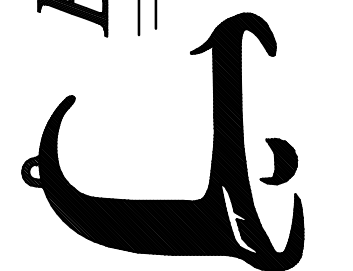


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**PROPOSED STORMLINE**  
**PORTWAY STORMWATER PIPELINE PROJECT**  
HOOD RIVER OREGON

JOB NO. 21B295  
DATE 07/25/22  
DRAWN BY CTB CHECKED BY SWB  
REVISIONS DATE  
RECORD DRAWINGS DATE



SHEET NO.

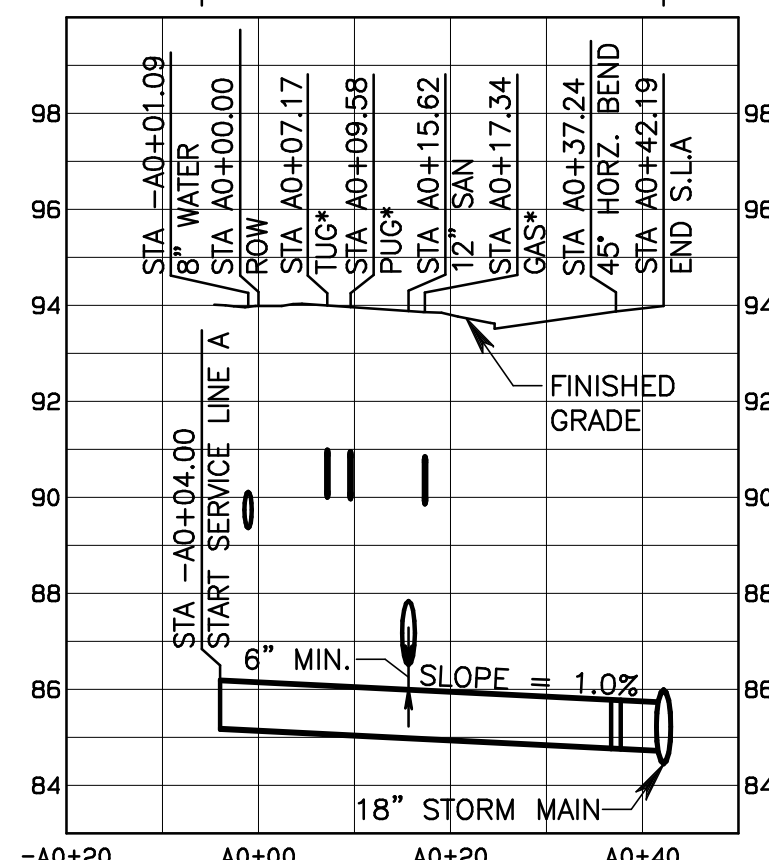
C2.00



### TEMPORARY OPERATION NOTES

THE PORTWAY STORMWATER PIPELINE IS ASSUMED TO BE CONSTRUCTED PRIOR TO THE CONSTRUCTION OF THE CITY'S NEW STORMLINE. THIS WILL REQUIRE THE STORMWATER COLLECTED BY THE CATCH BASINS TO BE DIVERTED TO THE EXISTING PIPE ON THE SOUTH SIDE OF THE NEW CATCH BASIN. THIS TEMPORARY OPERATION WILL REQUIRE THE COLLECTED STORMWATER TO FLOW IN REVERSE FROM MANHOLE #1 INTO THE PERMANENT OUTLET OF THE NEW CATCH BASIN, WHERE IT WILL CONTINUE TO FLOW IN REVERSE THROUGH THE BASIN TO THE TEMPORARY OUTLET ON THE SOUTH SIDE OF THE BASIN AND INTO THE EXISTING PIPE. THE TEMPORARY OPERATION OF THE BASIN WILL REQUIRE THE OUTLET OF MANHOLE #1 TO BE TEMPORARILY PLUGGED AND THE NEW CATCH BASIN FILTERS AND CLEANOUT ACCESS PLUG ON THE WEIR WALL TO BE REMOVED AND TEMPORARILY STORED. ONCE THE CITY'S NEW STORMLINE AT N. 8TH ST. IS INSTALLED, THE TEMPORARY PLUG IN MANHOLE #1 WILL BE REMOVED, THE NEW CATCH BASIN TEMP. OUTLET WILL BE PLUGGED, AND THE FILTERS AND CLEANOUT ACCESS PLUG WILL BE REINSTALLED.

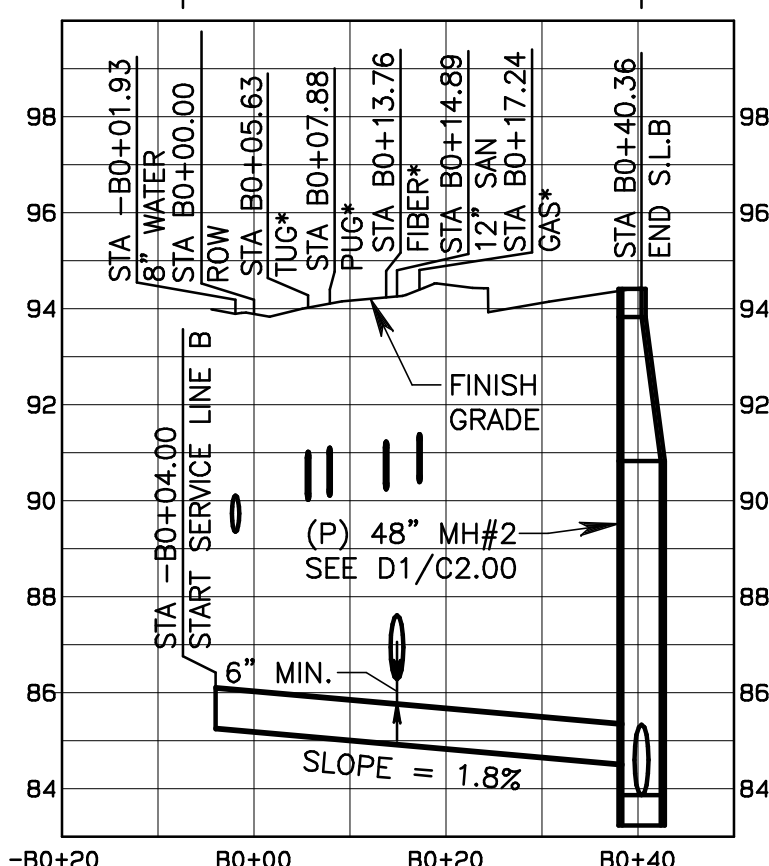
ACP | SCG | ACP  
CLASS B BACKFILL  
12" ASTM D3034 PVC



### SERVICE LINE A - PROFILE

SCALE HORZ. 1" = 20'-0", VERT. 1" = 4'-0"

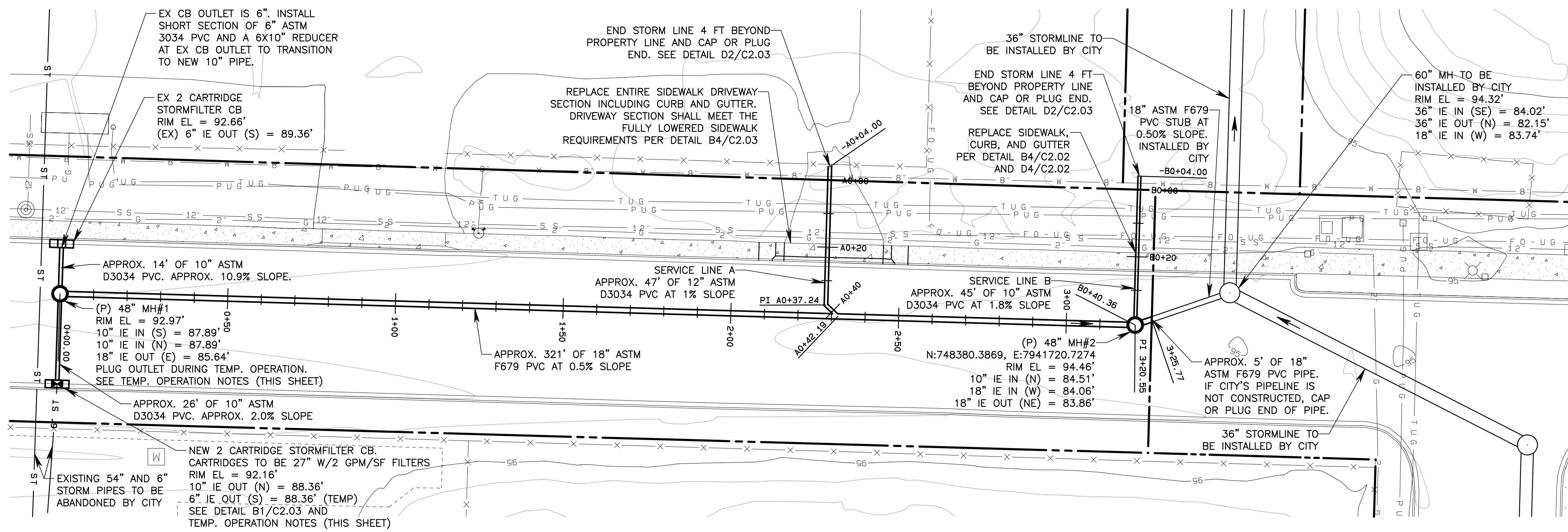
ACP | SCG | ACP  
CLASS A | CLASS B  
12" ASTM D3034 PVC



### SERVICE LINE B - PROFILE

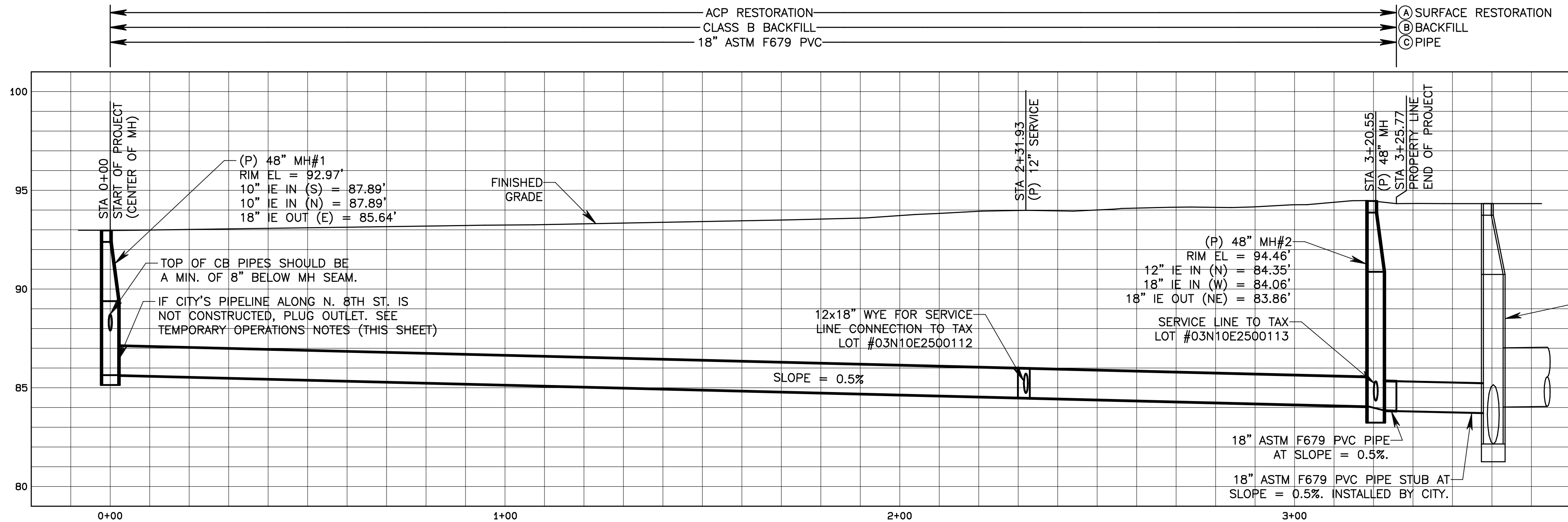
SCALE HORZ. 1" = 20'-0", VERT. 1" = 4'-0"

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### PORTWAY STORMLINE - PLAN

SCALE 1" = 20'-0", CONTOURS @ 1'



### PORTWAY STORMLINE - PROFILE

SCALE HORZ. 1" = 20'-0", VERT. 1" = 4'-0"

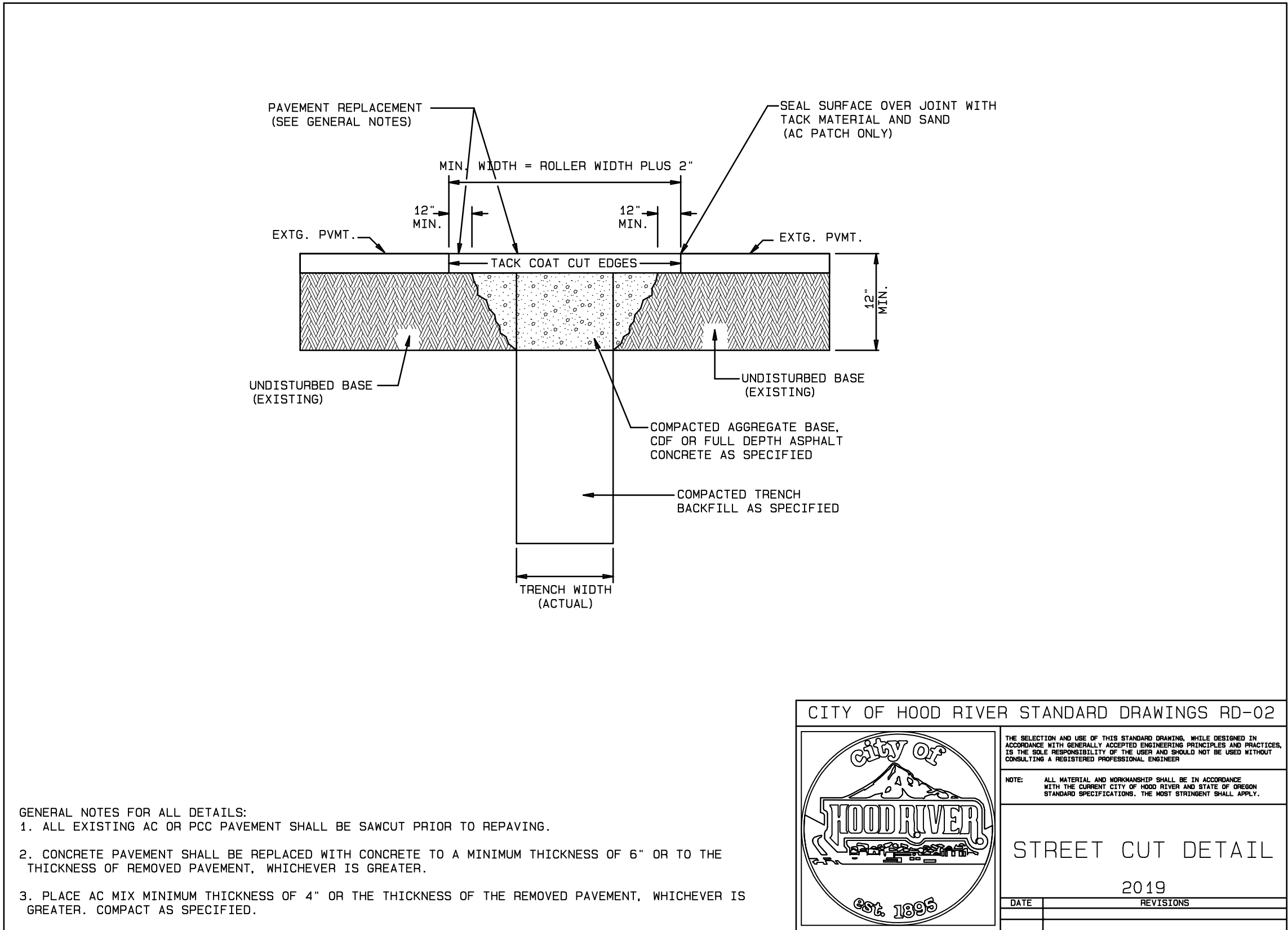
THIS LINE IS 1" LONG. IF THIS LINE IS NOT 1" LONG, ADJUST SCALE ACCORDINGLY

NOTES:  
-SCG = SIDEWALK, CURB, AND GUTTER REFER TO DETAILS B4/C2.02, D4/C2.02, AND B4/C2.03 FOR REPLACEMENT.  
-ALL ACP SHALL HAVE A MINIMUM THICKNESS OF 4" OR THE THICKNESS OF THE REMOVED PAVEMENT, WHICHEVER IS GREATER, COMPACT AS SPECIFIED.  
\*TUG, PUG, FIBER, AND GAS WERE NOT LOCATED. ASSUMED BURY DEPTH OF THESE UTILITIES BETWEEN 3 AND 4 FT. CONTRACTOR TO FIELD VERIFY DEPTH BEFORE CONSTRUCTION.



A

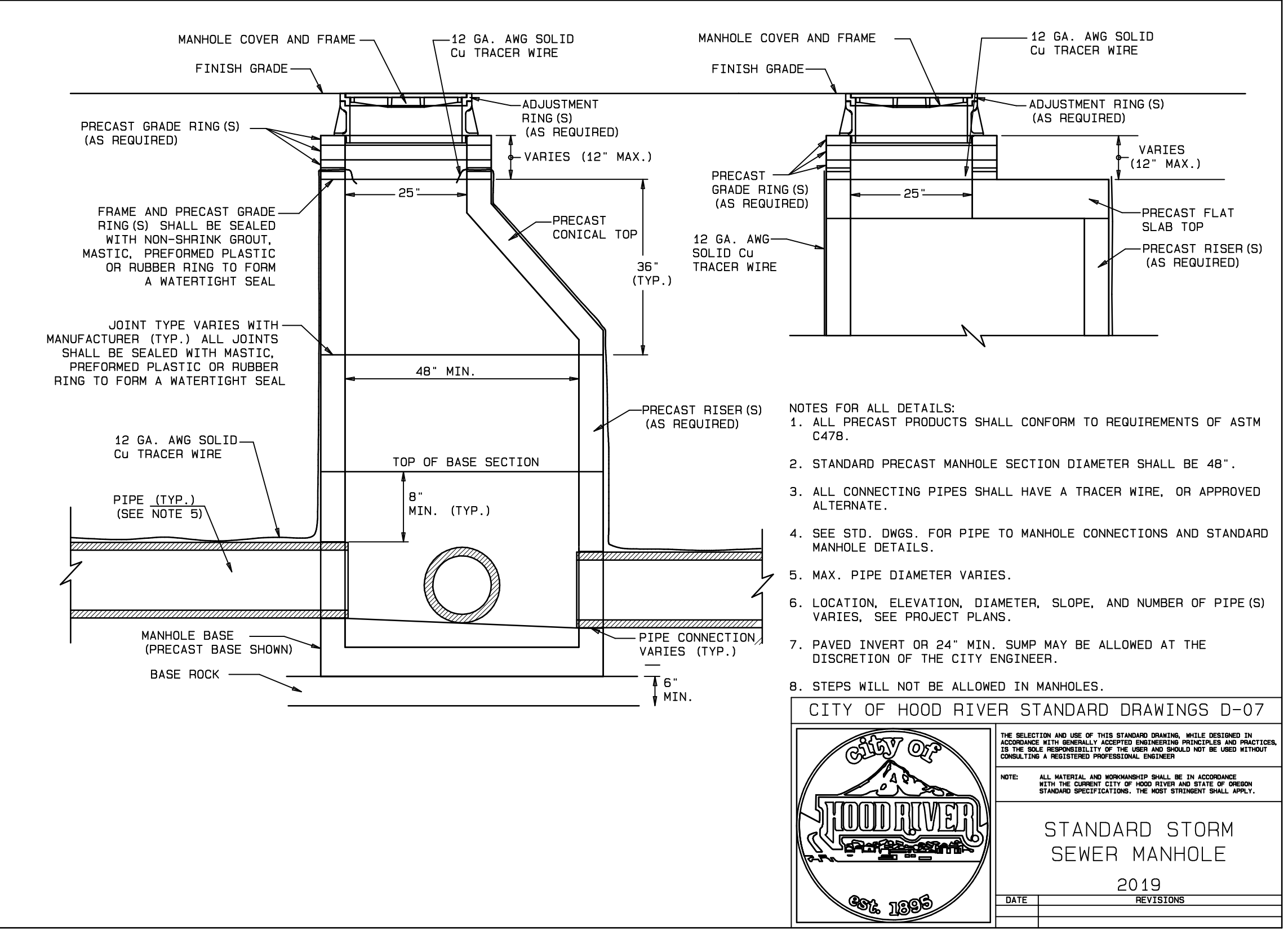
B



B-1  
C2.01

HR STANDARD TRENCH CUT DETAIL

NOT TO SCALE



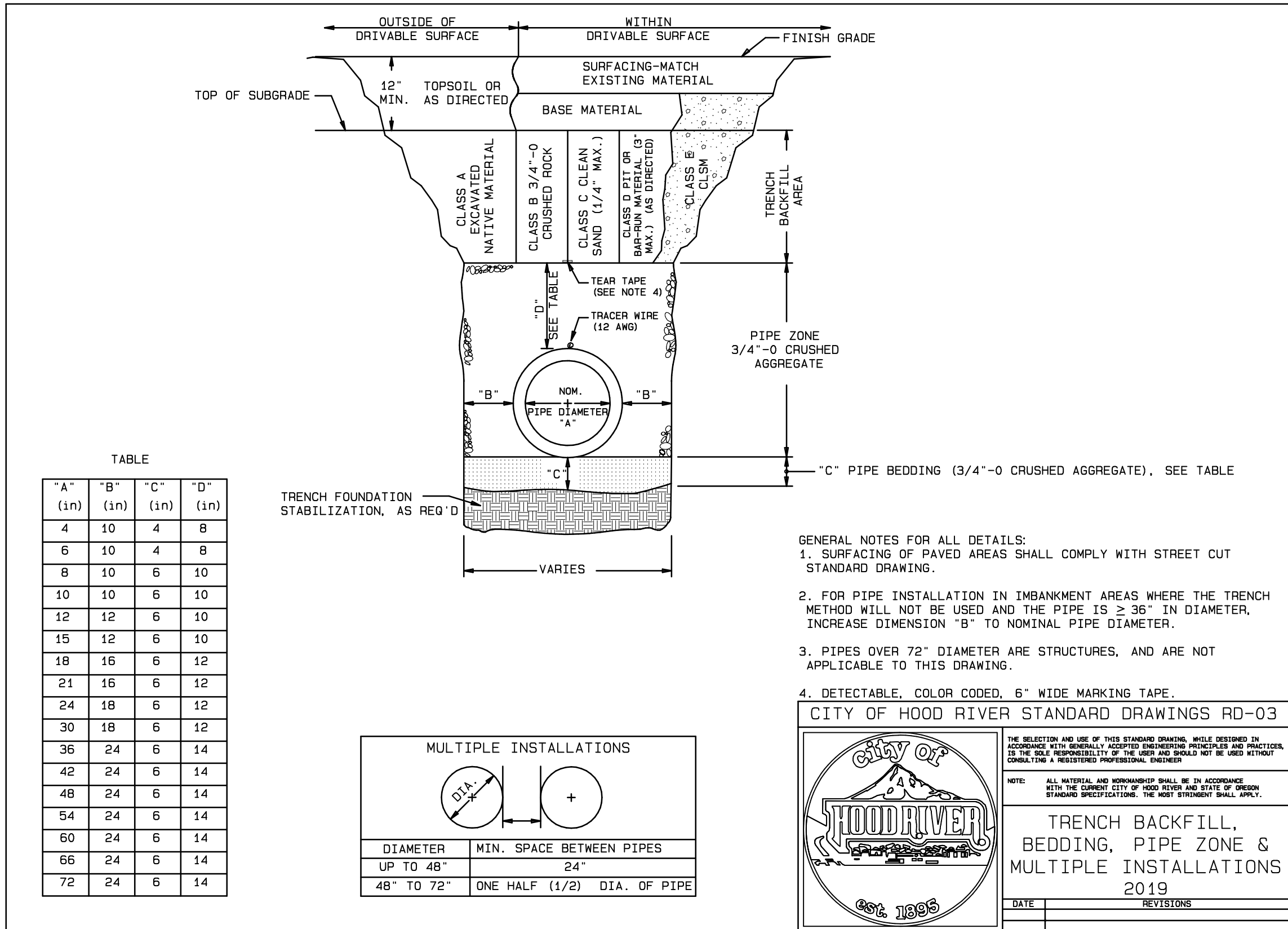
B-4  
C2.01

HR STANDARD MANHOLE DETAIL

NOT TO SCALE

C

D



D-1  
C2.01

HR STANDARD TRENCH DETAIL

NOT TO SCALE

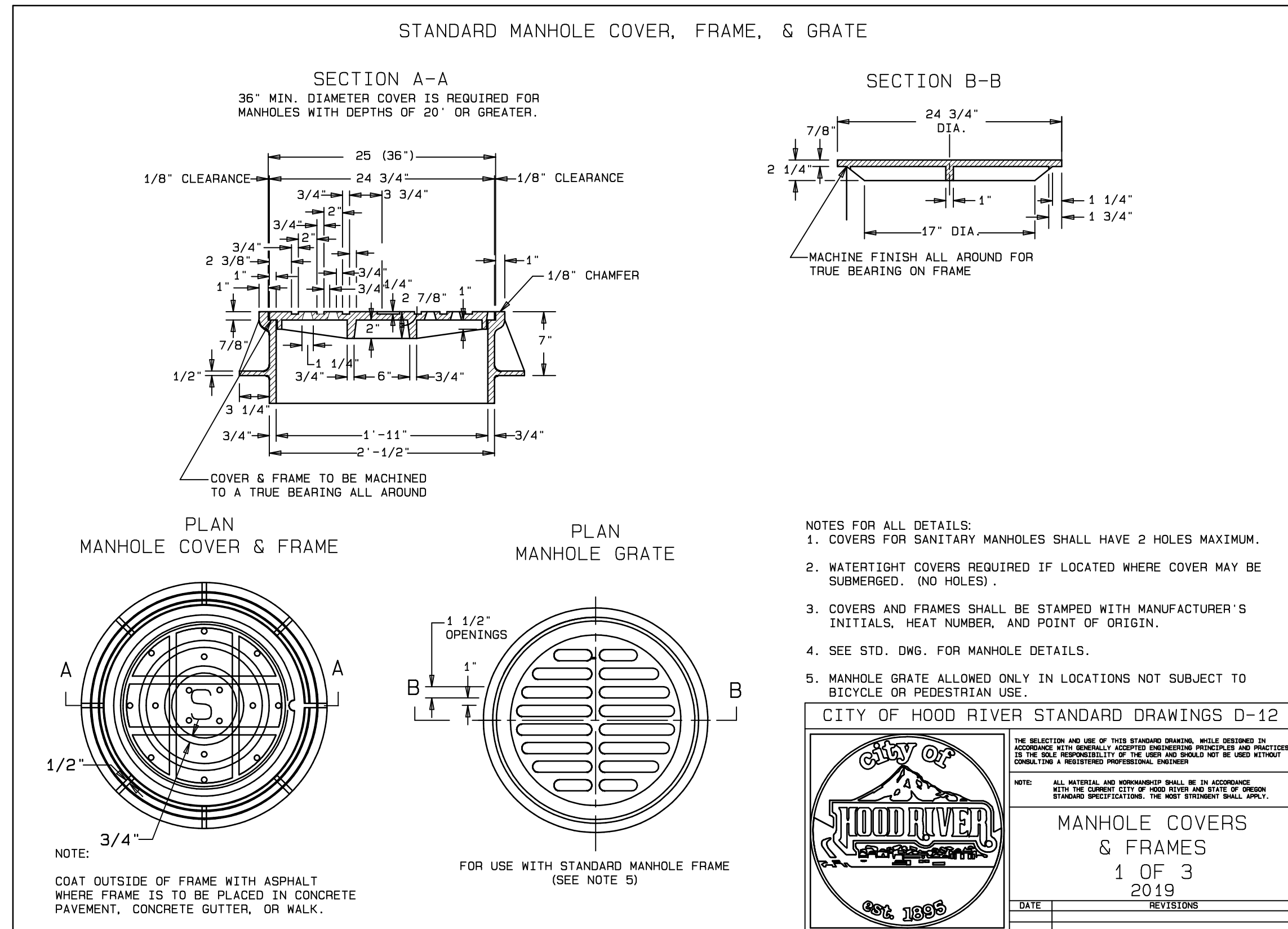
CITY OF HOOD RIVER STANDARD PLANS NOTE:

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D-4  
C2.01

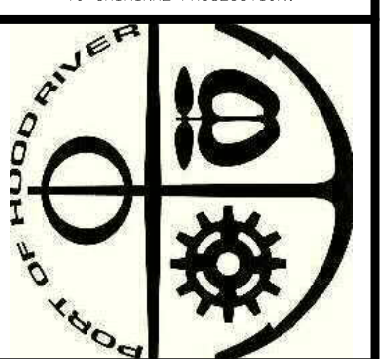
HR STANDARD MANHOLE COVER DETAIL

NOT TO SCALE

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**HOOD RIVER STANDARD DETAILS**

**PORTWAY STORMWATER PIPELINE PROJECT**

HOOD RIVER OREGON

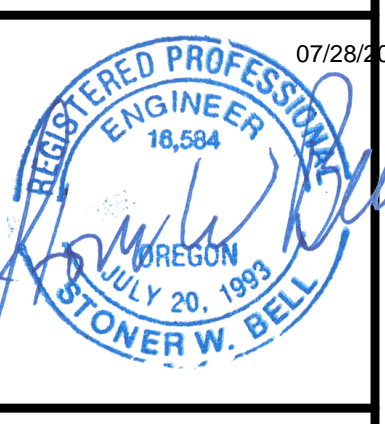
JOB NO. 21B295

DATE 07/25/22

DRAWN BY CTB CHECKED BY SWB

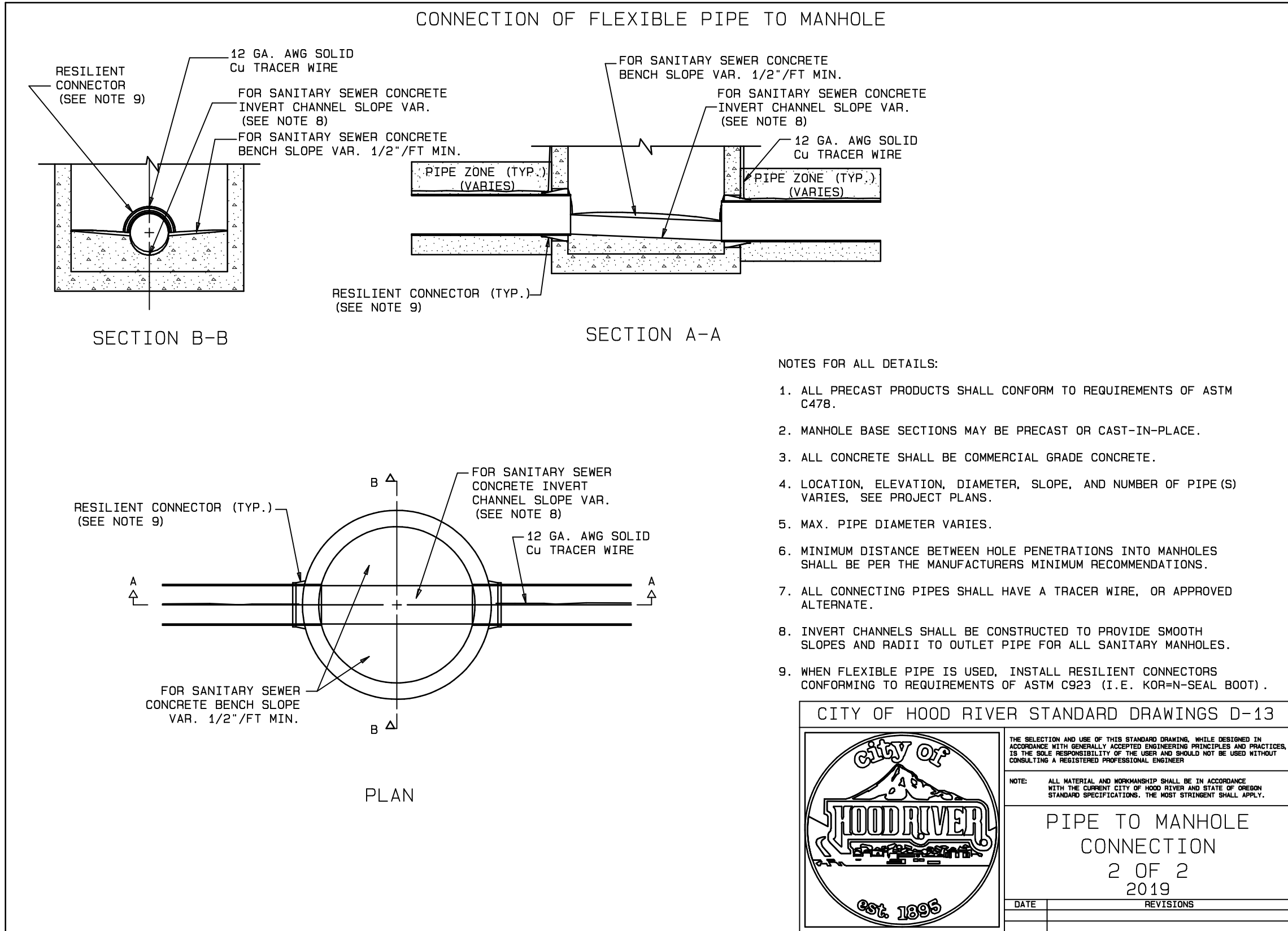
REVISIONS DATE

RECORD DRAWINGS DATE



SHEET NO. C2.01

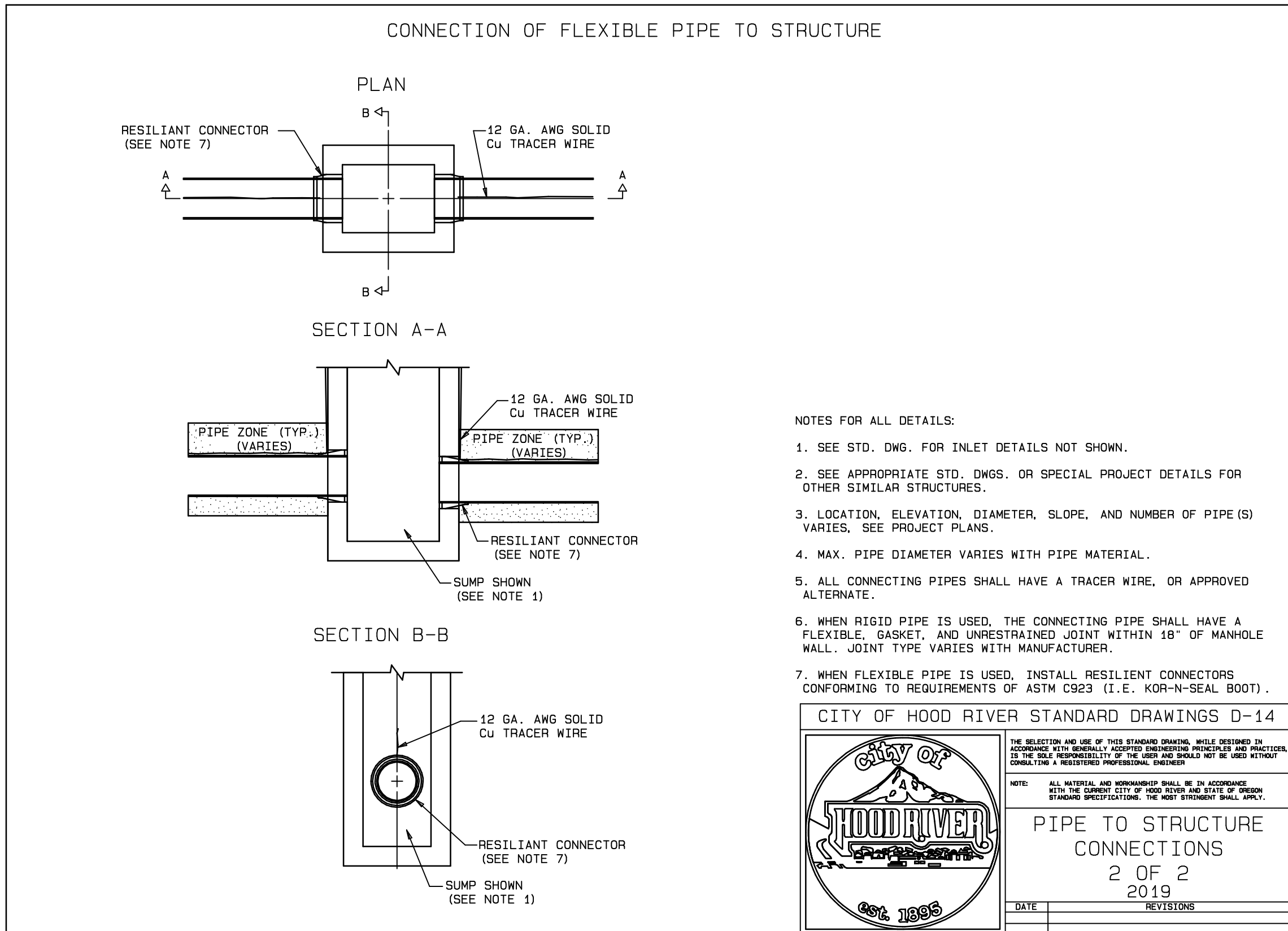




B-1  
C2.02

HR STANDARD MANHOLE CONNECTION DETAIL

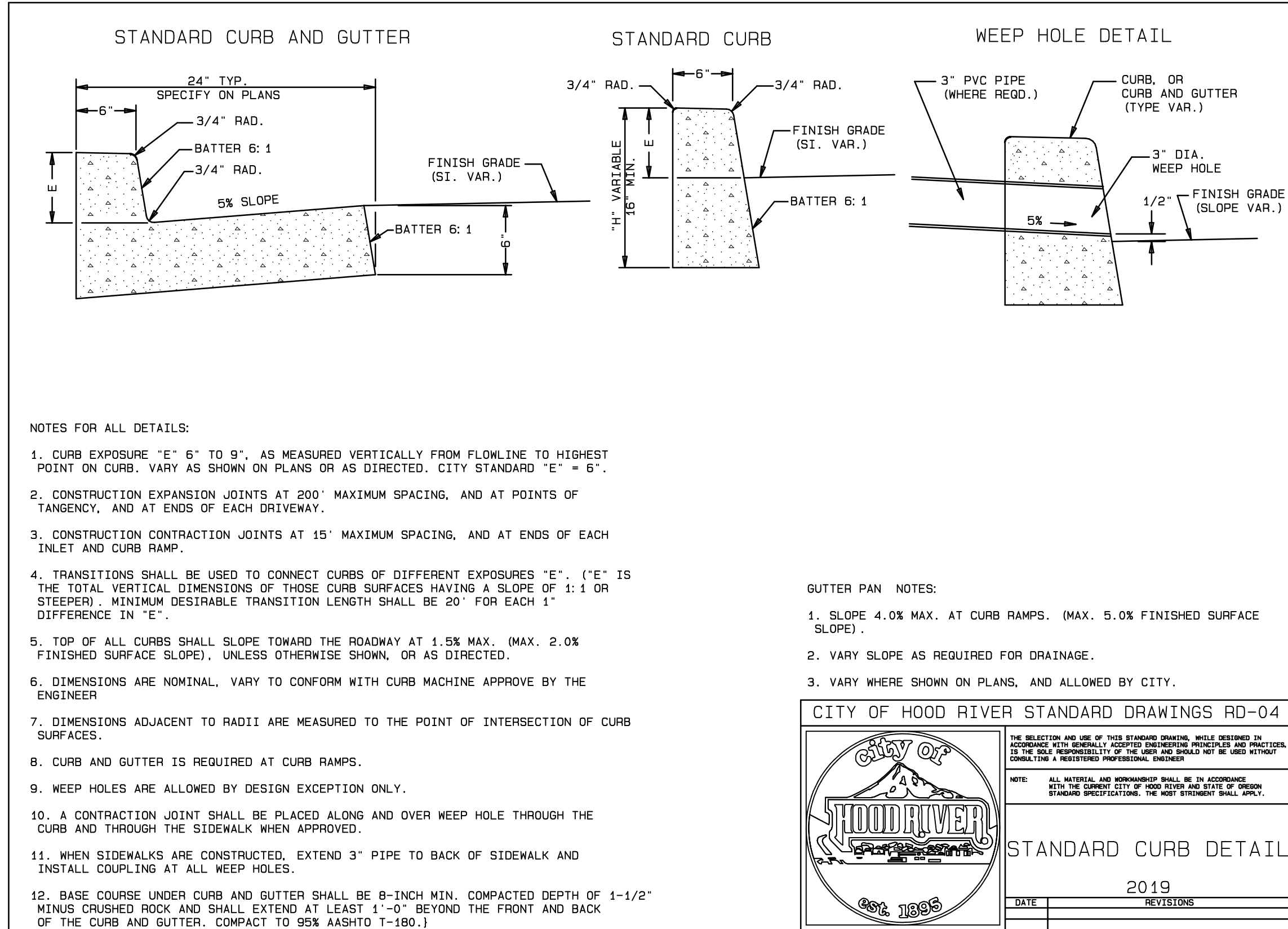
NOT TO SCALE



D-1  
C2.02

HR STANDARD CATCH BASIN CONNECTION DETAIL

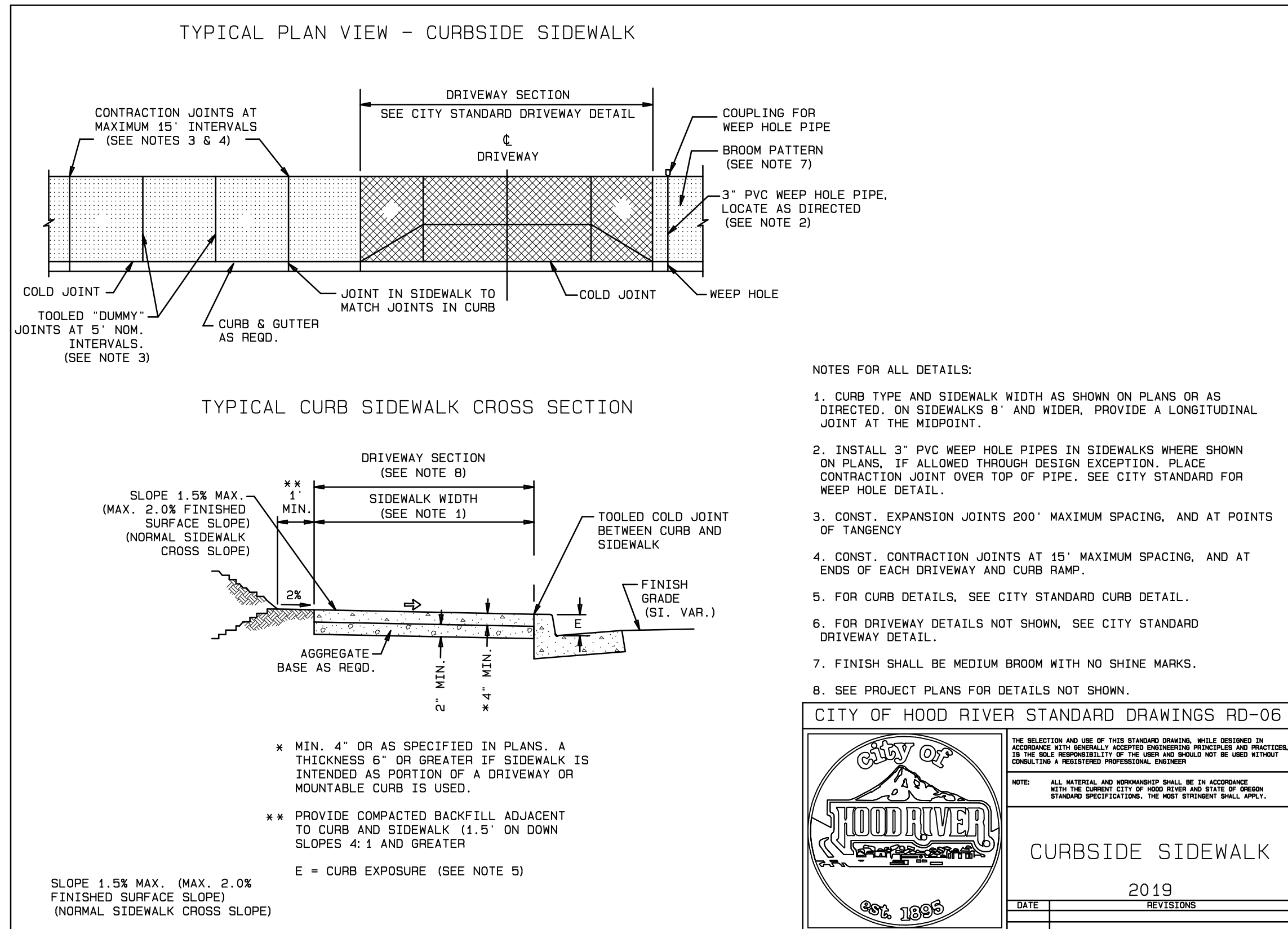
NOT TO SCALE



B-4  
C2.02

HR STANDARD CURB DETAIL

NOT TO SCALE



D-4  
C2.02

HR STANDARD CURBSIDE SIDEWALK DETAIL

NOT TO SCALE

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**PORTWAY STORMWATER PIPELINE PROJECT**

HOOD RIVER OREGON

JOB NO. 21B295  
DATE 07/25/22  
DRAWN BY CTB CHECKED BY SWB  
REVISIONS DATE  
RECORD DRAWINGS DATE

07/28/2022  
REGISTERED PROFESSIONAL ENGINEER  
18,584  
OREGON  
JULY 20, 1993  
STONER, W. BELL

SHEET NO.  
C2.02

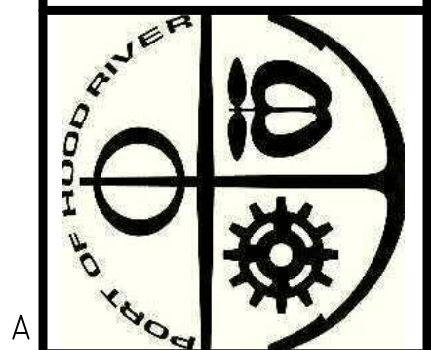


A

B

C

D

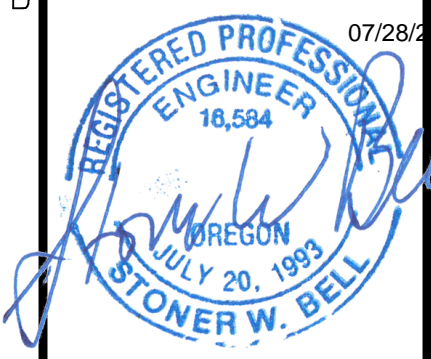


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**DETAILS**  
**PORTWAY STORMWATER PIPELINE PROJECT**  
HOOD RIVER  
OREGON

JOB NO. 21B295  
DATE 07/25/22  
DRAWN BY CTB CHECKED BY SWB  
REVISIONS DATE  
RECORD DRAWINGS DATE



SHEET NO.  
**C2.03**

STORMFILTER STEEL CATCHBASIN DESIGN NOTES

STORMFILTER TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE SELECTION AND THE NUMBER OF CARTRIDGES. 2 CARTRIDGE CATCHBASIN HAS A MAXIMUM OF TWO CARTRIDGES. SYSTEM IS SHOWN WITH A 2" CARTRIDGE, AND IS ALSO AVAILABLE WITH AN 1" CARTRIDGE. STORMFILTER CATCHBASIN CONFIGURATIONS ARE AVAILABLE WITH A DRY INLET BAY FOR VECTOR CONTROL. PEAK HYDRAULIC CAPACITY PER TABLE BELOW. IF THE SITE CONDITIONS EXCEED PEAK HYDRAULIC CAPACITY, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

CARTRIDGE SELECTION	
CARTRIDGE HEIGHT	2"
RECOMMENDED HYDRAULIC DROP (H)	3.0'
SPECIFIC FLOW RATE (gpm/sf)	2 gpm/sf
CARTRIDGE FLOW RATE (gpm)	22.5
PEAK HYDRAULIC CAPACITY, CFS	1.0
INLET PERMANENT POOL LEVEL (A)	1'-0"
OVERALL STRUCTURE HEIGHT (B)	4'-0"

\* 1.67 gpm/sf SPECIFIC FLOW RATE IS APPROVED WITH PHOSPHOSORB® (PSCRB) MEDIA ONLY.

GENERAL NOTES:  
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.  
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STORMFILTER CATCHBASIN STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE, WWW.CONTECHES.COM  
3. STORMFILTER CATCHBASIN WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.  
4. INLET SHOULD NOT BE LOWER THAN OUTLET. INLET (IF APPLICABLE) AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.  
5. MANUFACTURER TO APPLY A SURFACE BEAD WELD IN THE SHAPE OF THE LETTER "O" ABOVE THE OUTLET PIPE STUB ON THE EXTERIOR SURFACE OF THE STEEL SFCB.  
6. STORMFILTER CATCHBASIN EQUIPPED WITH 4 INCH (APPROXIMATE) LONG STUBS FOR INLET (IF APPLICABLE) AND OUTLET PIPING. STANDARD OUTLET STUB IS 8 INCHES IN DIAMETER. MAXIMUM OUTLET STUB IS 15 INCHES IN DIAMETER. CONNECTION TO COLLECTION PIPING CAN BE MADE USING FLEXIBLE COUPLING BY CONTRACTOR.  
7. STEEL STRUCTURE TO BE MANUFACTURED OF 1/4 INCH STEEL PLATE. CASTINGS SHALL MEET AASHTO M306 LOAD RATING. TO MEET HS20 LOAD RATING ON STRUCTURE, A CONCRETE COLLAR WITH #4 REINFORCING BARS TO BE PROVIDED BY CONTRACTOR.  
8. FILTER CARTRIDGES SHALL BE MEDIA FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF CLEANING. RADIAL MEDIA DEPTH SHALL BE 4 INCHES. FILTER MEDIA CONTACT TIME SHALL BE AT LEAST 38 SECONDS.  
9. SPECIFIC FLOW RATE IS EQUAL TO THE FILTER TREATMENT CAPACITY (gpm) DIVIDED BY THE FILTER CONTACT SURFACE AREA (sq ft).

INSTALLATION NOTES:  
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.  
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CATCHBASIN (LIFTING CLUTCHES PROVIDED).  
C. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

PLAN VIEW

SECTION A-A

SECTION B-B

CONFIGURATIONS

2 CARTRIDGE CATCHBASIN STORMFILTER STANDARD DETAIL

OPTION G  
FULLY LOWERED SIDEWALK

SECTION C-C

GENERAL NOTES:  
1. NOTES FOR ALL DETAILS FOUND ON SHEET 1.

DRIVEWAY LIP EXPOSURE 3/4" MAX.

FINISH GRADE

SLOPE VAR. (2.0% NORMAL)

LOWERED CURB & GUTTER THROUGH APRON

CURB TYPE VAR. (SEE NOTE 4)

DRIVEWAY PAY LIMIT

GUTTER LINE

ZONE TO MATCH EX. DRIVEWAY LENGTH VARIES (SEE NOTE 6)

20 MIN. LANDING AREA

SLOPE +/- 2% NORM. (+/- 5% MAX.)

12% MAX. CHANGE IN SLOPE @ 10' INTERVALS (SAG)

+1.4% MAX.

-5% MAX.

8% MAX. CHANGE IN SLOPE @ 10' INTERVALS (CREST)

P.C. CONCRETE DRIVEWAY, 6" MIN. THICKNESS AS SHOWN, OR AS DIRECTED

W WIDTH OF DRIVEWAY

E CURB EXPOSURE

SLOPE 1.5% MAX. (MAX. 2.0% FINISHED SURFACE SLOPE) (NORMAL SIDEWALK CROSS SLOPE)

SLOPE 7.5% MAX. (MAX. 8.3% FINISHED SURFACE SLOPE)

SIDEWALK

DRIVEWAY PAY LIMIT (SEE PROJECT PLAN FOR DETAILS NOT SHOWN)

W WIDTH OF DRIVEWAY

E CURB EXPOSURE

SLOPE 1.5% MAX. (MAX. 2.0% FINISHED SURFACE SLOPE) (NORMAL SIDEWALK CROSS SLOPE)

SLOPE 7.5% MAX. (MAX. 8.3% FINISHED SURFACE SLOPE)

5' MIN.

20' MIN. (SEE NOTE 9)

7' NORM. (VAR. WITH E)

7' NORM. (VAR. WITH E)

\* SEE NOTE 7

\* SEE NOTE 7

CITY OF HOOD RIVER STANDARD DRAWINGS RD-07

DRIVEWAY DETAIL (OPTIONS F)

5 OF 5

2019

DATE

REVISIONS

B-4  
C2.03  
HR STANDARD FULLY LOWERED SIDEWALK DETAIL  
NOT TO SCALE

CITY OF HOOD RIVER STANDARD PLANS NOTE:  
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EXISTING CURB AND GUTTER. DO NOT DISTURB EXCEPT WHERE NOTED ON PLANS. RESTORE AT CONTRACTOR'S SOLE EXPENSE.

EXISTING SIDEWALK SURFACE. DO NOT DISTURB EXCEPT WHERE NOTED ON PLANS. RESTORE AT CONTRACTOR'S SOLE EXPENSE.

SAWCUT BOTH SIDES OF TRENCH. SEE NOTE 1 AND DETAIL B-1/C2.01.

TRENCH WIDTH AS REQUIRED. CUT 12" BEYOND EDGE OF TRENCH ON EACH SIDE\*

2" GRIND AND OVERLAY\* SEE NOTE #2

CONTINUE 2" GRIND AND OVERLAY TO SOUTH CURB AND GUTTER

BASE TO BE REPLACED

EXISTING BASE TO REMAIN

ASPHALT TO BE REPLACED. MATCH EXISTING DEPTH AT TRENCH (4" MIN.).

TRENCH. SEE DETAIL D-1/C2.01

NEW PIPE OR CONDUIT

NOTES:  
1. CONTRACTOR SHALL SAWCUT AND REMOVE EXISTING ASPHALT TO THE WIDTH OF THE TRENCH PRIOR TO TRENCHING. AFTER TRENCH IS BACKFILLED AND COMPACTED, CONTRACTOR SHALL SAWCUT AND REMOVE THE ASPHALT A MIN. OF 12" BEYOND THE EDGE OF TRENCH.  
2. GRIND EXISTING PAVEMENT AND OVERLAY AFTER ALL TRENCHING WORK IS COMPLETED.

\*PAY LIMIT FOR 2" ASPHALT REPLACEMENT DIRECTLY OVER TRENCH SHALL BE LIMITED TO A MAX. OF 12' BETWEEN FINAL SAWCUTS. PAY LIMIT FOR 2" FULL STREET ASPHALT REPLACEMENT SHALL BE FROM EDGE OF THE CURB AND GUTTER TO OPPOSITE EDGE OF CURB AND GUTTER.

D-4  
C2.03  
FULL STREET GRIND AND OVERLAY DETAIL  
NOT TO SCALE

THIS LINE IS 1" LONG. IF THIS LINE IS NOT 1" LONG, ADJUST SCALE ACCORDINGLY  
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B-1  
C2.03  
CONTECH STORMFILTER CATCHBASIN DETAIL  
NOT TO SCALE

MANHOLE #1

MANHOLE #2

2"x4" PT SERVICE CONNECTION MARKER

BACKFILL AGAINST CAP TO PREVENT CAP BLOWOFF & SECURE IN PLACE WITH TRENCH BACKFILL.

PROVIDE PT BLOCK IF NEEDED

GASKETED CAP

SEWER LATERAL

PAINT WHITE TO 12" BELOW SURFACE

LOCATE WIRE, SECURE ABOVE GRADE TO 2"x4"

24" MIN.

24" MIN.

10" ASTM D3034 PVC

18" ASTM F679 PVC

89.8"

180°

90.2"

135°

225°

18" ASTM F679 PVC

D-1  
C2.03  
MANHOLE PIPE ORIENTATION DETAIL  
NOT TO SCALE

D-2  
C2.03  
SEWER LATERAL TERMINATION DETAIL  
NOT TO SCALE