

Marcus Vajdos, Mayor
Steve Bass
David Dominy



Allen Carpenter, Mayor Pro Tem
John Lisenby
Joy McCormack

Notice is Hereby Given of a Special Meeting of the City Council City of Spring Valley Village, Texas, 1025 Campbell Road, Spring Valley Village, Texas, in the Council Chambers, November 18, 2025, beginning at 5:00 PM. For the Purpose of Considering and Acting upon the Following Items of Business:

A quorum of the Mayor and Council Members will be physically present. Some Council Members may participate by videoconference in accordance with the provisions of Section 551.127 of the Texas Government Code.

The meeting agenda and agenda packet are posted online at www.springvalleytx.com. In accordance with Texas Government Code, Sec. 551.127, on a regular, non-emergency basis, Councilmember may attend and participate in a meeting remotely by video conference. Should such attendance transpire, a quorum of the Council will be physically present at the location noted above on this agenda.

The video link to this meeting is: <https://us02web.zoom.us/j/88311469562>

The public toll-free dial-in numbers to participate in the telephonic meeting are 1-346-248-7799 (Houston), 1-253-215-8782 (US), and 1-301-715-8592 (US); enter the Meeting ID: 896 6535 1089 and #.

The public will be permitted to offer public comments telephonically as provided by the agenda and as permitted by the presiding officer during the meeting.

A recording of the telephonic meeting will be made, and will be available to the public in accordance with the Open Meetings Act upon written request.

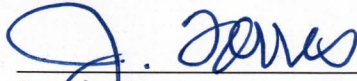
- 1. CALL THE ROLL AND ANNOUNCE A QUORUM IS PRESENT**
- 2. NEW BUSINESS**
 - 2.1 DISCUSSION AND DIRECTION CONCERNING: Public Infrastructure and Design Manual as applied to the Replacement of Existing Infrastructure
- 3. ADJOURNMENT**

Agenda items may not necessarily be considered in the order that they appear. With regard to any item, Council may take various actions, including but not limited to rescheduling an item in its entirety or for particular action at a future date or time.

The City Council reserves the right to convene in executive session from time to time as deemed necessary during this meeting to discuss any of the matters listed in the agenda, as authorized by Texas Government Code Sections 551.071 (Consultation with Attorney), 551.072 (Deliberations about Real Property), 551.073 (Deliberations about Gifts & Donations), 551.074 (Personnel Matters), 551.076 (Deliberations Regarding Security Devices) or 551.087 (Deliberations Regarding Economic Development Negotiations).

I certify that a copy of the November 18, 2025, agenda of items to be considered by City Council was posted on or before the 12th day of November, 2025, at 5:00 p.m, pursuant to the Open Meetings Act, Chapter 551 of the Texas Government Code.

Attest:



Jasmin Torres
City Secretary



In compliance with the Americans with Disabilities Act, this facility is wheelchair accessible and accessible parking spaces are available. To better serve attendees, requests for accommodations or interpretive services should be made 48 hours prior to this meeting. Please contact the City Secretary's office at 713-465-8308, Fax 713-461-7969, or [Email Jasmin Torres](#) for further information.



Spring Valley Village City Council Agenda Item Data Sheet

MEETING DATE:	November 18, 2025
SUBMITTING STAFF:	Jasmin Torres, City Secretary
SUBJECT:	DISCUSSION AND DIRECTION CONCERNING: Public Infrastructure and Design Manual as applied to the Replacement of Existing Infrastructure

BACKGROUND:

In February 2021, City Council adopted the Public Infrastructure Design Manual (PIDM) to establish consistent standards for the design and construction of public infrastructure throughout the City. The PIDM outlines specifications for roadway and utility materials and sets a minimum roadway width of 28 feet, measured back of curb to back of curb.

While the PIDM governs general roadway and material standards, it does not specifically define cul-de-sac geometry. The City follows the adopted Fire Code for those design parameters, which establishes turning radius requirements to ensure that emergency vehicles have adequate access and maneuverability.

Since the adoption of the PIDM, the City has designed and completed three roadway projects that have incorporated cul-de-sacs meeting or exceeding the 40-foot radius recommended by the Fire Code. These projects illustrate the City's consistent application of the PIDM and Fire Code where site conditions allow.

As the City continues roadway reconstruction projects under the PIDM, some areas present physical limitations that affect the ability to fully implement the standard 40-foot-radius cul-de-sac. These constraints are typically the result of existing right-of-way (ROW) widths, established development patterns, and roadway alignment or length.

A key example of these constraints can be found on Spring Oaks Circle, where the total ROW measures 30 feet, with

approximately 25 feet currently occupied by the existing cul-de-sac. Because additional ROW is not available, and acquisition would significantly impact adjacent residential properties, the cul-de-sac is being replaced in kind at 25 feet. This maintains access within the existing ROW limits.

The Croes project area presents a similar challenge, particularly at the north end, where the roadway extends approximately 1,000 feet and includes a curve. This roadway length necessitates an adequate turnaround area to support safe emergency and service vehicle access. In collaboration with the Fire Department, City staff evaluated potential options within the existing ROW and determined that a 30-foot-radius cul-de-sac would provide the necessary functionality for emergency ingress and egress while remaining feasible within the available space.

Variations in cul-de-sac dimensions across recent projects are the result of right-of-way constraints and roadway configurations, not inconsistencies in the application of City standards. The City continues to apply the Public Infrastructure Design Manual and adopted Fire Code consistently, using engineering and public safety judgment to adapt designs appropriately to each site.

ATTACHMENTS: Fire Code Cul-de-Sac requirements, Council Exhibits, PUBLIC INFRASTRUCTURE DESIGN MANUAL Campbell and I-10 Development

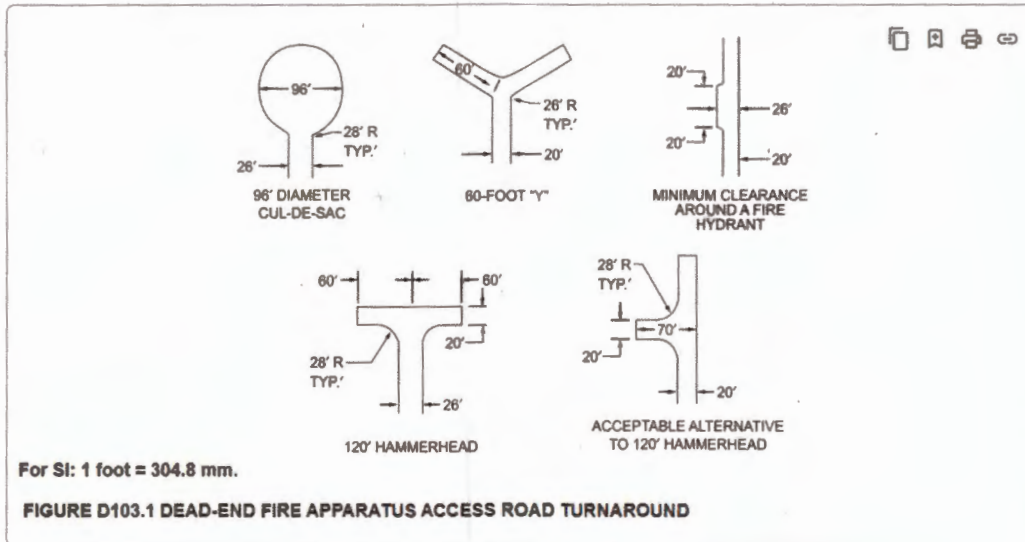
FUNDING:

Amount Available	Account No.	Additional Appropriation Required	Project No.	Amount Budgeted	Account Description
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RECOMMENDATION: Discussion item.

D103.1 Access road width with a hydrant.

Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1).



> INSIGHTS (1)

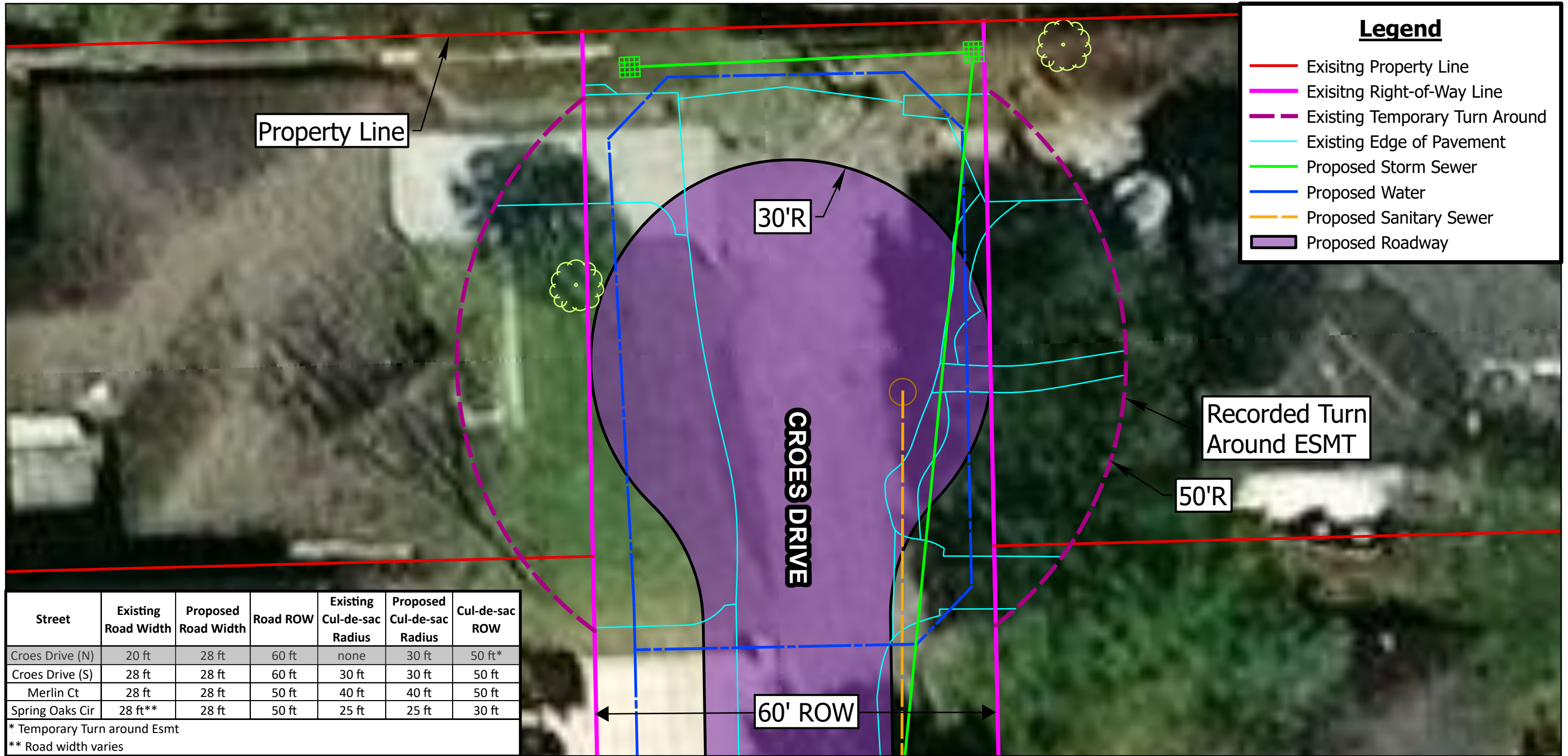
D103.3 Turning radius.

The minimum turning radius shall be determined by the fire code official.

TABLE D103.4 REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
501-750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
Over 750		Special approval required

For SI: 1 foot = 304.8 mm.



Legend

- Existing Property Line
- Existing Right-of-Way Line
- - - Existing Temporary Turn Around
- Existing Edge of Pavement
- Proposed Storm Sewer
- Proposed Water
- Proposed Sanitary Sewer
- Proposed Roadway

Street	Existing Road Width	Proposed Road Width	Road ROW	Existing Cul-de-sac Radius	Proposed Cul-de-sac Radius	Cul-de-sac ROW
Croes Drive (N)	20 ft	28 ft	60 ft	none	30 ft	50 ft*
Croes Drive (S)	28 ft	28 ft	60 ft	30 ft	30 ft	50 ft
Merlin Ct	28 ft	28 ft	50 ft	40 ft	40 ft	50 ft
Spring Oaks Cir	28 ft**	28 ft	50 ft	25 ft	25 ft	30 ft

* Temporary Turn around Esmt
 ** Road width varies

SPRING VALLEY VILLAGE

CobbFendley

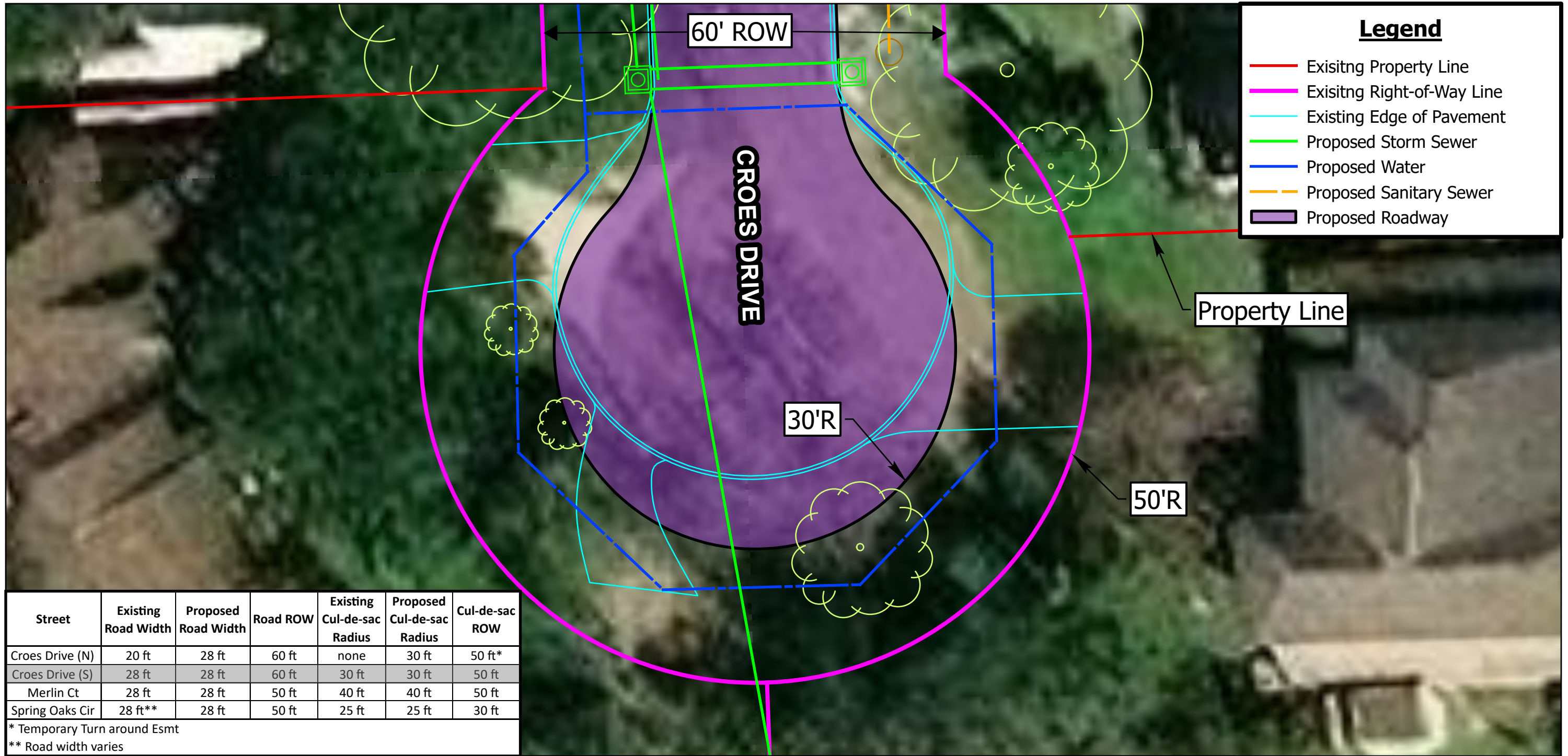
Croes Drive Reconstruction North Cul-de-sac

30' Road Radius
 City of Spring Valley Village

30' radius for cul-de-sac is the minimum recommended size.
 Proposed roadway is 28' from back of curb to back of curb.

N

15 7.5 0 15 Feet



Legend

- Existing Property Line
- Existing Right-of-Way Line
- Existing Edge of Pavement
- Proposed Storm Sewer
- Proposed Water
- Proposed Sanitary Sewer
- Proposed Roadway

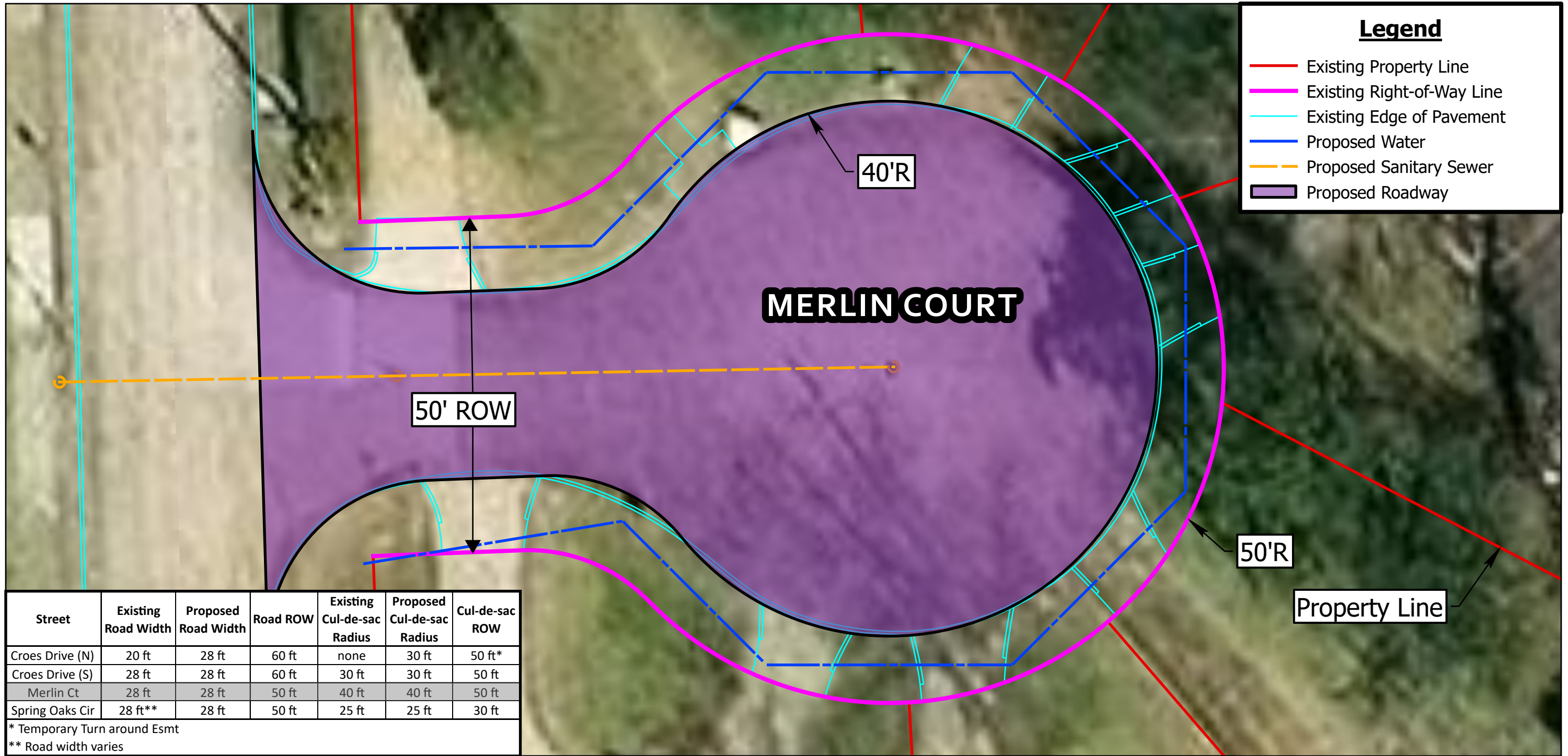
Street	Existing Road Width	Proposed Road Width	Road ROW	Existing Cul-de-sac Radius	Proposed Cul-de-sac Radius	Cul-de-sac ROW
Croes Drive (N)	20 ft	28 ft	60 ft	none	30 ft	50 ft*
Croes Drive (S)	28 ft	28 ft	60 ft	30 ft	30 ft	50 ft
Merlin Ct	28 ft	28 ft	50 ft	40 ft	40 ft	50 ft
Spring Oaks Cir	28 ft**	28 ft	50 ft	25 ft	25 ft	30 ft

* Temporary Turn around Esmt
 ** Road width varies

Croes Drive Reconstruction South Cul-de-sac

30' Road Radius
City of Spring Valley Village

30' radius for cul-de-sac is the minimum recommended size.
Proposed roadway is 28' from back of curb to back of curb.



Legend

- Existing Property Line
- Existing Right-of-Way Line
- Existing Edge of Pavement
- Proposed Water
- Proposed Sanitary Sewer
- Proposed Roadway

Street	Existing Road Width	Proposed Road Width	Road ROW	Existing Cul-de-sac Radius	Proposed Cul-de-sac Radius	Cul-de-sac ROW
Croes Drive (N)	20 ft	28 ft	60 ft	none	30 ft	50 ft*
Croes Drive (S)	28 ft	28 ft	60 ft	30 ft	30 ft	50 ft
Merlin Ct	28 ft	28 ft	50 ft	40 ft	40 ft	50 ft
Spring Oaks Cir	28 ft**	28 ft	50 ft	25 ft	25 ft	30 ft

* Temporary Turn around Esmt
 ** Road width varies

Spring Valley Village

CobbFendley

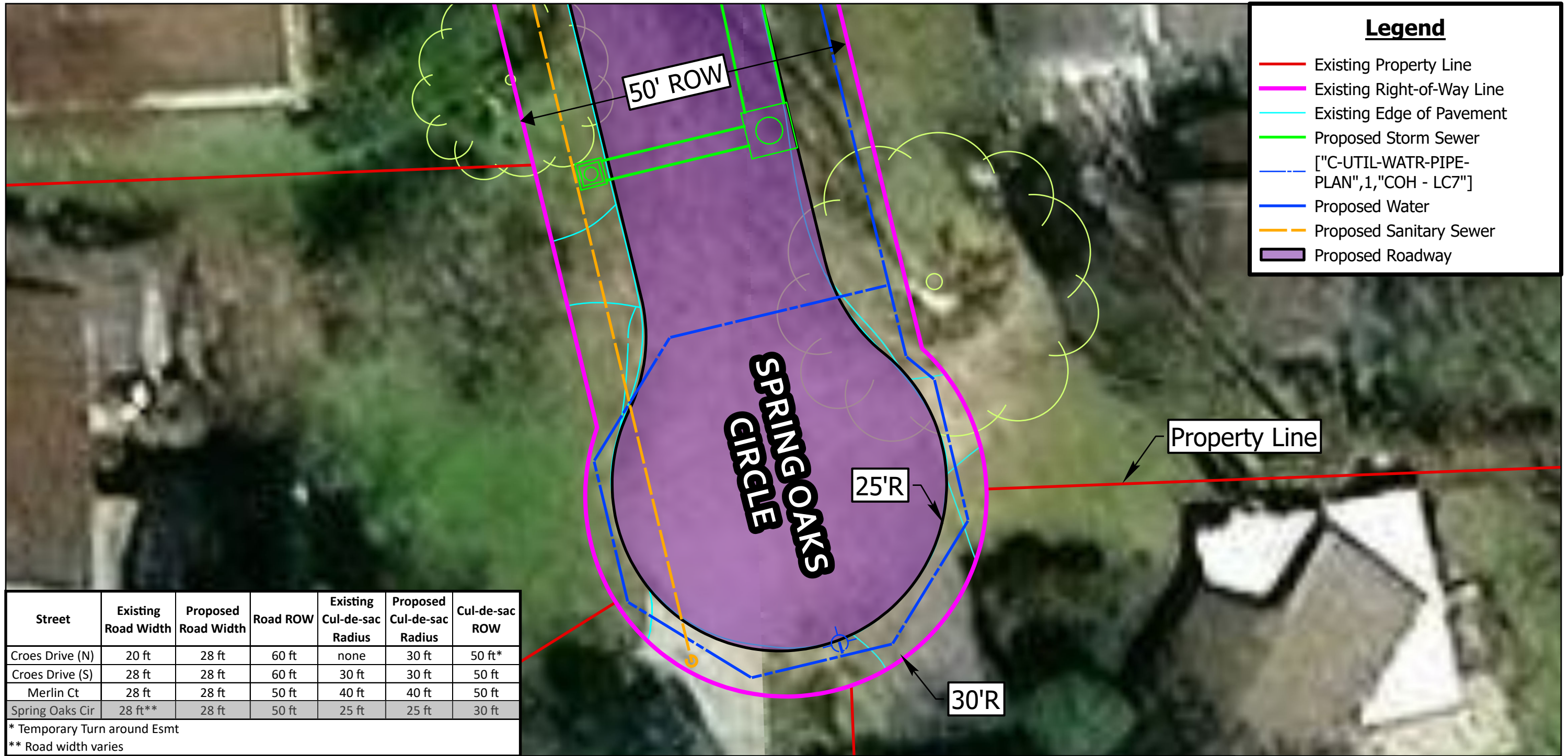
Merlin Court Cul-de-sac

40' Road Radius
City of Spring Valley Village

30' radius for cul-de-sac is the minimum recommended size.
Proposed roadway is 28' from back of curb to back of curb.

N

15 7.5 0 15 Feet



Legend

- Existing Property Line
- Existing Right-of-Way Line
- Existing Edge of Pavement
- Proposed Storm Sewer
- ["C-UTIL-WATR-PIPE-PLAN", 1, "COH - LC7"]
- Proposed Water
- Proposed Sanitary Sewer
- Proposed Roadway

Street	Existing Road Width	Proposed Road Width	Road ROW	Existing Cul-de-sac Radius	Proposed Cul-de-sac Radius	Cul-de-sac ROW
Croes Drive (N)	20 ft	28 ft	60 ft	none	30 ft	50 ft*
Croes Drive (S)	28 ft	28 ft	60 ft	30 ft	30 ft	50 ft
Merlin Ct	28 ft	28 ft	50 ft	40 ft	40 ft	50 ft
Spring Oaks Cir	28 ft**	28 ft	50 ft	25 ft	25 ft	30 ft

* Temporary Turn around Esmt
 ** Road width varies

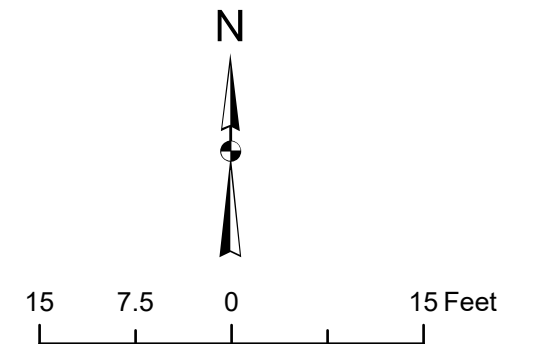
Spring Valley Village

CobbFendley

Spring Oaks Circle Cul-de-sac

25' Road Radius
 City of Spring Valley Village

30' radius for cul-de-sac is the minimum recommended size.
 Proposed roadway is 28' from back of curb to back of curb.





EST. 1955

SPRING VALLEY
V I L L A G E



**PUBLIC INFRASTRUCTURE
DESIGN MANUAL**
for
**SPRING VALLEY VILLAGE
TEXAS**

IT'S THE LAW



www.texas811.org

The City of Spring Valley Village is a member of the One-Call System. By contacting [811](tel:811), the City will be notified and will locate City-owned utilities within the limits of the marked dig area. The City will mark the facilities within 2 full business days for non-emergency tickets. Excavation operations cannot begin until all utilities have responded. For information on utility marking, please contact the Public Works Department at (713) 465-8308

White	Proposed Excavation
Pink	Temporary Survey Markings
Red	Electric Power Lines, Cables, Conduit, & Lighting Cables
Yellow	Gas, Oil, Steam, Petroleum, or Gaseous Materials
Orange	Communication, Alarm or Signal Lines, Cables, or Conduit
Blue	Potable Water
Purple	Reclaimed Water, Irrigation, and Slurry Lines
Green	Sewers & Drain Lines

References

Texas Commission on Environmental Quality ([TCEQ](#)) - "Design Criteria for Domestic [Water](#) & [Wastewater](#) Systems", [Texas Administration Code - Chapter 217](#) and "[Design Criteria for Sewerage Systems](#)" [Chapter 317](#) (current revision), [American Water Works Association \(AWWA\)](#), [ANSI/NSF](#) Standards (All newly installed pipes and related products must conform to American National Standards Institute/NSF International (ANSI/NSF) Standard 61 and must be certified by an organization accredited by ANSI.), National Sanitation Foundation (NSF), [International Plumbing Code](#), [Texas Department of Health](#), and [Texas Department of Insurance](#).

Drainage Design Criteria

Spring Valley Village has a separate Drainage Criteria Manual that shall be followed in conjunction with the engineer's design. This manual can be found at www.springvalleytx.com in [Chapter 3](#) of the City code of Ordinances.

Excavations

All excavations and other construction in the public rights-of-way shall be performed in accordance with all applicable state, federal, and City regulations. All construction within public rights-of-ways shall be undertaken so as to minimize interference with the use of public and private property and in accordance with any lawful direction given by the City under regulatory powers of the City.

Water & Sewer System Test & Inspections

All water and sewer tests shall be done by the contractor at the expense of the contractor unless otherwise allowed by the City. All tests shall be done in accordance with all applicable standards and requirements from TCEQ & AWWA. Testing must be scheduled five (5) business days in advance.

Inspections

All inspections must be done according to City requirements and scheduled through the inspector assigned to the job.

Bulk Water

Temporary Water Meter for Construction – The City offers its public infrastructure contractors a way to access water through City-owned fire hydrant meters. To obtain a fire hydrant meter, complete the [temporary meter application](#) and submit electronically to utilities@springvalleytx.com.

- ◆ City Projects - A deposit of \$1,400.00 is required with the application. Non-refundable credit card fees may apply. The deposit will be refunded when the meter is returned damage free and in initial condition. The City accepts all major credit cards.

PAY DEPOSIT

- ◆ Once the application is deemed complete by the City, City Staff will place the fire hydrant meter at the best location for the project.
- ◆ The City does not charge for the water on City Projects.

NOTE: ALL FIRE HYDRANT FILLING OPERATIONS MUST HAVE AN AIR GAP ON THE TANK OR A TESTED RPZD BETWEEN THE FIRE HYDRANT AND THE TANK.



GENERAL INFORMATION

INFO 1

Wastewater Collection (Detail Sheets WW-4 through WW-11)

All sewer collection items shall be designed and installed according to adopted plumbing codes and the Texas Commission on Environmental Quality Standards.

Manholes - All manholes shall be precast concrete unless approved by a Professional Engineer who submits a "cast in place" manhole design for review and is approved by the City. All precast manholes shall incorporate a "boot" type connector for sewer diameters up to twenty-four inches (24"). For sewer diameters greater than twenty-four inches (24"), utilize either the "boot" type connector (if available) or an integral gasket. All precast manholes shall conform to the latest American Society for Testing and Materials (ASTM) requirements. Manholes shall be coated with corrosion resistant epoxy coating approved by the City. For all public sewers, manholes shall be placed at all changes in alignment, changes in grade, junction points, and either at street, alley, or easement intersections as the design may require. The maximum spacing between manholes is four-hundred feet (400') unless otherwise approved by the City. The minimum manhole depth shall be four feet (4'). Manholes shall be placed at all dead-end mains and laterals unless otherwise approved by the City. Wall penetration shall be cored and shall use the appropriate boots and approved "grout" for sealing as approved by the City Engineer. For an existing manhole that is cored, the coating of the manhole will need to be repaired if lined.

Manhole Lids - Utilize manhole lids with the approved City of Spring Valley Village logo on all manholes. DETAIL WW-8 to WW-11.

Manholes within the 100 year floodplain - Manholes located within the 100 year floodplain or in areas of high ground water shall be waterproofed by wrapping the individual joints with Conwrap, Conseal, or approved equal. Waterproofing measures shall be approved by the City prior to backfill. Manholes showing signs of infiltration shall be excavated and repaired, to the satisfaction of the City, prior to acceptance by the City. Manholes located within the 100 year floodplain shall be installed with rim elevations not less than two feet (2') above the floodplain at that location. Manholes located within the one hundred (100) year floodplain may also require a sealable manhole cover or an infiltration cap (DETAIL WW-5).

Streets

Street Design Requirements

Residential Street Width – All residential streets shall have a width of twenty-eight (28') feet. Exceptions to the twenty-eight (28') feet may occur in limited situations (i.e. large trees in ROW), and require written approval from the City prior to any paving.

Pavement Type – All streets shall be constructed in concrete.

Street Curb Type – Six-inch (6") monument curbs shall be used on all collector streets and four-inch (4") rollover

curbs shall be used on all local/residential streets. In conjunction with these street curb types, a galvanized fabricated curb connection shall be used in compliance with the City's Drainage Criteria Manual.

Sidewalks – The construction of sidewalks will be limited to collector and thoroughfare streets.

Compliance with Right-of-Way Regulations – Any and all work performed within the City's rights-of-way, including cutting or excavating any public street, shall comply with all applicable local, state and federal regulations. The City has adopted right-of-way regulations that may be found on the City's website in the [Code of Ordinances](#). These regulations include a requirement to obtain a Right-of-Way Permit from the City for non-City projects prior to performing any work within the City's rights-of-way. Failure to comply with applicable right-of-way regulations will result in enforcement action by the City.

Barricades Required - It shall be the responsibility of the contractor performing the work along a street to install barricades, flags, and other safety measures necessary during the time of construction and until all hazards have been corrected after the completion of the work. Whether the project is designed by an engineer or not, a traffic plan must be submitted to and approved by the City.

NOTE: The [Texas Manual on Uniform Contraol Devices \(TxMUTCD\)](#) shall be followed.

Backfilling Excavations Outside the Pavement - All excavations in the street right-of-way shall be replaced by tamping, and backfilling with select fill, sand, gravel, or other methods approved by the City Engineer or the City. Backfill shall be compacted according to engineering plans and specifications. The contractor shall restore any areas damaged or disturbed to original by block sodding.

Concrete Pavement Restoration - If concrete pavement has to be restored and the work cannot be avoided, all excavations or removal of any concrete pavement in the street right-of-way shall be replaced as follows:

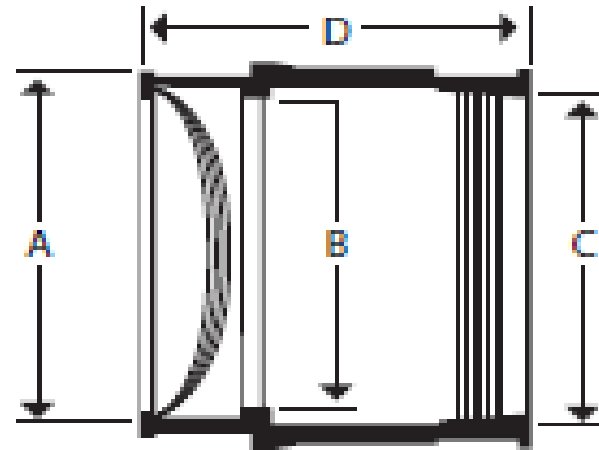
- ◆ Replace the entire street or sidewalk panel width, length, and depth to the nearest construction or expansion joint;
- ◆ Replace the concrete pavement to existing depth or according to engineering specifications approved by the City utilizing dowels and rebar specified.



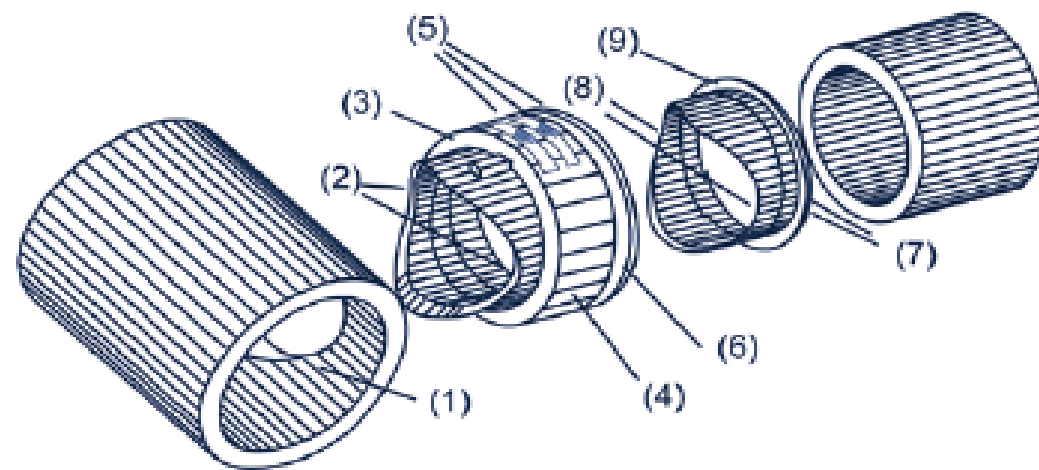
GENERAL INFORMATION

DETAIL: INFO 2

Connection of sewer service lines to existing clay City sewer mains shall use fittings specifically manufactured for the pipe materials of clay. The lateral connection shall be strapless and accommodate for ground movement with heavy duty stainless steel shear bands to prevent off set joints. The lateral connection fitting must provide a "positive stop" located inside the fitting that prohibits protrusion of the lateral pipe into the main line pipe. The fitting must provide a smooth transition all the way through to the main line pipe manufactured from synthetic rubber. The fitting will ensure a positive, water-tight and rot-free seal. The hole for the sewer service must be cored and not chipped. The fitting must meet or exceed ASTM 923, ASTM 425, ASTM 1173.



Connector Size	Connector P/N	Suggested Lateral Pipe O.D. Range	Hole/Connector Dimensions				Pipe Clamp P/N	Minimum Pipe I.D.	Minimum Wall Thickness
			A	B	C	D			
4"	4" TAP-N-TEE	5.38"	5.0625"	4.25"	5.38"	6.00"	#90	6"	.50"
6"	6" TAP-N-TEE	8.00"	7.125"	6.38"	8.00"	6.75"	#136	8"	.50"
8"	8" TAP-N-TEE	10.05"	9.125"	8.25"	10.00"	8.00"	#168	10"	.50"



EXAMPLE OF SEWER SADDLE USED FOR CLAY PIPE

Connection of service lines to existing City PVC or Cast Iron sewer mains shall use fittings specifically manufactured for the pipe materials. The lateral connection shall be a sewer saddle with an adjustable 3 1/2 inch stainless steel strap per ASTM A 240, type 304. Bolts shall be 1/2 inch UNC rolled thread, lubricant coated, stainless steel per ASTM A 193, type 304. The nuts shall be stainless steel per ASTM A 194, type 304. Washers shall be stainless steel per ASTM A 240, type 304 and plastic lubricating washers. The gasket shall be SBR per ASTM D 2000 MBA 710, compounded for water and sewer service. The lateral connection fitting must provide a "positive stop" located inside the fitting that prohibits protrusion of the lateral pipe into the main line pipe. The fitting must ensure a positive, water-tight and rot-free seal.



EXAMPLE OF SEWER SADDLE USED FOR PVC AND CAST PIPE

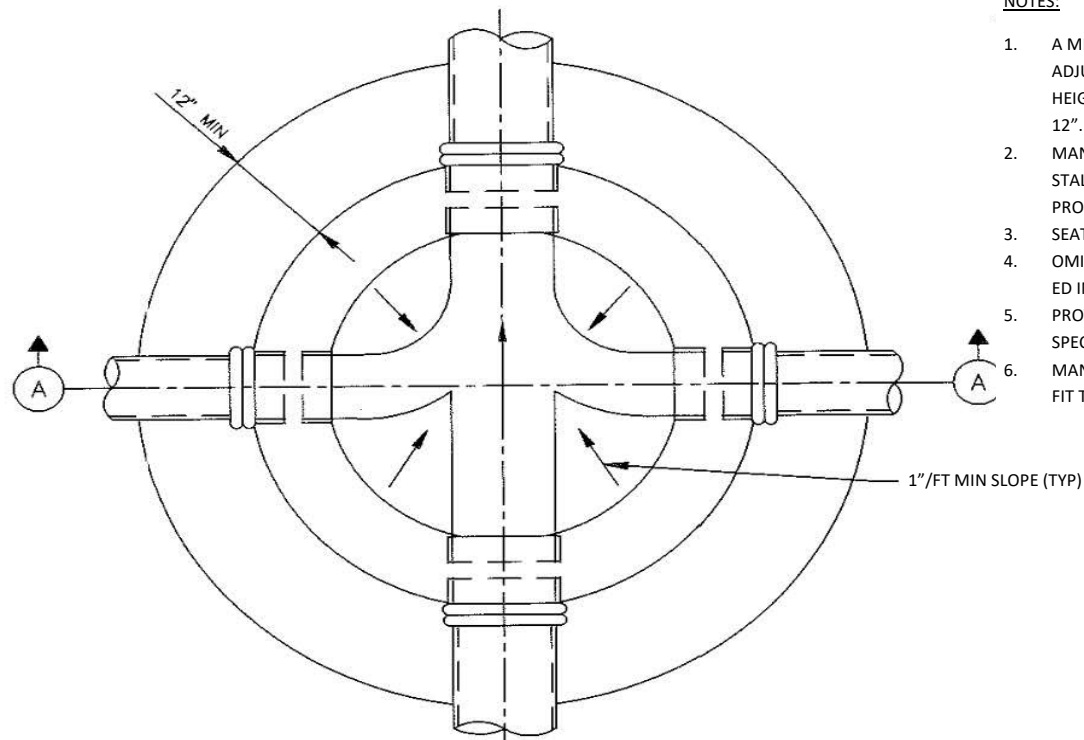


EST. 1955
SPRING VALLEY
VILLAGE

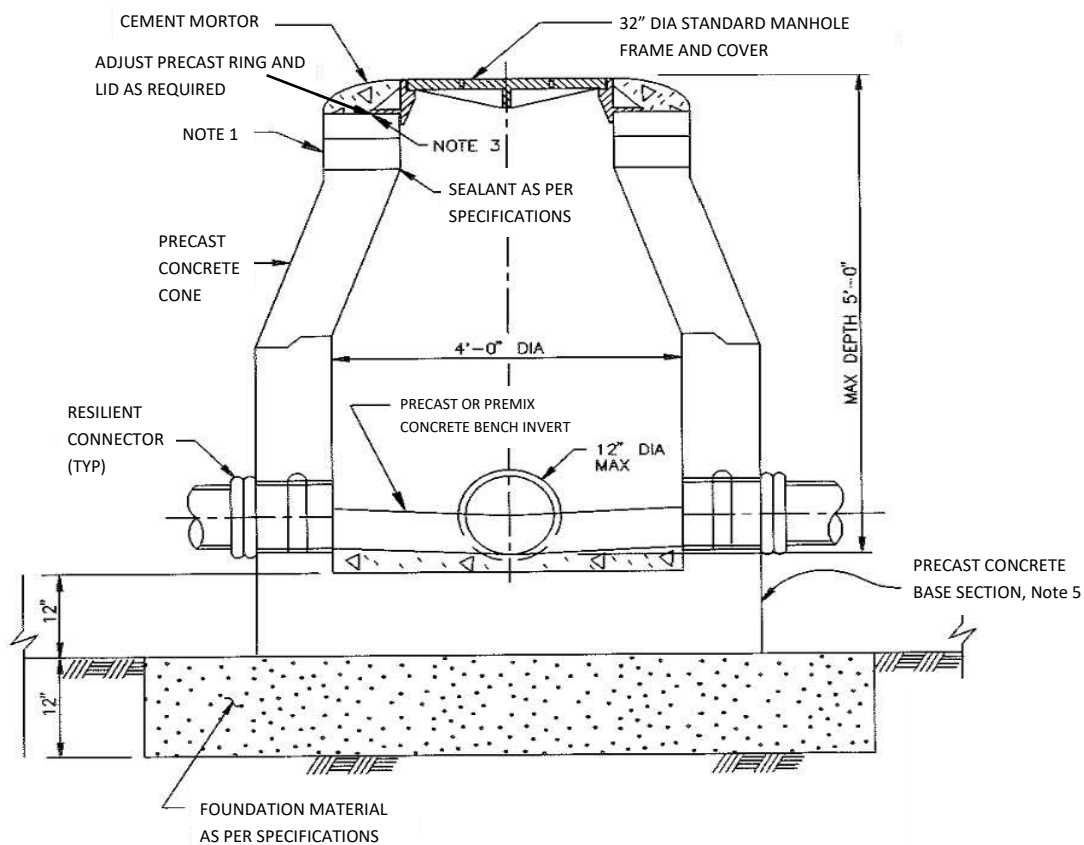


SEWER SERVICE TAP CONNECTION FITTINGS

DETAIL: WW-1



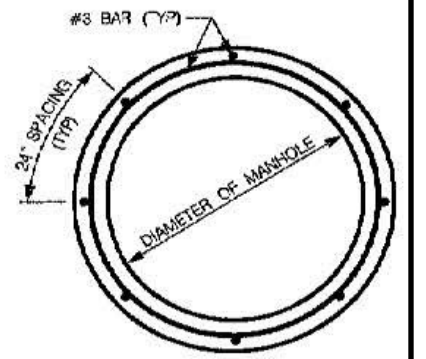
FOUNDATION PLAN



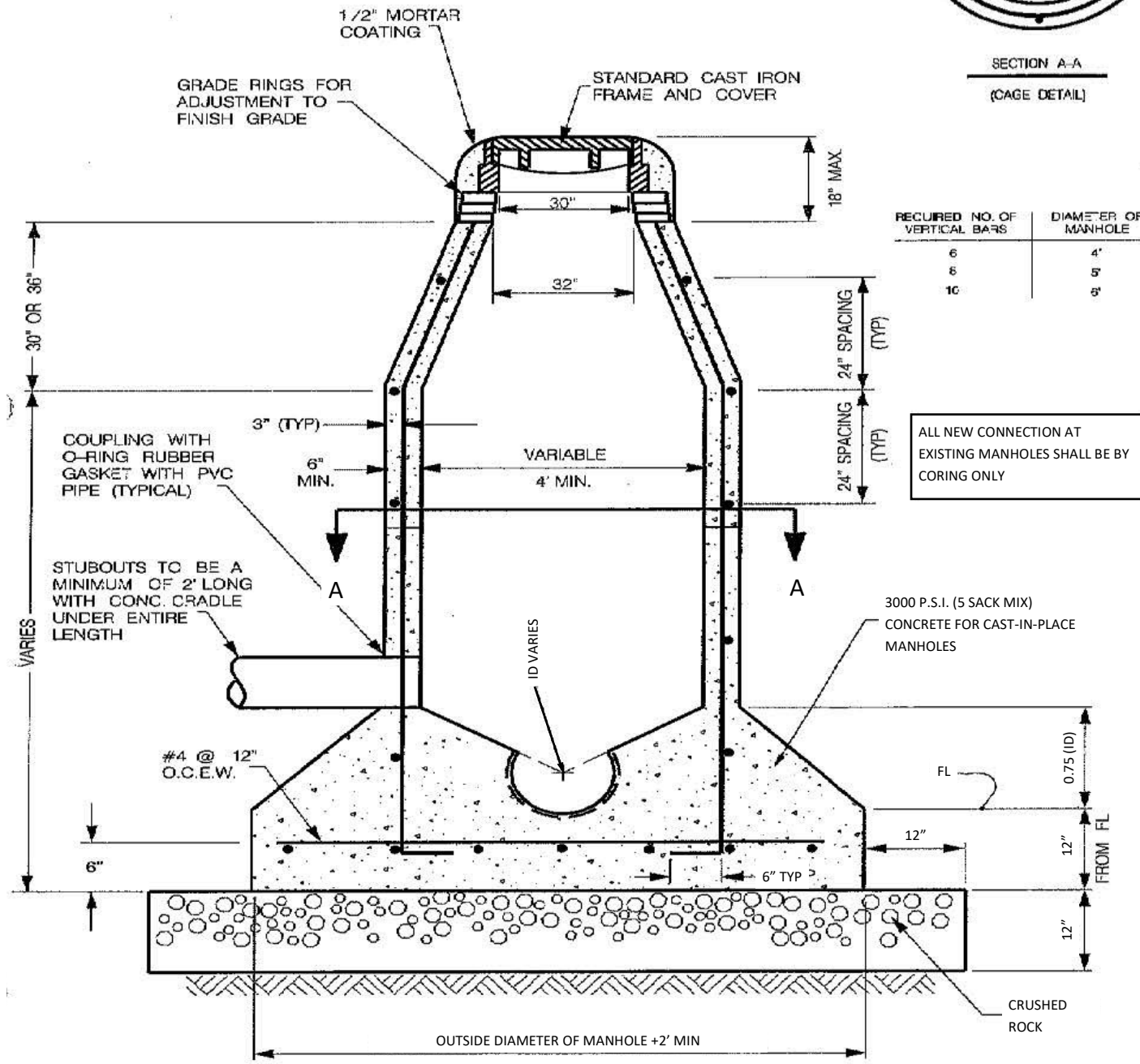
PRECASE SHORT MANHOLE

- NOTES:**
1. A MINIMUM OF 3" PRECAST CONCRETE OR HDPE ADJUSTMENT RING SHALL BE PROVIDED. TOTAL HEIGHT OF ADJUSTMENT RINGS SHALL NOT EXCEED 12".
 2. MANHOLE INTERSECTING PIPES SHALL BE INSTALLED ONLY WHEN CALLED FOR IN PLAN AND PROFILE DRAWING.
 3. SEAT MANHOLE FRAME IN A WATER TIGHT SEAL.
 4. OMIT CEMENT MOTOR WHEN MANHOLE IS LOCATED IN PAVED AREAS.
 5. PROVIDE BACKFILL MATERIAL PER ENGINEERING SPECIFICATIONS.
 6. MANHOLE RING AND LID SHALL BE ADJUSTED TO FIT THE EXISTING GRADE.

MANHOLE NOTES
 ALL MANHOLES FOR SEWERS SHALL BE LINED WITH A CORROSION RESISTANT COATING APPROVED BY THE CITY



**SECTION A-A
(CAGE DETAIL)**



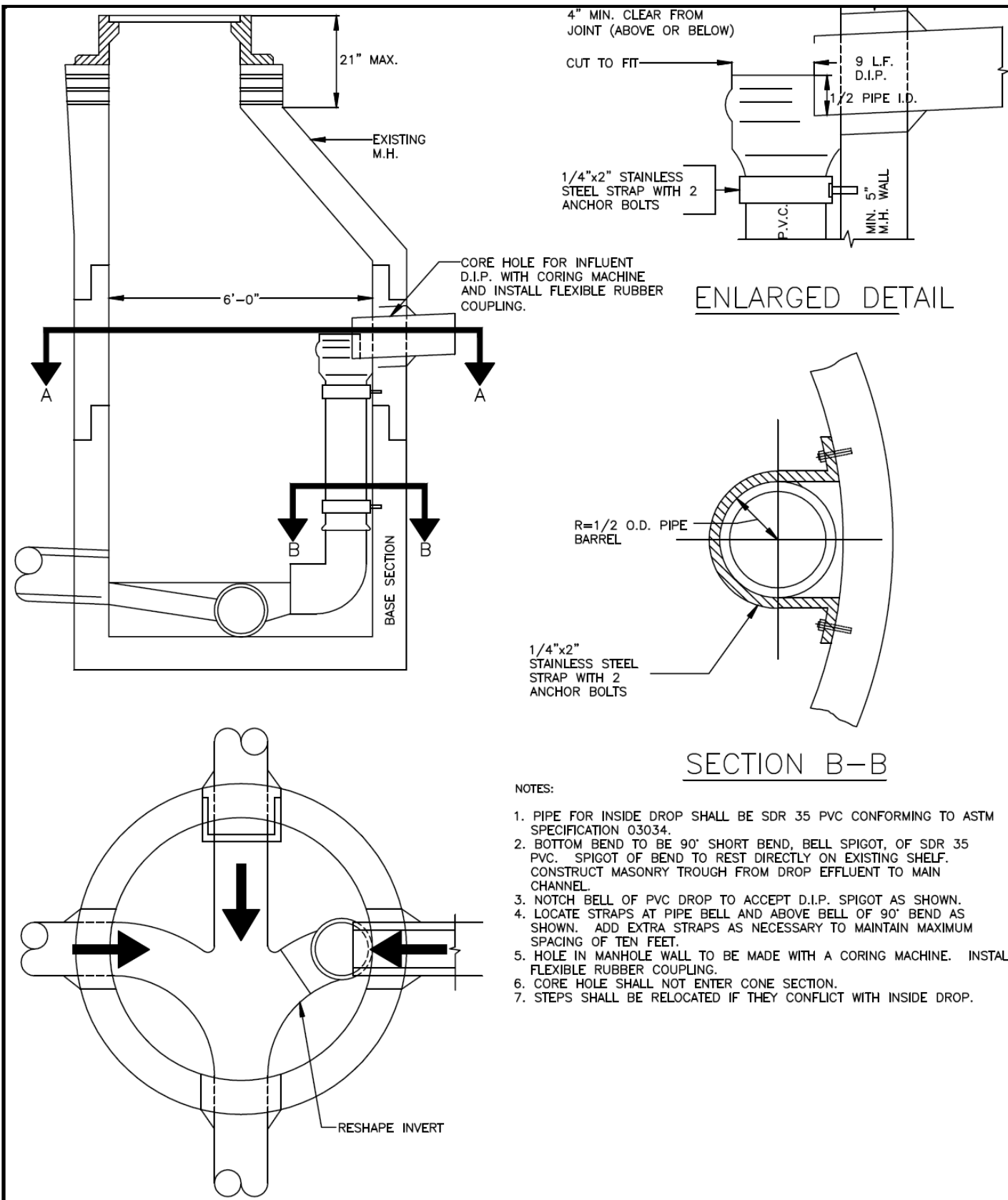
ALL NEW CONNECTION AT EXISTING MANHOLES SHALL BE BY CORING ONLY

CAST IN PLACE



PRECAST & CAST IN PLACE CONCRETE MANHOLES NO OUTSIDE DROP MANHOLES

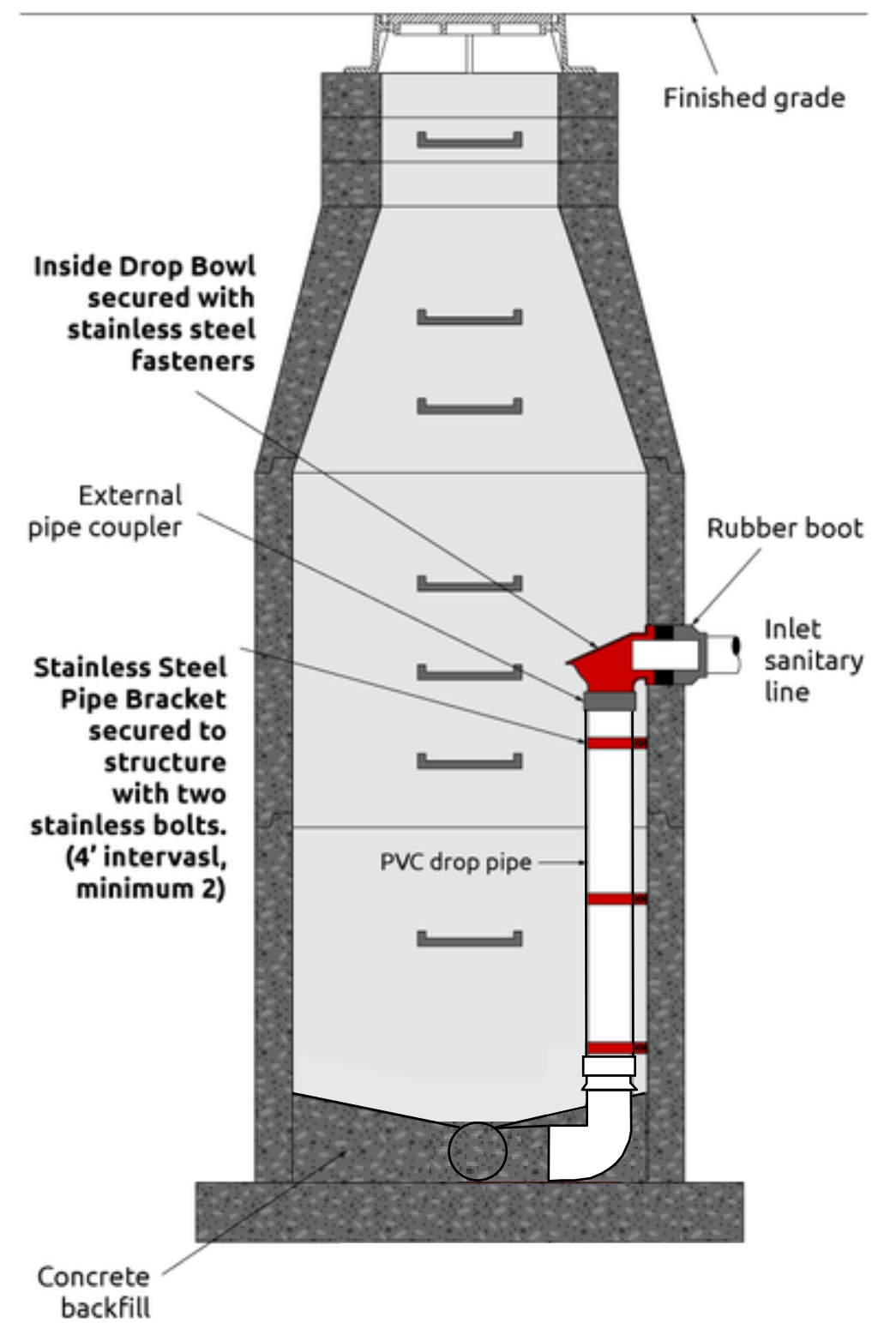
DETAIL: WW-4



NOTES:

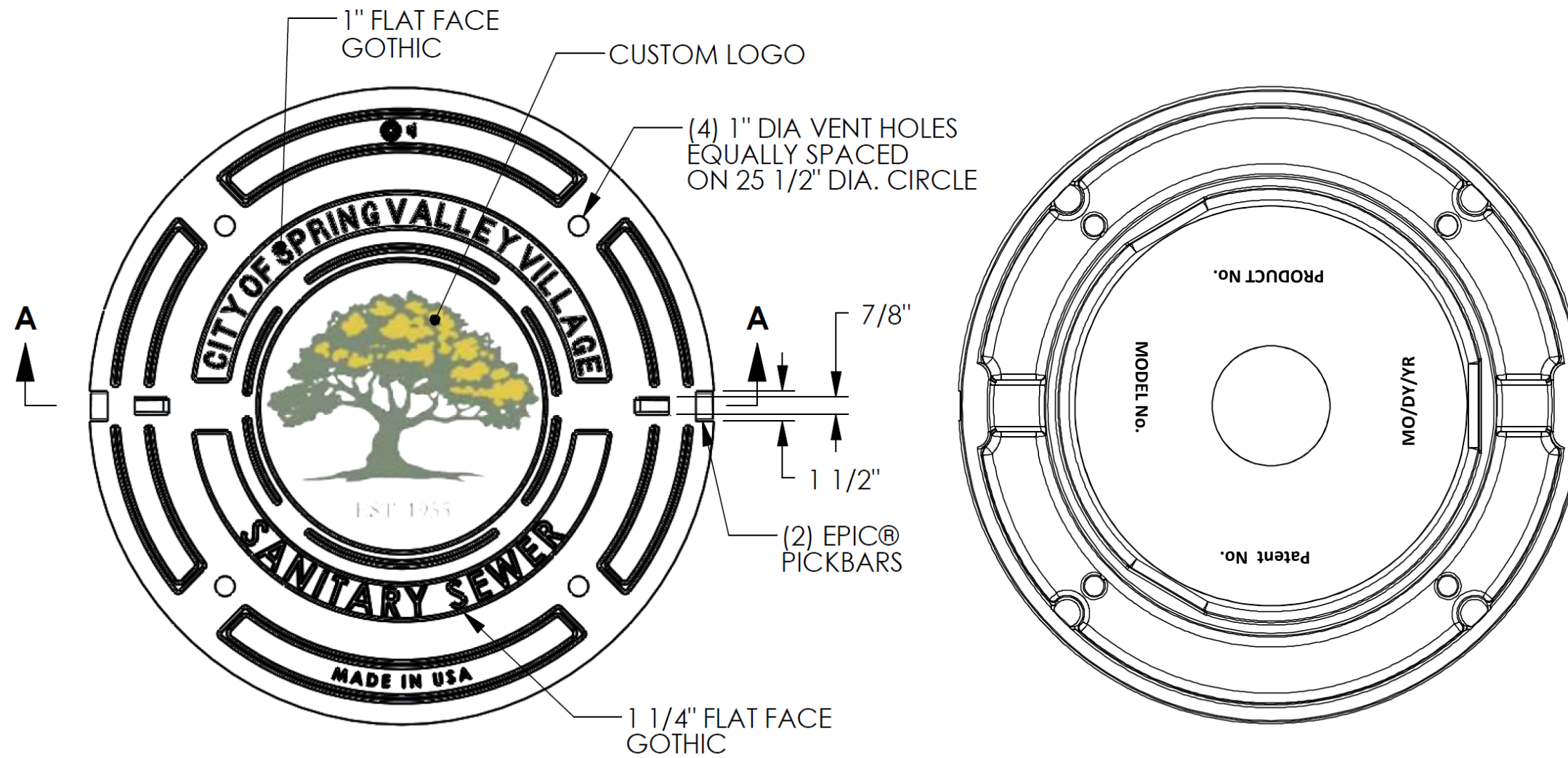
1. PIPE FOR INSIDE DROP SHALL BE SDR 35 PVC CONFORMING TO ASTM SPECIFICATION 03034.
2. BOTTOM BEND TO BE 90° SHORT BEND, BELL SPIGOT, OF SDR 35 PVC. SPIGOT OF BEND TO REST DIRECTLY ON EXISTING SHELF. CONSTRUCT MASONRY TROUGH FROM DROP EFFLUENT TO MAIN CHANNEL.
3. NOTCH BELL OF PVC DROP TO ACCEPT D.I.P. SPIGOT AS SHOWN.
4. LOCATE STRAPS AT PIPE BELL AND ABOVE BELL OF 90° BEND AS SHOWN. ADD EXTRA STRAPS AS NECESSARY TO MAINTAIN MAXIMUM SPACING OF TEN FEET.
5. HOLE IN MANHOLE WALL TO BE MADE WITH A CORING MACHINE. INSTALL FLEXIBLE RUBBER COUPLING.
6. CORE HOLE SHALL NOT ENTER CONE SECTION.
7. STEPS SHALL BE RELOCATED IF THEY CONFLICT WITH INSIDE DROP.

NOTE: ALL MANHOLES FOR SEWERS SHALL BE LINED WITH A CORROSION RESISTANT COATING APPROVED BY THE CITY.



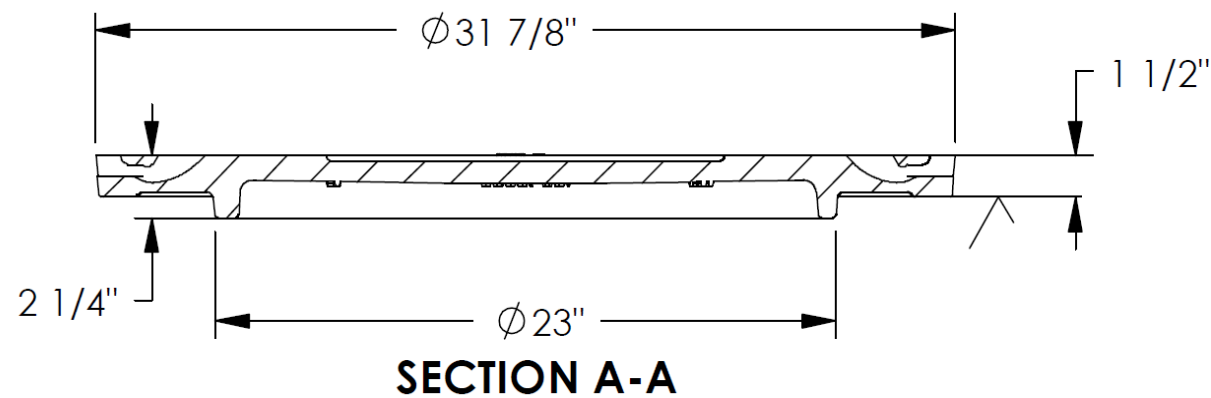
DROP MANHOLE DETAIL

DETAIL: WW-6



BOTTOM VIEW

NOTE: LOGO NOT COLORED ON ACTUAL CASTING



PERMISSION GRANTED TO THE CITY OF SPRING VALLEY VILLAGE BY EAST JORDAN IRON WORKS TO USE THIS DESIGN.

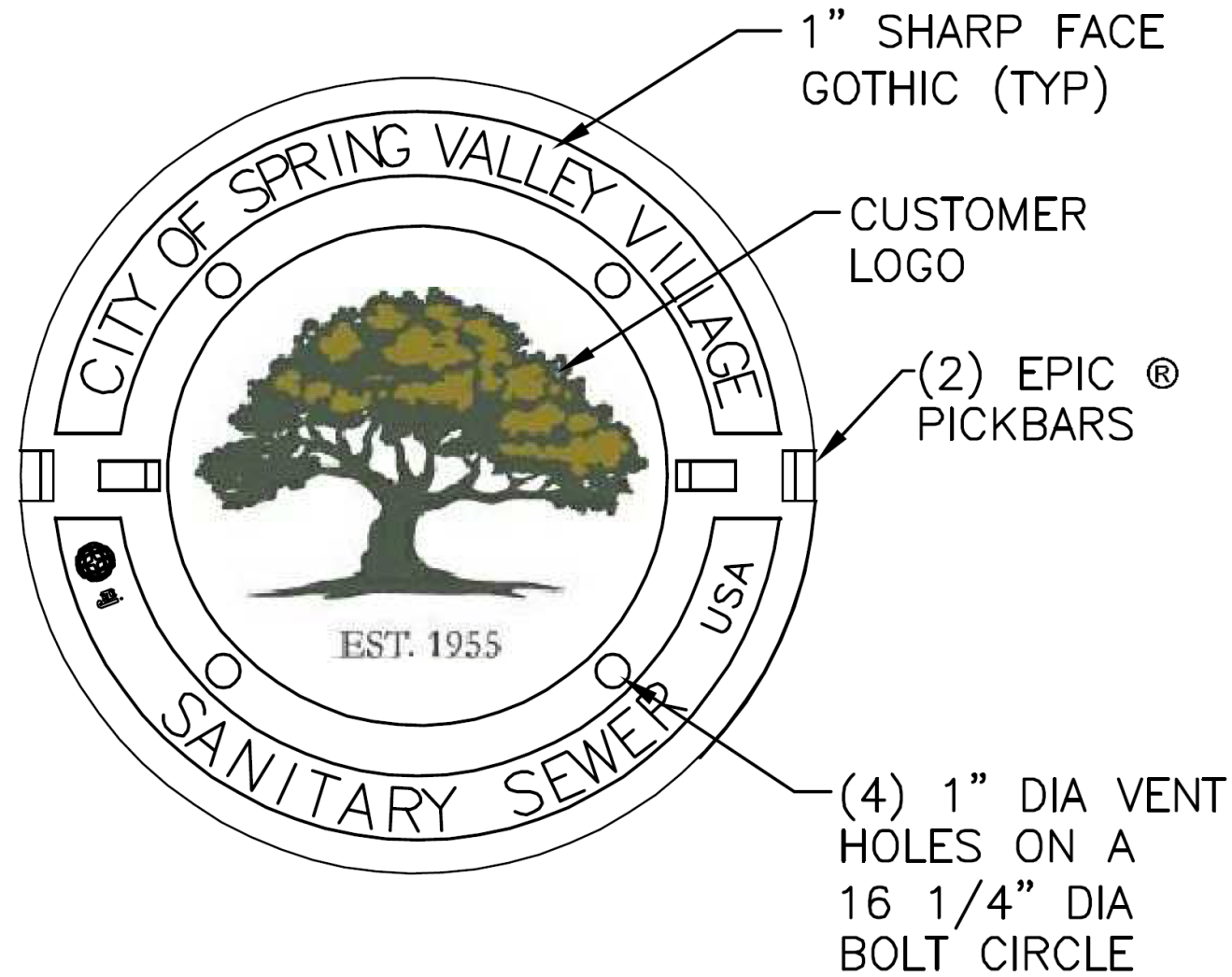


EST. 1955
SPRING VALLEY
VILLAGE

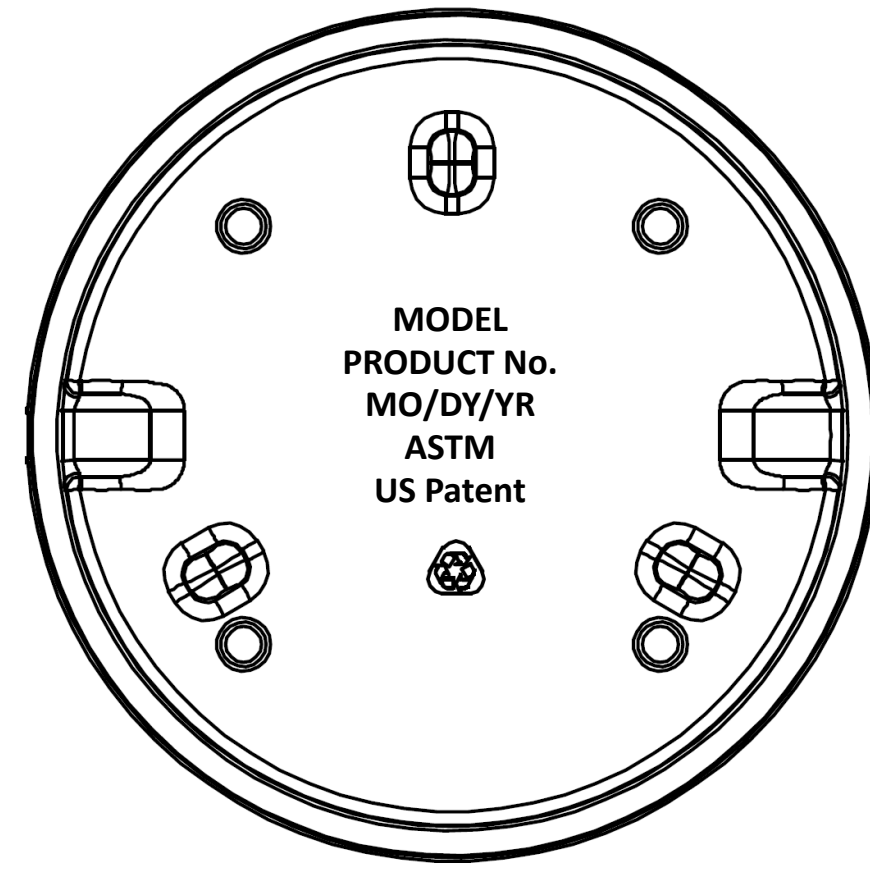


31 7/8" SEWER MANHOLE LID WITH LOGO

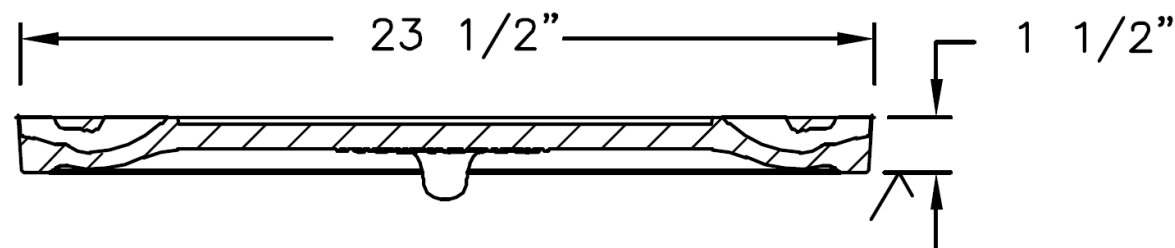
DETAIL: WW-8



NOTE: LOGO NOT COLORED ON ACTUAL CASTING



BOTTOM VIEW



SECTION

PERMISSION GRANTED TO THE CITY OF SPRING VALLEY VILLAGE BY EAST JORDAN IRON WORKS TO USE THIS DESIGN.

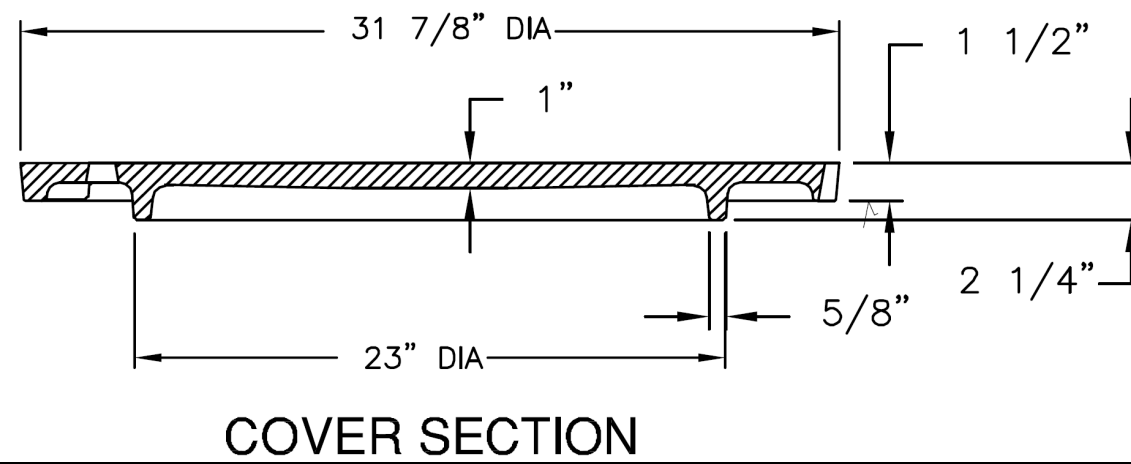
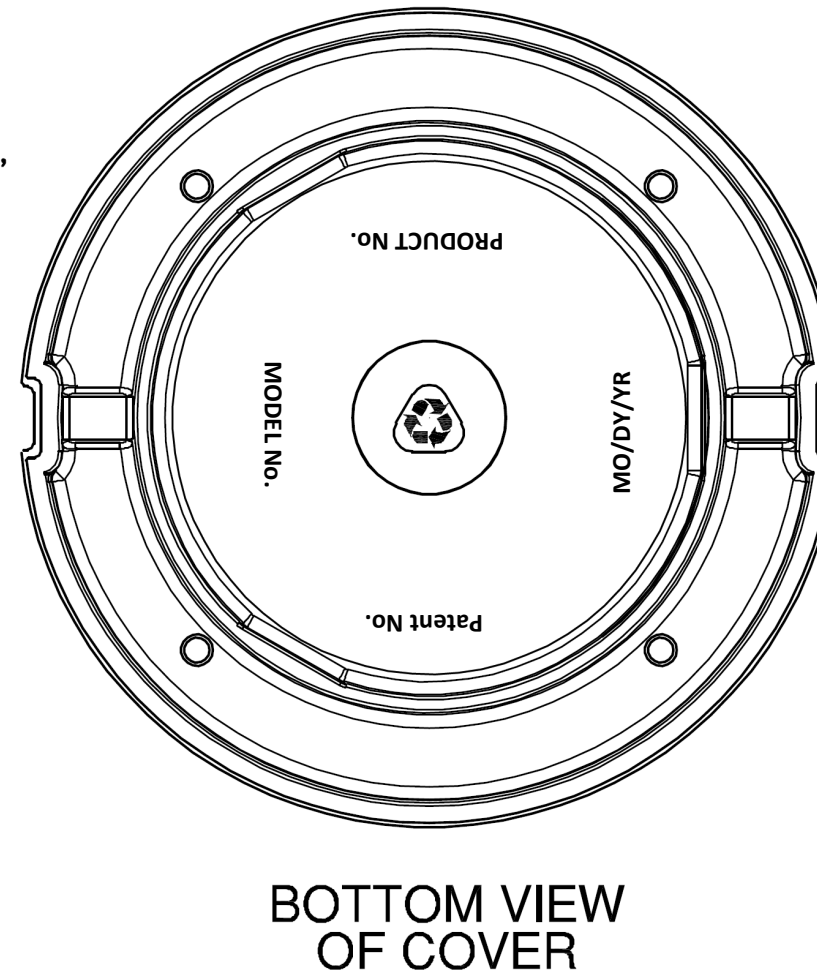
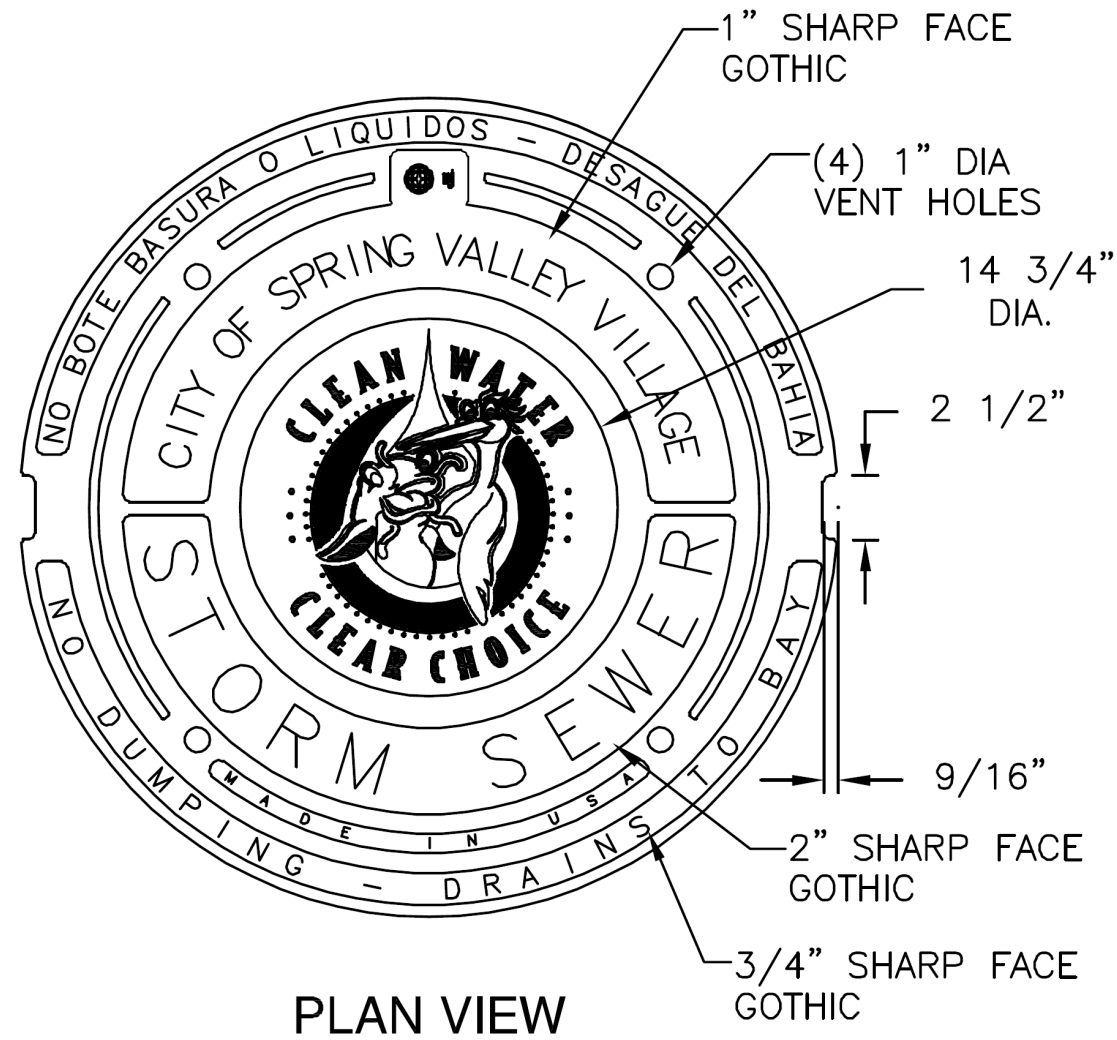


EST. 1955
SPRING VALLEY
VILLAGE



23 1/2" SEWER MANHOLE LID WITH LOGO (ONLY FOR EXISTING MANHOLES)

DETAIL: WW-9



PERMISSION GRANTED TO THE CITY OF SPRING VALLEY VILLAGE BY EAST JORDAN IRON WORKS TO USE THIS DESIGN.

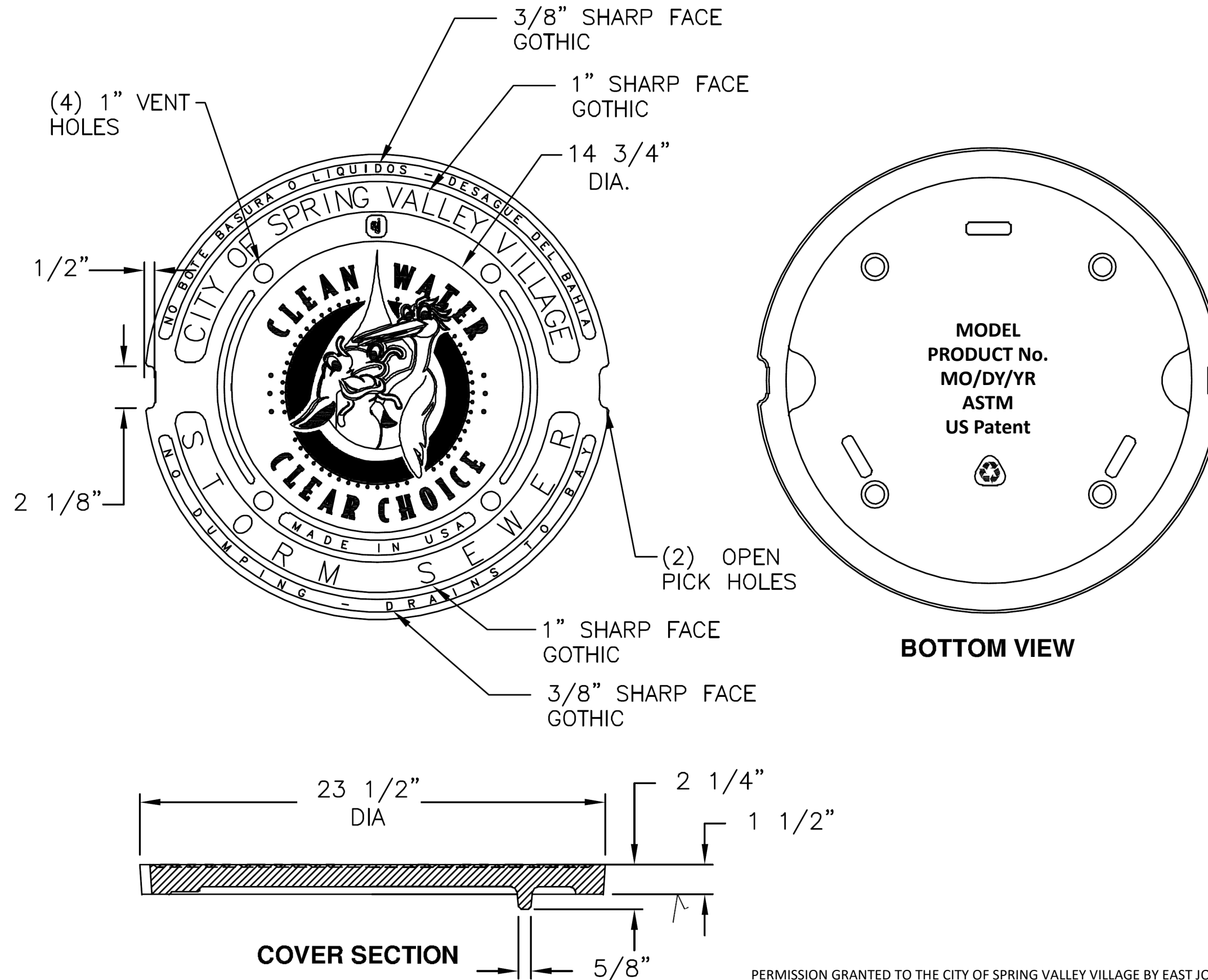


EST. 1955
SPRING VALLEY
 VILLAGE



31 7/8" STORMSEWER MANHOLE LID WITH LOGO

DETAIL: WW-10



PERMISSION GRANTED TO THE CITY OF SPRING VALLEY VILLAGE BY EAST JORDAN IRON WORKS TO USE THIS DESIGN.

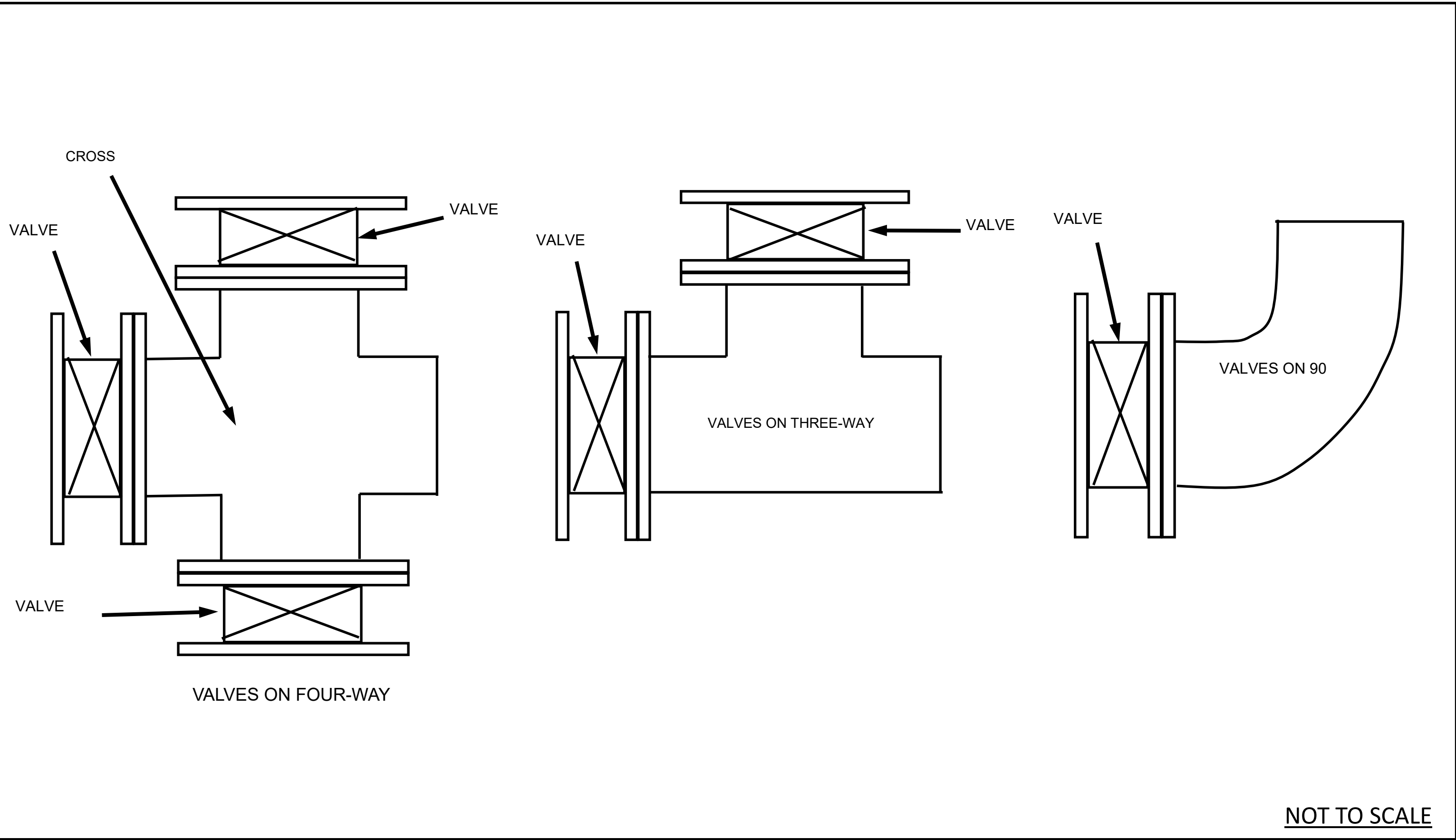


EST. 1955
SPRING VALLEY
 VILLAGE

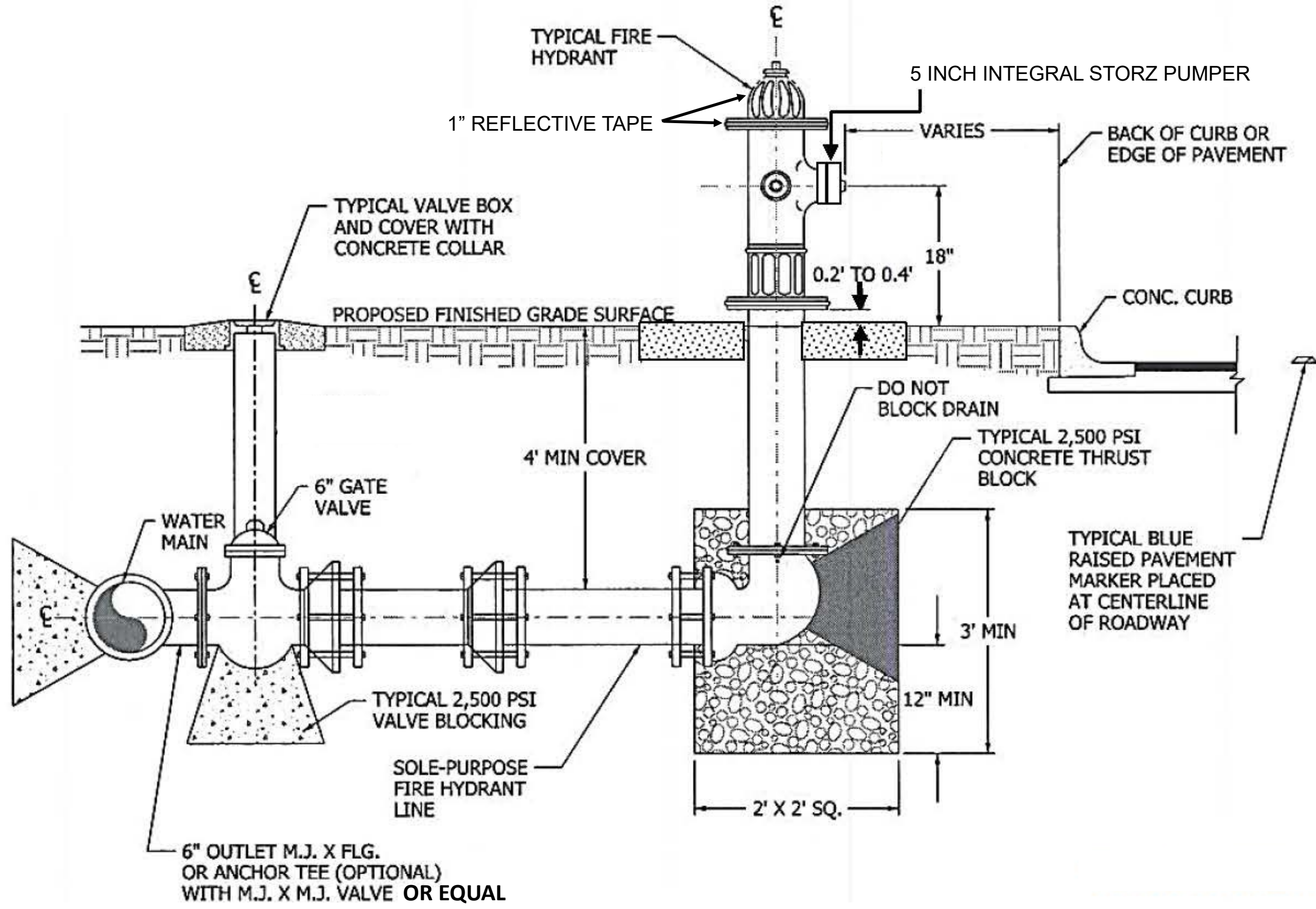


23 1/2" STORMSEWER MANHOLE LID WITH LOGO (ONLY FOR EXISTING MANHOLES)

DETAIL: WW-11



NOT TO SCALE



1. Fire hydrants shall meet or exceed all applicable requirements of the latest revisions of ANSI/AWWA Standard C502. Fire hydrants shall be UL 246 Listed, FM 1510 Approved and certified to ANSI/NSF 61 & 372.
2. Fire hydrants shall have a UL – FM – AWWA Water Working Pressure (WWP) rating of 350 psig (24 barg). Fire hydrants shall be production pressure tested in the fully closed and fully open positions to 700 psig (48 barg). Fire hydrants shall be UL and FM proof-of-design tested at 1400 psig (96 barg).
3. Fire hydrants shall be of the compression type, opening against the pressure and closing with the pressure.
4. Fire hydrants shall have a minimum 5-1/4" main valve opening and a nominal inside lower/upper barrel diameter (I.D.) of 6.9" to assure maximum flow performance. Pressure loss at 1,000 GPM shall not exceed the following values:
 - 4" Pumper Nozzle: 2.70 psi
 - 4.5" Pumper Nozzle: 2.50 psi
5. Fire hydrants shall be three-way in design, having one 5" integral STORZ pumper nozzle with latching cap and two 2-1/2" NTS threaded hose nozzles. Nozzles shall thread counterclockwise into hydrant barrel utilizing O-ring seals. A suitable nozzle lock shall be in place to prevent inadvertent nozzle removal. Nozzle caps shall be secured to the hydrant by a galvanized chain that meets ASTM A-467-64 Class MT.
6. The bonnet assembly shall provide an oil reservoir and lubrication system that automatically circulates lubricant to all stem threads and bearing surfaces each time the hydrant is operated. The bonnet shall have a service plug to facilitate oil replacement when the hydrant is serviced. This lubrication system shall be sealed from the waterway and any external contaminants by use of O-ring seals. An anti-friction washer shall be in place above the thrust collar to further minimize operating torque. The oil reservoir shall be factory filled with a low viscosity, non-toxic, NSF H1 Approved Hydrant Lubricant which will remain fluid through a temperature range of -40⁰ F. to +150⁰ F.
7. The operating nut shall be a one-piece design, manufactured of ASTM B62 or B584 bronze. Operating nut shape and dimensions shall be as specified by the end user. The operating nut shall be affixed to the bonnet by means of an ASTM B62 or B584 bronze hold down nut. The hold down nut shall be threaded into the bonnet in such a manner as to prevent accidental disengagement during the opening cycle of the hydrant. The use of set screws as a means of retention is unacceptable. A resilient weather seal shall be incorporated into the hold down nut, for the purpose of protecting the operating mechanism from the elements.
8. The direction of the opening shall be left to open. An arrow and the letter L shall be cast on the bonnet flange to indicate the specified opening direction.
9. A stainless steel tag shall be attached to the upper barrel of the hydrant that indicates the hydrant bury depth. The tag shall be designed so that it is still readable after multiple hydrant paintings.
10. The hydrant bonnet shall be attached to the upper barrel by not less than eight bolts and nuts and sealed by an O-ring.
11. Hydrants shall be a "traffic-model" having upper and lower barrels joined at the ground line by a separate and breakable "swivel" (traffic) flange providing 360⁰ rotation of upper barrel for proper nozzle facing. Traffic flange shall employ not less than eight bolts. Traffic flange segments shall be located under the upper barrel flange to prevent the segments from falling into the lower barrel when the hydrant is struck. Traffic flange shall be tested by an independent certified testing agency to assure proper function under low speed impact.
12. The upper and lower barrels shall have an O-ring pressure seal between the barrels. The proper ground line shall be cast clearly on the lower barrel and shall provide not less than 18" of clearance from the centerline of the lowest nozzle to the ground.



FIRE HYDRANT SPECIFICATIONS

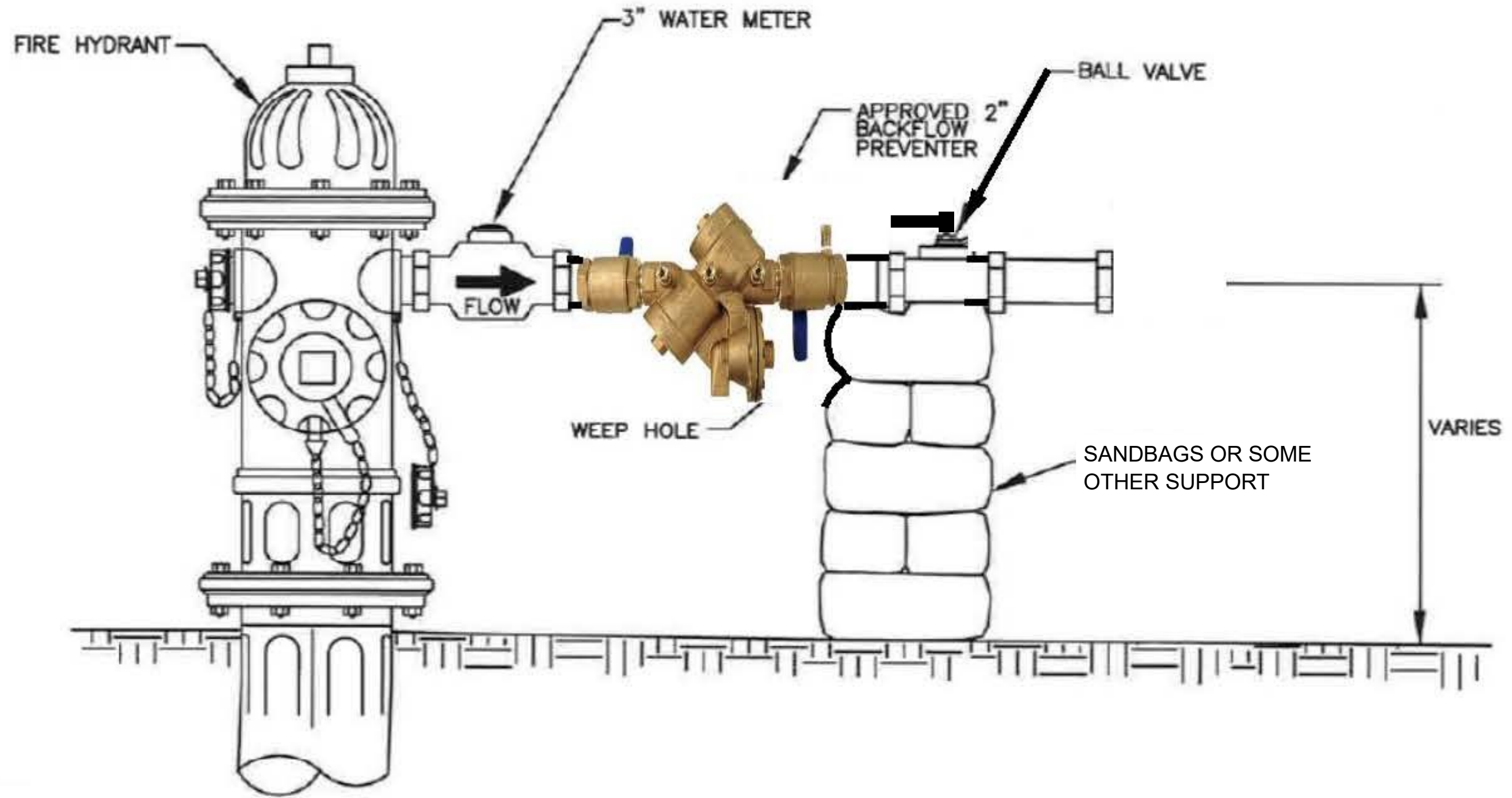
DETAIL: FH-2

13. The operating stem shall consist of two pieces, not less than 1-1/4" diameter (excluding threaded or machined areas) and shall be connected by a stainless steel safety coupling.
14. Operating stems shall be protected from corrosion by electrophoretic coating (e-coat) or FBE (powder coat).
15. The stem coupling shall have an integral internal stop to prevent the coupling from sliding down into the lower barrel when the hydrant is struck. The stem coupling shall be designed to break on traffic impact and so that impacted pieces shall not fall into the hydrant main valve. Proof of design impact testing to be performed at a certified independent test facility.
16. The lower barrel shall be an integrally cast unit composed of ASTM A126 Class B grey iron or ASTM A536 ductile iron. The use of threaded flanges or flanges mechanically attached to barrels or pipe is deemed unacceptable. The hydrant bury depth shall be clearly marked on the hydrant lower barrel.
17. Main Valve shall be constructed of an iron core encapsulated in molded rubber having a Shore A Durometer hardness of 95 +/- 5 and shall be reversible in design to provide a spare in place, it also shall be rated for 350PSI on either side of the main valve. Plastic (polyurethane) main valves are unacceptable. The main valve shall have a cross section not less than 1".
18. Hydrants shall be equipped with (2) two drain valves which drain the barrel when the hydrant is closed and seal per AWWA C502 requirements when the hydrant is opened. These drain valves shall be an integral part of the one-piece bronze upper valve plate. They shall operate without the use of springs, toggles, tubes, levers or other intricate synchronizing mechanisms.
19. The upper valve plate, seat ring and drain ring (shoe bushing) must be ASTM B62 or B584 lead free bronze alloys and work in conjunction to form an all bronze drain way. A minimum of two (2) internal and two (2) external drain openings are required. Drains ported through an iron shoe are not permitted.
20. The bronze seat ring shall thread into a bronze drain ring (or shoe bushing) providing a bronze to bronze threaded connection. Seat rings shall be O-ring pressure sealed.
21. The hydrant shoe shall be ASTM A536 ductile iron; inlet size and connection type shall be as specified (Flanged, MJ, etc.), having ample blocking pads for sturdy setting and the MJ connection must have two strapping lugs to secure the hydrant to piping. A minimum of six bolts and nuts is required to fasten the shoe to the lower barrel.
22. The interior of the shoe including the lower valve plate and stem cap nut shall have a protective coating that meets the requirements of AWWA C-550. If a stem cap nut is utilized, it must be locked in place by a stainless steel lock washer or similar non-corrosive device that will prevent the cap nut from backing-off during normal use.
23. Hydrants shall be warranted by the manufacturer against defects in materials or workmanship for a period of ten years (10) from the date of manufacture. The manufacturing facility for the hydrant must have current ISO certification.
24. Exposed portions of the hydrant including the exterior of the bonnet, upper barrel and hose caps, shall be factory coated with a polyurethane enamel paint . (Safety Red). Do not paint the STORZ connection.



FIRE HYDRANT SPECIFICATIONS

DETAIL: FH-3



NOT TO SCALE

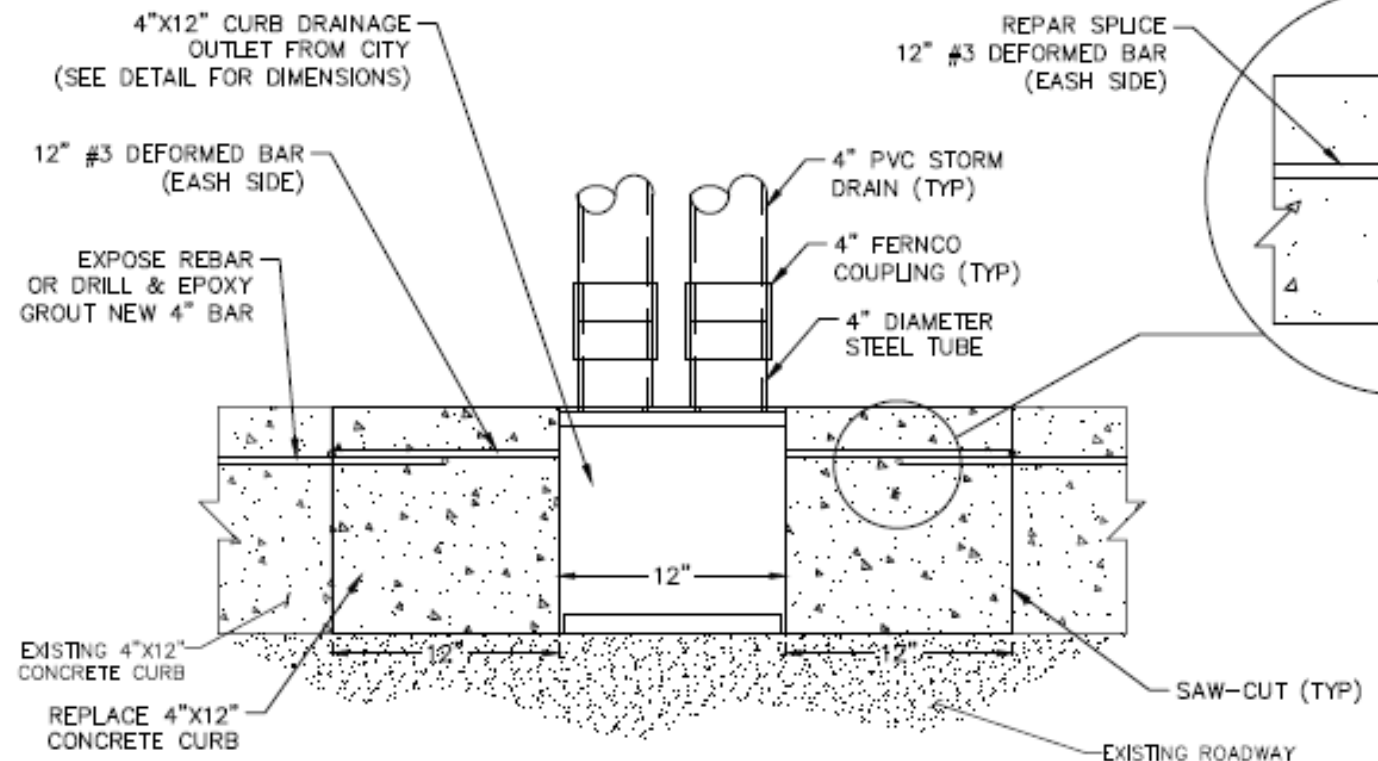


EST. 1955
SPRING VALLEY
 VILLAGE

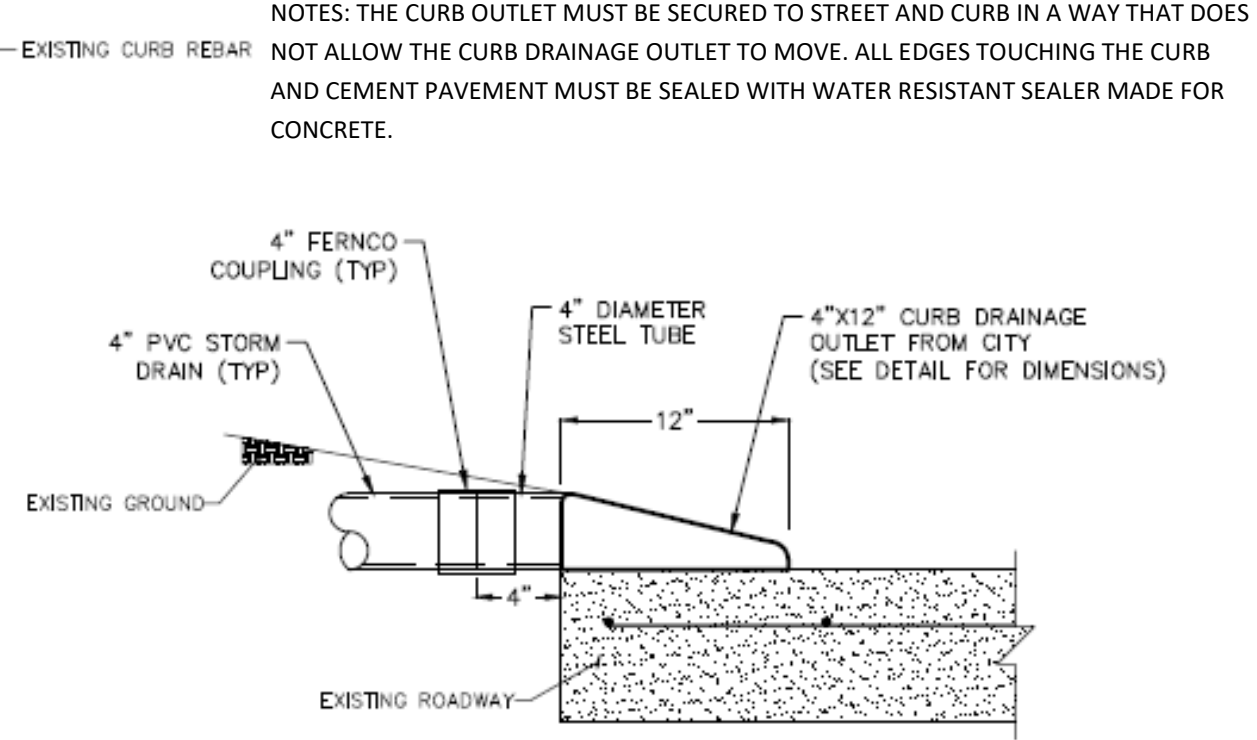


FIRE HYDRANT METER INSTALL

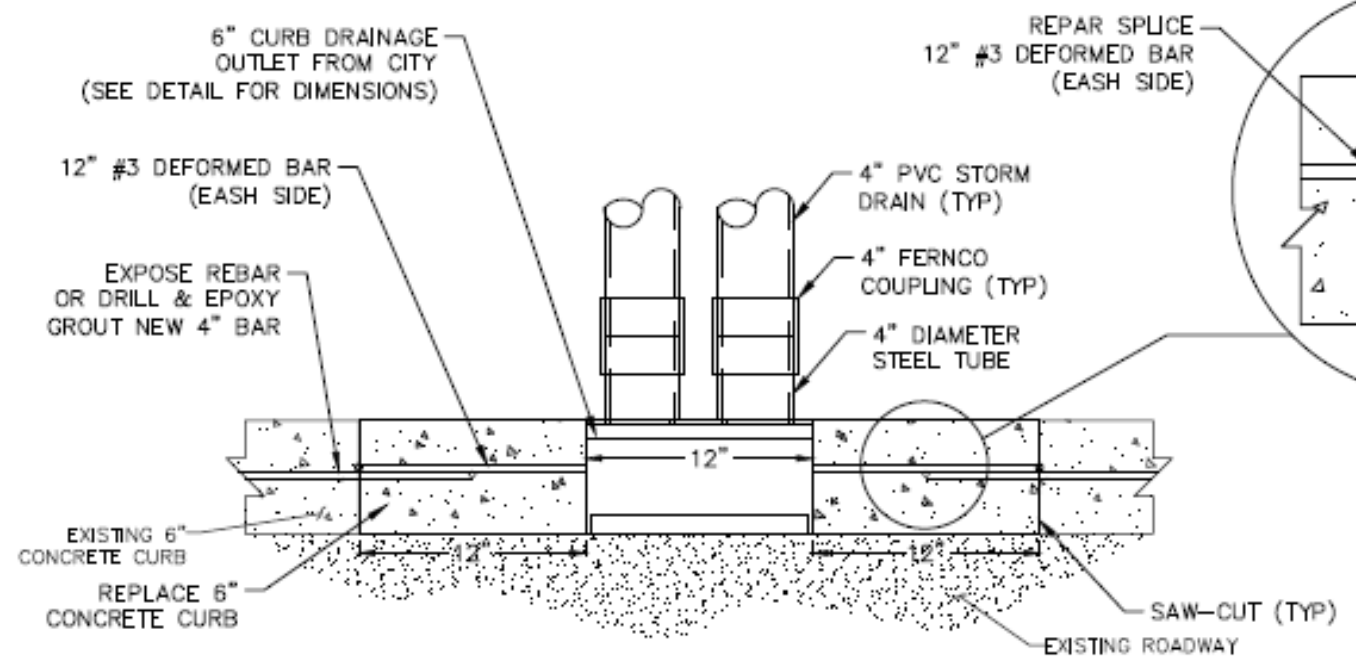
DETAIL: FH-4



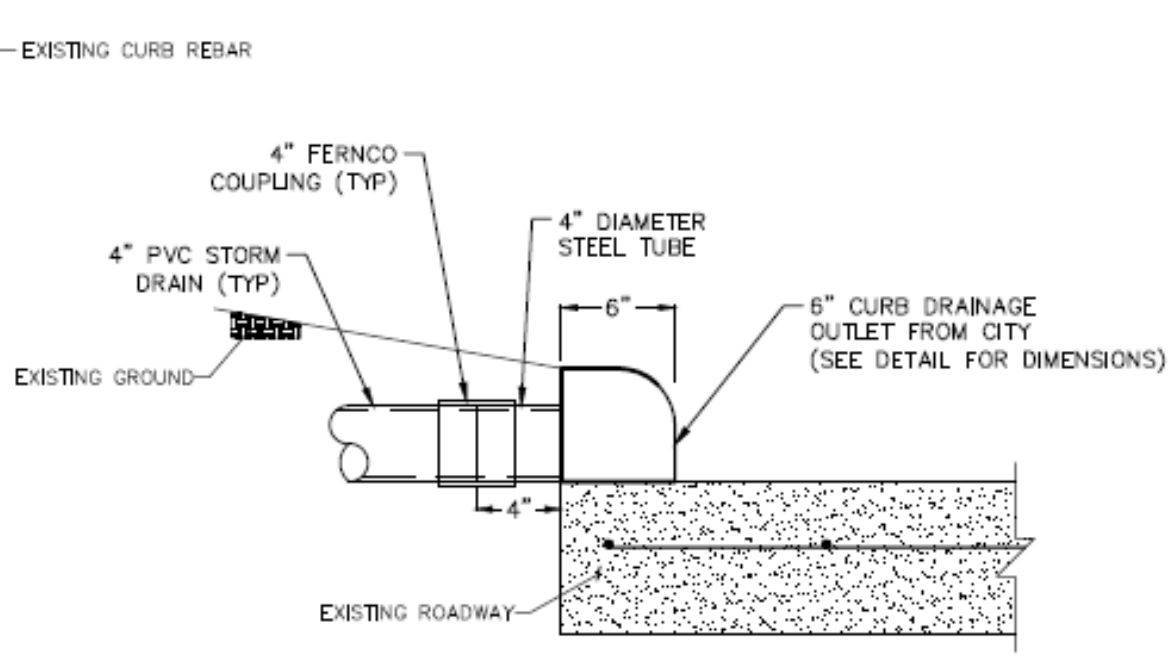
4"x12" CURB DRAINAGE OUTLET - PLAN



4"x12" CURB DRAINAGE OUTLET - SECTION



6" CURB DRAINAGE OUTLET - PLAN

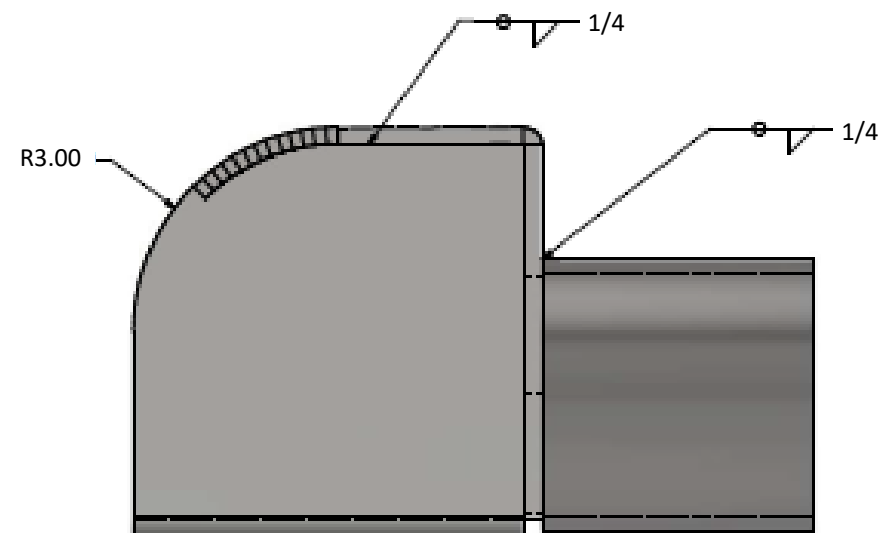
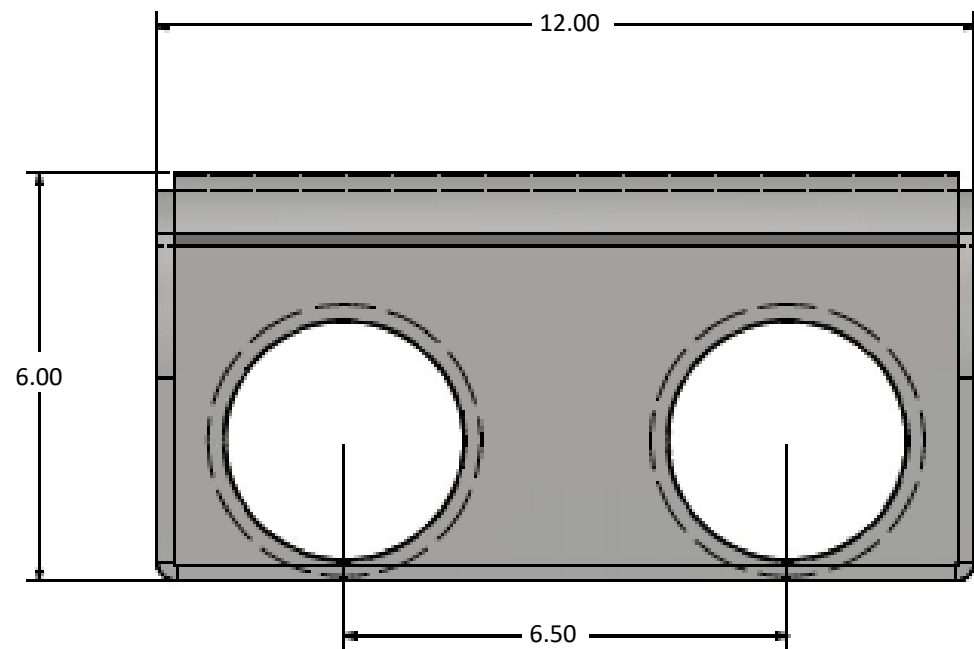
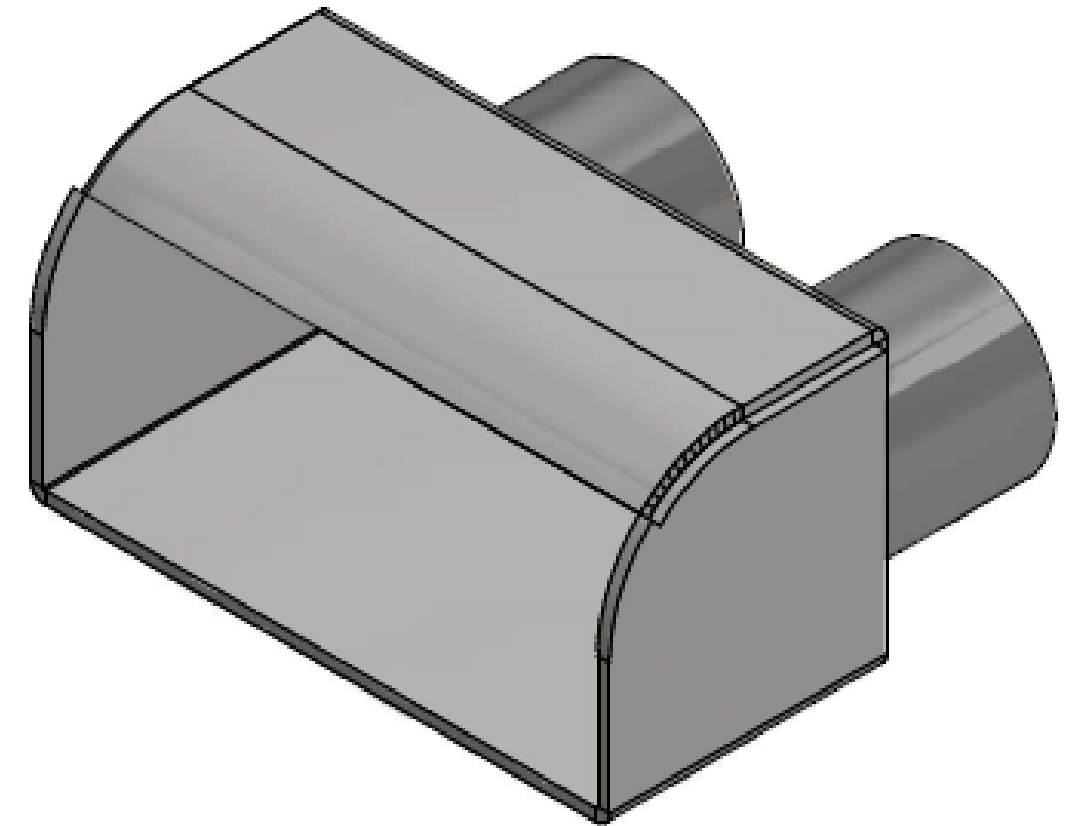
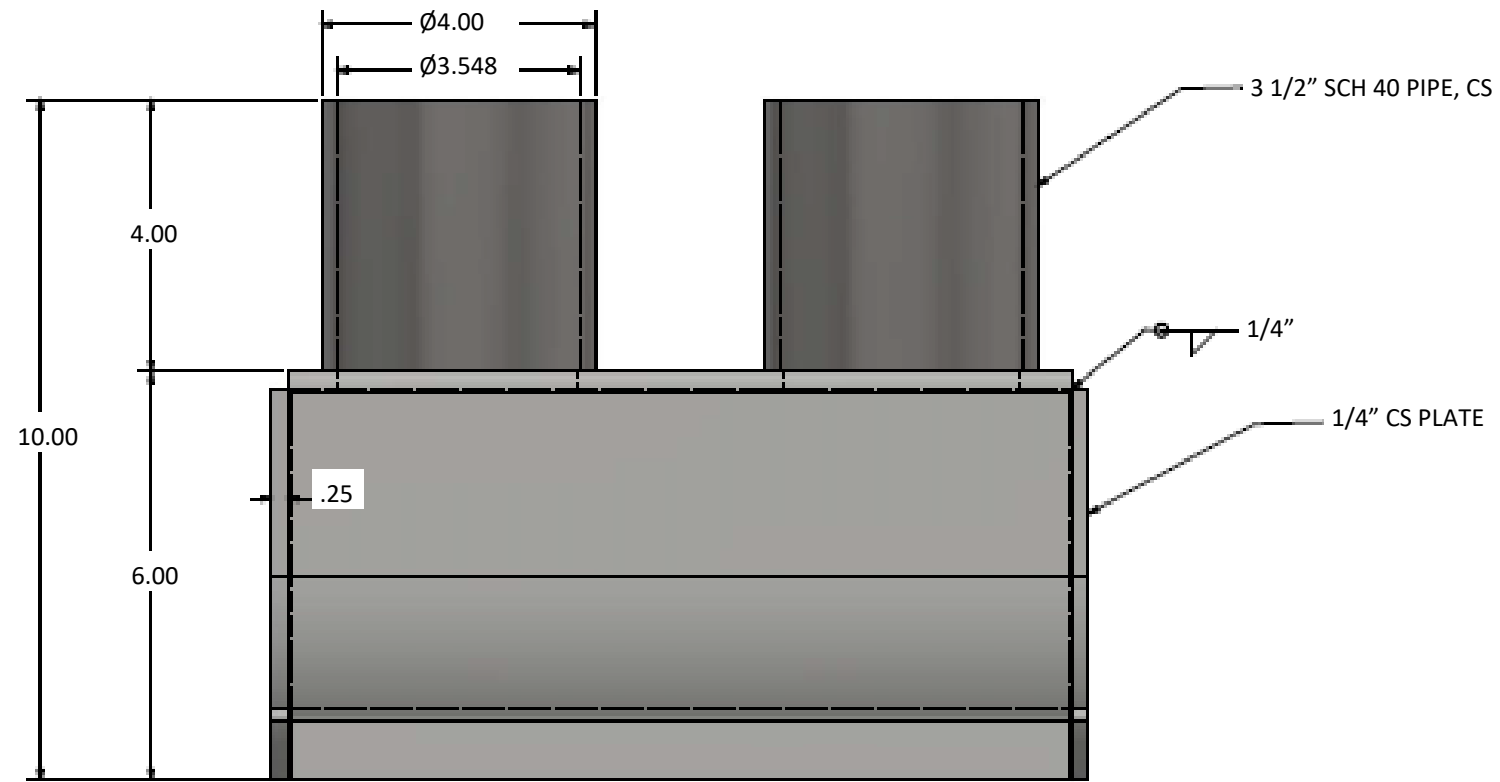


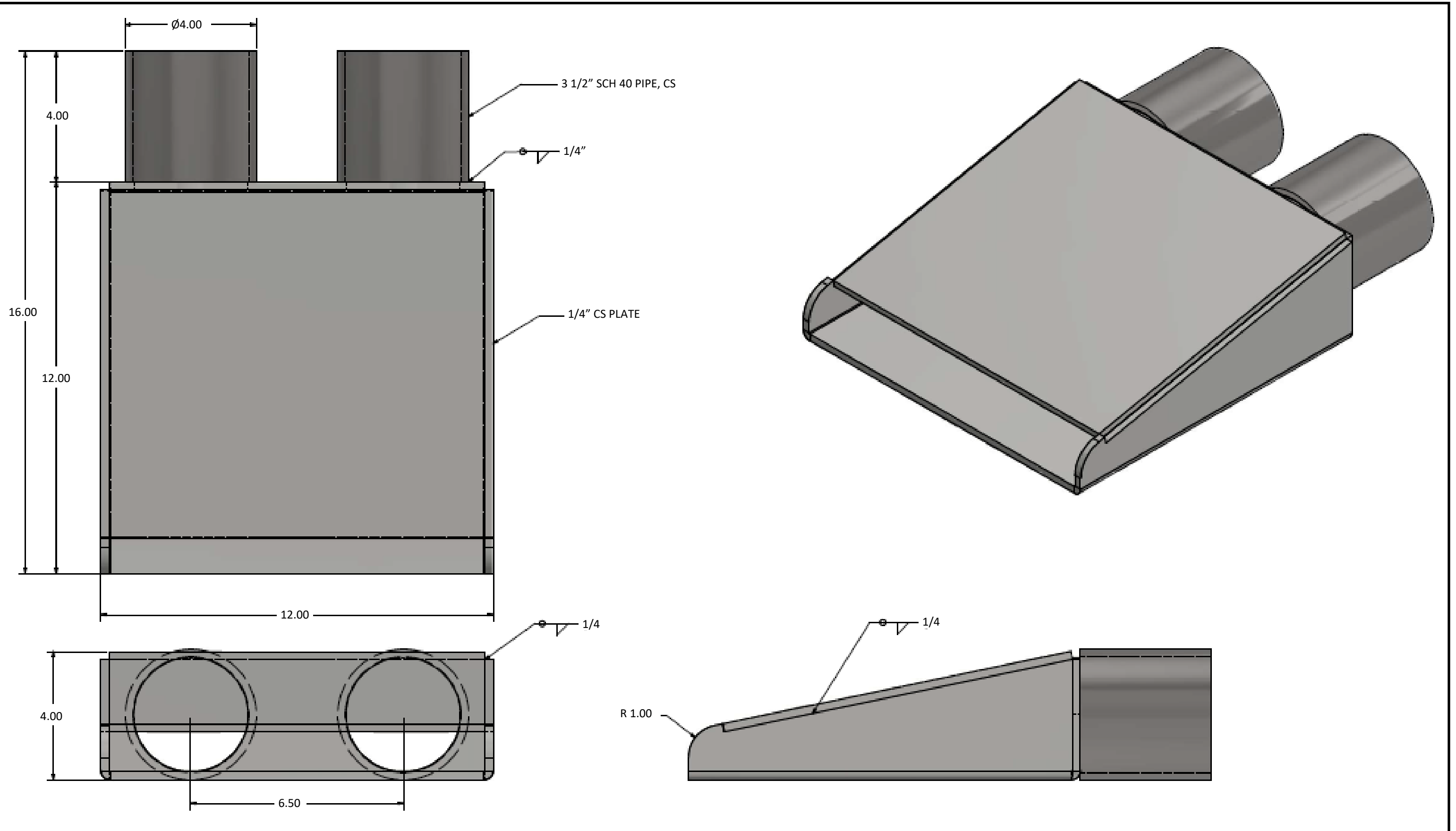
6" CURB DRAINAGE OUTLET - SECTION

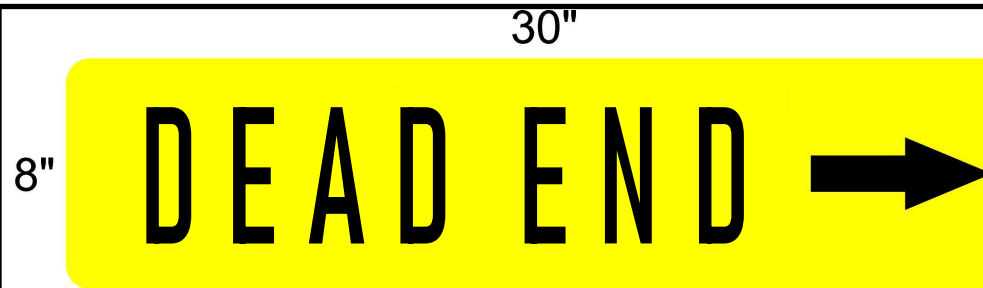


CURB DRAINAGE OUTLET DETAILS

DETAIL: DRAINAGE-1



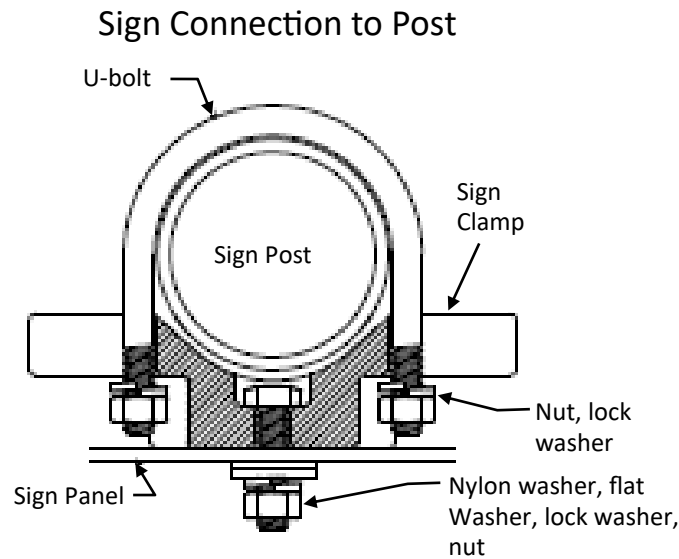




**.080 Aluminum sheeted with
Yellow High Intensity Prismatic Sheeting
and 5" Black Non Reflective Vinyl Lettering
Double**



STREET SIGN EXAMPLE FOR DEAD END STREETS



STREET SIGN MOUNTING SYSTEM



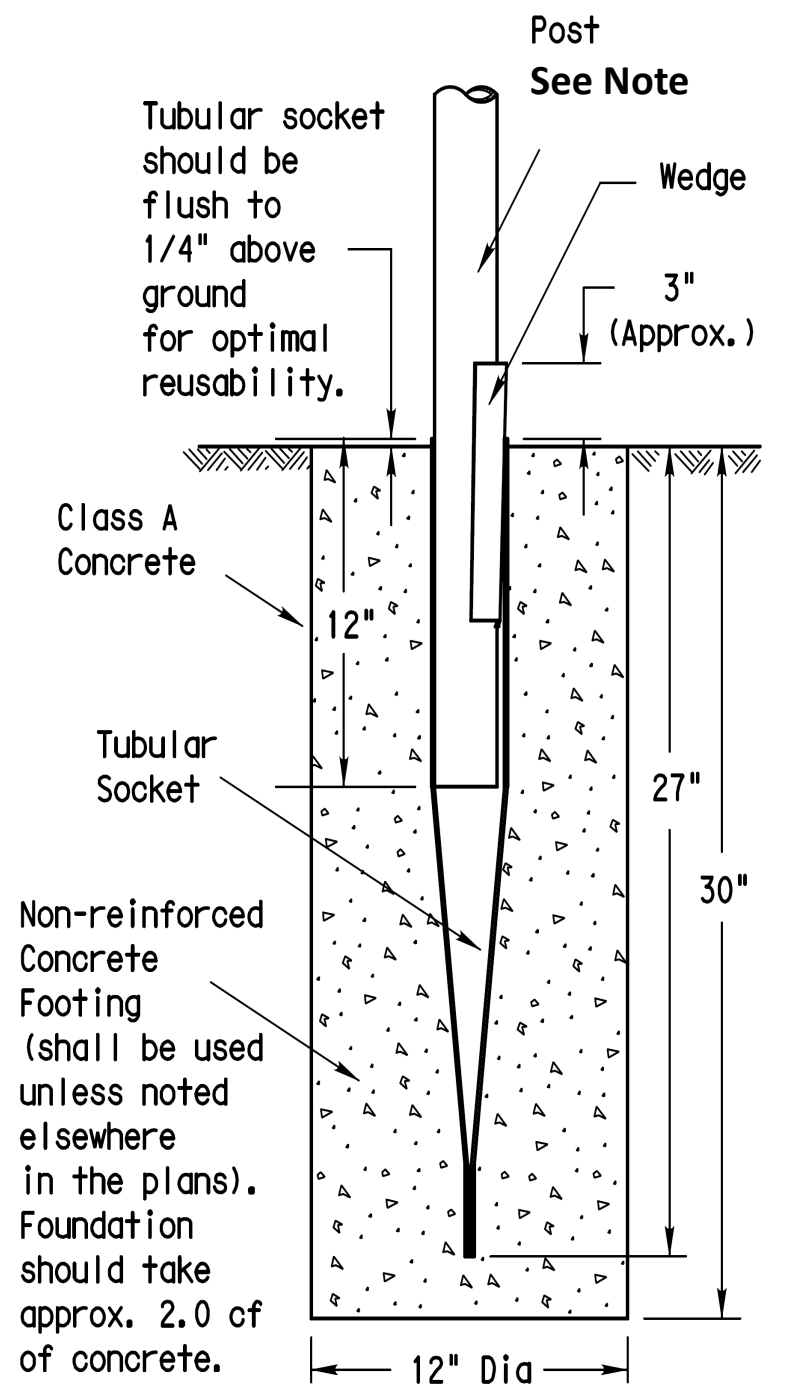
TUBULAR POSTS BREAKAWAY SYSTEM

NOTE: ALL SIGN POLES AND BRACKETS ARE TO BE POWDER COATED OR PAINTED BLACK WITH QUALITY OUTDOOR PAINT. USE THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) FOR ALL SIGN INFORMATION USED IN THE CITY.

Material used with this system shall conform to TxDOT standards. 13 BWG Tubing (2.375" outside diameter) (TWT) 0.095" nominal wall thickness. Seamless or electric-resistance welded steel tubing.

Galvanization per ASTM 123 or ASTM A653 G210.

Wedge Anchor Steel System



SM RD SGN ASSM TY TWT (X) WS (X)

Spring Valley Village



B a c e

Dr.
8700-8600

STREET SIGN EXAMPLE



STREET MARKING SIGNS

DETAIL SIGNS - 1