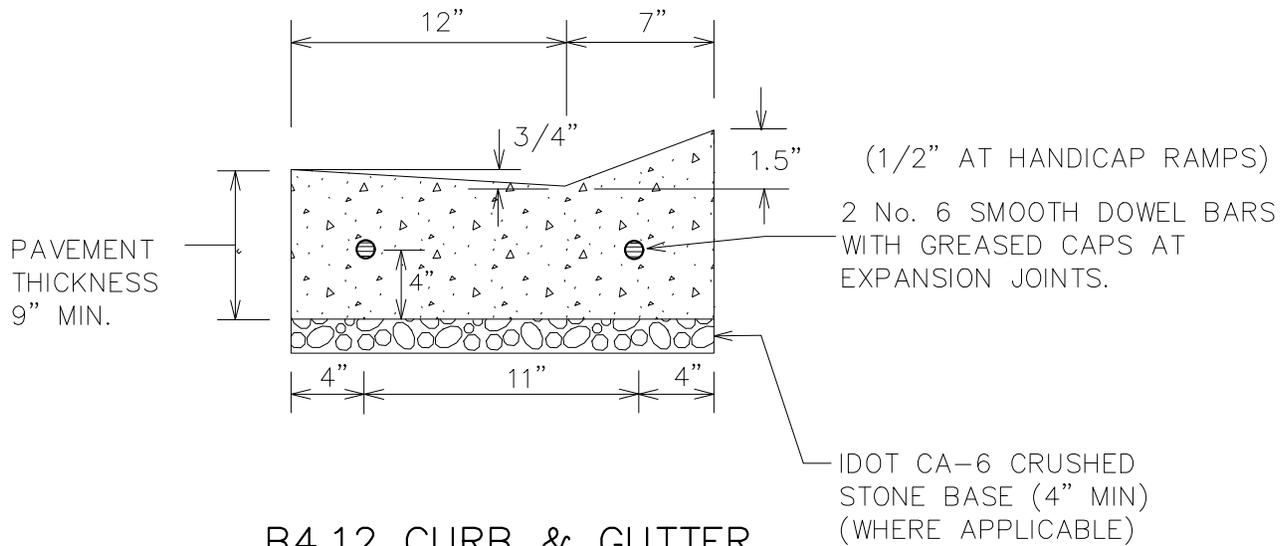
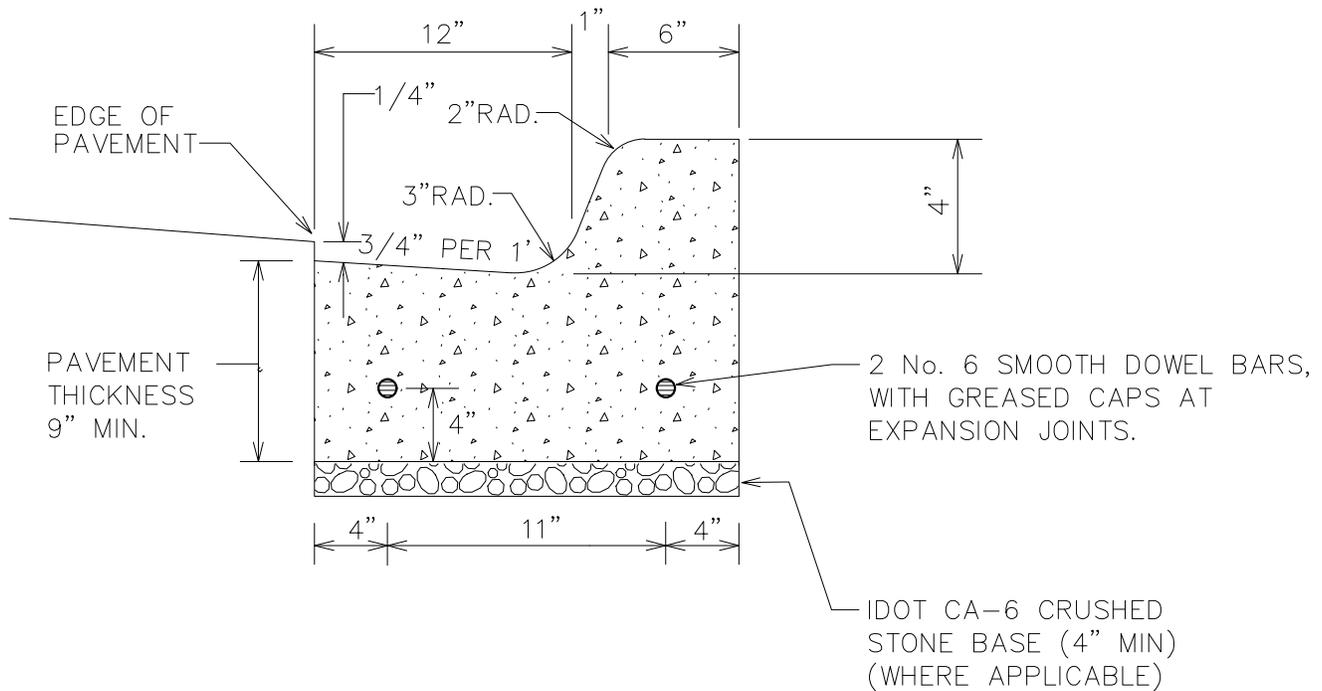


DEPRESSED CURB



B4.12 CURB & GUTTER



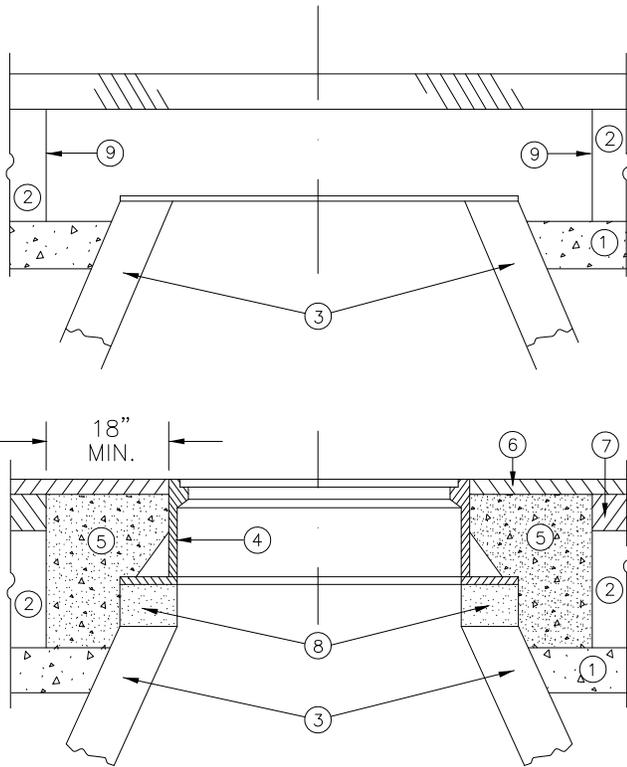
NOTES:

1. CONTRACTION JOINTS SHALL BE PLACED AT 15' INTERVALS, AND SHALL BE GROOVED WITH AN EDGING TOOL. SEE ARTICLE 420.10 OF IDOT STANDARD SPECIFICATIONS.
2. EXPANSION JOINTS SHALL BE PLACED AT 60' (MAX) INTERVALS, AT ALL P.C.'S AND P.T.'S, CURB RETURNS, AND AT THE END OF EACH POUR
3. P.C.C. SHALL CONSIST OF IDOT CLASS SI (6.1 BAG MIX) CONCRETE, WITH 5% TO 8% AIR ENTRAINMENT, AND A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 14 DAYS.(NO FLY ASH ALLOWED)

FOR RESIDENTIAL STREETS ONLY

DATE: 2-1-2023
NOT TO SCALE

B4.12 COMB. CONCRETE CURB AND GUTTER (SPECIAL)
B4.12 P.C.C. INTEGRAL CURB AND GUTTER (SPECIAL)



LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ EXISTING STRUCTURE
- ④ FRAME AND LID (SEE NOTES)
- ⑤ CLASS SI CONCRETE
- ⑥ PROPOSED HMA SURFACE COURSE
- ⑦ PROPOSED HMA BINDER COURSE
- ⑧ PROPOSED MORTAR, STEEL SHIMS & ADJUSTING RINGS 8" MAXIMUM
- ⑨ FULL DEPTH SAW CUT

NOTES:

EXISTING FRAMES AND LIDS SHALL BE REMOVED AND RETURNED TO THE VILLAGE OF WINNETKA BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER.

VILLAGE OF WINNETKA CASTINGS ARE THE PROPERTY OF THE VILLAGE AND THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF REMOVAL AND DISPOSITION OF THE CASTINGS.

INSTALLATION OF NEW OR ADJUSTMENTS TO EXISTING FRAMES & LIDS WILL NOT BE PAID FOR SEPARATELY BUT ARE INCLUDED AS PART OF THE COST PER EACH ARE INCLUDED AS PART OF THE COST PER EACH ADJUSTED, SPECIAL".

CONSTRUCTION PROCEDURES

STAGE 1 (AFTER PAVEMENT MILLING AND PLACEMENT OF HMA BINDER)

- A) FULL DEPTH SAW CUT 5' X 5' SQUARE OR DIAMOND AROUND CENTER OF FRAME TO BE ADJUSTED
- B) REMOVE FRAME, EXISTING PAVEMENT AND AGGREGATE MATERIAL TO A DEPTH OF 2" BELOW TOP OF MANHOLE STRUCTURE OR 2" BELOW BOTTOM OF LOWEST ADJUSTMENT RING.
- C) ADJUST NEW FRAME TO MATCH PROPOSED HMA PAVEMENT SURFACE GRADE USING MORTAR, STEEL SHIMS EMBEDDED IN MORTAR, AND PRECAST CONCRETE ADJUSTING RINGS.
- D) COMPACT EXISTING AGGREGATE STONE BASE.
- E) FILL 5'X5' SURROUNDING SPACE WITH IDOT APPROVED CLASS SI CONCRETE TO THE SAME ELEVATION OF THE TOP OF THE BINDER COURSE.
- F) PAVE SURFACE COURSE OVER 5'X 5' CONCRETE COLLAR.

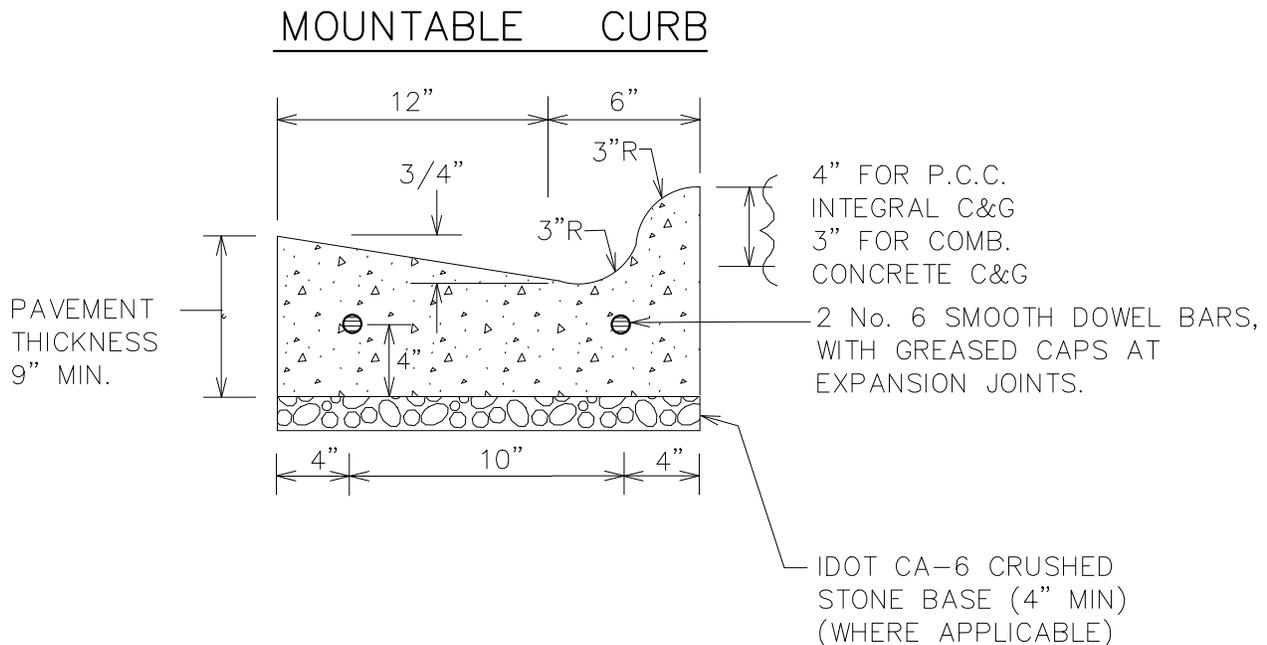
THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS

NOT TO SCALE

FRAME
AND LID
ADJUSTMENT
WITH
CONCRETE
COLLAR

DATE: 2-1-2023

MOUNTABLE CONCRETE CURB & GUTTER



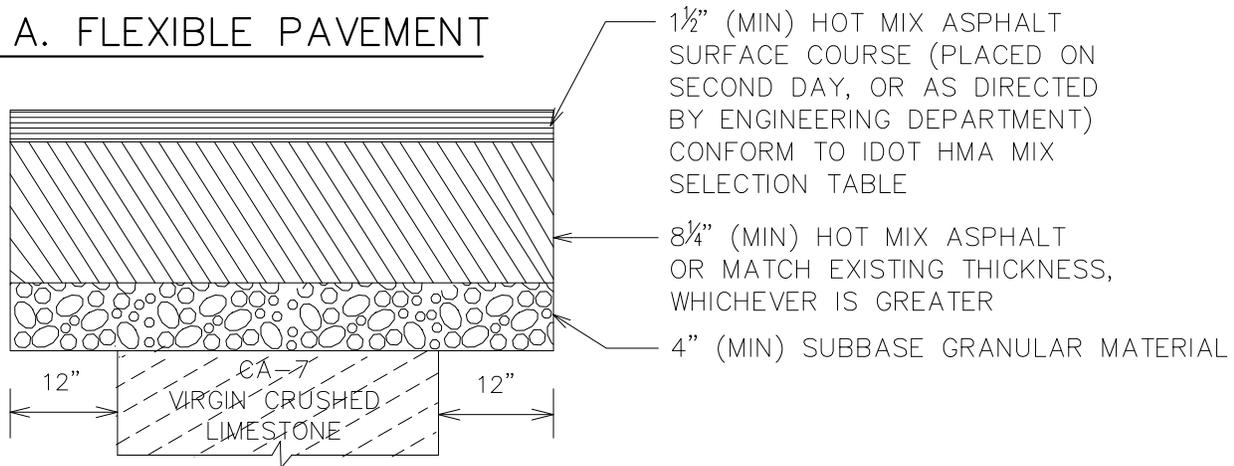
NOTES:

- 1.) 1/2" THICK PREFORMED EXPANSION JOINTS SHALL BE INSTALLED AT 50 FOOT INTERVALS. PROVIDE 2-3/4" STEEL DOWEL BARS AT EXPANSION JOINTS.
- 2.) EXPANSION JOINTS SHALL BE INSTALLED ON EACH SIDE, A DISTANCE OF 2 FEET FROM A STRUCTURE THAT FALLS WITHIN THE CURB AND GUTTER.
- 3.) CONSTRUCTION JOINTS SHALL BE SAWED TO A MINIMUM DEPTH OF 2 INCHES AND PLACED AT 10 FOOT INTERVALS. SAW CUTS SHALL BE SAWED NO SOONER THAN 6 HOURS AND NO LATER THAN 24 HOURS AFTER PLACEMENT OF CONCRETE.
- 4.) CURBS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (IDOT). MOST RECENT EDITION UNLESS NOTED OR DEPICTED HEREIN.
- 5.) A PROTECTIVE COAT SHALL BE APPLIED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

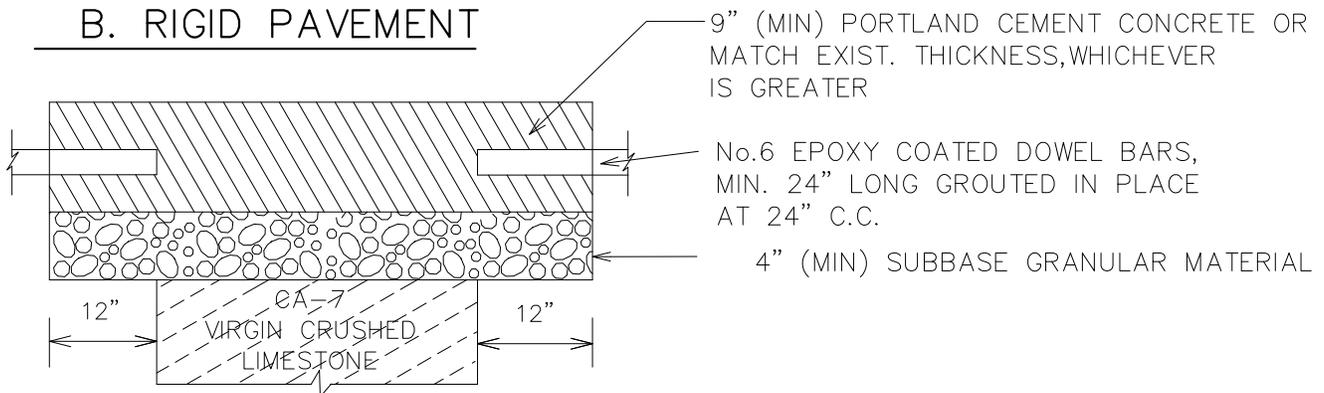
MOUNTABLE
CURB & GUTTER

DATE: 2-1-2023

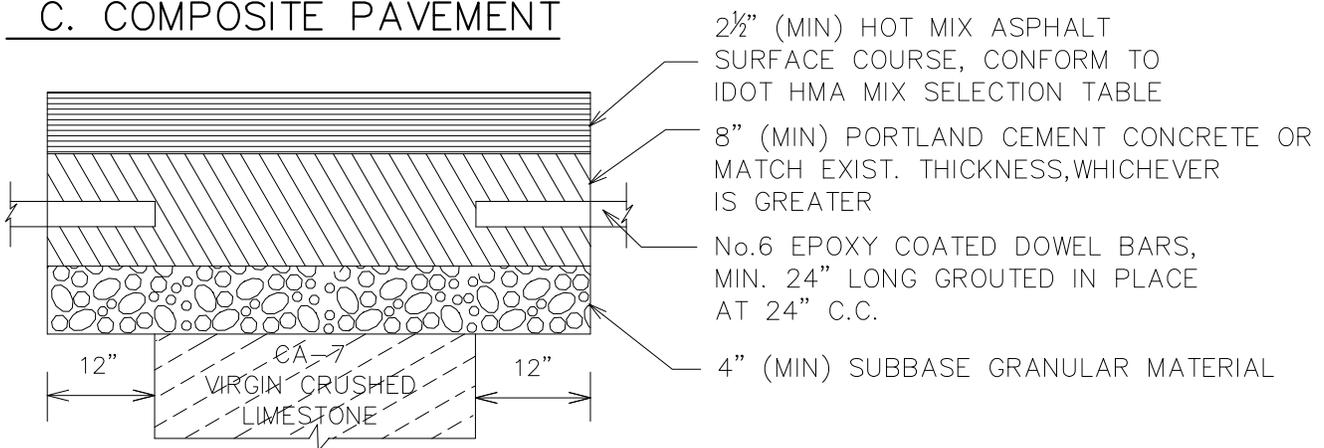
A. FLEXIBLE PAVEMENT



B. RIGID PAVEMENT



C. COMPOSITE PAVEMENT



NOTE:

1. ALL PAVEMENT PATCHES SHALL BE SAWCUT FULL-DEPTH A MINIMUM OF ONE FOOT BEYOND THE LIMITS OF THE FAILED PAVEMENT IN ALL DIRECTIONS.
2. PORTLAND CEMENT CONCRETE SHALL CONFORM TO IDOT CLASS PP MIN. 3.500 PSI (6.1 BAG MIX) AT 14 DAYS, WITH 5 % TO 7 % AIR ENTRAINMENT.(NO FLY ASH ALLOWED)

NOT TO SCALE

PAVEMENT
PATCH
DETAIL

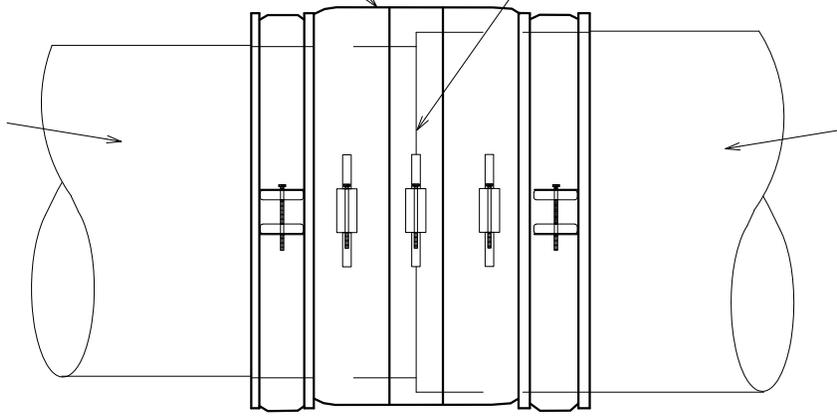
DATE: 2-1-2023

NON-SHEAR BAND SEAL
COUPLING OR EQUAL

BUTT PIPES OF MATCHING
DIAMETERS TOGETHER

EXISTING OR
REPLACED SEWER

EXISTING SEWER

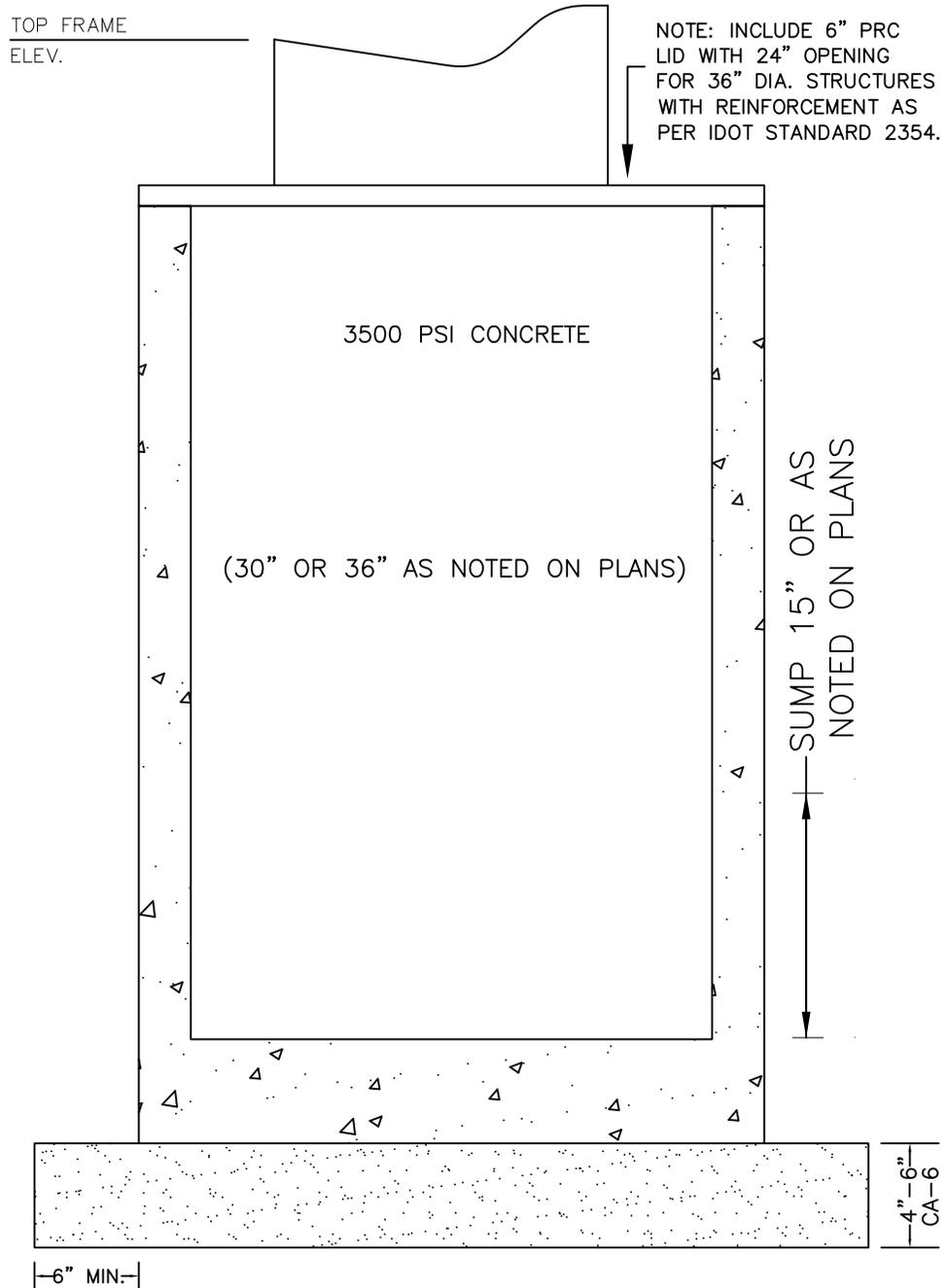


NOT TO SCALE

PIPE
COUPLING
DETAIL

DATE: 2-1-2023

UNLESS OTHERWISE SPECIFIED ON PLANS:
FOR 3" OR 4" M. TYPE CURB & GUTTER USE
NEENAH R-3501-P OR EQUAL. NEENAH R-3513
OR R-2504 FOR DEPRESSED CURB, DRIVEWAY ENTRANCE.
NEENAH R-3170 WITH B.6-12 CURB & GUTTER



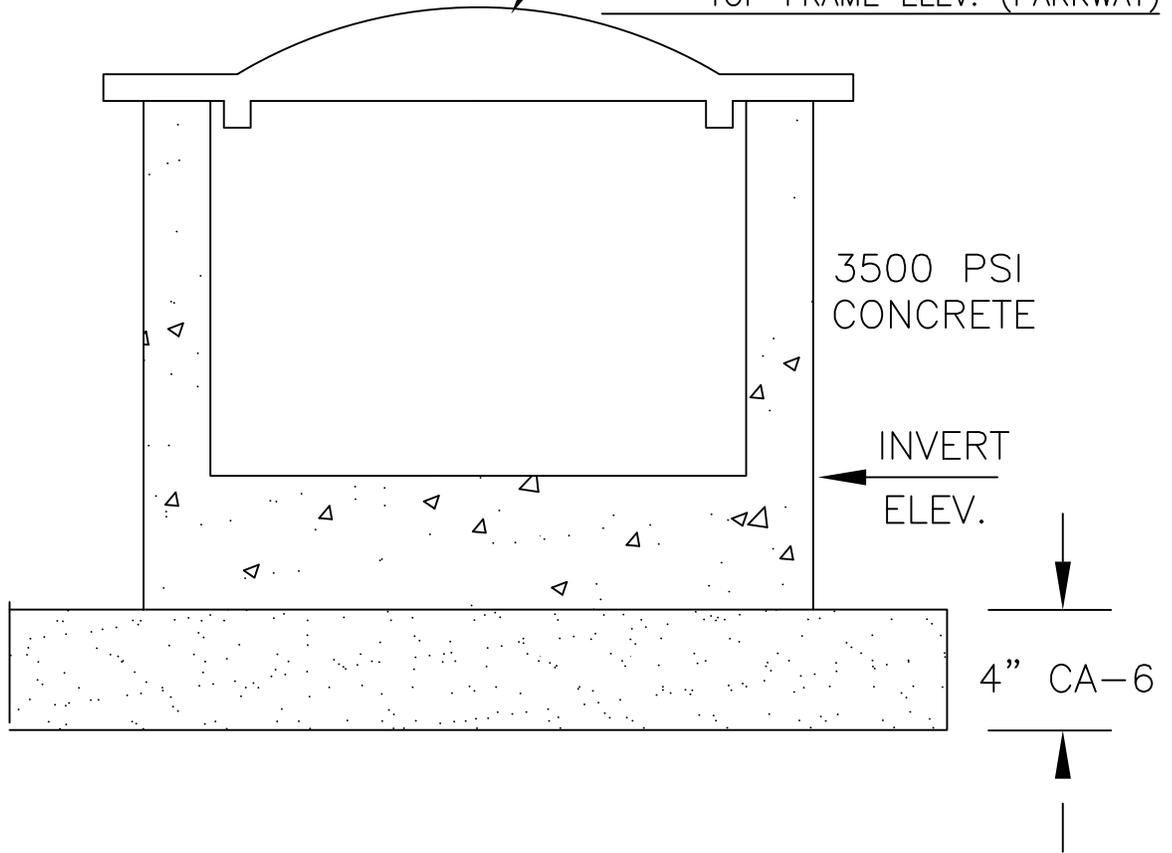
NOT TO SCALE

PRECAST
CATCH BASIN
DETAIL

DATE: 2-1-2023

NEENAH R-4340-B OR EQUAL
(FOR PARKWAY INLET)
OR TYPE 1 FRAME, OPEN LID
(FOR DRIVEWAY INLET)

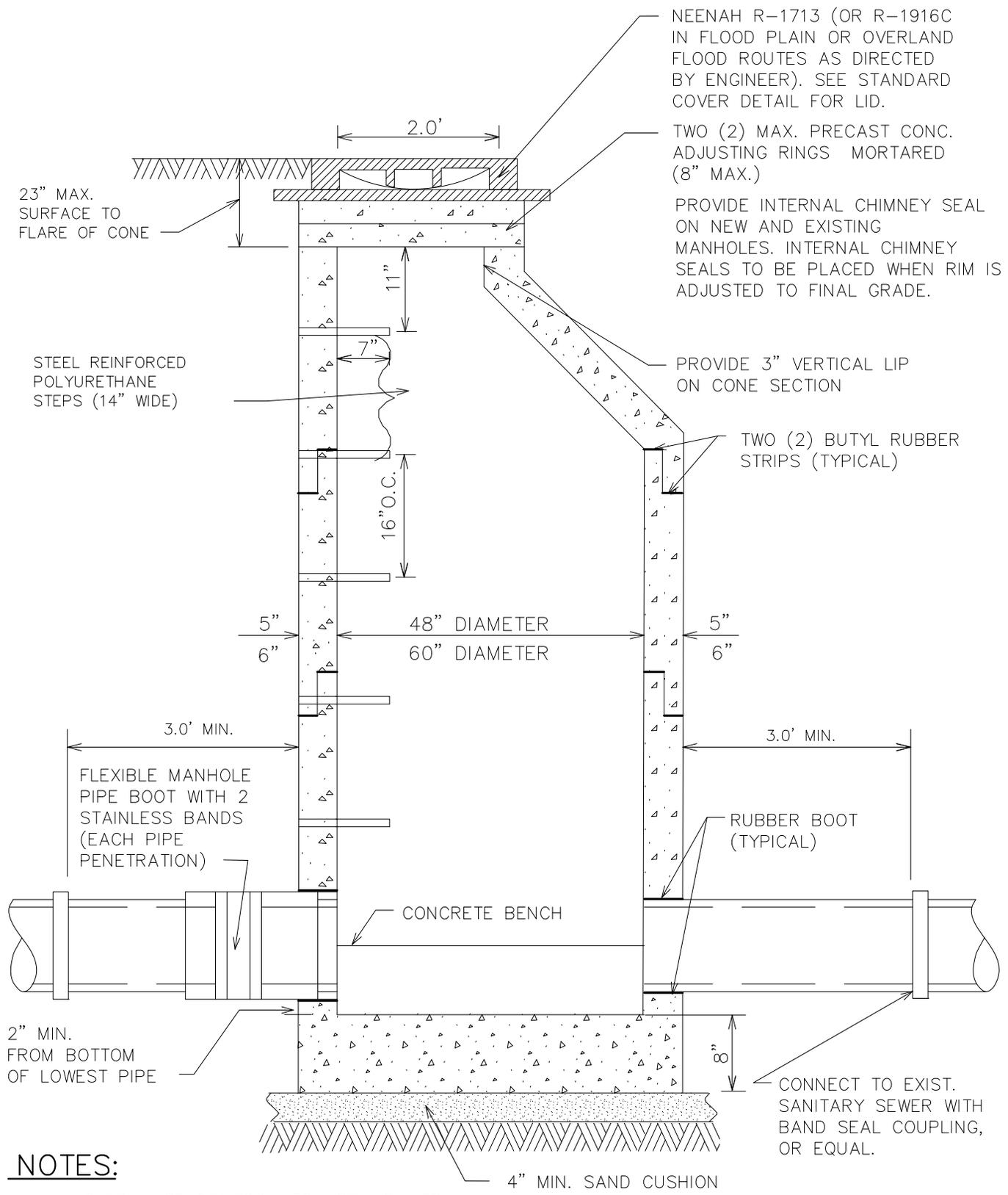
TOP FRAME ELEV. (PARKWAY)



NOT TO SCALE

PRECAST
INLET
DETAIL

DATE: 2-1-2023



NEENAH R-1713 (OR R-1916C IN FLOOD PLAIN OR OVERLAND FLOOD ROUTES AS DIRECTED BY ENGINEER). SEE STANDARD COVER DETAIL FOR LID.

TWO (2) MAX. PRECAST CONC. ADJUSTING RINGS MORTARED (8" MAX.)

PROVIDE INTERNAL CHIMNEY SEAL ON NEW AND EXISTING MANHOLES. INTERNAL CHIMNEY SEALS TO BE PLACED WHEN RIM IS ADJUSTED TO FINAL GRADE.

23" MAX. SURFACE TO FLARE OF CONE

STEEL REINFORCED POLYURETHANE STEPS (14" WIDE)

PROVIDE 3" VERTICAL LIP ON CONE SECTION

TWO (2) BUTYL RUBBER STRIPS (TYPICAL)

3.0' MIN.

FLEXIBLE MANHOLE PIPE BOOT WITH 2 STAINLESS BANDS (EACH PIPE PENETRATION)

CONCRETE BENCH

RUBBER BOOT (TYPICAL)

2" MIN. FROM BOTTOM OF LOWEST PIPE

CONNECT TO EXIST. SANITARY SEWER WITH BAND SEAL COUPLING, OR EQUAL.

4" MIN. SAND CUSHION

NOTES:

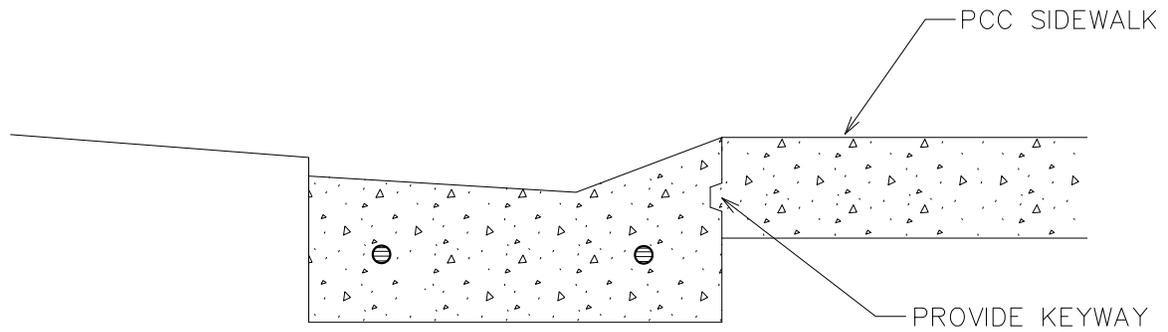
1. MANHOLES MUST CONFORM TO ASTM C-478.
2. MANHOLE SECTIONS TO BE TONGUE AND GROOVED.
3. BENCHES MUST BE PROVIDED IN ALL SANITARY SEWER MANHOLES
4. USE EXTERNAL LIFTING "HOLES" ONLY, BUT NOT FULL PENETRATION.
5. NON-PRECAST OPENINGS SHALL BE CORED AND RUBBER BOOTED.
6. PIPE PENETRATIONS TO BE RUBBER BOOTED AND INTERIOR MORTARED.
7. USE ECCENTRIC CONE ONLY.
8. PRIOR TO THE PLACEMENT OF FINAL LAYER OF ROADWAY, FRAMES AND ADJUSTING RINGS LOCATED WITHIN PAVED AREAS SHALL BE SET IN AN IDOT APPROVED CONCRETE "SI" MIXTURE.

NOT TO SCALE

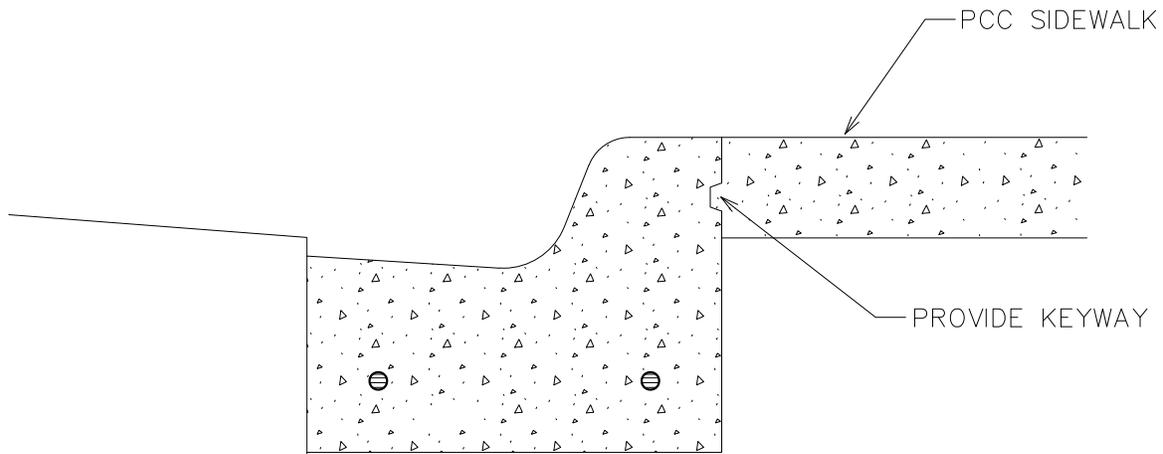
**SANITARY
MANHOLE
DETAIL**

DATE: 2-1-2023

DEPRESSED CURB



CURB & GUTTER



NOTES:

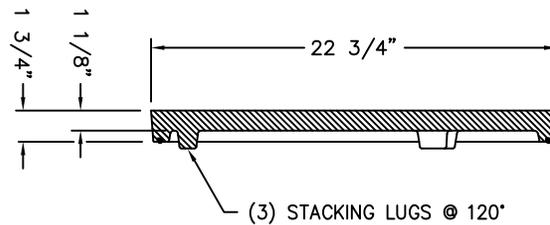
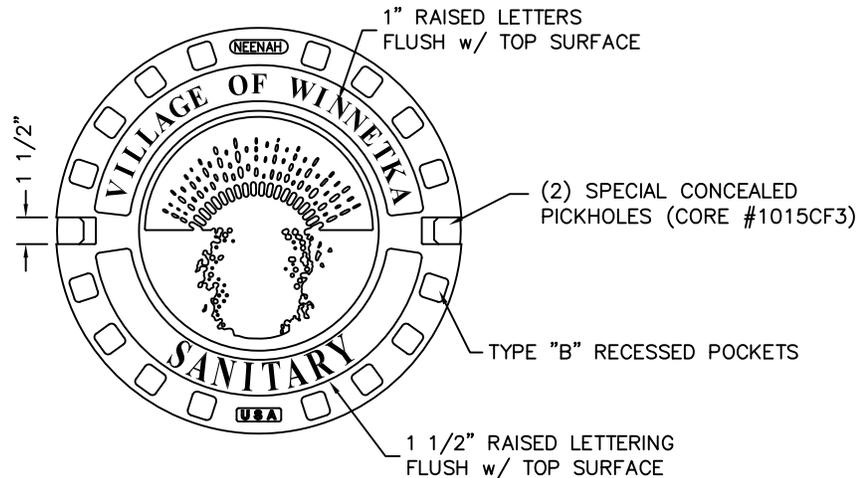
1. SEE TYPICAL DETAIL FOR CURB AND GUTTER FOR CURB DIMENSIONS AND SPECIFICATIONS.

NOT TO SCALE

DATE: 2-1-2023

SIDEWALK AT CURB AND GUTTER

SPECIAL LETTERED R-1713 HDSI WATER VAULT, SANITARY AND STORM SEWER MANHOLE COVER



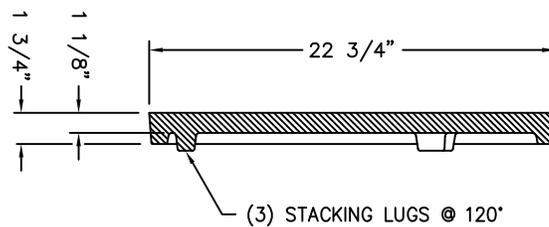
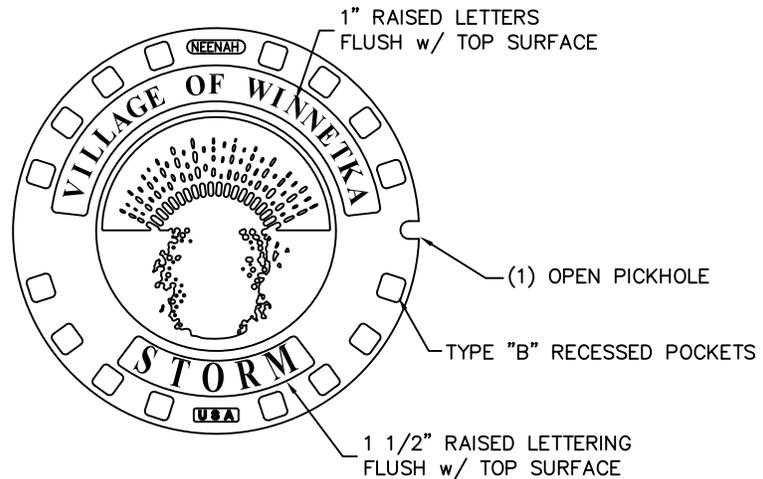
HEAVY DUTY
MATERIAL ASTM A48 CL 35
MACHINED BEARING SURFACE
COVER WT: 125 LBS (56.7 kg)

NOT TO SCALE

STANDARD
COVER
DETAIL

DATE: 2-1-2023

SPECIAL LETTERED R-1713 HDSI WATER VAULT, SANITARY AND STORM SEWER MANHOLE COVER



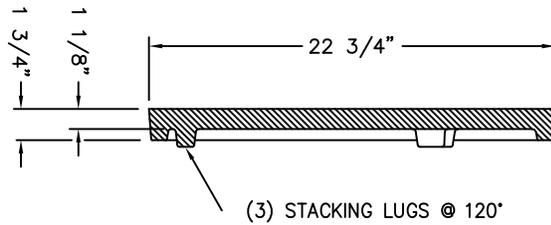
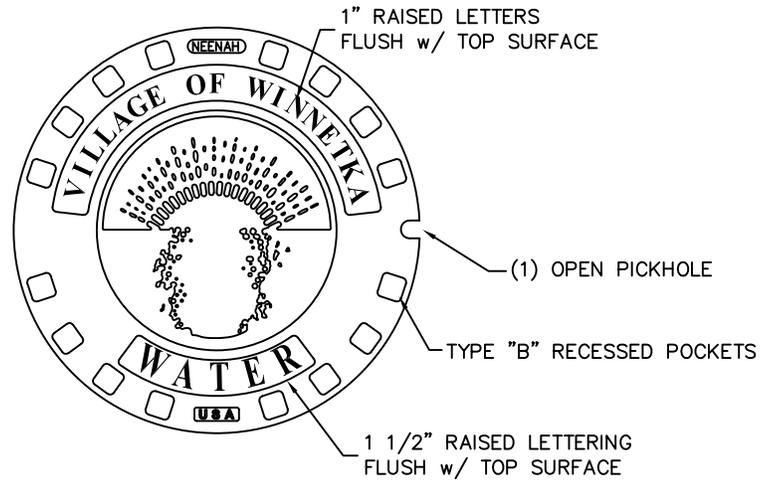
HEAVY DUTY
MATERIAL ASTM A48 CL 35
MACHINED BEARING SURFACE
COVER WT: 125 LBS (56.7 kg)

NOT TO SCALE

STANDARD
COVER
DETAIL

DATE: 2-1-2023

SPECIAL LETTERED R-1713 HDSI WATER VAULT, SANITARY AND STORM SEWER MANHOLE COVER

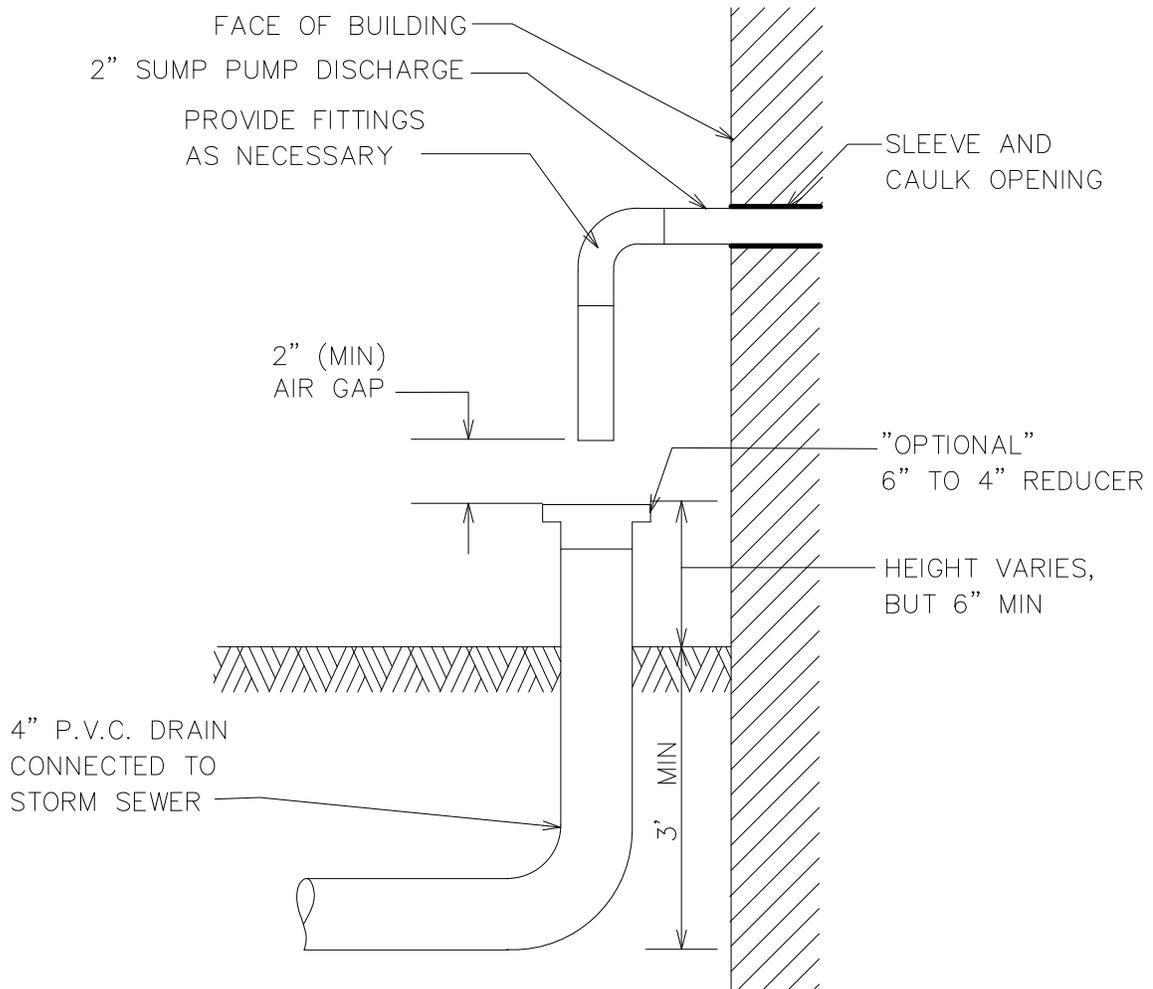


HEAVY DUTY
MATERIAL ASTM A48 CL 35
MACHINED BEARING SURFACE
COVER WT: 125 LBS (56.7 kg)

NOT TO SCALE

STANDARD
COVER
DETAIL

DATE: 2-1-2023



NOTE:

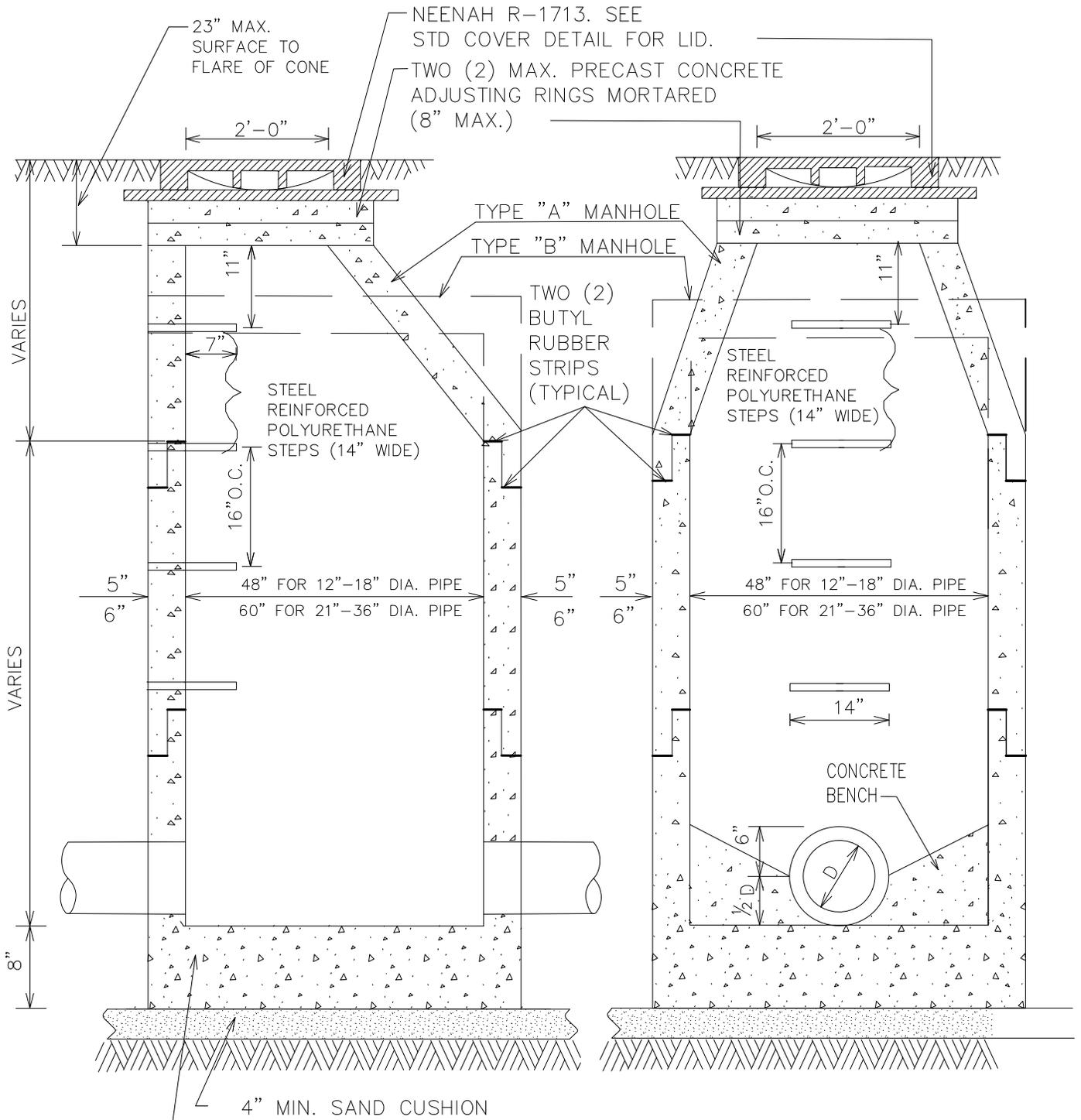
THE VILLAGE OF WINNETKA ALLOWS RESIDENTS TO CONNECT SUMP PUMP DISCHARGE LINES TO THE PUBLIC STORM SEWER SYSTEM. SUMP PUMPS SHALL BE DESIGNED WITH A MINIMUM 2" AIR GAP. A RIGID FOUR-INCH (4") DIAMETER PVC PIPE CAN BE USED TO CONNECT THE INDIVIDUAL SUMP PUMP SERVICE TO THE STORM SEWER. IN NO EVENT SHALL THE SUMP PUMP DISCHARGE INTO THE SANITARY SEWER SYSTEM.

A PLUMBING PERMIT IS REQUIRED PRIOR TO ANY CONNECTION. INCLUDE A PLAT OF SURVEY WITH THE PERMIT APPLICATION, SHOWING THE POINT OF DISCHARGE AND CONNECTION TO THE STORM SEWER. THE SITE PLAN SHALL ALSO INCLUDE PIPE SPECIFICATIONS AND INVERT ELEVATIONS. CALL THE CITY ENGINEERING DIVISION 24 HOURS IN ADVANCE TO SCHEDULE AN INSPECTION.

NOT TO SCALE

SUMP PUMP DISCHARGE CONNECTION DETAIL

DATE: 2-1-2023



4" MIN. SAND CUSHION

CONCRETE BASE CAST INTEGRAL WITH LOWEST BARREL SECTION

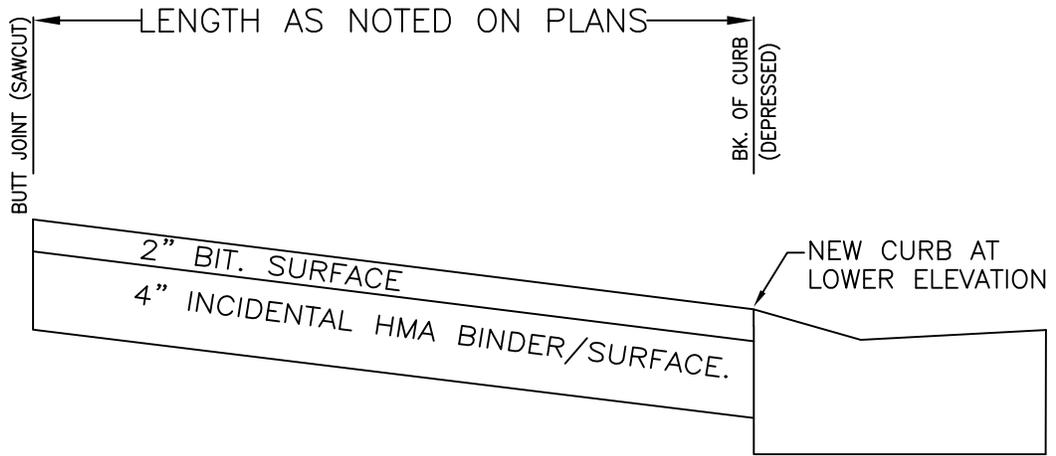
NOTES:

NOT TO SCALE

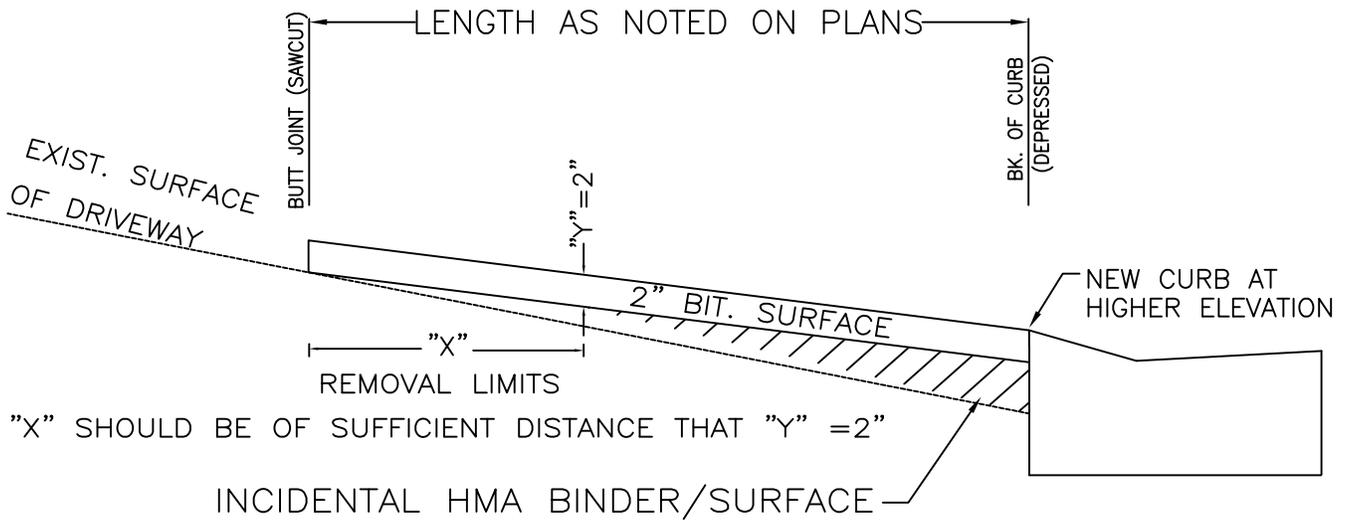
1. MANHOLES MUST CONFORM TO ASTM C-478.
2. MANHOLE SECTIONS TO BE TONGUE AND GROOVED.
3. BENCHES MUST BE PROVIDED IN ALL STORM SEWER MANHOLES.
4. NON-PRECAST OPENINGS SHALL BE CORED AND RUBBER BOOTED.
5. MORTAR ALL PIPE PENETRATIONS INSIDE AND OUTSIDE OF STRUCTURE.
6. IN "SUBMERGED" CONDITIONS, ALL PIPE PENETRATIONS TO BE CORED, RUBBER BOOTED AND INTERIOR MORTARED.
7. PRIOR TO THE PLACEMENT OF FINAL LAYER OF ROADWAY, FRAMES AND ADJUSTING RINGS LOCATED WITHIN PAVED AREAS SHALL BE SET IN AN IDOT APPROVED CONCRETE "SI" MIXTURE.

DATE: 2-1-2023

TYPE
A & B
STORM
MANHOLE
DETAIL



DRIVEWAY SURFACE TO BE LOWERED



"X" SHOULD BE OF SUFFICIENT DISTANCE THAT "Y" = 2"

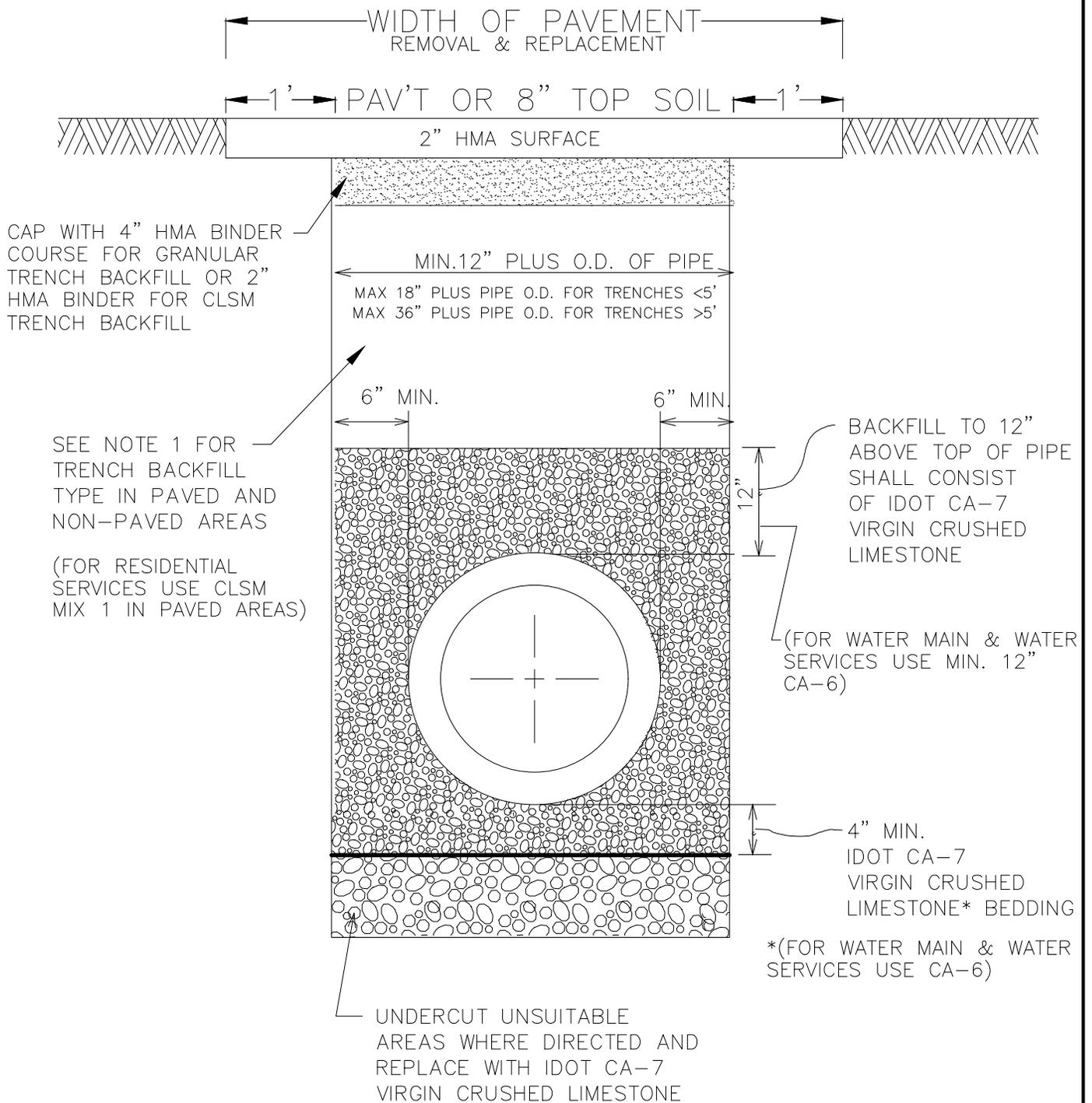
INCIDENTAL HMA BINDER/SURFACE

NEW SURFACE AT HIGHER ELEVATION

NOT TO SCALE

TYPICAL
HMA DRIVEWAY

DATE: 2-1-2023



NOTES:

1. TRENCH BACKFILL MATERIAL SHALL CONSIST OF CA-7 (VIRGIN CRUSHED LIMESTONE) UNDER PAVED AREAS OR WITHIN ZONE OF INFLUENCE, OR CA-6 IN NON-PAVED AREAS.
2. ALL MATERIALS SHALL BE PROPERLY COMPACTED PER SPECIFICATIONS (INUNDATION OR WATER JETTING NOT ALLOWED)
3. ALL TRENCH EXCAVATIONS SHALL MEET OSHA REQUIREMENTS
4. ALL WATER MAINS & WATER SERVICES SHALL HAVE MIN. 5.5 FEET DEPTH OF COVER.

DATE: 2-1-2023
NOT TO SCALE

**TYPICAL
PIPE
TRENCH
DETAIL**

NEENAH R-1713-B WITH
SELF SEALING LID "WATER"
CAST INTO THE COVER

PLUMB LINE TO OPERATING NUT
MUST NOT BE CLOSER THAN 6"
FROM EDGE OF FRAME

CONCRETE ADJUSTING RING
AND MORTAR IF NEEDED
8" MAXIMUM

VALVE VAULT SHALL BE
CONSTRUCTED WITH PRECAST
REINFORCED CONCRETE SECTIONS

BUTYL RUBBER MATERIAL
STRIP AND/OR RUBBER
GASKET. (TYP.)

TAPPING SLEEVE 1' MIN.
W/CORP. FOR FLUSHING

MORTAR
6" REINFORCED
CONCRETE SLAB

5.5' MIN. OR MEET EXIST. CONDITIONS

4.0'

2.0'

16" O.C.
STEEL REINFORCED
POLYURETHANE STEPS

1.0'

12"

CONCRETE SUPPORT

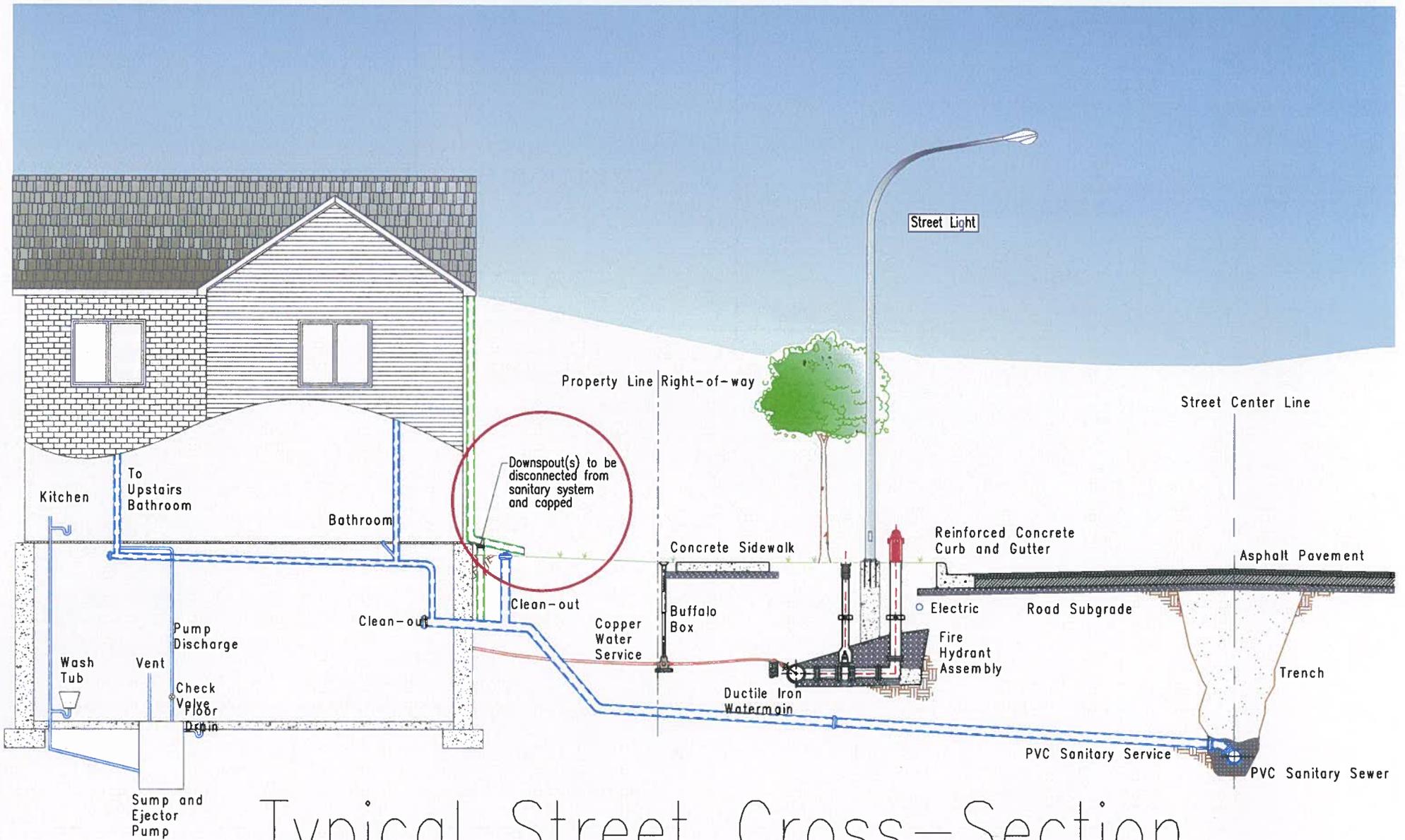
PROVIDE 1/2" PREFORMED JOINT FILLER
BETWEEN PIPE AND PEDESTAL

CA-7 TO PROVIDE EVEN
SUBGRADE, 4" MIN.

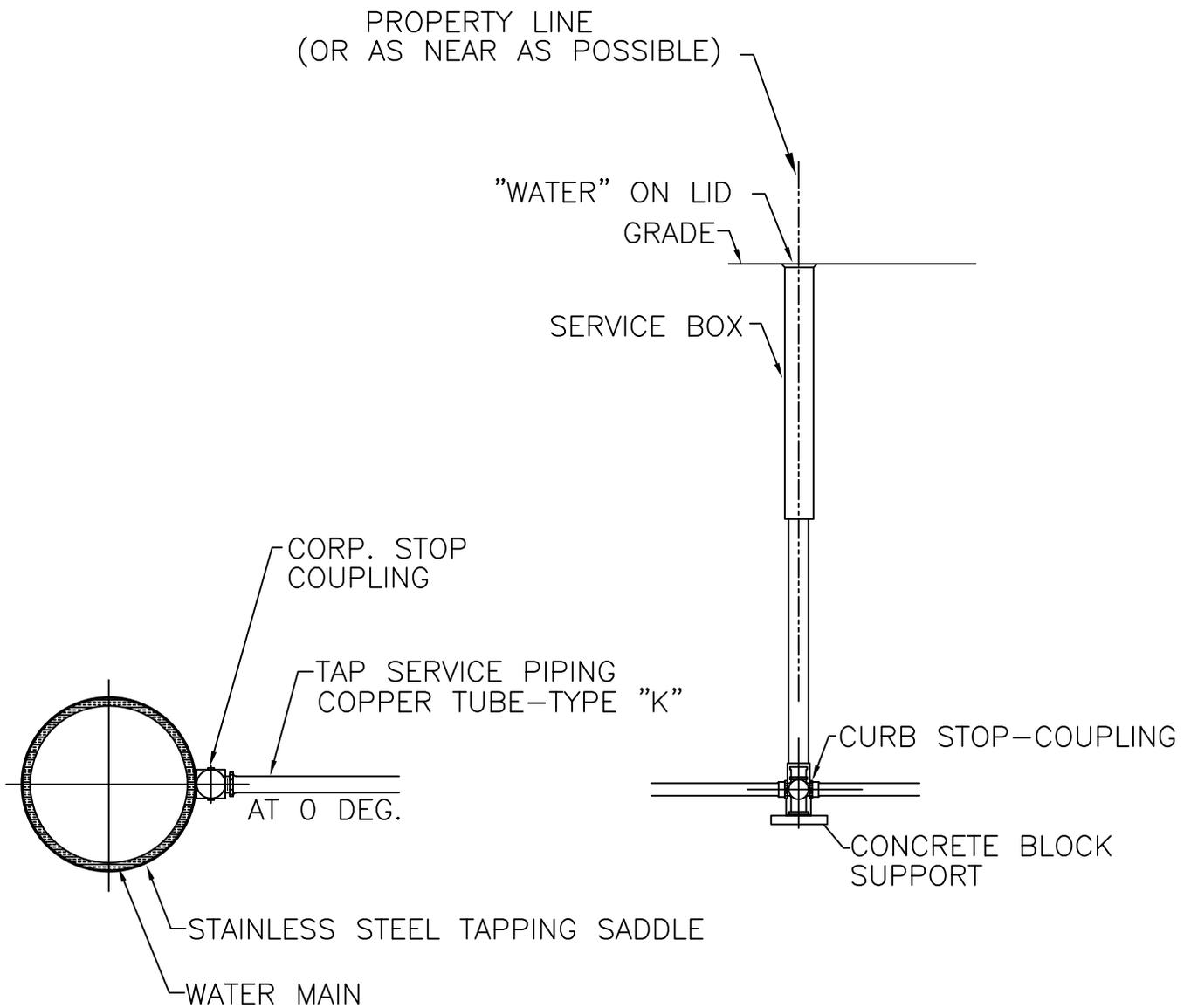
NOT TO SCALE

TYPICAL
PRESSURE
CONNECTION

DATE: 2-1-2023

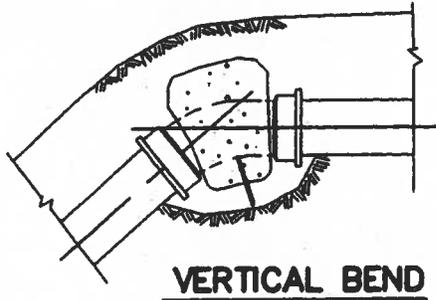


Typical Street Cross-Section

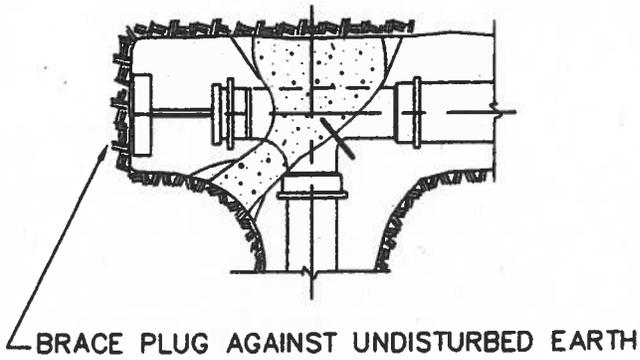


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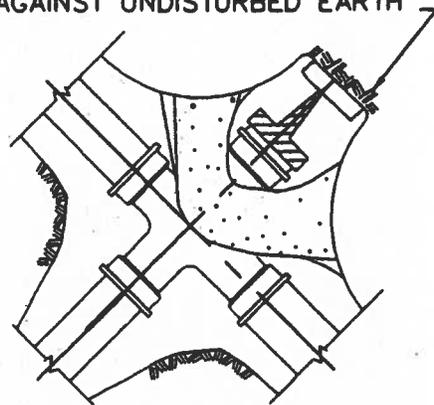
TYPICAL
TAP
SERVICE
PIPING
(COPPER)



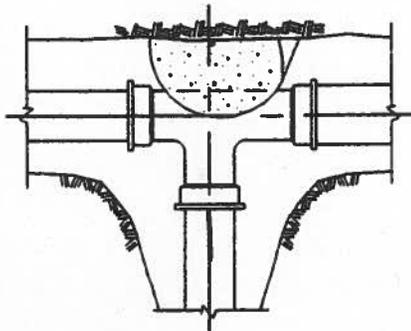
BRACE PLUG AGAINST UNDISTURBED EARTH



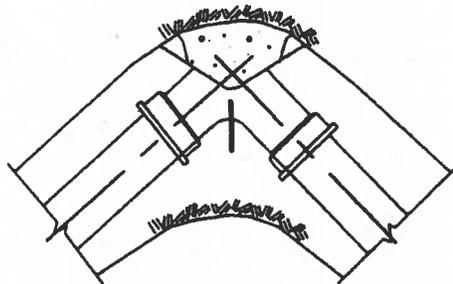
PLUGGED TEE



PLUGGED CROSS



TEE



90° ELBOW

NOTE: ALL BLOCKS BEAR AGAINST UNDISTURBED EARTH.
 ARROWS INDICATE DIRECTION OF THRUST.
 ALL BLOCKS TO BE 3000 P.S.I. CONCRETE.
 ALL FITTINGS SHOWN IN PLAN EXCEPT VERTICAL BEND.

**TYPICAL
 THRUST BLOCK
 INSTALLATIONS**

DMS

NEENAH R-1713-B WITH
SELF SEALING LID "WATER"
CAST INTO THE COVER

CONCRETE ADJUSTING RING
AND MORTAR IF NEEDED
8" MAXIMUM

VALVE VAULT SHALL BE
CONSTRUCTED WITH PRECAST
REINFORCED CONC. SECTIONS

BUTYL RUBBER MATERIAL
GASKET. (TYP.)

TAPPING SLEEVE 1' MIN.
W/CORP. FOR FLUSHING

16" O.C.
STEEL REINFORCED
POLYURETHANE STEPS

1.0' MIN.

12"

5.5' MIN.

4.0'

2'

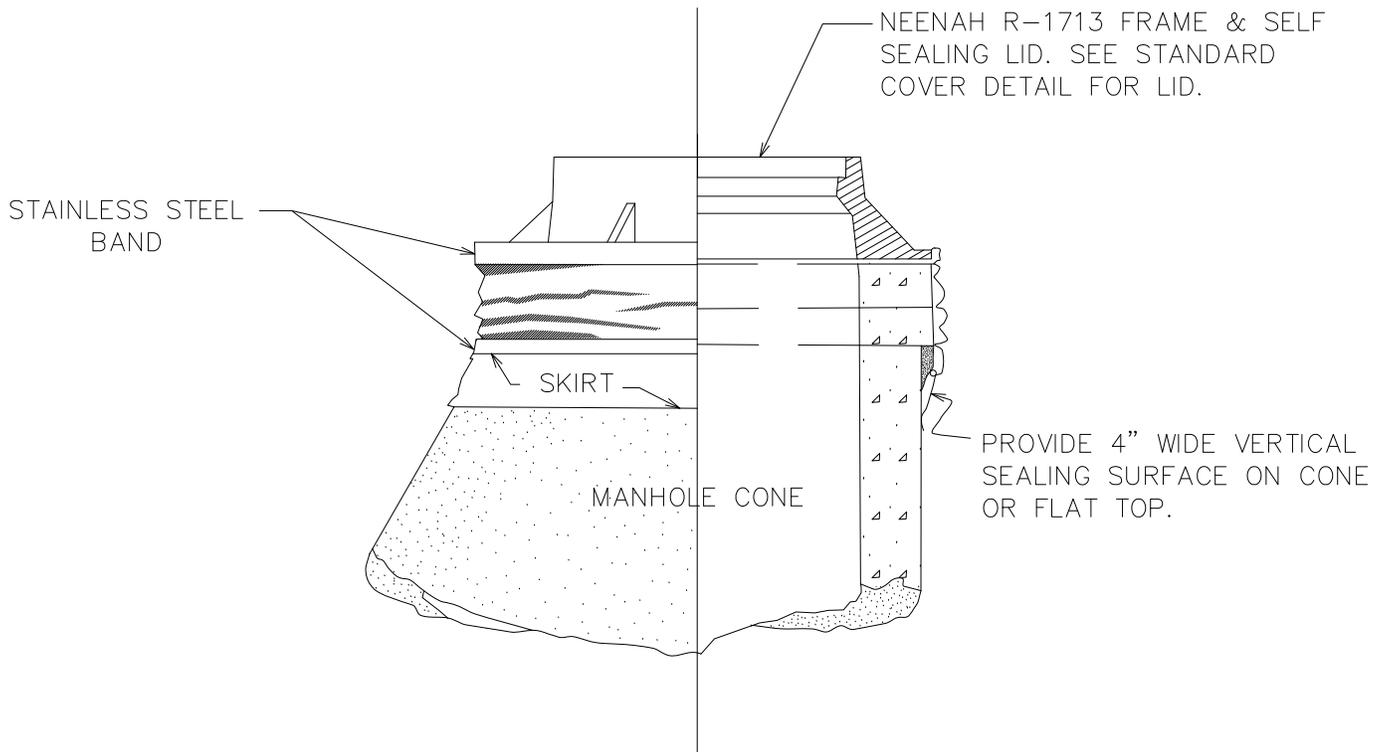
PROVIDE 1/2" PREFORMED JOINT
FILLER BETWEEN PIPE & PEDESTAL

CONCRETE SUPPORT
CA-7 TO PROVIDE EVEN
SUBGRADE, 4" MIN.

NOT TO SCALE

TYPICAL VALVE VAULT
WITH TAPPING SLEEVE
W/CORP. FOR FLUSHING

DATE: 2-1-2023



INTERNAL CHIMNEY SEALS
TO SPAN CHIMNEY HEIGHTS OF:

0 - 4½"	CHIMNEY SEAL ONLY
4½" TO 9"	SEAL + 7" EXTENSION
9" TO 12"	SEAL + 10" EXTENSION
OVER 12"	SEAL + MULTI. EXTENSIONS

EXTERNAL CHIMNEY SEALS
TO SPAN CHIMNEY HEIGHTS OF:

0 - 3"	NARROW (6") SEAL ONLY
3 TO 6½"	STANDARD (9") SEAL ONLY
6½" TO 12"	STD. SEAL + EXTENSION
OVER 12"	SEAL + MULTI. EXTENSIONS

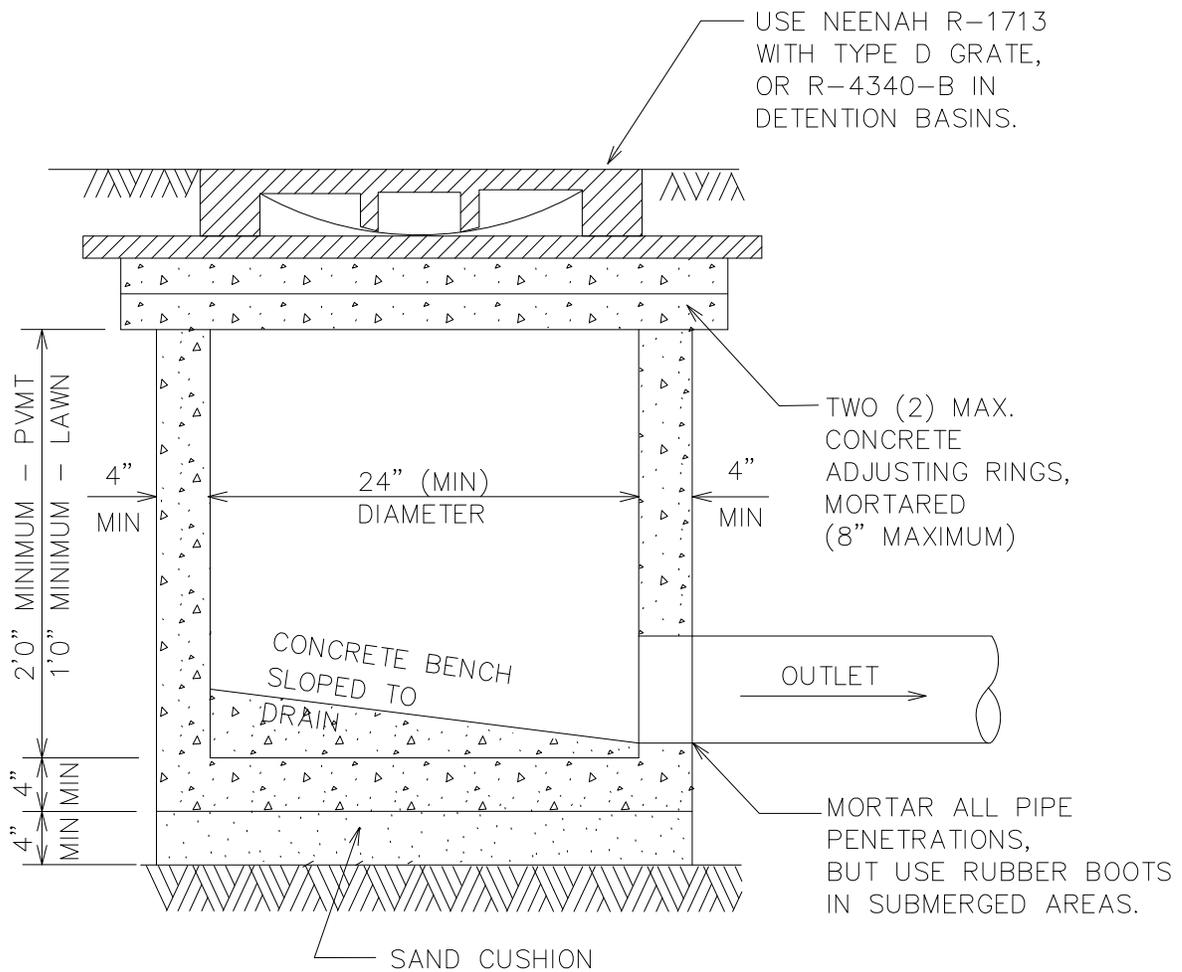
NOTE:

1. CHIMNEY SEALS SHALL BE INSTALLED ON ALL SANITARY SEWER SYSTEM MANHOLES.
2. "CRETEX" OR APPORVED EQUAL EXTERNAL/INTERNAL SEALS ARE REQUIRED. OTHER PRODUCTS OR OTHER DESIGN SOLUTIONS SHALL REQUIRE THE APPROVAL OF THE CITY ENGINEERING DEPARTMENT.
3. IF INTERNAL SEALS ARE USED, THE STRUCTURE, INCLUDING ADJUSTMENT RINGS, MUST BE INSPECTED BY CITY PERSONNEL BEFORE INSTALLATION.
4. CHIMNEY SEALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

NOT TO SCALE

CHIMNEY
SEAL
DETAIL

DATE: 2-1-2023



NOTE:

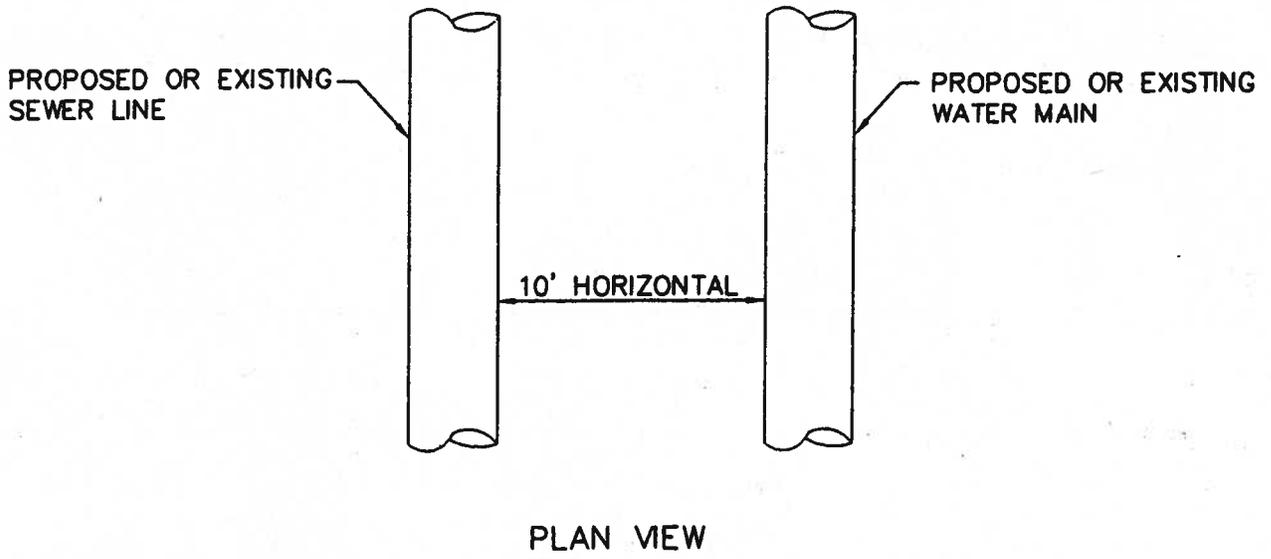
1. INLET TO BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE.
2. INLET MUST CONFORM TO ASTM C-478.
3. NON-PRECAST OPENINGS SHALL BE CORED AND RUBBER BOOTED.
4. MAXIMUM DEPTH FROM INVERT OF OUTLET PIPE TO TOP OF FRAME SHALL NOT EXCEED 42 INCHES. IF DESIGN OR CONSTRUCTION REQUIRES DEPTH BEYOND 42 INCHES, STRUCTURE SHALL BE REVISED TO A 48 INCH DIAMETER TY A MANHOLE.

NOT TO SCALE

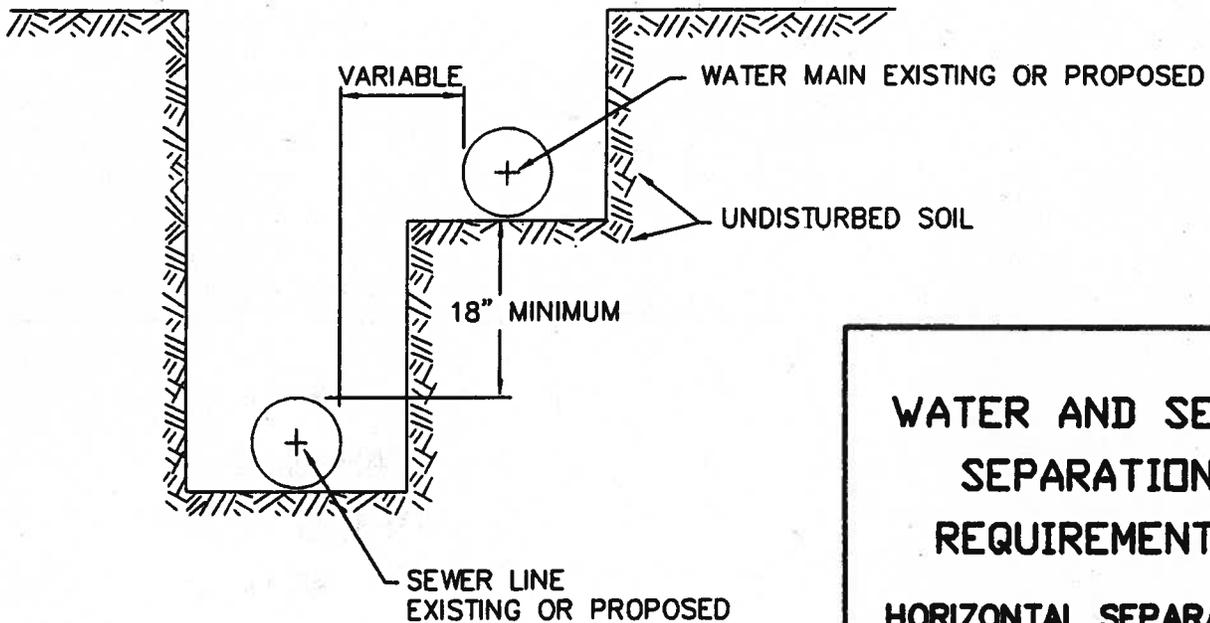
**TYPE A INLET
DETAIL**

DATE: 2-1-2023

WHEN **PROPOSED** SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED. SEE SECTION 41-2.01B (1)



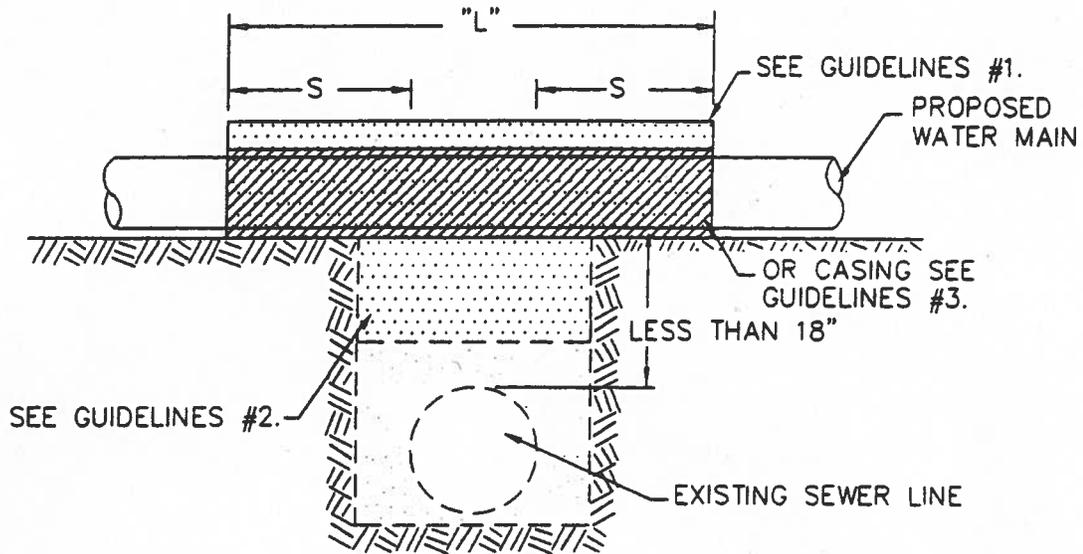
WHEN **PROPOSED** SEWER (OR WATER) IS LOCATED **LESS THAN 10 FEET** FROM EXISTING WATER (OR SEWER), DETAILS BELOW SHALL APPLY. SEE SECTION 41-2.01B (2)



**WATER AND SEWER
SEPARATION
REQUIREMENTS
HORIZONTAL SEPARATION**

PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH LESS THAN 18" VERTICAL SEPARATION.

NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B



NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO EXISTING SEWER LINE.

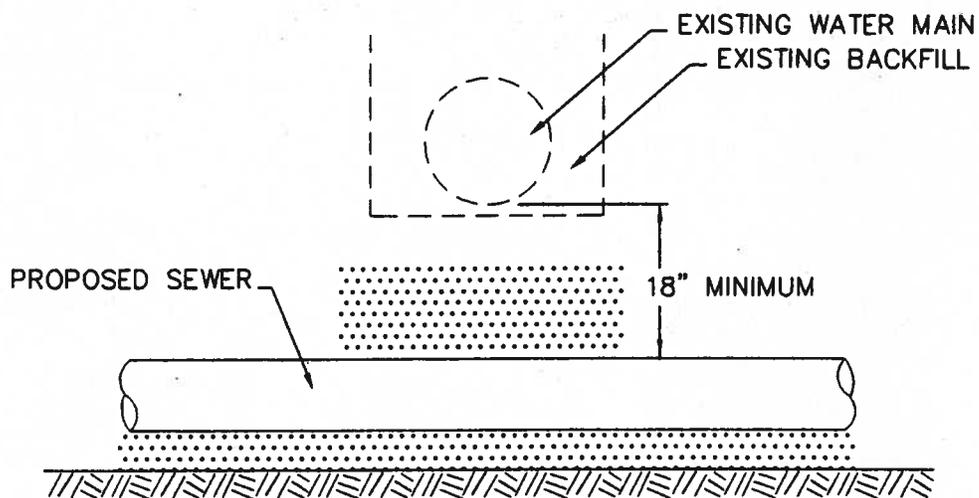
GUIDELINES

1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.
4. POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN CASING AND SEWER.

WATER AND SEWER
SEPARATION
REQUIREMENTS
(VERTICAL SEPARATION)

DMS

PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH 18" MINIMUM VERTICAL SEPARATION.



GUIDELINES

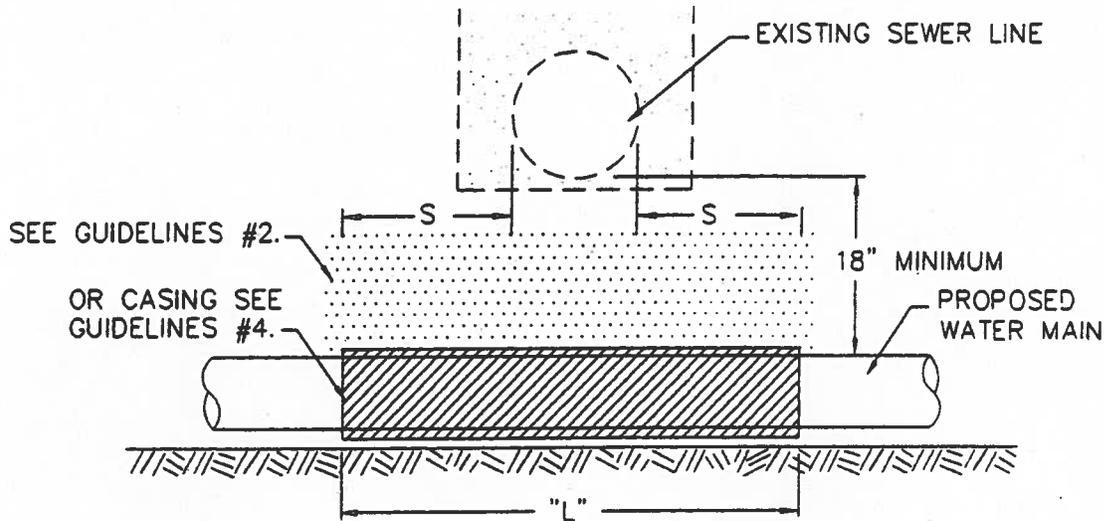
1. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.

**WATER AND SEWER
SEPARATION
REQUIREMENTS
(VERTICAL SEPARATION)**

DMS

PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION.

NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B



NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AND MEASURED PERPENDICULAR TO EXISTING SEWER LINE.

GUIDELINES

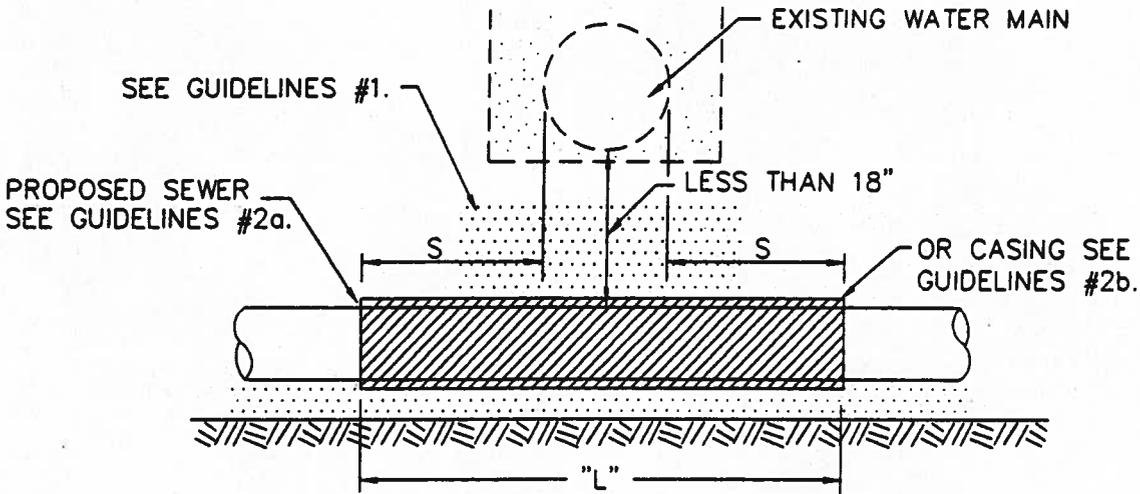
1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.
4. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATER MAIN AND SEAL ENDS OF CASING.

WATER AND SEWER
SEPARATION
REQUIREMENTS
(VERTICAL SEPARATION)

DMS

PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH LESS THAN 18" VERTICAL SEPARATION.

NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B



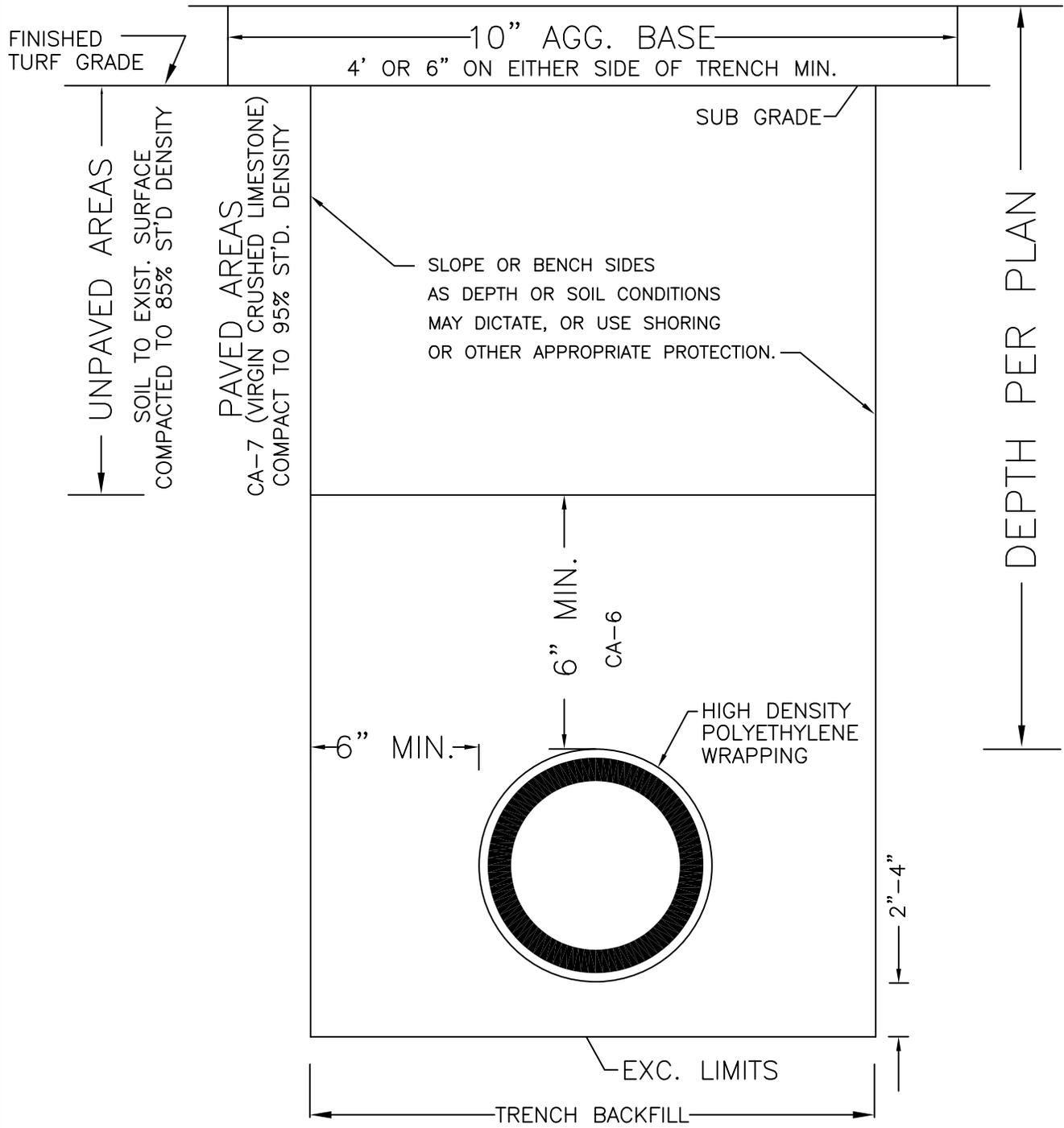
NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO EXISTING WATER MAIN.

GUIDELINES

1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF SEWER AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR "S" FEET ON EACH SIDE OF WATER MAIN.
- 2a. CONSTRUCT "L" FEET OF PROPOSED SEWER OF WATER MAIN MATERIAL AND PRESSURE TEST, OR;
- b. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED SEWER AND SEAL ENDS OF CASING.
3. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.

WATER AND SEWER
SEPARATION
REQUIREMENTS
(VERTICAL SEPARATION)

DMS



TRENCH BACKFILL
AND EXCAVATION
INCIDENTAL TO WATER MAIN CONS'T

WATER MAIN AS PER PLANS

NOTE:
BEDDING FOR WATER MAIN, 4" CA-6
CA-6 EXTENDS TO 6' ABOVE THE TOP OF WATER MAIN PIPE

NOT TO SCALE

WATER
MAIN
INSTALLATION

DATE: 2-1-2023