

NOTES:

1. ASPHALT SHALL BE LEVEL 2, 1/2" DENSE HMA WITH THE FOLLOWING THICKNESS:
 3" MIN. ON RESIDENTIAL LOCAL STREETS.
 4" MIN. ON RESIDENTIAL COLLECTOR AND MIXED USE STREETS.
 4" MIN. IN COMMERCIAL AND INDUSTRIAL AREAS.
2. SEE STANDARD DETAIL ST-2 FOR STANDARD WIDTH DIMENSIONS.
3. SOIL TESTING TO DETERMINE STRUCTURAL SECTION MAY BE REQUIRED BY THE CITY ENGINEER.
4. UNSUITABLE SUBGRADE MATERIAL SHALL BE REMOVED AND REPLACED WITH COMPACTED 2.5"-0" CRUSHED ROCK AT ENGINEER'S DIRECTION.



City of Astoria
Public Works Department
 1095 Duane Street

Street Cross Section Detail

Date Adopt. 11/01/12

Date Rev. 11/20/15

DWG. NO.

Dwg. Name: ST-1 Street Cross Section.dwg

ST-1

SEE CITY OF ASTORIA TSP ADOPTED
APRIL 21, 2014 - VOLUME 1, SECTION 6
"STANDARDS"



City of Astoria
Public Works Department
1095 Duane Street

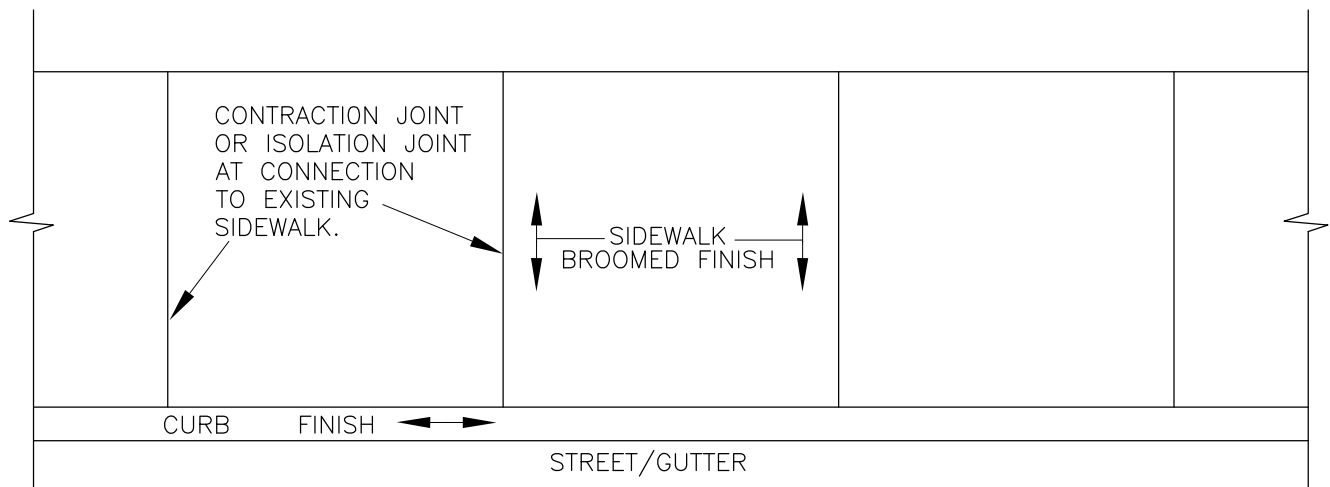
Typical Street Widths

| | |
|-----------------------------|---------------------------|
| Date Adopt. 11/01/12 | Date Rev. 07/24/14 |
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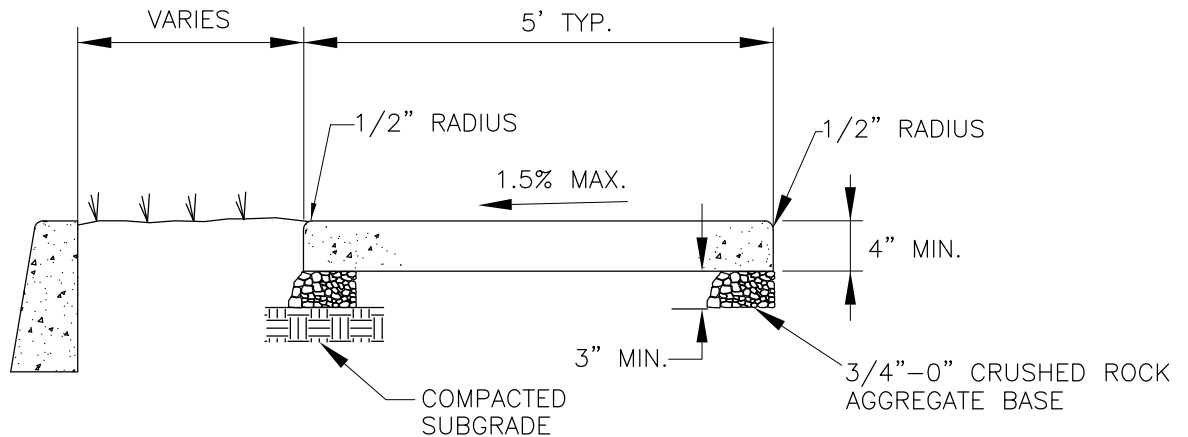
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|--|
| Dwg. Name: ST-2 Typical Street Widths.dwg |
|--|

DWG. NO.

ST-2



PLAN



PROFILE

NOTES:

1. PORTLAND CEMENT CONCRETE SHALL ATTAIN A 28-DAY COMPRESSIVE STRENGTH OF 3300 P.S.I.
2. CONTRACTION JOINTS SHALL BE PLACED SO AS TO MAKE SQUARE BLOCKS FOR WALKS UP TO 8' WIDE AND ALSO AT ALL CHANGES IN DIRECTION AND POINTS OF CURVATURE. JOINT SHALL BE 1/8" TO 1/4" WIDE WITH A MINIMUM DEPTH OF 1/3 OF THE CONCRETE THICKNESS.
3. ISOLATION JOINTS SHALL BE PLACED AT CONNECTIONS TO EXISTING SIDEWALK, EDGES OF DRIVEWAYS AND ALL STRUCTURES WITHIN SIDEWALK. JOINTS SHALL CONSIST OF A PREFORMED FILLER MATERIAL WITH MINIMUM 1/2" THICKNESS.



City of Astoria
Public Works Department
 1095 Duane Street

Sidewalk Detail

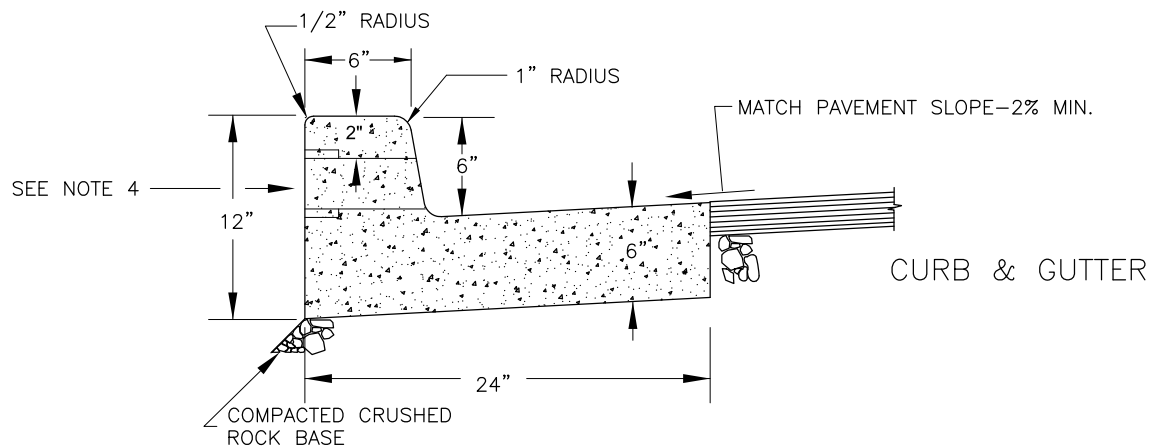
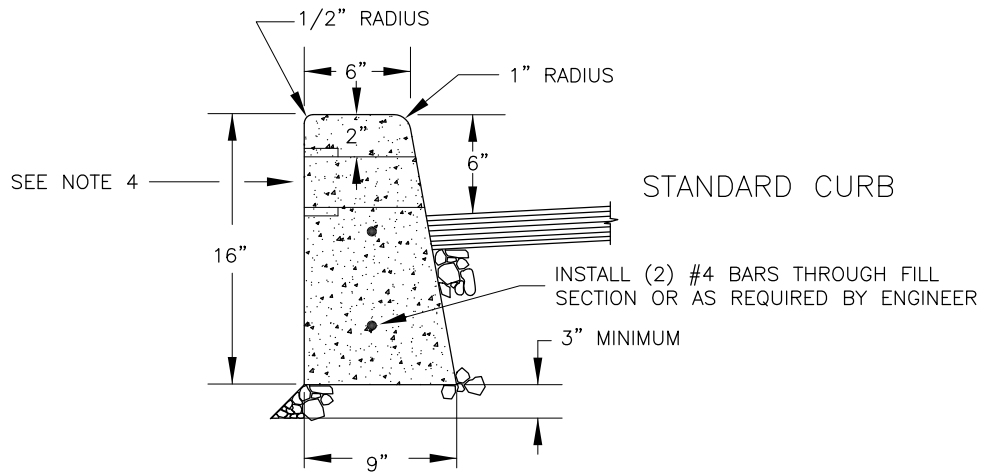
Date Adopt. 11/01/12

Date Rev. 06/20/18

DWG. NO.

Dwg. Name: ST-3 Sidewalk.dwg

ST-3



NOTES:

1. PORTLAND CEMENT CONCRETE SHALL ATTAIN A 28-DAY COMPRESSIVE STRENGTH OF 3300 P.S.I..
2. CONTRACTION JOINTS SHALL BE PLACED AT 15 FOOT MINIMUM INTERVALS WITH 1 1/2" DEPTH. MATCH SIDEWALK JOINTS.
3. PLACE CONTRACTION JOINT IN CURB OVER CENTER OF PIPE EXTEND PIPE TO BACK OF SIDEWALK IF SIDEWALK IS ADJACENT TO CURB.
4. DRAINAGE BLOCKOUT 3" I.D. PLASTIC PIPE W/BELL. LOCATED AS DIRECTED IN THE FIELD. GENERALLY NOT LESS THAT 2 PER LOT.



City of Astoria
Public Works Department
 1095 Duane Street

Curb Detail

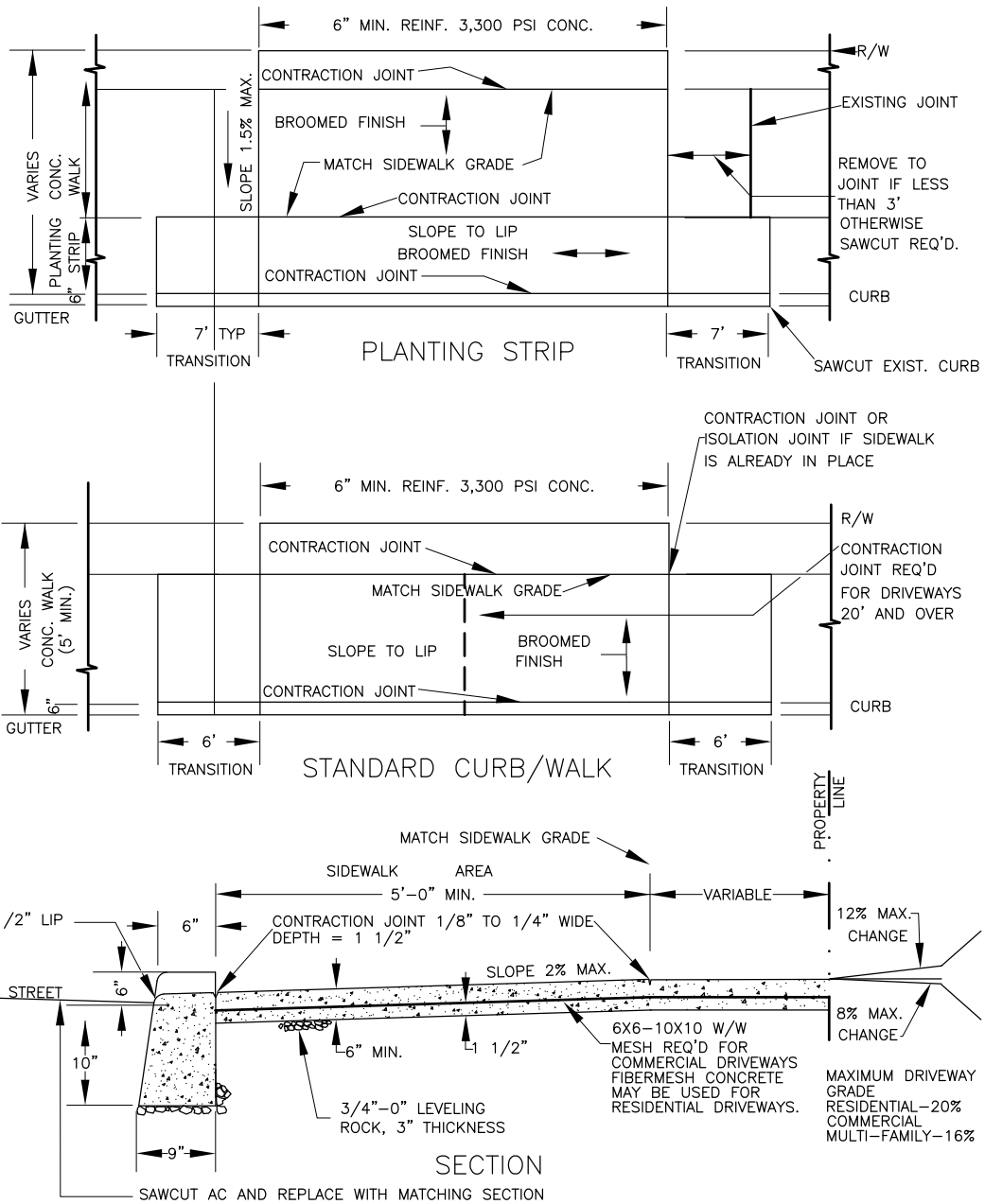
Date Adopt. 11/01/12

Date Rev. ----

DWG. NO.

Dwg. Name: ST-4 Curb.dwg

ST-4



City of Astoria
Public Works Department
 1095 Duane Street

Driveway Apron Detail

Date Adopt. 11/01/12

Date Rev. 11/10/15

DWG. NO.

Dwg. Name: ST-5 Driveway Apron.dwg

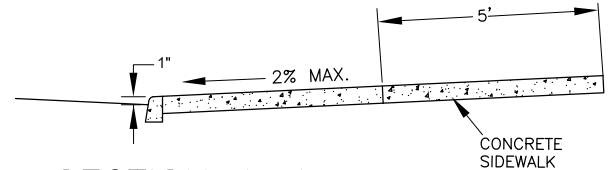
ST-5

CURB AND
SIDEWALK

PUBLIC ROAD

15' MIN. RADIUS

RIGHT-OF-WAY



SECTION A-A

TRUNCATED DOMES
SEE ODOT STD. DETAIL
RD759

1" EXPOSURE
PCC CONC. APRON
STRUCTURAL SECTION 4
TO MATCH DETAIL ST-5

A.C. OR P.C.C.
DRIVEWAY

VARIES

A

A

CONTRACTION JOINT

0" LIP

0" LIP

MAINTAIN BACK OF SIDEWALK GRADE

TAPER CURB

TRUNCATED DOME
SEE ODOT STD.
DETAIL RD759

6" CURB

15' MIN. RADIUS

INSTALL SIDEWALK (DETAIL ST-3)

LANDSCAPED PLANTING STRIP

PLANTING STRIP
SIDEWALK

NOTES:
THIS TYPE OF APPROACH TO BE USED FOR HIGH VOLUME
TRAFFIC GENERATORS WITH APPROVAL OR AS REQUIRED BY
THE CITY ENGINEER.



City of Astoria
Public Works Department
1095 Duane Street

Curb Return Driveway Detail

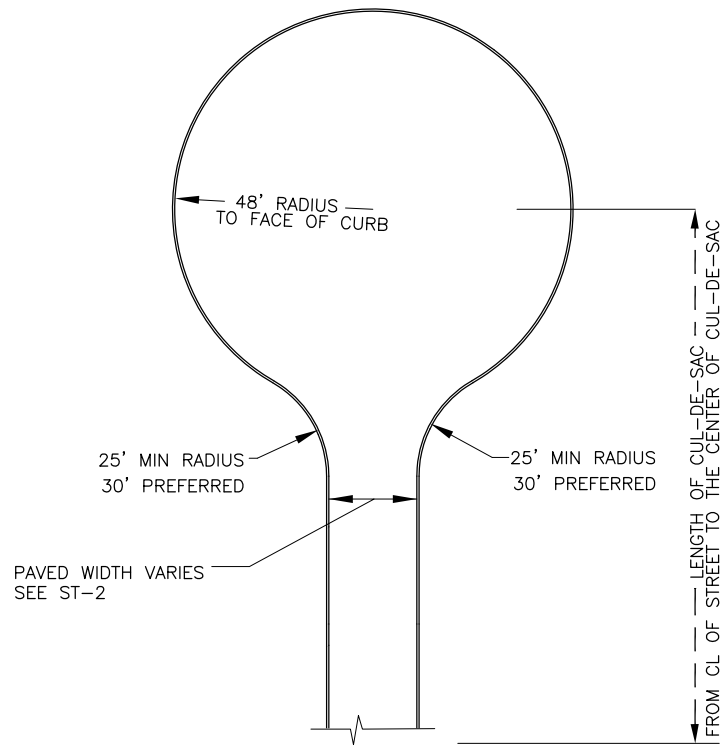
Date Adopt. 11/01/12

Date Rev. 11/10/15

DWG. NO.

Dwg. Name: ST-6 Curb Return.dwg

ST-6



NOTES:

1. LENGTH OF CUL-DE SAC NOT TO EXCEED 400 FEET
2. NO PARKING SIGNS REQUIRED AROUND BULB OF CUL-DE-SAC
3. THE DIMENSION OF THE CUL-DE-SAC BULB MAY BE REDUCED IF ADDITIONAL FIRE SUPPRESSION IS PROVIDED. FIRE SUPPRESSION MUST BE APPROVED BY THE FIRE MARSHAL.



City of Astoria
Public Works Department
 1095 Duane Street

Cul-de-Sac Detail

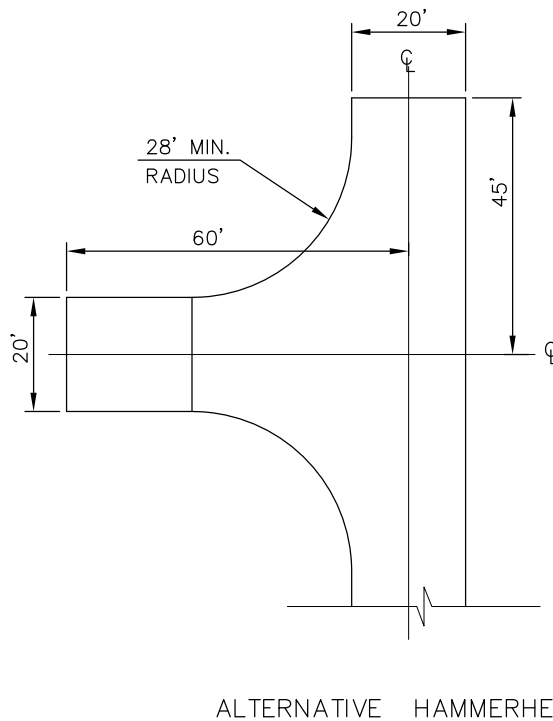
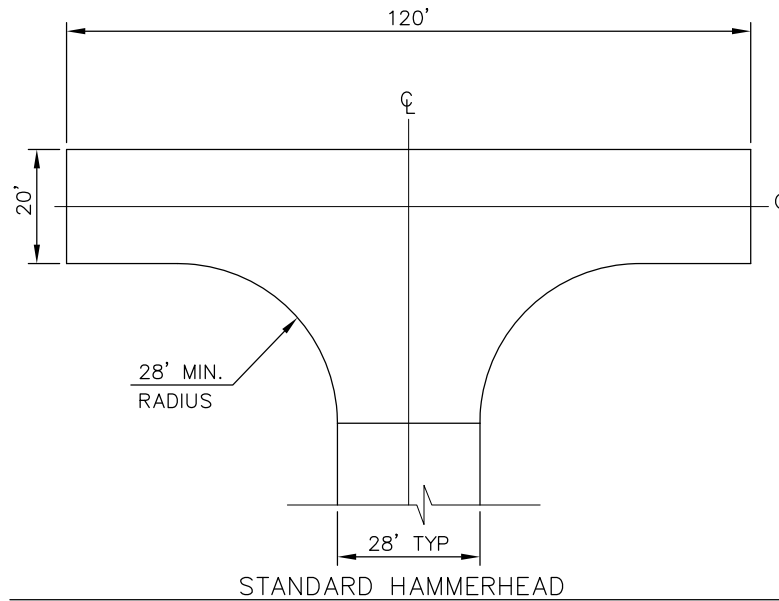
Date Adopt. 11/01/12

Date Rev. ----

DWG. NO.

Dwg. Name: ST-7 Cul-de-Sac.dwg

ST-7



NOTES:

1. HAMMERHEAD WIDTH RANGES BETWEEN 90' TO 120', DEPENDENT UPON ROADWAY LENGTH. SIDEWALKS AND UTILITIES MAY BE LOCATED WITHIN PUBLIC EASEMENTS.
2. ALTERNATIVE DESIGNS BY APPROVAL OF CITY ENGINEER AND FIRE MARSHAL.
3. TURNAROUND FACILITIES CANNOT BE LOCATED ON DRIVEWAYS.
4. ALL STREET ENDS SHALL BE SIGNED PER THE MUTCD.
5. NO PARKING SIGNS REQUIRED IN TURNAROUND AREAS.



City of Astoria
Public Works Department
 1095 Duane Street

Hammerhead Detail

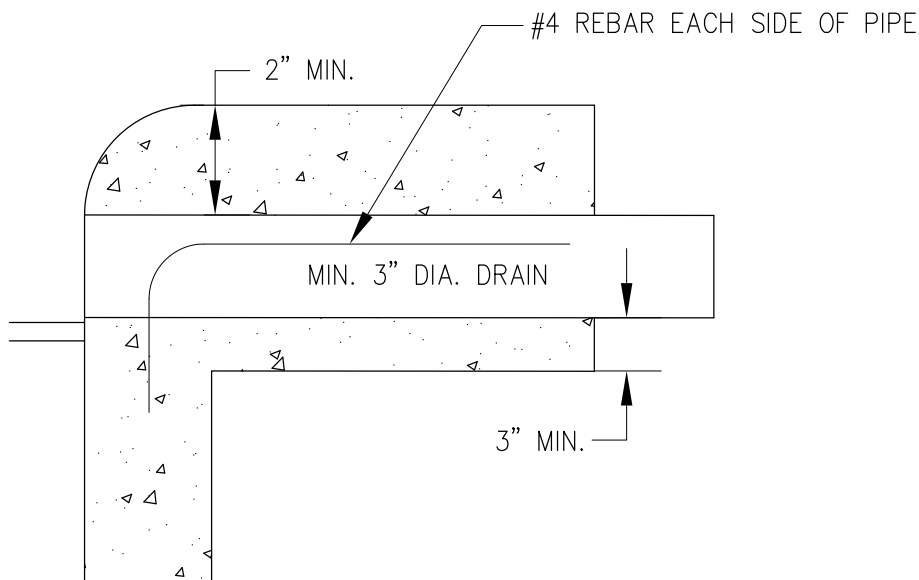
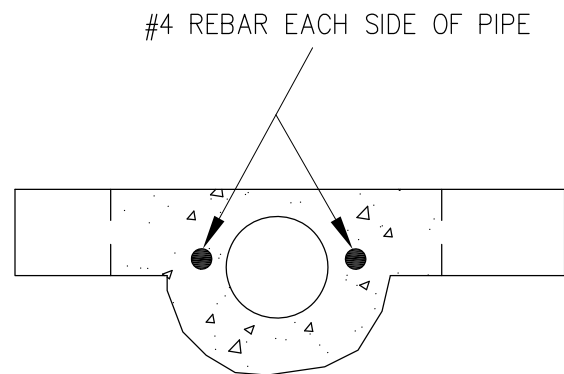
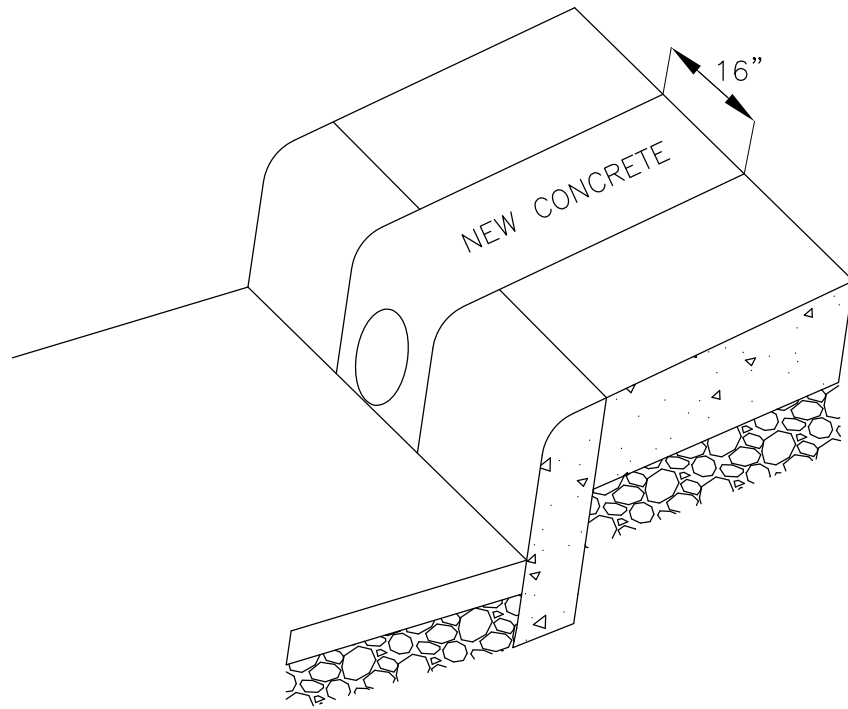
Date Adopt. 11/01/12

Date Rev. ----

DWG. NO.

Dwg. Name: ST-8 Hammerhead.dwg

ST-8



NOTE:

1. DRAINS WILL BE SIZED ACCORDING TO FLOW FROM ROOF DRAINS, WHERE REQUIRED MULTIPLE RAIN DRAINS SHALL BE INSTALLED.
2. SIDEWALKS SHALL BE SAWCUT.



City of Astoria
Public Works Department
 1095 Duane Street

Curb Rain Drain Detail

Date Adopt. 11/01/12

Date Rev. 11/13/15

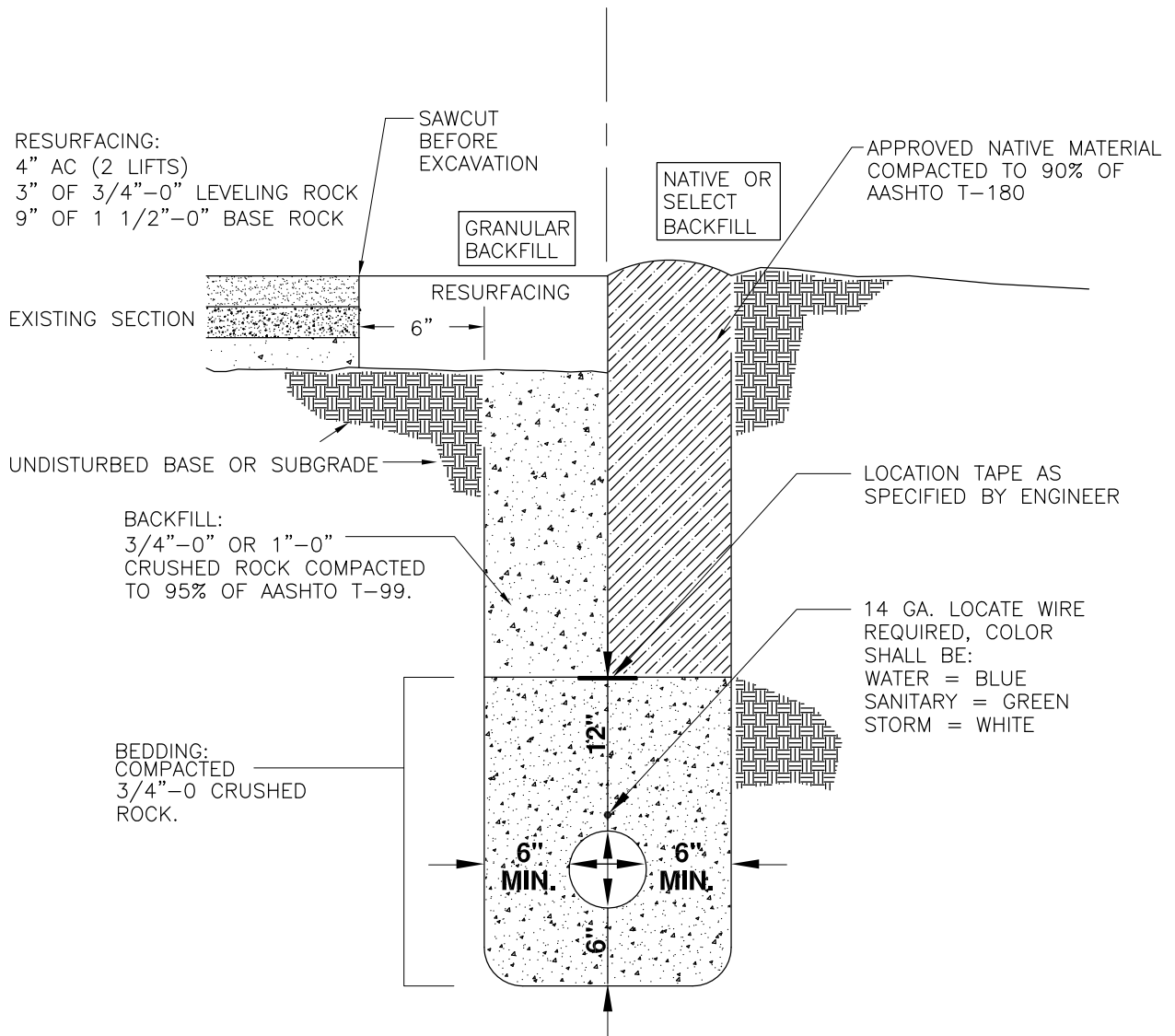
DWG. NO.

Dwg. Name: ST-9 Curb Rain Drain.dwg

ST-9

IN PAVED AREAS

LANDSCAPED OR UNIMPROVED AREAS



NOTE:

1. CONTRACTOR SHALL TACK EDGES OF TRENCH AND PLACE AND COMPACT ASPHALT IN ACCORDANCE WITH ODOT STANDARD SPECIFICATIONS.
2. REPLACE CONCRETE ROADWAY AS ENCOUNTERED, EQUIVALENT SECTION. CONCRETE TO BE CLASS 3300, 1 1/2" MAX AGGREGATE.
3. IN ROADWAY SHOULDERS AND GRAVEL DRIVEWAYS IN RIGHT-OF-WAY USE GRANULAR BACKFILL AND SURFACE WITH 6" OF 3/4"-0" CRUSHED ROCK.



City of Astoria
Public Works Department
 1095 Duane Street

Utility Trench Detail

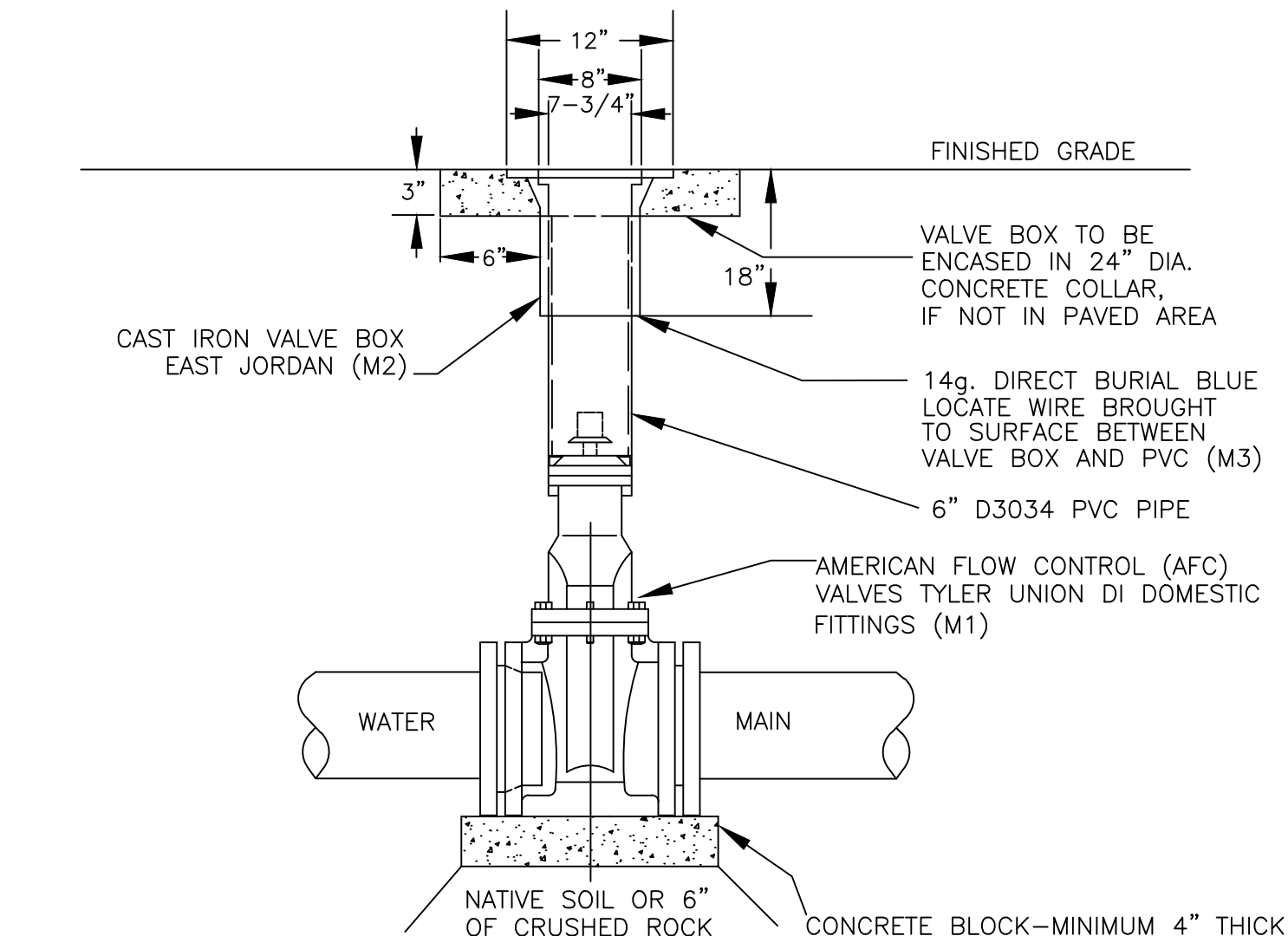
Date Adopt. 11/01/12

Date Rev. 11/20/15

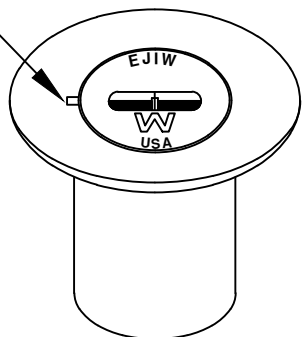
DWG. NO.

Dwg. Name: UT-1 Utility Trench.dwg

UT-1



NOTCH 1/16" DEEP AND 3/8" LONG INDICATING DIRECTION OF MAIN



VALVE BOX

MATERIALS:

- M1. AMERICAN FLOW CONTROL (AFC) SERIES 2500-1, RW, NRS, 2" SON, OL DI GATE VALVE
- M2. EAST JORDAN CI CL35B VALVE BOX; FRAME PN 00363912 COVER PN 00363926; FOR HIGHWAY & HIGH TRAFFIC AREAS USE HD COVER PN 00363981
- M3. 14GA. BLUE DIRECT BURIAL TRACER LOCATE WIRE, SOLID CORE, MIN .045 INSULATED COVER

NOTES:

1. VALVE BOXES SHALL BE PLUMB & CENTERED DIRECTLY OVER THE VALVE NUT IN A VERTICAL POSITION.
2. VALVE BOX TOP SHALL BE ADJUSTED TO MEET FINISHED GRADE.



City of Astoria
Public Works Department
 1095 Duane Street

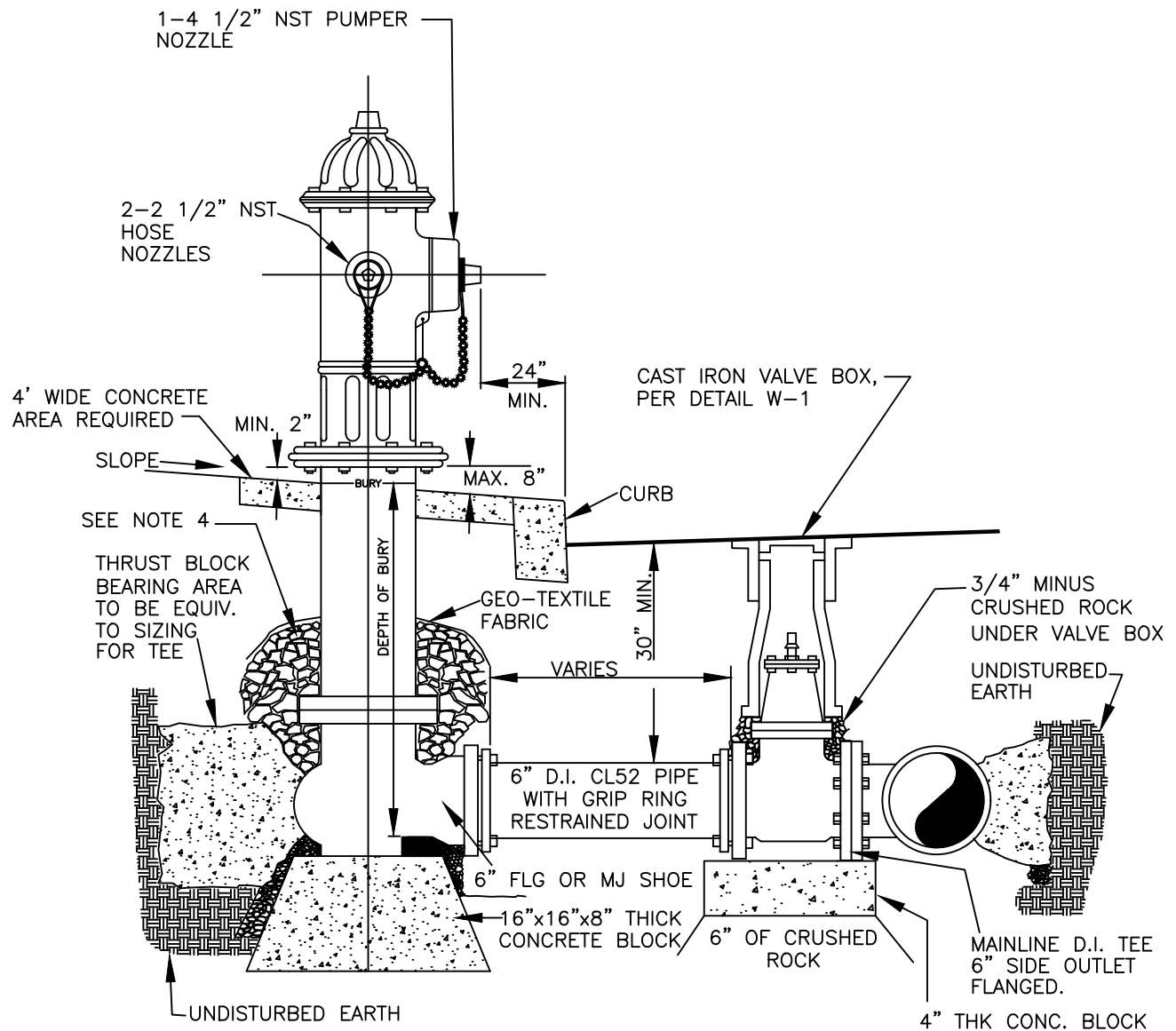
Water Valve Detail

Date Adopt. 10/31/2012 Date Rev. 08/04/2023

Dwg. Name: W-1 Water Valve.dwg

DWG. NO.

W-1



NOTES:

1. HYDRANTS TO BE MUELLER SUPER CENTURION A423-PN, INLET 6" - 5 1/4" MVO, 1-1/2" PENTAGON OPERATING NUT OPEN LEFT.
2. CITY OF ASTORIA HYDRANTS ARE YELLOW AND PRIVATE HYDRANTS ARE RED.
3. RESTRAIN JOINTS BY USING FLANGED HYDRANT SHOE, SPOOL, AND GATE VALVE -OR- WITH GRIP RING GASKET MJ JOINT RESTRAINTS.
4. ALL FITTINGS IN CONTACT WITH CONCRETE SHALL BE WRAPPED IN PLASTIC. HYDRANT DRAIN HOLES TO REMAIN OPEN TO DRAIN ROCK AND OPERATIONAL.
5. 1 1/2" - 3/4" CLEAN DRAIN ROCK SHALL BE PLACED A MINIMUM OF 6" ABOVE DRAIN OUTLET 1 YD MINIMUM AREA.
6. WHERE PLANTER STRIP EXISTS HYDRANT SHALL BE PLACED SO FRONT PORT IS A MINIMUM OF 24" BEHIND FACE OF CURB.
7. BURY OF HYDRANT SHALL BE MEASURED FROM FINISHED GRADE TO BOTTOM OF CONNECTION PIPE.
8. THRUST BLOCK AT FIRE HYDRANT TEE SHALL HAVE A 3.7 SQ. FT BEARING AREA.
9. HYDRANT VALVE SHALL BE AMERICAN FLOW CONTROL RESILIENT WEDGE GATE VALVE ONLY. SEE DETAIL W-1
10. PIPING BETWEEN HYDRANT AND VALVE TO BE SAME PRESSURE CLASS AS WATER MAIN OR GREATER.
11. HYDRANT MAY NOT BE LOCATED WITHIN 3' OF ANY OBSTRUCTION.



City of Astoria
Public Works Department
 1095 Duane Street

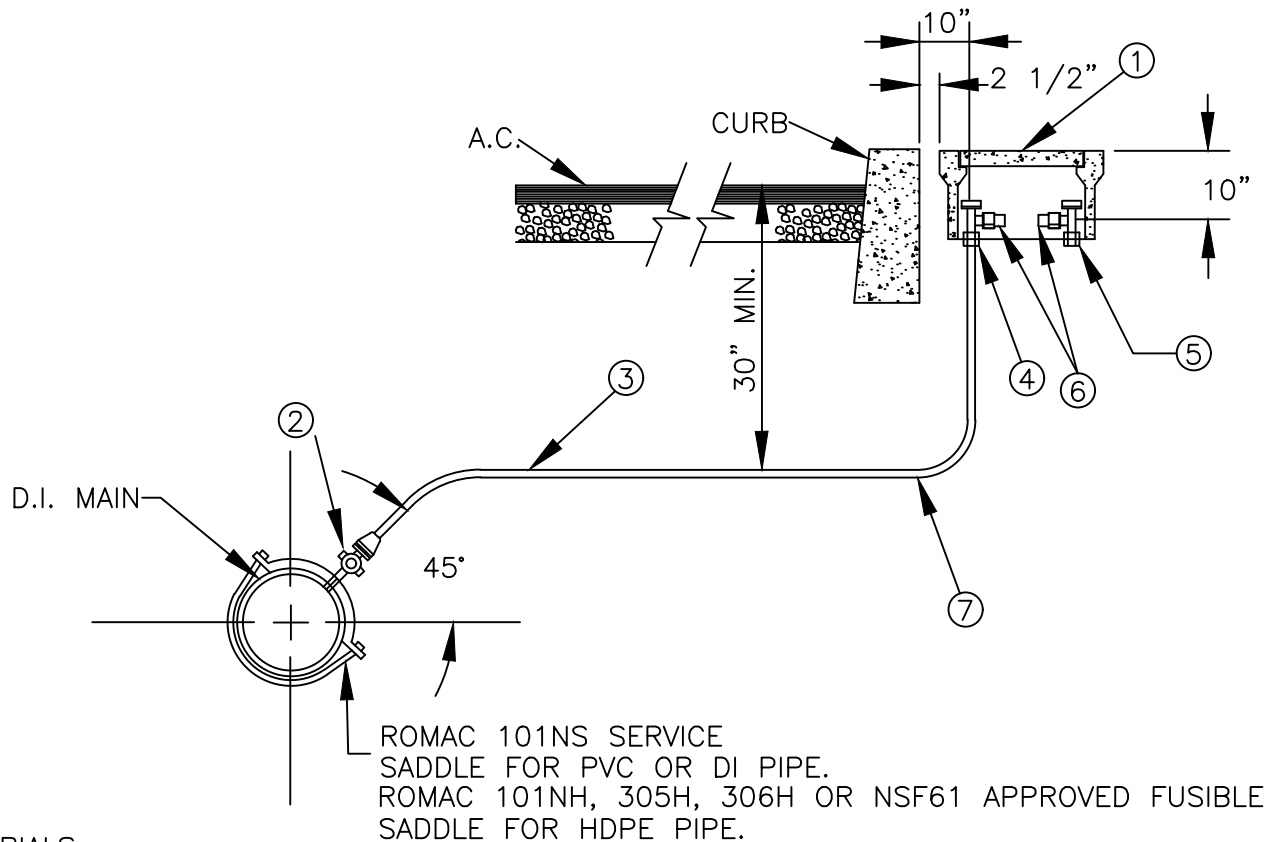
Fire Hydrant Detail

Date Adopt. 10/31/2012 Date Rev. 08/07/2023

Dwg. Name: W-2 Fire Hydrant.dwg

DWG. NO.

W-2



MATERIALS:

1. ARMOR CAST POLYMER CONCRETE METER BOX AND LID.
A. 3/4" OR 1" SERVICE – 13"X24"X12" BODY NO. A6001946PCX12 20K AND CAST IRON READ COVER NO. A6001969RC1 20K.
2. 1" MUELLER CORP. STOP PN B25028N
3. 1" CTS SDR 9 (200 PSI) PE BLUE. USE SS STIFFENER FOR FITTINGS PN504385 TUBING OR SOFT TEMPER, TYPE 'K' COPPER TUBING COMPLYING WITH ASTM B-88 UPON ENGINEERS APPROVAL.
4. 1" MUELLER ANGLE METER STOP PN B24258N CMP CTS X MTR
5. 1" MUELLER ANGLE METER STOP PN B24265N FIP X MTR (CUSTOMER SIDE)
6. 3/4" TO 1" BRASS METER ADAPTER FORD PN A-34NL OR APPROVED EQUAL (FOR 3/4" METER INSTALLATIONS)
7. 14GA. BLUE DIRECT BURIAL TRACER LOCATE WIRE, SOLID CORE MIN. .045 INSULATED COVER.

NOTES:

1. SUBSTITUTES FOR ANY MATERIALS SHOWN SHALL BE APPROVED BY THE CITY ENGINEER.
2. ALL PIPE AND STRUCTURE ZONES SHALL BE BACKFILLED USING 3/4" MINUS CRUSHED AGG. AND COMPACTED TO 95% MAX. DENS. AS DETERMINED BY AASHTO T-180.
3. METER BOX SHALL BE CENTER OVER THE COMPLETED METER ASSEMBLY.
4. WATER METERS THAT ALSO PROVIDE FIRE SUPPRESSION MUST BE TAGGED WITH "SUPPLIES FIRE SUPPRESSION." TAG SHALL BE MIN. 2.5" X 5", WEATHERPROOF, HEAVY DUTY RED PLASTIC. PRE-DRILL AND SECURED TO THE METER WITH PLASTIC CABLE TIES.
5. SERVICE SADDLES MANUFACTURED FOR USE WITH HDPE PIPE SHALL BE USED WHEN CONNECTING TO HDPE MAINS.
6. NEW SERVICES TO 3/4" METERS SHALL BE 1" PE BLUE TUBING.



City of Astoria
Public Works Department
1095 Duane Street

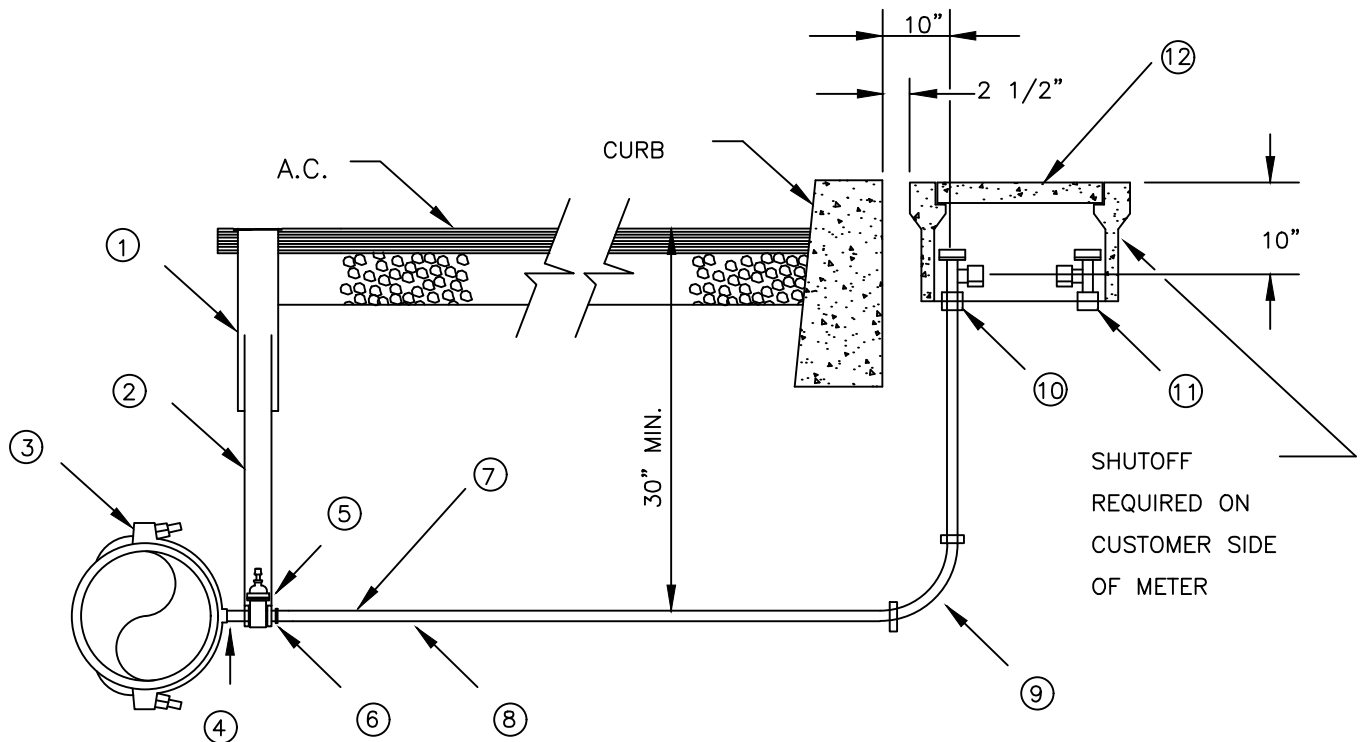
3/4" & 1" Water Service Detail

Date Adopt. 11/01/2012 Date Rev. 08/07/2023

Dwg. Name: W-3 1 Inch Water Service.dwg

DWG. NO.

W-3



NOTES:

1. EJ - 18" VALVE BOX TOP WITH COVER SEE W-1
2. 6" PVC D3034 SEWER PIPE
3. PIPE SIZE-ROMAC 202NS STYLE SERVICE SADDLE DOUBLE STRAP STAINLESS STEEL-TAP 2" I.P. THREAD FOR PVC OR DI PIPE. ROMAC 202NH, 305H, 306H OR NSF61 APPROVED FUSIBLE SADDLE FOR HDPE PIPE.
4. 2" BRASS NIPPLE 2" X 3"
5. 2" D.I. GATE VALVE WITH 2" OPERATING NUT, BOTH ENDS FEMALE I.P. THREADS-AMERICAN FLOW CONTROL (AFC) SERIES 2500-1, RW, NRS, OL, 2" SON. SEE W-1.
6. 2" MUELLER COMPRESSION #110 COUPLING, MALE I.P. THREADS #H15428N.
7. 2" HDPE. TUBING CTS SDR 9 (200 PSI). BLUE. USE SS STIFFENER FOR FITTINGS PN 506141.
8. 14GA. BLUE DIRECT BURIAL TRACER WIRE, SOLID CORE, MIN .045 INSULATED COVER.
9. IF NEEDED 2" QUARTER BEND UNION, COMPRESSION CONNECTOR CTS O.D. TUBING BOTH ENDS-#H15526N
10. 2" ANGLE METER STOP MUELLER 110 COMPRESSION, FOR CTS O.D. TUBING, METER FLANGE W/LOCK WING B24276N.
11. 2" MUELLER ANGLE METER STOP W/LOCKING FIP X METER FLANGE PN B24286N
12. ARMORCAST 17" X 30" X 12" POLYMER CONCRETE METER BOX (A6001640PCX12) AND COVER W/ CAST IRON READ LID (A6001947TRC1)
13. WATER METERS THAT ALSO PROVIDE FIRE SUPPRESSION MUST BE TAGGED WITH "SUPPLIES FIRE SUPPRESSION." TAG SHALL BE MIN. 2.5" X 5", WEATHERPROOF, HEAVY DUTY RED PLASTIC. PRE-DRILL AND SECURED TO THE METER WITH PLASTIC CABLE TIES.



City of Astoria
Public Works Department
 1095 Duane Street

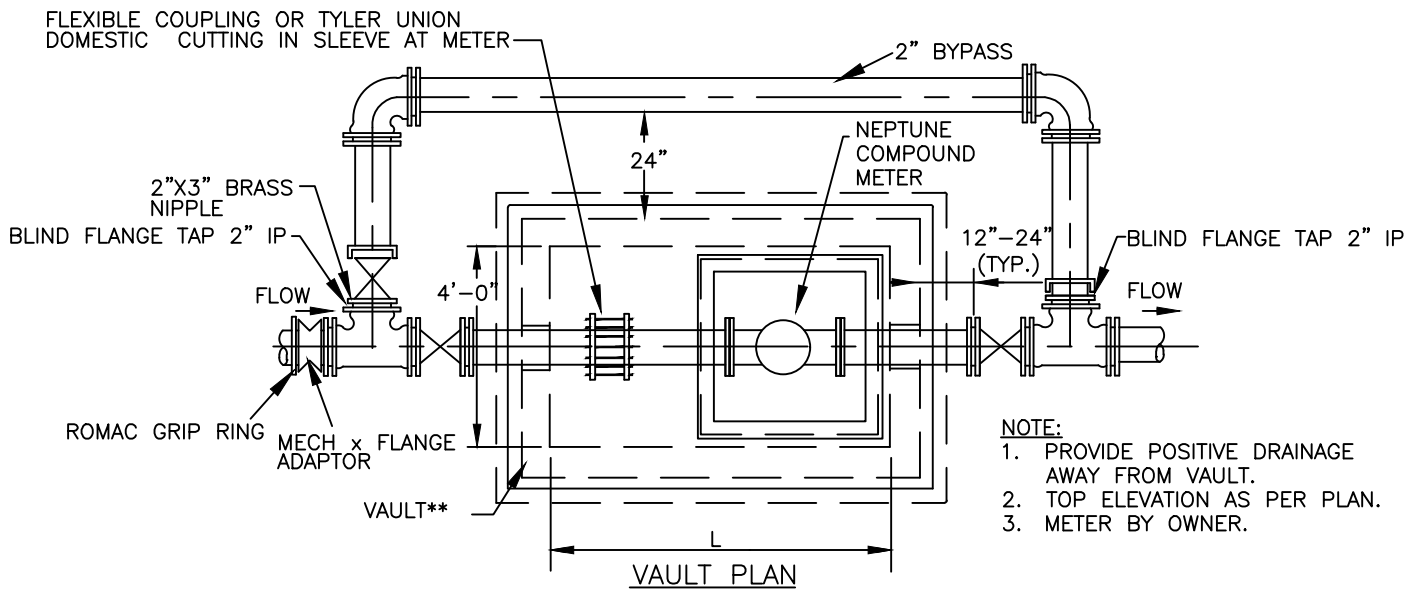
2 Inch Water Service Detail

Date Adopt. 11/01/2012 Date Rev. 08/07/2023

Dwg. Name: W-4 2 Inch Water Service.dwg

DWG. NO.

W-4

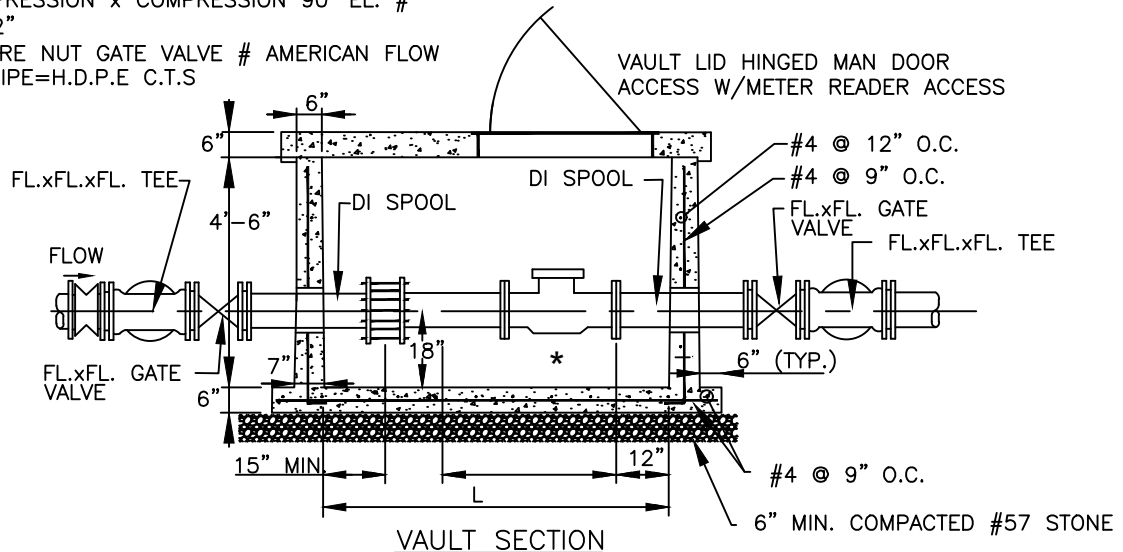


2" BYPASS (SIZE OF BYPASS TO BE DETERMINED BY ENGINEER).

2-2" COMPRESSION x I.P. MALE #H15428N-2"

2-2" COMPRESSION x COMPRESSION 90° EL. #H15526N-2"

1-2" SQUARE NUT GATE VALVE # AMERICAN FLOW
CONTROL PIPE=H.D.P.E C.T.S



VAULT** MINIMUM 1 FT. CLEARANCE ON FLANGED ENDS AND SIDES OF 3" & 4" METERS .
MINIMUM 2 FT. CLEARANCE ON FLANGED ENDS AND SIDES OF 6" AND LARGER METERS.
VAULT TO HAVE ATTACHED LADDER IF OVER 3' DEEP THAT MEETS CURRENT OSHA REQUIREMENTS.

METER TO BE SET 18" FROM TOP OF LID.

METER READER ACCESS DOOR TO BE CENTERED EVER METER REGISTER.

FLOOR TO HAVE DRAIN OR SUMP PUMP MAINTAINED BY CUSTOMER.

TOP OF VAULT TO BE FLUSH WITH FINISHED GRADE.

*METER MIN.1' ABOVE BOTTOM OF VAULT

CONCRETE PAD AROUND GATE VALVE BOXES, SEE W-1



City of Astoria
Public Works Department
1095 Duane Street

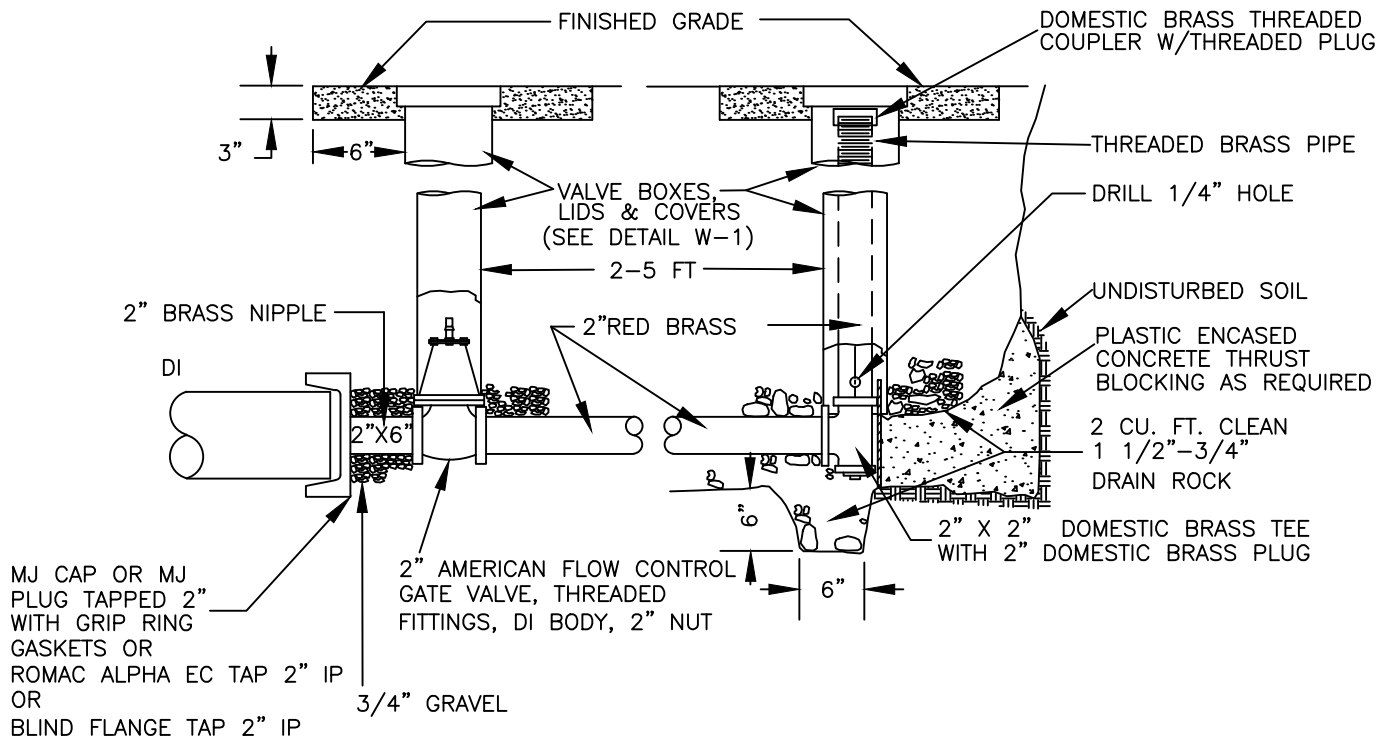
3 to 10 Inch Water Service Detail

Date Adopt. 11/01/2012 Date Rev. 08/07/2023

Dwg. Name: W-5 3 to 10 Inch Water Service.dwg

DWG. NO.

W-5



NOTES:

1. VALVE AND VALVE BOX SHALL BE PER STANDARD DETAIL W-1.
2. BLOW-OFF UNIT SHALL BE BACK FILLED WITH 3/4" MINUS AGGREGATE AND COMPACTED AS SHOWN.



City of Astoria
Public Works Department
 1095 Duane Street

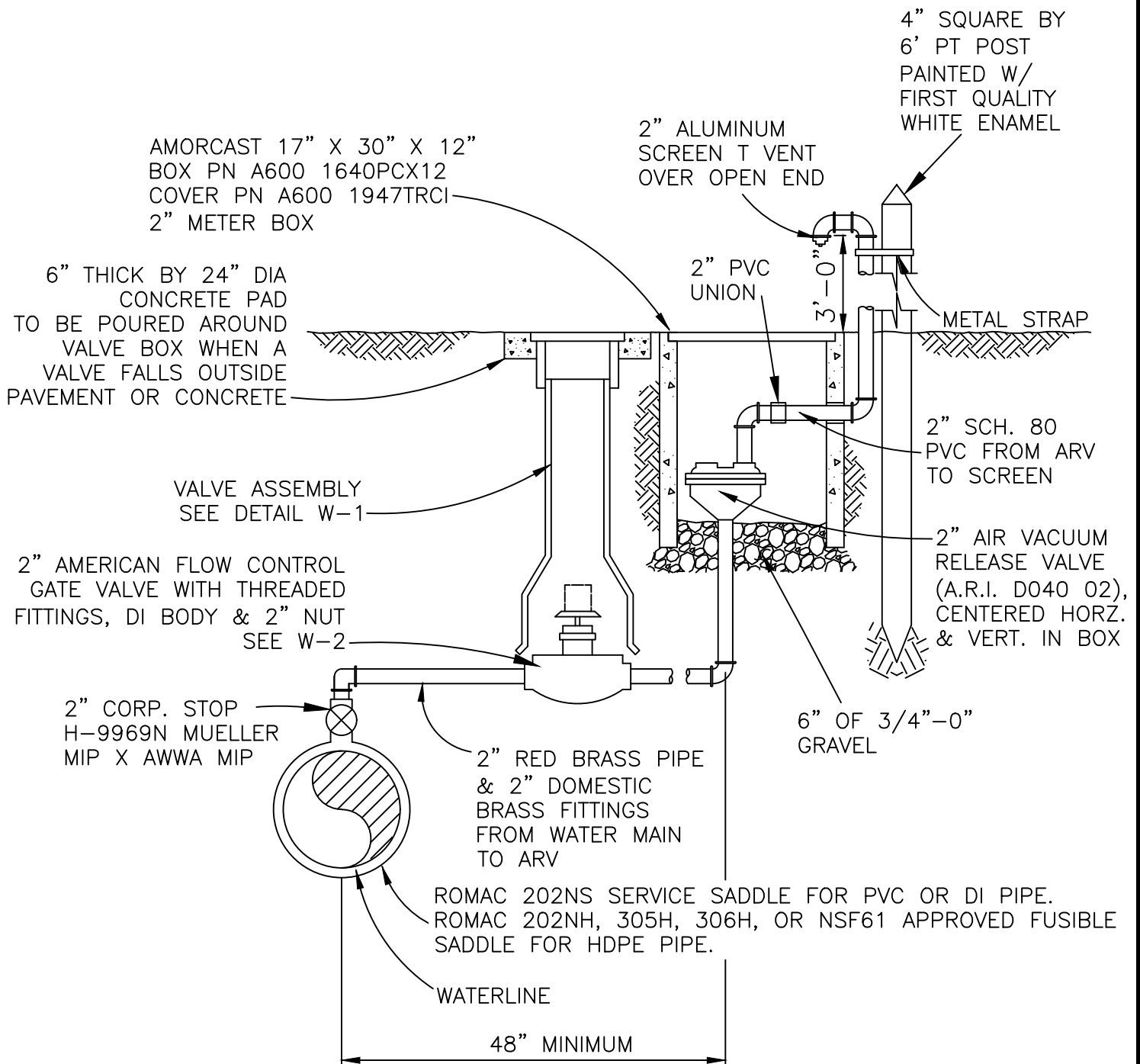
Blow Off Detail

Date Adopt. 11/01/2012 Date Rev. 08/07/2023

Dwg. Name: W-6 Blow Off.dwg

DWG. NO.

W-6



City of Astoria
Public Works Department
1095 Duane Street

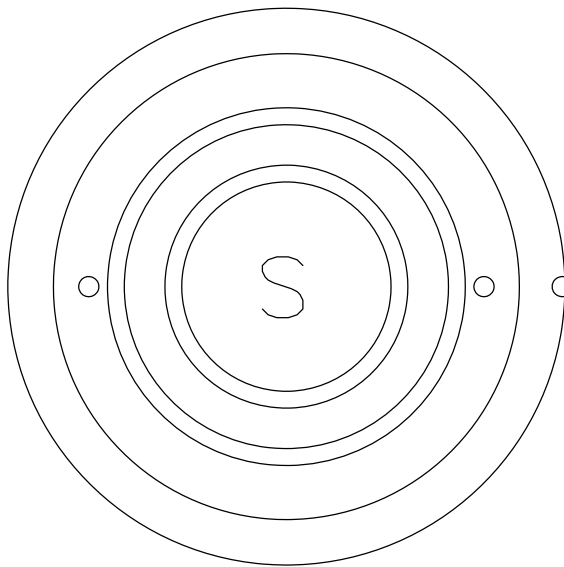
Air/Vacuum Release Valve Detail

Date Adopt. 09/23/2015 Date Rev. 08/07/2023

Dwg. Name: W-7 Air Release.dwg

DWG. NO.

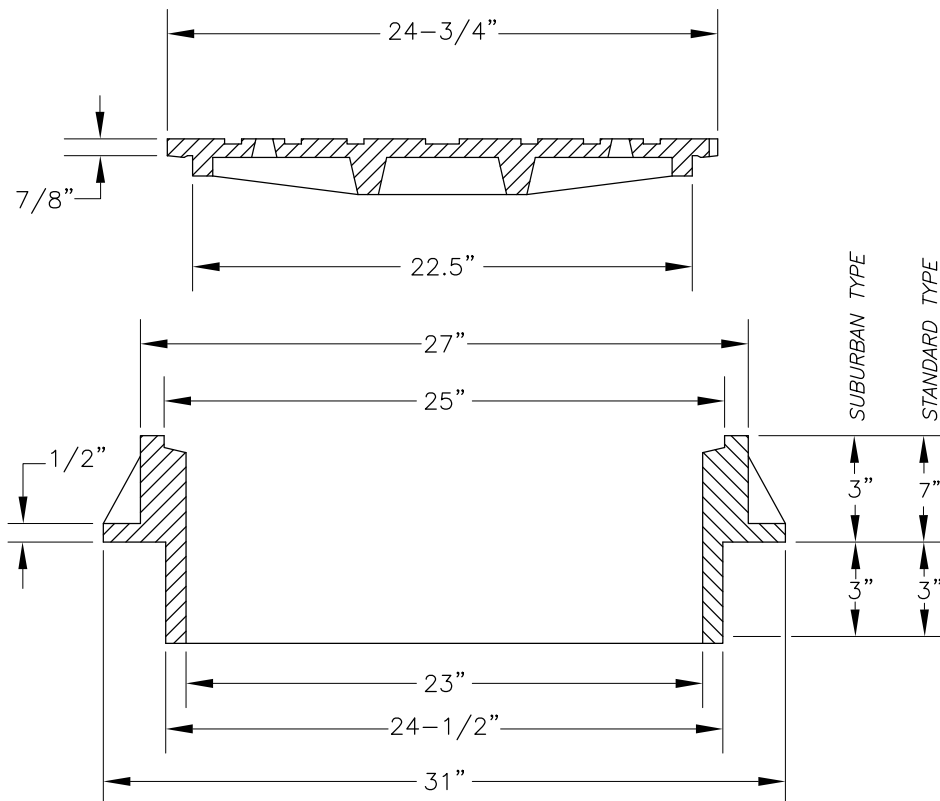
W-7



SANITARY



STORM



NOTES:

1. USE SUBURBAN TYPE ONLY IN NON-TRAFFIC AREAS.
2. COVER & FRAME SHALL BE GRAY CAST IRON ASTM A-48 CLASS 35B.
3. COVER & FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.
4. NOTCH LID FOR LIFTING HOOK.



City of Astoria
Public Works Department
 1095 Duane Street

Manhole Frame & Cover Detail

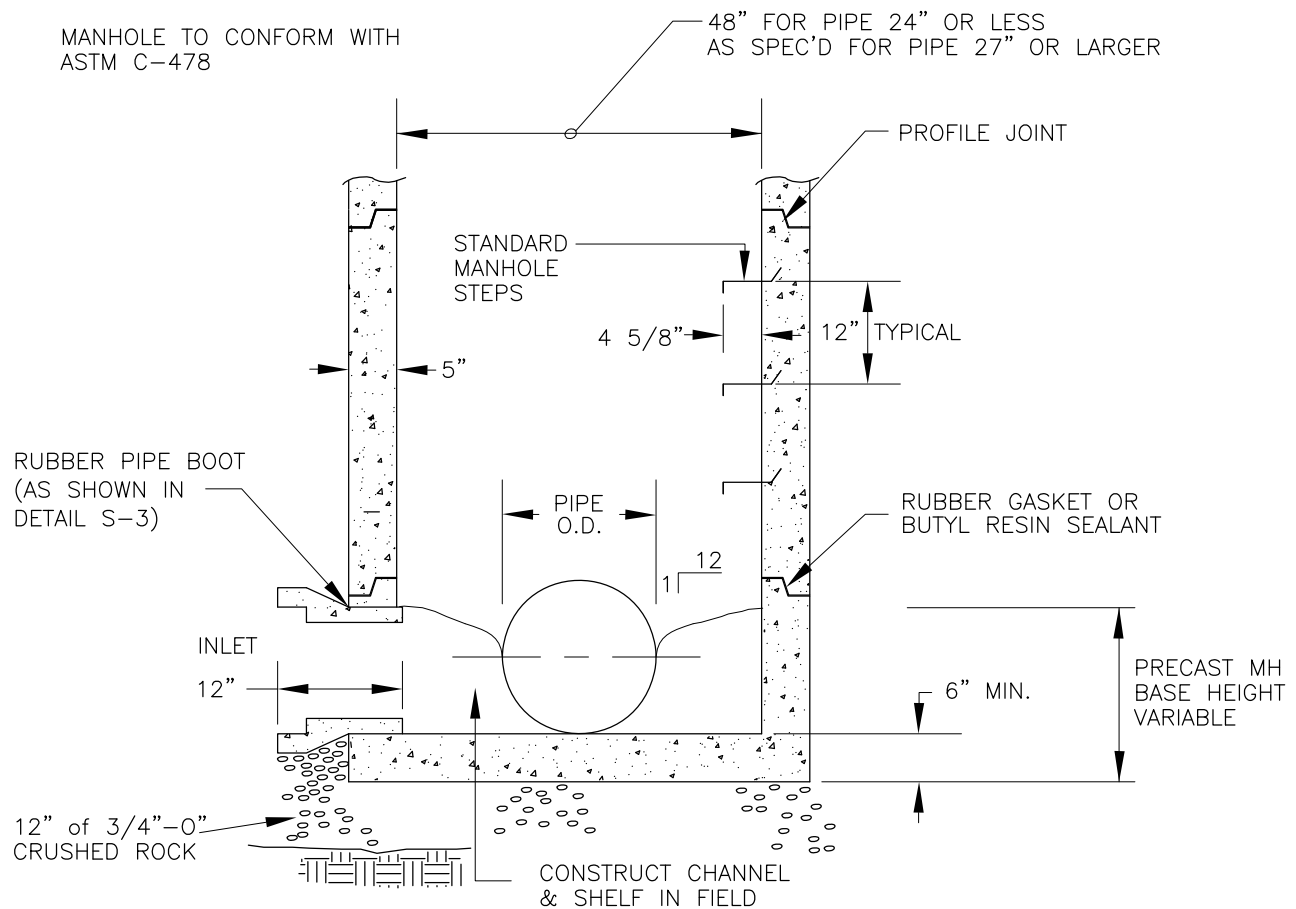
Date Adopt. 11/01/12

Date Rev. 09/11/17

DWG. NO.

Dwg. Name: S-1 Manhole Frame & Cover.dwg

S-1



City of Astoria
Public Works Department
1095 Duane Street

Precast Manhole Base Detail

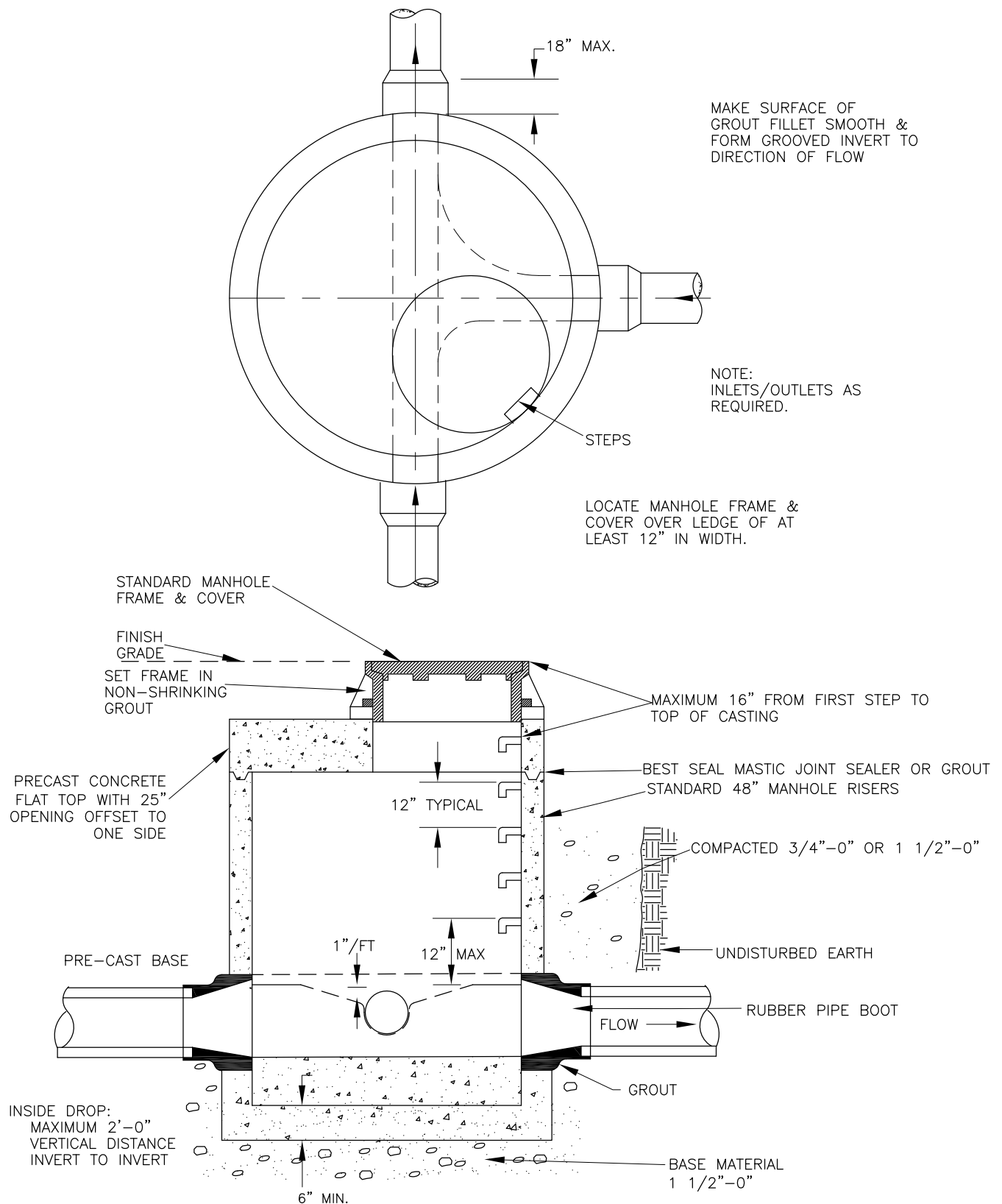
Date Adopt. 11/01/12

Date Rev. 09/11/17

DWG. NO.

Dwg. Name: S-2 Precast Manhole Base.dwg

S-2



City of Astoria
Public Works Department
 1095 Duane Street

Flat Top Manhole Detail

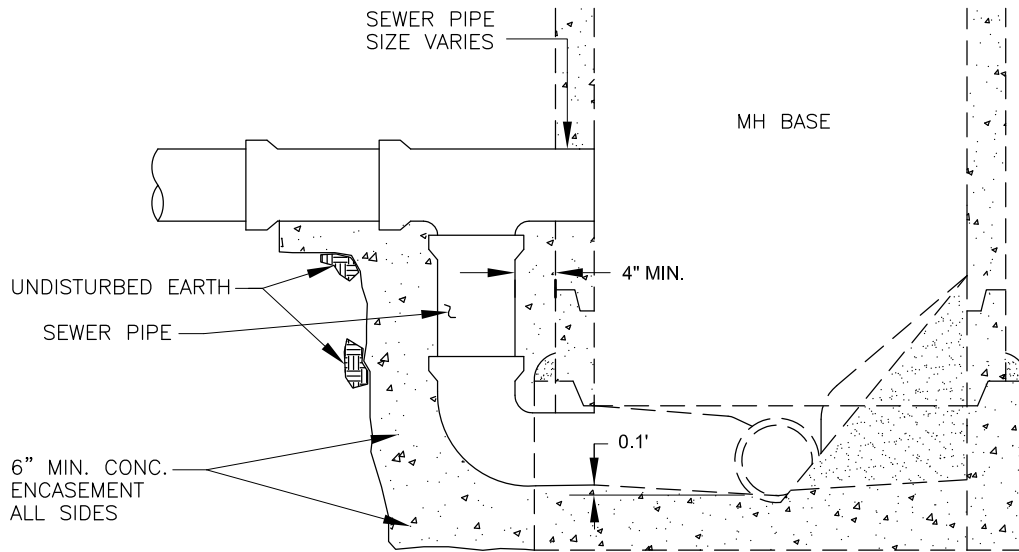
Date Adopt. 11/01/12

Date Rev. 11/15/12

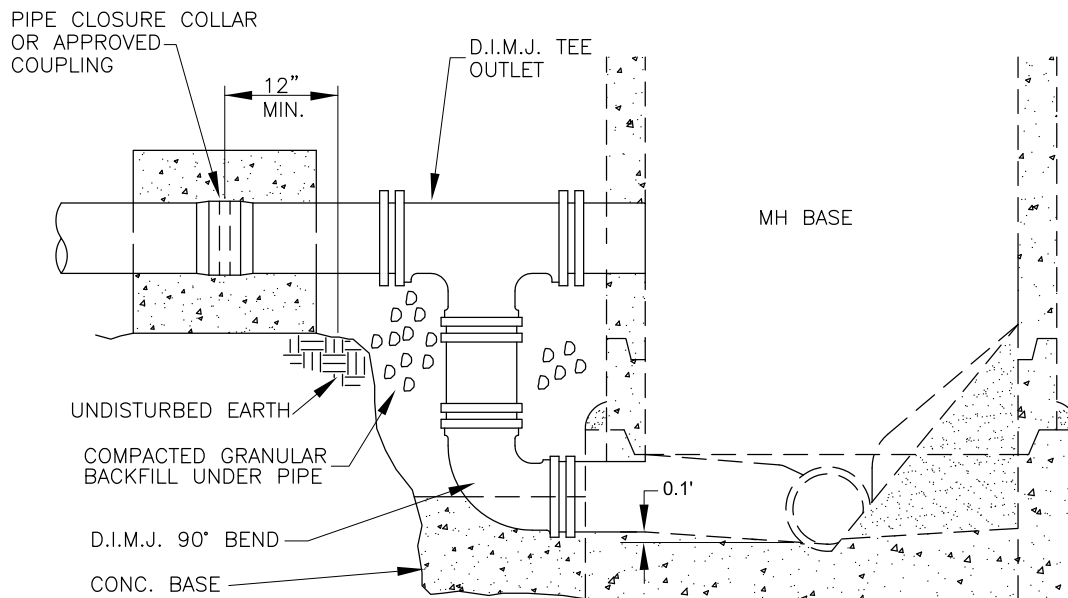
DWG. NO.

Dwg. Name: S-4 Flat Top Manhole.dwg

S-4



CONCRETE OR P.V.C. PIPE DROP



DUCTILE IRON PIPE DROP



City of Astoria
Public Works Department
 1095 Duane Street

Outside Drop Connection Detail

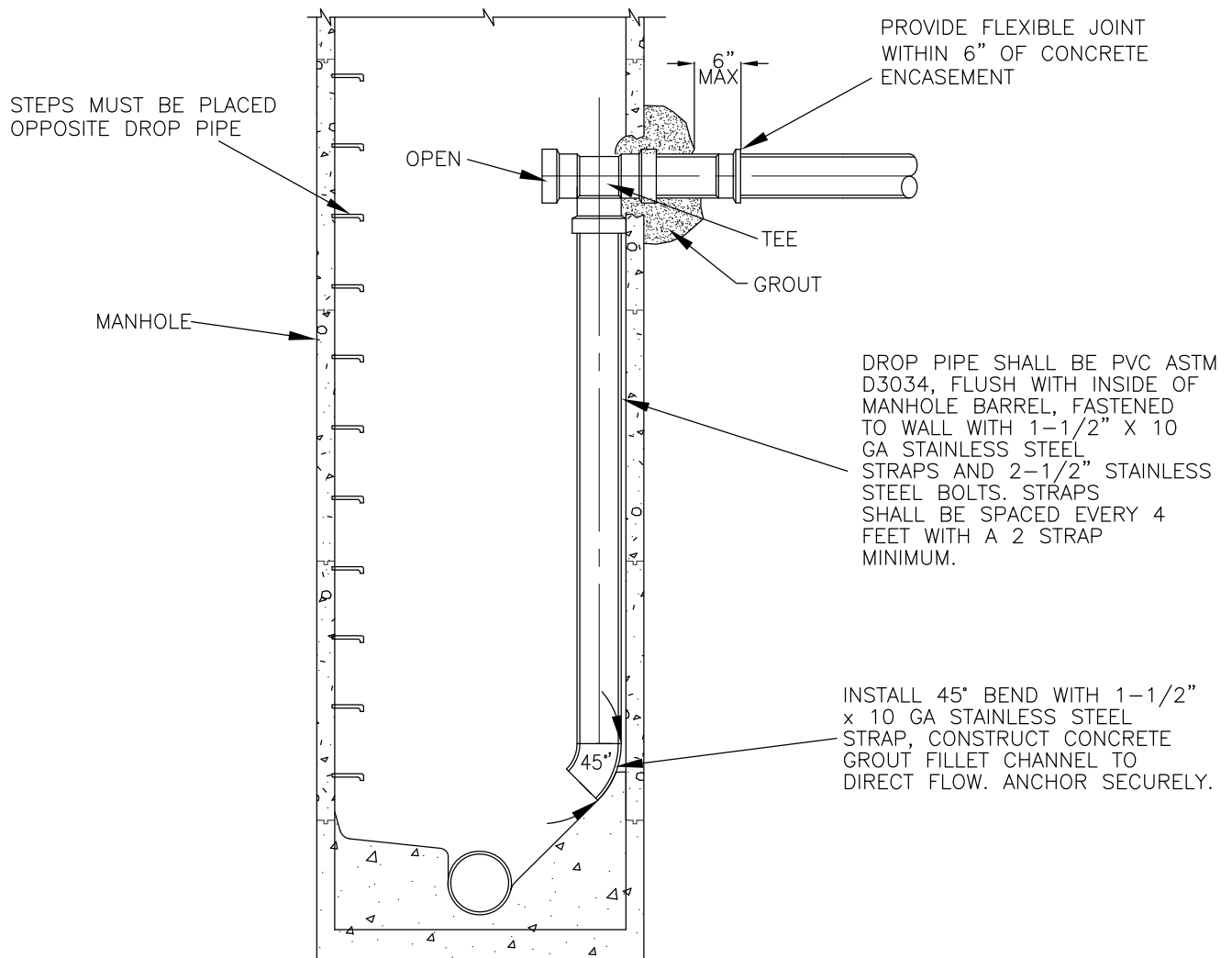
Date Adopt. 11/01/12

Date Rev. ----

DWG. NO.

Dwg. Name: S-6 Outside Drop Manhole.dwg

S-6



NOTE

1. ONLY ONE INSIDE DROP CONNECTION ALLOWED PER MANHOLE.
2. MINIMUM MANHOLE DIAMETER WITH DROP CONNECTION SHALL BE 48 INCHES.
3. MAXIMUM DROP PIPE DIAMETER SHALL BE 8 INCHES.



City of Astoria
Public Works Department
 1095 Duane Street

Inside Drop Connection Detail

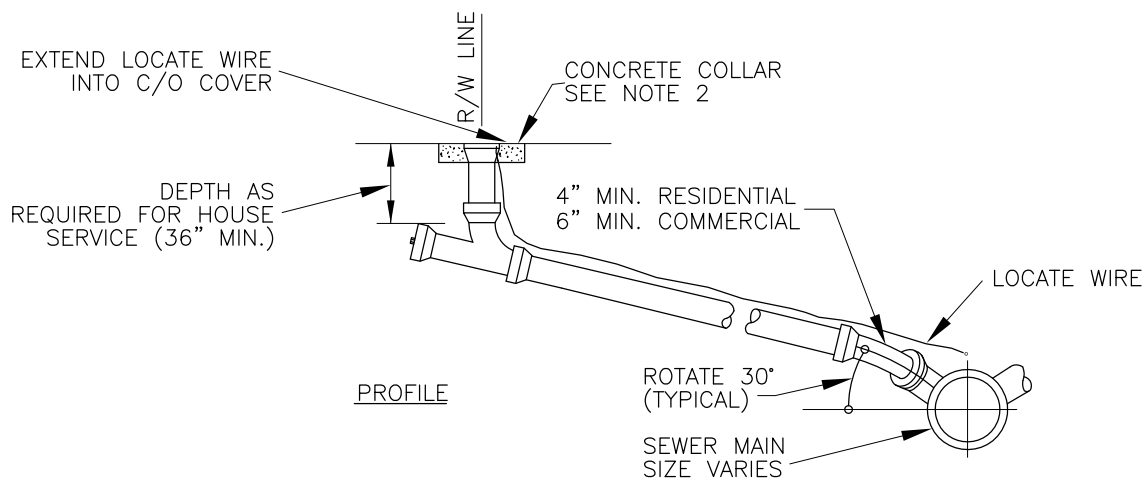
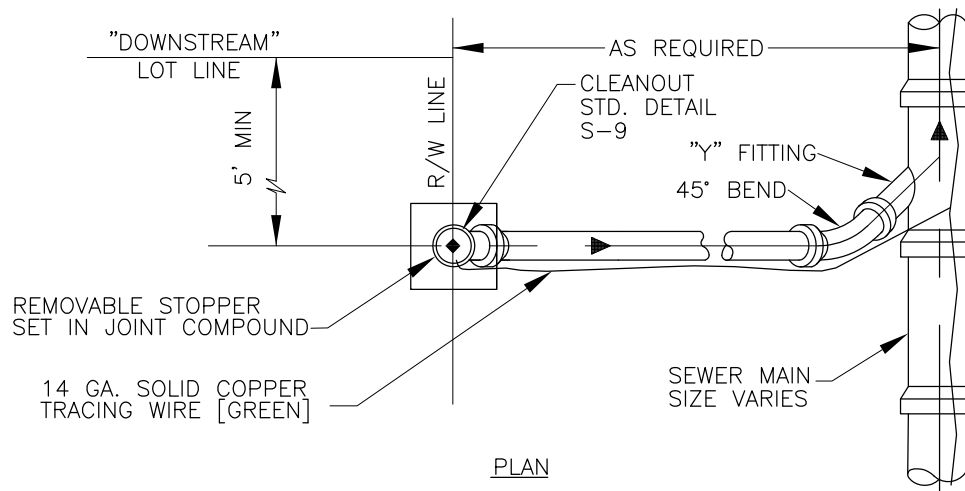
Date Adopt. 11/01/12

Date Rev. 10/06/14

DWG. NO.

Dwg. Name: S-7 Inside Drop Manhole.dwg

S-7



NOTES

1. SERVICE CONNECTION DETAILS ARE BASED ON GASKETED PVC PIPE AND FITTINGS. SEWER LATERAL PIPE SHALL BE PVC ASTM D3034.
2. SEWER CLEAN-OUTS NOT IN PAVEMENT SHALL HAVE CONCRETE COLLAR 18"x18"x4" AROUND THE COVER AND MUST BE INSTALLED AND ADJUSTED TO FINISHED GRADE AT THE RIGHT-OF-WAY/PROPERTY LINE.
3. CONNECTION TO EXISTING SANITARY SEWER PIPE SHALL BE MADE AS FOLLOWS:
 - *6" SS MAIN – PVC WYE AND FERNCO COUPLERS WITH SHEAR RINGS OR APPROVED EQUIVALENT
 - *8" AND LARGER SS MAIN – INSERT-A-TEE OR APPROVED EQUIVALENT
4. ALL PVC TO CLAY SERVICE CONNECTIONS UNDER LOAD BEARING SURFACES SHALL USE FERNCO TYPE CONNECTORS WITH STAINLESS STEEL SHEAR RINGS OR APPROVED EQUAL.
5. 90° FITTINGS ARE PROHIBITED. MINIMUM 6" PIPE LENGTH BETWEEN 45° FITTINGS.



City of Astoria
Public Works Department
 1095 Duane Street

Typical Sewer Connection Detail

Date Adopt. 11/01/12 Date Rev. 01/09/17

Dwg. Name: S-8 Typical Sewer Connection.dwg

DWG. NO.

S-8

Technical drawing of a mechanical part, likely a bracket or support. The drawing shows a cross-section of a rectangular base with a semi-circular cutout on the left side. The base has a total width of $9 \frac{7}{8}$ " and a height of $5 \frac{7}{8}$ ". A vertical support structure is attached to the top of the base, with a width of $1 \frac{1}{2}$ ". The top of the support structure has a thickness of $3 \frac{3}{8}$ ". A dimension of $3 \frac{1}{4}$ " is shown for the vertical distance from the top of the base to the top of the support structure. The drawing is labeled with dimensions in inches.

Technical drawing showing a cross-section of a wall and floor assembly. The drawing includes the following dimensions and labels:

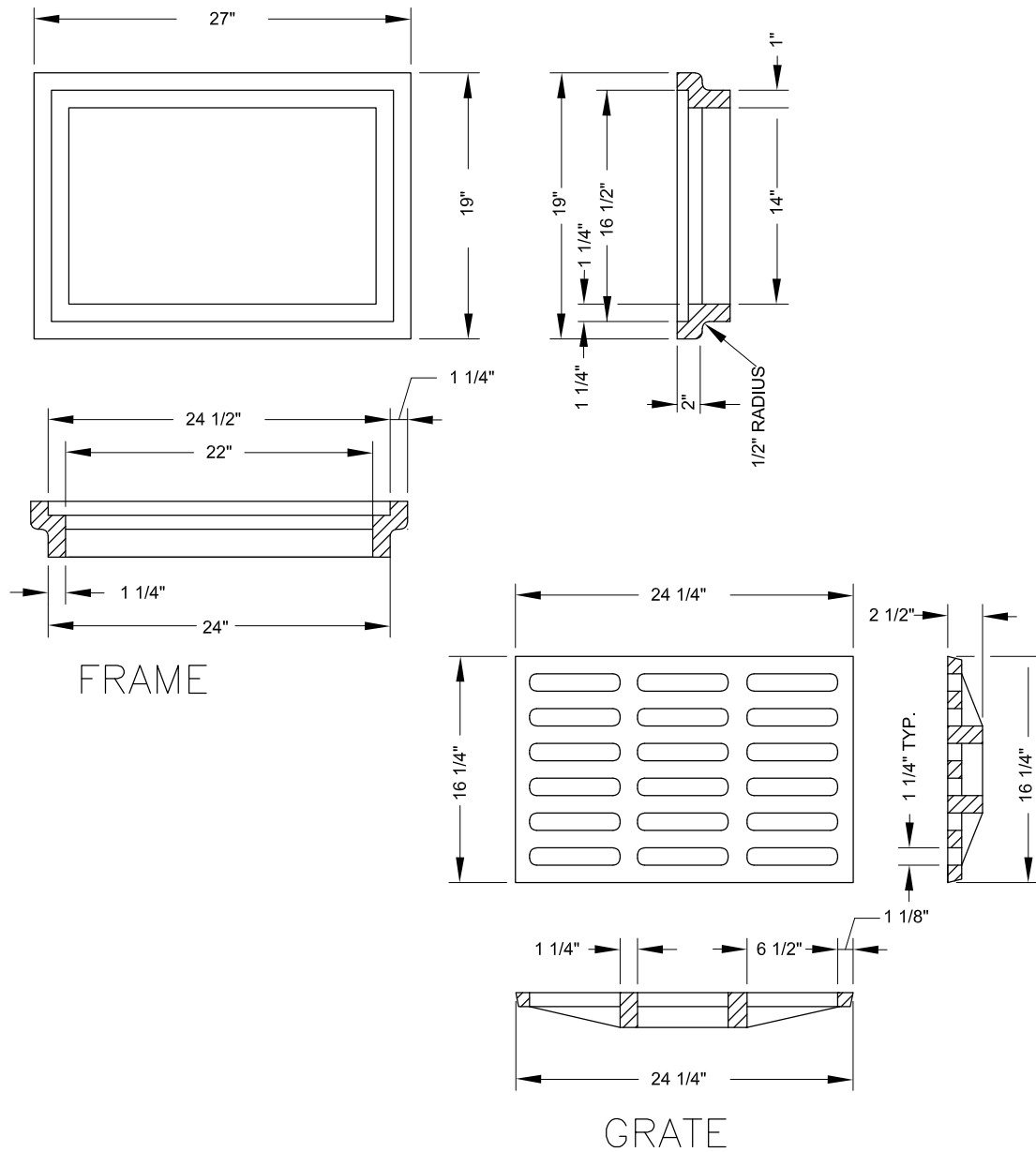
- Vertical dimensions on the left: $1\frac{1}{8}"$, $\frac{3}{4}"$, and $1\frac{1}{2}"$.
- Horizontal dimensions at the top: $11\frac{1}{2}"$, $10\frac{1}{2}"$, and $6" \text{ MIN.}$.
- Horizontal dimensions in the middle: $10\frac{3}{8}"$ and $9"$.
- Vertical dimensions on the right: $6\frac{3}{8}"$ and $4" \text{ MIN.}$.
- Horizontal dimensions at the bottom: $17\frac{1}{8}"$ and $4"$.
- Labels: "AC OR CONC. AS REQ'D.", "CONCRETE", "MECHANICAL PLUG", "AS SPECIFIED", and "CONCRETE PAD REQUIRED".

LOCATE WIRE GREEN 14 GAGE SOLID CORE.
VENDOR: FERGUSON WATERWORKS
(OR EQUAL)

CLEANOUT

Clean Out Detail

S-9



NOTES:

1. ALL CASTINGS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A48, CLASS 35B.
2. ROUNDS, FILLETS, TAPERS AND OTHER MINOR MODIFICATIONS TO THE DEMINSIONS SHOWN MAY BE MADE TO CONFORM TO COMMON SHOP PRACTICES.
3. GRIND SMOOTH FINISH BEARING SURFACES.
4. AVAILABLE THROUGH OLYMPIC FOUNDRY INC., PART NO. SM41
OR EAST JORDAN, PART NO. 00773701.



City of Astoria
Public Works Department
 1095 Duane Street

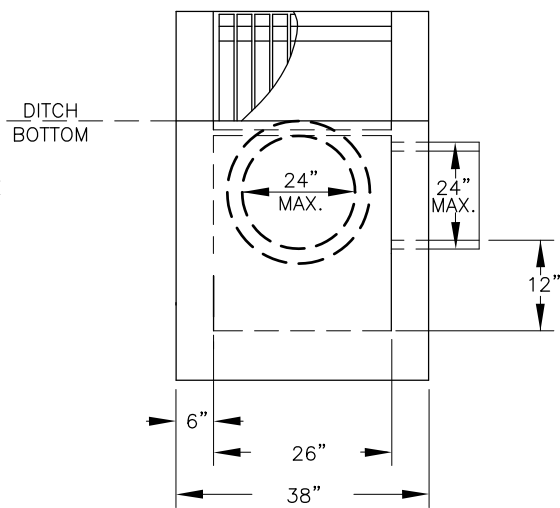
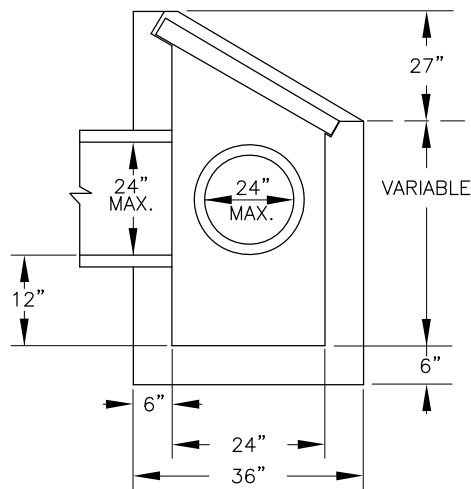
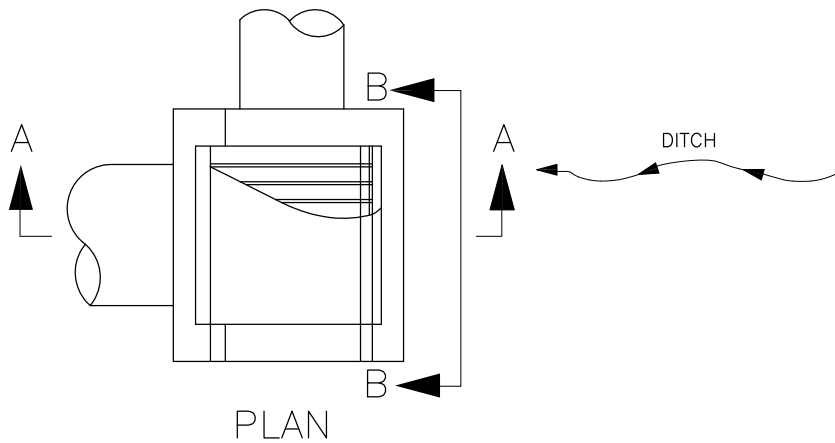
Catch Basin Frame & Grate Detail

Date Adopt. 11/01/12 **Date Rev.** 09/11/17

Dwg. Name: SD-1 CB Frame & Grate.dwg

DWG. NO.

SD-1



NOTES:

1. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3300 P.S.I. IN 28 DAYS.



City of Astoria
Public Works Department
 1095 Duane Street

Field Inlet Detail

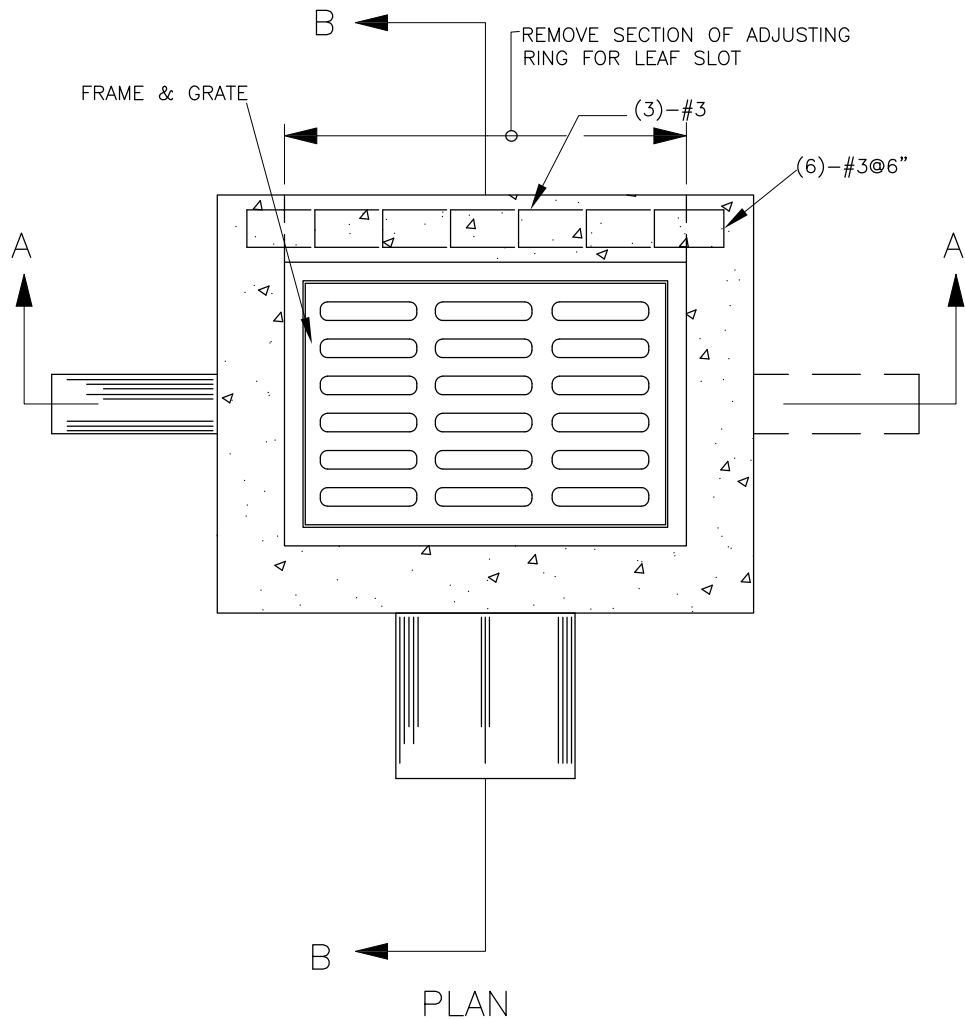
Date Adopt. 11/01/12

Date Rev. ----

DWG. NO.

Dwg. Name: SD-2 Field Inlet.dwg

SD-2



City of Astoria
Public Works Department
 1095 Duane Street

Catch Basin Detail

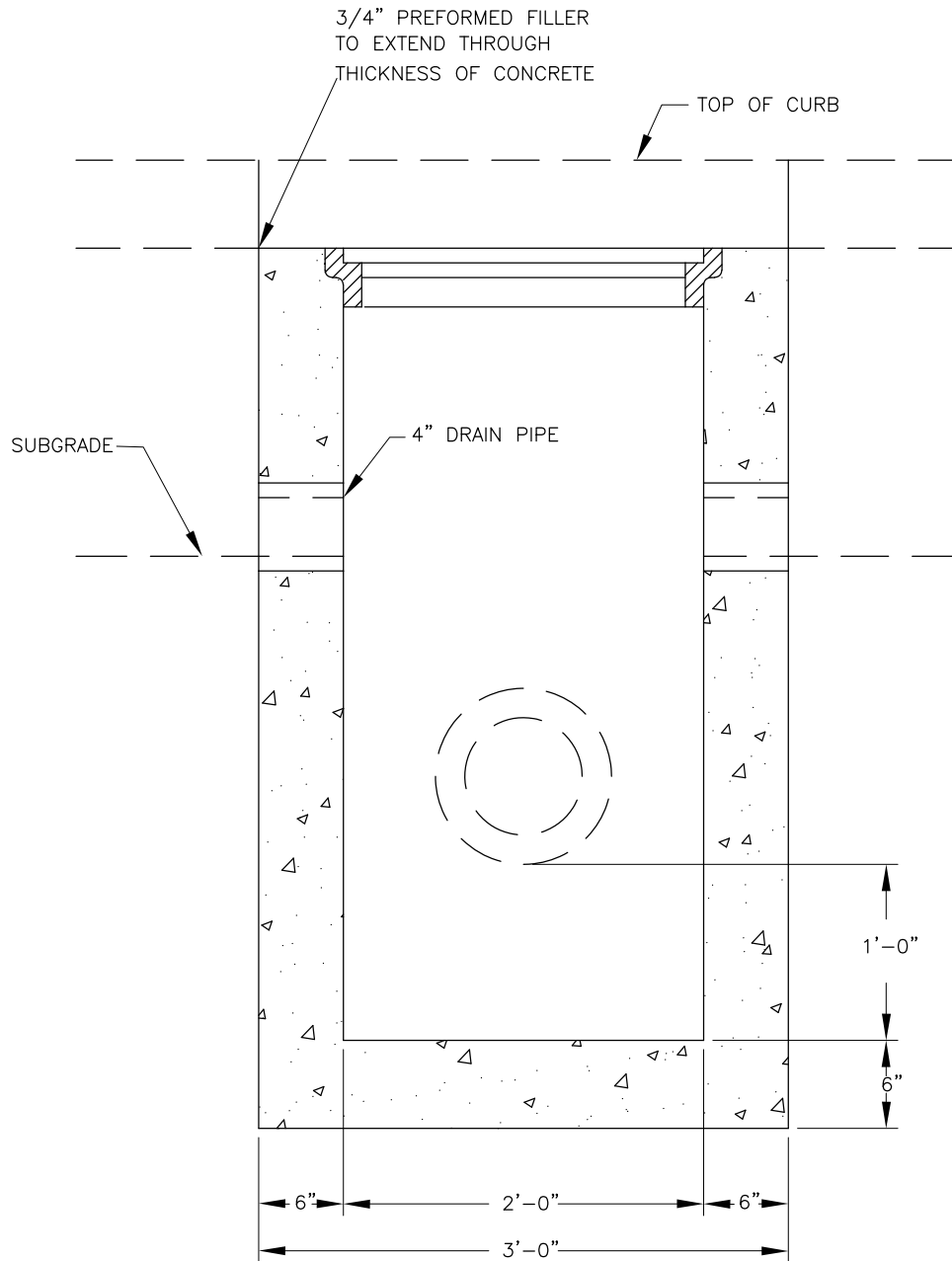
Date Adopt. 11/01/12

Date Rev. ----

DWG. NO.

Dwg. Name: SD-3 Catch Basin.dwg

SD-3



SECTION A

NOTES:

1. SUMP REQUIRED IN CATCH BASINS WITH OUTLET PIPE ONLY. FOR CATCH BASINS WITH INLET AND OUTLET PIPES FORM CHANNELS TO DIRECT FLOW.
2. CATCH BASIN BASE SHALL BE CITY OF SALEM TYPE 1, SHORT 36".
3. OPTION: CATCH BASIN BASE CAN BE WSDOT TYPE 1.



City of Astoria
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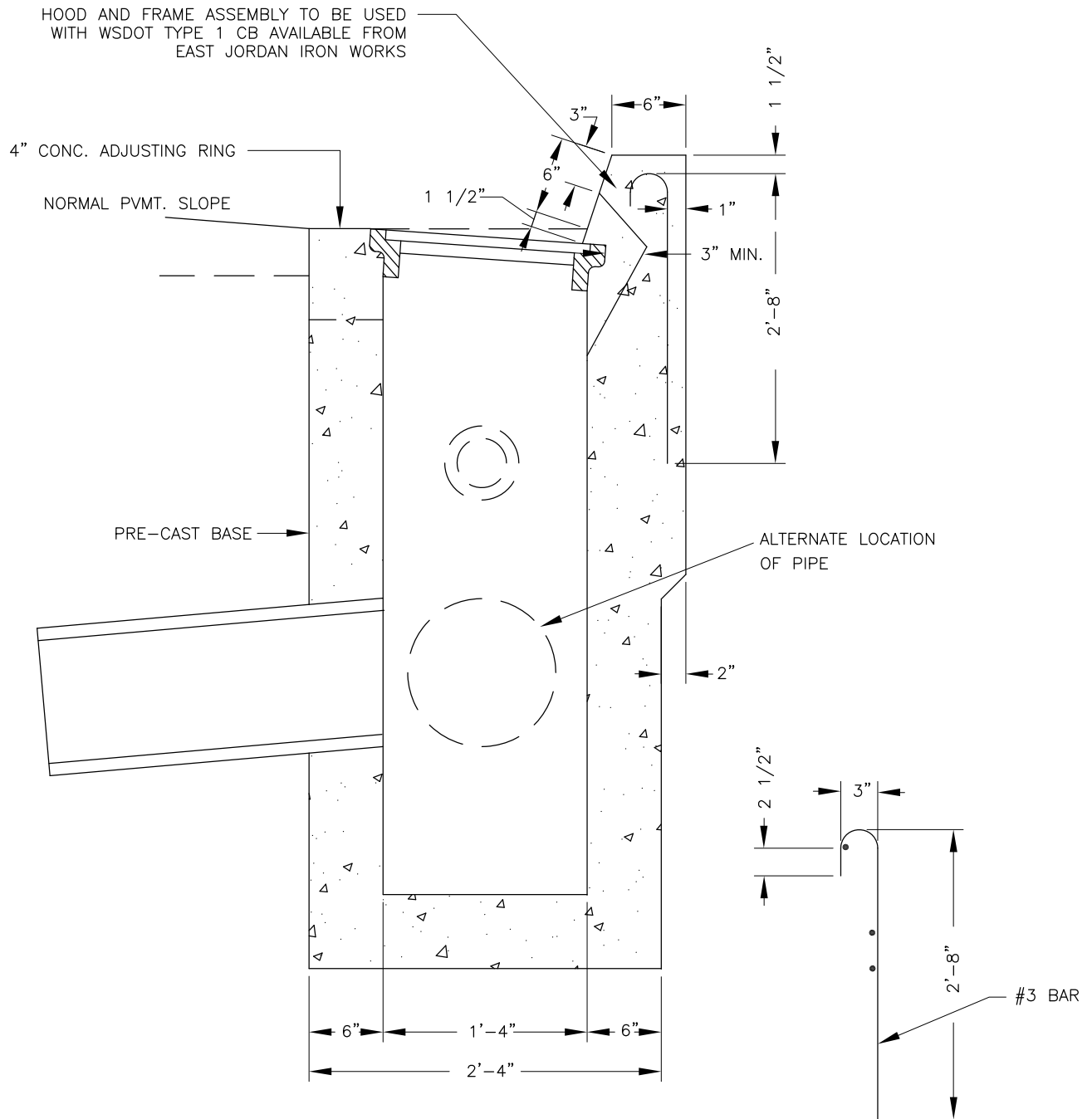
Catch Basin Detail

Date Adopt. 11/01/12 Date Rev. 09/11/17

Dwg. Name: SD-4 Catch Basin.dwg

DWG. NO.

SD-4



City of Astoria
Public Works Department
1095 Duane Street

Catch Basin Detail

Date Adopt. 11/01/12

Date Rev. 09/11/17

DWG. NO.

Dwg. Name: SD-5 Catch Basin.dwg

SD-5