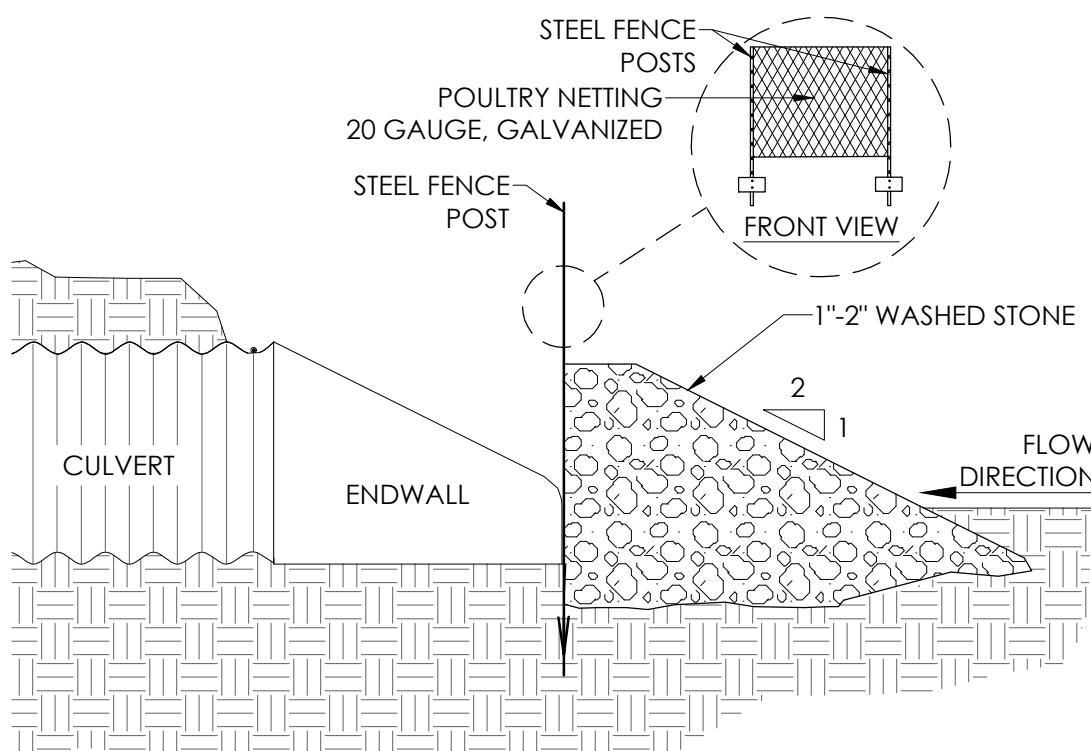
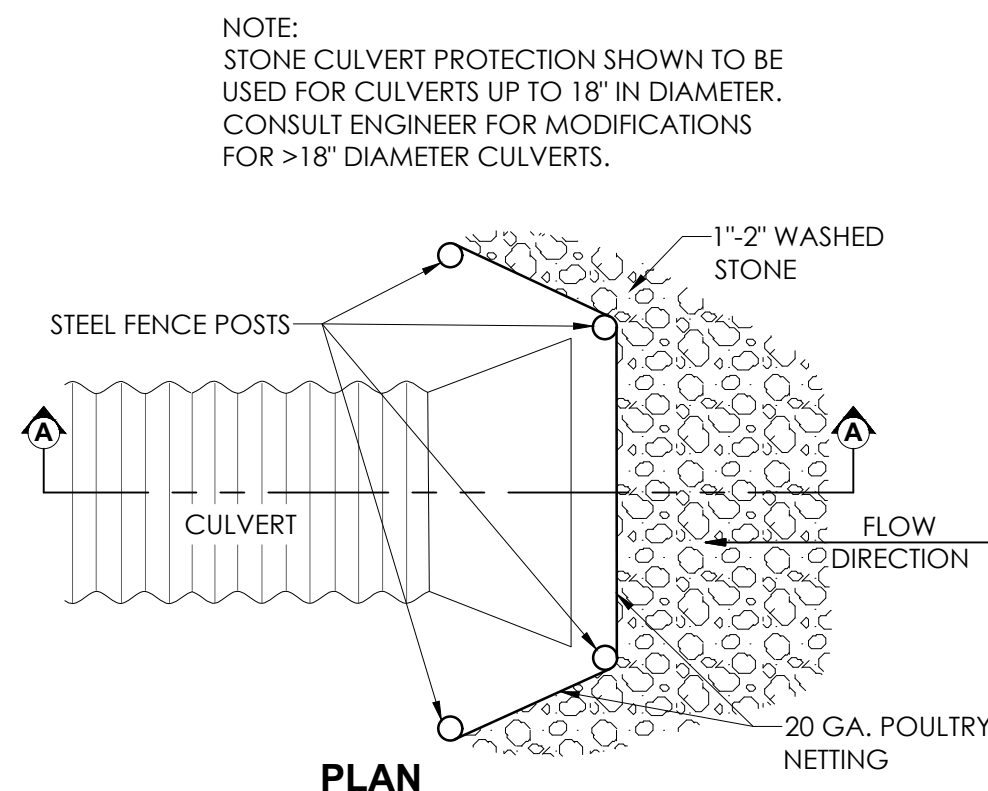
INLET PROTECTION



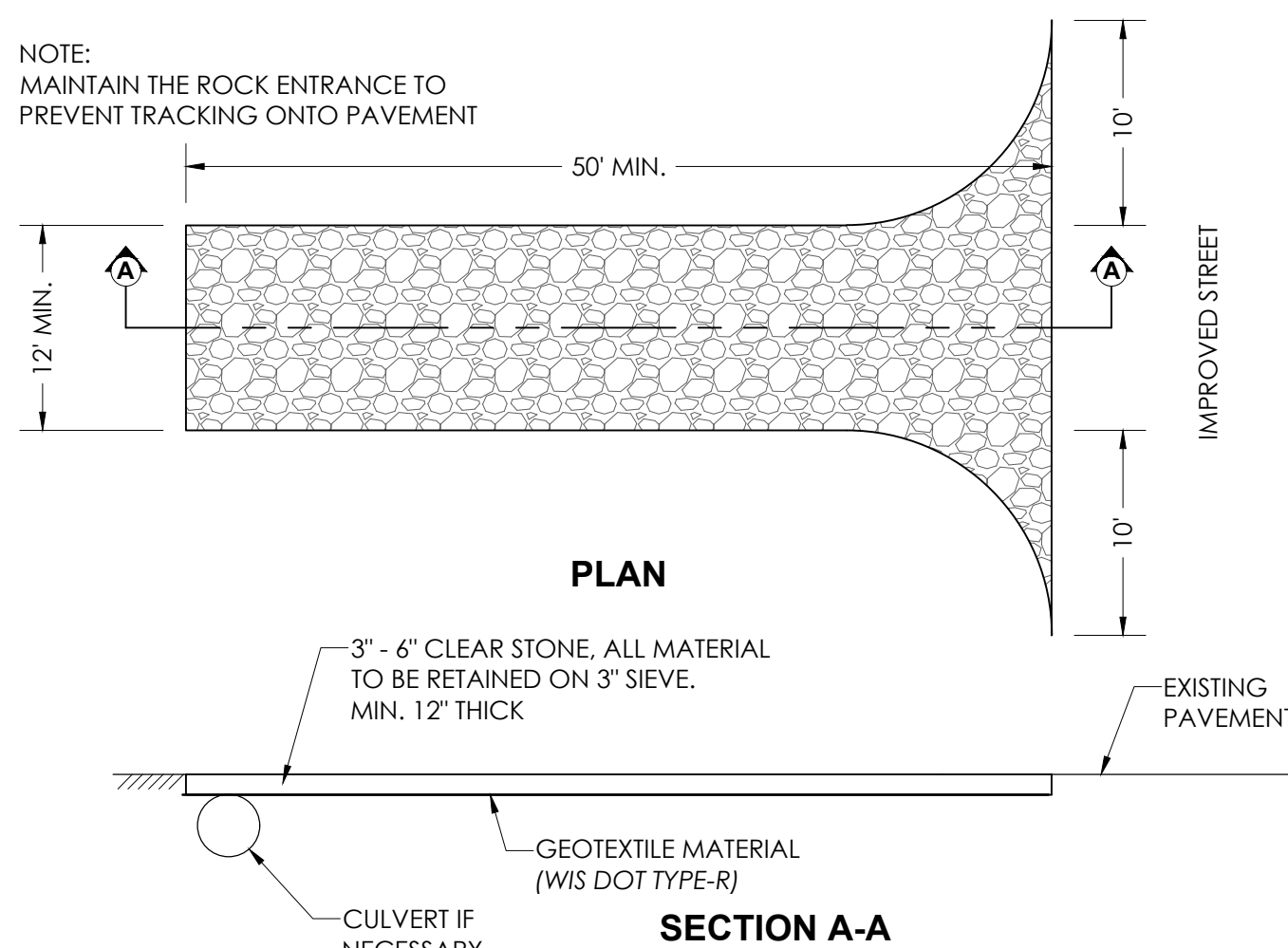
EROSION BALE  
INSTALLATION



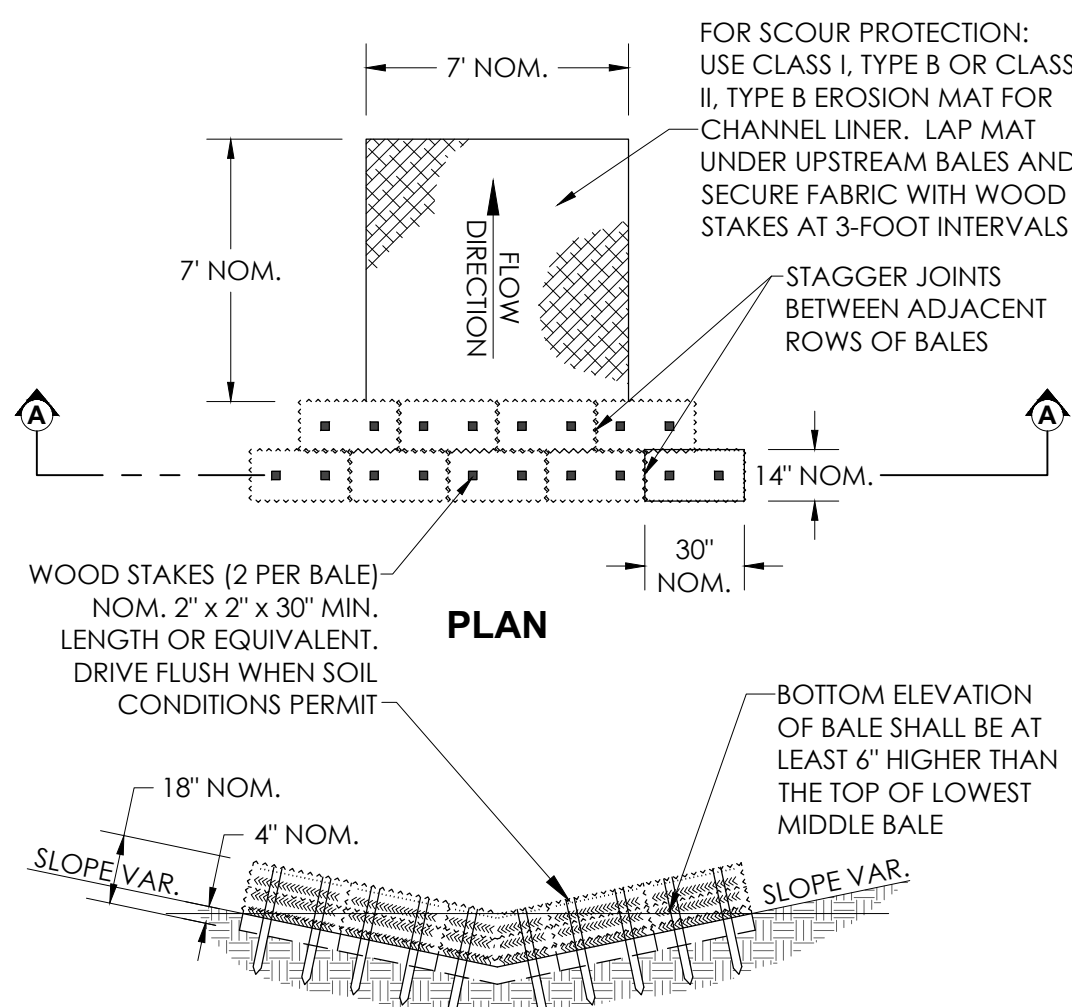
EROSION BALE FOR  
ALTERING FLOW  
DIRECTION



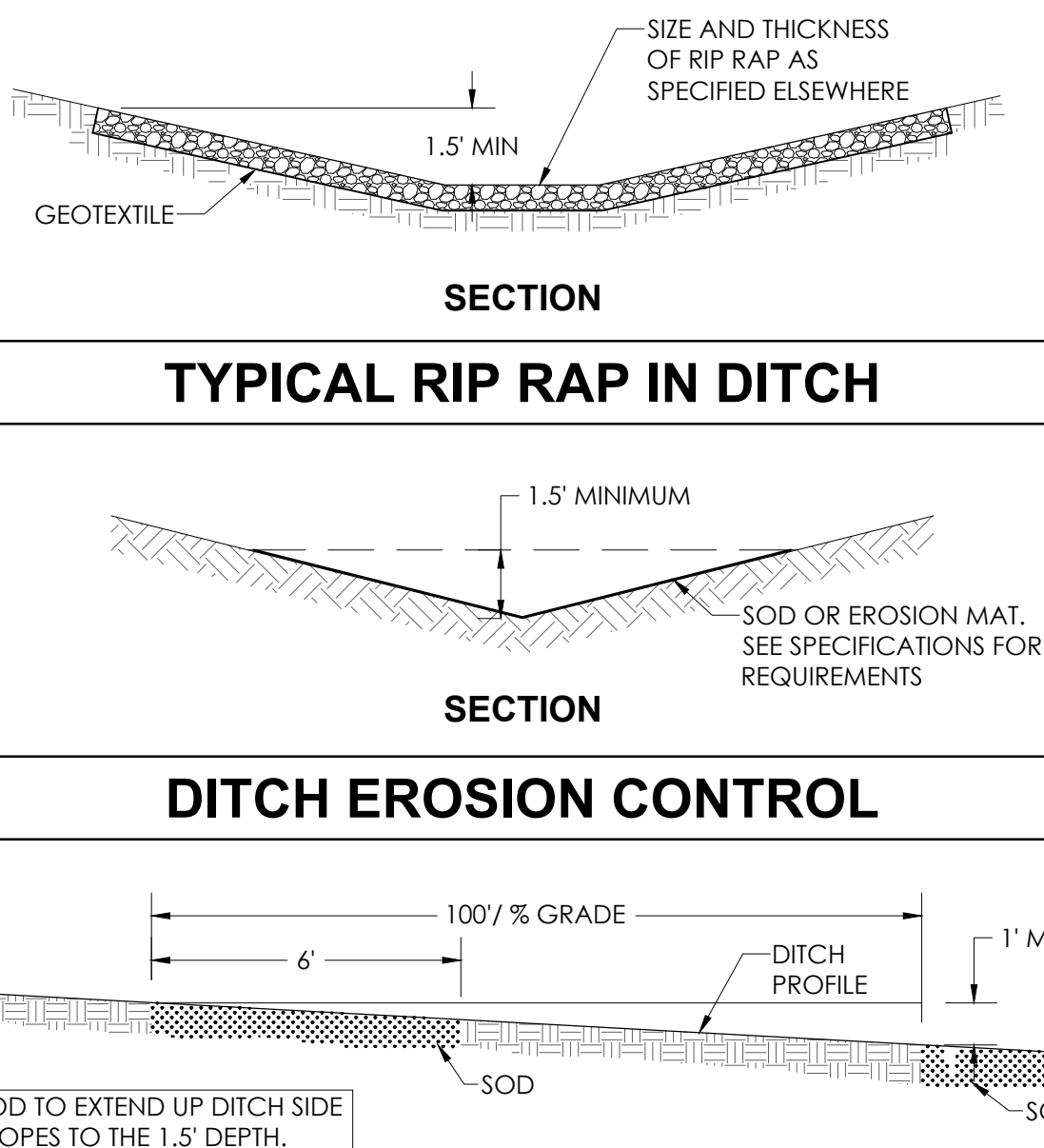
STONE CULVERT PROTECTION



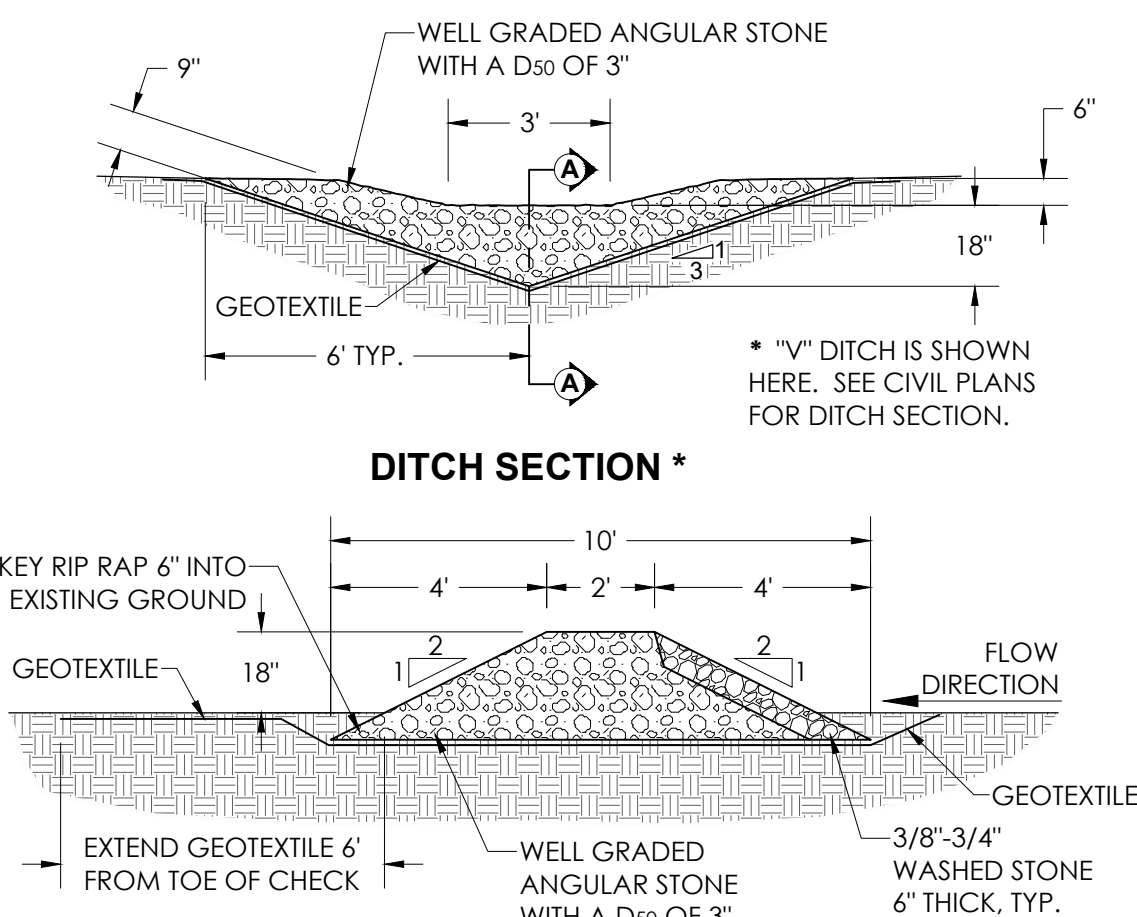
ROCK CONSTRUCTION ENTRANCE



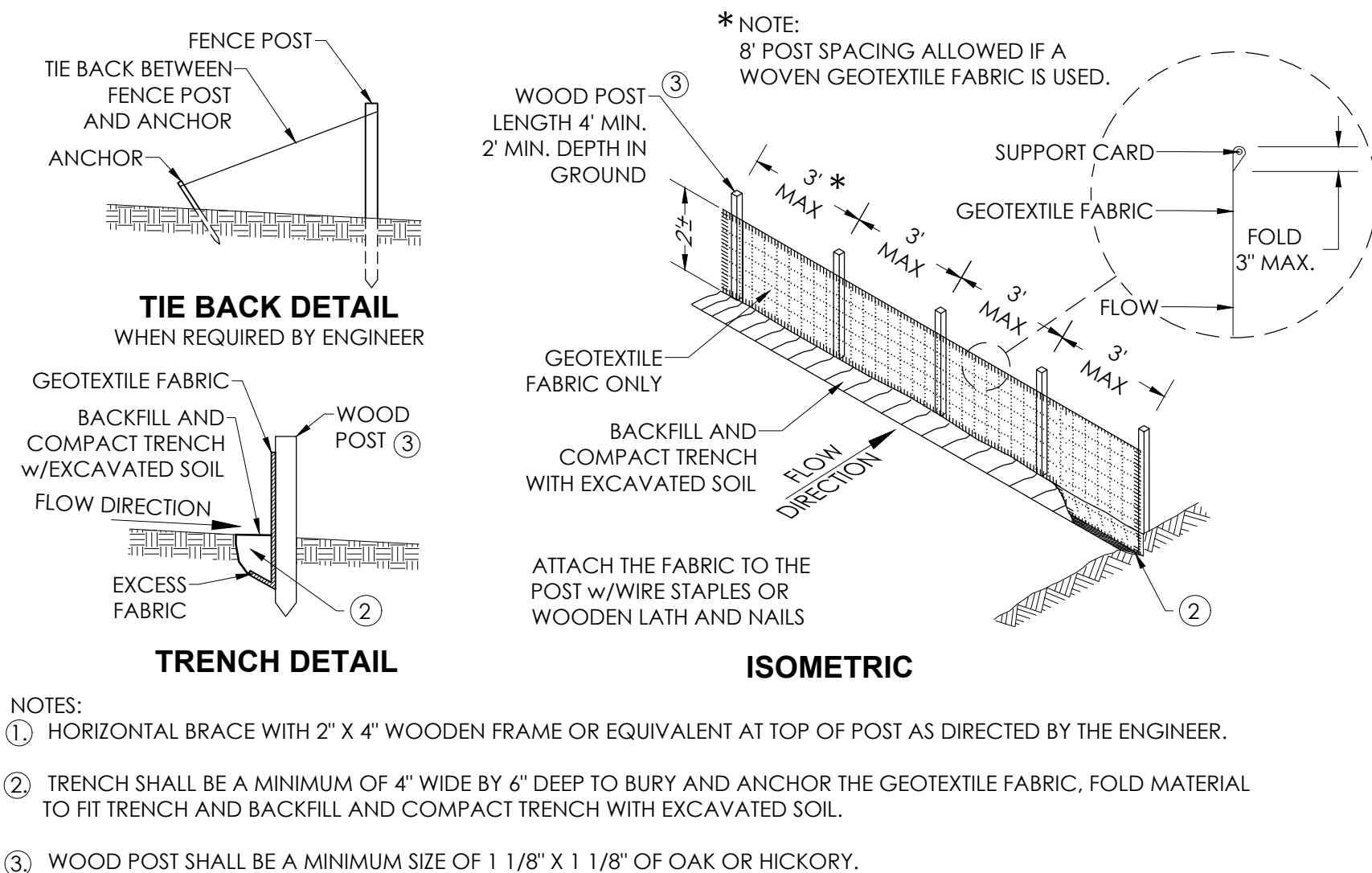
EROSION BALE FOR CHANNEL FLOW



SOD DITCH CHECKS



STONE DITCH CHECK



SILT FENCE





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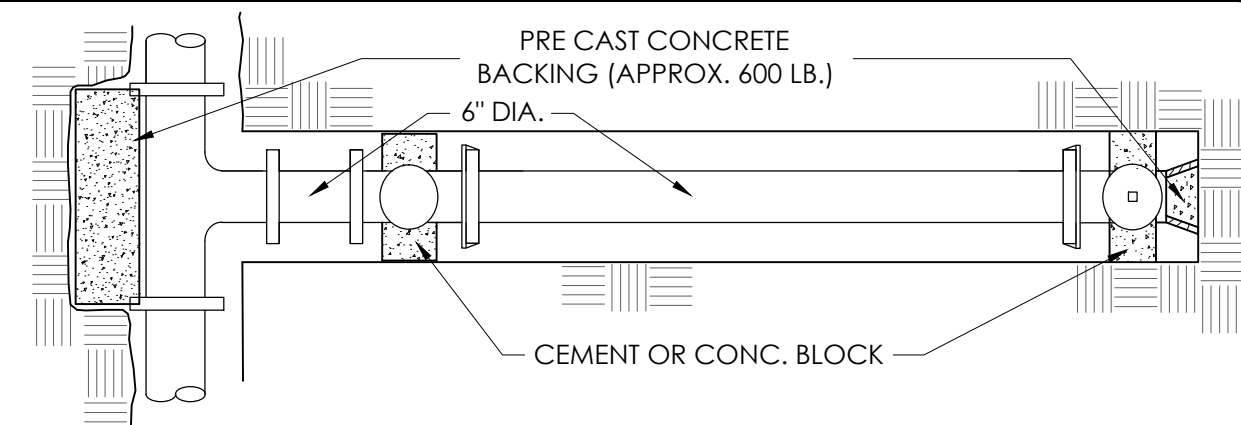
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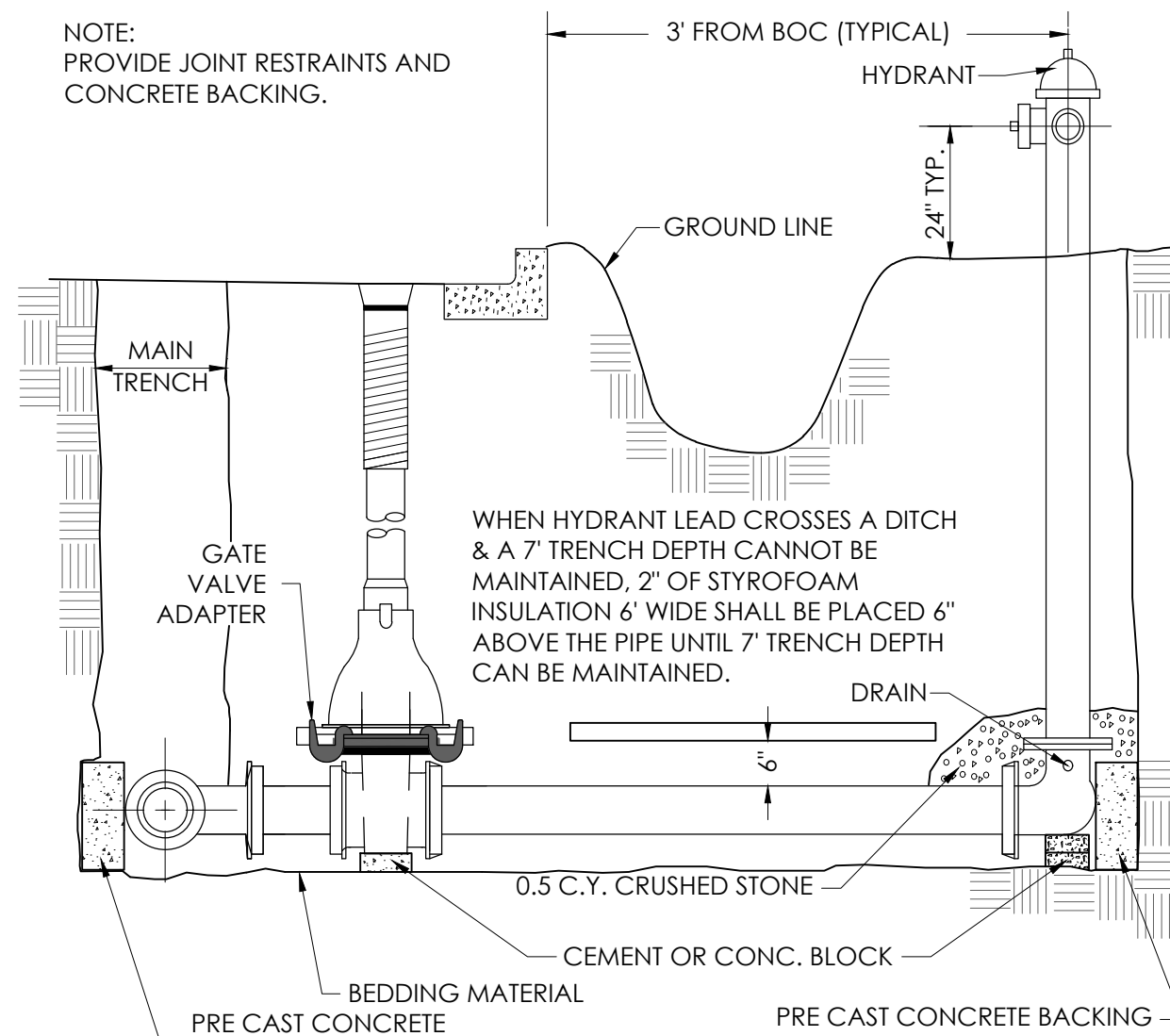
WATER MAIN CONSTRUCTION DETAILS (CIVIL)

NORWALK FIRE STATION  
NORWALK AREA FIRE DEPARTMENT

VILLAGE OF NORWALK  
MONROE COUNTY, WI

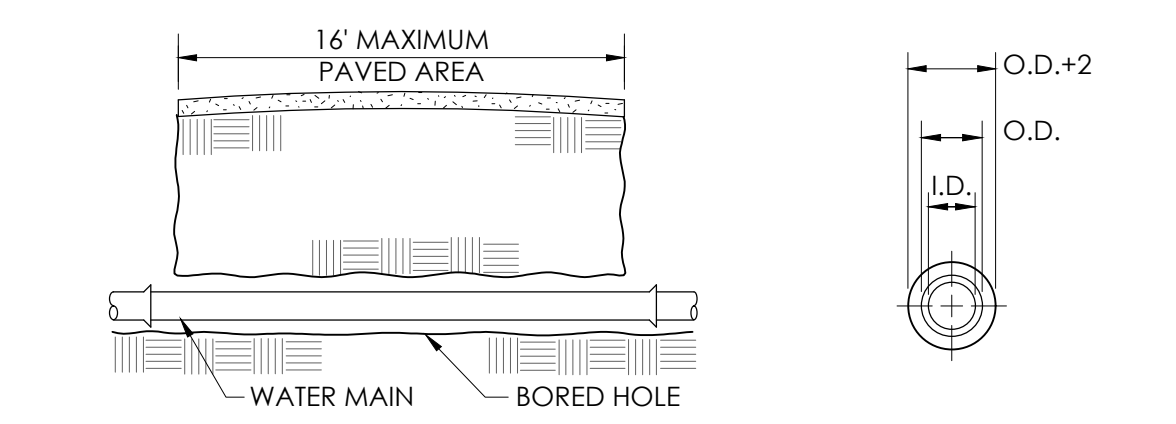


PLAN



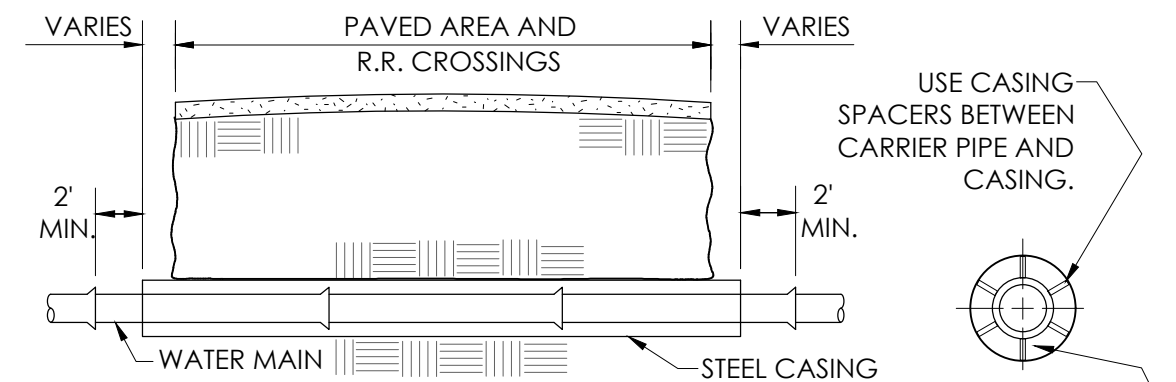
ELEVATION

### STANDARD HYDRANT SETTING



PLACE BEDDING BEFORE PUSHING PIPE. BACKFILL BETWEEN WATER MAIN AND BORED HOLE BY PUMPING OR BLOWING IN SAND. NO JOINTS PERMITTED WITHIN THE BORE.

#### BORING WITHOUT CASING PIPE



#### JACKING WITH CASING PIPE

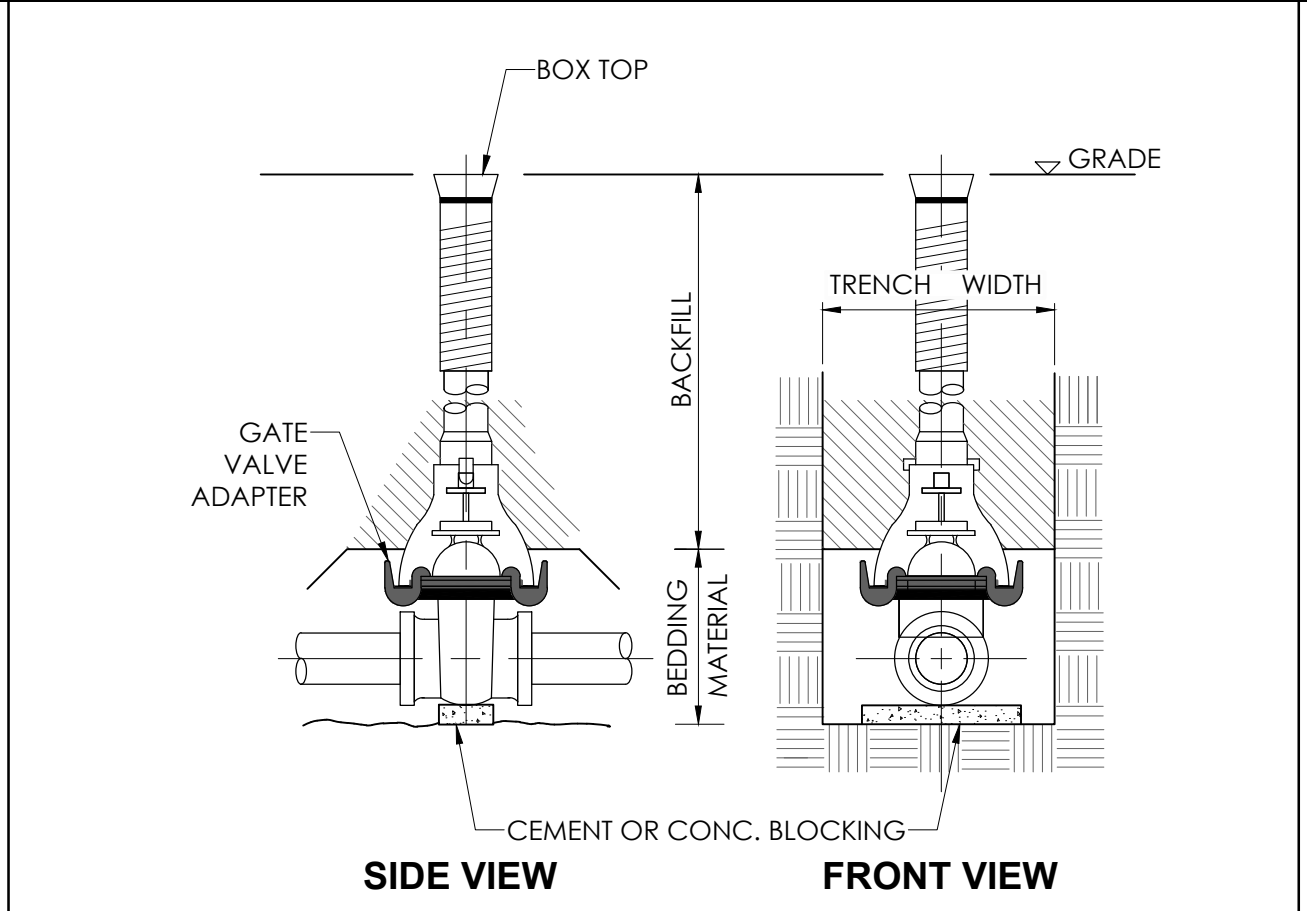
STEEL CASING PIPE ASTM A-53 GRADE B 35,000 PSI MIN.			
SIZE	CASING	CASING	NOTE
W.M.	MIN. WALL	MIN. DIA.	
6"	0.312	18"	12" THICK CONCRETE OR BRICK BULKHEADS REQ'D ONLY IN R.R. CROSSING OTHERWISE USE CASING END SEALS.
8"	0.312	18"	
12"	0.375	24"	
16"	0.500	30"	
20"	0.500	36"	
24"	0.562	48"	

### BORING OR JACKING w/CASING PIPE

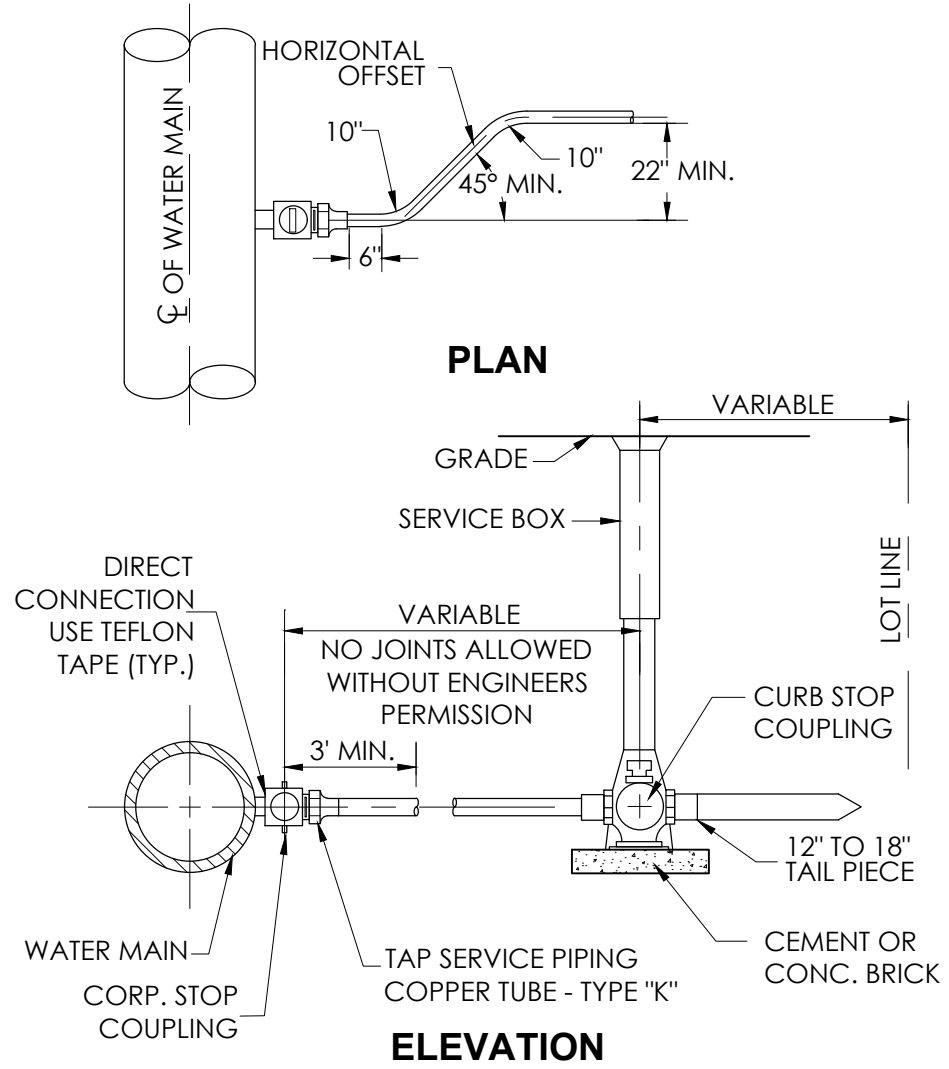
NOTES:

- SERVICE TAPS IN ALL WATER MAIN PIPE SHALL BE MADE WITH 2 WRAPS OF 3 MIL. TEFLON TAPE ON CORPORATION STOP THREADS.
- WHEN MORE THAN ONE TAP IN THE MAIN IS NECESSARY TO DELIVER THE REQUIRED FLOW FOR SERVICE LINES, THEY SHOULD BE STAGGERED AROUND THE CIRCUMFERENCE A MINIMUM OF 12" APART.

### GENERAL NOTES



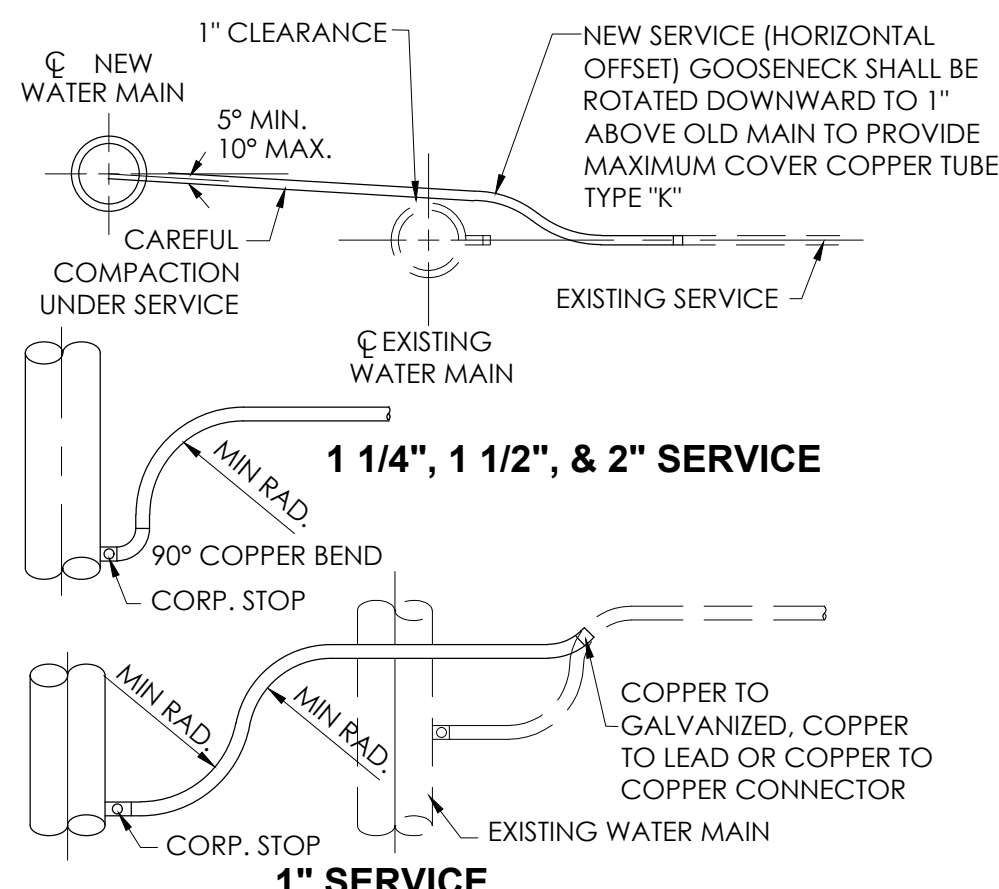
### STANDARD GATE VALVE BOX SETTING



SERVICE PIPE	CORP. STOP	CURB STOP	SERVICE BOX
1"	1"	1"	2 1/2"
1 1/4"	1 1/4"	1 1/4"	3"
1 1/2"	1 1/4" x 1 1/2"	1 1/2"	3"
* 2"	1 1/2" x 2"	2"	3"

* A 2" TAP ON A 6" DIAMETER MAIN REQUIRES A DOUBLE STRAP SERVICE SADDLE.

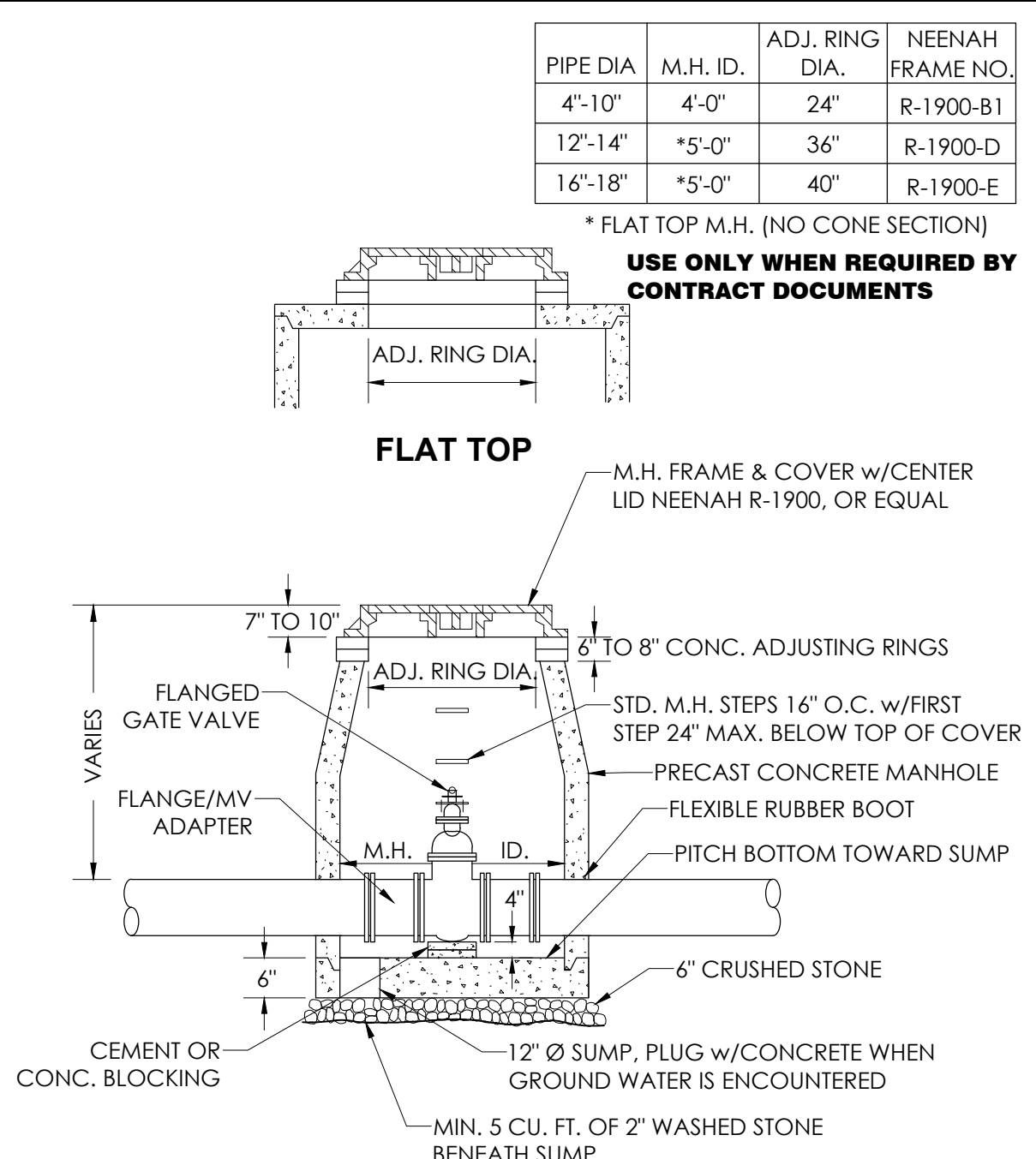
### TAP SERVICE PIPING ( COPPER )



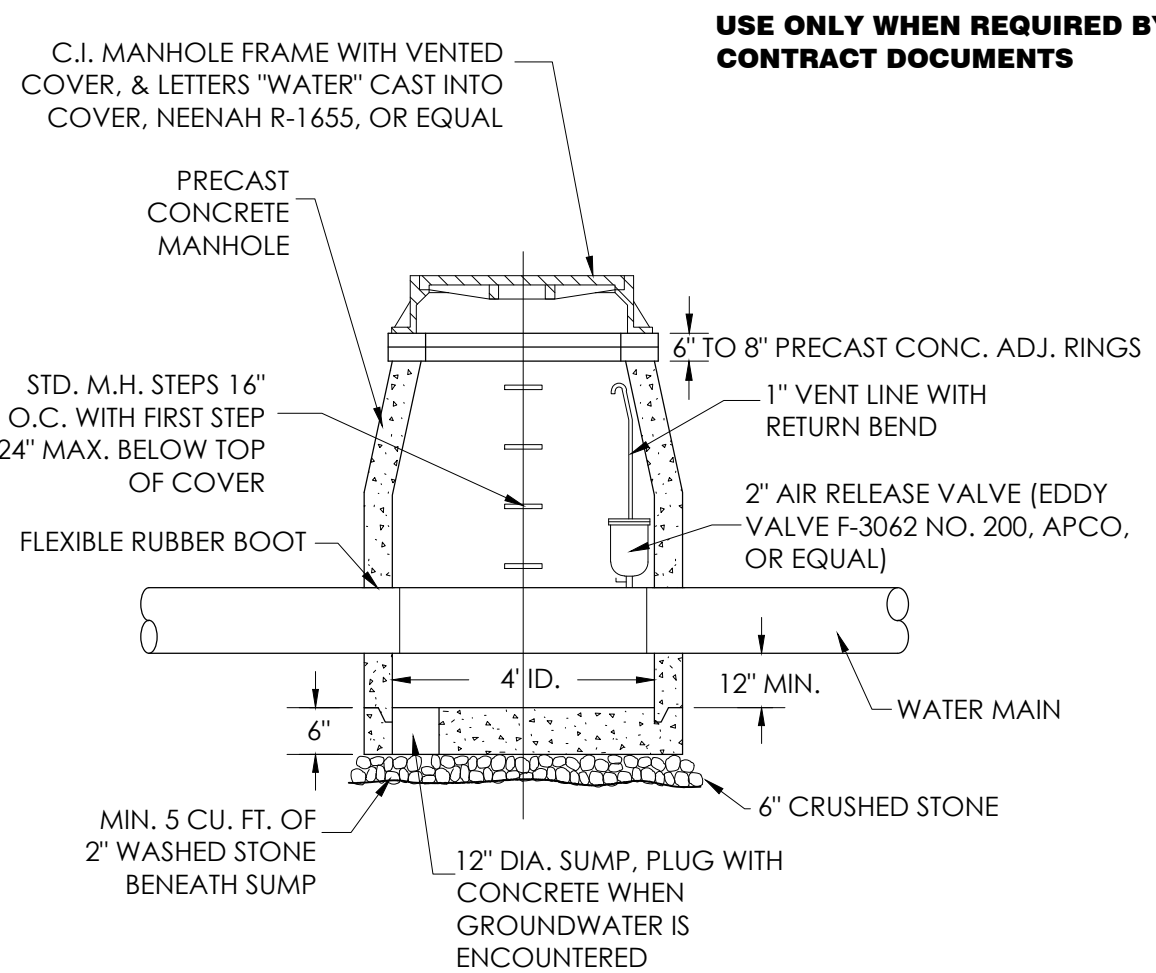
NOTES:

- WATER SERVICE MAY BE INSTALLED UNDER EXISTING WATER MAIN.
- IF 6' MIN. COVER IS NOT AVAILABLE, THE NEW INSTALLATION SHALL BE INSULATED.
- CONNECTIONS SHALL BE TESTED FOR LEAKAGE PRIOR TO BACKFILL AFTER SUPPORT HAS BEEN COMPACTED.
- PIPE SIZE MIN. RADII ARE AS FOLLOWS:  
1"=6", 1 1/4"=8", 1 1/2"=10", 2"=12"
- TAP AND SERVICE SHALL BE SAME SIZE AS EXISTING w/MIN. OF 1"

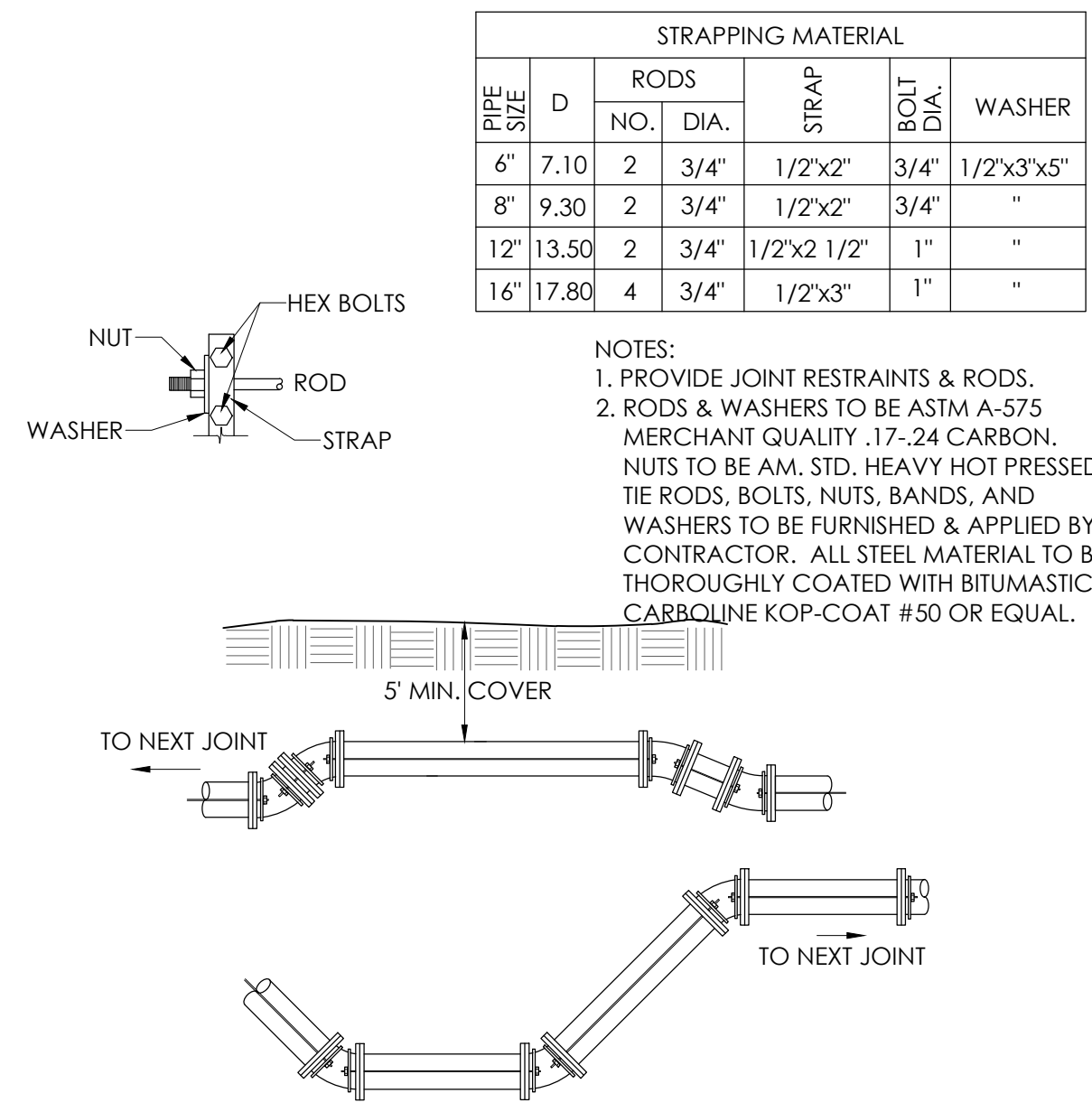
### TAP SERVICE PIPING



### STANDARD VAULT FOR GATE VALVES

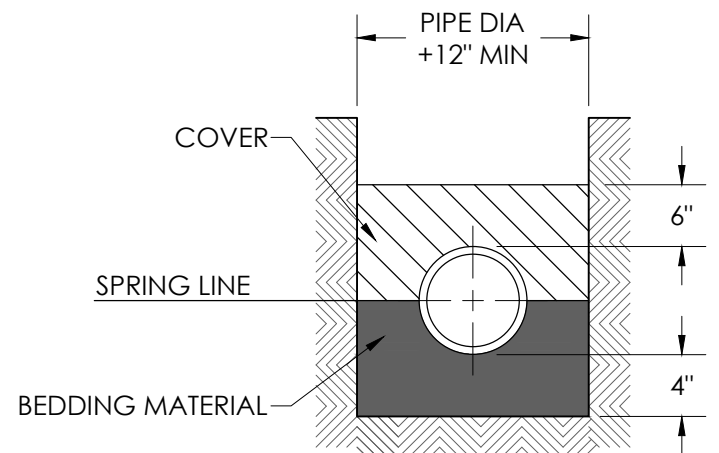


### AIR RELEASE VAULT

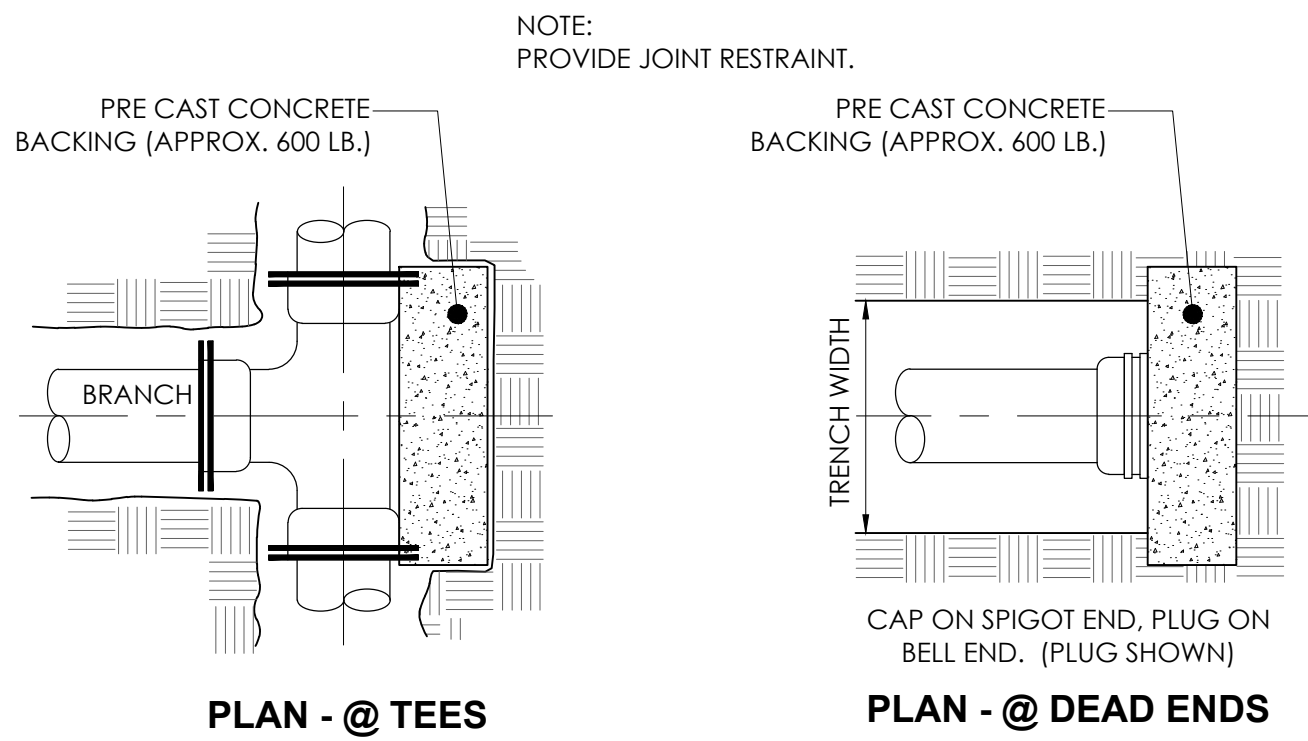


### VERTICAL WATER MAIN OFFSETS

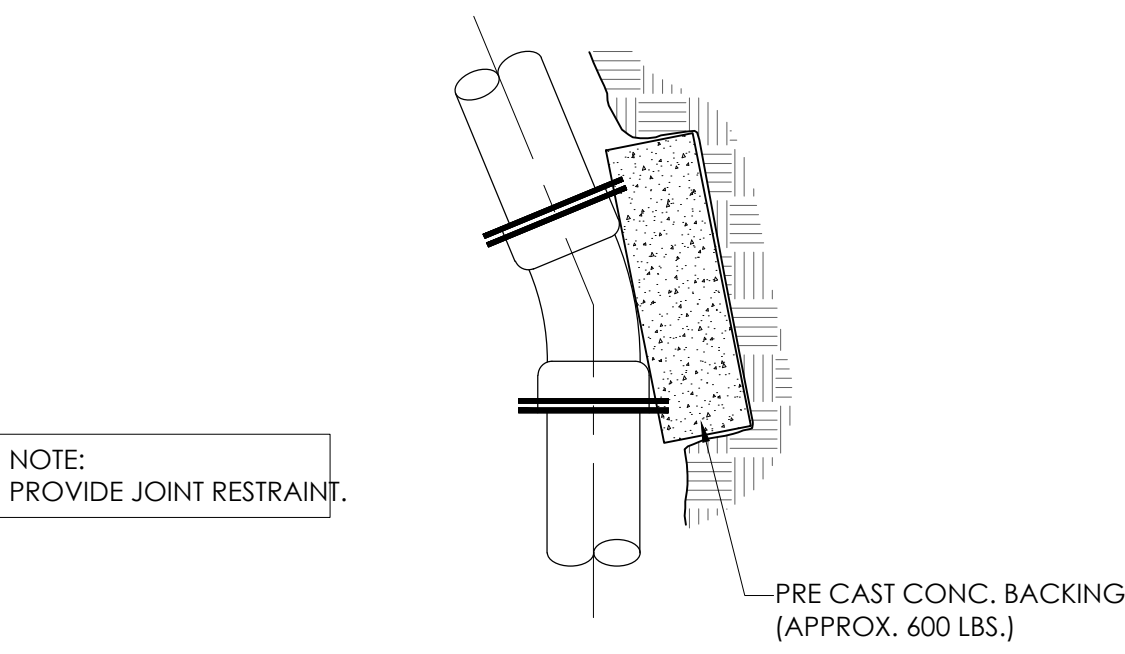
INSTALLATION:  
PLACE 4" OF BEDDING MATERIAL BENEATH PIPE. PLACE BEDDING MATERIAL AROUND THE PIPE TO THE SPRING LINE. WORK THE MATERIAL IN AND AROUND THE PIPE BY HAND TO PROVIDE UNIFORM SUPPORT. PLACE COVER MATERIAL CAREFULLY TO A LEVEL 6" ABOVE THE PIPE.



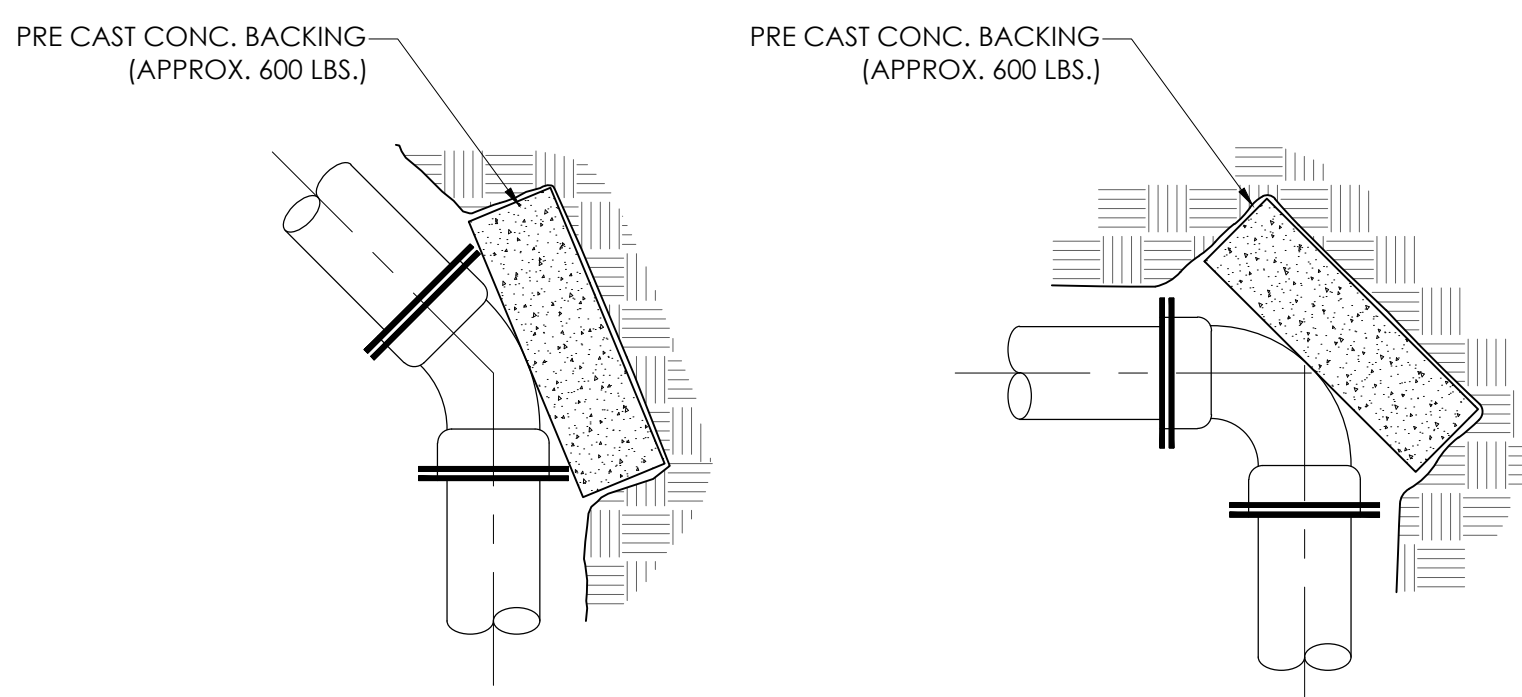
### STANDARD WATER MAIN TRENCH



### CONCRETE BACKING

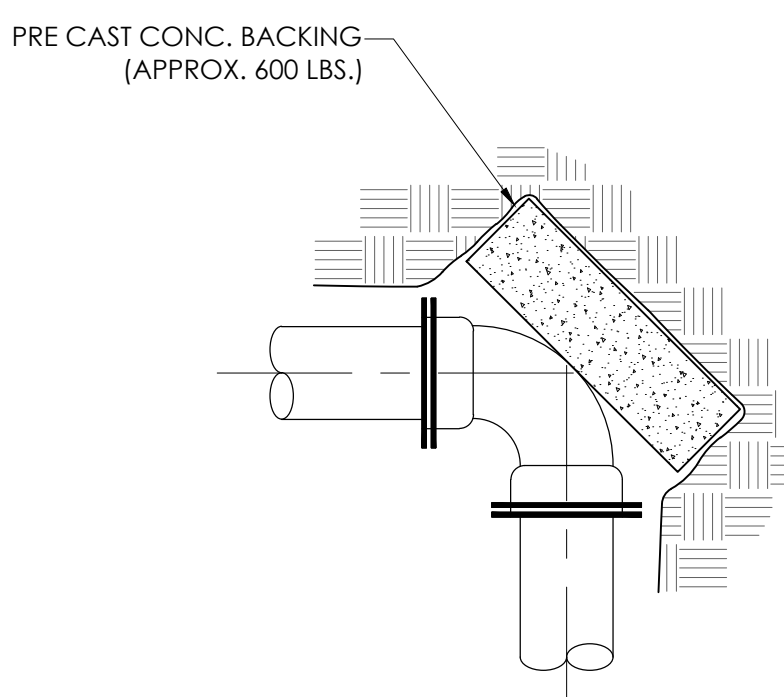


PLAN - 22.5° BEND



PLAN - 45° BEND

### CONCRETE BACKING FOR BENDS



PLAN - 90° BEND

### VERTICAL WATER MAIN OFFSETS

### TAP SERVICE PIPING

### GENERAL NOTES

AS NOTED  
SCALE

DRAWN BY CPP  
REVIEWED BY LAL  
ISSUE DATE 1/19/2026  
GEC FILE NO. 2-1024-466C  
SHEET NO.

C6.0





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SANITARY SEWER CONSTRUCTION DETAILS (CIVIL)

NORWALK FIRE STATION  
NORWALK AREA FIRE DEPARTMENT

VILLAGE OF NORWALK  
MONROE COUNTY, WI

REVISIONS	NO.	BY	DATE

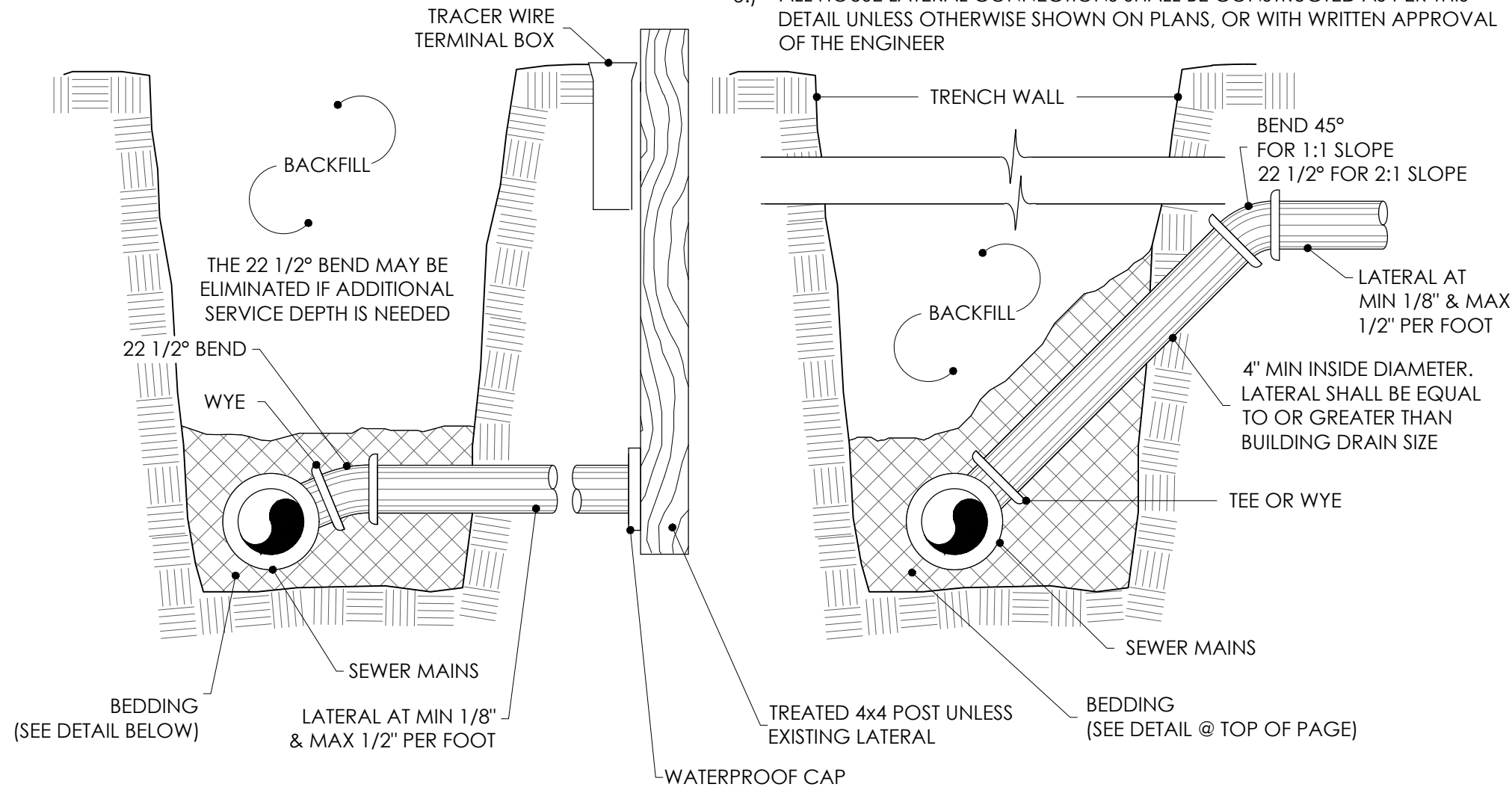
AS NOTED  
SCALE

DRAWN BY CPP  
REVIEWED BY LAL  
ISSUE DATE 1/19/2026  
GEC FILE NO. 2-1024-466C  
SHEET NO.

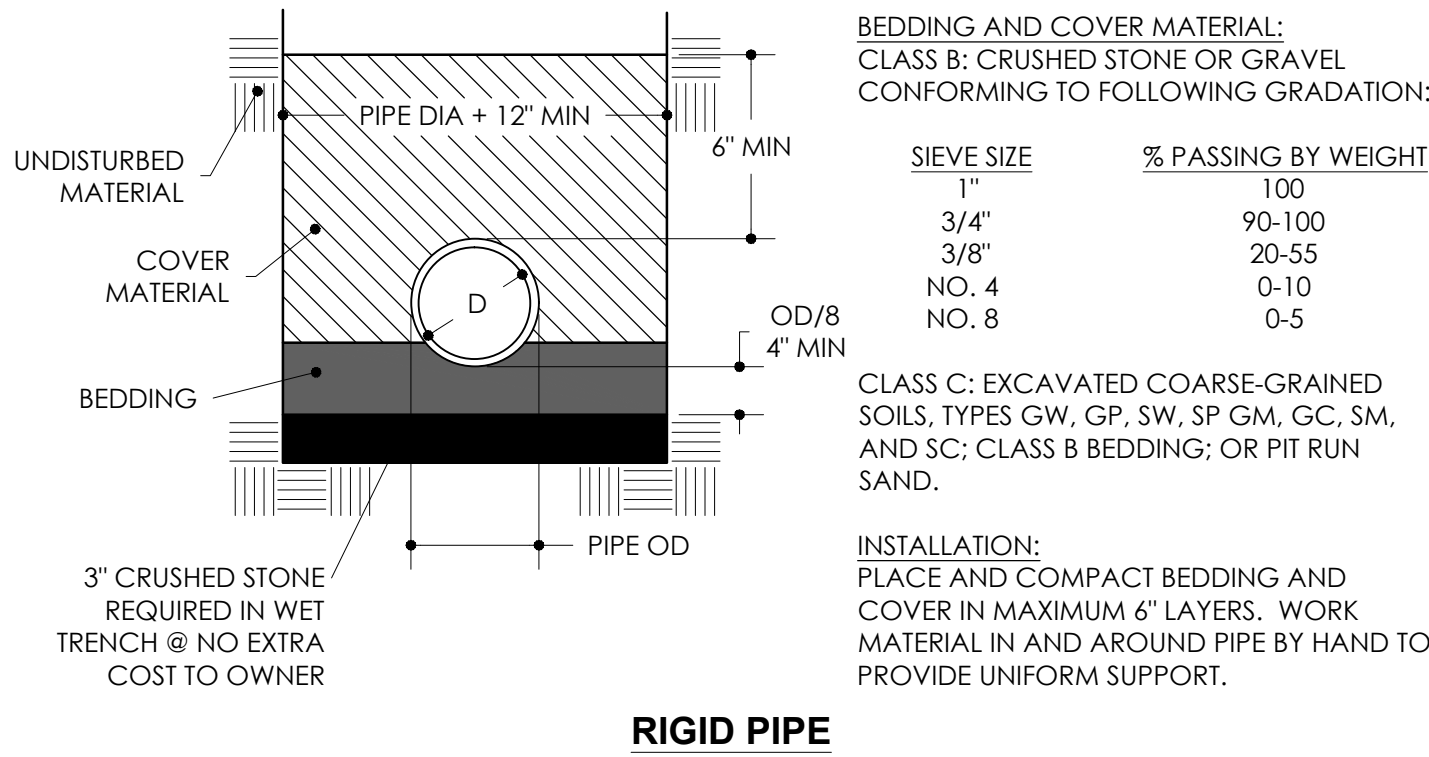
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NOTES:

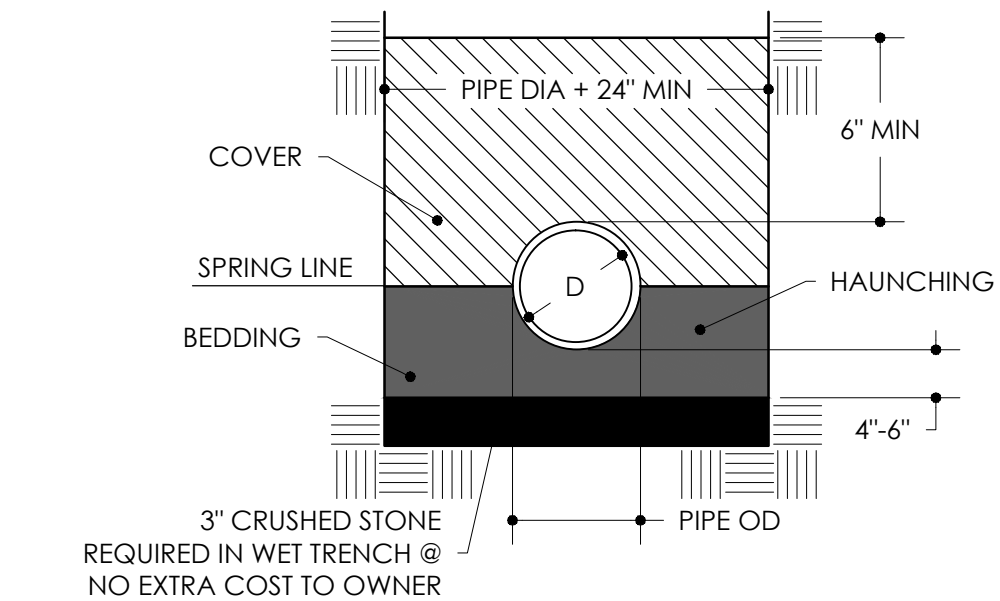
- USE OF RISERS GOVERNED BY BASEMENT DEPTH & LOCAL CONDITIONS OR AS DIRECTED BY ENGINEER
- LATERAL SHALL END AT PROPERTY LINE UNLESS OTHERWISE DIRECTED BY ENGINEER
- DEPTH TO LATERAL AT PROPERTY LINE SHALL NOT BE DEEPER THAN NECESSARY TO SERVICE PARCEL
- ALL LATERALS TO BE 4" UNLESS OTHERWISE NOTED ON PLANS OR IN SPECIFICATIONS
- ALL HOUSE LATERAL CONNECTIONS SHALL BE CONSTRUCTED AS PER THIS DETAIL UNLESS OTHERWISE SHOWN ON PLANS, OR WITH WRITTEN APPROVAL OF THE ENGINEER



TYPICAL LATERAL CONNECTIONS



RIGID PIPE



BEDDING AND COVER MATERIAL:  
CLASS IA: CRUSHED STONE OR GRAVEL CONFORMING TO FOLLOWING GRADATION:

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
3/4"	90-100
3/8"	20-55
NO. 4	0-10
NO. 8	0-5

CLASS IB: CRUSHED STONE OR GRAVEL CONFORMING TO FOLLOWING GRADATION:

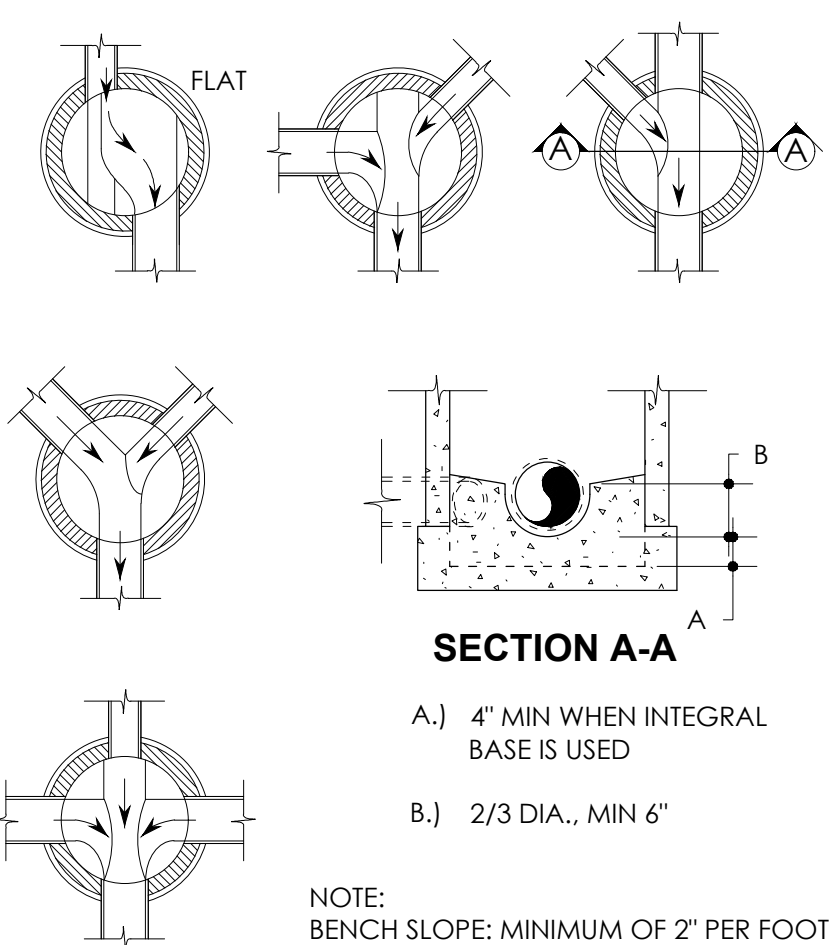
SIEVE SIZE	% PASSING BY WEIGHT
1/2"	100
3/8"	85-100
NO. 4	10-30
NO. 8	0-5

CLASS II: SAND, GRAVELS, AND SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES. SOIL TYPES GW, GP, SW, AND SP.  
CLASS III: SILTY OR CLAYEY SANDS, GRAVELS, AND SAND-GRAVEL MIXTURES WITH FINES. SOIL TYPES GM, GC, SM, AND SC.

INSTALLATION:  
PLACE AND COMPACT BEDDING AND COVER IN MAXIMUM 6" LAYERS. WORK MATERIAL IN AND AROUND PIPE BY HAND TO PROVIDE UNIFORM SUPPORT. COMPACT CLASS IB WITH HAND TAMPER OR VIBRATORY COMPACTOR TO 85% STANDARD PROCTOR, COMPACT CLASS II WITH VIBRATORY COMPACTOR TO 85% STANDARD PROCTOR, COMPACT CLASS III WITH VIBRATORY COMPACTOR TO 90% STANDARD PROCTOR.

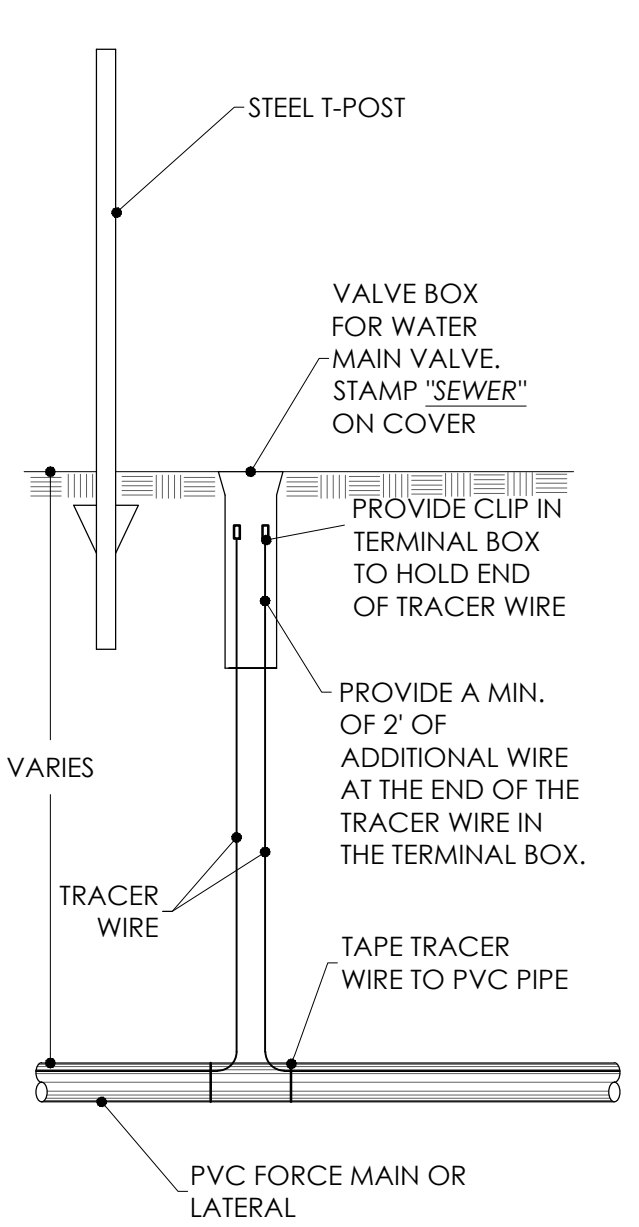
FLEXIBLE (PVC) PIPE

TYPICAL SANITARY SEWER PIPE BEDDING

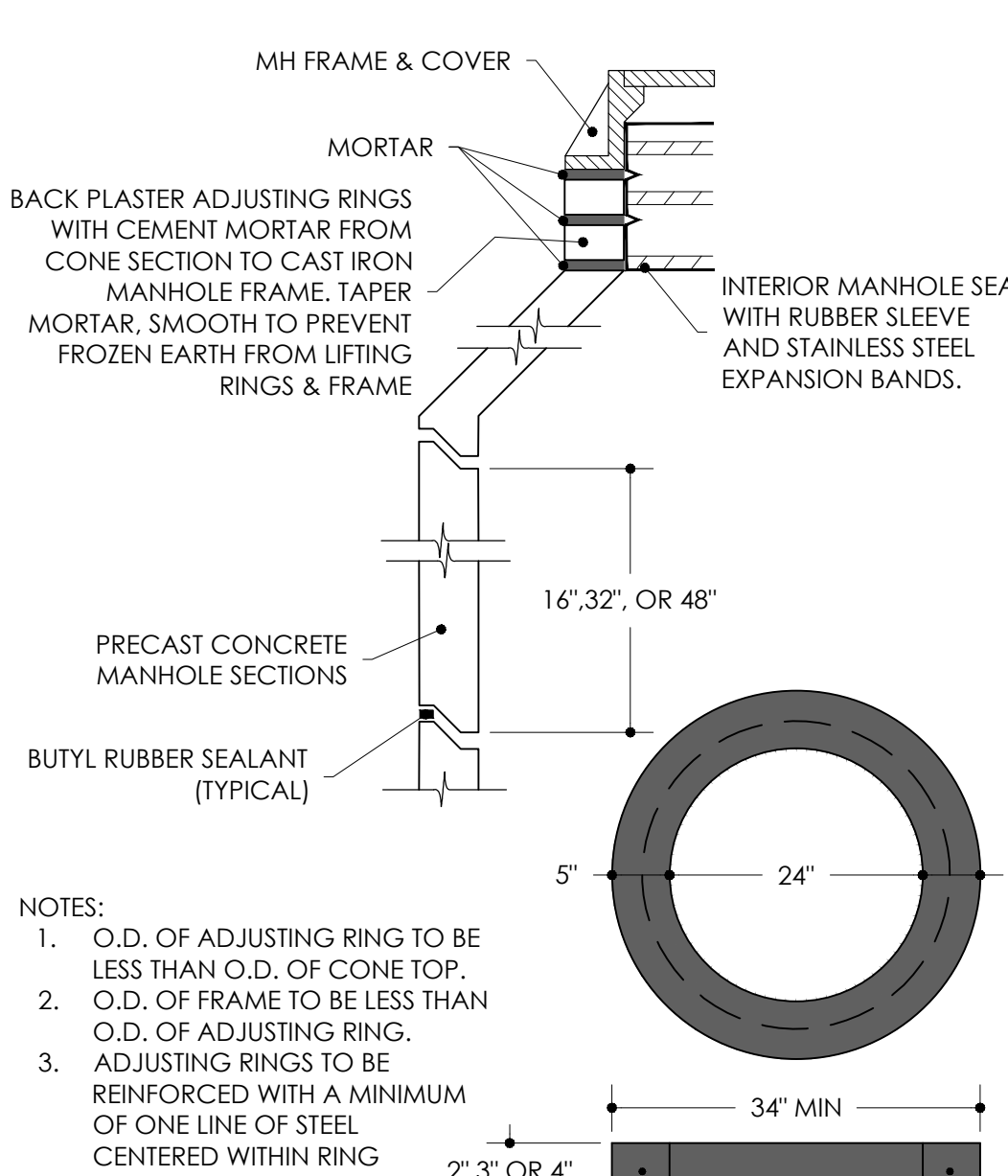


TYPICAL MANHOLE INVERTS

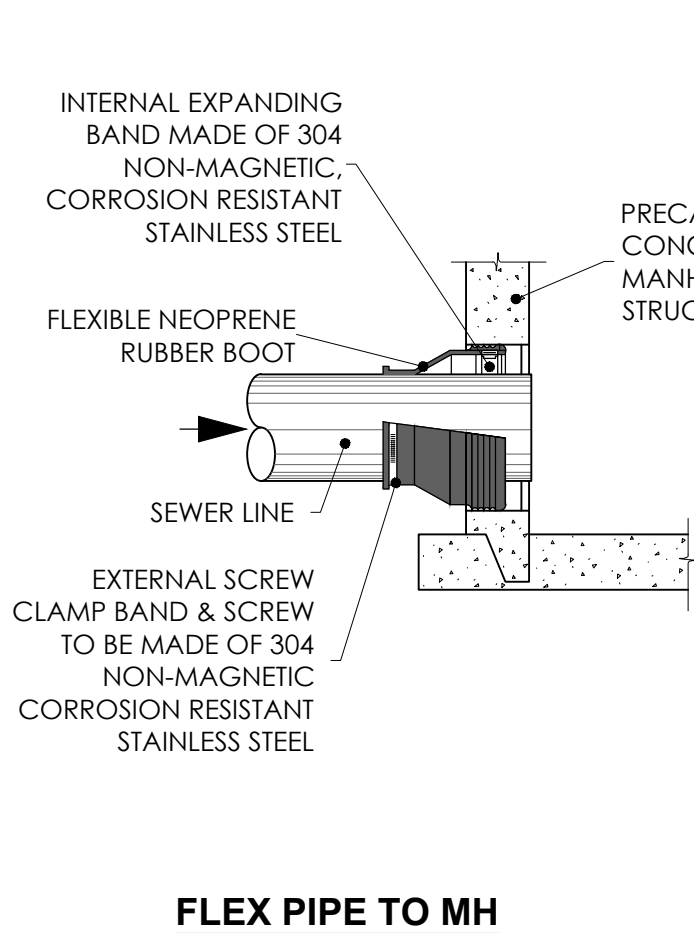
TYPICAL STEP DETAIL



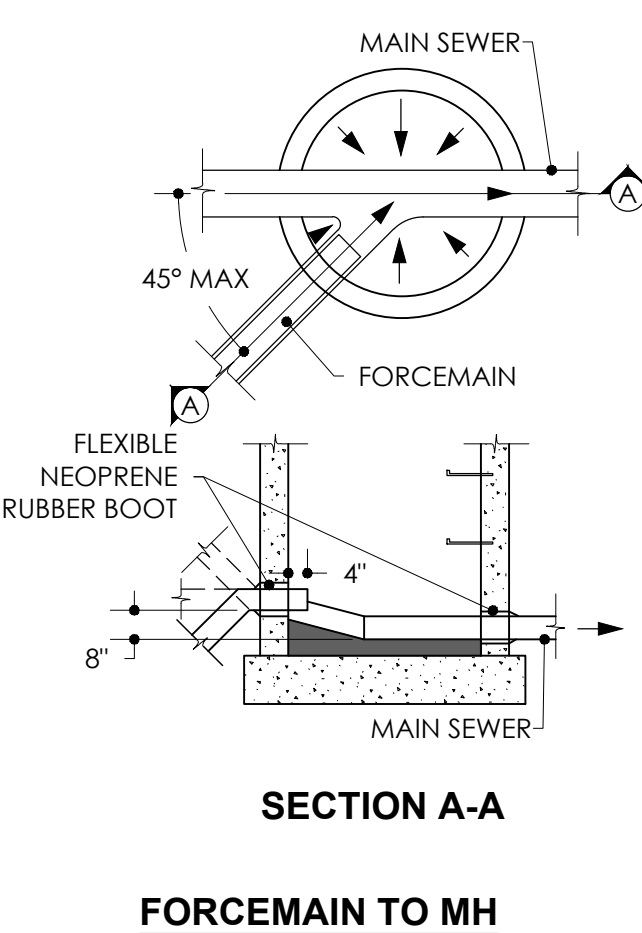
TRACER WIRE  
TERMINAL BOX



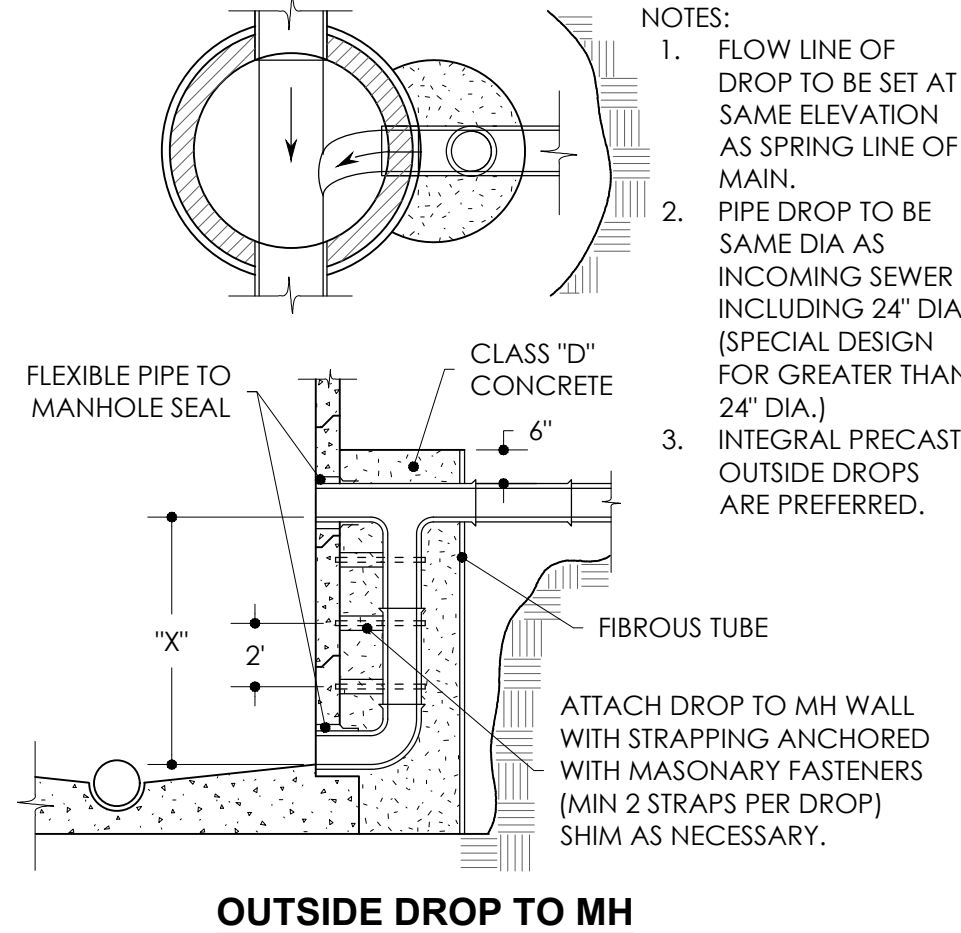
FRAME AND JOINT SEALING DETAIL



FLEX PIPE TO MH

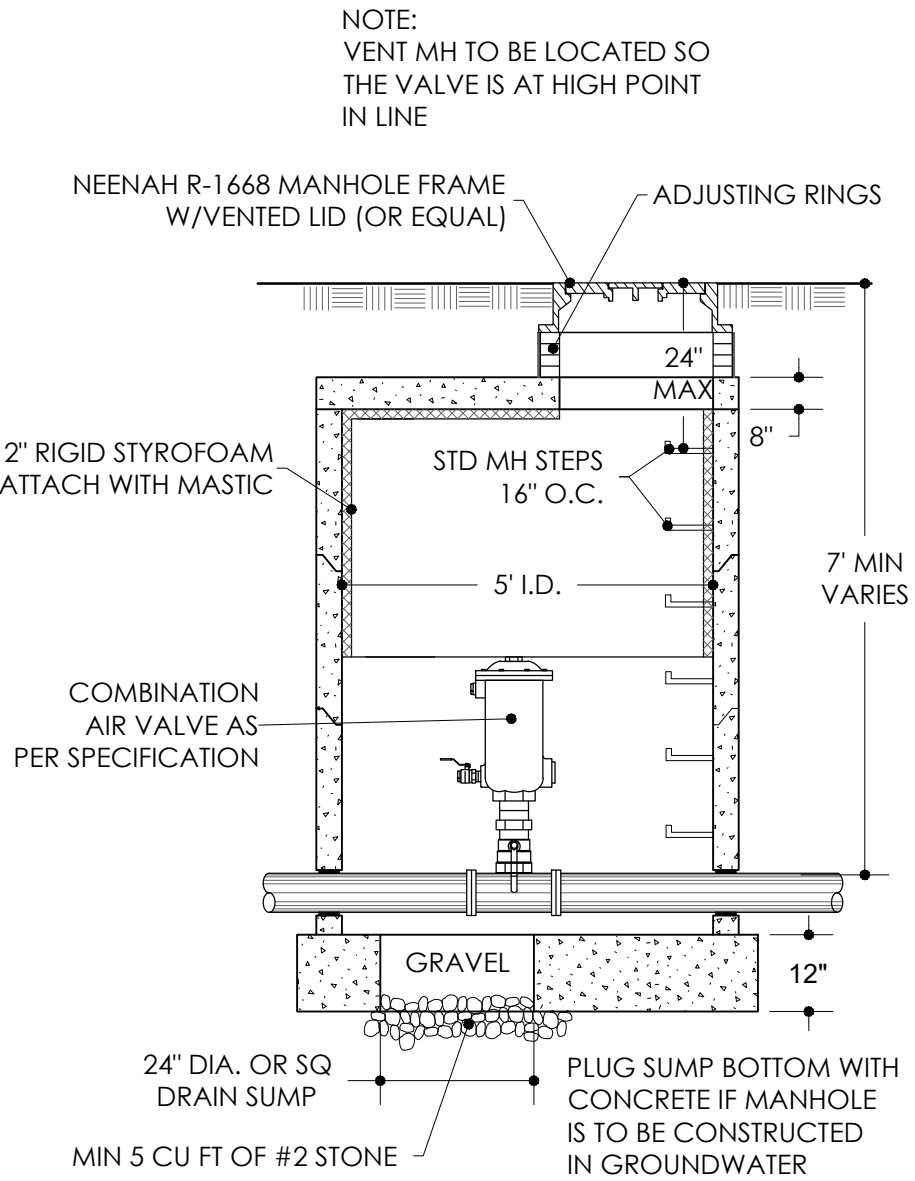


FORCEMAIN TO MH

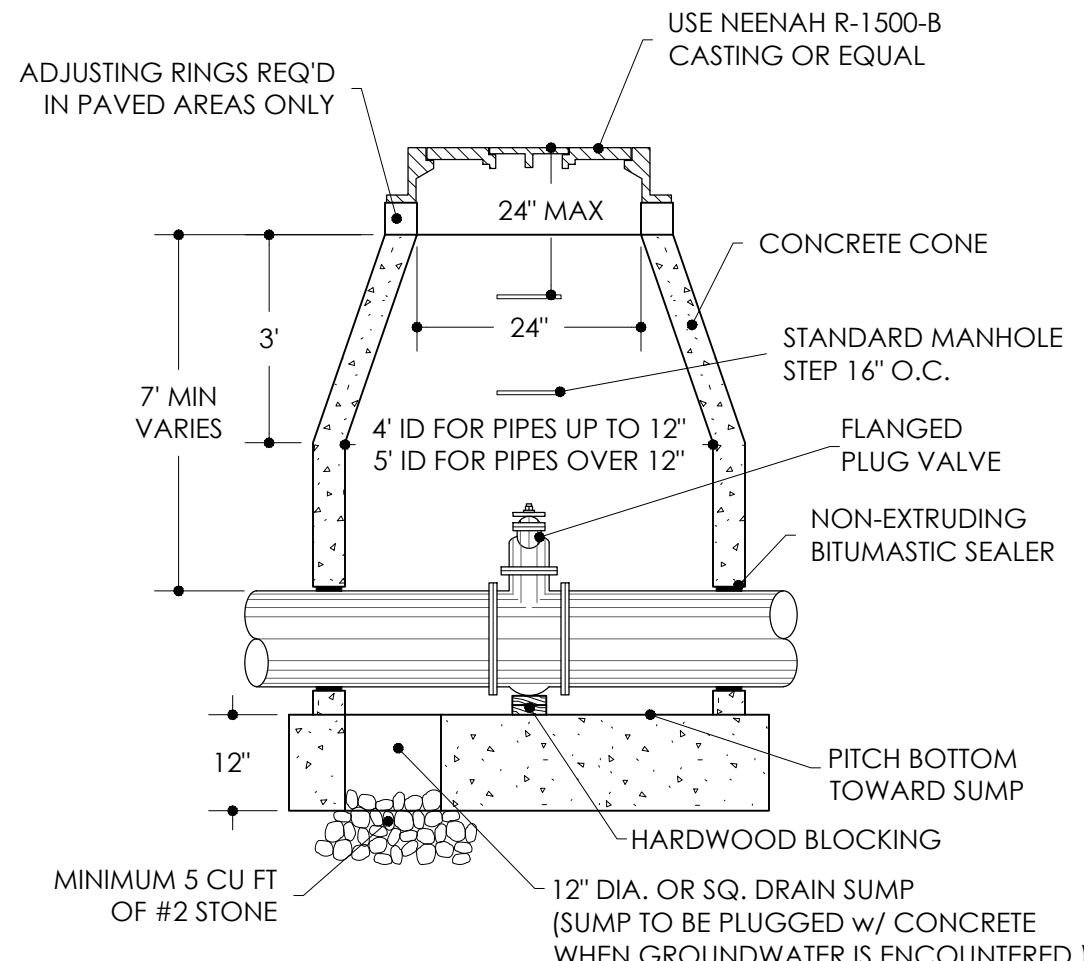


OUTSIDE DROP TO MH

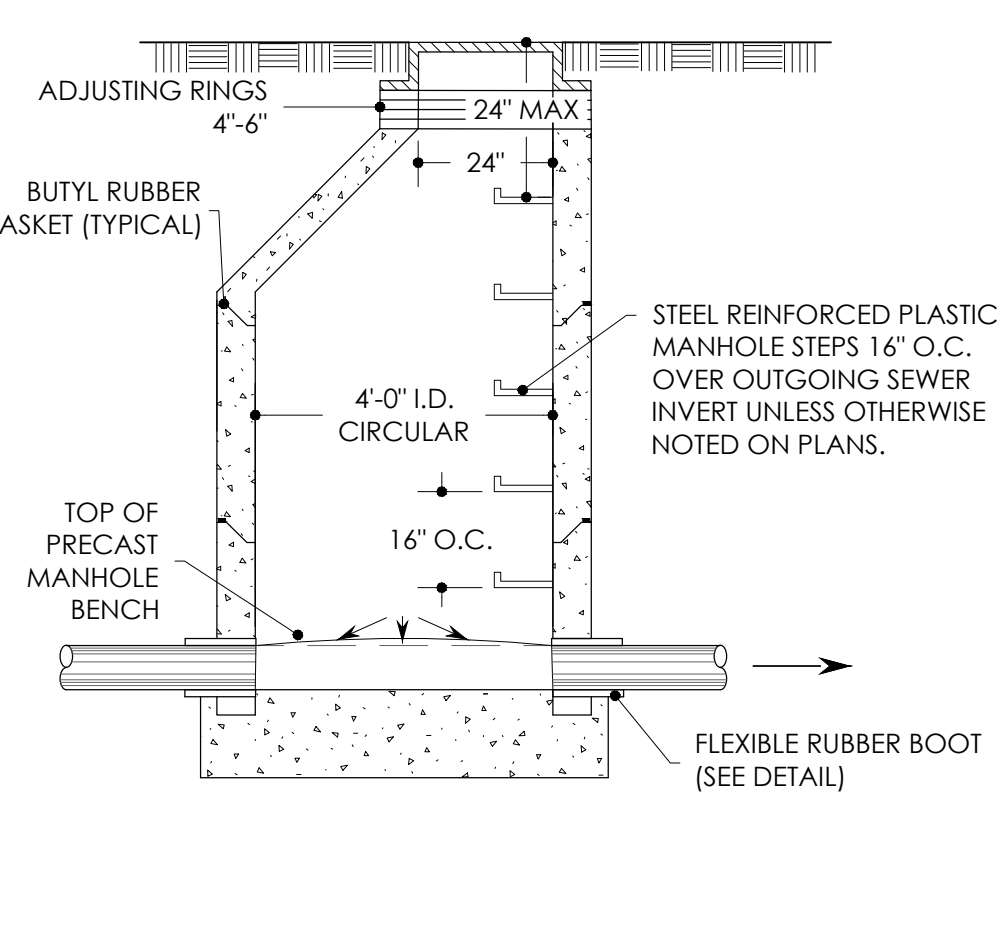
TYPICAL MANHOLES



FORCEMAIN  
STANDARD VENT MH

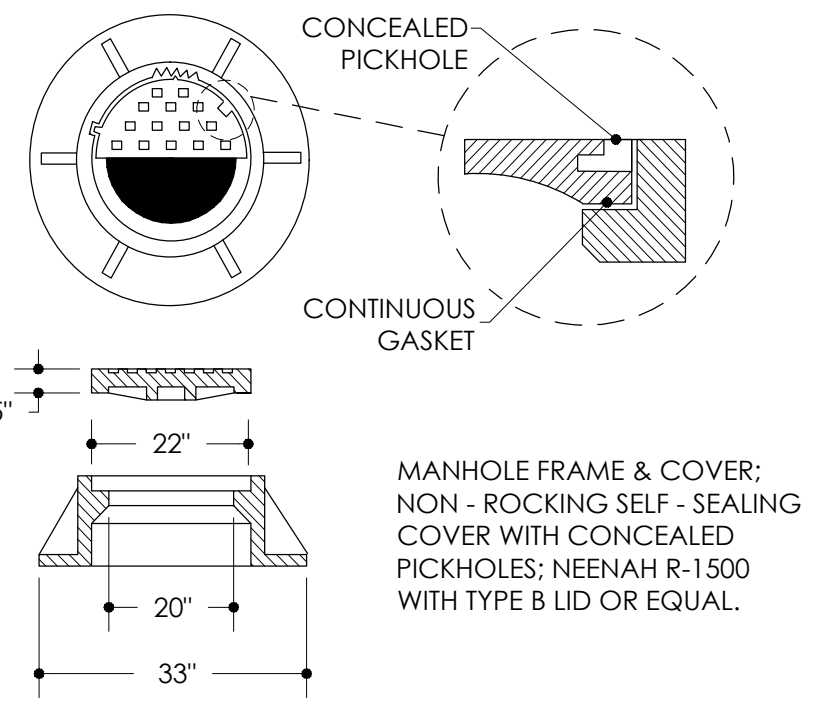


FORCEMAIN  
STANDARD VALVE MH

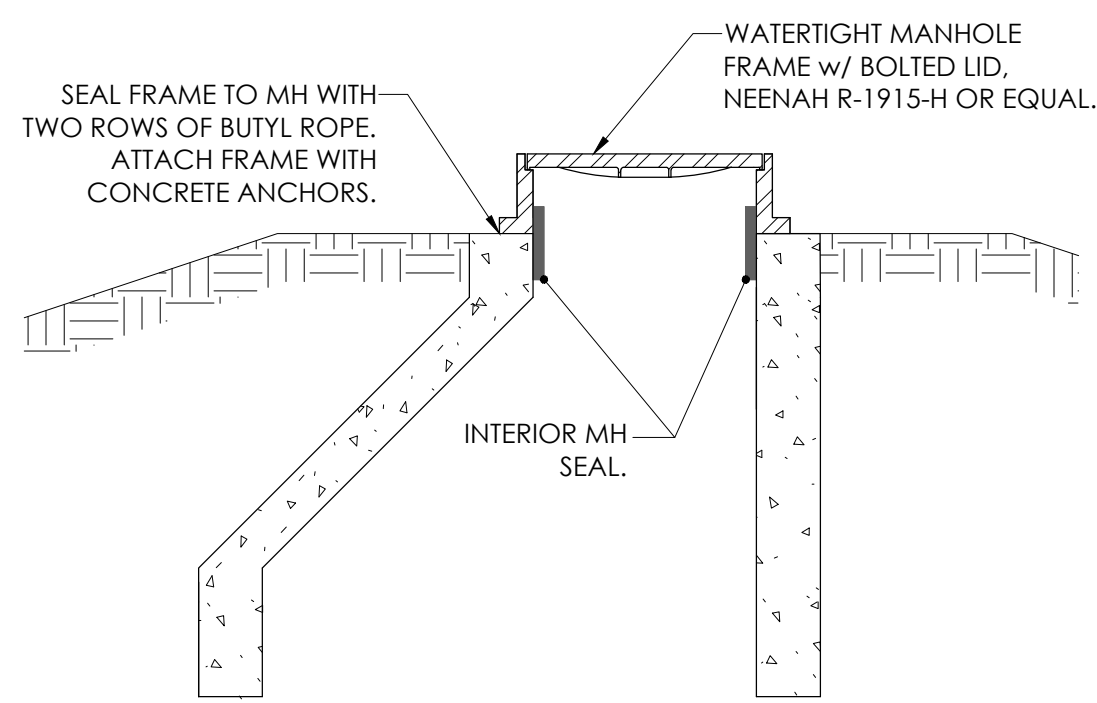


GRAVITY MAIN  
STANDARD PRECAST MH

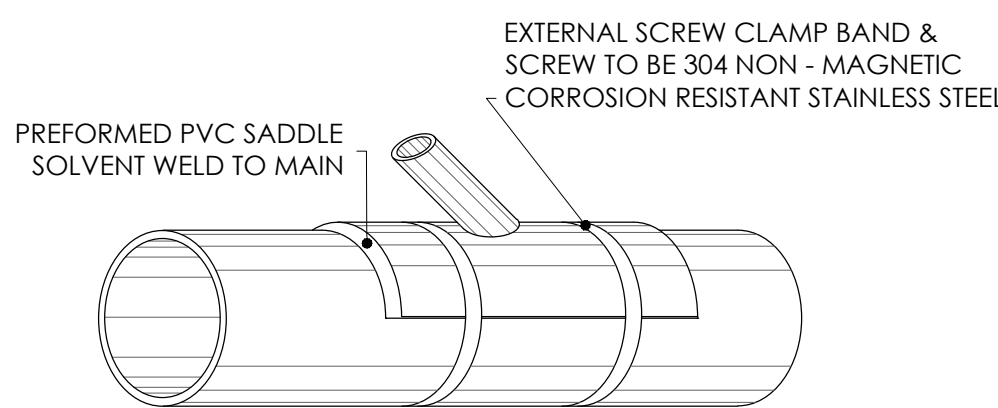
TYPICAL MANHOLE CONNECTIONS



TYPICAL FRAME & COVER



WATERTIGHT MANHOLE DETAIL



STANDARD PIPE SADDLE FOR WYE SERVICE CONNECTION TO SEWER

SADDLE INSTALLATION:

- MARK OUTLINE OF HOLE ON PIPE WITH TEMPLATE
- USE KEYHOLE OR SLOW SPEED SABER SAW TO CUT HOLE, DO NOT START HOLE WITH A HAMMER!
- APPLY PRIMER & CEMENT LIBERALLY TO CLEAN DRY SURFACE OF PIPE & UNDERSIDE OF SADDLE
- IMMEDIATELY PLACE SADDLE ON PIPE & PROCEED TO TIGHTEN THE TWO STAINLESS STEEL BANDS AROUND PIPE
- NEOPRENE SADDLES ARE NOT ALLOWED.