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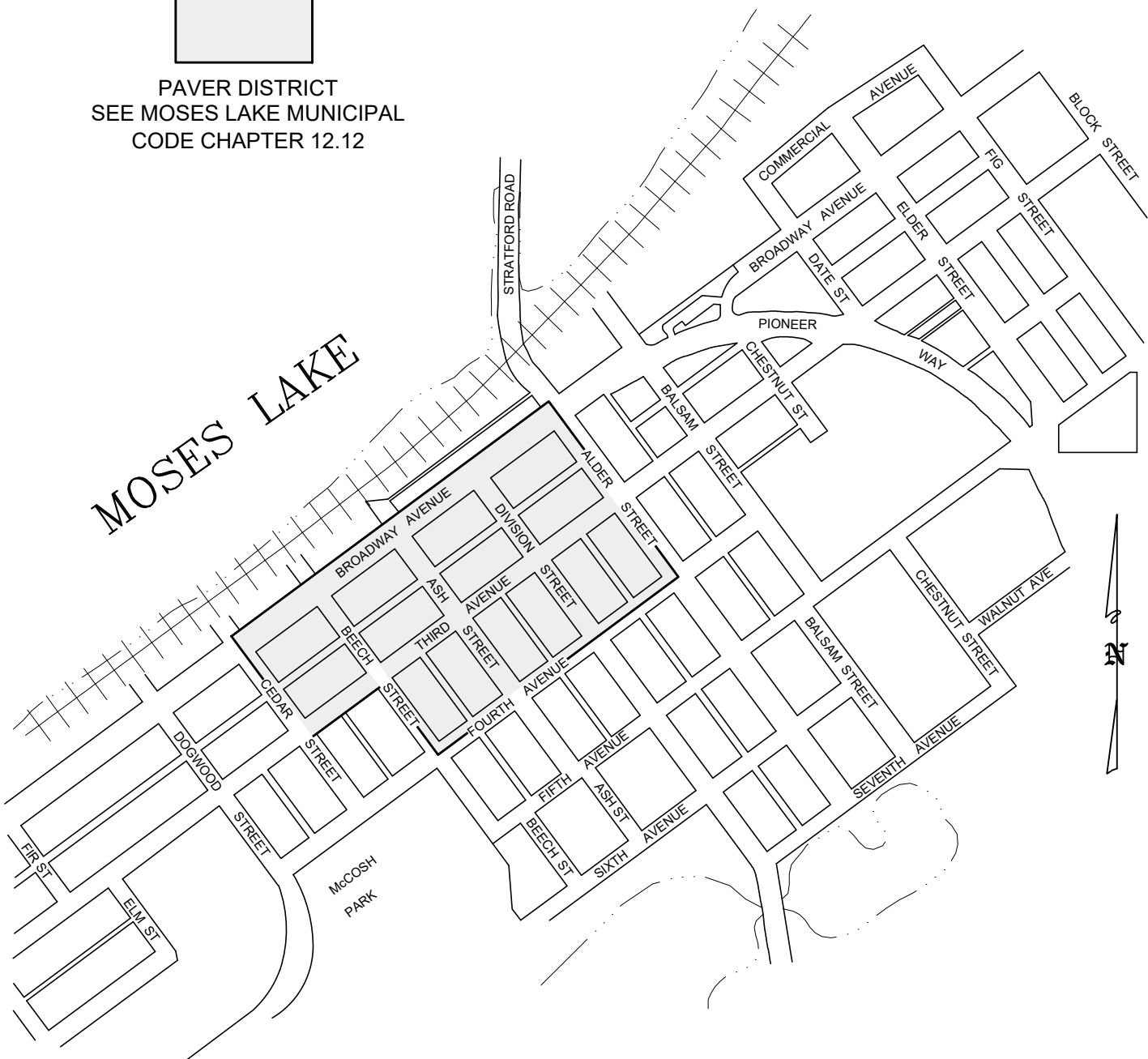
TITLE	DETAIL NO.
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SEWER

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PAVER DISTRICT
SEE MOSES LAKE MUNICIPAL
CODE CHAPTER 12.12

MOSES LAKE



NOTES:

1. CONSTRUCTION PLANS MAY BE REQUIRED FROM A PROFESSIONAL ENGINEER PRIOR TO AUTHORIZATION FROM THE CITY.
2. PAVERS MAY BE AUTHORIZED OUTSIDE OF THE PAVER DISTRICT. OWNER SHALL BE RESPONSIBLE FOR ALL COSTS OF INSTALLATION AND MAINTENANCE OF THE PAVERS.
3. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

PAVER DISTRICT

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

DRAWN RPM
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CITY OF MOSES LAKE

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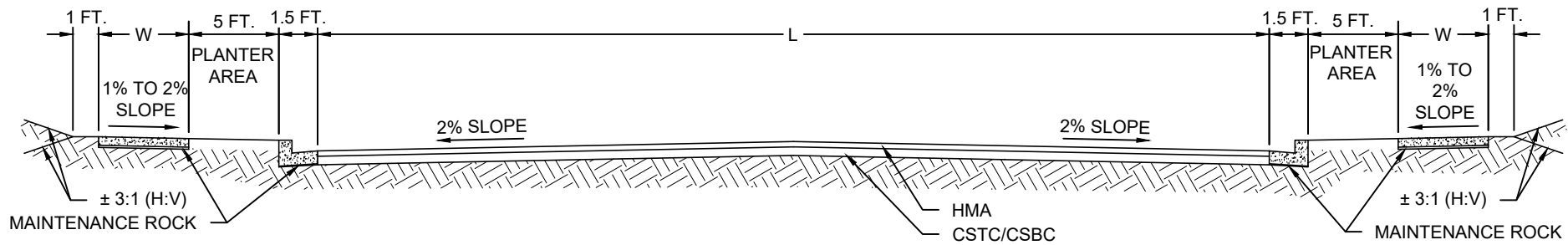
A-1

DIMENSIONS

	PRIMARY STREETS	SECONDARY STREETS	TERTIARY STREETS	RESIDENTIAL STREETS
ASPHALT DEPTH	4 INCHES	3 INCHES	2.5 INCHES	2.5 INCHES
ASPHALT WIDTH 'L'	50 FEET	50 FEET	35 FEET	28 FEET
CSTC DEPTH	3 INCHES	3 INCHES	4 INCHES	4 INCHES
CSBC DEPTH	6 INCHES	6 INCHES	N/A	N/A
SIDEWALK WIDTH 'W'	6 FEET	6 FEET	5 FEET	5 FEET
RADIUS TO BACK OF CURB AT INTERSECTION	30 FEET	30 FEET	20 FEET	20 FEET
RIGHT OF WAY	100 FEET	80 FEET	60 FEET	60 FEET
CURVATURE	300 FT. RADIUS	200 FT. RADIUS	200 FT. RADIUS	100 FT. RADIUS
MAXIMUM GRADE	6 %	8%	10 %	10 %

CUL-DE-SAC: SEE DETAIL A-13

NOTE: THESE DIMENSIONS MAY BE REQUIRED TO BE INCREASED DUE TO SPECIFIC CONDITIONS.



TYPICAL STREET CROSS SECTION

NOTES:

- FOR SIDEWALK AND DRIVEWAY CONSTRUCTION SEE STANDARD DRAWINGS A-5 AND A-6.
- FOR CURB CONSTRUCTION SEE STANDARD DRAWING A-4.
- STREETS SHALL HAVE A CENTERLINE SLOPE OF 0.5 PERCENT OR GREATER.
- ALL SIDEWALK SHALL BE INSTALLED WITH A SLOPE OF 1% TO 2.0% FROM BACK-OF-SIDEWALK TO BACK-OF-CURB.
- IN COMMERCIAL AND INDUSTRIAL DEVELOPMENTS, PLANTER AREAS MAY BE ELIMINATED BY INSTALLING AN 8-FOOT-WIDE SIDEWALK ADJACENT TO CURB.
- RIGHT-OF-WAY FOR RESIDENTIAL STREETS MAY BE REDUCED TO 53-FT PROVIDED THAT A 4-FT MUNICIPAL EASEMENT IS ACCEPTED BY THE CITY ON EACH SIDE OF THE 53-FT RIGHT-OF-WAY.
- ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

STREET STANDARDS

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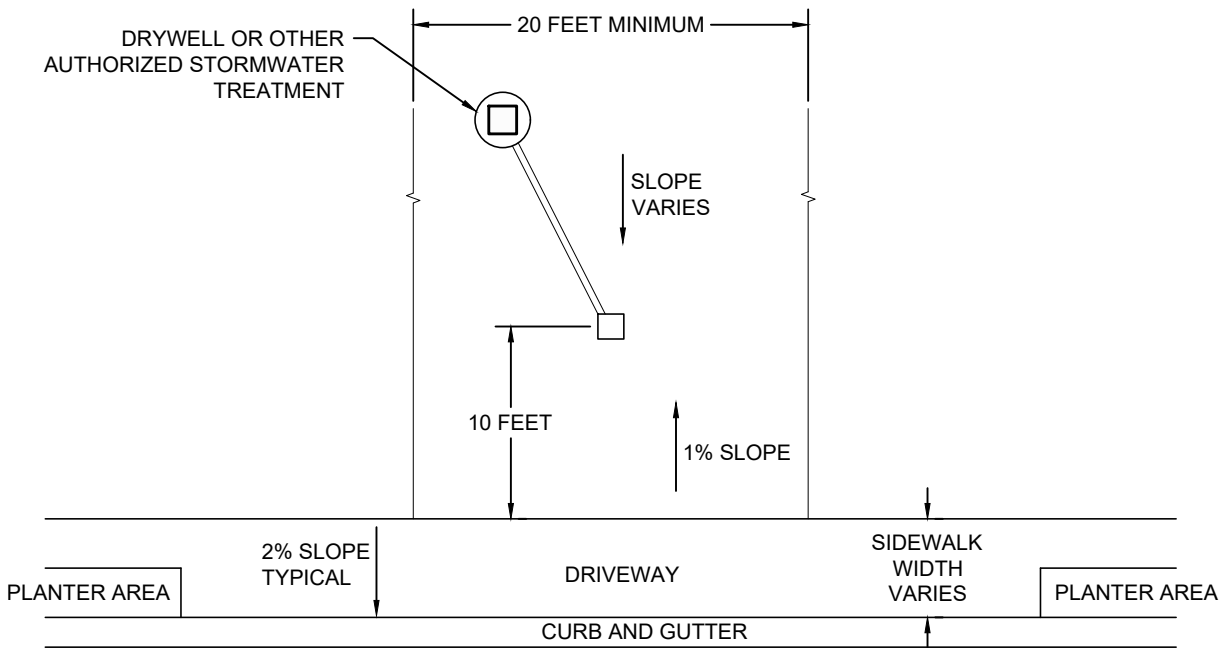
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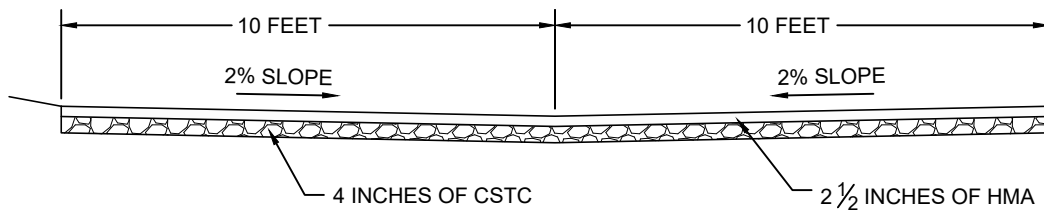
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A-2



PLAN VIEW



TYPICAL SECTION

NOTES:

1. ALLEYS IN RESIDENTIAL AREAS SHALL BE GRADED AND HAVE 4 INCHES CSTC.
2. ALLEYS ADJACENT TO PROPERTIES OTHER THAN RESIDENTIAL AREAS SHALL BE AS SHOWN IN THIS DETAIL.
3. PAVED ALLEYS SHALL HAVE A CENTERLINE SLOPE OF 0.5 PERCENT OR GREATER.
4. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

TYPICAL ALLEY

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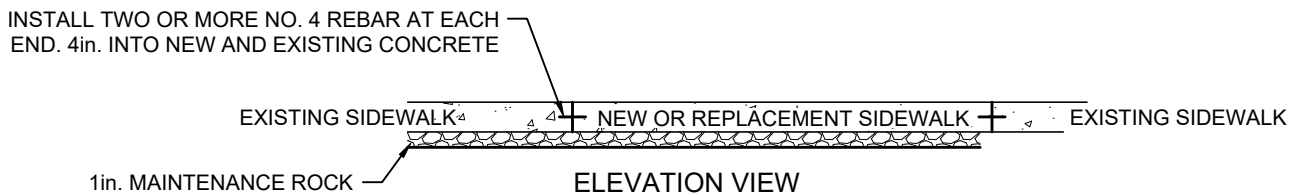
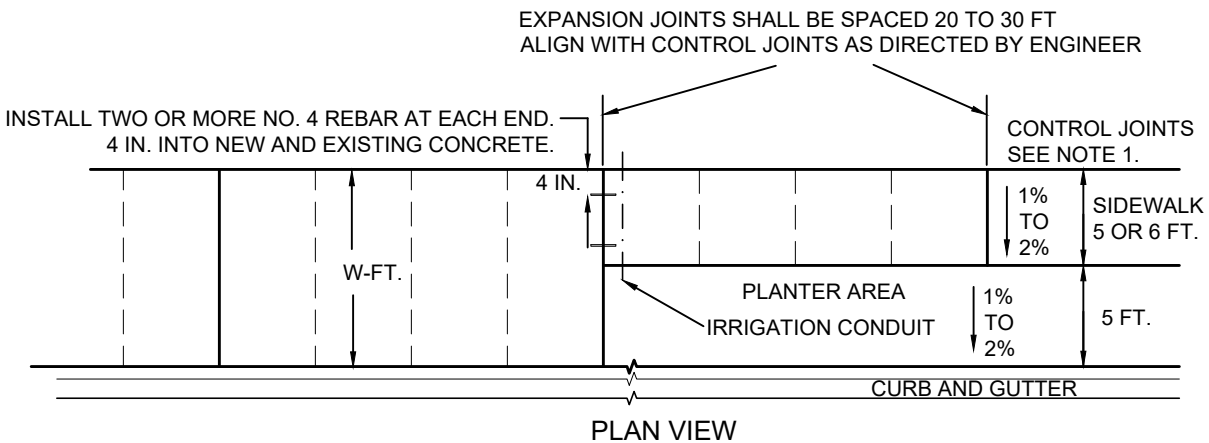
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A-3

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NOTES:

- CONTROL JOINTS SHALL BE 1 INCH DEEP AND PLACED PERPENDICULAR TO THE CURB. SPACING SHALL MATCH THE SIDEWALK WIDTH, BUT NOT GREATER THAN 10 FT.; EXCEPT, WHEN PLANTER AREAS ARE NOT INSTALLED, CONTROL JOINTS SHALL ALIGN WITH CURB JOINTS.
- FULL DEPTH EXPANSION JOINTS (MASTIC) SHALL BE PLACED PERPENDICULAR TO THE CURB AT 20 TO 30 FT. INTERVALS. ALIGN WITH CONTROL JOINTS AS DIRECTED BY ENGINEER.
- MASTIC SHALL BE 3/8-INCH THICK MATERIAL AND BE PLACED FULL DEPTH. MASTIC SHALL NOT BE INSTALLED WITHIN DRIVEWAYS OR RAMPS.
- SIDEWALK AND DRIVEWAYS SHALL BE BROOM FINISHED PERPENDICULAR TO THE CURB.
- MAINTAIN FIVE-FEET OF CLEARANCE FOR SIGN, MAILBOX, UTILITY POLE, AND ALL OTHER STRUCTURES WITHIN THE SIDEWALK.
- ONE INCH OF MAINTENANCE ROCK OR CRUSHED SURFACING TOP COURSE IS REQUIRED UNDER ALL CONCRETE.
- SIDEWALK THICKNESS:
4 INCHES WHEN BEHIND TYPE 'A' CURB AND TYPE 'E' CURB
6 INCHES IN ALL DRIVEWAYS (TOP-OF-TAPER TO TOP-OF-TAPER) AND BEHIND EXISTING ROLLED CURB.
- IN THE PLANTER AREA, A 2-INCH SCHEDULE 40 PVC PIPE WITH CAPS ON BOTH ENDS SHALL BE INSTALLED 12-INCHES DEEP WITH 6-INCHES OF SAND BEDDING UNDER THE SIDEWALK FOR EACH PROPERTY.
- PLANTER AREAS MAY BE WIDER THAN 5 FEET, PROVIDED THAT 1-FOOT R.O.W. IS PROVIDED BEHIND THE SIDEWALK.
- CURB, SIDEWALK, OR DRIVEWAYS CAN BE PLACED MONOLITHICALLY.
- FOR NON-RESIDENTIAL ZONES, PLANTER AREAS ARE NOT REQUIRED PROVIDED THAT THE WIDTH OF SIDEWALK "W" IS AT LEAST 8 FT. WIDE. IN THE PAVER DISTRICT, SIDEWALKS SHALL BE CONSTRUCTED FROM R.O.W. TO BACK-OF-CURB.
- WHEN NEW SIDEWALKS ARE INSTALLED ADJACENT TO EXISTING CURB OR SIDEWALKS, NO.4 REBAR SHALL BE INSTALLED IN THE DIRECTION OF PEDESTRIAN TRAVEL AS DIRECTED BY THE ENGINEER.
- ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE

TYPICAL PORTLAND CEMENT CONCRETE SIDEWALK

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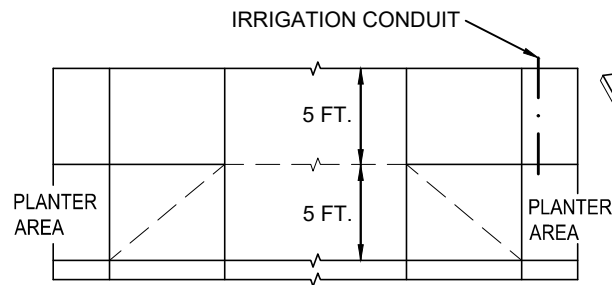
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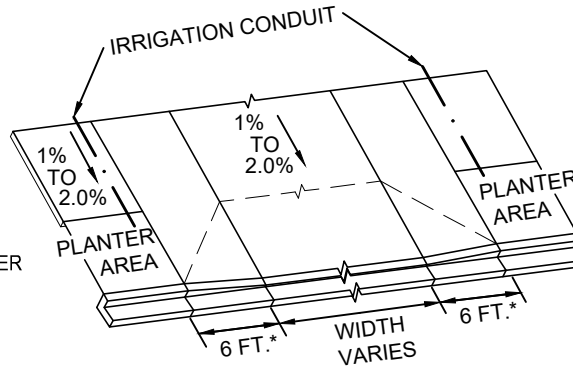
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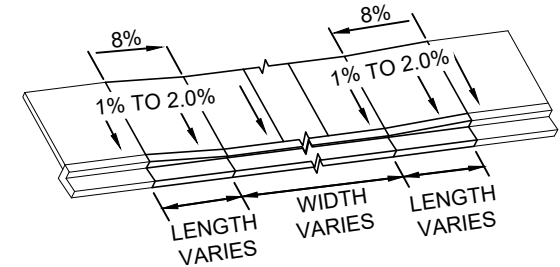
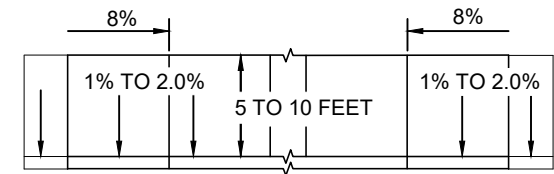
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OPTION A



* MAY BE REDUCED TO 18 INCHES ADJACENT TO PLANTER AREA



OPTION B

NOTES:

- ALL JOINTS SHALL BE CLEAN & EDGED. REFER TO DETAIL A-5 AS FOR LOCATION.
- ONE INCH OF MAINTENANCE ROCK REQUIRED UNDER ALL CONCRETE.
- CURING SHALL BE PER SECTION 8-14.3(4).
- UP TO TWO DRIVEWAYS AUTHORIZED PER RESIDENCE OR ONE BUSINESS, UNLESS APPROVED IN WRITING BY THE MUNICIPAL SERVICES DIRECTOR.
- CONCRETE SHALL BE 6 INCHES THICK IN DRIVEWAY FROM TOP OF TAPER TO TOP OF TAPER.
- DRIVEWAYS SHALL BE BROOM FINISHED PERPENDICULAR TO THE ROADWAY.
- IN PLANTER AREAS, A 2-INCH SCHEDULE 40 PVC PIPE WITH CAPS SHALL BE INSTALLED 12-INCHES DEEP UNDER THE SIDEWALK WITH 6-INCHES OF SAND BEDDING.
- SETBACKS FROM INTERSECTIONS ARE MEASURED FROM THE FRONT FACE OF THE EXISTING OR PROJECTED CURB OF THE INTERSECTING STREET.
- SEE DETAIL A-4 FOR DEPRESSED CURB CROSS SECTION. EXISTING CURB MAY BE SAWCUT FOR DRIVEWAY ACCESS.
- OPTION B IS REQUIRED WHEN DRIVEWAYS ARE CONSTRUCTED IN AREAS WITHOUT PLANTER STRIPS.
- RAMPS ON OPTION B SHALL BE EXTENDED AS NECESSARY TO PROVIDE PEDESTRIAN ACCESS AT 8% OR LESS, OR THE RAMP SHALL BE EXTENDED FOR A TOTAL LENGTH OF 15 FEET IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

--- CHANGE OF SLOPE
 ——— CONTROL JOINTS

DRIVEWAY SEPARATION (MEASURED FROM BOTTOM OF THE TAPERS)

	PRIMARY STREET	SECONDARY STREET	COMMERCIAL TERTIARY STREET	RESIDENTIAL TERTIARY STREET	RESIDENTIAL STREET
DISTANCE FROM INTERSECTIONS	100 FEET	75 FEET	50 FEET	30 FEET	30 FEET
DISTANCE FROM INTERIOR LOT LINES	30 FEET	20 FEET	20 FEET	TAPER LENGTH	TAPER LENGTH
SEPARATION BETWEEN DRIVEWAYS ON ONE LOT	100 FEET	75 FEET	60 FEET	12 FEET	12 FEET

DRIVEWAY WIDTH

SINGLE AND DUPLEX:
10 TO 30 FEET

OTHER: 10 TO 40 FEET

PORTLAND CEMENT CONCRETE DRIVEWAY

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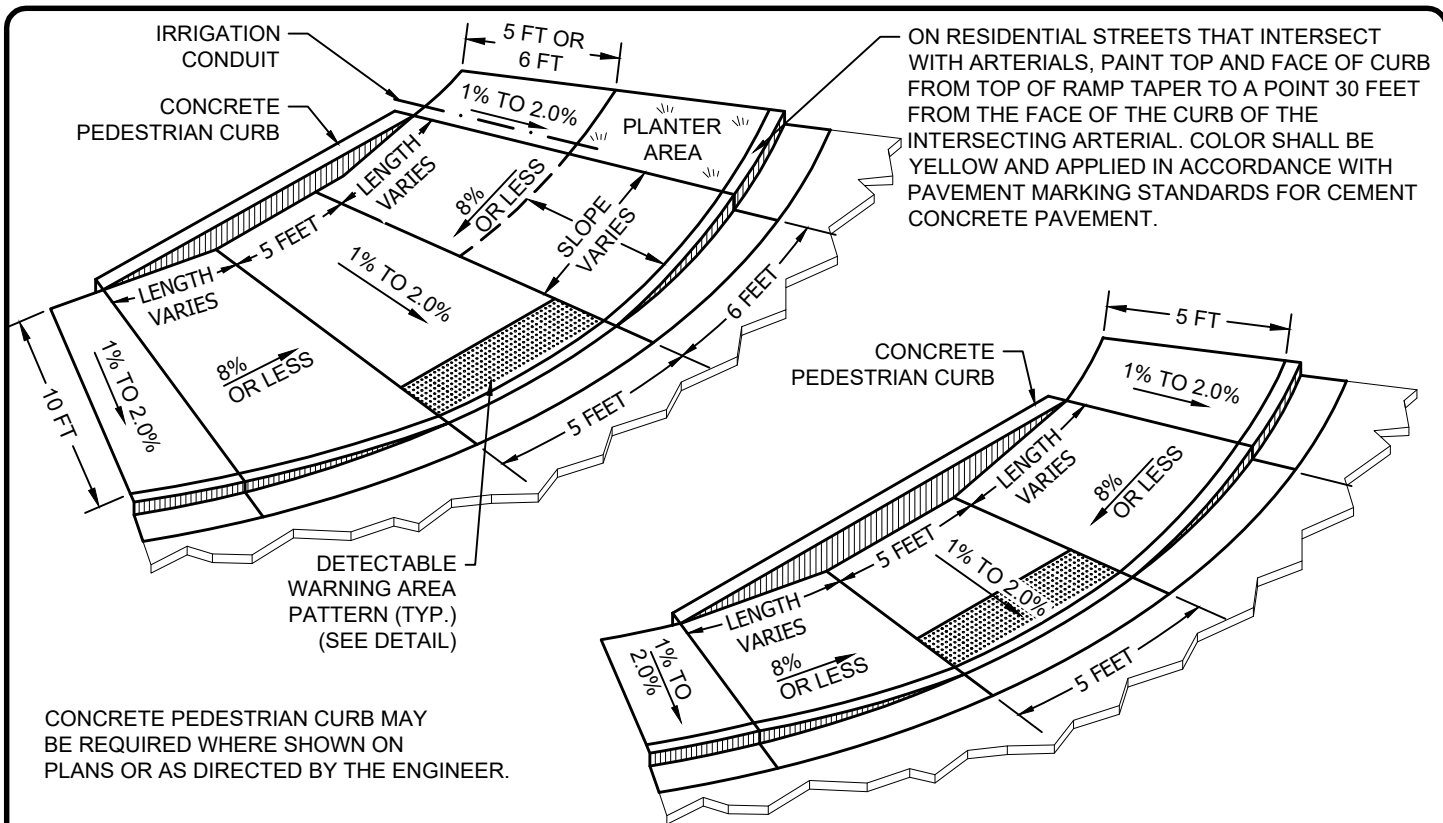
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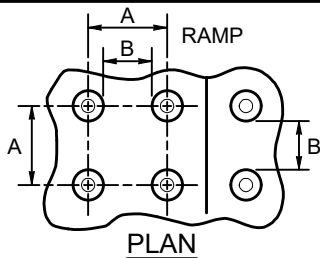
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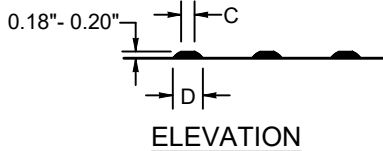
CONCRETE PEDESTRIAN CURB MAY BE REQUIRED WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

SIDEWALK RAMP DETAIL

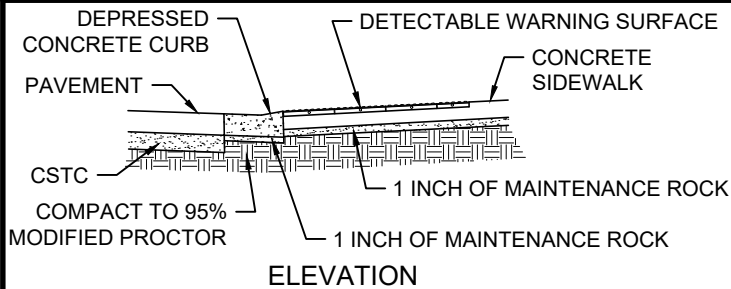
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	MIN.	MAX.
A	1 5/8 IN.	2 3/8 IN.
B	5/8 IN.	1 1/2 IN.
C	7/16 IN.	3/4 IN.
D	7/8 IN.	1 7/16 IN.



TRUNCATED DOMES PATTERN DETAIL



DETECTABLE WARNING AREA CONSTRUCTION DETAIL

GENERAL NOTES:

1. SEE DETAIL A-4 FOR CONSTRUCTION OF DEPRESSED CURB AND CONCRETE PEDESTRIAN CURB.
2. SEE SIDEWALK DETAIL A-5 FOR CONSTRUCTION OF CONCRETE SIDEWALK.
3. SIDEWALK RAMP SHALL BE 4 INCHES THICK.
4. SIDEWALK RAMP SHALL BE BROOM FINISHED PERPENDICULAR TO BACK OF CURB.
5. SIDEWALK RAMP SLOPES SHALL BE 8 PERCENT OR LESS, EXCEPT THAT RAMP SHALL NOT BE REQUIRED TO EXTEND MORE THAN 15 FEET.
6. FOR THE PLANTER AREAS, A 2-INCH SCHEDULE 40 PVC PIPE WITH CAPS ON BOTH ENDS SHALL BE INSTALLED 12-INCHES DEEP WITH 6-INCHES OF SAND BEDDING AROUND THE CONDUIT.
7. DETECTABLE WARNING SURFACES SHALL BE PER SPECIFICATIONS.
8. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

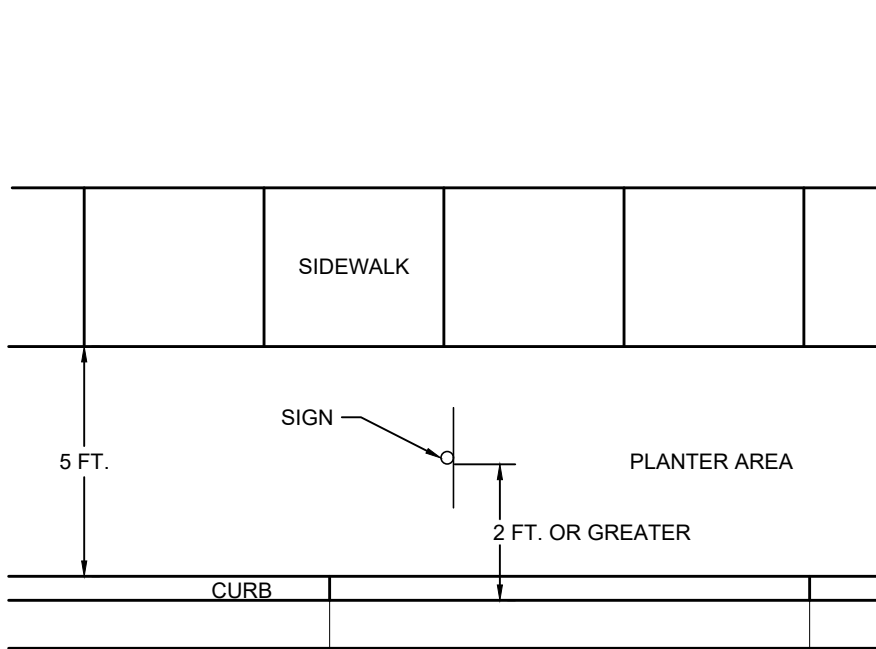
CURB RAMP

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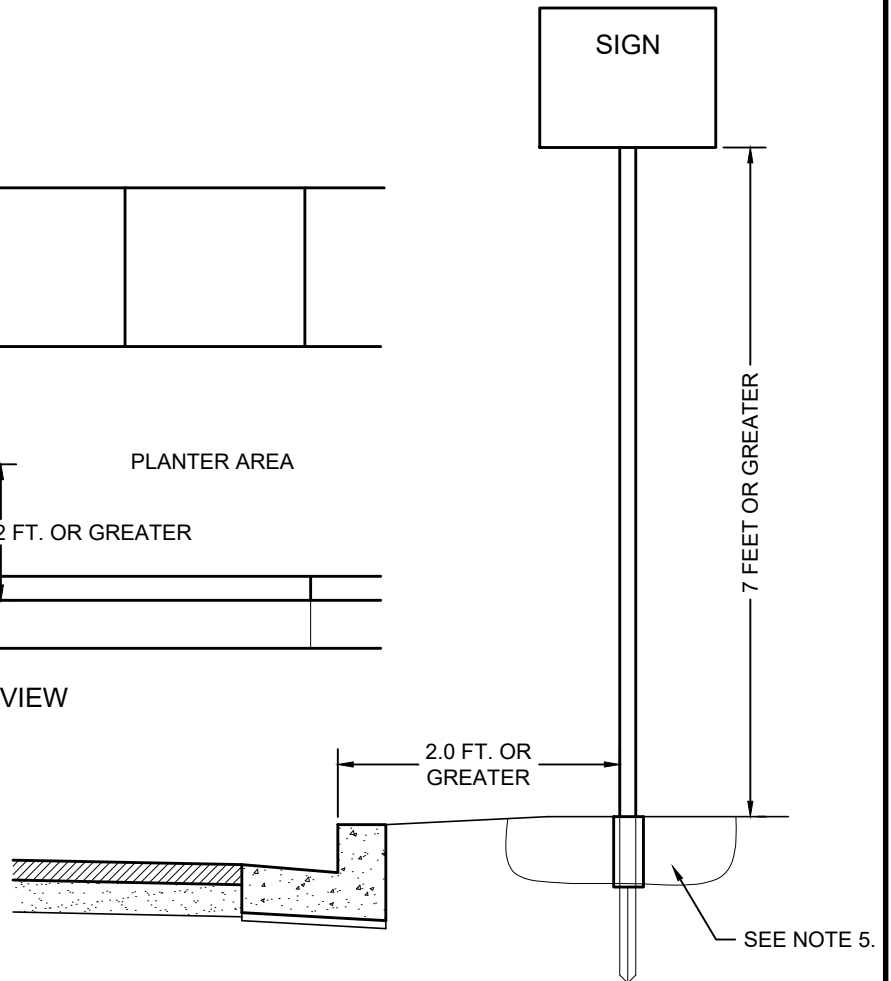
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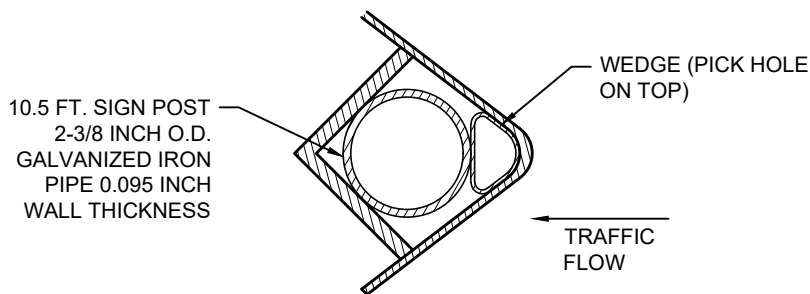
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SIGN PLAN VIEW



SIGN SECTION VIEW



V-LOCK SIGN ANCHOR

NOTES:

1. EXACT LOCATION OF THE SIGN AND ANCHOR WILL BE ESTABLISHED BY THE CITY AT THE TIME OF INSTALLATION.
2. V-LOCK SIGN ANCHORS AND WEDGES WILL BE SUPPLIED BY THE CITY.
3. NO PORTION OF THE SIGN SHALL OVERHANG THE SIDEWALK OR CURB.
4. THIS INSTALLATION SHALL BE ONLY FOR AREAS WITH PLANTER STRIPS, WITHOUT SIDEWALKS, OR WITHOUT ADEQUATE SPACE BEHIND THE SIDEWALK AS APPROVED BY THE ENGINEER.
5. IF CONCRETE IS PLACED AROUND V-LOCK, ENSURE V-LOCK DRAINAGE IS NOT BLOCKED.
6. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

STREET SIGN INSTALLATION

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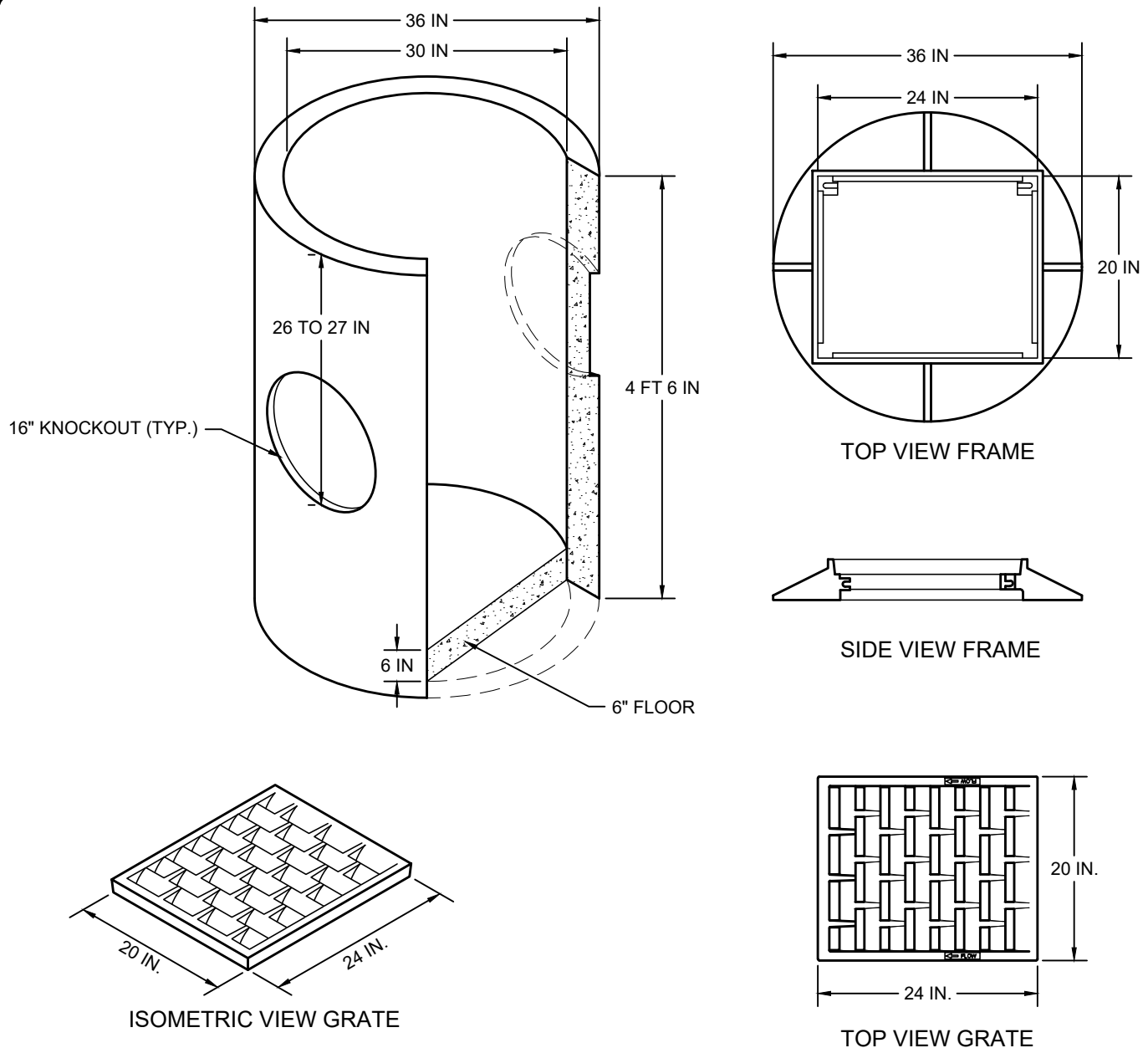
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A-8

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NOTES:

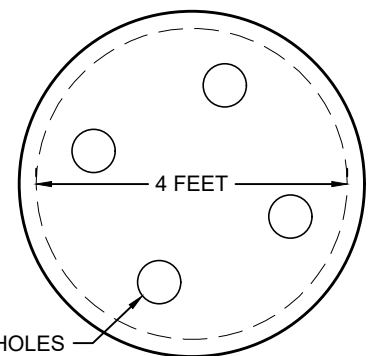
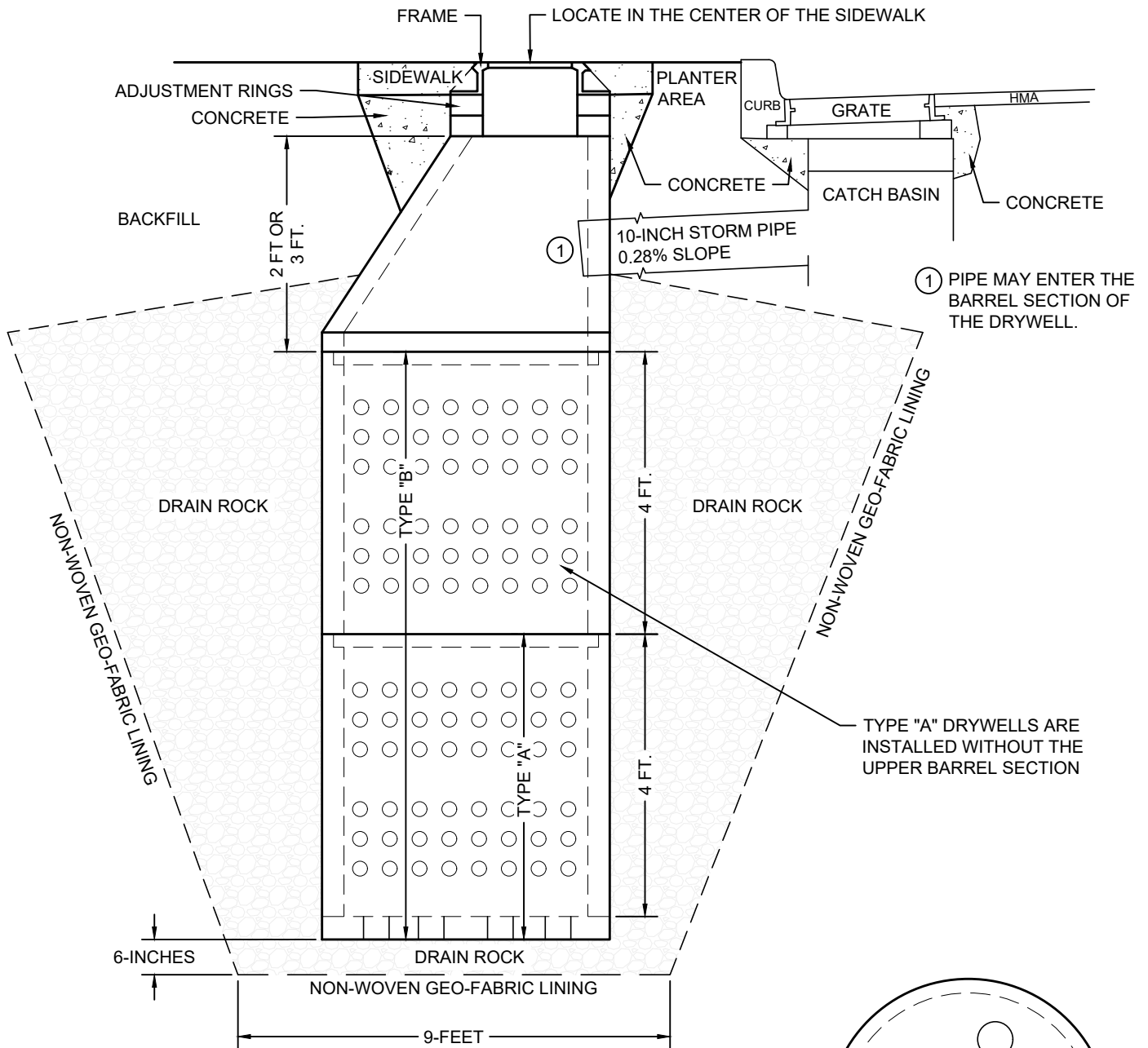
1. CATCH BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C 478 (AASHTO M 199) AND ASTM C 890.
2. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2 INCHES.
3. AN ENTRY COUPLING OR SAND COLLAR IS REQUIRED FOR PVC PIPE WHERE THE PIPE PENETRATES THE CATCH BASIN BASE.
4. DEPTH FROM PIPE INVERT TO FINISH GRADE SHALL BE 5 FEET OR LESS.
5. COVER FROM TOP OF PIPE TO FINISH GRADE UNDER SIDEWALKS SHALL BE 2 FEET OR MORE. COVER FROM TOP OF PIPE TO FINISH GRADE UNDER ROADWAYS SHALL BE 3 FEET OR MORE FOR PVC PIPE AND 18 INCHES OR MORE FOR DUCTILE IRON PIPE.
6. ADJUSTMENT RINGS AND THE CATCH BASIN GRATE SHALL BE WITHIN ONE INCH OF THE VERTICAL ALIGNMENT OF THE CATCH BASIN. PLACE CONCRETE AROUND OUTSIDE OF ADJUSTMENT RINGS AND GRATE.
7. CONTRACTOR SHALL USE D&L FOUNDRY FRAME No. I-4437 WITH VANED OR BI-DIRECTIONAL GRATE.
8. ENGINEER MAY REQUIRE DRAINAGE TEE. SEE STANDARD DETAIL A-28.
9. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

30" ROUND CATCH BASIN

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A-9



PRECAST BASE DETAIL

NOTES:

1. 4-INCHES TO 16 INCHES OF ADJUSTMENT RINGS ARE REQUIRED.
2. PLACE CONCRETE AROUND OUTSIDE OF ADJUSTMENT RINGS AND FRAME.
3. PRECAST CONE SECTION MAY BE CONCENTRIC OR ECCENTRIC.
4. INSTALL SAND COLLAR AND GROUT SEAL PVC PIPE WHERE THE PIPE PENETRATES THE DRYWELL.
5. DRYWELLS NOT IN SIDEWALK SHALL BE PLACED IN A 6-FT. BY 6-FT. BY 6-IN. CONCRETE PAD AT FINISH GRADE.
6. DRYWELL SHALL BE PLACED 15 FEET FROM OTHER UTILITY STRUCTURES AND 5 FEET FROM OVERHEAD UTILITIES.
7. "DRAIN" SHALL BE CAST IN THE LID.
8. PRIOR TO CONSTRUCTION, THE CITY SHALL RECEIVE APPROVAL FROM THE WSDOE PER SECTION 7-05.
9. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

48-INCH PRECAST CONCRETE DRYWELL

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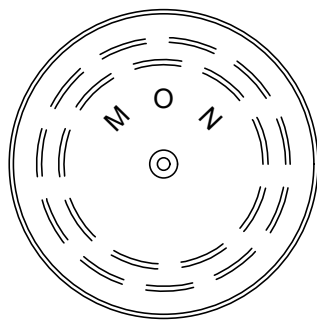
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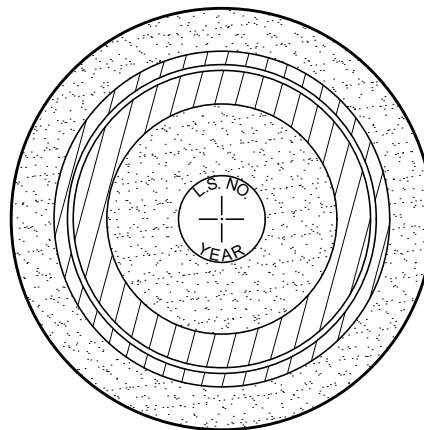
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MONUMENTS IN UNPAVED AREAS ARE NOT REQUIRED TO BE SET IN ACCORDANCE WITH THIS DETAIL.



PLAN VIEW

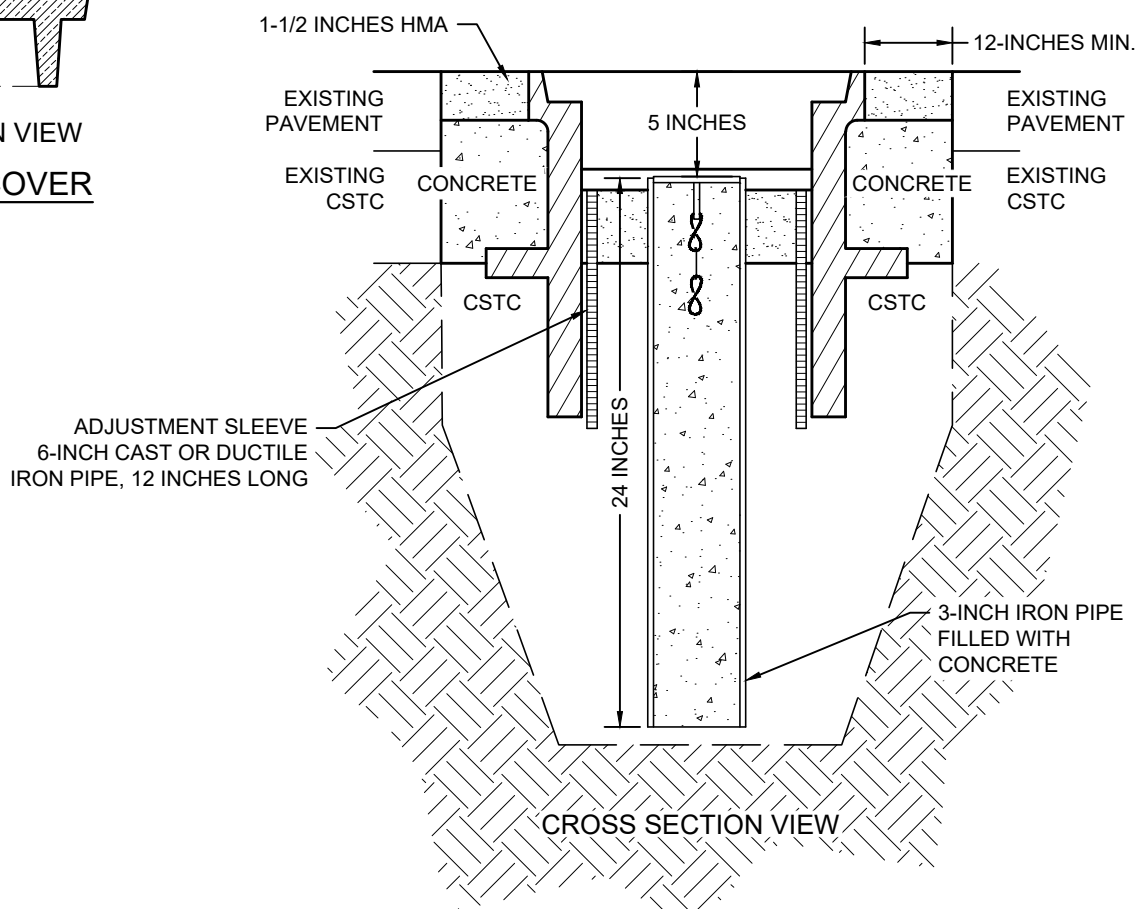


PLAN VIEW



CROSS SECTION VIEW

MONUMENT COVER



CROSS SECTION VIEW

NOTES:

1. BRASS CAP SHALL BE 2 INCHES IN DIAMETER, OR GREATER.
2. AREA EXCAVATED TO INSTALL MONUMENT SHALL BE BACKFILLED WITH CSTC TO WITHIN 9 INCHES OF FINISHED GRADE (THE BOTTOM OF THE MONUMENT CASE) AND COMPACTED TO 95% OF MAXIMUM DENSITY. THE VOID INSIDE THE MONUMENT CASE SHALL ALSO BE FILLED WITH CSTC TO THE BOTTOM OF THE BRASS CAP.
3. ADJUST MONUMENT IN ASPHALT TO 1/4 INCH BELOW FINISH GRADE.
4. "MON" SHALL BE CAST INTO THE LID.
5. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

MONUMENT - TYPE I

MONUMENT - TYPE I

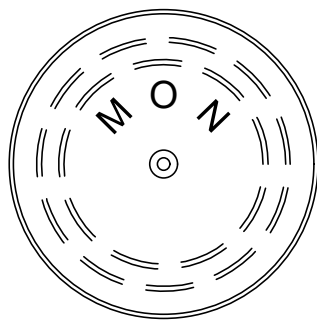
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SCALE	NONE	
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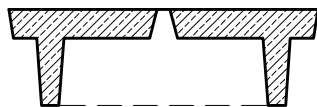
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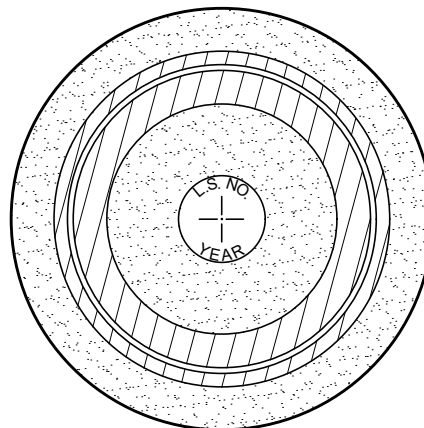


PLAN VIEW

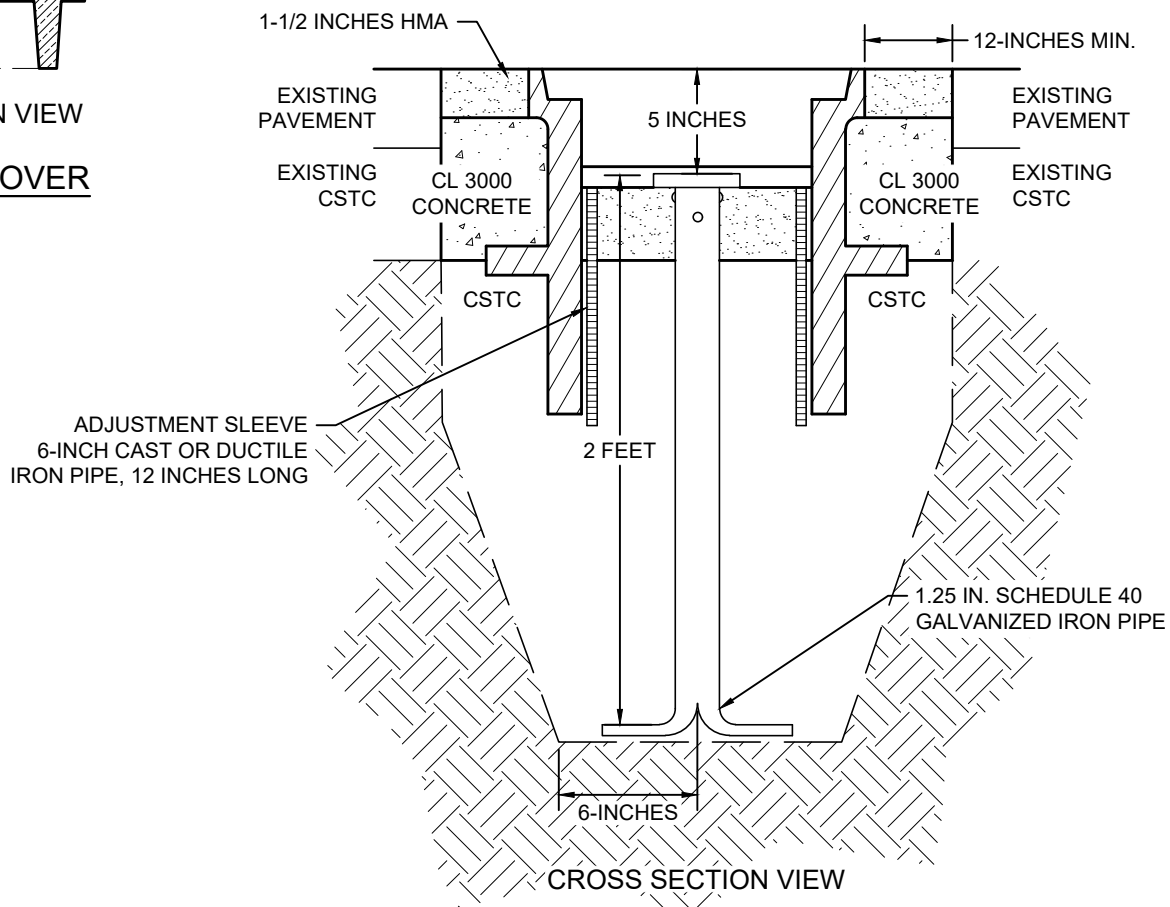


CROSS SECTION VIEW

MONUMENT COVER



PLAN VIEW



CROSS SECTION VIEW

MONUMENT - TYPE II

NOTES:

1. BRASS CAP SHALL BE 2 INCHES IN DIAMETER, OR GREATER.
2. AREA EXCAVATED TO INSTALL MONUMENT SHALL BE BACKFILLED WITH CSTC TO WITHIN 9 INCHES OF FINISHED GRADE (THE BOTTOM OF THE MONUMENT CASE) AND COMPACTED TO 95% OF MAXIMUM DENSITY. THE VOID INSIDE THE MONUMENT CASE SHALL ALSO BE FILLED WITH CSTC TO THE BOTTOM OF THE BRASS CAP.
3. ADJUST MONUMENT IN ASPHALT TO 1/4 INCH BELOW FINISH GRADE.
4. "MON" SHALL BE CAST INTO THE LID.
5. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

MONUMENT – TYPE II

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SCALE NONE

CITY OF MOSES LAKE

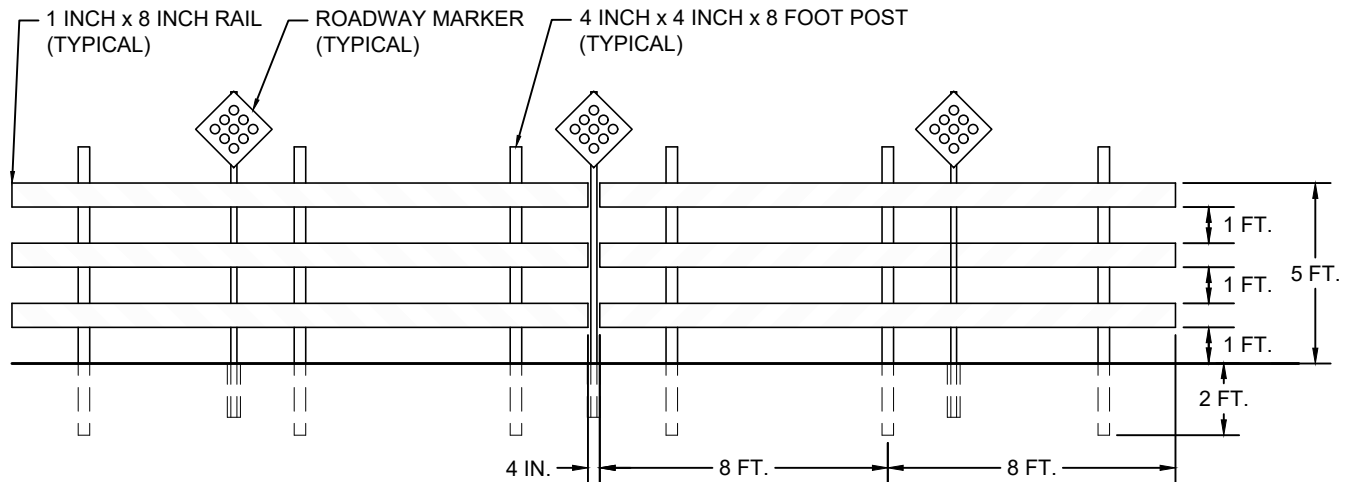
DATE 08/18
REVISION AMENDED
BY MLL

DATE 12/12

GRANT COUNTY

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A-11B



NOTES:

1. END-OF-ROADWAY MARKER SHALL BE PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES SIGN OM4-2, RED ON BLACK.
2. ROADWAY MARKER POSTS SHALL BE 2-INCH O.D. GALVANIZED IRON PIPE WITH 0.095-INCH WALL THICKNESS MOUNTED IN V-LOCKS BEHIND BARRICADES.
3. 4-INCH BY 4-INCH BY 8-FOOT POSTS SHALL BE PRESSURE TREATED LUMBER, PRIMED AND PAINTED WHITE.
4. RAILS SHALL BE PLASTIC, 1-INCH THICK BY 8-INCHES WIDE, RED ON WHITE, WITH STRIPES FACTORY APPLIED, ENGINEER GRADE AS SUPPLIED BY TRAFFIC SAFETY SUPPLY.
5. LENGTH OF BARRICADE SHALL BE OF A LENGTH THAT WILL PHYSICALLY RESTRICT ACCESS BY MOTORIZED VEHICLES.
6. BARRICADES SHALL MEET THE REQUIREMENTS OF SECTIONS 3C-04 AND 3F-01 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
7. WHERE ACCESS MAY BE REQUIRED BEYOND THE BARRICADE, ALTERNATE PASS-THROUGH BARRICADES MAY BE AUTHORIZED OR REQUIRED BY THE ENGINEER.
8. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

TO BE USED ONLY AS REQUIRED OR AUTHORIZED BY THE MUNICIPAL SERVICES DIRECTOR.

BARRICADE FOR TEMPORARY NO-OUTLET STREET

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

DRAWN RPM

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SCALE NONE

DATE 12/12

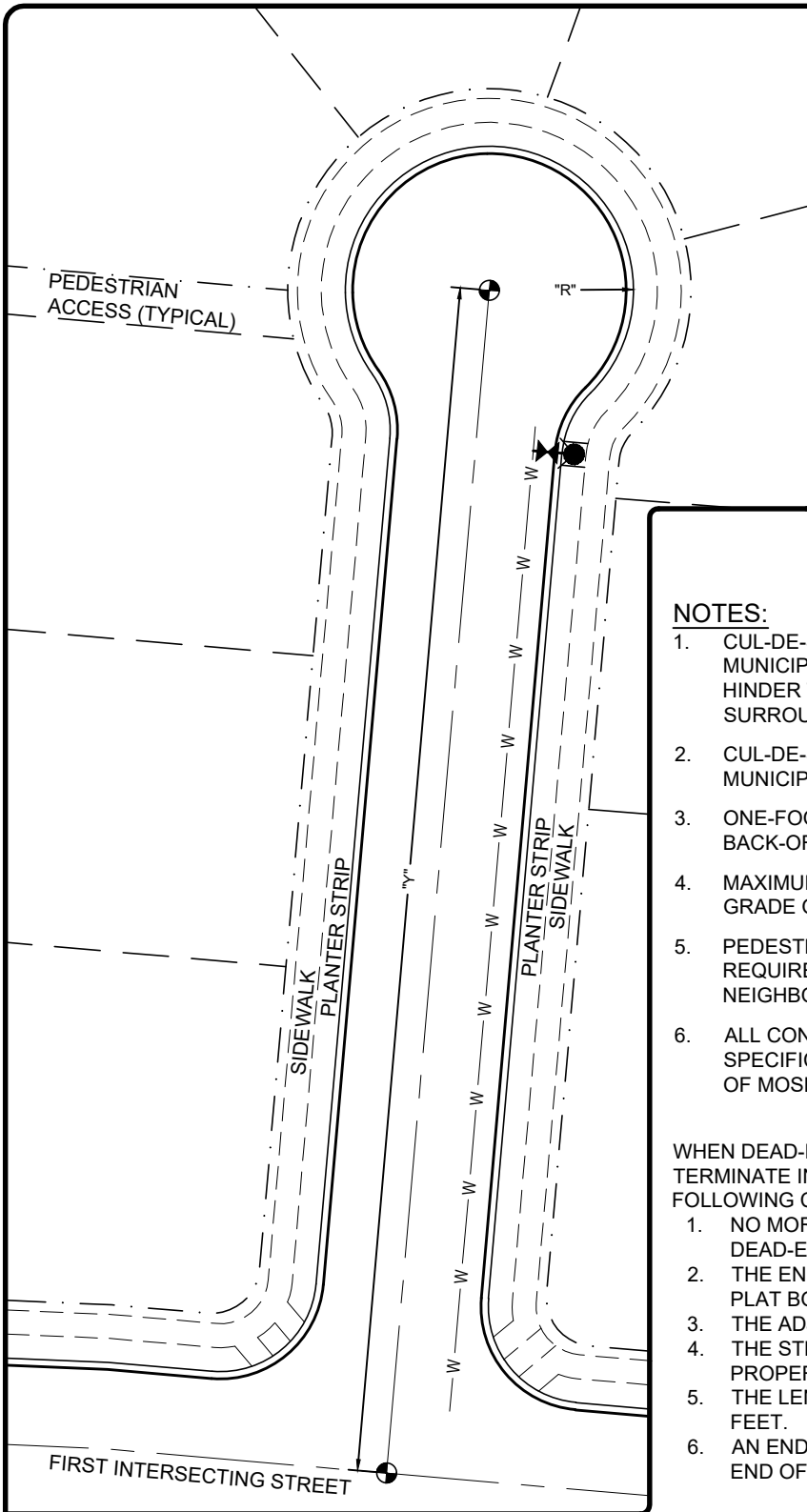
CITY OF MOSES LAKE

GRANT COUNTY

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DESIGN DISTANCES

"Y"	"R"
LESS THAN 220 FEET	30 FEET
220 FEET OR GREATER	46 FEET

"Y" IS MEASURED FROM THE MONUMENT AT THE INTERSECTING STREET ALONG THE CENTERLINE TO THE MONUMENT AT THE CENTER OF THE CUL-DE-SAC.

"R" IS MEASURED FROM CENTER OF THE CUL-DE-SAC TO TOP BACK OF CURB

NOTES:

1. CUL-DE-SACS MAY BE INSTALLED AS APPROVED BY THE MUNICIPAL SERVICES DIRECTOR, WHERE THEY DO NOT HINDER THE CONNECTIVITY OF STREETS IN THE SURROUNDING NEIGHBORHOOD.
2. CUL-DE-SACS MAY BE ECCENTRIC, AS APPROVED BY THE MUNICIPAL SERVICES DIRECTOR.
3. ONE-FOOT OF RIGHT-OF-WAY IS REQUIRED BEHIND THE BACK-OF-SIDEWALK.
4. MAXIMUM CUL-DE-SAC CROSS SLOPE IS 6 PERCENT. MAXIMUM GRADE ON THE CUL-DE-SAC STREET IS 10 PERCENT.
5. PEDESTRIAN ACCESSES AND RIGHT-OF-WAY MAY BE REQUIRED TO CONNECT THE CUL-DE-SAC TO ADJACENT NEIGHBORHOODS.
6. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

WHEN DEAD-END STREETS ARE APPROVED, THEY SHALL TERMINATE IN A CUL-DE-SAC UNLESS THEY MEET ALL OF THE FOLLOWING CRITERIA:

1. NO MORE THAN ONE LOT HAS SOLE ACCESS FROM THE DEAD-END STREET.
2. THE END OF THE STREET RIGHT-OF-WAY TERMINATES AT THE PLAT BOUNDARY.
3. THE ADJACENT PROPERTY IS UNPLATTED.
4. THE STREET SHOULD CONTINUE THROUGH THE ADJACENT PROPERTY WHEN IT IS DEVELOPED.
5. THE LENGTH OF THE DEAD-END STREET IS LESS THAN 175 FEET.
6. AN END-OF ROADWAY BARRICADE IS CONSTRUCTED AT THE END OF THE DEAD-END STREET.

—————	TOP BACK CURB
—————	EDGE OF ASPHALT
- - - - -	SIDEWALK
—————	CENTERLINE
- . - . -	RIGHT OF WAY
—————	PROPERTY LINE
— W — W — W — W —	WATER MAIN

CUL-DE-SAC STANDARDS

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

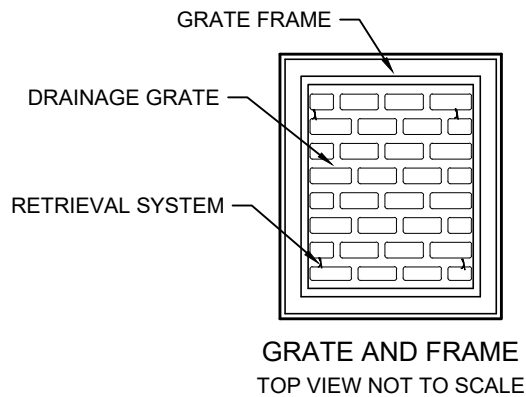
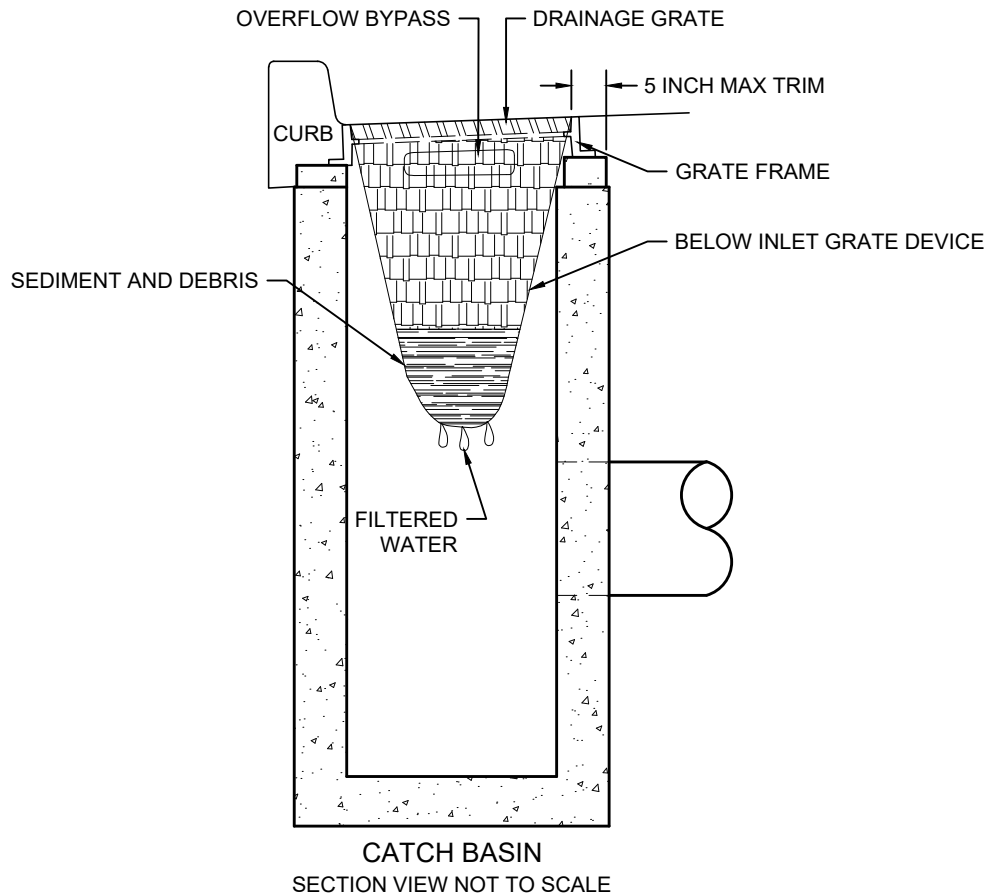
DRAWN RPM
CHECK MORO
SCALE NONE

CITY OF MOSES LAKE

DATE	REVISION	BY
08/18	UPDATE	MLL

DATE 01/10 GRANT COUNTY WASHINGTON

A-13



NOTES:

1. INLET PROTECTION DEVICES SHALL BE INSTALLED IN ALL CATCH BASINS DOWNSTREAM TO PROJECT SITE PRIOR TO ANY AND ALL CONSTRUCTION ACTIVITY. SEE STANDARD SPECIFICATION 8-01.3(9d)
2. SIZE THE BELOW INLET GRATE DEVICE (BIGD) FOR THE STORM WATER STRUCTURE IT WILL SERVICE.
3. THE BIGD SHALL HAVE A BUILT-IN HIGH-FLOW RELIEF SYSTEM (OVERFLOW BYPASS).
4. THE RETRIEVAL SYSTEM SHALL ALLOW REMOVAL OF THE BIGD WITHOUT SPILLING THE COLLECTED MATERIAL.
5. MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD SPECIFICATION 8-01.3(15).
6. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

INLET PROTECTION BELOW INLET GRATE DEVICE

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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SCALE NONE

DATE 12/12

CITY OF MOSES LAKE

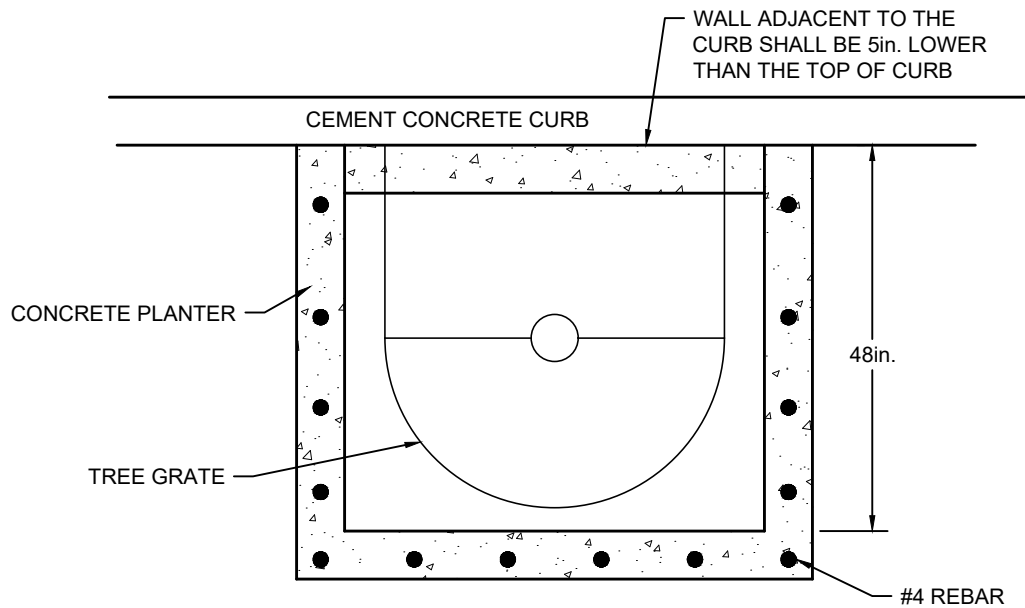
GRANT COUNTY

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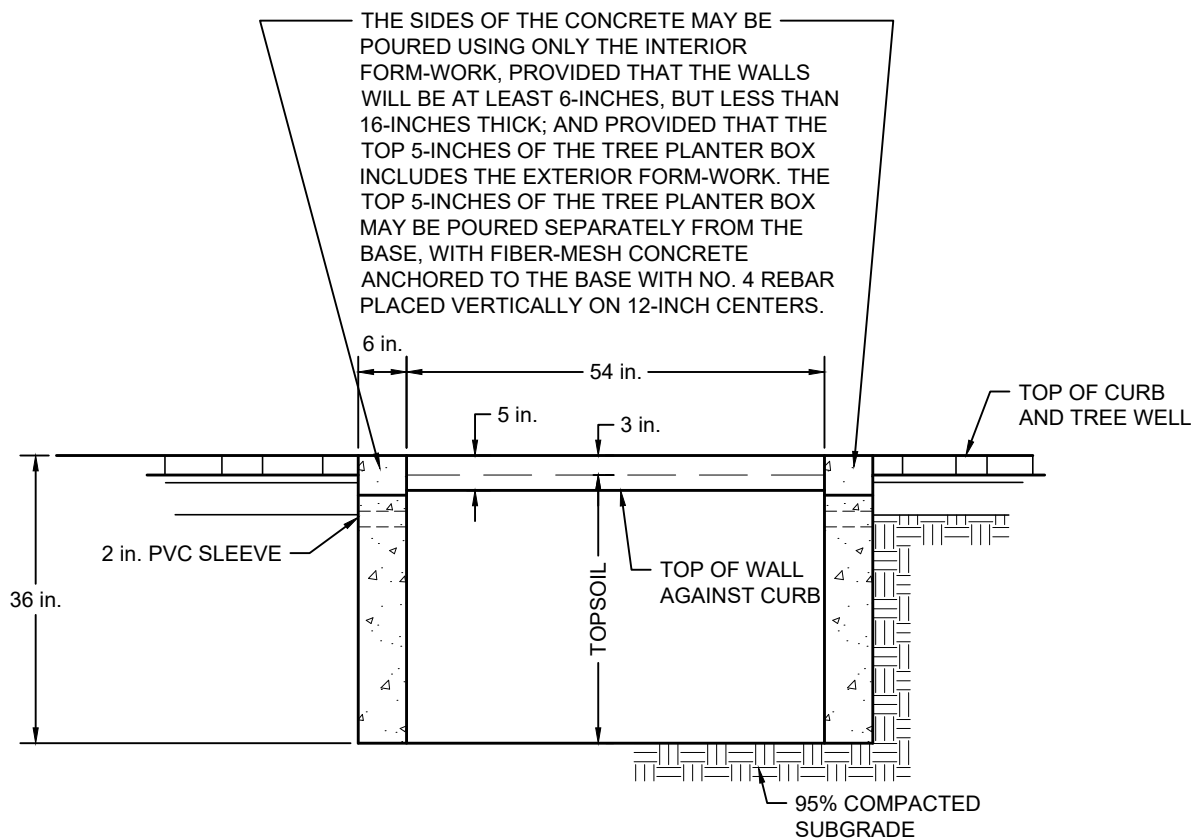
A-14

DATE	REVISION	BY
08/18	AMENDED	MLL

DATE	REVISION	BY	SCALE	NONE
08/18	AMENDED	MLL	DATE	01/13



PLAN VIEW



PROFILE VIEW

NOTES:

1. WHEN INSTALLING BEHIND EXISTING CURB, USE CONTROL DENSITY BACKFILL TO SUPPORT UNDERMINED CURB.
2. TREE AND IRRIGATION NOT SHOWN FOR CLARITY.
3. ALL CONSTRUCTION AND MATERIAL SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

TREE PLANTER DETAIL

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

DRAWN BO
CHECK JRH

SCALE NONE

DATE 03/04

CITY OF MOSES LAKE

GRANT COUNTY

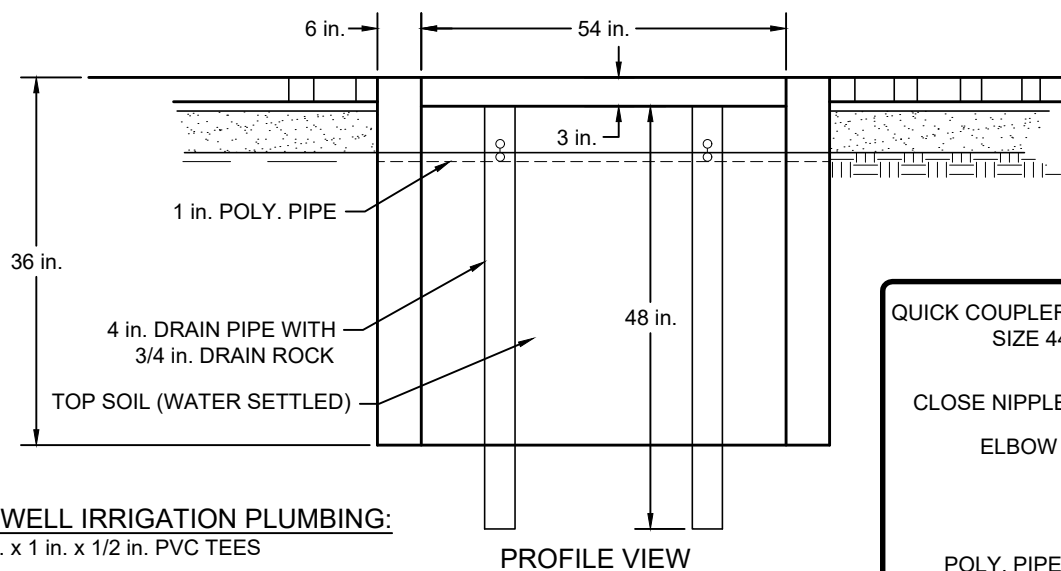
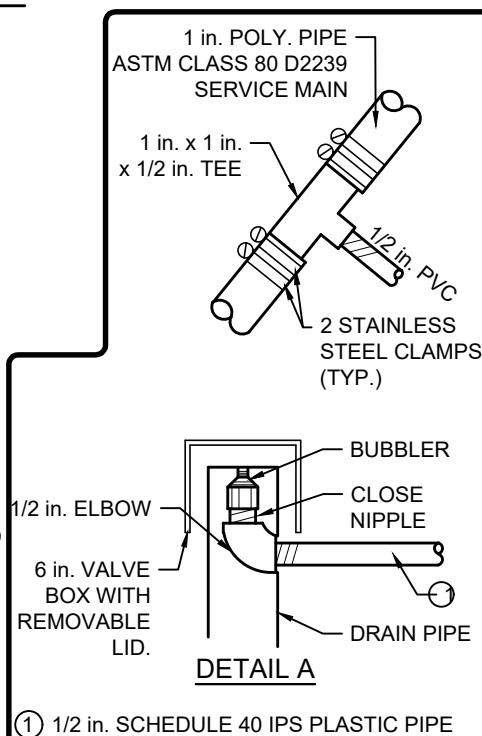
WASHINGTON

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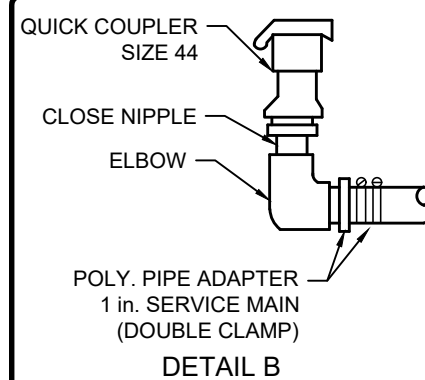
DATE	REVISION	BY
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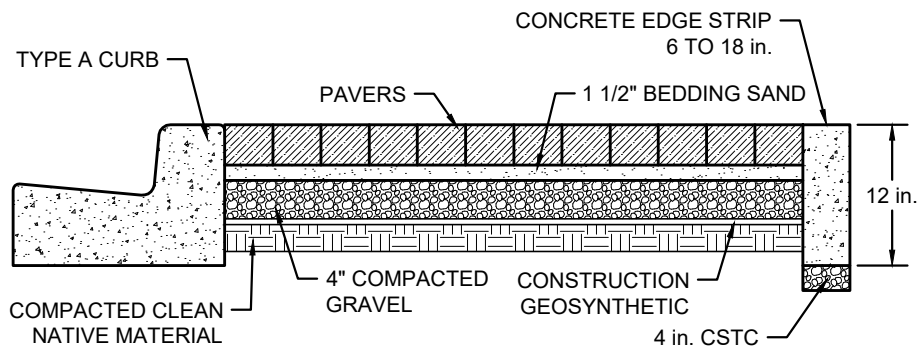
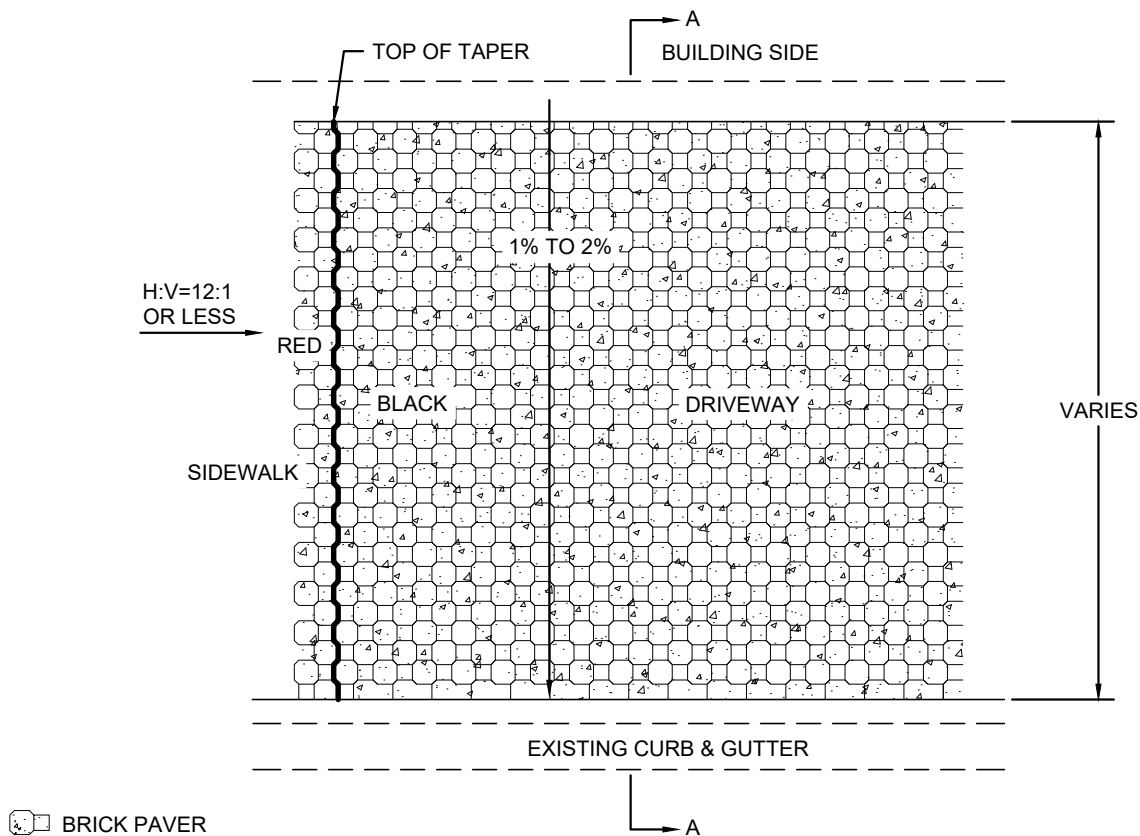
1. POLYETHYLENE PIPE SHALL RUN CONTINUOUS BETWEEN TREE WELLS. NO JOINTS OR CONNECTIONS SHALL BE MADE UNDER SIDEWALK. PIPE SHALL HAVE A SAND BED BETWEEN TREE WELLS
2. IRRIGATION PIPE SHALL BE 7 in. BELOW SIDEWALK GRADE.
3. QUICK COUPLER SHALL BE INSTALLED A 3 in. BELOW SIDEWALK GRADE IN LAST TREE WELL FROM IRRIGATION UNIT. CONTINUE 1 in. PIPE TO END OF PROJECT AND CAP ENDS. (SEE DETAIL B)
4. 4 in. DRAIN PIPE SHALL BE 4 ft. IN LENGTH AND BURIED TO A DEPTH OF 51 in. WRAP WITH WEED CONTROL FABRIC.
5. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.



BRASS QUICK COUPLER, 6 in. VALVE BOX WITH REMOVABLE LID



WASHINGTON



SECTION A-A

NOTES:

1. PAVERS SHALL BE INSTALLED 1/16 INCH TO 1/8 INCH ABOVE ANY ADJACENT CONCRETE SURFACES.
2. CONCRETE EDGE STRIP SHALL BE 6 TO 18 INCHES WIDE 12 INCHES DEEP, FIBERMESH CONCRETE OR INSTALL TWO #4 REBAR. REBAR SHALL BE PLACED 3" FROM BOTTOM & EDGE.
3. ALL PAVERS SHALL BE INSTALLED ON GRADE OF 1% TO 2% TOWARDS CURB. RAMPS SHALL H:V=12:1, OR LESS, PARALLEL WITH CURB.
4. REUSE EXISTING PAVERS AND MATCH EXISTING PAVER PATTERN WHEN APPLICABLE AND AS DIRECTED BY THE ENGINEER. FOR NEW PAVER INSTALLATIONS, PROVIDE MATERIAL SAMPLES TO ENGINEER FOR APPROVAL.
5. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

CONCRETE BRICK PAVERS

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

DRAWN RLG

CHECK MORO

SCALE NONE

DATE 08/11

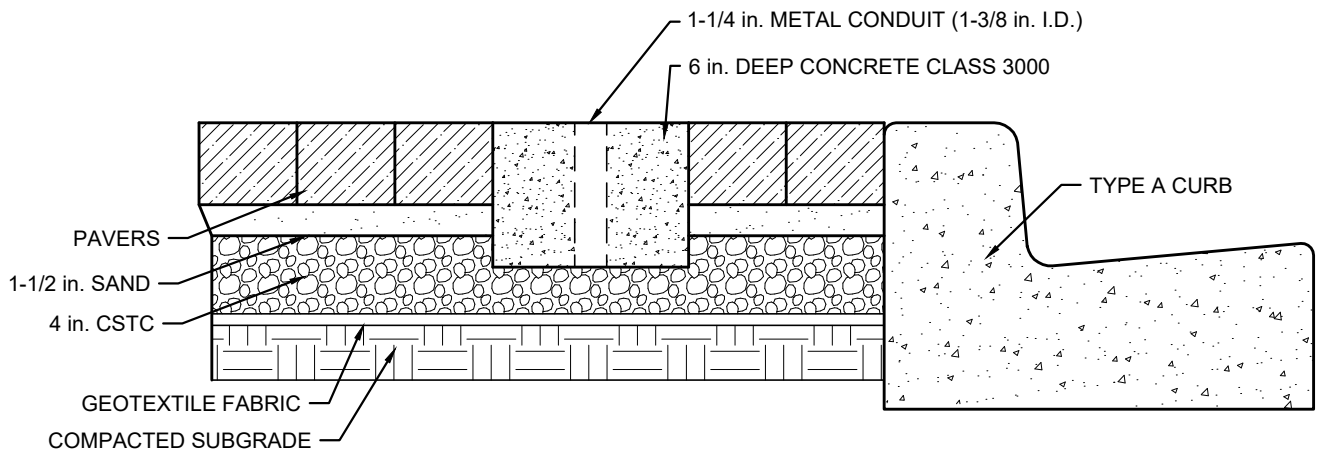
CITY OF MOSES LAKE

GRANT COUNTY

WASHINGTON

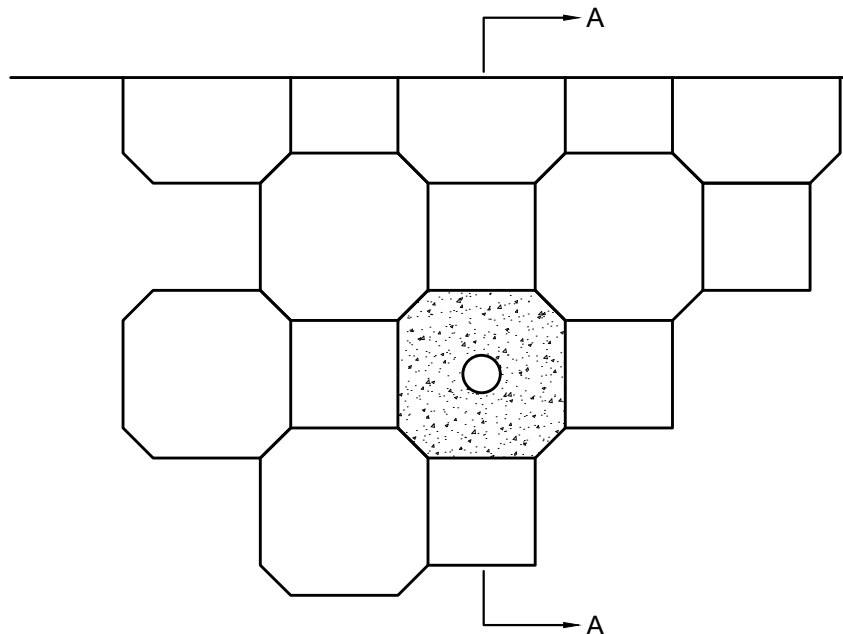
A-18

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08/18	UPDATE	MLL



SECTION A-A

NOTE- METAL CONDUIT SHALL BE 6 in. LONG
WELD 1/2-in. I.D. WASHER TO BOTTOM OF CONDUIT



NOTES:

1. ENGINEER MAY AUTHORIZE FLAGPOLE HOLDER TO BE INSTALLED IN UTILITY STRUCTURE EDGING.
2. PAVERS SHALL BE INSTALLED 1/16 INCH TO 1/8 INCH ABOVE ADJACENT CONCRETE SURFACES.
3. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

FLAGPOLE HOLDER

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

DRAWN TMD

CHECK MORO

SCALE NONE

DATE 09/1991

CITY OF MOSES LAKE

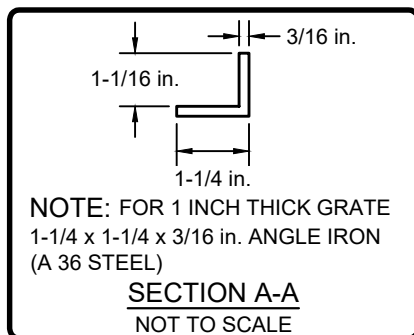
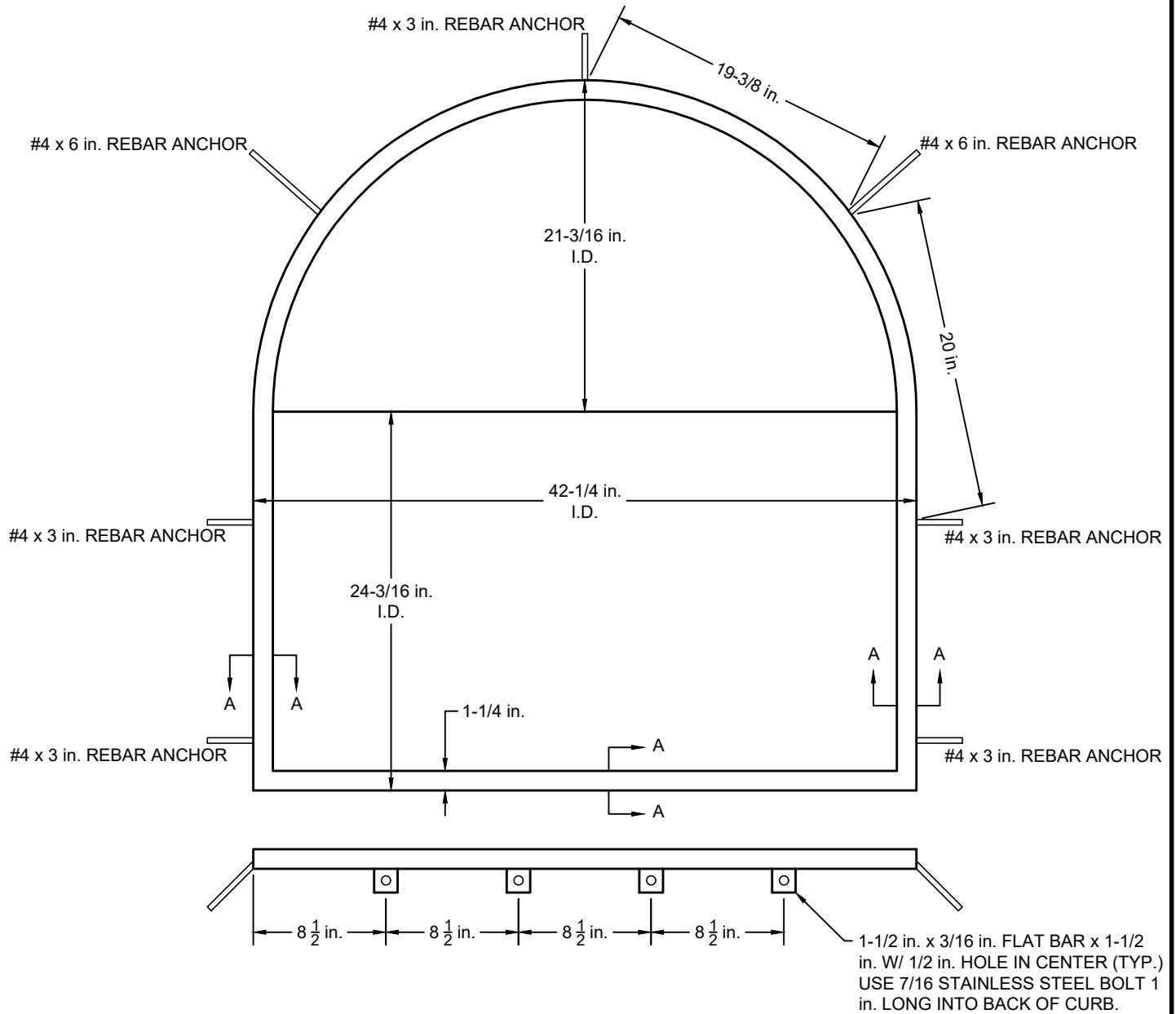
GRANT COUNTY

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A-19

DATE	REVISION	BY
08/18	UPDATE	MLL

DATE	REVISION	BY
08/18	UPDATE	MLL



NOTE:
 ALL CONSTRUCTION AND MATERIALS SHALL MEET
 THE SPECIFICATIONS AND REQUIRE AUTHORIZATION
 BY THE CITY OF MOSES LAKE.

TREE GRATE FRAME

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

DRAWN RPM
 CHECK MORO

CITY OF MOSES LAKE

SCALE NONE

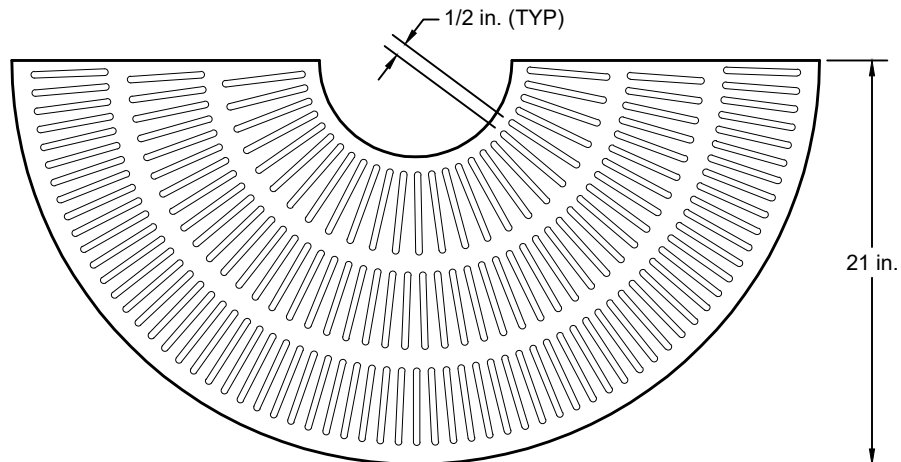
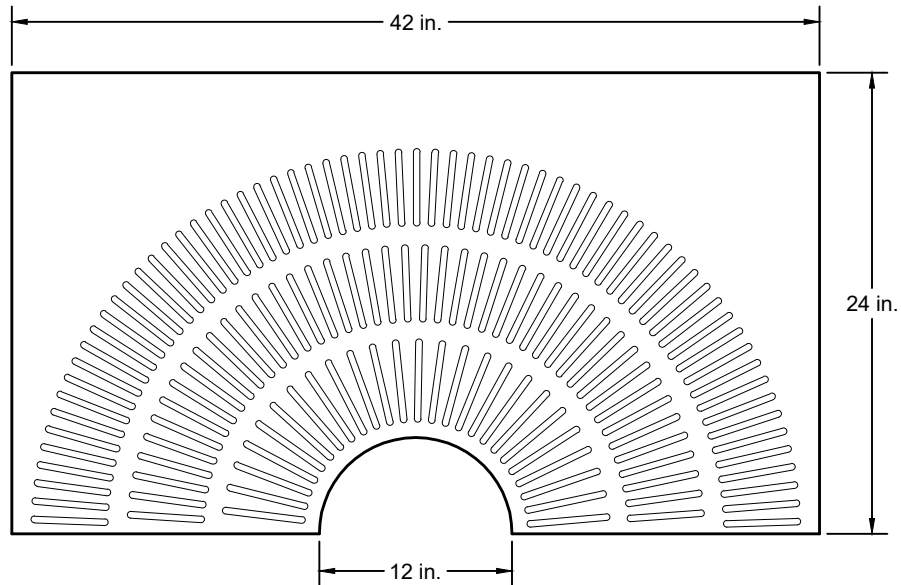
DATE 03/04

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A-20

DATE 08/18
 REVISION UPDATE
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OPENINGS SHALL NOT EXCEED 1/4-INCH WIDTH
GRATE THICKNESS SHALL BE 1-INCH CAST IRON.

NOTE:
ALL CONSTRUCTION AND MATERIALS SHALL MEET THE
SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE
CITY OF MOSES LAKE.

TREE GRATE

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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SCALE NONE

DATE 12/13

CITY OF MOSES LAKE

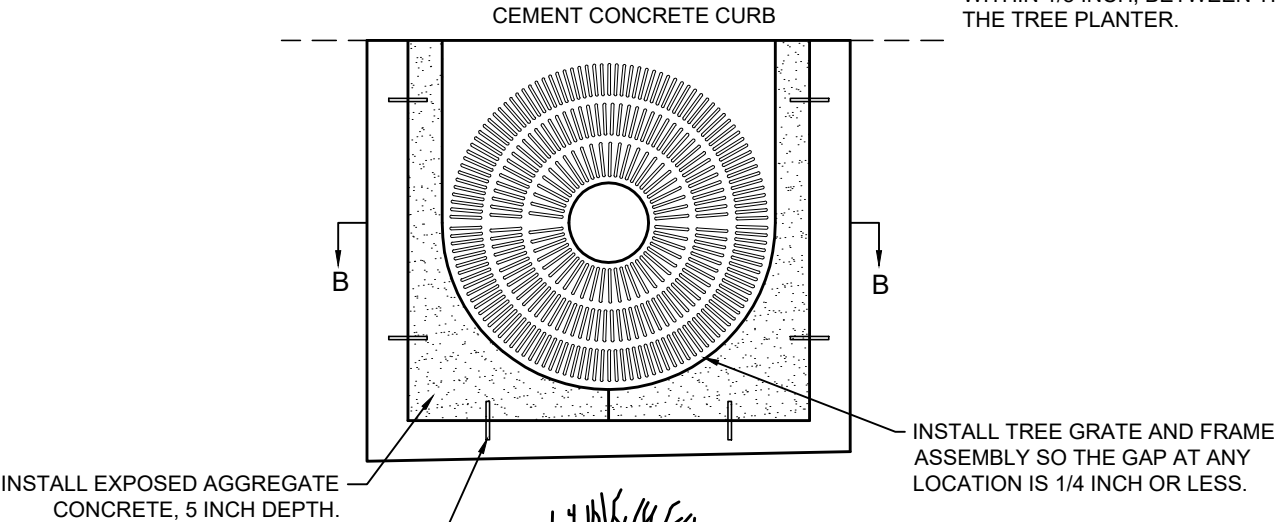
GRANT COUNTY

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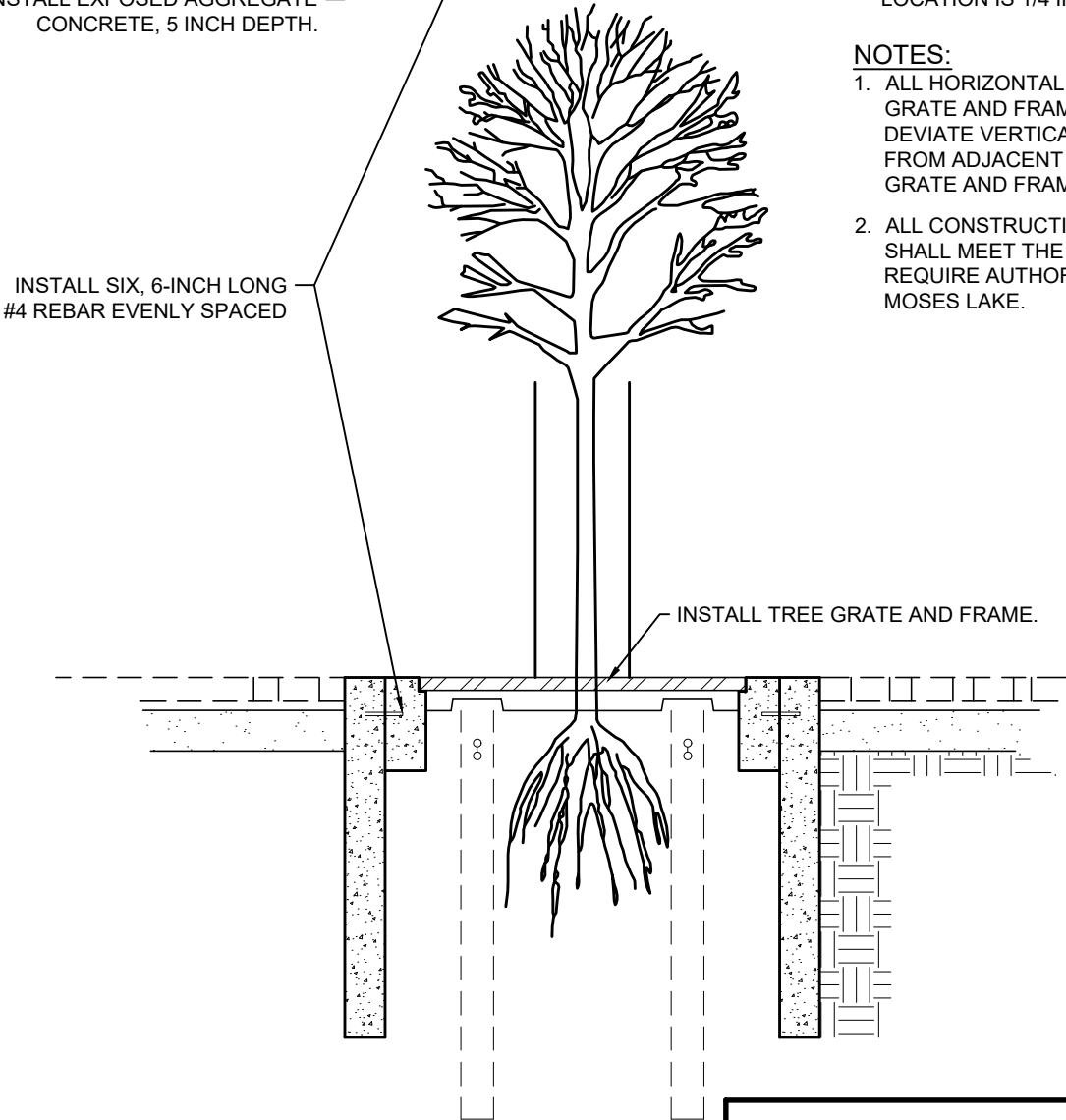
A-21

DATE	REVISION	BY
10/20	UPDATE	MLL

THE TREE GRATE SHALL BE CENTERED,
WITHIN 1/8 INCH, BETWEEN THE SIDES OF
THE TREE PLANTER.



- NOTES:**
1. ALL HORIZONTAL SURFACES OF THE TREE GRATE AND FRAME ASSEMBLY SHALL NOT DEVIATE VERTICALLY MORE THEN 1/8 INCH FROM ADJACENT SURFACES IN THE TREE GRATE AND FRAME ASSEMBLY.
 2. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.



SECTION B-B

TREE PLANTER GRATE

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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CHECK	MORO
SCALE	NONE
DATE	04/04

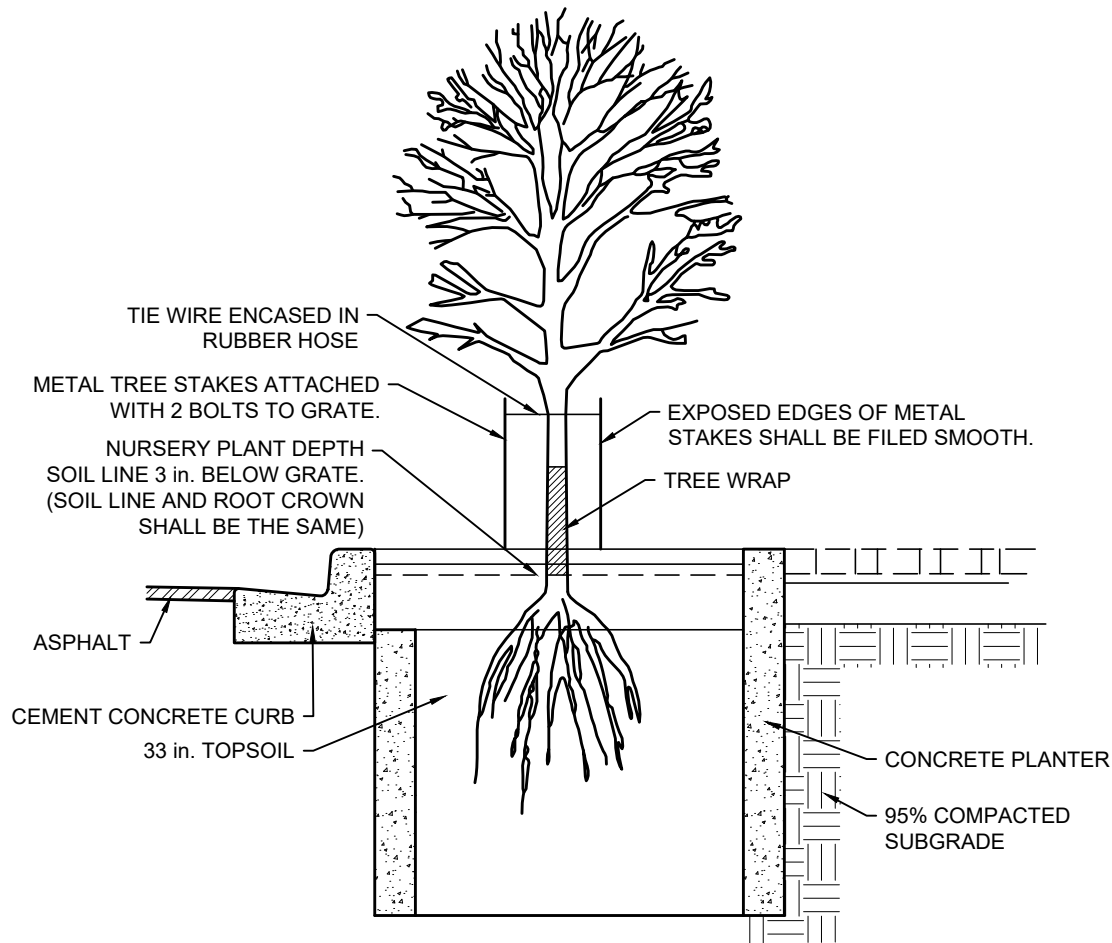
CITY OF MOSES LAKE

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DATE	REVISION	BY
10/20	UPDATE	MLL



NOTES:

1. TREE SHALL BE CENTERED WITHIN $\frac{1}{4}$ IN. IN THE TREE GRATE. THE ACTUAL CENTER OF THE TREE GRATE OPENING SHALL PASS THROUGH THE CENTER OF THE TREE.
2. TREE WELL SHALL BE FILLED WITH 33 INCHES OF TOPSOIL, WATER SETTLED TO FINISHED SOIL GRADE.
3. BARE ROOT OR ROOT BALL STOCK MAY BE USED. REMOVE BURLAP FROM TOP HALF OF ROOT BALL IF USED.
4. CUT AND STRAIGHTEN ROOTS THAT CIRCLE AND REMOVE ALL MATTED ROOTS.
5. TREE ROOT CROWN SHALL BE PLANTED TO SOIL LINE.
6. ADD AND FIRM SATURATED TOPSOIL AS NEEDED FOR GOOD CONTACT WITH ROOTS. WATER SETTLE TREE SO LEVEL OF NURSERY SOIL LINE MEETS SOIL FINISHED GRADE.
7. REMOVE ANY DAMAGED BRANCHES, DO NOT CUT LEADER.
8. REMOVE ALL BRANCHES UP TO 16 INCHES ABOVE TREE ROOT CROWN.
9. THE TREE SHALL BE STAKED PERPENDICULAR TO THE PAVER SIDEWALK USING $\frac{3}{8}$ INCH X 1 INCH X 4 FEET TALL STEEL FLAT BAR.
10. TIE WIRE AROUND TREE SHALL BE ENCASED IN SOFT RUBBER TUBING.
11. TREE SHALL BE WRAPPED WITH CORRUGATED PAPER TREE WRAP, WRAP FROM BOTTOM UPWARDS.
12. TREE SHALL NOT BE PLANTED UNTIL FULLY AUTOMATIC IRRIGATION SYSTEM IS OPERATIONAL AND INSPECTED.
13. TREE ROOT CROWN SHALL BE PLANTED 3 INCHES BELOW GRATE.
14. ALL CONSTRUCTION AND MATERIAL SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

TREE PLANTING DETAIL

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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DATE 05/1992

CITY OF MOSES LAKE

GRANT COUNTY

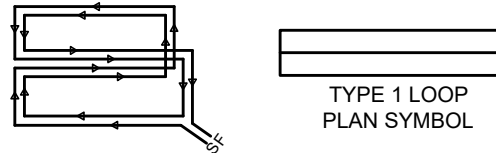
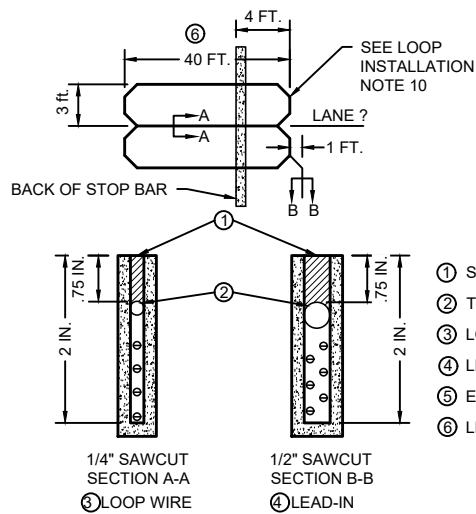
WASHINGTON

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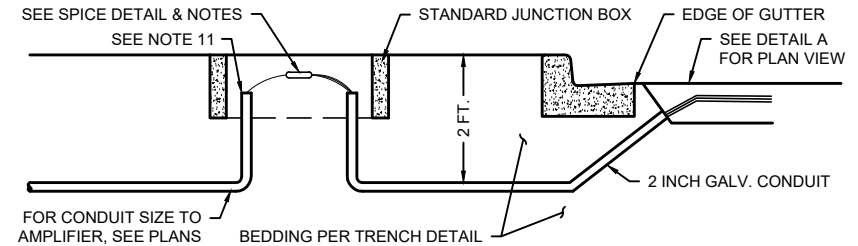
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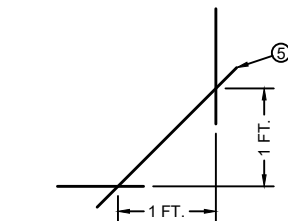
TYPE 1 LOOP WINDING DETAILS

NOTE: THE NUMBER OF TURNS SHALL BE AS SHOWN UNLESS NOTED OTHERWISE IN THE PLANS

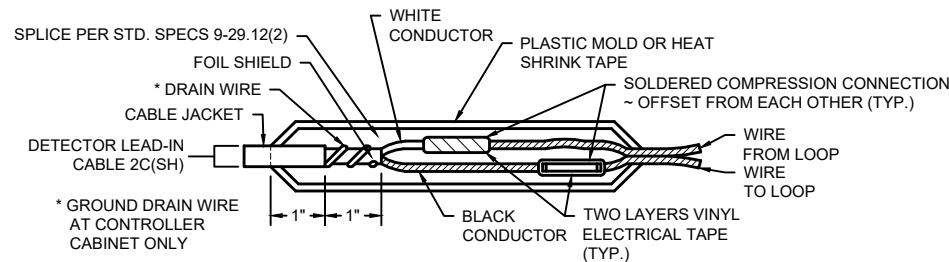
- ① SEALANT - SEE STD. SPEC. 8-20.3(14)C.
- ② TWISTED POLYPROPYLENE ROPE (SIZED FOR SNUG FIT).
- ③ LOOP WIRE - NUMBER VARIES (SEE LOOP WINDING DETAILS).
- ④ LEAD-IN WIRES: ONE PAIR FOR EACH LOOP SERVED. 3 PAIRS MAX. PER SAWCUT.
- ⑤ EXTEND SAWCUT SUFFICIENT LENGTH TO PROVIDE FULL SAWCUT DEPTH AROUND CORNERS.
- ⑥ LENGTH MAY VARY WHEN DIRECTED BY ENGINEER.



TYPICAL CONDUIT PLACEMENT FOR LOOP LEAD-IN WIRES

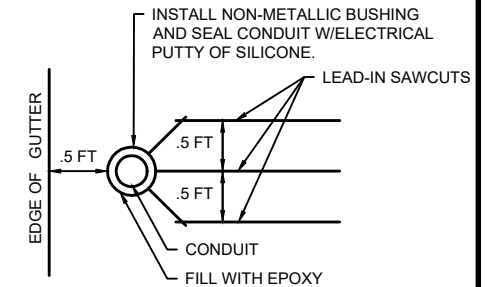


TYPICAL CORNER SAWCUT LOOP SAWCUT DETAILS



SPLICE DETAIL

NOTE: SPLICE KIT SHALL BE CENTERED ON CONDUCTORS AND SUFFICIENT SLACK SHALL BE PROVIDED SO THAT THE SPLICE CAN BE RAISED AT LEAST 12\"/>



DETAIL A

LEAD-IN SAWCUTS AND CONDUIT PLACEMENT DETAIL

LOOP INSTALLATION NOTES:

1. INSTALL JUNCTION BOX AND LEAD-IN CONDUIT.
2. SAW LOOP SLOTS AND LEAD-IN SLOTS.
3. LAY OUT LOOP WIRE BEGINNING AT JUNCTION BOX, ALLOWING 5' SLACK.
4. INSTALL WIRE IN LOOP SLOT. SEE LOOP WINDING DETAIL.
5. RETURN TO JUNCTION BOX AND IDENTIFY LEADS WITH PLAN DETECTOR NUMBER AND "S" FOR START AND "F" FOR FINISH.
6. TWIST EACH PAIR OF LEAD-IN WIRES TWO TURNS PER FOOT FROM LOOP TO JUNCTION BOX AND INSTALL IN LEAD-IN SLOT AND CONDUIT. REVERSE DIRECTION OF TWIST FOR EACH SUCCESSIVE PAIR INSTALLED.
7. CONSTRUCT SUPPLEMENTAL SPLICE CONTAINING ANY SERIES OR PARALLEL LOOP CONNECTIONS REQUIRED IN PLANS. SUPPLEMENTAL SPLICES ARE SUBJECT TO THE SAME REQUIREMENTS SHOWN FOR THE LOOP LEAD AND SHIELD CABLE SPLICE.
8. SPLICE LOOP LEADS OR SUPPLEMENTAL SPLICE LEADS TO SHIELDED CABLE AS NOTED.
9. COMPLETE INSTALLATION AND TEST LOOP CIRCUITS OR COMBINATION LOOP CIRCUITS. SEE STD. SPEC. 8-20.3(14)D.
10. FRONT OF LOOP SHALL BE MEASURED FROM BACK OF STOP BAR, OR BACK OF CROSSWALK WHERE NO STOP BAR IS INSTALLED.
11. SEAL END OF CONDUIT WITH ELECTRICAL PUTTY OR SILICONE.
12. EACH LEAD-IN WIRE SHALL BE TWISTED AT LEAST 6 TIMES PER FOOT BETWEEN THE INDUCTION LOOP WIRES AND THE DETECTORS LEAD-IN CABLES.
13. WHEN CONSTRUCTION ACTIVITIES CAUSE DAMAGE TO EXISTING INDUCTION LOOPS, LEAD-IN WIRES, OR LEAD-IN CABLES, REPLACEMENT SHALL BE IN ACCORDANCE WITH THIS DETAIL AND AS DIRECTED BY THE ENGINEER.
14. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

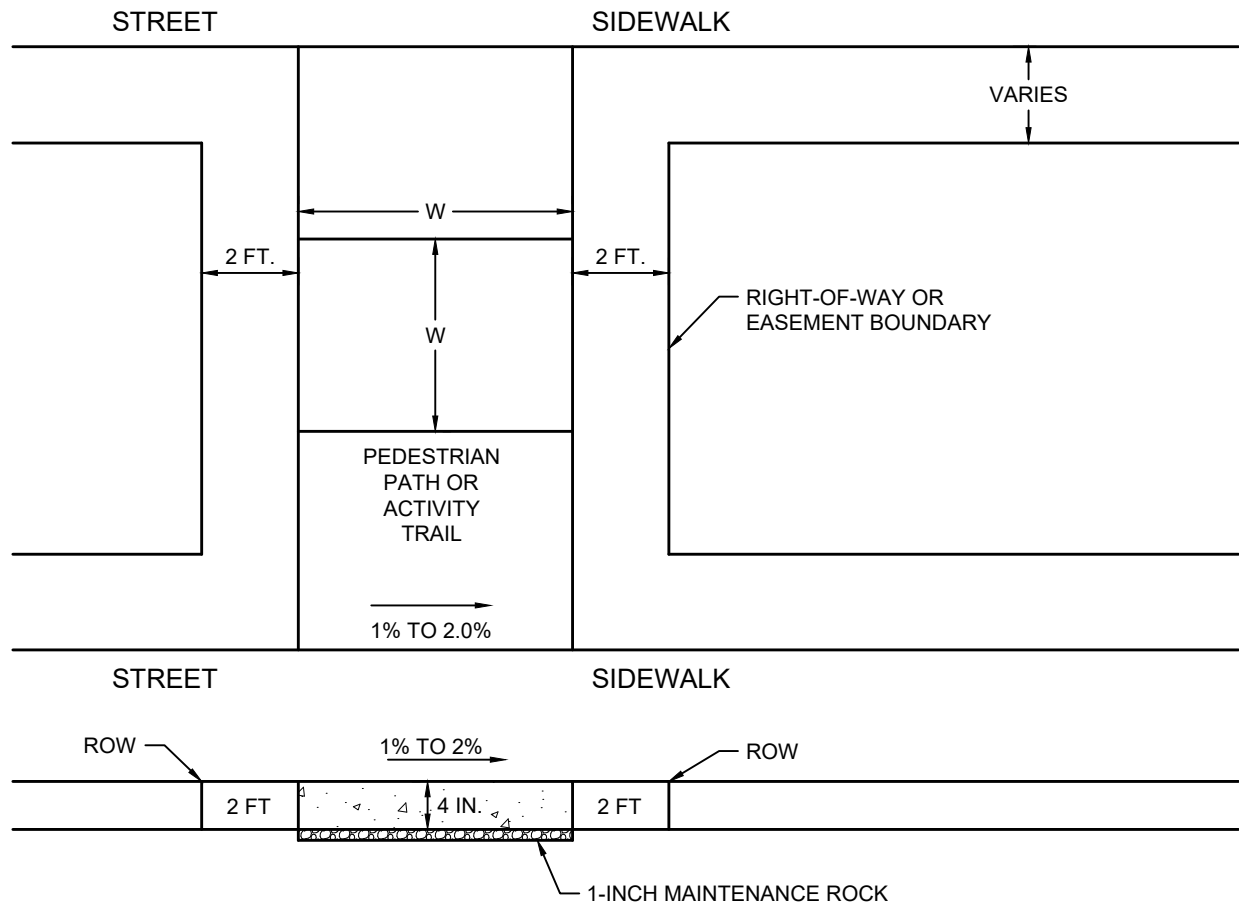
INDUCTION LOOP DETAIL

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

DRAWN	TMD
CHECK	MORO
SCALE	NONE
DATE	12/1996

CITY OF MOSES LAKE
GRANT COUNTY
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A-24



NOTES:

1. WHERE REQUIRED BY MLMC 17.21.040, PEDESTRIAN PATHS AND ACTIVITY TRAILS SHALL BE CONSTRUCTED TO CONNECT WITH SIDEWALKS AND ACTIVITY TRAILS WITHIN STREET RIGHT-OF-WAY.
2. ACTIVITY TRAILS SHALL BE CONSTRUCTED AT LOCATIONS SHOWN ON THE ACTIVITY TRAIL MASTER PLAN.
3. FOR PEDESTRIAN PATHS, WIDTH OF SIDEWALK SHALL BE AT LEAST 6 FEET. FOR ACTIVITY TRAILS, WIDTH OF SIDEWALK SHALL BE AT LEAST 10 FEET.
4. PEDESTRIAN PATHS SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE, 4 INCH DEPTH, ON 1-INCH MAINTENANCE ROCK.
5. ACTIVITY TRAILS SHALL BE CONSTRUCTED OF PORTLAND CEMENT CONCRETE, 4 INCH DEPTH, ON 1-INCH MAINTENANCE ROCK.
6. CROSS SLOPE SHALL BE 1% TO 2.0%.
7. JOINTS SHALL BE SPACED TO CORRESPOND WITH THE WIDTH. FULL DEPTH MASTIC SHALL BE INSTALLED EVERY 20 TO 30 FEET AS DIRECTED BY THE ENGINEER.
8. CONTROL JOINTS SHALL BE 1 INCH DEEP AND PLACED PERPENDICULAR TO THE CURB. SPACING SHALL MATCH THE SIDEWALK WIDTH, BUT NOT GREATER THAN 10 FT; EXCEPT, WHEN PLANTER AREAS ARE NOT INSTALLED, CONTROL JOINTS SHALL ALIGN WITH CURB JOINTS.
9. FULL DEPTH EXPANSION JOINTS (MASTIC) SHALL BE PLACED PERPENDICULAR TO THE CURB AT 20 TO 30 INTERVALS. ALIGN WITH CONTROL JOINTS AS DIRECTED BY ENGINEER.
10. MASTIC SHALL BE 3/8-INCH THICK MATERIAL AND BE PLACED FULL DEPTH. MASTIC SHALL NOT BE INSTALLED WITHIN DRIVEWAYS OR RAMPS.
11. SIDEWALK AND DRIVEWAYS SHALL BE BROOM FINISHED PERPENDICULAR TO THE CURB.
12. WHEN NEW SIDEWALKS ARE INSTALLED ADJACENT TO EXISTING CURB OR SIDEWALKS, NO.4 REBAR SHALL BE INSTALLED IN THE DIRECTION OF PEDESTRIAN TRAVEL AS DIRECTED BY THE ENGINEER.
13. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

TYPICAL PEDESTRIAN PATH OR ACTIVITY TRAIL

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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SCALE NONE

DATE 03/14

CITY OF MOSES LAKE

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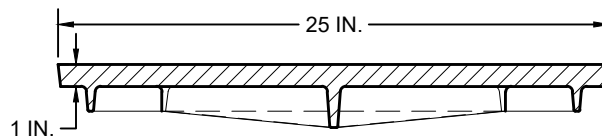
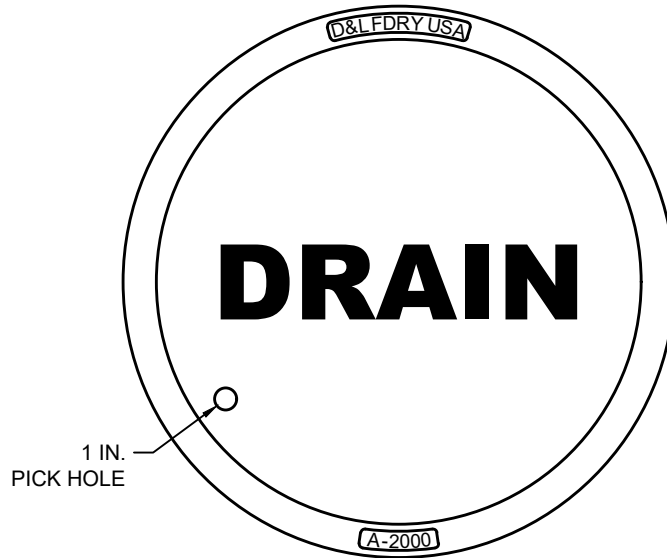
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DATE
08/18

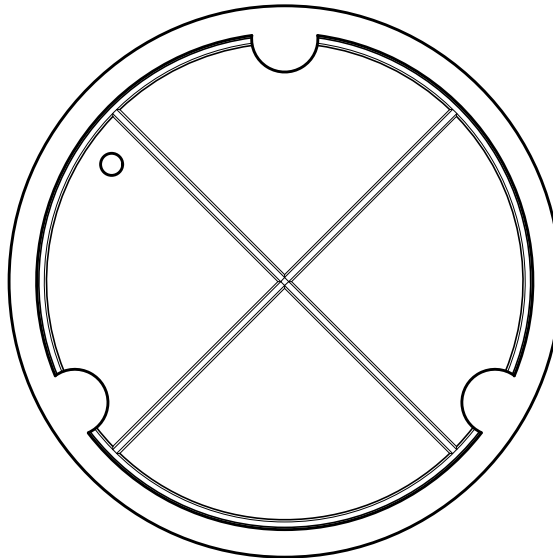
REVISION
AMENDED

BY
MLL

A-2000



SECTION A-A



NOTES:

1. LIDS WITH CITY LOGO MAY BE AUTHORIZED BY ENGINEER ON LIDS THAT WILL BE MAINTAINED BY THE CITY TO ALLOW EXISTING STOCK TO BE DEPLETED.
2. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

STORM DRAIN MANHOLE LID

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

DRAWN RPM

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SCALE NONE

DATE 07/16

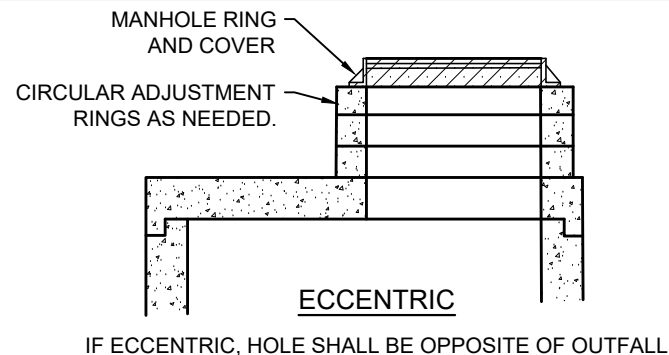
CITY OF MOSES LAKE

GRANT COUNTY

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A-26

DATE	REVISION	BY
10/20	AMENDED	MLL



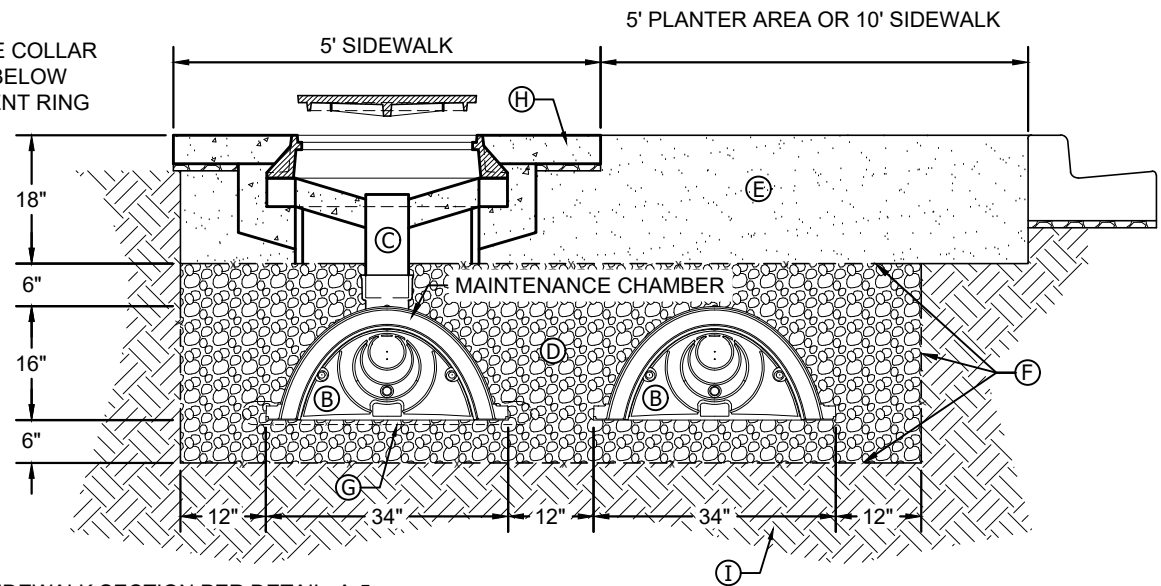
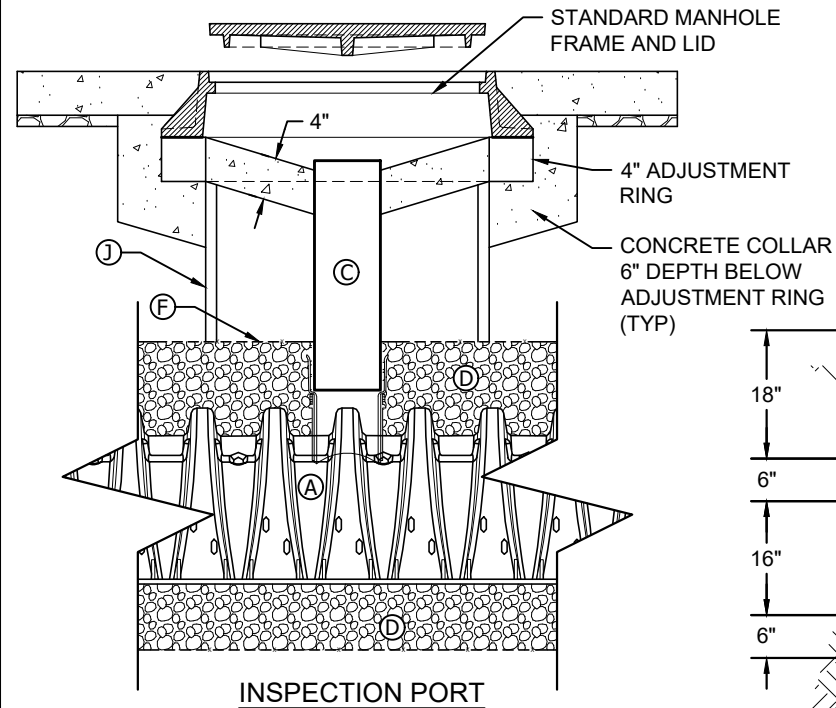
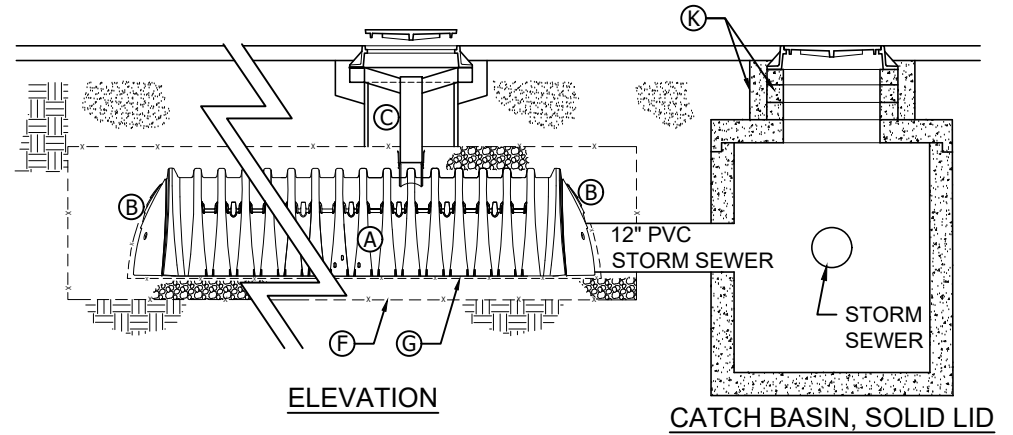
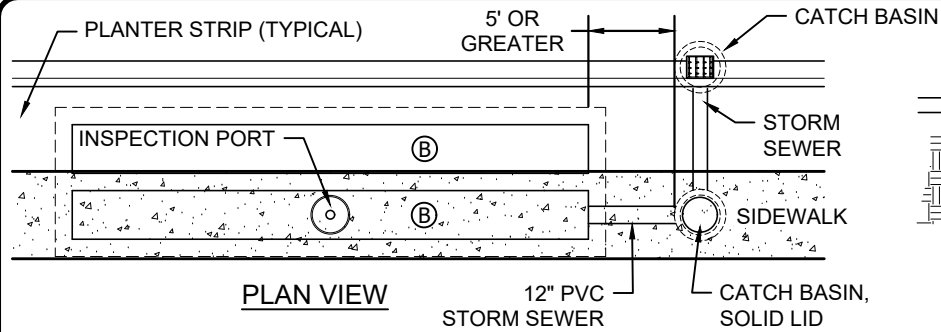
1. NO STEPS ARE REQUIRED WHEN HEIGHT IS 4' OR LESS.
2. THE BOTTOM OF THE PRECAST CATCH BASIN MAY BE ROUNDED.
3. FRAME AND GRATE SHALL BE INSTALLED WITH FLANGE DOWN.
4. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MINIMUM TO 2 1/2" MAXIMUM.
5. APPROVED MANHOLE RING AND COVER D & L FOUNDRY A-2000 MARKED "DRAIN" ON COVER.
6. WHERE EXISTING UTILITIES OR RIGHT-OF-WAY LIMITS CONSTRAIN THE SPACE, THE ENGINEER MAY AUTHORIZE OR REQUIRE THE USE OF A TYPE 1 CATCH BASIN.
7. WHERE DEPTH OF STORMWATER PIPE IS LESS THAN 24" ADJUSTMENT RINGS MAY BE OMITTED.
8. CITY LOGO SHALL BE ON ALL NEW STORMWATER LIDS THAT WILL BE MAINTAINED BY THE CITY.
9. CITY LOGO IS NOT AUTHORIZED ON STORMWATER LIDS THAT ARE NOT MAINTAINED BY THE CITY.
10. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

DIA.	WALL THICKNESS	BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS	BASE REINFORCING STEEL IN ² /FT IN EACH DIRECTION	
					INTEGRAL BASE	SEPARATE BASE
48"	4"	6"	36"	8"	0.15	0.23
60"	5"	8"	48"	8"	0.25	0.25
72"	6"	8"	60"	12"	0.24	0.35

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- (A) SC-310 CHAMBER
- (B) SC-310 END CAP
- (C) 6" PVC PIPE.
- (D) GRAVEL BACKFILL FOR DRYWELLS.
- (E) NATIVE MATERIAL FOR TRENCH BACKFILL. COMPACT IN 6" LIFTS.
- (F) NON-WOVEN GEOTEXTILE FABRIC PER CITY STANDARD SPECIFICATION 9-33.
- (G) WOVEN GEOTEXTILE FABRIC, 48" WIDTH, CONTINUOUS WITHOUT SEAMS BETWEEN MAINTENANCE CHAMBER AND DRAIN ROCK.

- (H) TYPICAL SIDEWALK SECTION PER DETAIL A-5.
- (I) UNDISTURBED NATIVE SOILS.
- (J) PRESSURE IRRIGATION PIPE, SDR 51, PVC 1120, 21-INCH DIAMETER.
- (K) ADJUSTMENT RINGS AS REQUIRED TO MEET FINISH GRADE. CONCRETE COLLAR FULL DEPTH AROUND ADJUSTMENT RINGS.

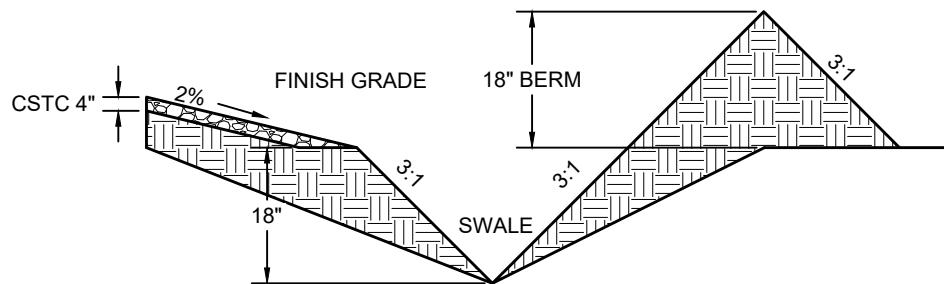
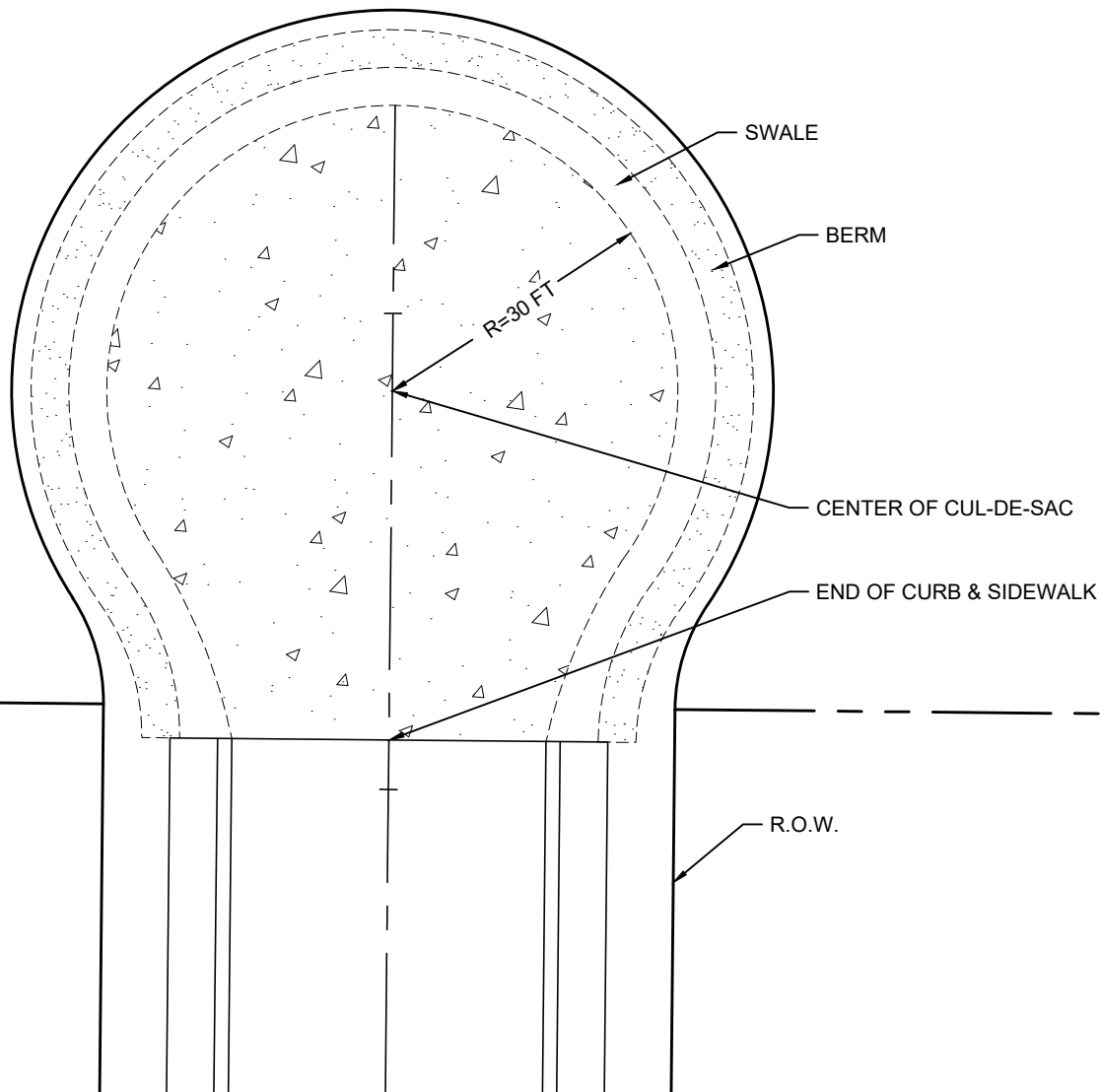
INFILTRATION GALLERY

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CITY OF MOSES LAKE
GRANT COUNTY
WASHINGTON

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SWALE & BERM
SECTION DETAIL (NTS)

NOTES:

1. CONSTRUCT TEMPORARY CUL-DE-SAC OF 4" COMPACTED CSTC.
2. TEMPORARY CUL-DE-SAC MAY BE AUTHORIZED FOR NEW SUBDIVISIONS IN ACCORDANCE WITH THE MOSES LAKE MUNICIPAL CODE.
3. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

**TEMPORARY GRAVEL
CUL-DE-SAC**

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CITY OF MOSES LAKE

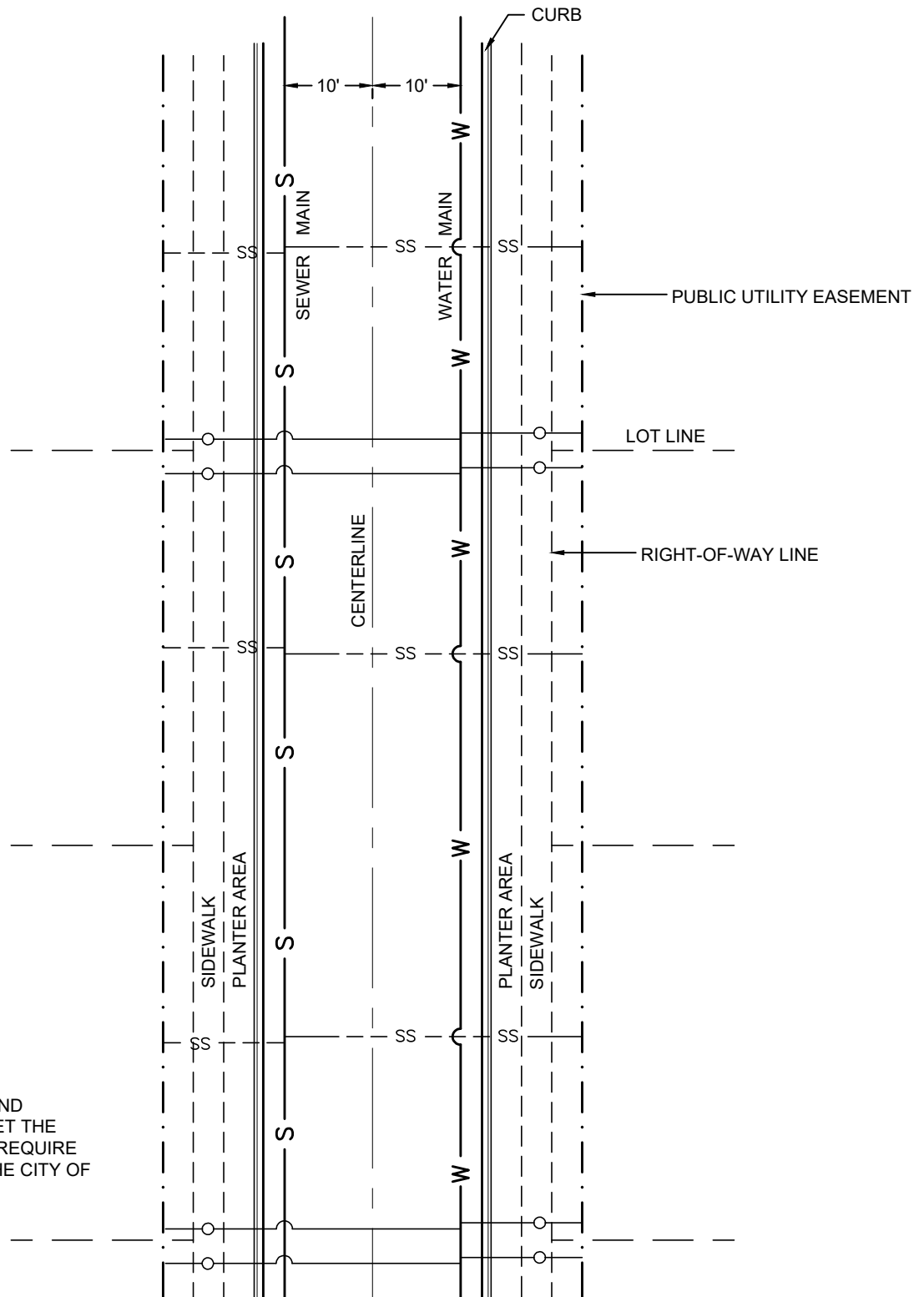
DATE 07/16

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DATE 08/18
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NOTE:

1. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

- WATER METERS SHALL BE INSTALLED IN THE MIDDLE OF THE SIDEWALK.
- SS— SANITARY SEWER AND WATER SERVICES SHALL BE INSTALLED TO EDGE OF PUBLIC UTILITY EASEMENT.

TYPICAL WATER AND SEWER SERVICE LOCATIONS IN RESIDENTIAL AREAS

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

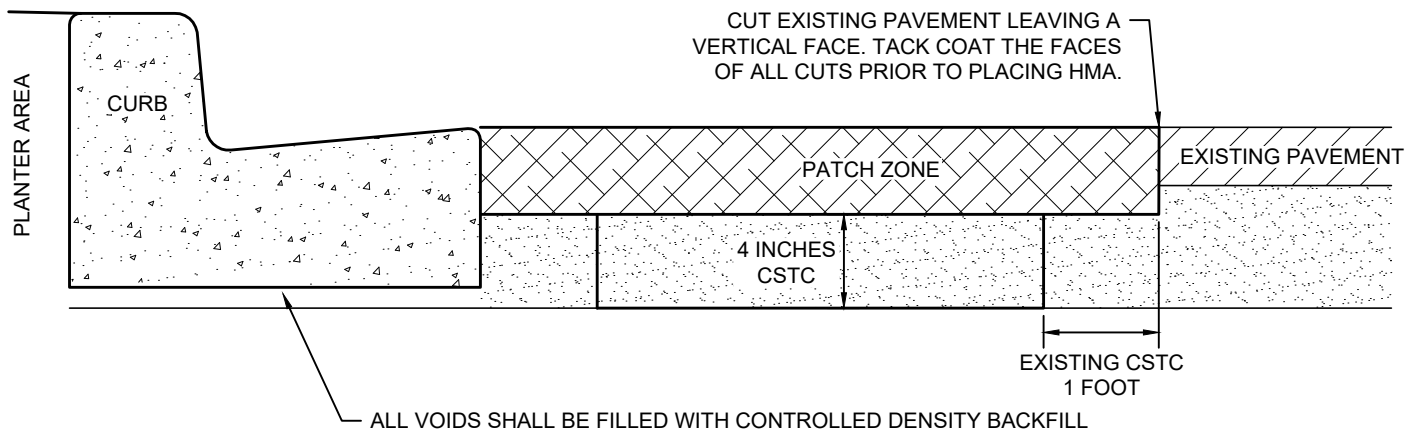
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B-1



NOTES:

1. HMA IN THE PATCH ZONE SHALL BE OF 3 INCHES THICK, OR MATCH EXISTING, WHICHEVER IS GREATER. HOWEVER, THE THICKNESS IS NOT REQUIRED TO BE GREATER THAN 6 INCHES. ALL PATCHES SHALL BE PLACED IN 2 OR MORE LIFTS. ALL LIFTS SHALL BE 2 INCHES (COMPACTED), OR LESS.
2. PATCH WIDTH SHALL ACCOMMODATE COMPACTION METHODS APPROVED BY THE ENGINEER.
3. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

PATCHING DETAIL

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B-2

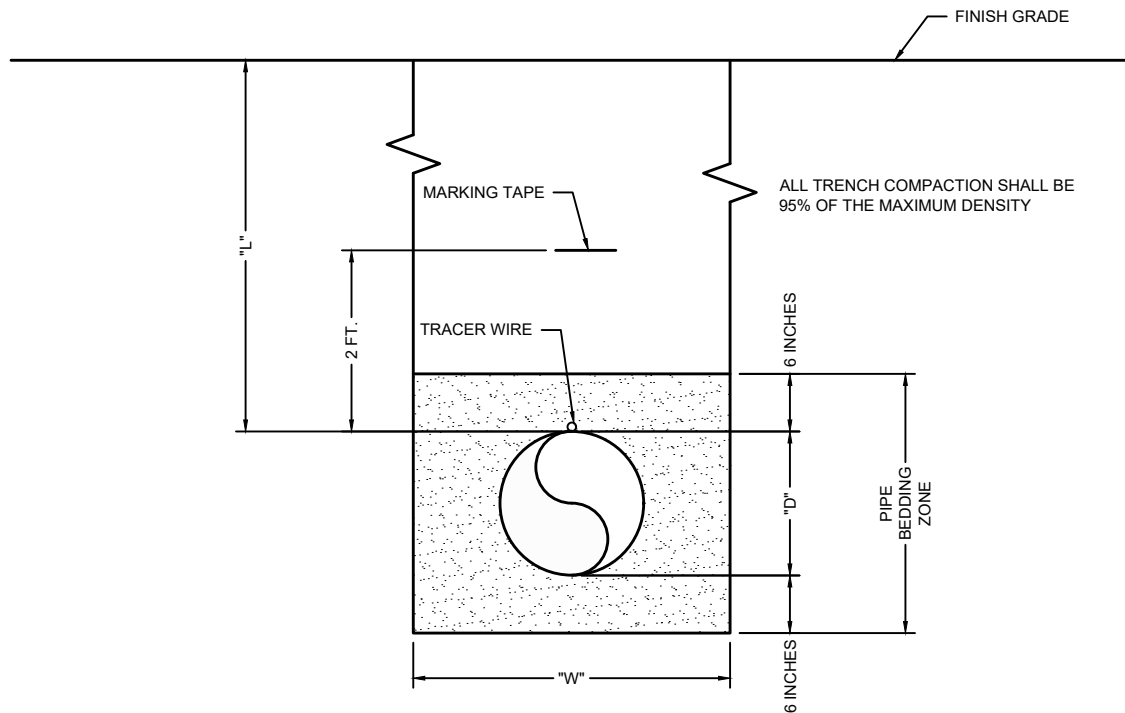


TABLE B-3		
WATER MAINS, SANITARY SEWER MAINS, AND STORM SEWER MAINS		
TRENCH WIDTH FOR MAINS (W) SHALL BE PIPE SIZE PLUS 18 INCHES.		
ALL TRENCHES SHALL MEET WAC CHAPTER 296-155 FOR CONSTRUCTION WORK.		
	REQUIRED PIPE COVER "L"	REQUIRED PIPE DIAMETER "D"
WATER MAINS	42 INCHES	8 INCH
WATER SERVICES	30 INCHES	1 INCH
SEWER MAINS	48 INCHES	8 INCH
BUILDING SEWERS	36 INCHES	4 INCH
SANITARY SEWER PRESSURE MAINS	72 INCHES	VARIES
SANITARY SEWER PRESSURE SERVICES	72 INCHES	VARIES
STORM SEWER UNDER ROADWAY	36 INCHES	8 INCH
STORM SEWER UNDER SIDEWALK	24 INCHES	8 INCH
STORM SEWER - DUCTILE IRON	18 INCHES	8 INCH

NOTES:

1. TRACER WIRE SHALL BE TAPED AT 10-FOOT INTERVALS TO THE TOP OF ALL WATER AND SEWER PRESSURE MAINS, AND WATER SERVICE LINES.
2. BEDDING MATERIAL SHALL BE PLACED UNDER ALL PIPE PRIOR TO PLACING PIPE.
3. TRENCHES MAY BE BACKFILLED WITH CONTROLLED DENSITY FILL.
4. ALL UTILITIES (PHONE, GAS, CABLE TV, TELECOMMUNICATIONS, ELECTRIC, WATER, SEWER, STORM, ETC.) SHALL MEET THE REQUIREMENTS OF THIS DETAIL.
5. WHERE THE DEPTH OF COVER IS LESS THAN 30 INCHES, THE ENGINEER SHALL DETERMINE THE LOCATION OF THE MARKING TAPE.
6. PIPE COVER (L) AND PIPE DIAMETER (D) MAY BE LONGER THAN REQUIRED BY TABLE B-3.
7. BUILDING SEWERS SHOULD BE INSTALLED BELOW WATER LINES. CASING IS NOT REQUIRED ON BUILDING SEWERS.
8. ENGINEER MAY APPROVE DEVIATIONS TO BUILDING SEWER LOCATIONS WHEN EXISTING CONDITIONS PREVENT COMPLIANCE WITH THIS DETAIL.
9. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

TRENCHING AND BEDDING

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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CITY OF MOSES LAKE

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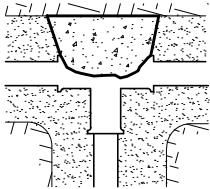
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B-3

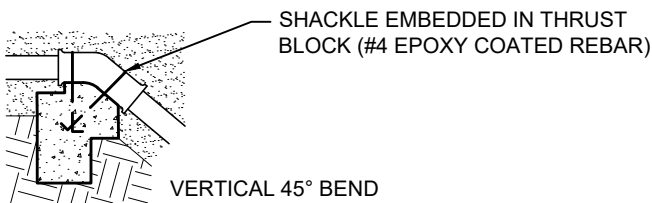
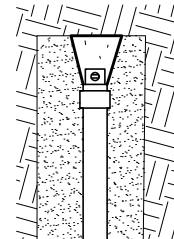
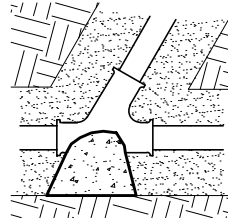
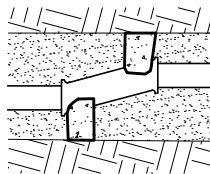
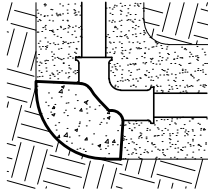
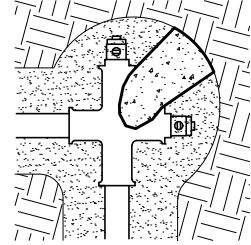
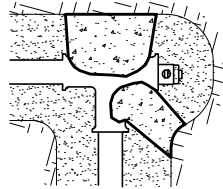
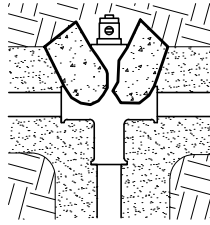
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TEE



THRUST BLOCK BEARING AREA REQUIRED*				
SIZE	TEES AND DEAD ENDS	90° BEND	45° BEND	22-1/2° BEND
4 INCH OR LESS	2 SF	3 SF	2 SF	1 SF
6 INCH	4 SF	5 SF	3 SF	2 SF
8 INCH	6 SF	8 SF	5 SF	3 SF
10 INCH	10 SF	13 SF	7 SF	4 SF
12 INCH	13 SF	19 SF	10 SF	6 SF
14 INCH	18 SF	25 SF	14 SF	7 SF
16 INCH	23 SF	32 SF	18 SF	9 SF

* BASED ON A PIPE TEST PRESSURE OF 250 PSI, A SAFETY FACTOR OF APPROXIMATELY 1.5, AND BEARING STRENGTH OF SOIL AT 3000 LBS./SQ. FT. FOR OTHER CONDITIONS REVISE AND INCREASE AS APPROVED BY THE ENGINEER.

NOTES:

1. THRUST BLOCKS SHALL EXTEND TO UNDISTURBED GROUND.
2. INCREASE THRUST BLOCK AREA SHOWN IN TABLE ABOVE BY 50% IN SAND.
3. WRAP ALL FITTINGS WITH 8-MIL POLYETHYLENE ENCASEMENT.
4. CONCRETE SHALL NOT COME INTO CONTACT WITH PIPE, VALVES, OR FITTINGS.
5. ALL THRUST BLOCKS SHALL BE FORMED ON THE SIDES WITH SUITABLE BACKFILL MATERIAL OR REMOVABLE FORMS.
6. THRUST BLOCKS SHALL NOT BE USED ON MUNICIPAL VALVES OR HYDRANTS. RESTRAINT JOINTS MAY BE REQUIRED.
7. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

WATERMAIN THRUST BLOCKS

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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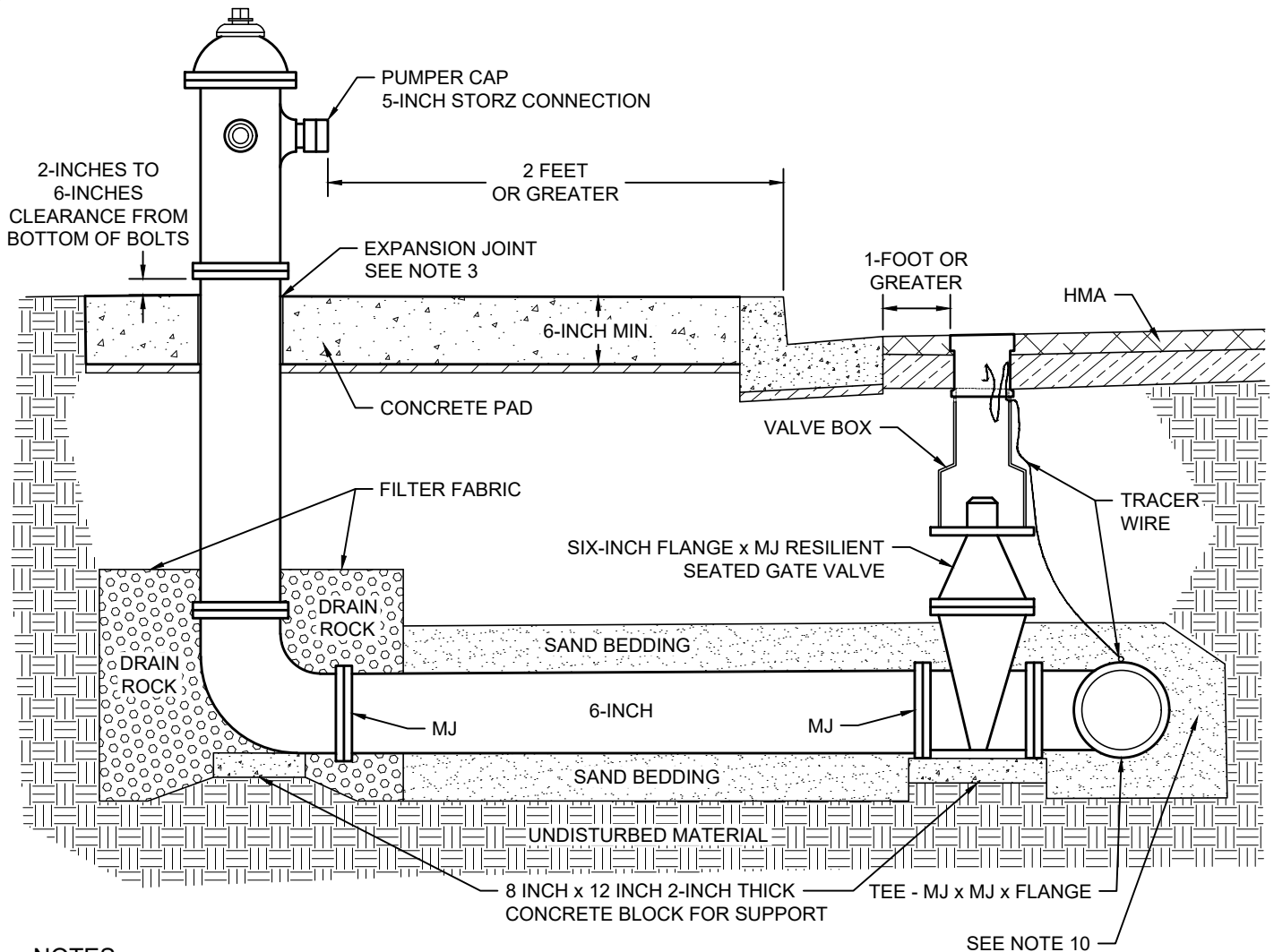
B-4

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NOTES:

1. NO PORTION OF THE HYDRANT SHALL PROJECT OVER THE SIDEWALK OR TRAVELED WAY.
2. THE HYDRANT SHALL BE CENTERED IN A 6-FT. X 6-FT. X 6-IN. CONCRETE PAD; HOWEVER, THE SIDEWALK MAY BE CONSIDERED PART OF THE PAD.
3. 1/4-INCH-THICK NEOPRENE EXPANSION JOINT REQUIRED BETWEEN CONCRETE PAD AND FIRE HYDRANT.
4. MUNICIPAL HYDRANTS SHALL BE PAINTED YELLOW. PRIVATE HYDRANTS SHALL BE PAINTED RED.
5. PLACE HYDRANT BOLLARDS WHEN REQUIRED BY THE CITY.
6. MECHANICAL JOINTS AND BELL/SPIGOT CONNECTIONS SHALL BE RESTRAINED JOINTS. CONCRETE THRUST BLOCKS AND SHACKLES ARE NOT ALLOWED ON HYDRANTS OR VALVES.
7. ALL FITTINGS SHALL BE DUCTILE IRON, WRAPPED IN 8-MIL POLYETHYLENE ENCASEMENT, EXCEPT FOR THE BARREL SECTION.
8. VALVE SHALL BE INSTALLED PER THE VALVE AND TRACER WIRE DETAIL.
9. FOR MUNICIPAL HYDRANTS, EXCEPTIONS WILL NOT BE AUTHORIZED FOR 8-INCH INSTALLATIONS, REDUCED FOR THE HYDRANTS.
10. WHERE A HYDRANT TEE IS INSTALLED ON AN EXISTING AC PIPE, INSTALL A THRUST BLOCK IN ACCORDANCE WITH DETAIL B-4.
11. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

HYDRANT ASSEMBLY

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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CITY OF MOSES LAKE

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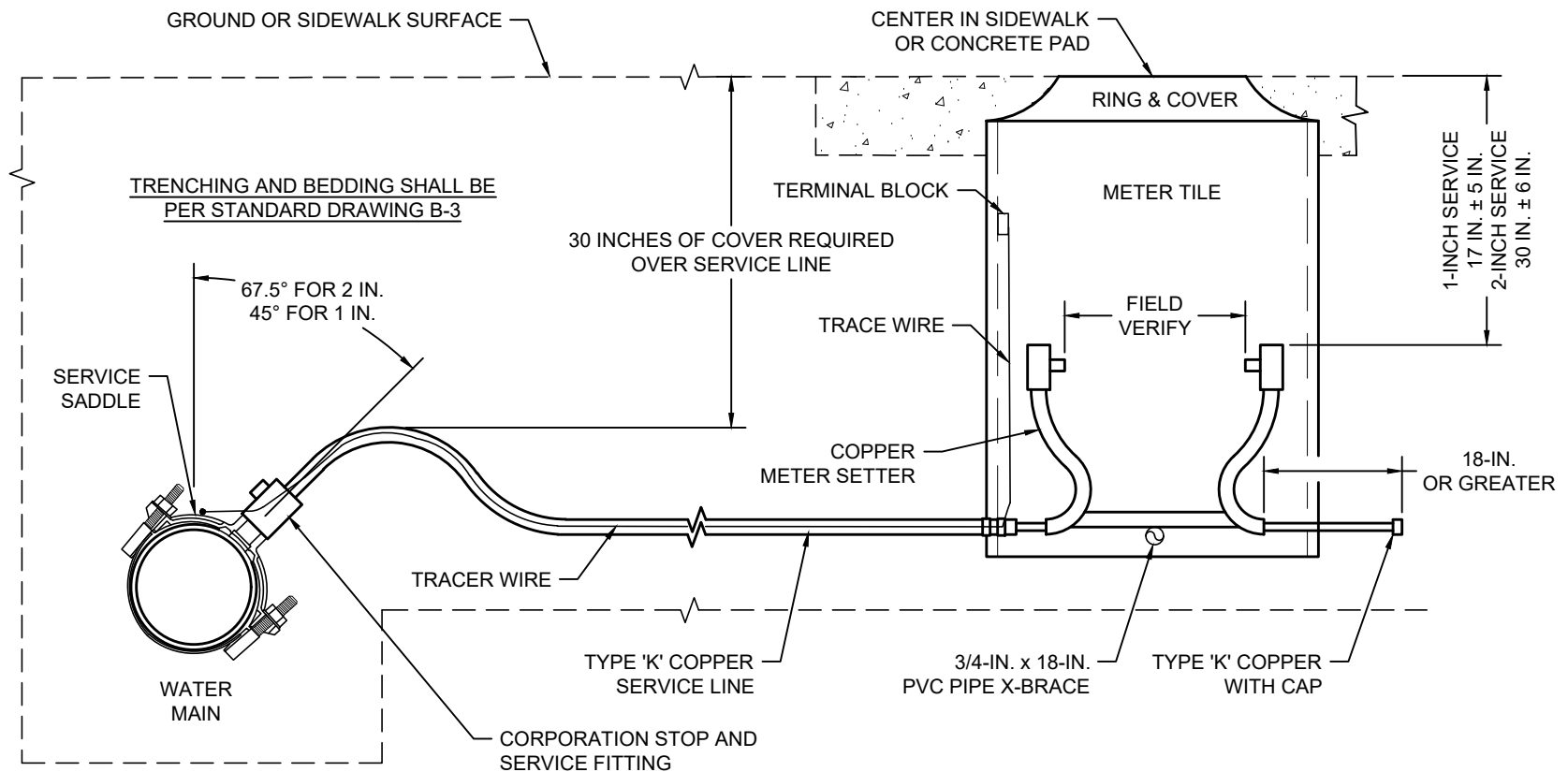
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NOTES:

- METER TILE SHALL BE CENTERED IN A 5-FOOT BY 5-FOOT BY 6-INCH-THICK CONCRETE PAD OR SIDEWALK. WATER SERVICES BEYOND THE RIGHT-OF-WAY SHALL BE INSTALLED FROM A PRIVATE WATER MAIN.
- CONNECT SERVICE TRACER WIRE TO WATER MAIN TRACER WIRE WIRE WITH BRASS WIRE CLAMP. BRASS WIRE CLAMP SHALL BE SPLIT-BOLT CONNECTOR OR OTHER CONNECTOR AS AUTHORIZED BY THE ENGINEER.
- SERVICE LINE SHALL BE INSTALLED WITHOUT JOINTS.
- SERVICE LINES ON THE SERVICE SIDE OF THE SETTER SHALL BE COPPER TYPE K, COPPER TYPE L, PEX, PVC SCHEDULE 40 OR GREATER, PE 200 PSI OR GREATER, CPVC, OR AS AUTHORIZED BY THE BUILDING OFFICIAL.
- ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

1-INCH AND 2-INCH WATER SERVICE

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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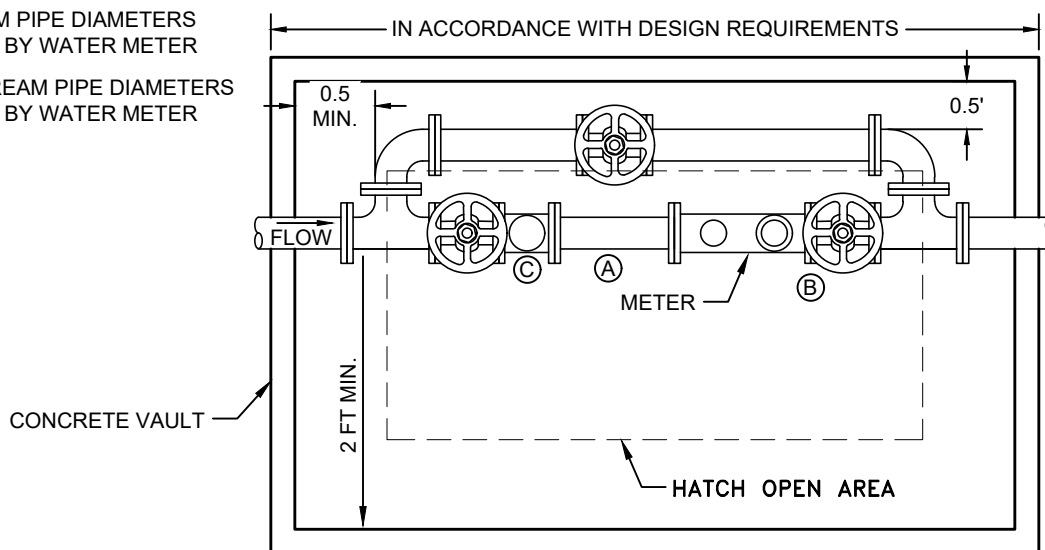
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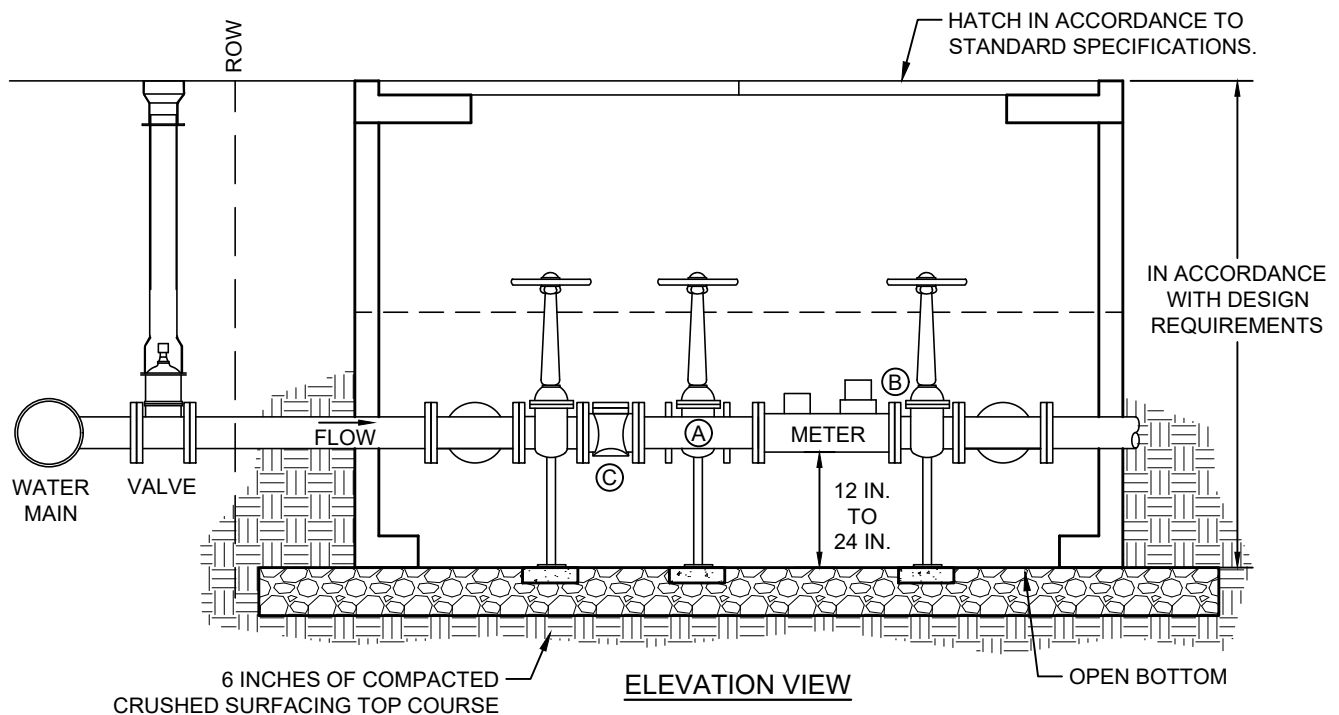
B-7

DATE	REVISION	BY
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- (A) UP STREAM PIPE DIAMETERS
REQUIRED BY WATER METER
- (B) DOWN STREAM PIPE DIAMETERS
REQUIRED BY WATER METER
- (C) STRAINER



PLAN VIEW



ELEVATION VIEW

NOTES:

- FOR 3-INCH WATER SERVICES INSTALL 4-INCH WATER SERVICE LINE FROM THE MAIN, REDUCED TO 3-INCH SERVICE IN THE VAULT.
- BYPASS PIPING SHALL BE THE SAME SIZE AS THE SERVICE LINE. SINGLE BYPASS VALVE IS REQUIRED. A REDUCED BYPASS MAY BE APPROVED WITH WRITTEN REQUEST FROM THE OWNER.
- THE SERVICE LINE SHALL BE ADJUSTED TO MEET THE DEPTH REQUIREMENT OF THE VAULT.
- ALL SERVICE LINE CONNECTIONS SHALL BE RESTRAINED JOINTS.
- VALVES AND TEES MAY BE INSTALLED OUTSIDE THE VAULT WITH AUTHORIZATION FROM THE ENGINEER.
- STRAINERS ARE REQUIRED FOR ALL METER INSTALLATIONS 3 INCHES AND LARGER. STRAINERS WILL BE SERVICED AND MAINTAINED BY THE WATER DIVISION.
- CONTRACTOR SHALL VERIFY ALL PIPING COMPONENTS AND VAULT SIZES PRIOR TO INSTALLATION.
- WATER SERVICES 3-INCHES AND LARGER SHALL BE INSTALLED ON PRIVATE PROPERTY.
- ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

3-INCH AND LARGER WATER SERVICE

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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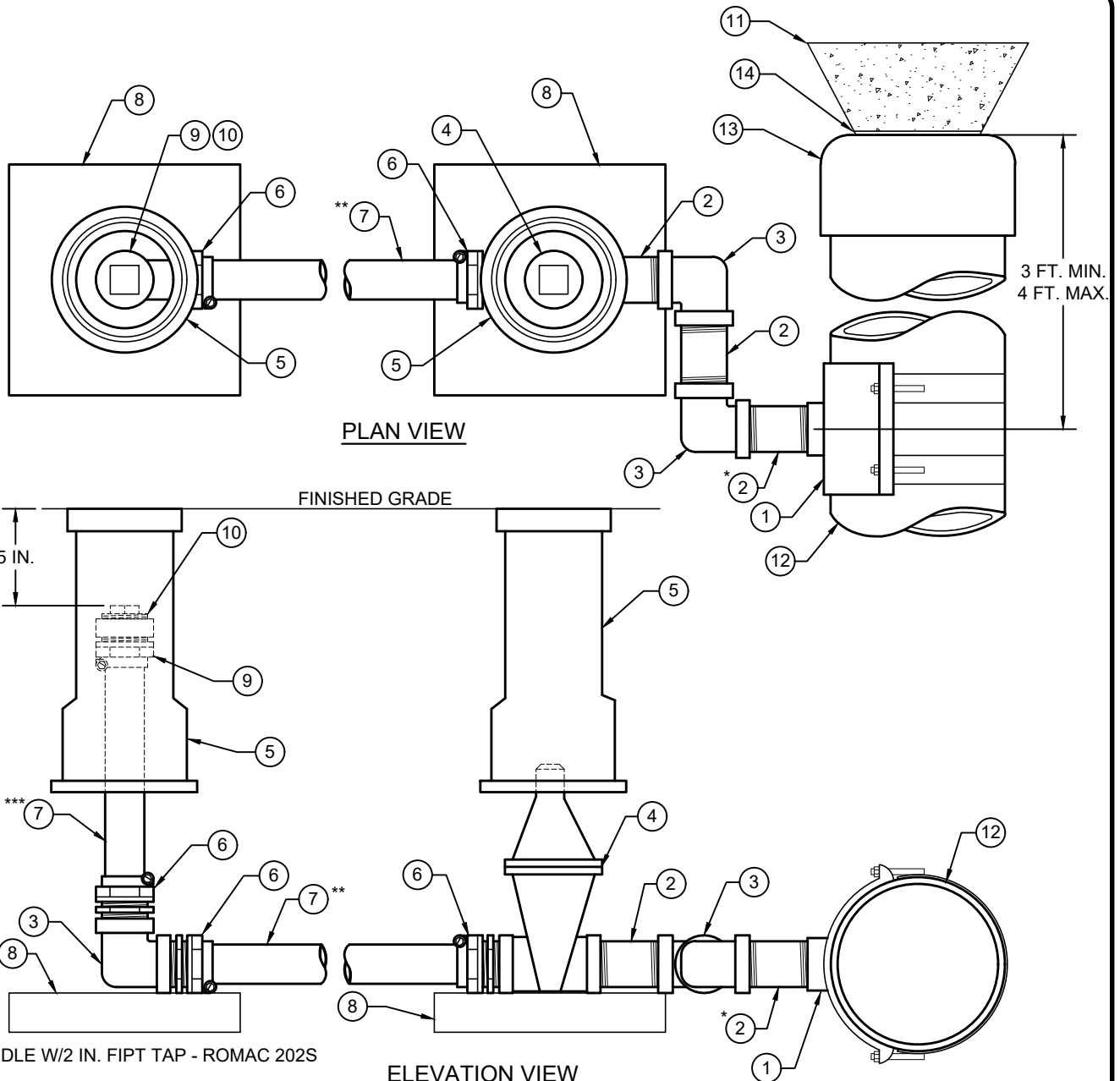
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- ① SADDLE W/2 IN. FIPT TAP - ROMAC 202S
- ② 2 IN. DIA X 4 IN. LG. BRASS IPT NIPPLE
- ③ 2 IN. BRASS 90° IPT ELBOW
- ④ 2 IN. AWWA NON-RISING STEM, RESILIENT WEDGE GATE VALVE W/FIPT ENDS AND 2 IN. OPERATING NUT
- ⑤ VALVE BOX PER 9-30
- ⑥ SERVICE FITTING PER 9-30
- ⑦ 2 IN. DIA TYPE K RIGID COPPER PIPE
- ⑧ 2 IN. THK. X 12 IN. X 12 IN. CONCRETE BLOCK
- ⑨ SERVICE FITTING PER 9-30
- ⑩ 2 IN. MIPT PLUG W/SQUARE OR HEX WRENCH HEAD, BRASS OR PVC
- ⑪ THRUST BLOCK
- ⑫ WATER MAIN - SIZE VARIES
- ⑬ PIPE CAP - SIZE VARIES
- ⑭ 6 MIL PLASTIC

NOTES:

1. SEE TRENCH BEDDING DETAIL B-3.
2. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.
- * FOR LIVE TAPS, NIPPLE SHALL BE REPLACED WITH 2 IN. CORPORATION STOP.
- ** COPPER PIPE SHALL BE CUT AT 24 IN. LONG.
- *** COPPER PIPE SHALL BE CUT AS REQUIRED.

2-INCH BLOW-OFF ASSEMBLY

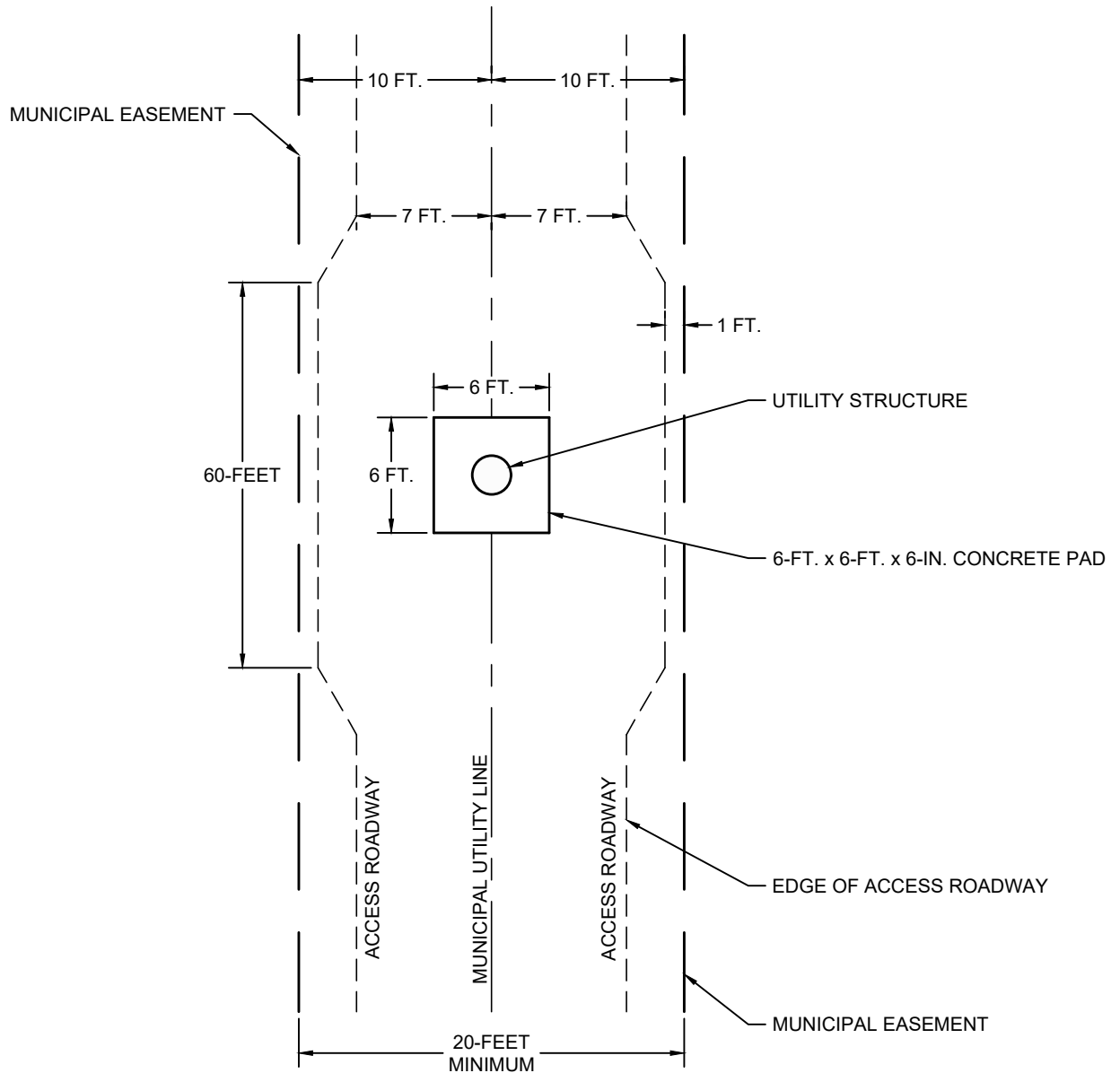
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NOTES:

1. MUNICIPAL UTILITIES THAT ARE AUTHORIZED BEYOND THE RIGHT-OF-WAY SHALL BE INSTALLED WITHIN A MUNICIPAL EASEMENT AND ACCESS ROADWAY PER THIS DETAIL. THE MUNICIPAL SERVICES DIRECTOR MAY WAIVE THE REQUIREMENT FOR AN ACCESS ROAD IF ALL UTILITY STRUCTURES CAN BE SERVICED BY AN APPROVED ROADWAY.
2. ACCESS ROADWAY SHALL BE CSBC OR CSTC, 3-INCHES DEPTH, AND DESIGNED FOR 50,000 LB. MAINTENANCE VEHICLE.
3. UTILITY STRUCTURES OUTSIDE OF RIGHT-OF-WAY SHALL BE CENTERED WITHIN THE MUNICIPAL EASEMENT.
4. UTILITY STRUCTURES THAT ARE MORE THAN 10-FEET DEEP MAY REQUIRE ADDITIONAL RIGHT-OF-WAY OR MUNICIPAL EASEMENT WIDTHS.
5. 6-FOOT x 6-FOOT x 6-INCH CONCRETE PADS ARE REQUIRED AROUND ALL UTILITY STRUCTURES THAT ARE INSTALLED IN NON-ASPHALT AREAS.
6. ACCESS ROADWAY SHALL DRAIN AWAY FROM UTILITY STRUCTURE.
7. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

ACCESS EASEMENT AND ROADWAY FOR MUNICIPAL UTILITIES

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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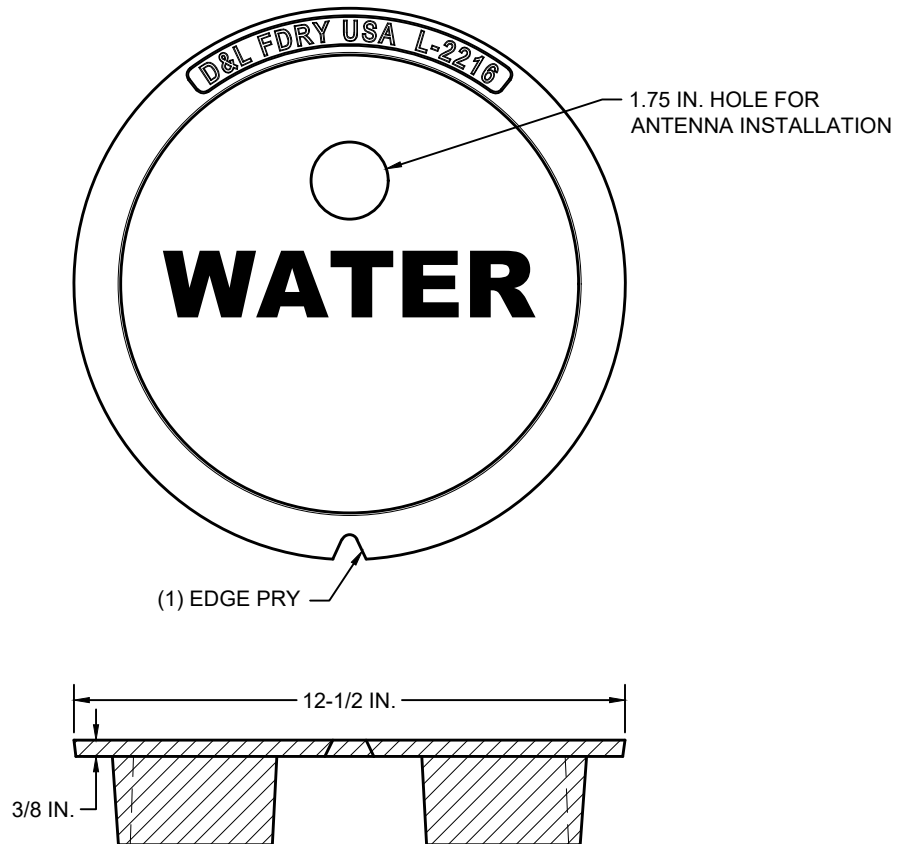
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DATE	REVISION	BY
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SECTION A-A

NOTES:

1. LIDS WITH CITY LOGO MAY BE AUTHORIZED BY ENGINEER ON LIDS THAT WILL BE MAINTAINED BY THE CITY TO ALLOW EXISTING STOCK TO BE DEPLETED.
2. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

**WATER METER LID
1-INCH SERVICE**

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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SCALE NONE

DATE 07/16

CITY OF MOSES LAKE

GRANT COUNTY

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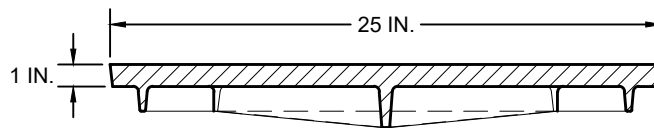
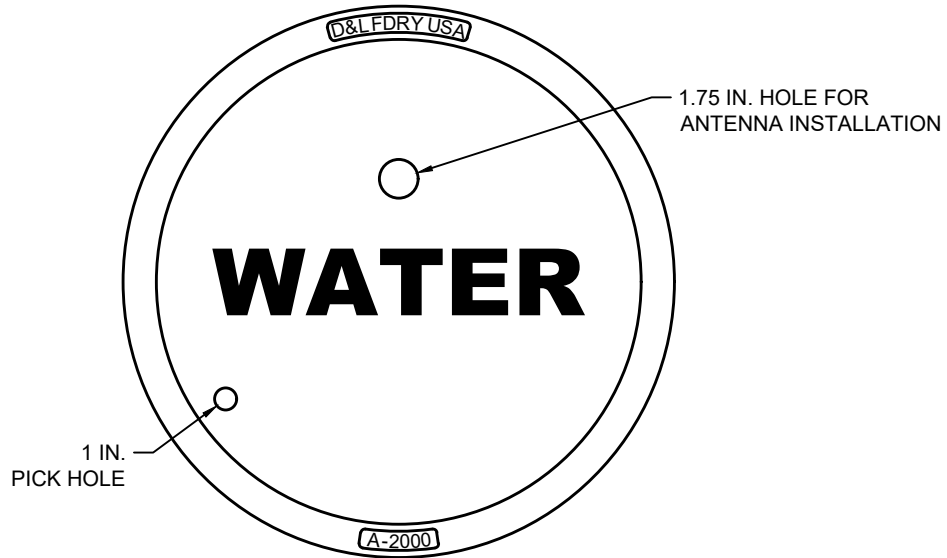
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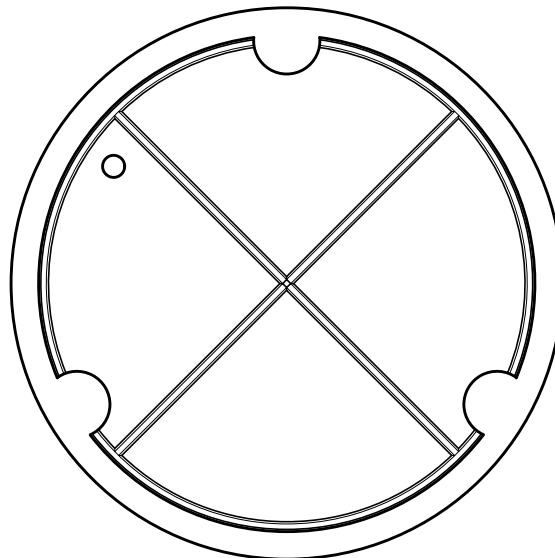
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SECTION A-A



NOTES:

1. LIDS WITH CITY LOGO MAY BE AUTHORIZED BY ENGINEER ON LIDS THAT WILL BE MAINTAINED BY THE CITY TO ALLOW EXISTING STOCK TO BE DEPLETED.
2. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

WATER MANHOLE LID 2-INCH AND LARGER SERVICE

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

DRAWN RPM

CHECK MORO

SCALE NONE

DATE 07/16

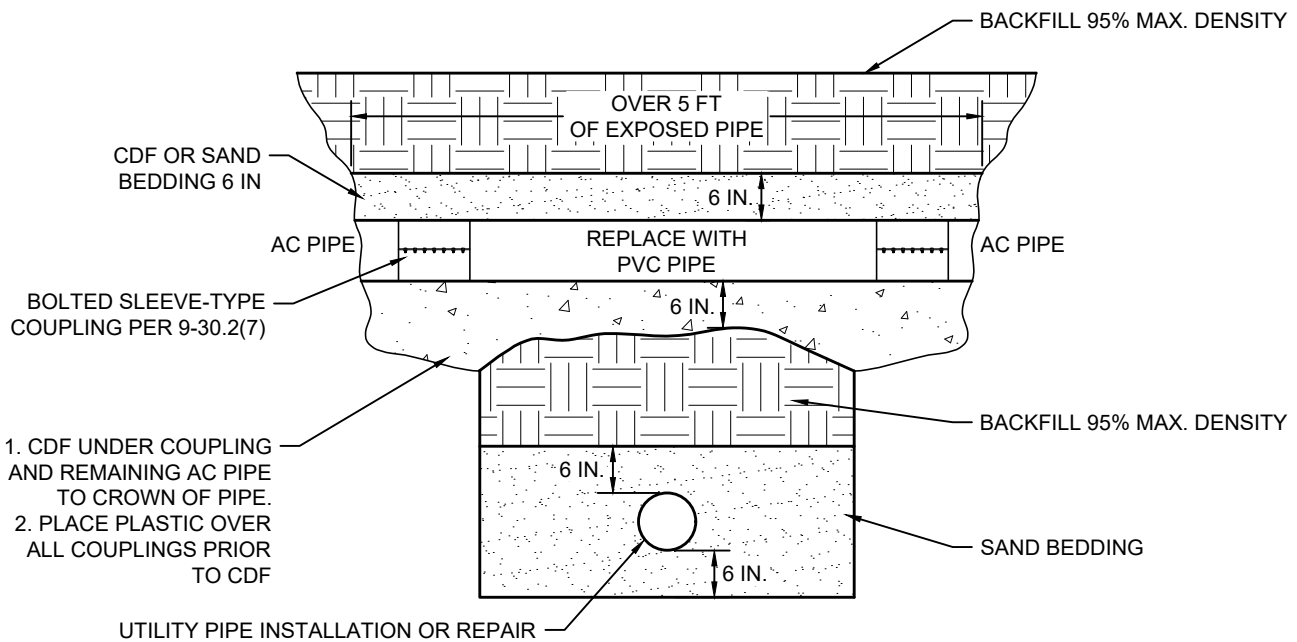
CITY OF MOSES LAKE

GRANT COUNTY

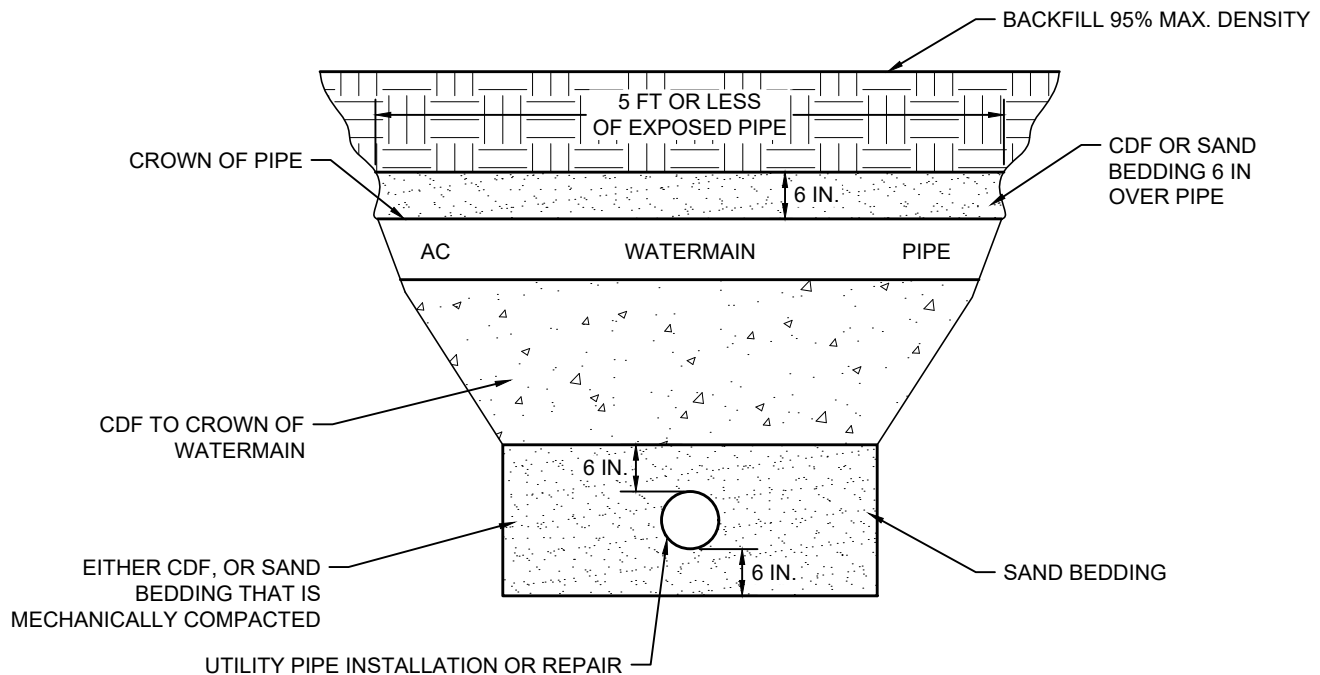
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MAJOR CROSSING



MINOR CROSSING (AC EXPOSURE: 5 FT OR LESS)

NOTES:

1. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

AC WATERMAIN CDF REQUIREMENTS

MUNICIPAL SERVICES DEPT. - ENGINEERING DIVISION

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CHECK MORO

CITY OF MOSES LAKE

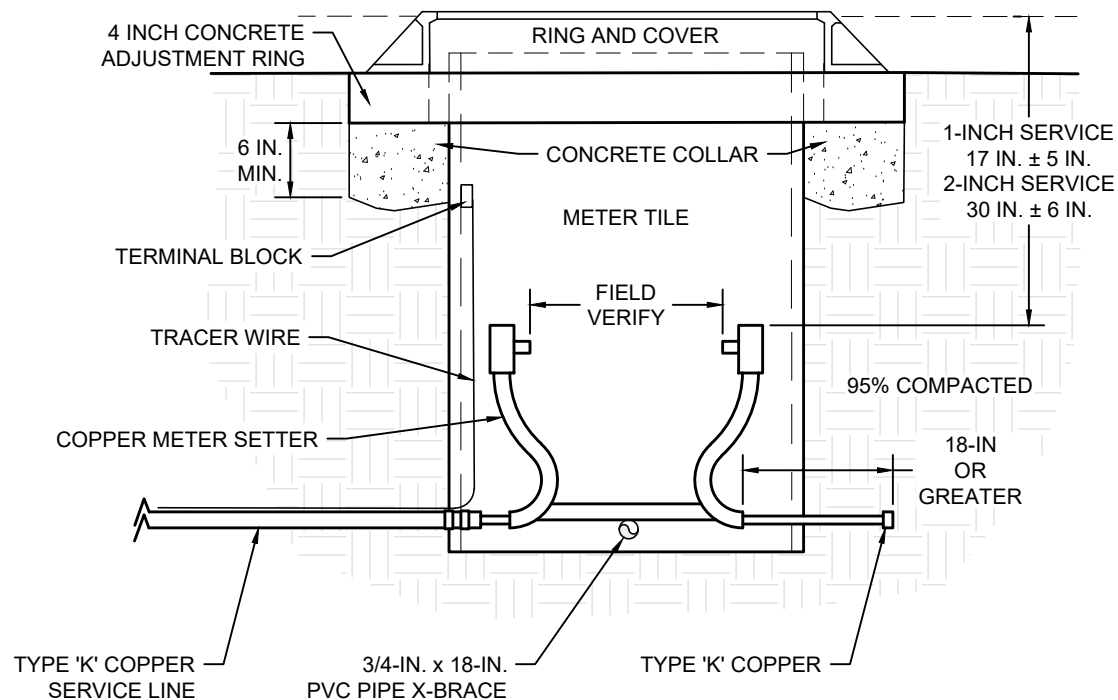
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NOTES:

1. METER TILE SHALL BE CENTERED IN A 6-FOOT BY 6-FOOT BY 6-INCH THICK CONCRETE PAD OR SIDEWALK. WATER SERVICES BEYOND THE RIGHT-OF-WAY SHALL BE INSTALLED FROM A PRIVATE WATER MAIN.
2. SEE STANDARD DETAIL FOR WATER SERVICE INSTALLATION.
3. USE RING AND COVER SPECIFIED FOR LARGER SERVICE WITH "WATER" CAST IN LID.
4. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

ALTERNATIVE TO TRAFFIC RATED VAULT FOR 1- INCH WATER SERVICE

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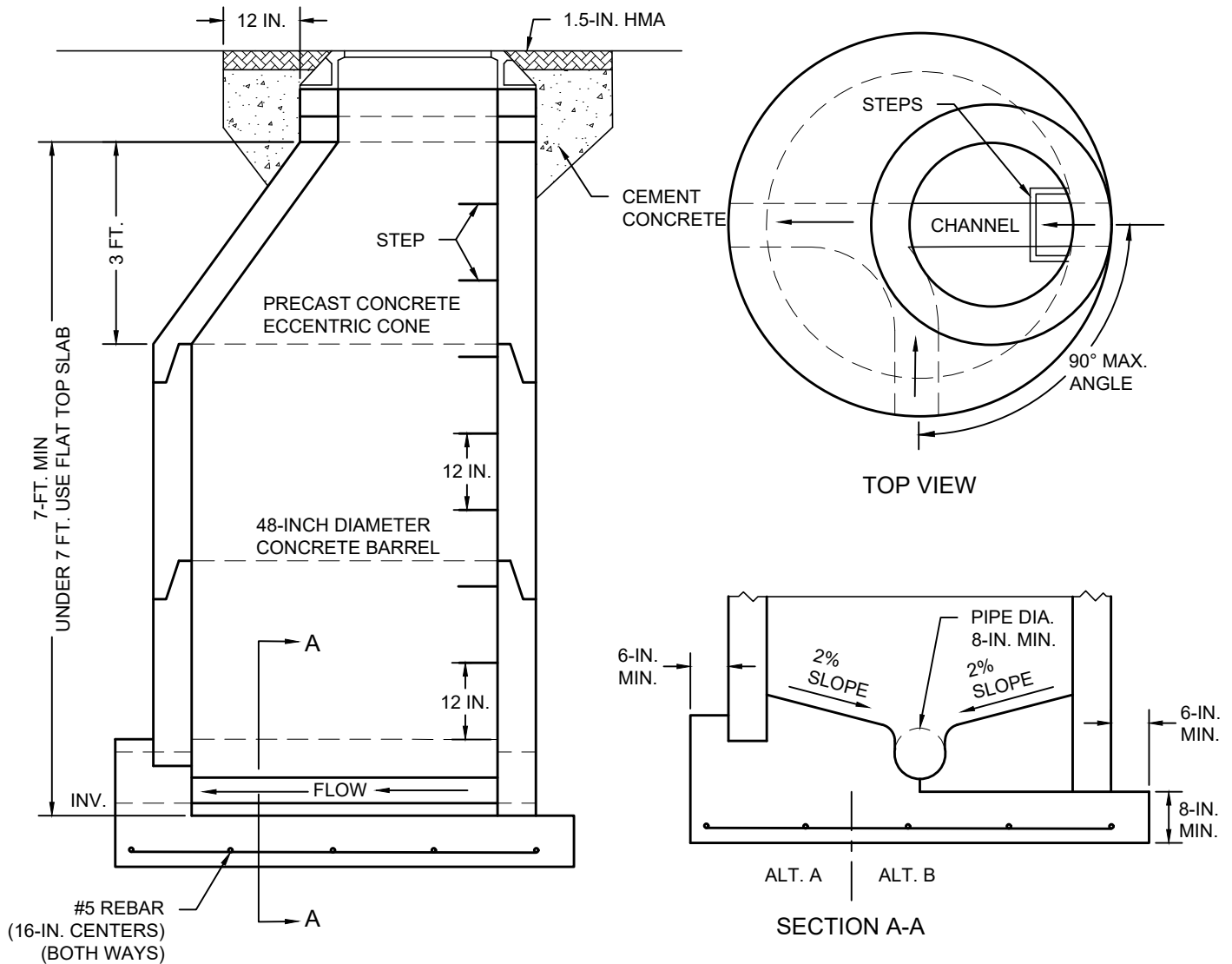
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BASE CONSTRUCTION ALTERNATIVES:

- ALT. A: BASE & INVERT IN SINGLE POUR
 ALT. B: POUR BASE, SET MANHOLE, THEN POUR INVERT
 ALT. C: PRECAST CONCRETE BASE & INVERTS

NOTES:

1. STEPS SHALL BE CENTERED OPPOSITE THE OUTFLOW LINE.
2. 4 TO 16 INCHES OF ADJUSTMENT REQUIRED.
3. "SEWER" SHALL BE CAST IN ALL LIDS.
4. MANHOLES NOT IN ASPHALT SHALL BE CENTERED IN A 6-FT. BY 6-FT. BY 6-IN. CONCRETE PAD AT FINISH GRADE. SLOPE CORNERS DOWN IN GRAVEL STREETS.
5. ADJUST MANHOLE LIDS IN ASPHALT TO 1/4 INCH BELOW FINISH GRADE.
6. PLACE FLEXIBLE GASKET BETWEEN BARREL SECTIONS, AND BETWEEN THE CONE, AND BARREL SECTION.
7. ALL OPEN JOINTS AND PICK HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND FINISHED TO A SMOOTH SURFACE. ANNULAR SPACES SHALL BE FILLED WITH FOAM SEALER.
8. ENTRY COUPLINGS OR SAND COLLARS ARE REQUIRED WHERE SEWER MAINS ENTER AND EXIT THE MANHOLE.
9. MANHOLE BASE SHALL BE ON UNDISTURBED OR COMPACTED EARTH.
10. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

SEWER MANHOLE

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DATE 01/10

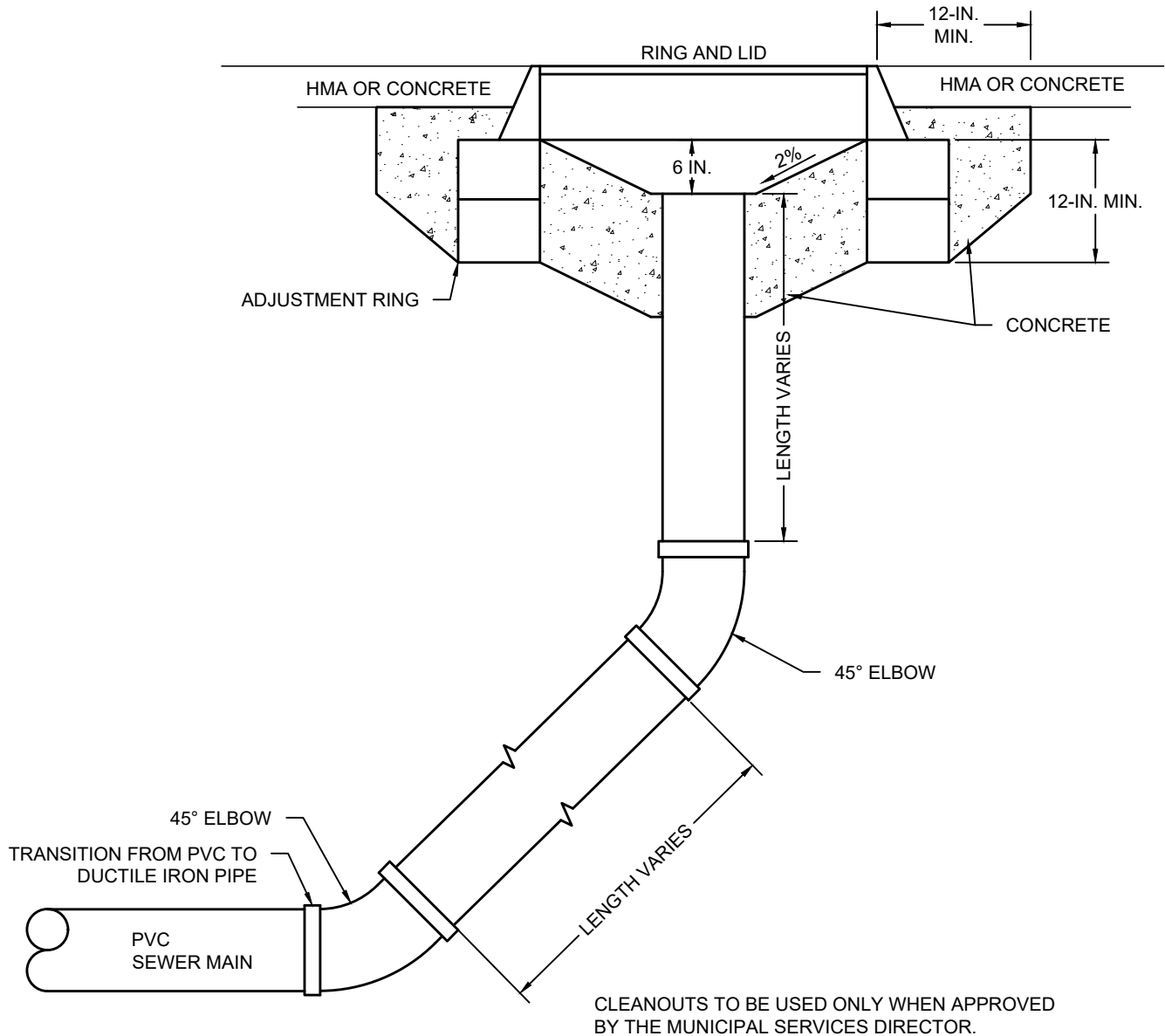
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NOTES:

- CLEANOUTS NOT IN ASPHALT SHALL BE CENTERED IN A 6-FOOT BY 6-FOOT BY 6-INCH CONCRETE PAD AT FINISH GRADE. SLOPE CORNERS DOWN IN GRAVEL STREETS.
- ADJUST CLEANOUT LIDS IN ASPHALT TO 1/4 INCH BELOW FINISH GRADE.
- "SEWER" SHALL BE CAST IN ALL CLEANOUT LIDS.
- RING/LID ASSEMBLY SHALL SET ON TWO 6-INCH CONCRETE ADJUSTMENT RINGS.
- ALL CLEANOUT PIPING AND ELBOWS SHALL BE A MINIMUM OF CLASS 50 DUCTILE IRON.
- LOCKING LIDS MAY BE REQUIRED.
- ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

SEWER CLEANOUT

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CITY OF MOSES LAKE

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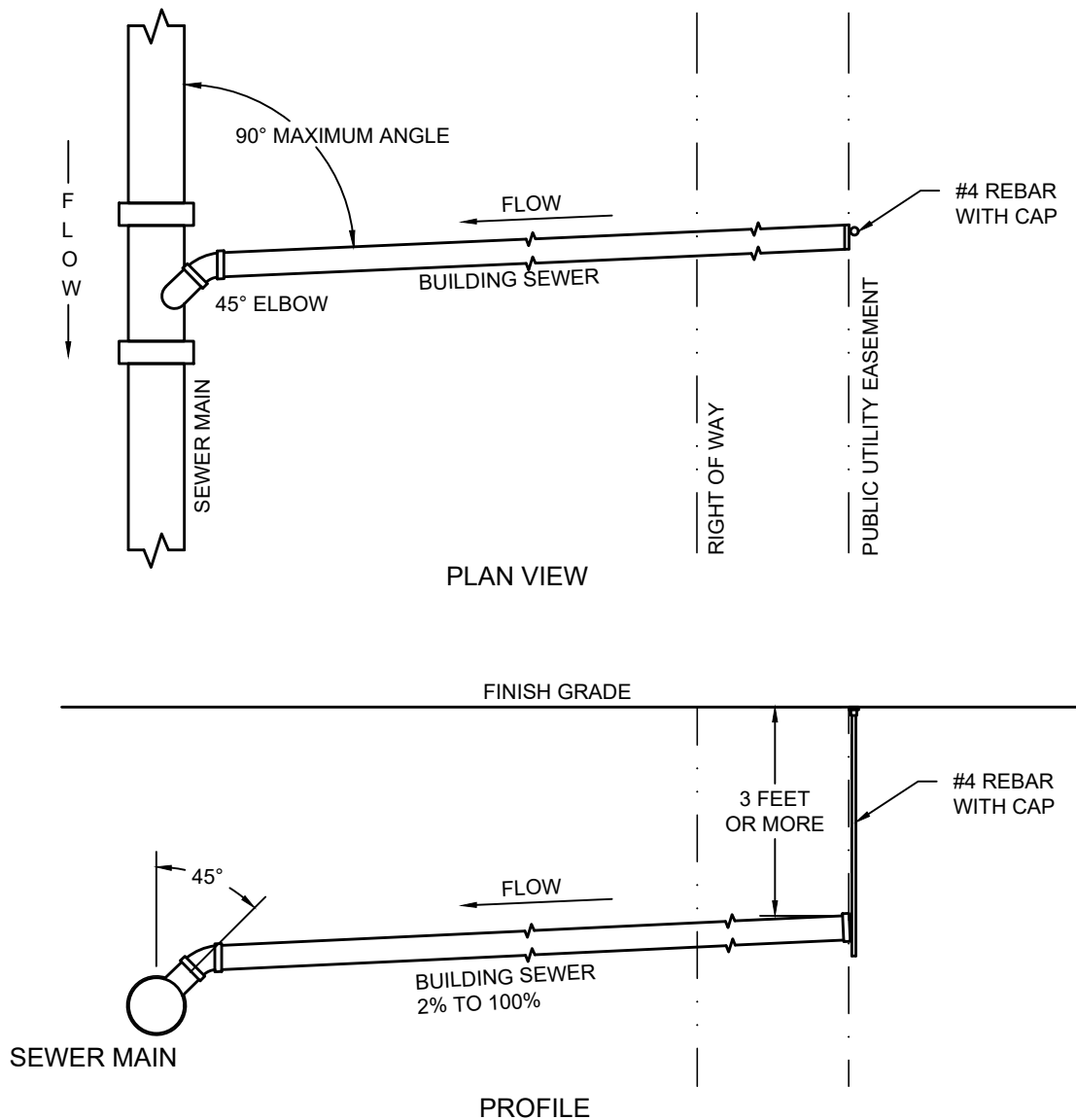
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NOTES:

1. IN-LINE GASKETED-WYE SEWER FITTING SHALL BE USED ON NEW MAINS. GASKETED-WYE SEWER SADDLE WITH STAINLESS STEEL CLAMPS SHALL BE USED ON EXISTING SEWER MAINS.
2. THE END OF THE SERVICE LINE SHALL BE CAPPED, WHEN NOT PLACED IN SERVICE.
3. A RED CAP SHALL BE PLACED ON THE #4 REBAR, FLUSH WITH FINISH GRADE, MARKING THE END OF THE SERVICE LINE. THE RED CAP WILL BE SUPPLIED BY THE CITY.
4. BUILDING SEWER CLEANOUTS ARE NOT AUTHORIZED WITHIN MUNICIPAL EASEMENTS OR RIGHT OF WAY.
5. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

BUILDING SEWER

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DATE 01/13

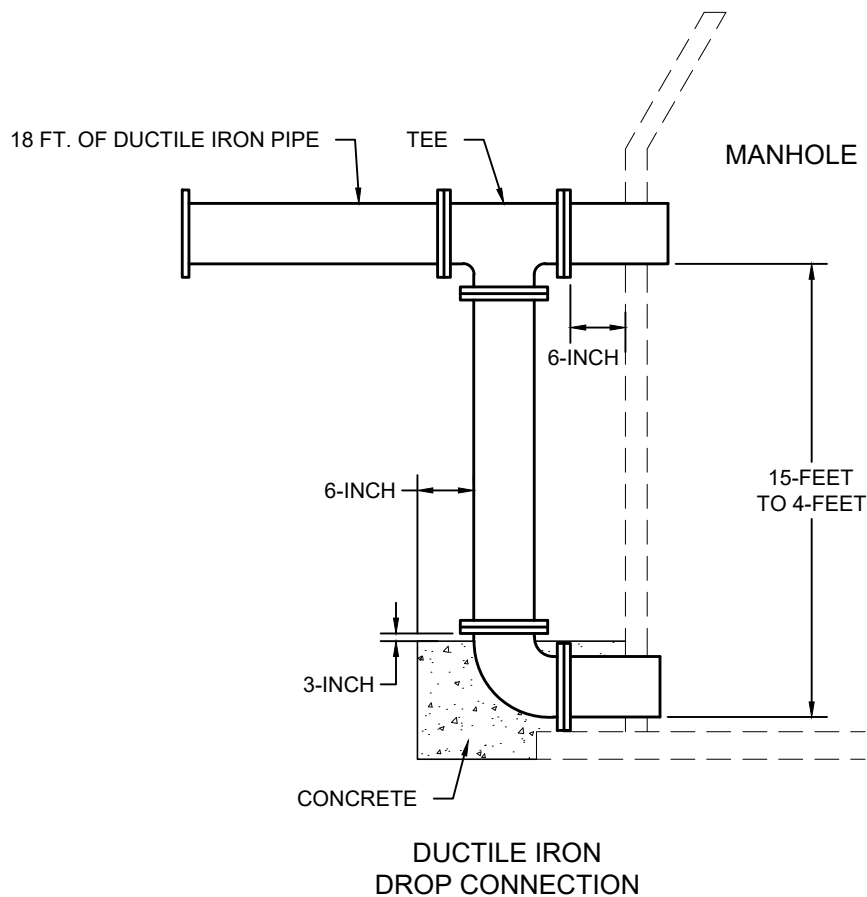
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NOTES:

1. ALL PIPE AND FITTINGS SHALL BE DUCTILE IRON, WRAPPED IN 8-MIL POLYETHYLENE ENCASEMENT.
2. MANHOLE SHALL BE CONSTRUCTED PER DETAIL C-1.
3. ALL DUCTILE IRON PIPE SHALL BE A CLASS 50.
4. DROP MANHOLE CONNECTIONS REQUIRE AUTHORIZATION BY MUNICIPAL SERVICE DIRECTOR.
5. FLANGED OR MECHANICAL JOINTS ARE AUTHORIZED FOR THE DUCTILE-IRON DROP CONNECTION.
6. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

DROP MANHOLE CONNECTION

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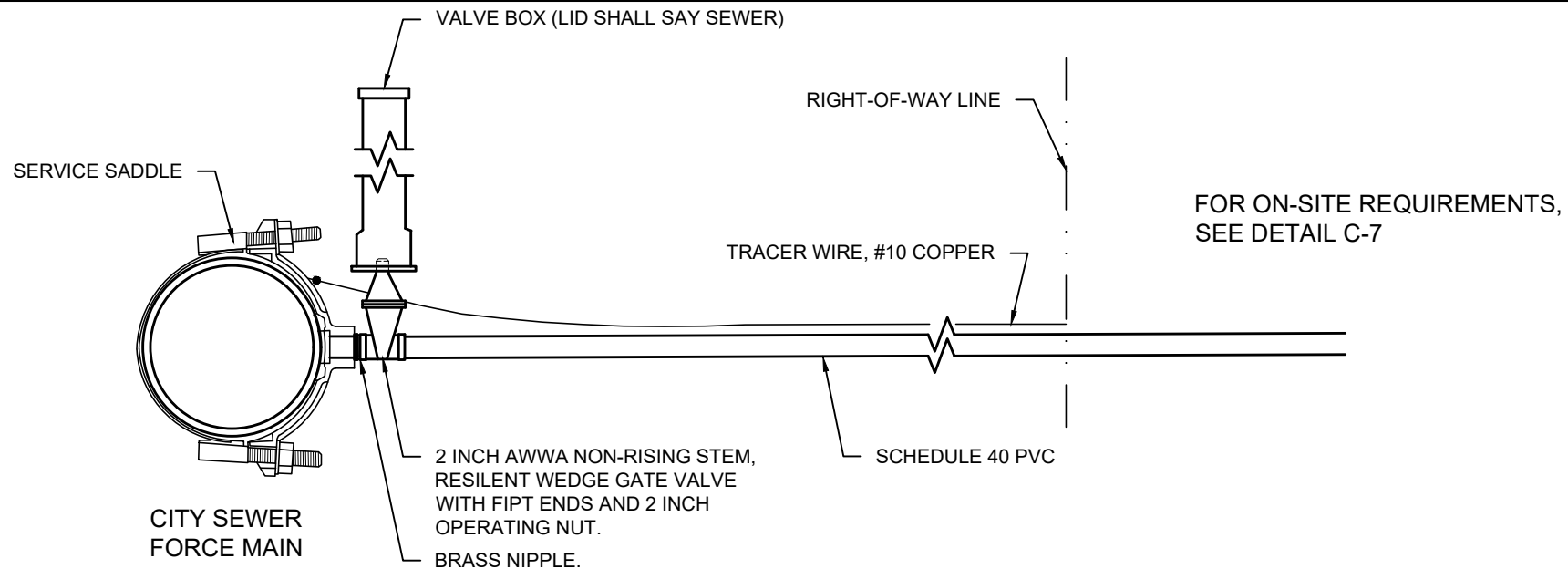
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NOTES:

1. TRENCHING AND BEDDING SHALL BE PER DETAIL B-3.
2. CONNECT SERVICE TRACER WIRE TO FORCE MAIN TRACER WIRE WITH BRASS WIRE CLAMP. BRASS WIRE CLAMP SHALL BE SPLIT-BOLT CONNECTOR OR OTHER CONNECTOR AS AUTHORIZED BY THE ENGINEER.
3. CONNECTIONS TO SEWER FORCE MAINS SHALL ONLY BE AS AUTHORIZED BY MUNICIPAL SERVICE DIRECTOR.
4. ALL CONNECTIONS TO SEWER MAIN SHALL BE FOR EFFLUENT ONLY, UNLESS AUTHORIZED BY MUNICIPAL SERVICE DIRECTOR.
5. ENGINEER WILL DETERMINE IF LIVE TAP IS REQUIRED BY OWNER FOR CONNECTION TO SEWER FORCE MAIN. IF LIVE TAP IS NOT REQUIRED, OWNER SHALL SUBMIT CONNECTION DETAILS TO THE ENGINEER FOR AUTHORIZATION PRIOR TO CONNECTION.
6. ROADWAY CROSSING OUTSIDE CITY LIMITS SHALL REQUIRE AUTHORIZATION BY GRANT COUNTY PUBLIC WORKS.
7. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

FORCE MAIN SEWER CONNECTION

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SCALE	NONE

CITY OF MOSES LAKE

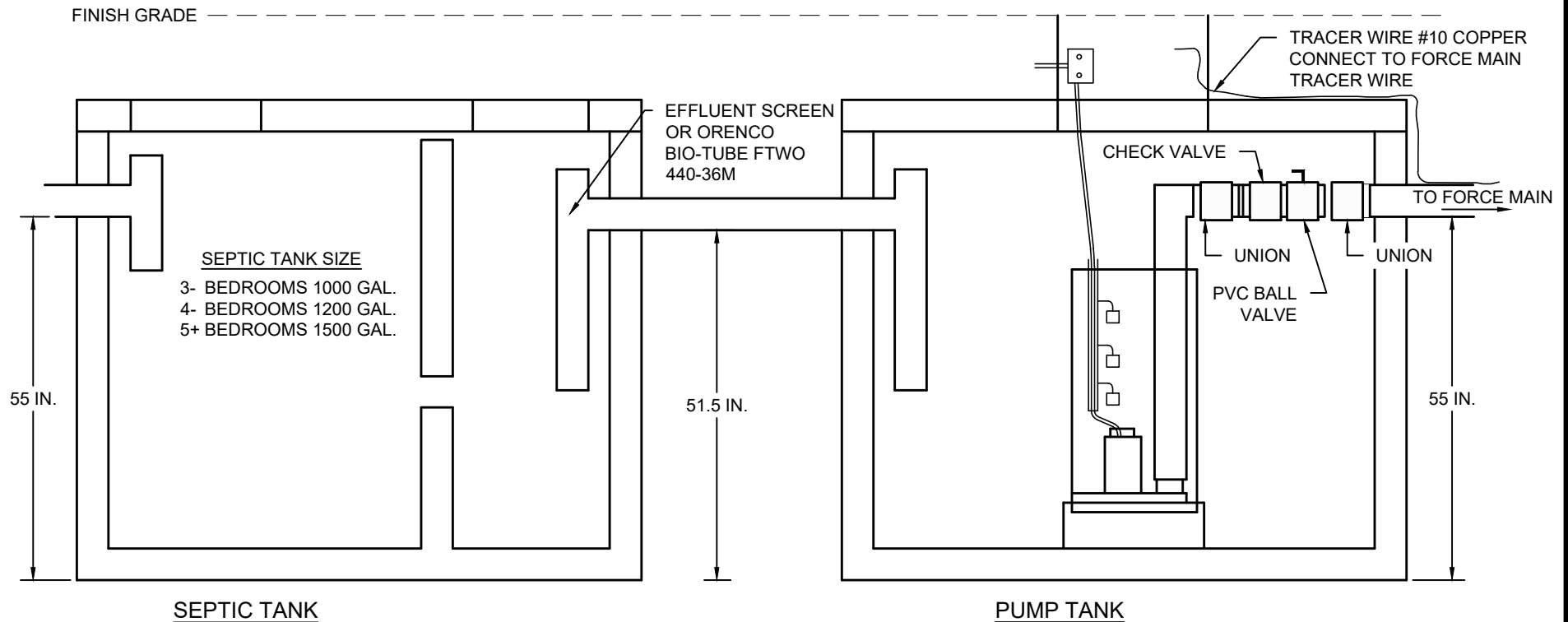
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NOTES:

- PUMP TANK SHALL BE AT LEAST 750 GALLONS (670 GALLON MI TANK AUTHORIZED FOR RESIDENTIAL).
- PUMP TANK SHALL CONTAIN THE FOLLOWING ITEMS: EFFLUENT SCREEN, 3-FLOAT SYSTEM, INLET BAFFLE FOR PUMP CHAMBER, AND AUDIO AND VISUAL ALARM SYSTEM.
- PUMP SHALL BE DESIGNED FOR ELEVATION DIFFERENCE AND LENGTH TO FORCE MAIN.
- DISCHARGE FROM PUMP TO MAIN SHALL INCLUDE UNIONS, CHECK VALVE, AND BALL VALVE AS SHOWN, UNLESS PROFESSIONAL ENGINEER STAMPS PLANS.
- TRACER WIRE SHALL BE ACCESSIBLE WITH AT LEAST 3 FEET OF WIRE INSIDE HATCH OR AS AUTHORIZED BY ENGINEER.
- CONNECTION TO CITY SEWER MAIN REQUIRES ONSITE INSPECTION BY CITY PRIOR TO CONNECTION AND REQUIRES MUNICIPAL ACCESS EASEMENT. WORK INSIDE CITY LIMITS WILL BE INSPECTED BY BUILDING OFFICIAL. WORK OUTSIDE CITY LIMITS WILL BE INSPECTED BY CITY'S DEVELOPMENT ENGINEER.
- ALL COMMERCIAL SYSTEMS ARE REQUIRED TO BE DESIGNED BY A PROFESSIONAL ENGINEER. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.
- ALL ON-SITE BUILDING SEWERS SHALL HAVE AT LEAST 30-INCHES OF COVER.
- ALL SEPTIC TANKS AND PUMPS SHALL BE AT LEAST 50 FEET FROM SURFACE WATER, AS MEASURED FROM THE ORDINARY HIGH WATER MARK, AND AT LEAST 5 FEET FROM FOUNDATION, IN-GROUND SWIMMING POOL, EASEMENTS, AND PROPERTY LINES.
- ON-SITE BUILDING SEWERS SHALL BE AT LEAST 10 FEET FROM SURFACE WATER MARK, AND AT LEAST 2 FEET FROM BUILDING FOUNDATION AND IN-GROUND SWIMMING POOLS.
- ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

ON-SITE FORCE MAIN & LOW-PRESSURE EFFLUENT SYSTEM SEWER CONNECTION

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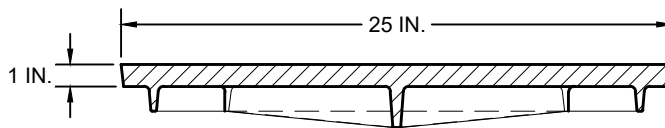
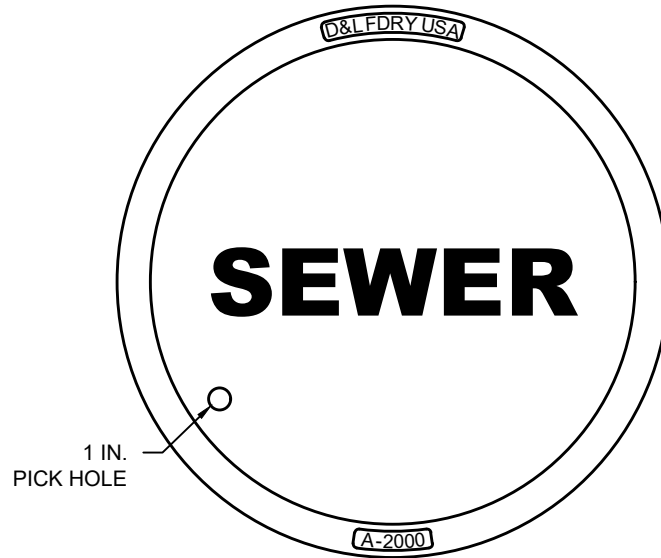
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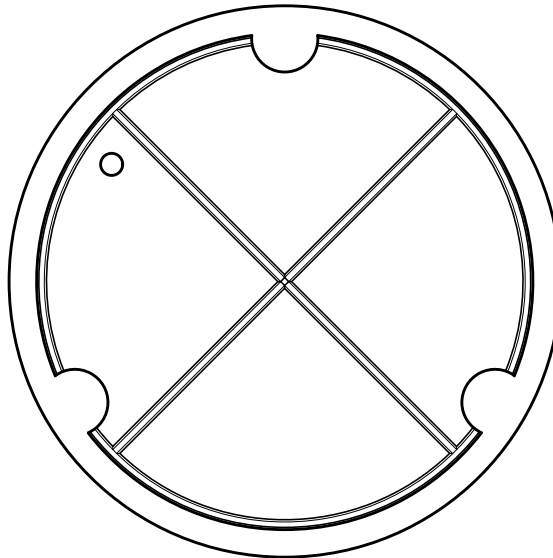
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A-2000



SECTION A-A



NOTES:

1. LIDS WITH CITY LOGO MAY BE AUTHORIZED BY ENGINEER ON LIDS THAT WILL BE MAINTAINED BY THE CITY TO ALLOW EXISTING STOCK TO BE DEPLETED.
2. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

SEWER MANHOLE LID

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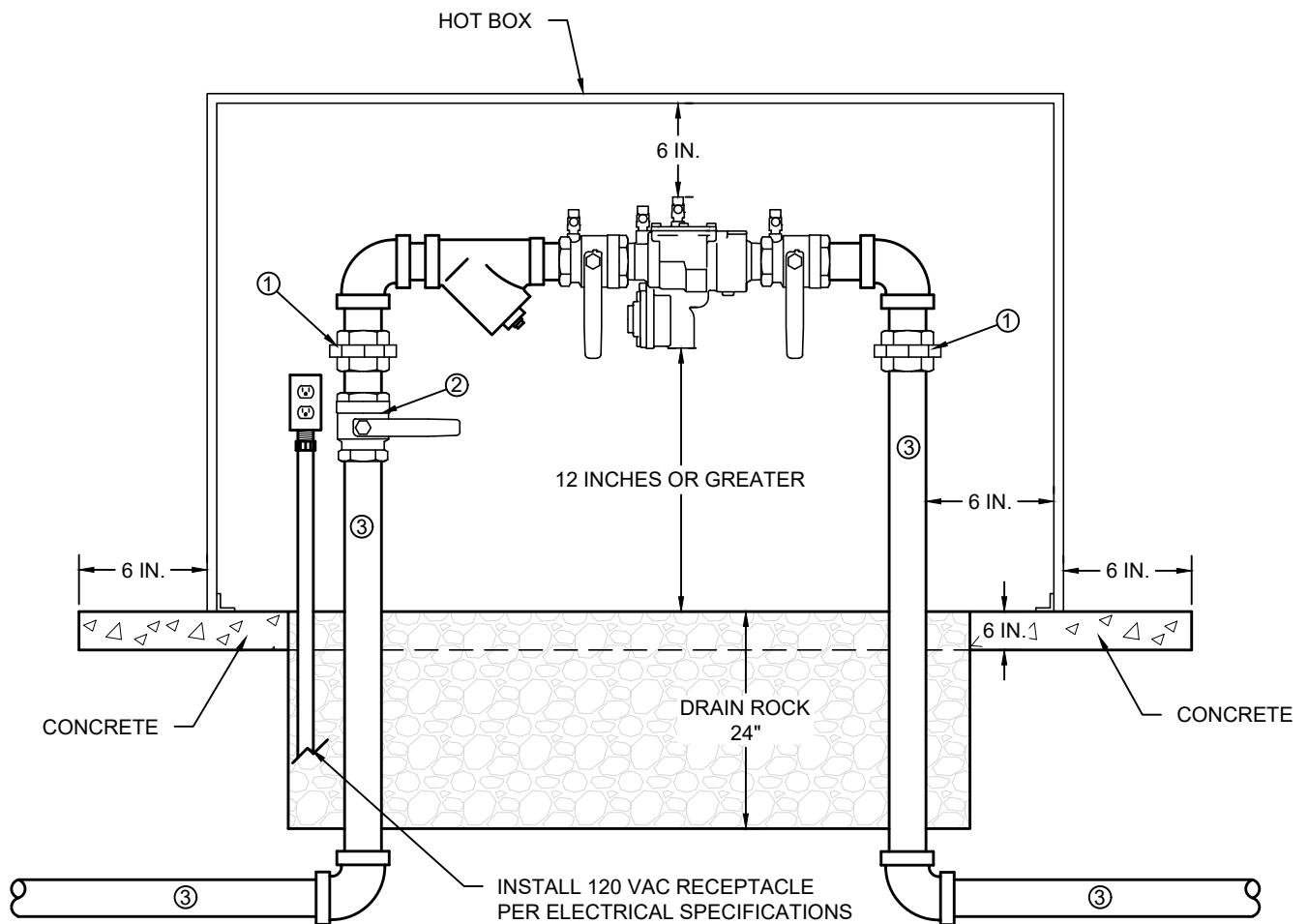
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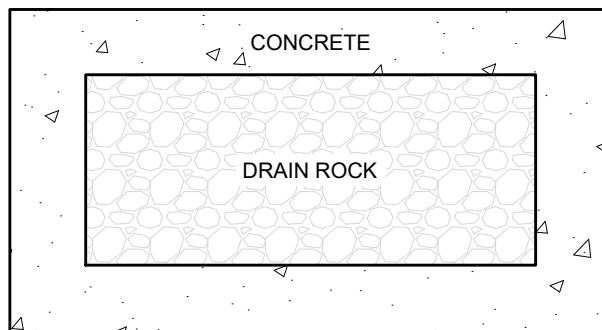
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NOTES:

- ① UNION
- ② 1 INCH BALL VALVE
- ③ 1 INCH TYPE K COPPER



PLAN VIEW

CONSTRUCTION NOTES:

1. CONCRETE SLAB SHALL DRAIN AWAY FROM RPBA. SLAB SHALL BE 1 FOOT WIDER AND LONGER THAN HOT BOX. WHERE UNIT IS IN LARGER PAD, MATCH ELEVATION OF LARGER PAD.
2. RPBA SHALL MEET SET BACKS SHOWN WITHIN HOT BOX, OR CONTRACTOR SHALL INCREASE SIZE OF HOT BOX TO MEET SET BACKS.
3. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

1-INCH RPBA DETAIL

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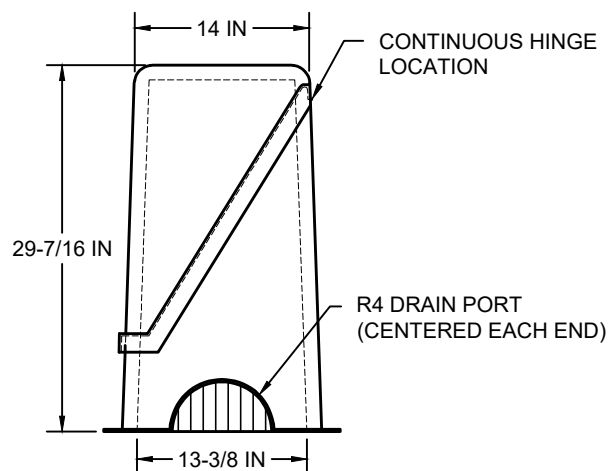
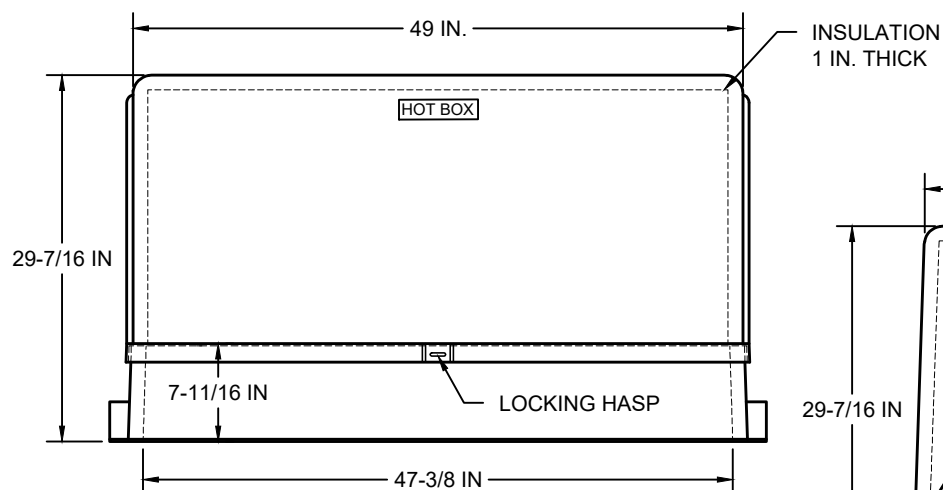
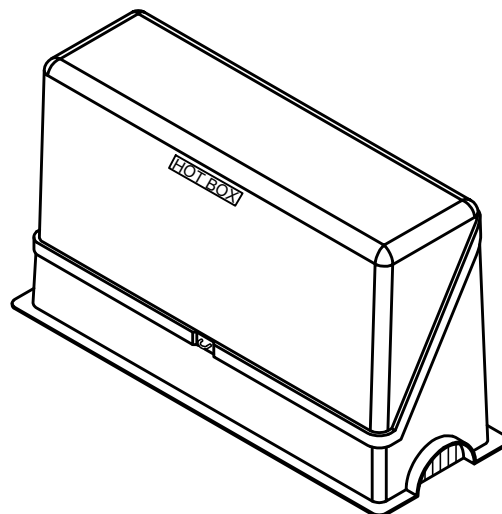
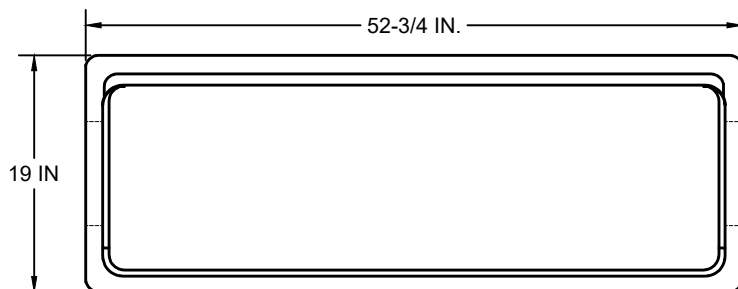
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NOTES:

1. HEAT IS PROVIDED BY A 90-WATT, 120-VOLT SINGLE PHASE HEAT TRACE TAPE. FOR UNHEATED VERSION REPLACE THE PREFIX "H" WITH AN "L".
2. FOUR INTERNAL BRACKETS AND CONCRETE ANCHORS ARE SUPPLIED WITH THE ENCLOSURE, (NOT SHOWN).
3. STANDARD COLOR IS BEIGE. (OPTIONS AVAILABLE)
4. FOR RECOMMENDED SLAB SIZE ADD 9" TO THE ENCLOSURE EXTERIOR.
5. INTERIOR DIMENSIONS ARE NORMAL.
6. OLD P/N: HB2S
7. ALL CONSTRUCTION AND MATERIALS SHALL MEET THE SPECIFICATIONS AND REQUIRE AUTHORIZATION BY THE CITY OF MOSES LAKE.

HOT BOX

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