

Appendix B

Construction Details



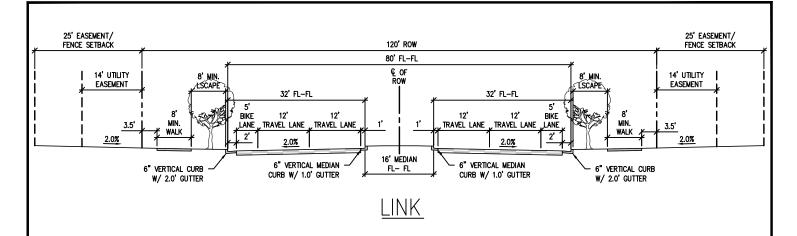
Town of Mead Design Standards and Construction Specifications

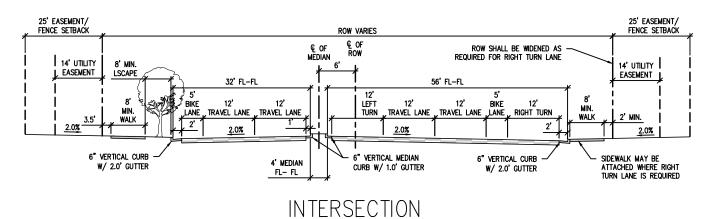
DETAILS

D3.01A D3.01B D3.02A D3.02B D3.03 D3.04 D3.05 D3.06 D3.07 D3.08 D3.09 D3.10 D3.11 D3.12 D3.13 D3.14 D3.15 D3.16 D3.17 D3.18A D3.18B D3.19 D3.20 D3.21 D3.22A D3.23B D3.23A D3.23B D3.23C D3.23D D3.24 D3.25 D3.26A	4-Lane Major Arterial Street 2-Lane Major Arterial Street 2-Lane Minor Arterial Street 2-Lane Minor Arterial Street Half Section Major Residential Collector and Business Collector Street Minor Collector Street Residential Local Street Rural Road Vertical Curb and Gutter Detail Mountable Curb and Gutter Detail Vertical Curb Catch to Spill Transition Detail Vertical to Mountable Curb Transition Detail Vertical to Mountable Curb Transition Detail Sidewalk and Joint Detail Directional Curb Ramp Detail Diagonal Curb Ramp Detail Mid-Block Curb Ramp Concrete Pan Layout Detail Concrete Pan Detail Concrete Driveway with Detached Sidewalk Detail Concrete Driveway with Attached Walk Detail Concrete Driveway with Attached Walk Detail Driveway Detail (Rural Road Only) Street Intersection Detail Street Intersection Striping Detail Concrete Chase at Curb Detail Concrete Chase Detail Asphalt Patch Detail (1 of 4) Asphalt Patch Detail (2 of 4) Asphalt Patch Detail (3 of 4) Asphalt Patch Detail Street Name Sign Detail Local Cul-De-Sac Detail
D3.25	Street Name Sign Detail
	Local Cul-De-Sac Detail Local Offset Cul-De-Sac Detail
D3.26B D3.27 D3.28	Widening Detail for Street Knuckle (Local Streets Only) Guardrail Detail
D4.01 D4.02 D4.03 D4.04 D4.05 D4.06 D4.07 D4.08 D4.09 D4.10 D4.11 D4.12 D4.13	General Construction Notes Example Site Plan Standard Sanitary Manhole Sanitary Drop Manhole Monitoring Sanitary Manhole Monitoring Sanitary Manhole Diagrams Sanitary Manhole Base Flexible Joint Pipe Penetrations Manhole Ring and Cover - Non-Bolted Manhole Ring and Cover - Bolted Pipe Trenching Pipe Trenching with Underdrain System Sanitary Cleanout

Town of Mead Design Standards and Construction Specifications

D4.14 D4.15 D4.16 D4.17 D4.18 D4.19 D4.20	Typical Service Connection Tapping Saddle Pipe Encasement Pipe Encasement Specifications Standard Pipe Casing Cut-Off Wall Sanitary Utility Marker Post
D5.01 D5.02	Fire Hydrant Placement Water Utility Marker Post
D6.01A D6.01B D6.02 D6.03 D6.04A D6.04B D6.05 D6.06 D6.07A D6.07B D6.08 D6.09A D6.09B D6.10A D6.10B D6.10C D6.11 D6.12 D6.13	Storm Manhole Storm Manhole Ring and Cover Storm Cleanout Storm Sewer Bedding Detail CMP Type 1 Flared End Section RCP Flared End Section Rip Rap Flared End Section Type C Inlet Combination Inlet (1 of 2) Combination Inlet (2 of 2) Direct Connection RCP To PVC Connection Valley Inlet (CDOT Type 13) (1 of 2) Valley Inlet (CDOT Type 13) (2 of 2) Type R Curb Inlet (1 of 3) Type R Curb Inlet (2 of 3) Type R Curb Inlet (3 of 3) Small Pipe Headwall Headwall with Circular Pipe Storm Utility Marker Post
D8.01 D8.02 D8.03 D8.04 D8.05 D8.06 D8.07 D8.08 D8.09 D8.10 D8.11 D8.12 D8.13 D8.14 D8.15 D8.16 D8.17 D8.18	Shrub Planting Detail Tree Planting Detail Winterization Assembly Remote Control Valve Assembly Quick Coupler Assembly Pop Up Spray Sprinkler Assembly Pop Up Rotor Sprinkler Assembly Master Valve Assembly Valve Drain Assembly Gate Valve Assembly Flush Cap Assembly Flow Meter Assembly Drip Remote Control Valve Assembly Shrub Bed Drip Detail Drip to Trees in Open Turf Areas Backflow Preventer Concrete Vault Concrete Thrust Block Flood Gate





ROADWAY WIDTH: 80' BETWEEN INTERSECTIONS: WIDEN AT INTERSECTION AS NEEDED.

RIGHT OF WAY WIDTH: 120' MIN. BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

TRAVEL LANES: 4 LANES AT 12' WIDE (EXCLUSIVE OF GUTTER OR MIN. 12' WHERE NO GUTTER).

LEFT TURN LANE: 12' WIDE, REQUIRED AT INTERSECTION.

BIKE LANES: 2 LANES, 5' WIDE MIN. (EXCLUSIVE OF GUTTER).

PARKING: NONE

<u>SIDEWALK:</u> 8' MIN. WIDE IF DETACHED BY AT LEAST 8'. ADDITIONAL WIDTH MAY BE REQUIRED FOR HIGHER PEDESTRIAN TRAFFIC IN AND LEADING TO ACTIVITY AREAS.

MEDIAN: 16' WIDE (FLOWLINE TO FLOWLINE), 4' IN LEFT TURN AREA. COLORED CONCRETE OR LANDSCAPED.

DESIGN SPEED: 50 MPH

POSTED SPEED: 40 MPH

ACCESS: NO PRIMARY ACCESS TO INDIVIDUAL LOTS PERMITTED. 1/2 MILE SPACING TO SIGNALIZED INTERSECTIONS IS REQUIRED.

CONTINUITY: UNLIMITED.

FENCES: FENCES SHALL BE PLACED OUTSIDE OF THE LANDSCAPING AND PEDESTRIAN EASEMENT. (25' FROM ROW)

<u>LANDSCAPING:</u> TREE LAWN, MEDIAN, AND BUFFER AREA LANDSCAPING MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR HOA.

CURB AND GUTTER: VERTICAL CURB AND GUTTER.

CR 9.5 (HIGH PLANS BOULEVARD): ADDITIONAL REQUIREMENTS MAY APPLY. SEE CDOT FOR SPECIFIC DESIGN CRITERIA.

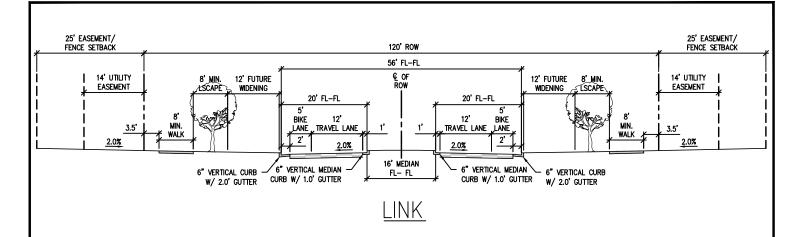
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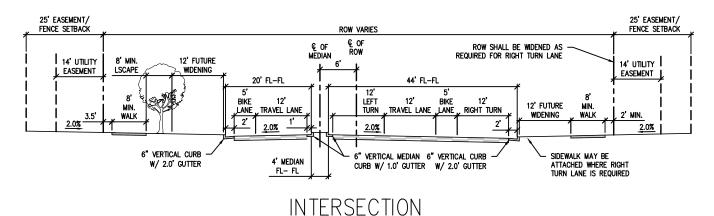


TOWN OF MEAD STANDARD DESIGN CRITERIA

D3.01A

4-LANE MAJOR ARTERIAL STREET





ROADWAY WIDTH: 56' BETWEEN INTERSECTIONS; WIDEN AT INTERSECTION AS NEEDED.

RIGHT OF WAY WIDTH: 120' MIN. BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

TRAVEL LANES: 2 LANES AT 12' WIDE (EXCLUSIVE OF GUTTER OR MIN. 12' WHERE NO GUTTER).

LEFT TURN LANE: 12' WIDE, REQUIRED AT INTERSECTION.

BIKE LANES: 2 LANES, 5' WIDE MIN. (EXCLUSIVE OF GUTTER).

PARKING: NONE

<u>SIDEWALK:</u> 8' MIN. WIDE IF DETACHED BY AT LEAST 8'. ADDITIONAL WIDTH MAY BE REQUIRED FOR HIGHER PEDESTRIAN TRAFFIC IN AND LEADING TO ACTIVITY AREAS.

MEDIAN: 16' WIDE (FLOWLINE TO FLOWLINE), 4' IN LEFT TURN AREA. COLORED CONCRETE OR LANDSCAPED.

DESIGN SPEED: 50 MPH

POSTED SPEED: 40 MPH

ACCESS: NO PRIMARY ACCESS TO INDIVIDUAL LOTS PERMITTED. 1/2 MILE SPACING TO SIGNALIZED INTERSECTIONS IS REQUIRED.

CONTINUITY: UNLIMITED.

FENCES: FENCES SHALL BE PLACED OUTSIDE OF THE LANDSCAPING AND PEDESTRIAN EASEMENT. (25' FROM ROW)

LANDSCAPING: TREE LAWN, MEDIAN, AND BUFFER AREA LANDSCAPING MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR HOA.

CURB AND GUTTER: VERTICAL CURB AND GUTTER.

CR 9.5 (HIGH PLANS BOULEVARD): ADDITIONAL REQUIREMENTS MAY APPLY. SEE CDOT FOR SPECIFIC DESIGN CRITERIA.

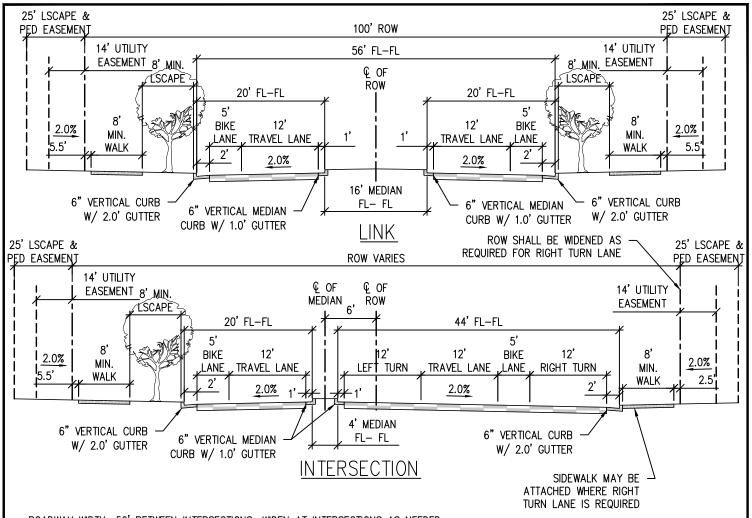
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TOWN OF MEAD STANDARD DESIGN CRITERIA

2-LANE MAJOR ARTERIAL STREET

D3.01B



ROADWAY WIDTH: 56' BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

RIGHT OF WAY WIDTH: 100' MIN. BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

TRAVEL LANES: 2 LANES AT 12' WIDE (EXCLUSIVE OF GUTTER).

LEFT TURN LANE: 12' WIDE, REQUIRED AT INTERSECTION.

BIKE LANES: 2 LANES, 5' WIDE MIN. (EXCLUSIVE OF GUTTER).

PARKING: NONE.

<u>SIDEWALK:</u> 8' MIN. WIDE IF DETACHED BY AT LEAST 8'. ADDITIONAL WIDTH MAY BE REQUIRED FOR HIGHER PEDESTRIAN TRAFFIC IN OR IF ATTACHED TO ACTIVITY AREAS. 8' MIN. WIDE DETACHED FOR REDEVELOPMENT.

MEDIAN: 16' WIDE (FLOWLINE TO FLOWLINE),4' IN LEFT TURN AREA. COLORED CONCRETE OR LANDSCAPED.

DESIGN SPEED: 45 MPH

POSTED SPEED: 40 MPH

ACCESS: NO PRIMARY ACCESS TO INDIVIDUAL LOTS PERMITTED. 1/4 MILE SPACING TO SIGNALIZED INTERSECTIONS IS REQUIRED.

CONTINUITY: UNLIMITED.

FENCES: FENCES SHALL BE PLACED OUTSIDE OF THE LANDSCAPING. (25' FROM ROW)

<u>LANDSCAPING:</u> TREE LAWN, MEDIAN, AND BUFFER AREA LANDSCAPING MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR HOA.

CURB AND GUTTER: VERTICAL CURB AND GUTTER.

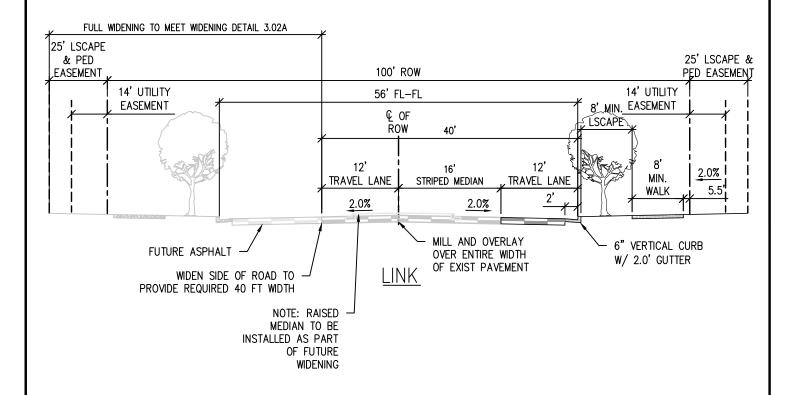
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TOWN OF MEAD STANDARD DESIGN CRITERIA

2-LANE MINOR ARTERIAL STREET

D3.02A



ROADWAY WIDTH: 56' BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

RIGHT OF WAY WIDTH: 100' MIN. BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

TRAVEL LANES: 2 LANES AT 12' WIDE (EXCLUSIVE OF GUTTER).

LEFT TURN LANE: 12' WIDE, REQUIRED AT INTERSECTION.

BIKE LANES: 2 LANES, 5' WIDE MIN. (EXCLUSIVE OF GUTTER).

PARKING: NONE.

<u>SIDEWALK:</u> 8' MIN. WIDE IF DETACHED BY AT LEAST 8'. ADDITIONAL WIDTH MAY BE REQUIRED FOR HIGHER PEDESTRIAN TRAFFIC IN AND LEADING TO ACTIVITY AREAS. 8' MIN. WIDE DETACHED FOR REDEVELOPMENT.

MEDIAN: 16' WIDE (FLOWLINE TO FLOWLINE),4' IN LEFT TURN AREA. COLORED CONCRETE OR LANDSCAPED.

DESIGN SPEED: 45 MPH

POSTED SPEED: 40 MPH

ACCESS: NO PRIMARY ACCESS TO INDIVIDUAL LOTS PERMITTED. 1/4 MILE SPACING TO SIGNALIZED INTERSECTIONS IS REQUIRED.

CONTINUITY: UNLIMITED.

FENCES: FENCES SHALL BE PLACED OUTSIDE OF THE LANDSCAPING. (25' FROM ROW)

LANDSCAPING: TREE LAWN, MEDIAN, AND BUFFER AREA LANDSCAPING MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR HOA.

CURB AND GUTTER: VERTICAL CURB AND GUTTER.

MILL AND OVERLAY: IF DEPTH OF PAVEMENT DOES NOT ALLOW FOR A MILL AND OVERLAY A FULL DEPTH REPLACEMENT IS REQUIRED

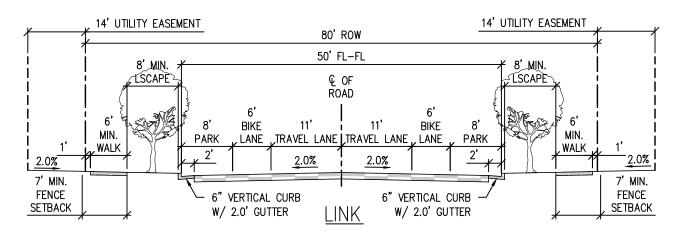
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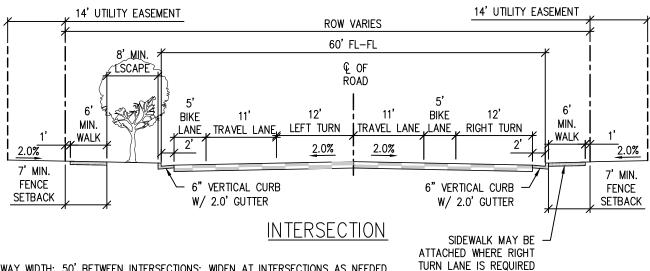


TOWN OF MEAD STANDARD DESIGN CRITERIA

2-LANE MINOR ARTERIAL STREET HALF SECTION

D3.02B





ROADWAY WIDTH: 50' BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

RIGHT OF WAY WIDTH: 80' MIN. BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

TRAVEL LANES: 2 LANES AT 11' WIDE (EXCLUSIVE OF GUTTER OR MIN. 12' WHERE NO GUTTER).

LEFT TURN LANE: 12' WIDE, AT INTERSECTION WHERE NEEDED.

BIKE LANES: 2 LANES, 6' WIDE MIN. (EXCLUSIVE OF GUTTER). 7' WIDE WHERE ADJACENT TO CURB.

PARKING: TWO LANES, 8' WIDE (MIN.); PARKING MAY BE REMOVED AT CERTAIN LOCATIONS TO PROVIDE A LEFT TURN LANE WHERE NEEDED.

SIDEWALK: 6' MIN. WIDE (MIN.) ADDITIONAL WIDTH MAY BE REQUIRED IF ATTACHED OR FOR HIGHER PEDESTRIAN TRAFFIC IN OR LEADING TO ACTIVITY AREAS.

MEDIAN: NOT REQUIRED, EXCEPT WHERE NECESSARY TO CONTROL ACCESS AND/OR TO PROVIDE PEDESTRIAN REFUGE. ADDITIONAL ROADWAY AND ROW WIDTH MAY BE REQUIRED.

DESIGN SPEED: 40 MPH

POSTED SPEED: 25-30 MPH

ACCESS: ACCESS WILL BE LIMITED. POINTS OF ACCESS MUST BE APPROVED BY THE LOCAL ENTITY.

CONTINUITY: THE STREET SHALL BE CONTINUOUS FOR NO MORE THAN 1,320 FT.

FENCES: FENCES SHALL BE PLACED OUTSIDE OF THE ROW.

LANDSCAPING: TREE LAWN, MEDIAN, AND BUFFER AREA LANDSCAPING MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR HOA.

CURB AND GUTTER: VERTICAL CURB AND GUTTER.

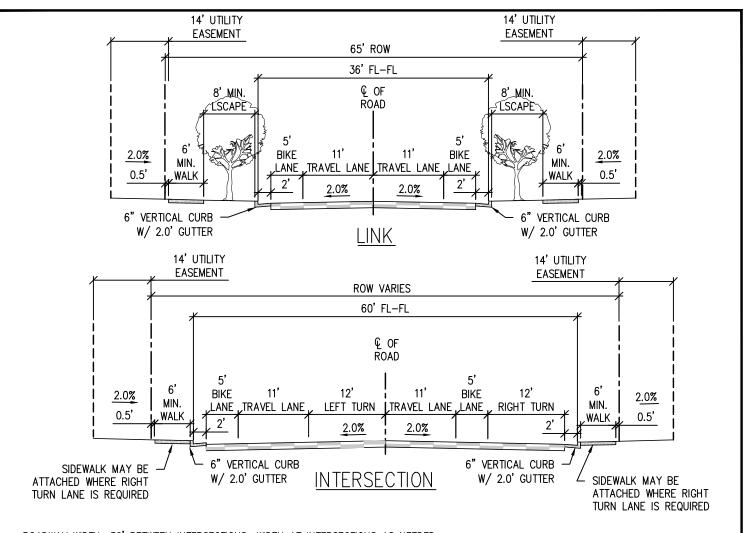
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TOWN OF MEAD STANDARD DESIGN CRITERIA

MAJOR RESIDENTIAL COLLECTOR AND BUSINESS COLLECTOR STREET

D3.03



ROADWAY WIDTH: 36' BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

RIGHT OF WAY WIDTH: 68' MIN. BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

TRAVEL LANES: 2 LANES AT 11' WIDE (EXCLUSIVE OF GUTTER OR MIN. 12' WHERE NO GUTTER).

LEFT TURN LANE: 12' WIDE, REQUIRED AT INTERSECTION.

BIKE LANES: 2 LANES, 7' WIDE MIN. (EXCLUSIVE OF GUTTER).

PARKING: NONE.

SIDEWALK: 6' MIN. WIDE (MIN.) ADDITIONAL WIDTH MAY BE REQUIRED IF ATTACHED OR FOR HIGHER PEDESTRIAN TRAFFIC IN OR LEADING TO ACTIVITY AREAS.

MEDIAN: NOT REQUIRED, EXCEPT WHERE NECESSARY TO CONTROL ACCESS AND/OR TO PROVIDE PEDESTRIAN REFUGE. ADDITIONAL ROADWAY AND ROW WIDTH MAY BE REQUIRED.

DESIGN SPEED: 40 MPH

POSTED SPEED: 25-30 MPH

ACCESS: ACCESS WILL BE LIMITED. POINTS OF ACCESS MUST BE APPROVED BY THE LOCAL ENTITY.

CONTINUITY: THE STREET SHALL BE CONTINUOUS FOR NO MORE THAN 1,320 FT.

FENCES: FENCES SHALL BE PLACED OUTSIDE OF THE ROW.

LANDSCAPING: TREE LAWN, MEDIAN, AND BUFFER AREA LANDSCAPING MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR HOA.

CURB AND GUTTER: VERTICAL CURB AND GUTTER.

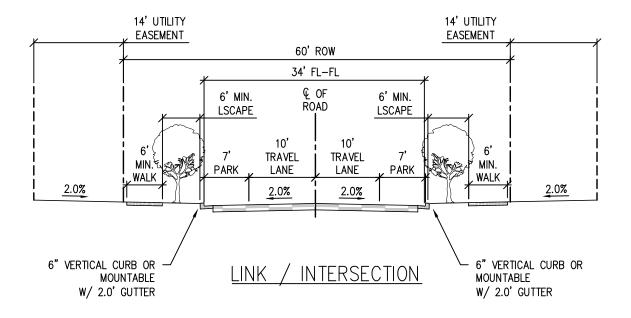
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TOWN OF MEAD STANDARD DESIGN CRITERIA

MINOR COLLECTOR STREET

D3.04



ROADWAY WIDTH: 36' BETWEEN INTERSECTIONS; WIDEN AT INTERSECTIONS AS NEEDED.

RIGHT OF WAY WIDTH: 50' MIN.

TRAVEL LANES: 2 LANES AT 11' WIDE (EXCLUSIVE OF GUTTER OR MIN. 12' WHERE NO GUTTER).

LEFT TURN LANE: NONE.

BIKE LANES: SHARED STREET.

PARKING: TWO LANES, 7' WIDE SHARED WITH BIKE LANE.

<u>SIDEWALK:</u> 6' MIN. WIDE (MIN.) ADDITIONAL WIDTH MAY BE REQUIRED IF ATTACHED OR FOR HIGHER PEDESTRIAN TRAFFIC IN OR LEADING TO ACTIVITY AREAS.

MEDIAN: NOT REQUIRED, EXCEPT WHERE NECESSARY TO CONTROL ACCESS AND/OR TO PROVIDE PEDESTRIAN REFUGE. ADDITIONAL ROADWAY AND ROW WIDTH MAY BE REQUIRED.

DESIGN SPEED: 25 MPH

POSTED SPEED: 25 MPH

ACCESS: NO LIMIT.

CONTINUITY: THE STREET SHALL BE CONTINUOUS FOR NO MORE THAN 660 FT.

FENCES: FENCES SHALL BE PLACED OUTSIDE OF THE ROW.

<u>LANDSCAPING:</u> TREE LAWN, MEDIAN, AND BUFFER AREA LANDSCAPING MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR HOA.

CURB AND GUTTER: VERTICAL OR MOUNTABLE CURB AND GUTTER.

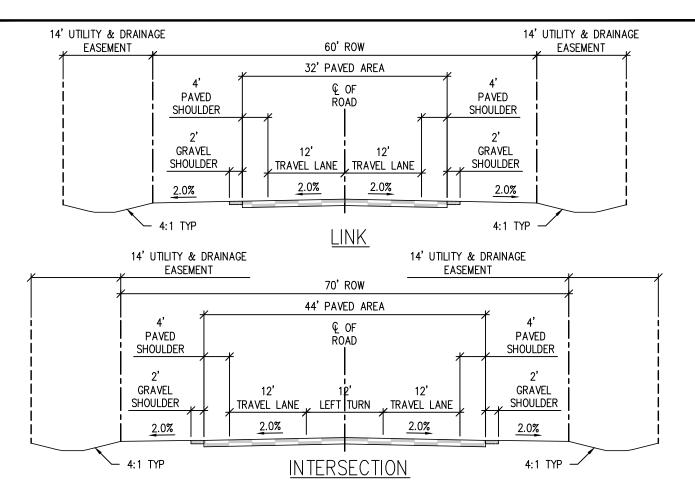
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TOWN OF MEAD STANDARD DESIGN CRITERIA

D3.05

RESIDENTIAL LOCAL STREET



ROADWAY WIDTH: 32' BETWEEN INTERSECTIONS; 44' AT INTERSECTIONS WITH TURN LANE.

RIGHT OF WAY WIDTH: 60' MIN. BETWEEN INTERSECTIONS; WIDEN TO 70' AT INTERSECTIONS.

TRAVEL LANES: 2 LANES AT 12' WIDE.

LEFT TURN LANE: NONE.

BIKE LANES: SHARED STREET OR ON PAVED SHOULDER.

PARKING: NO PARKING PERMITTED ON ARTERIAL ROADS, SHOULDER MAY BE USED FOR OTHER ROADS.

SIDEWALK: NONE.

MEDIAN: NOT REQUIRED, EXCEPT WHERE NECESSARY TO CONTROL ACCESS AND/OR TO PROVIDE PEDESTRIAN REFUGE. ADDITIONAL ROADWAY AND ROW WIDTH MAY BE REQUIRED.

WHERE USED: THESE SPECIFICATIONS MAY BE USED FOR ESTATE TYPE DEVELOPMENTS GROSS DENSITY ≤ 2 DWELLING UNITS / ACRE OR WITHIN SEPARATOR OR TRANSITION AREAS AS RECOMMENDED IN OTHER STUDIES ADOPTED BY LOCAL ENTITIES.

DESIGN SPEED: ARTERIAL 45 MPH; COLLECTOR 40 MPH; LOCAL 30 MPH

POSTED SPEED: ARTERIAL 40 MPH; COLLECTOR 35 MPH; LOCAL 25 MPH

ACCESS: NO LIMIT.

CONTINUITY: UNLIMITED.

FENCES: NONE.

LANDSCAPING: NATIVE GRASS.

<u>DRAINAGE MAINTENANCE:</u> MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE ADJACENT PROPERTY OWNER OR HOA

CURB AND GUTTER: NONE.

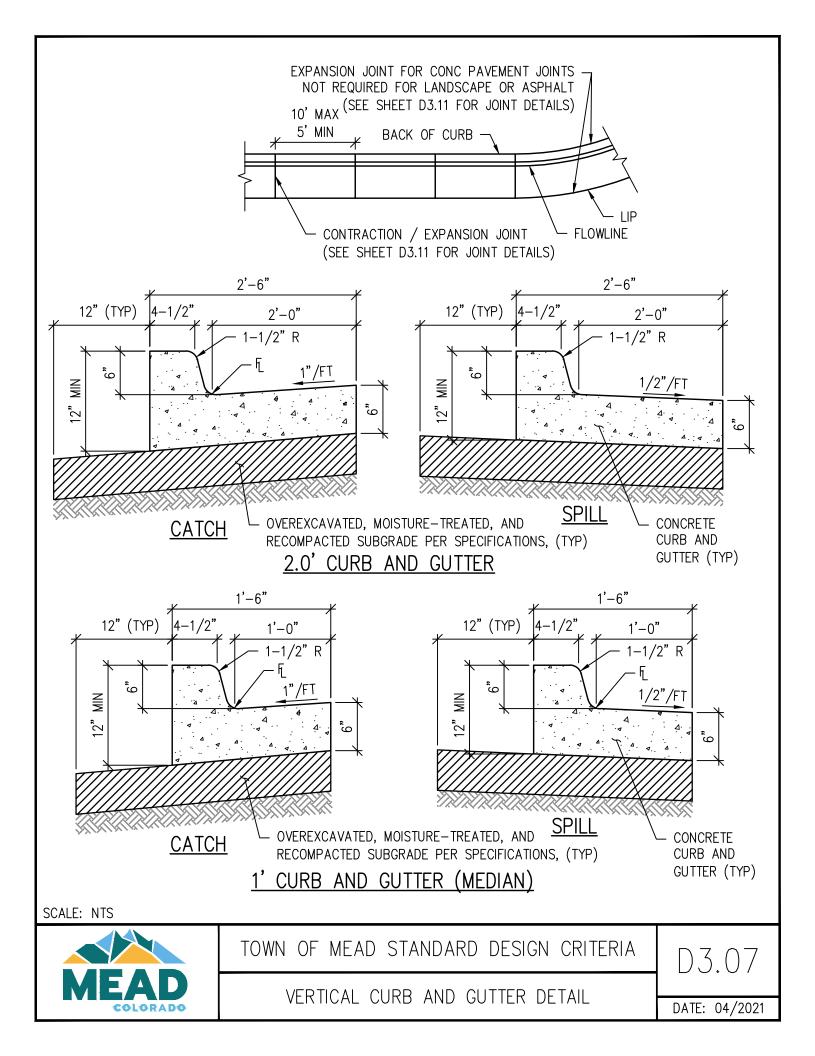
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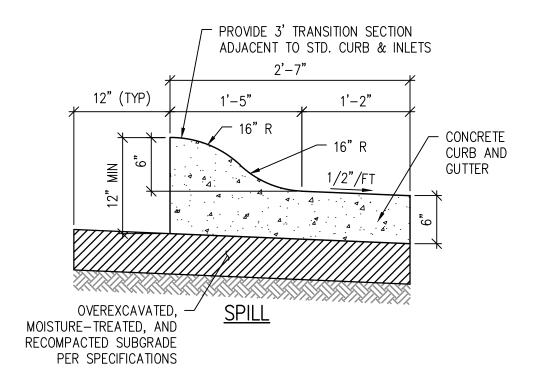


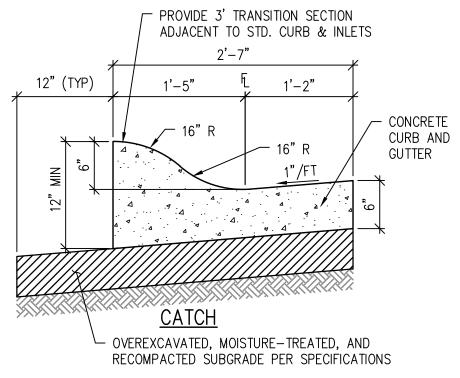
TOWN OF MEAD STANDARD DESIGN CRITERIA

RURAL ROAD

D3.06





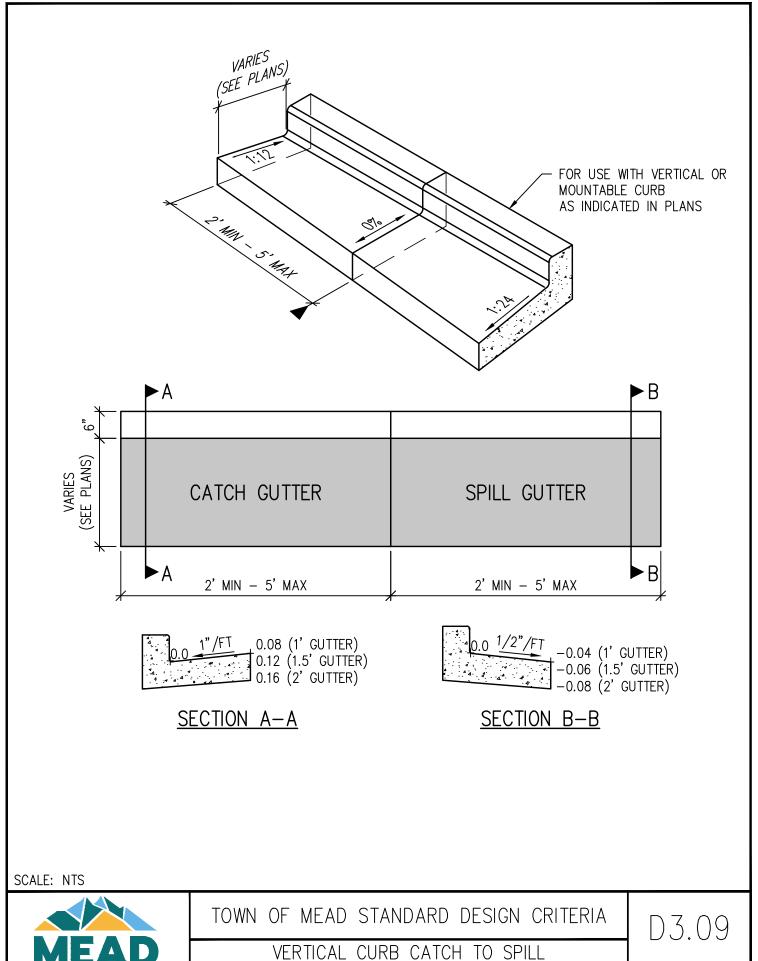




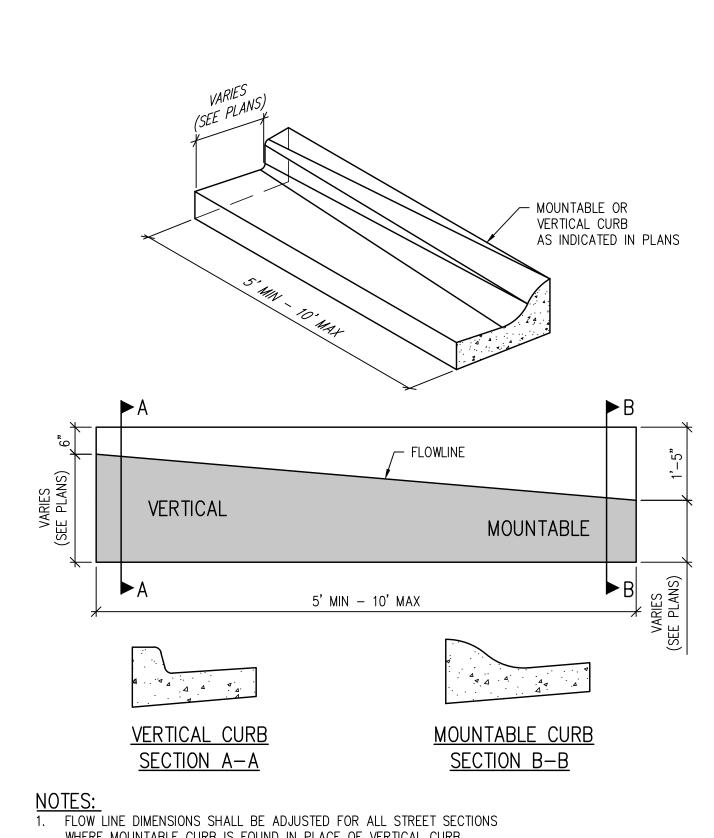
TOWN OF MEAD STANDARD DESIGN CRITERIA

MOUNTABLE CURB AND GUTTER DETAIL

D3.08



TRANSITION DETAIL



WHERE MOUNTABLE CURB IS FOUND IN PLACE OF VERTICAL CURB.

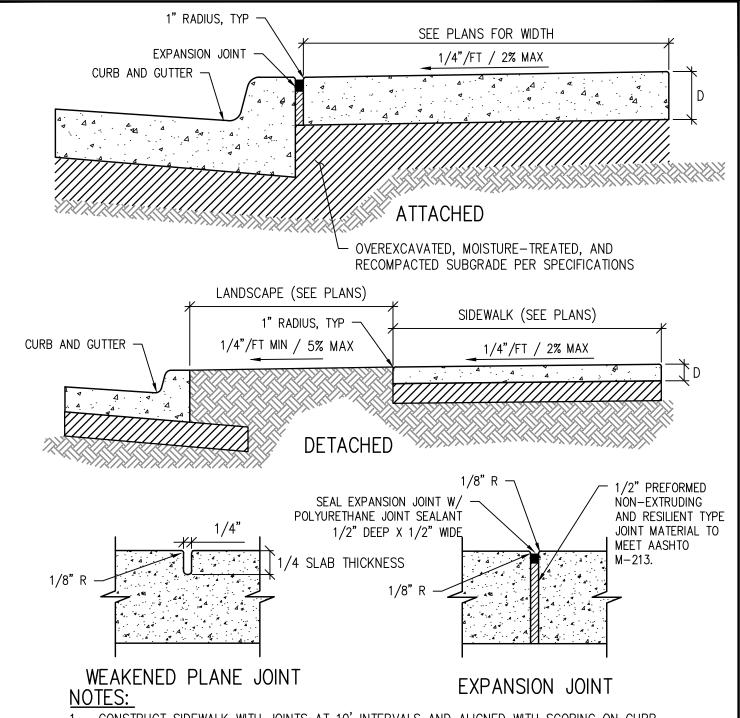
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TOWN OF MEAD STANDARD DESIGN CRITERIA

VERTICAL TO MOUNTABLE CURB TRANSITION DETAIL

D3.10



- 1. CONSTRUCT SIDEWALK WITH JOINTS AT 10' INTERVALS AND ALIGNED WITH SCORING ON CURB
- 2. EXPANSION JOINTS SHALL BE INSTALLED WHEN ABUTTING EXISTING CONCRETE OR FIXED STRUCTURE AND BE EVERY 200' ON CENTER, MAX.
- 3. EXPANSION JOINT MATERIAL SHALL BE 1/2" THICK AND SHALL EXTEND THE FULL DEPTH OF CONTACT SURFACE.
- 4. CONCRETE DEPTH "D"
 - −6" MIN.
 - -8" MIN. AT COMMERCIAL DRIVE CROSSINGS



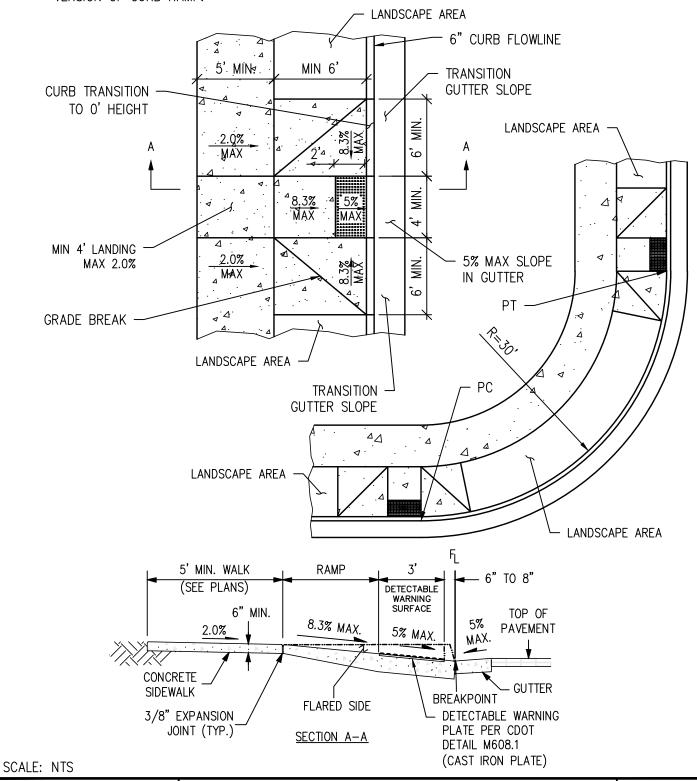
TOWN OF MEAD STANDARD DESIGN CRITERIA

SIDEWALK AND JOINT DETAIL

D3.11



- DIRECTIONAL RAMPS TO BE USED FOR INTERSECTIONS WITH A CLASS ABOVE LOCAL—LOCAL.
- REFER TO CDOT DETAIL M-608-1 FOR NON-MODIFIED VERSION OF CURB RAMP.

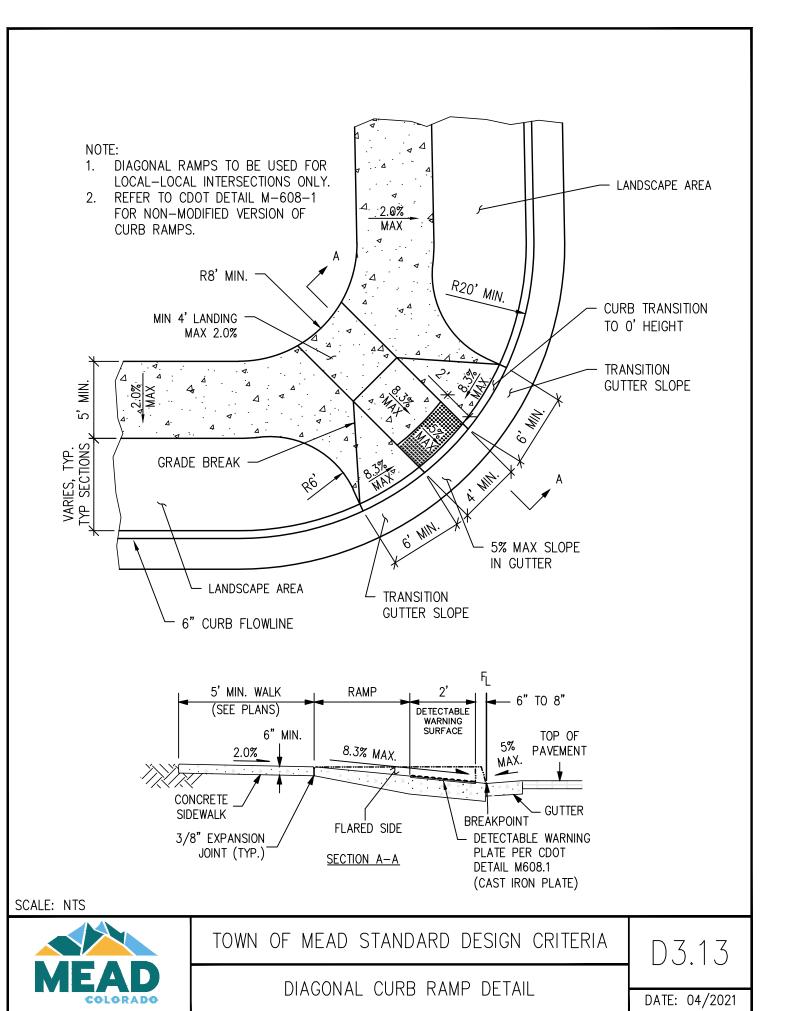


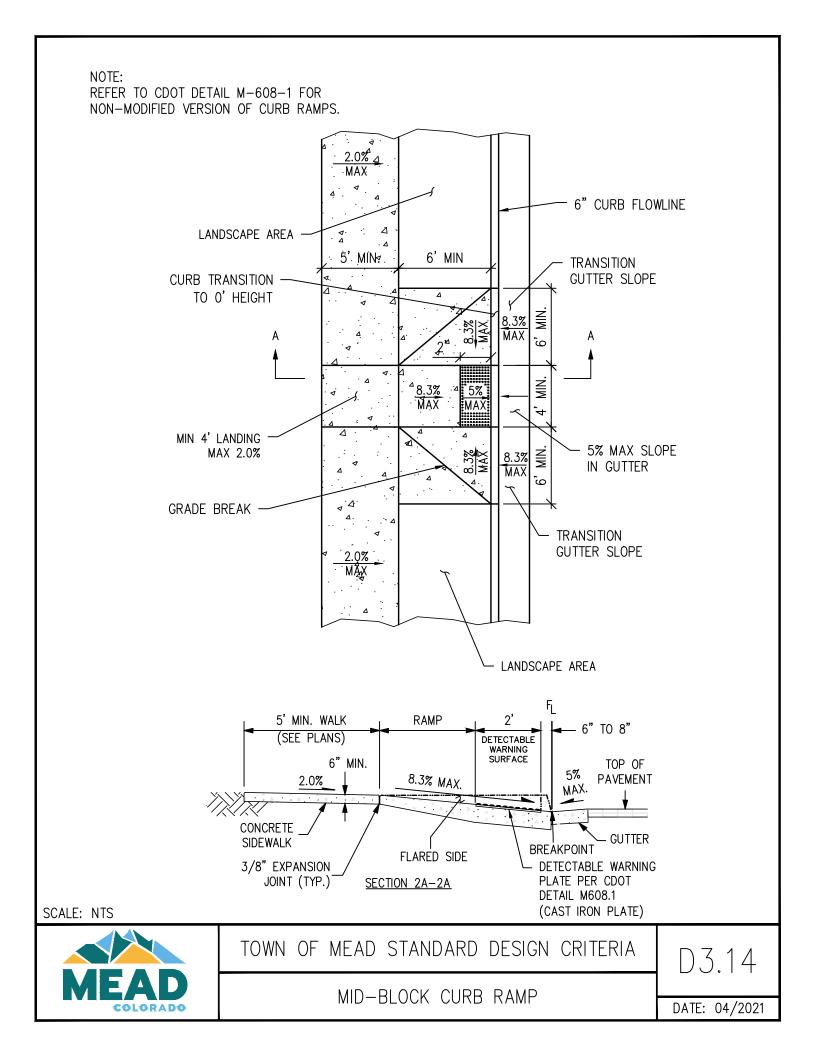
MEAD

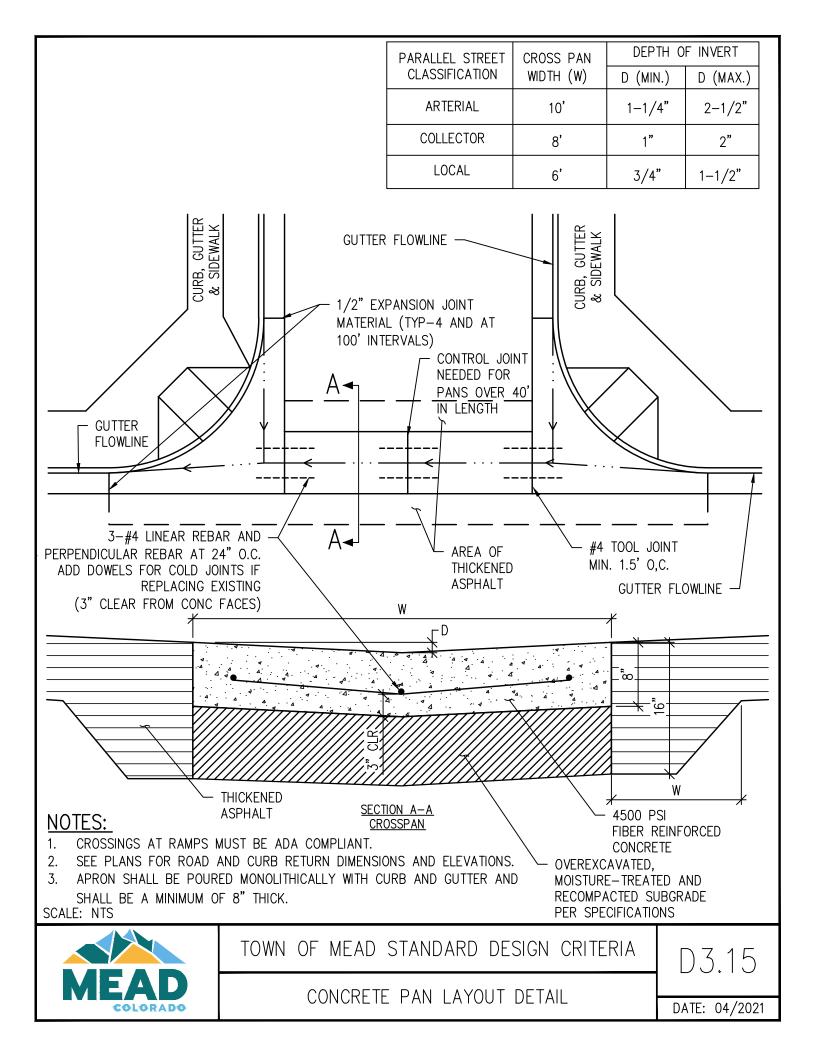
TOWN OF MEAD STANDARD DESIGN CRITERIA

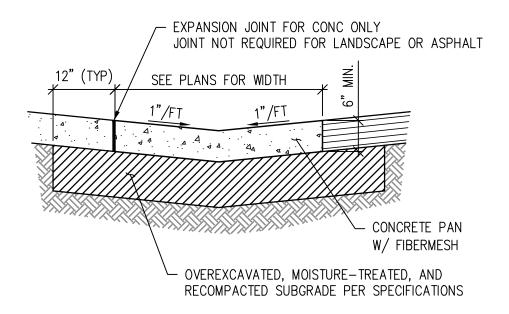
DIRECTIONAL CURB RAMP DETAIL

D3.12

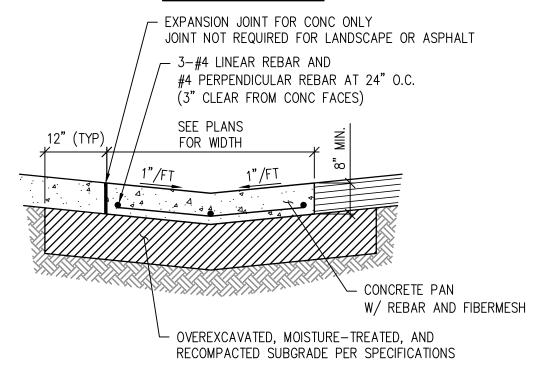








PAN IN LANDSCAPE AREAS



PAN IN TRAFFIC AREAS

NOTES:

- 1. USE REBAR REINFORCED PAN WHERE VEHICLE TRAFFIC IS EXPECTED.
- 2. SEE PLANS FOR INVERT ELEVATIONS AND HORIZONTAL CONTROLS.
- 3. SEE SHEET D3.11 FOR CONTRACTION AND EXPANSION JOINT DETAILS.
- 4. PROVIDE JOINT LAYOUT PLAN TO OWNER FOR APPROVAL PRIOR TO CONSTRUCTION. JOINTS TO MATCH ADJOINING SIDEWALK.

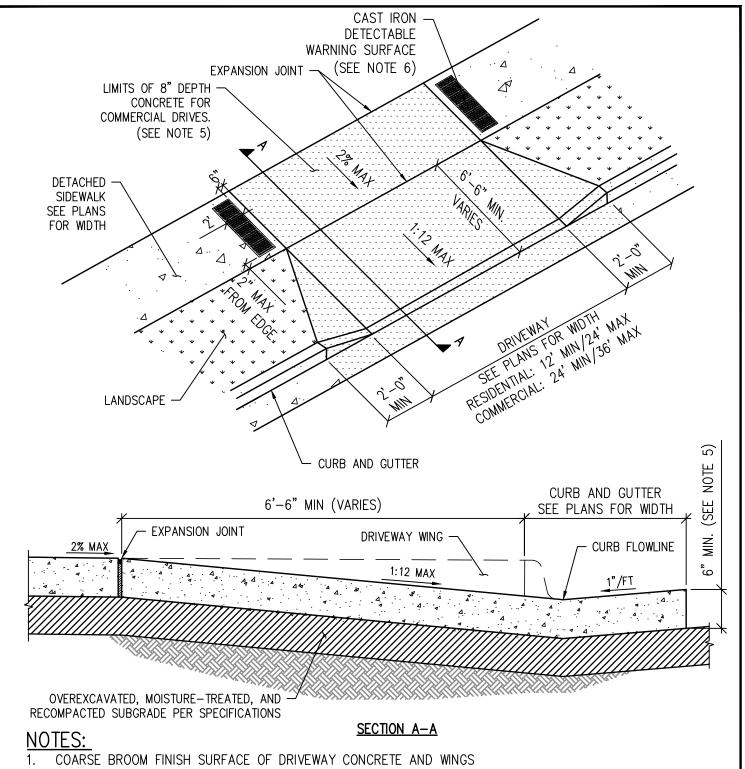
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TOWN OF MEAD STANDARD DESIGN CRITERIA

D3.16

CONCRETE PAN DETAIL



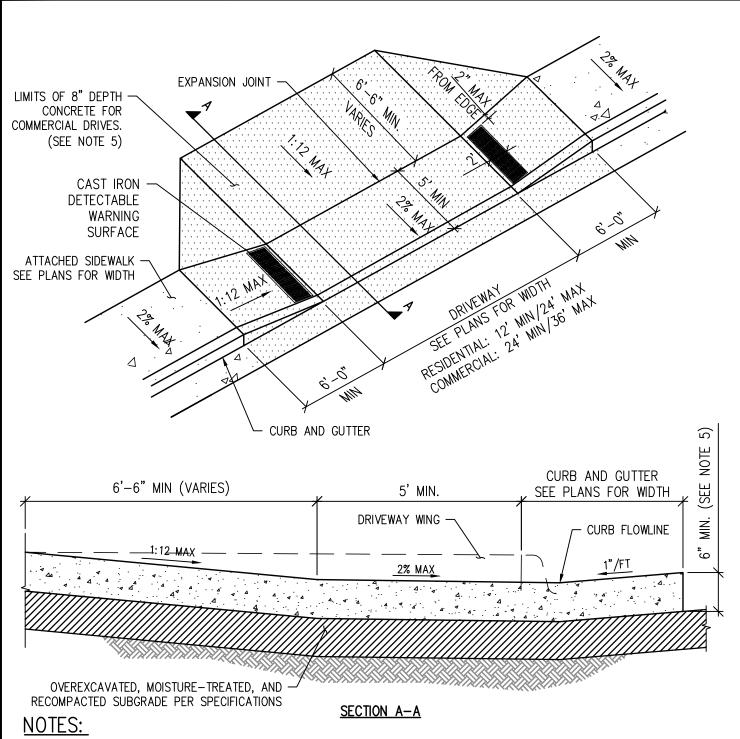
- 2. MAINTAIN NORMAL GUTTER FLOW AND PROFILE THROUGH RAMP AREA
- 3. PROVIDE 1/2" EXPANSION JOINT WHERE CONCRETE RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE
- 4. RAMP, CURB AND GUTTER CONSTRUCTION MAY BE POURED MONOLITHICALLY
- 5. COMMERCIAL DRIVEWAYS AND ADJACENT SIDEWALK SHALL BE A MINIMUM OF 8" THICK.
- 6. DETECTABLE WARNING SURFACE ONLY REQUIRED FOR HIGH VOLUME OR COMMERCIAL DRIVEWAYS.



TOWN OF MEAD STANDARD DESIGN CRITERIA

CONCRETE DRIVEWAY WITH DETACHED SIDEWALK DETAIL

D3.17



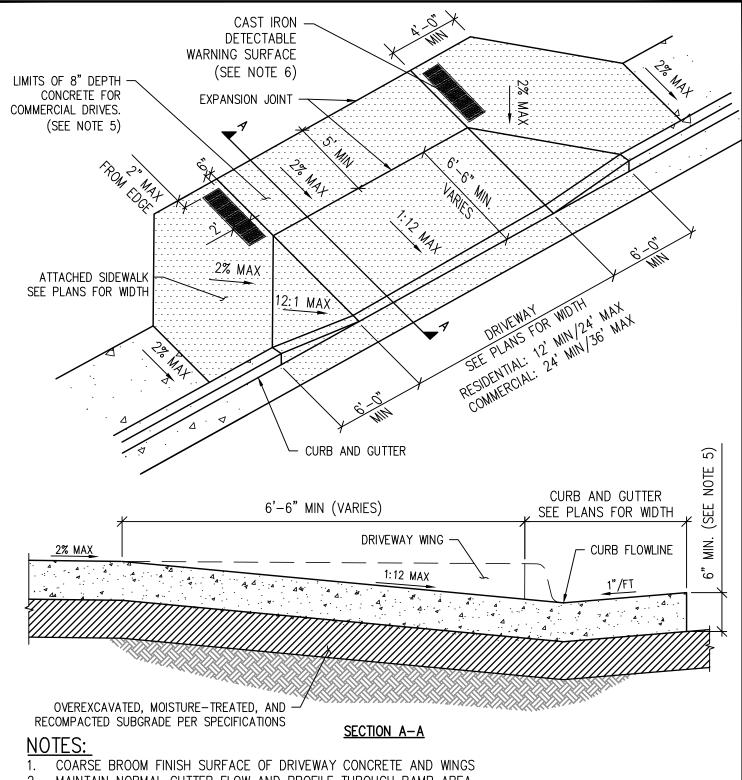
- COARSE BROOM FINISH SURFACE OF DRIVEWAY CONCRETE AND WINGS
- 2. MAINTAIN NORMAL GUTTER FLOW AND PROFILE THROUGH RAMP AREA
- 3. PROVIDE 1/2" EXPANSION JOINT WHERE CONCRETE RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE
- 4. RAMP, CURB AND GUTTER CONSTRUCTION MAY BE POURED MONOLITHICALLY
- COMMERCIAL DRIVEWAYS AND ADJACENT SIDEWALK SHALL BE A MINIMUM OF 8" THICK.
- 6. DETECTABLE WARNING SURFACE ONLY REQUIRED FOR HIGH VOLUME OR COMMERCIAL DRIVEWAYS



TOWN OF MEAD STANDARD DESIGN CRITERIA

CONCRETE DRIVEWAY WITH ATTACHED WALK DETAIL

D3.18A



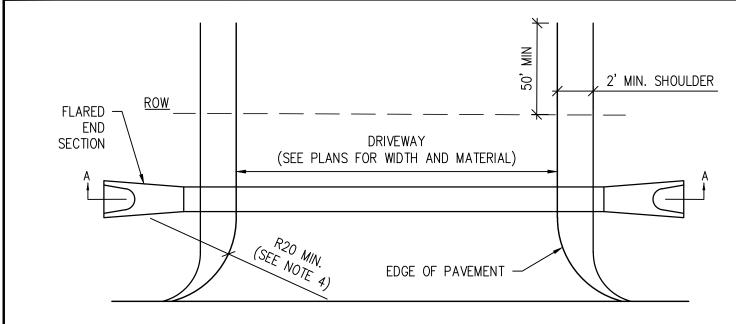
- 2. MAINTAIN NORMAL GUTTER FLOW AND PROFILE THROUGH RAMP AREA
- 3. PROVIDE 1/2" EXPANSION JOINT WHERE CONCRETE RAMP JOINS ANY RIGID PAVEMENT OR STRUCTURE
- 4. RAMP, CURB AND GUTTER CONSTRUCTION MAY BE POURED MONOLITHICALLY
- 5. COMMERCIAL DRIVEWAYS AND ADJACENT SIDEWALK SHALL BE A MINIMUM OF 8" THICK.
- DETECTABLE WARNING SURFACE ONLY REQUIRED FOR HIGH VOLUME OR COMMERCIAL DRIVEWAYS



TOWN OF MEAD STANDARD DESIGN CRITERIA

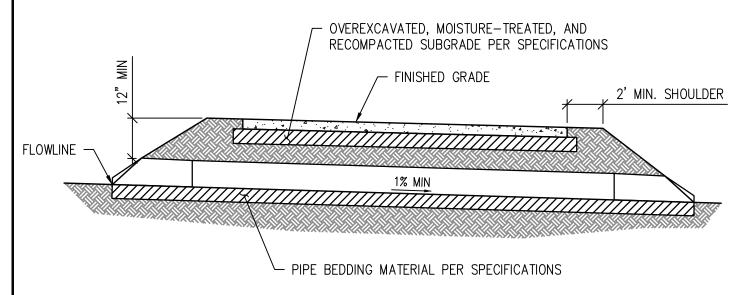
CONCRETE DRIVEWAY WITH ATTACHED WALK DETAIL

D3.18B



ROADWAY

PLAN VIEW



SECTION A-A

NOTES:

- 1. DRIVEWAY SHALL BE ASPHALT OR CONCRETE AND SHALL EXTEND A MIN OF 50' BEHIND ROW
- 2. A FLARED END SECTION IS REQUIRED AT EACH END OF PIPE. PIPE SHALL BE A MINIMUM OF 18" IN DIAMETER.
- 3. DITCH SIDE SLOPES SHALL BE A MAX OF 4:1
- 4. DRIVEWAY RADIUS SHALL BE 50' MIN WHERE LARGE TRUCK TRAFFIC IS ANTICIPATED.

DRIVE WIDTH	MIN	MAX	CULVERT MATERIAL
RESIDENTIAL	20'	24'	RCP OR CMP
COMMERCIAL	24'	36'	RCP ONLY

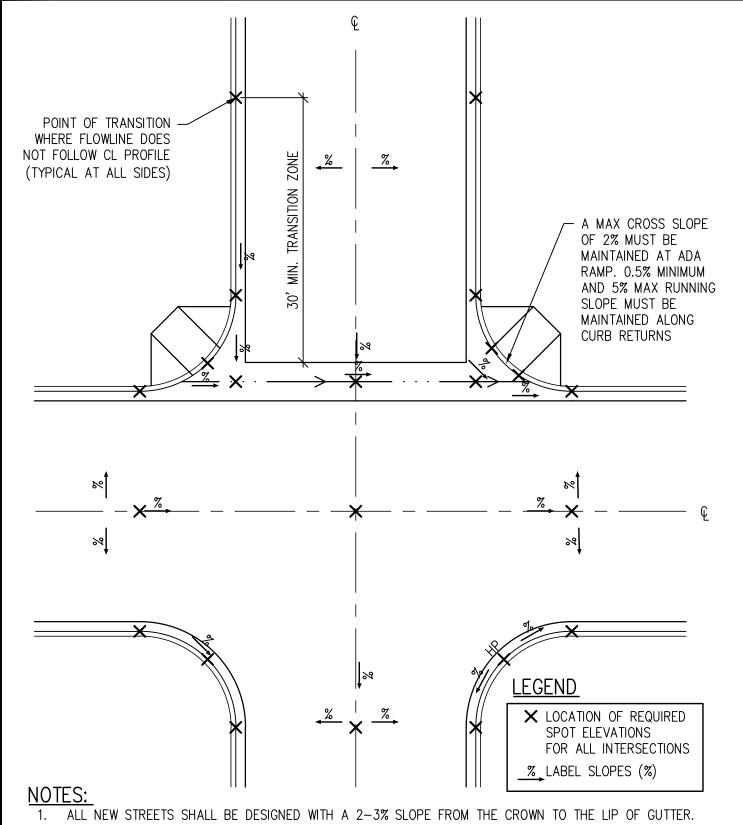
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TOWN OF MEAD STANDARD DESIGN CRITERIA

D3.19

DRIVEWAY DETAIL (RURAL ROAD ONLY)



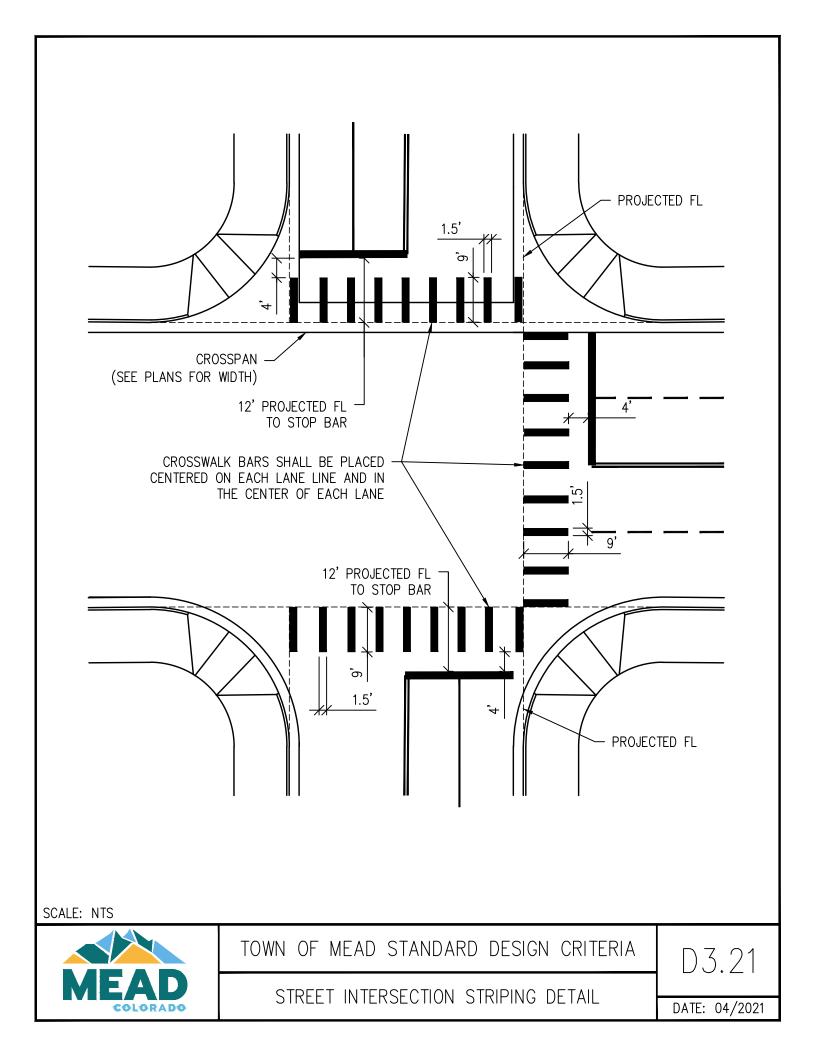
- VARIANCES FROM THE TYPICAL CROSS SLOPE (2%) WILL BE REVIEWED ON A CASE BY CASE BASIS.
- ALL PUBLIC IMPROVEMENT PLANS SHALL DEPICT THE REQUIRED MINIMUM INFORMATION AS SHOWN ABOVE.

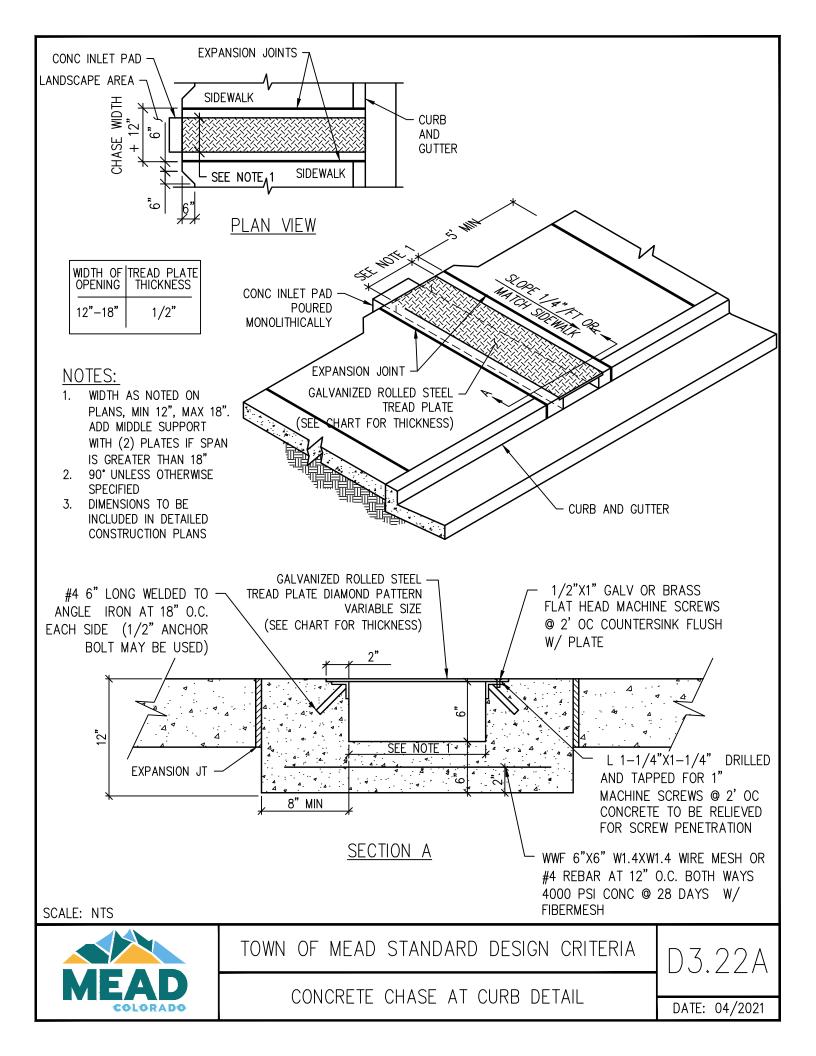


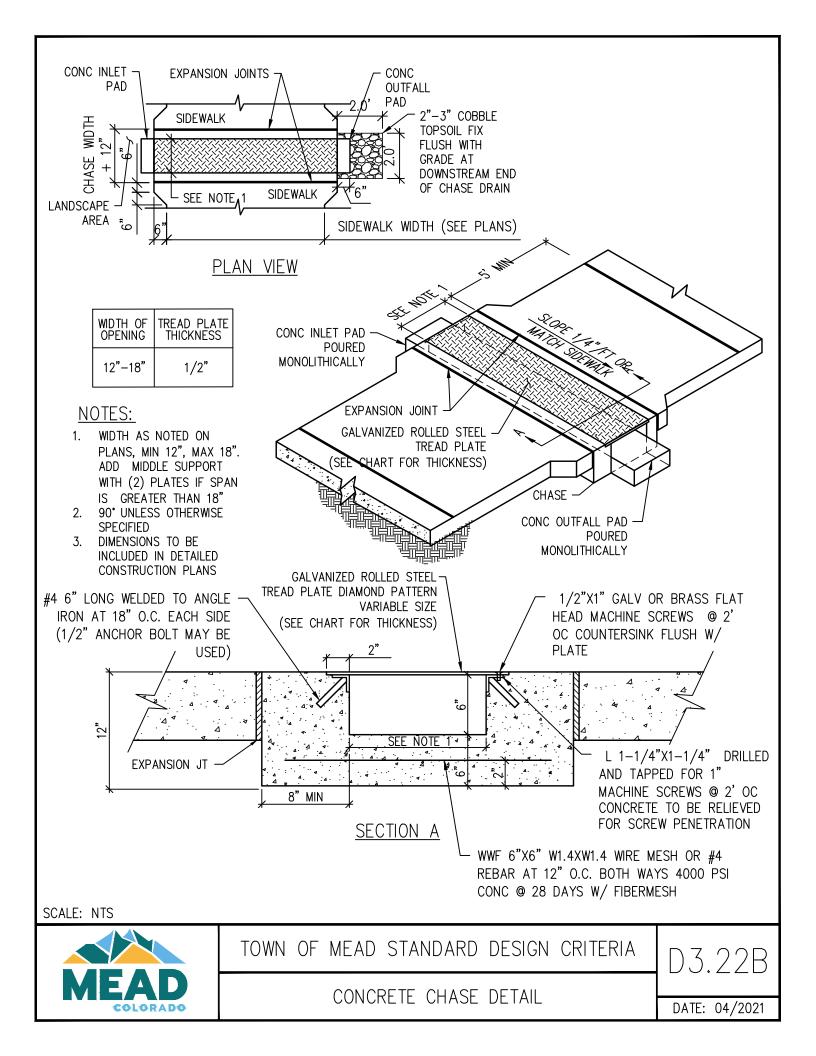
TOWN OF MEAD STANDARD DESIGN CRITERIA

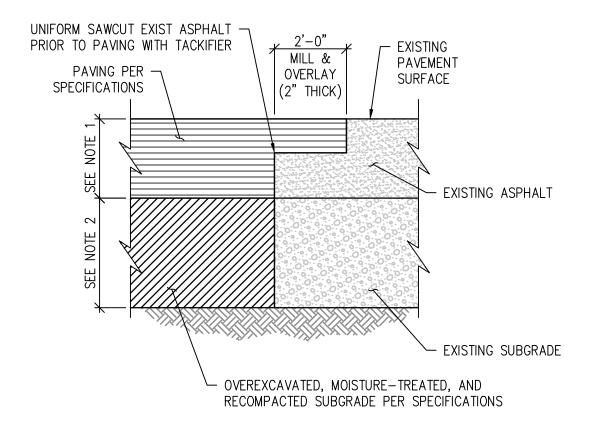
STREET INTERSECTION DETAIL

D3.20









NOTE:

- 1. MATCH EXISTING DEPTH +1". (REFER TO STANDARDS FOR MINIMUM ASPHALT DEPTHS BASED ON STREET CLASSIFICATION, WHICHEVER IS GREATER)
- 2. MATCH EXIST SUBGRADE DEPTH UNLESS OTHERWISE SPECIFIED (MIN 12")
- 3. PATCH LIMITS PER D23.23B AND D23.23C.

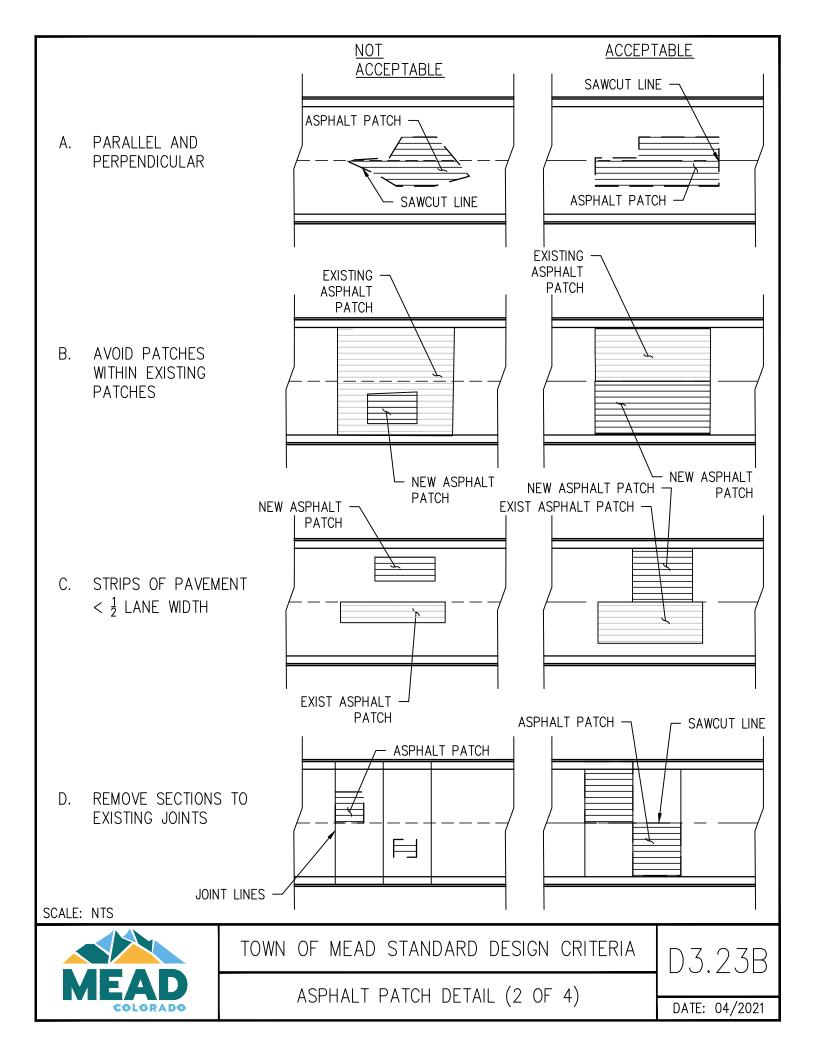
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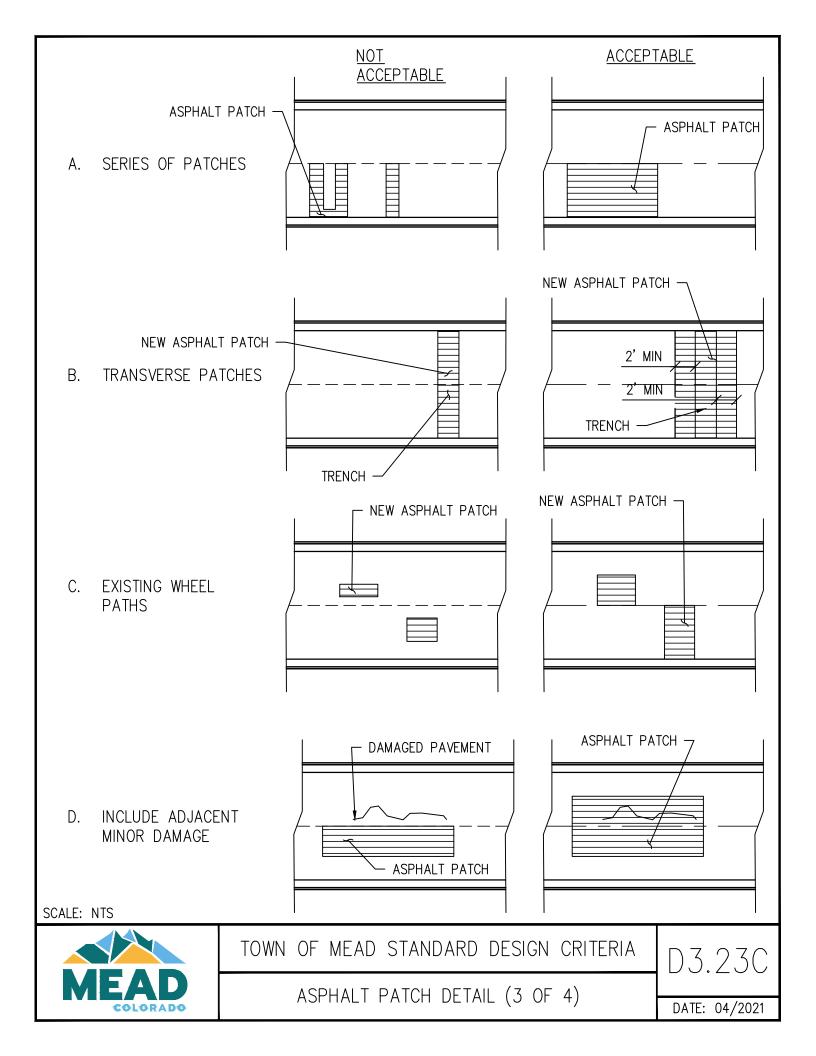


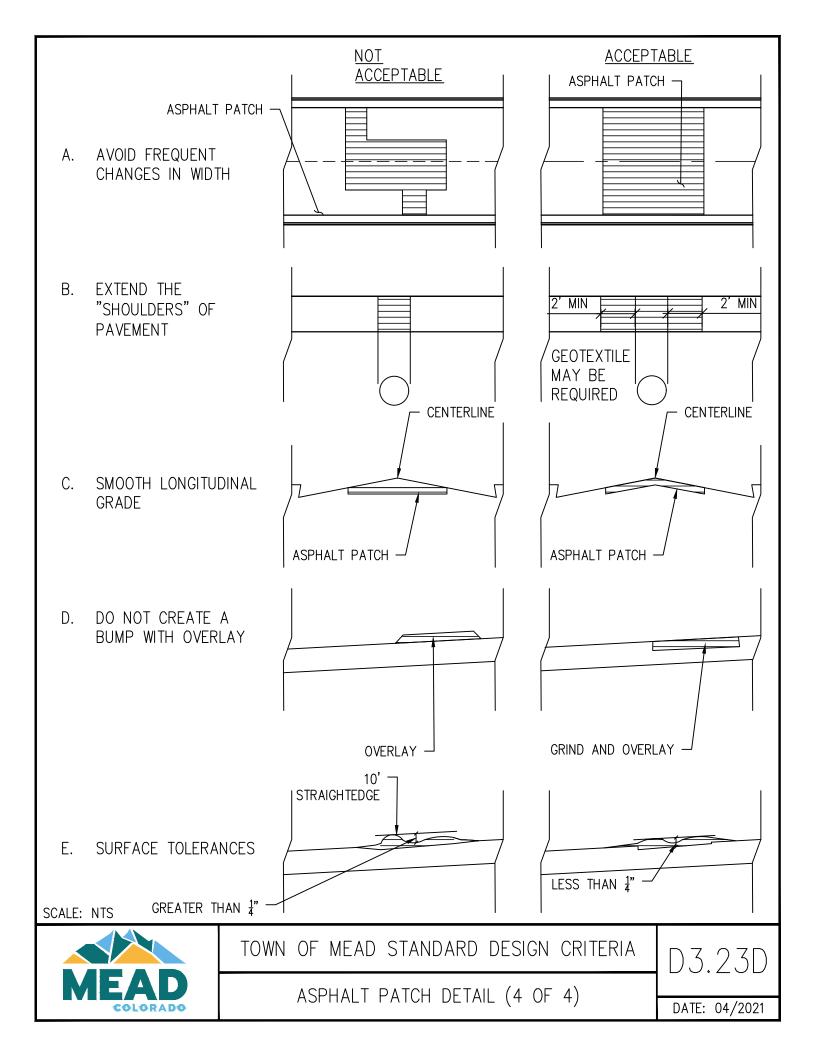
TOWN OF MEAD STANDARD DESIGN CRITERIA

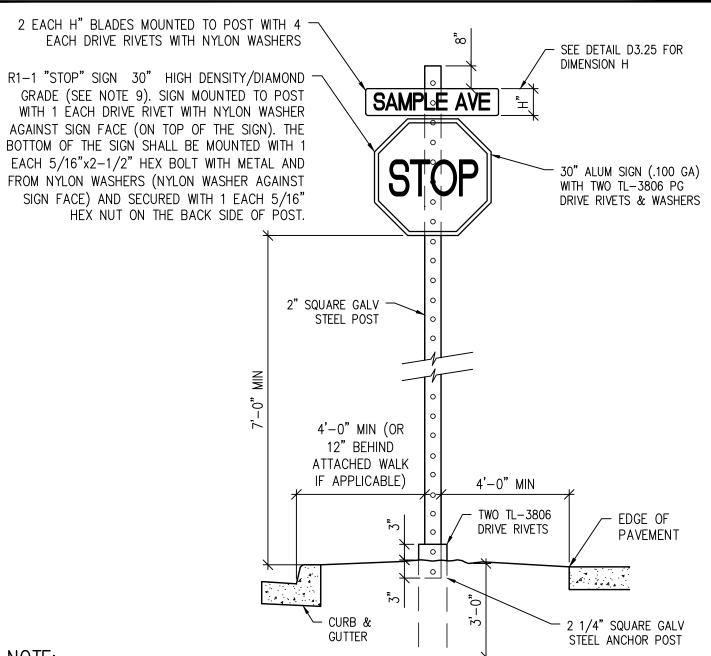
ASPHALT PATCH DETAIL (1 OF 4)

D3.23A









NOTE:

- SIGNS SHALL CONFORM TO MUTCD AND CDOT STANDARDS FOR MATERIAL AND PLACEMENT.
- 2. CLASS 1 SIGNS SHALL BE 0.100 GAUGE ALUM.
- 3. SIGNS WITH ARROW MAY REQUIRE SPECIAL PLACEMENT OR ROTATION. COORDINATE WITH ENGINEER.
- 4. ATTACH SIGN PANELS TIGHTLY TO THE POST AND USE OVERSIZED WASHERS TO KEEP THE SIGN FROM BREAKING LOOSE FROM THE POST WHEN HIT BY A VEHICLE.
- SIGN PANELS SHOULD BE MOUNTED A MINIMUM OF 7' ABOVE THE PAVEMENT OR GROUND.
- 6. SIGNS LARGER THAN 36" IN LENGTH OR WIDTH REQUIRE WIND BRACING AND SPECIAL POST DESIGN.
- 7. ANCHOR STUB AND POST ARE PERFORATED SQUARE STEEL TUBE.
- 8. ALL "NO PARKING" SIGNS SHALL BE INSTALLED AT 45° FROM FLOWLINE.
- 9. STOP SIGNS SHALL BE A MINIMUM 36" SIZE FOR ALL STREETS ABOVE A LOCAL RESIDENTIAL STREET CLASSIFICATION PER MUTCD REQUIREMENTS.

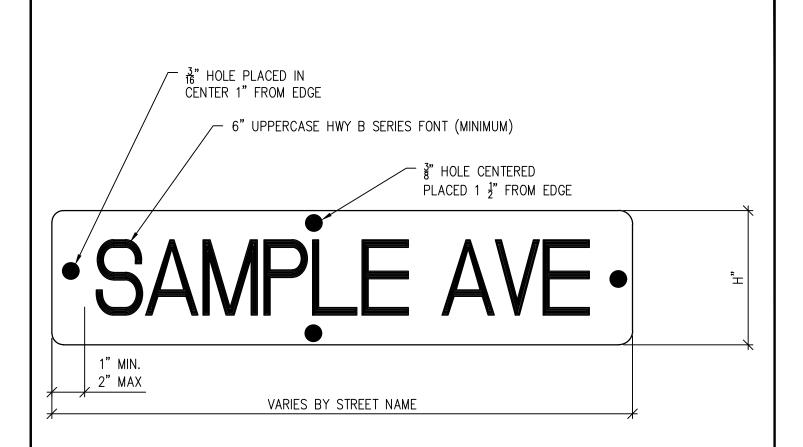
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TOWN OF MEAD STANDARD DESIGN CRITERIA

D3.24

SIGN POST DETAIL



STREET CLASSIFICATION	Н	LETTER SIZE
LOCAL-COLLECTOR	9"	6"
ARTERIAL	12"	8"

NOTE:

- 1. STREET NAMES AND SUFFIX MUST BE 6" MIN., CAPITAL WHITE LETTERS, FHWA SERIES "B" (PRIVATE STREETS SHALL HAVE GREEN LETTERS).
- 2. OVERALL SIGN LENGTH SHALL VARY BASED ON LENGTH OF STREET NAME.
- 3. ALL SIGN LETTERING AND GREEN BACKGROUND MATERIAL MUST BE AT LEAST DIAMOND GRADE SHEETING PER FHWA (PRIVATE STREET SIGNS SHALL HAVE WHITE BACKGROUNDS). NO SILK SCREENED SIGNS WILL BE PERMITTED.
- 4. STREET NUMBERS SHALL ALWAYS POINT TO HIGHER BLOCK NUMBER.
- 5. ALL STREET NAME SIGNS SHALL BE RETROREFLECTIVE.

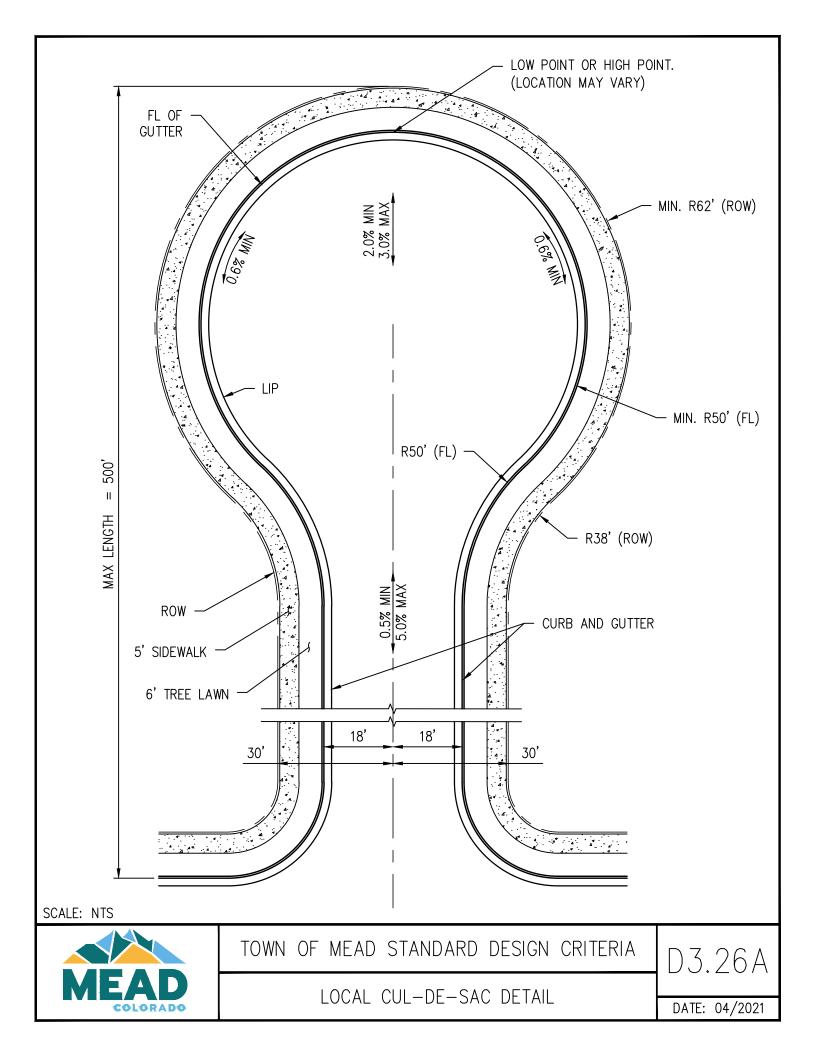
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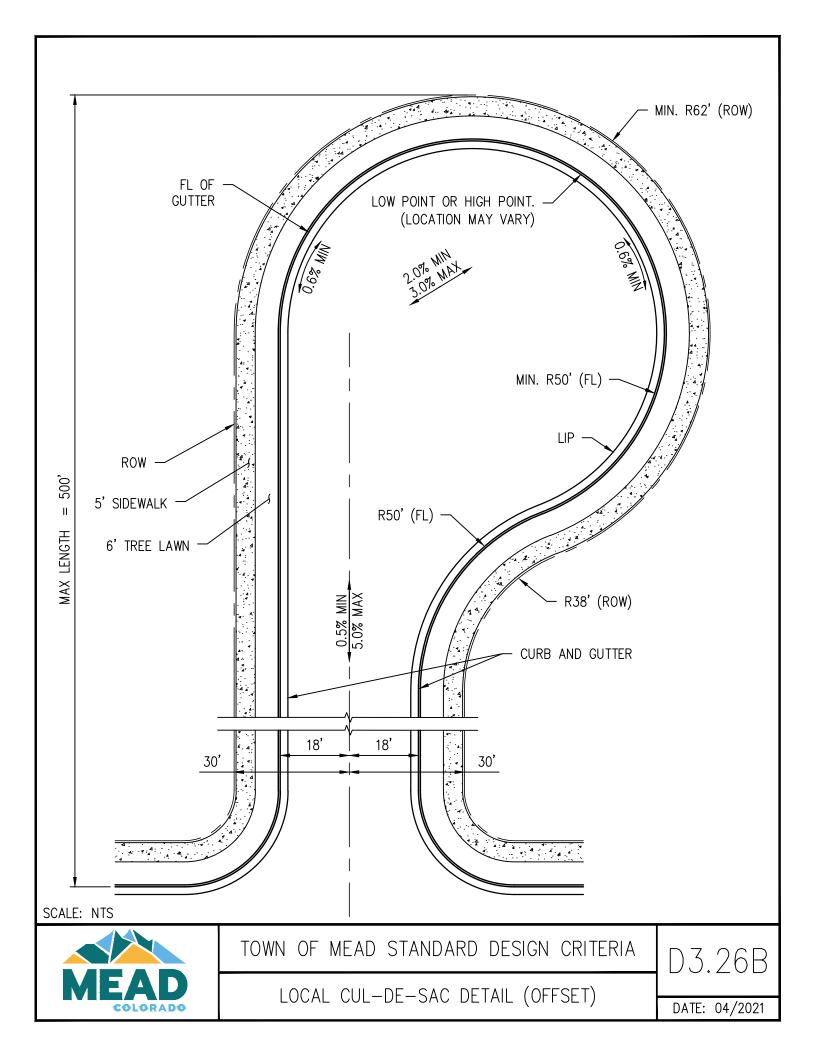


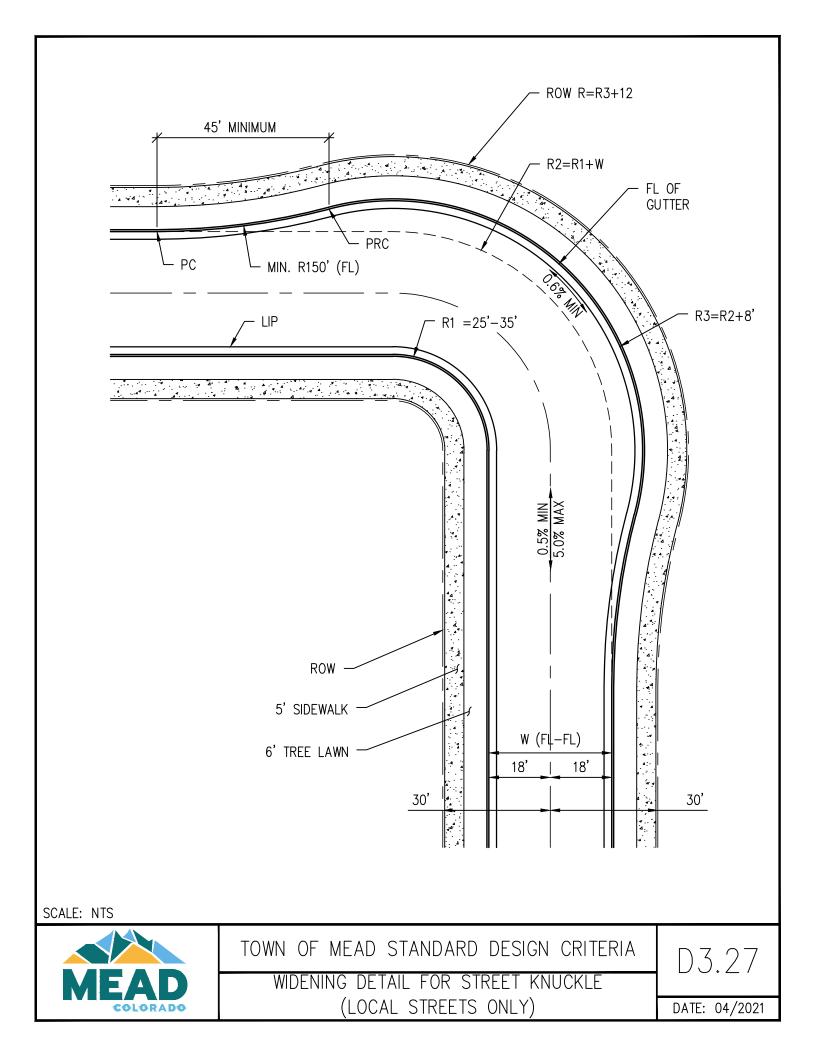
TOWN OF MEAD STANDARD DESIGN CRITERIA

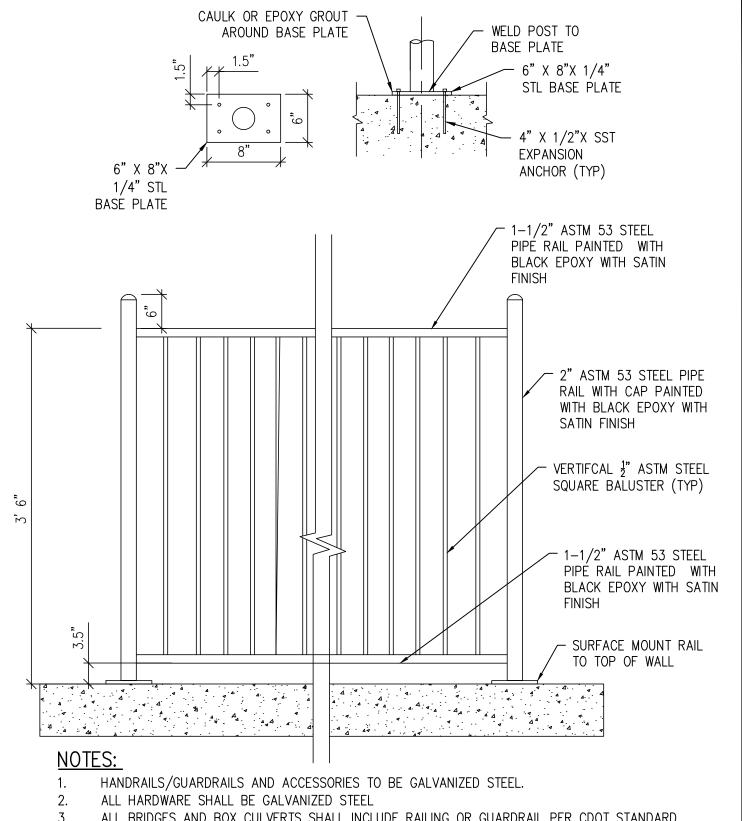
D3.25

STREET NAME SIGN









- 3. ALL BRIDGES AND BOX CULVERTS SHALL INCLUDE RAILING OR GUARDRAIL PER CDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (CDOT S&S).
- 4. GUARDRAIL SHALL BE DESIGNED TO INCLUDE ARCHITECTURAL FEATURES. FINAL DESIGN SHALL BE SCALE: NTS SUBMITTED TO TOWN ENGINEER FOR APPROVAL.



TOWN OF MEAD STANDARD DESIGN CRITERIA

D3.28

GUARDRAIL

TOWN OF MEAD GENERAL CONSTRUCTION NOTES - SANITARY

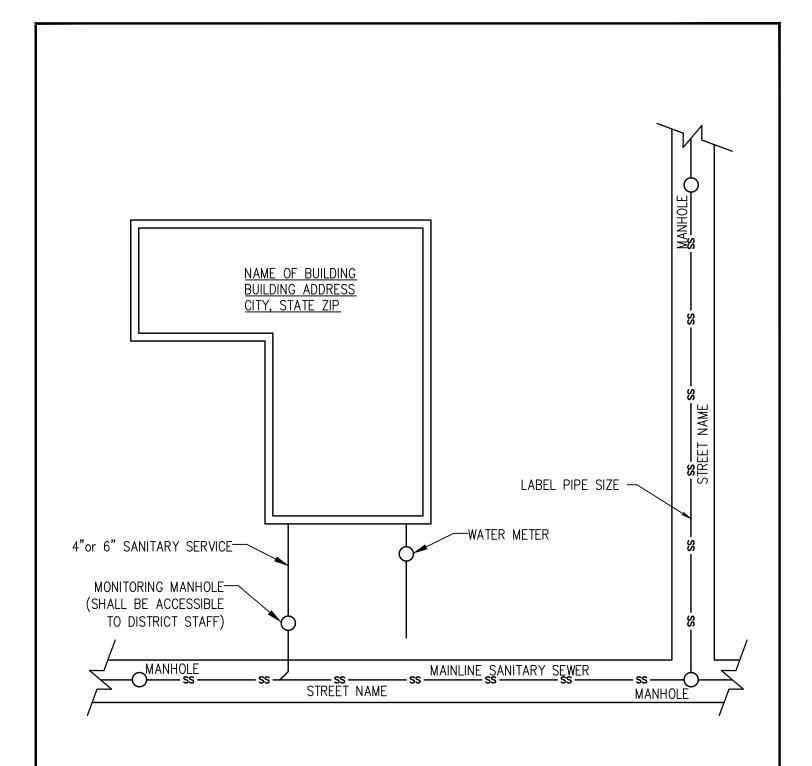
- 1. DISTRICT SHALL REFER TO THE TOWN OF MEAD IN THESE NOTES.
- 2. DISTRICT'S ACCEPTANCE OF THESE PLANS IS VALID FOR ONE YEAR.
- 3. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE DISTRICT STANDARDS.
- 4. CONTRACTOR TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO COMMENCING ANY CONSTRUCTION.
- 5. THE CONTRACTOR SHALL NOTIFY THE DISTRICT A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO STARTING CONSTRUCTION OR PRIOR TO RESUMING CONSTRUCTION AFTER A BREAK.
- 6. SANITARY SEWER SHALL BE POLYVINYL CHLORIDE (PVC) PIPE, ASTM D3034, SDR-26, SDR-35, OR AS INDICATED ON THE PLANS.
- 7. ALL CONCRETE SHALL BE MINIMUM 4000 PSI AT 28 DAY STRENGTH.
- 8. MAINTAIN A MINIMUM OF 10 FEET HORIZONTAL SEPARATION OUTSIDE DIAMETER TO OUTSIDE DIAMETER BETWEEN WATER LINES AND ALL SEWER LINES AND MANHOLES.
- 9. ALL SEWER MAINS CROSSING WATER MAINS WITH LESS THAN 18 INCHES OF SEPARATION SHALL BE ENCASED IN CONCRETE.
- 10. RIM ELEVATIONS SHOWN ARE APPROXIMATE AND SHOULD NOT BE TAKEN AS FINAL. ALL MANHOLES SHALL BE FINAL ADJUSTED AFTER PAVING SUCH THAT THE RIM IS ¼ TO ½ INCH BELOW FINISHED ASPHALT. MANHOLES IN UNPAVED AREAS SHALL BE SET SO THAT THE RIM IS 0.5' ABOVE FINISHED GRADE. BURIED MANHOLES ALLOWED IN CULTIVATED FIELDS AS APPROVED BY TOWN ENGINEER. AS—BUILTS SHALL ALLOW FINAL NORTHING/EASTING AND RIM ELEVATION OF ALL BURIED MANHOLES.
- 11. INVERT (AS-BUILT) DATA SHALL BE COLLECTED BY A LICENSED SURVEYOR ON EACH PIPE INVERT IN A MANHOLE. CENTER OF MANHOLE SURVEYING IS NOT ACCEPTABLE FOR SLOPE CALCULATIONS. RECORD DRAWINGS (AS-BUILTS) MUST DEMONSTRATE CONFORMANCE TO DISTRICT STANDARDS.
- 12. THE CONTRACTOR SHALL HAVE A SET OF APPROVED PLANS ON SITE AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING ACTUAL RECORD DRAWING DIMENSIONS AND DISTANCES AS WELL AS SERVICE LOCATIONS ON THESE PLANS AND SUBMITTING THEM TO THE ENGINEER FOR PREPARATION OF RECORD DRAWINGS. THESE DRAWINGS SHALL BE KEPT CURRENT AT ALL TIMES.
- 13. BEFORE ANY CONSTRUCTION COMMENCES, A PLUG SHALL BE INSTALLED TO PREVENT DRAINAGE THROUGH THE NEW SEWER LINE FROM ENTERING THE EXISTING SEWER LINE. THIS PLUG WILL BE INSTALLED IN THE MANHOLE, WHICH CONNECTS NEW WORK WITH THE EXISTING AND MAY NOT BE REMOVED UNTIL CONDITIONAL ACCEPTANCE.
- 14. UNDERDRAINS, IF INSTALLED, ARE THE RESPONSIBILITY OF THE DEVELOPER. DISTRICT ASSUMES NO LIABILITY FOR ANY PORTION OF OR ANY DAMAGE CAUSED BY UNDERDRAINS. ABSOLUTELY NO PART OF AN UNDERDRAIN SYSTEM, INCLUDING CLEAN OUTS, WILL BE ALLOWED INSIDE OF SANITARY SEWER MANHOLES. ALL UNDERDRAINS SHALL BE INSTALLED BELOW THE SANITARY SEWER AND OFFSET TO THE SIDE. PIPE MATERIAL SHALL BE DIFFERENT COLOR THAN SANITARY SEWER.
- 15. NO SERVICE LATERALS SMALLER THAN 8 INCH IN DIAMETER SHALL ENTER MANHOLES.
- 16. SERVICE CROSSINGS OF CURB SHALL BE MARKED WITH A CUT "S" IN CURB FACE. PAINT IS NOT ACCEPTABLE. SERVICE SHALL BE EXTENDED INTO THE LOT A MINIMUM OF 10 FEET.
- 17. CONTRACTOR SHALL MARK THE END OF ALL SEWER SERVICES WITH A CARBONITE COMPOSITE UTILITY MARKER WITH MINIMUM OF FOUR FEET ABOVE GRADE, PAINTED GREEN
- 18. ALL PIPES SHALL HAVE SQUEEGEE (CDOT #8 BEDDING) UNLESS OTHERWISE SHOWN OR THE DISTRICT MAY APPROVE AN ALTERNATE BEDDING IN SPECIAL CASES.
- 19. PRIOR TO APPROVAL, ALL SANITARY SEWER PIPES SHALL BE PRESSURE-TESTED PER ASTM C924. ALL MANHOLES SHALL BE VACUUM-TESTED PER UNI-B-98.
- 20.PRIOR TO REMOVAL OF PLUGS AT MANHOLES, PIPE SHALL BE JET-CLEANED AND VACUUMED TO REMOVE DEBRIS AND VIDEOED. NOTICE SHALL BE GIVEN TO THE DISTRICT INSPECTOR ONE (1) WEEK PRIOR TO CLEANING. INSPECTOR MUST BE PRESENT DURING THE OPERATION. ONCE APPROVAL HAS BEEN GIVEN BY INSPECTOR, PLUGS MAY ONLY BE REMOVED AFTER INITIAL ACCEPTANCE BY THE DISTRICT.
- 21. THE FINAL RECORDED PLAT AND RECORDED ADDRESS PLAT SHALL BE PROVIDED TO THE DISTRICT FOR INITIAL ACCEPTANCE.
- 22.TWENTY (20) MONTHS AFTER CONSTRUCTION AND PRIOR TO THE EXPIRATION OF WARRANTY, THE DEVELOPER SHALL CAMERA/VIDEO THE SANITARY SEWER LINES AND PROVIDE A DVD TO THE DISTRICT FOR REVIEW.



TOWN OF MEAD STANDARD DESIGN CRITERIA

D4.01

GENERAL CONSTRUCTION NOTES



- COMMERCIAL AND RESIDENTIAL SANITARY SERVICE TO BE CONSTRUCTED IN A STRAIGHT THRU MONITORING MANHOLE, IF REQUIRED.
- 2. INDICATE SEWER SIZES (DIAMETERS).
- 3. INDICATE LOCATION OF SEWAGE FLOW METER, IF REQUIRED.
- 4. DETAIL OF MONITORING MANHOLE MUST BE SUBMITTED ON SEPARATE SHEET.

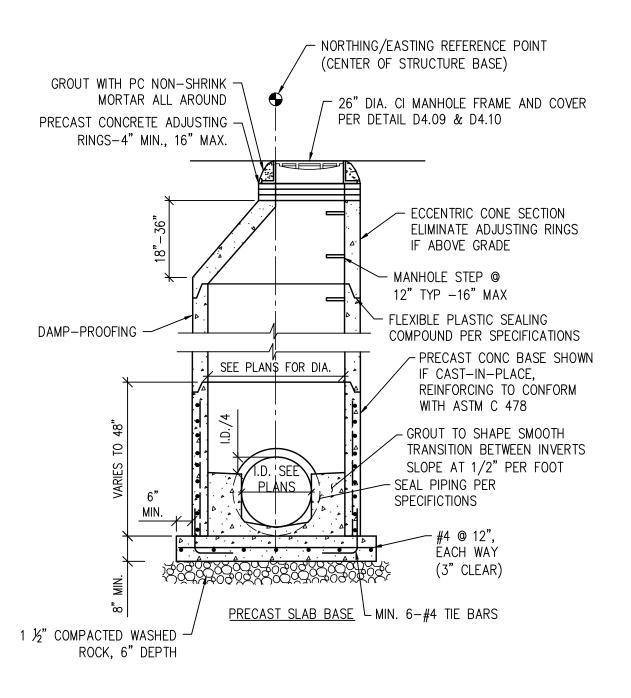
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TOWN OF MEAD STANDARD DESIGN CRITERIA

EXAMPLE SITE PLAN

D4.02



<u>NOTES:</u>

- 1. SHAPING FOR SMOOTH MANHOLE INVERTS MUST BE DONE BY FORMING OR SHAPING BASE CONCRETE.
- 2. BLOCK-OUTS WHEN APPROVED SHALL EXTEND A MAX OF 6" PAST MANHOLE OD AND BE SATISFACTORILY PLUGGED AND SEALED.
- 3. CONCRETE MANHOLES MAY BE POURED IN PLACE ONLY WITH PRIOR APPROVAL.
- 4. ALL MORTAR SHALL BE MIXED WITH A TYPE II CEMENT.
- 5. BENCH MUST HAVE A BRUSHED, NON-SKID SURFACE.

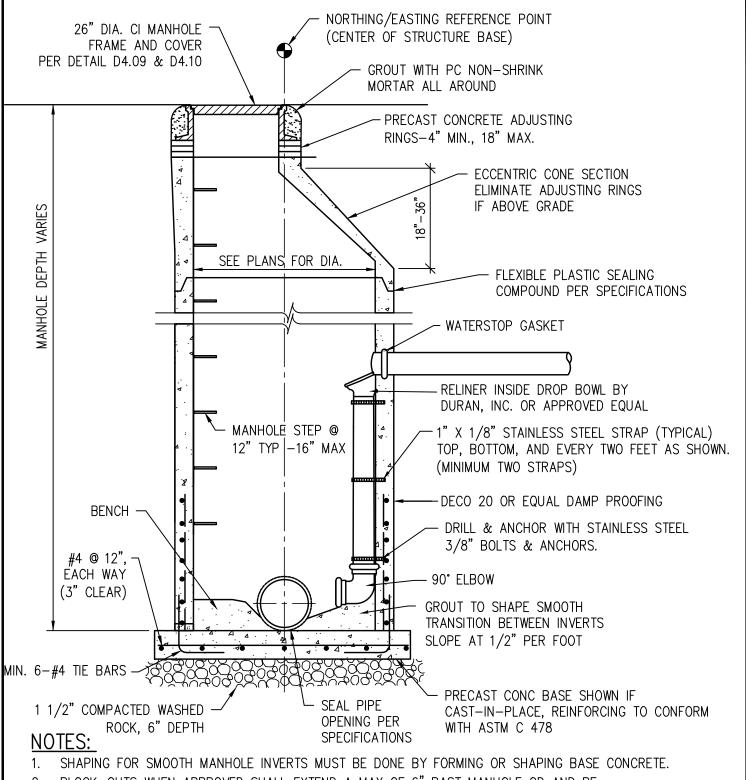
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TOWN OF MEAD STANDARD DESIGN CRITERIA

STANDARD SANITARY MANHOLE

D4.03



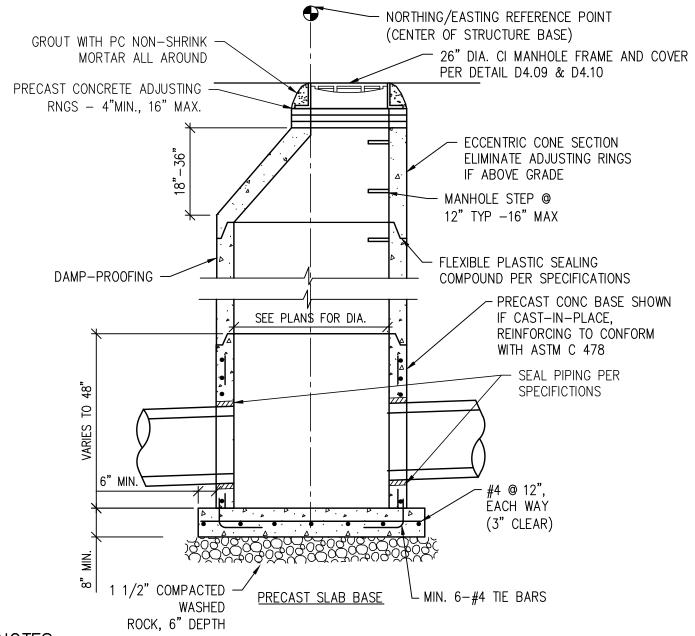
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- 4. ALL MORTAR SHALL BE MIXED WITH A TYPE II CEMENT.
- 5. BENCH MUST HAVE A BRUSHED, NON-SKID SURFACE.



TOWN OF MEAD STANDARD DESIGN CRITERIA

SANITARY DROP MANHOLE

D4.04



- MANHOLES SHALL BE SEALED WATERTIGHT. NO GROUT ALLOWED. MANHOLE EXTERIORS SHALL BE DAMP-PROOFED.
- 2. DROP THROUGH MANHOLE TO BE EQUAL TO SLOPE OF SURROUNDING PIPE. FOR FLUME INSTALLATIONS, FLUME MUST BE SET LEVEL.
- 3. MONITORING MANHOLE TO BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY, ON DISCHARGER'S PROPERTY. THE MANHOLE MUST BE SAFELY AND INDEPENDENTLY ACCESSIBLE FOR DISTRICT USE AT ALL TIMES.
- 4. FOR MANHOLE DEPTHS LESS THAN FOUR FEET FROM RIM TO TOP OF BENCH, VERTICAL MANHOLE BARRELS OR MINIMUM 30-INCH BY 30-INCH PRECAST BOX WITH PRECAST FLAT TOP SECTONS ARE REQUIRED.
- DESIGN AND LOCATION OF MONITORING MANHOLE SUBJECT TO DISTRICT APPROVAL.
- 6. THERE <u>SHALL NOT</u> BE ANY BENDS, DROP MANHOLES FLOW JUNCTIONS, CHANGES IN PIPE DIAMETER, ETC., WITHIN 25 PIPE DIAMETERS UPSTREAM OR DOWNSTREAM OF THE MANHOLE.

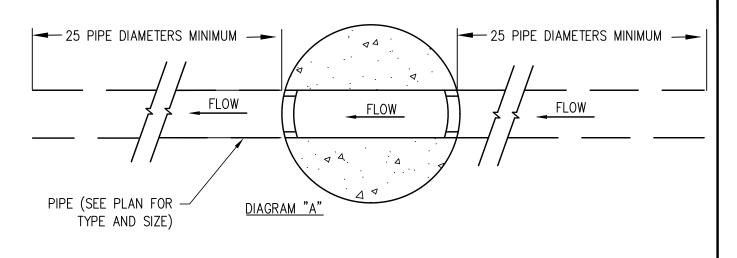
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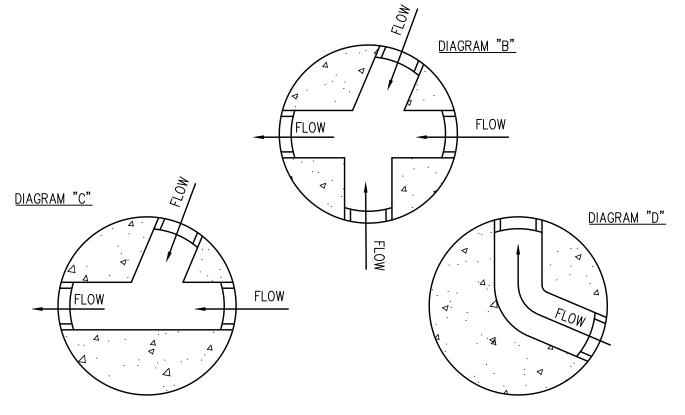


TOWN OF MEAD STANDARD DESIGN CRITERIA

D4.05

MONITORING SANITARY MANHOLE





- DIAGRAM "A" IS COMPATIBLE FOR THE INSTALLATION OF A FLOWMETER OR FLUME IN THE INVERT.
- 2. DIAGRAMS "B", "C", "D" ARE NOT SUITABLE FOR THE INSTALLATION OF A FLOW MEASURING DEVICE DUE TO THE LOCATION OF THE SIDE SEWERS OR A BEND IN THE INVERT CHANNEL.

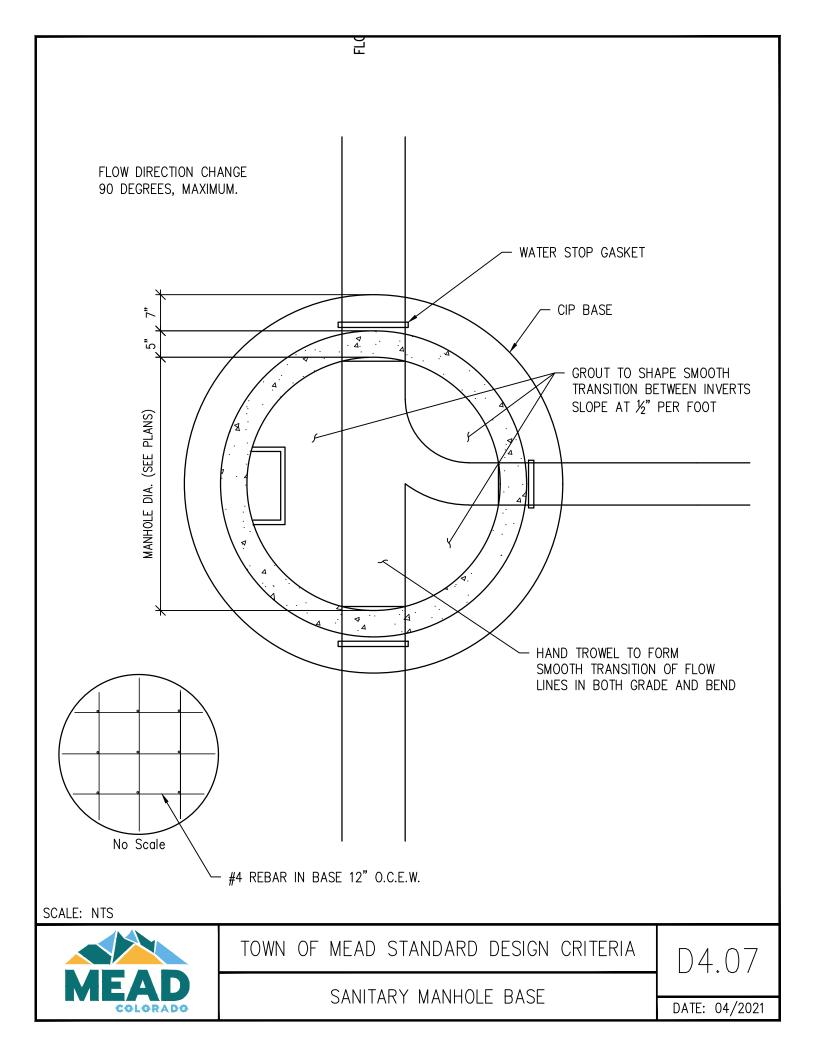
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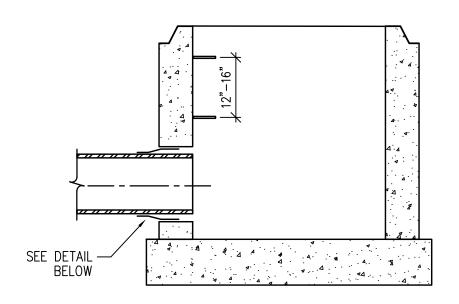


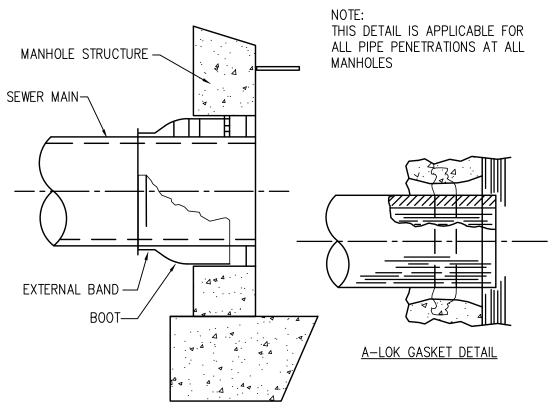
TOWN OF MEAD STANDARD DESIGN CRITERIA

D4.06

MONITORING SANITARY MANHOLE DIAGRAMS







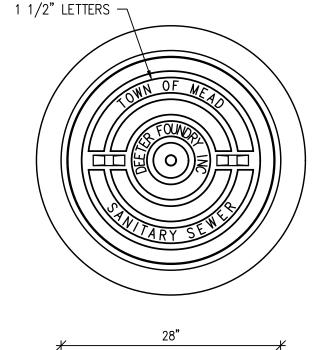


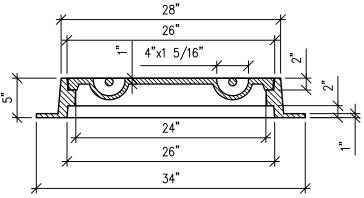
TOWN OF MEAD STANDARD DESIGN CRITERIA

FLEXIBLE JOINT CONNECTION

FLEXIBLE JOINT PIPE PENETRATIONS

D4.08





- 1. RING AND COVER SHALL BE IRON (AS MANUFACTURED FOR CURRENT AWWA STANDARD).
- 2. SANITARY SEWER MANHOLE COVERS SHALL BE NONPERFORATED WITH "TOWN OF MEAD SANITARY SEWER" FORGED ON THE TOP OF THE LID AS SHOWN ABOVE.
- 3. COVER SHALL BE BOLTED (PER DETAIL D4.10), WATER RESISTANT IF LOCATED IN 100 YEAR FLOOD PLAIN, BACK YARDS, OPEN SPACE AND/OR DITCHES BELOW GROUND.
- 4. ALL MANHOLES SHALL BE EQUIVALENT TO DEETER MODEL NUMBER 1156.
- 5. MANHOLE LID AND RING SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES.

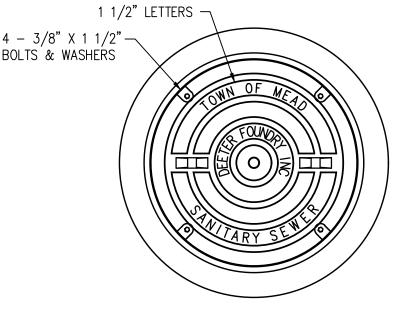
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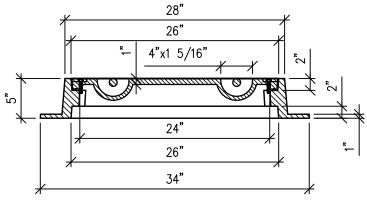


TOWN OF MEAD STANDARD DESIGN CRITERIA

MANHOLE RING AND COVER - NON-BOLTED

D4.09





- 1. RING AND COVER SHALL BE IRON (AS MANUFACTURED FOR CURRENT AWWA STANDARD).
- 2. SANITARY SEWER MANHOLE COVERS SHALL BE NONPERFORATED WITH "TOWN OF MEAD SANITARY SEWER" FORGED ON THE TOP OF THE LID AS SHOWN ABOVE.
- 3. COVER SHALL BE BOLTED, WATER RESISTANT IF LOCATED IN 100 YEAR FLOOD PLAIN, BACK YARDS, OPEN SPACE AND/OR DITCHES BELOW GROUND.
- 4. ALL MANHOLES SHALL BE EQUIVALENT TO DEETER MODEL NUMBER 1156.
- 5. MANHOLE LID AND RING SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES.
- 6. COVER IS BOLTED TO FRAME.
- 7. MANHOLE LID AND RING SHALL BE FURNISHED WITH GASKET.

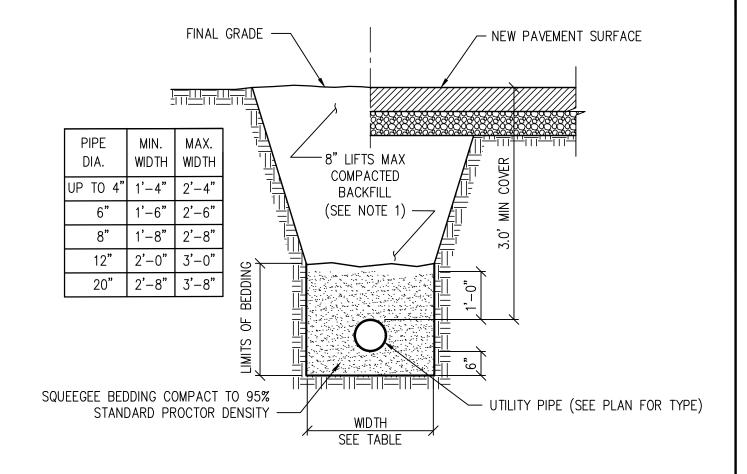
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TOWN OF MEAD STANDARD DESIGN CRITERIA

MANHOLE RING AND COVER - BOLTED

D4.10



- 1. COMPACTED BACKFILL TO 90% STANDARD PROCTOR DENSITY IN NON-DRIVING SURFACES AND 98% UNDER PAVEMENT.
- 2. IF UNSTABLE MATERIALS ARE FOUND IN TRENCH BOTTOM, OVER EXCAVATE 12" BELOW STANDARD EMBEDMENT AND FILL WITH 3/4" CRUSHED ROCK, COMPACTED TO 95%.
- 3. SHOULD THE TRENCH BE EXCAVATED WIDER THAN ALLOWED A CONCRETE CRADLE SHALL BE PLACED WITH 2500 PSI CONCRETE FROM TRENCH BOTTOM TO PIPE SPRINGLINE.
- 4. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND THE PROTECTION OF OTHER UTILITIES IN ACCORDANCE WITH LOCAL STATE AND FEDERAL SAFETY REGULATIONS.

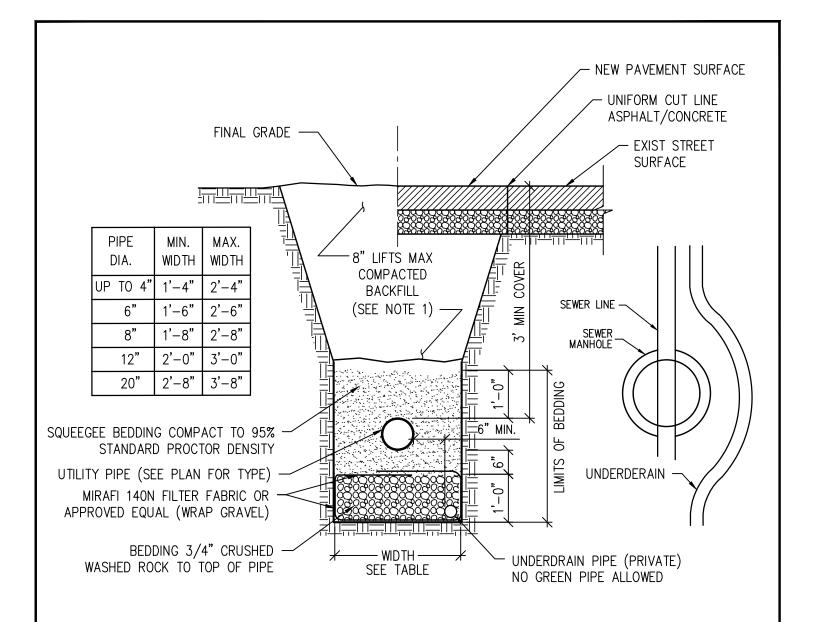
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TOWN OF MEAD STANDARD DESIGN CRITERIA

D4.11

PIPE TRENCHING



- 1. COMPACTED BACKFILL TO 90% STANDARD PROCTOR DENSITY IN NON-DRIVING SURFACES AND 98% IN STREET ROW.
- 2. SHOULD THE TRENCH BE EXCAVATED WIDER THAN ALLOWED, A CONCRETE CRADLE SHALL BE PLACED WITH 2500 PSI CONCRETE FROM TRENCH BOTTOM TO PIPE SPRINGLINE.
- 3. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND THE PROTECTION OF OTHER UTILITIES IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.
- 4. DISTANCE BETWEEN UNDERDRAIN INVERT AND SEWER INVERT TO BE EQUAL TO THE DIAMETER OF THE DRAIN BELOW THE SEWER AND TO BE OFFSET TO SIDE.
- 5. MAINTAIN POSITIVE SLOPE OF UNDERDRAIN TO DAYLIGHT.
- 6. TOWN OF MEAD SHALL NOT ASSUME OWNERSHIP OF UNDERDRAINS AND WILL NOT BE RESPONSIBLE FOR MAINTENANCE.

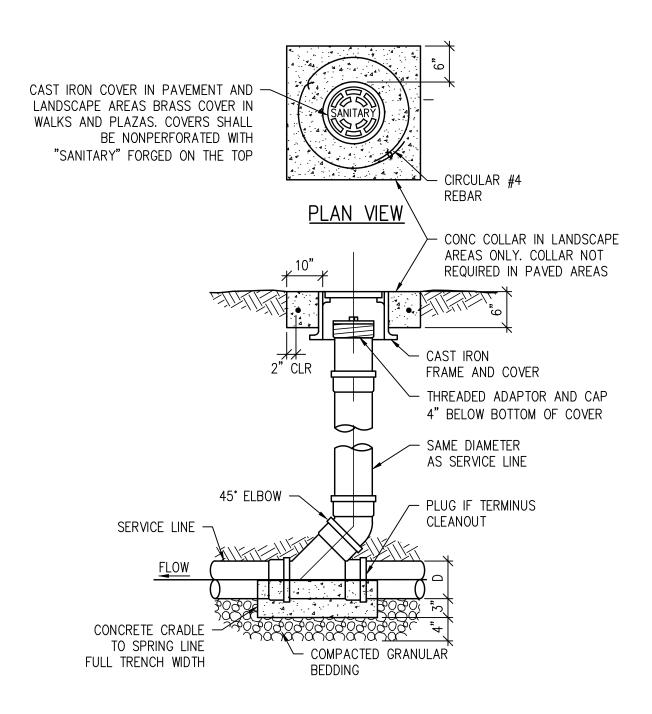
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TOWN OF MEAD STANDARD DESIGN CRITERIA

PIPE TRENCHING WITH UNDERDRAIN SYSTEM

D4.12



- 1. CLEANOUT SHALL BE CONSTRUCTED SO THAT SURFACE LOAD WILL NOT BE TRANSFERRED TO MAIN.
- 2. SERVICE LINE CLEANOUT MAY BE INSTALLED APPROXIMATELY 5 FEET OUTSIDE THE BUILDING FOUNDATION.
- 3. A CLEANOUT IS REQUIRED ON ALL SERVICE LINES EVERY 100 FEET, AT EVERY "Y" OR AFTER A COMBINED TOTAL 135 DEGREES OF BEND.

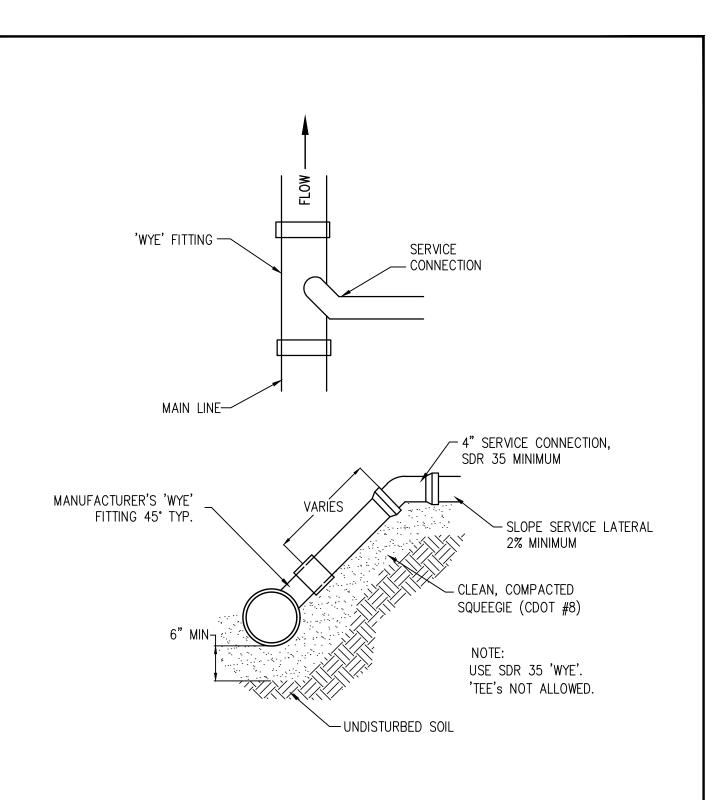
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TOWN OF MEAD STANDARD DESIGN CRITERIA

SANITARY CLEANOUT

D4.13

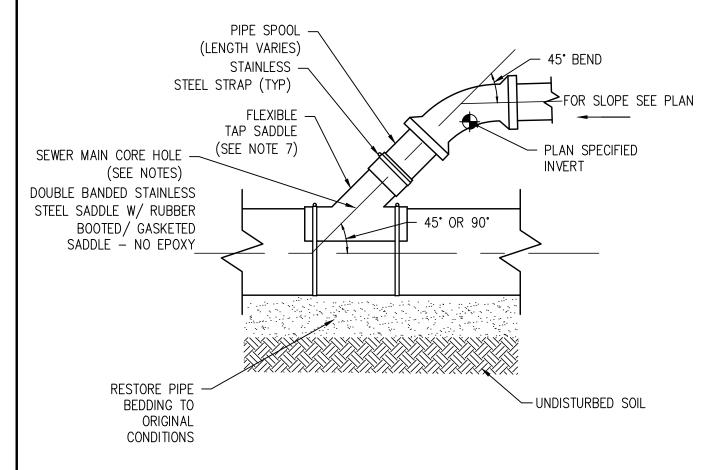




TOWN OF MEAD STANDARD DESIGN CRITERIA

TYPICAL SERVICE CONNECTION

D4.14



- APPROVED TAPPING SADDLE TO BE USED FOR NEW SERVICES TO EXISTING MAINS SHALL BE TEES. PIPE PENETRATIONS SHALL BE MECHANICALLY DRILLED.
- 2. TAPHOLE MUST BE ABOVE THE SPRINGLINE.
- 3. 4" SEWER SERVICES SHALL HAVE A MINIMUM SLOPE OF 2.0%.
- 4. 6" SEWER SERVICES SHALL HAVE A MINIMUM SLOPE OF 1.0%.
- 5. SERVICES SHALL NOT BE CLOSER THAN 5 FT. FROM EACH OTHER ON THE MAIN.
- 6. AN INSERT A TEE MAY BE AN ACCEPTABLE SUBSTITUTION AS APPROVED BY THE TOWN ENGINEER.
- 7. REFERENCE SPECIFICATIONS FOR APPROVED TAP SADDLE MANUFACTURERS.

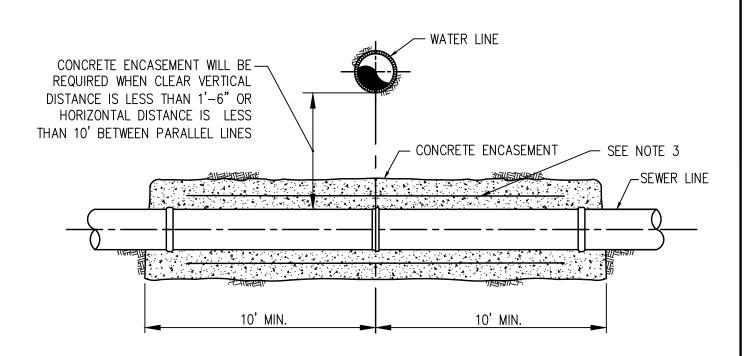
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TOWN OF MEAD STANDARD DESIGN CRITERIA

D4.15

TAPPING SADDLE



- 1. CONCRETE ENCASEMENT REQUIRED IN ALL CASES WHERE SEWER LINE IS ABOVE WATER LINE.
- 2. MINIMUM WIDTH AND DEPTH ARE 12" + PIPE O.D.
- 3. INSTALL REBAR PER DETAIL D4.17.

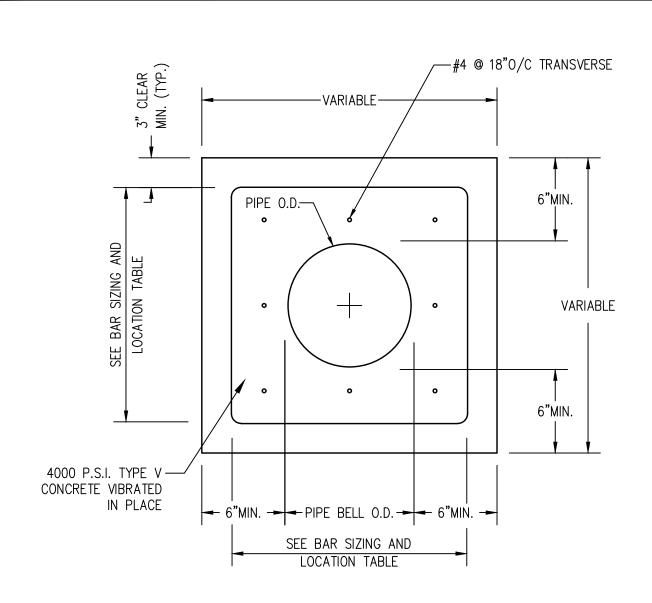
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TOWN OF MEAD STANDARD DESIGN CRITERIA

D4.16

PIPE ENCASEMENT



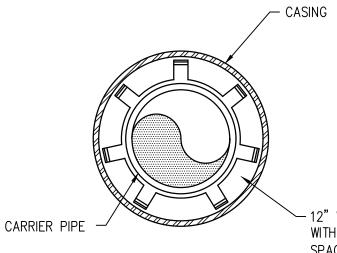
PIPE I.D.	LONGITUDINAL BARS	LOCATION
6 IN. 8 IN. 10 IN. 12 IN. 15 IN. 18 IN. 21 IN. 24 IN. 27 IN. 30 IN. 33 IN. 36 IN.	4-#4 BARS 4-#4 BARS 8-#4 BARS 8-#4 BARS 8-#4 BARS 12-#4 BARS 12-#4 BARS 12-#4 BARS 12-#4 BARS 12-#4 BARS 12-#4 BARS	1 EACH CORNER 1 EACH CORNER 3 EACH SIDE 3 EACH SIDE 3 EACH SIDE 4 EACH SIDE 5 EACH SIDE



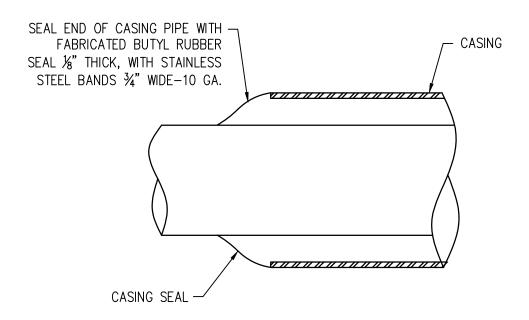
TOWN OF MEAD STANDARD DESIGN CRITERIA

PIPE ENCASEMENT SPECIFICATIONS

D4.17



-12" WIDE STAINLESS STEEL PIPELINE WITH CASING SPACERS. PLACE CASING SPACERS PER PIPE MANUFACTURER'S RECOMMENDATIONS. (AS MANUFACTURED BY CASCADE OR EQUAL)



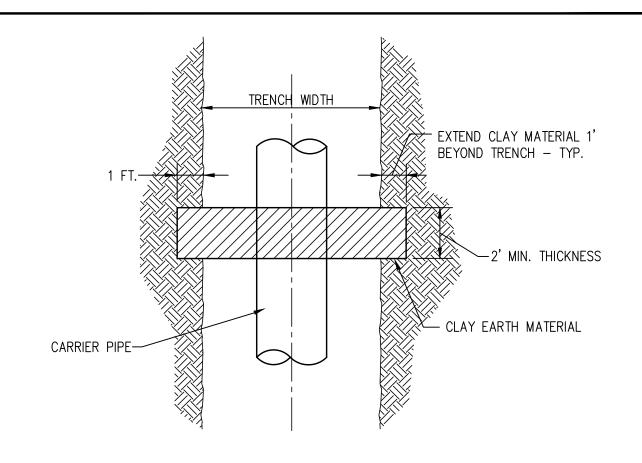
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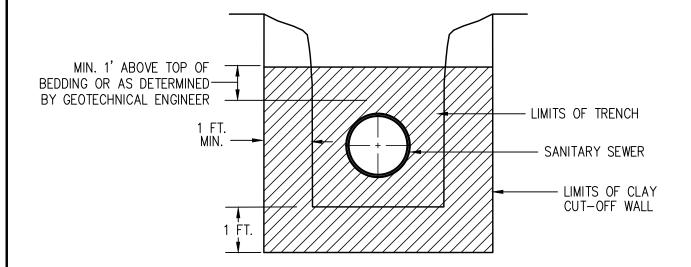


TOWN OF MEAD STANDARD DESIGN CRITERIA

STANDARD PIPE CASING

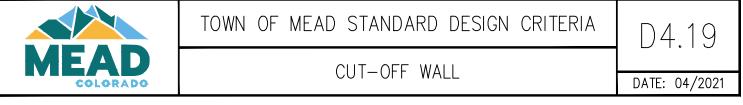
D4.18

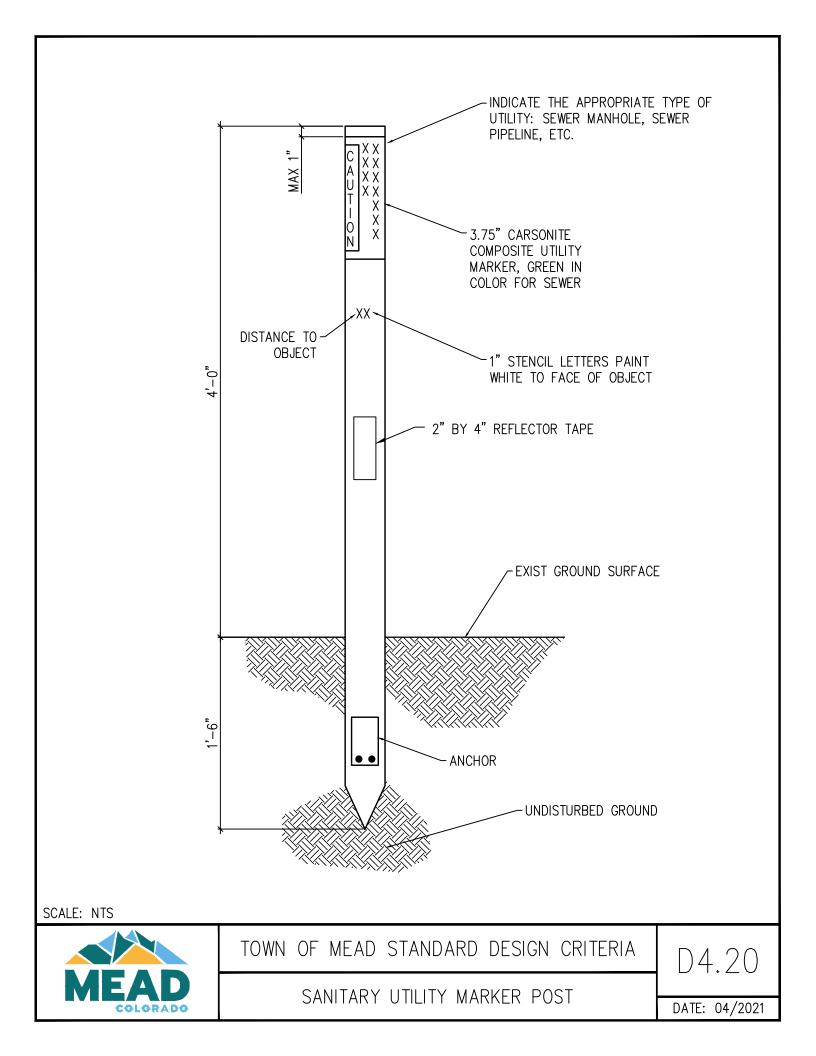


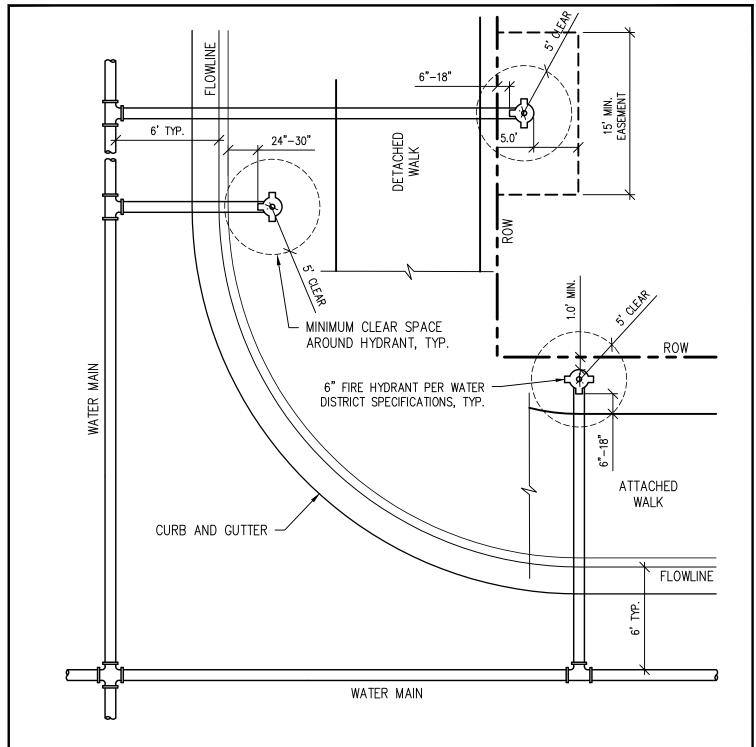


- 1. CLAY WALL EXTENDS A MINIMUM OF 12 INCHES INTO UDISTURBED SOIL ON EACH SIDE AND ON BOTTOM OF TRENCH.
- 2. CLAY MATERIAL TO BE CLASSIFIED AS CL, CH OR OH.
- 3. FLOWFILL MAY BE USED INSTEAD OF CLAY MATERIAL.

SCALE: NTS







- 1. HYDRANT TO BE SET AT CURB RETURN.
- 2. VALVES SHALL NOT BE LOCATED UNDER CURB AND GUTTER, OR CONCRETE PAN.
- 3. A 5.0' CLEAR DISTANCE MUST BE MAINTAINED AROUND HYDRANT.
- 4. ALL MEASUREMENTS ARE TO THE OUTSIDE OF PIPE.
- 5. AN EASEMENT IS REQUIRED FOR UTILITIES OUTSIDE OF RIGHT-OF-WAY. EASEMENT DIMENSIONS AS SHOWN ARE THE MINIMUM. EASEMENT DIMENSIONS SHALL MEET THE MINIMUM REQUIREMENTS OF THE APPROPRIATE WATER DISTRICT.

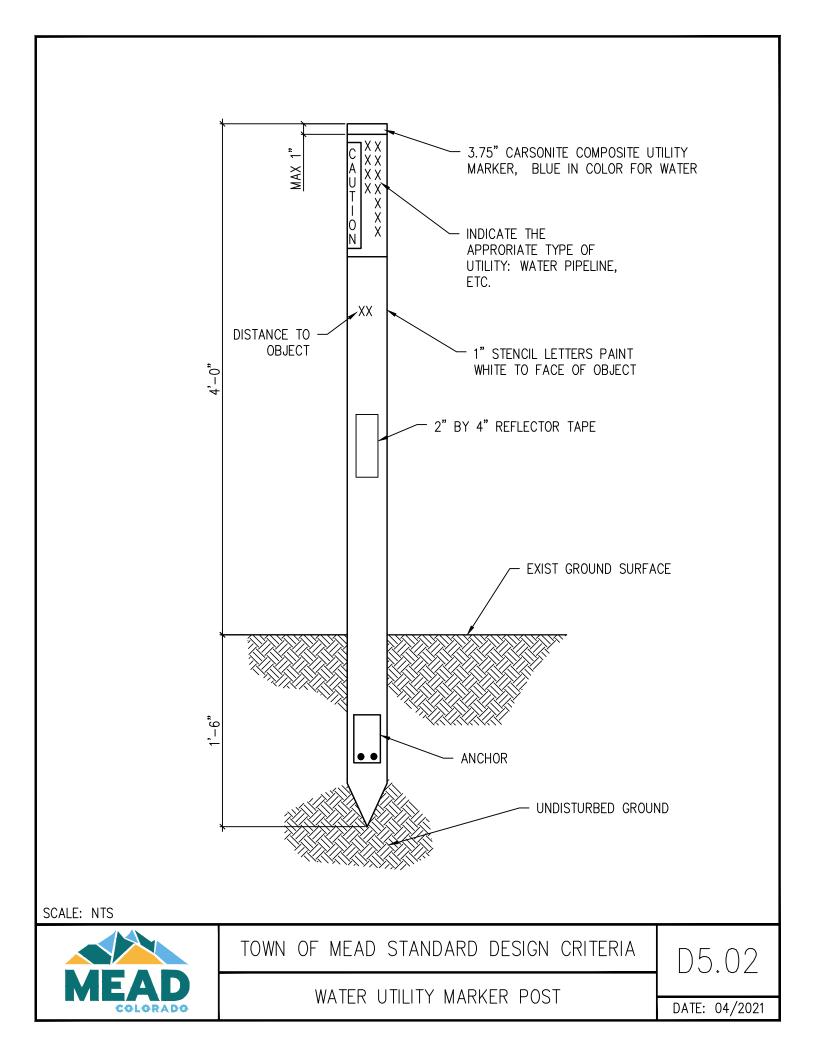
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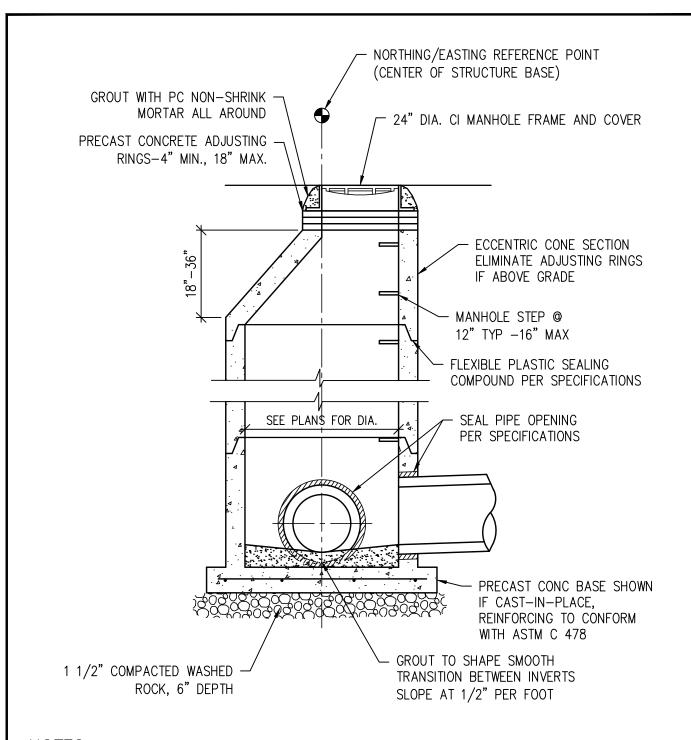


TOWN OF MEAD STANDARD DESIGN CRITERIA

FIRE HYDRANT PLACEMENT

D5.01





- 1. SHAPING FOR SMOOTH MANHOLE INVERTS MUST BE DONE BY FORMING OR SHAPING BASE CONCRETE.
- 2. BLOCK-OUTS WHEN APPROVED SHALL EXTEND A MAX OF 6" PAST MANHOLE OD AND BE SATISFACTORILY PLUGGED AND SEALED.
- 3. CONCRETE MANHOLES MAY BE POURED IN PLACE ONLY WITH PRIOR APPROVAL.
- 4. ALL MORTAR SHALL BE MIXED WITH A TYPE II CEMENT.
- 5. BENCH MUST HAVE A BRUSHED, NON-SKID SURFACE.

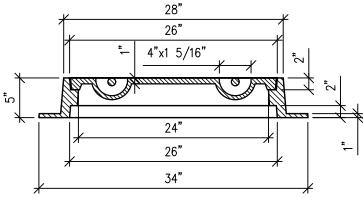


TOWN OF MEAD STANDARD DESIGN CRITERIA

D6.01A

STORM MANHOLE





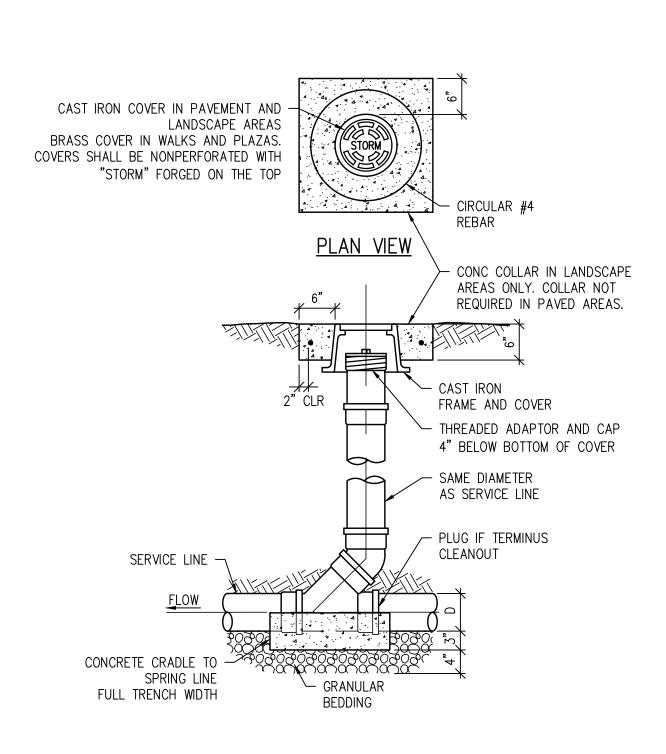
- 1. RING AND COVER SHALL BE IRON (AS MANUFACTURED FOR CURRENT AWWA STANDARD).
- 2. STORM SEWER MANHOLE COVERS SHALL BE NONPERFORATED WITH "DUMP NO WASTE! DRAINS TO WATERWAYS" AND "STORM SEWER" FORGED ON THE TOP OF THE LID AS SHOWN ABOVE.
- 3. ALL MANHOLES SHALL BE EQUIVALENT TO EAST JORDAN IRON WORKS MODEL 1480.
- 4. MANHOLE LID AND RING SHALL BE FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES.



TOWN OF MEAD STANDARD DESIGN CRITERIA

STORM MANHOLE RING AND COVER

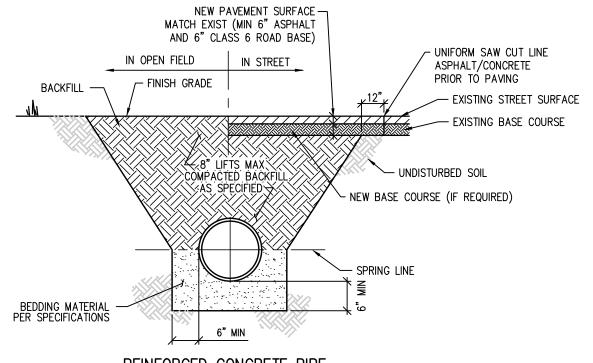
D6.01B



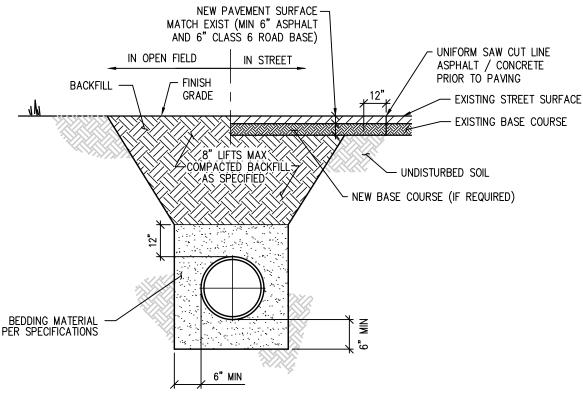


TOWN OF MEAD STANDARD DESIGN CRITERIA

D6.02



REINFORCED CONCRETE PIPE



CMP/PVC/HDPE PIPE (SEE PLANS FOR MATERIAL)

NOTES:

- 1. IF UNSTABLE MATERIALS ARE FOUND IN TRENCH, OVEREXCAVATED PER SPECIFICATIONS OR AS REQUIRED.
- 2. TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKERS AND THE PROTECTION OF OTHER UTILITIES.

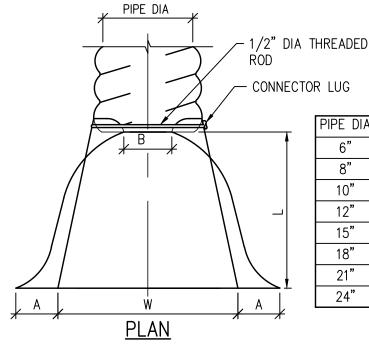
SCALE: NTS 3. MINIMUM COVER IS 18" BELOW FINISHED GRADE.



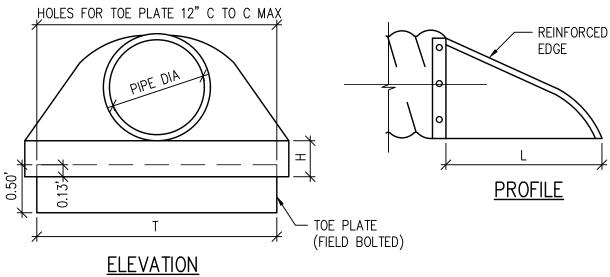
TOWN OF MEAD STANDARD DESIGN CRITERIA

STORM SEWER BEDDING DETAIL

D6.03



PIPE DIA	GAUGE	Α	В	Н	L	W	T
6"	18	4"	1"	3"	8"	12"	20"
8"	18	5"	5"	4"	14"	16"	27"
10"	18	7"	6"	6"	14"	20"	35"
12"	16	6"	6"	6"	21"	24"	36"
15"	16	7"	8"	6"	26"	30"	44"
18"	16	8"	10"	6"	31"	36"	52"
21"	16	9"	12"	6"	36"	42"	60"
24"	16	10"	13"	6"	41	48"	68"

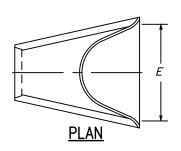




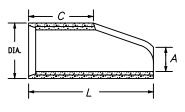
TOWN OF MEAD STANDARD DESIGN CRITERIA

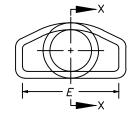
CMP TYPE 1 FLARED END SECTION

D6.04A



PIPE	DIMENSIONS				
I.D.	Α	С	L	E	
	IN.				
18	10	48	78	36	
24 30 36	10 14 18	48 36 36	78 96 96	48 60 72	
42 48 54	24 28 30	36 24 36	96 96 96	78 84 90	
60 72	36 34	36 20	96 96	96 108	

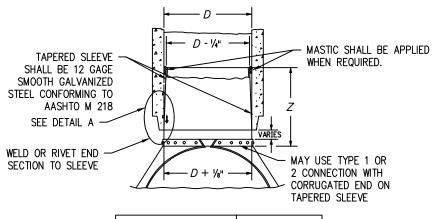




SECTION X-X

END VIEW

END SECTION FOR REINFORCED CONCRETE CIRCULAR PIPE



D	Z (MIN.)		
IN.			
18 - 24	12		
30 AND 36	16		
42 AND LARGER	24		

STEEL END SECTION FOR CONCRETE CIRCULAR PIPE (ALTERNATIVE FOR CONCRETE END SECTION)

NOTES:

METAL END SECTION SHALL BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING

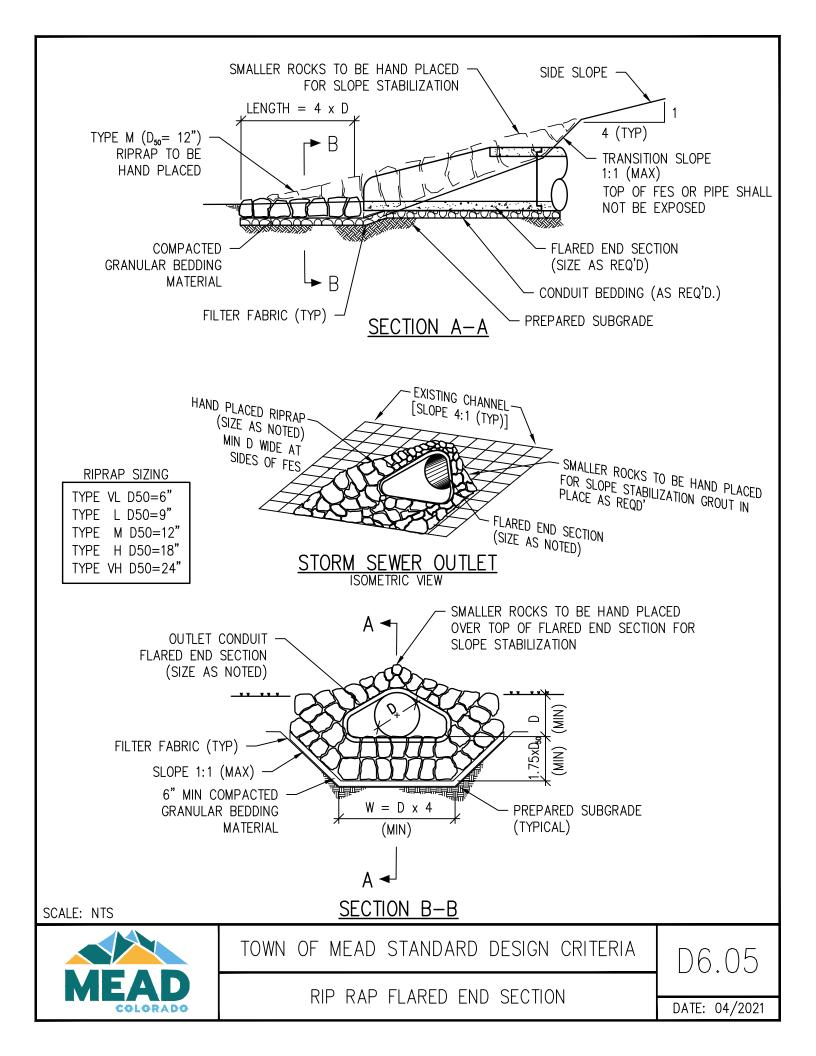
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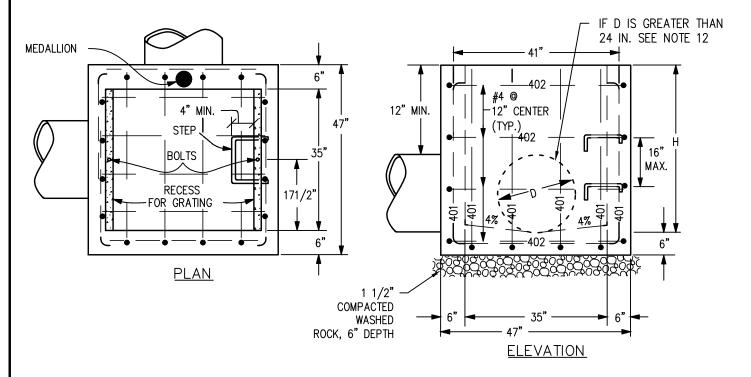


TOWN OF MEAD STANDARD DESIGN CRITERIA

RCP FLARED END SECTION

D6.04B





- 1. INLET TYPE C IS NOT HS-20 RATED AND SHALL NOT BE PLACED IN PAVED ROADWAYS. THIS INLET SHALL BE USED ONLY OUTSIDE PAVED ROADWAYS.
- 2. CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
- 3. REINFORCING BARS SHALL BE EPOXY COATED AND DEFORMED #4, AND SHALL HAVE A MINIMUM 2 IN. CLEARANCE. CUT OR BEND AROUND PIPES AS REQUIRED.
- 4. CONCRETE SLOPE AND DITCH PAVING SHALL BE IN ACCORDANCE WITH CDOT SECTION 507. REINFORCEMENT FOR CONCRETE SLOPE PAVING SHALL BE 6 X 6 W1.4 X W1.4 OR 6 X 6 W2.1 X W2.1.
- 5. STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED, AND SHALL BE IN ACCORDANCE WITH CDOT SUBSECTION
- 6. THE STANDARD INLET GRATES SHALL BE USED ON ALL TYPE C INLETS UNLESS CLOSE MESH GRATES ARE SPECIFIED ON THE PLANS.
- 7. CLOSE MESH GRATES ARE RECOMMENDED WHERE FOOT TRAFFIC OR BICYCLE ROUTES ARE IN CLOSE PROXIMITY TO GRATE. THIS GRATE IS NOT ADA COMPLIANT OR BICYCLE FRIENDLY AND SHALL NOT BE PLACED DIRECTLY IN SIDEWALKS, CROSSWALKS OR BIKE PATHS.
- 8. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FT. 6 IN., AND SHALL CONFORM TO AASHTO M 199.
- 9. ALL INLETS SHALL HAVE A 4 IN. DIA. METAL MEDALLION WITH A "NO DUMPING DRAINS TO STREAM" MESSAGE ON IT. THE MEDALLION SHALL HAVE A FISH SYMBOL WITH A BLUE BACKGROUND. IT SHALL BE FIRMLY ATTACHED TO THE TOP OF THE INLET WITH A PERMANENT FASTENER.
- 10. SEE PLANS FOR SIZE AND LOCATION OF PIPE.
- 11. FOR FULL DETAIL INCLUDING BAR LIST, DIMENSIONS AND QTY. TABLE, SEE CDOT DETAIL M-604-10
- 12. ALL CONNECTED PIPES WITH A DIAMETER (D) GREATER THAN 24" AND/OR ENTERING AT AN ANGLE GREATER THAN 80° A CUSTOM CONC BOX MUST BE CONSTRUCTED. CONTRACTOR TO COORDINATE BOX DIMENSIONS AND SPECS WITH MANUFACTURER.

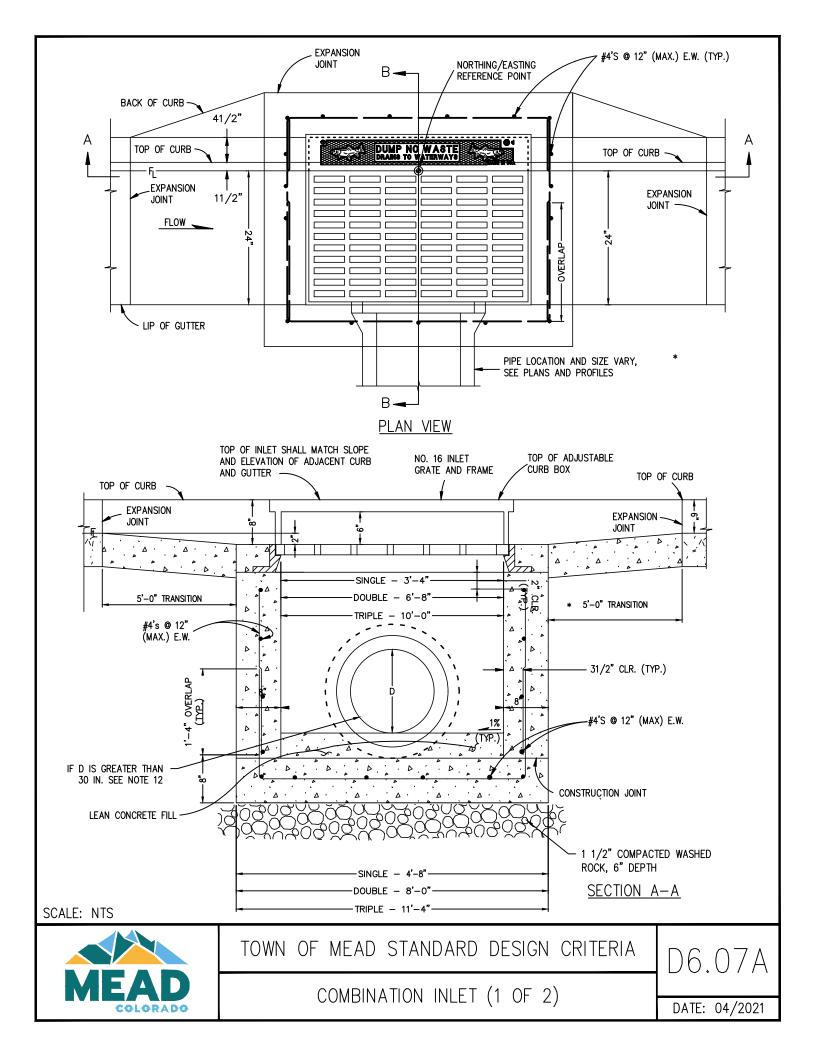
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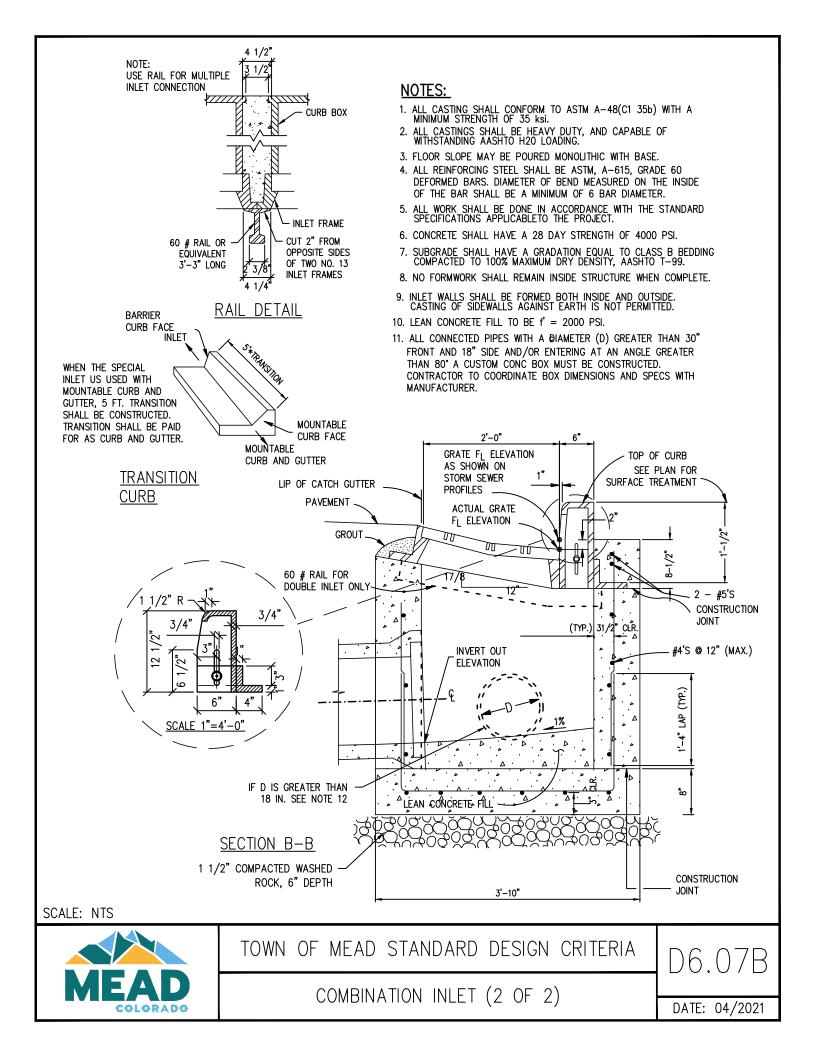


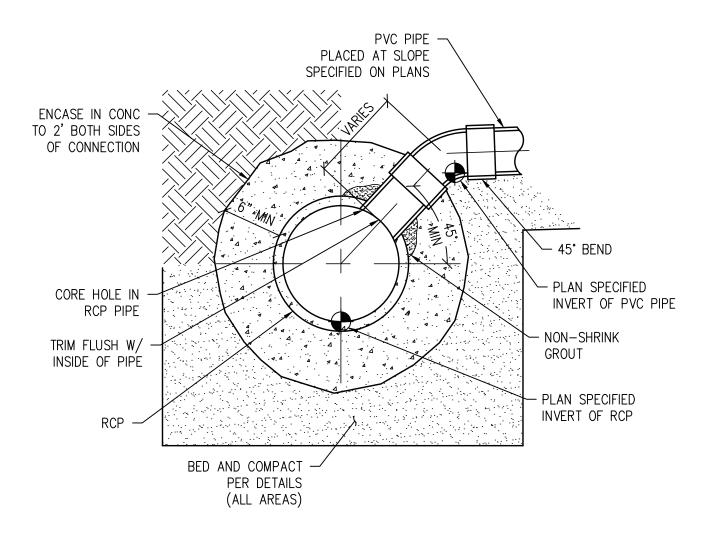
TOWN OF MEAD STANDARD DESIGN CRITERIA

D6.06

TYPE C INLET



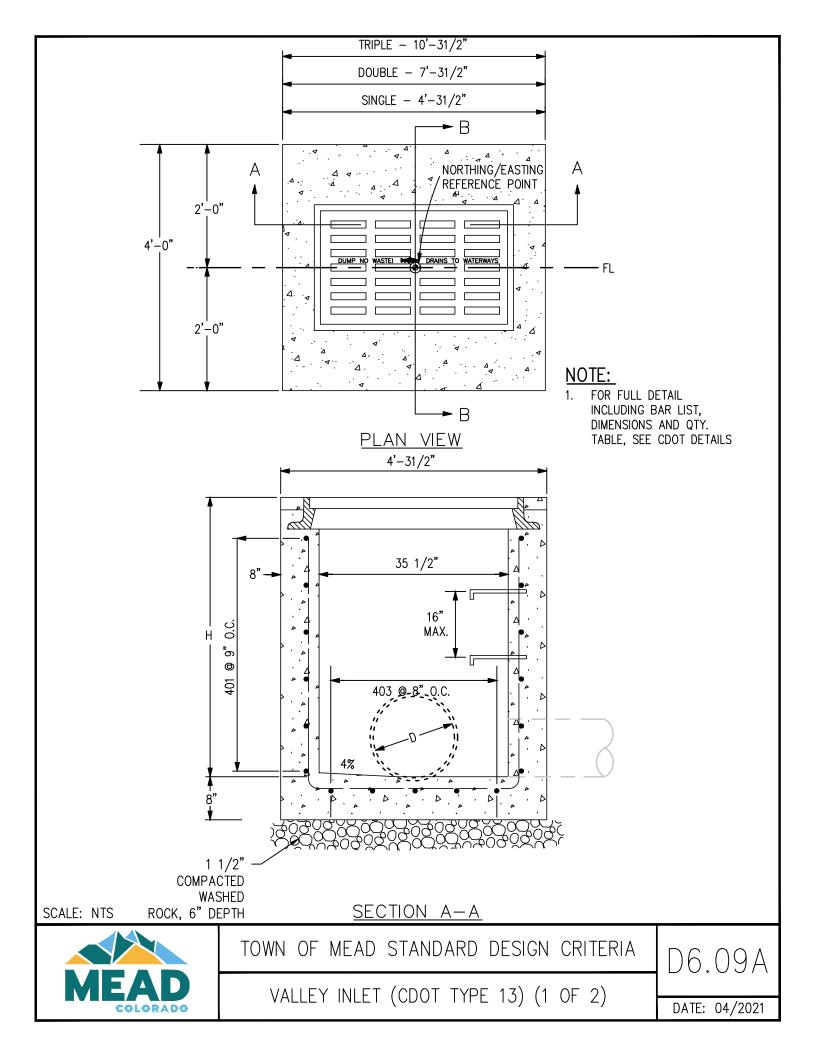


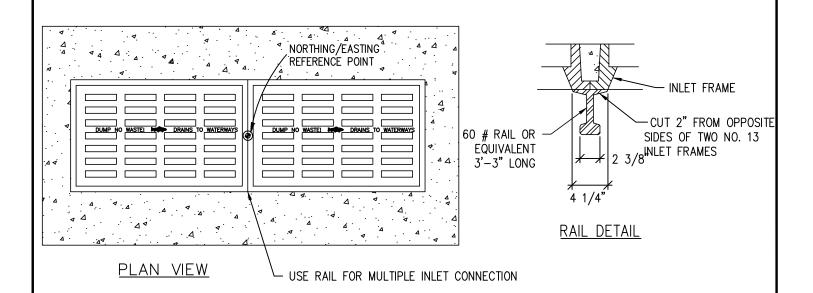


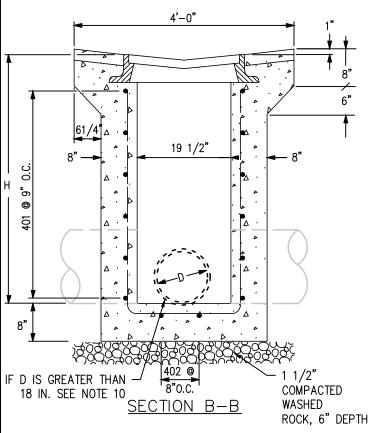


TOWN OF MEAD STANDARD DESIGN CRITERIA

D6.08







- CONCRETE SHALL BE CLASS B. INLET MAY BE CAST—IN—PLACE OR PRECAST.
- CAST-IN-PLACE CONCRETE WALLS SHALL BE FORMED ON BOTH SIDES.
- 3. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 3/4 IN.
- REINFORCING BARS SHALL BE DEFORMED #4 AND SHALL HAVE A 2 IN. MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
- STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FT.—6 IN. AND SHALL CONFORM TO AASHTO M 199.
- ALL GRATES AND FRAMES SHALL BE GRAY OR DUCTILE CAST IRON IN ACCORDANCE WITH SUBSECTION 712.06. GRATES AND FRAMES SHALL BE DESIGNED TO WITHSTAND HS 20 LOADING.
- 7. STATION POINT IS AT THE CENTER OF THE INLET.
- 8. GRATE SHALL HAVE "DUMP NO WASTE DRAINS TO STREAM" MESSAGE CAST ON SURFACE.
- FOR FULL DETAIL INCLUDING BAR LIST, DIMENSIONS AND QTY. TABLE, SEE CDOT DETAIL M-604-13
- 10. ALL CONNECTED PIPES WITH A DIAMETER (D) GREATER THAN 30" FRONT AND 18" SIDE AND/OR ENTERING AT AN ANGLE GREATER THAN 80° A CUSTOM CONC BOX MUST BE CONSTRUCTED. CONTRACTOR TO COORDINATE BOX DIMENSIONS AND SPECS WITH MANUFACTURER.
- 11. FOR FULL DETAIL INCLUDING BAR LIST, DIMENSIONS AND QTY. TABLE, SEE CDOT DETAILS

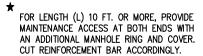
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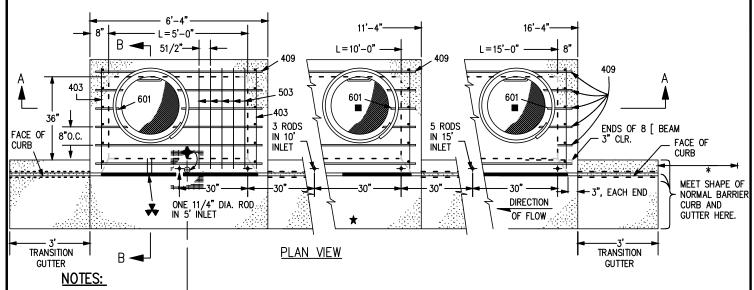
TOWN OF MEAD STANDARD DESIGN CRITERIA

VALLEY INLET (CDOT TYPE 13) (2 OF 2)

D6.09B



NORHTING/EASTING
REFERENCE POINT AT MIDPOINT
OF INLET ALONG FLOWLINE



- 1. CONCRETE SHALL BE CLASS B. INLET MAY BE CAST—IN—PLACE OR PRECAST.
- 2. CONCRETE WALLS SHALL BE FORMED ON BOTH SIDES AND SHALL BE 8 IN. THICK.
- 3. INLET STEPS SHALL BE IN CONFORMANCE WITH AASHTO M 199.
- 4. CURB FACE ASSEMBLY SHALL BE GALVANIZED AFTER WELDING. 5. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 3/4 IN. CURB AND GUTTER CORNERS SHALL BE FINISHED TO MATCH THE EXISTING CURB AND GUTTER BEYOND THE TRANSITION GUTTER.
- 6. REINFORCING BARS SHALL BE DEFORMED AND SHALL HAVE A 2 IN. MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE EPOXY COATED.
- 7. DIMENSIONS AND WEIGHTS OF TYPICAL MANHOLE RING AND COVER ARE NOMINAL.
- 8. MATERIAL FOR MANHOLE RINGS AND COVERS SHALL BE GRAY OR DUCTILE CAST IRON IN ACCORDANCE WITH SUBSECTION 712.06.
- 9. SINCE PIPE ENTRIES INTO THE INLET ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK. QUANTITIES INCLUDE VOLUMES OCCUPIED BY PIPES.
- 10. STRUCTURAL STEEL SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH SUBSECTION 712.06.
- 11. ALL MANHOLE COVERS SHALL BE CAST WITH A "NO DUMPING DRAINS TO STREAM" MESSAGE AND A FISH SYMBOL. THE SURFACE OF THE MANHOLE COVER SHALL HAVE A NON-SLIP PATTERN.
- 12. FOR FULL DETAIL INCLUDING BAR LIST AND DIMENSION TABLE, SEE CDOT DETAIL M-604-12 SHEETS 1 AND 2

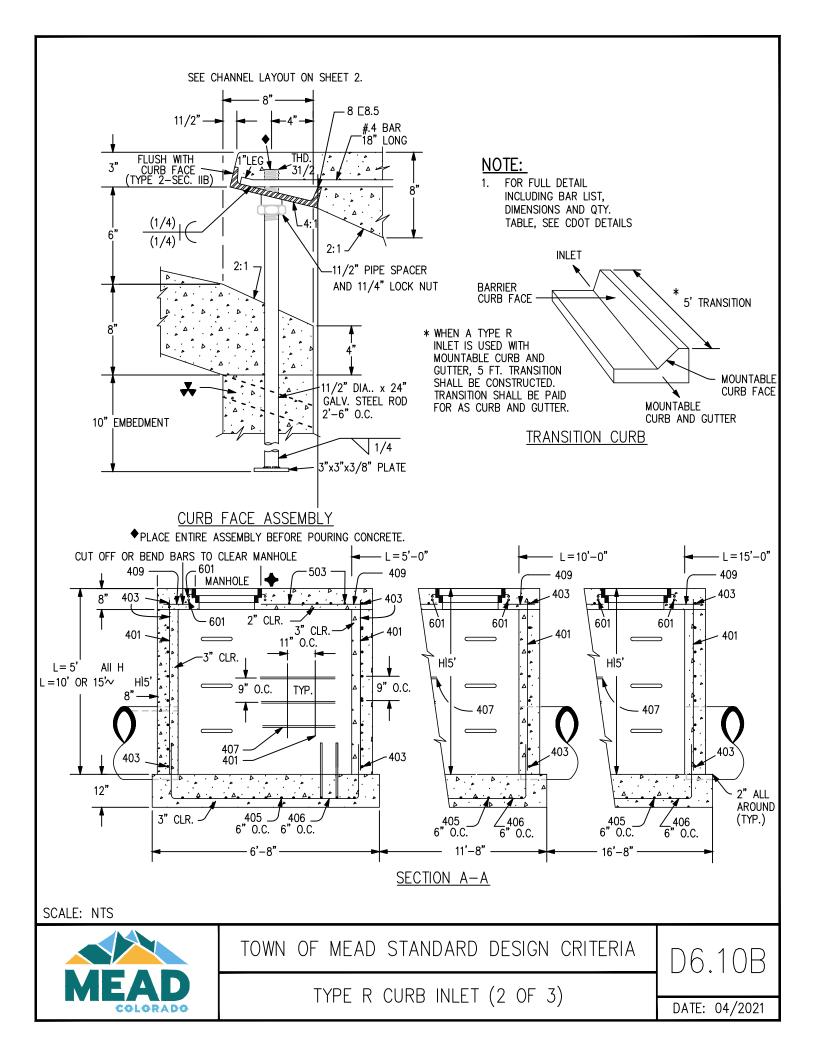
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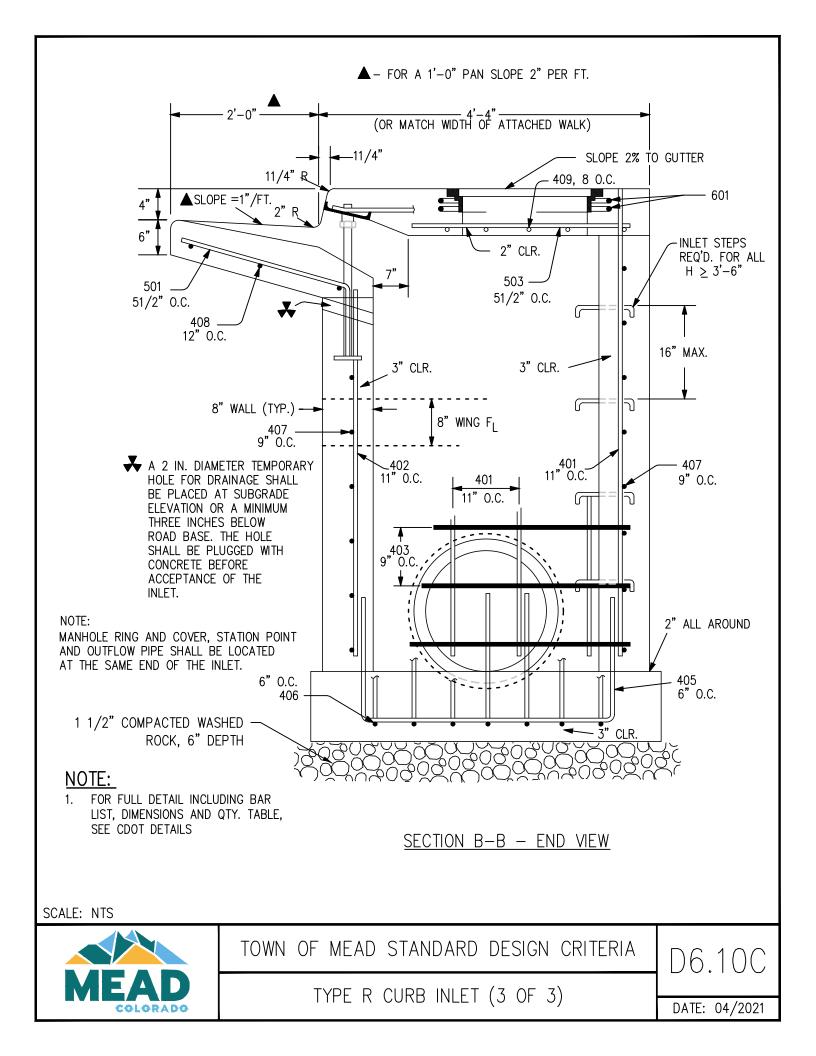


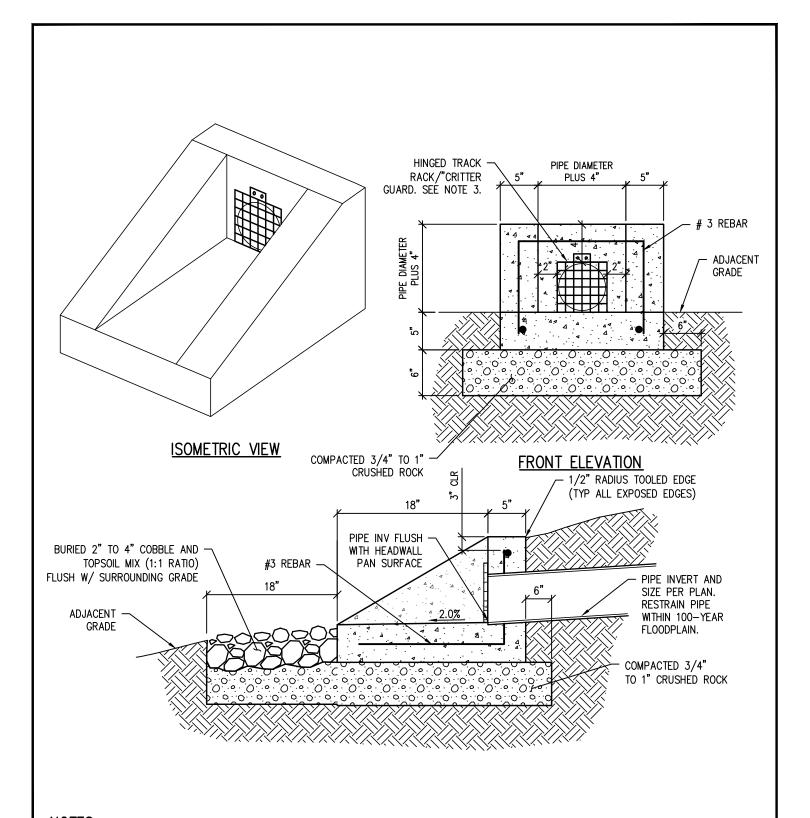
TOWN OF MEAD STANDARD DESIGN CRITERIA

D6.10A

TYPE R CURB INLET (1 OF 3)







- 1. ALL CONCRETE AND BEDDING PER SPECIFICATIONS
- 2. INSTALL REMOVABLE, GALVANIZED STEEL, HINGED TRASH RACK WITH 2" MAX OPENINGS.
- 3. TRASH GUARD TO BE APPROVED BY TOWN

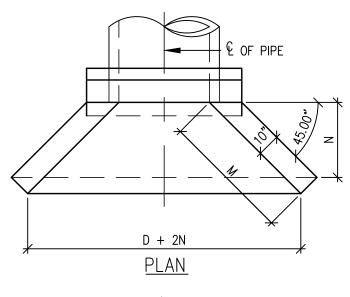
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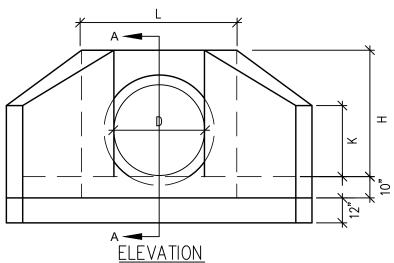


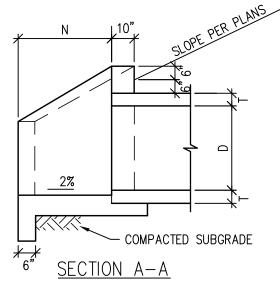
TOWN OF MEAD STANDARD DESIGN CRITERIA

SMALL PIPE HEADWALL

D6.11







- 1. CONCRETE SHALL BE CLASS B. CAST-IN-PLACE CONCRETE SHALL CONFORM TO ASTM C478
- 2. CAST-IN-PLACE CONCRETE WALL EDGES SHALL BE CHAMFERED 3/4".
- 3. ALL WALLS AND BASE SHALL BE REINFORCED WITH #4'S @ 12" OC EACH WAY. REINFORCING BARS SHALL BE DEFORMED AND SHALL HAVE 3" MINIMUM CLEARANCE FROM FACE OF CONCRETE.
- 4. DIMENSIONS AND MATERIAL REQUIREMENTS VARY DEPENDING ON APPLICATION. FOR COMPLETE DETAILS, MEASUREMENTS, MATERIALS LIST, AND OTHER FACTORS REFER TO THE CURRENT CDOT M&S STANDARDS.

DIMENSIONS									
D	AREA SQ FT	Т	Ι	K	L	М	Ν		
15"	1.23	2 1/4"	2'-5 1/4"	1'-5"	3'-7"	1'-9"	1'-3"		
18"	1.77	2 1/2"	2'-8 1/2"	1'-7"	3'-10"	2'-1 1/2"	1'-6"		
24"	3.14	3"	3'-3"	1'-10 1/2"	4'-4"	2'-10"	2'-0"		
30"	4.91	3 1/2"	3'-9 1/2"	2'-2"	4'-10"	3'-6 1/2"			
36"	7.07	4"		2'-5 1/2"	5'-4"	4'-3"	3'-0"		
42"	9.62	4 1/2"	4'-10 1/2"	2'-9"	5'-10"	4'-1 1/2"	3'-6"		

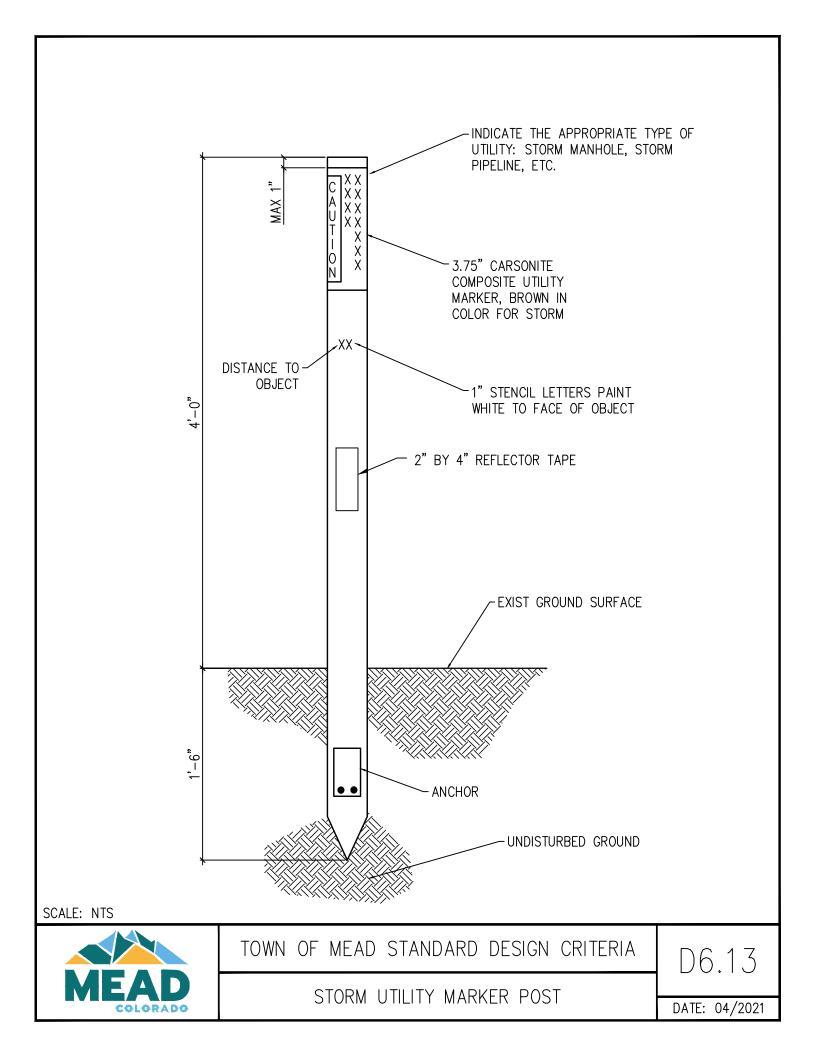
SCALE: NTS



TOWN OF MEAD STANDARD DESIGN CRITERIA

HEADWALL WITH CIRCULAR PIPE

D6.12



PRUNE DEAD OR DAMAGED BRANCHES PRIOR TO PLANTING. IF FORM IS COMPROMISED BY PRUNING, REPLACE SHRUB.

SPACE PLANTS AND SET PLUMB FOR BEST EFFECT.

MOUND COMPACTED BACKFILL UNDER ROOTBALL OR SET ON UNDISTURBED SOIL.

SPLIT BOTTOM 1/2 OF BALL. SPREAD AND PLANT. 2",

REMOVE ALL CONTAINERS, BASKETS, WIRE ETC. FROM ROOTBALL

18" MINIMUM

2"
DIAMETER
2X'S BALL WIDTH

PROVIDE 18" MINIMUM DISTANCE FROM EDGE OF MATURE PLANT SPREAD TO EDGER OR CONCRETE.

SET SHRUB PLUMB.
TOP OF ROOT BALL TO BE SLIGHTLY
ABOVE FINISH GRADE.

-3" — 4" DEEP APPROVED MULCH INSIDE SAUCER, ON GEO—TEXTILE WEED BARRIER. BUILD A 4" BASIN AROUND PIT IN NON—IRRIGATED AREAS ONLY.

PREPARED BACKFILL MIXTURE:

- 1. ONE PART SOIL AMENDMENT SEE APPROVED MATERIALS LIST.
- 2. TWO PARTS TOPSOIL.
- THREE PARTS NATIVE SOIL.
 SUPERPHOSPHATE AMENDMENT.
- MATERIALS TO BE THOROUGHLY BLENDED.

NOTES: SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.

ADD BEAVER PROTECTION AROUND DECIDUOUS PLANTINGS WITHIN 200' OF ALL RIPARIAN AREAS, PER CITY STANDARDS.

SCALE: NTS



TOWN OF MEAD STANDARD DESIGN CRITERIA

SHRUB PLANTING DETAIL

D8.01

NOTE: SET ROOT FLARE OF ALL TREES 4" ABOVE GRADE IN IRRIGATED AREAS AND AT GRADE TO 2" ABOVE GRADE IN NON-IRRIGATED AREAS, MODIFY IF SOIL CONDITIONS WARRANT & PER CITY DIRECTION, INSTALL A 5" HIGH BERM AROUND TREES TO CREATE A WATERING BASIN, BERM IS TEMPORARY IN IRRIGATED AREAS. REMOVE BERM AFTER TWO THOROUGH WATERINGS IN IRRIGATED AREAS & MULCH, LEAVE BERM & MULCH IN NON-IRRIGATED AREAS & IN AREAS ONLY IRRIGATED BY DRIP SYSTEMS AFTER DRYLAND GRASS ESTABLISHMENT PERIOD.

3" — 4" DEEP APPROVED MULCH
FLUSH WITH SOD AT EDGE.
& TO BE KEPT 2" FROM TRUNK.
TREE WELL TO BE 5' MINIMUM DIAMETER.

PLANTING HOLE: ROOTBALL TO BE PLACED ON UNDISTURBED SOIL AT DEPTH AS NOTED. HOLE TO BE MORE OF A "DISH" SHAPE RATHER THAN CYLINDRICAL

REMOVE BOTTOM 1/3 OF WIRE BASKET.
SET TREE IN PIT TO PROPER GRADE
AND PLUMB. REMOVE REMAINING WIRE & TWINE. IF PLASTIC OR TREATED BURLAP, PREMOVE AS MUCH AS POSSIBLE & BACKFILL.
IF REGULAR BURLAP, BACKFILL 2/3 OF PIT, REMOVE TOP 1/3 OF BURLAP & COMPLETE THE BACKFILL.

UNDISTURBED SOIL -

NOTES: SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.

ADD BEAVER PROTECTION AROUND DECIDUOUS PLANTINGS WITHIN 200' OF ALL RIPARIAN AREAS, PER CITY STANDARDS.

TREES IN GRASS AREAS: PROVIDE A MINIMUM 4' RADIUS FROM TRUNK TO SEED/SOD.

DIAMETER 3X BALL WIDTH PRUNE AS DIRECTED BY OWNER'S REPRESENTATIVE. DO NOT PRUNE OR DAMAGE CENTRAL LEADER.

WRAP TRUNK FROM GROUND LEVEL TO SECOND BRANCH WITH 4" KRAFT TYPE TREE WRAP. SECURE ENDS WITH FLEXIBLE TAPE.

APPROVED GUYING SYSTEM:

MIN. 6' LONG HEAVY DUTY T-BAR
STEEL POST STAKES WITH WHITE
-T-POST CAPS OR 6' WOODEN POLE
STAKES (PREFERRED). GUYS ARE
TO BE 17 GAUGE GALVANIZED STEEL
WIRES OR STRAP-X GUYS (PREFERRED)
SECURED TO TREE WITH CANVAS
STRAP ABOVE FIRST BRANCH.
WIRE TO BE TAUT BUT NOT OVERTIGHT. FLAG WIRE WITH WHITE
PLASTIC FLAGGING TAPE OR PVC PIPE.
CONIFIERS TO HAVE 2 STAKES FOR
TREES 6' AND LESS, 3 STAKES FOR
TREES ABOVE 6'. NO SHORT STAKES
PERMITTED FOR EVERGREENS. DECIDUOUS
TREES TO HAVE 2 STAKES FOR TREES
2-1/2" CAL. AND LESS, 3 STAKES ABOVE
2-1/2" CAL. ONE STAKE ALWAYS IN
DIRECTION OF PREVAILING WINDS. REMOVE
STAKES & GUYS AFTER 1 YEAR OR
BEFORE FINAL ACCEPTANCE BY CITY.

-PREPARED BACKFILL MIXTURE:

- ONE PART SOIL AMENDMENT SEE APPROVED MATERIALS LIST.
- 2. TWO PARTS TOPSOIL.
- 3. THREE PARTS NATIVE SOIL.
- 4. SUPERPHOSPHATE AMENDMENT
- MATERIALS TO BE THOROUGHLY BLENDED.

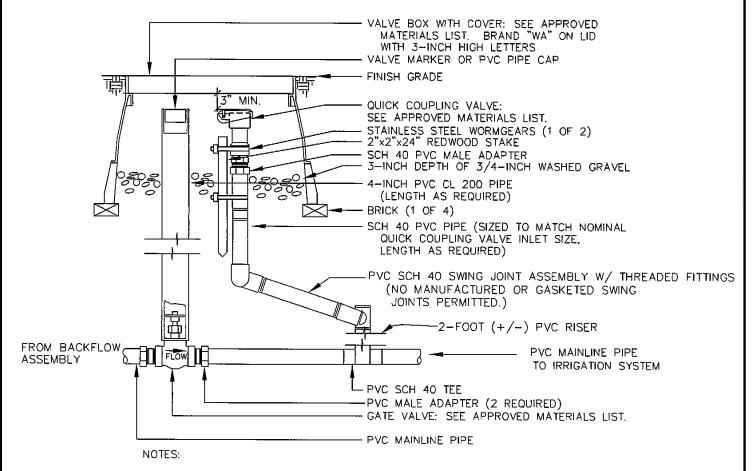
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TOWN OF MEAD STANDARD DESIGN CRITERIA

TREE PLANTING DETAIL

D8.02



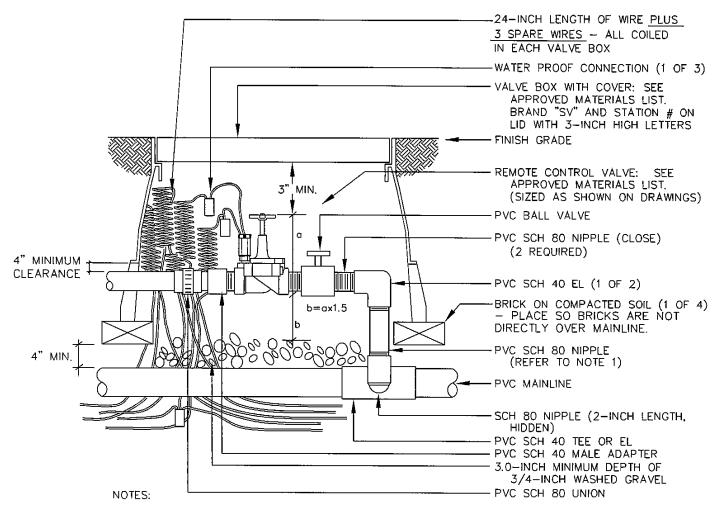
- NOMINAL VALVE AND FITTING SIZES SHALL BE IDENTICAL WITH MAINLINE PIPE SIZE UNLESS OTHERWISE NOTED.
- 2. DEPTH OF BURY OF GATE VALVE TO BE 24" MIN.
- SEE BACKFLOW PREVENTER, METER PIT & DOWNSTREAM ASSEMBLIES DETAIL.
- 4. SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.



TOWN OF MEAD STANDARD DESIGN CRITERIA

D8.03

WINTERIZATION ASSEMBLY



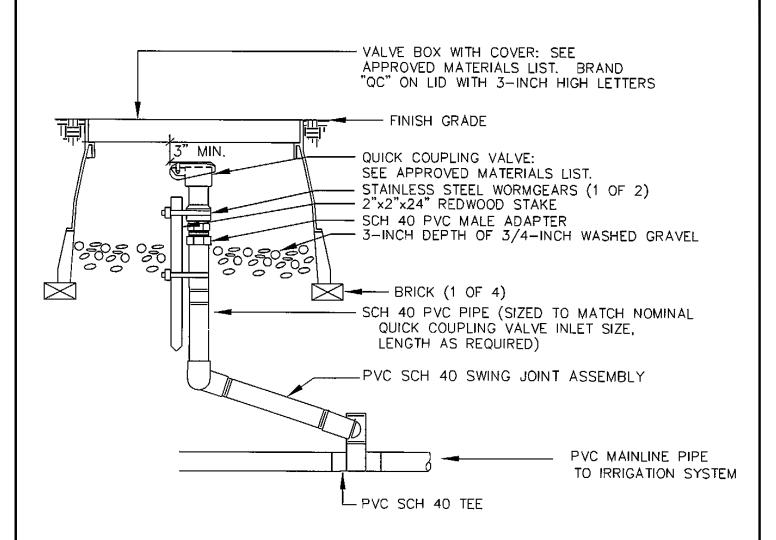
- 1. INSTALL VERTICAL NIPPLE WITH LENGTH ADEQUATE TO ALLOW REMOVAL OF REMOTE CONTROL VALVE WITHOUT CUTTING PIPE OR REMOVING BONNET (IE. VALVE STEM SHOULD CLEAR MAINLINE PIPE).
- 2. FITTINGS AND BALL VALVE TO BE SIZED IDENTICALLY WITH CONTROL VALVE.
- SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS
 AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.



TOWN OF MEAD STANDARD DESIGN CRITERIA

D8.04

REMOTE CONTROL VALVE ASSEMBLY



- QUICK COUPLER TO BE LOCATED IN THE CENTER OF THE VALVE BOX — PLACED AND STAKED COMPLETELY VERTICAL.
- DEPTH OF BURY OF MAINLINE TO BE 24" MIN.
- SEE DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.

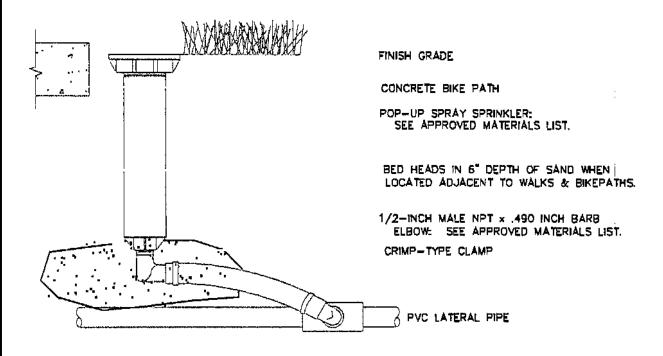
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TOWN OF MEAD STANDARD DESIGN CRITERIA

QUICK COUPLER ASSEMBLY

D8.05



PVC SCH. 40 TEE OR EL

SWING PIPE, 12-INCH LENGTH (MIN.):
TO MATCH PIPE BRAND. SEE APPROVED MATERIALS LIST.

NOTES:

 SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.

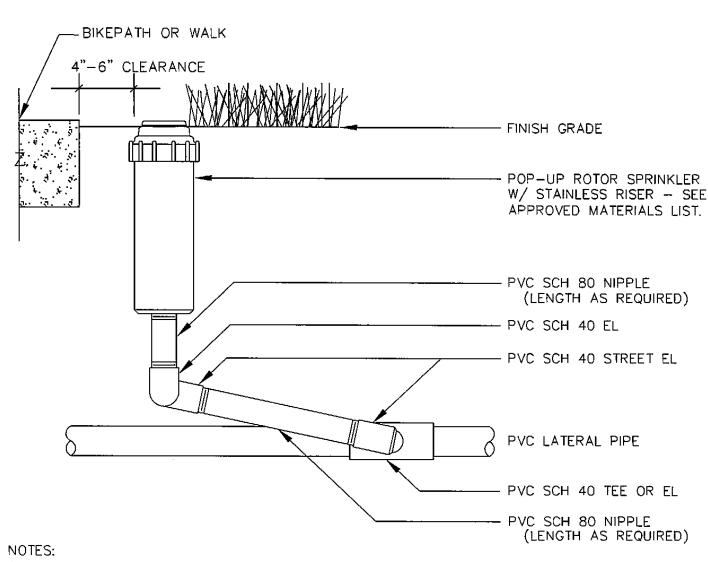
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TOWN OF MEAD STANDARD DESIGN CRITERIA

D8.06

POP-UP SPRAY SPRINKLER ASSEMBLY



 SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.

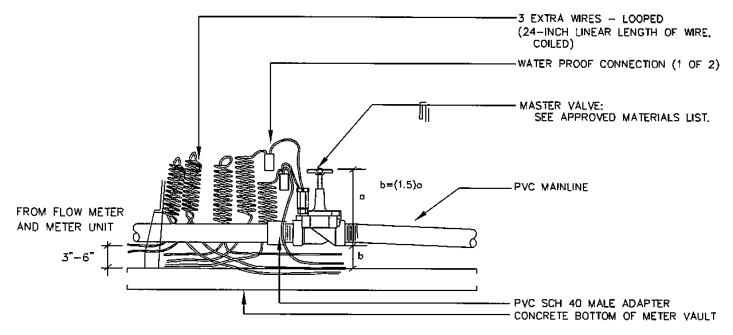
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TOWN OF MEAD STANDARD DESIGN CRITERIA

POP-UP ROTOR SPRINKLER ASSEMBLY

D8.07



- 1. FITTINGS AND MASTER VALVE TO BE SIZED IDENTICALLY WITH MAINLINE,
- 2. MASTER VALVE TO BE LOCATED WITHIN METER PIT (SEE DETAIL).
- 3. SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.

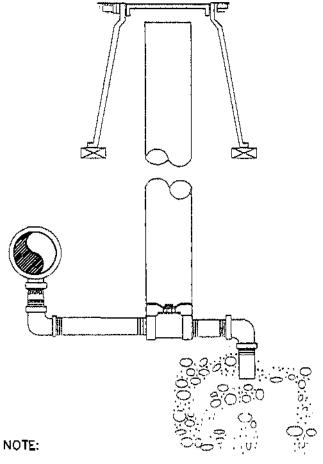
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TOWN OF MEAD STANDARD DESIGN CRITERIA

D8.08

MASTER VALVE ASSEMBLY



TEE OR EL ON MAINLINE PIPE

10" VALVE BOX WITH COVER: SEE APPROVED MATERIALS LIST. BRAND "DV" IN LID WITH 3-INCH HIGH LETTERS.
FINISH GRADE

6-INCH PVC CL 160 PIPE (LENGTH AS REQUIRED)

BRICK (1 OF 2)

PVC SCH 80 NIPPLE (2.0-INCH LENGTH)

PVC SCH 80 NIPPLE (4.0-INCH LENGTH)

PVC SCH 80 EL (1 OF 2)

PVC SCH 80 NIPPLE (4.0-INCH LENGTH)

SUMP OF 4.0 CUBIC FEET OF 3/4-INCH WASHED GRAVEL

3/4-INCH BALL VALVE WITH TEE HANDLE: SEE APPROVED MATERIALS LIST. PVC SCH 80 NIPPLE (8.0-INCH LENGTH)

- 1. SLEEVE TO BE SET SQUARE OVER BALL VALVE TO ALLOW FOR OPERATION OF VALVE WITHOUT BINDING.
- 2. SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST.

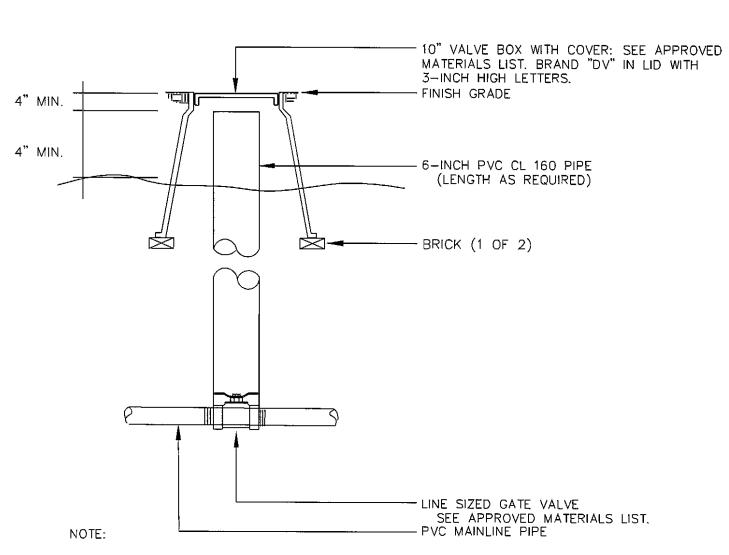
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TOWN OF MEAD STANDARD DESIGN CRITERIA

D8.09

VALVE DRAIN ASSEMBLY



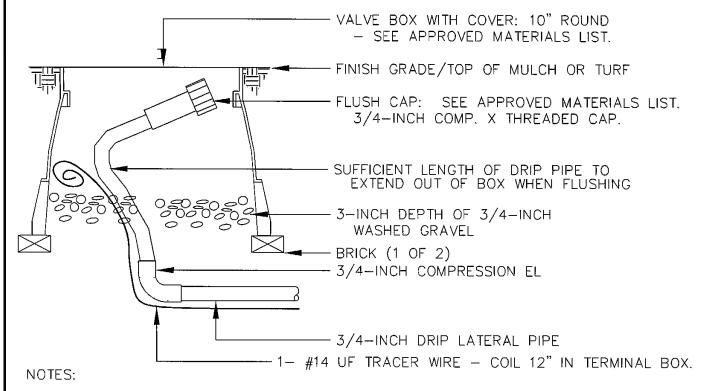
- 1. SLEEVE TO BE SET SQUARE OVER BALL VALVE TO ALLOW FOR OPERATION OF VALVE WITHOUT BINDING.
- 2. SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.



TOWN OF MEAD STANDARD DESIGN CRITERIA

GATE VALVE ASSEMBLY

D8.10



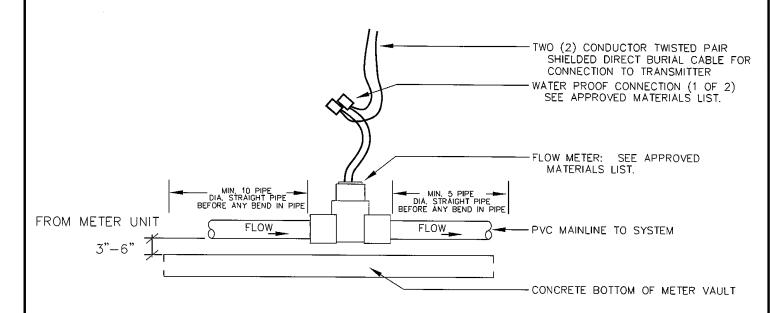
- 1. FLUSH CAP ASSEMBLY TO BE LOCATED AT THE TERMINUS OF EACH DRIP LINE.
- 2. INSTALL TRACER WIRE TO END OF EACH DRIP LINE BRANCH (TO TREES IN TURF AREAS ONLY) FOR EASE OF FUTURE LOCATES.
- SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.



TOWN OF MEAD STANDARD DESIGN CRITERIA

D8.11

FLUSH CAP ASSEMBLY



NOTES: 1. LOCATION OF FLOW METER ASSEMBLY TO BE LOCATED WITHIN METER PIT (SEE DETAIL) AND DETERMINED BY DISTANCES NOTED ON DETAIL ABOVE.

2. SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.

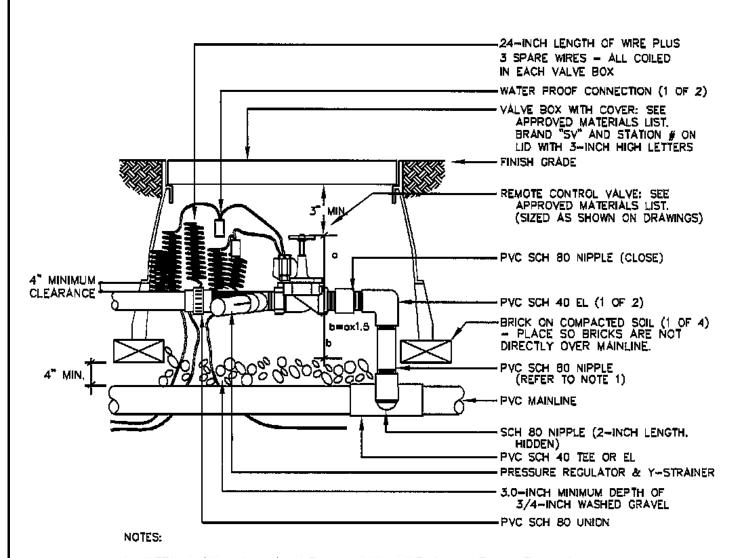
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TOWN OF MEAD STANDARD DESIGN CRITERIA

FLOW METER ASSEMBLY

D8.12



- FITTINGS AND BALL VALVE TO BE SIZED IDENTICALLY WITH CONTROL VALVE.
- 2. SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS
 AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.



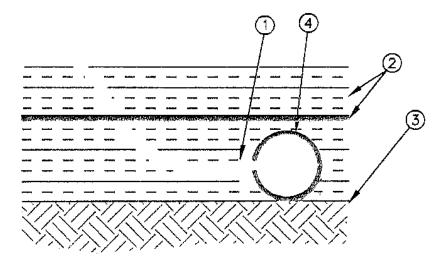
TOWN OF MEAD STANDARD DESIGN CRITERIA

D8.13

DRIP REMOTE CONTROL VALVE ASSEMBLY

LEGEND

- 1. SPIRAL BARB EMITTER SEE APPROVED MATERIALS LIST.
- 4" MINIMUM DEPTH OF MULCH OVER WEED BARRIER
- 3. UNDISTURBED SOIL
- 4. DRIP LATERAL PIPE SEE APPROVED MATERIALS LIST.



NOTES:

- 1. PROVIDE SUFFICIENT STAKES TO SECURE PIPE BELOW MULCH.
- EMITTER TO BE PLACED WITHIN PLANTING PIT AREA OF SHRUBS OR TREES. IF SLOPED AREA, PLACE ON UPHILL SIDE OF PLANTING.
- 2 1 GAL/HR EMITTERS PER SHRUB & 4 1 GAL/HR EMITTERS / TREE (2" CAL, SIZE) ARE REQUIRED. SPACE EMITTERS EVENLY.
- 4. SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.
- NO SPAGHETTI TUBING ALLOWED!
- 6. TRACER WIRE TO BE INSTALLED WITH ALL VURIED DRIP PIPE IN NATIVE GRASS AREAS AND IN OTHER AREAS WHERE NOT LOCATED AT THE SURFACE IN A SHRUB BED.

SCALE: NTS



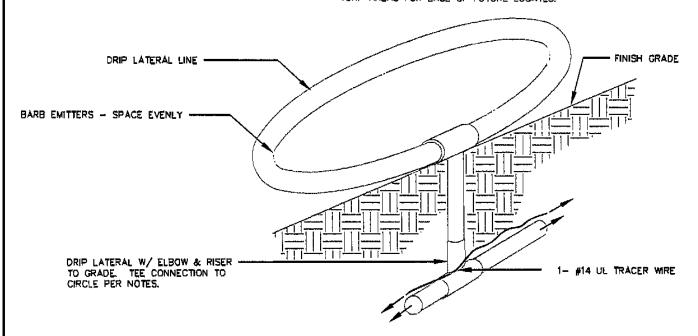
TOWN OF MEAD STANDARD DESIGN CRITERIA

D8.14

SHRUB BED DRIP DETAIL

- . SPIRAL BARB EMITTER SEE APPROVED MATERIALS LIST.
- 2. 3" MINIMUM DEPTH OF COVER BELOW MULCH IN PLANTING PITS
- 3. 12" MIN. TRENCH DEPTH FOR DRIP LATERALS BETWEEN PLANTINGS
- 4. DRIP LATERAL PIPE SEE APPROVED MATERIALS LIST.

 (NO 1/4" DISTRIBUTION TUBING (SPAGHETT! TUBING) ALLOWED!)
- 5. 2' DIAMETER DRIP PIPE TO CIRCLE EACH TREE, 18" DIAMETER DRIP PIPE TO CIRCLE EACH SHRUB IN OPEN TURF AREAS. STAKE SECURELY AT PERIMETER OF PLANTING PIT AND COVER WITH 3" MIN. DEPTH MULCH.
- ALL FITTINGS TO BE SECURED WITH STAINLESS COMPRESSION TYPE FITTINGS, OR APPROVED EQUAL.
- INSTALL TRACER WIRE DIRECTLY ABOVE DRIP LATERALS BURIED UNDER TURF AREAS FOR EASE OF FUTURE LOCATES.



NOTES:

 SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROVED MATERIALS LIST FOR APPROVED PRODUCTS AND INSTALLATION REQUIREMENTS.

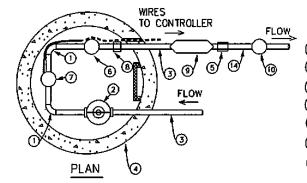
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TOWN OF MEAD STANDARD DESIGN CRITERIA

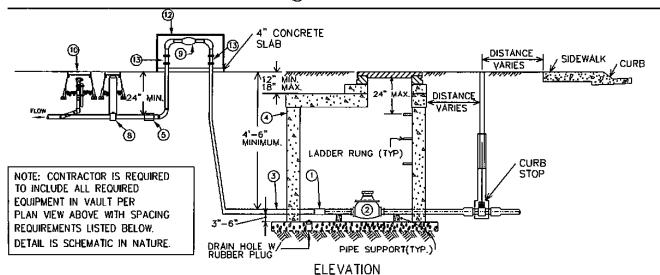
D8.15

DRIP TO TREES IN OPEN TURF AREAS



- 1 -90 DEG. ELBOW
- (2) -METER UNIT
- (3) TYPE K 'SOFT' COPPER TUBING
- 4) 60" CONCRETE VAULT
- 5) PVC ADAPTER
- 6) -MASTER VALVE
- (7) -FLOW METER
- a) DRAIN VALVE

- (9) REDUCED PRESSURE PRINCIPLE BPD
- (10) WINTERIZATION ASSEMBLY
- (1) -2" CLASS 200 PVC OR SMALLER
- (12) STRONGBOX ENCLOSURE
- (13) UNION



- A BASE AND BOTTOM BARREL SECTION SHALL BE PRECAST AS A SINGLE UNIT. THE VAULT IS INTENDED TO BE WATERTIGHT, USE APPROYED GASKET MATERIALS TO SEAL PIPE PENETRATIONS.
- B A 60" DIA, VAULT IS REQUIRED FOR ALL TAPS 3/4" 2" IN SIZE. METERS LARGER THAN 2" OR NON-POTABLE SYSTEMS WILL REQUIRE A SPECIAL DESIGN TO VERIFY VAULT SIZE.
- C COPPER JOINTS INSIDE METER VAULT SHALL BE EITHER THREAD OR SOLDERED WITH 95-5 TINANTIMONY SOLDER.
- D COORDINATE WITH CITY OF LONGMONT WATER/WASTEWATER OPERATIONS & MAINTENANCE FOR PICK-UP OF METERS & METER CONNECTERS.
- E METERS TO BE INSTALLED PER WATER/WASTEWATER STANDARDS AND DETAILS.
- F NO CONNECTIONS OR CHANGES IN PIPE DIRECTION SHALL BE MADE IN 10 PIPE DIAMETERS UPSTREAM OF THE FLOW SENSOR OR 5 PIPE DIAMETERS DOWNSTREAM OF THE FLOW SENSOR.
- G LADDER RUNGS SHALL BE CENTERED UNDER EITHER SIDE OF PIT LID AND OVER METER.
- H EXTEND 2 SPARE WIRES BETWEEN THE FLOW SENSOR AND THE CONTROLLER.
 WIRES TO BE IN 3/4" PYC CONDUIT THROUGH YAULT WALL. CONDUIT TO BE SEALED
 WITH WATERPROOF SILICONE FROM INSIDE OF YAULT.
- I REDUCED PRESSURE 8PDS ARE TO BE LOCATED SO SURROUNDING GRADES DRAIN TO A PAYED SURFACE WITHOUT ENCOUNTERING BUILDINGS OR OTHER STRUCTURES.
- J SEE CITY OF LONGMONT DESIGN STANDARDS & CONSTRUCTION SPECIFICATIONS AND APPROYED MATERIALS LIST FOR APPROYED PRODUCTS AND INSTALLATION REQUIREMENTS.
 K - SEE WINTERIZATION, FLOW METER AND MASTER VALVE DETAILS.

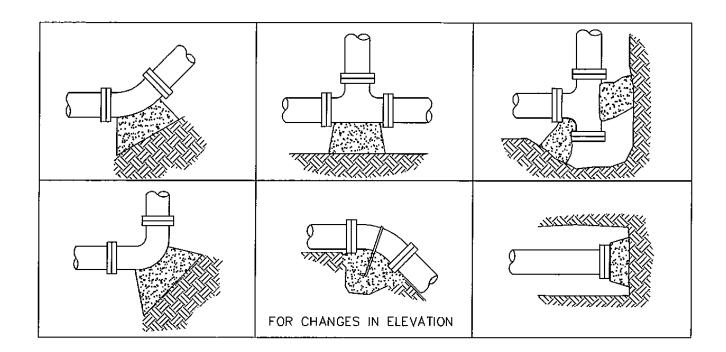


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TOWN OF MEAD STANDARD DESIGN CRITERIA

D8.16

BACKFLOW PREVENTER CONCRETE VAULT



THRUST BLOCK SURFACE AREA AGAINST UNDISTURBED SOIL (SF)

PIPE SIZE		TEE OR DEAD		
	22-1/2°	45°	90°	END
3"	0.3	0.6	1.1	0.8
4"	0.5	1,1	1.9	1.4

^{*}BASED ON 2,000 PSF SOIL BEARING CAPACITY

NOTES:

- USE NO. 4 REBAR WITH MASTIC COATING WHERE PIPE MUST BE ANCHORED TO THRUST BLOCK.
- 2. INSTALL THRUST BLOCK SO THE HORIZONTAL AND VERTICAL DIMENSIONS OF THE THRUST BLOCK ARE APPROXIMATELY EQUAL.
- 3. INSTALL THRUST BLOCKS AGAINST UNDISTURBED SOIL.
- 4. KEEP WIRES CLEAR OF THRUST BLOCK.
- 5. IRRIGATION CONTRACTOR SHALL VERIFY SOIL BEARING CAPACITY. IF SOIL BEARING CAPACITY VARIES FROM ASSUMPTION LISTED ABOVE, CONTRACTOR SHALL RE-DESIGN AS NEEDED.

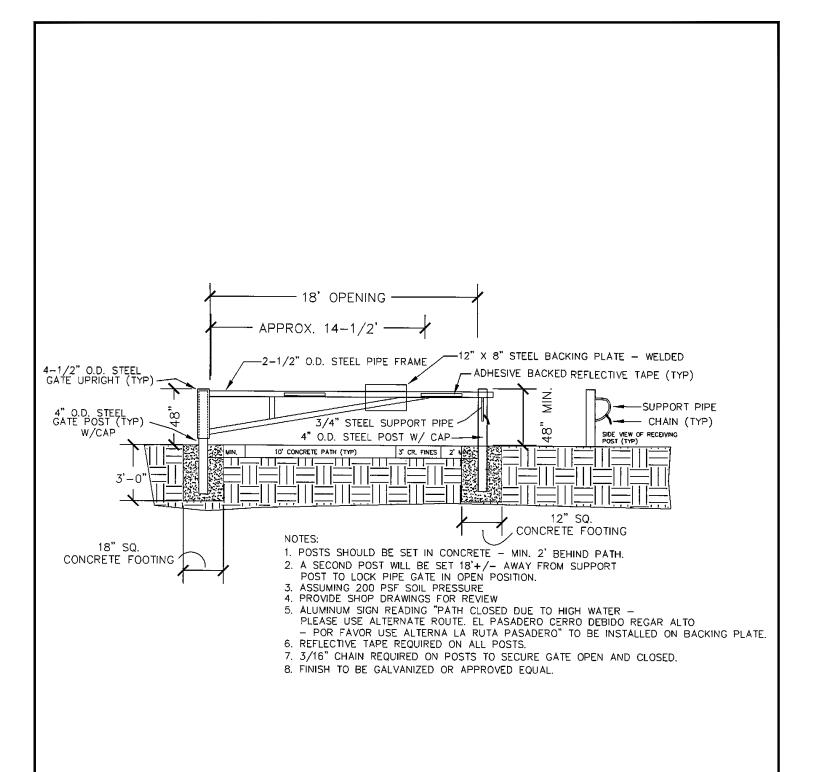
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TOWN OF MEAD STANDARD DESIGN CRITERIA

CONCRETE THRUST BLOCK

D8.17





TOWN OF MEAD STANDARD DESIGN CRITERIA

D8.18

FLOOD GATE