City of Stevenson
Ordinance 2025-1231

An Ordinance Amending the City of Stevenson Engineering Standards for Public Works Construction

WHEREAS, the City of Stevenson has adopted Engineering Standards for Public Works Construction ("Standards") governing the design and construction of water, sanitary sewer, streets, stormwater, drainage, erosion control, and related public works improvements; and

WHEREAS, the current Standards contain gaps and ambiguities that can lead to misinterpretation and inconsistent application; and

WHEREAS, Section 1.15 of Volume 1 – Design and Planning of the Standards authorizes the City to amend and update these requirements as necessary; and

WHEREAS, the City Council finds that the proposed amendments:

1. Comply with all applicable laws and regulations;
2. Modernize and clarify the Standards to reflect current public works practices; and
3. Promote the health, safety, and welfare of the community;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF STEVENSON ORDAINS AS FOLLOWS:

Section 1. Amendment to Standards.

The City of Stevenson Engineering Standards for Public Works Construction, as previously adopted, are hereby amended and replaced with the updated **Standard Details** prepared by Shell Engineering and attached as *Exhibit A*. These updated Standards incorporate clearer guidance, additional illustrations, and simplified requirements to ensure consistency and usability in the field.

Section 2. Severability.

If any section, subsection, sentence, clause, or phrase of this ordinance, or its application to any person or circumstance, is held invalid, the remainder of this ordinance and its application shall not be affected.

Section 3. Effective Date.

This ordinance shall take effect and be in full force following passage and publication as required by law.

PASSED by the City Council of the City of Stevenson and approved by the Mayor this _____ day of _____, 2025.

SIGNED:

Scott Anderson
Mayor of Stevenson

ATTEST:

Wesley Wootten
Administrator/Clerk

APPROVED AS TO FORM:

Robert Muth
City Attorney

Exhibit A

Standard Details for Sanitary services; Street Services; Storm water Services; General details; Drainage; Erosion-Control; Single Family Residents.

- Update the language to better reflect today's Public Works requirements
- Update to include less text and more examples of work via images
- Update to make easier for users to interpret and follow

STANDARD EROSION CONTROL NOTES

1. APPROVAL OF EROSION/SEDIMENTATION CONTROL (ESC) PLANS DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).

2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR/ DEVELOPER UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED. THE CONTRACTOR SHALL INSTALL AND MAINTAIN BMP'S AS SHOWN AND PERFORM ALL ACTIONS NECESSARY TO CONTROL EROSION AND PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE.

3. ALL EROSION CONTROL MEASURES (I.E. SILT FENCE, CONSTRUCTION ENTRANCE, SEDIMENTATION BARRIERS, SEDIMENTATION TRAPS, ETC.) SHALL BE IN-PLACE AND IN WORKING CONDITION PRIOR TO DISTURBING AND/OR EXPOSING ANY SITE SOIL SURFACES.

4. ALL EROSION PREVENTION AND CONTROL BMP'S SHALL BE MAINTAINED AND REPAIRED AS NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. NEEDED REPAIRS SHALL BE MADE AS SOON AS POSSIBLE. CONSTRUCTION ACTIVITIES SHALL NOT CONTINUE OR RESUME UNTIL REPAIRS TO EROSION CONTROL FACILITIES ARE MADE AND THE FACILITIES ARE FUNCTIONAL. ANY SEDIMENT LEAVING THE SITE OR DISCHARGING TO A SENSITIVE AREA SHALL BE STOPPED AND CONTROLLED IMMEDIATELY. AREAS CONTAMINATED WITH SEDIMENT SHALL BE CLEANED AND RESTORED.

5. NO EXPOSED/BARE SOILS SHALL REMAIN UNSTABILIZED FOR MORE THAN TWO DAYS DURING THE PERIOD OCTOBER 1 THRU APRIL 30, OR FOR MORE THAN SEVEN DAYS DURING THE PERIOD OF MAY 1 THROUGH SEPTEMBER 30. ALL DISTURBED SOIL SURFACES SHALL BE STABILIZED BY A SUITABLE APPLICATION OF "BEST MANAGEMENT PRACTICES" (“BMP'S”).

6. DURING DRY WEATHER CONSTRUCTION PERIODS THE CONTRACTOR SHALL PROVIDE PROJECT-SPECIFIC DUST CONTROL MEASURES INCLUDING BUT NOT LIMITED TO INCLUDE SEEDING, MULCHING, MATTING, WATER, TACKIFIER, OR CHEMICAL SOIL STABILIZERS. THE CONTRACTOR SHALL MAINTAIN THE DUST CONTROL MEASURES THROUGH DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED. IMMEDIATELY RE-STABILIZE AREAS DISTURBED BY CONTRACTOR'S OPERATIONS OR OTHER ACTIVITIES (WIND, WATER, VANDALISM, ETC.).

7. SIGNIFICANT VARIATION AND DEGREE OF EROSION CONTROL EFFORT WILL BE DICTATED BY WEATHER CONDITIONS. FINE GRAINED AND UNCONSOLIDATED SOILS ON SLOPING SITES MAY BECOME UNSTABLE WHEN SUBJECT TO EXCESSIVE MOISTURE.THE DEVELOPER AND CONTRACTOR SHALL BE PREPARED TO PROVIDE EXTRA EROSION CONTROL PROVISIONS AND EFFORT DURING WINTER AND WET WEATHER CONDITIONS BEYOND THAT NORMALLY REQUIRED DURING SUMMER AND DRY WEATHER CONDITIONS.

8. TO PREVENT SEDIMENT LADEN RUNOFF FROM LEAVING OR BEING TRANSPORTED, EROSION CONTROL BMP'S SHALL BE PROVIDED FOR STAGING AREAS, INCLUDING AREAS USED FOR EMPLOYEE PARKING AND MATERIALS STORAGE. STOCKPILES OF ERODIBLE EARTHEN MATERIALS SHALL BE COVERED WHEN NOT BEING INCORPORATED INTO THE WORK.

9. ENTRY ONTO THE CONSTRUCTION SITE SHALL BE RESTRICTED TO A SINGLE APPROVED ENTRANCE AS SHOWN ON THE PLAN. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

10. ANY SOIL OR DEBRIS TRANSPORTED ONTO ROADWAYS AND SIDEWALKS SHALL BE COMPLETELY REMOVED BY SHOVELING AND/OR SWEEPING. WASHING IS NOT ALLOWED UNLESS SPECIFICALLY APPROVED IN WRITING BY THE CITY.

11. CLEARING LIMITS AND WORK AREA LIMITS SHALL BE DELINEATED AND MARKED. DO NOT DISTURB MORE AREA THAN NEEDED FOR CONSTRUCTION REQUIREMENTS.

12. ALL SENSITIVE OR CRITICAL AREAS (WETLANDS, STEEP SLOPES, NATURAL WATERWAYS) AND BUFFERS SHALL ALL BE CLEARLY DELINEATED, MARKED, AND PROTECTED FROM SEDIMENT DEPOSITION.

STEVENSON

STANDARD NOTES FOR EROSION CONTROL
1 OF 2

DRAWING NO. E01A

DATE AUG '25 | SCALE NTS

APPROVED BY CR

13. MAINTENANCE AND REPAIR OF HEAVY EQUIPMENT AND VEHICLES WHICH INVOLVE POTENTIAL CONTAMINANTS (OIL, SOLVENTS,HYDRAULIC FLUID, ETC.) MUST BE CONDUCTED IN A MANNER WHICH PREVENTS CONTAMINATION OF SOILS, SURFACE WATER AND GROUND WATER. TARPS, DRIP PANS, OR OTHER APPROPRIATE MEASURES SHALL BE USED AS NECESSARY.

14. ALL POLLUTANTS THAT OCCUR DURING CONSTRUCTION SHALL BE HANDLED AND DISPOSED OF IN A MANNER THAT DOES NOT CAUSE CONTAMINATION OF STORMWATER.

15. SEDIMENT LADEN RUNOFF SHALL BE PREVENTED FROM ENTERING ALL EXISTING STORM WATER CATCH BASINS, INLETS AND PERVIOUS DRAINAGE SYSTEMS AFFECTED BY CONSTRUCTION.

16. ALL PERMANENT INFILTRATION SYSTEMS SHALL BE ISOLATED AND PROTECTED FROM SEDIMENT LADEN RUNOFF. PROTECTION SHALL NOT BE REMOVED UNTIL THE DRAINAGE AREA TRIBUTARY TO THE SYSTEM IS COMPLETELY STABILIZED.

17. CUT AND FILL SLOPES SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. EROSION SHALL BE CONTROLLED AND PREVENTED BY SUCH MEASURES INCLUDING BUT NOT LIMITED TO ROUGHENING THE SURFACE OR INSTALLING INTERCEPTOR DITCHES, TERRACING, MATTING, MULCHING, OR PLASTIC SHEETING. RUNOFF SHALL BE PREVENTED FROM ENTERING SLOPES AND FROM UNDERCUTTING THE BASE OF SLOPES.

18. WHERE FEASIBLE, NO MORE THAN 500 FEET OF TRENCH SHALL BE OPEN AT ONE TIME. EXCAVATED MATERIAL SHALL BE PLACED ON THE UP-HILL SIDE OF TRENCHES PROVIDED IT DOES NOT CONFLICT WITH SAFETY REQUIREMENTS.

19. DEWATERING DEVICES SHALL DISCHARGE INTO A SEDIMENT TRAP OR SEDIMENT POND. NO DISCHARGE SHALL BE MADE TO A PAVED STREET OR STORMWATER COLLECTION SYSTEM WITHOUT APPROVAL AND REMOVING SEDIMENT.

20. VEGETATED STABILIZATION AND LANDSCAPING SHALL BE FERTILIZED, WATERED AND MAINTAINED TO ENSURE THAT GROWTH OF VEGETATION IS ESTABLISHED AND SUSTAINED.

21. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN.

22. ALL CONVEYANCE CHANNELS, BOTH TEMPORARY AND PERMANENT, SHALL BE STABILIZED TO PREVENT EROSION OF THE CHANNEL. STABILIZATION SHALL EXTEND TO AREAS AT OUTLETS AND DOWNSTREAM REACHES VULNERABLE TO EROSION.

23. IF UTILIZED BMP'S ARE INSUFFICIENT TO PREVENT SEDIMENT FROM REACHING WATER BODIES, ADJACENT PROPERTIES, OR PUBLIC RIGHT-OF-WAY, ADDITIONAL BMP'S SHALL BE IMPLEMENTED IMMEDIATELY TO PREVENT FURTHER ENCROACHMENT OF SEDIMENT.

24. THE CONTRACTOR SHALL KEEP AN INSPECTION LOG OF THE CONDITION OF THE EROSION CONTROL FACILITIES. EROSION CONTROL FACILITIES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RAINFALL. THE INSPECTION LOG SHALL BE KEPT AT THE PROJECT SITE AT A DESIGNATED LOCATION AND SHALL BE AVAILABLE FOR REVIEW BY THE CITY. AN INDIVIDUAL THAT HAS SUCCESSFULLY COMPLETED AN EROSION CONTROL CERTIFICATION COURSE SHALL PERFORM INSPECTIONS AND MAINTAIN THE LOG.

25. STRIPPING, TOPSOIL, AND UNSUITABLE MATERIAL STOCKPILES SHALL BE SEEDED. MAINTENANCE OF STOCKPILE AREAS AND REAPPLICATION OF SEED COVERING SHALL BE REQUIRED IF BARE SOIL IS PRESENT. DURING WINTER AND WET WEATHER CONDITIONS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING.

26. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT SLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.

27. ALL TEMPORARY BMP'S SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT SHALL BE REMOVED, DEPOSITED AND STABILIZED ON SITE. AREAS DISTURBED DURING SEDIMENT REMOVAL SHALL BE PERMANENTLY STABILIZED.

28. FINAL INSPECTION WILL NOT BE APPROVED UNTIL ALL TEMPORARY BMP'S HAVE BEEN REMOVED AND ALL DISTURBED SOIL SURFACES HAVE BEEN PROTECTED FROM EROSION WITH PERMANENT LANDSCAPING, COVERING WITH IMPERVIOUS SURFACES, RESTORED TO ORIGINAL PRE-DISTURBANCE CONDITION, OR PERMANENTLY STABILIZED.

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STANDARD NOTES FOR EROSION CONTROL
2 OF 2

DRAWING NO. E01B

DATE AUG '25 | SCALE NTS

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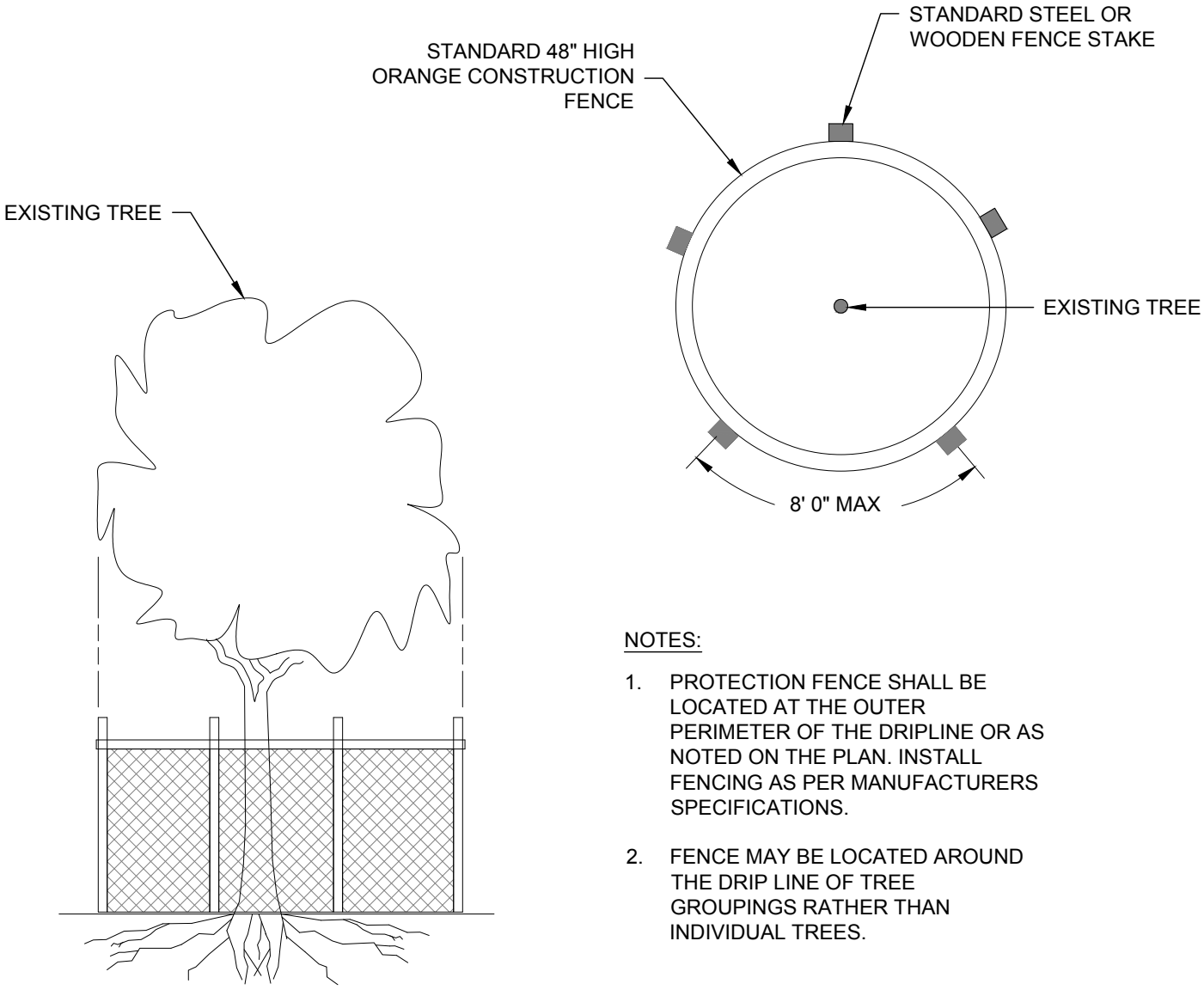

NOTES:

1. PROTECTION FENCE SHALL BE LOCATED AT THE OUTER PERIMETER OF THE DRIPLINE OR AS NOTED ON THE PLAN. INSTALL FENCING AS PER MANUFACTURERS SPECIFICATIONS.

2. FENCE MAY BE LOCATED AROUND THE DRIP LINE OF TREE GROUPINGS RATHER THAN INDIVIDUAL TREES.

STEVENSON

TREE PROTECTION FENCING

DRAWING NO.	E02
DATE AUG '25	SCALE NTS
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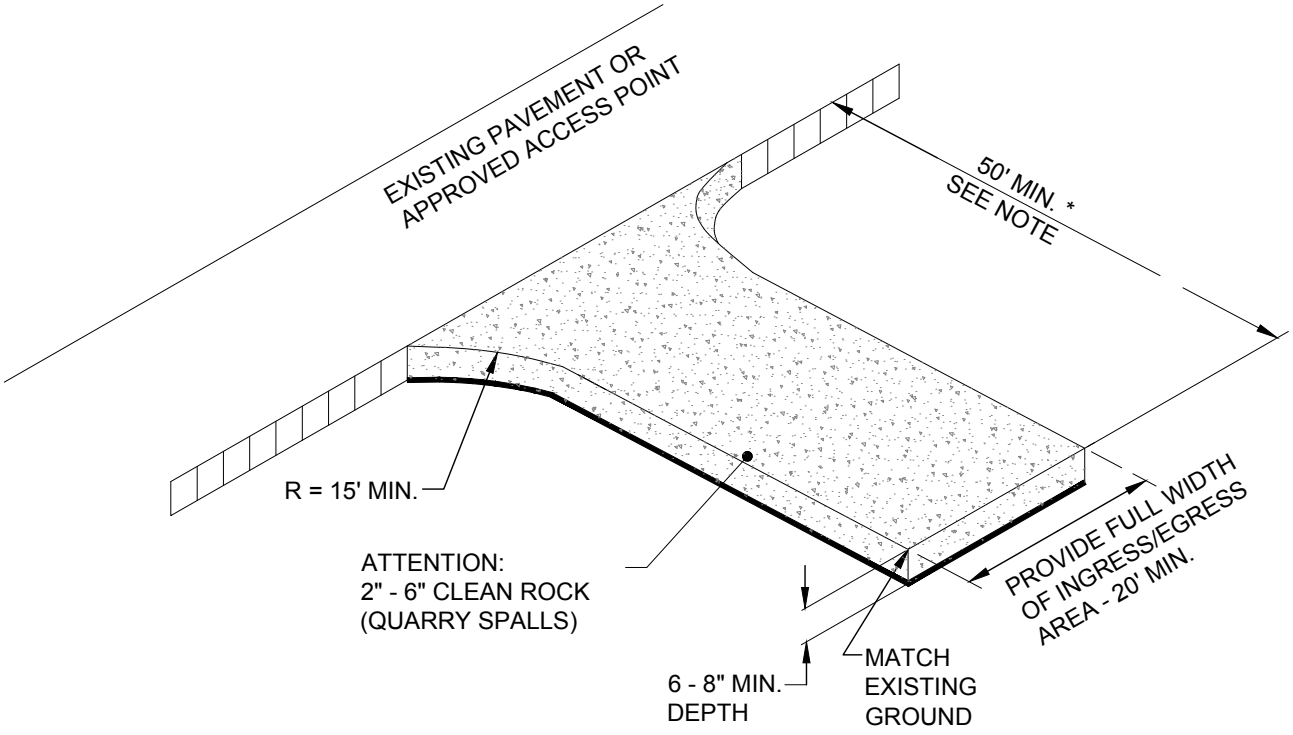

* 20' MIN. FOR SINGLE FAMILY AND DUPLEX RESIDENTIAL

NOTES:

1. USE OF CRUSHED CONCRETE CEMENT OR CALCIUM CHLORIDE PROHIBITED.

2. PREVENT VEHICLES FROM TRACKING SOIL FROM THE SITE ONTO STREETS OR NEIGHBORING PROPERTIES BY STABILIZING THE ENTRANCE WITH A ROCK PAD. IF POSSIBLE, PLACE THE ENTRANCE WHERE A FUTURE DRIVEWAY WILL BE LOCATED, AS IT MAY BE POSSIBLE TO USE THE ROCK AS A DRIVEWAY BASE MATERIAL. IF SEDIMENT IS TRACKED OFFSITE, SWEEP OR SHOVEL IT FROM THE PAVED SURFACE IMMEDIATELY.

3. THE LENGTH OF ENTRANCE MAY BE REDUCED TO THE MAXIMUM PRACTICAL SIZE WHEN THE SIZE OR CONFIGURATION DOES NOT ALLOW THE FULL REQUIRED LENGTH.

4. AT TIME OF PRE-EROSION INSPECTION, CITY OF STEVENSON REQUIRES THE ENTRANCE TO BE INSTALLED TO THE EDGE OF THE RIGHT-OF-WAY TO AVOID DAMAGE TO THE EXISTING ROADWAY.

5. CERTIFIED EROSION SEDIMENT CONTROL LEAD (CESCL) IS TO ENSURE THAT ALL VEHICLES USE THIS ENTRANCE AND ARE TO BE INSPECTED AND CLEANED OF SOILS BEFORE LEAVING PROJECT, AND THAT THE ENTRANCE IS TO BE KEPT CLEAN AT ALL TIMES.

6. NO OTHER CONSTRUCTION MATERIALS ARE TO BE PLACED ON CONSTRUCTION ENTRANCE DURING TIME OF CONSTRUCTION SUCH AS LANDSCAPE MATERIALS OR SMALLER AGGREGATE.

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CONSTRUCTION ENTRANCE

DRAWING NO. E03

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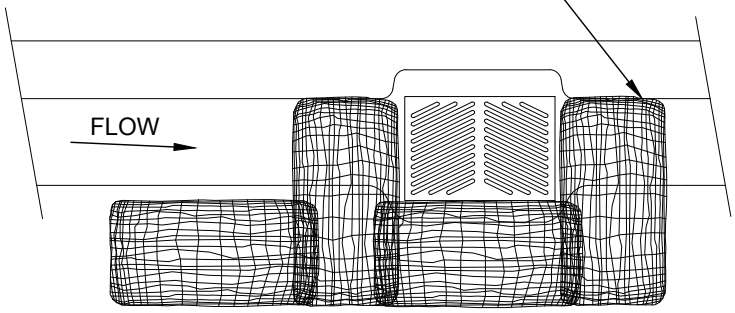
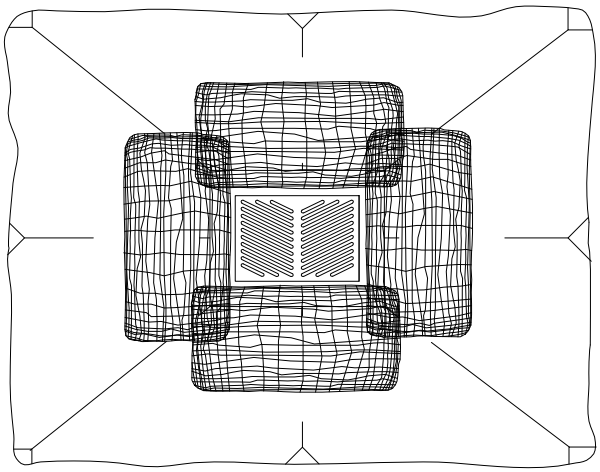
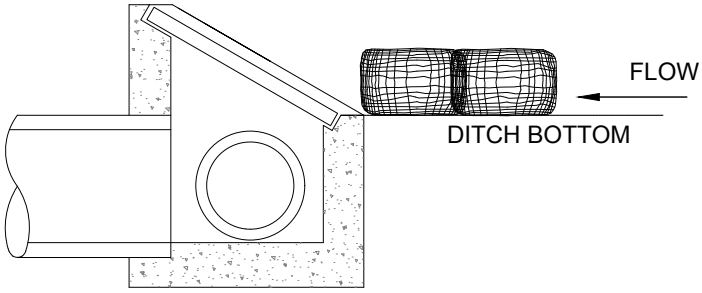
BIO-FILTER BAGS OR STRAW WATTLES MAY BE USED SHORT TERM W/ UTILITY WORK AND W/ PHASING OF DEVELOPMENT



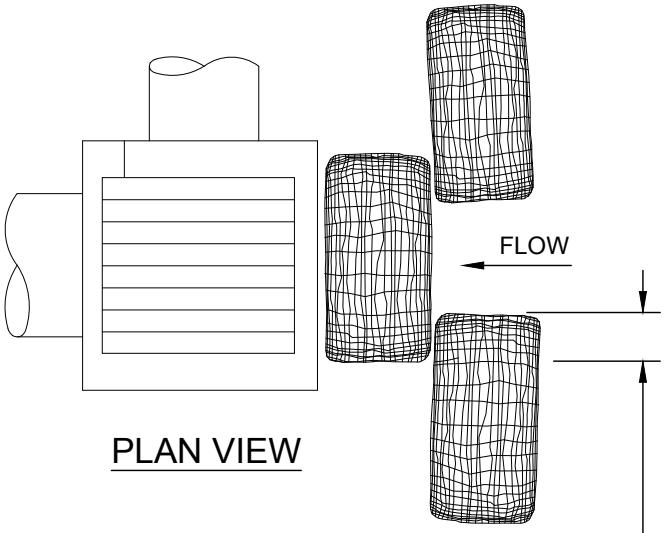
CATCH BASIN



AREA DRAIN



DITCH INLET



PLAN VIEW

NOTES:

1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPE.
2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1"x2" WOODEN STAKES OR APPROVED EQUAL PER BAG.
3. STRAW WATTLES MUST BE STABILIZED BY ATTACHING WIRE CLIPS TO THE CATCH BASIN PER MANUFACTURES SPECIFICATIONS.
4. INLET PROTECTION MUST BE REGULARLY INSPECTED BY THE EROSION CONTROL INDIVIDUAL TO INSURE PROPER PLACEMENT/FUNCTION AND MAINTENANCE.

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INLET PROTECTION TYPE 4 - BIOFILTER BAGS

DRAWING NO. E04

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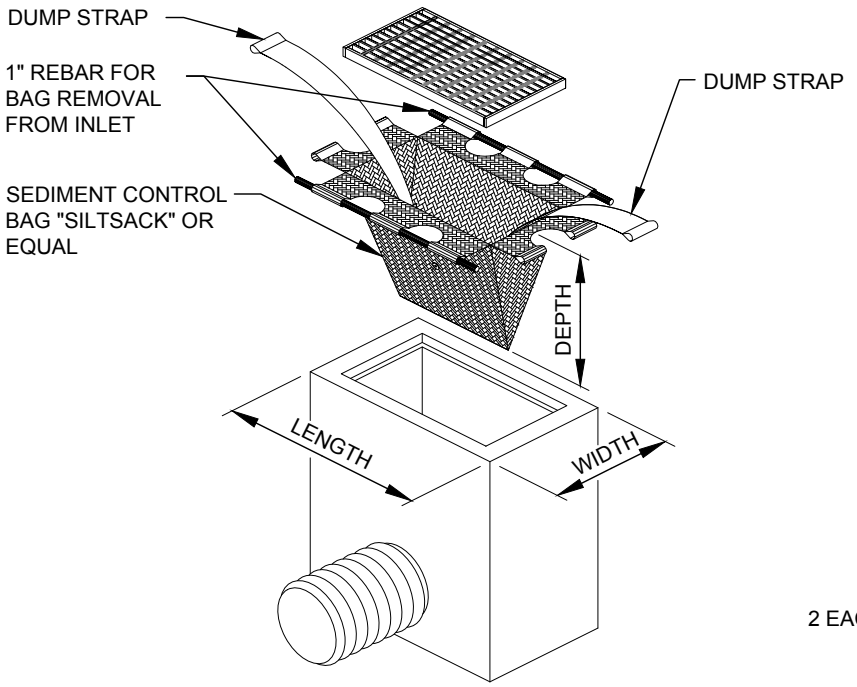
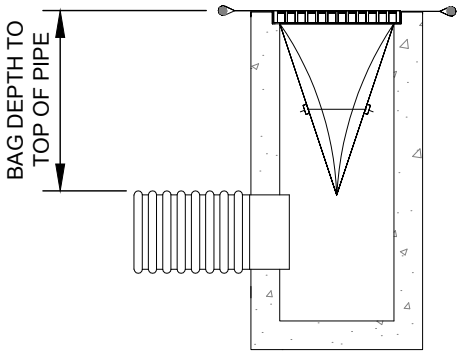
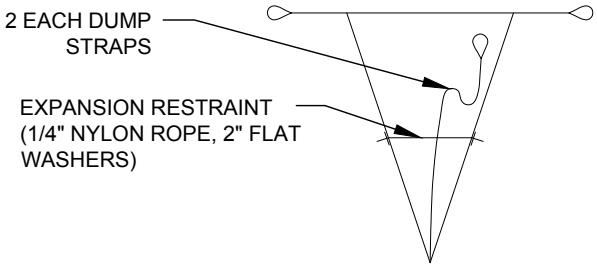




INSTALLATION DETAIL



BAG DETAIL

CB STYLE	LENGTH	WIDTH	DEPTH
TYPE 1 CB	24"	20"	VARIES
TYPE 1 CCI	29.5"	24"	VARIES
USA G2	32.5"	27.5"	VARIES

INLET SEDIMENT CONTROL DEVICE - SILT SACK

NOTES:

1. THE DIMENSION CHART ABOVE IS FOR STANDARD CATCH BASINS AND INLETS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE CORRECT SIZE DEVICE FOR EACH INLET.
2. FOR NON-STANDARD CATCH BASINS AND INLETS, THE CONTRACTOR SHALL MEASURE DIMENSIONS IN THE FIELD AND ORDER THE APPROPRIATE SIZE(S).
3. THE INLET SEDIMENT CONTROL DEVICE SHALL BE OF HIGH FLOW DESIGN (200 GAL/MIN/FT), AS PER THE MANUFACTURER'S SPECS.
4. THE SEDIMENT CONTROL DEVICE SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED A MINIMUM ONCE PER MONTH OR WITHIN THE 48 HOURS FOLLOWING A STORM EVENT. FILTER SHALL BE CLEANED IN A MANNER WHICH ENSURES THAT ALL SEDIMENT REMAINS ON SITE.
5. SUBSTITUTION OF A SHEET OF FILTER FABRIC PLACED OVER THE OPENING OF THE INLET IS NOT APPROVED.
6. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS, SIZE OF FILTER INLET SACK TO BE DETERMINED BY MANUFACTURER.
7. THE FILTER SHALL BE REPLACED OR CLEANED WHEN THE BAG BECOMES HALF FULL AND IN A MANNER THAT ENSURES COLLECTED MATERIAL IS NOT SPILLED.

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INLET PROTECTION TYPE 5 - SILT SACK

DRAWING NO. E05

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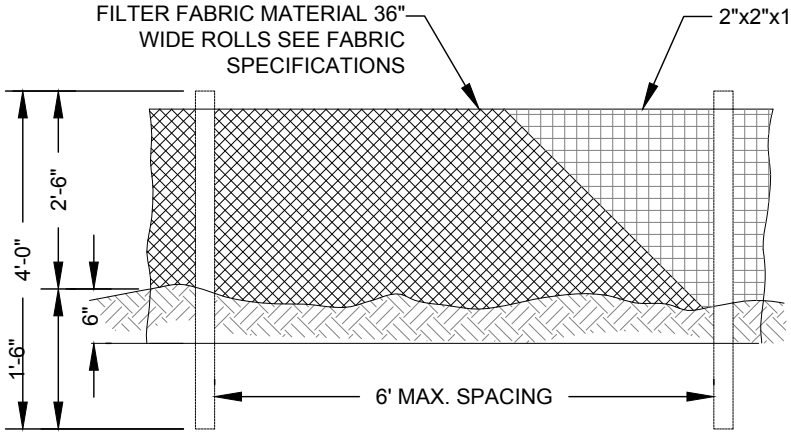
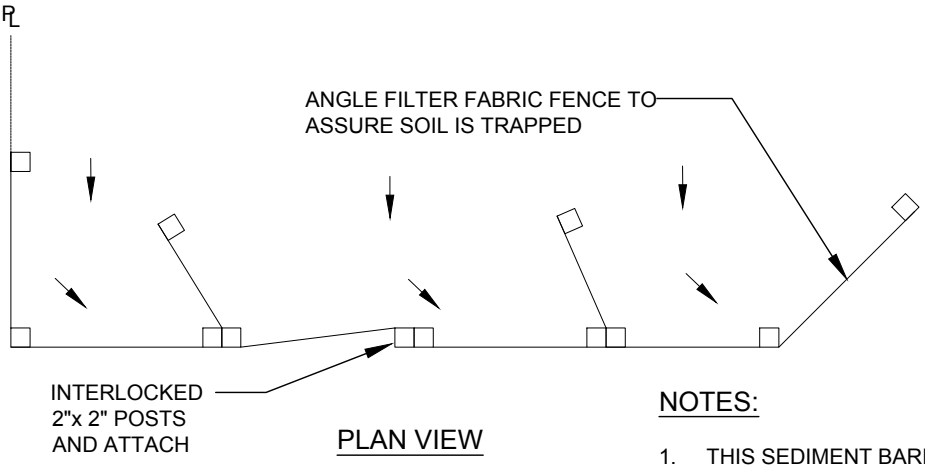


FRONT VIEW

SILT FENCE FABRIC SPECIFICATIONS
(WOVEN POLYPROYLENE SILT FENCE FABRIC)

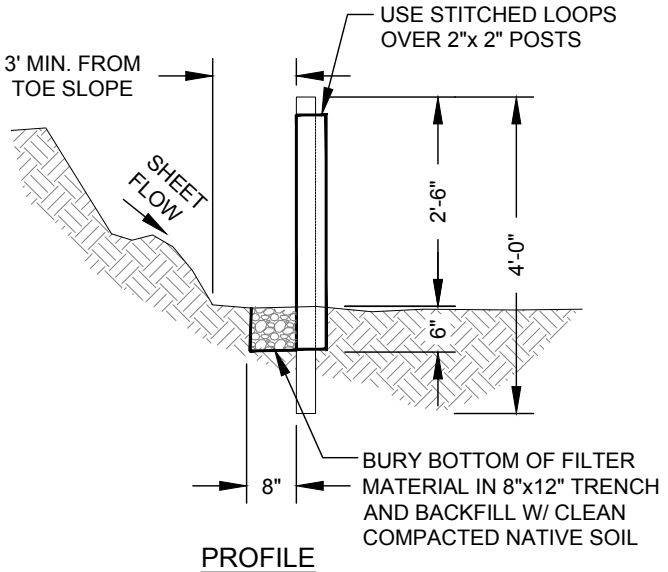
PROPERTY	TEST PROCEDURE	MIN. FABRIC VALUE
GRAB TENSILE STRENGTH	ASTM D-4632	180 LBS.
GRAB ELONGATION	ASTM D-4632	30%
TRAPEZOID TEAR	ASTM D-4533	70 LBS.
MULLEN BURST	ASTM D-3786	300 PSI.
PUNCTURE	ASTM D-4833	80 LBS.
PERMITTIVIRY	ASTM D-4491	0.07 SEC-1 MIN.
PERMEABILITY	ASTM D-4491	.005 CM/SEC
A.O.S.	ASTM D-4751	50 U.S. SIEVE
UV RESISTANCE(500 HRS)	ASTM D-4355	70%



PLAN VIEW

NOTES:

1. THIS SEDIMENT BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS, IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED. (SEE FABRIC SPECIFICATIONS ABOVE).
2. BURY BOTTOM OF FILTER FABRIC 6" VERTICALLY BELOW FINISHED GRADE.
3. POST ARE TO BE 2"x2" FIR, PINE OR STEEL FENCE POSTS.
4. POST TO BE INSTALLED ON UPHILL SIDE OF SLOPE FOR FENCING WITH STITCHED LOOP. FOR STAPLED FENCING, POST TO BE INSTALLED ON DOWNHILL SLOPE.
5. COMPACT BOTH SIDES OF FILTER FABRIC TRENCH.
6. SEDIMENT FENCE TO BE SPACED ON SLOPES PER TABLE BELOW.



PROFILE

INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS		
% SLOPE	SLOPE	MAX. SPACING ON SLOPE
10% FLATTER	10:1 OR FLATTER	300 ft.
10>%<15	10:1>x<7.5:1	150 ft.
15>%<20	7.5:1>x<5:1	100 ft.
20>%<30	5:1>x<3.5:1	50 ft.
30>%<50	3.5:1>x<2:1	25 ft.

STEVENSON

SILT FENCE

DRAWING NO. E06

DATE AUG '25 | SCALE NTS

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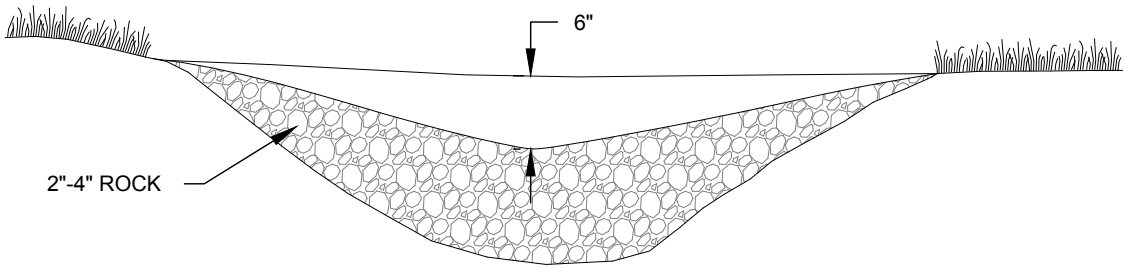
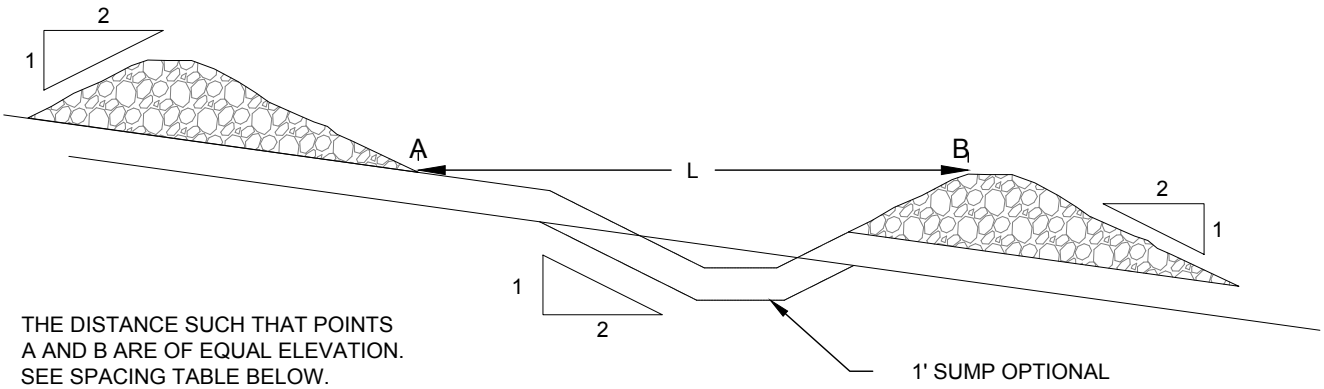


ROCK CHECK DAM



L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION. SEE SPACING TABLE BELOW.

SPACING BETWEEN CHECK DAMS

CHECK DAM NOTES:

1. CHECK DAMS ARE CONSTRUCTED ACROSS A SWALE OR DITCH TO REDUCE VELOCITIES OF CONCENTRATED FLOWS, THEREBY REDUCING EROSION AND ALLOWING A SIGNIFICANT AMOUNT OF SUSPENDED SEDIMENT TO SETTLE OUT.

2. CHECK DAMS SHALL BE USED IN TEMPORARY OR PERMANENT CHANNELS THAT DRAIN 10 ACRES OR LESS, ARE NOT YET VEGETATED, AND WHEN INSTALLING CHANNEL LINING IS NOT FEASIBLE.

3. USE TYPICAL ROCK SIZE OF 2-4 INCH. PLACE ROCK BY HAND OR BY MECHANICAL MEANS RATHER THAN DUMPING THE ROCK. BRIDGE ENTIRE DITCH OR SWALE WIDTH AND ENSURE THE CENTER OF THE DAM IS 6" LOWER THAN THE OUTER ENDS. FOR HIGHER VELOCITY FLOWS: ±5 FPS USE 6"-12" RIPRAP, AND HAND PLACE LARGER ROCK ON UPSTREAM SIDE OF DAM.

4. REMOVE CHECK DAMS FROM GRASS-LINED DITCHES AND SWALES ONCE THE GRASS IS ESTABLISHED. SEED, MULCH OR MAT THE AREA WHERE THE CHECK DAMS WERE, IMMEDIATELY FOLLOWING REMOVAL.

5. INSPECT ONCE PER WEEK ON ACTIVE SITES, ONCE EVERY TWO WEEKS ON INACTIVE SITES, AND WITHIN 24 HOURS FOLLOWING A 0.5 INCH RAIN EVENT. REMOVE SEDIMENT ONCE IT REACHES ONE-THIRD THE DEPTH OF THE ROCK WEIR. REPLACE ROCK WEIR WHEN FILTERING CAPACITY IS REDUCED BY ONE-HALF.

6. SPACING TABLE FOR CHECK DAMS:

DITCH GRADE	MINIMUM WEIR DEPTH		
	6 INCH	12 INCH	18 INCH
6%	**	L= 16 ft O.C.	L= 26 ft O.C.
5%	**	L= 20 ft	L= 30 ft
4%	**	L= 26 ft	L= 40 ft
3%	15 ft	L= 33 ft	L= 50 ft
2%	25 ft	L= 50 ft	L= 80 ft

**NOT ALLOWED

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ROCK CHECK DAM

DRAWING NO. E07

DATE AUG '25 | SCALE NTS

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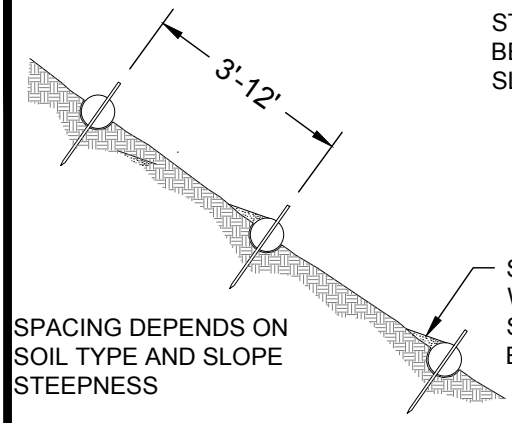
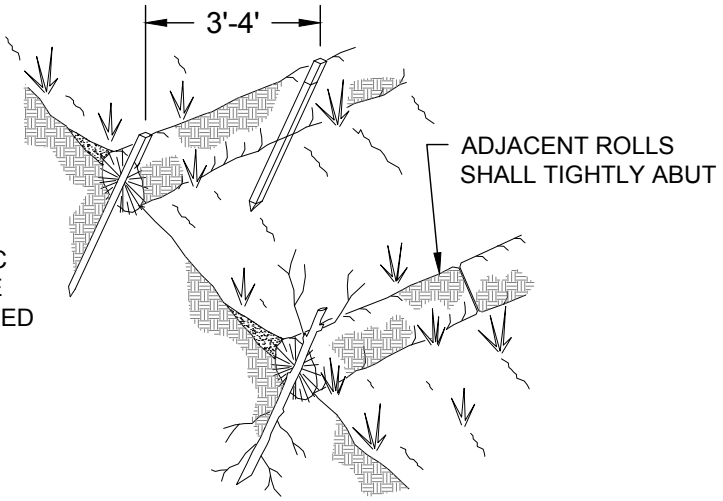
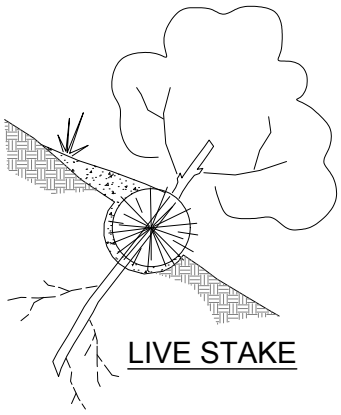


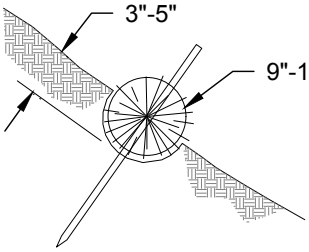
STRAW ROLLS MUST BE PLACED ALONG SLOPE CONTOURS

SEDIMENT, ORGANIC WATER, AND NATIVE SEEDS ARE CAPTURED BEHIND THE ROLLS





LIVE STAKE



1" X 1" STAKE

CONSTRUCTION SPECIFICATIONS:

1. PREPARE THE SLOPE BEFORE THE WATTLING PROCEDURE IS STARTED.
2. SHALLOW GULLIES SHOULD BE SMOOTHED AS WORK PROGRESSES.
3. DIG SMALL TRENCHES ACROSS THE SLOPE ON CONTOUR, TO PLACE ROLLS IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE HALF THE THICKNESS OF THE ROLL. WHEN THE SOIL IS LOOSE AND UNCOMPACTED, THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE ROLL 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE.
4. IT IS CRITICAL THAT ROLLS ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR.
5. START BUILDING TRENCHES AND INSTALL ROLLS FROM THE BOTTOM OF THE SLOPE AND WORK UP.
6. CONSTRUCT TRENCHES AT CONTOUR INTERVALS OF 3-12 FEET APART DEPENDING ON STEEPNESS OF SLOPE. THE STEEPER THE SLOPE, THE CLOSER TOGETHER THE TRENCHES.

   1:1 = 10' 3:1 = 30'
   2:1 = 20' 4:1 = 40'
7. LAY THE ROLL ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.
8. USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE WATTLE AND INTO THE SOIL FOR THE WILLOW OR WOODEN STAKES.
9. DRIVE THE STAKE THROUGH PREPARED HOLE INTO SOIL. LEAVE ONLY 1 OR 2 INCHES OF STAKE EXPOSED ABOVE ROLL.
10. IF USING WILLOW STAKES REFER TO LIVE STAKING BMP.
11. INSTALL STAKES AT LEAST EVERY 4 FEET APART THROUGH THE WATTLE. ADDITIONAL STAKES MAY BE DRIVEN ON THE DOWNSLOPE SIDE OF THE TRNCHES ON HIGHLY EROSIVE OR VERY STEEP SLOPES. INSPECTION AND MAINTENANCE:

- INSPECT THE STRAW ROLLS AND THE SLOPES AFTER SIGNIFICANT STORMS. MAKE SURE THE ROLLS ARE IN CONTACT WITH THE SOIL
- REPAIR ANY RILLS OR GULLYS PROMPTLY
- RESEED OR REPLANT VEGETATION IF NECESSARY UNTIL THE SLOPE IS STABILIZED.

STEVENSON

STRAW WATTLE

DRAWING NO. E08

DATE AUG '25 | SCALE NTS

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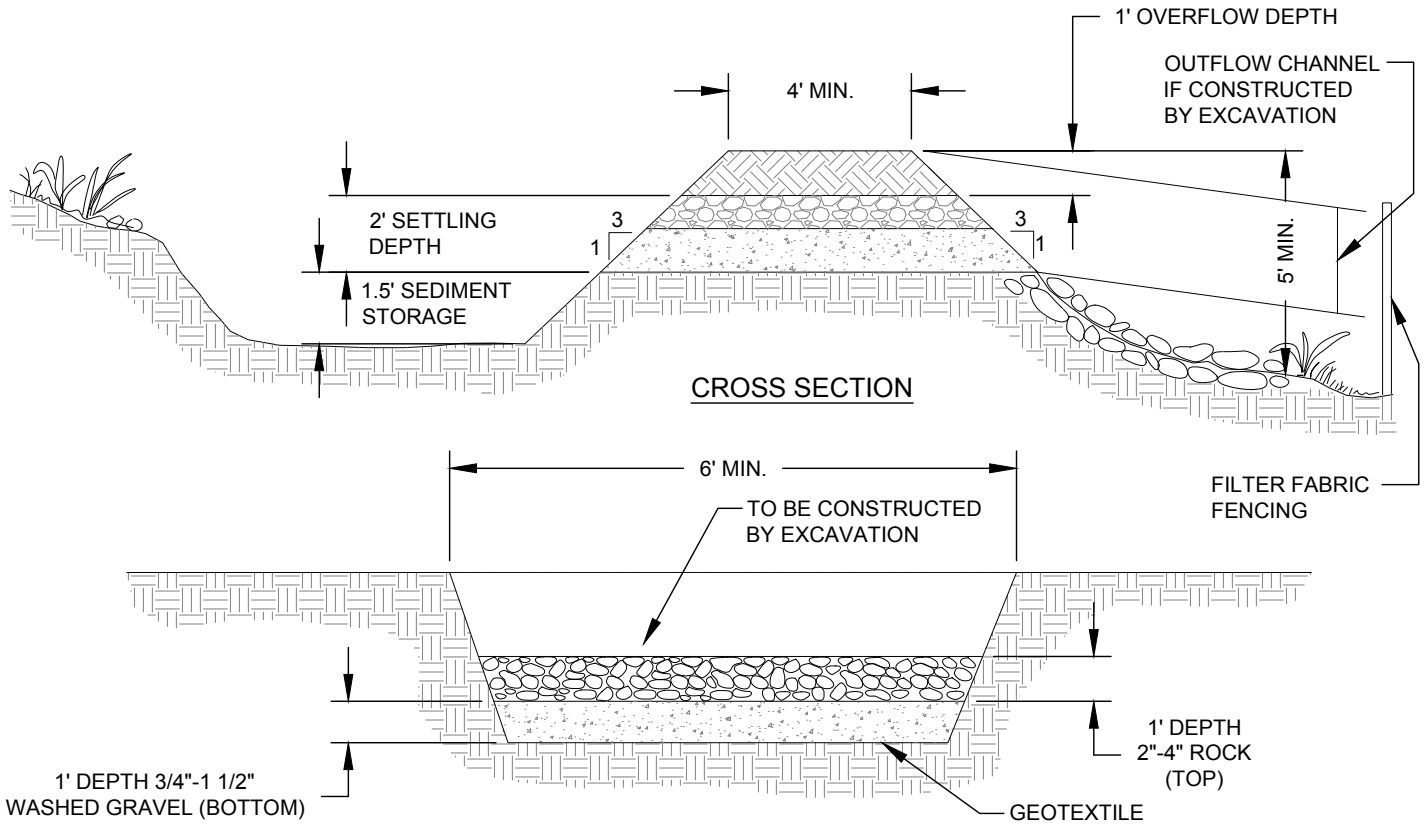

NOTES:

1. THE SEDIMENT TRAP MAY BE FORMED COMPLETELY BY EXCAVATION OR BY CONSTRUCTION OF A COMPACTED EMBANKMENT, AND IS TO BE CONSTRUCTED PRIOR TO ANY UPSLOPE CLEARING AND GRADING.
2. TRAP IS TO BE LOCATED IN A LOW AREA WHERE THE TRAP WILL INTERCEPT ALL OR MOST OF THE RUNOFF FROM THE DISTURBED AREA. MUST BE ACCESSIBLE FOR MAINTENANCE.
3. PROVIDE DIVERSION DIKES AND DITCHES, AS NEEDED TO COLLECT AND DIVERT WATER SEDIMENT LADEN FLOWS TO TRAPS AND PONDS.
4. SEDIMENT TRAPS SHALL BE LIMITED TO A TRIBUTARY AREA OF LESS THAN 3 ACRES. SEE THE BMP MANUAL SECTION II-5.8.6 DESIGN CRITERIA, FOR SEDIMENT STORAGE VOLUME.
5. SEDIMENT TRAPS AND PONDS ARE TO HAVE A LEVEL BOTTOM, 3:1 OR FLATTER SIDE SLOPES AND A L:W RATIO OF 3.
6. WATER TEMPERATURE IN TRAPS AND PONDS MAY BE TOO HIGH FOR DIRECT RELEASE. ALWAYS MODERATE THE WATER TEMPERATURE BEFORE IT DRAINS INTO A LAKE, STREAM, WETLAND OR WATERWAY. WHENEVER POSSIBLE, RELEASE THE DISCHARGE ONSITE ONTO A RELATIVELY LEVEL, DENSELY GRASSED AREA AT LEAST 50 FEET FROM A WATERWAY OR WETLAND.
7. INSPECT ONCE PER WEEK ON ACTIVE SITES, ONCE EVERY TWO WEEKS ON INACTIVE SITES, AND WITHIN 24 HOURS FOLLOWING A 0.5 INCH RAIN EVENT.
8. CONSTANT MAINTENANCE IS ESSENTIAL FOR PROPER FUNCTIONING.
9. REMOVE SEDIMENT FROM THE TRAP WHEN IT REACHES ONE FOOT IN DEPTH, AND REPAIR ANY DAMAGE TO THE TRAP, THE EMBANKMENT OR THE SLOPES.
10. CARE MUST BE GIVEN TO CONSIDERING LOCATION OF TRAPS FOR SAFETY IN CASE THE STRUCTURE FAILS. FENCING MUST ALSO BE CONSIDERED FOR SAFETY.

STEVENSON WASHINGTON

STANDARD SEDIMENT TRAP

DRAWING NO. E09

DATE AUG '25 | SCALE NTS

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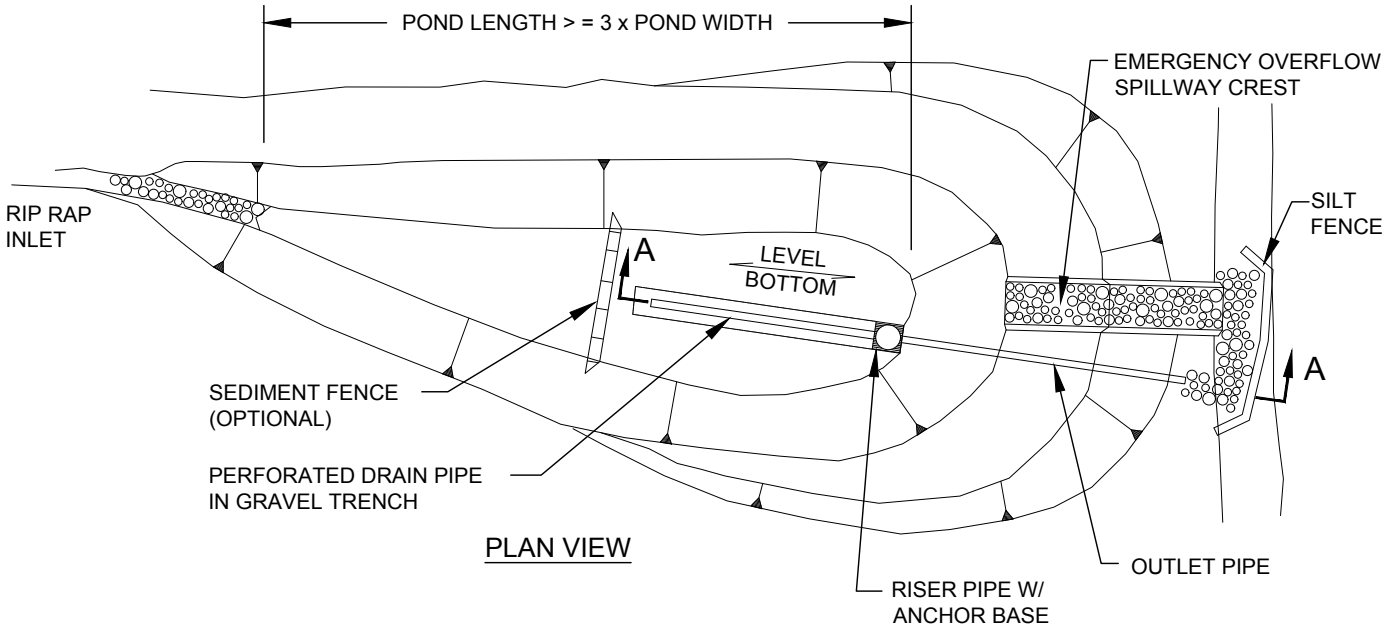
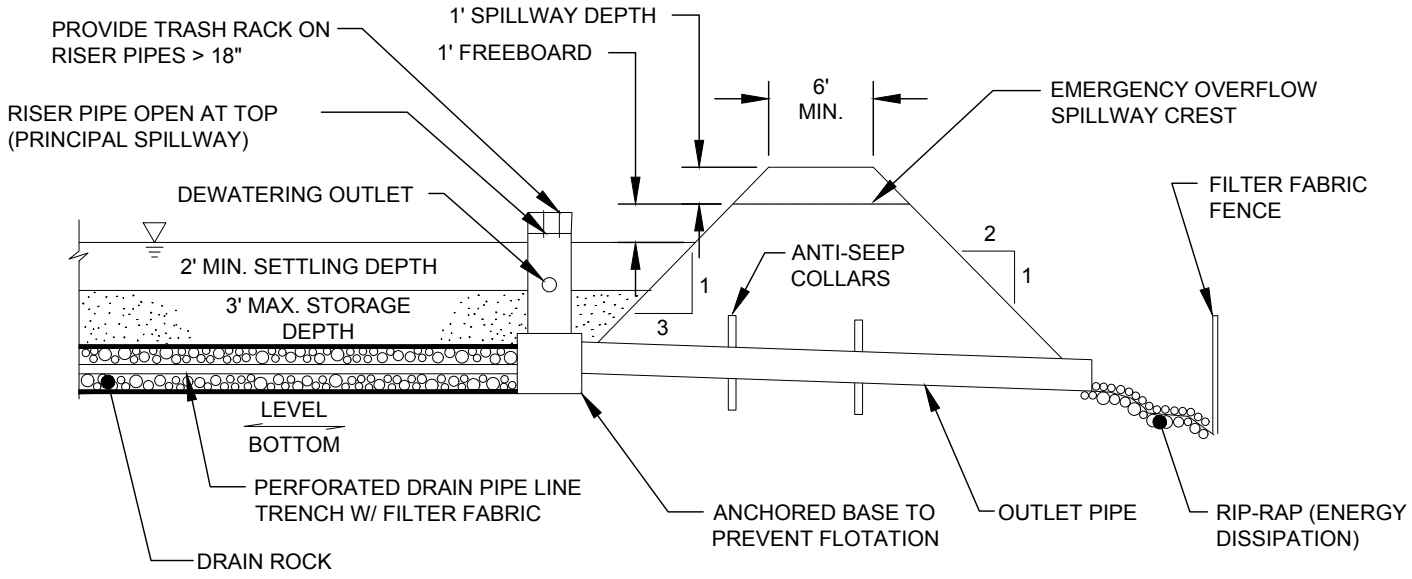


PLAN VIEW



SECTION A-A

NOTES:

1. FOR USE WITH TRIBUTARY DRAINAGE AREA OF LESS THAN 10 ACRES. IF DRAINAGE AREA EXCEEDS 10 ACRES, CONSULT THE DAM SAFETY SECTION OF THE WASHINGTON DEPARTMENT OF ECOLOGY MANUAL.
2. PROVIDE BAFFLES TO PREVENT SHORT-CIRCUITING.
3. SPILLWAY SHALL BE LINED WITH 2"-4" ROCKS.
4. ALL INLETS AND OUTLETS SHALL BE PROTECTED WITH RIP-RAP.
5. IF POND POSES A SAFETY HAZARD, IT SHALL BE FENCED.
6. REMOVE SEDIMENT BEFORE 1.5" ACCUMULATES.
7. PERFORATED PIPE TRENCH SHALL BE COMPLETELY LINED WITH FILTER FABRIC.
8. SEE APPLICABLE NOTES ON STD. DETAIL E09.

STEVENSON

TEMPORARY SEDIMENT POND

DRAWING NO. E10

DATE AUG '25 | SCALE NTS

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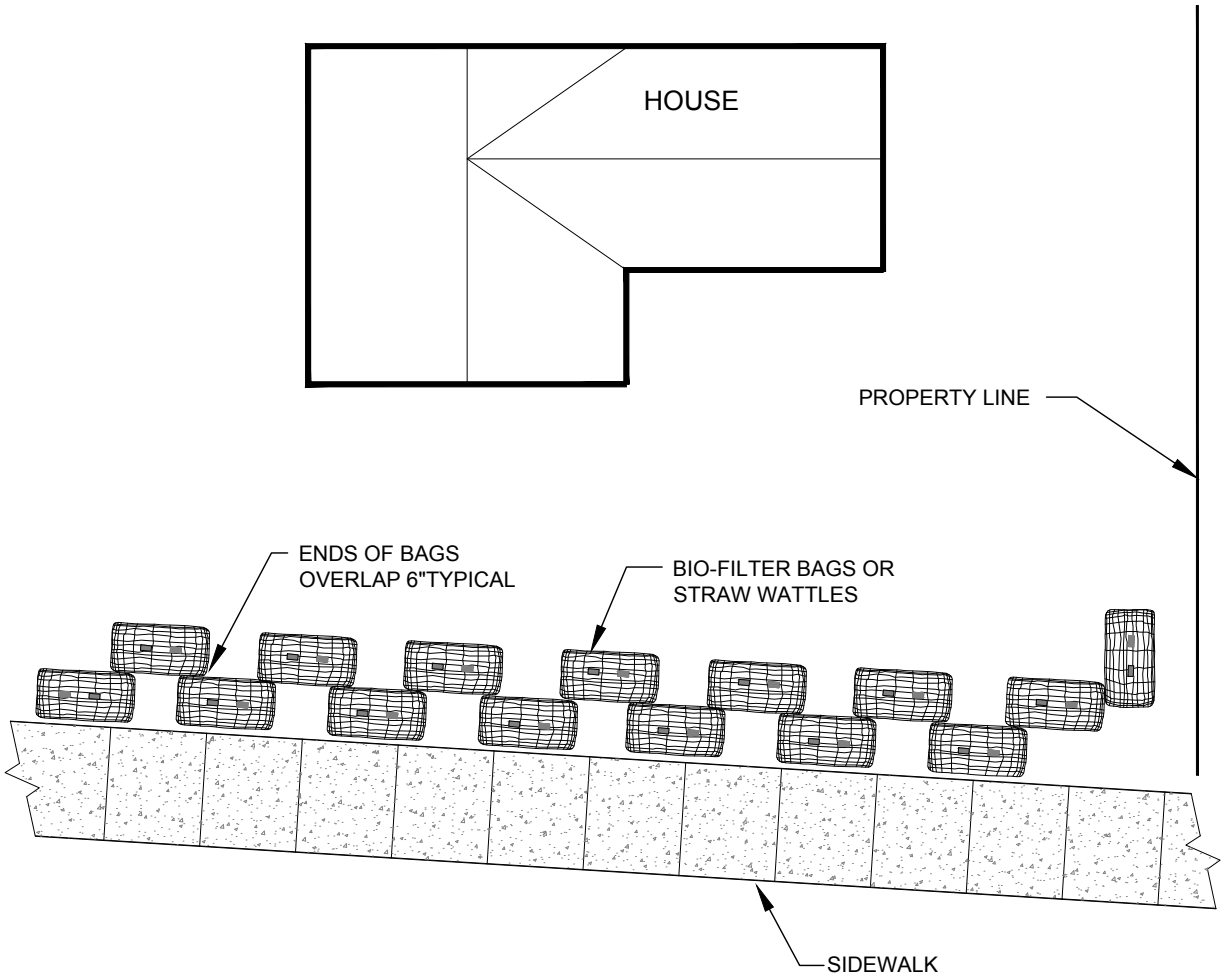


PLAN VIEW

NOTES:

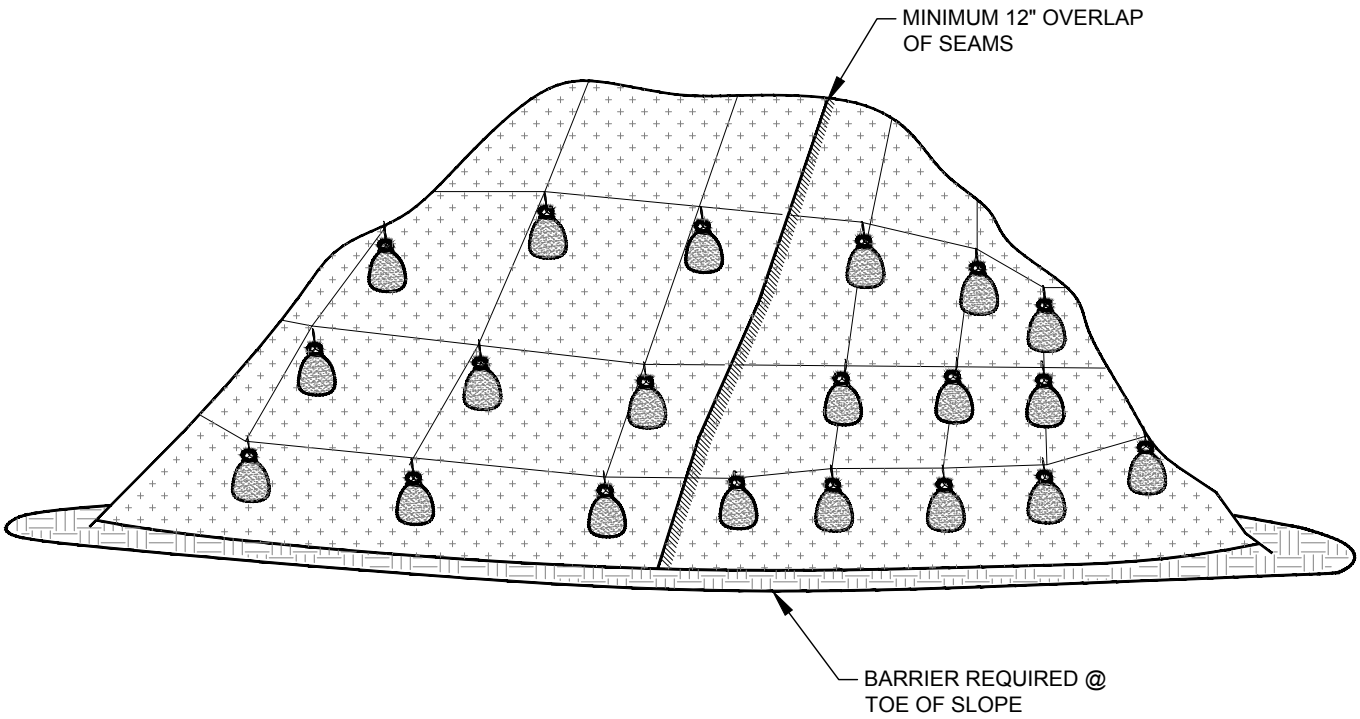
1. STAKING OF BAGS REQUIRED USING (2) 1"x2" WOOD STAKES OR APPROVED EQUAL PER BAG.

2. BAGS OR WATTLES MAY BE USED AS ALTERNATE FOR SEDIMENT FENCE FOLLOWING INSTALLATION OF SIDEWALK ON SINGLE FAMILY CONSTRUCTION ONLY.

STEVENSON

BIO-FILTER BAGS - SEDIMENT BARRIERS

DRAWING NO.	E11
DATE AUG '25	SCALE NTS
APPROVED BY	CR



PLASTIC SHEETING

NOTES:

1. PLASTIC SHEETING IS USED TO PROVIDE IMMEDIATE PROTECTION TO SLOPES AND STOCKPILES.
2. DO NOT USE PLASTIC COVERING UPSLOPE OF AREAS SUCH AS STEEP AND/OR UNSTABLE SLOPES THAT MIGHT BE ADVERSELY AFFECTED BY CONCENTRATED RUNOFF.
3. WHEN POSSIBLE, INSTALL AN INTERCEPTER DIKE AT THE TOP OF THE PLASTIC TO DIVERT FLOWS AWAY FROM THE PLASTIC.
4. TOE-IN THE TOP OF THE SHEETING IN A 6"x6" TRENCH BACKFILLED WITH COMPACTED NATIVE MATERIAL.
5. INSTALL A GRAVEL BERM, RIPRAP, OR OTHER SUITABLE PROTECTION AT THE TOP OF THE SLOPE IN ORDER TO DISSIPATE RUNOFF VELOCITY.
6. ANCHOR THE PLASTIC USING SANDBAGS OR OTHER SUITABLE TETHERED ANCHOR SYSTEM SPACED ON A 10' GRID SPACING IN ALL DIRECTIONS.
7. OVERLAP SEAMS 1-2', TAPE, ROLL AND STAKE THE SEAMS AND THEN WEIGH DOWN THE ENTIRE LENGTH.
8. BARRIER IS REQUIRED @ TOE OF STOCK PILE.
9. REPLACE TORN SHEETS AND REPAIR OPEN SEAMS. COMPLETELY REMOVE AND REPLACE PLASTIC WHEN IT BEGINS TO DETERIORATE.

STEVENSON

PLASTIC SHEETING

DRAWING NO. E12

DATE AUG '25 | SCALE NTS

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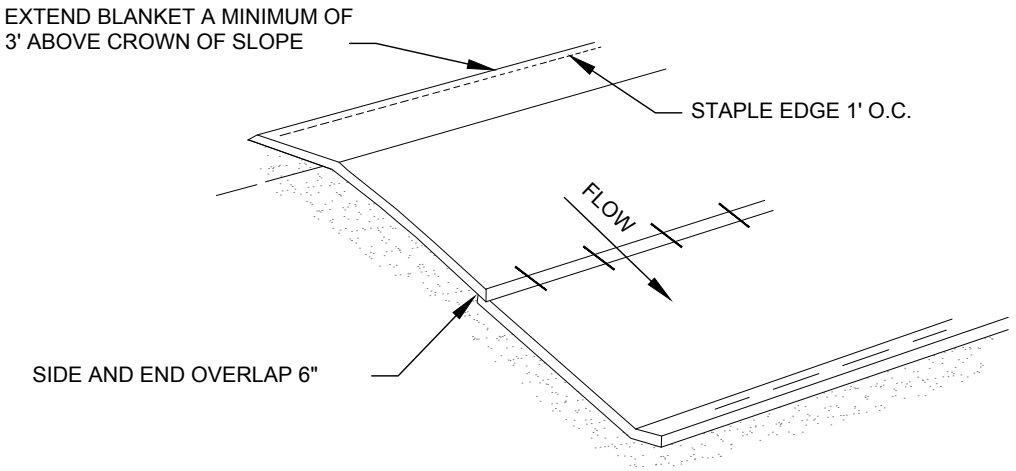
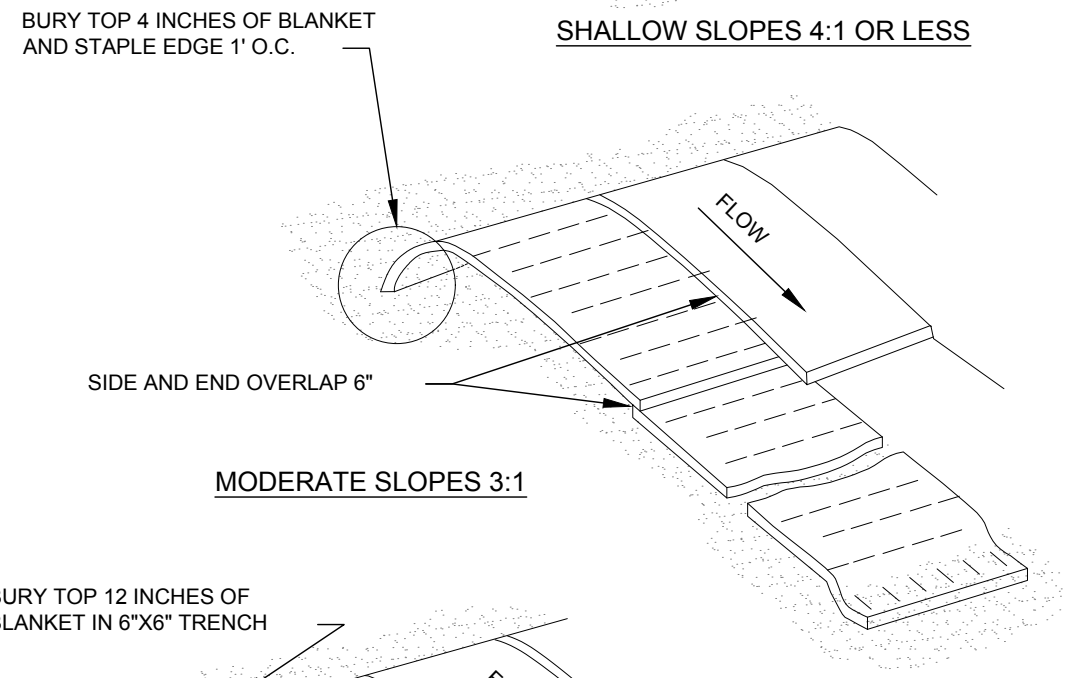
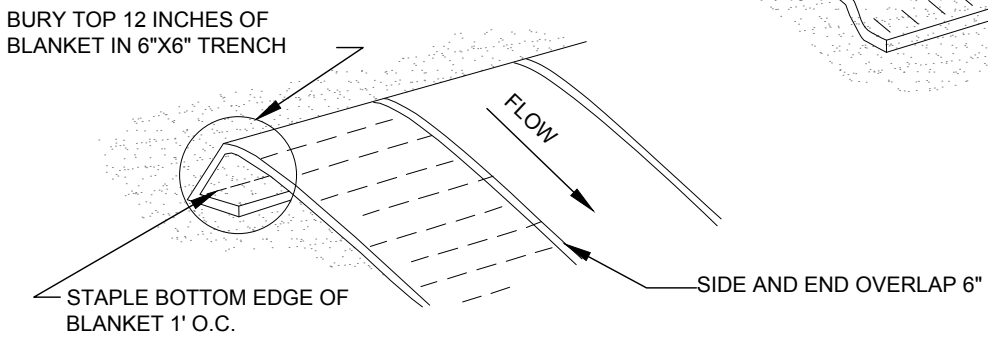


SHALLOW SLOPES 4:1 OR LESS



MODERATE SLOPES 3:1



STEEP SLOPES 2:1 OR GREATER

NOTES:

1. ON 4:1 OR LESS SLOPES BLANKETS MAY BE APPLIED ACROSS THE SLOPE.
2. ALL BLANKET INSTALLED AND STAPLED PER MANUFACTURERS SPECIFICATIONS.
3. SEE MATTING NOTES STD. DETAIL E15.

STEVENSON

MATTING - SLOPE INSTALLATION

DRAWING NO. E13

DATE AUG '25 | SCALE NTS

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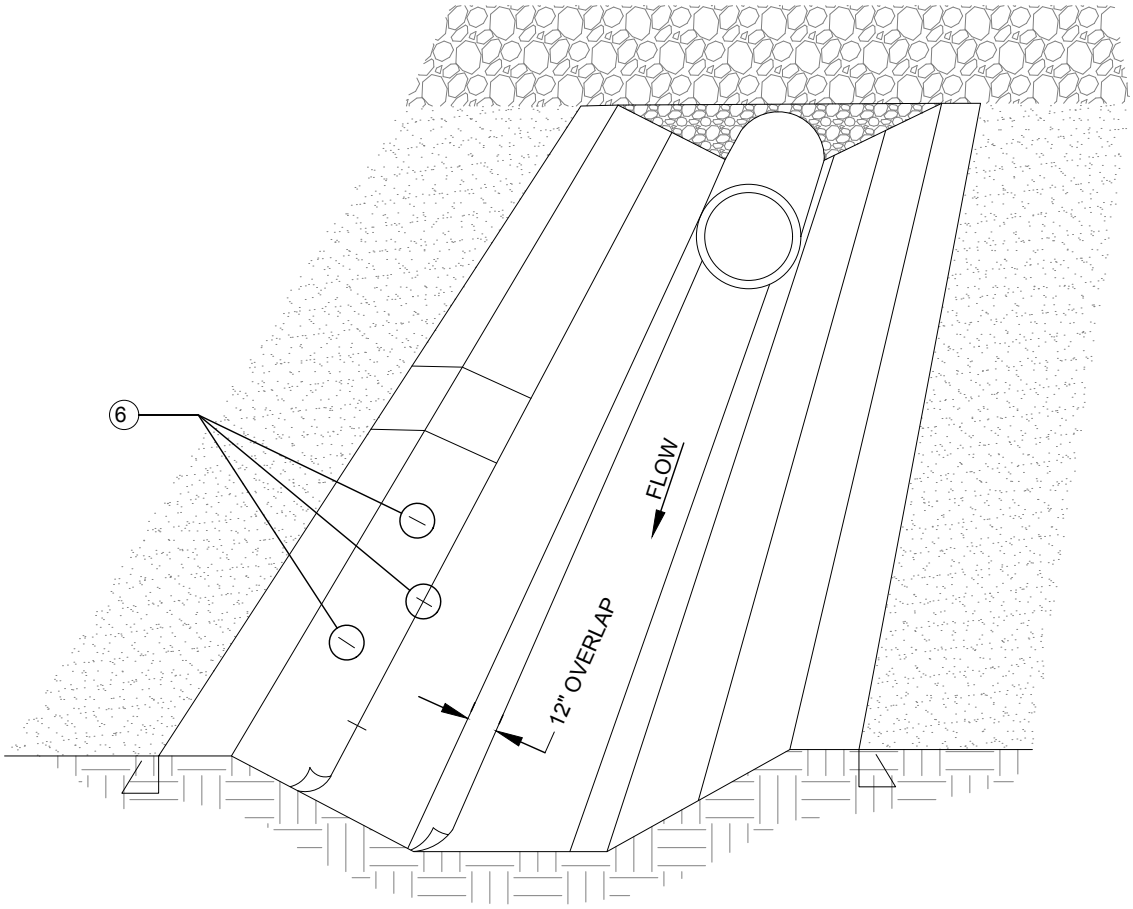


CHANNEL INSTALLATION

NOTES:

1. INFORMATION PROVIDED IS MINIMUM REQUIREMENTS. MANUFACTURERS REQUIREMENTS WHICH ARE MORE STRINGENT SHALL BE USED.
2. INSTALL MAT PARALLEL IN CENTER OF CHANNEL IN THE DIRECTION OF FLOW. FOR CULVERT OUTFALLS, PLACE MAT UNDER CULVERT OR RIP RAP A MIN. OF 12".
3. IN CHANNEL BOTTOM, OVERLAP LENGTH ENDS A MINIMUM OF 12 INCHES.
4. REFER TO STD. DETAIL E15 FOR MATTING NOTES.
5. STAPLE PER MANUFACTURERS SPECIFICATIONS.
6. LENGTH OF STAPLES SHALL BE DETERMINED BY SOIL TYPE- COHESIVE SOIL USE 6 INCH, NON-COHESIVE SOILS 8-12 INCH.

STEVENSON

MATTING - CHANNEL INSTALLATION

DRAWING NO. E14

DATE AUG '25 | SCALE NTS

APPROVED BY CR

MATTING NOTES:

1. THERE ARE A WIDE RANGE OF MATERIALS AND COMBINATION OF MATERIALS USED TO PRODUCE MATTING INCLUDING, BUT NOT LIMITED TO: STRAW, JUTE, WOOD FIBER, COIR (COCONUT FIBER), PLASTIC NETTING, AND BONDED FIBER MATRIX. THE SELECTION OF MATTING MATERIAL FOR A SITE CAN MAKE A SIGNIFICANT DIFFERENCE IN THE EFFECTIVENESS OF THE BMP.

2. GENERALLY, MATTING IS USED ON SLOPES 2:1 AND STEEPER.

3. SURFACE MUST BE GRADED SMOOTH TO REMOVE ALL DEBRIS AND UNDULATIONS LARGER THAN 2" IN ANY DIRECTION.

4. APPLY SEED AND FERTILIZER PRIOR TO MATTING. INSTALL SO THAT MATTING IS IN COMPLETE CONTACT WITH SOIL SURFACE.

5. STAPLES ARE TO BE INSTALLED PER MANUFACTURES SPECIFICATIONS.

6. ORGANIC MATTING MATERIALS (EXCELSIOR, JUTE, AND COIR) BIODEGRADE AND ARE USEFUL FOR APPLICATIONS REQUIRING STABILIZATION FOR UP TO THREE MONTHS. USE ORGANIC BLANKETS, WHICH RETAIN MOISTURE AND PROVIDE ORGANIC MATTER TO THE SOIL, FOR SLOPE PROTECTION AND SHORT-TERM WATERWAY PROTECTION AND TO IMPROVE THE SPEED AND SUCCESS OF REVEGETATION.
   - EXCELSIOR BRAND (ASPEN WOOD FIBER), WOVEN STRAW, AND COIR BLANKETS MAY BE INSTALLED WITHOUT MULCH BECAUSE THEY PROVIDE COMPLETE SURFACE PROTECTION.

7. SYNTHETIC MATS ARE MADE FROM NON-BIODEGRADABLE MATERIALS AND WILL REMAIN IN PLACE FOR YEARS (SOME PHOTODEGRADATION DOES OCCUR). USE PURELY SYNTHETIC BLANKETS FOR LONG-TERM STABILIZATION OF WATERWAYS.
   - TURF REINFORCEMENT MATS (TRM) ARE MADE FROM POLYMER NETTING OR MONOFILAMENTS FORMED INTO A SYNTHETIC 3-D MAT. TRMs PROTECT SEED AND INCREASE GERMINATION AND ALSO ACTS AS PART OF THE ROOT STRUCTURE; GIVING THE TURF HIGHER STRENGTH.
   - EROSION CONTROL AND REVEGETATION MATS (ECRM), COMPOSED OF HEAT-FUSED MONOFILAMENTS AND MONOFILAMENTS STITCHED BETWEEN NETTING ACT AS PERMANENT MULCH. ECRM ALLOW GROWTH THROUGH THE MAT.

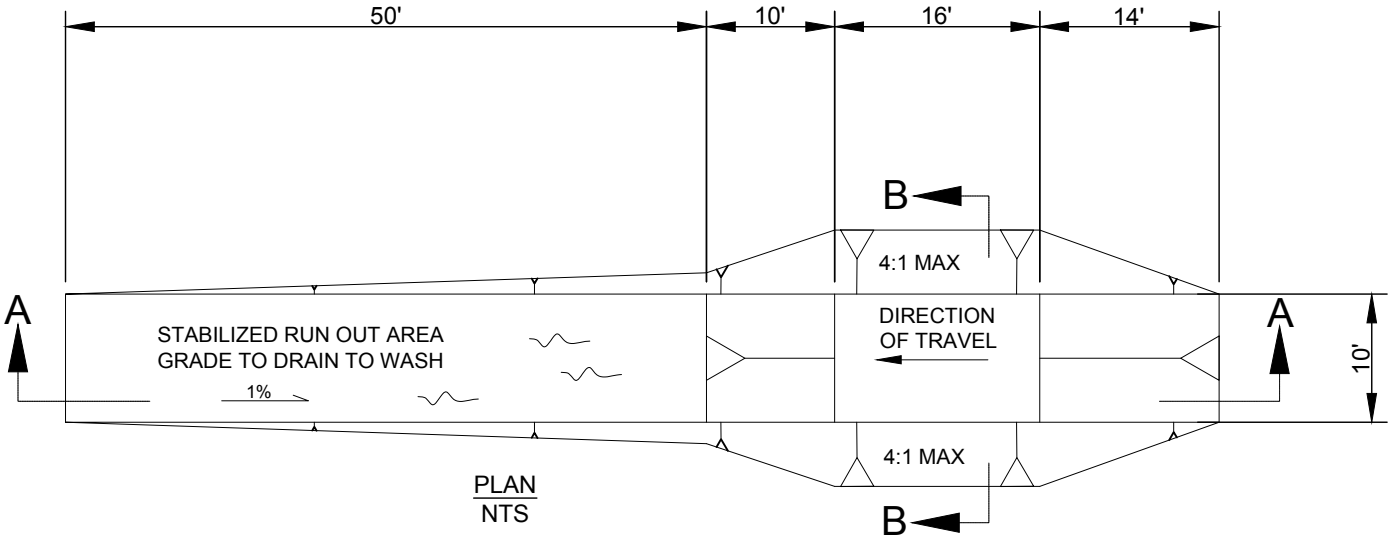
8. CHANNEL OR SWALE APPLICATIONS: LENGTHWISE OVERLAP MATTING A MINIMUM OF 12"; CROSSWISE OVERLAP A MINIMUM OF 6", AND AVOID JOINING MATERIAL IN CENTER OF DITCH OR SWALE.

9. SLOPE APPLICATION: LENGTHWISE OVERLAP MATTING A MINIMUM OF 6"; CROSSWISE OVERLAP A MINIMUM OF 6"; AT TOP OF SLOPE, ENTRENCH MATERIAL IN A 6"x6" TRENCH AND STAPLE AT 12" INTERVAL; AT BOTTOM OF SLOPE, EXTEND MAT 2 FEET BEYOND THE TOE OF THE SLOPE, TURN MATERIAL UNDER 4" AND STAPLE AT 12" INTERVAL; ON 4:1 SLOPES, ROLLS CAN BE PLACED IN HORIZONTAL STRIPS; MATS MUST BE STAPLED IN PLACE AS THEY ARE INSTALLED DOWN THE SLOPE FACE EVERY 4' UNTIL YOU REACH THE BOTTOM. THIS KEEPS BLANKET IN A RELAXED POSITION, ELIMINATING THE POTENTIAL FOR UNDER-RILLING.

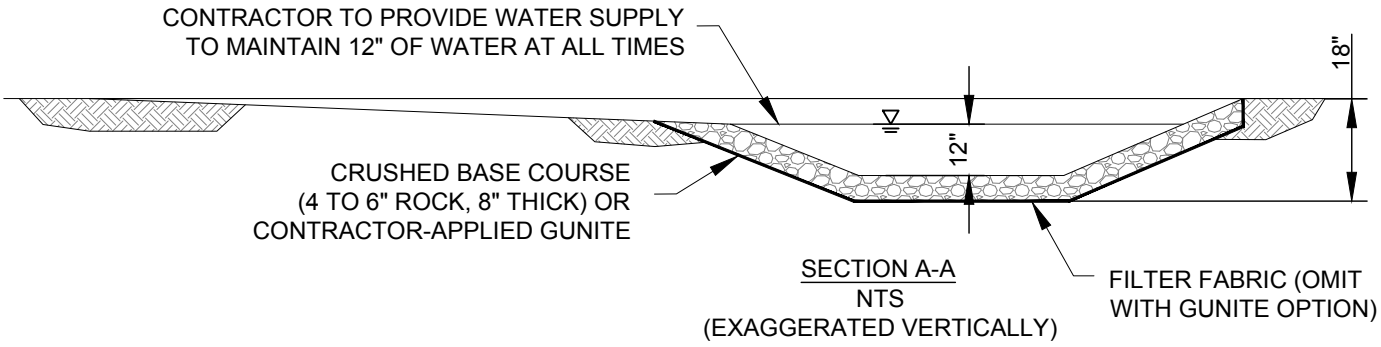
10. INSPECT ONCE PER WEEK ON ACTIVE SITES, ONCE EVERY TWO WEEKS ON INACTIVE SITES, AND WITHIN 24 HOURS FOLLOWING A 0.5 INCH RAIN EVENT.

11. REPAIR ANY DAMAGED AREAS OF THE NET OR BLANKET AND STAPLE INTO THE GROUND ANY AREAS NOT IN CLOSE CONTACT WITH THE GROUND SURFACE.

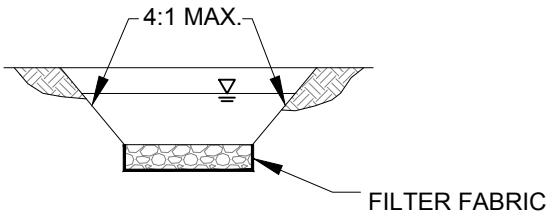
12. IF EROSION OCCURS, REPAIR AND PROTECT THE ERODED AREA.



PLAN
NTS



SECTION A-A
NTS
(EXAGGERATED VERTICALLY)



SECTION B-B
NTS
(EXAGGERATED VERTICALLY)

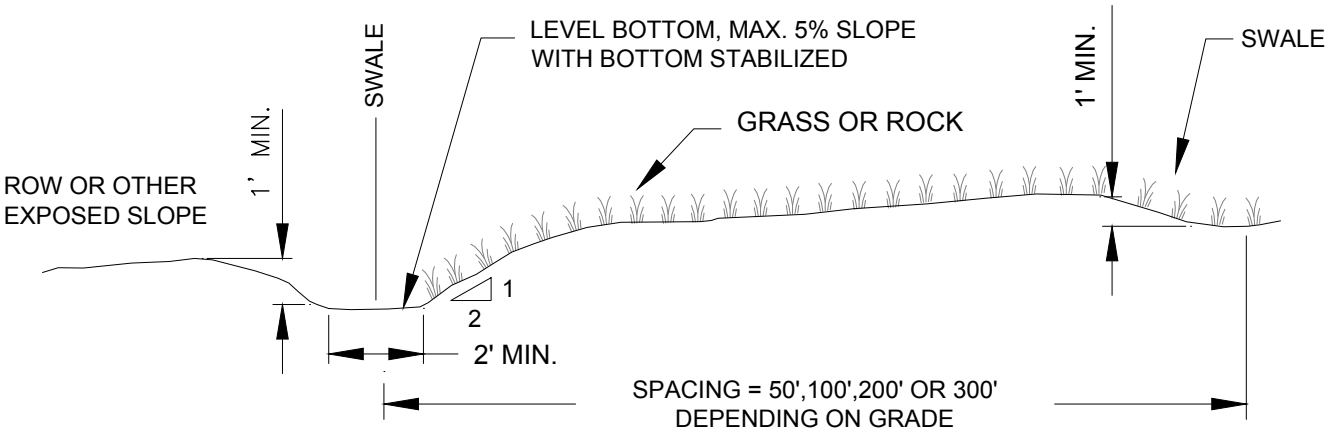
NOTE:
1. CONTRACTOR TO REMOVE ACCUMULATED SEDIMENT FROM WHEEL WASH; MAY BE PIPED TO AN APPROVED SEDIMENT TRAP.

REFERENCE:
USE GEOTEXTILE FABRIC WITH AGGREGATE FOR A TEMPORARY TIRE WASH.

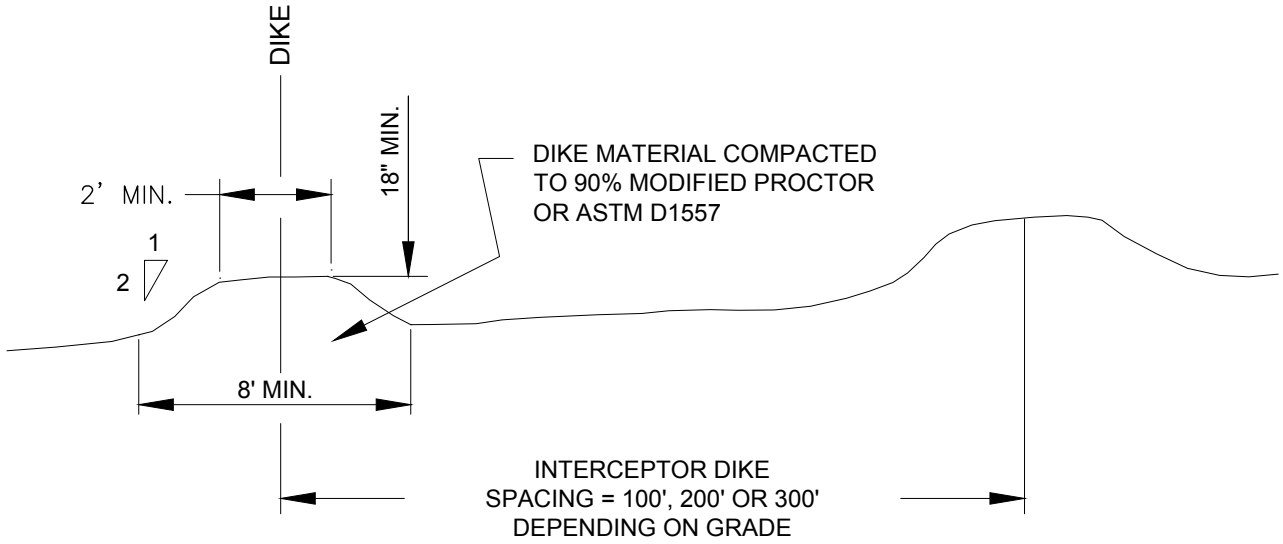
STEVENSON

TIRE WASH

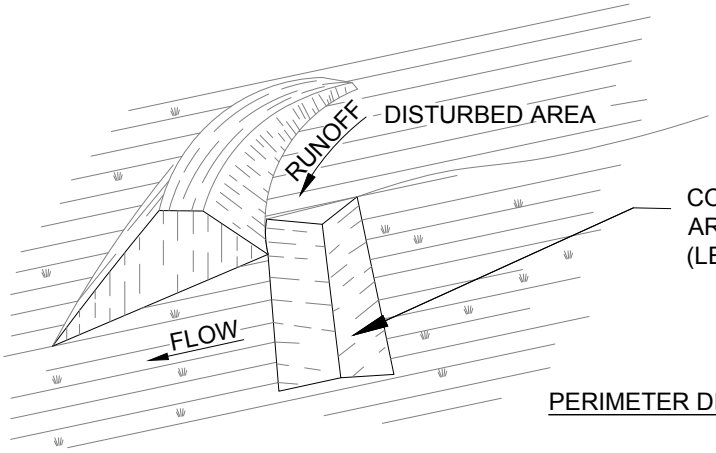
DRAWING NO. E16
DATE AUG '25
SCALE NTS
APPROVED BY CR



INTERCEPTOR SWALE



TEMPORARY INTERCEPTOR DIKES



PERIMETER DIKE

STEVENSON

INTERCEPTOR DIKES AND SWALES

DRAWING NO. E17

DATE AUG '25 | SCALE NTS

APPROVED BY CR

STORM DRAINAGE NOTES

1. THESE REQUIREMENTS SHALL APPLY TO ALL STORM DRAINAGE FACILITIES IN EXISTING AND PROPOSED PUBLIC RIGHT-OF-WAY, PUBLIC DRAINAGE EASEMENTS, AND TRACTS OF COMMON OWNERSHIP IN THE CITY. STORM DRAINAGE SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO: INLETS, PIPES, DITCHES, CREEKS, RIVERS, WETLANDS, AND STORM WATER QUALITY AND QUANTITY FACILITIES.

2. MATERIALS AND WORKMANSHIP FOR STORM WORK SHALL CONFORM TO THE CITY OF STEVENSON STANDARD DETAIL SHEETS.

3. EMBANKMENT FOR STORMWATER RETENTION OR DETENTION BASINS SHALL BE PLACED IN MAXIMUM EIGHT (8) INCH LIFTS AND EACH LIFT SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT. EMBANKMENTS SHALL BE CONSTRUCTED PER SECTION 2-03 OF THE STANDARD SPECIFICATIONS.

4. PRE-CAST DRAINAGE STRUCTURES PREVIOUSLY APPROVED BY THE WASHINGTON DEPARTMENT OF TRANSPORTATION AND THE CITY OF STEVENSON PUBLIC WORKS DEPARTMENT MAY BE SUBSTITUTED FOR ANY NEW STANDARD CAST-IN-PLACE UNIT. HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THE PRE-CAST DRAINAGE STRUCTURES COMPLY WITH THE DESIGN INVERTS AND RIM ELEVATIONS.

5. THE CONTRACTOR IS TO VERIFY ALL INVERT AND TOP ELEVATIONS OF EXISTING STORM SEWERS, AND REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

6. THE CONTRACTOR IS TO VERIFY CENTERLINE AND TOP OF CURB ELEVATIONS PRIOR TO CONSTRUCTION TO INSURE COMPLIANCE WITH THE CONSTRUCTION DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

7. ALL STORM SEWER PIPE AND FITTINGS SHALL BE WATER TIGHT.

8. ALL EXPOSED CULVERT ENDS SHALL BE BEVELED.

9. PROVIDE LOCKING MANHOLE COVERS IN AREAS OUTSIDE OF PUBLIC RIGHT-OF-WAY.

10. CONNECTIONS TO EXISTING MANHOLES SHALL BE ACCOMPLISHED BY USING MANUFACTURER'S PROVIDED KNOCK-OUTS OR CORE DRILLED.

11. WHEN SETTING A NEW MANHOLE ON EXISTING PIPES, THE EXISTING PIPE SHALL NOT BE CUT INTO UNTIL APPROVAL IS RECEIVED FROM THE CITY.

12. WHERE A STORM PIPE CROSSES UNDER AN A.C. WATERLINE THE CONTRACTOR SHALL REPLACE THE EXISTING A.C. WATERLINE OVER THE EXCAVATION WITH DUCTILE IRON PIPE CLASS 52 TO A POINT OF BEARING SOIL A MINIMUM OF THREE FEET (3') EACH SIDE OF THE EXCAVATION.

13. VEGETATION IN BIOFILTRATION SYSTEMS SHALL BECOME FULLY ESTABLISHED PRIOR TO COMMENCING WITH INSTALLATION OF A.C. OR CONCRETE PAVEMENT FOR ALL AREAS DRAINING INTO THE WATER QUALITY SYSTEM. SEED MIXTURES FOR BIOFILTRATION SHALL BE IN ACCORDANCE WITH BMP C120: TEMPORARY AND PERMANENT SEEDING AS NOTED IN THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON, VOLUME II - CONSTRUCTION STORMWATER POLLUTION PREVENTION. SEEDING SHALL BE APPLIED AT A RATE OF 120 LBS/ACRE.

14. UNLESS APPROVED OTHERWISE, ALL STORM SEWERS SHALL BE CLEANED, TESTED AND TV'D IN ACCORDANCE WITH THE CITY OF STEVENSON ENGINEERING STANDARDS AND SECTION 7-04.3(1) OF THE STANDARD SPECIFICATIONS PRIOR TO PLACING THE FINAL LIFT OF PAVEMENT.

STEVENSON WASHINGTON

STANDARD DRAINAGE NOTES

DRAWING NO. D01

DATE AUG '25 | SCALE NTS

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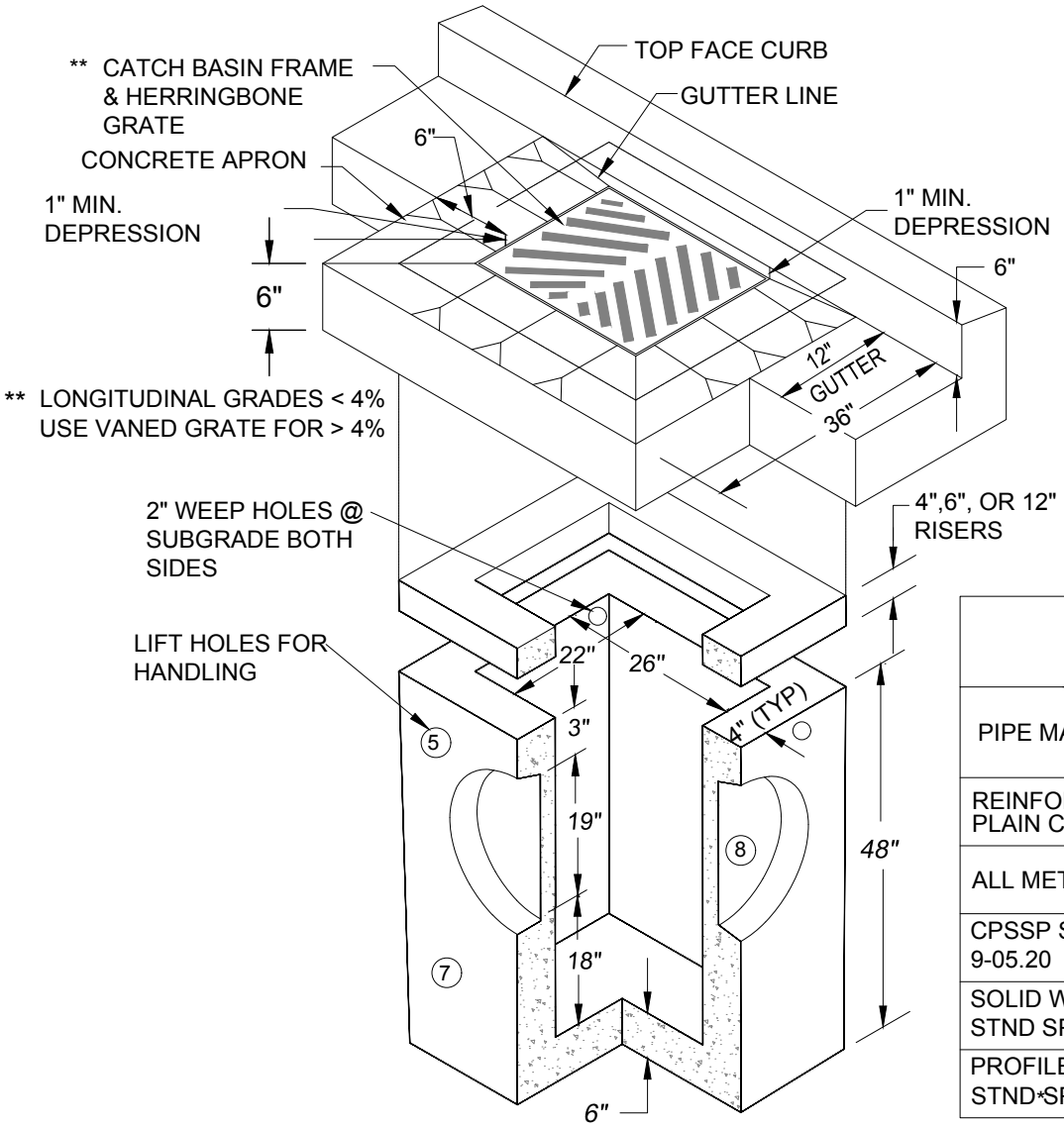


PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	18"
ALL METAL PIPE	21"
CPSSP STND SPEC 9-05.20	18"
SOLID WALL PVC STND SPEC 9-05.12(1)	21"
PROFILE WALL PVC STND SPEC 9-05.12(2)	21"

CORRUGATED POLYETHYLENE STORM SEWER PIPE

NOTES:

1. CATCH BASIN INLET TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 (AASHTO) M 199) & C890 UNLESS SHOWN ON PLANS OR NOTED IN STANDARD SPECIFICATIONS.
2. REINFORCING FOR INLET UNIT, 3 EA. #4 HORIZONTAL BARS.
3. REINFORCING FOR TOP UNIT, 2 EA. #3 HORIZONTAL BARS.
4. ALL REBAR TO MEET ASTM A615 GRADE 60.
5. PRECAST BASES SHALL BE WSDOT TYPE 1 CATCH BASINS PER STANDARD PLAN B-1. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT.
6. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4,000.
7. THE MAX. DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5'-0".
8. ANY PROTRUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE WALLS AND GROUTED TO THE SATISFACTION OF THE CITY.
9. CATCH BASIN FRAME AND GRATE SHALL BE CAST INTO 6" CONCRETE SLAB AND BE ACCORDANCE WITH WSDOT STANDARD SPECIFICATIONS AND MEET THE STRENGTH REQUIREMENTS OF FEDERAL SPECIFICATION RR-F-62ID. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
10. CONTRACTOR SHALL USE PRECAST INLET STRUCTURES, UNLESS APPROVED OTHERWISE.
11. INSTALL REMOVABLE TRAP IN ACCORDANCE WITH THE STANDARD CATCH BASIN TRAP DETAIL.
12. METAL CATCH BASIN STRUCTURES MAY BE APPROVED BY THE CITY OF STEVENSON ON A CASE-BY-CASE BASIS.

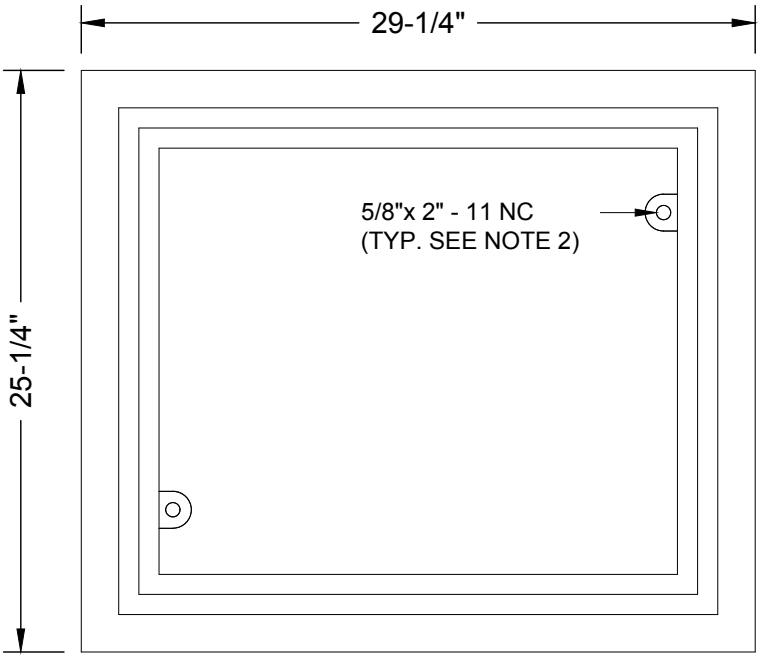
STEVENSON WASHINGTON

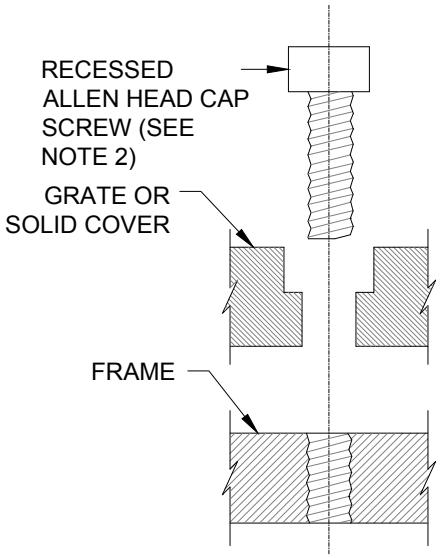
CATCH BASIN TYPE 1

DRAWING NO. D02

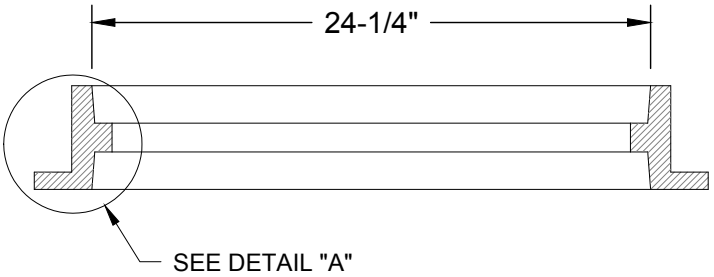
DATE AUG '25 | SCALE NTS

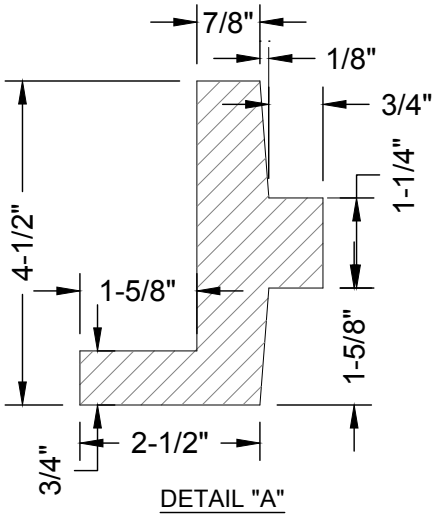
APPROVED BY CR





BOLT DOWN DETAIL





DETAIL "A"

NOTES:

1. WHEN BOLT DOWN GRATES OR COVERS ARE SPECIFIED, PROVIDE TWO HOLES IN THE FRAME THAT ARE VERTICALLY ALIGNED WITH THE GRATE OR COVER SLOTS. TAP EACH HOLE TO ACCEPT A 5/8"x 2" - 11 NC ALLEN HEAD CAP SCREW. LOCATION OF BOLT DOWN HOLES VARIES AMONG DIFFERENT MANUFACTURERS.

2. REFER TO WSDOT STANDARD SPECIFICATION 9-05.15(2) FOR ADDITIONAL REQUIREMENTS.

3. CATCH BASIN FRAME SHALL BE CAST INTO 6" CONCRETE SLAB.

STEVENSON
WASHINGTON

CATCH BASIN FRAME

DRAWING NO. D03

DATE AUG '25 | SCALE NTS

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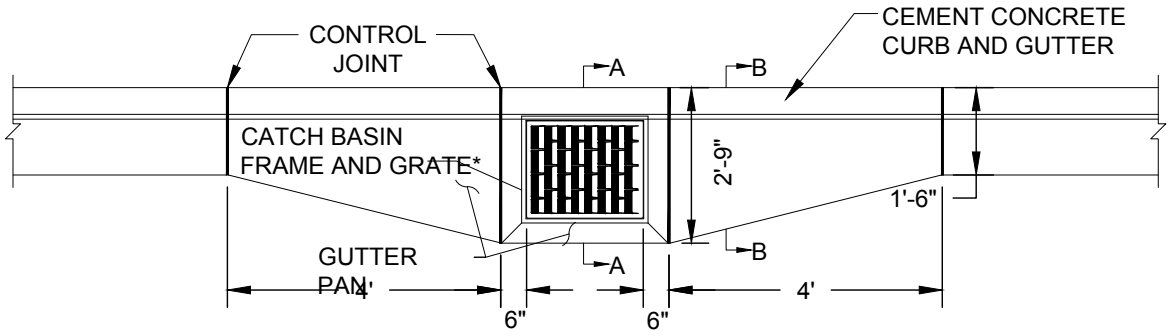
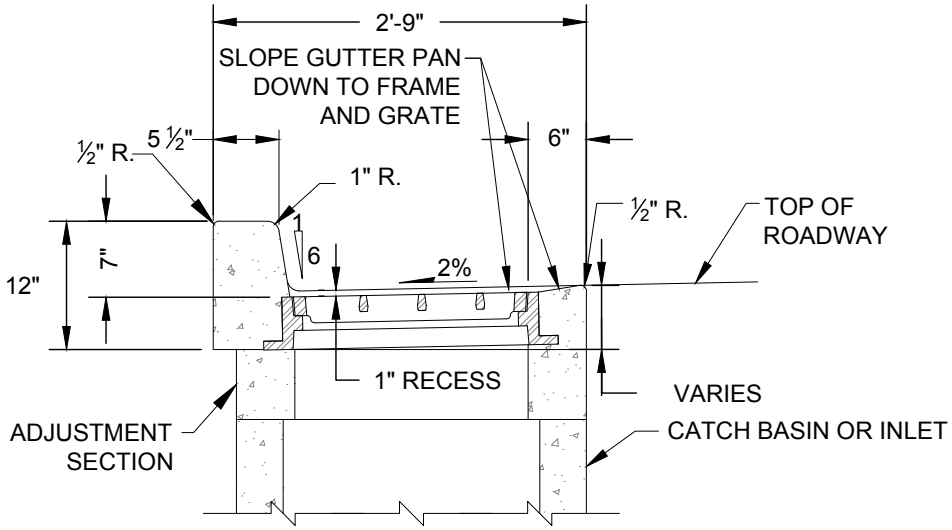
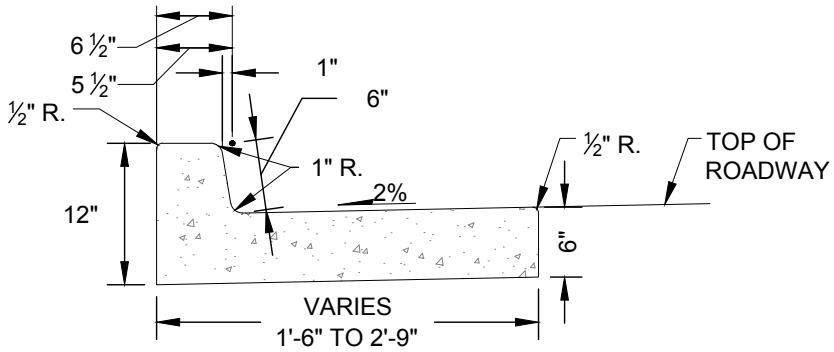


PLAN VIEW



SECTION A



SECTION B

*NOTES:

1. USE VANED GRATE WHERE LONGITUDINAL SLOPE IS 4% OR GREATER.

2. USE HERRINGBONE GRATE WHERE LONGITUDINAL SLOPE IS LESS THAN 4%, SEE STANDARD DETAIL D05.

STEVENSON WASHINGTON

GUTTER PAN

DRAWING NO. D04

DATE AUG '25 | SCALE NTS

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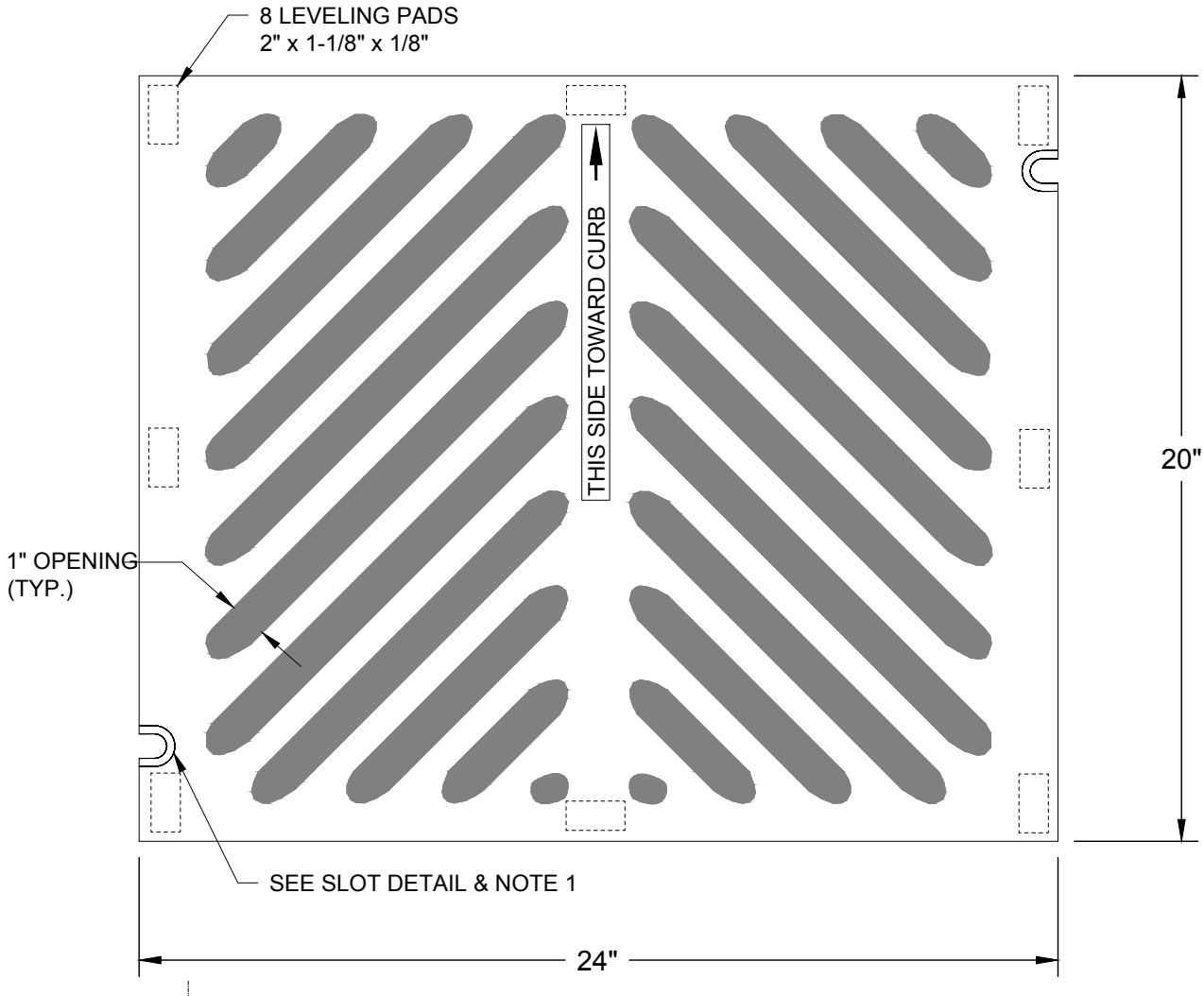
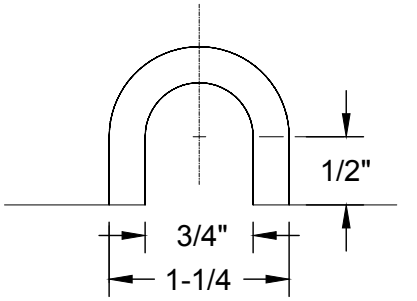
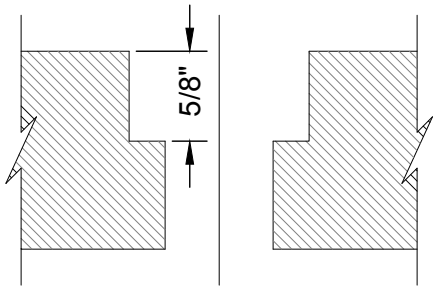






SLOT DETAIL

NOTES:

1. WELDING NOT PERMITTED
2. WHEN BOLT DOWN GRATES ARE SPECIFIED, PROVIDE TWO SLOTS IN THE GRATE THAT ARE VERTICALLY ALIGNED WITH THE HOLES IN THE FRAME. LOCATION OF BOLT DOWN SLOTS VARIES AMONG DIFFERENT MANUFACTURERS.
3. REFER TO WSDOT STANDARD SPECIFICATION 9-05.15(2) FOR ADDITIONAL REQUIREMENTS.
4. FOR FRAME DETAIL, SEE STD. PLAN D04
5. THE THICKNESS OF THE GRATE SHALL NOT EXCEED 1-5/8".

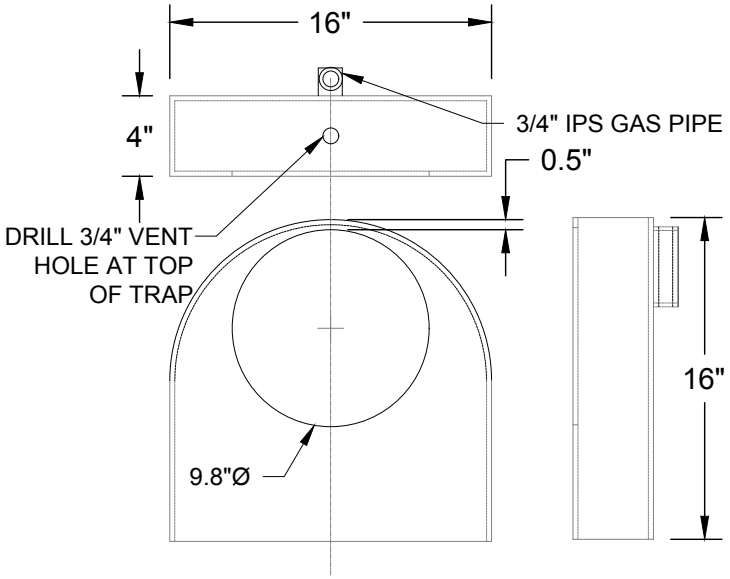
STEVENSON WASHINGTON

HERRINGBONE GRATE

DRAWING NO. D05

DATE AUG '25 | SCALE NTS

APPROVED BY CR

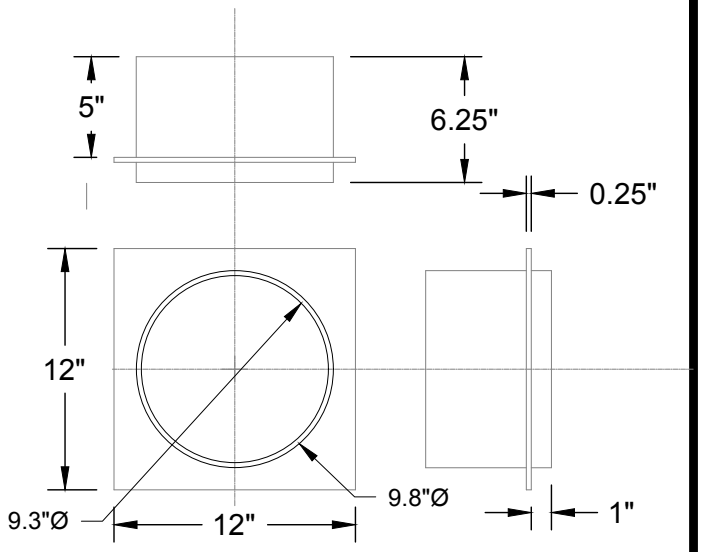


FF57575

MATERIAL HDPE

LOW PROFILE ELBOW

NTS



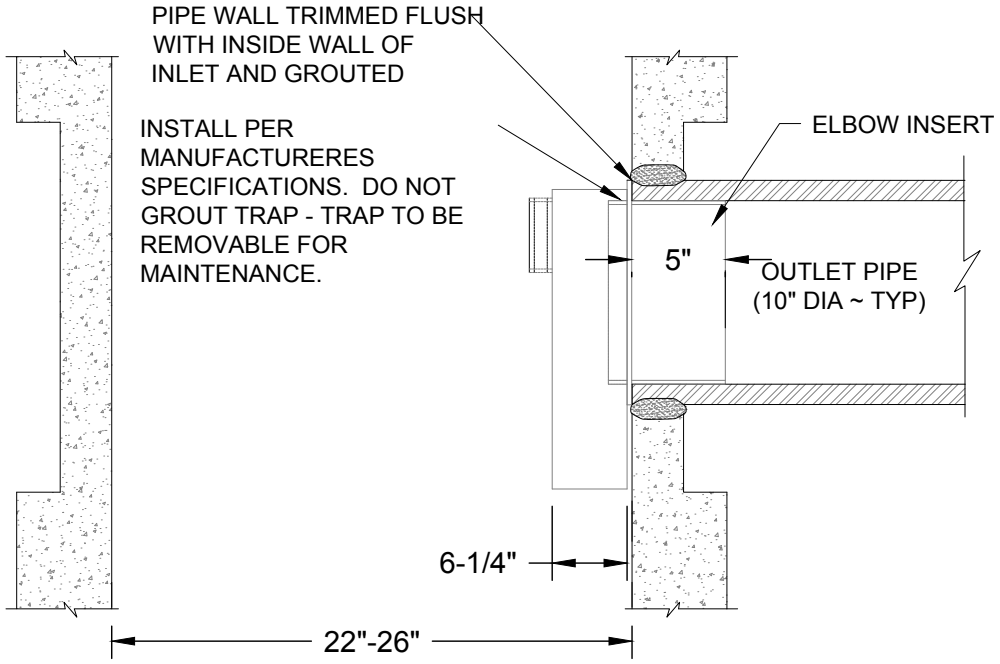
FF57576

MATERIAL HDPE

ELBOW INSERT

NTS

ZYMARK BRAND OR EQUIVALENT



STEVENSON WASHINGTON

CATCH BASIN TRAP

DRAWING NO. D06

DATE AUG '25 | SCALE NTS

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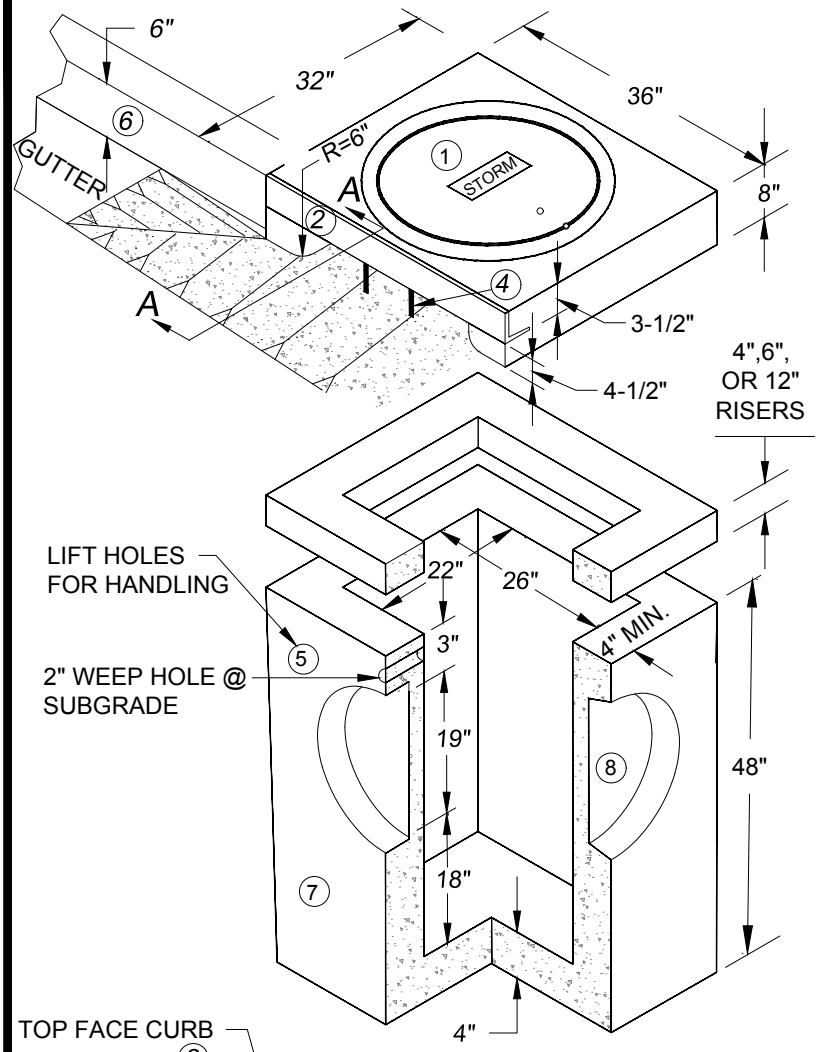
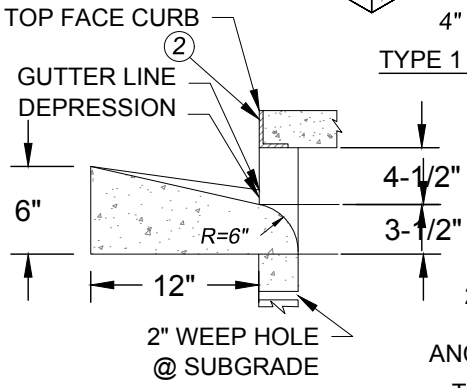
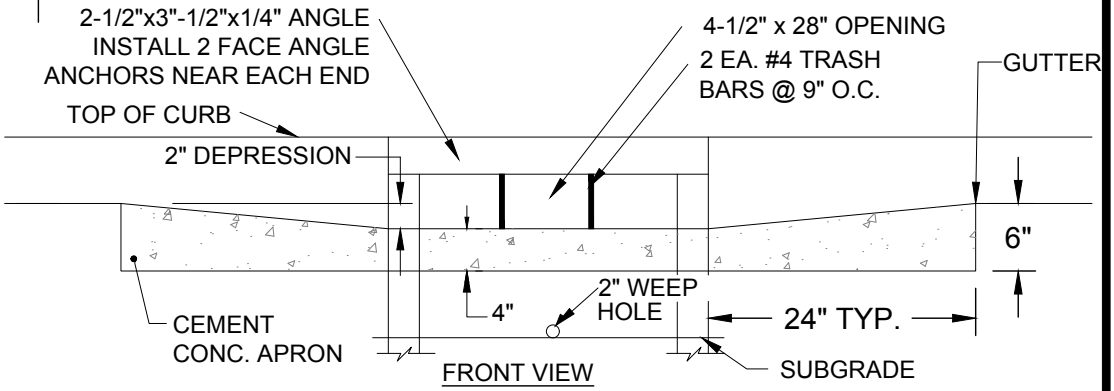


TYPE 1 CURB INLET

NTS



SECTION A-A



FRONT VIEW

1. 24" CAST IRON LOCKING FRAME & COVER
2. 2 1/2"x3 1/2"x1/4"x 35 7/8" GALVANIZED ANGLE IRON
3. 2"x2 1/2"x1/4"x33" GALVANIZED ANGLE IRON
4. 2 EA. #4 TRASH BARS @ 9" O.C.
5. 2 EA. BASE UNIT LIFT HOLES
6. 6" CURB AND 12" GUTTERS
7. STANDARD WSDOT TYPE 1 BASE UNIT
8. PIPE KNOCKOUTS ALL FOUR SIDES.

NOTES:

1. CURB INLET TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 & C890 UNLESS SHOWN ON PLANS OR NOTED IN STANDARD SPECIFICATIONS.
2. REINFORCING FOR INLET UNIT, 3 EA. #4 HORZONTAL BARS.
3. REINFORCING FOR TOP UNIT, 2 EA. #3 HORIZONTAL.
4. ALL REBAR TO MEET ASTM A615 GRADE 60.
5. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4,000.
6. PRECAST BASES SHALL BE WSDOT TYPE 1 CATCH BASINS PER STANDARD PLAN B-1. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT.
7. THE MAXIMUM DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5'-0".
8. ANY PROTUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE WALLS AND GROUTED TO THE SATISFACTION OF THE CITY.
9. INSTALL REMOVABLE TRAP IN ACCORDANCE WITH THE STANDARD CATCH BASIN TRAP DETAIL.
10. CONTRACTOR SHALL USE FURNISHING PRECAST INLET STRUCTURES, UNLESS APPROVED OTHERWISE.

STEVENSON
WASHINGTON

CURB INLET TYPE 1

DRAWING NO. D07

DATE AUG '25 | SCALE NTS

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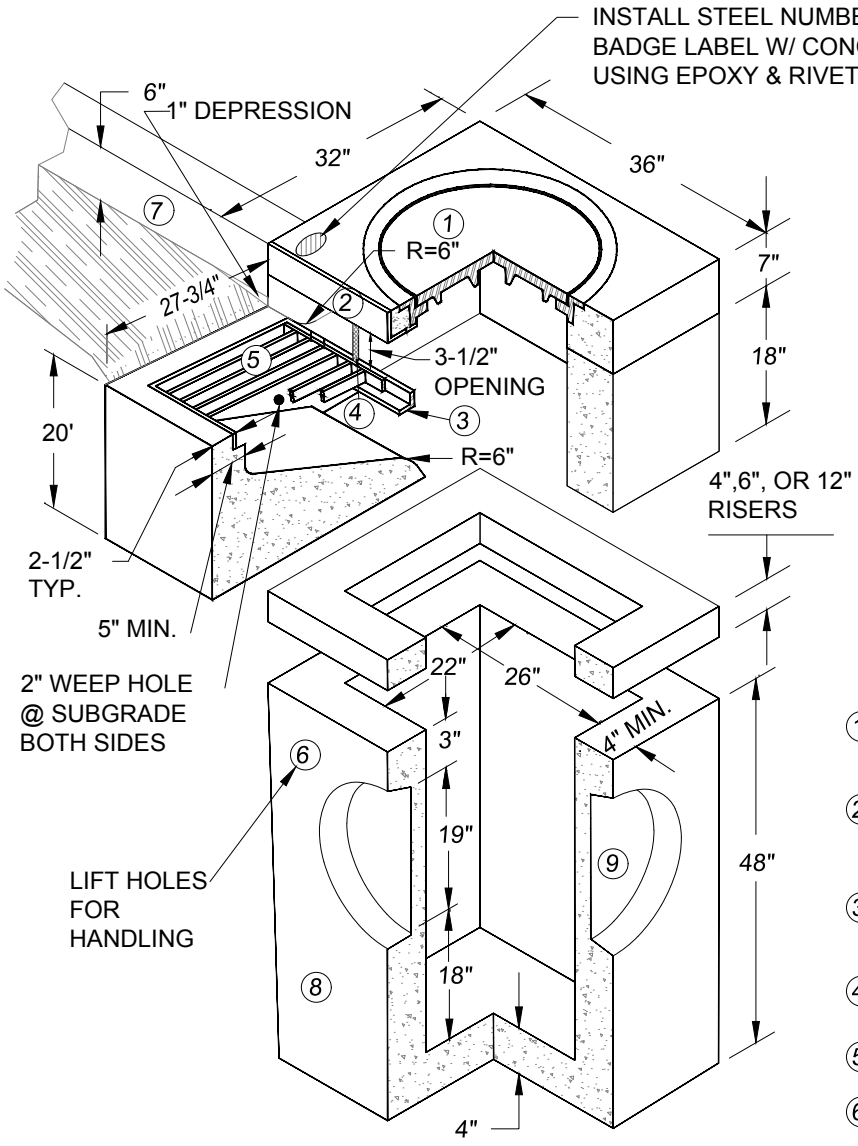
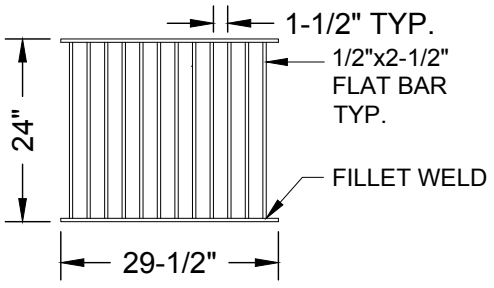
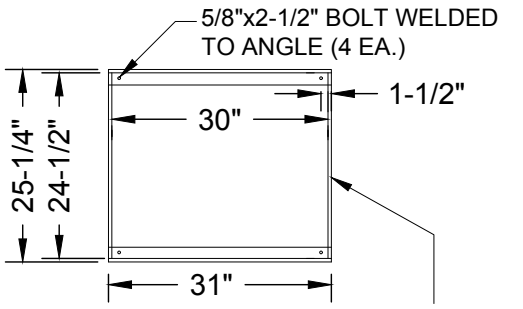




GRATE



FRAME

1/2"x2-1/2"x24-1/2" FLAT BAR (2 EA.)

1. 24" x 3-1/2" CAST IRON LOCKING FRAME & COVER
2. 2-1/2"x3-1/2"x1/4"x 35 7/8" GALVANIZED ANGLE IRON
3. 2-1/2"x2-1/2"x3/8" FRAME GALVANIZED ANGLE IRON
4. 2 EA. #4 TRASH BARS @ 8" O.C.
5. 1/2"x2-1/2" FLAT BAR GALVANIZED GRATE
6. 2 EA. BASE UNIT LIFT HOLES 7
7. 6" CURB AND 12" GUTTERS
8. STANDARD WSDOT TYPE 1 BASE UNIT
9. PIPE KNOCKOUTS ALL FOUR SIDES.

NOTES:

1. COMBINATION CURB INLET TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 & C890 UNLESS SHOWN ON PLANS OR NOTED IN STANDARD SPECIFICATIONS.
2. REINFORCING FOR INLET UNIT, 3 EA. #4 HORIZONTAL BARS; REINFORCING FOR TOP UNIT, 2 EA. #3 HORIZONTAL BARS; REINFORCING FOR INLET SLOPED BASE, 4x4 MESH.
3. ALL REBAR TO MEET ASTM A615 GRADE 60.
4. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4,000.
5. PRECAST BASES SHALL BE WSDOT TYPE 1 CATCH BASINS PER STANDARD PLAN B-1. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT.
6. THE MAX. DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5'-0".
7. ANY PROTRUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE WALLS AND GROUTED TO THE SATISFACTION OF THE CITY.
8. GRATE TO HAVE 1" DEPRESSION AT GUTTER INLET WITH GUTTER TO BE TAPERED DOWN TO INLET.
9. INSTALL REMOVABLE TRAP IN ACCORDANCE WITH THE STANDARD CATCH BASIN TRAP DETAIL.
10. CONTRACTOR SHALL USE PRECAST INLET STRUCTURES, UNLESS APPROVED OTHERWISE.

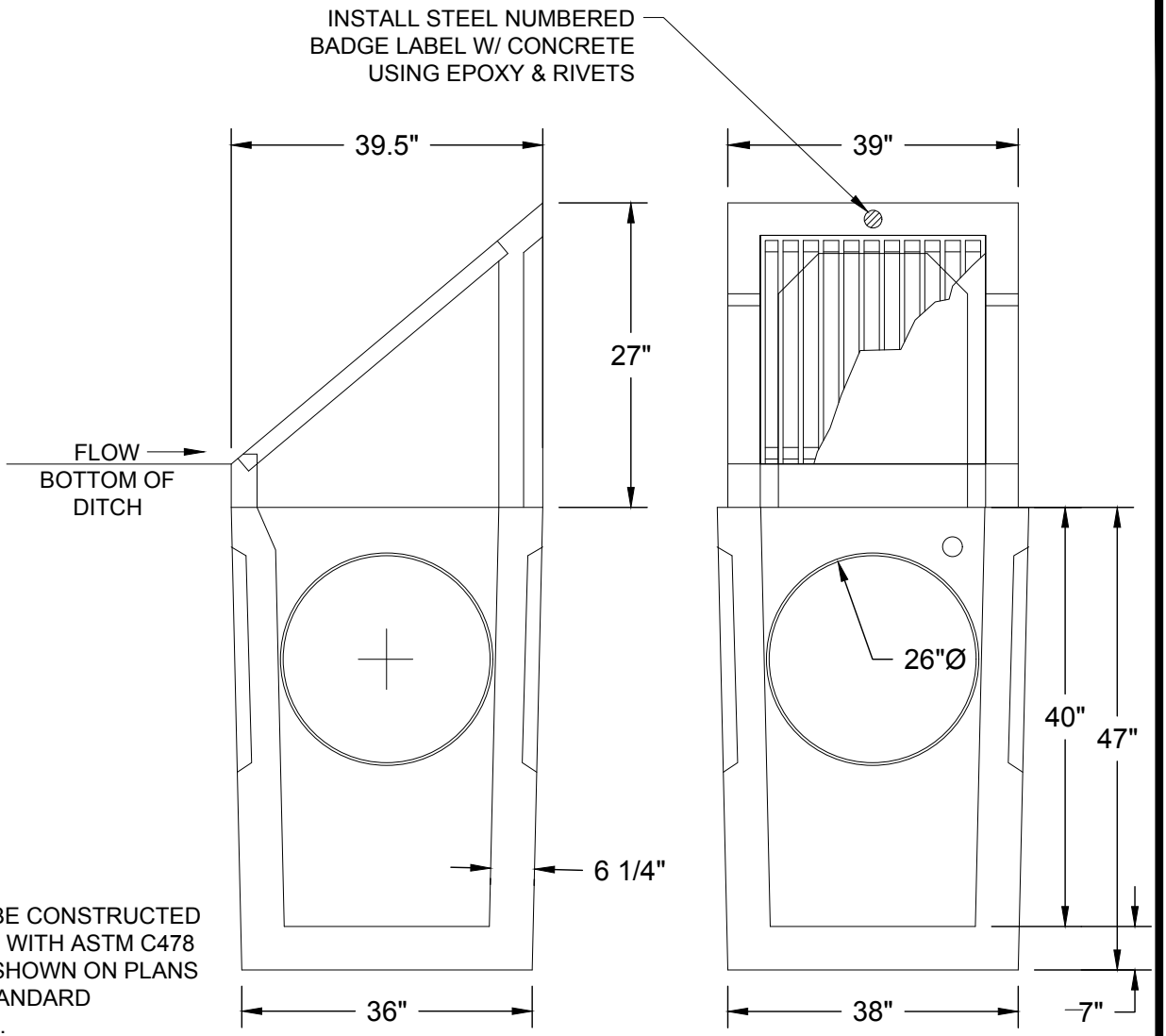
STEVENSON WASHINGTON

COMBINATION CURB INLET

DRAWING NO. D08

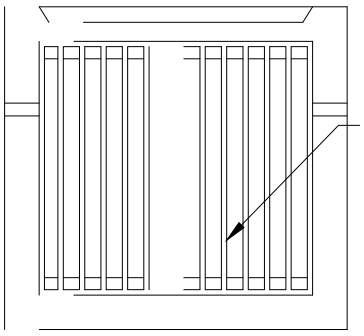
DATE AUG '25 | SCALE NTS

APPROVED BY CR

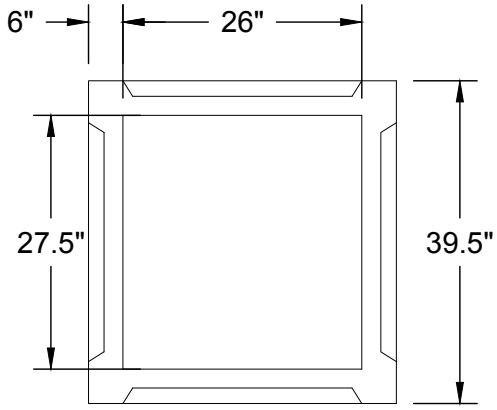


NOTES:

1. CURB INLET TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 & C890 UNLESS SHOWN ON PLANS OR NOTED IN STANDARD SPECIFICATIONS.
2. REINFORCING FOR INLET UNIT, 3 EA. #4 HORZONTAL BARS.
3. ALL REBAR TO MEET ASTM A615 GRADE 60.
4. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4,000.
5. THE MAXIMUM DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5'-0".
6. ANY PROTUDING ENDS OF PIPES SHALL BE TRIMMED FLUSH WITH THE INSIDE WALLS AND GROUTED TO THE SATISFACTION OF THE CITY.



TOP VIEW - GRATE



TOP VIEW - CATCH BASIN

STEVENSON WASHINGTON

DITCH INLET

DRAWING NO. D09

DATE AUG '25 | SCALE NTS

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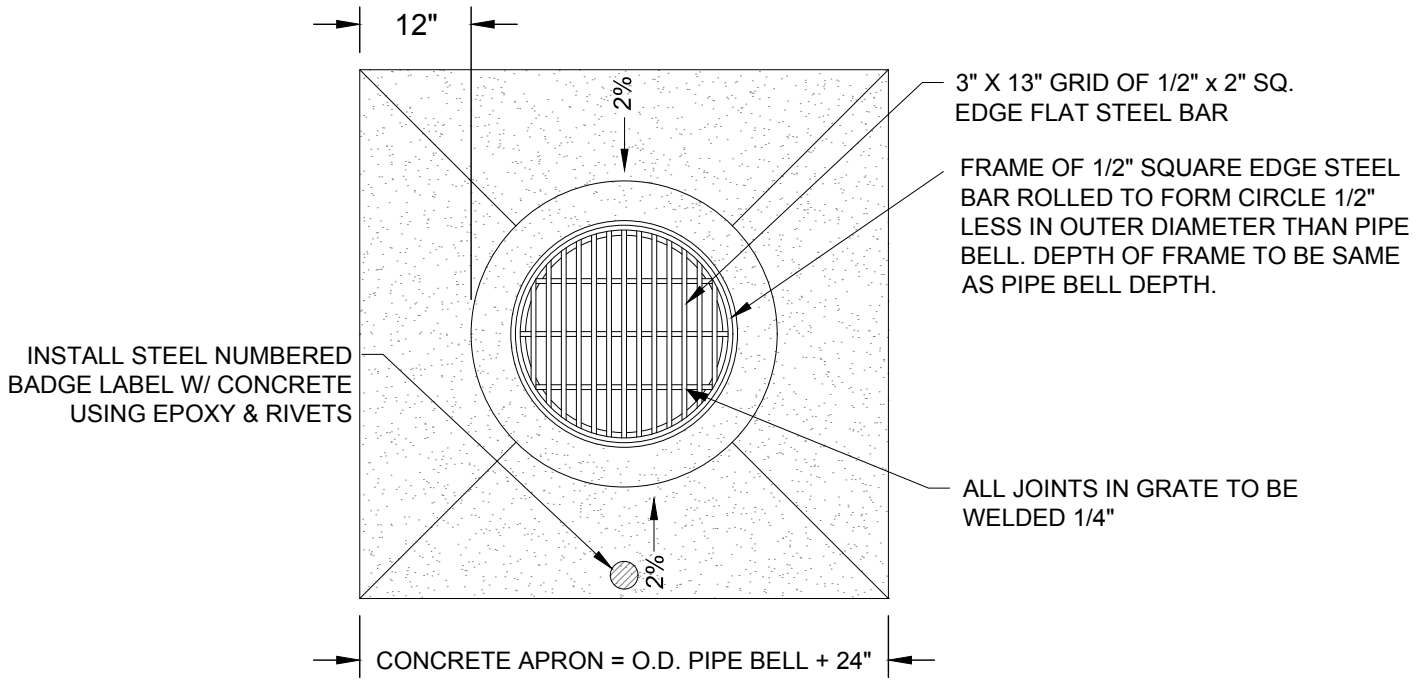
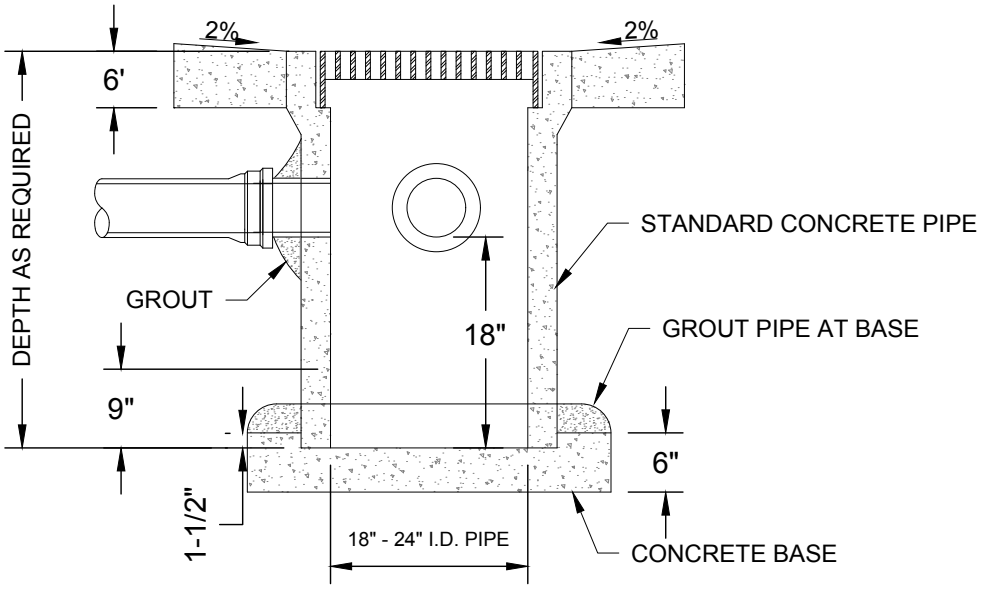


PLAN



SECTION A-A

NOTES:

1. GRATES SHALL BE CONSTRUCTED FOR BICYCLE SAFETY.
2. PRECAST CONCRETE CATCH BASINS MAY BE USED WHEN SPECIFIED OR APPROVED.
3. NOT FOR USE IN VEHICULAR TRAFFIC AREAS.

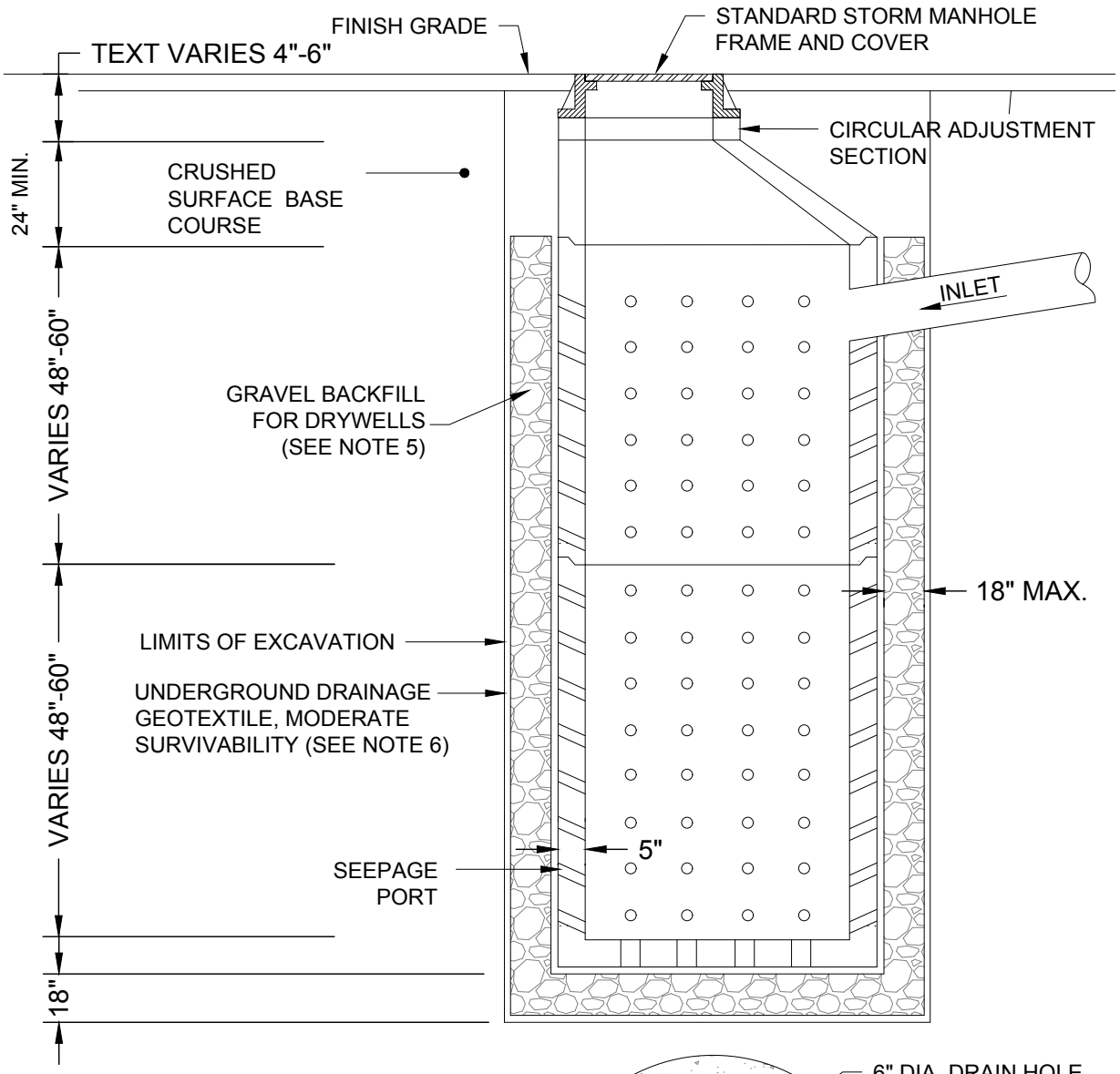
STEVENSON WASHINGTON

AREA INLET

DRAWING NO. D10

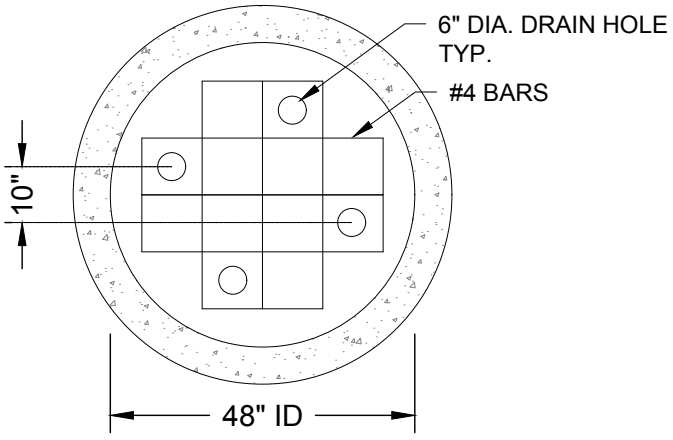
DATE JULY '25 | SCALE NTS

APPROVED BY XX



NOTES:

1. ALL PRECAST SECTIONS SHALL CONFORM TO REQUIREMENTS OF ASTM C478.
2. PRECAST CONE SECTIONS MAY BE ECCENTRIC OR CONCENTRIC.
3. ALL PIPING TO AND FROM PRECAST DRYWELLS SHALL HAVE AT LEAST 8" OF CRUSHED ROCK COVER CONTINUOUSLY AROUND PIPE WHERE DRAIN ROCK WOULD OTHERWISE BE IN CONTACT WITH PIPE.
4. PERFORATIONS SHALL BE HORIZONTAL ROWS OF (14) 2-1/4" SQUARE OR (14) 2-3/8" ROUND HOLES, EQUALLY SPACED. ROWS SHALL BE SPACED 6-1/2" CENTER TO CENTER.
5. GRAVEL BACKFILL FOR DRYWELLS PER WSDOT STANDARD SPECIFICATION 9-03.12(5).
6. UNDERGROUND DRAINAGE GEOTEXTILE, MODERATE SURVIVABILITY. PER WSDOT STANDARD SPECIFICATION 9-33.
7. TYPICAL DRYWELL DEPTH IS 13'



BASE SECTION - PLAN VIEW

STEVENSON WASHINGTON

PRECAST DRYWELL

DRAWING NO. D11

DATE JULY '25 | SCALE NTS

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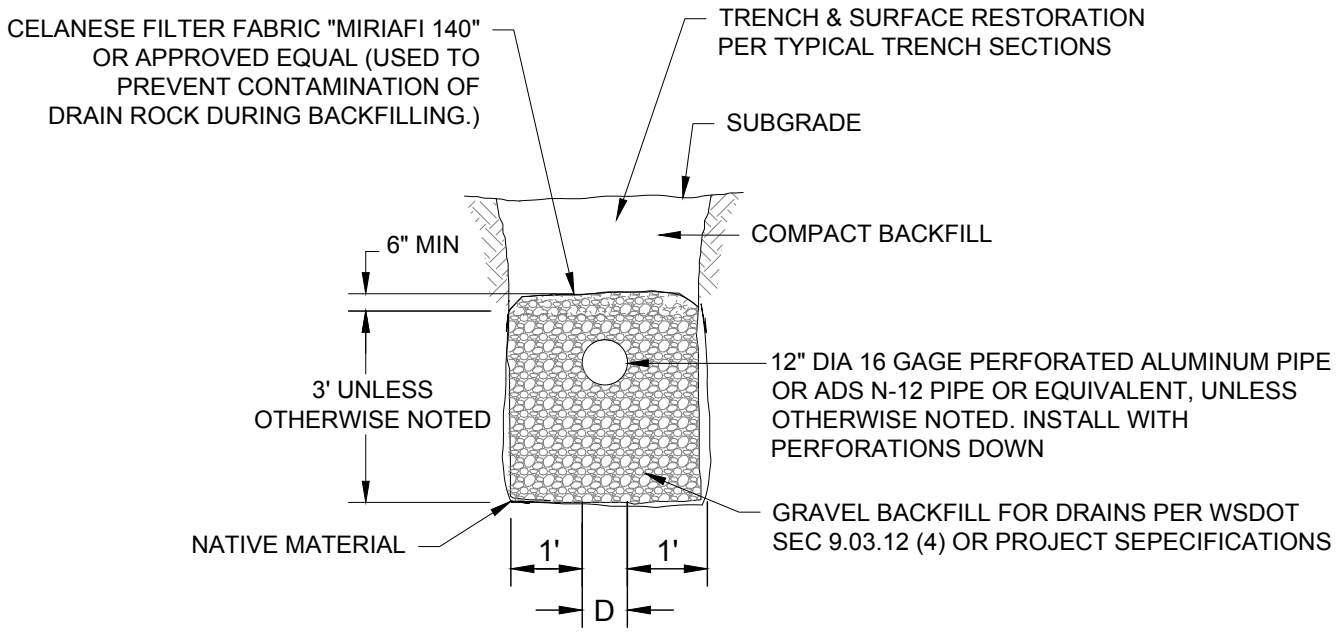


STEVENSON
WASHINGTON

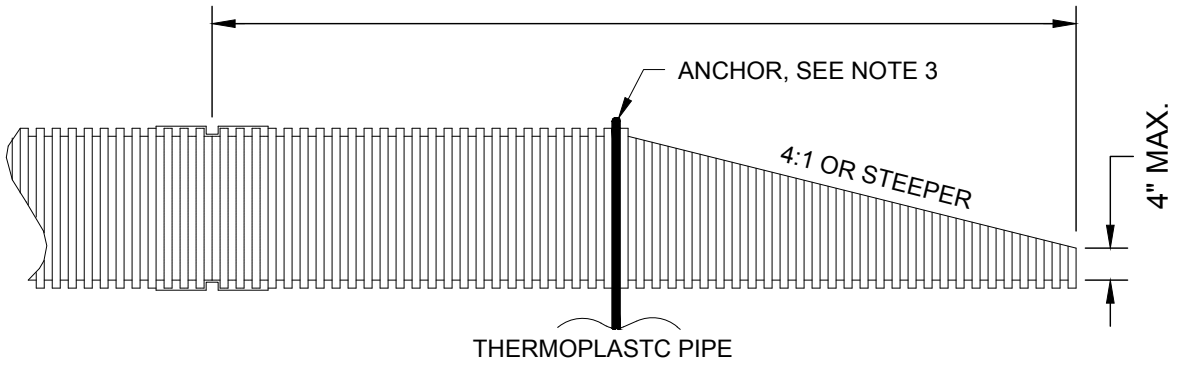
INFILTRATION TRENCH

DRAWING NO. D12

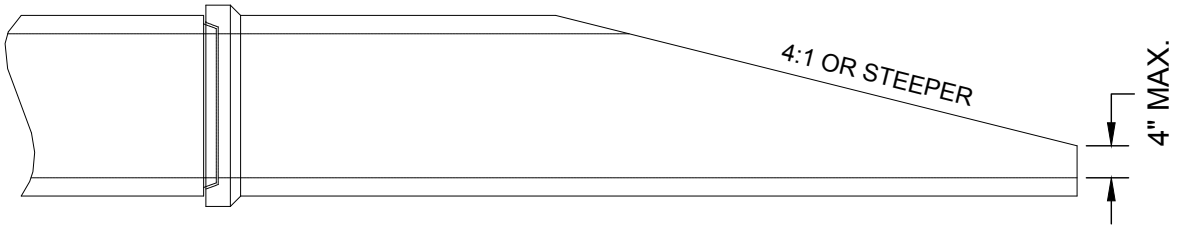
DATE JULY '25 | SCALE NTS

APPROVED BY XX

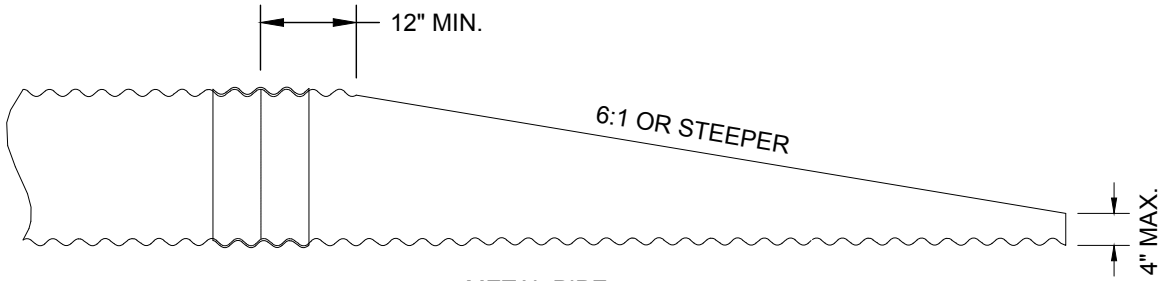
END SECTION OF THE PIPE SHALL BE SIX TIMES THE DIAMETER OF THE PIPE



THERMOPLASTC PIPE



CONCRETE PIPE



METAL PIPE

NOTES:

1. THE CULVERT ENDS SHALL BE BEVELED TO MATCH THE EMBANKMENT OR DITCH SLOPE, WITHOUT EXCEEDING THE LIMITS SHOWN ON THE PLAN.

2. FIELD CUT OF CULVERT ENDS IS PERMITTED, WHEN APPROVED BY THE CITY. ALL FIELD CUT PIPE CULVERTS SHALL BE TREATED WITH TREATMENT SHOWN IN THE STANDARD SPECIFICATION OR GENERAL SPECIAL PROVISIONS.

3. THE END OF THERMOPLASTIC PIPE SHALL BE ANCHORED.

4. FOR PIPES 18" OR LARGER, TRASH SCREEN REQUIRED.

STEVENSON WASHINGTON

BEVELED END CULVERT

DRAWING NO. D13

DATE AUG '25 | SCALE NTS

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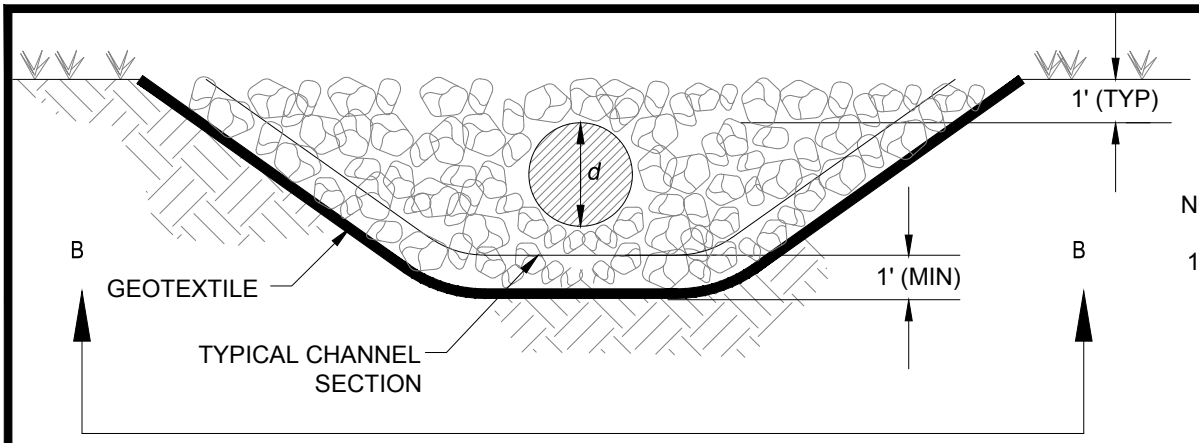
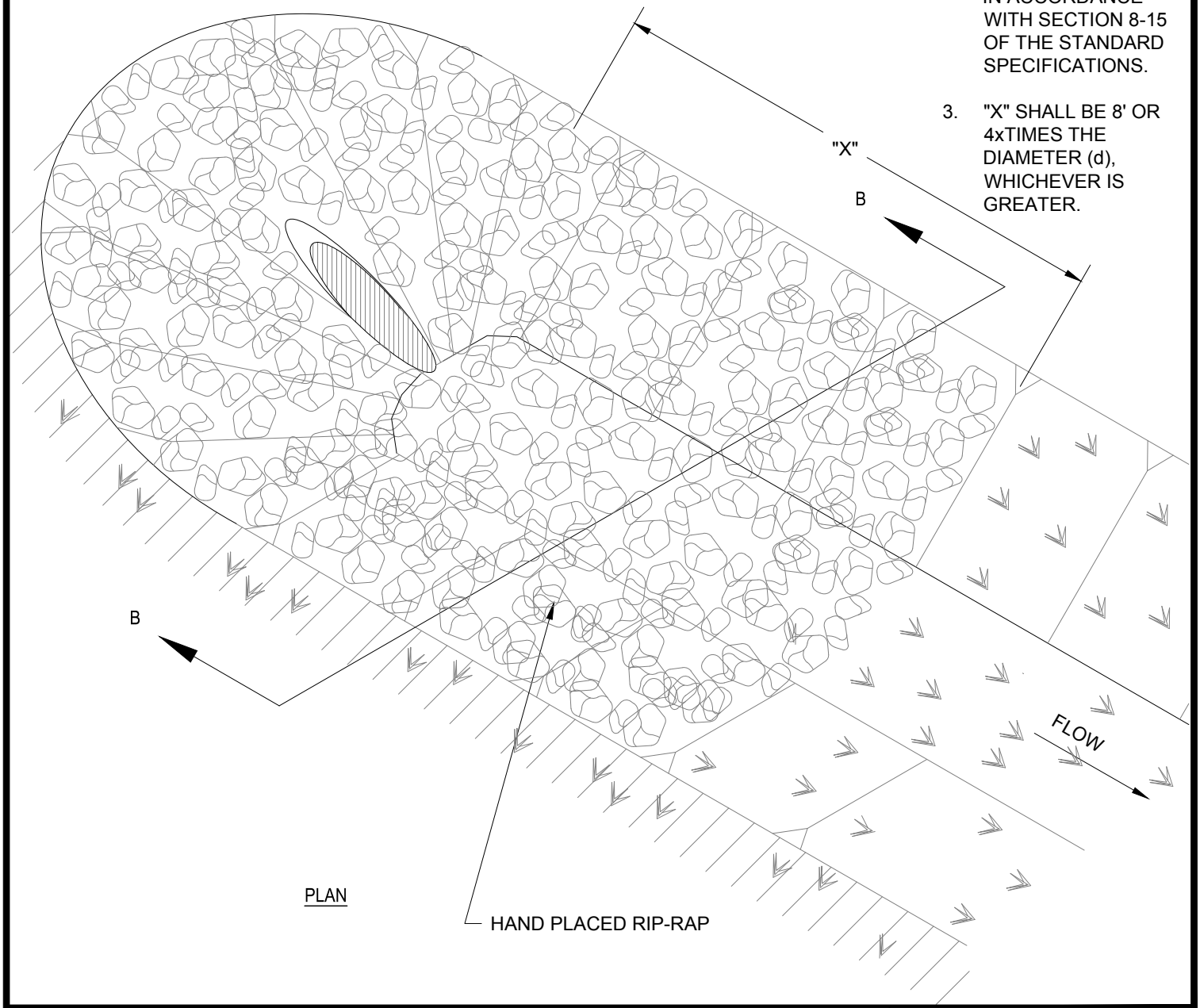


SECTION

NOTES:

1. GEOTEXTILE SHALL BE IN ACCORDANCE WITH SECTION 9-33 TABLE 3 OF THE STANDARD SPECIFICATIONS.
2. HANDPLACED RIP-RAP SHALL BE IN ACCORDANCE WITH SECTION 8-15 OF THE STANDARD SPECIFICATIONS.
3. "X" SHALL BE 8' OR 4xTIMES THE DIAMETER (d), WHICHEVER IS GREATER.



PLAN

FLAT BOTTOM DITCH RIPRAP

DRAWING NO. D14

DATE AUG '25 | SCALE NTS

APPROVED BY CR

GENERAL NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL FOLLOW THE CITY OF STEVENSON ENGINEERING STANDARDS AND STANDARD DETAILS AND THE LATEST EDITION OF THE WSDOT "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION." WHEREVER THE WSDOT STANDARD SPECIFICATIONS REFER TO THE OWNER AS THE "STATE" OR "SECRETARY" OR WHEN REFERENCE IS MADE TO THE DEPARTMENT OF TRANSPORTATION IT SHALL BE UNDERSTOOD THAT THE STANDARD SPECIFICATIONS SHOULD READ THE "CITY". WHERE A CONFLICT EXISTS, THE CITY OF STEVENSON'S STANDARDS SHALL APPLY.

2. A COPY OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

3. NO WORK SHALL COMMENCE PRIOR TO CITY OF STEVENSON'S APPROVAL OF THE CONSTRUCTION PLANS AND A PRECONSTRUCTION CONFERENCE BEING HELD WITH CITY STAFF. THE CONTRACTOR SHALL COORDINATE AND ATTEND A PRECONSTRUCTION CONFERENCE WITH THE CITY OF STEVENSON PUBLIC WORKS DEPARTMENT PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT (509-427-5970) AT LEAST 48 HOURS PRIOR TO THE START OF ON-SITE CONSTRUCTION AND PRIOR TO ANY REQUIRED CITY INSPECTION. ALL MATERIALS AND WORK ARE SUBJECT TO INSPECTION AND APPROVAL BY THE CITY OF STEVENSON'S DEPARTMENT OF PUBLIC WORKS.

4. THE INSPECTOR SHALL, AT ALL TIMES, HAVE ACCESS TO THE WORK FOR THE PURPOSE OF INSPECTION AND TESTING, AND THE CONTRACTOR SHALL PREPARE FACILITIES FOR SUCH ACCESS AND SUCH INSPECTION AND TESTING.

5. THE CONTRACTOR IS RESPONSIBLE FOR OBSERVING THE SAFETY OF THE WORK AND OF ALL PERSONS AND PROPERTY COMING INTO CONTACT WITH THE WORK. THE CONTRACTOR SHALL CONDUCT HIS WORK IN SUCH A MANNER AS TO COMPLY WITH ALL THE REQUIREMENTS PRESCRIBED BY OSHA/WSHA. THE CITY PROJECT INSPECTOR'S ROLE IS NOT ONE OF SUPERVISION OR SAFETY MANAGEMENT, BUT IS ONE OF OBSERVATION ONLY. NOTHING HEREIN SHALL BE INTERPRETED TO OBLIGATE THE CITY TO ACT IN ANY SITUATION, NOR SHIFT THE OWNER'S RESPONSIBILITY FOR SAFETY COMPLIANCE TO THE CITY. NO RESPONSIBILITY FOR THE SAFETY OF THE WORK OR FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES SHALL ATTACH TO THE CITY BY VIRTUE OF ITS ACTION OR INACTION UNDER THIS SECTION.

6. IF ANY CULTURAL RESOURCES AND/OR HUMAN REMAINS ARE DISCOVERED IN THE COURSE OF UNDERTAKING THE DEVELOPMENT ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION IN OLYMPIA AND CITY OF STEVENSON DEPARTMENT OF COMMUNITY DEVELOPMENT. FAILURE TO COMPLY WITH THESE REQUIREMENTS MAY CONSTITUTE A CLASS C FELONY, SUBJECT TO IMPRISONMENT AND/OR FINES.

7. THE CITY MAY TEMPORARILY SUSPEND THE WORK OR REQUIRE ADDITIONAL PROTECTION MEASURES IF IT APPEARS, BASED UPON OBSERVED CONDITIONS OF THE PROJECT, THAT THE APPROVED PLANS ARE INSUFFICIENT TO PREVENT ENVIRONMENTAL HARM, AND THAT SUCH SUSPENSION OR ADDITIONAL MEASURES WILL PREVENT OR MINIMIZE SUCH HARM.

8. CONSTRUCTION NOISE SHALL BE LIMITED IN ACCORDANCE WITH THE CITY OF STEVENSON NOISE CONTROL ORDINANCE 8.08; NORMALLY, THIS IS 7 A.M. TO 10 P.M., SEVEN DAYS A WEEK.

9. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND/OR CONTRACTOR TO PROCURE ALL APPLICABLE PERMITS, LICENSES, AND CERTIFICATES RELATIVE TO THE TRADES TO COMPLETE THE PROJECT AND FOR THE USE OF SUCH WORK WHEN COMPLETED. COMPLIANCE SHALL BE AT ALL LEVELS, FEDERAL, STATE, COUNTY, AND CITY, RELATING TO THE PERFORMANCE OF THE WORK.

10. THE CONTRACTOR SHALL OBTAIN AND/OR VERIFY THAT THE OWNER HAS OBTAINED ALL OFF-SITE CONSTRUCTION EASEMENTS AND UTILITIES EASEMENTS PRIOR TO THE START OF OFF-SITE CONSTRUCTION.

11. THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ALL PERMITS ISSUED AND EASEMENTS GRANTED TO THE CITY.

12. ANY DEVIATIONS FROM THE PLANS WILL REQUIRE A WRITTEN REQUEST FROM THE APPLICANT'S ENGINEER AND APPROVAL BY THE CITY ENGINEER AND INSPECTOR. “OR EQUAL” PRODUCTS SHALL NOT BE USED WITHOUT PRIOR WRITTEN APPROVAL BY THE CITY ENGINEER.

DRAWING NO. G01A

DATE AUG '25 | SCALE NTS

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13. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY OF STEVENSON FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION. INSIDE THE CITY THIS PLAN SHALL BE APPROVED BY THE CITY OF STEVENSON PUBLIC WORKS DEPARTMENT (509) 427-5970 AND OUTSIDE THE CITY THE PLAN SHALL BE APPROVED BY SKAMANIA COUNTY OR WSDOT AS APPLICABLE. APPROVAL SHALL BE OBTAINED TWO (2) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION. ROAD CLOSURE REQUESTS SHALL BE SUBMITTED A MINIMUM OF TWO (2) WEEKS BEFORE BEGINNING CONSTRUCTION.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES, INCLUDING THE INVERT AND TOP OF PIPE ELEVATIONS AT CROSSING LOCATIONS, PRIOR TO THE START OF CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS ARE COMPILED FROM AVAILABLE RECORDS. THIS DOES NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF SUCH RECORDS. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL DIG TEST HOLES OVER ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THEIR EXACT LOCATION. THE CONTRACTOR MAY CONTACT THE NORTHWEST UTILITY NOTIFICATION CENTER AT 1-800-424-5555 (OR 811) IN LIEU OF CONTACTING INDIVIDUAL UTILITIES.

15. NO EXCAVATED MATERIAL IS TO BE PLACED ON CITY STREETS WITHOUT PRIOR WRITTEN APPROVAL FROM THE CITY OF STEVENSON.

16. INSTALL ALL PIPE IN ACCORDANCE WITH THE CITY OF STEVENSON STANDARD DETAILS FOR PIPE BEDDING AND BACKFILL (SEE STANDARD DETAILS G04 THROUGH G07).

17. MAINTAIN A MINIMUM OF 10' HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN ALL EXISTING AND PROPOSED WATER AND SEWER LINES. PROVIDE 6" MINIMUM VERTICAL AND 3' MINIMUM HORIZONTAL CLEARANCE (OUTSIDE SURFACES) BETWEEN STORM DRAINPIPES AND OTHER UTILITY PIPES AND CONDUITS. FOR CROSSINGS OF SANITARY SEWER LINES, THE WASHINGTON DEPARTMENT OF ECOLOGY CRITERIA SHALL APPLY.

18. ALL TRENCHES SHALL BE CLOSED AT THE END OF THE DAY WITH A WATERTIGHT PLUG PLACED IN THE END OF THE PIPE. UNATTENDED TRENCHES SHALL BE CLOSED IN THE SAME FASHION.

19. ALL CITY OF STEVENSON PUBLIC UNDERGROUND UTILITIES MUST BE TESTED AND APPROVED PRIOR TO PAVING.

20. STREET RESTORATION SHALL CONFORM TO THE CITY OF STEVENSON STANDARD DETAILS G06 AND G07.

21. ALL STORMWATER FACILITIES SHALL BE FULLY SEEDED AND SHALL HAVE AN ADEQUATE STAND OF VEGETATION PRIOR TO PAVING.

22. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL CONDITION WHERE APPLICABLE.

23. CONTRACTOR TO LEAVE ALL AREAS OF PROJECT FREE OF DEBRIS AND UNUSED CONSTRUCTION MATERIAL.

24. QUALITY CONTROL TESTING

    TESTING SHALL BE PERFORMED BY A CERTIFIED INDEPENDENT TESTING LAB HIRED BY THE DEVELOPER OR DEVELOPER'S CONTRACTOR WITH THE RESULTS BEING SUPPLIED TO THE CITY ENGINEER. ALL TESTING SHALL BE COMPLETED AS SPECIFIED IN THE STANDARD SPECIFICATIONS. THE TEST RESULTS SHALL BE GIVEN TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO PAVING. THE TESTING IS NOT INTENDED TO RELIEVE THE CONTRACTOR FROM ANY LIABILITY FOR THE TRENCH RESTORATION. IT IS INTENDED TO SHOW THE INSPECTOR AND THE CITY THAT THE RESTORATION MEETS THESE SPECIFICATIONS.

    <u>BEDDING AND BACKFILL FOR UTILITY TRENCHES</u>

    A. FOR UTILITY TRENCHES PROVIDE ONE COMPACTION TEST AT TOP OF BEDDING FOR EVERY 500 FEET OF TRENCH.

    B. FOR UTILITY TRENCHES PROVIDE ONE COMPACTION TEST FOR EACH LIFT OF BACKFILL FOR EVERY 500 FEET OF TRENCH.

EMBANKMENT FOR SUBGRADE

FOR EACH LOCATION WHERE THE FILL IS DEEPER THAN TWO (2) FEET OR GREATER THAN 300 CUBIC YARDS, PROVIDE ONE COMPACTION TEST FOR EVERY TWO (2) VERTICAL FEET AND EVERY 500 CUBIC YARDS.

PROOF ROLL

AREAS TO BE PAVED SHALL BE PROOF-ROLLED FOR APPROVAL BY THE CITY INSPECTOR 24 HOURS PRIOR TO PLACEMENT OF PAVEMENT SURFACING. ALL ROADWAY SUBGRADE, BASE ROCK, AND CURB AREAS SHALL BE PROOF-ROLLED WITH A FULLY LOADED DUMP TRUCK. SOFT SUBGRADE AREAS SHALL BE OVER-EXCAVATED AND REPLACED WITH GRANULAR BASE MATERIAL, COMPACTED AND RETESTED FOR APPROVAL. DEFICIENCIES IN THE PAVEMENT BASE ROCK SHALL BE CORRECTED AND RETESTED PRIOR TO APPROVAL.

SUBGRADE AND CRUSHED SURFACING TESTING

FOR STREETS PROVIDE ONE COMPACTION TEST OF THE SUBGRADE AND ONE COMPACTION TEST OF THE CRUSHED SURFACING FOR EVERY 5,000 SQUARE FEET OF SURFACE AREA OF PAVEMENT, CURB, AND SIDEWALK.

HMA TESTING

A. FOR STREETS, FOR EVERY LIFT, PROVIDE ONE (1) COMPACTION TEST FOR EVERY 5,000 SQUARE FEET OF SURFACE AREA.

B. FOR SURFACE RESTORATION OF UTILITY TRENCHES, FOR EVERY LIFT, PROVIDE ONE (1) COMPACTION TEST FOR EVERY 200 FEET OF TRENCH FOR EVERY LIFT.

CITY OF STEVENSON

APPROVAL

PUBLIC WORKS DIRECTOR _____ DATE _____

COMMUNITY DEVELOPMENT DIRECTOR _____ DATE _____

FIRE MARSHAL _____ DATE _____

SIGNATURE BLOCK

DRAWING NO. G02

DATE AUG '25 | SCALE NTS

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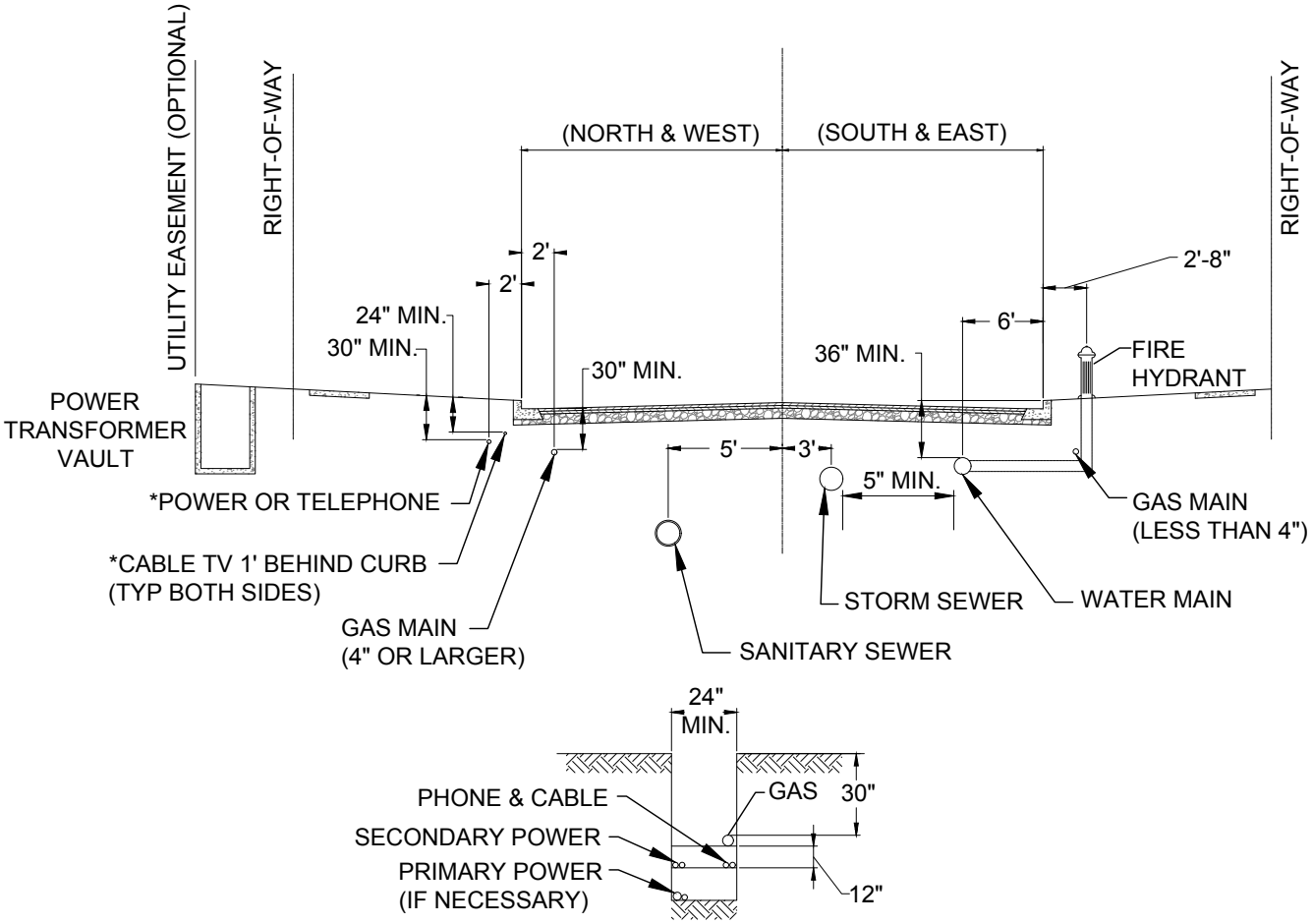

*JOINT TRENCH DETAIL (OPTIONAL)

NOTES:

1. LOCATIONS SHOWN ARE TYPICAL. ON STREETS WITH CENTER TURN LANES OR MEDIANS, THE LOCATION OF THE SEWER OR STORM LINES MAY BE ADJUSTED TO KEEP MANHOLES OUT OF MEDIANS AND MANHOLES CONES ARE TO BE ROTATED TO KEEP MANHOLE COVER LOCATED OUTSIDE OF WHEEL PATH.

2. ANY VARIATION FROM THIS DESIGN MUST BE APPROVED BY THE CITY.

3. FRANCHISE UTILITIES - IF SIX FOOT UTILITY EASEMENT IS PRESENT ALONG PROPERTY FRONTAGE, PLACEMENT SHALL BE AT BACK OF SIDEWALK WITHIN UTILITY EASEMENT. ALTERNATE LOCATIONS CONSIDERED ONLY TO SALVAGE CORE ROADWAY, OR TO AVOID SUBSTANTIAL CONFLICT WITH EXISTING UTILITIES. GAS VALVES ARE TO BE LOCATED 2' MIN. FROM FACE OF CURB.
   MINIMUM COVER:
   - GAS - 30"
   - CABLE TV - 24" IN STREET
   - 18" IN SIDEWALK-EXISTING SUBDIVISION
   - ALL OTHERS - 36"

STEVENSON WASHINGTON

UNDERGROUND UTILITY LOCATIONS

DRAWING NO. G03

DATE AUG '25 | SCALE NTS

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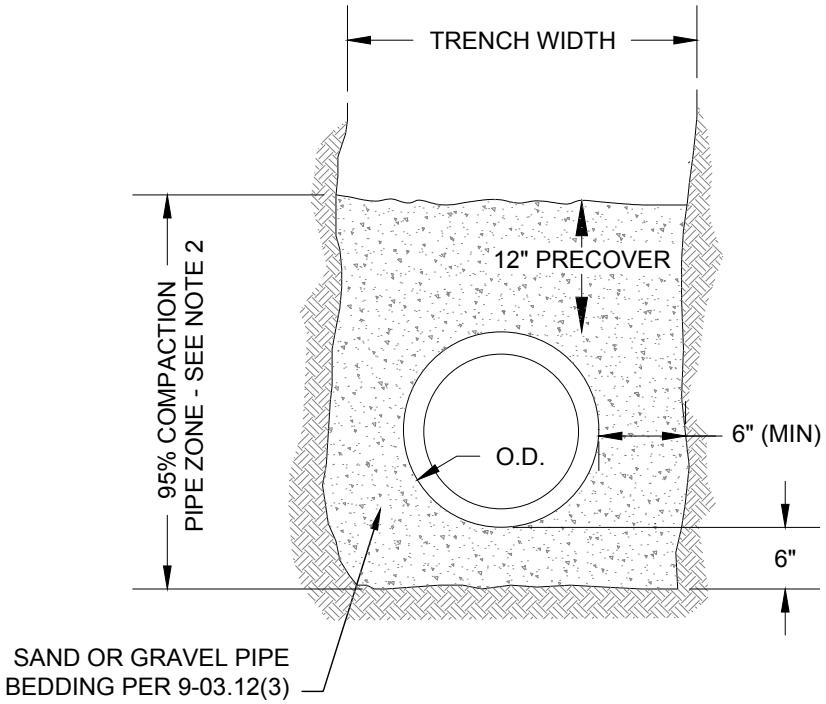

GRANULAR FOUNDATION - CLASS C

NOTES:

1. WHERE DIRECTED BY THE ENGINEER, GRANULAR TRENCH FOUNDATION STABILIZATION SHALL BE PLACED PRIOR TO PLACEMENT OF THE BEDDING. SIZE AND DEPTH ARE DEPENDENT ON SOIL CONDITIONS.

2. BEDDING AND BACKFILL MATERIALS IN THE PIPE ZONE SHALL BE COMPACTED AS SPECIFIED PRIOR TO BACKFILLING THE REMAINDER OF THE TRENCH.

3. TRENCH SHALL BE OVER EXCAVATED 6" AND REFILLED WITH GRANULAR MATERIALS AS DIRECT BY THE ENGINEER.

4. BACKFILL AND COMPACTION ABOVE THE PIPE ZONE SHALL BE AS SHOWN IN TYPICAL TRENCH SECTIONS DETAIL.

5. ALTERNATIVE PRE-COVER MATERIALS ARE ALLOWABLE FROM PIPE CENTERLINE TO ONE FOOT ABOVE THE TOP OF PIPE. ALTERNATIVE PRE-COVER MATERIALS MUST BE PRE-APPROVED BY THE INSPECTOR AND MAY BE SAND, CRUSHED SCREENINGS, GRAVEL, OR OTHER CLEAN GRANULAR MATERIAL CONTAINING NO ROCK LARGER THAN 1-$\frac{1}{4}$" IN LENGTH.

6. APPROVAL FOR SUCH ALTERNATE MATERIALS WILL BE GRANTED UPON CONFIRMATION BY TEST OF ITS COMPLIANCE WITH THESE REQUIREMENTS. SUBMIT 50 LB. SAMPLE FOR TESTING TO THE CITY INSPECTOR, AND OBTAIN APPROVAL OF MATERIAL PRIOR TO STARTING PIPE INSTALLATION WORK. THE TEST REQUIRES A MINIMUM OF FIVE BUSINESS DAYS TO COMPLETE.

7. BEDDING OF PIPE TO BE 6" BELOW AND 12" ABOVE BEFORE BACKFILLING.

STEVENSON WASHINGTON

STANDARD PIPE BEDDING, FLEXIBLE PIPE

DRAWING NO. G04

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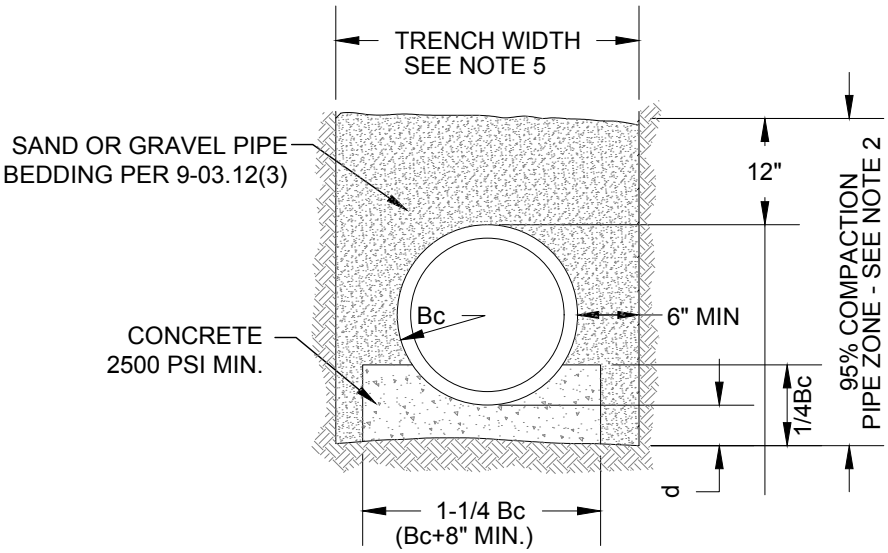
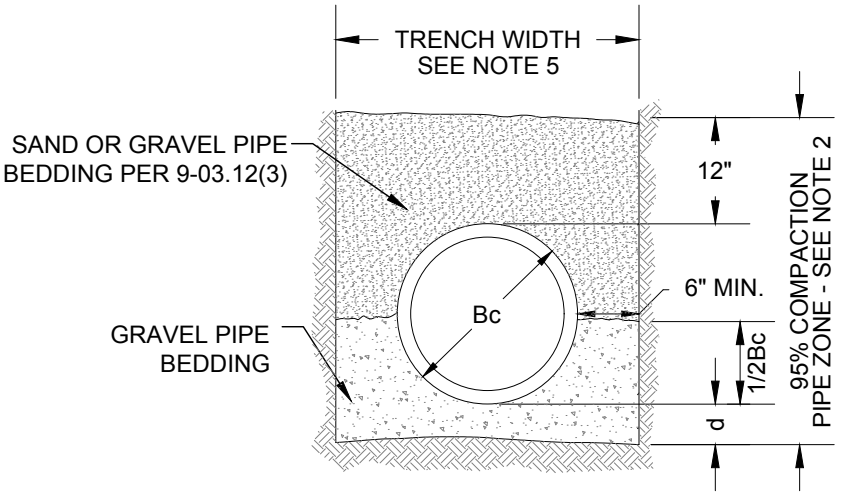
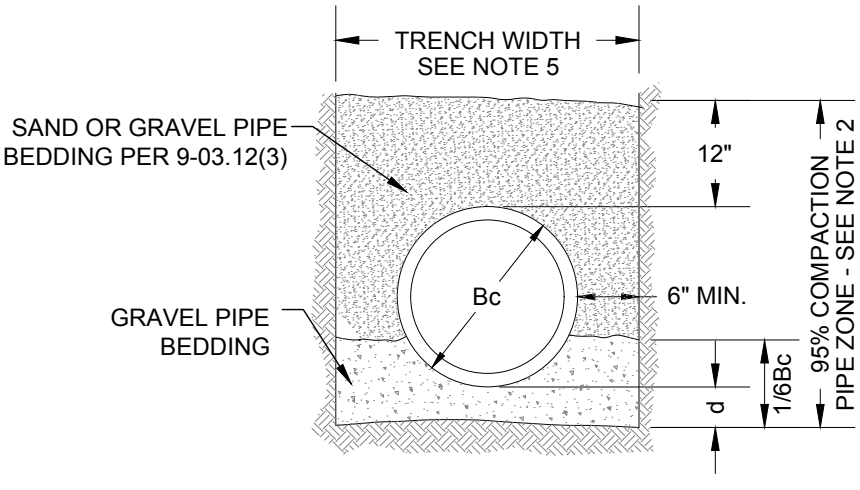


CONCRETE CRADLE - CLASS A



GRANULAR FOUNDATION - CLASS B



GRANULAR FOUNDATION - CLASS C

LEGEND:

Bc = OUTSIDE DIAMETER
d = DEPTH OF BEDDING MATERIAL BELOW PIPE

NOTES:

1. WHERE DIRECTED BY THE ENGINEER GRANULAR TRENCH FOUNDATION STABILIZATION SHALL BE PLACED PRIOR TO PLACEMENT OF THE BEDDING, SIZE AND DEPTH ARE DEPEND- ENT ON SOIL CONDITIONS.
2. BEDDING AND BACKFILL MATERIALS IN THE PIPE ZONE SHALL BE COMPACTED AS SPECIFIED PRIOR TO BACKFILLING THE REMAINDER OF THE TRENCH.
3. THE TRENCH SHALL BE OVER-EXCAVATED 6" AND REFILLED WITH GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER.
4. BACKFILL AND COMPACTION ABOVE THE PIPE ZONE SHALL BE AS SHOWN IN TYPICAL TRENCH SECTIONS DETAIL.
5. TRENCH WIDTH SHALL NOT EXCEED ONE AND ONE-HALF THE INSIDE DIAMETER OF THE PIPE PLUS 18" AT THE TOP OF THE PIPE ZONE.
6. FOR FLEXIBLE PIPE BEDDING SEE DETAIL G04.

STEVENSON
WASHINGTON

STANDARD PIPE BEDDING, RIGID PIPE

DRAWING NO. G05
DATE AUG '25
SCALE NTS
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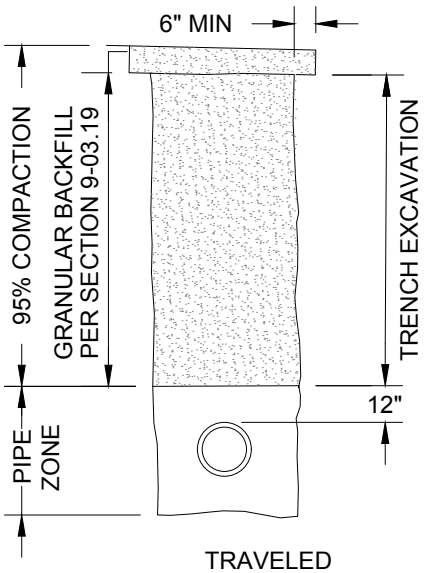
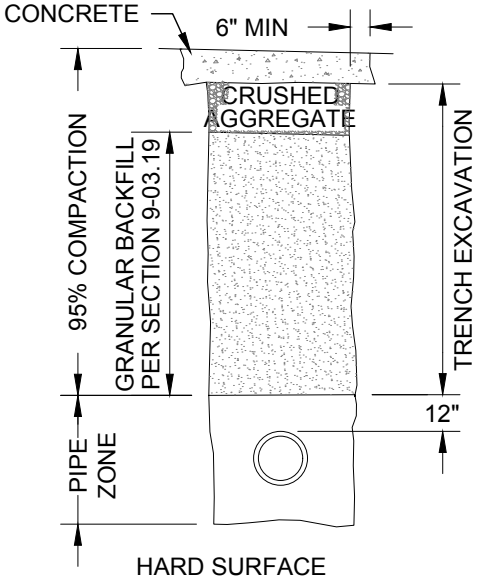
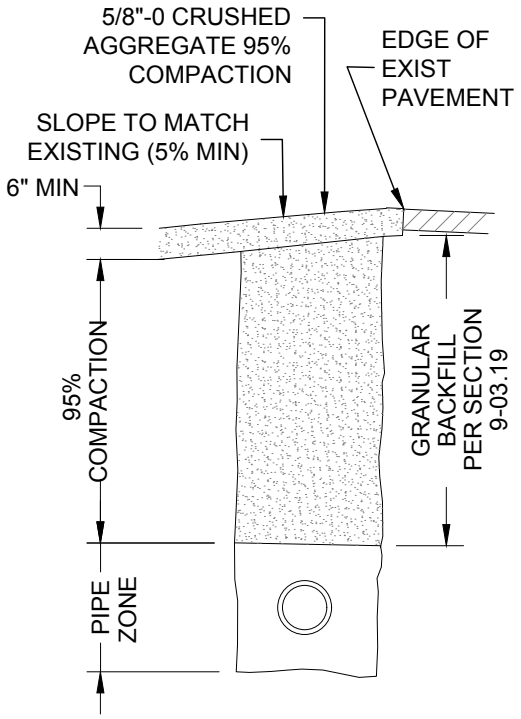


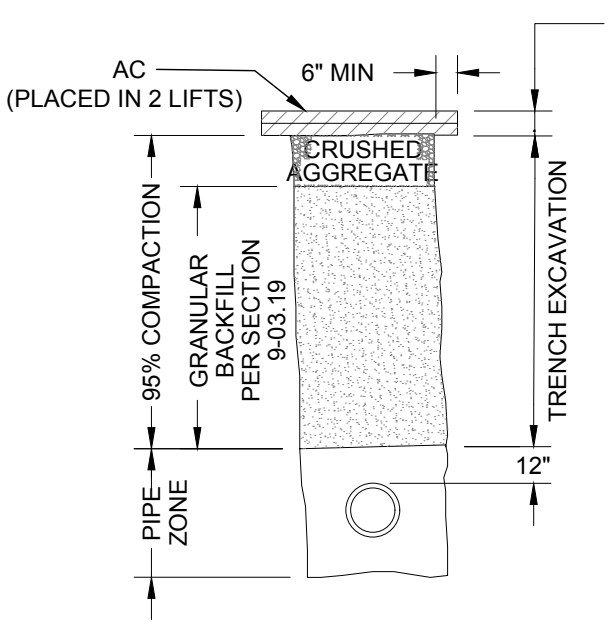
TRAVELED
UNIMPROVED STREET



HARD SURFACE
(CONCRETE)



ROADWAY SHOULDER



ASPHALT
CONCRETE SURFACE

TYPICAL UTILITY TRENCH SECTIONS

DRAWING NO. G06

DATE AUG '25 | SCALE NTS

APPROVED BY CR

1. TRENCHING OPERATIONS IN PAVED AREAS SHALL BE PATCHED WITH TEMPORARY COLD MIX IMMEDIATELY FOLLOWING COMPLETION. IN NO CASE SHALL A TRENCH BE LEFT UNPATCHED FOR MORE THAN THREE (3) WORKING DAYS. THE FINAL PERMANENT PAVEMENT PATCH SHALL BE COMPLETED AS SOON AS POSSIBLE AND SHALL BE COMPLETED WITHIN THIRTY (30) DAYS AFTER FIRST OPENING THE TRENCH. THIS TIME FRAME MAY BE ADJUSTED DUE TO INCLEMENT PAVING WEATHER OR OTHER ADVERSE CONDITIONS, SUBJECT TO CITY OF STEVENSON APPROVAL.

2. ASPHALT CONCRETE ROAD TRENCH RESTORATION SHALL BE PER THE TABLE. ALL ASPHALT CONCRETE PAVEMENT SHALL BE CLASS 1/2" PG 58V-22. PERMANENT ASPHALT RESTORATION DEPTH SHALL MATCH EXISTING DEPTHS OR PER TABLE (WHICHEVER IS GREATER).

ROAD CLASSIFICATION	MINIMUM PAVEMENT DEPTH (IN)	CRUSHED SURFACING TOP COURSE DEPTH (IN)	CRUSHED SURFACING BASE COURSE (IN)
ARTERIAL	5	2	12
COLLECTOR	4	2	10
ALL OTHER STREETS	3	2	8

3. FOR PIPE ZONE BEDDING, BACKFILL AND COMPACTION REQUIREMENTS, SEE PIPE BEDDING DETAIL FOR RIGID PIPE AND FLEXIBLE PIPE.

4. COMPACTION PERCENTAGES REFER TO RELATIVE DRY DENSITY AS DETERMINED BY STANDARD PROCTOR (ASTM D 698).

5. CONTRACTOR MAY USE UP TO 2-1/2" OF 5/8" - 0 OR 3/4" - 0 CRUSHED AGGREGATE IN LIEU OF 1-1/4" - 0 BASE ROCK UNDER SURFACING FOR LEVELING COURSE.

6. ALL EXISTING PAVED SURFACES SHALL BE SAW CUT A MINIMUM OF 6" OUTSIDE OF EDGE OF TRENCH TO PROVIDE A NEAT STRAIGHT EDGE.

7. THE EDGES OF ALL EXISTING ASPHALT SURFACES SHALL BE CLEANED AND A TACT COAT SHALL BE APPLIED PER STD. SPEC. SECTION 5-04.3(5). ALL JOINTS SHALL BE SEALED WITH AR-4000 AND SANDED.

8. ALL BACKFILL SHALL BE MECHANICALLY COMPACTED IN LIFTS WHICH DO NOT EXCEED RATED CAPABILITY OF EQUIPMENT USED, BUT IN NO CASE EXCEED 12" LOOSE.

STEVENSON WASHINGTON

TYPICAL UTILITY TRENCH SECTIONS NOTES

DRAWING NO. G07

DATE AUG '25 | SCALE NTS

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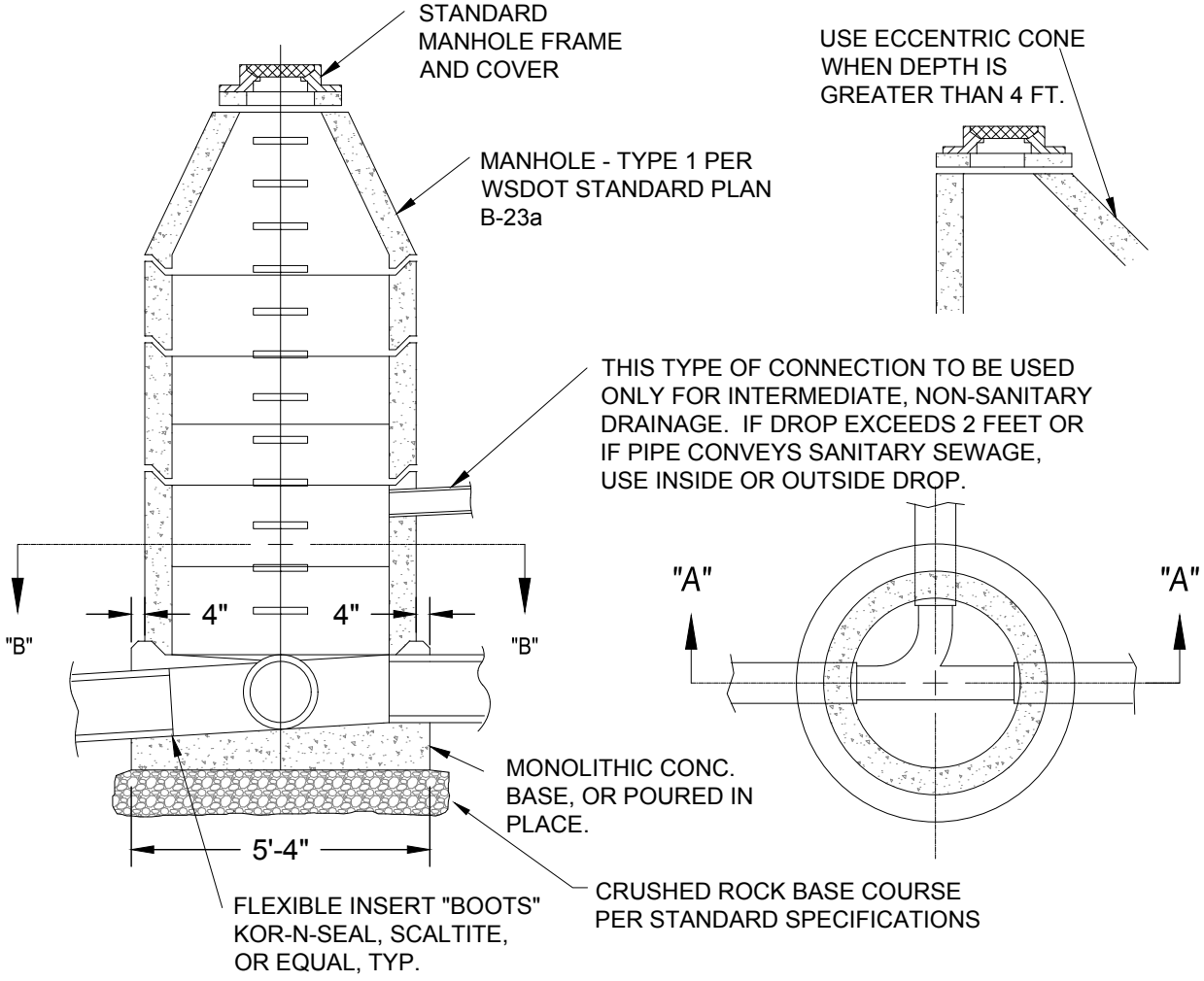

SECTION "A-A"

SECTION "B-B"

NOTES:

1. SEE STANDARD MANHOLE DETAILS FOR ADDITIONAL INFORMATION.
2. CONSTRUCT CONCRETE CHANNEL IN MANHOLE TO $\frac{3}{4}$ OF PIPE DIAMETER.

STEVENSON WASHINGTON

STANDARD MANHOLE

DRAWING NO. G08

DATE AUG '25 | SCALE NTS

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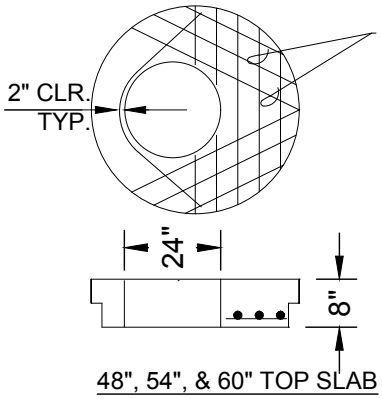
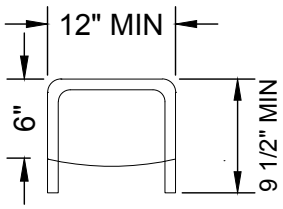
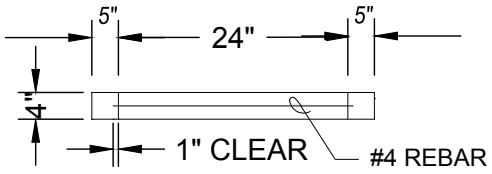


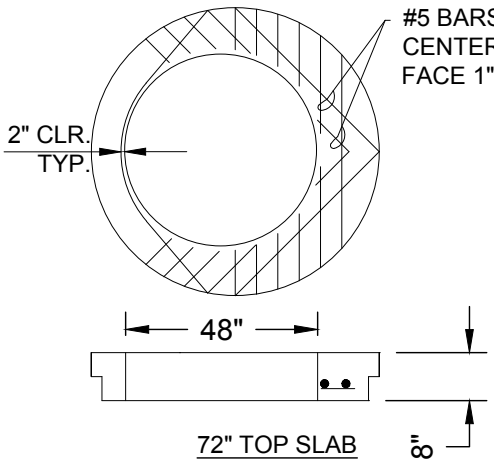
48", 54", & 60" TOP SLAB



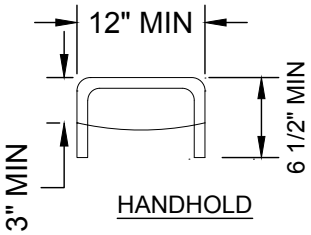
MANHOLE STEP



GRADE RING

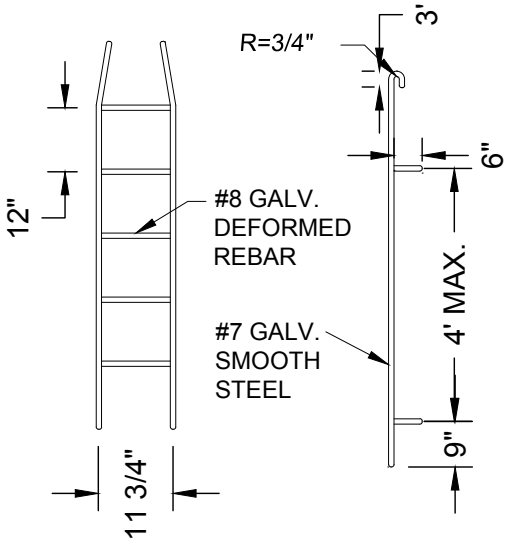


72" TOP SLAB

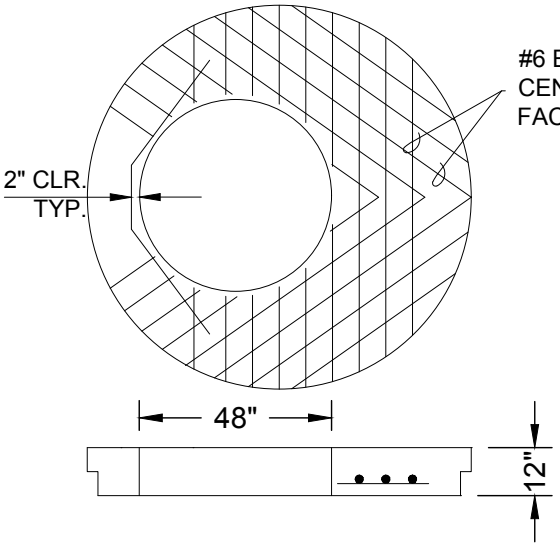


HANDHOLD

* ALL STEPS & RUNGS SHALL BE COPOLYMER PROPYLENE



PREFABRICATED LADDER



NOTES:

1. PROPRIETARY MANHOLE HANDHOLDS AND STEPS ARE ACCEPTABLE, PROVIDED THAT THEY CONFORM TO SEC. R, ASTM C478, AASHTO M199 AND MEET ALL WISHA REQUIREMENTS.
2. MANHOLE STEPS SHALL BE INSTALLED PER 7-05.3 AND SHALL BE PARALLEL OR APPROXIMATELY RADIAL AT THE OPTION OF THE MANUFACTURER. PENETRATION OF OUTER WALL BY A LEG IS PROHIBITED.
3. HANDHOLDS AND STOPS SHALL HAVE "DROP" RUNGS OR PROTUBERANCES TO PREVENT SIDEWAYS SLIP.
4. LADDERS OR STEPS SHALL EXTEND TO WITHIN 16" OF BOTTOM OF MANHOLE.
5. HANGING LADDERS SHALL BE PERMANENTLY FASTENED AT TOP BY HANGING ON STEP OR BY BOLTING OR EMBEDDING IN CONCRETE. EACH SHALL BE EMBEDDED AT BOTTOM IN BASE.
6. ADDITIONAL SAFETY FEATURES MAY BE REQUIRED IN VERY DEEP OR UNUSUAL STRUCTURES.

STEVENSON WASHINGTON

MANHOLE DETAILS

DRAWING NO. G09

DATE AUG '25 | SCALE NTS

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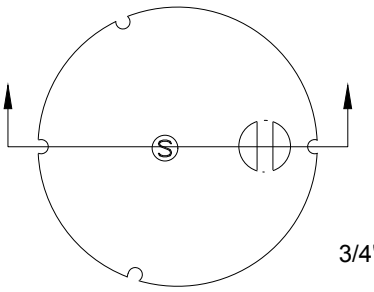
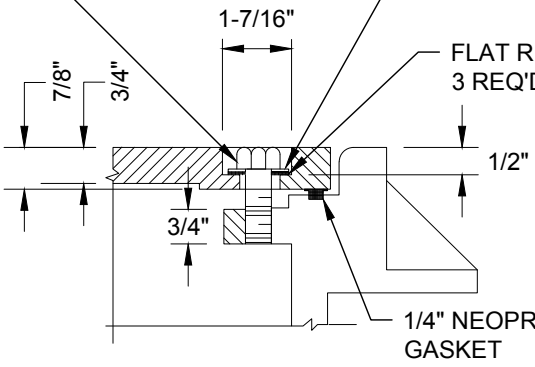
WATERTIGHT

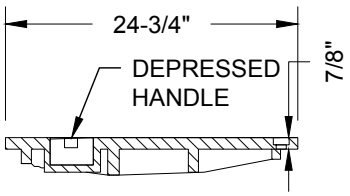


1/2" - 13 N.C. x 1
1/8" HEX. HD. S.STEEL
CAP SCREW 3 REQ'D
PER COVER 120° APART

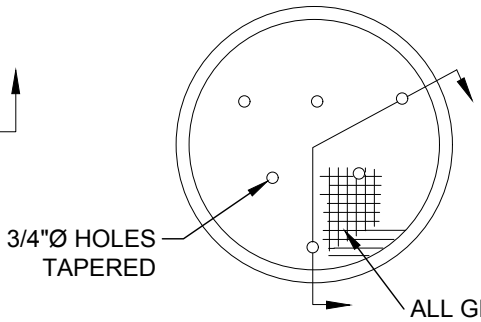
1-1/4" O.D S. STEEL
WASHER 3/32" THICK,
3 REQ'D PER COVER

FLAT RUBBER WASHER
3 REQ'D

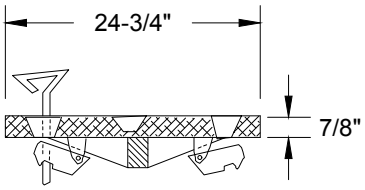


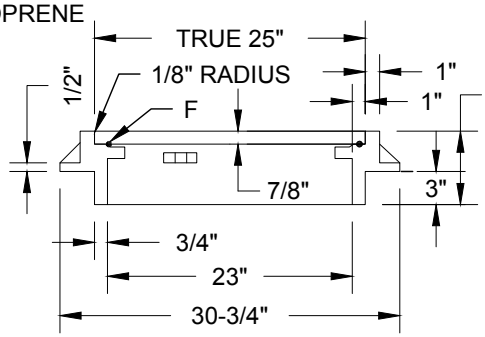


LOCKING



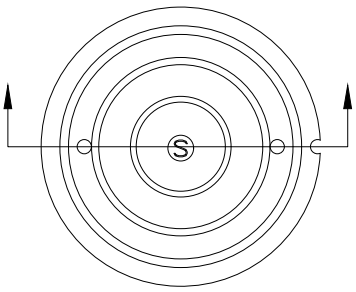
ALL GROOVES
1/8" WIDE X
1/8" DEEP AND
3/4" O.C.
INSIDE
21-3/4"Ø 1/8"
GROOVE



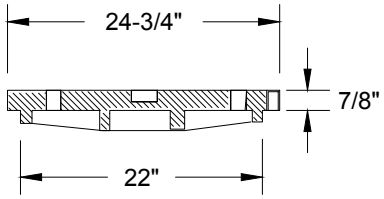


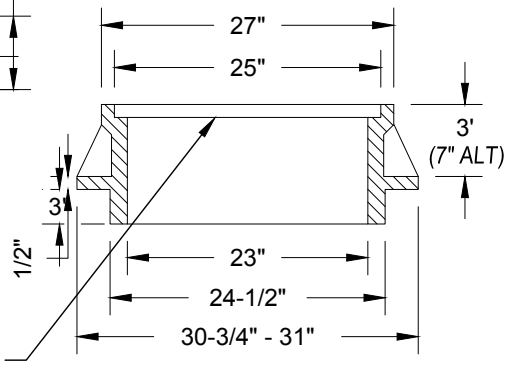
WATERTIGHT FRAME

STANDARD



2 HOLE COVER, SANITARY
SEWER (16 HOLE STORM
SEWER ONLY)
MANUFACTURED BY:
OLYMPIC FOUNDRY,
SEATTLE OR INLAND
FOUNDRY, SPOKANE





INSTALL
MANPAN OR
APPROVED
EQUAL

STANDARD FRAME

NOTES:

1. COVER & FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND. MATERIAL SHALL BE OF GREY CAST
2. IRON, A.S.T.M. A-48, CLASS 30.

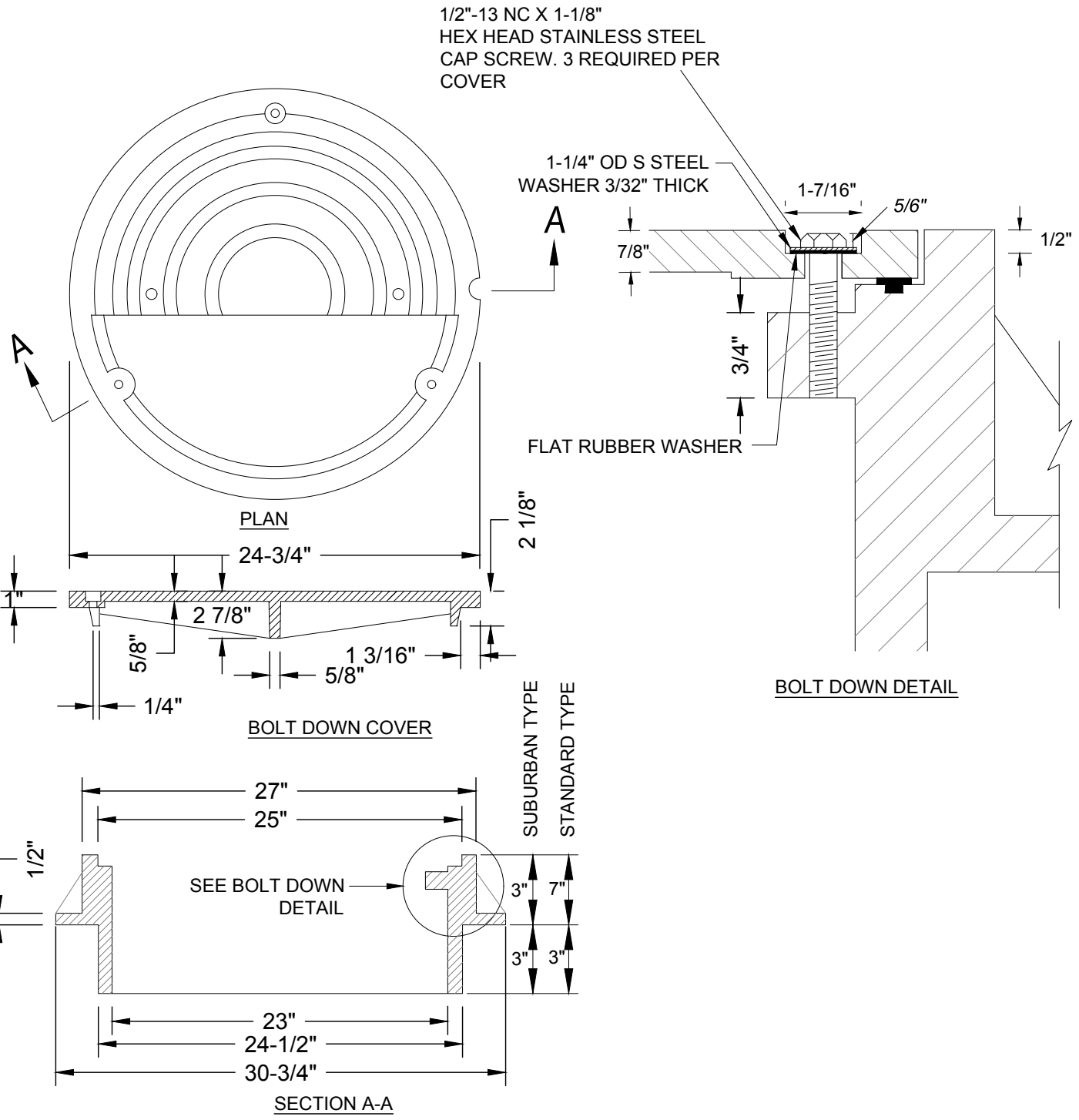
STEVENSON WASHINGTON

STANDARD MANHOLE FRAMES & COVER

DRAWING NO. G10

DATE AUG '25 | SCALE NTS

APPROVED BY CR



NOTES:

1. USE TAMPER-PROOF COVER IN UNIMPROVED AREAS ONLY.
2. COVER MATERIAL TO BE DUCTILE IRON ASTM A536 GRADE 80-55-06
3. FRAME MATERIAL T0 BE GRAY CAST IRON ASTM A-48 CLASS 30.
4. COVER AND FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND.
5. NOTCH LID FOR LIFTING HOOK.

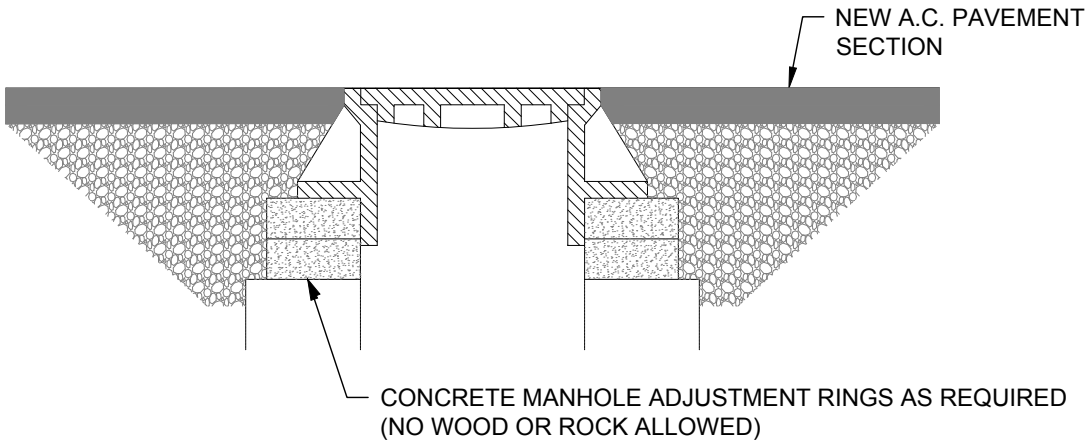
STEVENSON WASHINGTON

TAMPERPROOF MANHOLE FRAME & COVER

DRAWING NO. G11

DATE AUG '25 | SCALE NTS

APPROVED BY CR



NOTES:

1. ALL MANHOLES AND STRUCTURES SHALL BE RAISED TO FINISH GRADE DURING FINISH PAVING OPERATIONS.

2. RAISE MANHOLE FRAME AND COVER USING CONCRETE RINGS AND MECHANICAL ADJUSTMENT DEVICES TO FINISH GRADE MATCHING PROFILE AND CROSS SLOPE.

3. STEEL SHIMS, CONCRETE BRICK, AND/OR CONCRETE DOBIES PERMITTED FOR MINOR ADJUSTMENTS TO MATCH ROADWAY SLOPES WITH APPROVAL FROM THE CITY OF STEVENSON. WOOD SHALL NOT BE USED FOR GRADE ADJUSTMENTS.

4. ALL JOINTS AND ADJUSTMENTS SHALL BE GROUTED SMOOTH WITH NON-SHRINK GROUT.

5. SEE WSDOT STANDARD SPECIFICATIONS 7-05 FOR ADDITIONAL REQUIREMENTS.

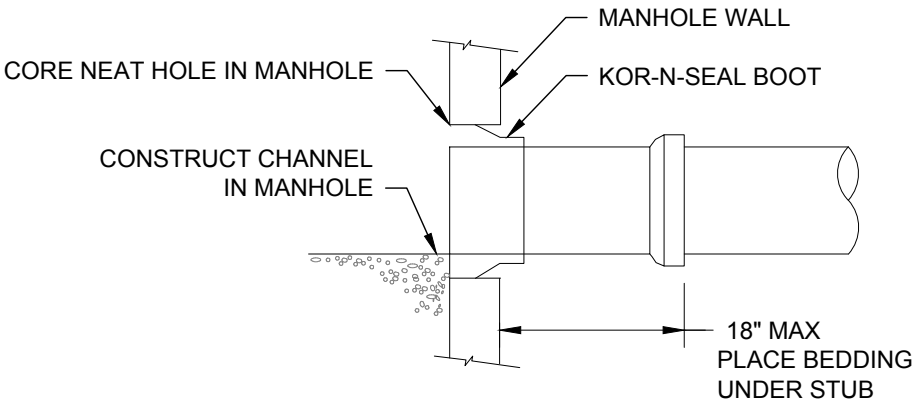
STEVENSON
WASHINGTON

MANHOLE ADJUSTMENT DETAIL

DRAWING NO. G12

DATE AUG '25 | SCALE NTS

APPROVED BY CR



THREE TYPES OF CONNECTIONS APPROVED:

1. EXPANSION TYPE RUBBER BOOT: KOR-N-SEAL
2. CONCRETE PIPE, GROUTED WITH NON-SHRINK GROUT, IF APPROVED BY CITY.
3. GPK PVC EPOXY-SAND COATED MANHOLE ADAPTER, GROUTED WITH NON-SHRINK GROUT, ONLY IF APPROVED BY CITY.

NOTES:

1. CENTER STUB OR SLEEVE IN HOLE W/2" GROUTED SPACE ALL AROUND. CORE HOLE 4" LARGER THAN O.D. OF STUB OR SLEEVE.
2. STANDARD GROUT WILL NOT BE ACCEPTED AS A SUBSTITUTE FOR NON-SHRINK GROUT. NON-SHRINK GROUT SHALL BE FIVE STAR, SIKA 212, EUCO N-5 OR AS APPROVED.
3. STUB-OUTS INSTALLED FOR FUTURE EXTENSION ARE TO BE PLUGGED AT BOTH ENDS.

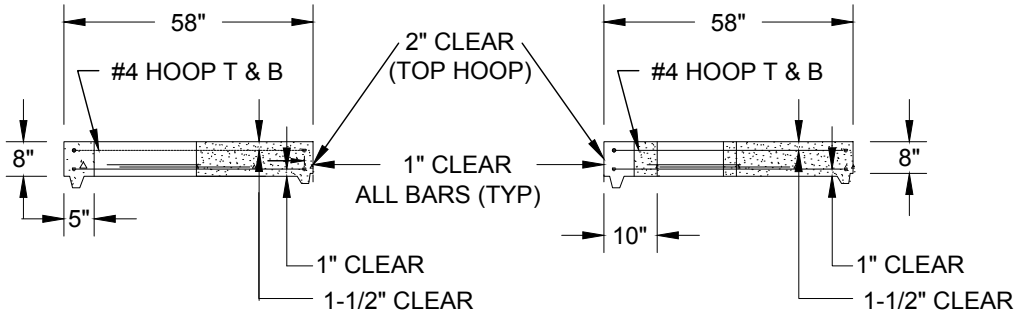
STEVENSON
WASHINGTON

MANHOLE CONNECTION

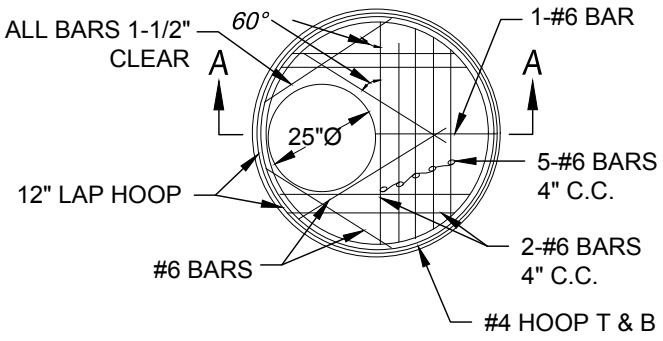
DRAWING NO. G13

DATE AUG '25 | SCALE NTS

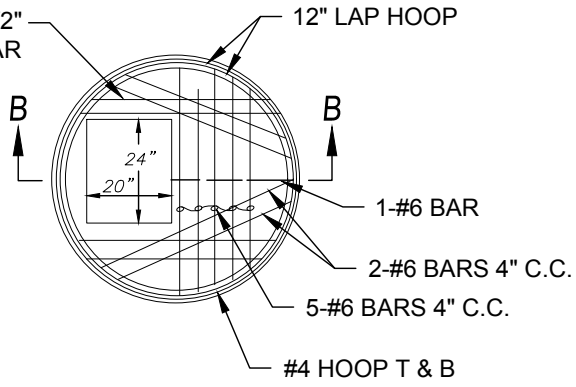
APPROVED BY CR



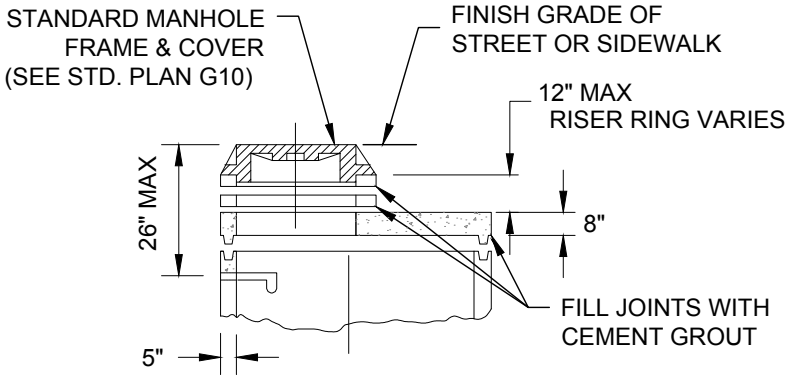
SECTION A-A



SECTION B-B



UNIT "MH"



FLAT SLAB ALTERNATE

UNIT "CB"

NOTES:

1. CONSTRUCTION SHALL CONFORM TO STANDARD PRECAST MANHOLE DETAIL IF NOT OTHERWISE SHOWN.
2. ALL PRECAST SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478. ALL POURED IN PLACE CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3000 P.S.I. & 2" TO 4" SLUMP.
3. ALL REINFORCING SHALL BE GRADE 40 STEEL.
4. MANHOLES UNDER 6'-0" IN DEPTH FROM RIM TO SHELF SHALL HAVE UNIT "MH" TOP SLAB IN LIEU OF CONE AS SHOWN ON STANDARD PRECAST MANHOLE DETAIL. UNIT "CB" TOP SLAB SHALL BE USED WHERE "TYPE 2" CATCH BASIN IS SPECIFIED. STANDARD RISER UNITS AND FRAME AND GRATE FOR CATCH BASIN SHALL BE USED IN CONJUNCTION WITH TYPE "CB" TOP SLAB.

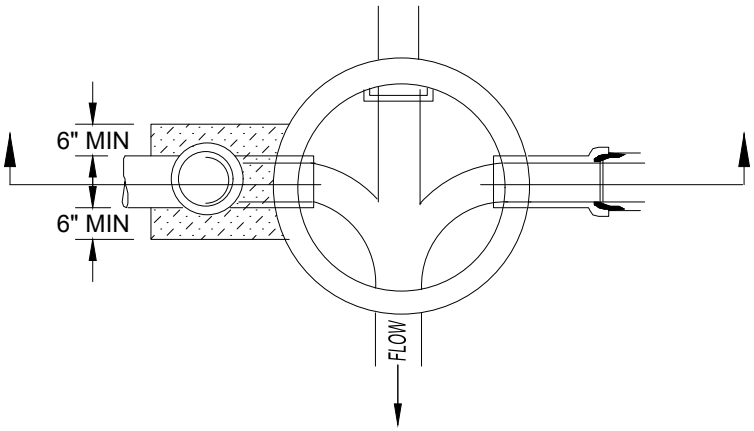
STEVENSON
WASHINGTON

TOP SLAB STANDARD PRECAST MANHOLE

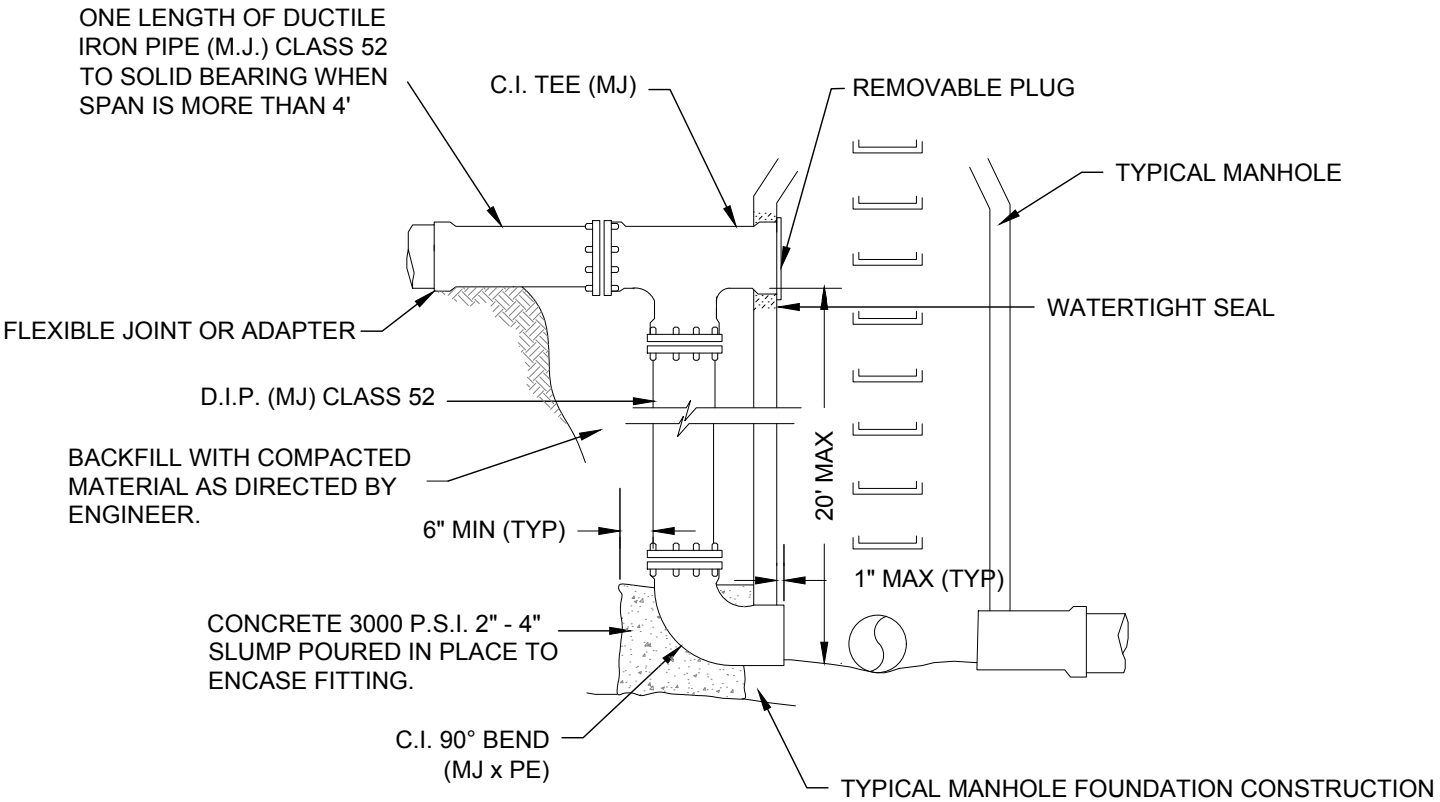
DRAWING NO. G14

DATE AUG '25 | SCALE NTS

APPROVED BY CR



PLAN

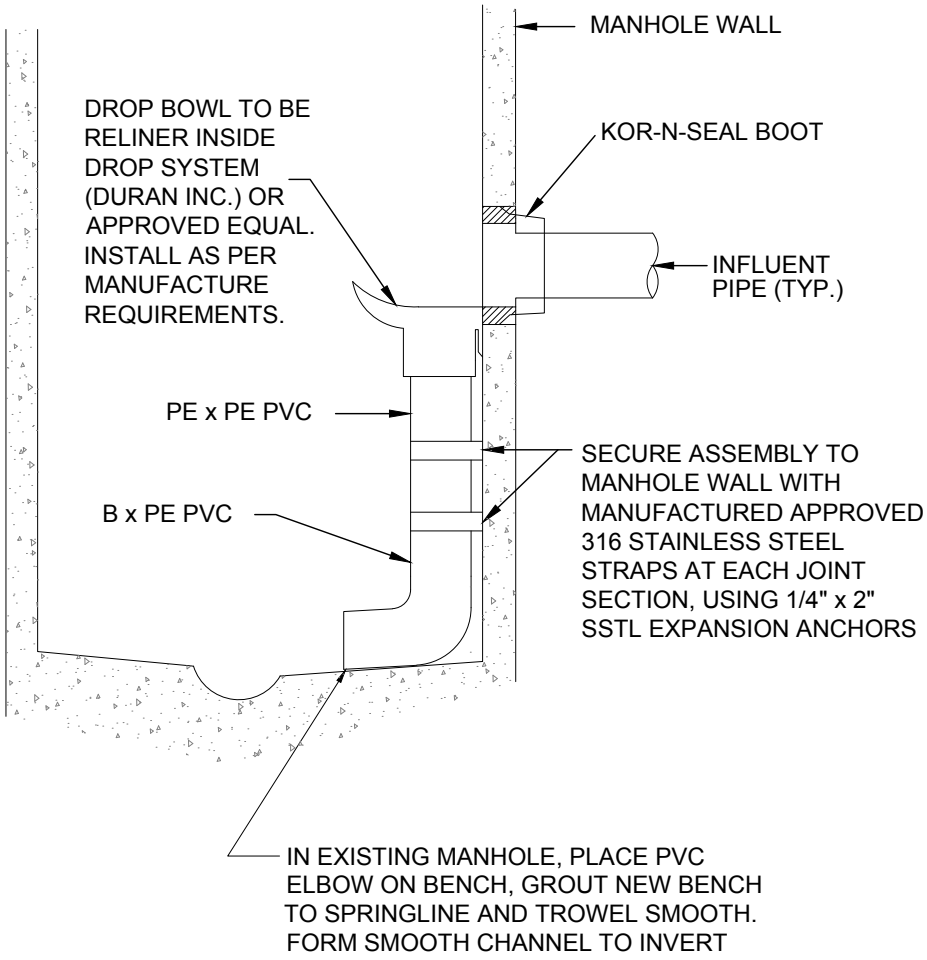


OUTSIDE DROP CONNECTION

DRAWING NO. G15

DATE AUG '25 | SCALE NTS

APPROVED BY CR



NOTE:

1. INSIDE DROP ASSEMBLY MAY BE USED FOR RESIDENTIAL CONNECTION ONLY, AND WHEN SPECIFICALLY APPROVED BY CITY ENGINEER. MAXIMUM ONE ASSEMBLY PER 48" MANHOLE.

STEVENSON WASHINGTON

INSIDE DROP CONNECTION

DRAWING NO. G16

DATE AUG '25 | SCALE NTS

APPROVED BY CR

STREET NOTES

1. WHEN MATCHING EXISTING PAVEMENT, SAWCUT TO FIRM PAVEMENT. MINIMUM SAWCUT IS 1' FROM EXISTING EDGE OF PAVEMENT.

2. ALL RADII SHALL INDICATE FACE OF CURB OR EDGE OF PAVEMENT, AS APPLICABLE.

3. ALL STRUCTURES EXCEPT FOR STORMWATER INLETS SHALL BE RAISED 1/4" ABOVE FINISHED GRADE PRIOR TO PLACING THE FINAL LIFT OF PAVEMENT. STORMWATER INLETS SHALL BE ADJUSTED TO 1/4" BELOW FINISH GRADE.

4. THE CONTRACTOR SHALL VERIFY CENTERLINE AND TOP OF CURB ELEVATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH THE CONSTRUCTION DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.

5. THE CONTRACTOR SHALL PROVIDE ALL CONCRETE TESTING FOR SIDEWALKS AND CURBS, AS WELL AS ALL COMPACTION TESTING FOR SUBGRADE, CRUSHED SURFACING, AND ASPHALT THROUGH AN INDEPENDENT LAB PRE-APPROVED BY THE CITY OF STEVENSON.

6. SEE CITY OF STEVENSON STANDARD DETAIL G01C FOR TESTING REQUIREMENTS.

7. ASPHALT CONCRETE PAVEMENT SHALL BE HMA CLASS ½", PG 58V-22 PER THE STANDARD SPECIFICATIONS.

8. SURVEY MONUMENTS SHALL BE PLACED AT ALL CENTERLINE INTERSECTIONS. SEE WSDOT STANDARD DRAWINGS FOR SURVEY MONUMENT CASE AND COVER CONSTRUCTION.

9. PAVEMENT MARKINGS MATERIALS SHALL CONFORM TO THE STANDARD SPECIFICATIONS.

10. STREET INSPECTION PROCESSES: THE FOLLOWING ITEMS OF WORK SHALL BE INSPECTED BY CITY FORCES. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING CITY INSPECTIONS 48 HOURS PRIOR.

    A. SUBGRADE PRIOR TO PLACEMENT OF CRUSHED SURFACING.

    B. CRUSHED SURFACING PRIOR TO PLACEMENT OF PAVING, CURBS, AND SIDEWALKS.

    C. PAVING, CURBS, AND SIDEWALKS.

    D. COMPACTION OF BEDDING AND BACKFILL OF UTILITY TRENCHES

    E. COMPACTION OF FILLS WITHIN PUBLIC RIGHT-OF-WAY AND SLOPE EASEMENTS

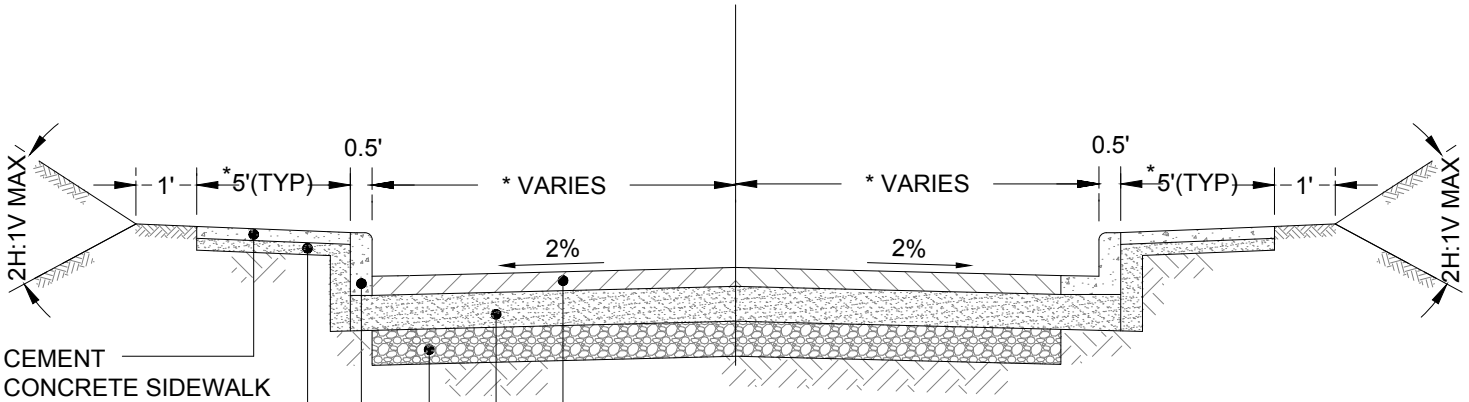
STEVENSON WASHINGTON

STANDARD STREET NOTES

DRAWING NO. S01

DATE AUG '25 | SCALE NTS

APPROVED BY CR



CEMENT CONCRETE SIDEWALK

0.33' CRUSHED SURFACING TOP COURSE

CEMENT CONCRETE CURB & GUTTER OR BARRIER CURB AS REQUIRED (TYP)

HMA CLASS 1/2" PG 58V-22

CRUSHED SURFACING TOP COURSE

CRUSHED SURFACING BASE COURSE

*SEE STREET STANDARDS FOR APPLICABLE DIMENSIONS AND DEPTHS.

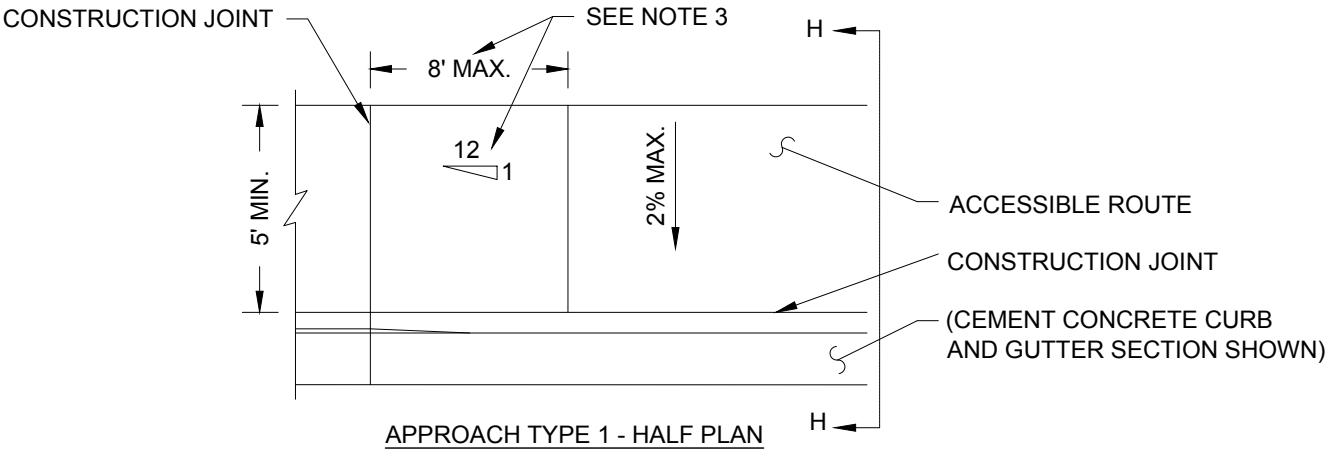
ROADWAY CROSS-SECTION

DRAWING NO. S02

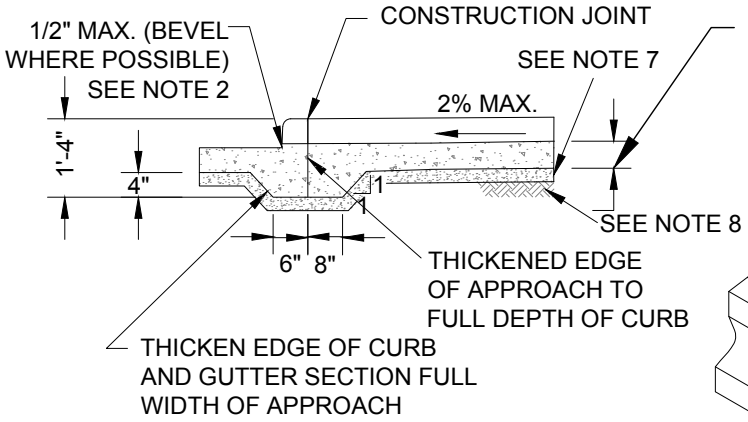
DATE AUG '25

SCALE NTS

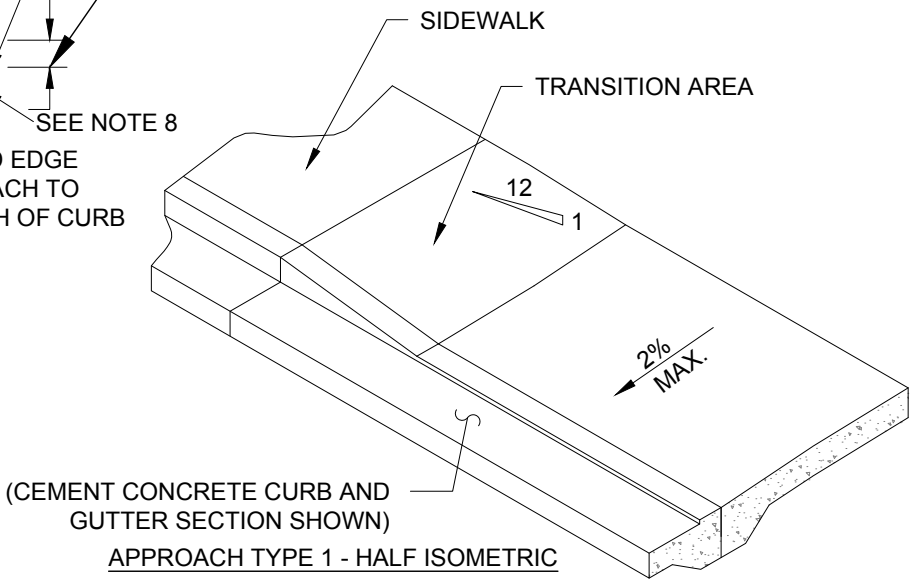
APPROVED BY CR



APPROACH TYPE 1 - HALF PLAN



SECTION H-H



APPROACH TYPE 1 - HALF ISOMETRIC

NOTES:

1. A MINIMUM 4' WIDE ACCESSIBLE ROUTE SHALL BE MAINTAINED IN ALL PEDESTRIAN ACCESSIBLE AREAS.
2. CHANGES IN LEVEL UP TO 1/4" MAY BE VERTICAL AND WITHOUT EDGE TREATMENT. CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 2:1.
3. TRANSITION AREA TO BE SLOPED AT 1v TO 12h, UNLESS STREET GRADE WOULD CREATE A TRANSITION LENGTH GREATER THAN 8', THEN THE MAXIMUM LENGTH OF 8' GOVERNS SLOPE.
4. CEMENT CONCRETE APPROACHES SHALL BE CONSTRUCTED OF AIR-ENTRAINED CONCRETE CLASS 3000 AND MAY BE POURED INTEGRAL WITH CURB.
5. EXISTING CURB, GUTTER AND SIDEWALK TO BE SAWCUT AND REMOVED FOR INSTALLATION OF APPROACH.
6. COMMERCIAL DRIVEWAY REQUIRES REINFORCING STEEL (6"x6"x10 GA MESH) WITH A MIN OF 3" OF COVER AND 8" MIN THICKNESS OF CONCRETE.
7. 3" DEPTH CRUSHED SURFACING TOP COURSE COMPACTED T0 95% OF MAX DRY DENSITY.
8. SUBGRADE PREPARED PER WSDOT STANDARD SPECIFICATION 2-06.3(1).
9. DRIVEWAY WIDTHS:

RESIDENTIAL	COMMERCIAL
ONE WAY = 10' MAX. TWO WAY = 20' MAX. SHARED = 20' MIN / 30' MAX	ONE WAY = 22' MAX. TWO WAY = 26' MAX.

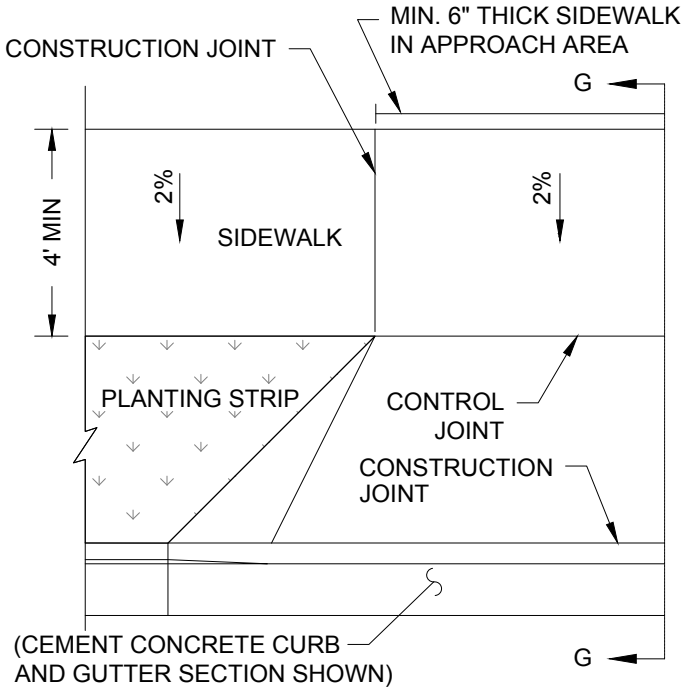
STEVENSON

DRIVEWAY APPROACH TYPE 1

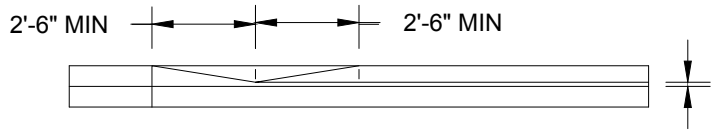
DRAWING NO. S03

DATE AUG '25 | SCALE NTS

APPROVED BY CR



APPROACH TYPE 3 - HALF PLAN



OPTIONAL APPROACH - HALF ELEVATION

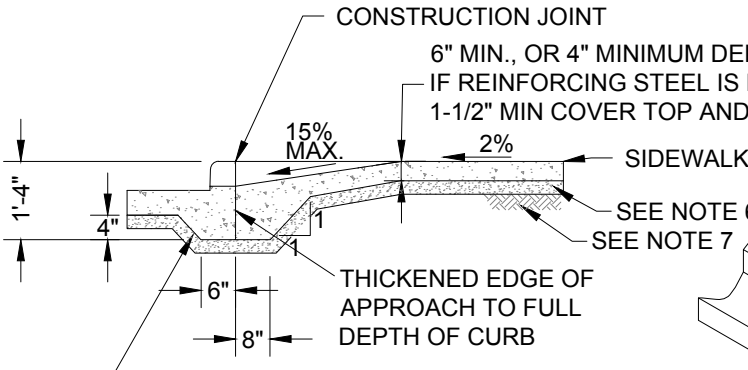
NOTE: USE TYPE 1 APPROACH ONLY WHEN A SIDEWALK IS USED AT THE BACK OF THE APPROACH.

NOTES:

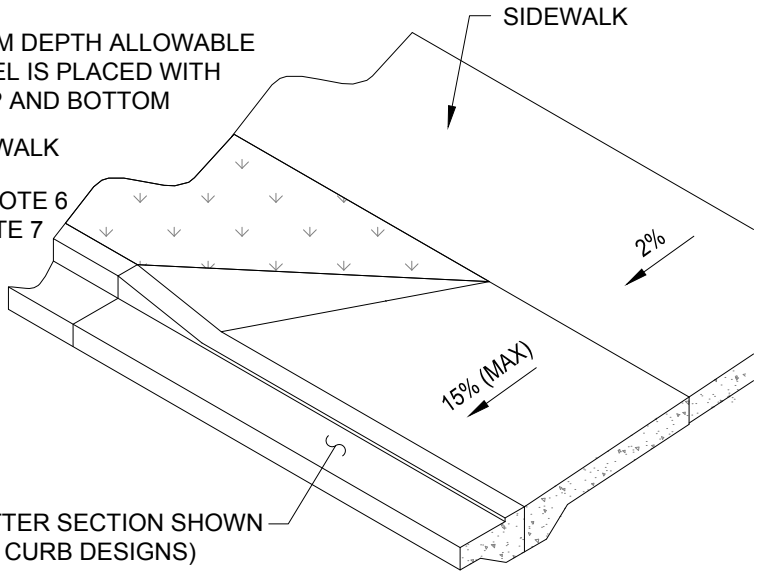
1. A MINIMUM 4' WIDE ACCESSIBLE ROUTE SHALL BE MAINTAINED IN ALL PEDESTRIAN ACCESSIBLE AREAS.
2. CHANGES IN LEVEL UP TO 1/4" MAY BE VERTICAL AND WITHOUT EDGE TREATMENT.
3. CHANGES IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 2:1. CEMENT CONCRETE APPROACHES SHALL BE CONSTRUCTED OF AIR-ENTRAINED CLASS 3000 AND MAY BE POURED INTEGRAL WITH CURB.
4. EXISTING CURB, GUTTER, AND SIDEWALK TO BE SAWCUT AND REMOVED FOR INSTALLATION OF APPROACH.
5. COMMERCIAL DRIVEWAY REQUIRES REINFORCING STEEL (6"x6"x10 GA MESH) WITH A MIN OF 3" OF COVER AND 8" MIN THICKNESS OF CONCRETE.
6. 3" DEPTH 3/4"-0 CRUSHED SURFACING TOP COURSE COMPACTED TO 95% OF MAX. DRY DENSITY.
7. SUBGRADE PREPARATION PER WSDOT STANDARD SPECIFICATION 2-06.3(1).
8. DRIVEWAY WIDTHS:

RESIDENTIAL	COMMERCIAL
ONE WAY = 10' MAX. TWO WAY = 20' MAX. SHARED = 20' MIN / 30' MAX	ONE WAY = 22' MAX. TWO WAY = 26' MAX.

1/2" MAX
(BEVEL WHERE POSSIBLE)
SEE NOTE 2



SECTION G-G



APPROACH TYPE 3 - HALF ISOMETRIC

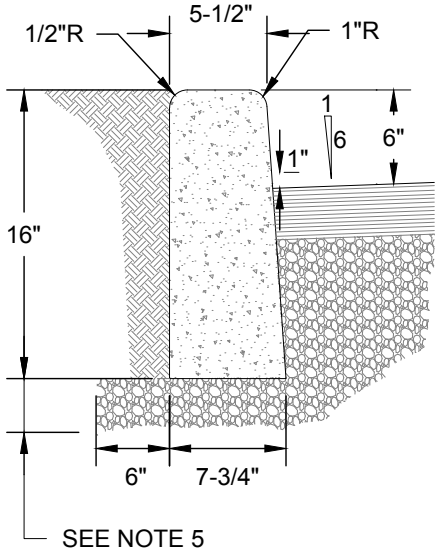
STEVENSON WASHINGTON

DRIVEWAY APPROACH TYPE 3

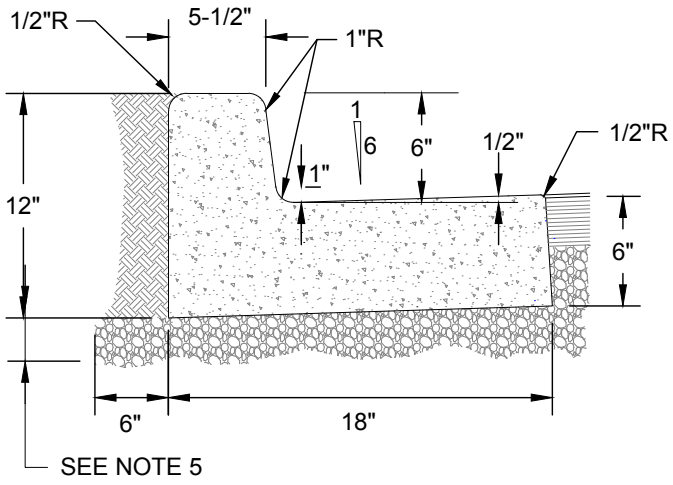
DRAWING NO. S04

DATE AUG '25 | SCALE NTS

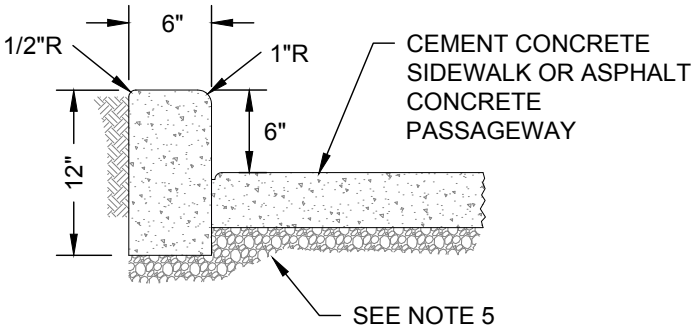
APPROVED BY CR



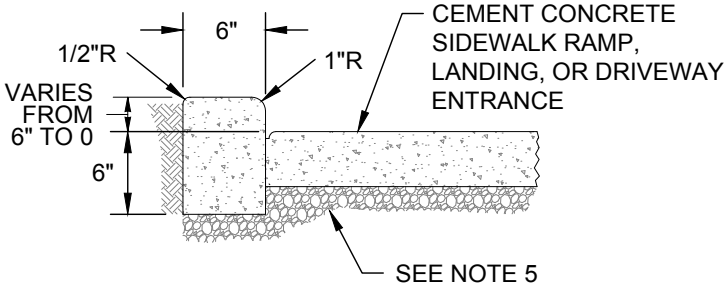
CEMENT CONCRETE
BARRIER CURB



CEMENT CONCRETE BARRIER
CURB AND GUTTER



CEMENT CONCRETE
PEDESTRIAN CURB



CEMENT CONCRETE
PEDESTRIAN CURB
AT SIDEWALK RAMPS & LANDINGS,
AND DRIVEWAY ENTRANCES

NOTES:

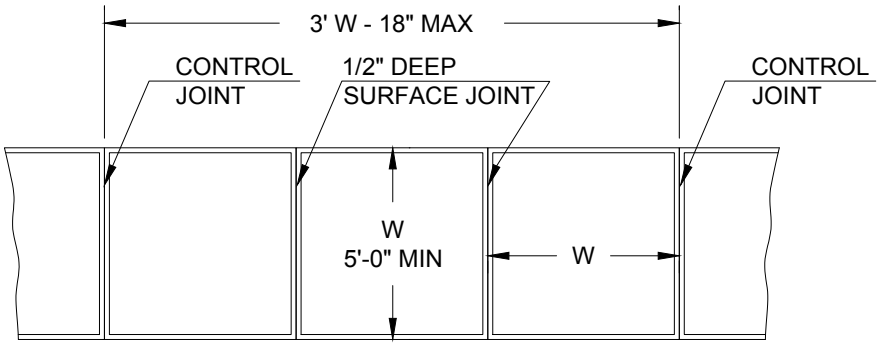
1. CONCRETE SHALL BE 3000 PSI MIN COMMERCIAL CONCRETE.
2. CONTROL JOINT SPACING NOT TO EXCEED 15 FEET. THE DEPTH OF THE JOINT SHALL BE AT LEAST 1-1/2 INCHES. CONTROL JOINTS IN CURB SHALL MATCH PATTERNS IN ADJACENT SIDEWALK.
3. CRUSHED SURFACING SHALL BE TO SUBGRADE OF STREET SECTION OR 3 INCHES, WHICHEVER IS GREATER, AND SHALL EXTEND 6" BEHIND THE CURB.
4. CURB TO BE BRUSH FINISHED. ALL EXISTING EDGES SHALL BE SAWCUT.
5. 3" DEPTH CRUSHED SURFACING TOP COURSE COMPACTED TO 95% OF MAX DRY DENSITY.

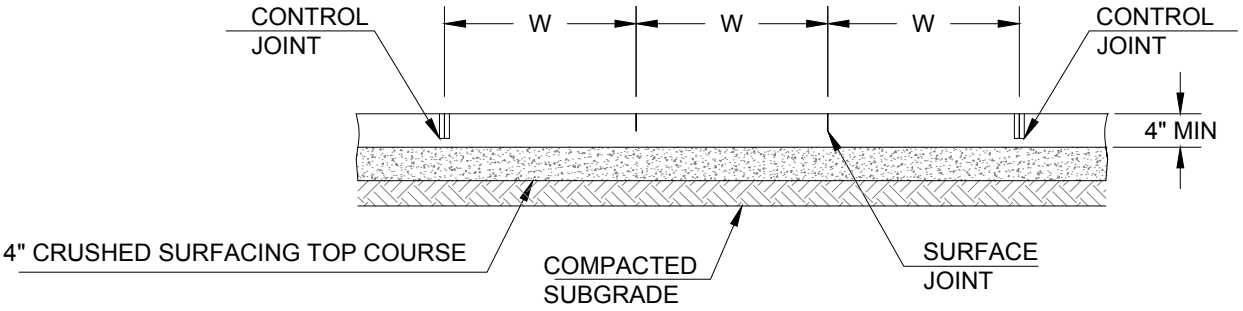
STEVENSON
WASHINGTON

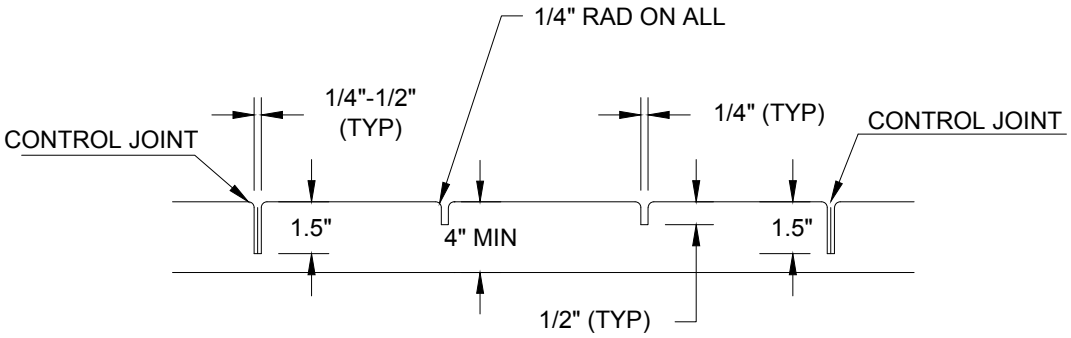
CONCRETE CURBS

DRAWING NO. S05
DATE AUG '25
SCALE NTS
APPROVED BY CR

JOINT SPACING:
SURFACE JOINTS - 5'
CONTROL JOINTS - 15'
EXPANSION JOINTS -
AS REQUIRED BY THE
INSPECTOR







NOTES:

1. CONCRETE SHALL BE 3,000 PSI MIN COMMERCIAL CONCRETE.
2. FINISH SHALL BE MEDIUM BROOM PERPENDICULAR TO PEDESTRIAN TRAFFIC UNLESS OTHERWISE DIRECTED.
3. ALL EXISTING EDGES SHALL BE SAWCUT.
4. ALL JOINTS AND EDGES SHALL BE FINISHED WITH 1/4" RADIUS EDGER (3" SMOOTH EACH SIDE).

STEVENSON WASHINGTON

STANDARD SIDEWALK

DRAWING NO. S06
DATE AUG '25 | SCALE NTS
APPROVED BY CR

NOTES:

1. FOR SIDEWALK AND RAMP DETAILS USE WASHINGTON DEPARTMENT OF TRANSPORTATION'S (WSDOT) STANDARD F SERIES DRAWINGS. SEE INDEX BELOW:

CURB RAMP INDEX

STD. DWG. NO	STD. DWG. TITLE
F-40.12-03	Parallel Curb Ramp
F-40.14-03	Combination Curb Ramp
F-40.15-04	Perpendicular Curb Ramp
F-40.16-03	Single Direction Curb Ramp
F-45.10-05	Detectable Warning Surface

2. THESE DRAWINGS CAN BE FOUND ON WSDOT'S WEBSITE: https://wsdot.wa.gov/engineering-standards/all-manuals-and-standards/standard-plans.

3. MAX 1.5% DESIGN LANDING SLOPE (MAX. 2.0% FINISHED SLOPE).

4. MAX. 7.5% DESIGN RAMP SLOPE (MAX. 8.33% FINISHED SLOPE).

5. TRUNCATED DOME PANELS SHALL BE NO SMALLER THAN 2' X 1'.

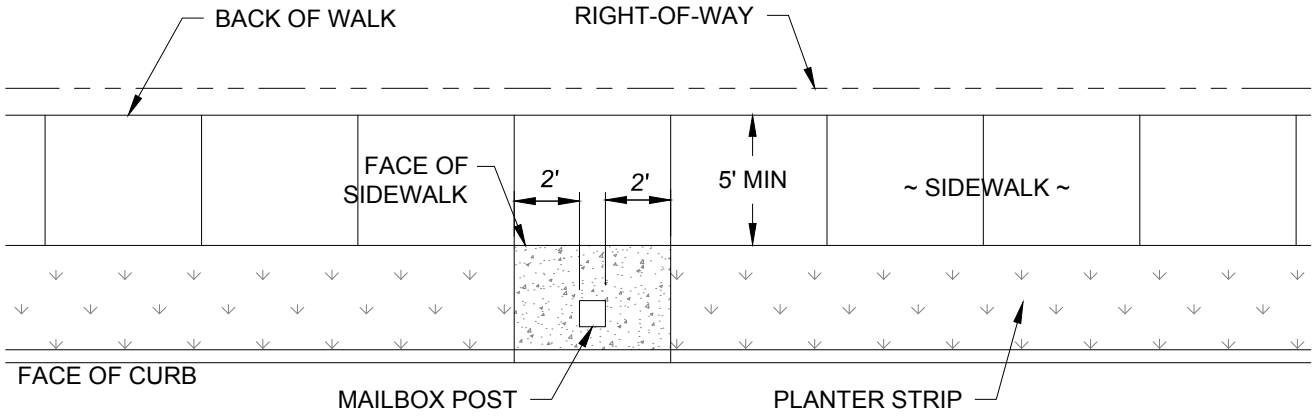
STEVENSON WASHINGTON

CURB RAMP INFO SHEET

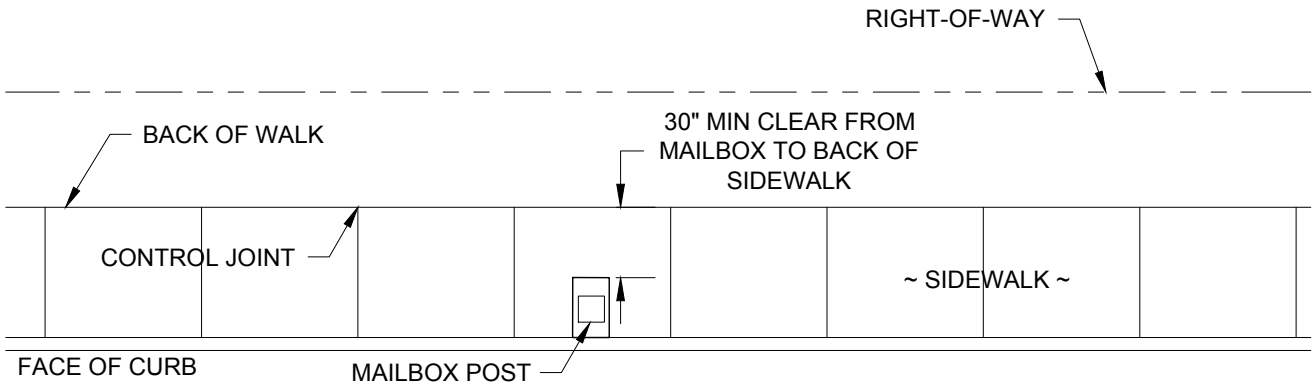
DRAWING NO. S07

DATE AUG '25 | SCALE NTS

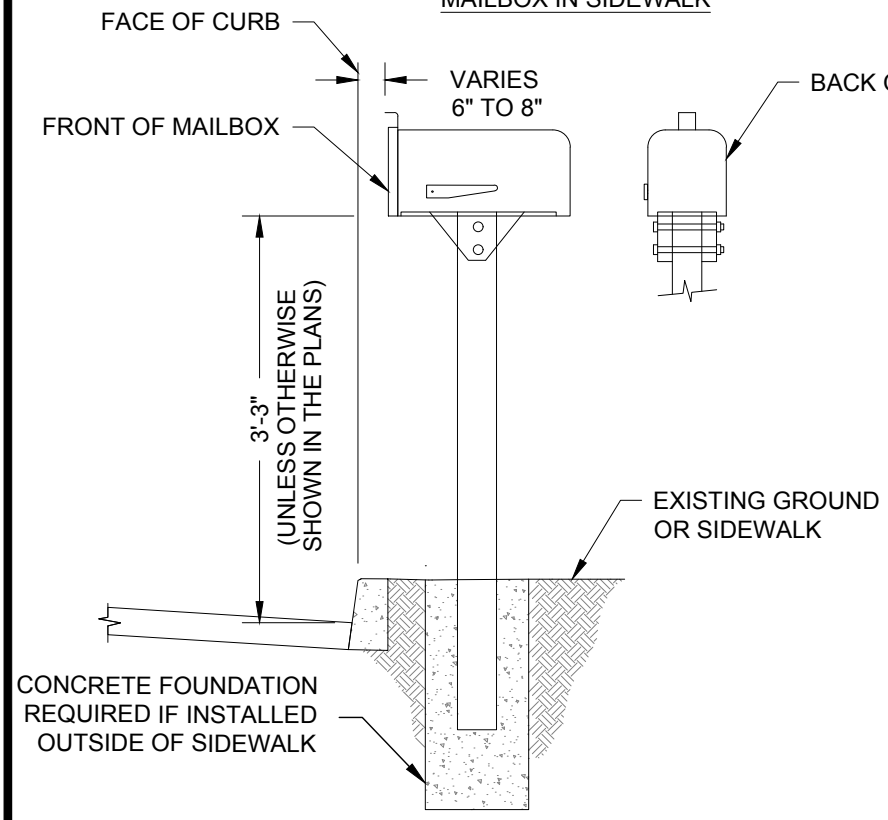
APPROVED BY CR



MAILBOX IN PLANTER STRIP



MAILBOX IN SIDEWALK



NOTES:

1. SEE WSDOT STANDARD DETAIL H-12 FOR MAILBOX, POST, BRACKET AND OTHER INSTALLATION DETAILS.
2. MAILBOXES MUST BE POSTMASTER APPROVED.
3. LOCATION OF MAILBOXES ARE SUBJECT TO APPROVAL BY THE CITY ENGINEER FOR ACCESS AND SIGHT DISTANCE REQUIREMENTS.
4. INSTALL EXPANSION JOINT MATERIAL AROUND MAILBOX POST WHEN SET IN SIDEWALK.
5. EXTEND SIDEWALK JOINTS THROUGH WIDENED SIDEWALK SECTION.
6. CONTACT POSTMASTER FOR PLACEMENT GUIDANCE IF THERE IS NO CURB PRESENT.

STEVENSON WASHINGTON

MAILBOX PLACEMENT

DRAWING NO. S08

DATE AUG '25 | SCALE NTS

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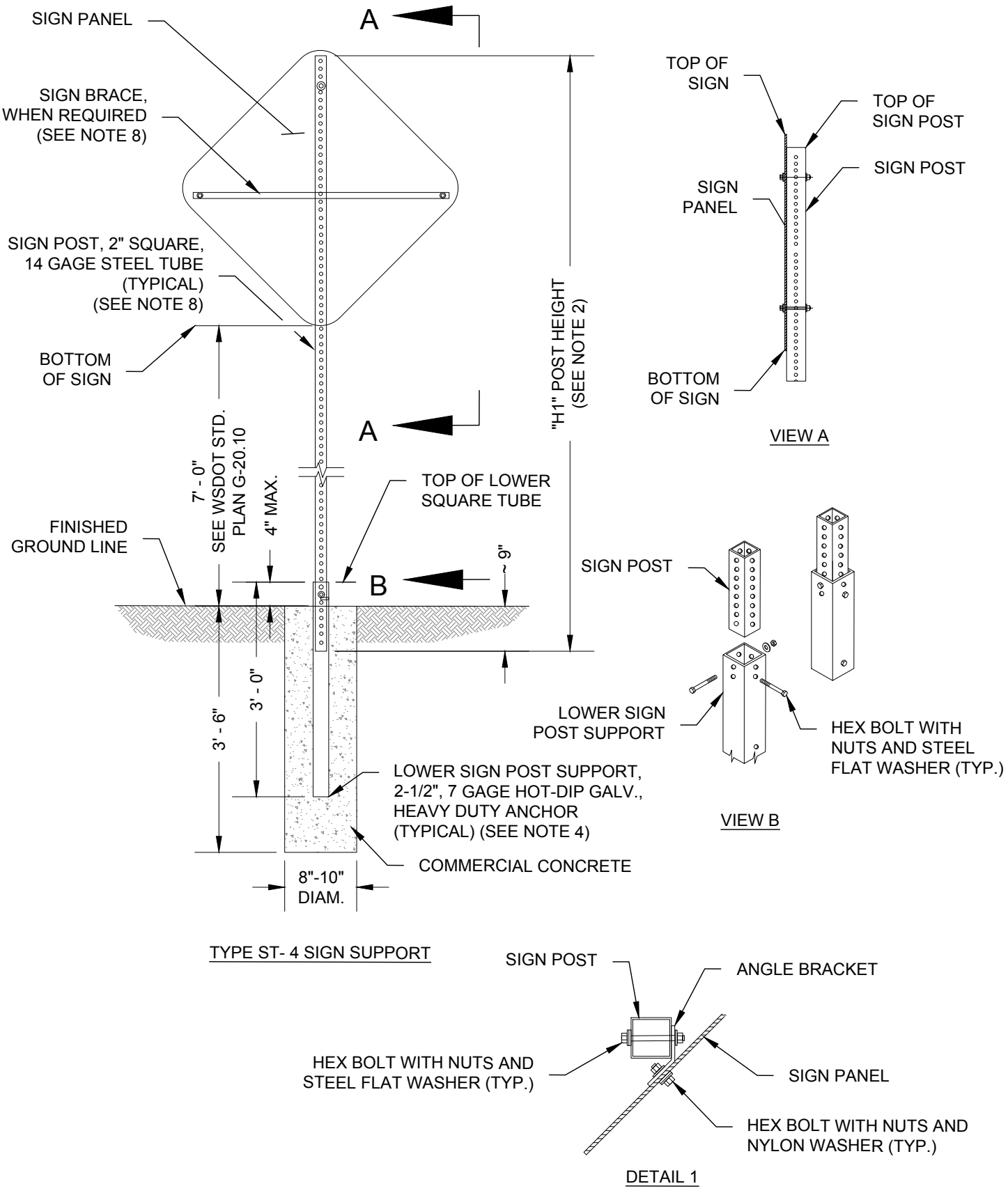

TYPE ST- 4 SIGN SUPPORT

SIGN SUPPORT

DRAWING NO. S09

DATE AUG '25 | SCALE NTS

APPROVED BY CR

1. DIMENSIONS FOR THE PARTS USED TO ASSEMBLE THE BASE CONNECTIONS ARE INTENTIONALLY NOT SHOWN. BASE CONNECTIONS ARE PATENTED, MAUNFACTURED PRODUCTS THAT ARE IN COMPLIANCE WITH NCHRP 350 CRASH TEST CRITERIA. THE BASE CONNECTION DETAILS ARE ONLY SHOWN ON THIS PLAN TO ILLUSTRATE HOW THE PARTS ARE ASSEMBLED.

2. FOR "H1" REFER TO THE SIGN SPECIFICATION TABLES IN THE CONTRACT.

3. DEPENDING UPON THE SIGN AREA, SIGN POST MAY BE A 2", 12 OR 14 GAGE POST OR 2-1/2", 12 OR 14 GAGE POST. SEE CONTRACT PLAN.

4. 2-1/2", 7 GAGE HEAVY DUTY ANCHOR IS REQUIRED WITH 2" POST. 3", 7 GAGE HEAVY DUTY ANCHOR IS REQUIRED WITH 2-1/2" POST. SEE CONTRACT PLAN.

5. ANGLE BRACKET SHALL BE USED FOR SIGN POST SQUARE TUBE GALVANIZED STEEL TUBE ATTACHMENT AT 45 DEGREES, SHOWN IN DETAIL 1.

6. HEX BOLT WITH NUTS AND NYLON WASHER SHALL BE USED FOR SIGN ATTACHMENT. HEX BOLT WITH NUTS AND STEEL FLAT WASHER SHALL BE USED FOR ANCHOR ATTACHMENT.

7. CONTRACT PLAN MAY ALLOW THE USE OF OTHER TYPES OF STEEL OR TIMBER SIGN SUPPORT SYSTEM, SPECIFIEC IN THE WSDOT STANDARD PLAN, DEPENDING UPON THE SPECIFIC CONDITIOND AND SOIL TYPE, UPON APPROVAL BY THE ENGINEER.

8. SIGN BRACES ARE REQUIRED FOR SIGN WIDTHC OF 48" (IN) OR GREATER. FOR SIGN WIDTHS OF 36" (IN) OR LESS, SIGN BRACES ARE ONLY REQUIRED WITHIN SPECIFIED IN THE CONTRACT. SEE WSDOT STANDARD PLAN G-50.10 FOR FURTHER DETAILS.

STEVENSON
WASHINGTON

SIGN SUPPORT NOTES

DRAWING NO. S10

DATE AUG '25 | SCALE NTS

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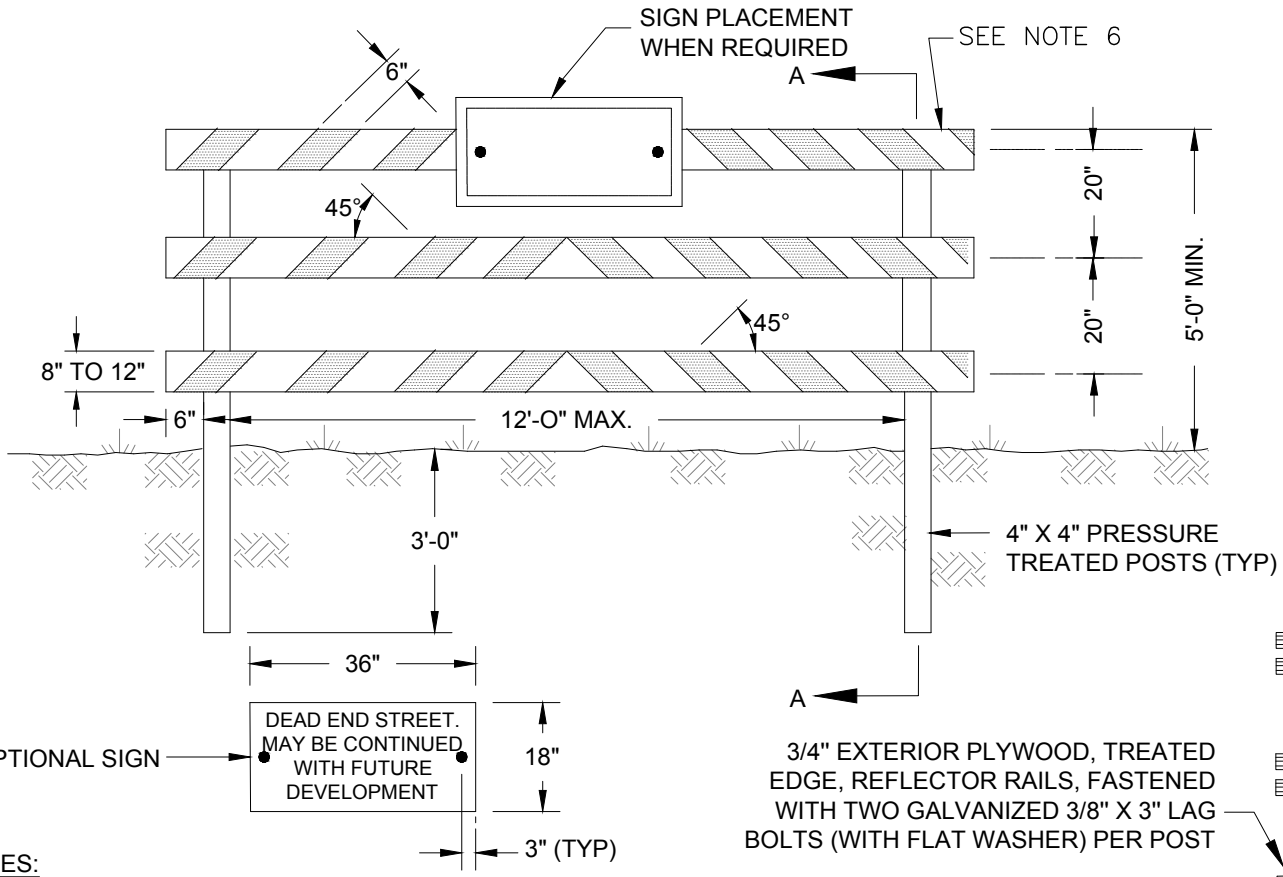

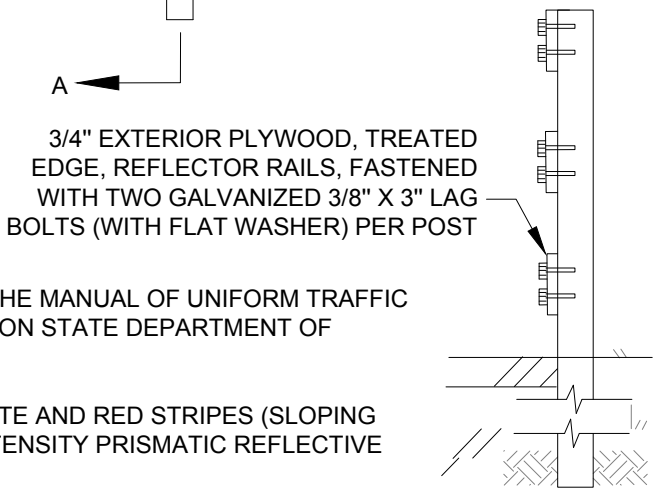

SECTION A-A

NOTES:

1. BARRICADES SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS MODIFIED BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION (WSDOT).

2. MARKINGS FOR BARRICADE RAILS SHALL BE ALTERNATE WHITE AND RED STRIPES (SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES), UTILIZE HIGH INTENSITY PRISMATIC REFLECTIVE SHEETING.

3. THE ENTIRE AREA OF WHITE AND RED STRIPES SHALL BE REFLECTIONIZED SO AS TO BE VISIBLE UNDER NORMAL ATMOSPHERIC CONDITIONS FROM A MINIMUM DISTANCE OF 1,000 FEET WHEN ILLUMINATED BY THE LOW BEAMS OF STANDARD AUTOMOBILE HEADLIGHTS. THE PREDOMINANT COLOR FOR OTHER BARRICADE COMPONENTS SHALL BE WHITE.

4. BARRICADE SECTION SHALL EXTEND ACROSS THE ENTIRE STREET AREA. WHERE BARRICADE EXTENDS ENTIRELY ACROSS A ROADWAY, THE STRIPES SHALL SLOPE DOWNWARD IN THE DIRECTION TOWARD WHICH TRAFFIC MUST TURN IN DETOURING. WHERE BOTH RIGHT AND LEFT TURNS ARE ALLOWED, THE CHEVRON STRIPING SHALL SLOPE DOWNWARD IN BOTH DIRECTIONS FROM THE CENTER OF THE BARRICADE. RAILS SHALL BE PLACED BOTH FRONT AND BACK OF BARRICADE IF REQUIRED FOR TWO-WAY TRAFFIC. RAILS SHALL BE THE SAME SIZE. FOR WIDER APPLICATIONS, MULTIPLE SECTIONS, SPACED NO FURTHER THAN 4" SHALL BE USED.

5. RAILS SHALL BE PLACED BOTH ON THE FRONT AND BACK OF THE BARRICADE IF REQUIRED FOR TWO-WAY TRAFFIC. RAILS SHALL BE THE SAME SIZE.

6. LUMBER SHALL BE STANDARD GRADE OR BETTER.

7. IF SIGN IS REQUIRED, FIELD DRILL TWO HOLES TO ACCOMMODATE GALVANIZED 3/8" MACHINE BOLT, WASHER AND NUT. THE SIGN SHALL BE INSTALLED SO THAT THE CENTER RAIL IS NOT COVERED.

8. FOR TEMPORARY BARRIER SEE WSDOT STANDARD PLAN H-2.

STEVENSON WASHINGTON

PERMANENT STREET BARICADE TYPE 3

DRAWING NO. S11

DATE AUG '25 | SCALE NTS

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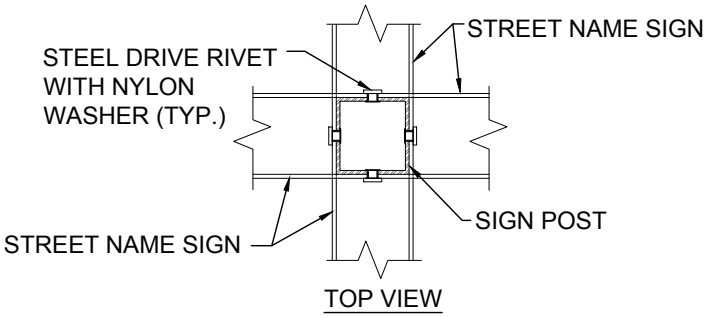
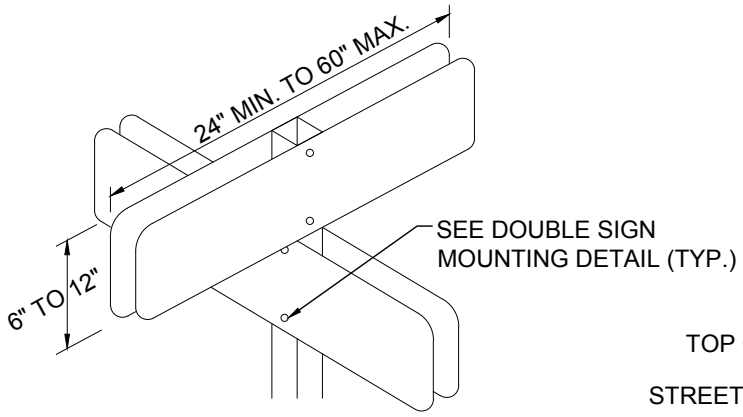


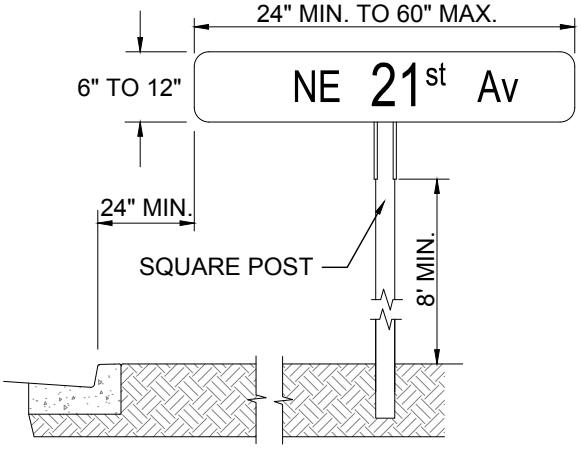
TOP VIEW

DOUBLE SIDED SIGN MOUNTING DETAIL

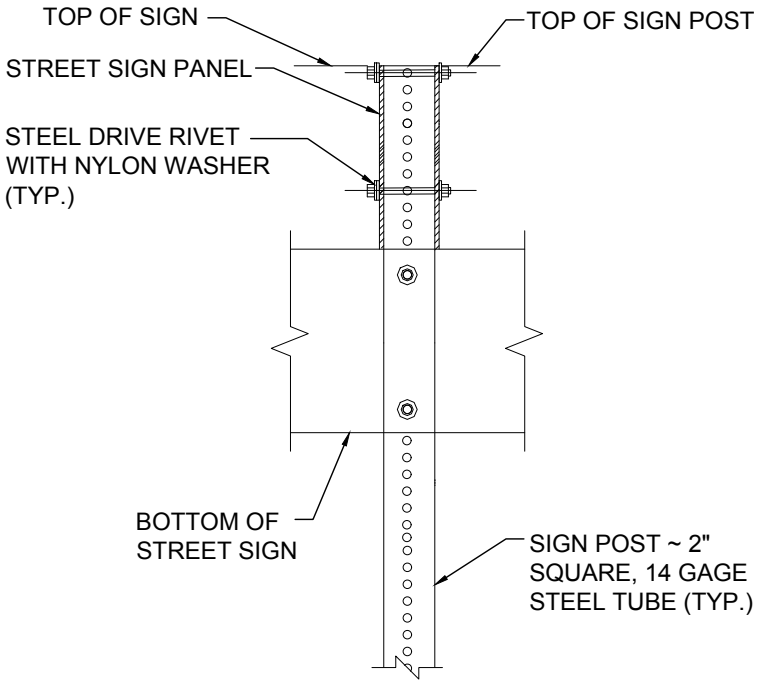


NOTES:

1. BOLT IN LIEU OF STEEL RIVET PERMITTED WITH THE ENGINEER'S APPROVAL. BOLTS WITH NUTS IN LIEU OF RIVETS REQUIRED FOR SIGNS 42 INCHES AND LONGER.
2. CONTRACT PLAN MAY ALLOW THE USE OF OTHER TYPES OF STEEL OR TIMBER SIGN SUPPORT SYSTEM, SPECIFIED IN THE WSDOT STANDARD PLAN, DEPENDING UPON SPECIFIC CONDITION AND SOIL TYPE.
3. SIGN BRACES ARE REQUIRED WHEN STREET NAME SIGNS ARE 42 INCHES OR GREATER IN WIDTH.
4. SEE S13 FOR LETTERING REQUIREMENTS.



GROUND MOUNTED
STREET NAME SIGN



POST TYPE ST-4

STREET NAME SIGN
INSTALLATION DETAIL

STEVENSON WASHINGTON

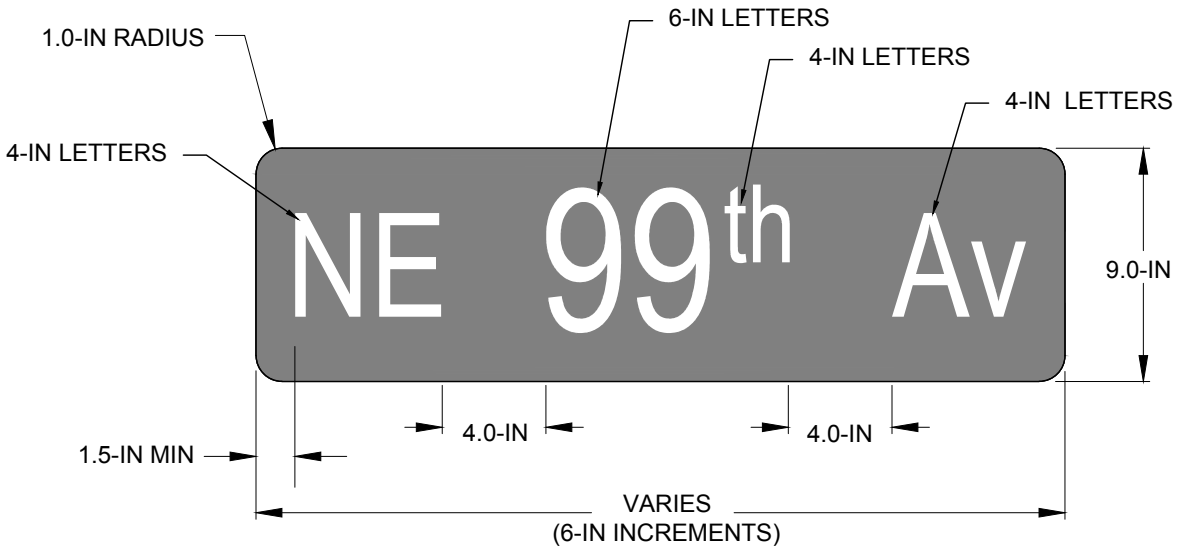
STREET NAME SIGNS

DRAWING NO. S12

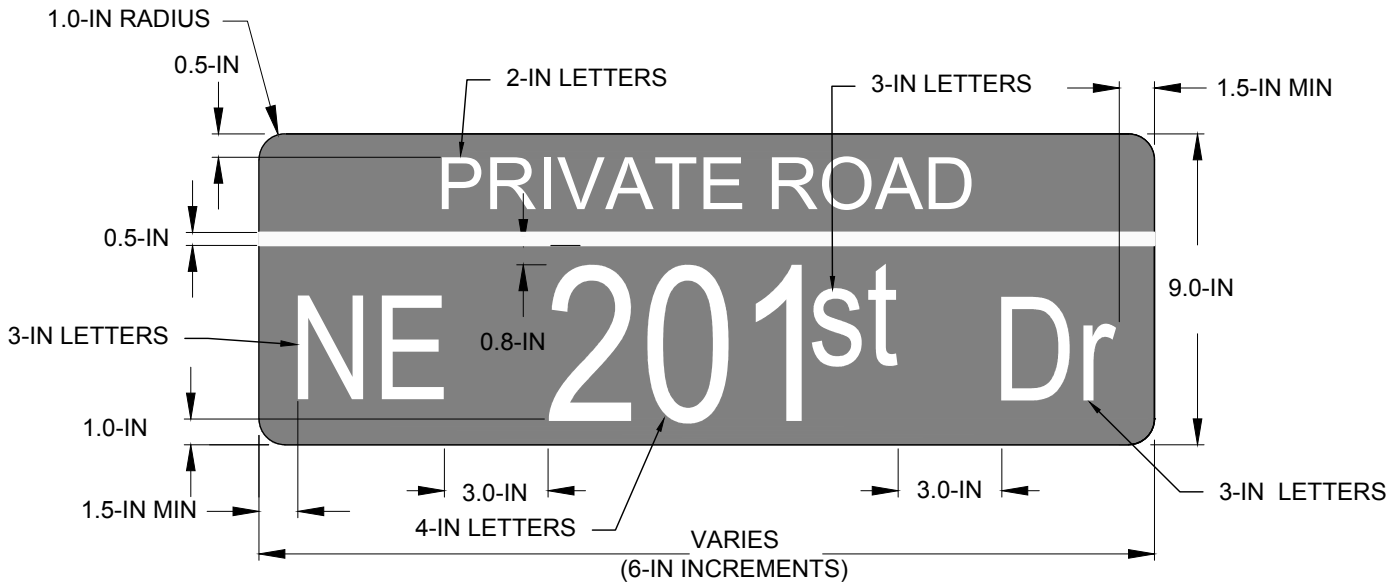
DATE AUG '25 | SCALE NTS

APPROVED BY CR

PUBLIC STREET NAME SIGNS



PRIVATE ROAD NAME SIGNS



NOTES:

1. LETTERS AND NUMBERS ARE "C" SERIES LETTERS. THE "B" SERIES FONT MAY BE USED IF THE SIGN BLADE IS GREATER THAN 48 INCHES IN LENGTH.
2. ROAD NAME SIGNS SHALL BE WHITE LETTERING ON DOUBLE SIDED BLUE TYPE IV ALUMINUM SHEETING MATERIAL.
3. SIGN BLADES SHALL BE IN 6-IN INCREMENTS (18-IN, 24-IN, 30-IN, ETC). 1.5-IN CLEAR FROM LETTERING TO SIDES OF SIGNS SHALL BE MINIMUM, WITH MESSAGE CENTERED ON SIGN BLADE.
4. SIGN BLADES UNDER 36-IN IN LENGTH SHALL BE ON 0.080 ALUMINUM. 36-IN OR LONGER BLADES SHALL BE ON 0.125-IN ALUMINUM.

STEVENSON

STREET NAME SIGNS

DRAWING NO. S13

DATE AUG '25 | SCALE NTS

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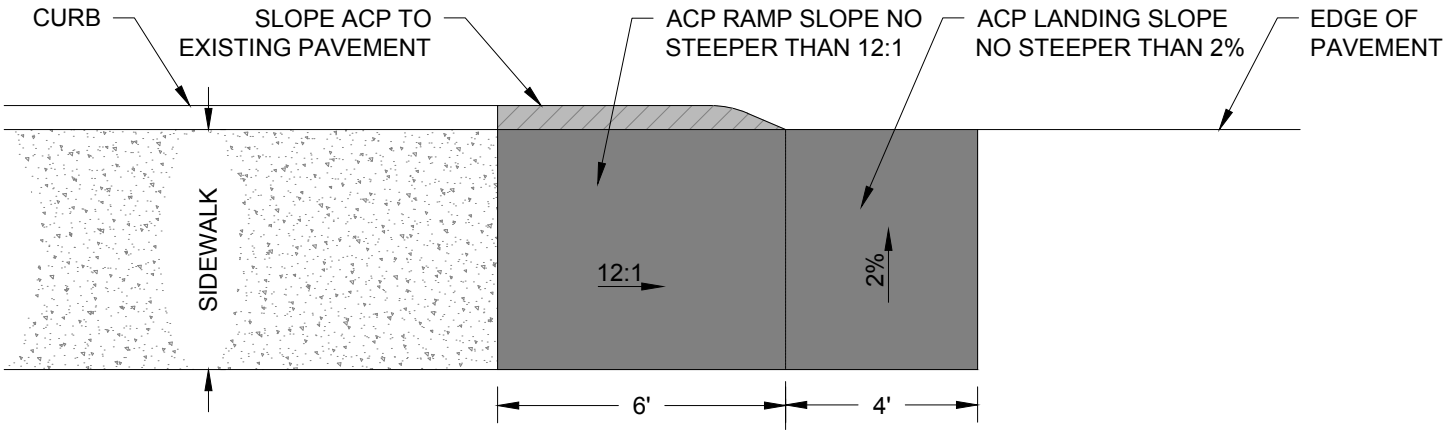
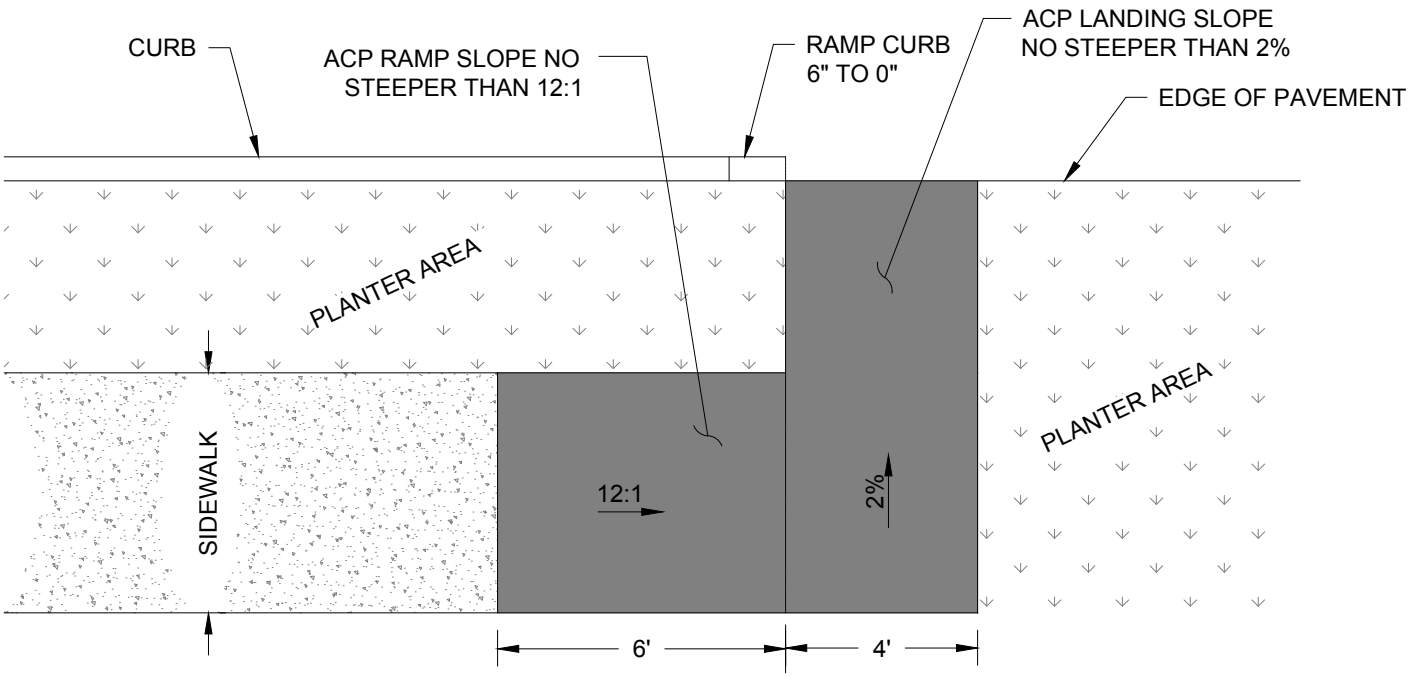


ATTACHED SIDEWALK



DETACHED SIDEWALK

NOTES:

1. CLASS "B" ASPHALT CONCRETE PAVEMENT (ACP) SHALL BE A MINIMUM OF 0.20' DEEP, OVER 3" MIN. DEPTH OF AGGREGATE (5/8"-0).
2. ACP LANDINGS SHALL BE AT A SLOPE NO GREATER THAN 2%.
3. BEGIN ACP RAMP AT NEAREST SIDEWALK JOINT.

STEVENSON WASHINGTON

TEMPORARY AC RAMP

DRAWING NO. S14

DATE AUG '25 | SCALE NTS

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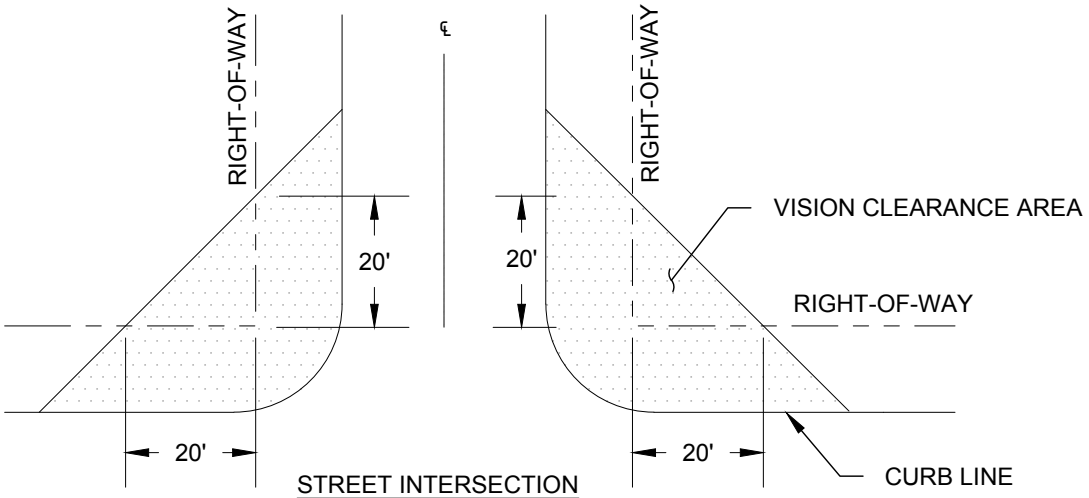
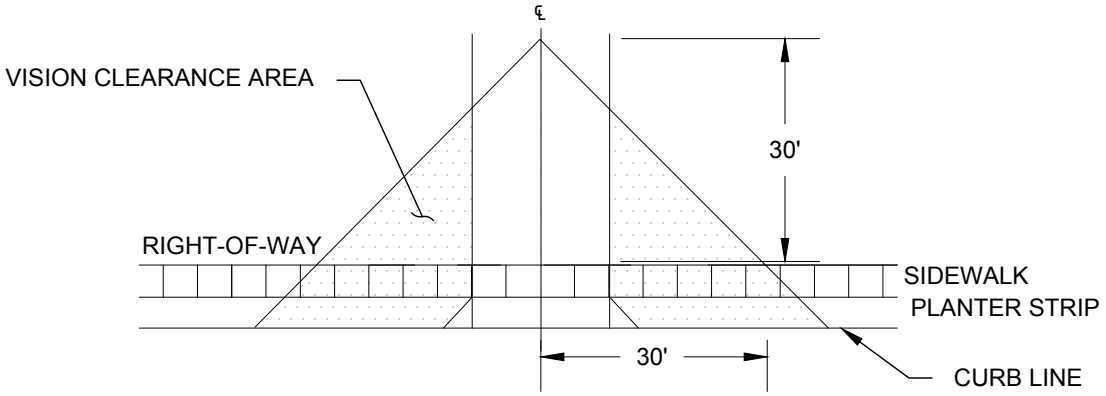
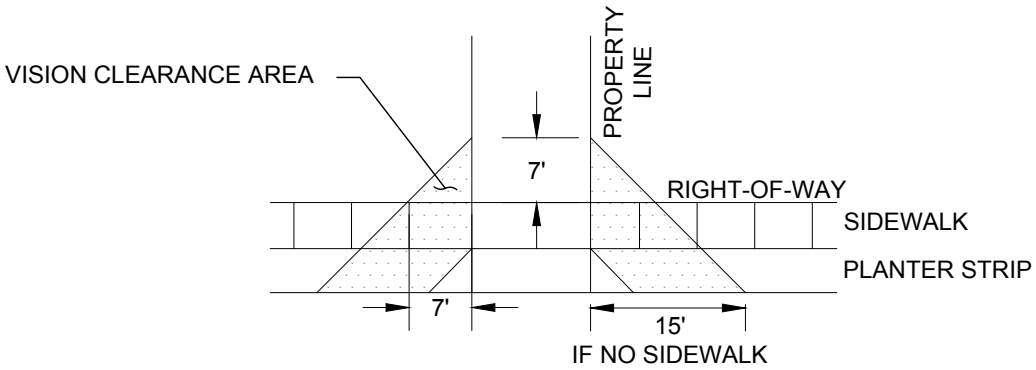


STREET INTERSECTION



COMMERCIAL DRIVEWAYS, PRIVATE STREETS, MULTI FAMILY DWELLINGS, LOCAL SERVICE STREETS AND ALLEYS



RESIDENTIAL DRIVEWAYS AND SINGLE FAMILY DWELLINGS

NOTES:

1. THERE SHALL BE NO SIGHT OBSTRUCTION WITHIN THE TRIANGULAR VISION CLEARANCE AREA BETWEEN 30-INCHES AND 10-FEET ABOVE THE STREET GRADE.

2. NO STREET TREES THAT WILL GROW BEYOND 12" DIAMETER SHALL BE PLACED WITHIN THE VISION CLEARANCE TRIANGLES.

3. IN ADDITION TO VISION CLEARANCE TRIANGLE, STREET INTERSECTIONS SHALL COMPLY WITH SIGHT DISTANCE PROVISIONS DEFINED IN THE "INTERSECTION CHAPTER" OF THE AASHTO'S POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS. THE INTERSECTION SIGHT DISTANCE AND SIGHT LINE SHALL BE SHOWN ON PLAN SUBMITTALS.

STEVENSON WASHINGTON

DRIVEWAY SIGHT DISTANCE

DRAWING NO. S15

DATE AUG '25 | SCALE NTS

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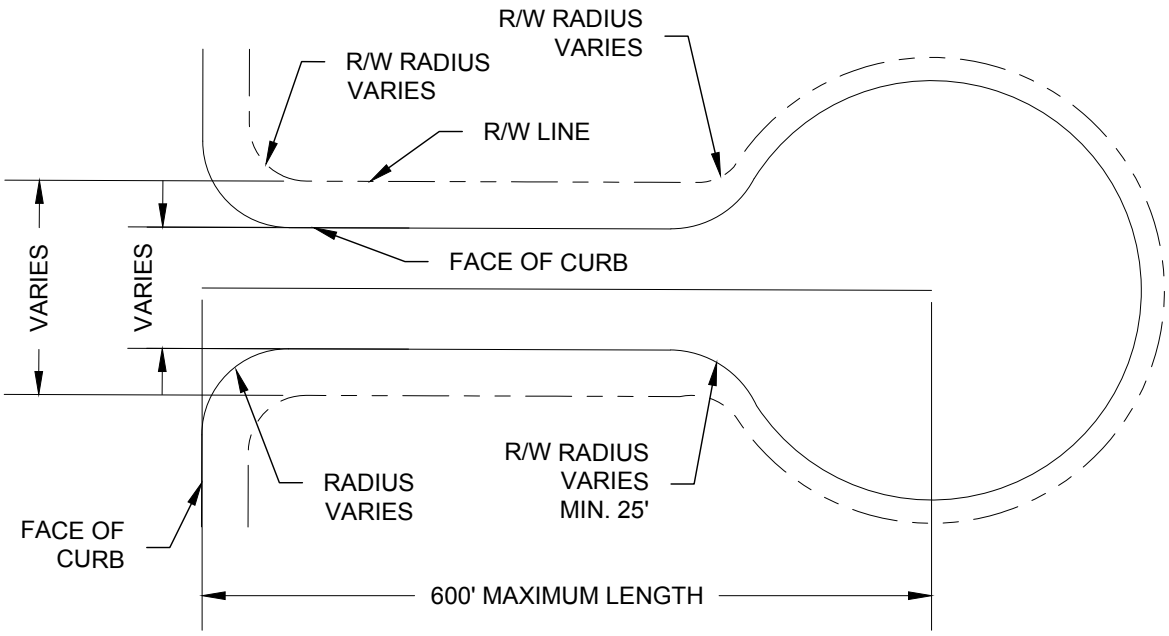

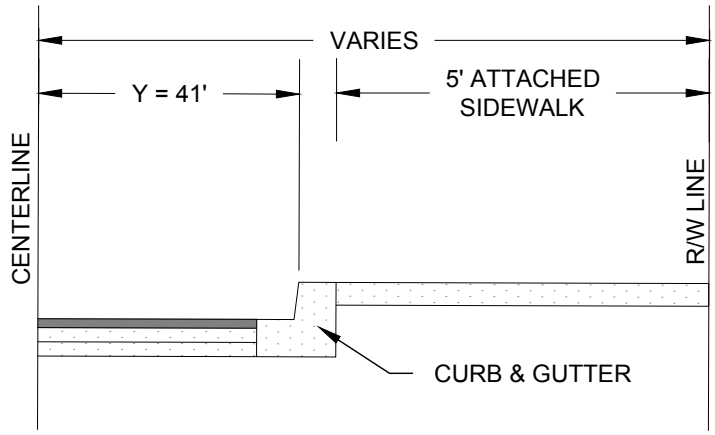

BULB DIMENSIONS
NTS

NOTES:

1. THE DISTANCE FROM THE CURB TO THE R/W AROUND THE CUL-DE-SAC BULB SHALL BE THE SAME AS THE ADJACENT STREET SECTION.

2. MINIMUM 48' RADIUS REQUIRED.

STEVENSON
WASHINGTON

STANDARD CUL-DE-SAC

DRAWING NO. S16
DATE AUG '25 | SCALE NTS
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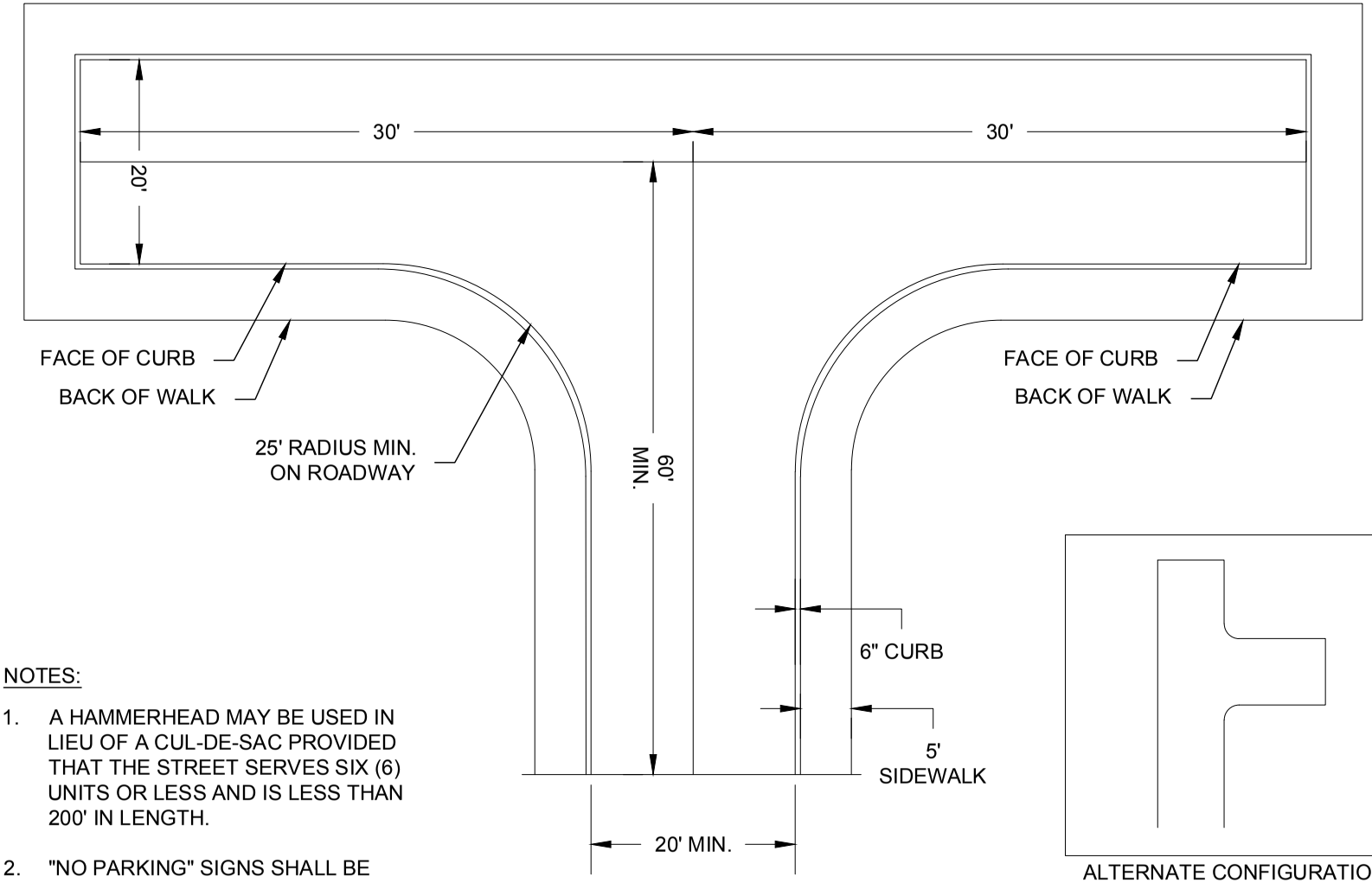
DEAD-END HAMMERHEAD



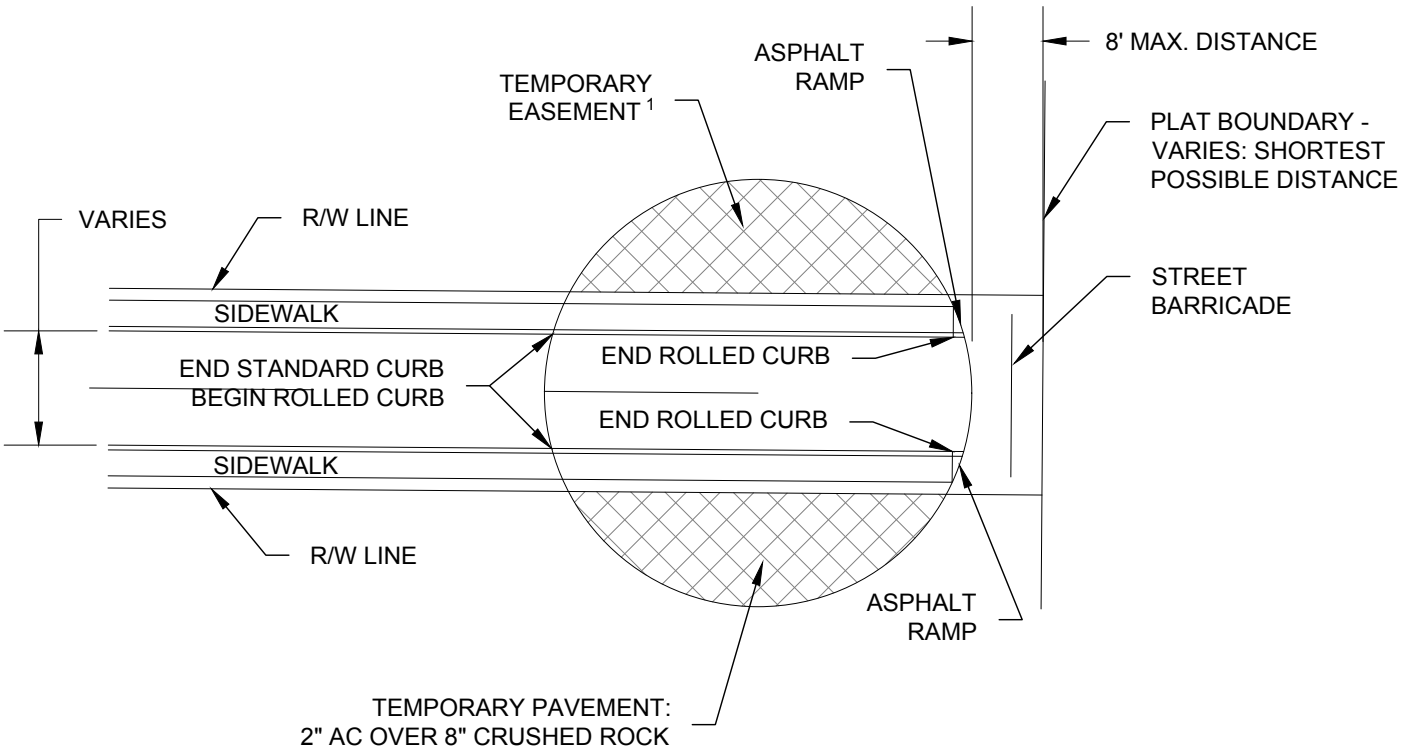
NOTES:

1. A HAMMERHEAD MAY BE USED IN LIEU OF A CUL-DE-SAC PROVIDED THAT THE STREET SERVES SIX (6) UNITS OR LESS AND IS LESS THAN 200' IN LENGTH.

2. "NO PARKING" SIGNS SHALL BE INSTALLED ON ALL LEGS OF THE HAMMERHEAD.

ALTERNATE CONFIGURATION

APPROVED BY	DATE	SCALE	DRAWING NO.
CR	AUG '25	NTS	S17



NOTES:

1. BARRICADE REQUIRED AT END OF BULB. SEE STREET BARRICADE TYPE 3.
2. HAMMERHEAD TURNAROUNDS MAY BE USED FOR TEMPORARY DEAD-ENDS LESS THAN 200' IN LENGTH. SEE DRAWING FOR DIMENSIONAL REQUIREMENTS.
3. MINIMUM 48' RADIUS REQUIRED FOR INDUSTRIAL STREETS.

STEVENSON WASHINGTON

TEMPORARY CUL-DE-SAC

DRAWING NO. S18

DATE AUG '25 | SCALE NTS

APPROVED BY CR

STEVENSON WASHINGTON

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DRAWING NO. TOC01

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WASHINGTON

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DRAWING NO. TOC4

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APPROVED BY CR

WATER NOTES

1. MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTIONS 7-09 THROUGH 7-15 OF THE STANDARD SPECIFICATIONS AND THE CITY OF STEVENSON STANDARD DETAILS.

2. WHERE EXISTING SERVICE MUST BE INTERRUPTED, THE CONTRACTOR SHALL NOTIFY THE PUBLIC WORKS DEPARTMENT AND ALL CUSTOMERS AFFECTED AS TO THE DATE AND DURATION OF THE INTERRUPTION. NOTIFICATION MUST BE DONE 48 HOURS IN ADVANCE OF THE INTERRUPTION, OR AS REQUIRED BY THE CITY. THE CONTRACTOR SHALL SCHEDULE CONSTRUCTION TO PROVIDE MINIMUM INTERRUPTION OF SERVICES AS DETERMINED BY THE CITY. ALL SERVICE INTERRUPTIONS SHALL BE PERFORMED BY THE CITY. NECESSARY PIPE, FITTINGS AND GATE VALVES SHALL BE ASSEMBLED AT THE SITE READY FOR INSTALLATION PRIOR TO SHUTTING OFF WATER IN THE EXISTING MAIN. ONCE THE WATER HAS BEEN SHUT OFF, THE WORK SHALL BE PERFORMED VIGOROUSLY AND SHALL NOT BE HALTED UNTIL THE LINE IS RESTORED TO SERVICE.

3. THE MINIMUM COVER FOR ALL SIZES OF PIPE SHALL BE 3 FEET BELOW FINISHED STREET GRADE OR BELOW EXISTING GROUND, WHICHEVER IS GREATER. MAXIMUM COVER SHALL BE 5 FEET UNLESS APPROVED OTHERWISE.

4. IN FILL AREAS, SPECIAL TREATMENT MAY BE REQUIRED AT THE DISCRETION OF THE CITY. THIS TREATMENT MAY CONSIST OF COMPACTING THE BACKFILL IN SIX INCH (6") LAYERS, CAREFUL CHOICE OF BACKFILL MATERIALS, USE OF MECHANICAL JOINT DUCTILE IRON PIPE IN SHORT LENGTHS, OR SUCH OTHER REASONABLE METHOD OR COMBINATIONS AS MAY BE NECESSARY OR AS REQUIRED BY THE CITY.

5. PIPE SHALL BE FURNISHED NEW AND CONFORM TO THE REQUIREMENTS OF AWWA C151-71. 5. ALL PIPE SHALL BE CLASS 52, DUCTILE IRON, UNLESS OTHERWISE NOTED ON THE PLANS. PIPE SHALL BE FURNISHED IN 18 TO 20 FOOT LENGTHS AND SHALL BE CEMENT MORTAR LINED.

6. FITTINGS SHALL BE OF THE SIZE, TYPE, TYPE OF IRON, AND TYPE OF JOINT AS CALLED FOR ON THE PLANS, SHALL CONFORM TO THE REQUIREMENTS OF AWWA C110-82 OR C153-85 AND SHALL HAVE A PRESSURE RATING OF 250 PSI MINIMUM. ALL RUBBER GASKET JOINTS FOR DUCTILE IRON AND GREY IRON FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF AWWA C111-80. DUCTILE IRON FITTINGS SHALL BE CEMENT LINED. COMPACT FITTINGS WILL ONLY BE ALLOWED ON INSTALLATIONS THRU 12" DIAMETER. ALL COMPACT FITTINGS SHALL BE DUCTILE IRON, CEMENT LINED, AND HAVE A PRESSURE RATING OF 350 PSI. ALL REDUCERS SHALL BE MECHANICALLY RESTRAINED.

7. VALVES SHALL BE FURNISHED WITH JOINTS AS CALLED FOR ON THE PLANS. VALVES SHALL BE FURNISHED WITH AN UNDERGROUND MANUAL OPERATOR WITH AN AWWA 2 INCH SQUARE OPERATING NUT AND SHALL OPEN WITH A COUNTER-CLOCKWISE ROTATION. IF OVER 4' TO FINISHED GRADE THE OPERATOR NUT SHALL HAVE A FACTORY EXTENSION ADDED TO A DISTANCE OF 18" FROM FINISHED GRADE.

   A. RESILIENT-SEATED GATE VALVES WILL BE USED FOR VALVE INSTALLATIONS OF 8 INCH AND SMALLER AND ON ALL FIRE HYDRANT AND FIRE PROTECTION SERVICE INSTALLATIONS. RESILIENT-SEATED VALVES SHALL CONFORM TO AWWA C509-87 AND SHALL BE EPOXY COATED ON THE INSIDE.

   B. BUTTERFLY VALVES SHALL BE USED FOR ALL VALVE INSTALLATIONS 10 INCH AND LARGER. BUTTERFLY VALVES SHALL MEET OR EXCEED ALL AWWA C504-80 SPECIFICATIONS AND SHALL BE CLASS 150-B WITH SHORT BODY. BUTTERFLY VALVES SHALL HAVE A MINIMUM OF 28 TURNS TO MOVE FROM FULLY OPEN TO FULLY CLOSED POSITION. THE OPERATOR SHALL BE MOUNTED DIRECTLY ON THE VALVE WITH NO EXPOSED OR EXTERNAL COUPLINGS. UNITS SHALL BE FULLY GASKETED AND GREASE PACKED. VALVES SHALL BE INSTALLED WITH THE OPERATOR ON THE CENTERLINE OF THE ROAD SIDE OF THE PIPE.

8. BOLTS FOR FLANGED FITTINGS SHALL BE GALVANIZED OR ZINC-CADMIUM PLATED. BOLTS FOR MECHANICAL JOINTS AND CAST IRON TAPPING SLEEVES SHALL BE NSS CORTEN STEEL.

9. BED PIPE IN ACCORDANCE WITH CITY OF STEVENSON STANDARD DETAILS G04 AND G05. TRENCH BACKFILL MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF STEVENSON STANDARD DETAILS G06 AND G07.

10. NO DITCHES SHALL BE LEFT OPEN AFTER WORK HOURS. TEMPORARY TRENCH PATCHING SHALL BE INSTALLED WHEN WORK IMPACTS TRAVEL LANES.

STEVENSON

STANDARD WATER NOTES 1 OF 2

DRAWING NO.	W01A
DATE AUG '25	SCALE NTS
APPROVED BY	CR

11. CONTRACTOR SHALL FURNISH A WATERTIGHT PLUG OF THE APPROPRIATE SIZE WHICH SHALL BE INSTALLED IN THE END OF WATER MAIN WHEN WORK IS DELAYED OR STOPPED AT THE END OF THE WORK SHIFT.

12. VALVES AND BLOW-OFFS SHALL BE CENTERED IN VALVE BOXES ON RISERS. VALVE BOX COVERS SHALL BE CAST IRON WITH A 'W' CAST INTO THE TOP, MANUFACTURED BY VARICAST OR APPROVED EQUAL. VALVE BOX EXTENSIONS SHALL BE ONE PIECE SCHEDULE 40 PVC, 6" MINIMUM. THE EXTENSION SHALL BE LOCATED 4" BELOW THE CAST LID. VALVE BOXES NOT SET IN PAVED AREAS, SHALL BE SET IN A CONCRETE PAD, 24" SQUARE, 4"-6" THICK.

13. HYDRANTS SHALL BE COVERED TO INDICATE UNDER CONSTRUCTION UNTIL ACCEPTED BY THE CITY.

14. PIPES TO BE ABANDONED SHALL BE CAPPED WITH MECHANICAL COUPLINGS.

15. WATER SERVICES ARE TO BE INSTALLED BY THE CONTRACTOR AND INSPECTED BY THE PUBLIC WORKS DEPARTMENT.

    A. WATER METERS SIZED ¾" TO 2" WILL BE PROVIDED AND SET BY THE CITY ONLY AFTER BOX AND SETTER ARE AT FINISHED GRADE. PRIOR TO INSTALLATION OF THE WATER SERVICES, A REPRODUCIBLE COPY OF THE PLAT MAP SHALL BE PROVIDED INDICATING THE ADDRESS OF EACH LOT. NO WATER METERS WILL BE SET UNTIL THESE CONDITIONS ARE MET.

    B. WATER METERS LARGER THAN 2" WILL BE INSTALLED BY THE OWNER AS PART OF THE CONSTRUCTION PROJECT AND WILL BE LOCKED OFF BY THE CITY. METERS WILL BE TURNED ON BY THE CITY BY REQUEST FROM THE OWNER AFTER ACCEPTANCE BY THE CITY.

16. THE CONTRACTOR SHALL MAKE PRESSURE AND LEAKAGE TESTS ON ALL NEWLY LAID PIPE AND SHALL BE ABLE TO DEMONSTRATE A "ZERO LEAKAGE" RATE. IF ATTEMPTS TO DEMONSTRATE ZERO LEAKAGE CAN NOT BE ACHIEVED, CONTRACTOR MAY CHOOSE TO TEST IN ACCORDANCE WITH SECTION 7-09.3 (23) OF THE STANDARD SPECIFICATIONS, FURNISH ALL NECESSARY EQUIPMENT AND MATERIAL, MAKE ALL TAPS IN THE PIPE AS REQUIRED, AND CONDUCT THE TESTS. THE ENGINEER WILL MONITOR THE TESTS, THE CITY SHALL WITNESS THE TEST; IF THE TEST DOES NOT PASS INSPECTION FOR ANY REASON, ADDITIONAL TRIPS REQUIRED TO WITNESS THE TEST SHALL BE AT OWNER'S EXPENSE.

17. THE QUALITY, TASTE AND ODOR OF WATER DRAWN FROM NEW CONSTRUCTION WATER MAINS SHALL BE THE SAME AS THE WATER IN THE EXISTING FACILITY CLASSED AS ACCEPTABLE FOR USE BY THE CITY. SHOULD THE WATER NOT BE ACCEPTABLE FOR USE BECAUSE OF TASTE, REQUIRED STEPS AS APPROVED BY THE CITY SHALL BE ACCOMPLISHED TO ATTAIN WATER QUALITY ACCEPTABLE FOR USE.

WATER VAULT NOTES

1. VAULTS SHALL BE CONSTRUCTED PER THE CITY OF STEVENSON STANDARD DETAILS AND SHALL HAVE NO OTHER USE, EXCEPT FOR USE AS APPROVED BY THE CITY OF STEVENSON.

2. PRESSURE REDUCING VALVE VAULTS ARE UNIQUE TO EACH SITUATION. PRESSURE REDUCING VAULTS SHALL BE DETAILED BY THE ENGINEER ON THE PLANS. THE CITY WILL REVIEW THE VAULT FOR SIZE AND COMPLIANCE WITH THE GENERAL REQUIREMENTS LISTED UNDER THIS SECTION.

3. AN ELECTRICAL PERMIT IS REQUIRED, AS APPLICABLE. ALL ELECTRICAL WIRING SHALL BE INSPECTED BY THE WASHINGTON STATE ELECTRICAL INSPECTOR.

4. VAULTS SHALL BE SEALED WITH CRYSTAL SEAL OR APPROVED EQUAL ON THE OUTSIDE OF THE VAULT. VAULT PENETRATIONS SHALL BE SEALED WITH NON SHRINK GROUT FROM THE OUTSIDE. APPLY WATER PROOF COATING OVER GROUT. BACKFILL AROUND VAULT PER THE MANUFACTURER'S SPECIFICATIONS.

5. VAULT ACCESS SHALL BE THROUGH AN H-20 RATED STANDARD BILCO DOOR, OR APPROVED ALTERNATE. A LADDER SHALL BE PROVIDED IF THE VAULT OR CHAMBER DEPTH IS 5 FOOT 0 INCHES OR GREATER AND ENTRY IS THROUGH THE VAULT OR CHAMBER ROOF. LADDERS SHALL INCLUDE A MODEL 1 BILCO LADDERUP SAFETY POST OR APPROVED EQUAL.

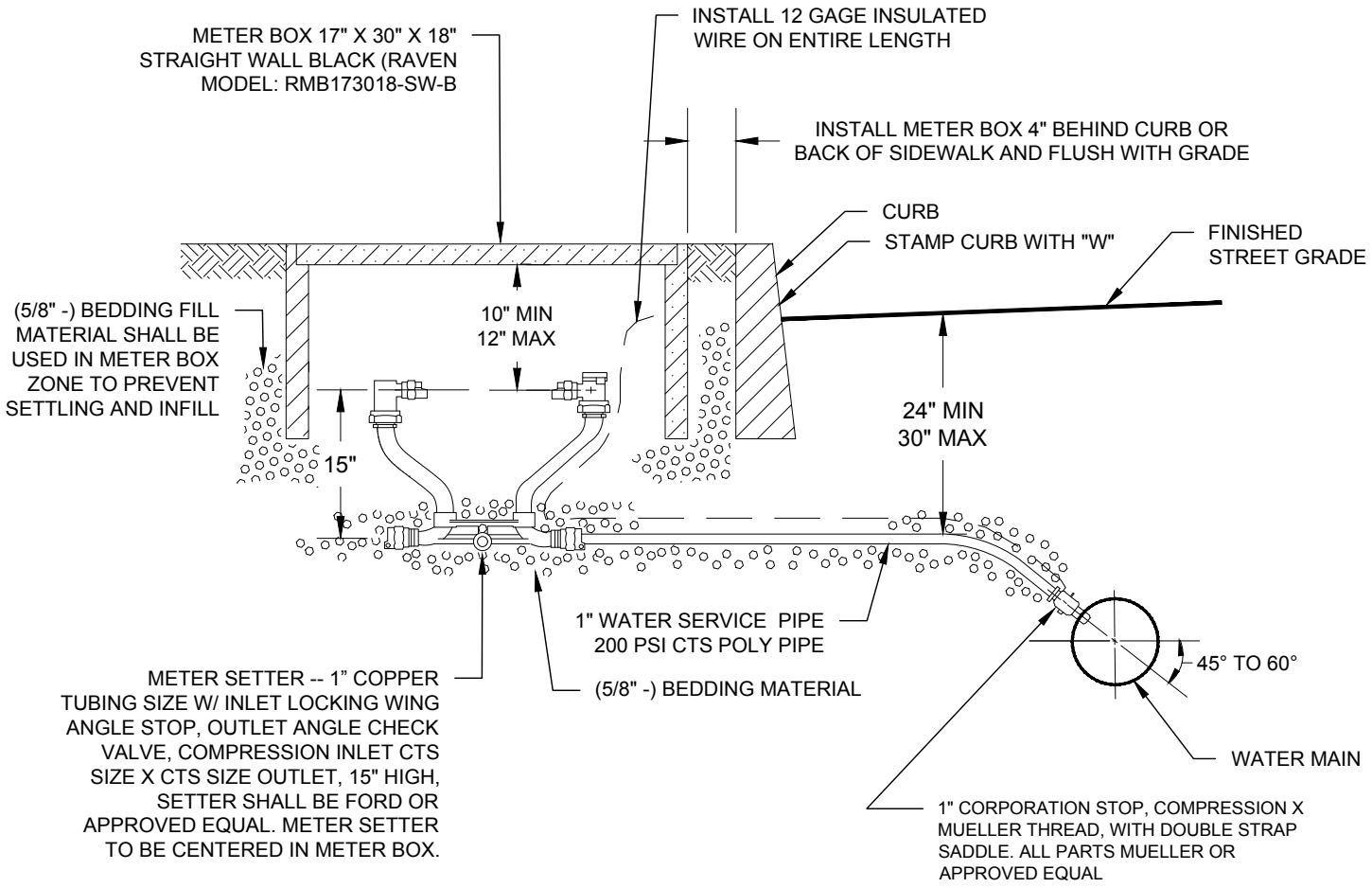
6. DRAINAGE FOR THE VAULT OR CHAMBER SHALL BE PROVIDED. CONNECTION TO PIPED STORM SYSTEMS WITH CHECK VALVE IS ALLOWED, OR A DAYLIGHTED DRAIN.

7. VAULTS SHALL BE PROVIDED WITH A MOISTURE PROOF LIGHT FIXTURE IF ADEQUATE LIGHTING IS NOT AVAILABLE.

8. VAULTS SHALL BE INSTALLED ON UNDISTURBED SUBGRADE OR COMPACTED 3/4-0 GRAVEL BASE.

9. PIPING ASSEMBLIES SHALL BE ADEQUATELY SUPPORTED FROM THE FLOOR, READILY ACCESSIBLE WITH ADEQUATE ROOM FOR MAINTENANCE AND SUITABLY RESTRAINED FROM MOVEMENT. SUPPORTS SHALL CONSIST OF STEEL SUPPORTS OR APPROVED EQUAL; WOOD SUPPORTS WILL NOT BE ALLOWED. NO PIPING SHALL BE INSTALLED IN EXCESS OF 3 FEET ABOVE THE VAULT FLOOR.

10. ALL NEW SERVICES ARE TO BE PRESSURE TESTED AND DISINFECTED BY THE CONTRACTOR AND PROVEN TO BE BACTERIOLOGICALLY SAFE FROM THE EXISTING MAIN TO THE VAULT.



NOTES

1. METER BOX SHALL BE MANUFACTURED BY RAVEN PRODUCTS UNLESS OTHERWISE APPROVED.
2. METER BOX IS NOT ALLOWED IN HARD SURFACE AREAS.
3. ALL METERS SHALL BE INSTALLED BY THE CITY OF STEVENSON
4. PRIOR TO INSTALLATION OF METER A REQUEST FOR METER INSTALLATION MUST BE SUBMITTED, ALL SERVICE FEES PAID IN FULL AND THE WATER MAIN SHALL BE TESTED AND ACCEPTED BY THE CITY. ALLOW 1-2 WEEKS FOR METER INSTALLATION
5. PRIOR TO FINAL OCCUPANCY OF BUILDING BACKFILL MUST BE PLACED AROUND METER BOX, THE BOX SET TO FINISHED GRADE AND SURROUNDING LANDSCAPING INSTALLED. CALL PUBLIC WORKS AT (509) 427-5970 FOR FINAL INSPECTION PRIOR TO FINAL OCCUPANCY. ALLOW 48 HOURS FOR FINAL INSPECTION.
6. WATER SERVICES UP TO AND INCLUDING THE SETTER SHALL BE PRESSURE TESTED WITH THE MAIN.
7. LICENSED PLUMBER TO INSTALL OR REATTACH CUSTOMER SIDE PLUMBING.

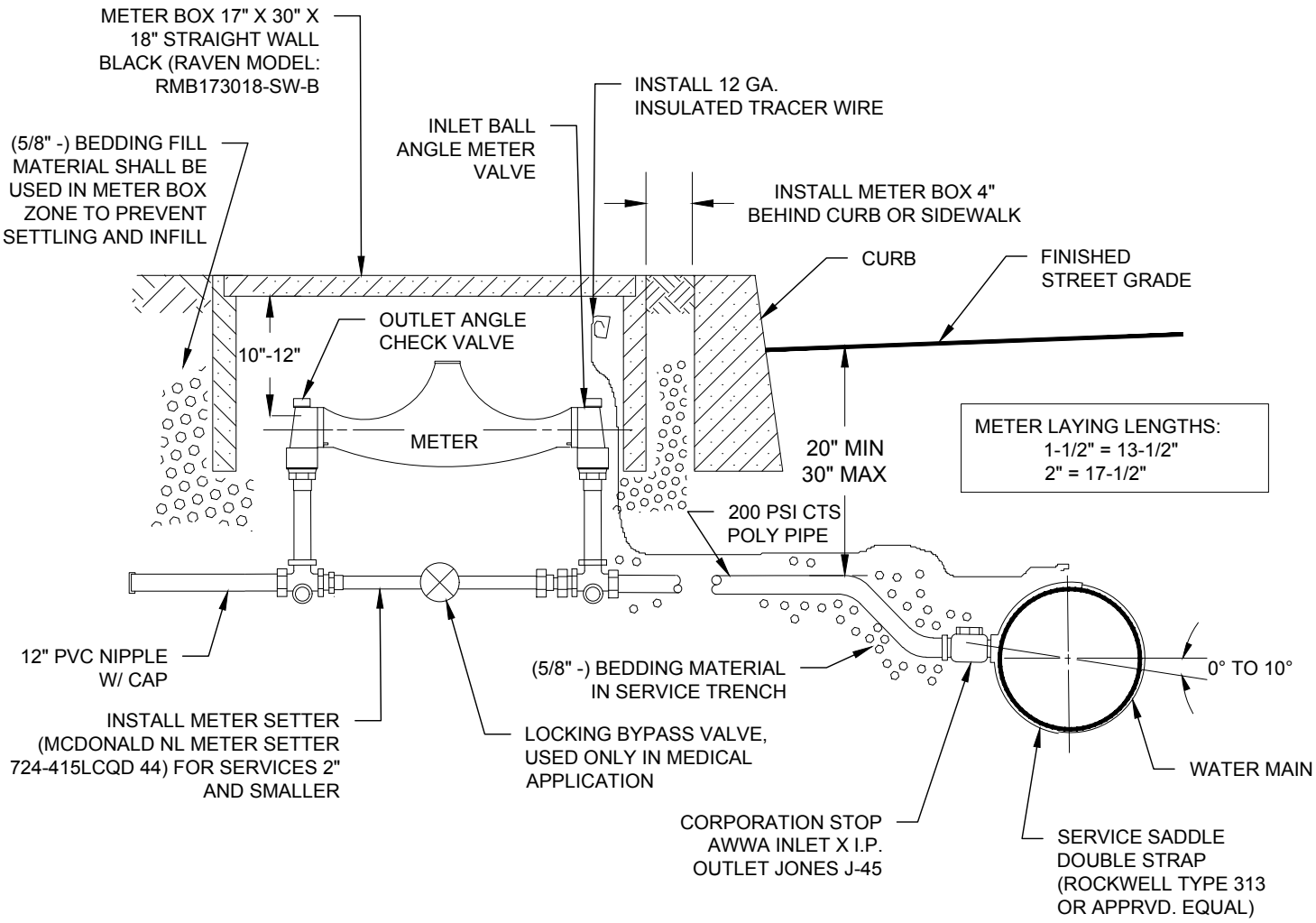
STEVENSON

1" WATER SERVICE

DRAWING NO. W02

DATE AUG '25 | SCALE NTS

APPROVED BY CR



NOTES

1. ALL METERS SHALL BE INSTALLED BY THE CITY OF STEVENSON.
2. PRIOR TO CITY INSTALLATION OF METERS, ALL SERVICE APPLICATIONS MUST BE COMPLETED AND APPROVED. SERVICE FEES PAID IN FULL AND AS-BUILTS SUBMITTED AND APPROVED.
3. CONTRACTOR SHALL CONTACT CITY PUBLIC WORKS OFFICE (509) 427-5970 48 HOURS PRIOR TO INSTALLING ANY WATER SERVICE CONNECTIONS.
4. METERS WILL NOT BE SET BY THE CITY PRIOR TO DISINFECTION OF THE MAIN AND SERVICE, AND PRIOR TO A SUCCESSFUL BACTERIOLOGICAL TEST.
5. WATER SERVICES SHALL BE PRESSURE TESTED ALONG THE MAIN.
6. DURING THE PRESSURE TEST, THE MAIN SHALL BE OPEN FOR INSPECTION OF ALL CORPORATION STOPS.
7. USE 1-7/8" BIT FOR ALL 2" SADDLE TAPS AND 1-3/8" BIT FOR 1-1/2" SADDLE TAPS.
8. USE PRO-TRACE CONNECTORS.
9. METER BOX NOT ALLOW IN HARD SURFACE AREAS.

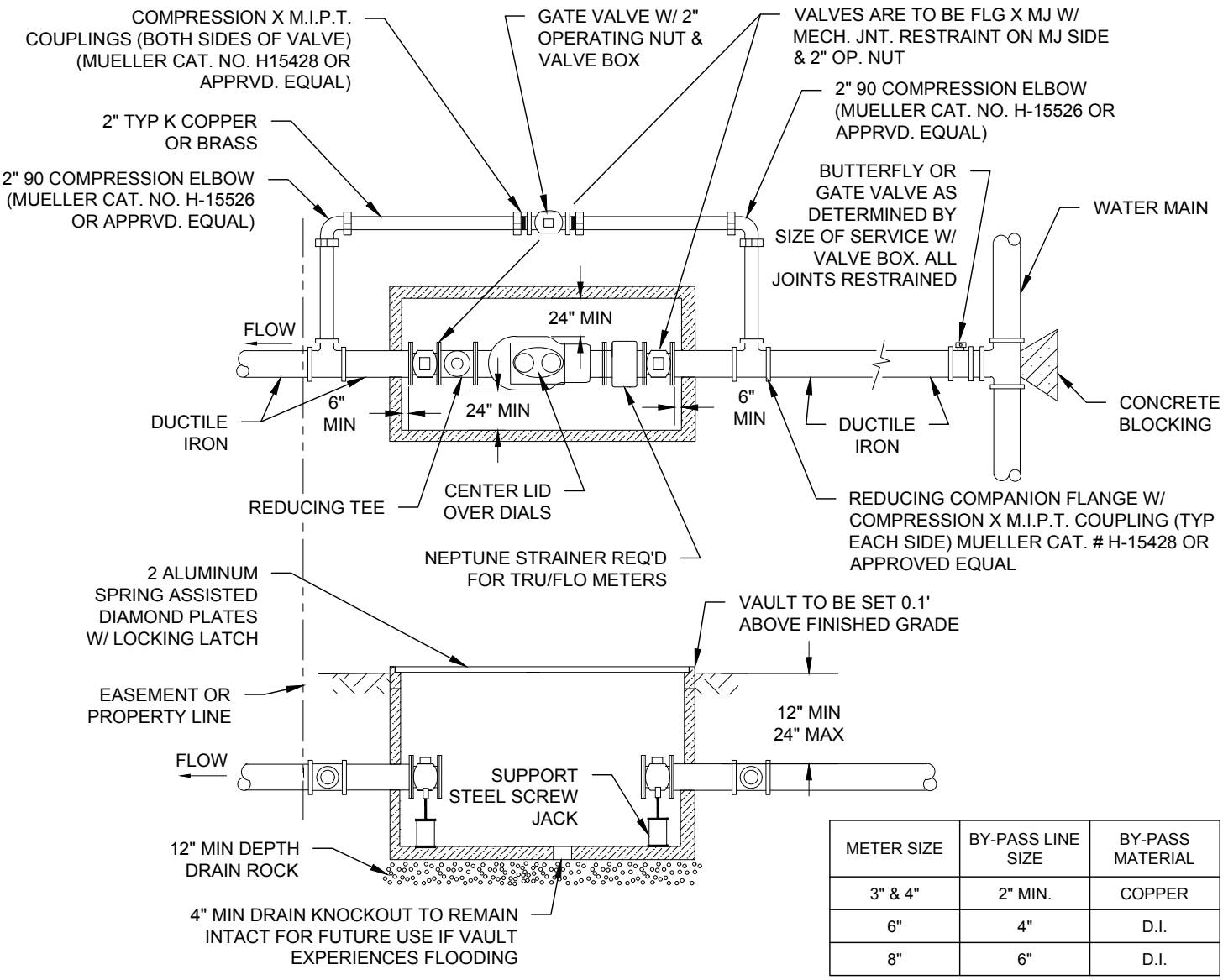
STEVENSON

1 1/2" - 2" WATER SERVICE

DRAWING NO. W03

DATE AUG '25 | SCALE NTS

APPROVED BY CR



METER SIZE	BY-PASS LINE SIZE	BY-PASS MATERIAL
3" & 4"	2" MIN.	COPPER
6"	4"	D.I.
8"	6"	D.I.

VAULT	
UTILITY VAULT CO.	#575-LA-3660P
UTILITY VAULT CO.	#676-WA-3660P
R.C.P VAULTS	#76632
R.C.P VAULTS	W/ #57-TL-B LID

VAULTS SHALL BE SIZED TO ALLOW FOR CLEARANCES

NOTES

1. TEN PIPE DIAMETERS OF STRAIGHT PIPE REQ'D. IN & OUT OF METER. (IF USING 6" PIPE, NO BENDS ALLOWED WITHIN 5' OF THE METER IN EITHER DIRECTION. IE: 6" x 10 = 60).
2. CONTRACTOR SHALL USE APPROPRIATE METHODS TO ENSURE COPPER PIPE, FITTINGS AND JOINTS WILL REMAIN LEAK-TIGHT.
3. ALL METERS 3" AND LARGER SHALL BE INSTALLED BY THE CONTRACTOR.
4. METER BOX IS NOT ALLOWED WITHOUT PRIOR APPROVAL.
5. VAULT LID DRAINS T0 BE PIPED TO CURB OR STORM SEWER.
6. VAULT TO BE SEALED AND WATER TIGHT.
7. METER TYPE TO BE APPROVED BY PUBLIC WORKS PRIOR TO INSTALLATION.

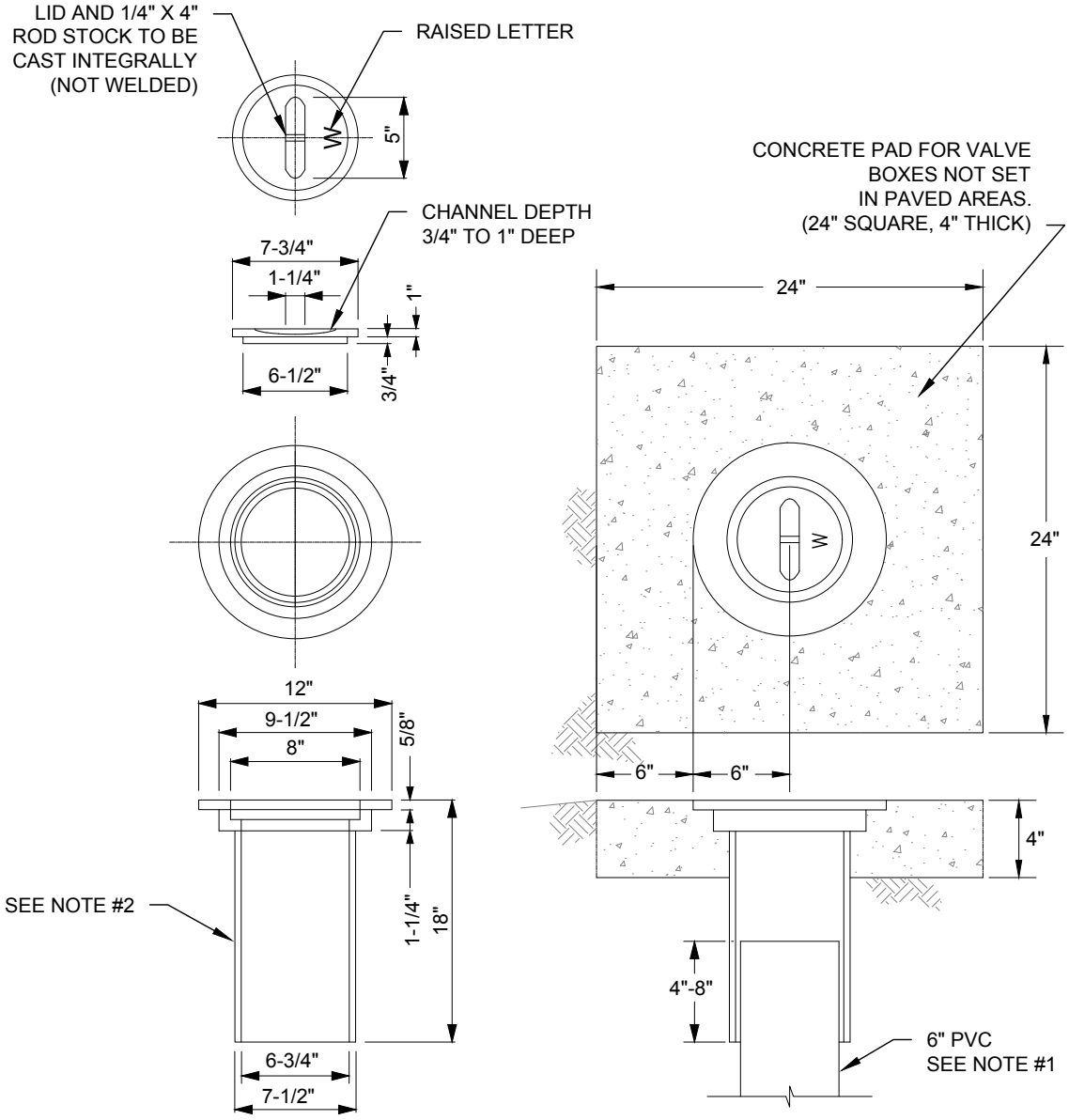
STEVENSON WATER DISTRICT

3" AND LARGER METER INSTALLATION

DRAWING NO. W04

DATE AUG '25 | SCALE NTS

APPROVED BY CR



NOTES:

1. EXTENSIONS SHALL BE 6" ASTM D 3034 SDR 35 PVC PIPE (ONE PIECE)

2. VALVE BOX SHALL BE U.S. FILTER/PACIFIC WATER WORKS NO. 910 OR EQUAL.

3. THE LID SHALL INCLUDE THE "W" IN THE DESIGN.

4. IF THE ORIGIN IS OTHER THAN USA, THE COUNTRY OF ORIGIN SHALL BE CAST ON THE UNDERSIDE OF THE LID

5. THERE SHALL BE 1/2" CLEARANCE UNDER THE PIN CAST INTO THE LID.

6. THE OPERATOR NUT SHALL HAVE A DEPTH FROM 18"-36" FROM FINISH GRADE TO THE OPERATOR NUT.

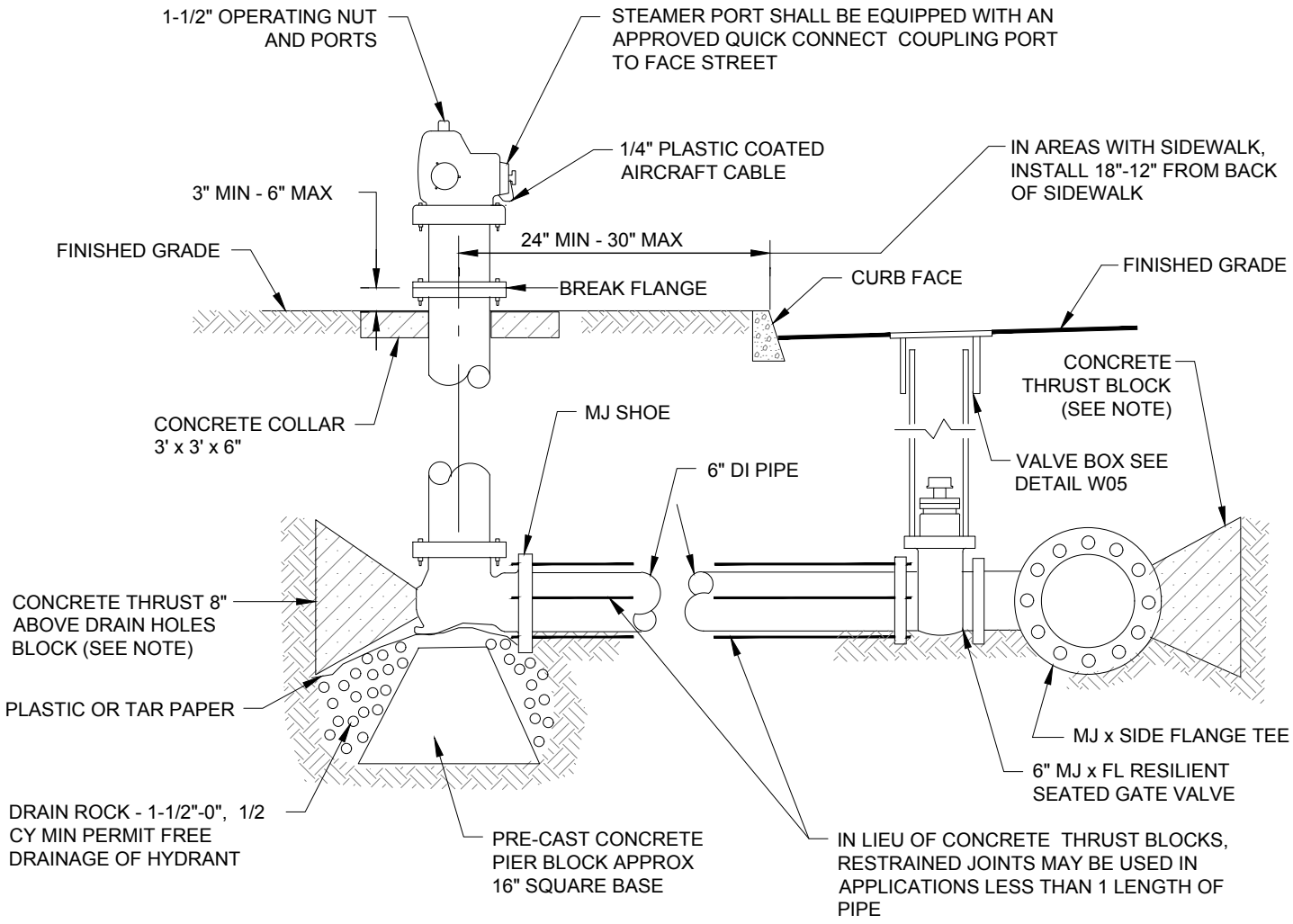
STEVENSON WATER DISTRICT

VALVE BOX & COVER

DRAWING NO. W05

DATE AUG '25 | SCALE NTS

APPROVED BY CR



APPROVED HYDRANTS
MEULLER SUPER CENTURION, A423
WITH A MAXIMUM WORKING
PRESSURE OF 200 PSIG

NOTES:

1. FIRE HYDRANT INSTALLATIONS SHALL BE INSPECTED PRIOR TO BACKFILLING.
2. FIRE HYDRANTS SHALL BE PAINTED (BRUSH APPLIED) AFTER INSTALLATION W/STANDARD AWWA, GLOSS B, YELLOW

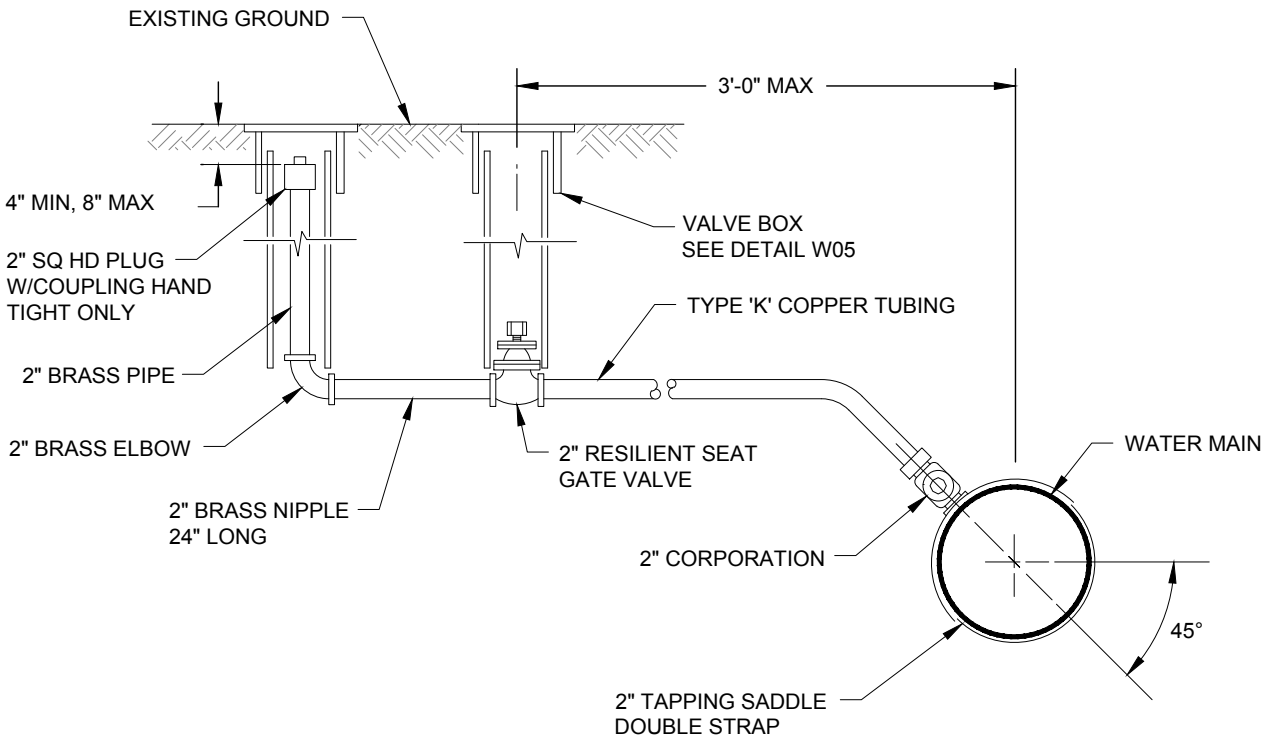
STEVENSON WATER DISTRICT

FIRE HYDRANT ASSEMBLY

DRAWING NO. W06

DATE AUG '25 | SCALE NTS

APPROVED BY CR



NOTE:

1. BLOW0FF SHALL BE INSTALLED 1'-0" FROM AN END OF A LINE.

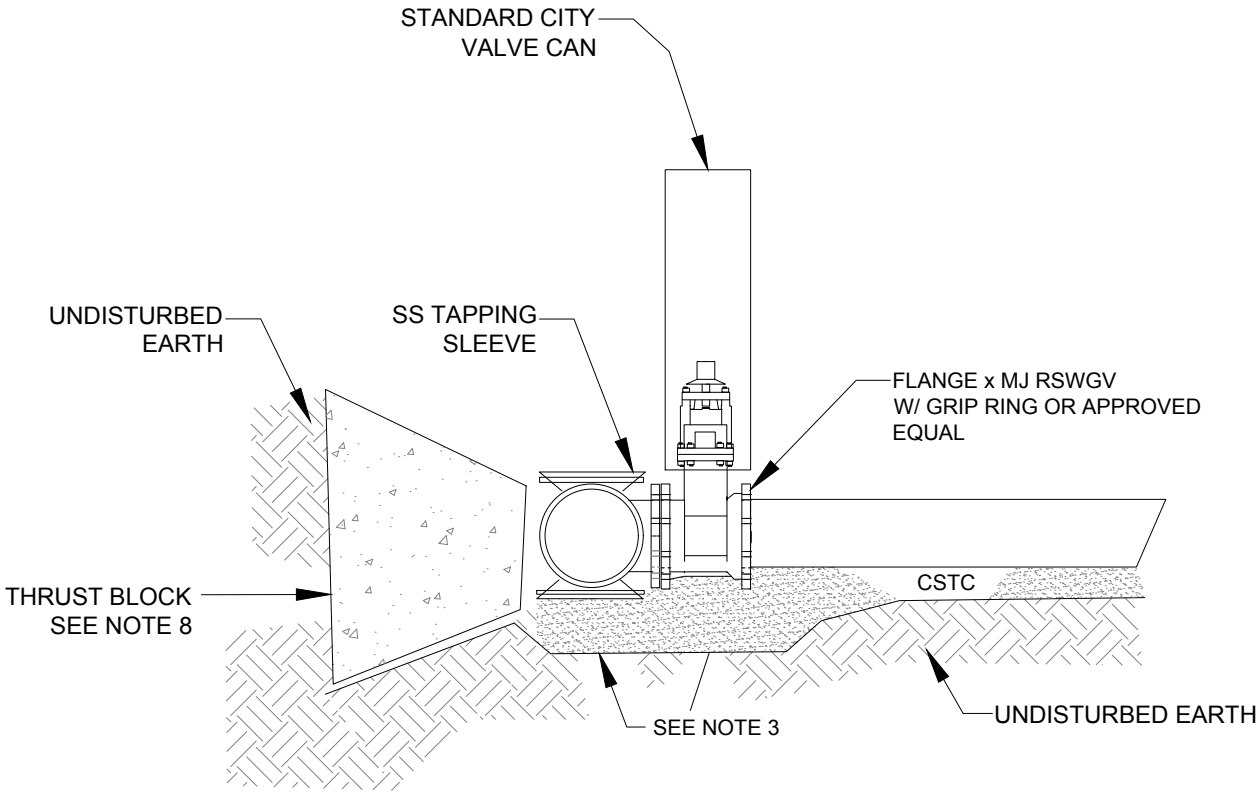
STEVENSON

BLOWOFF ASSEMBLY

DRAWING NO.	W07
DATE AUG '25	SCALE NTS
APPROVED BY	CR

NOTES:

1. TAPPING SLEEVE SHALL BE 304 STAINLESS STEEL W/ STAINLESS STEEL FLANGE. JCM OR EQUIVALENT.
2. ALL BOLTS SHALL BE 304 STAINLESS STEEL OR APPROVED EQUAL.
3. TAPPING SLEEVE AND VALVE SHALL BE SUPPORTED BY 6" MIN. CTSC OR AS DETERMINED BY THE INSPECTOR & COMPACTED TO 95%.
4. CITY MUST WITNESS AIR TEST AND BE PROVIDED W/ WITH TAPPING COUPON.
5. TAPPING SLEEVE EDGE SHALL BE A MIN. OF 18" FROM BELL OR SPIGOT END OF EXISTING PIPE, AND A MIN. OF 18" FROM ANY OTHER TAP OR FITTING.
6. CONTRACTOR SHALL SCHEDULE THE HOT TAP WITH THE CITY 48 HOURS (2 WORKING DAYS) IN ADVANCE.
7. SIZE ON SIZE TAPS ARE NOT PERMITTED.
8. ALL THRUST BLOCKS TO BE CLASS 4000 AND SAME SIZE AS REQUIRED FOR AN EQUAL SIZE TEE. SEE DETAIL W09.



STEVENSON WATER ENGINEERING

HOT TAP OF EXISTING WATER MAIN

DRAWING NO. W08

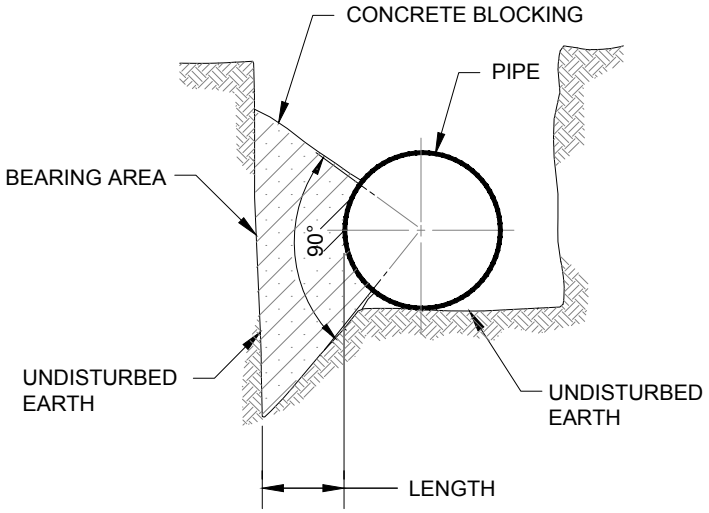
DATE AUG '25 | SCALE NTS

APPROVED BY CR

SOIL BEARING = 2000 LB/FT²				
PIPE SIZE	HORIZ. BENDS	BEARING AREA S.F.	VOL. OF BLOCKING C.F.	LENGTH OF BLOCKING
4"	TEE 90° 45° 22-1/2° 11-1/4°	2.3 3.2 1.7 0.9 -	0.8 1.4 0.5 0.2 -	0.86 1.06 0.73 0.46 -
6"	TEE 90° 45° 22-1/2° 11-1/4°	4.7 6.6 3.6 1.8 0.9	2.4 4.0 1.6 0.6 0.2	1.24 1.53 1.05 0.66 0.39
8"	TEE 90° 45° 22-1/2° 11-1/4°	8.0 11.4 6.2 3.1 1.6	5.4 9.0 3.6 1.3 0.5	1.63 2.00 1.37 0.87 0.51
10"	TEE 90° 45° 22-1/2° 11-1/4°	12.1 17.1 9.3 4.7 2.4	9.9 16.7 6.6 2.4 0.9	2.00 2.46 1.69 1.08 0.63
12"	TEE 90° 45° 22-1/2° 11-1/4°	17.1 24.2 13.1 6.7 3.4	16.7 28.0 11.2 4.1 1.5	2.37 2.93 2.01 1.28 0.74
16"	TEE 90° 45° 22-1/2° 11-1/4°	23.8 33.6 18.2 9.3 4.7	27.3 46.0 18.3 6.7 2.4	2.73 3.37 2.29 1.42 0.80
18"	TEE 90° 45° 22-1/2° 11-1/4°	29.9 42.2 22.9 11.7 5.9	38.5 64.7 25.8 9.4 3.3	3.05 3.79 2.57 1.60 0.90
20"	TEE 90° 45° 22-1/2° 11-1/4°	36.6 51.8 28.1 14.3 7.2	52.3 87.9 35.0 12.7 4.5	3.38 4.19 2.84 1.77 1.00
24"	TEE 90° 45° 22-1/2° 11-1/4°	52.3 74.0 40.0 20.4 10.3	89.1 149.8 59.7 21.7 7.7	4.03 5.00 3.55 2.11 1.18

NOTES:

1. ALL BLOCKING SHALL BE POURED AGAINST FIRM UNDISTURBED SOIL.
2. WHEN POURING AGAINST PLUGS AND BLIND FLANGES, SEE SPECIAL PROVISIONS.
3. LAYOUT TO BE APPROVED BY THE INSPECTOR PRIOR TO AND AFTER CONCRETE POUR.
4. ALL CONCRETE BLOCKING SHALL BE POURED IN PLACE WITHOUT DIRECT CONTACT TO THE PIPE OR FITTINGS. SOME PROTECTIVE MATERIAL SUCH AS TAR PAPER SHALL BE PLACED BETWEEN THE CONCRETE AND PIPE OR FITTING.
5. CONCRETE FOR ALL BLOCKING SHALL HAVE A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF 2,300 P.S.I.
6. CONCRETE BLOCKING FOR VERTICAL BENDS SHALL BE PER APWA STD. PLAN NO. 74.



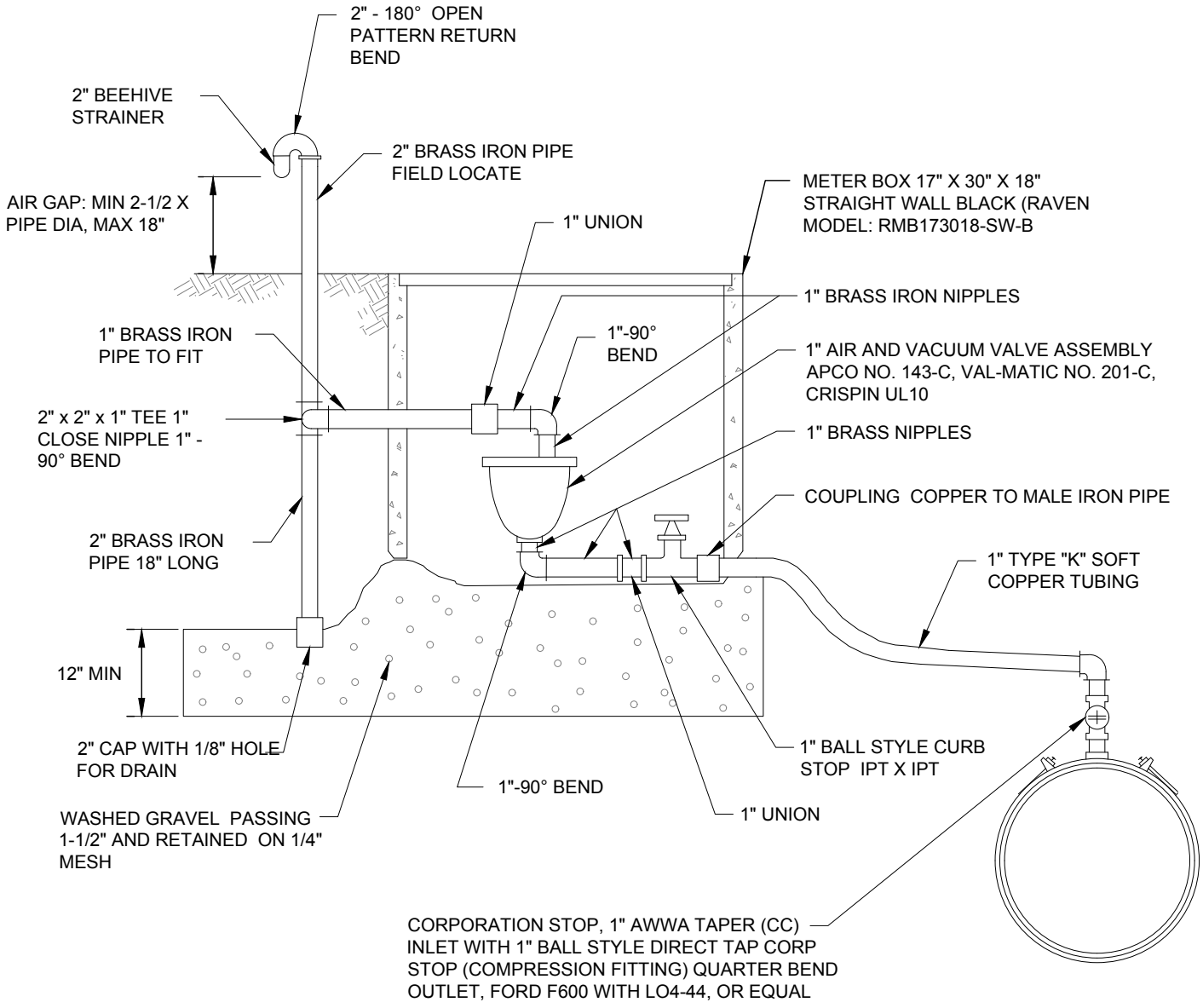
STEVENSON

THRUST BLOCK

DRAWING NO. W09

DATE AUG '25 | SCALE NTS

APPROVED BY CR



NOTES:

1. ALL FITTINGS TO BE BRASS OR COPPER FROM WATER MAIN TO 1" AIR & VACUUM ASSEMBLY.
2. AIR & VACUUM RELEASE VALVE ASSEMBLY MUST BE INSTALLED AT HIGHEST POINT OF LINE. IF HIGH POINT FALLS IN A LOCATION WHERE ASSEMBLY CANNOT BE INSTALLED, PROVIDE ADDITIONAL DEPTH OF LINE TO CREATE HIGH POINT AT A LOCATION WHERE ASSEMBLY CAN BE INSTALLED.

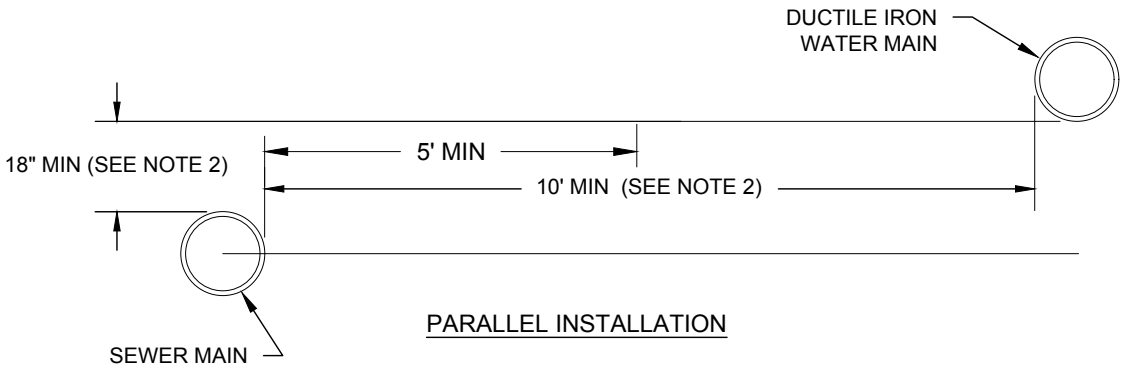
STEVENSON WATER DISTRICT

COMBINATION AIR RELEASE VALVE

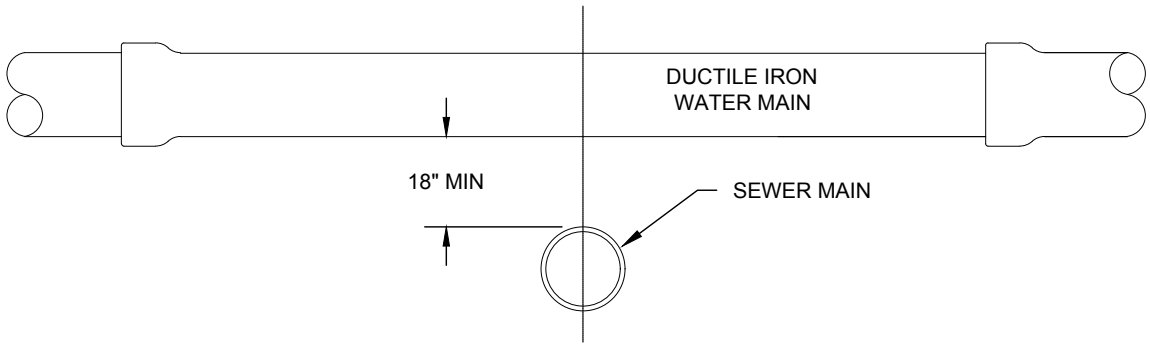
DRAWING NO. W10

DATE AUG '25 | SCALE NTS

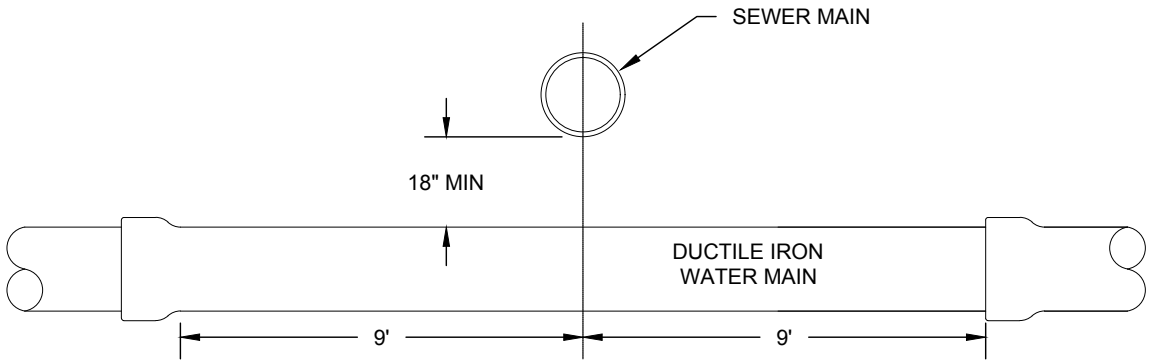
APPROVED BY CR



PARALLEL INSTALLATION



CROSSING WATER OVER SEWER



CROSSING WATER UNDER SEWER

NOTES:

1. EXCEPTIONS SHALL BE APPROVED BY THE CITY OF STEVENSON IN WRITING.

2. WHERE MINIMUM CLEARANCES CANNOT BE MET, THE SEWER MAIN SHALL BE PLACED IN SEPARATE TRENCHES AND CONSTRUCTED OF MATERIAL EQUIVALENT TO THE CITY OF STEVENSON WATER MAIN STANDARDS, INCLUDING PRESSURE TESTING. ADEQUATE RESTRAINT SHALL BE PROVIDED TO ALLOW TESTING TO OCCUR.

3. ALL SEWER CROSSINGS OVER OR UNDER WATER MAINS SHALL MAXIMIZE THE JOINT SEPARATION BY USING THE LONGEST STANDARD LENGTH PIPE AVAILABLE FROM THE MANUFACTURER FOR BOTH THE WATER AND SEWER MAINS. BOTH PIPES SHALL BE CENTERED AT THE POINT OF CROSSING.

4. ALL SEWER CROSSING OVER WATER MAINS SHALL BE CONSTRUCTED OF MATERIALS EQUIVALENT TO THE CITY OF STEVENSON WATER MAIN STANDARDS, INCLUDING PRESSURE TESTING.

STEVENSON
WASHINGTON

WATER AND SEWER SPACING

DRAWING NO. W11

DATE AUG '25 | SCALE NTS

APPROVED BY CR

GENERAL BACKFLOW NOTES

1. ALL BACKFLOW PREVENTION DEVICES SHALL BE WASHINGTON STATE APPROVED.

2. FIRE SPRINKLER AND IRRIGATION SYSTEMS SHALL BE ISOLATED WITH BACKFLOW PROTECTION.

3. COMMERCIAL, INDUSTRIAL AND MULTI-FAMILY DEVELOPMENTS SHALL BE ISOLATED WITH BACKFLOW PROTECTION. FURTHER BACKFLOW PREVENTION MAY BE REQUIRED DEPENDING ON WATER USAGE (I.E. BOILERS, CHILLERS, CHEMICAL ADDITION, BOOSTER PUMPS, WELLS, MEDICAL EQUIPMENT, SODA POP MACHINES, ETC).

4. BACKFLOW DEVICES SHALL BE PROTECTED FROM FREEZING.

5. HOSEBIBS SHALL BE PROTECTED WITH VACUUM BREAKERS.

6. IF CHEMICALS ARE ADDED TO THE FIRE PROTECTION SYSTEM, A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER IS REQUIRED.

7. AN APPROVED AIR GAP OR REDUCED PRESSURE BACKFLOW ASSEMBLY IS REQUIRED FOR SERVICE CONNECTIONS AND FIRE PROTECTION SYSTEMS ON A SITE WITH ACCESS TO AN UNAPPROVED AUXILIARY WATER SUPPLY CONNECTED TO A PIPING SYSTEM, WHETHER OR NOT AN INTERCONNECTION EXISTS BETWEEN THE UNAPPROVED AUXILIARY WATER SUPPLY AND CITY WATER SYSTEM.

8. DOUBLE CHECK ASSEMBLIES 2-1/2” AND LARGER SHALL BE INSTALLED IN AN APPROVED VAULT. SEE DETAIL W14 FOR VAULT REQUIREMENTS.

9. REDUCED PRESSURE ASSEMBLIES SHALL BE INSTALLED OUTSIDE ABOVE GROUND. SEE DETAILS W15 AND W16.

10. BACKFLOW PREVENTION ASSEMBLY VAULTS SHALL BE INSTALLED AT THE CUSTOMER'S SIDE OF THE EASEMENT OR PROPERTY LINE. SEE DETAIL W18. ALTERNATE LOCATIONS MAY BE APPROVED BY THE CITY OF STEVENSON IF REQUESTED IN WRITING PRIOR TO INSTALLATION.

11. IF A BACKFLOW PREVENTION ASSEMBLY IS INSTALLED IN A VAULT, ADEQUATE DRAINAGE SHALL BE PROVIDED. NO PART OF THE BACKFLOW PREVENTION ASSEMBLY SHALL BE SUBMERGED IN WATER OR INSTALLED IN A LOCATION SUBJECT TO FLOODING.

12. FIRE PROTECTION SERVICES FOR COMMERCIAL, INDUSTRIAL AND MULTI-FAMILY DEVELOPMENTS SHALL BE CONSTRUCTED TO CITY OF STEVENSON PUBLIC MAIN CONSTRUCTION STANDARDS UP TO THE BACKFLOW DEVICE AND SHALL HAVE A RESILIENT SEATED WEDGE GATE VALVE AT THE PUBLIC MAIN.

13. BACKFLOW PREVENTION DEVICES SHALL BE TESTED AFTER INSTALLATION AND PRIOR TO ACCEPTANCE, ALSO YEARLY THEREAFTER BY A CERTIFIED BACKFLOW ASSEMBLY TESTER. TEST RESULTS SHALL BE SENT TO THE CITY OF STEVENSON.

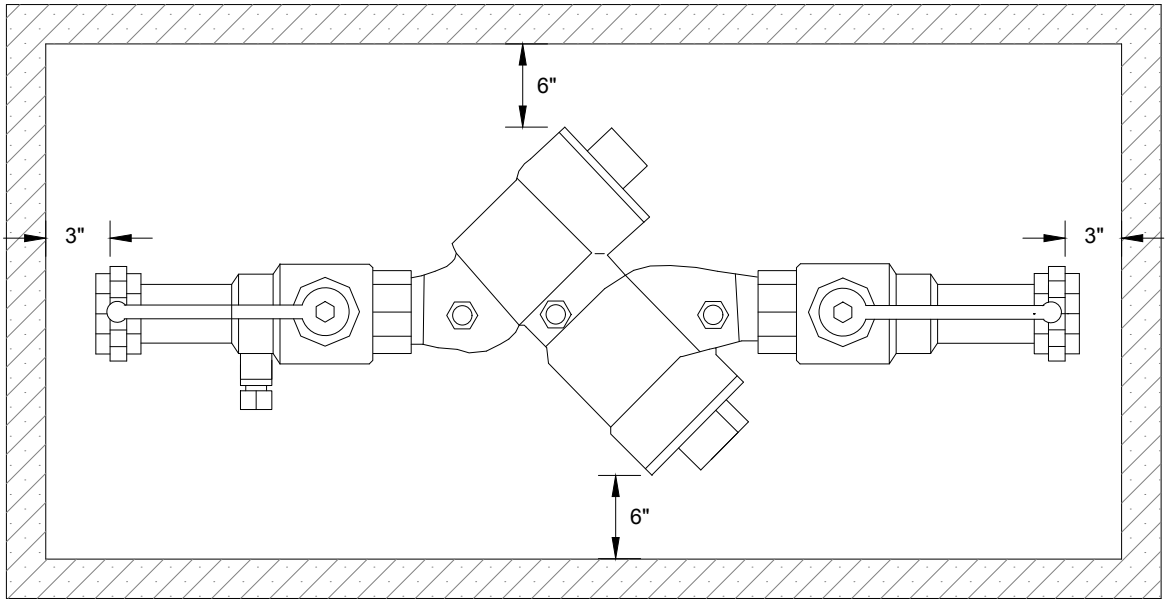
STEVENSON
WATER DEPARTMENT

GENERAL BACKFLOW NOTES

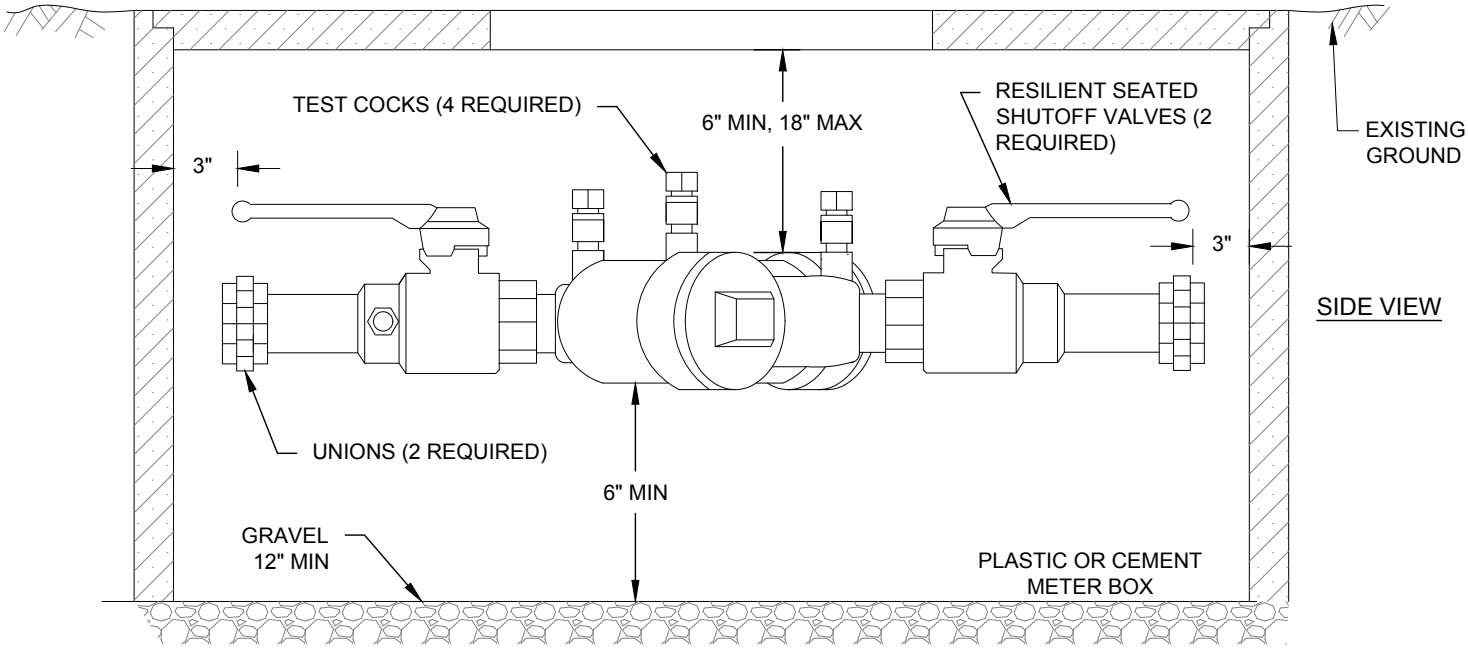
DRAWING NO. W12

DATE AUG '25 | SCALE NTS

APPROVED BY CR



TOP VIEW



SIDE VIEW

(BELOW GROUND INSTALLATION)

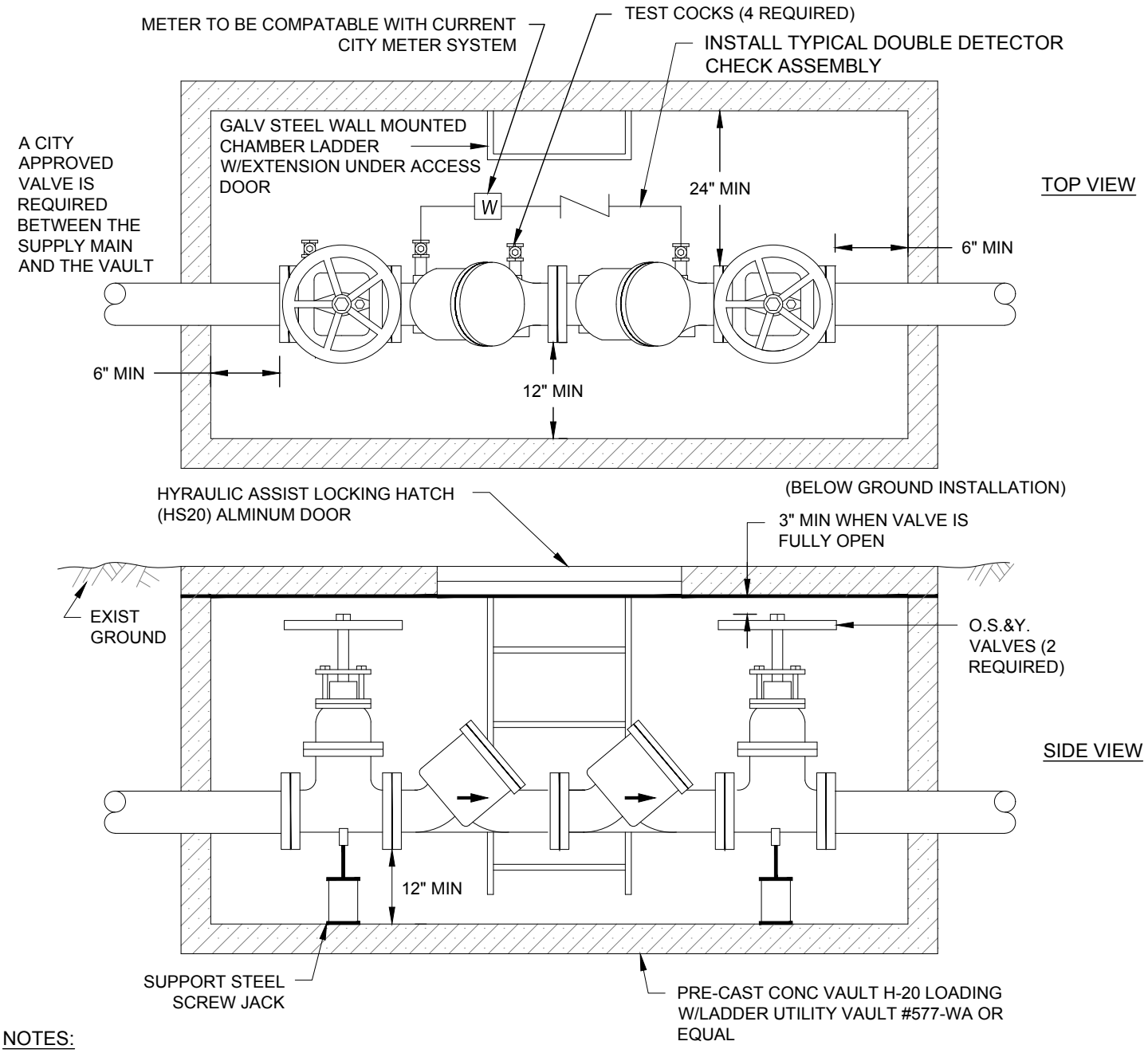
NOTES:

1. APPROVED DOUBLE CHECK VALVE ASSEMBLY TO LAY HORIZONTAL WITH GROUND. - DESIGNED FOR BACK SIPHONAGE AND BACK PRESSURE.
2. TEST COCKS TO EITHER FACE OUTWARDS OR UPWARDS FROM ASSEMBLY. - THOUROUGHLY FLUSH LINES PRIOR TO INSTALLATION OF BACKFLOW PREVENTER. INSTALL SO DATA PLATE & S/N ARE READABLE.
3. THE DCVA MAY BE INSTALLED ABOVE OR BELOW THE GROUND PROVIDED ALL CLEARANCES ARE MET - DO NOT INSTALL IN AN AREA SUBJECT TO FLOODING.
4. MUST BE PROTECTED FROM FREEZING CONDITIONS.
5. THE BACKFLOW ASSEMBLY SHALL BE A STATE APPROVED MODEL.
6. A PLUMBING PERMIT IS REQUIRED, PLEASE CONTACT YOUR LOCAL PLUMBING PERMIT CENTER.
7. MUST BE TESTED AFTER INSTALLATION AND YEARLY THEREAFTER BY A WASHINGTON STATE CERTIFIED BACKFLOW ASSEMBLY TESTER. TEST RESULTS SHALL BE SUBMITTED TO THE CITY UPON COMPLETION.

STEVENSON WASHINGTON

DOUBLE CHECK VALVE ASSEMBLY 2" AND SMALLER

DRAWING NO.	W13
DATE AUG '25	SCALE NTS
APPROVED BY	CR



NOTES:

1. APPROVED DOUBLE CHECK VALVE ASSEMBLY TO LAY HORIZONTAL WITH THE GROUND. DESIGNED FOR BACK SIPHONAGE AND BACK PRESSURE.
2. THE WATER LINE SHALL BE DISINFECTED, FLUSHED, AND PRESSURE TESTED PRIOR TO INSTALLING THE BACKFLOW ASSEMBLY. THE BACKFLOW ASSEMBLY SHALL BE PROTECTED FROM FREEZING AND FLOODING.
3. THE DCVA MAY BE INSTALLED ABOVE OR BELOW GROUND PROVIDED ALL CLEARANCES ARE MET.
4. ALL PIPE, VALVE, AND FITTING JOINTS, FROM THE SUPPLY MAIN, SHALL BE FLANGED AND RESTRAINED.
5. FIRE DEPT. CONNECTION SHALL NOT EXIT THROUGH THE TOP OF THE VAULT.
6. LINK SEAL PIPE ENTRANCE/EXIT.
7. ALL VAULTS SHALL BE PRE-APPROVED PRIOR TO INSALLATION.
8. VAULTS SHALL BE INSTALLED AT PROPERTY LINE OR EASEMENT LINE AND ON OWNERS PROPERTY.
9. VAULTS SHALL HAVE A MINIMUM OF 3' CLEARANCE FROM ALL STRUCTURES.
10. THE BACKFLOW ASSEMBLY SHALL BE TESTED AFTER INSTALLATION AND PRIOR TO ACCEPTANCE AND ALSO YEARLY THEREAFTER BY A WASH. STATE CERTIFIED BACKFLOW ASSEMBLY TESTER. TEST RESULTS SHALL BE SUBMITTED TO THE CITY UPON COMPLETION.

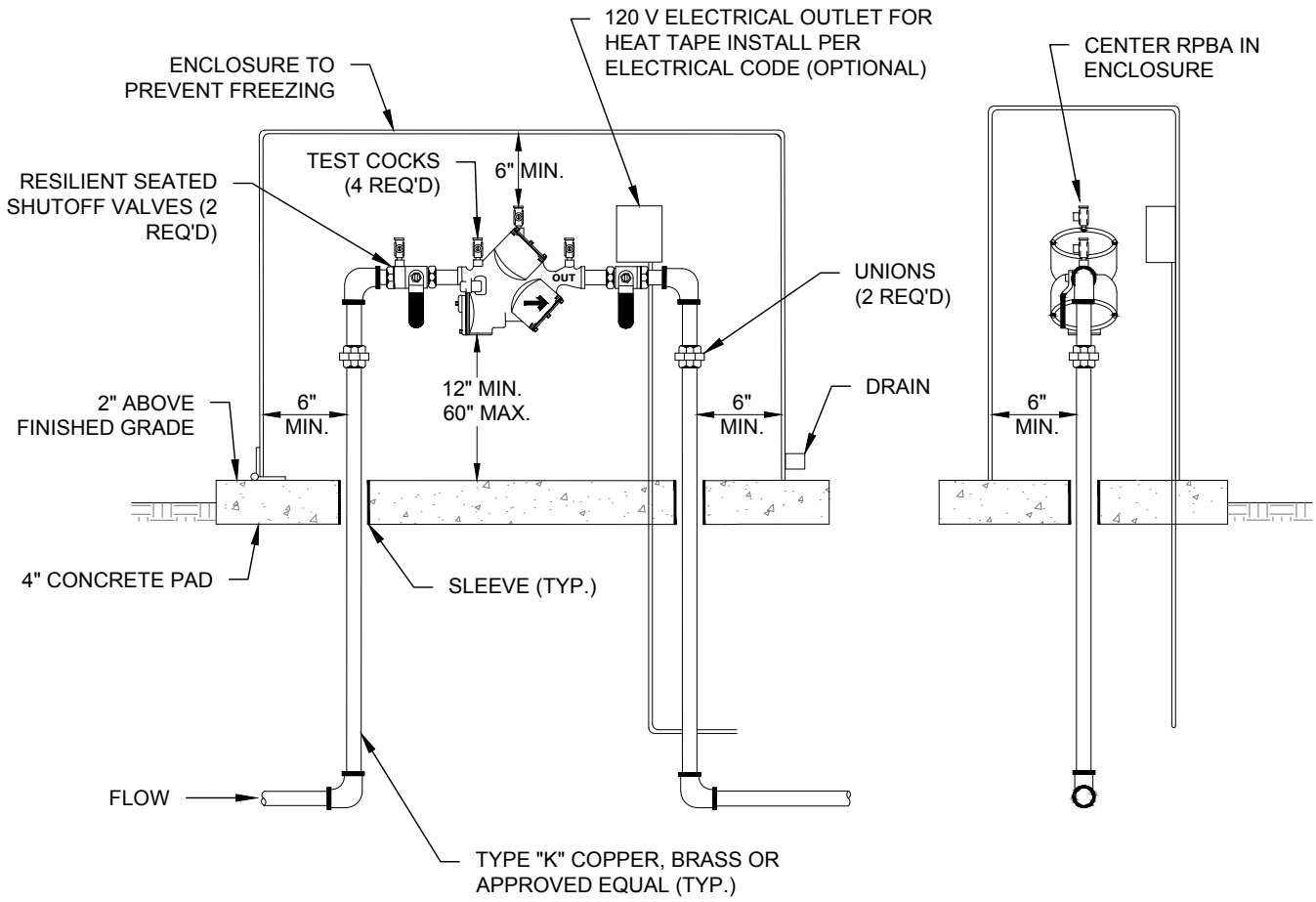
STEVENSON WATER DISTRICT

DOUBLE CHECK VALVE ASSEMBLY 2 1/2" & LARGER

DRAWING NO. W14

DATE AUG '25 | SCALE NTS

APPROVED BY CR



NOTES:

1. APPROVED REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA) TO LAY HORIZONTAL WITH GROUND. (VERTICAL ALLOWED IF APPROVED BY WA. DEPT. OF HEALTH)
2. DESIGN RPBA FOR BACK SIPHONAGE AND BACK PRESSURE.
3. THOROUGHLY FLUSH LINES PRIOR TO INSTALLATION OF BACKFLOW PREVENTER.
4. DO NOT INSTALL IN AN AREA SUBJECT TO FLOODING.
5. RPBA MUST BE ACCESSIBLE.
6. PROTECT RPBA FROM FREEZING.
7. A PLUMBING PERMIT IS REQUIRED-CONTACT THE APPROPRIATE JURISDICTION'S PERMITS COUNTER
8. RPBA MUST BE TESTED AFTER INSTALLATION, THEN ANNUALLY BY A WA. STATE CERTIFIED BACKFLOW TESTER. TEST RESULTS SHALL BE SUBMITTED TO THE CITY UPON COMPLETION.
9. RPBA SHALL BE APPROVED BY THE STATE OF WASHINGTON.
10. DRAIN SHALL BE SIZED PER THE AWWA CROSS CONNECTION CONTROL MANUAL
11. RPBA MUST BE RETESTED IF MOVED OR REPAIRED
12. AS OF JANUARY 4, 2014 ALL NEWLY INSTALLED FITTINGS IN CONTACT WITH WATER SHALL BE IN COMPLIANCE WITH THE REVISED SECTION 1417 OF THE EPA SAFE WATER DRINKING ACT AND CERTIFIED LEAD FREE USING NSF 372 STANDARDS.

(ABOVE GROUND INSTALLATION ONLY)

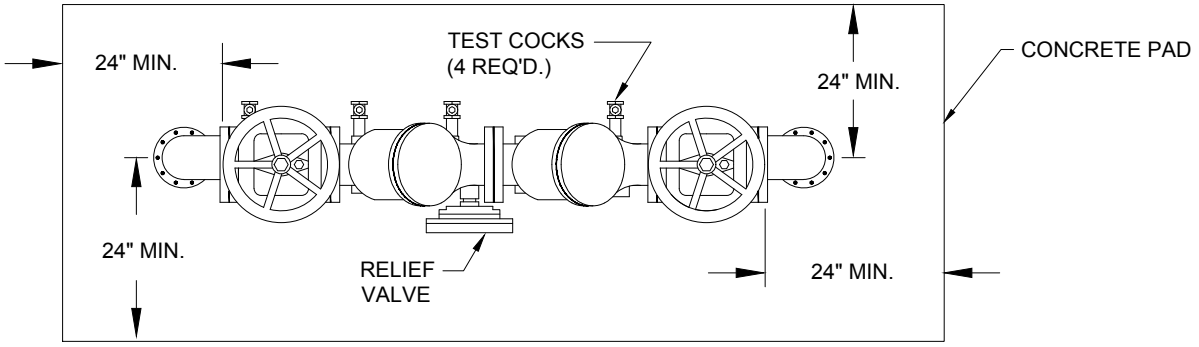
STEVENSON WATER & SEWER DISTRICT

RPBA FOR DOMESTIC AND IRRIGATION - 2" AND SMALLER

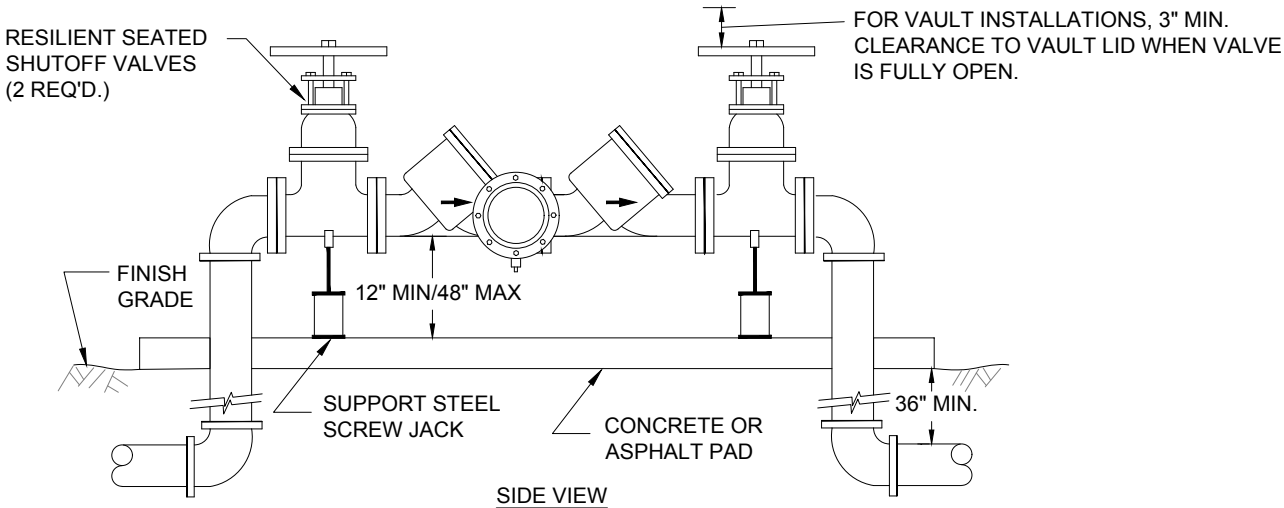
DRAWING NO. W15

DATE AUG '25 | SCALE NTS

APPROVED BY CR



TOP VIEW



SIDE VIEW

NOTE:
A CITY APPROVED VALVE IS REQ'D. BETWEEN THE SUPPLY MAIN AND THE R.P.B.A.

NOTE:
PROVIDE HEAT AND/OR INSULATION

NOTES:

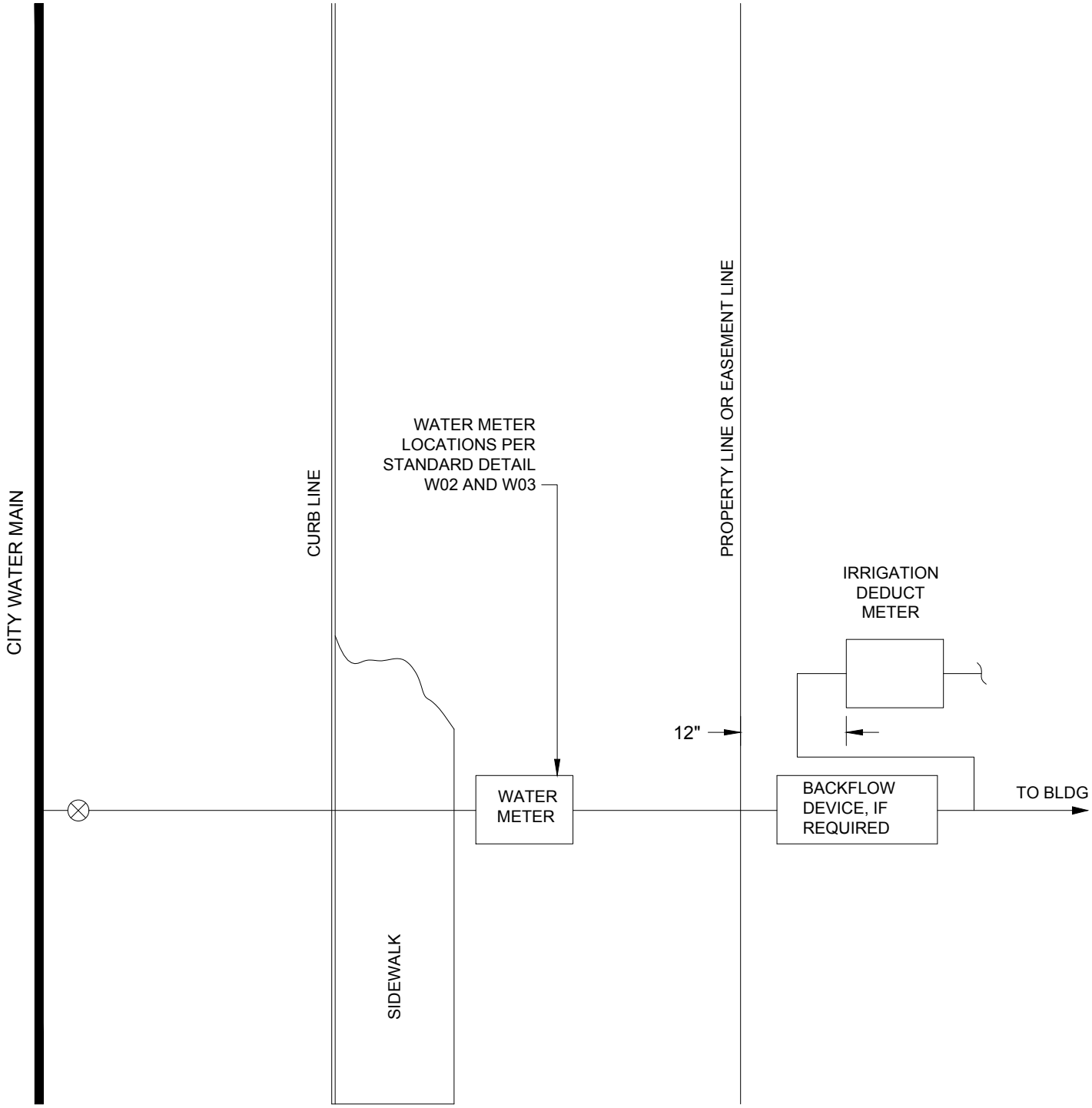
1. APPROVED REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA) TO LAY HORIZONTAL ONLY. (VERTICAL IF APPROVED BY DEPT. OF HEALTH)
2. DESIGNED FOR BACK SIPHONAGE AND BACK PRESSURE.
3. THE WATER LINE SHALL BE DISINFECTED, FLUSHED AND PRESSURE TESTED PRIOR TO INSTALLING THE RPBA. THE RPBA SHALL BE PROTECTED FROM FREEZING AND FLOODING.
4. ALL UNDERGROUND PIPE, VALVES AND FITTING JOINTS SHALL BE RESTRAINED FROM THE SUPPLY MAIN. ALL ABOVE GROUND JOINTS SHALL BE FLANGED.
5. GROUT PIPE ENTRANCE AND EXIT IN VAULT, WITH WATERTIGHT GROUT.
6. ALL ENCLOSURES SHALL BE PRE-APPROVED PRIOR TO INSTALLATION.
7. RPBA SHALL BE INSTALLED AT PROPERTY LINE OR EASEMENT LINE AND ON OWNER'S PROPERTY.
8. ADEQUATE GRAVITY DRAINAGE SYSTEM REQUIRED WITH APPROVED AIR GAP.
9. MINIMUM 24" CLEARANCE ON ALL SIDES AROUND RPBA.
10. RPBA MUST BE TESTED AFTER INSTALLATION, THEN ANNUALLY BY A WA. STATE CERTIFIED BACKFLOW TESTER. TEST RESULTS SHALL BE SUBMITTED TO THE CITY UPON COMPLETION.
11. HEAT AND/OR INSULATION SHALL BE PROVIDED TO PREVENT FREEZING

(ABOVE GROUND INSTALLATIONS ONLY)

STEVENSON

REDUCED PRESSURE PRINCIPLE BACKFLOW ASSEMBLY 2 1/2" & LARGER

DRAWING NO.	W16
DATE AUG '25	SCALE NTS
APPROVED BY	CR



NOTES:

1. THE CITY DOES NOT READ DEDUCT METERS
2. SEE STANDARD BACKFLOW NOTES DETAIL W12.

STEVENSON WASHINGTON

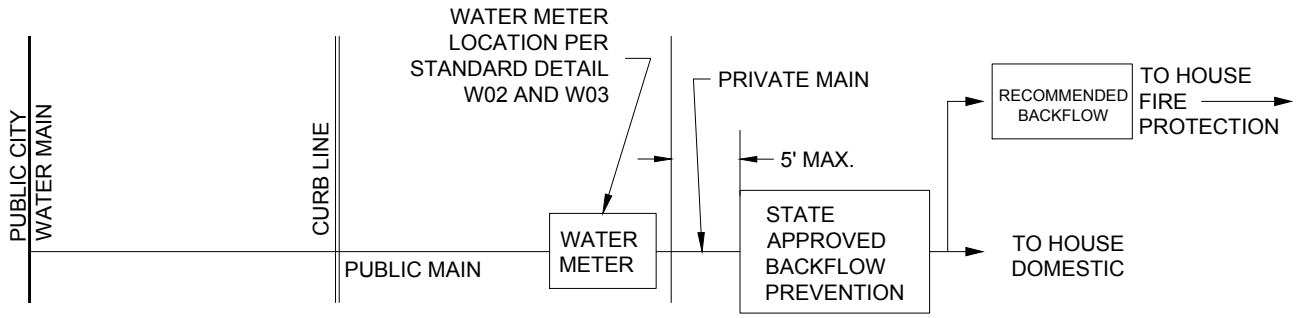
STANDARD DEDUCT METER & BACKFLOW LOCATION

DRAWING NO. W17

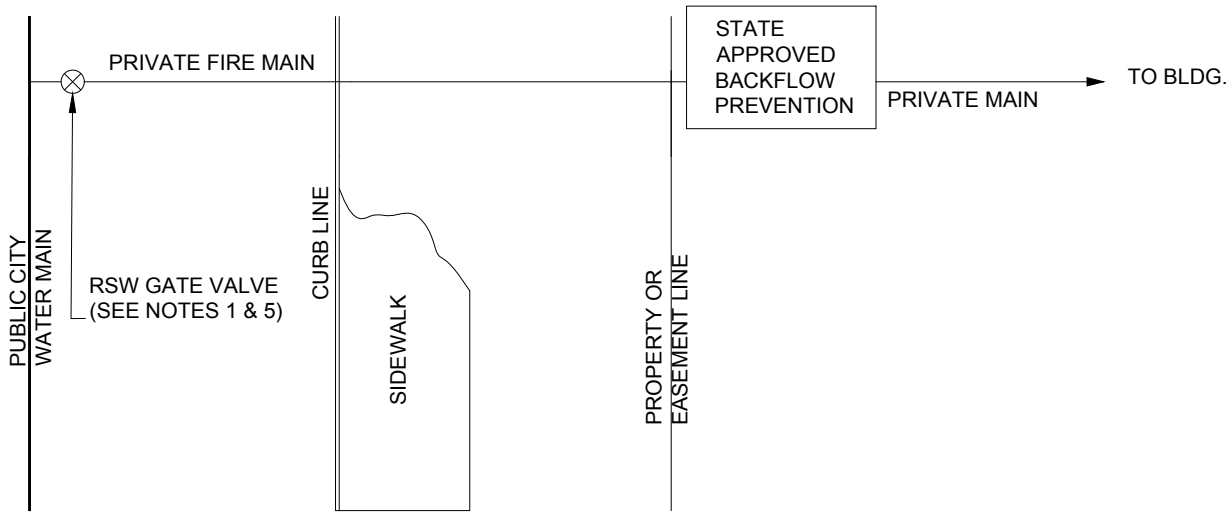
DATE AUG '25 | SCALE NTS

APPROVED BY CR

SINGLE FAMILY FIRE PREVENTION INSTALLATION



COMMERCIAL/MULTI-FAMILY BACKFLOW PREVENTION INSTALLATION



NOTES:

1. ALL STAND ALONE FIRE PROTECTION SERVICES (F.P.S.) SHALL HAVE A 4" OR LARGER IRON BODY GATE VALVE. VALVES SHALL BE LOCATED AT THE CONNECTION TO THE WATER MAIN.
2. FIRE PROTECTION SERVICES 2" AND SMALLER SHALL BE TYPE "K" COPPER AND F.P.S. LARGER THAN 2" SHALL BE 4" OR LARGER DUCTILE IRON PIPE.
3. ALL BACKFLOW DEVICES SHALL BE PER APPROVED PLAN.
4. ALL COMMERCIAL FIRE PROTECTION SERVICES SHALL BE PRIVATELY OWNED AND MAINTAINED DOWNSTREAM OF THE ROW OR EASEMENT.
5. REQUESTS FOR EXCEPTIONS TO THESE REQUIREMENTS SHALL BE SUBMITTED IN WRITING TO THE CITY OF STEVENSON WITH THE PLAN REVIEW.
6. ALL BACKFLOW DEVICES ARE PRIVATELY OWNED, TESTED AND MAINTAINED.
7. SINGLE FAMILY WATER METERS SHALL BE SIZED TO MEET THE REQUIRED FIRE FLOW, AS APPLICABLE.
8. ALL FIRE PROTECTION SERVICES, EXCEPT SINGLE FAMILY APPLICATIONS, SHALL BE TAPPED SEPARATELY FROM ALL DOMESTIC SERVICES AND FIRE HYDRANT LEADS.

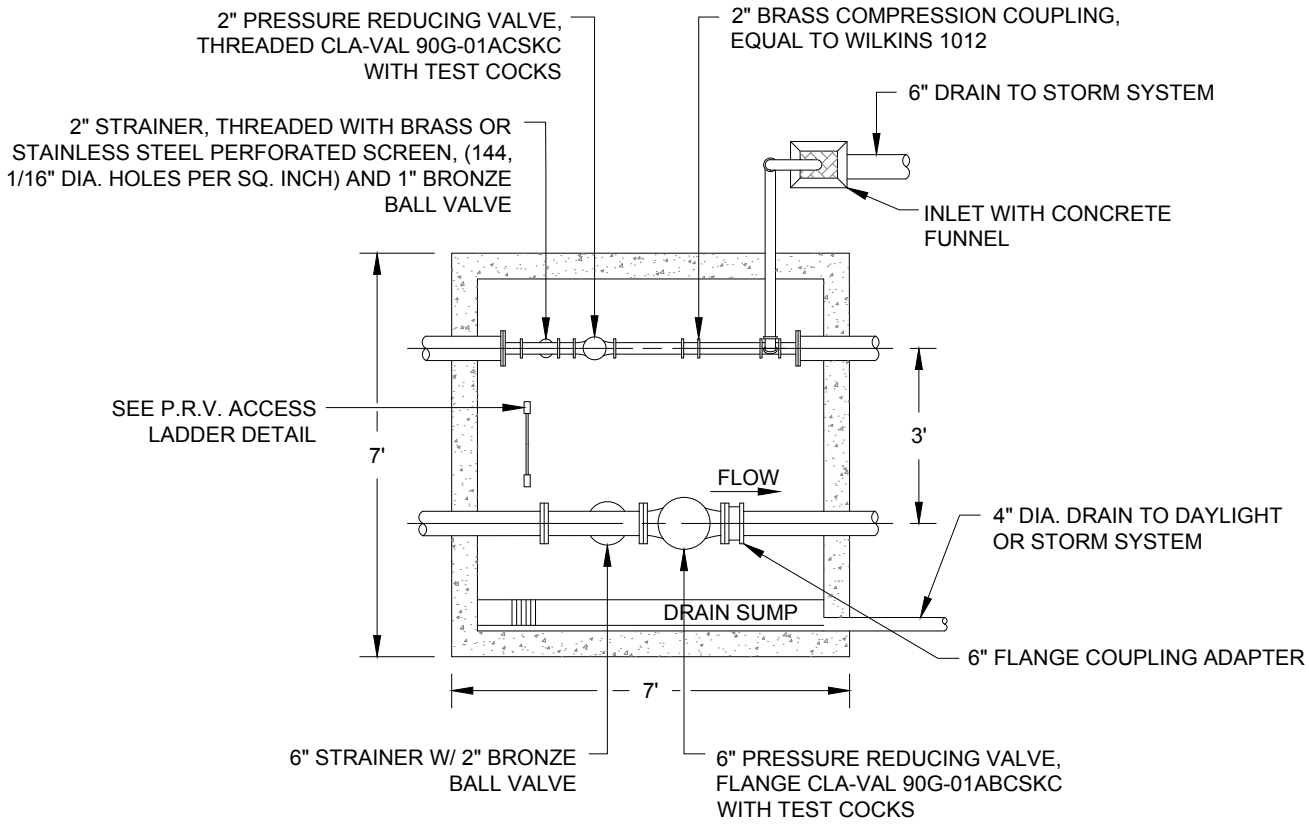
STEVENSON
WASHINGTON

FIRE PROTECTION BACKFLOW LOCATION

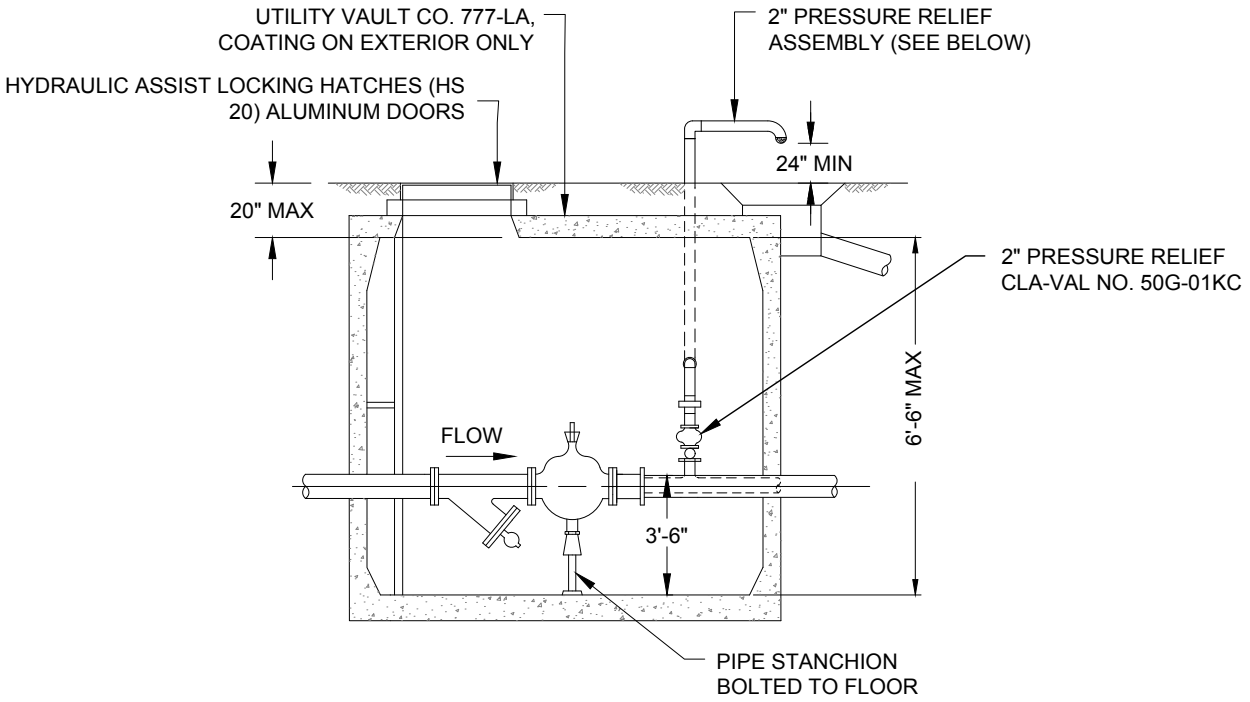
DRAWING NO. W18

DATE AUG '25 | SCALE NTS

APPROVED BY CR



PLAN



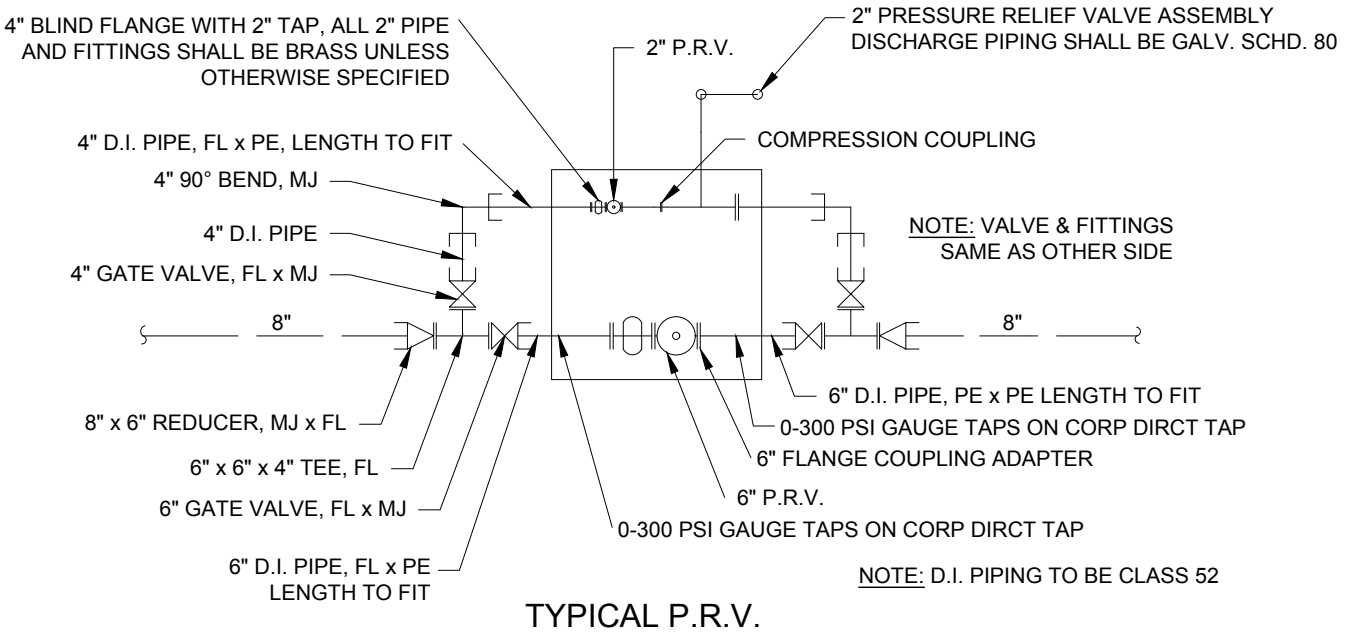
PROFILE

STANDARD PRESSURE REDUCING STATION

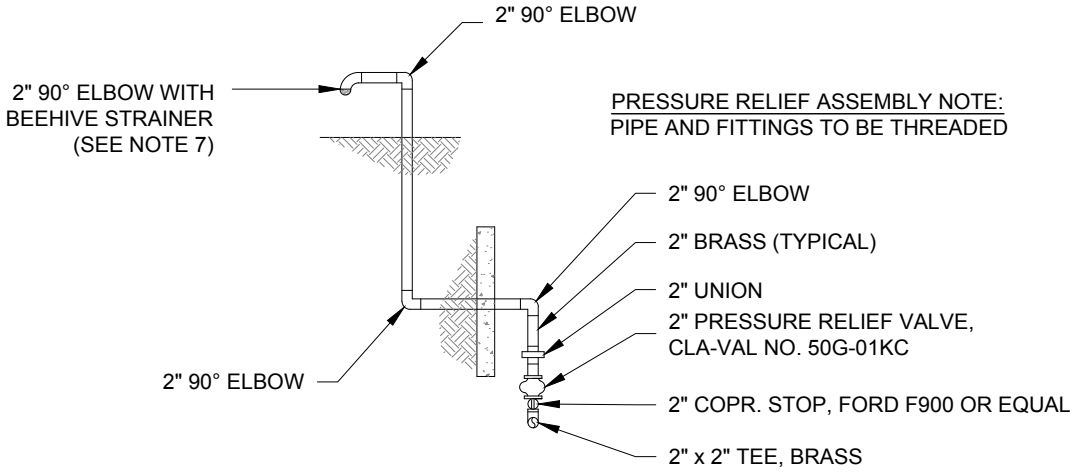
DRAWING NO. W19A

DATE AUG '25 | SCALE NTS

APPROVED BY CR



TYPICAL P.R.V.



2" PRESSURE RELIEF ASSEMBLY

NOTES

1. SIZING OF VALVES WILL BE MODIFIED FOR OTHER SIZES OF PIPE.
2. GALVANIZED LADDER TO BE SECURED TO VAULT PER STD. DTL.
3. ALL P.R.V.'s SHALL HAVE OPENING/CLOSING SPEED CONTROLS, EPOXY COATED BODY AND VALVE POSITION INDICATOR, CLA-VAL X101.
4. PILOT CONTROLS SHALL BE ON SIDE OF P.R.V. FACING INTERIOR OF VAULT TO PROVIDE EASY ACCESS.
5. ALL 90G MODEL CLA-VAL P.R.V.'s 3" AND SMALLER SHALL BE EQUIPPED WITH STAINLESS STEEL TRIM (SEAT, STEM, & COVER BEARING).
6. SEAL ALL PIPE PENETRATIONS THROUGH VAULT WITH LINK SEAL.
7. PRESSURE RELIEF DISCHARGE DOWNSPOUT SHALL DIRECT WATER TOWARDS CENTER OF INLET GRATE.

STEVENSON WATER DISTRICT

STANDARD PRESSURE REDUCING STATION - MECH. DTLS.

DRAWING NO. W19B

DATE AUG '25 | SCALE NTS

APPROVED BY CR

SINGLE-FAMILY CONSTRUCTION GENERAL NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROCURE ALL APPLICABLE PERMITS, LICENSES, AND CERTIFICATES RELATIVE TO THE TRADES TO COMLETE THE PROJECT AND FOR THE USE OF SUCH WORK WHEN COMPLETED. THE CONTRACTOR SHALL COMPLY WITH THE PROVISIONS OF ALL PERMITS ISSUED AND EASEMENTS GRANTED. COMPLIANCE SHALL BE AT ALL LEVELS, FEDERAL, STATE, COUNTY, AND CITY, RELATING TO THE PERFORMANCE OF THE WORK.

2. THE CONTRACTOR SHALL VERIFY THAT ALL NECESSARY OFF-SITE UTILITY EASEMENTS HAVE BEEN OBTAINED PRIOR TO THE COMMENCEMENT OF THE OFF-SITE CONSTRUCTION.

3. THE CITY MAY TEMPORARILY SUSPEND THE WORK OR REQUIRE ADDITIONAL PROTECTION MEASURES IF IT APPEARS, BASED UPON OBSERVED CONDITIONS OF THE PROJECT, THAT THE APPROVED PLAN IS INSUFFICIENT TO PREVENT ENVIRONMENTAL HARM, AND THAT SUCH SUSPENSION OR ADDITIONAL MEASURES WILL PREVENT OR MINIMIZE SUCH HARM.

4. CONSTRUCTION NOISE SHALL BE LIMITED IN ACCORDANCE WITH THE CITY OF STEVENSON NOISE CONTROL ORDINANCE 8.08; NORMALLY, THIS IS 7 A.M. TO 10 P.M., SEVEN DAYS A WEEK.

5. THE CONTRACTOR IS RESPONSIBLE FOR OBSERVING THE SAFETY OF THE WORK AND OF ALL PERSONS AND PROPERTY COMING INTO CONTACT WITH THE WORK. THE CONTRACTOR SHALL CONDUCT HIS WORK IN SUCH A MANNER AS TO COMPLY WITH ALL THE REQUIREMENTS PRESCRIBED BY OSHA/WSHA. THE CITY PROJECT INSPECTOR'S ROLE IS NOT ONE OF SUPERVISION OR SAFETY MANAGEMENT, BUT IS ONE OF OBSERVATION ONLY. NOTHING HEREIN SHALL BE INTERPRETED TO OBLIGATE THE CITY TO ACT IN ANY SITUATION, NOR SHIFT THE OWNER'S RESPONSIBILITY FOR SAFETY COMPLIANCE TO THE CITY. NO RESPONSIBILITY FOR THE SAFETY OF THE WORK OR FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES SHALL ATTACH TO THE CITY BY VIRTUE OF ITS ACTION OR INACTION UNDER THIS SECTION.

6. IF ANY WELLS OR SEPTIC TANKS EXIST ON-SITE, THEY SHALL BE ABANDONED IN ACCORDANCE WITH THE APPLICABLE CODES AND REQUIREMENTS. WRITTEN VERIFICATION OF ABANDONMENT SHALL BE PROVIDED TO THE SKAMANIA COUNTY HEALTH DEPARTMENT, WASHINGTON DEPARTMENT OF ECOLOGY, AND THE CITY OF STEVENSON.

7. IF ANY CULTURAL RESOURCES AND/OR HUMAN REMAINS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION IN OLYMPIA AND CITY OF STEVENSON COMMUNITY DEVELOPMENT. FAILURE TO COMPLY WITH THESE STATE REQUIREMENTS MAY CONSTITUTE A CLASS C FELONY, SUBJECT TO IMPRISONMENT AND/OR FINES.

8. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION WITHIN CITY RIGHT-OF-WAY. INSIDE THE CITY THIS PLAN SHALL BE APPROVED BY THE CITY OF STEVENSON PUBLIC WORKS DEPARTMENT (509) 427-5970. OUTSIDE THE CITY THE PLAN SHALL BE APPROVED BY SKAMANIA COUNTY OR WSDOT AS APPLICABLE. APPROVAL SHALL BE OBTAINED A MINIMUM OF TWO (2) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION. ROAD CLOSURE REQUESTS SHALL BE SUBMITTED A MINIMUM OF TWO (2) WEEKS BEFORE BEGINNING CONSTRUCTION.

9. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL FIELD VERIFY THE LOCATIONS, INCLUDING THE INVERT AND TOP OF PIPE ELEVATIONS AT CROSSING LOCATIONS. THE CONTRACTOR SHALL DIG TEST HOLES OVER ALL EXISTING UTILITIES TO DETERMINE THEIR EXACT LOCATION. CALL 1-800-424-5555 FOR UTILITIES LOCATE A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

10. ROOF DOWN SPOUTS SHALL NOT DRAIN ONTO ANY PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE CITY OF STEVENSON ENGINEERING STANDARDS.

11. MAINTAIN A MINIMUM OF 5' HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN ALL EXISTING AND PROPOSED WATER AND SEWER SERVICE LINES.

12. WATER SERVICES FOR METERS SIZED ¾” TO 2” WILL BE PROVIDED AND SET BY THE CITY. PRIOR TO INSTALLATION OF THE WATER SERVICES, A REPRODUCIBLE COPY OF THE PLAT MAP SHALL BE PROVIDED INDICATING THE ADDRESS OF EACH LOT. NO WATER METERS WILL BE SET UNTIL THESE CONDITIONS ARE MET.

13. SEE STANDARD DETAIL SAN02 FOR SERVICE LATERAL CONNECTION.

14. SEE STANDARD DETAILS W02 AND W05 FOR WATER SERVICE CONNECTION.

15. ALL TRENCHES SHALL BE CLOSED AT THE END OF THE DAY WITH A WATERTIGHT PLUG PLACED IN THE END OF THE PIPE. UNATTENDED TRENCHES SHALL BE CLOSED IN THE SAME FASHION.

16. NO EXCAVATED MATERIAL IS TO BE PLACED WITHIN CITY RIGHT-OF-WAY WITHOUT PRIOR WRITTEN APPROVAL FROM THE CITY OF STEVENSON.

17. WITHIN CITY RIGHT-OF-WAY, INSTALL ALL PIPE IN ACCORDANCE WITH THE CITY OF STEVENSON STANDARD DETAILS FOR PIPE BEDDING AND BACKFILL G04, G05, G06 AND G07.

18. PAVEMENT RESTORATION SHALL CONFORM TO THE CITY OF STEVENSON STANDARD DETAILS G06A AND G06B.

19. WATER BACKFLOW DEVICES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF STEVENSON STANDARD DETAILS W12 THRU W16.

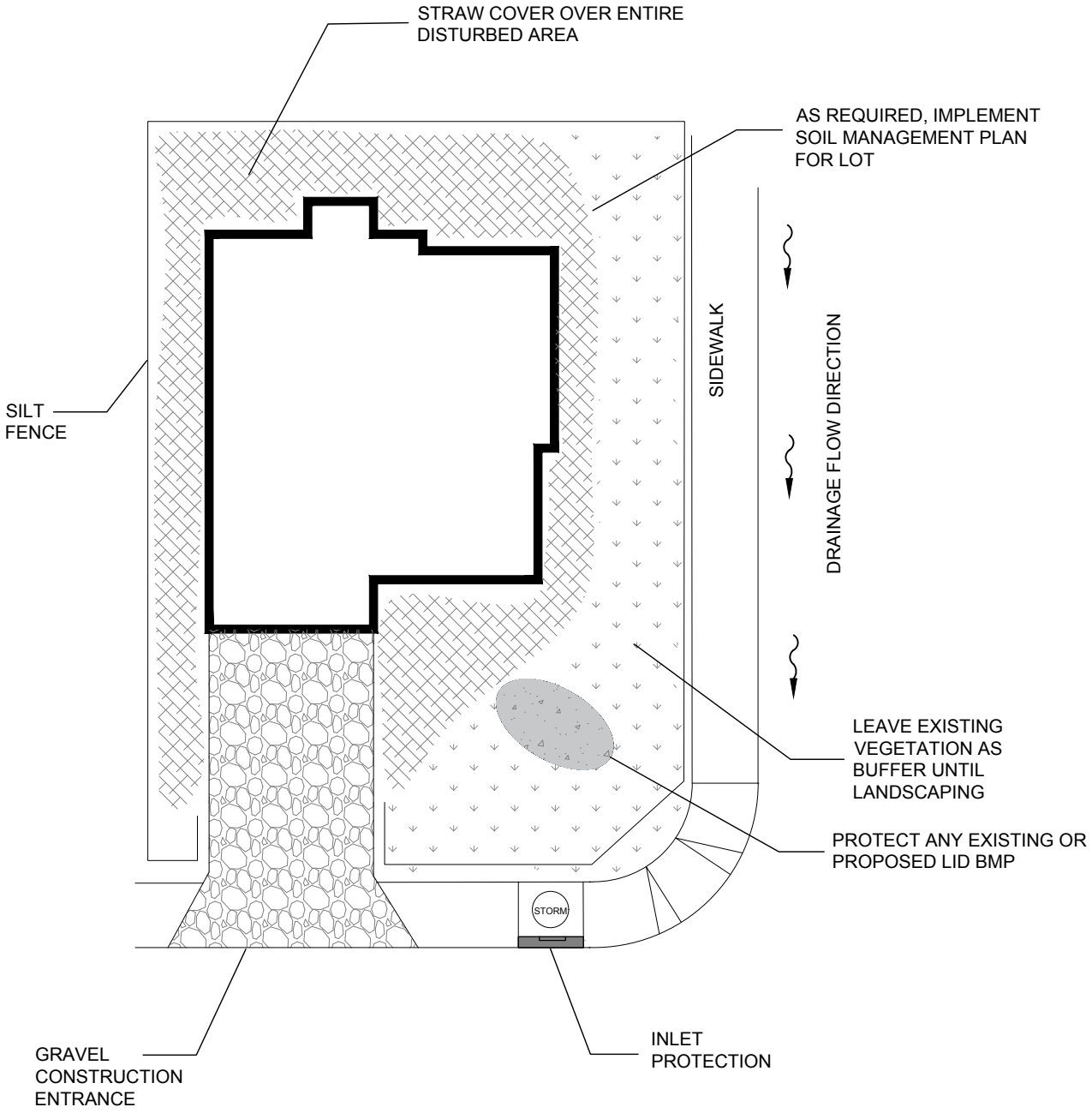
STEVENSON

SINGLE-FAMILY RESIDENTIAL GENERAL NOTES
2 OF 2

DRAWING NO. R01B

DATE AUG '25 | SCALE NTS

APPROVED BY CR



NOTES:

1. BMP LOCATIONS, TYPES AND FREQUENCY MAY BE ADJUSTED TO FIT SITE CONDITIONS. SEE NOTE 2 ON R03.
2. ALL TEMPORARY EROSION CONTROL BMPS AND DEVICES SHALL BE REMOVED AT THE END OF CONSTRUCTION.

STEVENSON

SINGLE FAMILY EROSION PREVENTION PLAN

DRAWING NO.	R02
DATE AUG '25	SCALE NTS
APPROVED BY	CR

SINGLE-FAMILY RESIDENTIAL EROSION CONTROL NOTES

THE FOLLOWING BMP'S ARE REQUIRED ON ALL SINGLE-FAMILY RESIDENTIAL PROJECTS UNLESS IT CAN BE SHOWN, AND IS APPROVED BY THE CITY OF STEVENSON IN WRITING, THAT IT IS NOT NECESSARY:

1. A GRAVEL CONSTRUCTION ENTRANCE PER CITY OF STEVENSON STANDARD DETAIL E03 CONSTRUCTION ENTRANCE SHALL BE PLACED FROM THE CURB TO THE STRUCTURE PRIOR TO POURING THE FOUNDATION. THE ROCK MUST EXTEND THE FULL WIDTH OF THE INGRESS/EGRESS AREA (MIN. 20'). THE CONSTRUCTION ENTRANCE SHALL BE KEPT FREE OF EXCESSIVE MUD AND SHALL BE REPAIRED TO GOOD WORKING CONDITION AS NEEDED. IF IT IS DISCOVERED THAT THE CONSTRUCTION ENTRANCE IS BEING CIRCUMVENTED, CONSTRUCTION FENCING WILL BE IMMEDIATELY REQUIRED AROUND THE ENTIRE PROPERTY PERIMETER.

2. SILT FENCE PER CITY OF STEVENSON STANDARD DETAIL E06 SHALL BE INSTALLED ON THE ENTIRE FRONTAGE OF ALL IMPERVIOUS SURFACES, AT ANY PROPERTY LINE COMMON WITH AN ALREADY DEVELOPED PROPERTY, AT ANY PROPERTY LINE ADJACENT TO A STORMWATER FACILITY, AND AT ANY PROPERTY LINE WHERE THERE ARE STEEP SLOPES AND/OR CRITICAL AREAS. THE CORRECTLY INSTALLED SILT FENCE SHALL "J-HOOK" AT THE ENDS. THE PURPOSE OF THIS FENCE IS TO PROTECT NEIGHBORING PROPERTIES, CRITICAL AREAS AND RIGHTS-OF-WAY FROM SEDIMENT DEPOSITS, DELINEATE CLEARING LIMITS, AND TO CHANNEL ALL CONSTRUCTION TRAFFIC TO THE GRAVEL CONSTRUCTION AREA.

3. INLET PROTECTION MUST BE INSTALLED PER CITY OF STEVENSON STANDARD DETAILS E04 BIOFILTER BAGS OR E05 SILT SACK. INLET PROTECTION SHALL BE MAINTAINED UNTIL FINAL LANDSCAPING. THIS INCLUDES THE REMOVAL OF SEDIMENT BUILDUP IN FRONT OF THE INLET AND BMP REPLACEMENT AS NECESSARY.

4. NO DISCHARGE OF ANY KIND SHALL BE MADE TO A PAVED STREET OR STORMWATER COLLECTION SYSTEM.

5. DENUDED SOILS SHALL BE STABILIZED AS QUICKLY AS POSSIBLE AND SHALL BE EXPOSED NO MORE THAN 48 HOURS. ON STEEPER SLOPES, STRAW COVERING MAY NOT BE APPROVED AND A MORE ROBUST MEASURE MAY BE NEEDED. IF ALLOWED, THE STRAW COVERING SHALL BE THICK ENOUGH SO THAT NO BARE EARTH IS VISIBLE.

6. CONSIDER THE PLACEMENT OF STRAW WATTLES (CITY OF STEVENSON STANDARD DETAIL E08) BEHIND ADA CURBING AND AT DRIVEWAY DROPS DURING THE WET SEASON (OCTOBER 1ST TO APRIL 30TH). STRAW WATTLES CAN BE DRIVEN OVER WITH VEHICLES OR EQUIPMENT WHILE MAINTAINING SITE CONTAINMENT.

7. PROTECT EXISTING AND PROPOSED LID BMP'S FROM IMPACTS BY EROSION, COMPACTION, AND SEDIMENTATION. PREVENT COMPACTION OF AREAS PLANNED FOR LID BMP'S BY EXCLUDING CONSTRUCTION EQUIPMENT. AVOID UNNECESSARY FOOT TRAFFIC AND ALLOW NECESSARY FOOT TRAFFIC ONLY WHEN SOILS ARE NOT WET. HIGH VISIBILITY FENCING OR SILT FENCE MAY BE NECESSARY TO PROTECT LID BMP AREAS.

8. IN DEVELOPMENTS WHERE A BUILDER IS BUILDING MORE THAN ONE RESIDENCE, A CONCRETE WASHOUT SHALL BE INSTALLED AND MAINTAINED.

9. IF SPECIFIED BMP'S ARE UTILIZED BUT ARE INSUFFICIENT TO PREVENT SEDIMENT FROM REACHING WATER BODIES, ADJACENT PROPERTIES, OR PUBLIC RIGHTS-OF-WAY THEN ADDITIONAL BMP'S SHALL BE IMPLEMENTED IMMEDIATELY.

STEVENSON

SINGLE FAMILY EROSION PREVENTION NOTES

DRAWING NO. R03

DATE AUG '25 | SCALE NTS

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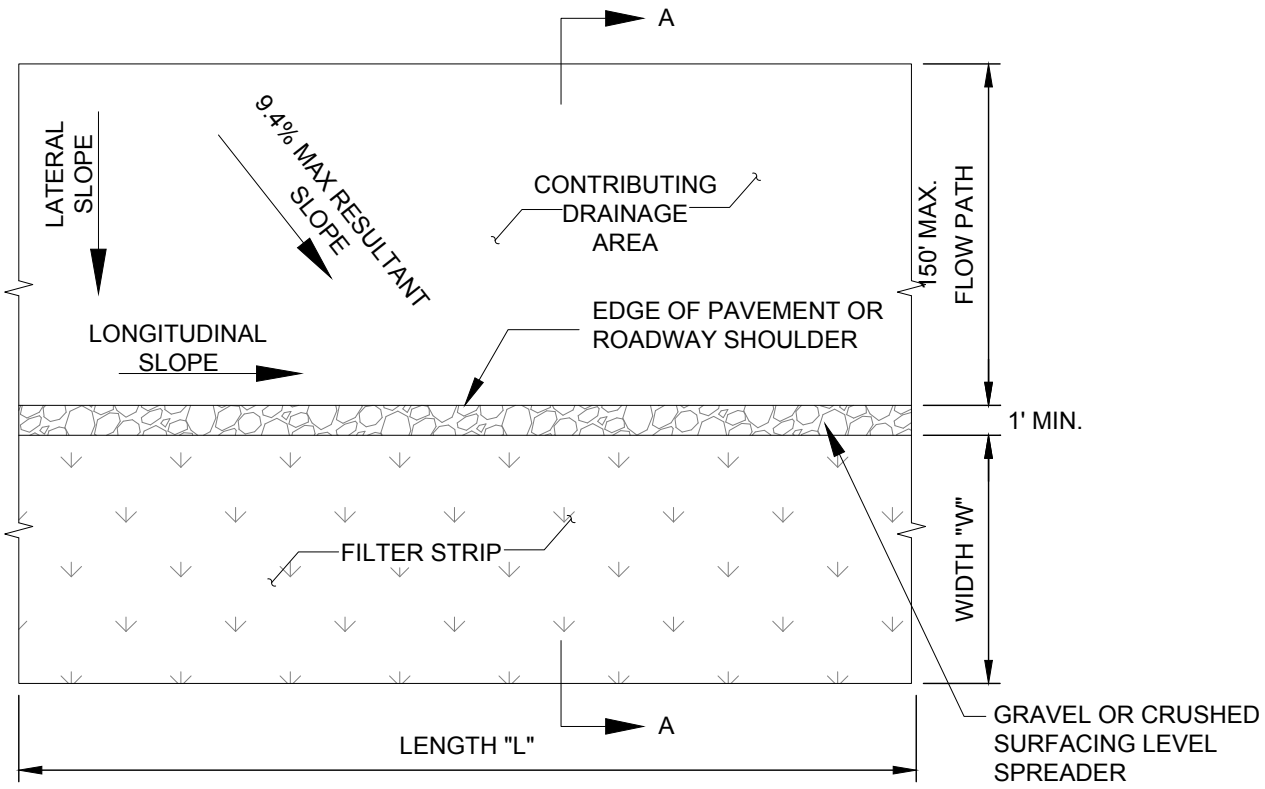
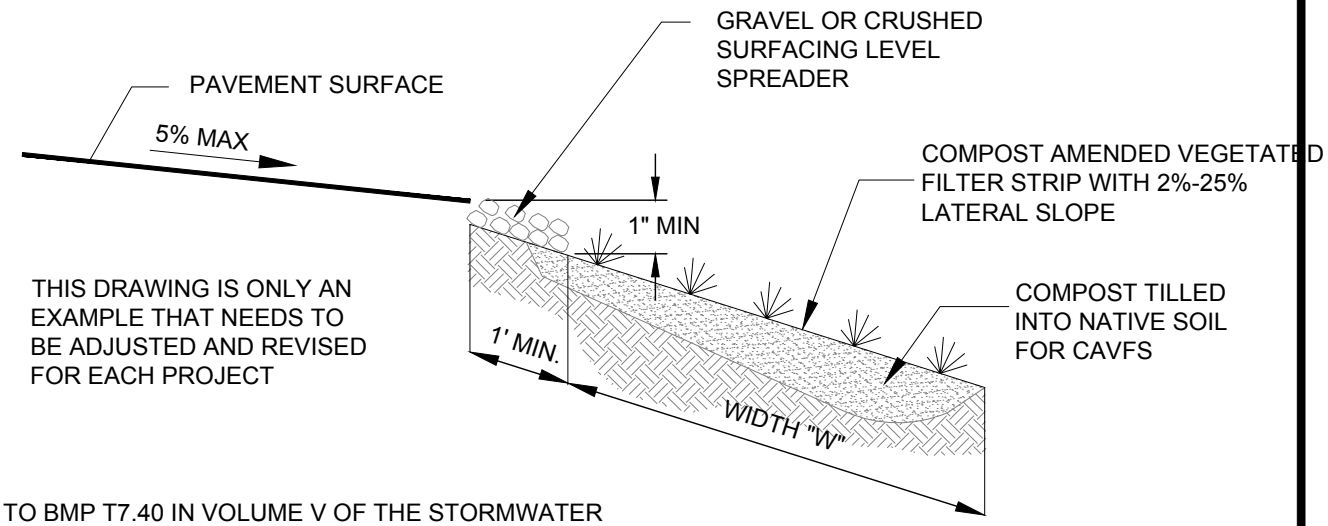


PLAN



THIS DRAWING IS ONLY AN EXAMPLE THAT NEEDS TO BE ADJUSTED AND REVISED FOR EACH PROJECT

NOTE:

REFER TO BMP T7.40 IN VOLUME V OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON.

SECTION A-A

STEVENSON

COMPOST AMENDED VEGETATED FILTER STRIP

DRAWING NO. R04

DATE AUG '25 | SCALE NTS

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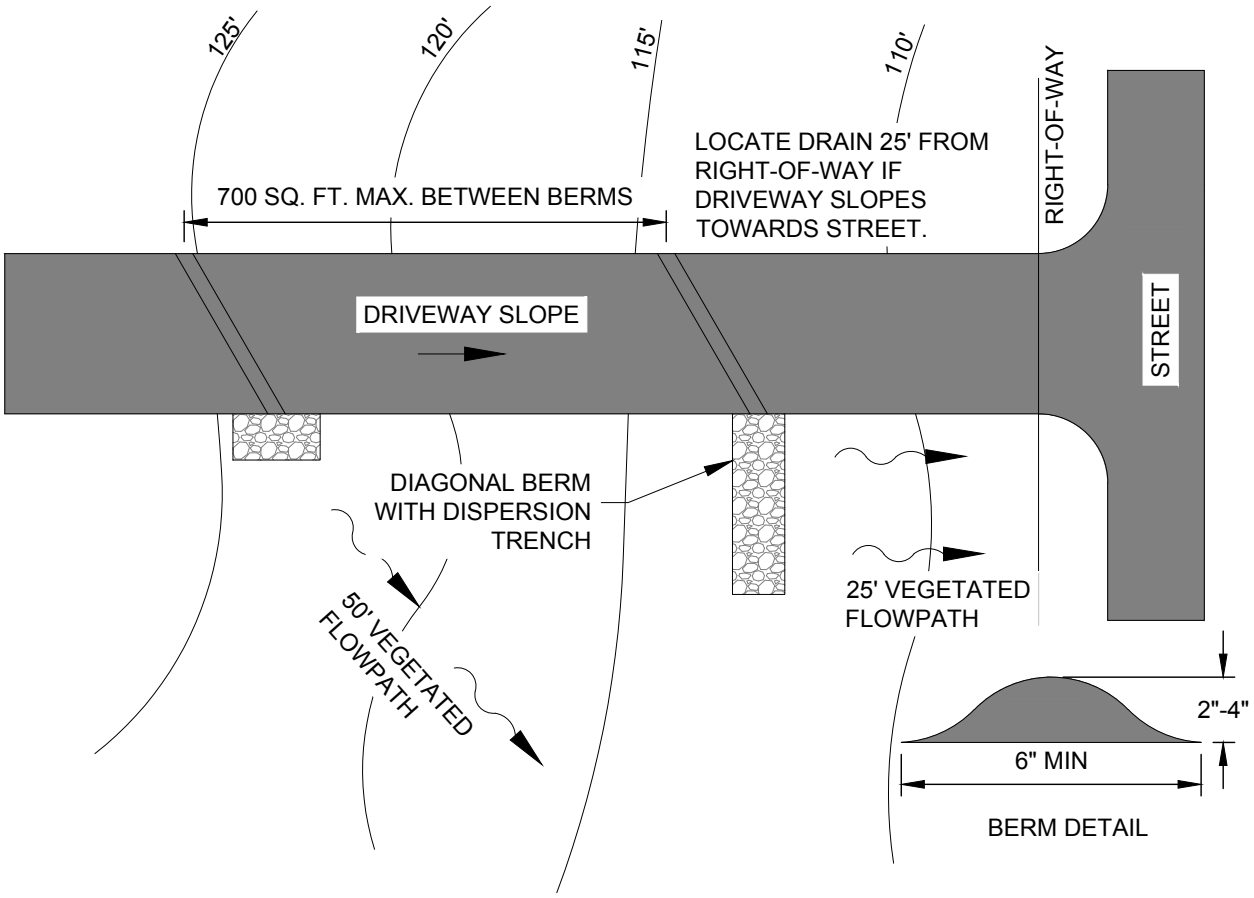


STEEP DRIVEWAY WITH DIAGONAL BERMS

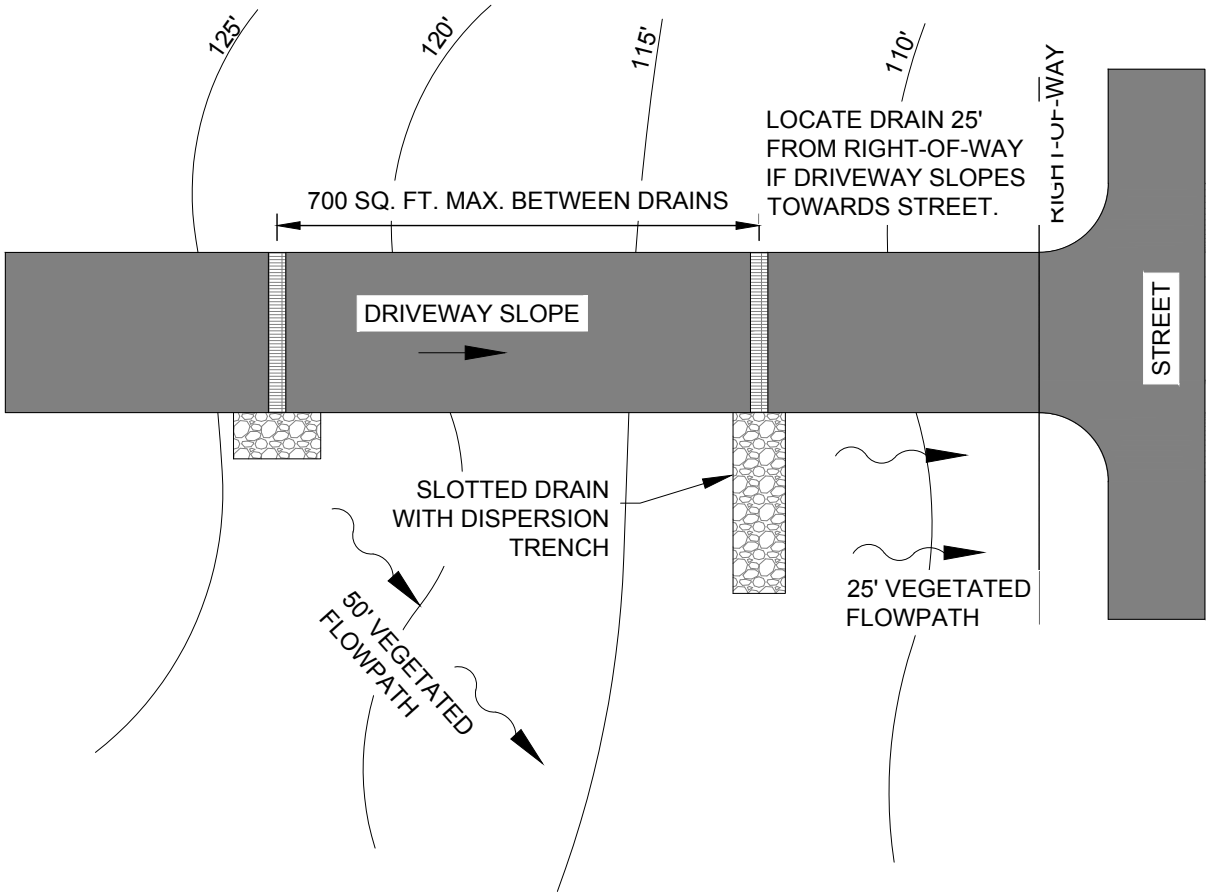
NOTE:

REFER TO BMP T5.11 IN VOLUME V OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON FOR MORE INFORMATION.

STEVENSON

CONCENTRATED FLOW DISPERSION - DIAGONAL BERMS

DRAWING NO.	R05
DATE AUG '25	SCALE NTS
APPROVED BY	CR



STEEP DRIVEWAY WITH SLOTTED DRAINS

NOTE:

REFER TO BMP T5.11 IN VOLUME V OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON FOR MORE INFORMATION.

STEVENSON

CONCENTRATED FLOW DISPERSION - SLOTTED DRAINS

DRAWING NO. R06

DATE AUG '25 | SCALE NTS

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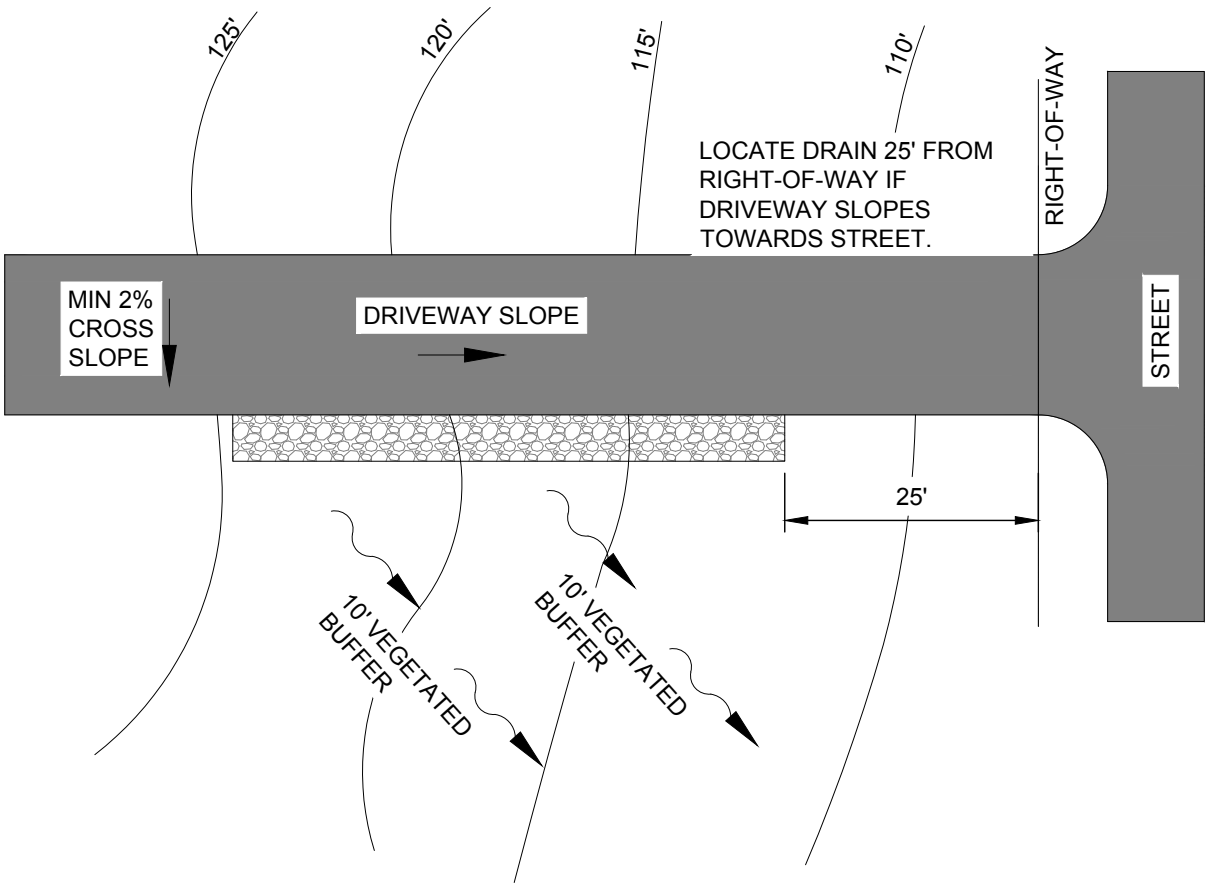


SHEET FLOW DISPERSION FROM A DRIVEWAY
FLAT TO MODERATELY SLOPING DRIVEWAYS

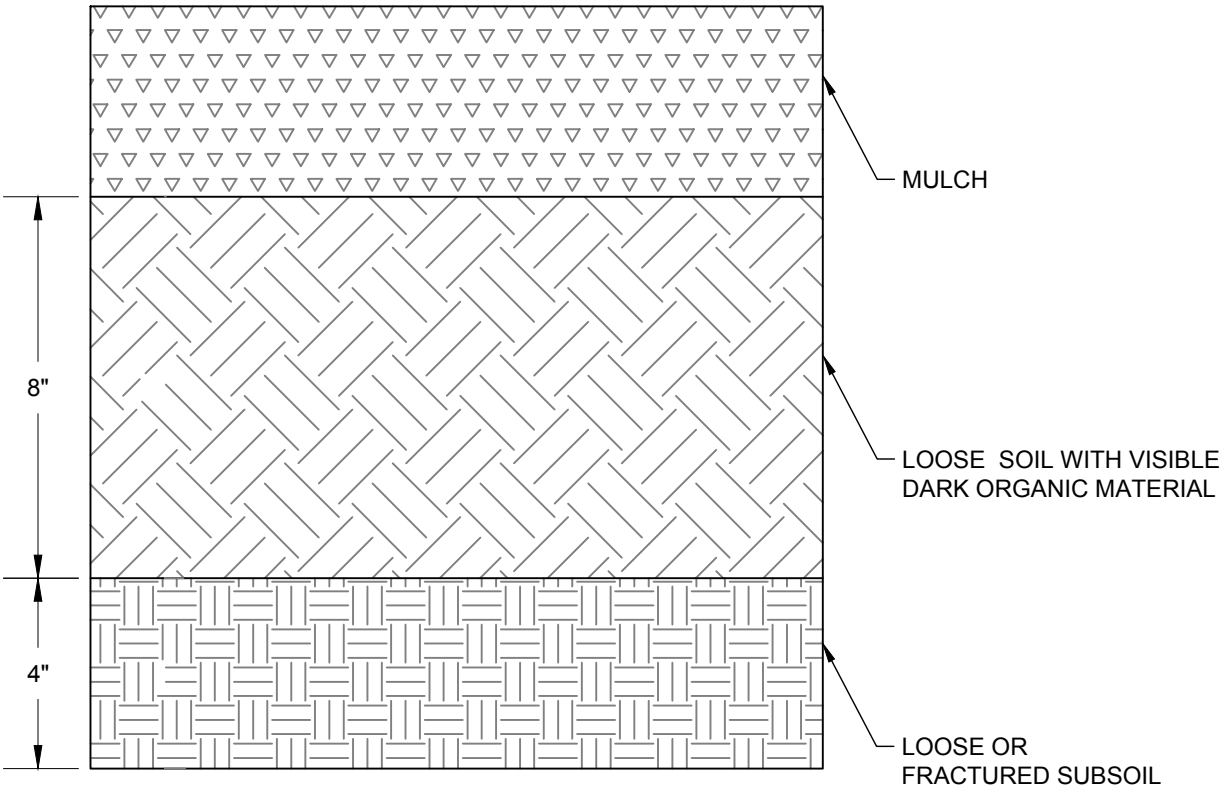
NOTE:

REFER TO BMP T5.12 IN VOLUME V OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON FOR MORE INFORMATION.

STEVENSON

SHEET FLOW DISPERSION TRENCH

DRAWING NO.	R07
DATE AUG '25	SCALE NTS
APPROVED BY	CR



NOTE:

REFER TO BMP T5.13 IN VOLUME V OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON FOR MORE INFORMATION.

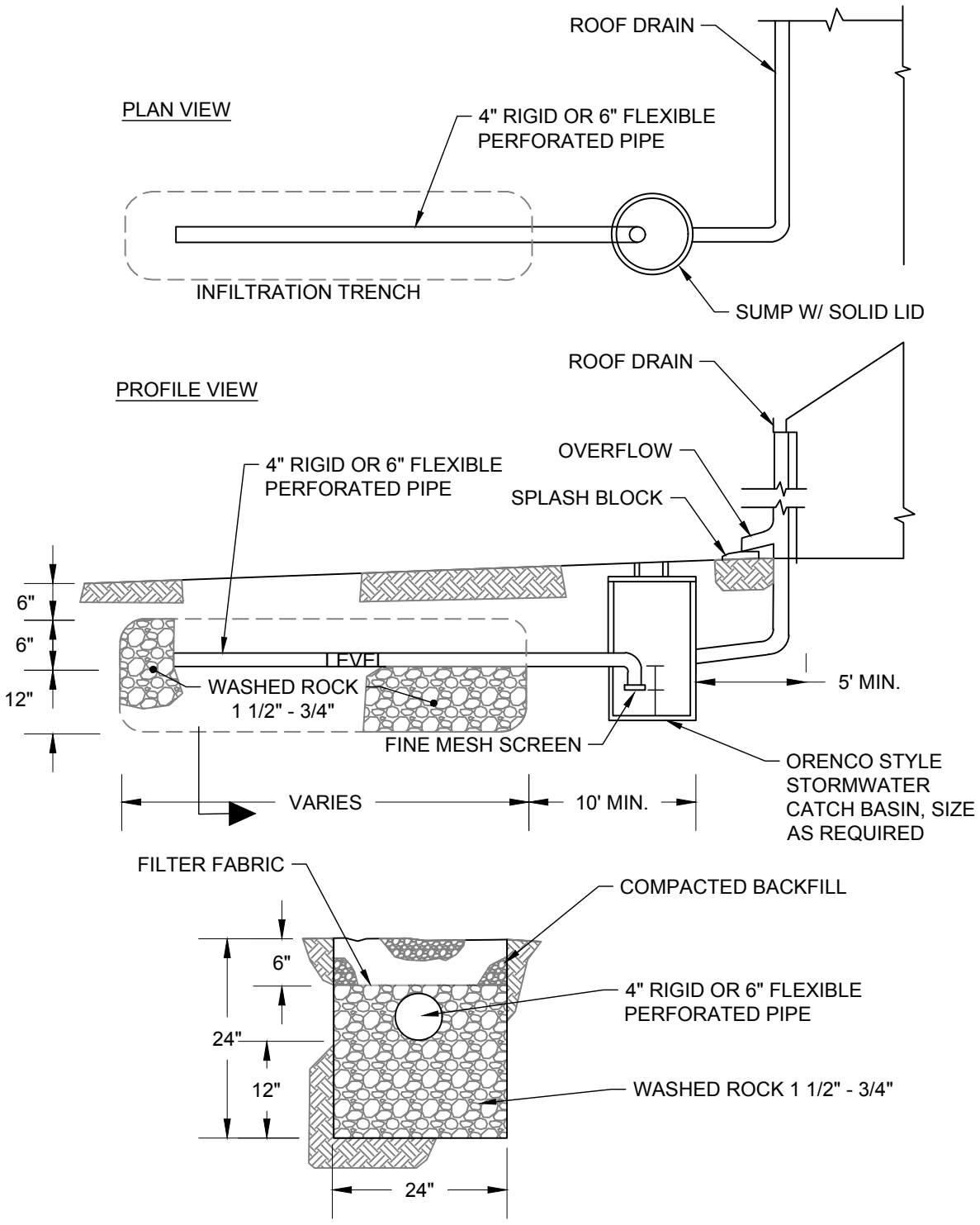
STEVENSON

PLANTING BED CROSS-SECTION

DRAWING NO. R08

DATE AUG '25 | SCALE NTS

APPROVED BY CR



SECTION A

NOTE:

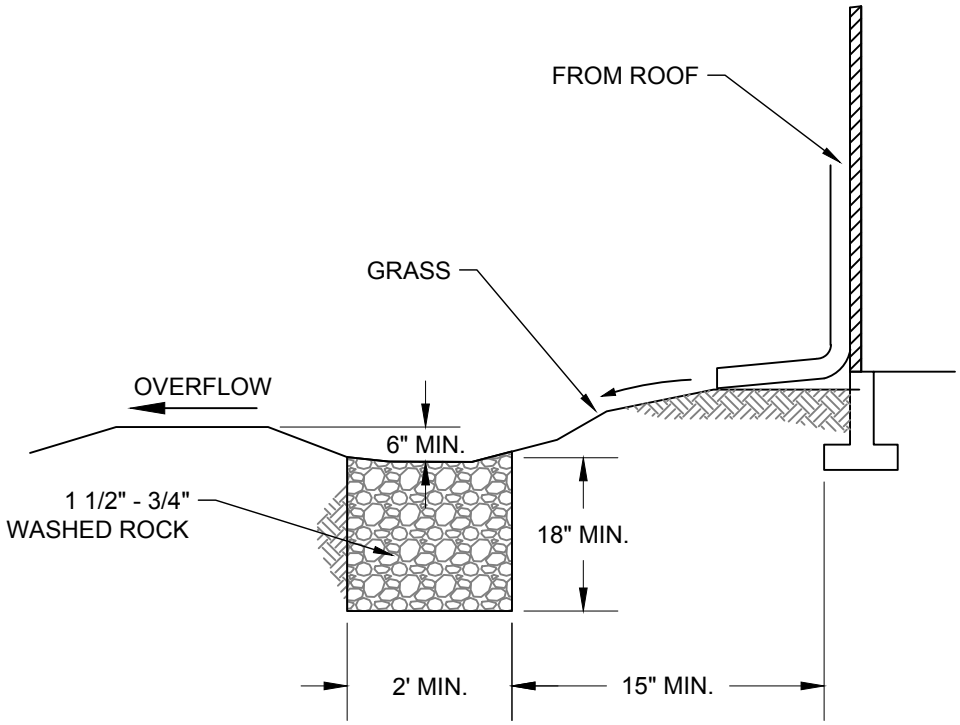
1. REFER TO BMP T5.10A IN VOLUME III OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON FOR MORE INFORMATION.
2. SEE R13 FOR SIZING INFORMATION.

DOWNSPOUT INFILTRATION TRENCH

DRAWING NO. R09

DATE AUG '25 | SCALE NTS

APPROVED BY CR



CROSS SECTION

NOTE:

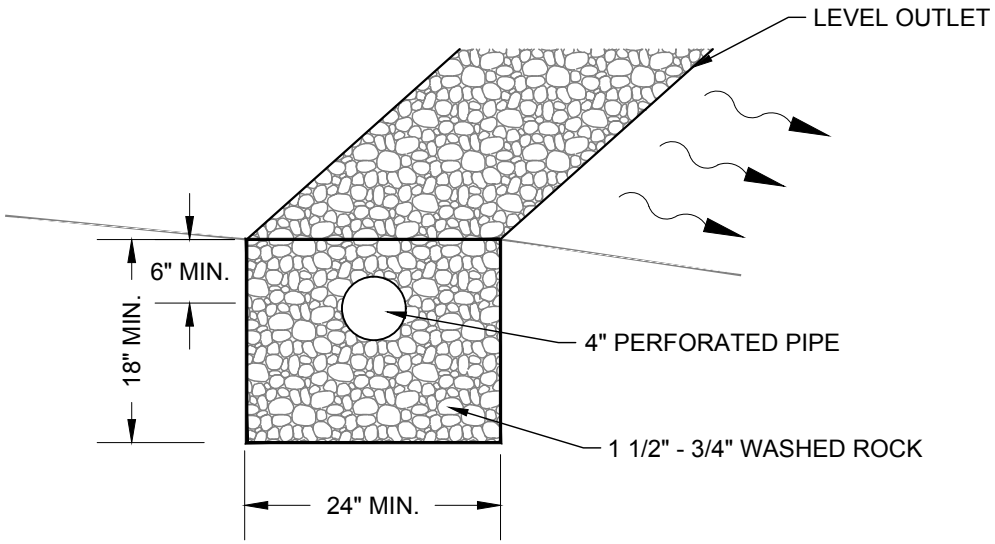
1. REFER TO BMP T5.10A IN VOLUME III OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON FOR MORE INFORMATION.
2. SEE R13 FOR SIZING INFORMATION.

ALTERNATIVE DOWNSPOUT INFILTRATION TRENCH FOR COARSE SAND AND GRAVEL

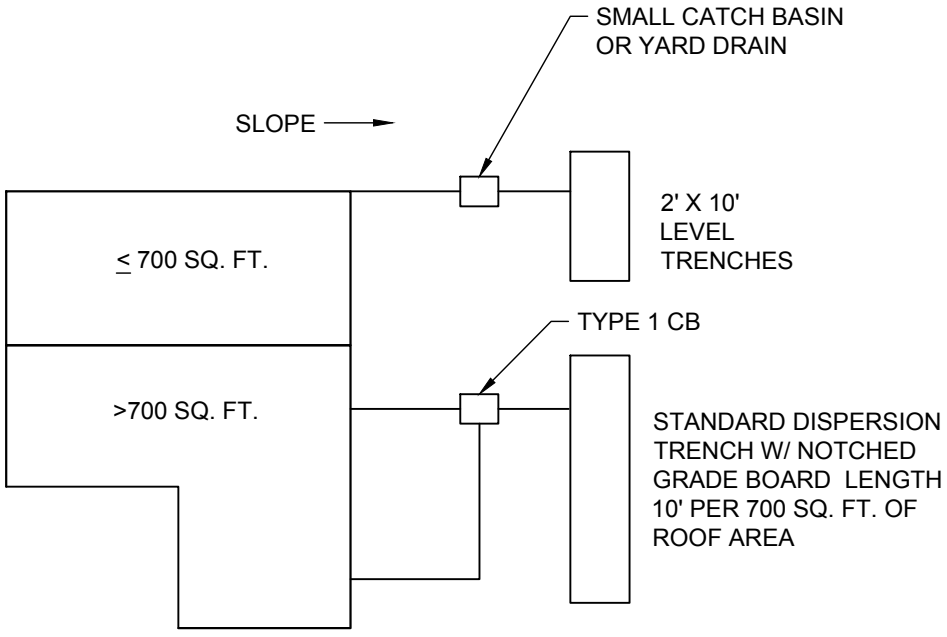
DRAWING NO. R10

DATE AUG '25 | SCALE NTS

APPROVED BY CR



TRENCH CROSS SECTION



PLAN VIEW OF ROOF

NOTE:

REFER TO BMP T5.10B IN VOLUME III OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON FOR MORE INFORMATION.

STEVENSON

DOWNSPOUT DISPERSION TRENCH

DRAWING NO. R11

DATE AUG '25 | SCALE NTS

APPROVED BY CR

SOIL TYPE	LENGTH "L" OF INFILTRATION TRENCH (PER 1,000 SF OF ROOF AREA)
COURSE SAND AND COBBLES	20 LF
MEDIUM SAND	30 LF
FINE OR LOAMY SAND	75 LF
SANDY LOAM	125 LF
LOAM	190 LF

NOTES:

1. MAXIMUM LENGTH OF TRENCH MUST NOT EXCEED 100 FEET FROM THE INLET SUMP.
2. MINIMUM SPACING BETWEEN TRENCH CENTERLINES IS 6 FEET.
3. INFILTRATION MAY NOT BE PLACED IN FILL AREAS UNLESS APPROVED BY A GEOTECHNICAL ENGINEER.
4. INFILTRATION TRENCHES CONSTRUCTED ON SLOPE STEEPER THAN 15% OR WITHIN 200 FEET OF THE TOP OF A STEEP SLOPE OR LANDSLIDE HAZARD MUST BE APPROVED BY A GEOTECHNICAL ENGINEER.
5. PERFORATED PIPE SHALL BE 6" DIAMETER ADS N-12 OR AN APPROVED EQUAL.

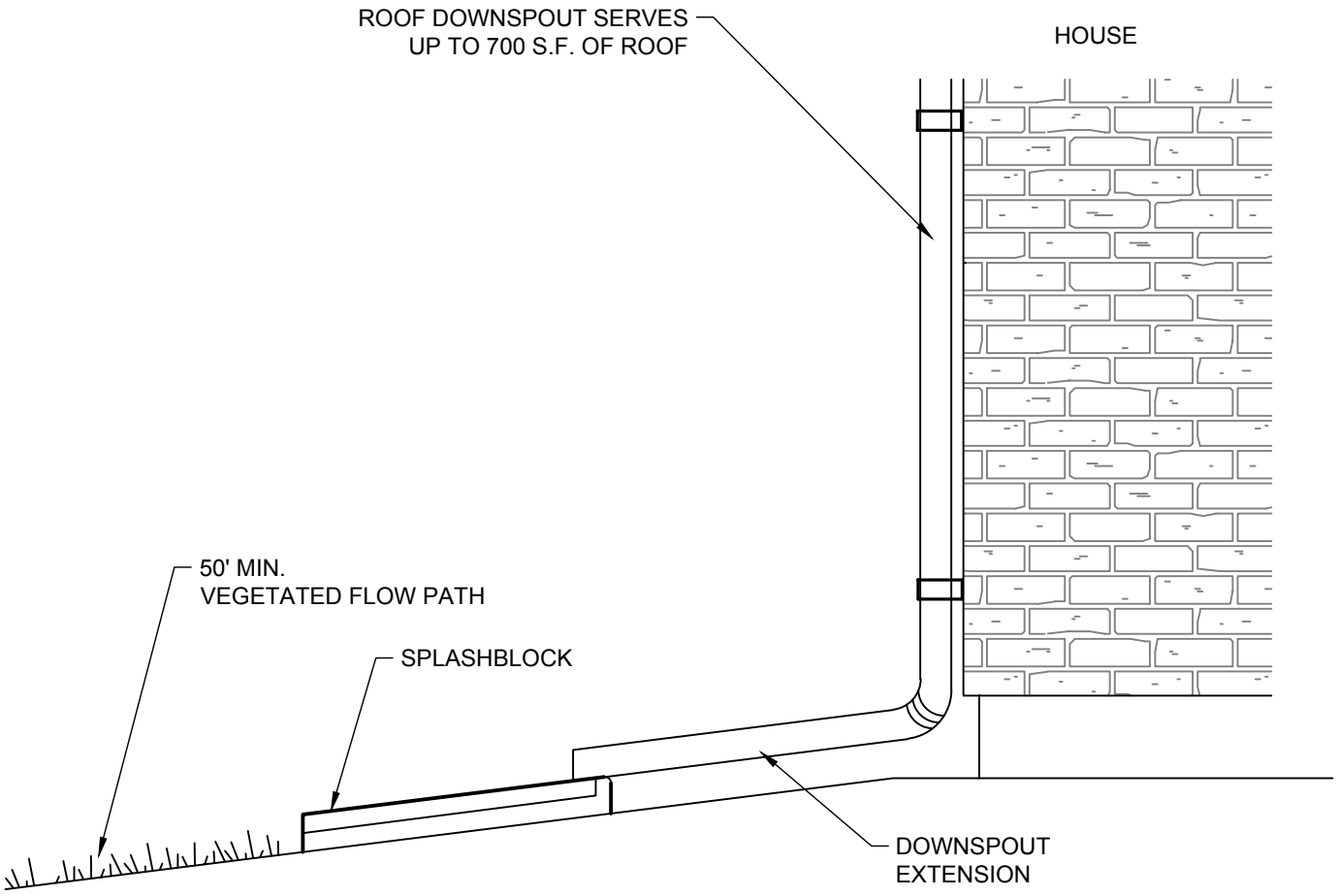
STEVENSON

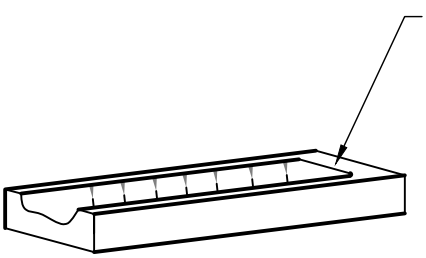
STANDARD ROOF INFILTRATION SYSTEM NOTES

DRAWING NO. R12

DATE AUG '25 | SCALE NTS

APPROVED BY CR





NOTE:

1. REFER TO BMP T5.10B IN VOLUME III OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON FOR MORE INFORMATION.

2. 2' x 2' x 6' DEEP ROCK PAD MAY BE USED IN LIEU OF PREFABRICATED SPLASHBLOCK.

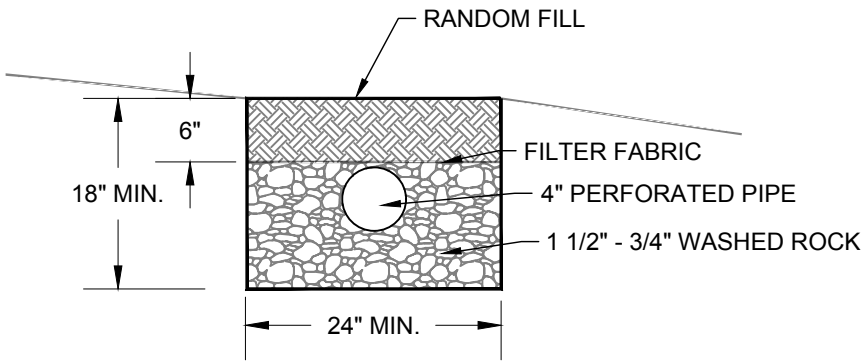
STEVENSON

DOWNSPOUT SPLASHBLOCK DISPERSION

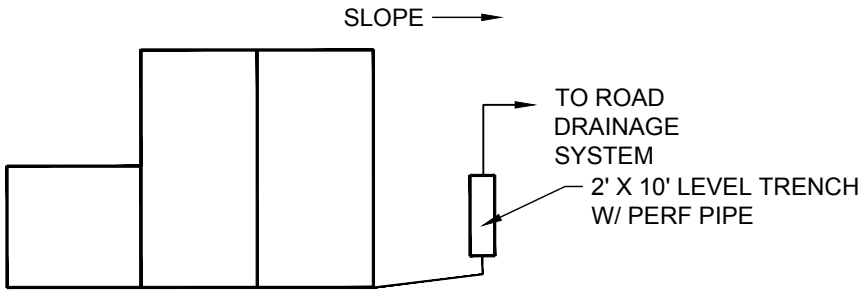
DRAWING NO. R13

DATE AUG '25 | SCALE NTS

APPROVED BY CR



TRENCH CROSS SECTION



PLAN VIEW OF ROOF

NOTE:

1. REFER TO BMP T5.10C IN VOLUME III OF THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON FOR MORE INFORMATION.

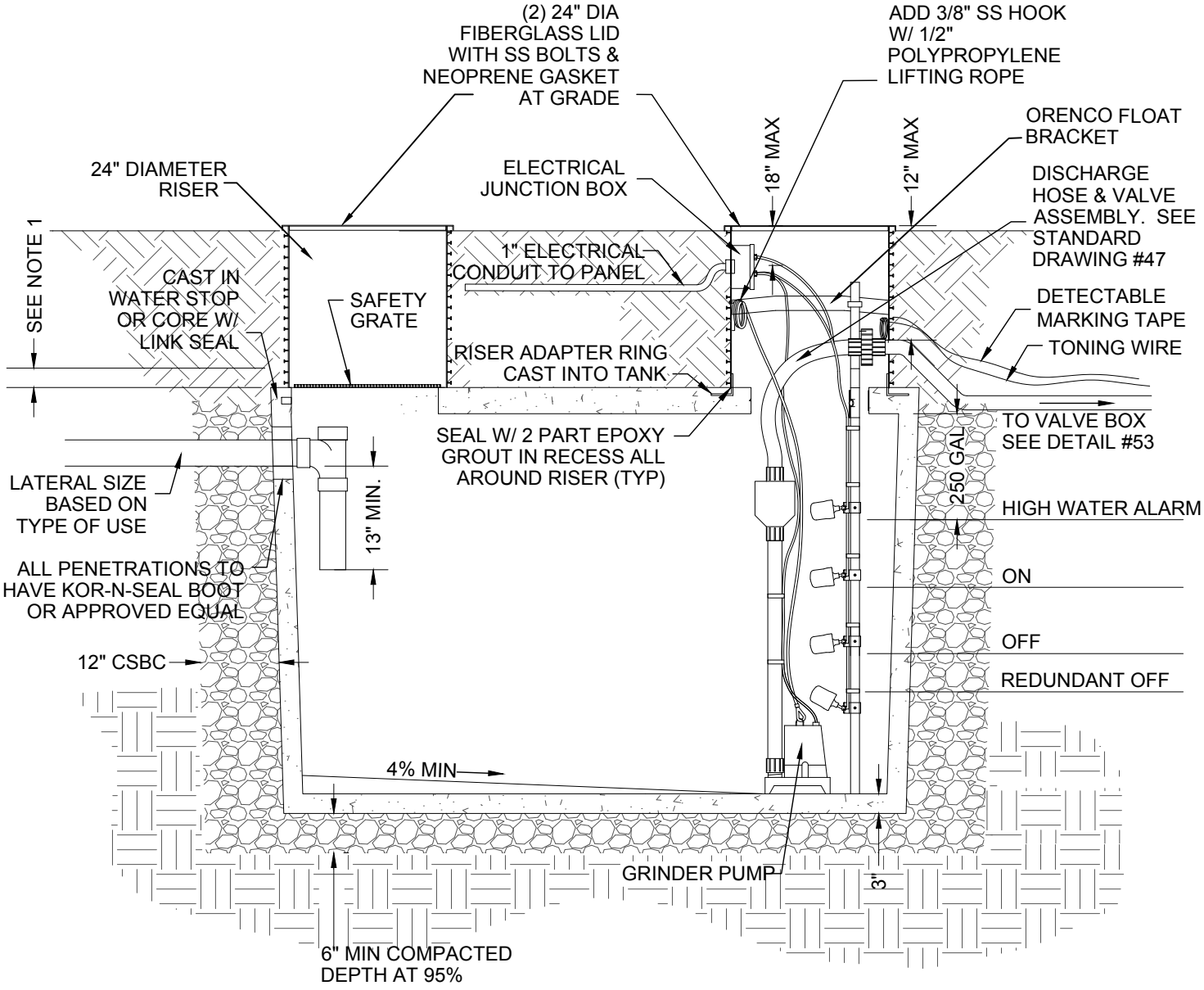
STEVENSON

PERFORATED STUB-OUT CONNECTION

DRAWING NO. R14

DATE AUG '25 | SCALE NTS

APPROVED BY CR



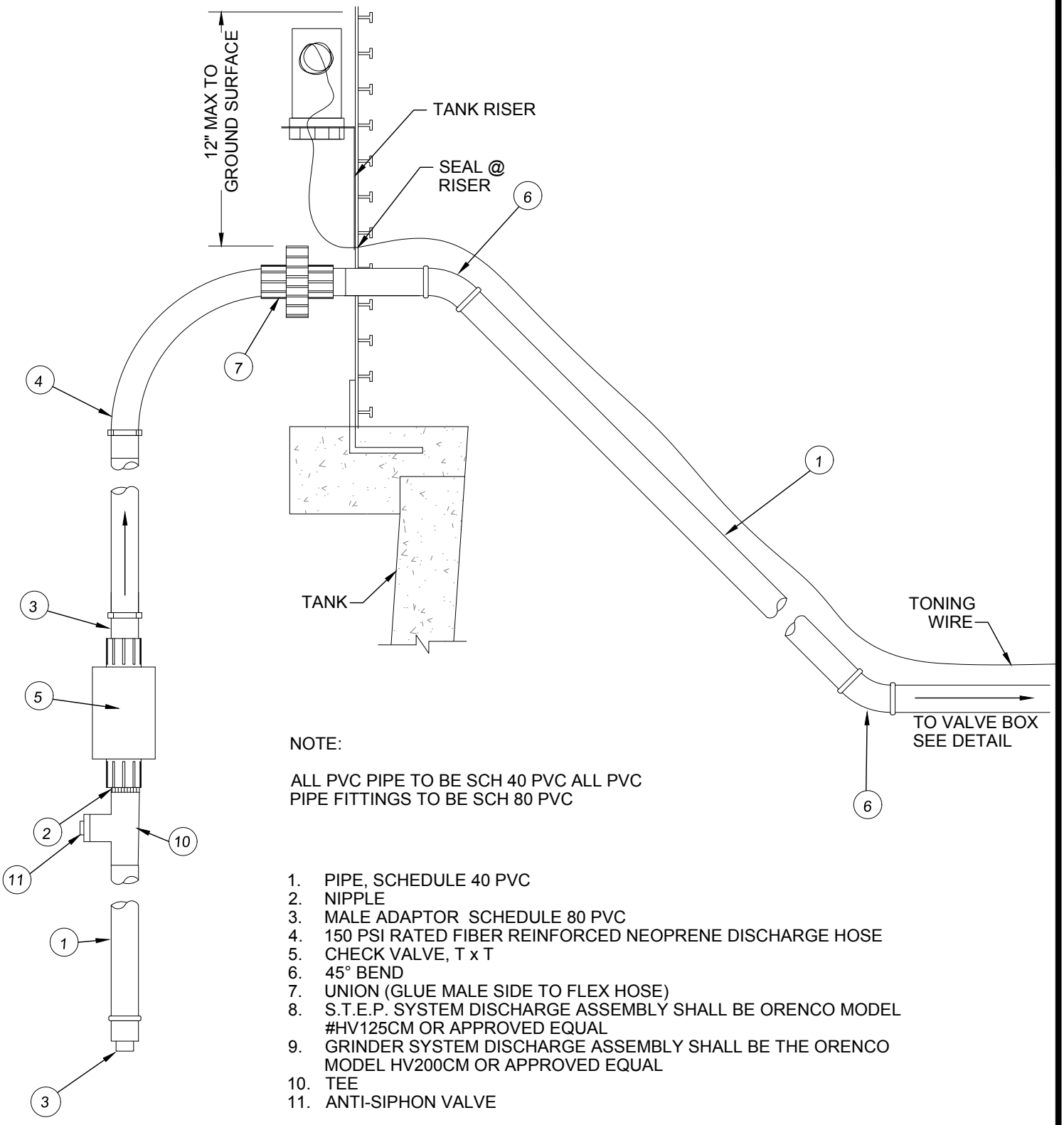
NOTES:

1. FIELD LOCATE EXISTING BUILDING SEWER & SET INTERCEPTOR TANK ELEVATION TO DRAIN BUILDING SEWER AT MIN 1/4" PER FOOT.
2. MIN SIZE SHALL BE 500 GAL.
3. COORDINATE WITH ENGINEER FOR FLOAT SET POINTS.

STEVENSON

RESIDENTIAL GRINDER PUMP TANK

DRAWING NO.	R15
DATE AUG '25	SCALE NTS
APPROVED BY	CR



NOTE:

ALL PVC PIPE TO BE SCH 40 PVC ALL PVC PIPE FITTINGS TO BE SCH 80 PVC

1. PIPE, SCHEDULE 40 PVC
2. NIPPLE
3. MALE ADAPTOR SCHEDULE 80 PVC
4. 150 PSI RATED FIBER REINFORCED NEOPRENE DISCHARGE HOSE
5. CHECK VALVE, T x T
6. 45° BEND
7. UNION (GLUE MALE SIDE TO FLEX HOSE)
8. S.T.E.P. SYSTEM DISCHARGE ASSEMBLY SHALL BE ORENCO MODEL #HV125CM OR APPROVED EQUAL
9. GRINDER SYSTEM DISCHARGE ASSEMBLY SHALL BE THE ORENCO MODEL HV200CM OR APPROVED EQUAL
10. TEE
11. ANTI-SIPHON VALVE

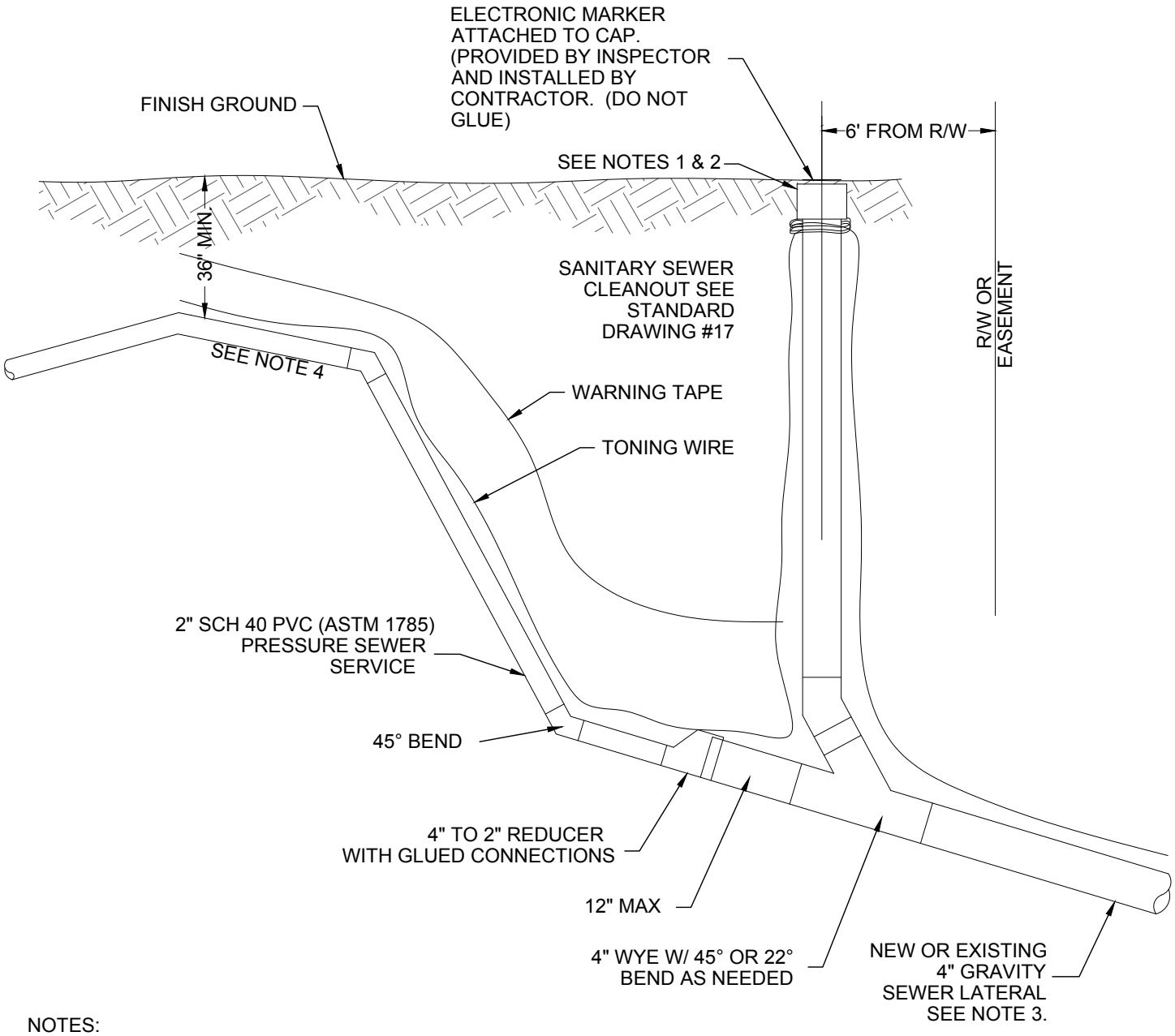
STEVENSON

GRINDER DISCHARGE HOSE & VALVE ASSEMBLY

DRAWING NO. R16

DATE AUG '25 | SCALE NTS

APPROVED BY CR



NOTES:

1. IF CLEANOUT IS IN DRIVEWAY USE SIOUX CHIEF MFG. CO., INC. TOUPEE PLUS ADJUSTABLE CLEANOUT #851-34I (FOR ABS) OR APPROVED EQUAL.
2. VALVE BOX NOT REQUIRED.
3. ALL PVC PRESSURE PIPE TO BE SCH 40 (ASTM 1785).
4. ALL THREADED PVC PRESSURE FITTINGS TO BE SCH 80.
5. GRAVITY SIDE SEWER MATERIAL MAY BE ABS OR PVC PLASTIC OR DUCTILE IRON PIPE.

STEVENSON

PRESSURE TO GRAVITY SERVICE CONNECTION

DRAWING NO. R17

DATE AUG '25 | SCALE NTS

APPROVED BY CR

SANITARY SEWER NOTES

1. UNLESS APROVED OTHERWISE, ALL PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING:

   - POLYVINYLCHLORIDE (PVC) SEWER PIPE 15" DIAMETER OR LESS SHALL CONFORM TO ASTM D3034, SDR 35 OR ASTM F 789. IT SHALL HAVE A MINIMUM PIPE STIFFNESS OF 46 PSI.
   - PVC PIPE 18" DIAMETER AND LARGER SHALL CONFORM TO ASTM F 679 OR ASTM F 794, SERIES 46.
   - ALL PVC PIPE SHALL HAVE AN INTEGRAL BELL GASKETED JOINT WITH ELASTOMERIC GASKET AND SHALL BE FURNISHED IN 12-1/2 FOOT LAYING LENGTHS.
   - ALL DUCTILE IRON PIPE USED FOR SEWER CONSTRUCTION SHALL BE CLASS 52, DUCTILE IRON, UNLESS OTHERWISE NOTED ON THE PLANS.

2. PROVIDE LOCKING MANHOLE COVERS IN AREAS OUTSIDE OF PUBLIC RIGHT-OF-WAY.

3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT NO CONFLICTS EXIST BETWEEN SANITARY SEWER LINES AND PROPOSED OR EXISTING UTILITIES PRIOR TO CONSTRUCTION.

4. WHERE SEWER CROSSES OVER THE WATERMAIN, ONE FULL LENGTH OF DUCTILE IRON PIPE SHALL BE USED WITH THE PIPES CENTERED FOR MAXIMUM JOINT SEPARATION.

5. WHERE A SEWER MAIN CROSSES UNDER AN A.C. WATERLINE THE CONTRACTOR SHALL REPLACE THE EXISTING A.C. WATERLINE OVER THE EXCAVATION WITH DUCTILE IRON PIPE CLASS 52 TO A POINT OF BEARING SOIL A MINIMUM OF THREE FEET (3') EACH SIDE OF THE EXCAVATION.

6. TRENCHES SHALL BE BACKFILLED AS SOON AFTER LAYING PIPE AS POSSIBLE. TRENCH EXCAVATION SHALL NOT BE MORE THAN 150 FEET AHEAD OF THE PIPE LAYING OPERATION AND SHALL BE CLOSED UP AT THE END OF THE DAY.

7. PVC D-3034 SHALL BE INSTALLED WITH A MINIMUM OF 6 FEET OF COVER OVER THE MAIN AND 5' COVER AT SERVICE LATERAL ENDS. IF COVER OVER THE MAIN IS LESS THAN 5', DUCTILE IRON MUST BE USED. IF COVER OVER THE MAIN IS GREATER THAN 15 FEET, DUCTILE IRON OR C900 MUST BE USED.

8. THE FIRST SECTION OF PIPE NOT LESS THAN ONE HUNDRED FEET (100') IN LENGTH INSTALLED BY EACH CREW SHALL BE TESTED IN ORDER TO QUALIFY THE CREW AND/OR MATERIAL. SUCCESSFUL INSTALLATION OF THIS SECTION SHALL BE A PREREQUISITE TO FURTHER PIPE INSTALLATION BY SAID CREW.

9. DIRECT CONNECTION OF SERVICE TAPS TO MANHOLES ARE NOT ALLOWED.

10. SEWER CONNECTIONS TO EXISTING MANHOLES SHALL BE ACCOMPLISHED BY USING MANUFACTURER'S PROVIDED KNOCK-OUTS OR CORE DRILLED.

11. CONNECTION TO AN EXISTING MANHOLE REQUIRES THE INSTALLATION OF 1/4" INCH MESH SCREEN IN THE DOWNSTREAM LINE WHILE MAKING CONNECTION TO ELIMINATE DEBRIS FROM ENTERING THE EXISTING SYSTEM. AFTER THE CONNECTION HAS BEEN COMPLETED THE NEW INCOMING PIPE SHALL BE PLUGGED. WHERE A HEAVY FLOW EXISTS IN THE CONNECTION MANHOLE AND WHEN UNABLE TO USE THE 1/4" MESH SCREEN, DUE CARE SHOULD BE USED TO KEEP DEBRIS OUT OF THE DOWNSTREAM LINE.

12. CONNECTIONS TO EXISTING MAINS SHALL BE ACCOMPLISHED WITH MANHOLES. AFTER EXPOSING THE EXISTING SEWER LINES, CONSTRUCT CAST IN PLACE BASE PER THE PRECAST CONCRETE MANHOLE DETAILS. ONLY AFTER THE BASE HAS A COMPRESIVE STRENGTH OF 1800 PSI AND WITH CITY APPROVAL MAY THE RISER SECTIONS BE INSTALLED.

13. ALL LIFT HOLES ON PRECAST ITEMS SHALL BE COMPLETELY FILLED WITH NON-SHRINK GROUT AND SMOOTHED BOTH INSIDE AND OUT TO INSURE WATER-TIGHTNESS. ALL STEEL LOOPS ON PRECAST SECTION MUST BE REMOVED, FLUSH WITH THE MANHOLE WALL. THE STUBS SHALL BE MORTARED AND SMOOTHED. ROUGH, UNEVEN SURFACES WILL NOT BE PERMITTED.

STEVENSON WASHINGTON

STANDARD SEWER NOTES 1 OF 2

DRAWING NO. SAN01A

DATE AUG '25 | SCALE NTS

APPROVED BY CR

14. ONE MANHOLE SHALL FIRST BE GROUTED AND CHANNELED FOR APPROVAL BY THE CITY. IF THE CHANNEL IS ACCEPTABLE, THEN OTHER MANHOLES MAY BE COMPLETED TO THE SAME LEVEL OF WORKMANSHIP.

15. PRIOR TO FINAL PAVING, ALL MAINLINE SEWERS AND LATERALS SHALL BE CLEANED AND TESTED EITHER THE EXFILTRATION TEST OR AIR TEST IN ACCORDANCE WITH THE SECTION 7-17.3(2).

- ALL SEWERS ARE TO BE TESTED AND A MANDREL PULLED TO ASSURE ROUNDNESS OF PIPE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
- A MANDREL SHALL BE PULLED ON FLEXIBLE PIPE NOT LESS THAN 30 DAYS AFTER THE TRENCH BACKFILL AND COMPACTION HAS BEEN COMPLETED.
- A VIDEOTAPE INSPECTION SHALL BE PROVIDED OF ALL SANITARY SEWERS AT LEAST 7 DAYS PRIOR TO PAVING AND ALL DEFICIENCIES FOUND SHALL BE CORRECTED. REPAIR BY CHEMICAL GROUT WILL NOT BE ALLOWED.
- MANHOLES SHALL BE VACUUM TESTED AFTER FINAL PAVING.
- SANITARY FORCE MAINS SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE IN ACCORDANCE WITH SECTION 7-09.3(23).

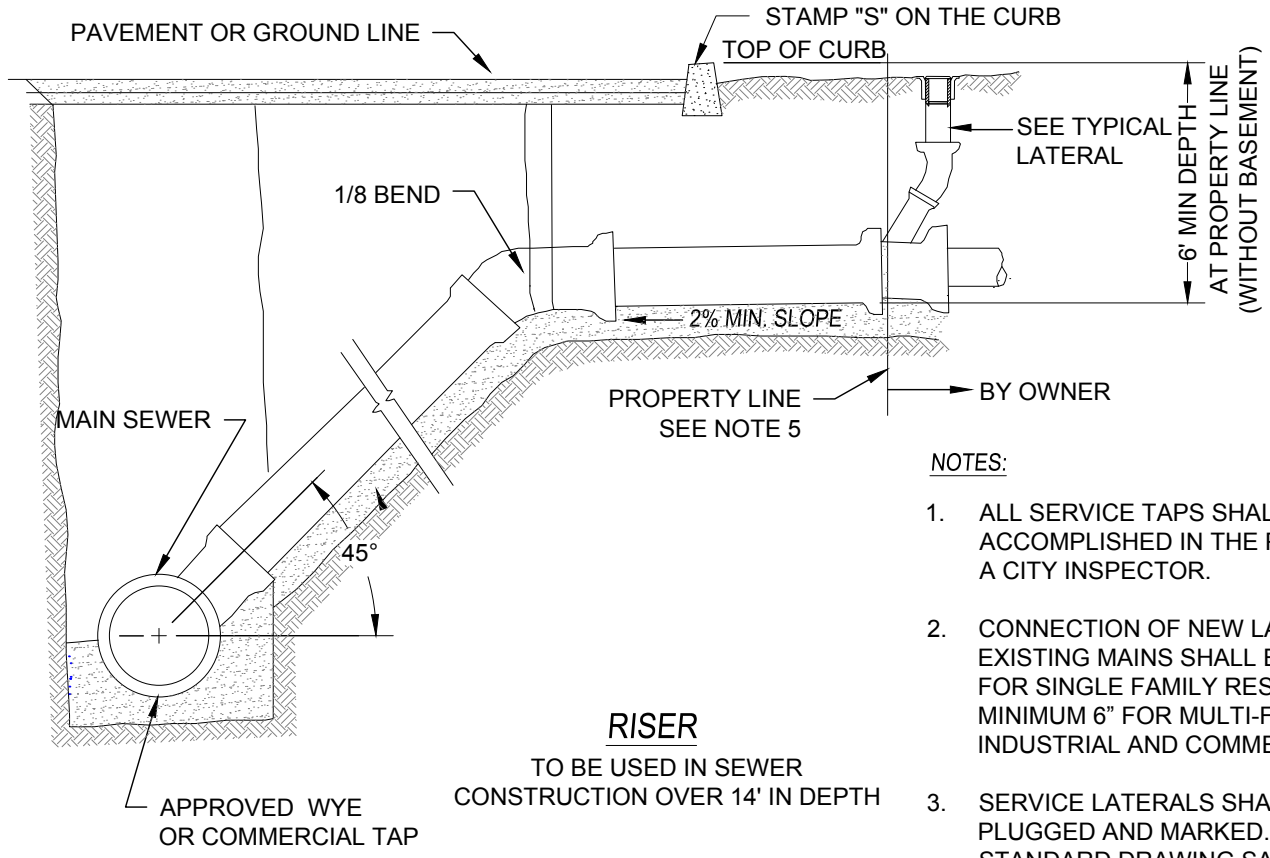
STEVENSON WASHINGTON

STANDARD SEWER NOTES 2 OF 2

DRAWING NO. SAN01B

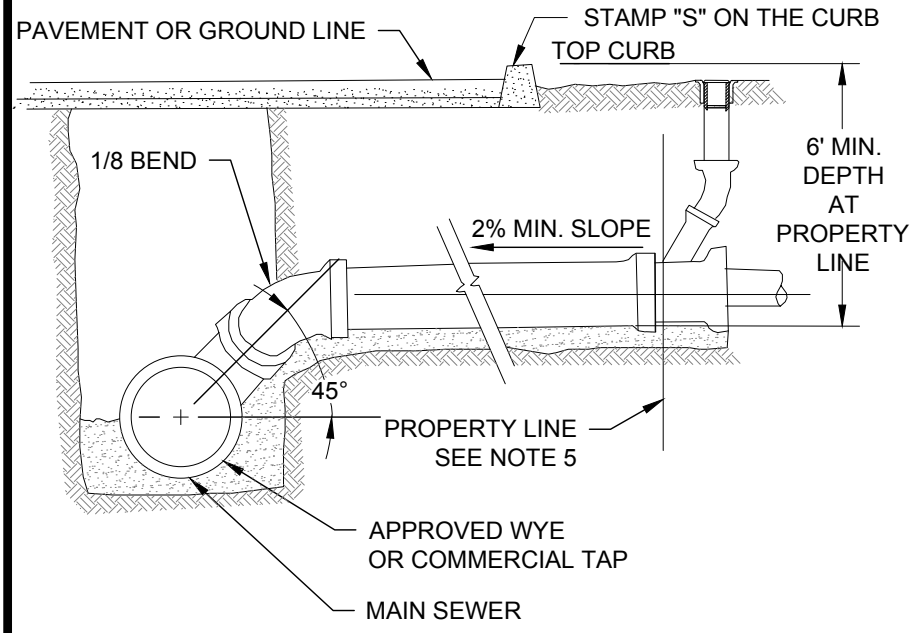
DATE AUG '25 | SCALE NTS

APPROVED BY CR



RISER

TO BE USED IN SEWER CONSTRUCTION OVER 14' IN DEPTH



TYPICAL HOUSE BRANCH

NOTES:

1. ALL SERVICE TAPS SHALL BE ACCOMPLISHED IN THE PRESENCE OF A CITY INSPECTOR.
2. CONNECTION OF NEW LATERALS TO EXISTING MAINS SHALL BE MINIMUM 4" FOR SINGLE FAMILY RESIDENTIAL. MINIMUM 6" FOR MULTI-FAMILY, INDUSTRIAL AND COMMERCIAL.
3. SERVICE LATERALS SHALL BE PLUGGED AND MARKED. SEE STANDARD DRAWING SAN05.
4. APPROVED COMMERCIAL TAPS:
   - SEALTIGHT TYPE "C" OR "D" SEWER SADDLE.
   - FOWLER QUIK-WAY SEWER TAP
   - FOWLER "T & L" SEWER TEE
   - FOWLER "INSERTA TEE"
   - "TAP-TITE" SEWER TEE
5. TRANSITIONS BETWEEN DISSIMILAR PIPE MATERIALS OR SIZES SHALL BE MADE WITH APPROVED ADAPTERS (FERNCO, CAULDER, OR EQUAL).
6. IN NEW SUBDIVISIONS AND OTHER CONSTRUCTION INVOLVING NEW ROADS, INSTALL LATERALS TO 6 FEET BEHIND PROPERTY LINE FOR SEWERS IN STREET RIGHT-OF-WAY.

STEVENSON WASHINGTON

SERVICE LATERAL CONNECTIONS

DRAWING NO. SAN02

DATE AUG '25 | SCALE NTS

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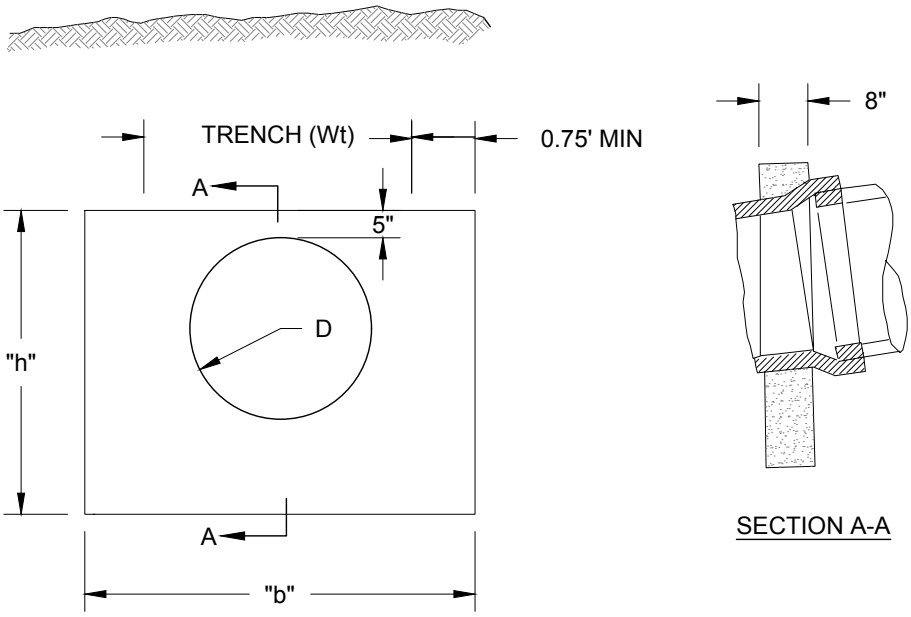

NOTES:

1. ALL CONCRETE TO BE 3000 P.S.I., 2" TO 4" SLUMP.
2. WALLS TO BE PLACED WHERE GRADE IS 20% OR OVER.
3. ANCHOR WALLS TO BE EQUALLY SPACED WITH MAXIMUM DISTANCE BETWEEN WALLS TO BE AS SHOWN IN TABLE "A".
4. PLACE WALL IMMEDIATELY BELOW BELL OF PIPE WHERE POSSIBLE.
5. CONCRETE SHALL BE POURED AGAINST FORMS OR STABLE UNDISTURBED SOIL.

TABLE "A"		
SLOPE %		MAXIMUM SPACING (FT.) (MEASURED ON SLOPE)
OVER	TO	
20	35	36'
35	50	24'
50	100	16'

TABLE "B"				
PIPE SIZE (D)	TRENCH WIDTH MAX. (Wt)	h	b	VOLUME OF CONCRETE (APPROX.)
6", 8", 10"	2.5'	3.0'	4.0'	0.29 C.Y.
12", 15"	2.5'	4.0'	4.0'	0.37 C.Y.
18", 21", 24"	3.5'	4.0'	5.0'	0.42 C.Y.
30", 36"	4.5'	5.0'	6.0'	0.62 C.Y.

STEVENSON WASHINGTON

ANCHOR WALL

DRAWING NO. SAN03

DATE AUG '25 | SCALE NTS

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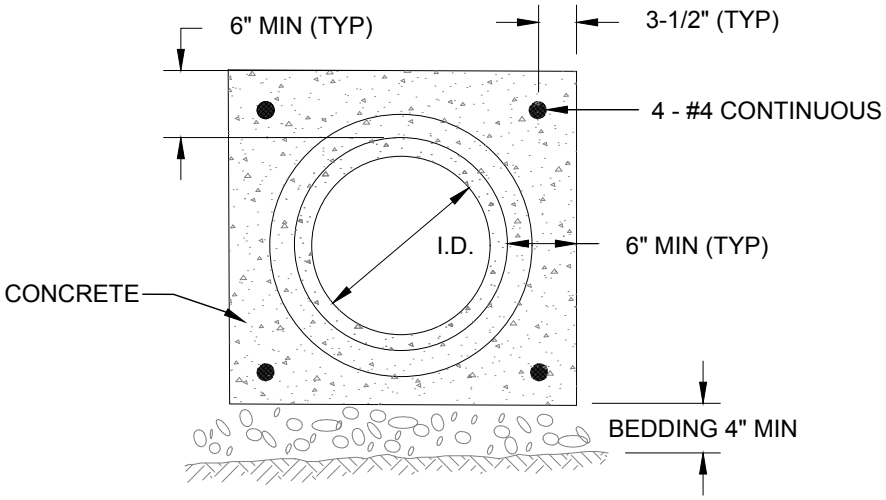
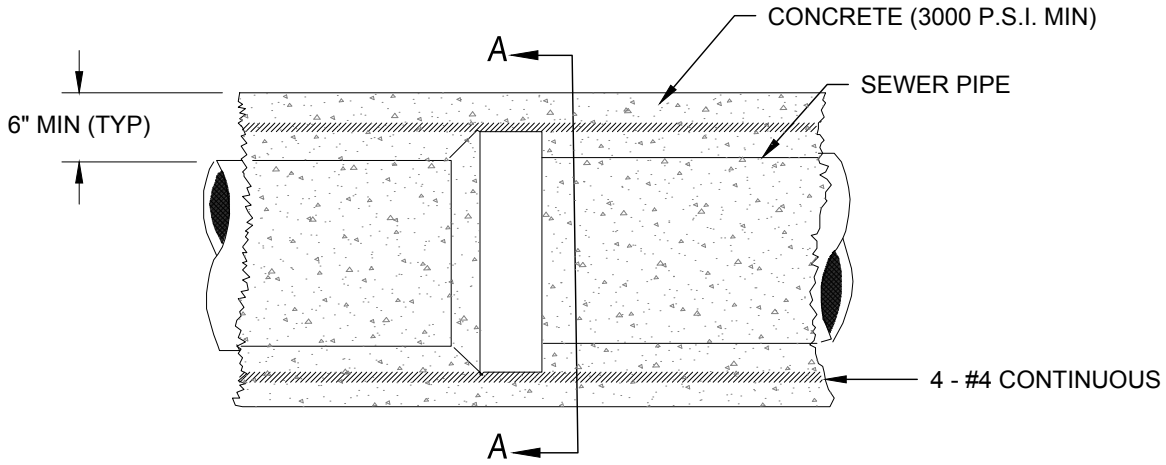


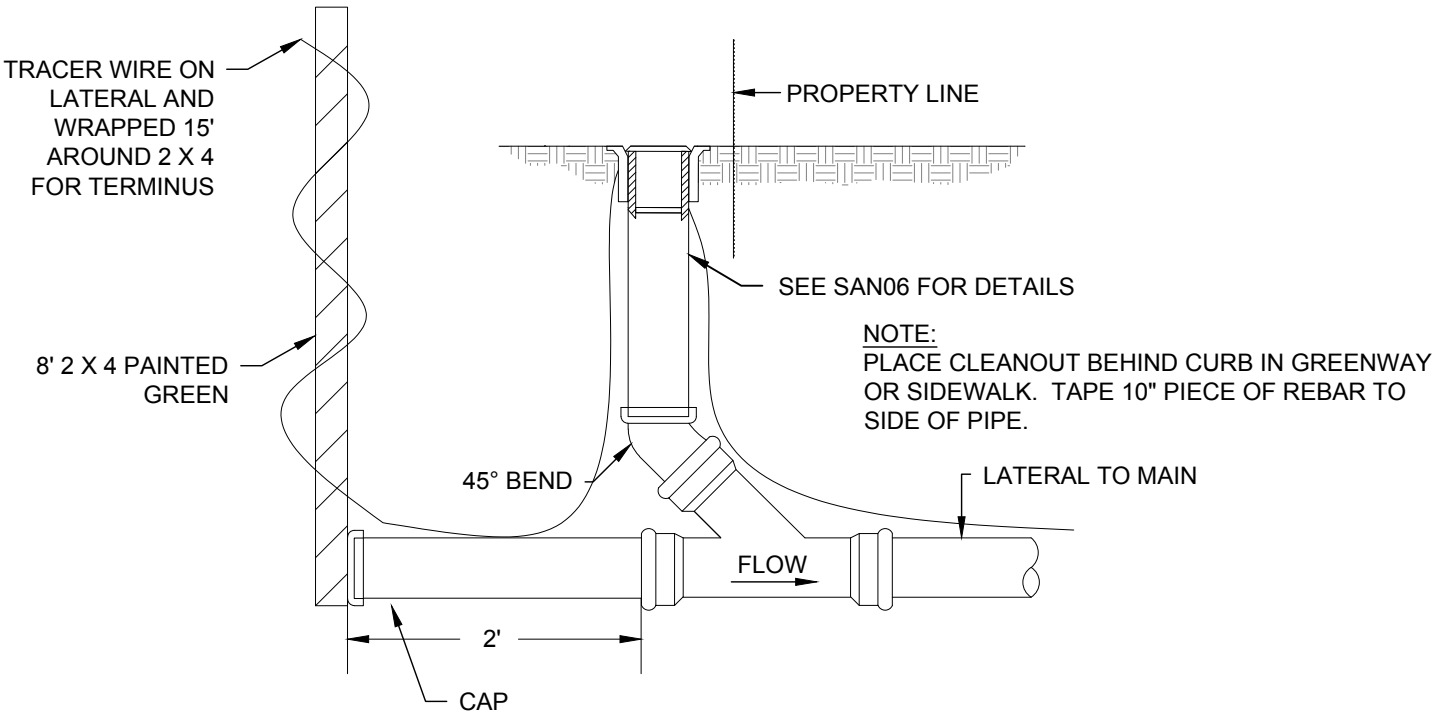
VIEW A-A



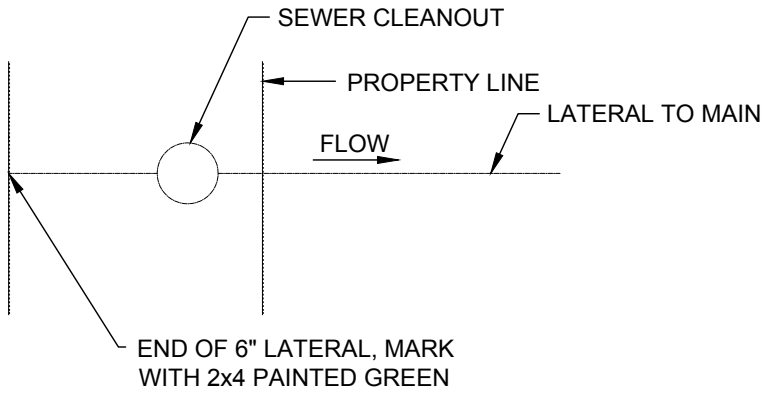
PLAN

CONCRETE ENCASED SEWER PIPE

DRAWING NO.	SAN04
DATE	AUG '25
SCALE	NTS
APPROVED BY	CR



ELEVATION

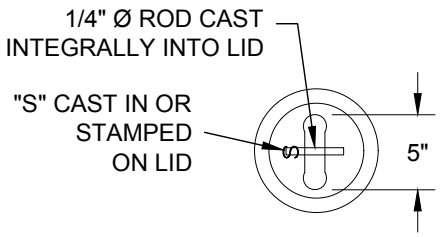


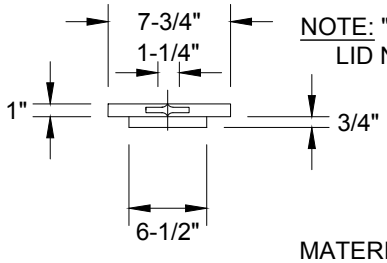
PLAN

STEVENSON WASHINGTON

TEMPORARY SEWER LATERAL

DRAWING NO.	SAN05
DATE AUG '25	SCALE NTS
APPROVED BY	CR

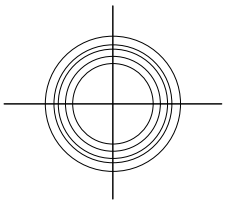


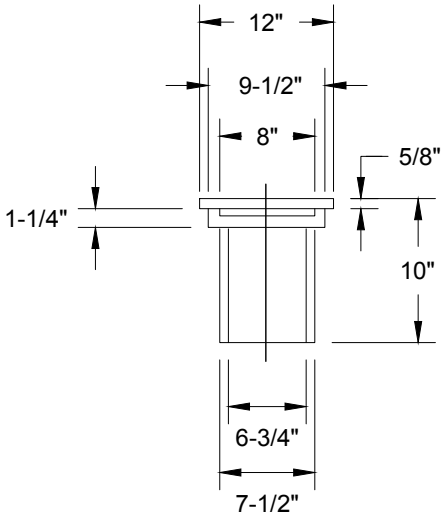


NOTE: "W" CASTING ON LID NOT ALLOWED

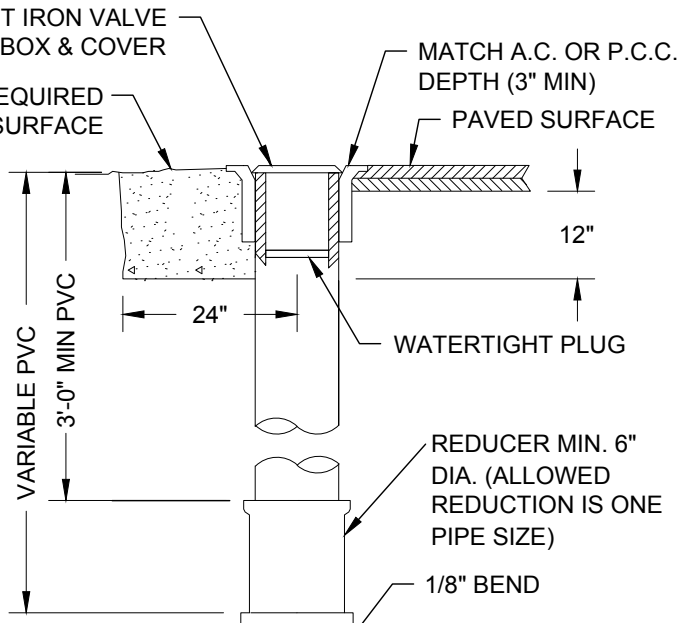
COVER

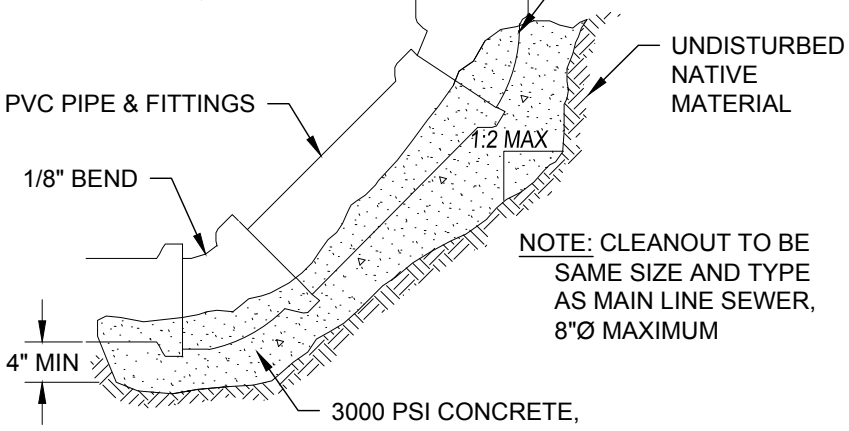
MATERIAL TO BE GREY CAST IRON CONFORMING TO ASTM A-46 CLASS 30





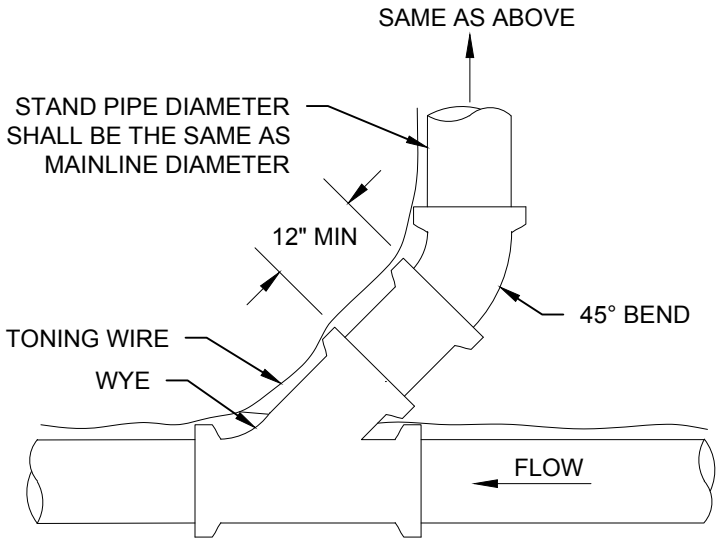
CAST IRON VALVE BOX AND COVER





NOTE: CLEANOUT TO BE SAME SIZE AND TYPE AS MAIN LINE SEWER, 8"Ø MAXIMUM

MAINLINE SEWER CLEANOUT



COMMERCIAL INLINE SEWER CLEANOUT

NOTES:

1. FOR 6" CLEANOUTS ONLY, USE IFCO FRAME NO. 235, AS MANUFACTURED BY INLAND FOUNDARY CO., OR APPROVED EQUAL. COVER SHALL BE THE MANUFACTURER'S STANDARD, WITH "S" OR "SEWER" CAST STAMPED ON TOP. INSTALL MECHANICAL PLUGS ON ALL CLEANOUTS.

STEVENSON WASHINGTON

STANDARD SEWER CLEANOUT

DRAWING NO. SAN06

DATE AUG '25 | SCALE NTS

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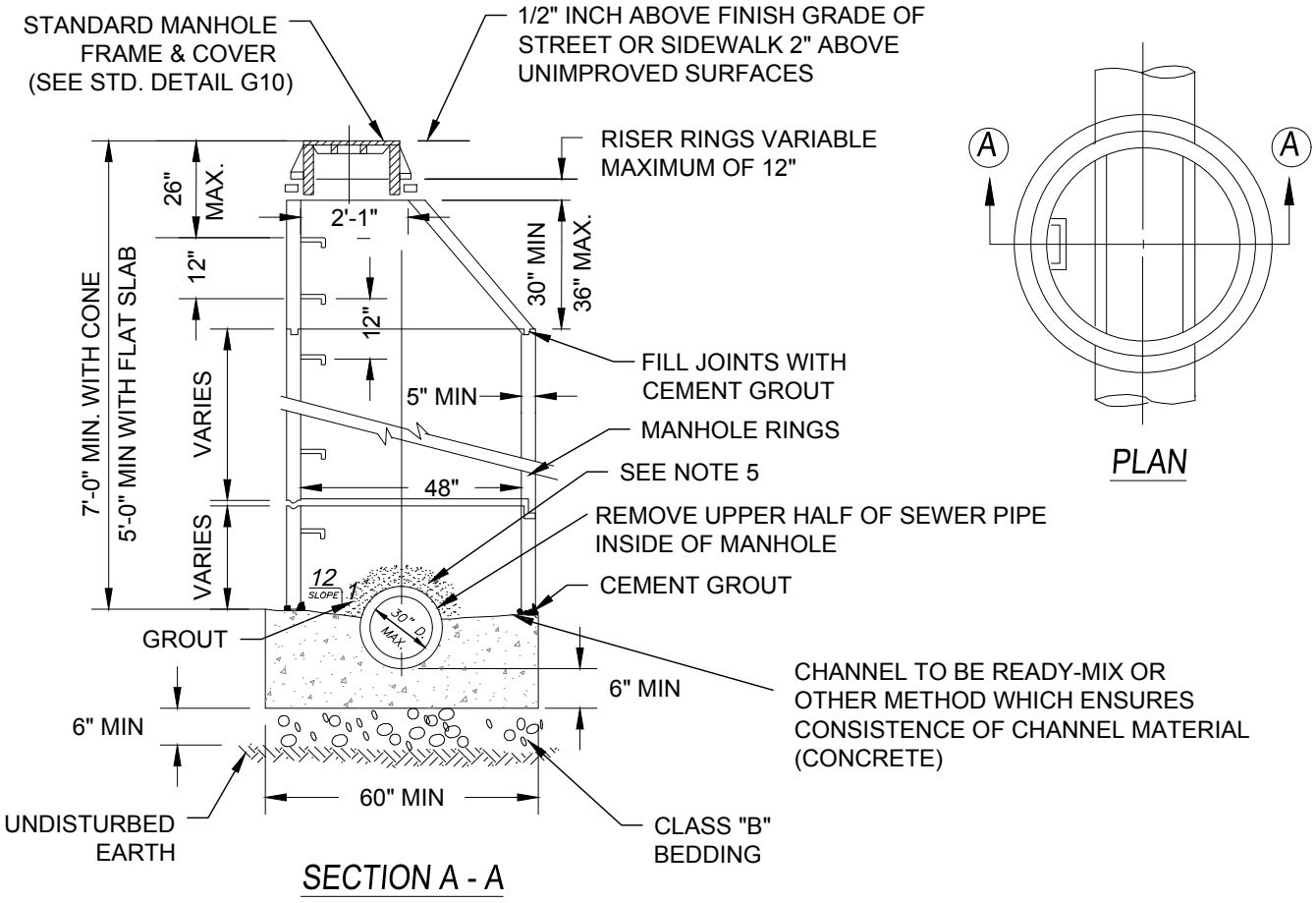
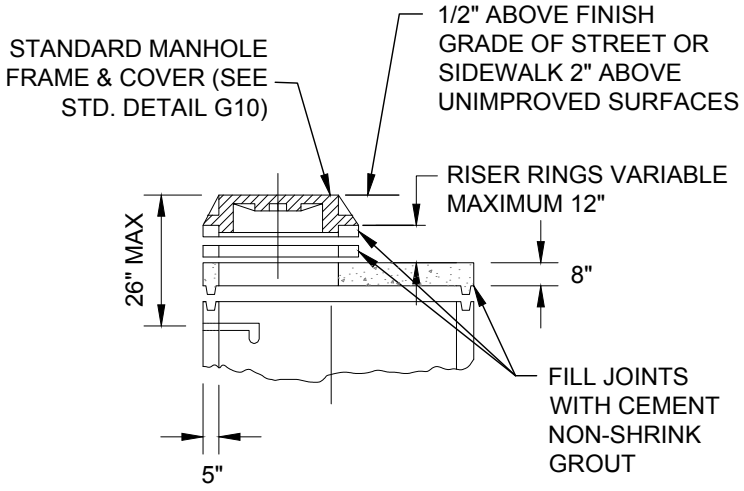


NOTES:

1. CONSTRUCTION SHALL CONFORM TO STANDARD PRECAST MANHOLE DETAIL, IF NOT OTHERWISE SHOWN.
2. ALL PRECAST SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478. ALL POURED IN PLACE CONCRETE SHALL HAVE A 28 DAY STRENGTH OF 3000 P.S.I. AND 2" TO 4" SLUMP.
3. THE MANHOLE MAY BE POURED MONOLITHIC TO 8" ABOVE THE BARREL OF THE MAIN SEWER.
4. FLAT SLAB MANHOLE COVER NOT FOR USE IN TRAFFIC AREAS.
5. FOR GROUTED CONNECTIONS, THIS HOLE DIAMETER SHALL BE EQUAL TO THE OUTSIDE PIPE DIAMETER PLUS THE MANHOLE WALL THICKNESS.
6. MANHOLE FRAME & LID TO EXTEND 1/2" ABOVE PAVED SURFACE OR 2" ABOVE UNIMPROVED SURFACE IF ADJACENT (<2') WITHIN PAVED AREA. IF NO PAVED AREA (2' GREATER THAN GROUND).



FLAT SLAB ALTERNATE

STEVENSON WATER ENGINEERING

SAMPLING MANHOLE

DRAWING NO. SAN07

DATE AUG '25 | SCALE NTS

APPROVED BY CR