

2026 Modifications to Standard Specifications Summary

1. 501.5 – Tests

- a. Adding “existing” sewers subject to CCTV inspection and changing time frame on when it needs to be completed.
- b. Adding language that WWTP needs 5 days to review CCTV inspection before surface paving can be completed. Contractor is responsible for defects/debris.
- c. Updated CCTV deliverable software.

2. 501.6 – Finishing Work and Maintenance

- a. Added “existing”, remove “re-laid”. Re-laid is new sewer.

3. 502.5 – Precast Manholes

- a. WWTP wants language added on minimal number of adjustment rings to achieve final grade.
- b. Added language on where to find information for adjustment heights.

4. 502.7 – Castings

- a. Removed sentence about shimming castings. With Cretex adjustment rings for manholes and inlets, shimming is no longer allowed.

5. 502.8 – Granular Backfill

- a. Added “Asphalt millings shall not be used for sanitary sewer backfill material. The use of millings does not allow compaction testing equipment to get accurate readings.

6. 502.9.1 – Flexamat or Approved Equal

- a. New section for this material. Replacing riprap at end of endwalls if indicated on a plan set.

7. 503.6 – Backfilling

- a. Changed distance of rock larger than 6” to top of pipe from 18” to 36”.

8. 601.1.6 – Service Laterals

- a. Added a list of two approved corporations and curb stops should the specified parts not be produced by the project commencement.

9. 601.2.6 – Fittings/Hydrants

- a. Edited time frame for SPU to approve valves.
- b. SPU wants to place a concrete collar around all valves to help prevent asphalt settling around them potentially causing them to get hit by plows and crack/break.

10. 601.2.10 – Sterilizing the Pipe

- a. Added language prohibiting flushing new water main into the sanitary system and reference to specifications for dechlorinating during flushing.

11. 601.2.11 - Backfilling

- a. Added asphalt millings shall also not be used for backfill material.

12. 601.4 - Bacterial Testing

- a. Added reference to specification for sampling guidelines and procedures.

13. Detail 3-10: Pavement Marking

- a. Changed Transverse Crosswalk marking for Paths to Longitudinal Bar Crosswalk.
- b. Specified to begin markings at the road centerline and work toward the crosswalk ramps.

14. Detail 3-12: Curb & Gutter Bump-In

- a. Added note for “Minimum of 20’ radius to face of curb” for intersection radii.
- b. Re-aligned crosswalk ramps.

15. Details 3-13 & 3-14: Speed Humps

- a. Added this detail for Speed Humps.

16. Detail 5-10: Typical Inlet

- a. Changed structure base dimension from 6” to 5”. Most used supplier makes bases 5” thick.

17. Detail 5-12: Pipe Gate for Reinforced Concrete Endwall

- a. Added “(Forest Green)” after “Third coat-Rust-Oleum 1282. Removed Note #2 “Each coat an overall coat”.
- b. Re-numbered Note #3 to #2.

1.

501.5 TESTS

All **existing and** new sewers, **as specified by the Engineer,** shall have a closed circuit television inspection performed after **finished road grading but prior to the surface** ~~the binder~~ course of asphalt **being installed.** ~~is placed and prior to acceptance of these sewers.~~ The television reports **must be compatible with ITPipes software and** shall be supplied to the City of Sun Prairie Waste Water Treatment Plant (WWTP) for review. **The City's WWTP personnel shall have 5 calendar days to review the report after the contractor has received confirmation of receiving the deliverables.** ~~Television reports must be compatible with WinCan software.~~ The WWTP will notify the contractor of any defective work, damaged pipes, or debris within 5 days. Any defects, damaged pipes, and/or debris shall be replaced, repaired, and/or cleaned by the contractor prior to the surface course of asphalt being installed. Prior to acceptance of these sewers, corrections will be made to the satisfaction of the City's WWTP Director and may require an additional television inspection. ~~Any defects and/or debris shall be corrected prior to the acceptance of these sewers.~~

2.

501.6 FINISHING WORK AND MAINTENANCE

All **existing or** new ~~or re-laid~~ sewers and structures shall be cleaned of any accumulations of silt, debris, and other foreign matter, and prior to acceptance, such installations shall be tested with water or by other approved methods, and under such tests unimpeded flow shall be indicated.

3.

502.5 PRECAST MANHOLES (part c.)

- b. c. All adjusting rings for sanitary and storm sewer manholes shall be made from Expanded Polypropylene (EPP) as manufactured by CRETEX (PRO-RING) or approved equal and meet the requirements of ASTM D3575 and ASTM D4819-13. The adjustment rings shall be tested to assure compliance with impact and loading requirements per AASHTO M-306, H-25, and HS-25. The adjusting rings shall be sealed using M-1 Structural Adhesive/Sealant, or approved equal, meeting requirements of ASTM C-920.

Per the manufacturer's installation instructions, the contractor shall use the minimal number of grade, angle, and finish rings necessary to match manhole casting to 3/8" below road grade. Prior to the application of the adhesive/sealant, the adjustment

rings shall be approved by the Engineer. Maximum height of adjusting rings shall not exceed 7.50". The inner diameter of the adjustment rings must match the inner diameter of the cone installed. The Contractor shall refer to the structure shop drawings for adjustment heights. (For existing structures where shop drawings are not required, the Contractor shall supply the adjusting rings and refer to the final Plan Set for the existing adjustment heights and proposed rim grades).

4.

502.7 CASTINGS

The following Neenah Foundry castings, or equal castings, are standard for City construction. Other equal castings, as approved by the Engineer in writing, or when specified, may be used.

~~If shimming is necessary between the top adjustment ring and casting, no wood shims shall be used.~~

5.

502.8 GRANULAR BACKFILL

The material, furnished and used in the work, shall consist of natural sand or a mixture of sand with gravel, crushed gravel, crushed stone, or other broken or fragmented material that has sufficient fine material to fill all the voids in the coarser material.

The maximum size of any gravel, stone or other broken or fragmented material when used for backfill for structures or trench excavations shall be of such size that 100 percent passes a 6-inch sieve and not less than 85 percent, by weight, passes a 3-inch sieve. Crushed stone screenings shall not be used as backfill material. **Asphalt millings shall not be used as sanitary sewer backfill material.**

6.

502.9.1 PERMANENT EROSION CONTROL – TIED CONCRETE BLOCK MAT

Flexamat (Standard) or approved equal shall be placed at storm sewer endwalls as indicated on the project plan set and installed per the manufacturer's guidelines.

The Flexamat or approved equal area shall be seeded using DOT Seed Mix #20, unless otherwise specified on the project plan set. The seed and fertilizer shall be sown or spread as described in Method B under Section 205.2.6.

7.

503.6 BACKFILLING

After bedding and covering the pipe as required by the Bedding and Cover Specification the trench shall be backfilled with material approved by the Engineer. Unless otherwise specified or directed by the Engineer, the Contractor shall backfill trenches and other excavations with materials excavated in the course of the work. Vegetation and stones or fragments of broken rock in excess of 6 inches in diameter in any dimension shall not be allowed within ~~18"~~ 36" of the top of the pipe. Frozen material shall not be used for backfilling, and shall be replaced with suitable material at no additional cost. Twelve inch in diameter or larger boulders shall not be allowed in the trench.

8.

601.1.6 SERVICE LATERALS

Service connections shall be laid with Type "K" copper tubing of 1-inch diameter unless other diameters are specified.

Corporation stops shall be Mueller Compression Fitting, Part # H15008.

Curb stops shall be Mueller Compression Fitting, Part # B25155.

Service boxes shall be Arch Pattern with 1-1/4" Upper Section -Type PL Lid Stationary Rod or equal Mueller pattern for standard 6.5' depth, Part # H10385. Cotter pins shall be stainless steel.

Service connections 1-1/2-inch and 2-inch diameters:

Corporation stops shall be Mueller Compression Fitting Part # H15013.

Curb Stops shall be Mueller Compression Fitting Part # B25155.

Service Boxes shall be Arch Pattern with 1-1/4" upper section – Type PL Lid Stationary Rod or equal Mueller Pattern for standard 6.5' depth, Part # H10386. Cotter pins shall be stainless steel.

All fittings shall be set on a 4" x 8" x 16" concrete block, or equivalent. (Curb stop, coupling, etc.). Costs for blocks shall be included in the UNIT Bid Prices.

All service boxes must be poly-wrapped where the arch sits on the block to prevent debris from getting to the curb stop

Lots designated for duplexes shall have two separate water services.

**** Approved alternate Corporation stops or Curb stops to be used if the above specified cannot be produced at the project commencement:**

Corporation stops:

Ford Compression Fitting, Part # FB1000-x

Curb stops:

Mueller Compression Fitting. Part # B25209N

Ford Compression Fitting. Part # B44-xxx-Q-NL

9.

601.2.6 FITTINGS /HYDRANTS

If the Engineer and/or SPU determines that a valve box is improperly aligned or otherwise damaged and unacceptable, excavate and expose the water valve box to the depth needed to install a new valve box with a new lid, center the valve box over the operating nut and adjust the valve boxes to 3/8" below finished surface elevation. Ensure that all adjusted valve boxes are centered over the valve operating nut and free of dirt and debris when complete. The Contractor is responsible for contacting SPU to schedule an inspection of the valve boxes. SPU will need to approve the valve boxes ~~prior to surface paving.~~ after finished road grading and prior to paving.

~~After surface asphalt is installed the valve shall be inspected and monitored throughout the warranty period by City staff. If the water valves are not 3/8" below the surface course elevation, the contractor shall install a circular concrete collar to resolve the issue at any time within the 1 year warranty, determined by the Engineer. Refer to Detail 5-16.~~

During asphalt paving, valve boxes shall be adjusted to 3/8" below the surface for each lift of asphalt. Upon completion of all asphalt lifts, the contractor shall install a circular concrete collar around EACH valve box. The finished valve box must remain at 3/8" below finished grade. Refer to Detail 5-16. Should the concrete collar or asphalt adjacent to the concrete collar fail or not meet the engineer's requirements within the warranty period, the concrete collar shall be replaced or enlarged to meet the requirements

10.

601.2.10 STERILIZING THE PIPE

Flushing shall be in accordance with AWWA C501 at a velocity of 3.0 feet per second (AWWA C651).

Flushing is prohibited from being discharged into the wastewater sewer system. Refer to ANSI/AWWA C655 "Field Dechlorination" for dechlorination procedures. The Engineer must approve the flushing location and dechlorination procedures.

11.

601.2.11 BACKFILLING

The trench and other excavations shall be refilled with such excavated material and in such a manner as directed by the Engineer. No boulders over six (6) inches shall be included in the backfilling material. The ditches shall be mechanically compacted to 95% compaction in the amount and manner as the Engineer may direct. Crushed stone screenings or asphalt millings shall not be used as backfill material.

12.

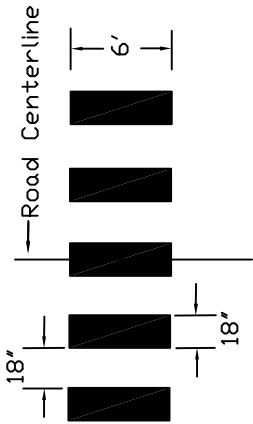
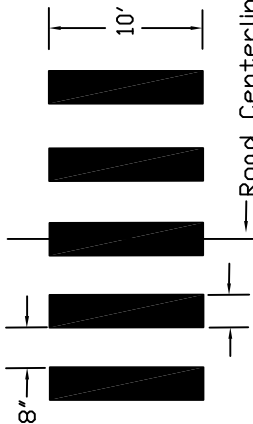
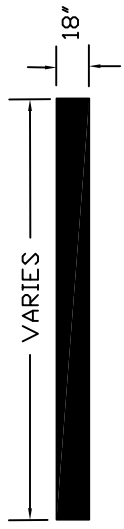
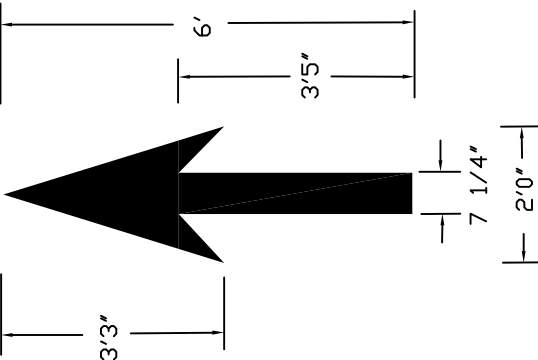
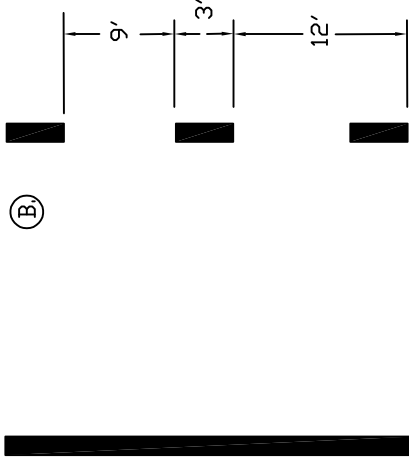
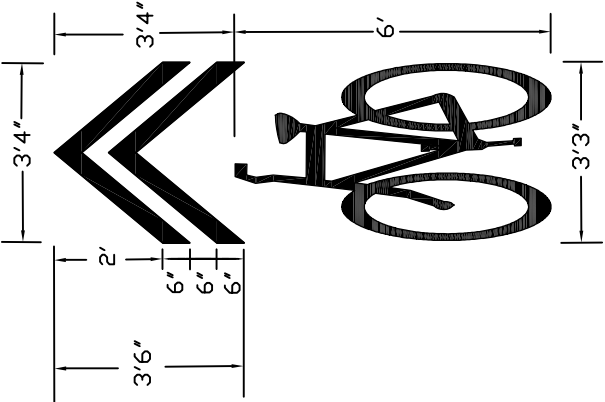
601.4 BACTERIAL TESTING

The Contractor/Developer shall cause the completed mains to be filled slowly with water for a reasonable period of time (approximately seven (7) days). The Contractor shall then flush the lines (See 6.1.2.10) and take samples in containers furnished by the State of Wisconsin Laboratory of Hygiene, 2601 Agriculture Drive, Madison, WI 53718. The samples are to be delivered within six (6) hours such that the Laboratory has normal working time to test the samples. Sun Prairie Utilities shall supply the necessary documents and test bottles to the Contractor.

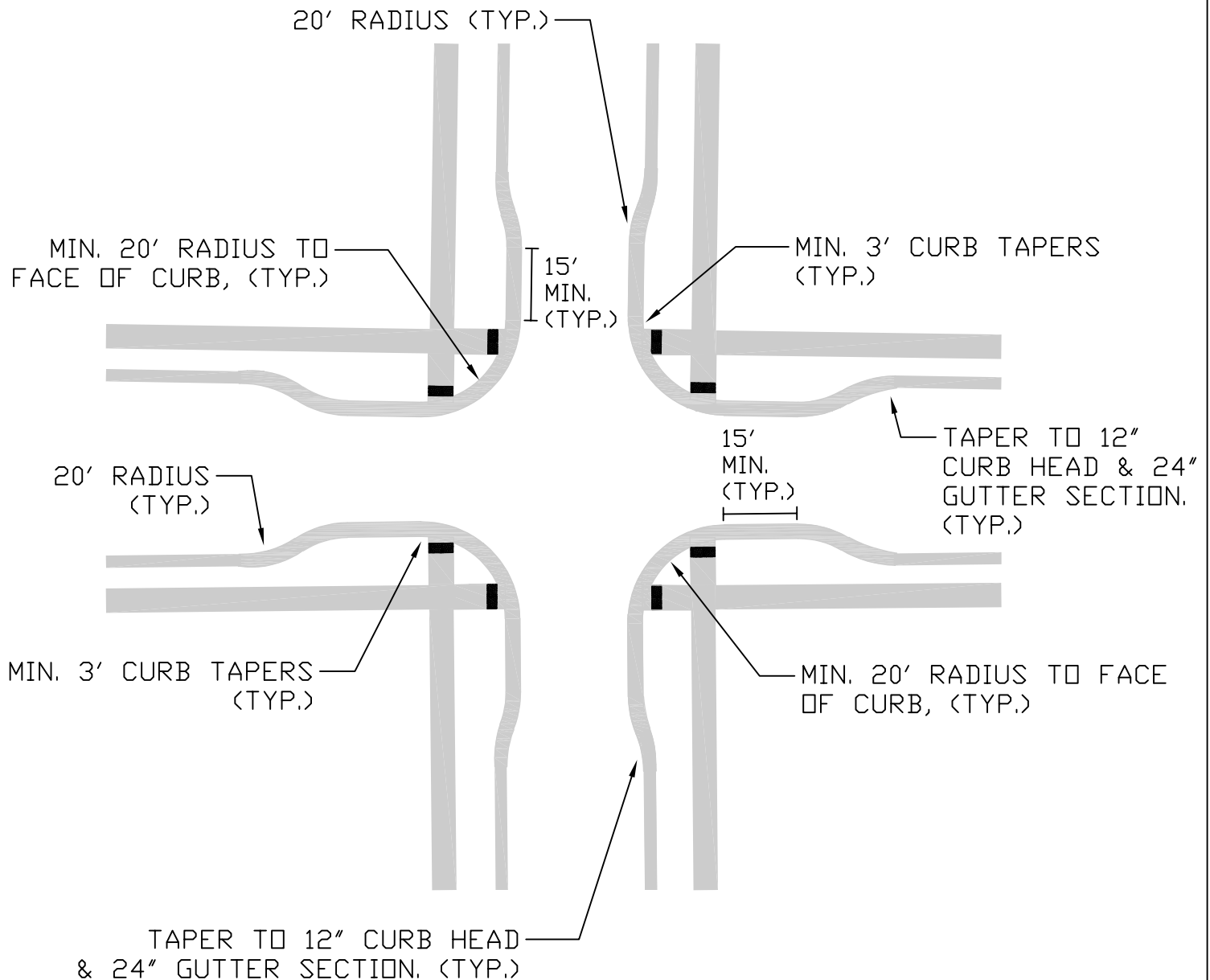
Refer to AWWA C651-14 (Section 5.1) for sampling guidelines and procedures.

Sample results are to be sent by the State of Wisconsin Laboratory of Hygiene back to the Engineer and Sun Prairie Utilities.

Upon safe result, the water will be turned on by Sun Prairie Utilities personnel. If the samples fail, the Contractor/Developer will be notified immediately by Sun Prairie Utilities in order that the Contractor/Developer may make repairs and re-test the system before the water can be turned on by Sun Prairie Utilities.

Lines shall be spaced 18" apart.  18" Road Centerline 6" 18" LONGITUDINAL BAR CROSSWALK MUTCD 3C.03	Lines shall be spaced 18" apart.  18" 10" Road Centerline 18" LONGITUDINAL BAR CROSSWALK (PATH) MUTCD 3C.03	 VARIES 18" TYPICAL STOP BAR MUTCD 3B.19	 3'3" 6' 3'5" 7 1/4" 2'0" BIKE LANE ARROW DOT # S.D.D.15 C 7-16e	① SOLID 4-INCH WHITE CENTERLINE FOR AREAS WHERE PASSING IS PROHIBITED. ② BROKEN 4-INCH WHITE CENTERLINE FOR AREAS WHERE PASSING IS ALLOWED. BROKEN LINES SHOULD HAVE A 1-TO-3 SEGMENT-TO-GAP RATIO. A NOMINAL 3 FT. SEGMENT WITH A 9 FT. GAP IS RECOMMENDED.  9' 3' 12' SHARED PATH PAVEMENT MARKINGS	 3'6" 2' 3'4" 6" 6" 6" 6' 3'4" 3'3" BIKE SYMBOL FOR SHARED LANE DOT # S.D.D.15 C 7-16e	NOTES: 1. ALL PAVEMENT MARKINGS SHALL BE EPOXY OR METHYL METHACRYLATE (MMA) 2. REFER TO WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD DETAIL DRAWING, SERIES 15, AND MUTCD CHAPTER 3C FOR COMPLETE PAVEMENT MARKING DETAILS 3. REFLECTIVE BEADS SHALL BE USED ON ALL PAVEMENT MARKINGS 4. ALL SIDEWALK OR MULTI-PURPOSE PATH CROSSWALKS SHALL REQUIRE LONGITUDINAL BAR CROSSWALK MARKINGS. CITY OF SUN PRAIRIE PAVEMENT MARKING DATE: JAN. 2026 DRAWING NO. 3 - 10
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CURB & GUTTER BUMP-IN



NOTES:

- 1.) TAPER CURB HEAD TO 12" WITH A 24" GUTTER SECTION ENTERING BUMP-IN.
- 2.) THE RADIUS FOR ENTERING AND EXITING THE BUMP-IN SHALL BE 20'.
- 3.) THE LENGTH OF THE CURB & GUTTER AT CROSSWALKS SHALL BE A MINIMUM OF 15'.

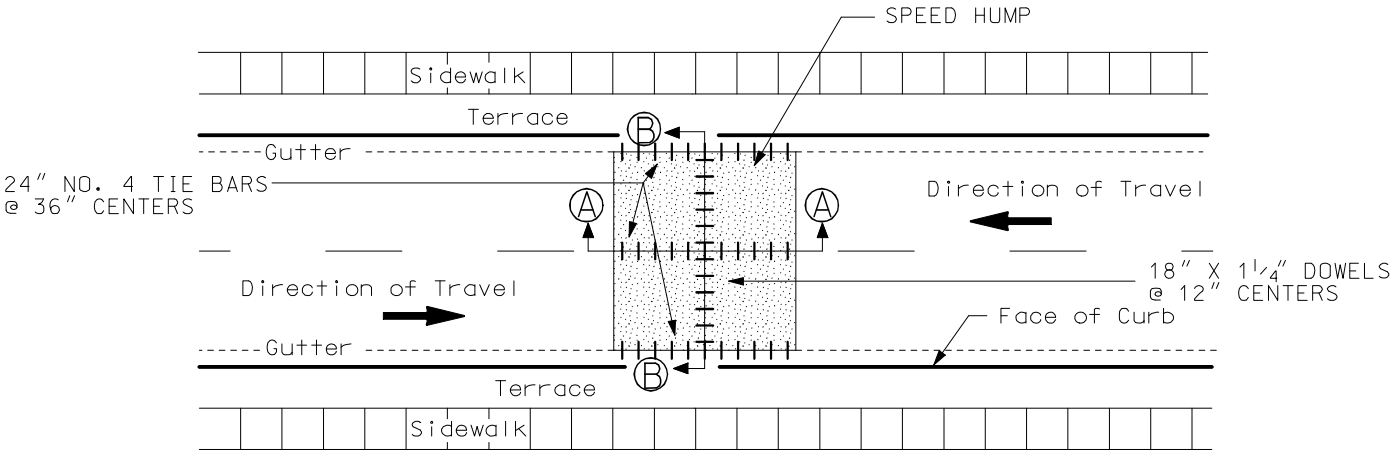
CITY OF SUN PRAIRIE
TYPICAL CURB & GUTTER
BUMP-IN

DATE: JAN. 2026

DRAWING NO.

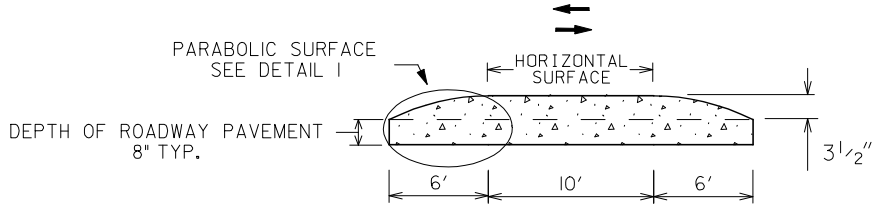
3-12

SPEED HUMP DETAIL



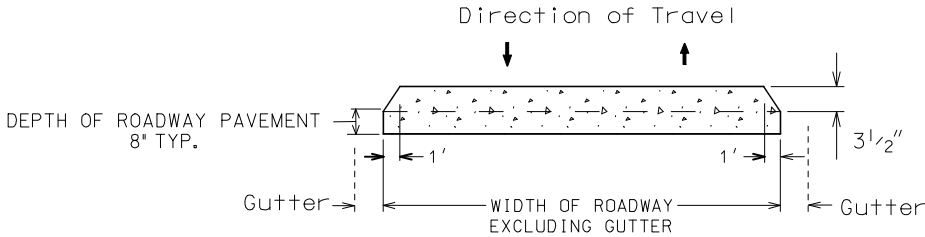
PLAN VIEW

SPEED HUMP ON TYPICAL URBAN STREET



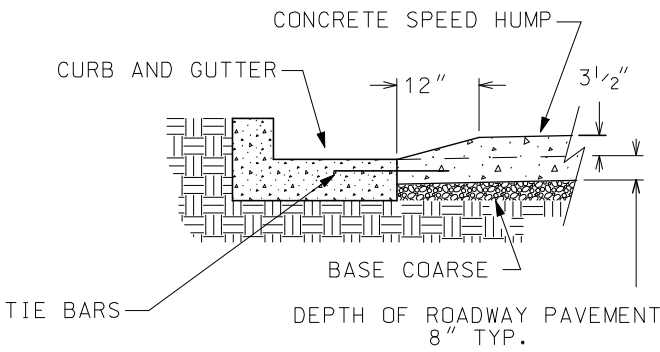
SECTION AA

NOT TO SCALE
(VERTICAL SCALE IS EXAGGERATED)



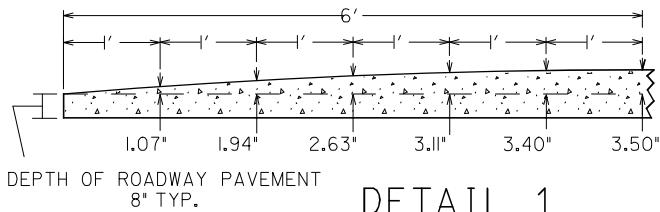
SECTION BB

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(VERTICAL SCALE IS EXAGGERATED)



CURB DETAIL

CROSS SECTION



DETAIL 1

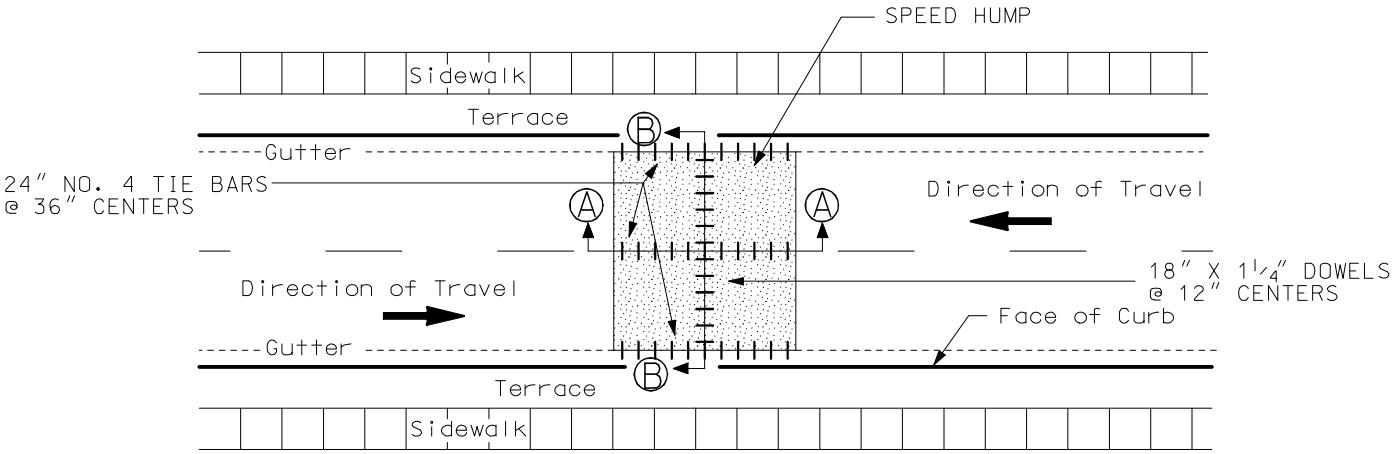
PARABOLIC SURFACE

CITY OF SUN PRAIRIE
CONCRETE SPEED HUMP FLOW
THROUGH GUTTER

DATE: JAN. 2026

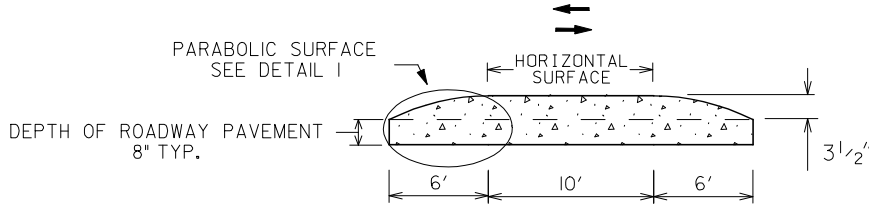
DRAWING NO.
3-13

SPEED HUMP DETAIL



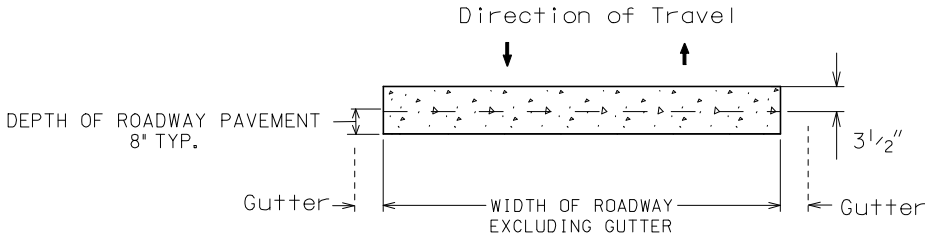
PLAN VIEW

SPEED HUMP ON TYPICAL URBAN STREET



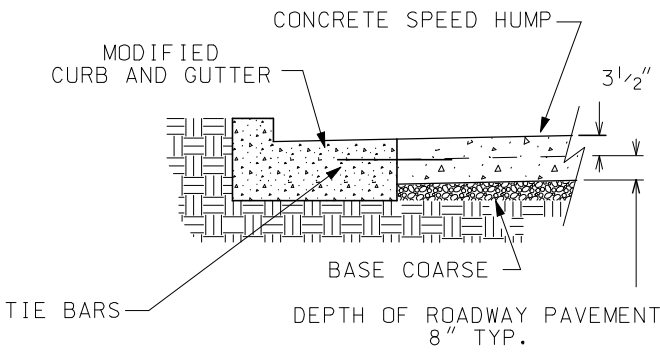
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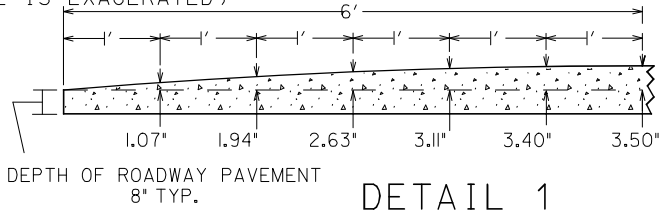
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CURB DETAIL

CROSS SECTION



DETAIL 1

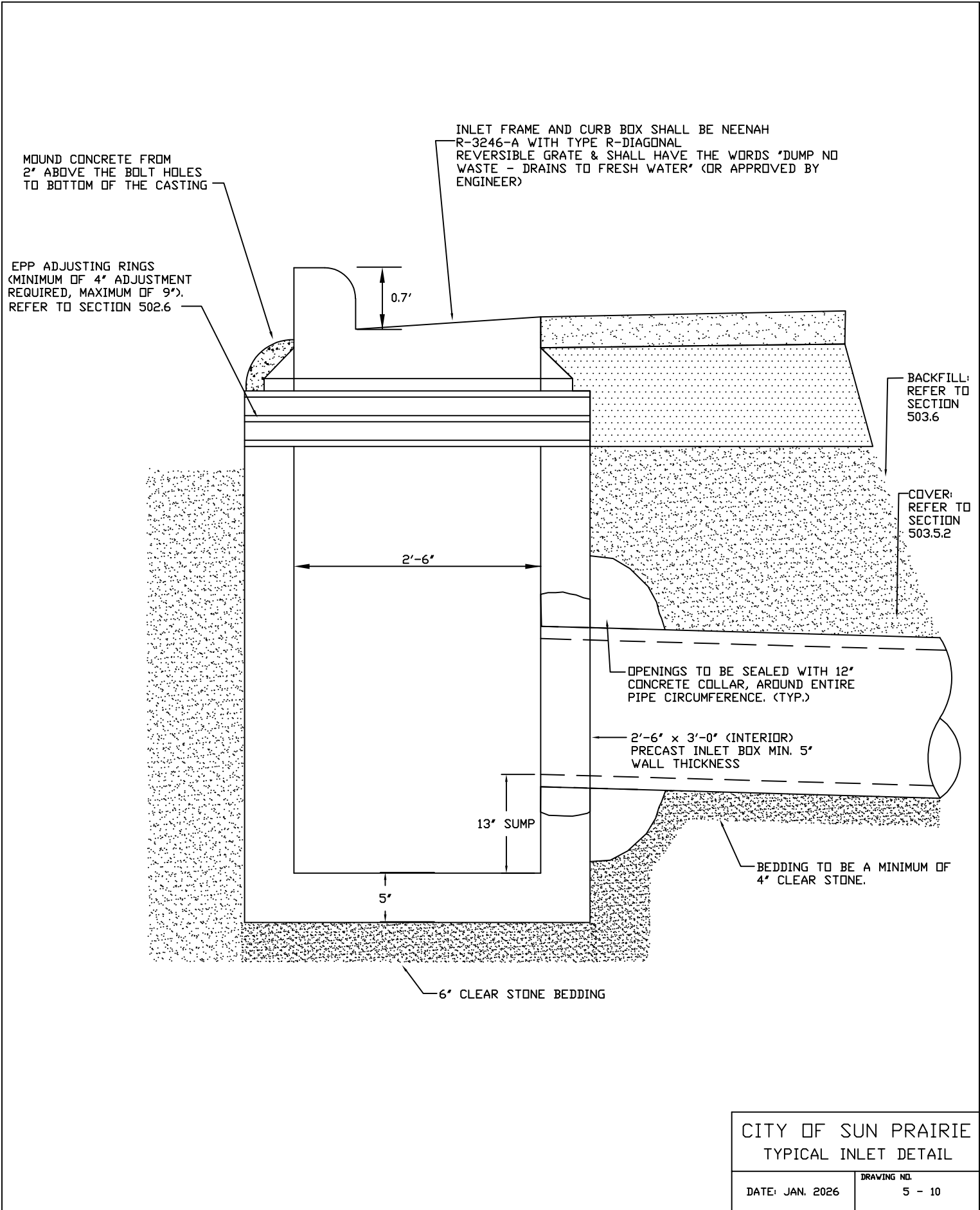
PARABOLIC SURFACE

CITY OF SUN PRAIRIE

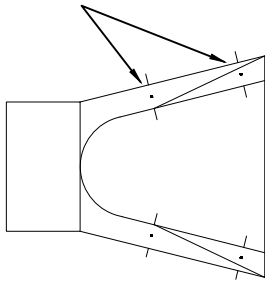
CONCRETE SPEED HUMP RAISED
GUTTER

DATE: JAN. 2026

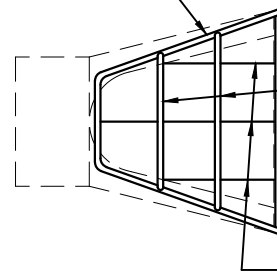
DRAWING NO.
3-14



SHOP DRILL FOUR 7/16"
HOLES AS SHOWN

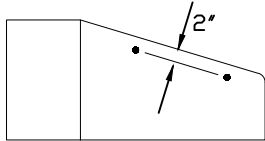


1"Ø STD. PIPE FRAME

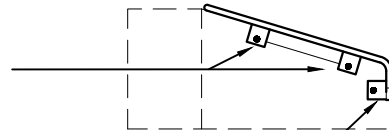


1"Ø STD. PIPE
@ 8" O.C.

3/4"Ø ROD @ 12"
O.C. MAX - WELD
@ EACH PIPE

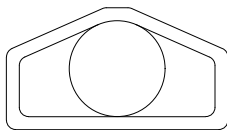
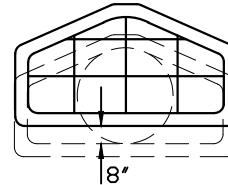


4"x4"x3/16" ANGLES
(4 REQ'D)
WELD TO FRAME
PROVIDE 7/16" HOLE
IN EACH ANGLE



PROVIDE 2 ADDITIONAL
CONNECTIONS WHEN PIPE
IS 36" OR LARGER

1"Ø STD. STEEL PIPE



NO SCALE

THE CONTRACTOR SHALL BOLT THE PIPE GATE TO THE CONCRETE ENDWALL WITH FOUR 3/8"x6" MACHINE BOLTS WITH NUTS ON INSIDE WALL.

PIPE GATES ARE REQUIRED ON ENDWALLS GREATER THAN OR EQUAL TO 12 INCHES.

PAINTING SPECIFICATIONS

THE PIPE GATE SHALL RECEIVE THE FOLLOWING PREPARATION & PAINTING. SEE NOTES:
FIRST COAT-RUST-OLEUM X-60 RED BARE METAL PRIMER OR EQUAL. SECOND COAT-
RUST-OLEUM 960 ZINC CHROMATE PRIMER OR EQUAL. THIRD COAT-RUST-OLEUM
1282 (FOREST GREEN) HIGH GLOSS OR EQUAL.

- NOTES: 1. BARE SURFACES - AFTER THROUGH SCRAPING, WIRE BRUSHING & CLEANING
APPLY THE THREE COAT SYSTEM LISTED.
2. ALLOW 24-48 HOURS DRYING TIME BETWEEN COATS.