2017

Supplemental Specifications

Adopted: January 1, 2017

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Engineering Division
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INTRODUCTION

This book contains SUPPLEMENTAL SPECIFICATIONS and CONSTRUCTION STANDARD DETAILS used for the City of Moline, Illinois. This 2017 edition of the Moline Supplemental Specifications and Standard Details replaces all previous editions. This edition includes revisions and clarifications intended to remove conflicts and ambiguities. All revised sections and standard details are noted in the index with an asterisk and all revised language within the section is underlined.

The SUPPLEMENTAL SPECIFICATIONS included herein supplement a specific Section or Article of the edition in effect on the date of invitation of bids of the following: the Illinois DOT "Standard Specifications for Road and Bridge Construction", hereinafter referred to as the Standard Specifications; the "Illinois DOT Supplemental Specifications and Recurring Special Provisions"; the "Illinois Recommended Standards for Sewage Works and the Design Criteria for Pressure Sewer Systems"; the "Manual on Uniform Traffic Control Devices for Streets and Highways; the "Manual of Test Procedures of Materials"; and the "Standard Specifications for Water & Sewer Main Construction in Illinois", hereinafter referred to as *the Sewer and Water Specifications*.

In case of conflict with any part, or parts, of the above, the City of Moline Supplemental Specifications, the City of Moline Special Provisions (specific to the project being bid), and City of Moline Standard Details shall take precedence and will govern. In the case of conflict between the Moline Supplemental Specifications and the Moline Special Provisions, the Moline Special Provisions shall take precedence and will govern.

INDEX FOR
CITY OF MOLINE
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2017

SUPPLEMENTAL SPECIFICATIONS

* Indicates Revised Section

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City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 105
CONTROL OF WORK

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

105.05 Coordination of the Contract Documents

Revise this Article to read:

The contract is intended to describe a complete work. In case of discrepancy, calculated dimensions govern over scaled dimensions and the following relationships apply:

Moline Special Provisions	Hold over:	Moline Supplemental Specifications IDOT Special Provisions Plans IDOT Recurring Special Provisions IDOT Supplemental Specification IDOT Specifications
Moline Supplemental Specifications	Hold Over:	IDOT Special Provisions Plans IDOT Recurring Special Provisions IDOT Supplemental Specification IDOT Specifications
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IDOT Supplemental Specifications	Hold Over:	IDOT Specifications
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105.07 Cooperation with Utilities

Add the following to this Article:

Call Julie 1-800-892-0123 before you dig.

The following utility companies may have utilities located on this project:

Midamerican Energy Elec. (563) 333-8706 Gas (309) 793-3704	AT&T (309) 757-4707
Mediacom (309) 743-4750	Centurylink (563) 355-6402
Geneseo Communications (309) 944-8025	Windstream (309) 282-3110

City of Moline Sanitary Sewer	(309) 524-2341
City of Moline Storm Sewers	(309) 524-2363
City of Moline Water Mains	(309) 524-2323

The above represents the best information of the City and is included for the convenience of the bidder. The applicable provisions of Section 105 and 107 of the Standard Specifications shall apply.

It shall be the Contractor's responsibility to notify the private utility companies of his/her construction plans sufficiently in advance to allow them to make field locations, adjustments and relocations. Any adjustments and relocations necessary will be performed by the affected utility company at no expense to the Contractor. Any adjustments to city-owned facilities are the Contractor's responsibility and will be included in the applicable contract.

If any utility adjustment or removal has not been completed when required by the Contractor's operations, the Contractor shall notify the Engineer in writing. No additional compensation will be allowed for possible delays encountered due to utility conflicts; however, a request for an extension of time will be considered to the extent the contractor's operations were affected.

The Contractor shall excavate and verify the exact location and elevation of all known utilities that could affect the installation of any proposed items. The cost shall be incidental to the associated items of construction.

Article 105.09 Survey Control Points

Add the following to this Article:

The Contractor shall contact the City of Moline's Construction Inspector a minimum of 48 hours in advance to request construction staking. No allowance will be made for any delay or suspension of work due to the Contractor's failure to give the required notice.

Revise the first sentence of the third paragraph to read:

The Contractor shall furnish, as directed by the Engineer, the type, size, quality, and quantity of material required to establish control points and all construction staking for the project.

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 107
LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

107.14 Maintenance of Traffic

Add this paragraph to this Article:

The presence of temporary traffic control drawings or standards in the project plans, whether a pay item or not, does not relieve the Contractor of his/her obligation to provide protection to the public. This article shall be determined to stipulate that the contractor shall provide, to the satisfaction of the Engineer, all reasonable protection deemed necessary beyond that shown in the plans, Standards or Special Provisions. The expense of this work to the Contractor shall be included in the traffic control items or considered incidental to the contract.

107.23 Protection of Streams, Lakes, Reservoirs, Natural Areas, Wetlands, Prairie Areas, Savannahs, and Endangered and Threatened Species

Add the following paragraph to this Article:

The Contractor shall be responsible for ensuring compliance with all National Pollutant Discharge Elimination System (NDPES) permit requirements and City of Moline Storm water Ordinance regulations. This shall include the timely and accurate completion of all Erosion Control Inspection Reports. Failure to comply with the above regulations shall be a violation of the Moline Code of Ordinances and may result in fines of up to $750 per day per violation.

107.25 Protection and Restoration of Traffic Signs

Revise the third paragraph of this Article to read:

Any signs or posts the Engineer determines have been damaged during the removal, storage or re-erection shall be replaced by the Contractor at the Contractor’s expense.

107.30 Contractor’s Responsibility for Work

Add this sentence to 1st paragraph of this Article:

Permission to work during freezing, stormy or inclement weather shall in no way be construed as a release of the Contractor's responsibility regarding the quality of work executed at such time.

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 108
PROSECUTION AND PROGRESS

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

108.04 Working Days

Revise the first paragraph to read:

When the contract provides a specific number of working days or a completion date with a guaranteed number of working days, the charging of working days shall start when the Contractor begins actual construction work, and in no case later than 10 days after the execution and approval of the contract, unless otherwise provided in the contract or directed by the Engineer.

Revise the first sentence of the second paragraph to read:

"A working day shall be defined as any calendar day after the Contractor begins actual construction work, except Saturdays, Sundays or holidays observed in Illinois by the Contractor's entire workforce."

Revise the third paragraph to read:

“A full working day will be charged for any day described in the foregoing on which conditions are such that the Contractor could be expected to do a full day’s work. A full working day will be charged on days when the Contractor could be working, but elects not to work, or elects to work elsewhere.”

Add the following paragraph to this article:

Saturdays shall be charged as a working day when complete street and/or intersection closures are in effect and the Contractor shall be required to work onsite with a full crew making progress on the project. If, in the sole opinion of the Engineer, the Contractor is not working onsite with a full crew or is not attempting to make progress on the project, the contractor shall pay the City the amount shown in the schedule of deductions in Article 108.09. This amount shall not be a penalty but shall be liquidated damages as defined in Article 108.09.

Add the following paragraph to this Article:

The Contractor shall complete all work, including punch-list items, in the working days specified.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 109
MEASUREMENT AND PAYMENT

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

109.03 Increased or Decreased Quantities

Add the following paragraph to this Article:

The City reserves the right, for any reason, to expand or decrease the scope of the project. As-built quantities may differ significantly from plans.

109.04 Payment for Extra Work.

Revise subparagraph (b) (8) of this Article:

All statements of the cost of force account work shall be furnished to the Engineer not later than 14 days after the date of final acceptance. If the statement is not received within the specified time frame, all demands for payment for the extra work are waived and the City of Moline is released from any and all such demands. It is the responsibility of the Contractor to ensure that all statements are received within the specified time regardless of the manner or method of delivery.

Add the following paragraph to subparagraph (b) (8) of this Article:

“EXTRA WORK DAILY REPORTS” shall be submitted no later than the end of the next working day. If the reports are not received within the specified time allowed, all demands for payment for the extra work are waived and the City of Moline is released from all demands for payment. It is the responsibility of the Contractor to ensure that all reports are received within the specified time regardless of the manner or method of delivery.

109.07 Partial Payments.

Add a subsection (c) to read:

"There shall be deducted from the amount so determined of the completed work a sum of 10 percent to be retained until after the completion of the entire work to the satisfaction of the Engineer."

109.08 Acceptance and Final Payment.

Revise the 2nd paragraph of this Article to read:

A one year performance, labor, material and maintenance bond, in the full amount of the contract, shall be furnished by the successful bidder upon execution of the contract. The one year warranty period shall begin on the date of final acceptance. Final acceptance shall be defined as the date the Moline City Council approves the final pay estimate. Final acceptance shall not constitute acceptance of any unauthorized or defective work or material. The City of Moline shall not be barred from requiring the removal, replacement, repair or disposal of any unauthorized or defective work or material or from recovering damages from any such work or material.

Add the following paragraphs at the end of this Article:

Final payment to the Contractor will not be made until the Contractor has provided, to the City of Moline, all documentation required by the State and or the Federal Government. This includes but is not limited to certified payrolls, material certification, material tickets and copies of any and all items reported directly to the State.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 202
EARTH AND ROCK EXCAVATION

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

202.01 Description

Revise this Article to read:

This work shall consist of the removal and satisfactory disposal of all suitable earth excavation as defined on the plans. This item includes removal of existing vegetation and organic topsoil; existing, identified, concrete structures not covered elsewhere; seal coat or bituminous surfacing on aggregate base, aggregate base, seal coat or bituminous base and earth materials, and rock. If the Contractor encounters physical conditions differing materially from those indicated in the contract, he/she shall notify the Engineer before they are disturbed, as per Article 104.03.

202.04 Classification

Revise the second paragraph of this Article to read:

Rock excavation is defined as boulders exceeding 1/2 cubic yard in size, or solid ledge rock, which in the opinion of the Engineer requires, for its removal, wedging, sledging, barring, or breaking up with power tools. No soft or disintegrated rock; no hard-pan or cemented gravel that can be removed with a hand pick or power-operated excavator or shovel; no loose, shaken, or previously blasted rock or broken stone in rock fillings or elsewhere; and no rock outside of the maximum limits of measurement allowed, which may fall into the excavation, will be measured for payment.

Add the following 2 paragraphs to this Article:

Drilling and blasting shall not be allowed for rock removal operations unless provided for by special provision.

The Contractor shall excavate and remove overburden and expose the rock to allow the Engineer to profile or cross section the rock for measurement of pay quantity.

202.07 Method of Measurement

Revise (a) of this Article to read:

(a) Contract Quantities. If constructed according to lines, grades, and dimensions, plan quantities shall be final. Should any disagreement of plan quantity exist, it must be presented to the Engineer in writing and resolved prior to the start of the project. The quantity will then be measured for accuracy. Once resolved, adjustments to the quantity will be made for changes in grades, lines and dimensions only.

202.08 Basis of Payment

Revise this Article to read:

Earth excavation for subbase, base course, and breaker run backfill, topsoil placement, sidewalks, driveways, PCC curb and gutter, and patches will be incidental to those items. This item shall also include the removal of all items encountered except unsuitable material outside the normal required construction limits, as per Article 104.03.

The cost of removal and satisfactory disposal of all suitable materials, except those listed above as required for the installation of the proposed contract items, shall be included in the unit price for earth excavation or rock excavation. No additional compensation will be allowed for required saw cutting for said removal or for the disposal of any surplus materials from the job site.

This work shall be paid for at the contract unit price per cubic yard for EARTH EXCAVATION or ROCK EXCAVATION.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 204
BORROW AND FURNISHED EXCAVATION

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

204.08 Basis of Payment:

Revise this Article to read:

Separate measurement and payments for Borrow and Furnished excavation materials shall not be made unless otherwise specified.

All costs associated with Borrow and Furnished excavation shall be included in the EMBANKMENT unit cost.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 205
EMBANKMENT

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

205.01 Description

Revise this Article to read:

EMBANKMENT shall be defined as all earthwork involving the preparation and placement of all earth in fill sections as shown in the plans and/or cross sections. The material placed shall come from approved earth excavation material from within the project limits or from an approved borrow pit. All material placed, regardless of source, will be considered embankment. No additional compensation shall be made for Mass Haul (in the event that material requires transporting from one section of the project to another section that has fill specified in the original plans as bid).

205.07 Maintaining and Trimming Embankments

Add the following paragraph to this Article:

Any improvements or existing appurtenances damaged due to embankment placement shall be repaired by the contractor, to the satisfaction of the Engineer, with all such repairs being paid for by the contractor.

205.08 Method of Measurement

Revise this Article to read:

Embankment shall be measured for payment in cubic yards placed and compacted in accordance with Article 202.07 (a). Earth excavation material intended for use as embankment but found to be unsuitable shall be removed and replaced with material from other earth excavation from within the project limits. If enough acceptable material cannot be obtained from within the project limits to complete the fill sections, the cost of removing the unsuitable material and furnishing approved material from a borrow site shall be paid for as per Article 109.04 (force account) or per agreed to unit prices approved by the City of Moline.

205.09 Basis of Payment

Revise this Article to read:

This work shall be paid for at the contract unit price per cubic yard for EMBANKMENT. If constructed according to the lines, grades and dimensions shown on the plans the bid quantity shall be considered Final Quantity. Should any disagreement of plan quantity exist, it must be presented to the Engineer in writing and resolved prior to the start of the project. The quantity will then be checked for accuracy. If errors are found, adjustments to the quantity will be made and the new quantity will then be considered the Final Quantity. Areas not specifically identified for embankment on the plans shall not be paid for unless approved by the Engineer prior to placement. Backfilling at backs of curbs, sidewalks, and driveways shall not be considered or paid for as embankment. All costs associated with said backfilling shall be incidental to PCC PAVEMENT, PCC SIDEWALK and PCC DRIVEWAY PAVEMENT.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 208
TRENCH BACKFILL

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

208.01 Description

Revise the second paragraph of this Article to read:

Disposal of the surplus excavated material which is replaced by trench backfill shall be included in the contract unit price per cubic yard of TRENCH BACKFILL (STORM), TRENCH BACKFILL (SANITARY), and/or TRENCH BACKFILL (WATER).

Add this sentence to this Article:

Installation shall be as per City of Moline Standard Details.

208.02 Materials

Revise this Article to read:

If surface slope is less than 4.0%, the backfill material shall be FA-6. If the project contains surface slopes greater than 4.0%, the backfill material shall be CA-13 throughout the project.

208.04 Basis of Payment

Revise this Article to read:

Trench backfill will be measured and paid for at the contract unit prices per cubic yard of TRENCH BACKFILL (STORM), TRENCH BACKFILL (SANITARY), and TRENCH BACKFILL (WATER) measured in place, as specified in the Documentation Guide given in the IDOT Construction Manual.

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 210
FABRIC FOR GROUND STABILIZATION

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

210.03 Installation Requirements

Add the following paragraphs to this Article:

The application surface shall be smooth and compacted to the satisfaction of the Engineer. At no time will fabric be placed over a rough, uneven surface or loose material.

Driving trucks, equipment and vehicles directly on the placed fabric will not be allowed.

The fabric shall be placed with sufficient quantity to wrap the subbase as shown in the City of Moline Standard Details.

210.05 Method of Measurement

Add the following sentence to the end of this Article:

Geotechnical Fabric shall be measured for payment to a distance of 1 foot behind back of curb in square yards. Sufficient quantity to wrap the subbase, as shown in the City of Moline Standard Details shall be included in this item and shall not be paid for separately.

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 211
TOPSOIL AND COMPOST

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

211.02 Materials

Revise Item (a) to read:

a. Topsoil (Furnished from outside of the R.O.W.) shall be loamy soil from the horizon of soil profiles of local soils. It must have an organic content of at least 5%. It shall be free from large roots, stocks, weeds, brush, or stones larger than 1/4 inch in diameter, or other litter and waste products. At least 90 percent must pass the No. 10 sieve and the PH must be between 5.0 and 7.0. Topsoil shall be placed to a minimum four inch (4") thickness. At the Engineer's request, the Contractor shall provide material verification.

211.08 Basis of Payment

Revise this Article to read:

This work will not be paid for separately, but will be incidental to SEEDING SPECIAL COMPLETE and/or SODDING SPECIAL COMPLETE.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 250
SEEDING

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

250.01 Description

Add the following paragraph to this Article:

The Contractor shall have the final responsibility for establishment of a close, healthy stand of grass. No extra compensation will be allowed in the event all or part of the area must be reseeded, including areas damaged by erosion. At time of final acceptance, all seeded areas shall be free of weeds.

250.02 Materials

Revise this Article to read:

On slopes less than 4:1, the materials shall be CLASS 1, LAWN MIXTURE. On slopes greater than 4:1, the materials shall be CLASS 3, SLOPE MIXTURE.

250.04 Fertilizer and Agricultural Ground Limestone Application

Revise this Article to read:

A commercial grade starter fertilizer having a 3:1:2 ratio and shall be applied according to the manufacturer's specified rate per square yard, and lightly tilled into the seedbed prior to the sowing of the seed.

250.05 Seed Bed Preparation

Revise second and third sentence to read:

Before placing topsoil, the area to be seeded shall be free from weeds, clods, rocks, stones, sticks, rivulets, gullies, crusting, caking, and or other undesirable material to the satisfaction of the Engineer. Before seeding, the seed bed shall be free of all material over 1/4 inch in diameter. No seeding shall be done until the seed bed is approved by the Engineer.

250.06 Seeding Methods

Add the following sentence to this Article:

Mulch as per Article 251.03, shall be used to protect the seed.

250.09 Method of Measurement

Add the following sentence to subparagraph (b) of this Article:

All areas disturbed shall be seeded by the Contractor as part of this pay item.

250.10 Basis of Payment

Revise this Article to read:

This work will be paid for at the contract unit price per lump sum for SEEDING SPECIAL COMPLETE and shall include all costs for furnishing and placing topsoil, supplemental watering, fertilizer, and necessary mulch.

Earth excavation for topsoil placement shall not be paid for separately, but will be incidental to SEEDING SPECIAL COMPLETE.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 252
SODDING

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

252.01 Description

Revise this Article to read:

This work shall consist of preparing the ground surface and furnishing and placing sod and other materials required in the sodding operations. It shall be the Contractor's final responsibility to provide a close, healthy stand of grass.

252.03 Ground Preparation

Add the following paragraph to this Article:

Before placing topsoil, the area to be sodded shall be free from weeds, clods, rocks, stones, sticks, rivulets, gullies, crusting, caking, and or other undesirable material to the satisfaction of the Engineer. Before sodding, the sod bed shall be free of all material over 1/4 inch in diameter. No sod shall be placed until the sod bed is approved by the Engineer.

A commercial grade starter fertilizer having a 3:1:2 ratio and shall be applied according to the manufacturer's specified rate per square yard, and lightly tilled into the seedbed prior to placing sod.

Supplemental Watering

Add the following paragraph to this Article:

Any and all supplemental watering required for establishing the sod shall be incidental to this item. No extra compensation will be allowed in the event all or part of the area must be re-sodded. Payment on this item shall not be made until the grass becomes established to the satisfaction of the Engineer. At time of final acceptance, all sodded areas shall be free of weeds.

252.12 Method of Measurement

Add the following sentence to paragraph 1 of this Article:

Sodding will be paid for a maximum of three feet from the proposed construction; any areas disturbed beyond three feet shall be restored at the Contractor's expense.

Revise the 3rd paragraph of this Article to read:

Supplemental watering required for establishing the sod shall be incidental and will not be paid for separately.

Delete the 4th paragraph

252.13 Basis of Payment

Revise this Article to read:

This work will be paid for at the contract unit price per square yard for SODDING SPECIAL COMPLETE, and shall include all costs for supplemental watering, fertilizer, furnishing and placing topsoil.

Earth excavation for topsoil placement shall not be paid for separately, but will be incidental to SODDING SPECIAL COMPLETE.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 280
TEMPORARY EROSION CONTROL

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

280.08 Basis of Payment

Revise this Article to read:

The Contractor will be responsible for construction of all temporary erosion control systems as ordered by the Engineer during the life of the contract to prevent erosion and sediment from leaving the project limits and / or causing damage to the roadway, adjacent properties and water resources through the use of basin, ditch checks, temporary ditches, mulch barriers and other erosion control devices or methods. Unless specific pay items are included in the bid form, the cost of temporary erosion control shall be incidental to the project.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 281
RIPRAP

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

281.02 Materials

Revise this Article to read:

Riprap stone material shall meet the requirements of Article 1005.01(b) quality designation "C" and gradation No. 4 unless otherwise specified.

The Contractor shall provide a minimum 4" layer of State-approved plant-mixed concrete to bond with the proposed rip rap. The Contractor shall install the filter fabric, then place the concrete followed by the rip rap immediately. No special concrete mix shall be required.

No bedding material shall be required.

281.05 Disposal of Surplus Material

Revise this Article to read:

This item shall include the removal and satisfactory disposal of materials encountered in the construction of new stream channels. This includes all excavated material for widening, deepening or straightening, and re-grading surrounding areas of existing stream channels to provide required drainage.

281.07 Basis of Payment

Revise this Article to read:

This work will be paid for at the contract unit price per ton for STONE DUMPED RIPRAP.

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 351
AGGREGATE BASE COURSE

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

351.01 Description

Revise this Article to read:

This work shall consist of all necessary earth excavation, furnishing, placing and compacting aggregate material of the thickness specified, on the prepared subgrade.

351.02 Materials

Revise paragraph (a) of this Article to read:

Aggregate Base Course, Type B:
Gradation CA-6 shall be used.

Aggregate Base Course, Type C:
Gradation shall be CA11, or other approved equal which will allow the free flow of water through the material while maintaining the structural stability of the layer at the thickness specified.

351.05 Base Course

Add the following paragraphs to (a) of this Article:

When pipe underdrains are installed prior to delivery of the base course material, a clean aggregate interface shall be maintained between the base course material and the aggregate for the underdrain.

The Contractor is responsible for maintenance of the completed base course to the required density, cross section, and smooth condition free from loose material prior to and during subsequent construction activities. Hauling equipment or other traffic shall not be allowed on the completed base course unless approved in writing by the Engineer.

351.06 Tolerance and Thickness

Revise this Article to read:

The finished base course shall be constructed in such a manner that it conforms to the designed profile and cross section to the extent that it is not higher than the designed elevation and at no point is lower than 0.05 feet below this elevation.

351.11 Method of Measurement

Revise the 1st and 2nd paragraphs of this Article to read:

Measurement and payment shall be made, to 1 foot behind back of curb, in square yards.

351.12 Basis of Payment

Revise this Article to read:

Earth excavation for this item shall be included as part of the contract unit cost for this item.

This work will be paid for at the contract unit price per square yard of AGGREGATE BASE COURSE, of the thickness and type specified, installed as measured above. Additional width required to facilitate the use of slip-form paving equipment shall be required and will be placed at the Contractor's expense.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 403
BITUMINOUS SURFACE TREATMENT

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

403.01 Description

Add to subparagraph (b):

A-2 work shall include the removal and satisfactory disposal of all existing pavement, all required earth excavation for construction of a prepared subgrade, and the furnishing of all labor, materials and equipment necessary to furnish and install a 6" aggregate base course. Gradation CA-6 shall be used.

Add to subparagraph (c):

A-3 Work shall include the removal and satisfactory disposal of all existing pavement, all required earth excavation for construction of a prepared subgrade, and the furnishing of all labor, materials and equipment necessary to furnish and install a 6" aggregate base course. Gradation CA-6 shall be used.

403.08 Repair and Preparation of Base or Existing Surface

Add the following sentence to this Article:

Roadway ditch repair, when required, shall be incidental to this item.

403.16 Basis of Payment

Revise the last paragraph to read:

A-1, A-2 and A-3 work shall be paid for at the contact unit price per square yard for BITUMINOUS SURFACE TREATMENT CLASS A-1 COMPLETE, BITUMINOUS SURFACE TREATMENT CLASS A-2 COMPLETE or BITUMINOUS SURFACE TREATMENT CLASS A-3 COMPLETE installed.

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 406
HOT MIX ASPHALT BINDER AND SURFACE COURSE

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

406.01 Description

Revise this Article to read:

This item shall include the furnishing of all equipment, labor and materials required to construct hot mix asphalt (HMA) binder and surface course in accordance with the typical sections on the plan sheets.

406.05 Preparation, Priming and Leveling of Brick, Concrete, HMA or Aggregate Bases.

Revise the first two sentences of (a) to read:

Preparation - When existing pavement is used as a base, all loose, unstable pavement pieces, including but not limited to all cold patch material, crack filler and bituminous material that is unstable in hot weather, shall be removed with pneumatic tools or other approved equipment. The existing pavement shall then be cleaned of dirt and loose material to the satisfaction of the Engineer. Removal of all loose and unsound material will be as directed by the Engineer and will be paid for according to Article 109.04.

Revise the 2nd paragraph of (a) of this Article to read:

Prior to placing leveling binder course for multiple course construction and prior to placing surface course mixture for single course construction, all open cracks and open expansion joints shall be primed and filled with mixture for cracks, joints and flangeways. Mixture shall be compacted to the satisfaction of the Engineer. Any sections of pavement cleaned in the above manner shall be filled before opening to traffic.

Revise the 1st and 2nd sentence of (b) to read:

Prime Coat: Before placing the bituminous mixture, the base, or base and gutter shall be dry and cleaned of all dust, dirt, and foreign material. Bituminous prime coat material for pavement to be resurfaced shall be SS-1hp or as specified in the project plans and specifications and applied at the rate specified in the plans and specifications.

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 408
TEMPORARY HOT MIX ASPHALT (HMA) SURFACING

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

408.01 Description

Add the following paragraph to this Article:

Temporary HMA Surfacing: This work shall consist of the construction and removal of a temporary HMA surface on a prepared base. This item is to be used over storm sewer, sanitary sewer, and water main trenches, and other locations as determined by the Engineer, to maintain travel lanes during construction and to facilitate construction of storm sewer, sanitary sewer, and water main items between construction phases and to provide access to side streets and driveways within a project area as required. The use of Temporary HMA Surfacing shall be at the discretion and/or approval of the engineer. Temporary HMA Surfacing used without the Engineer's approval will not be paid for.

408.03 General

Add the following paragraph to this Article:

Temporary HMA Surfacing shall consist of 2 inches of bituminous surface plant mix on 6 inches of Aggregate Base Course Type B. The aggregate shall be placed in accordance with Section 351.05(c) of the Standard Specifications. Aggregate Base Course shall be incidental to Temporary HMA Surfacing. Gradation CA-6 shall be used. When temporary surfacing is used over storm sewer, sanitary sewer, and water main trenches, the area from the subgrade to the bottom of temporary subbase shall be backfilled with trench backfill. No earth fill shall be used. Trench backfill will be measured and paid for as specified elsewhere.

408.05 Basis of Payment

Add the following subparagraph to this Article:

Temporary HMA Surfacing:

This work will be paid for at the contract unit prices per square yard for TEMPORARY HOT MIX ASPHALT SURFACING.

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 420
PORTLAND CEMENT CONCRETE PAVEMENT

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

420.01 Description

Add the following sentences to this Article:

All P.C.C. pavements shall include 6 inch integral curb unless otherwise specified. Curbs shall be constructed in accordance with the City of Moline Standard Details.

Integral concrete curb shall be cast monolithically with the pavement in accordance with the City of Moline Standard Details. The curb shall be formed with a moving finishing template or "mule" of a design approved by the Engineer. The template shall be a part of the pavement finishing machine and shall be designed so as to produce uniform curb of the exact dimensions required by the plans. It shall incorporate a means of consolidation of the concrete in the curb by a method approved by the Engineer.

Forms with a base width less than the height may be used provided they are stable, while the finishing equipment is operated upon them and do not settle under the weight of the finishing machine. If additional form height is added to accommodate the curb after the passage of the pavement finishing equipment, the form arrangement shall meet with the approval of the Engineer.

When a vibrating screed is used the curb may be formed in a separate operation from the pavement, and shall be placed immediately following the longitudinal floating operation. Curb concrete shall be thoroughly rodded or spaded into the surface of the pavement concrete while the latter is still in a completely plastic state. The curb and the gutter line shall be finished in accordance with the applicable provisions of Section 606.10.

Contraction joints shall be constructed in the curb in prolongation of the joints in the pavement and shall be constructed as per the plans or as directed by the Engineer.

Curing shall be in accordance with Article 1020.13 (a).

420.03 Equipment

Revise the following paragraphs as indicated:

(c) A mechanical concrete spreader will not be required.

(d) "The finishing machine shall be of a type approved by the Engineer, shall be self-propelled and shall be capable of striking off, consolidating and finishing concrete of the consistency required by the specifications to the proper crown and grade." A vibrating screed will not be allowed for pavement placement of mainline pavement.

(e) A mechanical longitudinal float will not be required.

Add the following paragraph to this Article:

(k) "The subgrade template shall be of a design approved by the Engineer and shall be capable of accurately indicating high and low spots in the subgrade with relation to the side forms." The finished subbase shall be constructed in such a manner that it conforms to the designed profile and cross section to the extent that it is not higher than the designed elevation and at no point is lower than 0.05 feet below this elevation.

420.05 Joints

Add the following to the 1st paragraph of this Article:

Longitudinal joints shall only be located at traffic lane edges and shall not be placed in wheel paths. City of Moline Details shall govern for load transfer assembly and tie bar requirements.

420.06 Forms and Form Setting

Add the following paragraph to this Article:

Flexible or curved forms of proper radius, made of wood or other bendable material shall be supplied for use on curves of 100 foot radius or less. "Box-outs" shall be optional for manholes, valve boxes, cleanouts, inlets single and doubles, etc. All adjustments must be completed prior to pavement placement or finishing box-outs.

420.09 Strike Off, Consolidation, Finishing, Longitudinal Floating, Straightedging, Edging, and Final Finish

(a) Strike Off, Consolidation, and Finishing

(1) Revise last sentence of 2nd paragraph to read:

The rate of depositing concrete shall not exceed the amount that the finishing machine can strike off and consolidate. Not more than one pass of the vibratory equipment shall be made over the pavement surface.

(3) Add following subparagraph to this section of this Article:

No sections 100 ft. or greater in length shall be placed by this method. All sections greater than 100 feet shall be placed using a paving machine.

(b) Longitudinal Float Method

Revise 1st sentence of (b)(3) to read:
Longitudinal Floating, Hand Method, will be required.

(e) Final Finish

Revise 1st sentence to read:

The final finish type used shall be Type “B” unless otherwise noted on the plans, or Type “A” if the pavement grade exceeds 6%.

420.19 Method of Measurement

Add subparagraph (c) to this Article:

PORTLAND CEMENT CONCRETE PAVEMENT, and PORTLAND CEMENT CONCRETE PAVEMENT WITH INTEGRAL CURB shall be measured in place and the area computed in square yards completed and accepted. The width for measurement shall be the width from outside to outside of completed pavement, including integral curb when required, as shown on the plans or as directed by the Engineer.

420.20 Basis of Payment

Revise the 1st paragraph of this Article to read:

These items will be paid for at the contract unit price per square yards for: PORTLAND CEMENT CONCRETE PAVEMENT and PORTLAND CEMENT CONCRETE PAVEMENT WITH INTEGRAL CURB of the thickness specified which shall include the following items:

1. Integral curb when required
2. Longitudinal, construction, and expansion joints as shown on the plans or required by the attached standards or during construction including all associated hardware;
3. Sawed transverse or other joints;
4. Reinforcement

Revise the 4th paragraph to read:

Protective Coat, when required, shall be incidental to the pavement and shall not be paid for separately.

Add this paragraph to this Article:

Excavation required in the performance of the work will be included under other sections in this Supplemental Specification.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 423
PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

423.01 Description

Add the following paragraph to this Article:

Driveway Pavement shall be 7" unreinforced or 6" with 42 lb. or 63 lb. woven wire fabric.

423.11 Basis of Payment

Add following subparagraph to this section of this Article:

All excavation; the furnishing and placing of any required aggregate fill; the furnishing of equipment and materials including all expansion joint material adjacent to sidewalks and property lines; and all labor, including required saw cutting, necessary to construct new driveways to the lines and grades shown on the plans or as directed by the Engineer shall be included in the unit cost for this item.

This work will be paid for at the contract unit price per square yard of P.C.C. DRIVEWAY PAVEMENT.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 424
PORTLAND CEMENT CONCRETE SIDEWALK
EXPOSED AGGREGATE SIDEWALK
PORTLAND CEMENT CONCRETE SIDEWALK RAMP
DETECTABLE WARNINGS

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

424.01 Description

Add the following sentences to this Article:

Sidewalks shall be a minimum of 4 inches or 6 inches thick, as specified on the plans. Any additional excavation and/or fill necessary to raise or lower the grade to obtain a 4 inch or 6 inch thickness shall be included in this pay item.

424.02 Materials

Add this Item:

(c) Exposed aggregate sidewalk shall be constructed with 4,000 PSI air-entrained concrete using 3/8" diameter river gravel. The surface shall receive Preco "EACS" Retarder, or approved equal in accordance with manufacturer's instructions.

424.06 Placing and Finishing

Add the following to this Article:

For exposed aggregate sidewalks, the surface shall be exposed by removing top surface of concrete by hosing. After concrete has cured seven days, it shall receive an application of W.R. Meadows, Inc. TIAH or approved equal.

424.08 Curb Ramps

Add the following to the 1st paragraph of this Article:

Sidewalk ramps are required at all intersections calling for sidewalk removal and replacement.

Sidewalk ramps shall be constructed in accordance with the latest Highway Standards.

Sidewalk ramps shall be a minimum of 6 inches thick, or as specified in the plans. This includes the lower landing, the ramp, and the upper landing. Any additional excavation and/or fill to raise or lower the grade as required to obtain a 6 inch thickness shall be included in this pay item.

The procedure for installing handicap ramps on a section of pavement being overlaid with HMA shall be the following:

1. Place the asphalt on the roadway
2. Saw cut and remove the curb and asphalt-overlaid flag
3. Replace the concrete curb and gutter to meet ADA compliance
4. Install new ADA compliant sidewalk ramp

424.09 Detectable Warnings

Add the following sentence to the 1st paragraph of this Article:

The City of Moline specifies the installation of cast in place surface tiles. Tiles shall be powder coated cast iron. Color shall be "Canox Red" or approved equal. The Contractor shall provide a sample to the Engineer for approval.

Detectable warnings shall be radial or straight as indicated on the plans. The Contractor shall not saw cut straight detectable warnings to make them radial.

424.12 Method of Measurement

Delete the 2nd paragraph of this Article and insert the following:

Sidewalk (ADA) accessibility ramps shall be measured as the horizontal surface area of P.C.C. Sidewalk Ramp, of the specified thickness, and shall include the lower landing, ramp, and upper landing. Detectable warnings shall be measured and paid for separately.

424.13 Basis of Payment

Revise this Article to read:

This work will be paid for at the contract unit price per square foot for P.C.C SIDEWALK of the thickness specified, P.C.C. SIDEWALK RAMP, EXPOSED AGGREGATE SIDEWALK and/or DETECTABLE WARNINGS. Price shall include all excavation, the furnishing and placing of any required aggregate fill, the furnishing of equipment and material, and all labor required to construct new sidewalks and ramps to the lines and grades shown on the plans or as directed by the Engineer. Sidewalk removal shall be paid for separately.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 442
PAVEMENT PATCHING

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

442.01 Description of work

Revise this Article to read:

This work shall consist of the removal of existing pavement, all necessary excavation and replacement in accordance with City of Moline Standard Detail Sheets, with the class and type of patch specified on the contract documents, plans, schedule of quantities or as directed by the Engineer.

442.02 Materials

Add:

Note 5. P.C.C. materials used for all patching shall be a Ty III, 3500psi, 3 day mix design.

Note 6. All patches shall include 63# mesh.

442.05 Pavement Removal

Revise the last sentence of the 6th paragraph of (b) Class B Patches

If any subbase or stabilized subbase material that is disturbed during pavement removal operations or determined unsuitable by the Engineer, the Contractor shall furnish and place sufficient aggregate to bring the subbase back to the bottom of pavement elevation. Re-compaction of existing and/ or added aggregate base will be required.

442.06 Pavement Replacement

Revise the 1st sentence of this Article to read:

Patches shall conform to City of Moline Standard Detail Sheets.

Revise subparagraph (a) (2) to read:

If an expansion joint is present in the existing pavement, # 8 dowel bars at 12 inch centers with caps and 1" preformed expansion material shall be inserted at the existing joint location instead of deformed bars.

The Hot Mix Asphalt (HMA) binder and surface course shall be constructed in accordance with Section 406.

The patches shall be placed to the same thickness as the existing pavement or with a minimum of 7" P.C.C. Pavement and a minimum of 3" (HMA) Surface. The aggregate base course shall be constructed in accordance with Section 351. (HMA) surface on patches greater than 15 square yards shall be placed with a spreading and finishing machine. Furnishing and placing 6" of subbase shall be incidental to this pay item unless a separate pay item is provided. Gradation CA-6 shall be used unless the existing subbase is a drainable base. If existing subbase is drainable base, Contractor shall match existing gradation.

When membrane curing is applied, Type II curing compound shall be used as per Article 1022.01 of the Standard Specifications when the patch is to be covered with (HMA) concrete.

442.10 Method of Measurement

Revise the 1st paragraph to read:

The patch quantities listed on the Schedule of Prices are estimates and actual measured quantities may vary substantially. Measurements for this work shall be made for in square yards for actual quantities placed.

Delete the 2nd paragraph:

Revise the 3rd paragraph to read:

No additional compensation for variation in thickness will be allowed.

Revise the 5th paragraph to read:
Expansion joint shall be incidental to patches.

Revise the 6th paragraph to read:
Epoxy coated smooth dowel and deformed bars shall be incidental.

Revise the 7th paragraph to read:
Pavement fabric shall be incidental to all patches regardless of size.

Revise the 8th paragraph to read:
All required saw cutting shall be incidental.

442.11 Basis of Payment

Delete the 3rd, 7th, 8th, 9th, 10th, and 11th paragraphs of this Article

Add the following paragraphs to this Article:

All work shall be paid for at the contract unit price for the type of patch constructed which shall include all items of labor, equipment and materials. If curb and gutter replacement is required as part of a patch, it shall be measured in square yards of horizontal and vertical surface area and paid for as "CLASS B PATCHES" of the type specified.

Work shall include all labor, material and equipment necessary to saw cut the existing pavement to full depth around patches as directed by the Engineer, pavement removal or temporary patch removal and the surrounding pavement to the new full depth saw cut or existing joint, and excavation as needed for furnishing and placing a minimum 6 inches of aggregate base course material. Pavement removal shall include the removal of all existing paving materials encountered.

Costs associated with furnishing, placing and compacting a minimum 6 inches of aggregate base course, re-compaction of existing aggregate base, and membrane curing, will be included as part of the per square yard unit price for CLASS B PATCHES.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 542
PIPE CULVERTS

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

542.07 End Treatment

Add to 1st paragraph of this Article:

Flared end sections shall be tied together to the adjacent three pipe sections with galvanized pipe couplers. All P.R.C. FLARED END SECTIONS shall be a standard P.R.C. flared end section which conforms to standard 542301. A section of A-2000 CPVC or SaniTite HP ® pipe will be cast into the P.R.C. FLARED END SECTION by the manufacturer to connect to A-2000 CPVC pipe or SaniTite HP ® pipe, if applicable.

Article 542.11 Basis of Payment

Revise paragraph 11 of this Article to read:

If cast-in-place concrete collars are required, they will be included as part of the contract unit cost for the culvert or flared end section specified.

~~Revise paragraph 13 of this Article to read:~~

~~Grating shall be incidental to the cost of the specified FLARED END SECTION, if specified.~~

Add these paragraphs to this Article

The pipe couplers shall be included as part of the unit cost for the end section specified on the plans.

The cost of excavating for and determining the exact location of all existing storm sewers shall be incidental to these items. Items shall include, but not be limited to, excavation, supply and placement of bedding material and supply and placement of culvert fittings of the size, type, and pipe material noted on the plans.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 550
STORM SEWERS

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

550.02 Materials

Items (a), (b), (c), (g), (i), (k), (l), (q), (r), (s), (t) from the material list shall not be allowed unless directed by the engineer.

Revise these items to read:

(d) Reinforced Concrete Culvert, Storm Drain and Sewer Pipe……..……1042
R.C.P. storm sewers shall be of the class specified on the plans with rubber gaskets.

(h) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior ……1040.03
All C.P.V.C. storm sewers shall be A-2000, or an equivalent that is approved by the Engineer. The corrugated exterior, smooth interior pipe shall conform to Articles 550.04, 550.06, and 550.07 for construction requirements.

(j) Rubber gaskets and preformed flexible joint sealants for concrete pipe
Rubber gaskets shall conform to ASTM C-443 (profile “wedge” gasket)

Add item:

SaniTite HP® Pipe
The corrugated exterior, smooth interior pipe shall conform to Articles 550.04, 550.06, and 550.07 for construction requirements.

Add the following paragraph:

When specified in the project plans and specifications, STORM SEWER (WATER MAIN QUALITY) will be required when storm sewers and water mains cross each other without meeting the current separation guidelines as specified in the Sewer & Water Specifications. Acceptable pipe materials for STORM SEWER (WATER MAIN QUALITY) are those outlined in Division IV of the latest version of t*he Sewer & Water Specifications*.

550.04 Excavation and Foundation

Revise the 4th paragraph to read:

CA-7 at least 4 inches in depth below the pipe shall be placed the entire width of the trench and for the length of the pipe.

Add these paragraphs to this Article:

The Contractor shall conduct his/her operations so as to protect all "in-place" utilities and appurtenances. Damaged items shall be repaired or replaced at the Contractor's expense.

Poor subgrade that will not support the pipe will be reviewed according to 104.03 to determine if additional payment is warranted for repairing the trench bottom. Failure on the Contractor's part to adequately dewater the trench will not be a basis for additional payment.

550.06 Laying Sewer Pipe

Add this paragraph to this Article:

New connections shall be made in a manner approved by the Engineer. Saw-cutting of holes for new connections and reinforcement of all collars/patches will be required. Proper finishing of the inside of the connection/patch will be required.

Horizontal and vertical separation of storm sewer pipe from water main pipe shall be in accordance with the latest version of the *Sewer & Water Specifications*.

Flared end sections shall be tied together to the adjacent three pipe sections with galvanized pipe couplers. All P.R.C. FLARED END SECTIONS shall be a standard P.R.C. flared end section which conforms to standard 542301. A section of A-2000 CPVC pipe or SaniTite HP® pipe will be cast into the P.R.C. FLARED END SECTION by the manufacturer to connect to A-2000 CPVC or SaniTite HP ® pipe, if applicable.

550.07 Backfilling

Revise the 1st sentence of paragraph 1 to read:

As soon as the condition of the pipe will permit, the entire width of the trench shall be backfilled with CA-7 to a height of at least the elevation of the center of the pipe.

550.08 Deflection Testing for Storm Sewers

Add this paragraph to this Article:

This work shall be performed by the Contractor and witnessed by the City in accordance with applicable sections of the current edition of the *Sewer & Water Specifications*.

All storm sewers will receive a TV inspection by Water Pollution Control personnel and all manholes will receive a visual inspection by Engineering personnel prior to final City acceptance. The initial inspection will be done at no charge to the Contractor. Any required TV re-inspection will be charged at a fee of $200 per hour. Said fee will be deducted from the payment due the Contractor.

If televising cannot be performed due to sediment and debris in the pipe, the Contractor will be charged a fee of $200 per hour to jet the pipe clean, providing City scheduling allows. It is the responsibility of the Contractor to provide a clean pipe for inspection.

550.10 Basis of Payment

Add this paragraph to this Article:

All labor, materials, and equipment for the following shall be included as part of the unit cost for this item.

a) Costs for connecting proposed storm sewers to existing or proposed storm structures.

b) Costs for connecting proposed storm sewers to existing storm sewers or drain tubing including unlike storm sewer materials with collars.

c) Costs for all trench excavation.

d) Cost of excavating for and determining the exact location of all existing storm sewers.

e) Cost of removing existing storm sewers within the path of new storm sewers.

f) The cost of furnishing, placing and compaction of all bedding material will be considered as incidental work and no additional compensation will be allowed.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 551
STORM SEWER REMOVAL AND INSTALLATION
(SANITARY)
(WATER)

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

551.01 Description

Revise this Article to read:

Removal: No installation will be paid for under this item. Installation shall be paid for under Articles 550, 560, and 561.

This work shall consist of the removal of storm sewers, water main, and sanitary sewers and sewer laterals only in areas where no new sewers and/or water mains are to be placed. Removal of existing sewers and mains within the path of new sewers and mains shall not be paid for separately, but shall be incidental to the installation of the new sewer and or main.

Indicated depths of existing sewers and/or mains to be removed are the best information available and have not been verified by the City. The Contractor shall be responsible for verifying said depths and locating all laterals entering sewers to be removed.

Abandon and fill: This item shall consist of filling all existing sewers, mains, valve vaults and manholes within the project limits, which are not removed, with an approved grout mixture and plugging all ends with concrete or a tightly sealed twist plug.

551.03 Removal

Revise the 1st paragraph of this Article to read:

Reuse of removed pipe will not be allowed. Material removed shall be disposed of according to Article 202.03 and will be included as part of the unit cost for this item.

551.04 Installation

Revise this Article to read:

Any pipe found, but not shown on the plans, and determined by the Engineer to be "live", shall be extended and connected to an existing or proposed storm structure as directed by the Engineer. Payment shall be made in accordance with Article 104.03 of the Standard Specifications.

Abandon and fill:

All pipes to be abandoned in place shall be filled to at least 90% of volume with flowable fill. This includes all laterals, sewers, mains, etc. Manholes may be filled with sand. This item shall also include the removal of all castings and sections of all manholes and cleanouts to an elevation a minimum of 3' below finished grade.

551.05 Method of Measurement

Delete 2nd paragraph of this Article

Revise 4th paragraph to read:

Trench backfill shall be properly compacted pit run sand or equal.

551.06 Basis of Payment

Revise this Article to read:

Removal:

This work will be paid at the contract unit price per lineal foot for STORM SEWER REMOVAL, SANITARY SEWER REMOVAL, and WATER MAIN REMOVAL of the diameter specified.

All costs for excavation, trench backfill, and plugging existing lines that are to remain shall be included as part of the unit cost for STORM SEWER REMOVAL, SANITARY SEWER REMOVAL, and WATER MAIN REMOVAL.

Abandon and fill:

This work will be paid for at the contract unit price per the measurement method outlined in the project plans and specifications for ABANDON AND FILL EXISTING STORM SEWER, ABANDON AND FILL EXISTING SANITARY SEWER, and ABANDON AND FILL EXISTING WATER MAIN. This work shall be paid for at the contract unit cost per each for ABANDON AND FILL MANHOLE, ABANDON AND FILL EXISTING VALVE VAULT, and ABANDON AND FILL EXISTING CLEANOUT.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 560
CAST IRON SOIL PIPE
(SANITARY SEWER)

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

Delete the existing Article as is in its entirety and insert the following.

560.01 Description

This work shall be done in accordance with Section 560 of the Standard Specifications, in so far as applicable, *the Sewer & Water Specifications*, and the City of Moline Standard Details.

560.02 Materials

Sanitary sewer, services, and fittings shall be manufactured in the U.S.A. and be of pressure class 350 (P CL 350) ductile iron pipe (D.I.P.) and conforming to the latest ANSI/AWWA C150/A21.50-91. Flexible gaskets shall be used at all new pipe joints. Sanitary sewer services shall be a minimum of 6-inches in diameter.

The exterior of the ductile iron pipe shall be coated with a layer of arc-sprayed zinc per ISO 8179. The mass of the zinc applied shall be 200 g/m^2 of pipe surface area. A finishing layer of topcoat shall be applied to the zinc. The mean dry film thickness of the finishing layer shall not be less than 3 mils with a local minimum not less than 2 mils. The coating system shall conform to ISO 8179-1 “Ductile iron pipes – External zinc-based coating – Part 1: Metallic zinc with finishing layer, of the latest edition.”

All sanitary sewers to be installed at a 5.0% or larger slope shall include restrained joints. These restrained joints shall be included in the contract unit price per foot for SANITARY SEWER, DIP P CL 350, of the size specified.

All sanitary sewer pipe, fittings and services shall be polyethylene wrapped in accordance with ANSI/AWWA C105/A21.5, *Polyethylene Encasement for Ductile Iron Pipe Systems.*

Polyethylene encasement for use with ductile iron pipe systems shall consist of three layers of co-extruded linear low-density polyethylene (LLDPE), fused into a single thickness of not less than 8 mils.

The inside surface of the polyethylene wrap to be in contact with the pipe exterior shall be infused with a blend of anti-microbial biocide to mitigate microbiologically influenced corrosion and a volatile corrosion inhibitor to control galvanic corrosion.

The wrap shall be overlapped one foot in each direction at joints and securely in place around the pipe, and any wrap at tap locations shall be taped tightly prior to tapping and inspected for any needed repairs. Any tears or holes in the polyethylene wrap shall be repaired to the satisfaction of the Engineer.

560.03 General

Work shall include excavation (including the removal of existing sanitary sewers within the path of new sanitary sewers); supply and placement of bedding material (Bedding material shall be CA-7); the supply and placement of sanitary sewers, services and fittings of the size noted on the plans.

Handling of the pipe shall be done in such a manner as will prevent damage to the pipe or coating. Accidental damage to pipe or coating shall be repaired to the satisfaction of the Engineer or be removed from the job and methods of handling shall be corrected to prevent further damage. In no case will pipe with damaged coating be allowed to remain as part of the job.

Handling after the gasket has been affixed shall be carefully controlled to avoid disturbing the gasket and knocking it out of position or loading it with dirt or other foreign material. Any gaskets so disturbed shall be removed and replaced, cleaned and re-lubricated if required, before the jointing is attempted.

At no time shall raw sewage be allowed to flow along the new pipe bedding. Temporary piping may be installed in the trench to eliminate pumping during non-working hours. The cost of temporary piping and/or all by-pass pumping shall be incidental to this item. Pumping into storm sewers will not be allowed.

The Contractor shall keep the trench free from water while the sewer is being placed and until the joint has been sealed. All costs associated with trench dewatering shall be incidental to this item.

Poor subgrade that will not support the pipe will be reviewed according to 104.03 to determine if additional payment is warranted for repairing the trench bottom. Failure on the Contractor's part to adequately dewater the trench will not be a basis for additional payment.

Care shall be taken to properly align the pipe before joints are entirely forced home. During insertion of the tongue or spigot, the pipe shall be partially supported by hand, sling or crane to minimize unequal lateral pressure on the gasket and to maintain concentricity until the gasket is properly positioned. Sufficient pressure shall be applied in making the joint to assure that it is home, as described in the installation instructions provided by the pipe manufacturer. Sufficient restraint shall be applied to the line to assure that joints are secure until bedding material under and alongside the pipe is compacted in place. At the end of the work day, the last pipe laid shall be blocked in an effective way to prevent creep. At times when pipe laying is not in progress, open ends of the pipe shall be closed by an approved cap. If replacing existing sewer, a temporary connection, approved by the Engineer, may be made to maintain flow through the pipe.

Pipe required to be laid on curved alignment shall be joined in straight alignment and then be deflected, joint by joint. Special care shall be taken in blocking the pipe just previously laid, by tamped fill or otherwise to resist the misaligning forces generated during compression of the joints being made.

Connecting the proposed sanitary sewer to an existing sewer of unlike materials shall be made with approved mission couplings. Connecting the proposed sanitary sewer to existing ductile iron pipe shall be made with a solid sleeve.

Connecting sanitary service laterals shall be done in accordance with City of Moline Standard Details. The pay item SANITARY SERVICE, of the size specified, shall consist of all labor, materials, and equipment required to install a complete service lateral, from the sanitary main to the existing sanitary lateral. This shall include all D.I.P. bends, reducers, couplings, solid sleeves, fernco, etc. necessary to run the lateral and connect to the existing sanitary service lateral. If connecting to existing D.I.P. sewer, the connection will be made with a solid sleeve.

The pay item CONNECT SANITARY SERVICE TO MAIN, of the size specified, shall include all labor, materials, and equipment necessary to connect a sanitary service lateral to a sanitary main. This shall include all wyes, tees, elbows, etc. necessary to connect a proposed lateral to a sewer main. Tees and elbows shall only be allowed on service laterals 8" or larger in diameter.

All work associated with the construction of sanitary service laterals shall be performed by a licensed plumber as per State and City statutes. Sewer line connections to existing trunks, mains, laterals or side sewers shall be left uncovered until after an acceptance inspection has been made. The Engineer shall make the inspection within two working days after notification by the Contractor. After approval of the connection, the trench shall be backfilled as specified in Article 208.

No existing sewer shall be connected to a sanitary sewer unless specifically authorized in each instance by the Engineer. Storm drains and drain tiles shall not be connected to sanitary sewers.

This work shall be performed by the Contractor and witnessed by the City in accordance with applicable Sections of the *Sewer and Water Specifications*.

All sanitary sewers will receive a TV inspection by Water Pollution Control personnel and all manholes will receive a visual inspection by Engineering personnel prior to final City acceptance. The initial inspection will be done at no charge to the Contractor. Any required TV re-inspection will be charged at a fee of $200 per hour. Said fee will be deducted from the payment due the Contractor.

If televising cannot be performed due to sediment and debris in the pipe, the Contractor will be charged a fee of $200 per hour to jet the pipe clean, providing City scheduling allows. It is the responsibility of the Contractor to provide a clean pipe for inspection.

560.04 Method of Measurement

Sanitary sewers shall be paid for payment in place in lineal feet. When the sewer enters a manhole, the measurement shall be taken through the manhole. Measurement will also be taken through wyes, tees and elbows where sanitary sewer services are reconnected.

Trench backfill shall be measured for payment in accordance with Article 208.04 of this supplemental specification, *the Sewer and Water Specifications*, and the City of Moline Standard Details.

560.05 Basis of Payment

The work will be paid for at the contract unit price per lineal foot for SANITARY SEWER and SANITARY SEWER SERVICE, of the size specified. The cost of excavation for and location of all existing sanitary sewers shall be incidental to these items.

Work, materials, and equipment associated with reconnecting sanitary service laterals will be paid for at the contract unit price for each CONNECT SANITARY SERVICE TO MAIN, of the size specified, installed. Wyes, tees, and elbows (tees and elbows for sewers greater than 8" dia.), of the size specified for connection to the main will be incidental to this item. Pipe from the main to the connection at the existing service shall be paid for as SANITARY SERVICE, of the size specified.

All labor, Materials, and Equipment for the following shall be included as part of the unit cost for this item.

(a) Costs for connecting proposed sanitary sewers to existing or proposed sanitary manholes.

(b) Costs for connecting proposed sanitary sewers to existing sanitary sewers of unlike sanitary sewer materials with collars and/or mission couplings.

(c) Costs for all trench excavation.

(d) Cost of excavating for and determining the exact location of all existing sanitary sewers.

(e) Cost of removing existing sanitary sewers within the path of new sanitary sewers.

(f) The cost of furnishing, placing and compaction of all bedding material will be considered as incidental work and no additional compensation will be allowed.

Items incidental to sanitary sewer shall include, but not be limited to, excavation (including the removal of existing sanitary sewers within the path of new sanitary sewers); supply and placement of bedding material (Bedding material shall be CA-7); the supply and placement of sanitary sewer of the size, type, and pipe material noted on the plans; and connecting the proposed sanitary sewer to existing sewers with approved mission couplings.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 561
WATER MAIN

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

561.01 Description

Add this sentence to this Article:

This work shall include but not be limited to the supply and installation of vaults and bases; supply and installation of frames and lids, and backfilling as shown on the plans and/or as directed by the Engineer.

561.02 Materials

Revise this Article to read:

All water main shall be ductile iron pipe manufactured in the USA in accordance with the latest revision of ANSI/AWWA C150/21.50 and C151/A121.51, of the pressure class 350, cement lined meeting ANSI/AWWA C104/A21.4* with push-on joints meeting ANSI/AWWA C111/A21.11*. ~~Pipe shall have standard asphaltic coating on the exterior.~~

The exterior of the ductile iron pipe shall be coated with a layer of arc-sprayed zinc per ISO 8179. The mass of the zinc applied shall be 200 g/m^2 of pipe surface area. A finishing layer of topcoat shall be applied to the zinc. The mean dry film thickness of the finishing layer shall not be less than 3 mils with a local minimum not less than 2 mils. The coating system shall conform to ISO 8179-1 "Ductile iron pipes – External zinc-based coating – Part 1: Metallic zinc with finishing layer, of the latest edition."

All water main to be installed at a 5.0% or larger slope shall include restrained joints. These restrained joints shall be included in the contract unit price per foot for WATER MAIN, DIP P CL 350, of the size specified.

All water main pipe, fittings and services shall be polyethylene wrapped in accordance with ANSI/AWWA C105/A21.5, *Polyethylene Encasement for Ductile Iron Pipe Systems.*

In addition, polyethylene encasement for use with ductile iron pipe systems shall consist of three layers of co-extruded linear low-density polyethylene (LLDPE), fused into a single thickness of not less than 8 mils.

The inside surface of the polyethylene wrap to be in contact with the pipe exterior shall be infused with a blend of anti-microbial biocide to mitigate microbiologically influenced corrosion and a volatile corrosion inhibitor to control galvanic corrosion.

The wrap shall be overlapped one foot in each direction at joints and securely in place around the pipe, and any wrap at tap locations shall be taped tightly prior to tapping and inspected for any needed repairs. Any tears or holes in the polyethylene wrap shall be repaired to the satisfaction of the Engineer.

Trace wire shall be #14 AWG copper clad steel wire, or #14 AWG solid copper wire with 30 mil high molecular weight polyethylene insulation .

Blue plastic pipe line markers with test screws shall be as manufactured by Rhino, or approved equal.

Direct bury wire nuts shall be waterproof with a UL 486D rating listed as a sealed wire connector system. For use on copper/copper wire in damp, wet, direct bury locations. Connectors shall be rated for #22/max #8 wire range, with a temperature rating of 105°C (122°F). Silicone Sealant temperature rating shall be -45°F to 400°F.

Direct bury lug shall be one piece, water and corrosion proof, pre-filled with a non-hardening dielectric silicone sealant, and has a temperature rating of -45°F to 400°F. Lug shall be manufacturer approved for direct bury on solid copper wire with a #14 - #10 AWG range.

TAPPING SLEEVE WITH VALVE AND VALVE BOX

When a tapping tee is specified, the City of Moline will provide the labor and the tapping machine necessary to make the required taps. However, it will be the Contractor's responsibility to furnish all other labor, material, and equipment necessary to install the tees. This will include excavation, the furnishing and installation of the required tees and valves, and backfilling. The City will only provide the tapping machine and labor to run the tapping machine to make the required taps. The remaining work will be at the sole responsibility of the Contractor.

VALVES - 3" to 8" IN DIAMETER AND ALL TAPPING VALVES

Valves shall conform to the latest revision of AWWA Standard C-509 covering resilient seated gate valves and be approved by ULFM. The valves shall be non-rising stem, opening by turning stem left (counterclockwise) and provided with 2" square operating nut with the word Open and an Arrow cast in the metal to indicate direction to open. The wedge shall be of cast iron completely encapsulated with rubber. The sealing rubber shall be permanently bonded to the cast iron wedge to meet ASTM tests for rubber metal bond ASTM D429. Stems for NRS assemblies shall be cast bronze with integral collars in full compliance with AWWA. The NRS stem stuffing box shall be the o-ring seal type with two rings located above thrust collar. The two o-rings shall be replaceable with valve fully open and subjected to full rated working pressure. There shall be two low torque thrust bearings located above and below the stem collar. The stem nut shall be independent of wedge and shall be made of solid bronze. There shall be smooth, unobstructed waterway free of all pockets, cavities and depressions in the seat area.

The body and bonnet shall be coated with fusion-bonded epoxy both interior and exterior. The bonnet and stuffing box bolts and nuts shall be 304 stainless steel.

Each valve shall have maker's name, pressure rating and year in which manufactured cast on the body. Prior to shipment from factory, each valve shall be tested by hydrostatic pressure equal to requirements for both AWWA (twice the specified working pressure) and 400-PSI ULFM requirements.

All fittings and valves shall be mechanical joint type. All mechanical joints shall be constructed with Cor-Blue T-bolts (NSS) or approved equal.

Approved Gate Valves are: Clow Resilient Wedge Valve, F-6100
Mueller Resilient Wedge, 2360 Series

Valve boxes shall be installed with all valves, and shall be installed per City of Moline Details. They shall be set on clean crushed stone. Valve box lids shall be embossed with "WATER".

Approved valve boxes are:

Tyler 6860
Tyler 6860 w/ #6 base or Tyler 6850 w/ rubber boot between valve and box base.

This work shall be paid for at the Contract Unit Price per each "VALVE" of the size and type specified, which shall include cast iron valve box and cover and thrust blocking.

VALVES – 10" AND ABOVE

BUTTERFLY VALVES - shall be Class 150B conforming to ANSI/AWWA C504*. The two (2) inch square operating nut shall connect to the stainless steel shaft through an operator with a minimum gear ratio of 120:1. Butterfly valves shall be installed in a valve vault with the frame and lid centered over the operating nut. Construction of Valve Vaults shall be in accordance with Section 602 of these supplemental specifications, and the City of Moline Standard Details.

Approved butterfly valves are:

Pratt Groundhog
M &H / Clow
Mueller Line Seal III
Valmatic Series 2100
GA Industries Series 800

FIRE HYDRANT ASSEMBLIES

Fire Hydrants shall be manufactured in accordance with AWWA Standard C502, be listed by Underwriters Laboratories, Inc. and have Factory Mutual Research approval.

Fire Hydrants shall be designed for 250 psi working pressure and tested to 400 psi hydrostatic pressure.

Fire Hydrants shall be backed by manufacturer's 10-year limited warranty.

Fire Hydrants shall be dry-top center stem construction having an O-Ring sealed lubrication reservoir.

Fire Hydrant shall be manufactured with operating nut and thrust nut made of bronze, with bearings located both above and below the thrust collar and with operating nut protected by a cast-iron weather shield.

Fire Hydrant shall be manufactured with nozzles mechanically locked into the barrel and having O-Ring pressure seals.

Fire Hydrant shall be a “Traffic Model”, complete with safety flanges and steel stem coupling.

Nozzle section must rotate 360 degrees.

Fire Hydrant shall be manufactured with a main valve seat ring of bronze threaded into a bronze drain ring.

A 360 degree drain channel shall have a minimum of two drain outlets.

Fire Hydrant shall have an upper valve plate and two urethane rubber facings that activate the drain ports.

Fire Hydrant shall be manufactured with a lower valve plate that bottoms out in the shoe for maximum opening.

Fire Hydrant shall have a 1-1/2” pentagon operating nut and open left.

Fire Hydrant shall be 3 way with two 2-1/2” and one 4-1/2” NSHT nozzles.

Fire Hydrant shall be painted safety orange.

Fire Hydrant shall have 6” mechanical joint inlet.

Fire Hydrant shall be manufactured with a minimum main valve opening of 5-1/4 inches.

Fire Hydrant valve shall be restrained to Hydrant tee, and Hydrant shall be restrained to Hydrant valve. MJ Field Lok accessories are approved. All bolts shall be Cor-Blue or approved equal. See City of Moline Standard Details for more information.

Approved hydrants are:

- Mueller Super Centurian 250
- Clow Medallion
- Waterous WD67/250 Pacer

Fittings shall be manufactured in the U.S.A. and be ductile iron or gray cast iron. Ductile iron fittings shall conform to either ANSI/AWWA C110/A21.10* or C153/A21.53*. Gray iron fittings shall be in accordance with ANSI/AWWA C110/A21.10*. Fittings shall also have a cement mortar lining on the interior in accordance with ANSI/AWWA C104/A21.4*. Connecting pipe shall be at least 18 inches long.

Thrust blocking shall be cast-in-place concrete (3500 psi) bearing against undisturbed soil. Reaction load shall be calculated as follows:
Bends: R=236 x (I.D.)2 x sin (½ angle of bend)
Cross, Tee, or Plug: R=118 x (I.D.)2

If necessary to provide restrained joints for proper retention, either thrust blocking or a combination of a metal harness or retainer gland with thrust blocking may be used. The metal harness shall consist of 3/4 inch tie rods and metal socket clamps ("Cor-ten" eye bolts or Duc-Lugs). This assembly shall be completely coated with grease (no oxide) before backfilling.

Approved retainer glands are:
EBBA Iron – Mega Lug Series 1100
US Pipe - MJ Field Lok Accessories

TEMPORARY FIRE HYDRANT FOR TESTING

Temporary fire hydrants for testing shall be installed where specified on the plans. Temporary fire hydrants and valves will be supplied and delivered by the City of Moline. The Contractor is required to supply and install the tee and plug, and installation only of the furnished valve and hydrant, all for testing purposes. Once testing is complete, the Contractor shall remove the hydrant and valve at the tee and plug the tee with an approved DIMJ plug. The hydrant and valve will remain property of the City of Moline, and will be picked up on-site by City Staff. Furnishment and installation of the DIMJ Tee and the DIMJ Plug will be paid for under those respective pay items. Installation and removal of the furnished valve and hydrant will be paid for under this pay item.

561.03 General

Add to this Article:

(c) All water distribution items shall be in accordance with Sections 561, 562, 564 and 565 of the Standard Specifications, these supplemental specifications, applicable sections of *the Sewer and Water Specifications*, and City of Moline Standard details.

(d) Water mains shall have a minimum of five (5) feet cover in all directions.

(e) Whenever pipe laying is not in progress, the open end of all pipe/fittings shall be plugged with a Clow F-1147 or equal plug.

(f) Where casing pipe is required or called out on the plans, the casing pipe shall be six to eight inches larger than the outside diameter of the bells on the ductile iron pipe. Stainless steel/polyethylene casings chocks/spacers shall be used to keep the pipe centered in the casing and to prevent damage when the installation is made. Approved chocks/spacers shall be installed at a maximum of 6 foot intervals within the casing pipe such that no part of the carrier pipe rests on the casing pipe. All labor, equipment, and material necessary for installing casing pipe shall be paid for at the contract unit price per LINEAR FOOT for WATER MAIN ENCASEMENT.

Approved casing chocks/spacers are:
Powerseal 4810
Cascade CCS
RACI Spacers

(g) When necessary to deflect pipe from a straight line, the degree of deflection shall be approved by the Utilities Department representative. Maximum permissible deflection shall be three (3) degrees or 12 inches on a 20-foot length pipe.

(h) Any interruption of service shall be held to a minimum length as determined and approved by the Utilities Department representative. Any damage to existing mains or services shall be repaired immediately.

(i) No valve, hydrant, or other control on the existing system shall be operated for any purpose by the Contractor. The City will fill and flush all water mains. The Contractor may air test installations prior to city testing.

Should the Contractor need an onsite water source for construction purposes, the Contractor will be required to pay for all water used. Contractor shall contact the City of Moline Water Department and apply for a meter. The Water Department will install a meter at the nearest hydrant. The Contractor will be billed at the current city water rate. Water used for flushing as well as disinfection and pressure testing shall be incidental to disinfection and pressure testing.

(j) Trace wire shall be installed on all water mains. Typical hydrant branches that are perpendicular to the water main do not require trace wire. Trace wire shall be installed on non-typical hydrant branches, i.e., dog-legged hydrant branch.

Connections into existing trace wire, connections into trace wire used during water main bores, connections between one spool of trace wire to another and other similar connections shall be made using a direct bury wire nut. When connecting trace wire ends together, strip 5/8” of insulation from the end of each wire. Insert the two ends firmly into the direct bury wire nut. Twist the wire nut clockwise while pushing the wires firmly into the nut. Do not over torque. Tie the wires in a knot. See Moline Standard Details.

Connections of trace wire at tees, crosses and at locations where the trace wire will be brought to the surface shall be conducted using a direct bury lug. See Moline Standard Details.

Trace wire shall be installed in a continuous fashion. Install trace wire on top of the water main and secure to polyethylene wrap every five (5) feet with tape. See Moline Standard Details.

Bring trace wire to surface at every valve box, vault, blue plastic marker, dead end hydrant and as called out on the plans. Trace wire shall be brought to the surface at least every one thousand (1,000) feet. Take care not to damage the wire coating. Repair damaged coating with electrical tape.

Trace wire shall be brought up in all valve boxes. Spiral (three turns) the trace wire up the outside of the valve box. Drill a 3/16” hole 4-1/2” from the top of the valve box. Extend the wire through the hole and tie a knot. Coil enough wire on the inside of the box to extend twelve (12) inches above ground. See Moline Standard Details.

Trace wire shall be brought up in all vaults. Trace wire shall be brought up the outside of the vault and through the concrete vault, not between the concrete vault and frame. A coil sufficient to extend twelve (12) inches above ground shall be fastened to the vault. The hole shall be grouted water tight. The wire shall be opposite the steps, if applicable, and not hinder access to the vault. The trace wire on the main shall extend through the vault. See Moline Standard Details.

Blue plastic pipe line markers with test screws shall be installed as directed by the Engineer. Bury a four foot u-channel post two feet in the ground, run the trace wire up through the marker and slide the blue plastic marker over the post. Bury the bottom six inches of the marker. Connect the trace wire to the brass connecting screws and label the screws with a permanent marker as directed by the Engineer. See Moline Standard Details.

Trace wire shall be brought up at all dead end hydrants through ¾” x 12” long schedule 40 PVC pipe with solvent welded cap. Pipe shall be buried such that the cap is just above grade and below the hydrant ground ring. Drill a 3/16” hole in the pipe just below the cap. Trace wire shall be extended through the pipe, out the hole and knotted with twelve (12) inches outside the pipe. See Moline Standard Details.

(k) Disinfection and Hydrostatic Testing: Disinfection and pressure testing procedures shall be performed by the Department of Public Works staff for all water mains and services four (4) inches and larger. Hydrostatic pressure tests shall be made with a minimum pressure of 150 psi for a period not less than one (1) hour and not more than six (6) hours. The basic provisions of AWWA C600 shall be applicable for both pressure and leakage testing except that no leakage shall be allowed. The Contractor shall install standard test connection(s) as requested by City in order to complete testing. See Moline Standard Details.

The Contractor shall provide the City with 48 hour notice for disinfection/pressure testing to allow for scheduling.

The first disinfection and pressure test will be done at no charge to the Contractor. All subsequent tests required due to failing tests will be at the Contractor’s expense.

The footage shall be based on the total footage of a specific project and not each individual segment. For work contracted with the City of Moline, the charges to the Contractor will be deducted from the retainage payment at the completion of the project.

Article 45-3 of Specifications for Water & Sewer Main Construction, Construction Details

Add to this Article:

Precast concrete blocking shall be used to support hydrants as shown on the City of Moline Standard details. Sufficient clean one (1) inch rock or equivalent shall be placed around the base of the hydrant to provide an adequate drain field. Rock must be placed to a minimum depth of six (6) inches above the lower flange.

Where fire hydrant assemblies are called for, they shall include the required 6-inch gate valve and cast iron valve box and 6-inch Pressure Class 350 D.I.P. connecting pipe and fittings as shown on the City of Moline Standard details.

Fire hydrant depth of bury shall be limited to seven (7) feet. If depth of bury would exceed seven (7) feet, provide two 45-degree fittings with thrust blocks in connecting to limit depth of bury to six (6) feet.

561.05 Basis of Payment

Revise this Article to read:

WATER MAIN - This work will be paid for at the contract unit price per linear foot for WATER MAIN of the size specified, which shall include trench excavation, fittings, thrust blocks, tie rods, restrained joints, as required, bedding (except extra bedding), disinfection, and taps. Any existing pipe to be removed/abandoned that is located in the trench of the proposed water main shall be removed by the Contractor, and all costs shall be included in this pay item.

Poor subgrade that will not support the pipe will be reviewed according to 104.03 to determine if additional payment is warranted for repairing the trench bottom. Failure on the Contractor's part to adequately dewater the trench will not be a basis for additional payment.

TRENCH BACKFILL – This work shall be measured for payment in accordance with Article 208.04 of these supplemental specifications and the City of Moline Standard Details.

PIPE FITTINGS - These items shall be paid for at the contract unit price per each unit of the size and type specified.

VALVES - This item shall be paid as VALVE (of the size and type specified) IN VALVE VAULT (of the diameter specified) installed. The unit price of this item shall also include the type of frame and lid specified. The frame and lid unless otherwise noted, shall be a NEENAH R-1713 or equal, with a "SELF-SEALING" lid stamped "WATER" and a concealed pick-hole.

FIRE HYDRANT ASSEMBLY -This work shall be paid for at the contract unit price per each for FIRE HYDRANT ASSEMBLY, which shall include the 6-inch gate valve, valve box, 6-inch connecting pipe and fittings with bedding, (except extra bedding) and thrust blocking.

TRACE WIRE - This work, including materials, shall be included in the price per linear foot of WATER MAIN of the size specified.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 562
WATER SERVICE LINE

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

562.02 Materials

Revise this Article to read:

Approved service saddles are:
Powerseal 3412, 3413
Smith Blair 317 or equivalent

Outlet connections shall be CC, corporation thread.

Tapping sleeves shall be of stainless steel construction equal to that manufactured by Power Seal 3490AS.

All corporation stops and curb stops shall be ball type, rated at 300 PSI, fabricated of brass and shall be provided with outlets suitable for copper connections and shall conform to AWWA/ANSI C800*. Curb stops shall be of the round-way type. Fittings for service pipe shall be copper and of the flare type.

Copper pipe shall be of copper water tube, Type K, soft temper, for underground service, conforming to ASTM B88-88. All joints shall be of the “flared union” type.

Curb boxes shall be of the Buffalo or “arch” type, A.Y. McDonald #5601 or equal, of such construction that it shall be capable of extension to finished grade.

562.03 General

Add to this Article:

The making and installation of all service connections, placing of all service pipes and the setting of all water service fittings within public rights-of-way shall be performed by a duly licensed plumber under the supervision of the City Plumbing Inspector.

Article 41-2.12 of the *Sewer and Water Specifications*:
Each water service pipe shall be connected to the water main through a brass corporation stop. The main shall be tapped at an angle of 45 degrees with the vertical, and the stop must be turned so that the T-handle will be on the top. Any damage, tears, cuts, etc. of the polyethylene wrap on the main shall be repaired after tapping and prior to backfilling.

Service pipes must be placed at least five (5) feet below the surface of the ground. When pipes are placed in streets or grounds subject to fixed grades, where the surface of the ground is higher than the established grades, they shall be so placed that they will be at least five (5) feet below the established grade, except in sandy soil formation, the Public Utilities Department may require pipes to be placed to a depth of at least six (6) feet below the established grade. Service pipes shall run perpendicular from the main to the curb stop and box.

For service connections to all water main installed prior to 1993 and to Class 52 D.I.P. water main installed after 1992, the corporations shall be installed through the following methods:

Size of Tap	**Method of Tap**
Less than or equal to 1"	Direct tap
Less than or equal to 2"	Approved saddle
Greater than 2"	Tapping sleeve

For service connections to pressure class 350 water main installed after 1992, the corporations shall be installed through the following methods:

Size of Tap	**Method of Tap**
Less than or equal to 2"- main in place	Direct tap (I.A.W. the following table) or Approved saddle
Less than or equal to 2”- new main	Direct Tap(I.A.W. the following table) or tapped TEE
Greater than 2"- new main	D.I.P. tee
Greater than 2" - main in place	Tapping sleeve

Maximum Direct Tap Size for
3-Through 24-Inch Ductile Iron Pipe

Size (in.)	Pressure Class				
	150	200	250	300	350
	Maximum Direct Tap Size				
3	--	--	--	--	¾
4	--	--	--	--	¾
6	--	--	--	--	1
8	--	--	--	--	1
10	--	--	--	--	1
12	--	--	--	--	1 ¼

14	--	--	1 ¼	1 ½	1 ½
16	--	--	1 ½	2	2
18	--	--	2	2	2
20	--	--	2	2	2
24	--	2	2	2	2

A curb stop box and shut-off for controlling the supply of water to customers shall be placed on every service. When connections are made in street or avenues, the stop box shall be placed 12 inches outside sidewalk line on the street side; and when made in alleys or in areas where no sidewalks exist, it shall be placed six (6) inches outside the lot line. The cover of said stop box shall be maintained at the same height as the sidewalk of surrounding ground by the owner of the premises. Where obstacles prevent the location of stop box and shut-off at the point indicated, they shall be placed on public right-of-way as directed by the plumbing inspector. All stop boxes must be set on a line drawn at right angles to the main through the service corporation or connection in the main.

562.05 Basis of Payment

Revise this Article to read:

This work will be paid for at the contract unit price per each for WATER SERVICE CONNECTION (CORPORATION), per linear foot for COPPER WATER SERVICE PIPE of the size indicated and per each for CURB STOP AND BOX installed.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 564
MOVING FIRE HYDRANTS

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

564.01 Description

Revise this Article to read:

The item "Move Fire Hydrant" is to cover all costs associated with relocating the fire hydrant and valve which serves the hydrant.

564.03 General

Revise the first two paragraphs of this Article with:

Where indicated on plans, the existing fire hydrant shall be removed and reinstalled at a new location in accordance with City of Moline Standard Details. Pressure Class 350 D.I.P. 6-inch connecting pipe and fittings shall be required as detailed in the plans and the City of Moline Standard Details. Sufficient clean two (2) inch rock or equivalent shall be placed around the base of the hydrant to provide an adequate drain field. Rock must be placed to a minimum depth of six (6) inches above the lower flange.

Fire hydrant depth of bury shall be limited to seven (7) feet. If depth of bury would exceed seven (7) feet, provide two 45-degree fittings with thrust blocks in connecting to limit depth of bury to six (6) feet. Any fittings or risers necessary shall be included in the pay item.

The hydrant shall be tied to the existing main by means of rodding or the use of mega lugs. This shall be included in the unit cost for MOVE FIRE HYDRANT. Rodding shall not bypass any valves or fittings.

Add the following to this article:

Upon completion of relocating or adjusting the fire hydrant, it shall be tested and disinfected as specified in Section 561 of these Supplemental Specifications.

564.04 Basis of Payment:

Revise this Article to read:

This work shall be paid for at the contract unit price per each for MOVE FIRE HYDRANT.

This pay item shall include:

a. All connecting pipe and fittings needed to relocate a fire hydrant or fire hydrant assembly. All required pipe and fittings shall be new D.I.P and meet the City of Moline Water Department standards.

b. All necessary bedding and thrust blocking

c. All labor and materials required to tie the hydrant to the existing main shall be included in this pay item.

d. Mega lugs may be used in lieu of rodding, with no additional payment made.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 565
MOVING DOMESTIC METER VAULTS AND WATER SERVICE BOXES
(ADJUSTING DOMESTIC METER VAULTS AND WATER SERVICE BOXES)

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

565.01 Description

Revise the 1st paragraph of this Article to read:

This work shall include but not be limited to the relocation and/or adjusting of domestic water service boxes. Installation shall be in accordance with the City of Moline Standard Details and as specified on the plans.

565.02 Materials

Revise this article to read:

All materials shall meet the City of Moline Plumbing Code.

565.04 Basis of Payment

Revise this Article to read:

Relocating water service boxes shall be paid for at the contract unit price per each for MOVE DOMESTIC WATER SERVICE BOX. The unit price for this item shall include all labor, material and equipment necessary to move the respective devices to the proposed location and grade. The Contractor shall supply and install a "Curb Box Sleeve" Mueller H-10342 or A.Y. McDonald #5639 or equal when the water service box is located within concrete.

Adjusting water service boxes shall be paid for at the contract unit price per each for ADJUST DOMESTIC WATER SERVICE BOX. The unit price for this item shall include all labor, material and equipment necessary to adjust the respective devices to the proposed grade. The Contractor shall supply and install a "Curb Box Sleeve" Mueller H-10342 or A.Y. McDonald #5639 or equal when the water service box is located within concrete.

City of Moline, Illinois
SUPPLEMENTAL SPECIFICATION
FOR
SECTION 566
REMOVE FIRE HYDRANTS AND REMOVE VALVE BOXES

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

566.01 Description

This item shall include removal and disposal of existing hydrants and valves as noted on the plans. These items shall become property of the City of Moline. The Contractor shall be responsible for delivering these items to the City's Water Division.

566.02 General

All holes shall be backfilled with moist aggregate and compacted. Backfilling shall be incidental to these items. Hydrants shall be removed to an elevation a minimum of 3' below finished grade and abandoned water lines shall be plugged to the satisfaction of the Engineer.

566.03 Basis of Payment

This work will be paid for at the contract unit price per each for REMOVE FIRE HYDRANTS or REMOVE VALVE BOXES. Plugging of abandoned water lines shall be incidental to these items.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 601
PIPE DRAINS, UNDERDRAINS AND FRENCH DRAINS

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

601.02 Materials

Revise this Article to read:

Pipe underdrains shall be 4-inch or 6-inch perforated corrugated polyethylene (PE) tubing as specified.

601.04 Pipe Underdrain Installation

Replace 4th and 5th paragraph with:

The trench shall be backfilled with CA-13.

601.07 Method of Measurement

Delete the 3rd and 4th paragraph:

601.08 Basis of Payment

Add these sentences to the 1st paragraph of this Article:

This work shall be paid for at the contract unit price per lineal foot for PIPE UNDERDRAIN ~~COMPLETE~~ of the size specified installed. All costs of connecting to new manholes and catch basins, aggregate, geotechnical fabric, and caps shall be included in this pay item.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 602
CATCHBASIN, MANHOLE, INLET, DRAINAGE STRUCTURES,
AND VALVE VAULT CONSTRUCTION,
ADJUSTMENT AND RECONSTRUCTION

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

602.01 Description

Add the following sentence to this Article:

This section shall also consist of the construction and/or adjustment of HAND HOLES, VALVE BOXES, and CLEANOUTS.

602.04 Concrete

Revise this Article to read:

Structures shall be constructed of pre-cast reinforced concrete sections or cast-in-place concrete only.

Sanitary sewer structures:
The bottom, barrel and concentric transition sections of the manhole or flat top shall be constructed of precast reinforced concrete sections only. Sanitary Sewer manholes shall have a sealed exterior, sealed with bitumastic material meeting federal specification SSC153C, Type 1 or SSA 649D. Manhole bottoms shall be configured so that the flowline of the bottom reflects a cross section that is at a minimum the diameter of the outgoing pipe.

Valve Vaults shall be constructed with a minimum inside diameter of five (5) feet.

602.05 Brick Masonry

Revise this Article to read:

Brick masonry shall not be used for the construction or adjustment of structures.

602.06 Concrete Masonry Units

Revise this Article to read:

Concrete masonry units shall not be used for the construction or adjustment of structures.

602.07 Precast Reinforced Concrete Sections

Add this paragraph to this Article:

When required, a cast in place concrete collar shall be used. Adjustments shall be made using cast in place concrete or HI-SPEC grout TYPE “S” or approved equal. Drilled bars shall be used when extending walls to the proper elevation. Bars shall be #4, drilled 4” into existing walls at 12” centers. All reinforcement bars shall be epoxy coated. Any bricks and/or adjustment rings shall be removed and replaced with this method of adjustment.

The casting shall be sealed to the concrete with a mastic type material approved by the Engineer.

602.08 Steps

Revise this Article to read:

Steps are not required for valve vaults or manholes and shall be omitted.

602.11 Furnishing and Placing Castings

Add the following paragraph (a):

All existing frames and lids shall be replaced with frames and lids provided by the City. All replaced frames and lids shall remain property of the City of Moline, with the Contractor responsible for transporting them to the City’s requested location.

All new or replaced frames and lids for manholes and valve vaults will be furnished by the City of Moline. This includes any storm or sanitary manhole, or water valve vault being adjusted, reconstructed, or installed. The Contractor shall be responsible for transporting the new frames and lids from the City’s storage facility to the jobsite, and for transporting the old frames and lids from the jobsite to the City. The Contractor shall install the new frames and lids on manholes to be adjusted or new manholes and/or valve vaults. The cost of delivery and installation of the provided frames and lids shall be included in the contract unit price per each for SANITARY MANHOLE, of the type and size specified, STORM MANHOLE, of the type and size specified, VALVE VAULT, of the size specified, FRAME AND LID ADJUST, of the type specified, or VALVE VAULT ADJUST, of the size specified.

All City-owned infrastructure shall be installed with the Moline-provided Sanitary, Storm, or Water-stamped lids. This includes infrastructure being installed by a private developer that will be deemed public upon completion. These frames and lids will be provided by the City to the developer at that time.

When a Type 1 Frame W/Bolted Frame and Lid is specified, the frame shall be bolted directly to the concrete section. Bolting to an adjustment ring will not be allowed.

This item shall include the furnishing of all labor, equipment and materials and the performing of all work required to remove and replace existing frames and lids of sanitary sewer manholes. New frames and lids unless otherwise noted shall be US FOUNDRY 192, NEENAH R-1916C or equal, with a self-sealing lid stamped “SANITARY”, concealed pick-hole, gaskets, and anchor bolts.

All storm drainage structures with new frames, lids and grates, including but not limited to catch basin single / double, catch basin specials, etc. shall have a “NO DUMP” environmental stamp. When existing frames, grates and lids are to be used, a fabricated marker will be provided by the City of Moline, to be installed by the Contractor.

Add this paragraph to (b) Placing for Rigid Pavements:

"Box-outs" shall be optional for valve vaults, manholes, valve boxes, cleanouts, inlets single and doubles, etc. All adjustments must be completed prior to pavement placement or finishing box-outs.

Revise the second paragraph of (c) Placing for Flexible Pavements to read:

After the finish surface has been placed, the structures shall be adjusted to grade using Concrete "Box-outs" constructed according to City of Moline Standard Details. Adjustment shall be required for valve vaults, manholes, valve boxes, cleanouts, inlets single and doubles, etc.

602.13 Inlet and Outlet Pipes

Add this paragraph to this Article:

Place upstream of structure, where new storm sewer is constructed, a six-foot length of perforated, corrugated polyethylene (PE) tubing 4”, encased in a fabric envelope. Connect to storm manholes, inlets and catch basins. Pipe and connection shall be incidental to these items, as per City of Moline Standard Details. The end of said tubing shall be capped.

602.15 Cleaning

Add this paragraph to this Article:

The Contractor shall remove lids and thoroughly inspect all existing structures prior to reconstructing and/or adjusting. The Contractor shall notify the Engineer in writing, of structures containing preconstruction silt, debris or foreign matter of any kind. If the Contractor fails to notify the Engineer of pre-existing conditions, no additional compensation will be allowed for, Engineer directed, cleaning of structures prior to final project approval.

Pressure testing of sanitary manholes shall be in accordance with the “Illinois Recommended Standards for Sewage Works and the Design Criteria for Pressure Sewer Systems” except as follows.

Section 370.32 (h) Joints and Infiltration

2) Leakage Testing

A) All main line sewers on new development projects shall be tested. On reconstruction projects where laterals have already been connected, testing will not be required.

B) Leakage testing for manholes with frame in place shall be in accordance with the latest version of ASTM C1244, “Standard Test Method for Concrete Sewer Manholes by the Negative Pressure (Vacuum) Test Prior to Backfill”

602.16 Basis of Payment

Add these paragraphs to this Article:

Connection of new structures to new and/or existing sewers shall be incidental to these items. All required pipe for said connections shall also be incidental.

Any additional adjustments required for new and/or reconstructed structures to meet the design elevation will be incidental to the item.

These items include the furnishing of all labor, equipment and materials and the performing of all work required to adjust frames, lids or tops of inlets, valve boxes, hand-holes, manholes, etc. to fit the finished surface elevation of the completed pavement, top of curb, sidewalk, driveway or ground.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 605
REMOVING OR FILLING EXISTING MANHOLES, CATCH BASINS
AND INLETS

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

605.01 Description

Add to the end of the 1st sentence:

valve vaults, handholes, and valve boxes.

605.03 Removing Existing Manholes, Catch Basins, and Inlets

Add the following paragraph to this Article:

Removal shall be complete, except that the existing base may be left in place only with the Engineer's approval if it does not interfere with the proposed construction. However, in no case shall the existing base be incorporated in the new construction.

605.06 Basis of Payment

Add the following sentence to this Article:

Inlet doubles to be removed will be paid for as REMOVE INLET DOUBLE, valve vaults to be removed shall be paid for as REMOVE VALVE VAULT handholes to be removed shall be paid for as REMOVE HANDHOLE, valve boxes to be removed shall be paid for as REMOVE VALVE BOX, and valves and boxes to be removed shall be paid for as REMOVE VALVE AND BOX.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 670
ENGINEERS FIELD OFFICE AND LABORATORY

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

670.02 Engineer's Field Office Type A

Add this sentence to paragraph 1:

The field office furnished shall not be more than three years old unless approved by the Engineer, and shall be designated a non-smoking area.

Revise 1st sentence of paragraph 4 to read:

Hot and cold potable running water for the lavatory and toilet as an integral part of the office will not be required. A portable lavatory shall be positioned nearby.

Delete paragraph 5.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 671
MOBILIZATION

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

671.02 Basis of Payment

Revise this Article to Read:

Mobilization will not be paid for. All costs of mobilization shall be included in applicable unit prices.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 701
WORK ZONE TRAFFIC CONTROL

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

701.04 General

Add the following paragraphs to this Article:

On the date that the Contractor begins work, he shall assume responsibility for the normal maintenance of all existing pavements, drives and temporary surface within the limits of the improvement. Normal maintenance shall include all repair work deemed necessary by the Engineer including snow removal operations. This responsibility shall end upon the completion and acceptance of all the pay items in this contract.

No work shall begin until all traffic control devices are in place and have been approved by the Engineer. Approval will be written.

Notify the City of Moline, Dept. of Engineering at least 24 hours prior to the placement of any concrete and the temporary closing of any traffic lanes.

The Contractor is to notify all property owners prior to removal and replacement of any driveway pavements in front of their properties.

The Contractor is to notify the City of Moline Street/Sanitation Department to arrange for local garbage pickup, (309) 524-2400.The Contractor will be responsible for proper location, relocation, installation, arrangement, maintenance and removal of all traffic control devices furnished and installed by him. Whenever operations indicate that a relocation of a proposed or existing traffic control device is advisable, as determined by the Engineer, the Contractor shall remove, relocate and reinstall the device in question.

Add the following sentences to the 5th paragraph in this Article:

To ensure a prompt response to incidents involving the integrity of the work zone traffic control devices, the Contractor shall provide 3 (three) telephone numbers at the preconstruction meeting where a responsible individual can be contacted on a 24-hour-a-day basis. Said individual must be able to respond within 15 minutes of any call by the Engineer.

701.08 Contractor's Operations and Equipment

Replace paragraph (2) with the following:

The Contractor will provide 24 hour surveillance of all barricades, warning signs and lights during the duration of this contract. In the event of severe weather conditions, the Contractor shall be required to furnish any additional personnel required to maintain all traffic control devices as may be required by the Engineer. Surveillance shall mean checking control devices periodically, but not less than once every 12 hours. The Engineer shall be the sole judge as to whether the deficiency is an immediate safety hazard. The Contractor shall dispatch sufficient resources within one hour of notification to make needed corrections of deficiencies that constitute an immediate safety hazard. Other deficiencies shall be corrected within 12 hours. If the Contractor fails to restore the required traffic control and protection within the time limits specified above, the Engineer will impose a daily monetary deduction for each 24-hour period (or portion thereof) the deficiency exists. This time period will begin with the time of notification to the Contractor and end with the Engineer's acceptance of the corrections. The daily deduction will be $500.00 per day. In addition, if the Contractor fails to respond, the Engineer may correct the deficiencies and the cost thereof will be deducted from monies due or which may become due the Contractor. This correcting action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

701.15 Traffic Control Devices

Replace the first paragraph in (j) with the following:

The Contractor shall provide and maintain portable changeable message signs advising of road closure at least 14 days before the road is closed. Placement shall be as specified. All costs associated with signs shall not be paid for separately, but shall be incidental to the traffic control.

701.20 Basis of Payment

Revise this Article to read:

The above work will be paid for at the contract lump sum price for TRAFFIC CONTROL ~~COMPLETE~~, if a pay item has been provided for in the "Schedule of Prices." If a pay item has not been provided TRAFFIC CONTROL ~~COMPLETE~~ shall be incidental to the project.

City of Moline, Illinois

SUPPLEMENTAL SPECIFICATION
FOR
SECTION 780
PAVEMENT STRIPING

This Supplemental Specification amends the provisions of the current edition of the Illinois DOT Standard Specifications for Road and Bridge Construction, and shall be construed to be a part thereof, superseding any conflicting provisions thereof applicable to the work under the contract.

780.02 Materials

Add the following sentence to this Article:

All Painted Pavement Marking shall include glass beads.

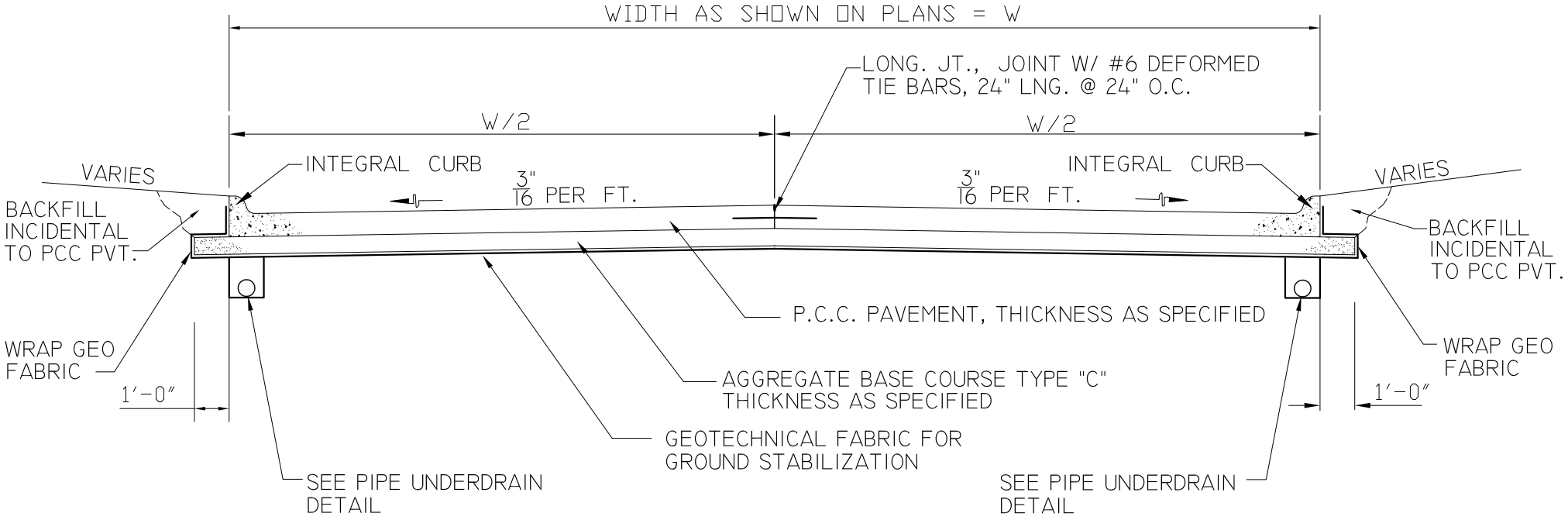
780.04 General

Add this sentence to the 1st paragraph of this Article:

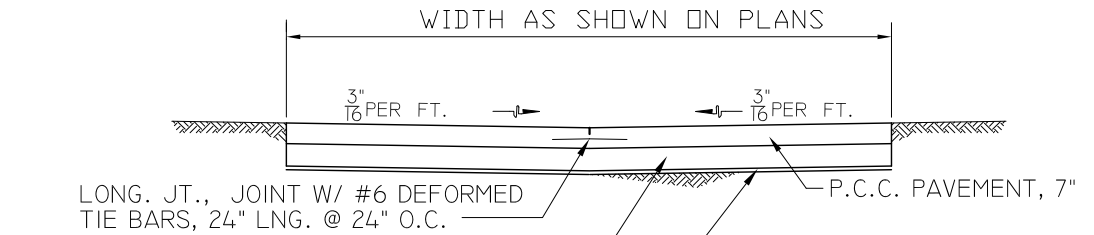
Thermoplastic pavement marking shall be used only on asphalt pavement surfaces.

CITY OF MOLINE STANDARD DETAILS

	Detail No.		Date Revised
*	**1**	**Pavement Section & Alley Pavement Section**	**01/17**
*	**2**	**Integral Curb detail**	**01/17**
	3	Manhole Box Out Detail	12/05
	4	Joint Type & Layout Detail	02/05
	5	Construction Joint & Expansion Joint Detail	12/05
	6	Longitudinal Joint With Tie Bar	10/11
	7	Longitudinal Joint & Transverse Joint Detail	10/11
*	**8**	**Residential/Commercial Driveway & Sidewalk Details**	**01/17**
*	**9**	**Typical Boulevard Sections Detail**	**01/17**
*	**10**	**Typical Boulevard Sections Detail**	**01/17**
*	**11**	**Pavement Patching Detail**	**01/17**
	12	Remove & Replace Combination Curb & Gutter	05/05
*	**13**	**Typical Adjustment Detail**	**01/17**
*	**14**	**Typical Manhole Detail**	**01/17**
	15	Cleanout	02/02
	16	Typical Service Connection and Sewer Main	12/05
*	**17**	**Inside Drop Storm Manhole**	**01/17**
*	**18**	**Inside Drop Sanitary Manhole**	**01/17**
*	**19**	**Bedding and Trench Backfill**	**01/17**
*	**20**	**Bedding and Trench Backfill Corrugated PVC & HP Pipe**	**01/17**
*	**21**	**Catch Basin Single/Double Detail**	**01/17**
	22	Catch Basin Special No. 1, 2, 3	10/11
*	**23**	**Catch Basin Triple Detail**	**01/17**
	24	Storm Water Alley Catch Basin	10/11
*	**25**	**Inlet Special Type “A” Detail**	**01/17**
	26	Pipe Underdrain Detail	12/05
*	**27**	**Pipe Underdrain Detail**	**01/17**
	28	Inlet Type “B” Special Detail	07/03
*	**29**	**Storm Vault Structure**	**01/17**
	30	Gate Valve Box Installation	01/10
*	**31**	**Typical Valve Vault Detail**	**01/17**
	32	Trace Wire Detail	10/11
	33	Trace Wire Marker Post	01/10
	34	Tracer Wire Direct Bury Connection	01/10
	35	Direct Tap Service Piping (Copper)	12/05
	36	Curb Box and Sleeve	10/95
	37	Thrust Block Installations	02/96
	38	Fire Hydrant Assembly	01/10
	39	Standard Test Connection	02/09
	40	Concrete Encasement Detail	09/11



TYPICAL PROPOSED SECTION



TYPICAL ALLEY PAVEMENT SECTION

NOTES:

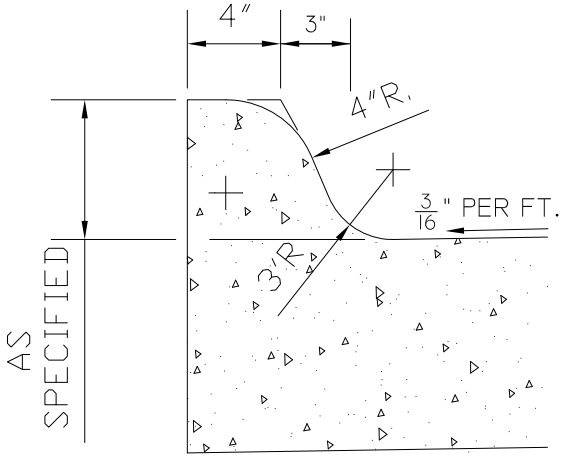
ALL HONEYCOMBING & OR POROUS AREAS IN BACK OF CURB WILL BE CORRECTED AS DIRECTED BY THE ENGINEER.

SLUMP NOT TO EXCEED 3". REQUIRED AIR, 5% - 8%. NO WATER MAY BE ADDED AT JOBSITE TO EXCEED THE DESIGN SLUMP.

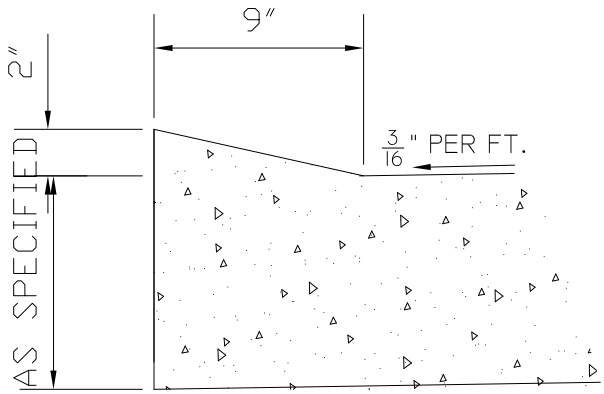
ALL TIE BARS, DOWEL BARS AND REINFORCING STEEL SHALL BE EPOXY COATED.

IF PAVEMENT IS AT A 6% OR GREATER SLOPE, THE FINAL FINISH SHALL BE TYPE A, ACCORDING TO 420.09(E)

DATE	PAVEMENT SECTION & ALLEY PVM'T. SECTION
01/17	
CITY OF MOLINE	
STANDARD	
#1	



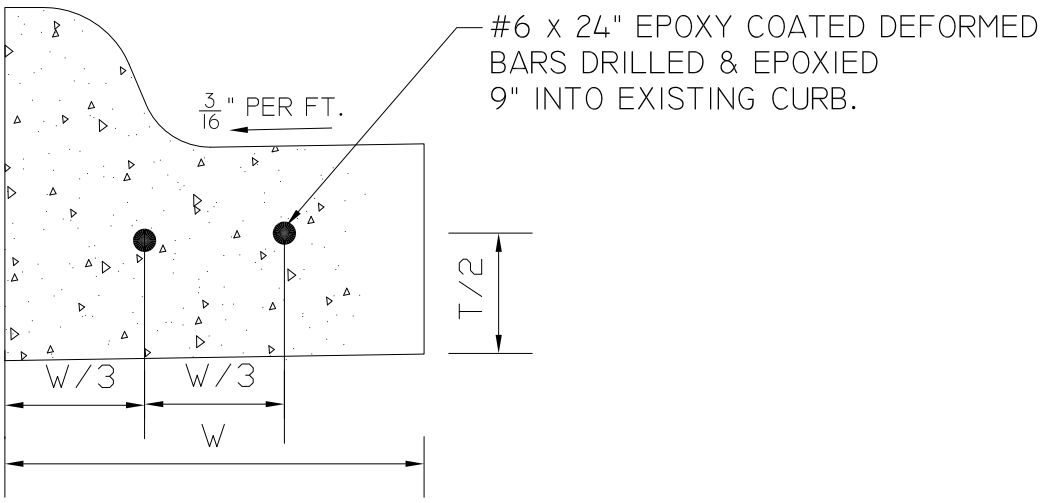
BARRIER CURB



MOUNTABLE CURB

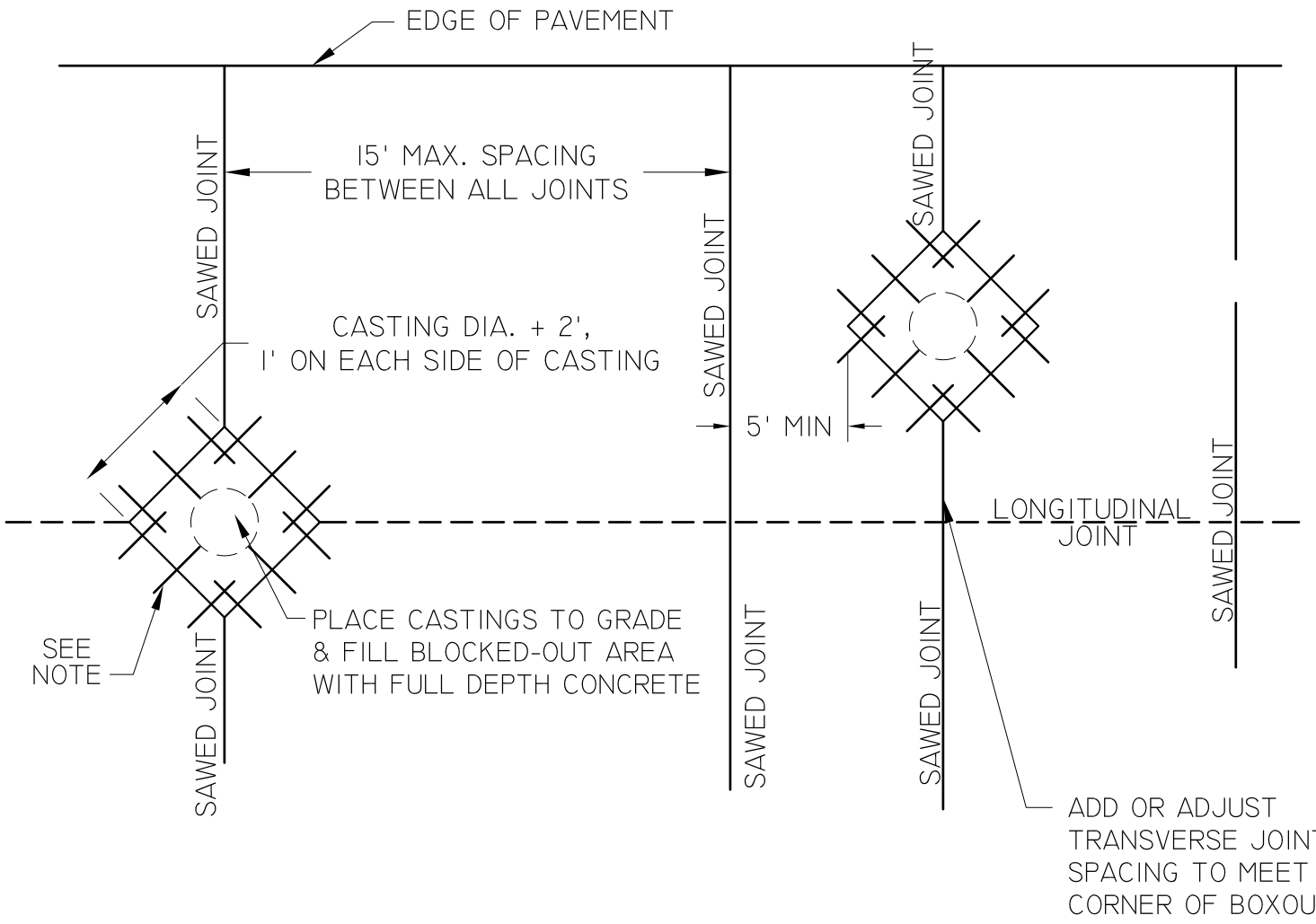
NOTE:
ALL HONEYCOMBED AND OR POROUS AREAS IN BACK OF CURB WILL BE CORRECTED AS DIRECTED BY THE ENGINEER.

CURB & GUTTER REMOVAL & REPLACEMENT:
CURB SHALL BE A B-6.12 OR AN M 6.12 UNLESS OTHERWISE SPECIFIED.



CURB CONSTRUCTION JOINT

INTEGRAL CURB DETAIL		
DATE 01/17	CITY OF MOLINE STANDARD	#2



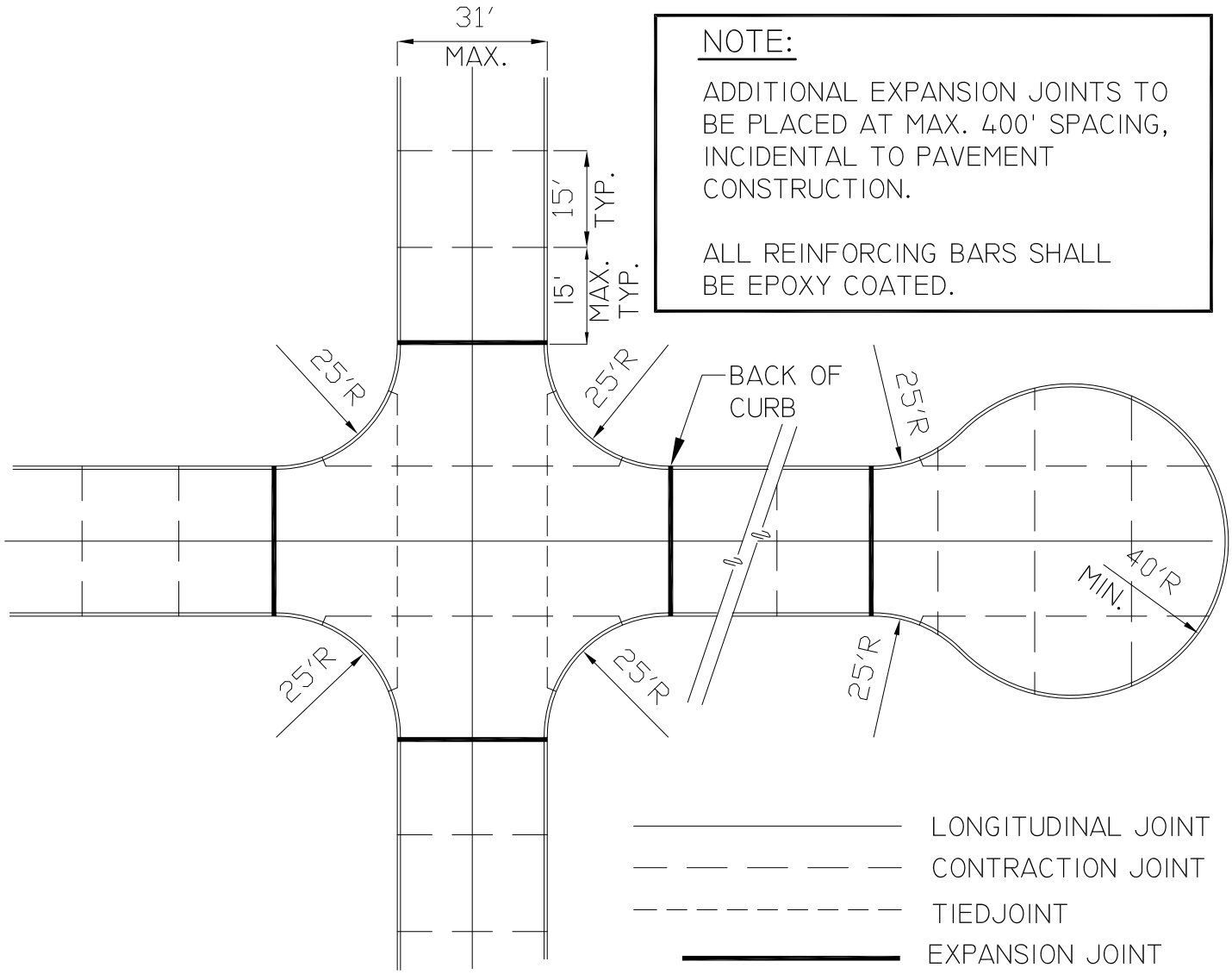
MANHOLE BOX-OUT DETAIL

NOTE:

ALL BOXOUTS SHALL BE TIED TO THE MAINLINE PAVEMENT WITH #6 X 18" BARS @ 18" O.C ALL SIDES.

ALL REINFORCING BARS SHALL BE EPOXY COATED.

MANHOLE BOX OUT DETAIL		
DATE	CITY OF MOLINE	
12/05	STANDARD	#3



NOTE:

ADDITIONAL EXPANSION JOINTS TO BE PLACED AT MAX. 400' SPACING, INCIDENTAL TO PAVEMENT CONSTRUCTION.

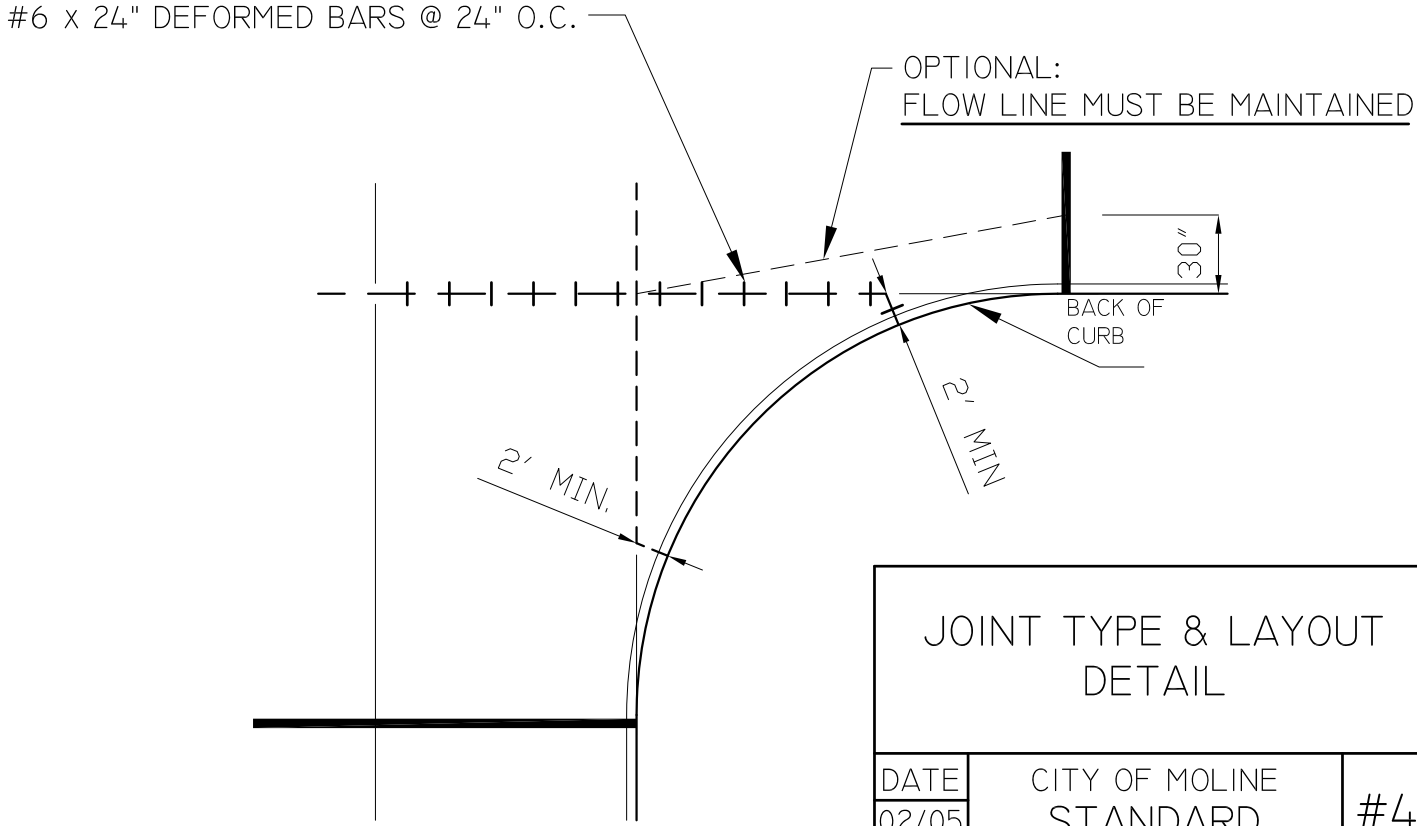
ALL REINFORCING BARS SHALL BE EPOXY COATED.

LONGITUDINAL JOINT

CONTRACTION JOINT

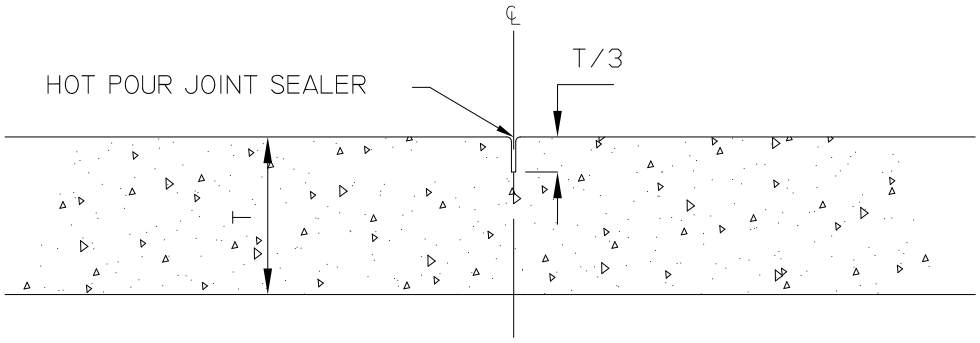
TIEDJOINT

EXPANSION JOINT

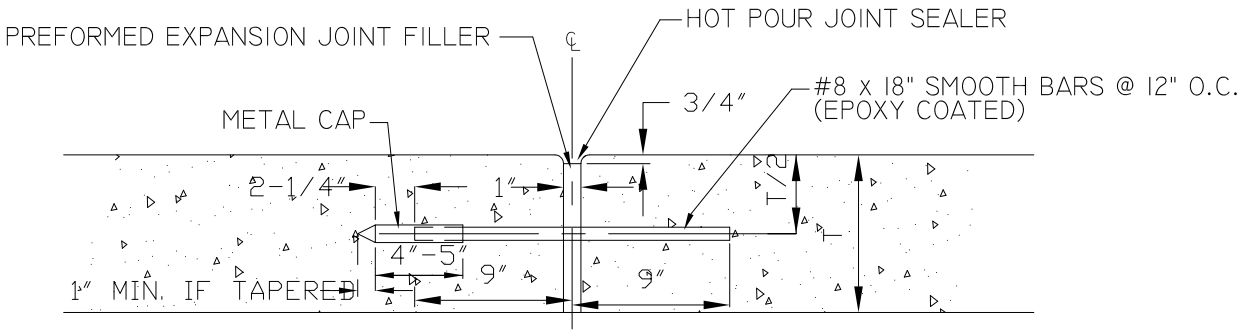


JOINT TYPE & LAYOUT DETAIL

DATE	CITY OF MOLINE	
02/05	STANDARD	#4



TRANSVERSE CONTRACTION JOINT



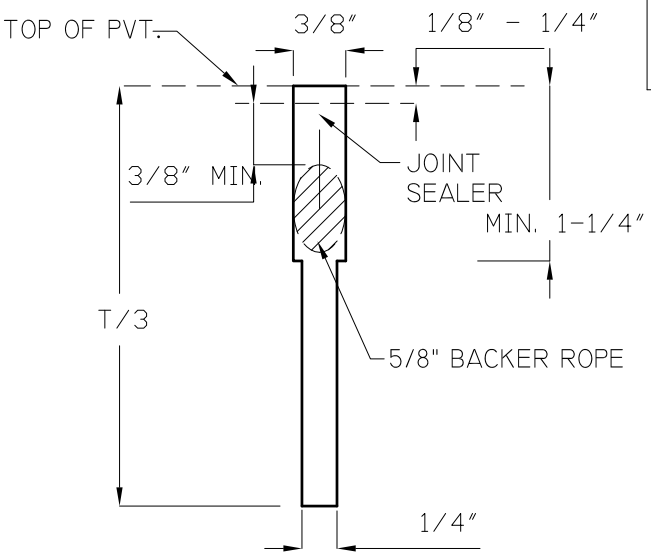
EXPANSION JOINT

NOTES:

HOLES SHALL BE DRILLED IN PREFORMED EXPANSION JOINT FILLER.

NO SLOTS OR GAPS WILL BE ALLOWED.

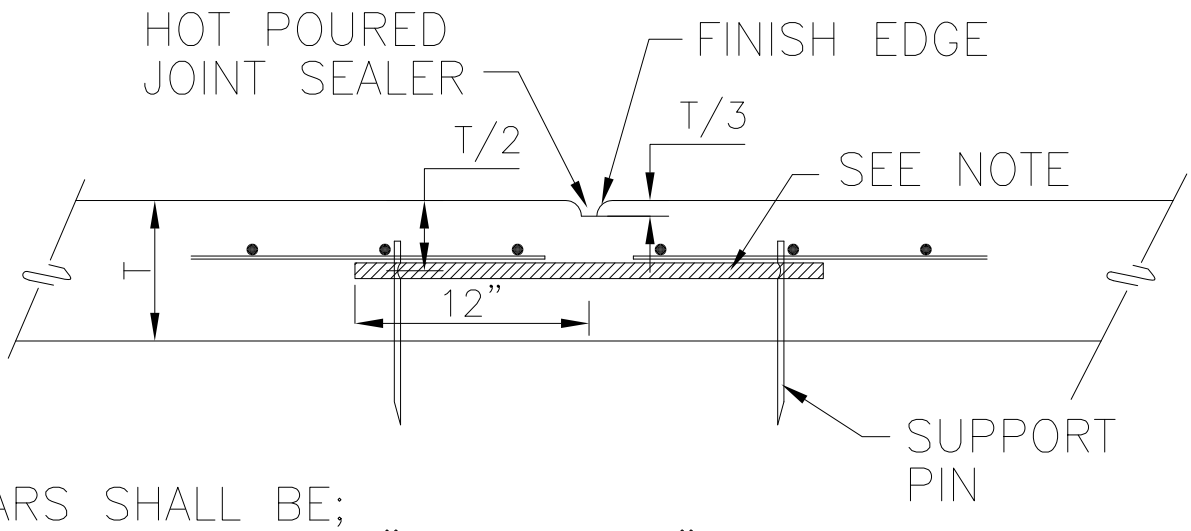
DOWEL BARS SHALL BE GREASED TO THE SATISFACTION OF THE ENGINEER.



JOINT FILLER

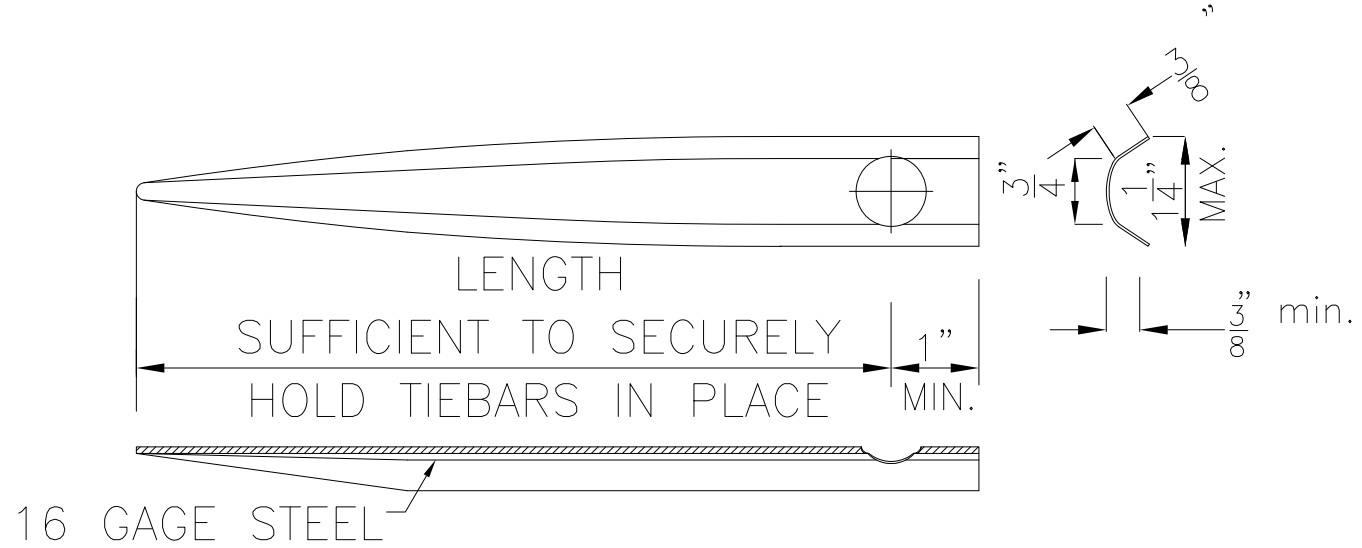
1. AFTER SAWING FLUSH JOINT WITH WATER OR AIR.
2. CLEAN BY SAND BLASTING UNTIL SURFACES ARE FREE OF SAWCUTTING FINES
3. JUST PRIOR TO INSTALLATION OF BACKER ROPE, BLOW WITH OIL AND WATER FREE COMPRESSED AIR TO ELIMINATE SAND AND WATER.

CONSTRUCTION JOINT & EXPANSION JOINT DETAIL		
DATE 12/05	CITY OF MOLINE STANDARD	#5



BARS SHALL BE;
#6 DEFORMED 24" LG. AT 24" CTRS.

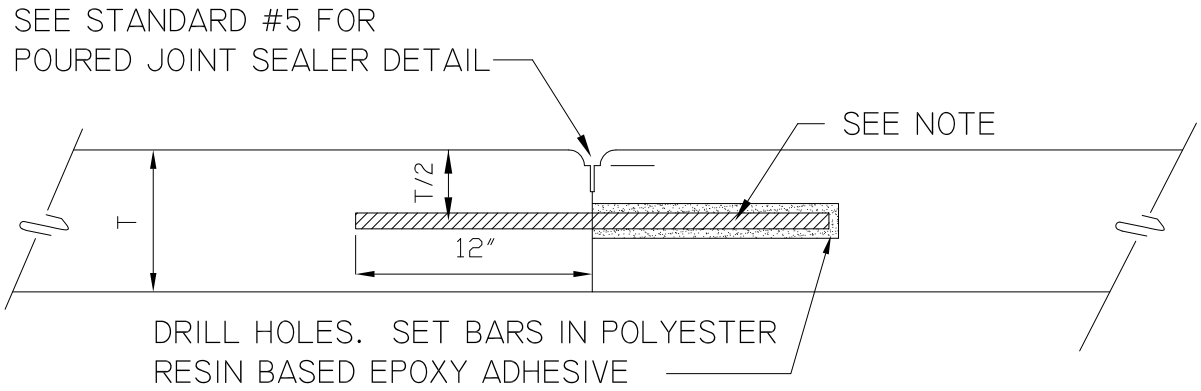
LONGITUDINAL JOINT WITH TIEBAR



SUPPORT PIN

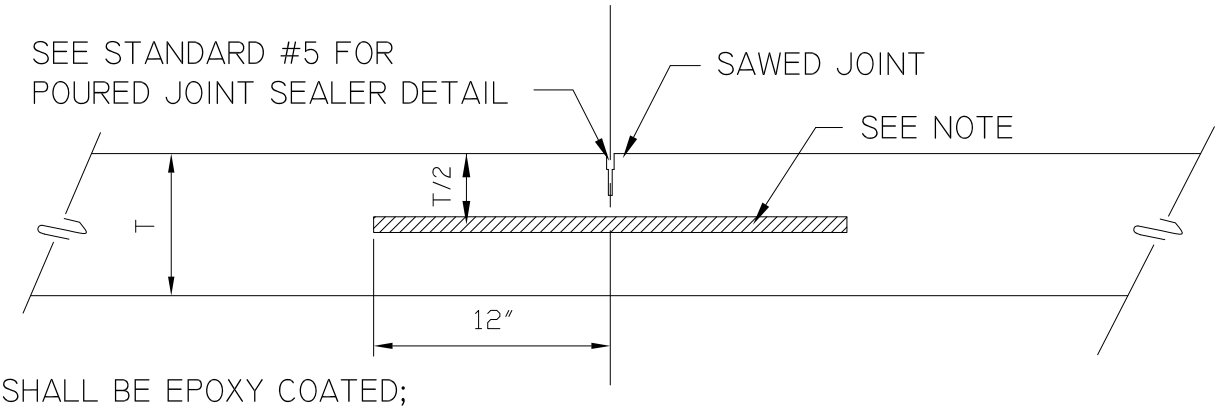
PINS NOT LESS THAN
16 GAGE AND LONG ENOUGH TO
SECURELY HOLD JOINT IN PLACE,

LONGITUDINAL JOINT WITH TIE BAR		
DATE 10/11	CITY OF MOLINE STANDARD	#6



BARS SHALL BE EPOXY COATED;
#6 DEFORMED, 24" LG. AT 24" CTRS. FOR LONG CONST. JT.
#6 DEFORMED, 24" LG. AT 18" CTRS. FOR TRANS. CONST. JT.

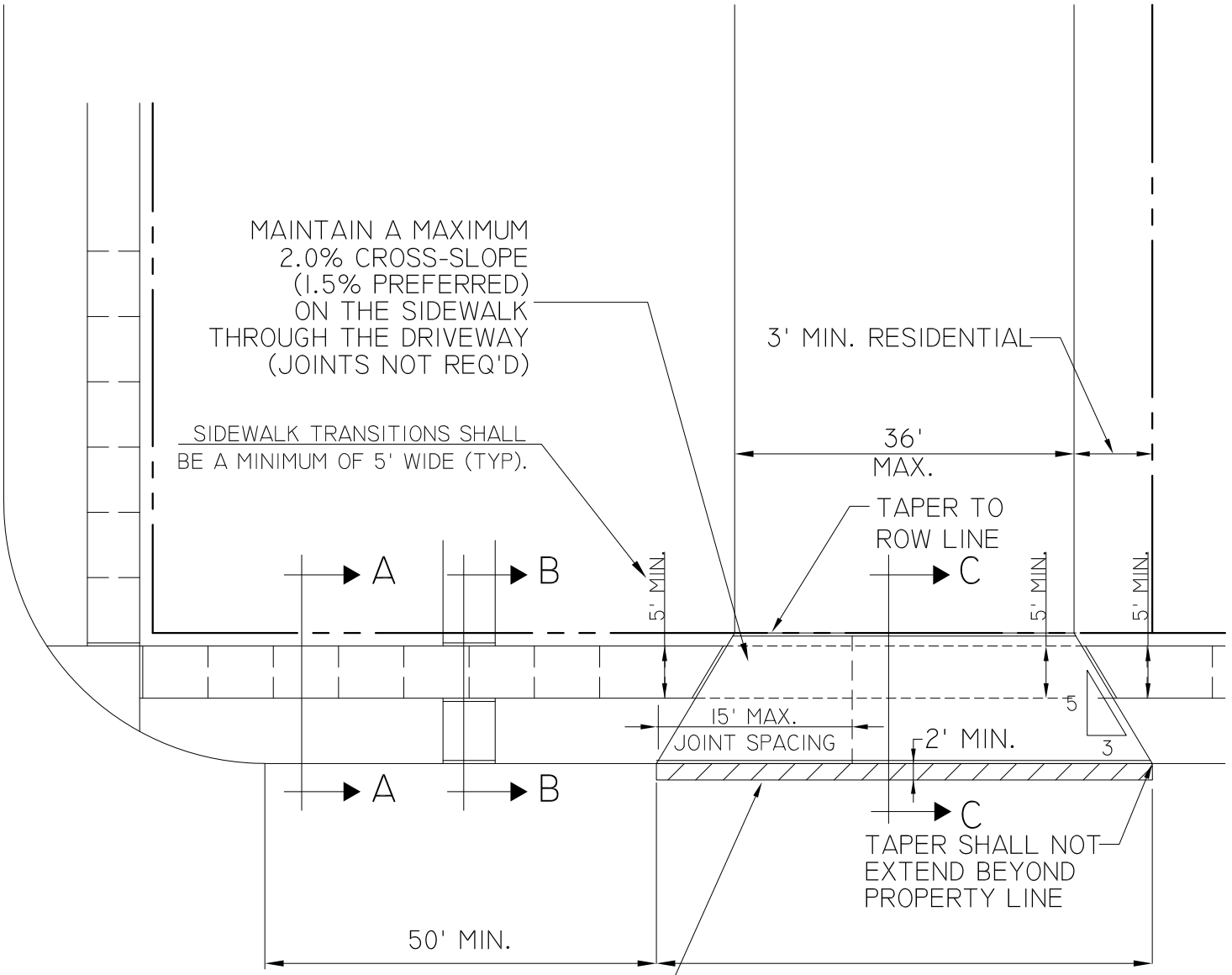
CONSTRUCTION JOINT



BARS SHALL BE EPOXY COATED;
#6 DEFORMED 24" LG. AT 24" CTRS.

SAWED LONGITUDINAL CONTRACTION JOINT

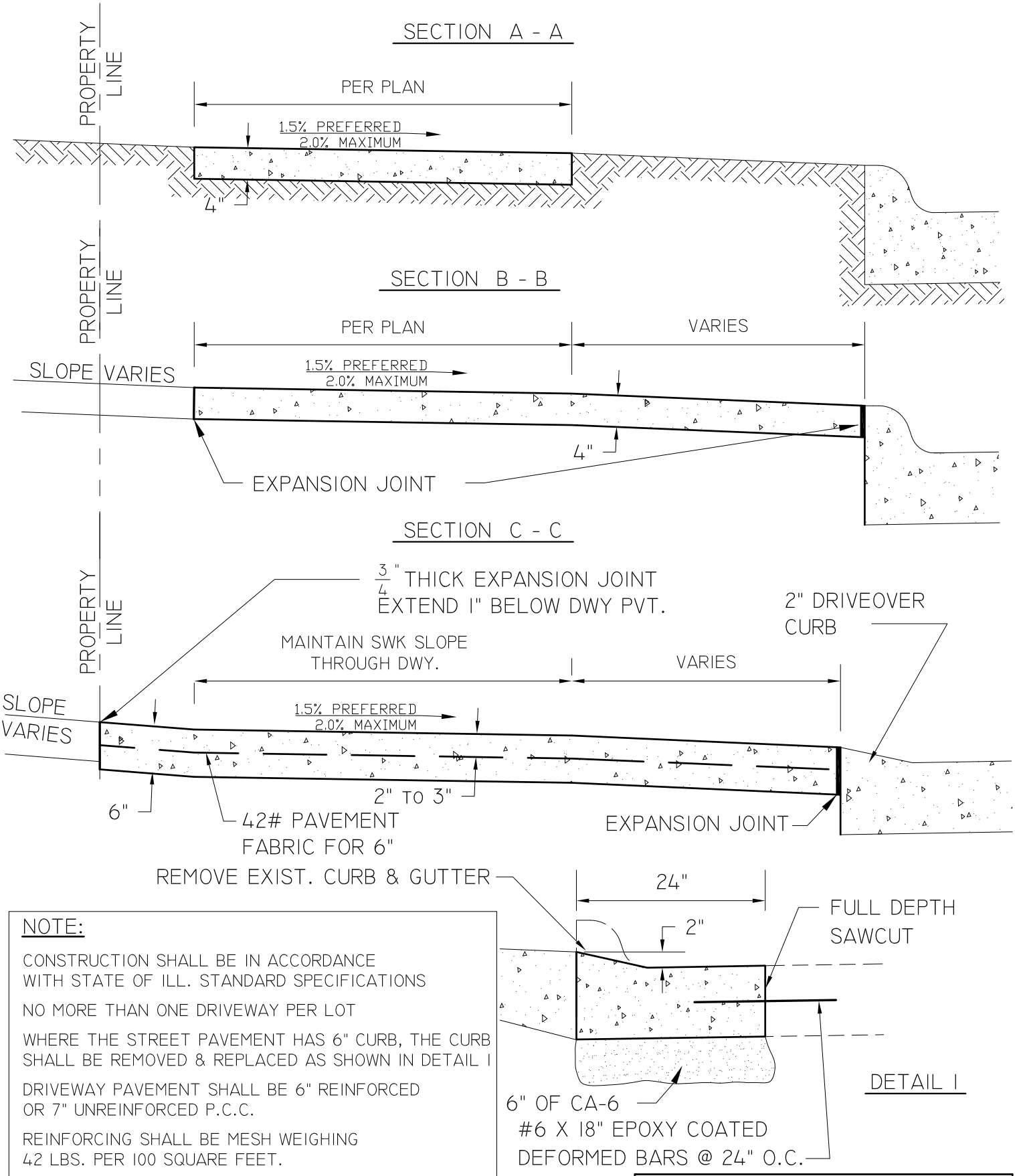
LONGITUDINAL JOINT & TRANSVERSE JOINT DETAIL		
DATE 10/11	CITY OF MOLINE STANDARD	#7



RESIDENTIAL/COMMERCIAL DRIVEWAY & SIDEWALK DETAILS

DRIVEWAY DEPTH SHALL BE A MINIMUM OF 6" WITH 42# WIRE MESH OR A MINIMUM OF 7" UNREINFORCED

RESIDENTIAL/COMMERCIAL DRIVEWAY & SIDEWALK DETAILS		
DATE	CITY OF MOLINE	
01/17	STANDARD	#8



NOTE:

CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE OF ILL. STANDARD SPECIFICATIONS

NO MORE THAN ONE DRIVEWAY PER LOT

WHERE THE STREET PAVEMENT HAS 6" CURB, THE CURB SHALL BE REMOVED & REPLACED AS SHOWN IN DETAIL 1

DRIVEWAY PAVEMENT SHALL BE 6" REINFORCED OR 7" UNREINFORCED P.C.C.

REINFORCING SHALL BE MESH WEIGHING 42 LBS. PER 100 SQUARE FEET.

ALL JOINTS AT BACK OF CURB AND ALL EXPANSION JOINTS SHALL BE SET 3/8" BELOW GRADE AND SEALED WITH AN APPROVED POURED JOINT SEALER.

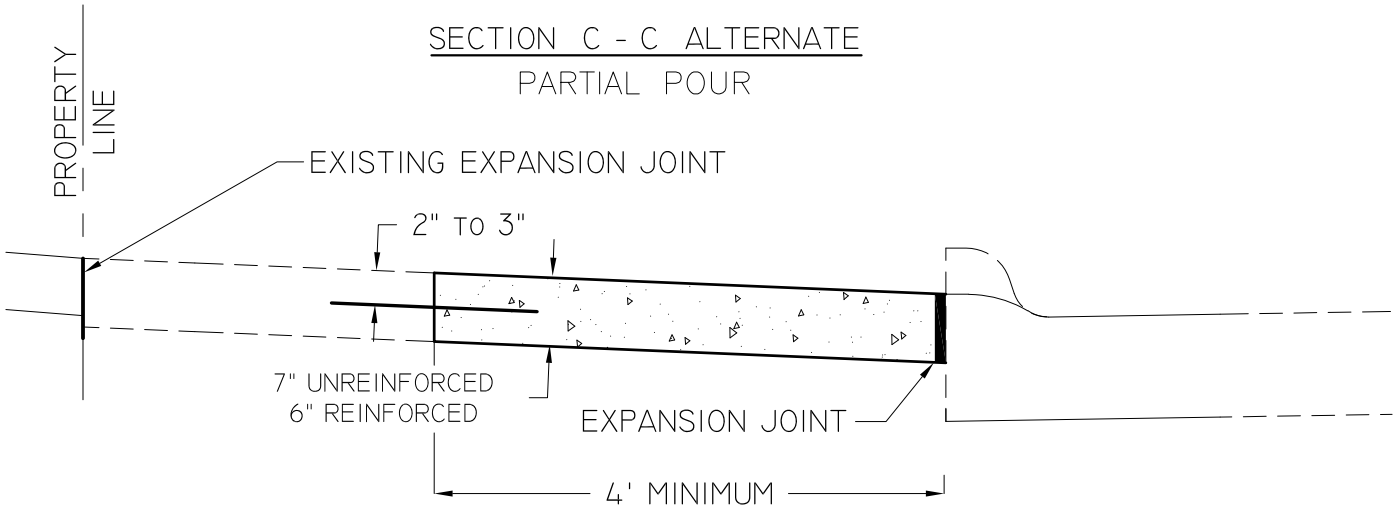
WHERE THE STREET PAVEMENT HAS 4" DRIVEOVER CURB, THE CURB MAY REMAIN INTACT. NO MATERIAL SHALL BE PLACED IN THE GUTTER.

BARS TO BE 18" LONG, DRILLED AND EPOXIED 9" INTO EXISTING PAVEMENT

TYPICAL BOULEVARD SECTIONS DETAIL

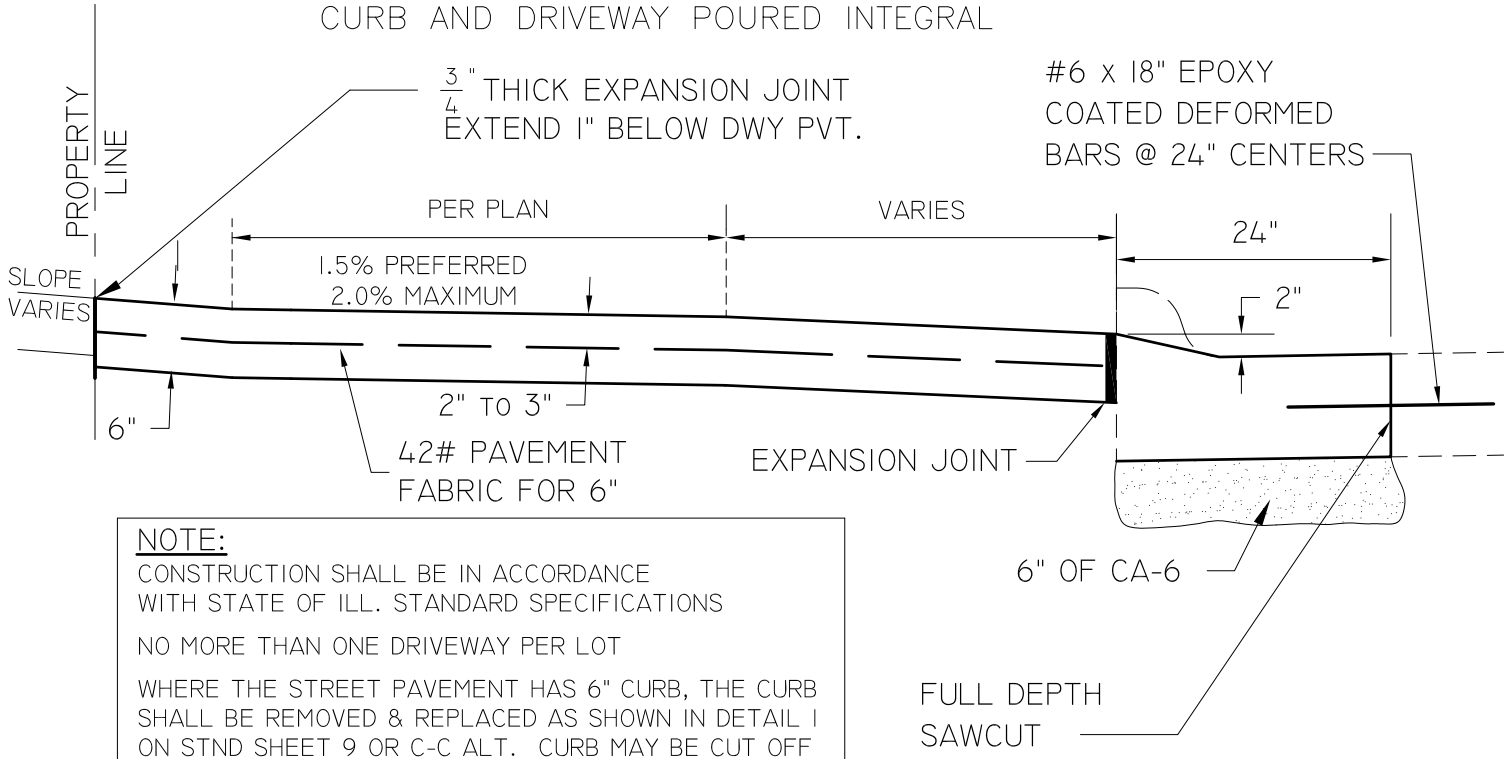
DATE	CITY OF MOLINE	#9
01/17	STANDARD	

SECTION C - C ALTERNATE
PARTIAL POUR



NOTE:
#4 X 18" EPOXY COATED
DEFORMED BARS @ 12" CENTERS.
NO EXPANSION JOINT IS REQUIRED.

SECTION C - C ALTERNATE
CURB AND DRIVEWAY POURED INTEGRAL



NOTE:

CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE OF ILL. STANDARD SPECIFICATIONS

NO MORE THAN ONE DRIVEWAY PER LOT

WHERE THE STREET PAVEMENT HAS 6" CURB, THE CURB SHALL BE REMOVED & REPLACED AS SHOWN IN DETAIL 1 ON STND SHEET 9 OR C-C ALT. CURB MAY BE CUT OFF WITH A SAW DESIGNED FOR THIS APPLICATION.

DRIVEWAY PAVEMENT SHALL BE 6" REINFORCED OR 7" PLAIN P.C.C.

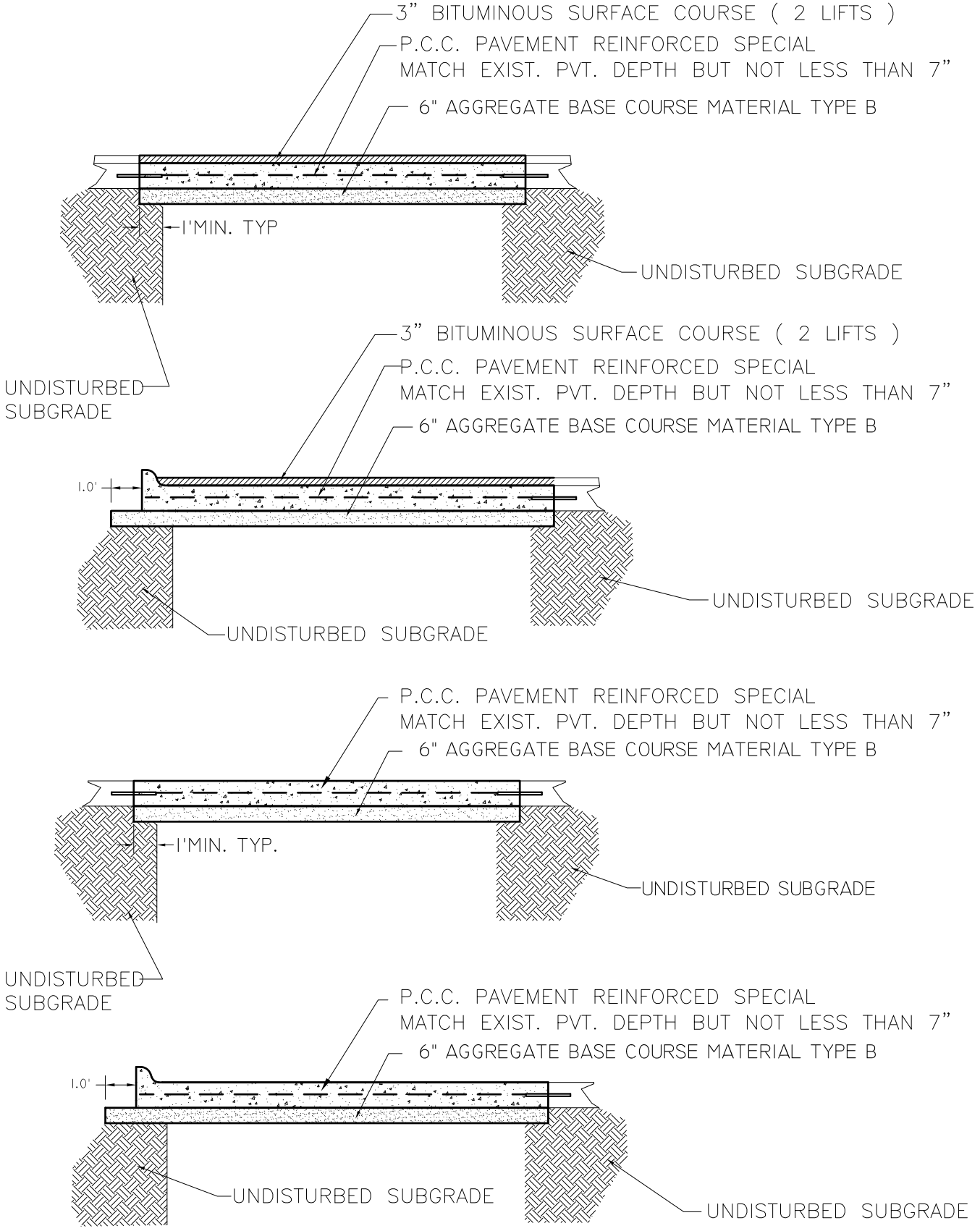
REINFORCING SHALL BE MESH WEIGHING 42 LBS. PER 100 SQUARE FEET.

ALL JOINTS AT BACK OF CURB AND ALL EXPANSION JOINTS SHALL BE SET 3/8" BELOW GRADE AND SEALED WITH AN APPROVED POURED JOINT SEALER.

WHERE THE STREET PAVEMENT HAS 4" DRIVEOVER CURB, THE CURB MAY REMAIN INTACT. NO MATERIAL WILL BE ALLOWED TO BE PLACE IN THE GUTTER.

BARS TO BE 18" LONG, DRILLED AND EPOXIED 9" INTO EXISTING PAVEMENT

TYPICAL BOULEVARD SECTIONS DETAIL		
DATE 01/17	CITY OF MOLINE STANDARD	#10

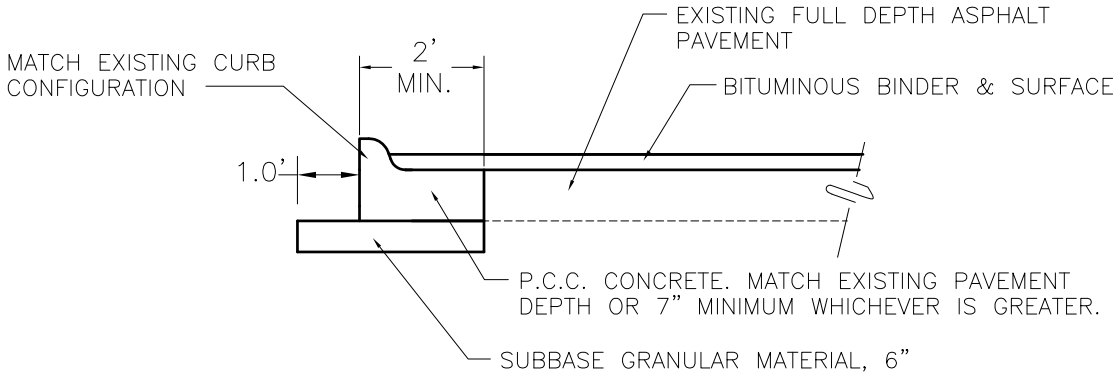


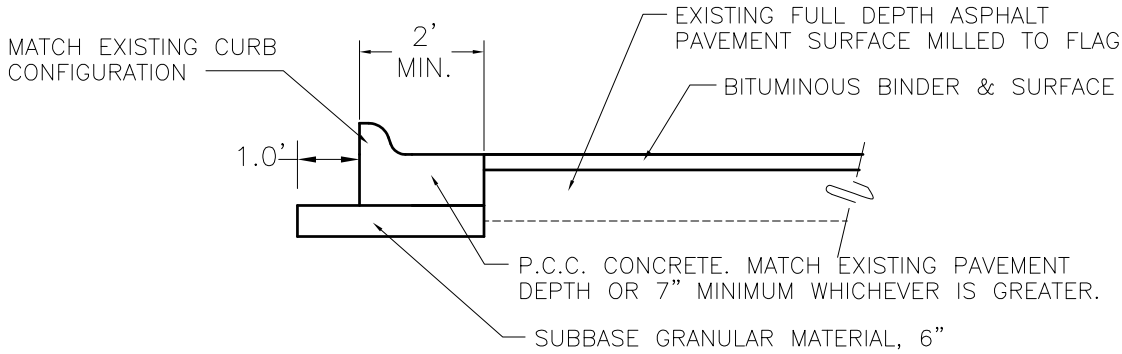
NOTE:
BARS TO BE #6 x 18" LONG, DEFORMED, EPOXY COATED DRILLED & EPOXIED 9" INTO EXISTING PAVEMENT
@ 24" O.C. LONGITUDINALLY. BOTH SIDES
@ 18" O.C. TRANSVERSELY. BOTH ENDS

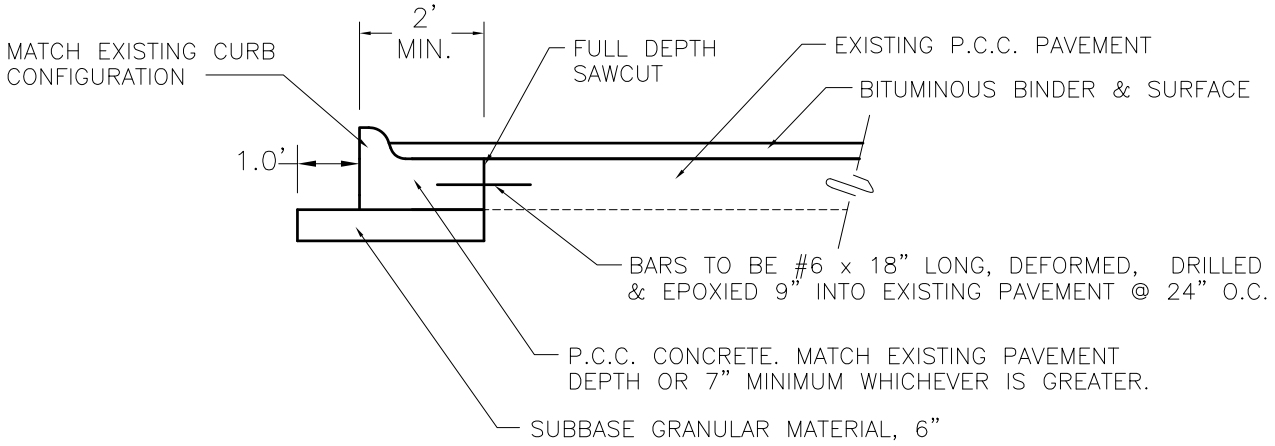
63# WIRE MESH SHALL BE USED IN ALL PAVEMENT PATCHES.

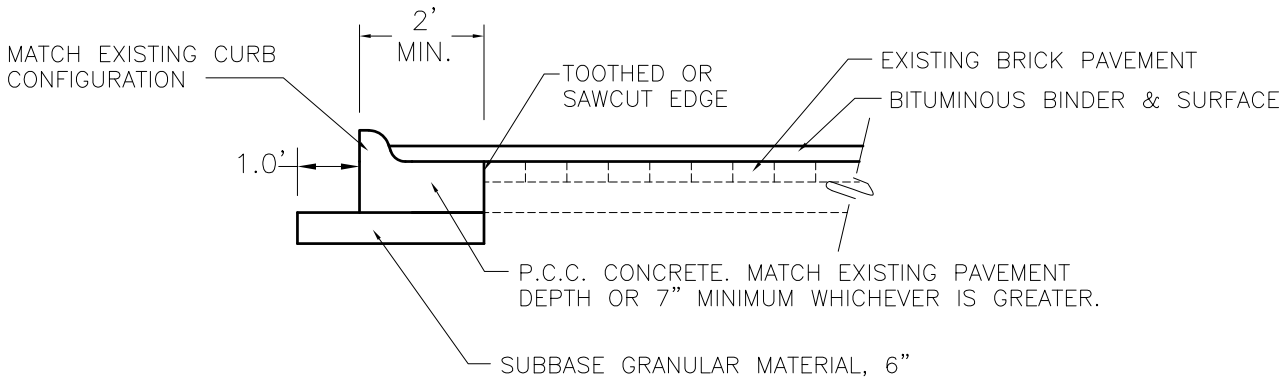
PAVEMENT PATCHING DETAIL

DATE	CITY OF MOLINE	#11
01/17	STANDARD	



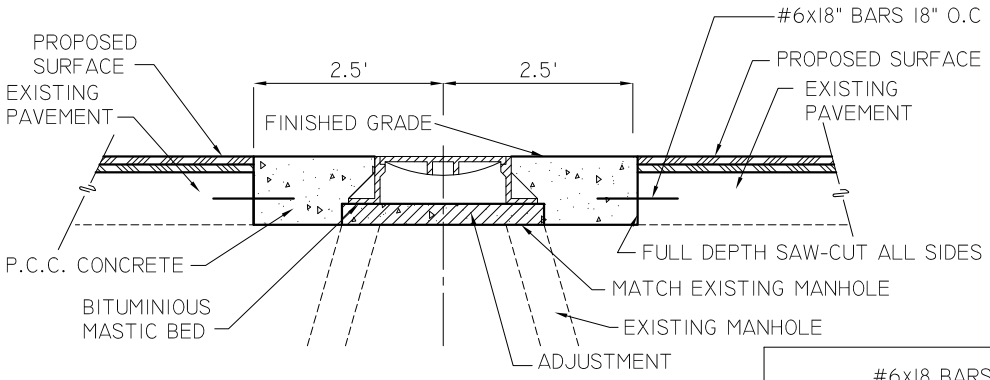






REMOVE & REPLACE COMBINATION CURB & GUTTER

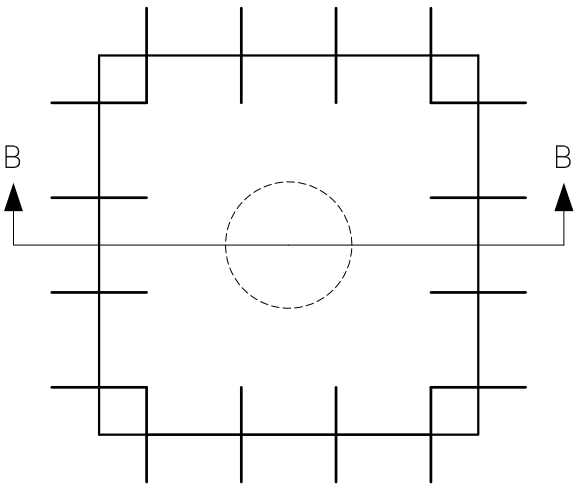
DATE	CITY OF MOLINE	#12
05/05	STANDARD	



NOTE:
SEE SECTION 602 OF THE CITY OF MOLINE SUPPLEMENTAL SPECIFICATION FOR ADJUSTMENT SPECIFICATIONS

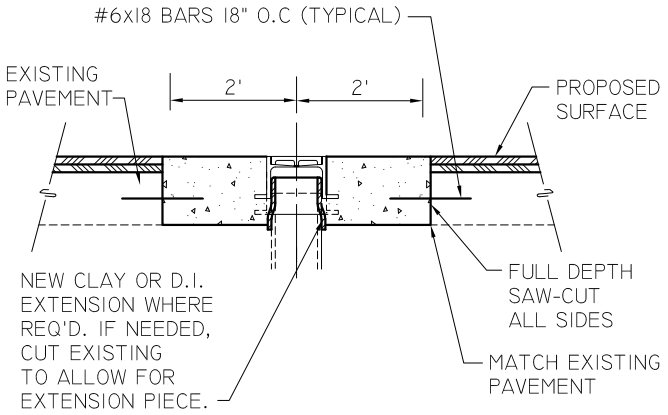
THE CITY OF MOLINE WILL FURNISH ALL FRAMES AND LIDS. THE CONTRACTOR SHALL TRANSPORT FRAMES AND LIDS TO THE JOBSITE AND DELIVER EXISTING FRAMES AND LIDS TO THE CITY'S STORAGE FACILITY

SECTION B-B

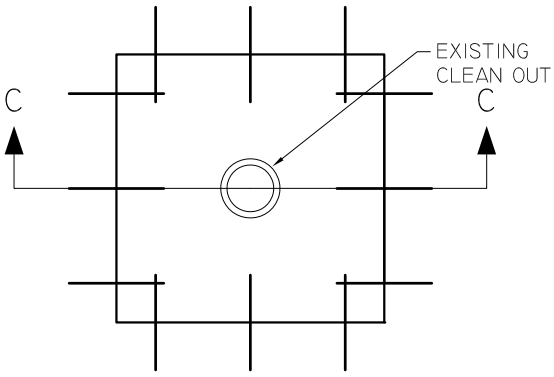


PLAN VIEW

MANHOLE ADJUSTMENT DETAIL

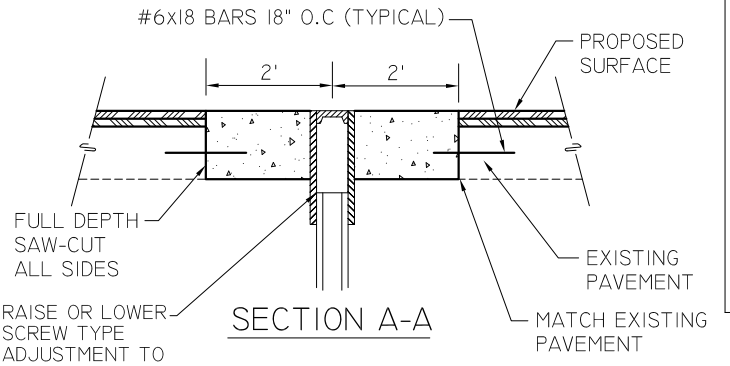


SECTION C-C

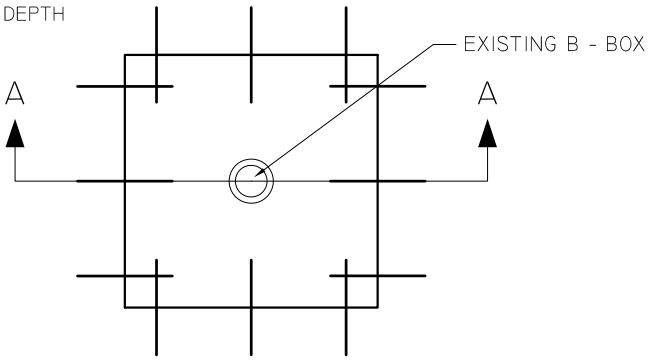


PLAN VIEW

CLEAN OUT ADJUSTMENT DETAIL



SECTION A-A



PLAN VIEW

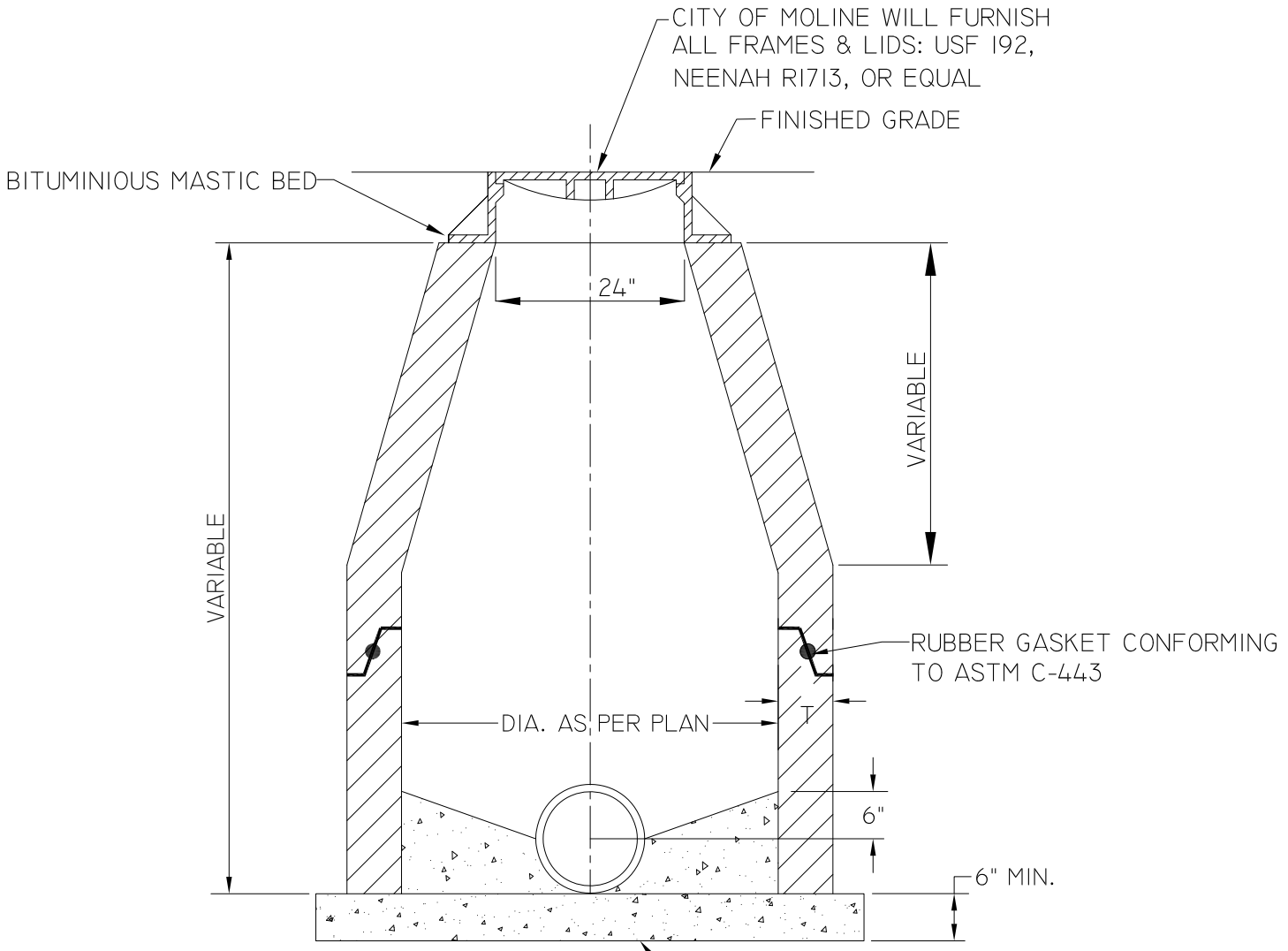
B - BOX ADJUSTMENT DETAIL

NOTE:
ALL REINFORCING BARS SHALL BE EPOXY COATED

TYPICAL ADJUSTMENT DETAIL

DATE	CITY OF MOLINE	
01/17	STANDARD	#13

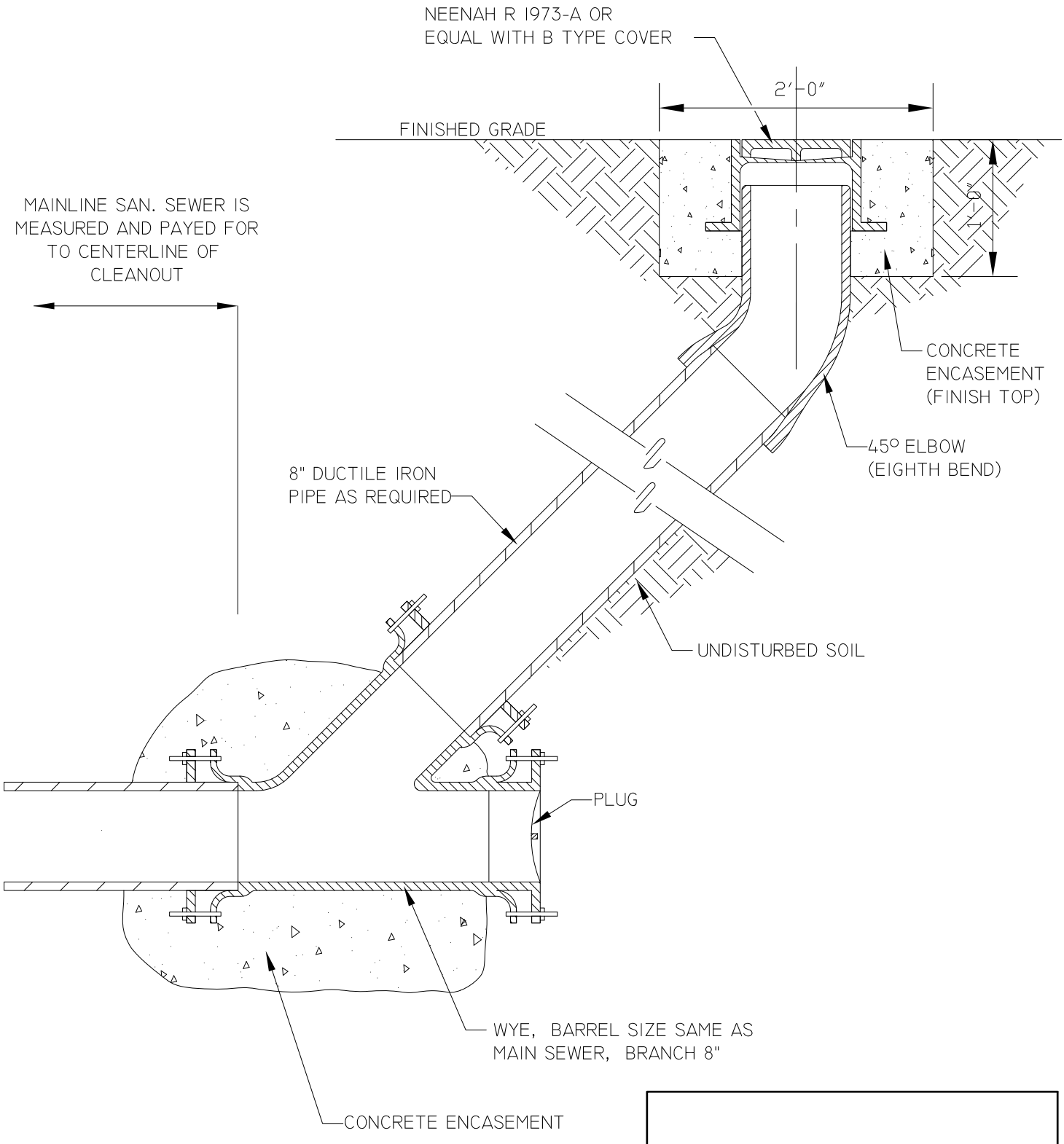
MATERIAL WALL THICKNESS (T)
PRE-CAST CONC.- MIN. 1/12 OF INSIDE DIAMETER
CAST-IN-PLACE CONC. MIN. 6"



- CONCENTRIC CONE
- NO STEPS
- SANITARY MANHOLE SHALL HAVE A SEALED EXTERIOR SEALED WITH BITUMASTIC MATERIAL MEETING FEDERAL SPECIFICATION SSCI53C, TYPE I OR SSA 649D.
- THE CITY OF MOLINE WILL FURNISH ALL FRAMES AND LIDS.
  THE CONTRACTOR MUST TRANSPORT ALL NEW FRAMES AND LIDS TO THE JOBSITE, AND MUST DELIVER ALL EXISTING FRAMES AND LIDS TO THE CITY'S STORAGE FACILITY.

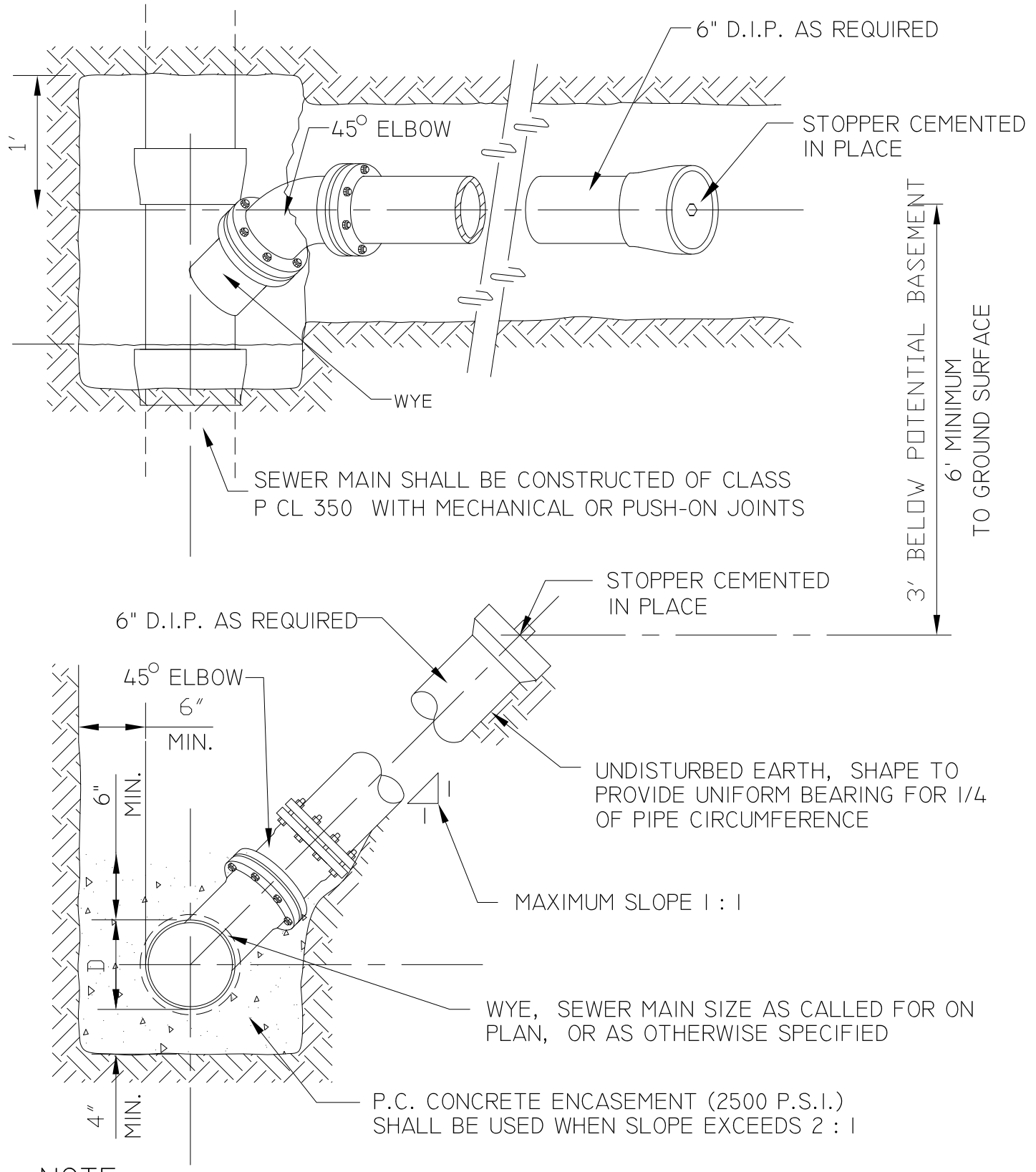
TYPICAL MANHOLE DETAIL

DATE	CITY OF MOLINE	
01/17	STANDARD	#14



CLEANOUT

DATE	CITY OF MOLINE	
02/02	STANDARD	#15

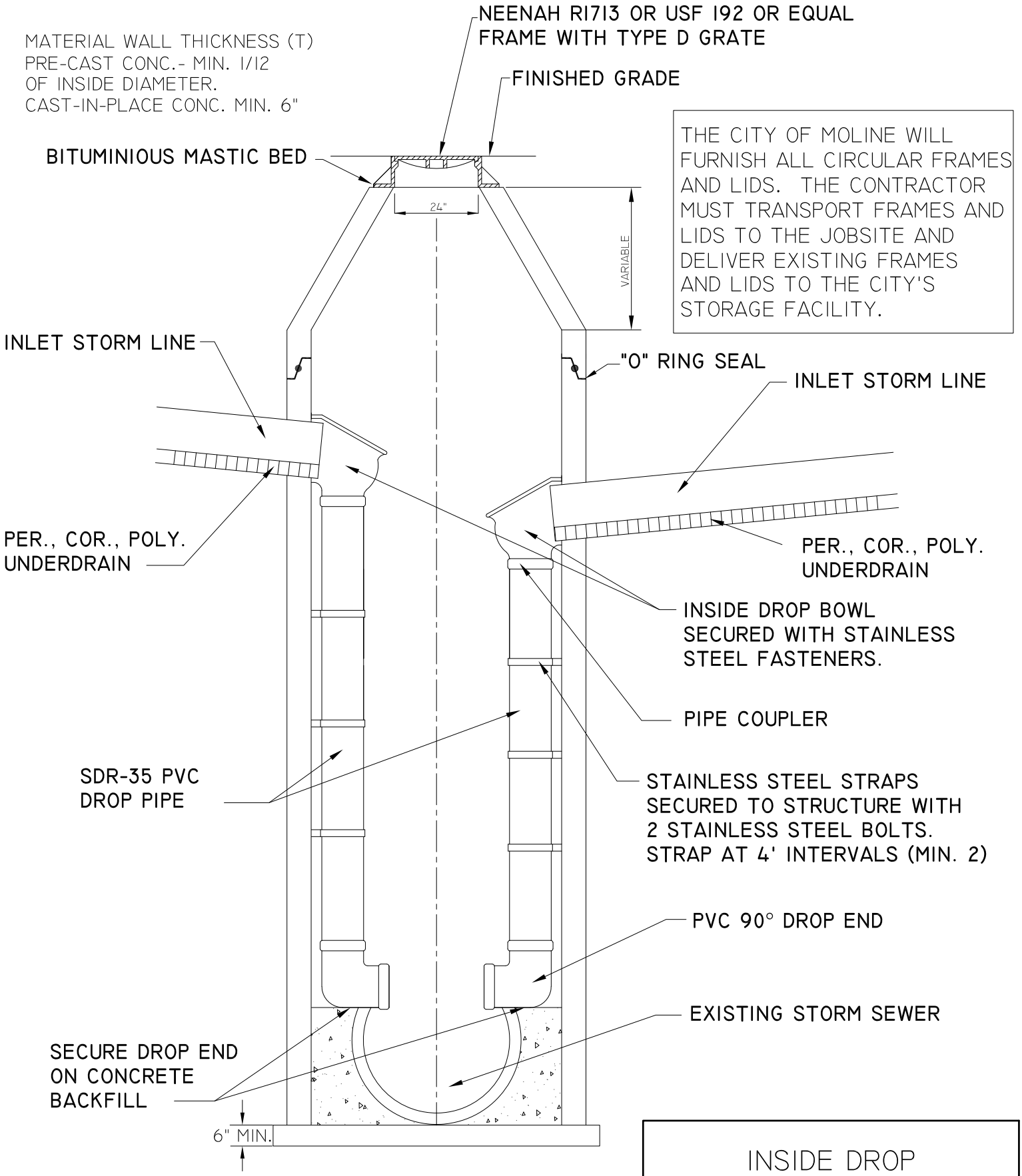


NOTE:

RISERS TO BE CONSTRUCTED WHERE SEWER DEPTH EXCEEDS 6' BELOW POTENTIAL BASEMENT.

ALL SERVICE SEWER IN R.O.W. SHALL BE 6" D.I.P.

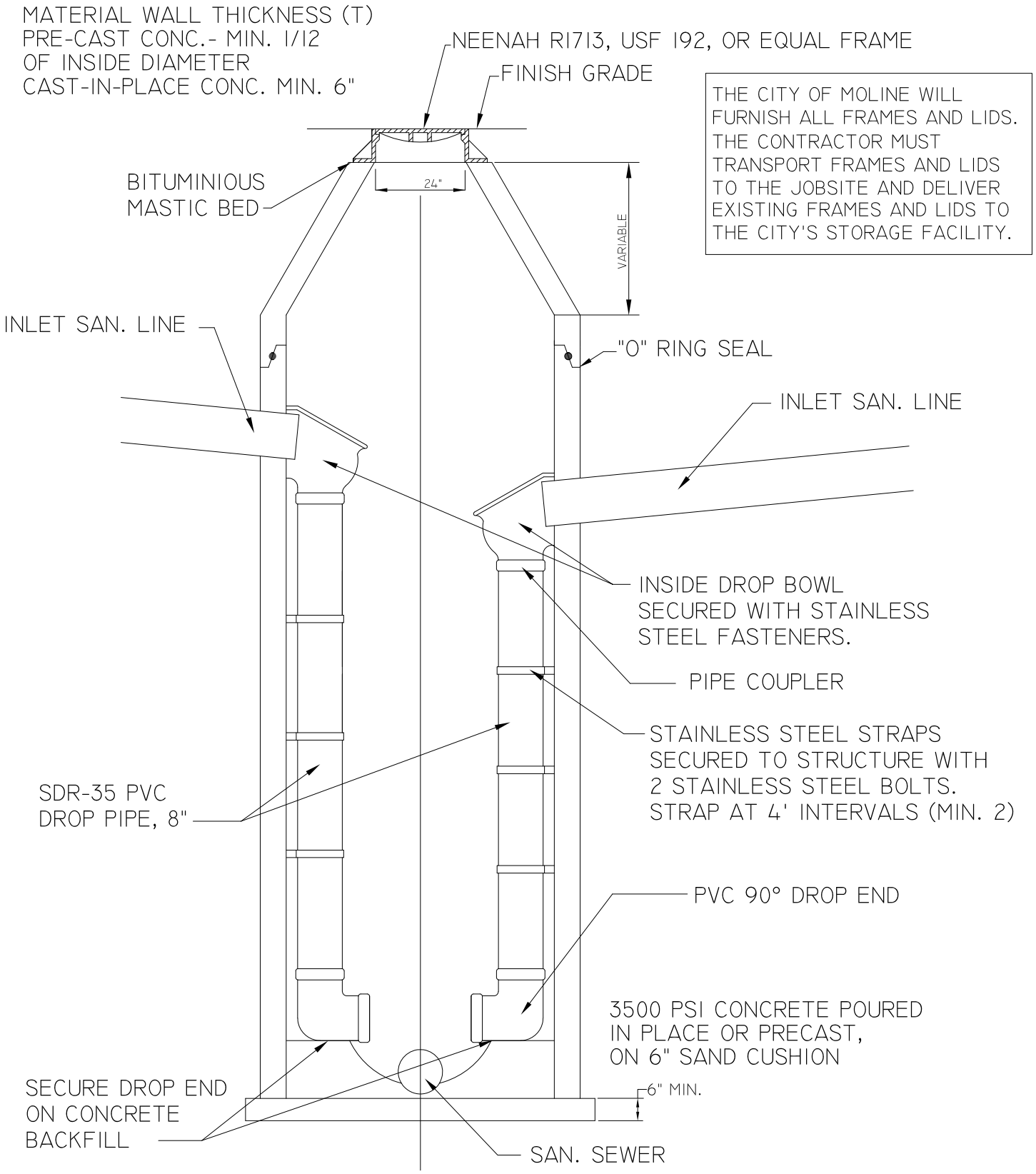
TYPICAL SERVICE CONNECTION AND SEWER MAIN		
DATE 12/05	CITY OF MOLINE STANDARD	#16



3500 PSI CONCRETE POURED
IN PLACE OR PRECAST,
ON 6" SAND CUSHION

INSIDE DROP STORM MANHOLE

DATE	CITY OF MOLINE	#17
01/17	STANDARD	

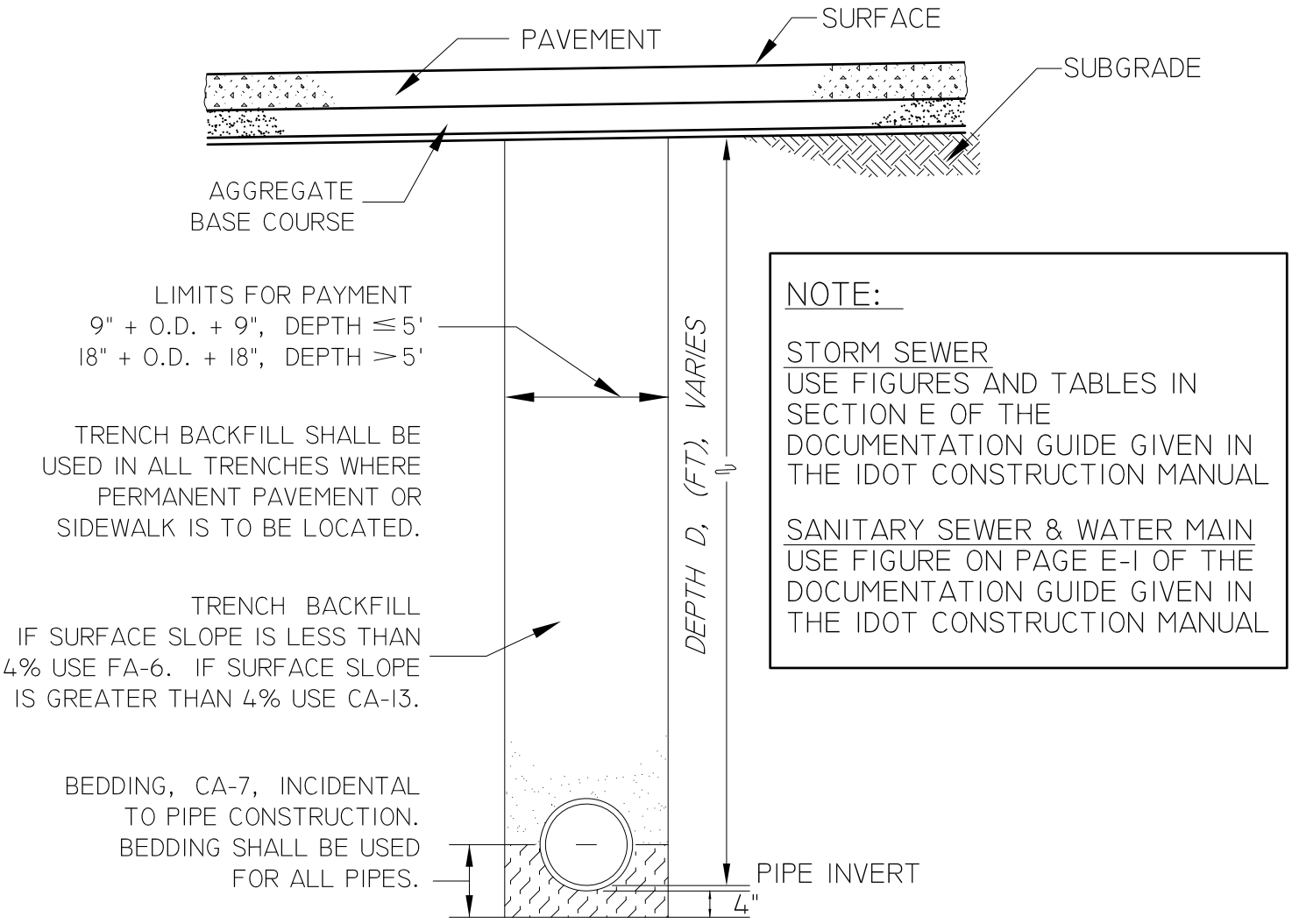


DROP MANHOLE DETAIL

- CONCENTRIC CONE
- NO STEPS
- SANITARY MANHOLE SHALL HAVE A SEALED EXTERIOR SEALED WITH BITUMASTIC MATERIAL MEETING FEDERAL SPECIFICATION SSC153C, TYPE I OR SSA 649D.

INSIDE DROP MANHOLE SANITARY

DATE	CITY OF MOLINE	#18
01/17	STANDARD	

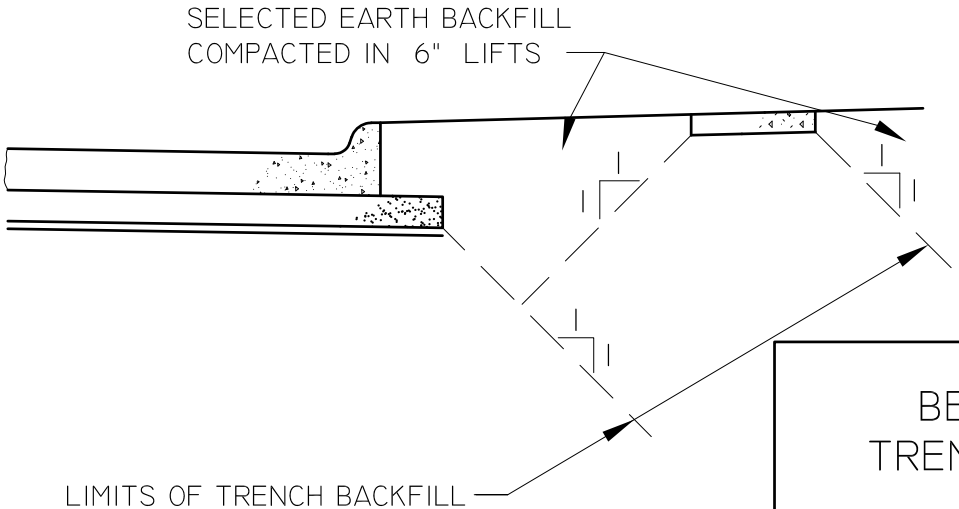


NOTE:

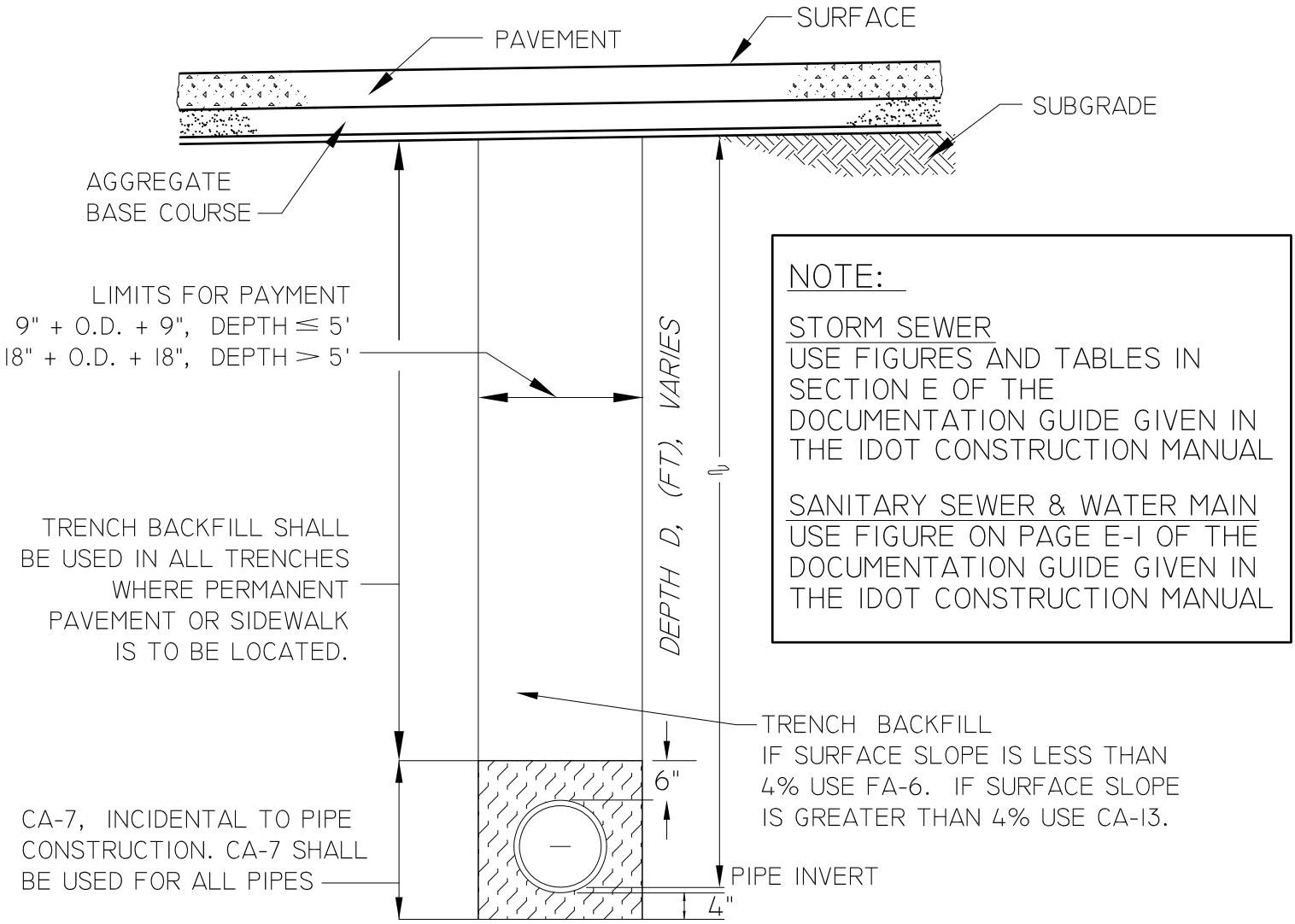
STORM SEWER
USE FIGURES AND TABLES IN SECTION E OF THE DOCUMENTATION GUIDE GIVEN IN THE IDOT CONSTRUCTION MANUAL

SANITARY SEWER & WATER MAIN
USE FIGURE ON PAGE E-1 OF THE DOCUMENTATION GUIDE GIVEN IN THE IDOT CONSTRUCTION MANUAL

TYPICAL TRENCH BACKFILL SECTION
DUCTILE & CONCRETE PIPE



BEDDING AND TRENCH BACKFILL		
DATE 01/17	CITY OF MOLINE STANDARD	#19

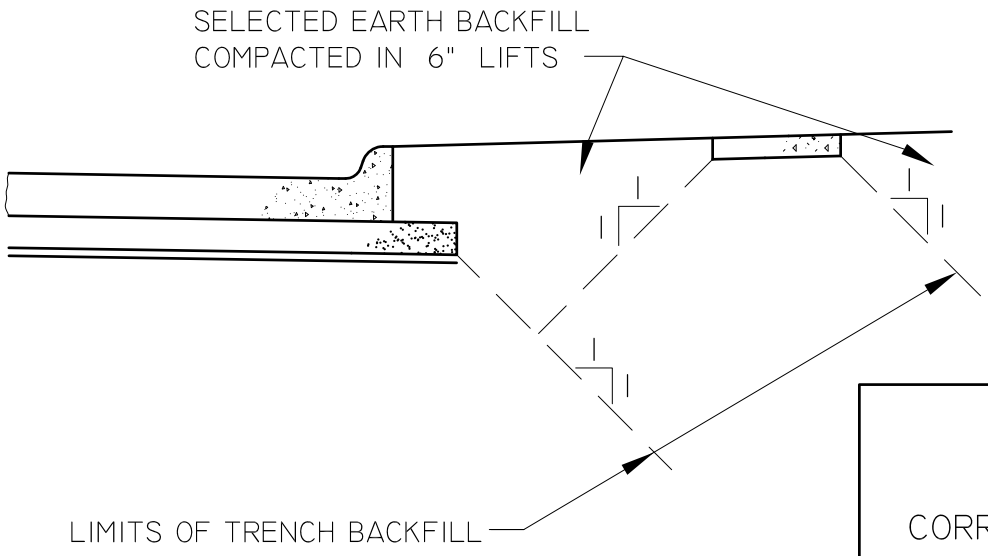


NOTE:

STORM SEWER
USE FIGURES AND TABLES IN SECTION E OF THE DOCUMENTATION GUIDE GIVEN IN THE IDOT CONSTRUCTION MANUAL

SANITARY SEWER & WATER MAIN
USE FIGURE ON PAGE E-1 OF THE DOCUMENTATION GUIDE GIVEN IN THE IDOT CONSTRUCTION MANUAL

TYPICAL TRENCH BACKFILL SECTION
CORRUGATED PVC & HP PIPE



BEDDING AND
TRENCH BACKFILL
CORRUGATED PVC & HP PIPE

DATE	CITY OF MOLINE	
01/17	STANDARD	#20

NO PART OF PIPE SHALL BE PLACED WITHIN 9 INCHES OF ℄ OF BEAMS.

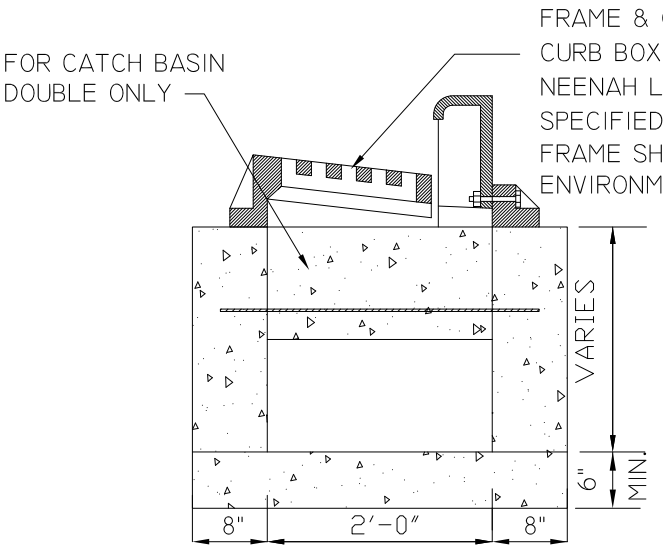
2 L.F. OF CURB AND GUTTER (EACH SIDE) SHALL BE INCLUDED AS PART OF CATCH BASIN CONSTRUCTION & ADJUSTMENT IF NOT WITHIN NEW PVT. CONSTRUCTION.

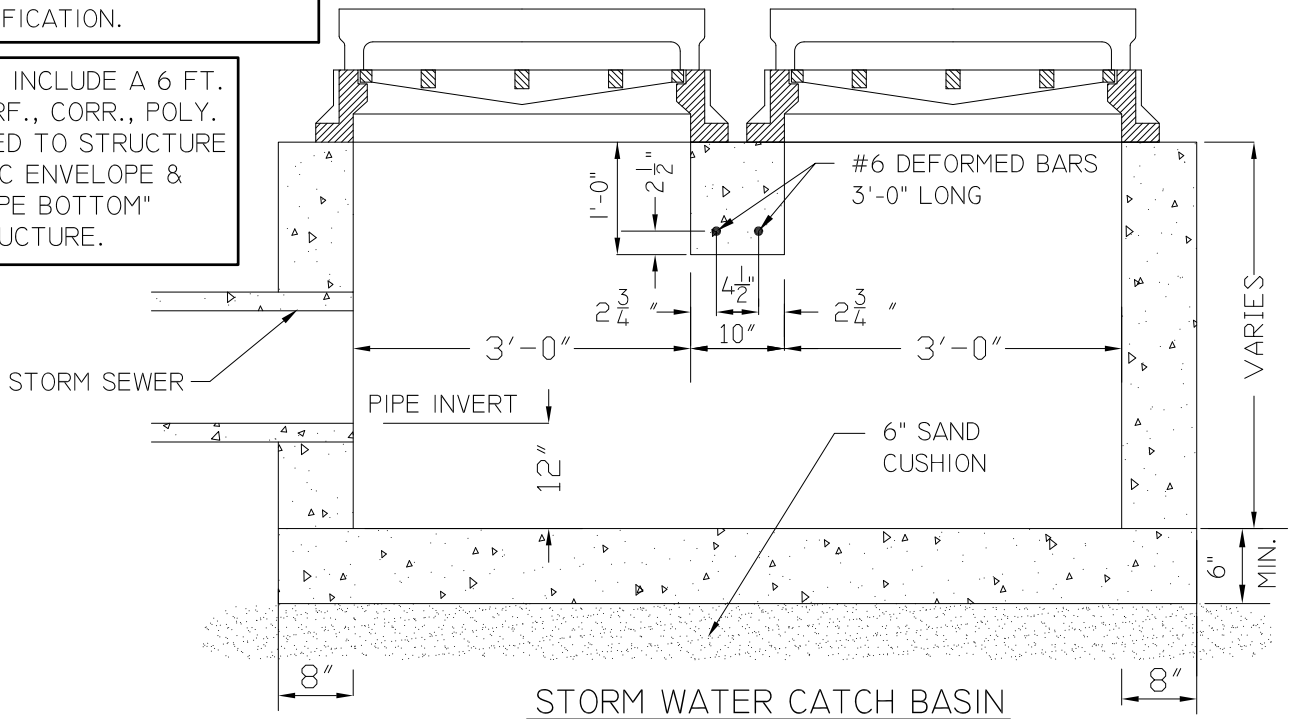
ALL REINFORCING BARS SHALL BE EPOXY COATED.

CURB BOX SHALL BE STAMPED WITH AN ENVIRONMENTAL NOTICE. NOTICE SHALL STATE "NO DUMPING. DRAINS TO WATERWAY" OR SIMILAR, TO BE APPROVED BY THE ENGINEER.

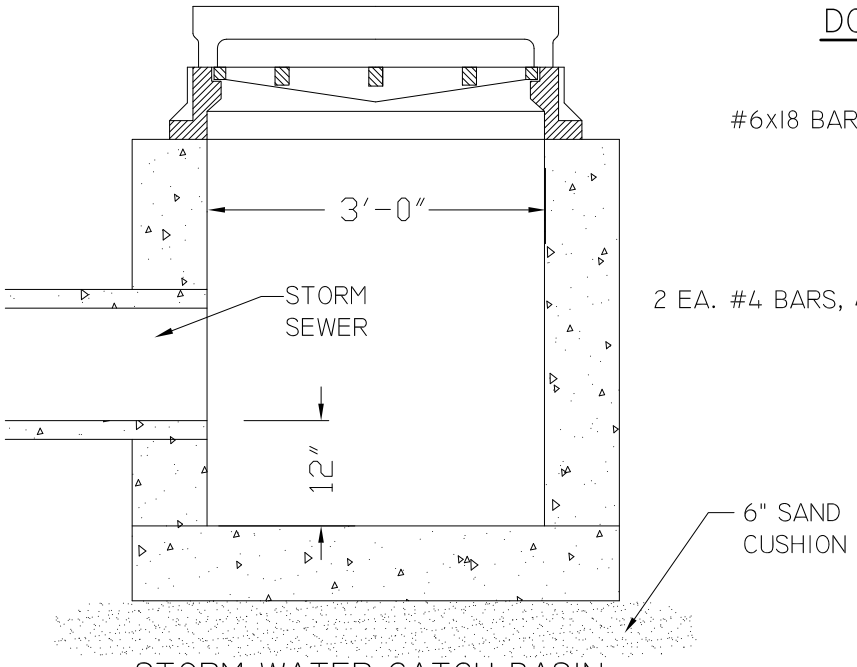
SEE SEC. 602 OF THE CITY OF MOLINE SUPPLEMENTAL SPECIFICATIONS FOR ADJUSTMENT SPECIFICATION.

STRUCTURE SHALL INCLUDE A 6 FT. LENGTH OF 4", PERF., CORR., POLY. TUBING, CONNECTED TO STRUCTURE ENCASED IN FABRIC ENVELOPE & PLACED "ALONG PIPE BOTTOM" UPSTREAM OF STRUCTURE.

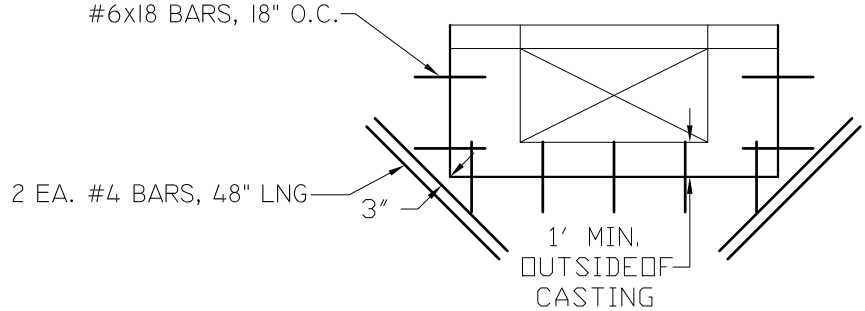




STORM WATER CATCH BASIN DOUBLE



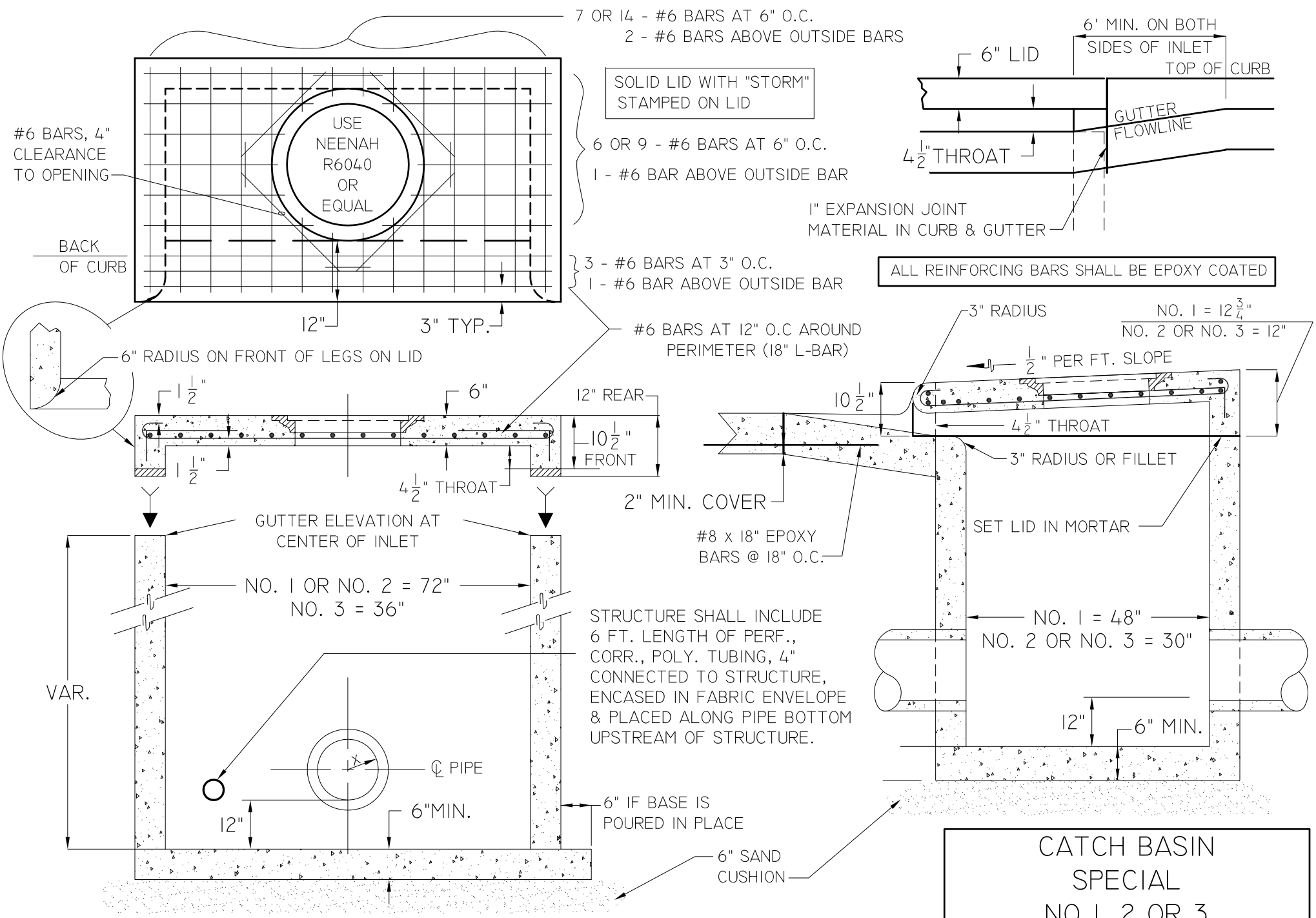
STORM WATER CATCH BASIN SINGLE



BOXOUT DETAIL

CATCH BASIN SINGLE/DOUBLE DETAIL

DATE	CITY OF MOLINE	#21
01/17	STANDARD	



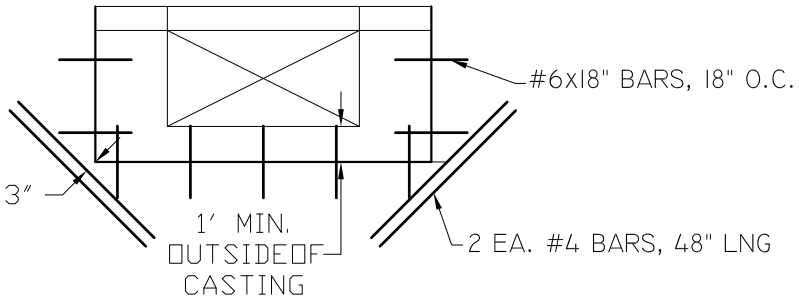
THE UNIT PRICE EACH FOR "CATCH BASIN SPECIAL" SHALL INCLUDE COST OF FURNISHING & INSTALLING FRAME, LID, REINFORCEMENT BARS, & MODIFICATIONS TO CURB & GUTTER.

CURB & GUTTER WILL BE PAID FOR SEPARATELY ONLY IF ASSOCIATED WITH PVT REPLACEMENT.

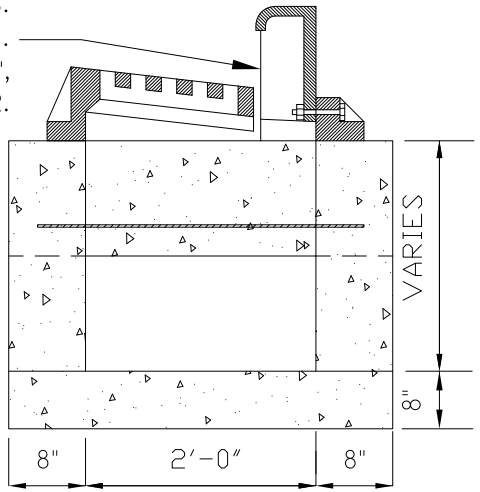
CATCH BASIN SPECIAL NO 1, 2 OR 3

DATE	CITY OF MOLINE	#22
10/11	STANDARD	

FRAME & GRATE W/ ADJUSTABLE CURB BOX NEENAH R-3067, NEENAH L-3067, OR EQUAL, AS SPECIFIED ON THE PLANS. FRAME SHALL BE STAMPED WITH AN ENVIRONMENTAL NOTICE. NOTICE SHALL STATE "NO DUMPING. DRAINS TO WATERWAY", OR SIMILAR, TO BE APPROVED BY THE ENGINEER.



BOXOUT DETAIL



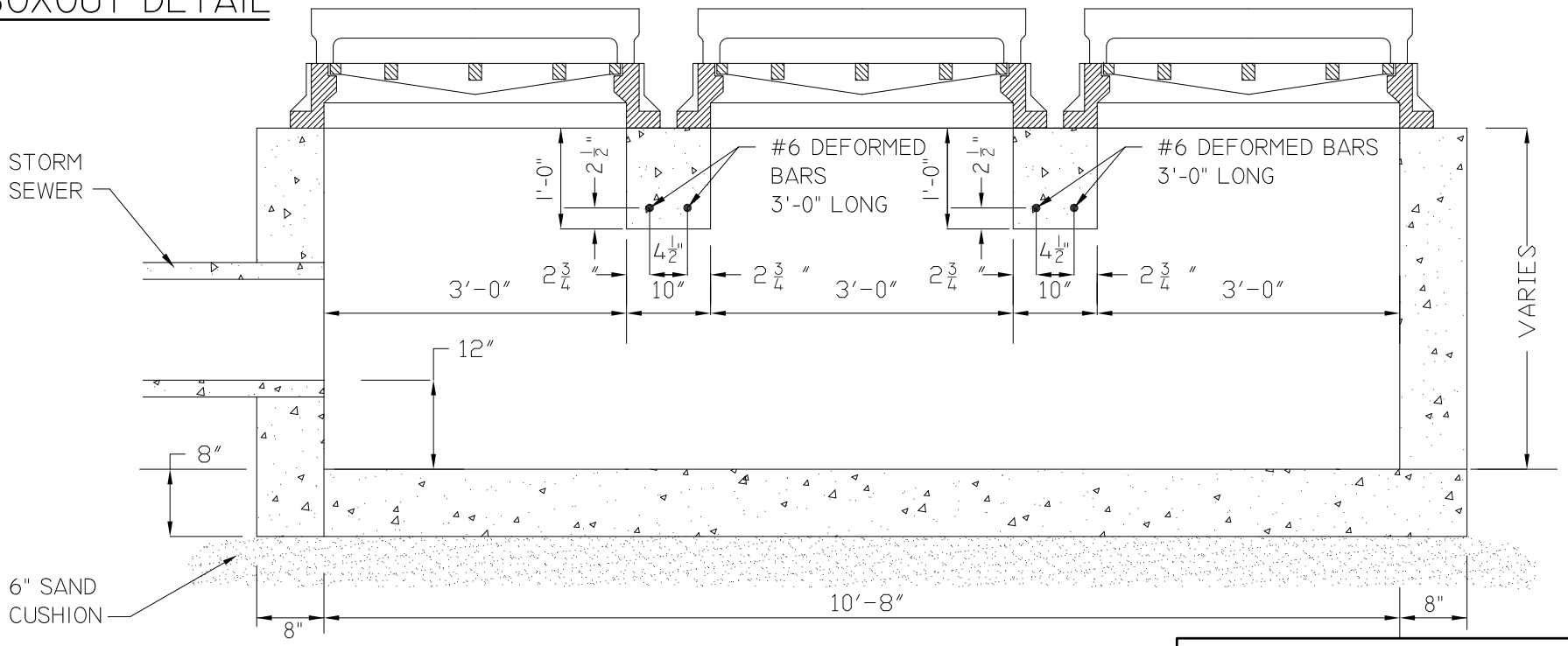
NOTES:

NO PART OF PIPE SHALL BE PLACED WITHIN 9 INCHES OF THE $\mathbb{C}_L$ OF BEAMS.

2 L.F. OF CURB AND GUTTER (EACH SIDE) SHALL BE INCLUDED AS PART OF INLET CONSTRUCTION AND ADJUSTMENT IF NOT WITHIN NEW PVT. CONSTRUCTION

ALL REINFORCING BARS SHALL BE EPOXY COATED.

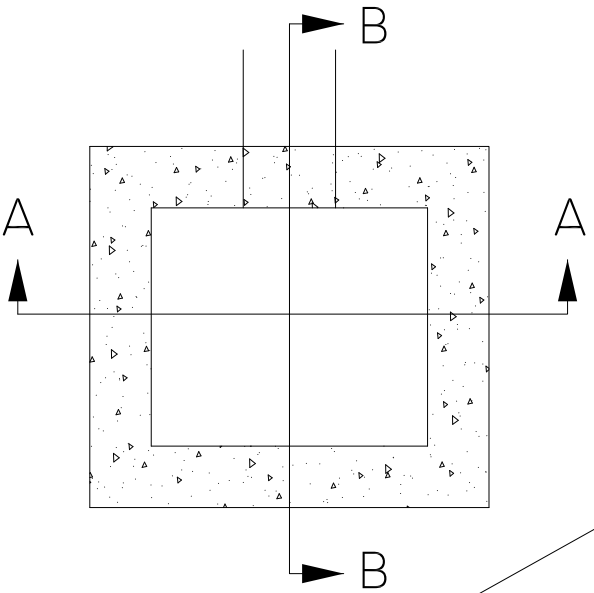
SEE SEC. 602.07 OF THE CITY OF MOLINE SUPPLEMENTAL SPECIFICATION. FOR ADJUSTMENT SPECIFICATION.

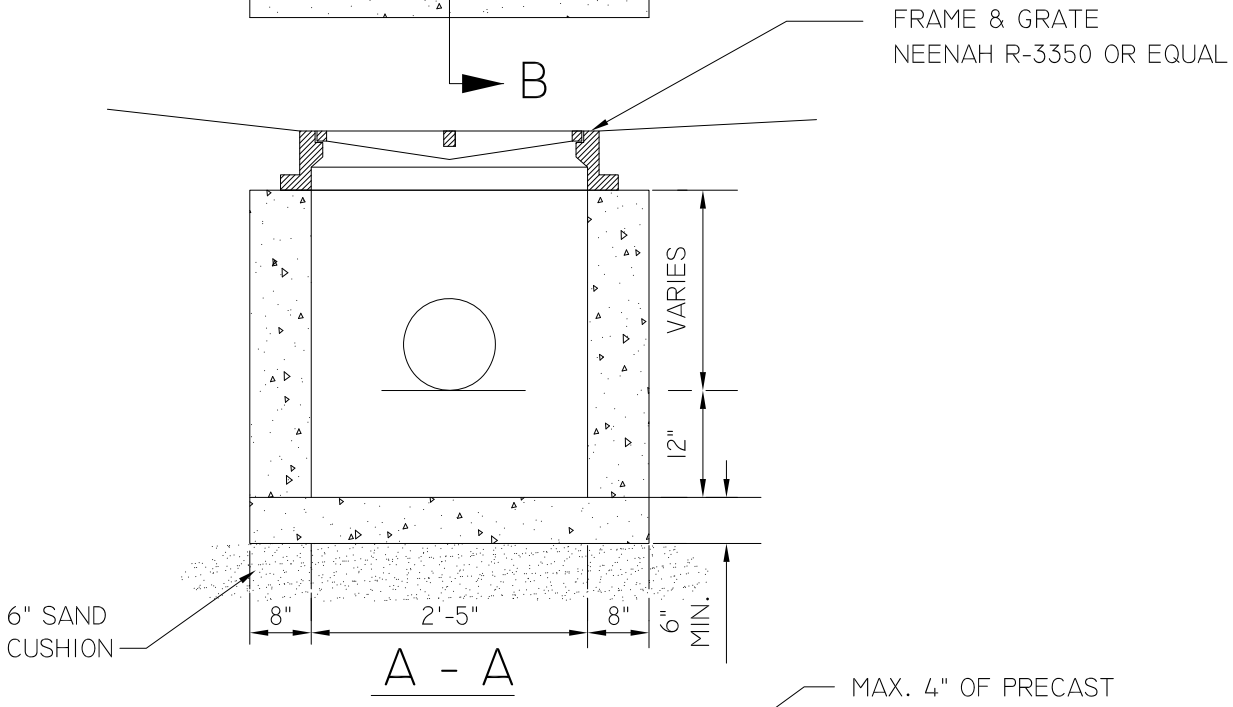


STRUCTURE SHALL INCLUDE A 6 FT. LENGTH OF 4", PERF., CORR., POLY TUBING CONNECTED TO STRUCTURE, ENCASED IN A FABRIC ENVELOPE & PLACED ALONG PIPE BOTTOM UPSTREAM OF STRUCTURE.

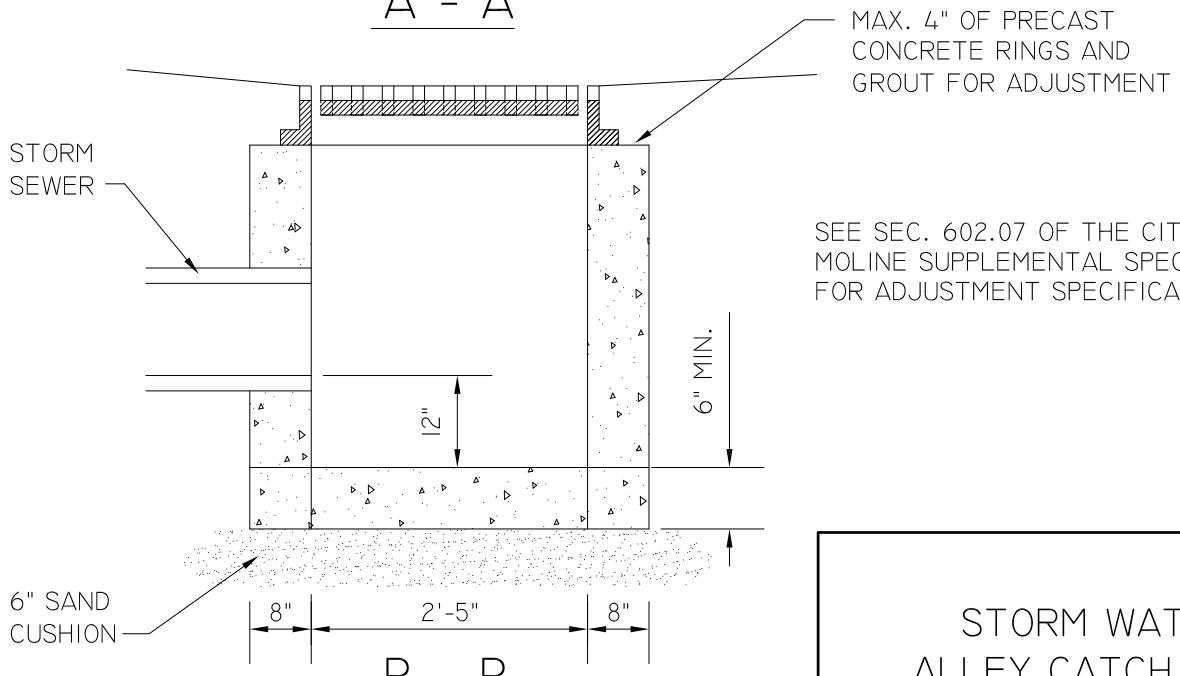
CATCH BASIN TRIPLE DETAIL

DATE	CITY OF MOLINE	
01/17	STANDARD	#23





A - A

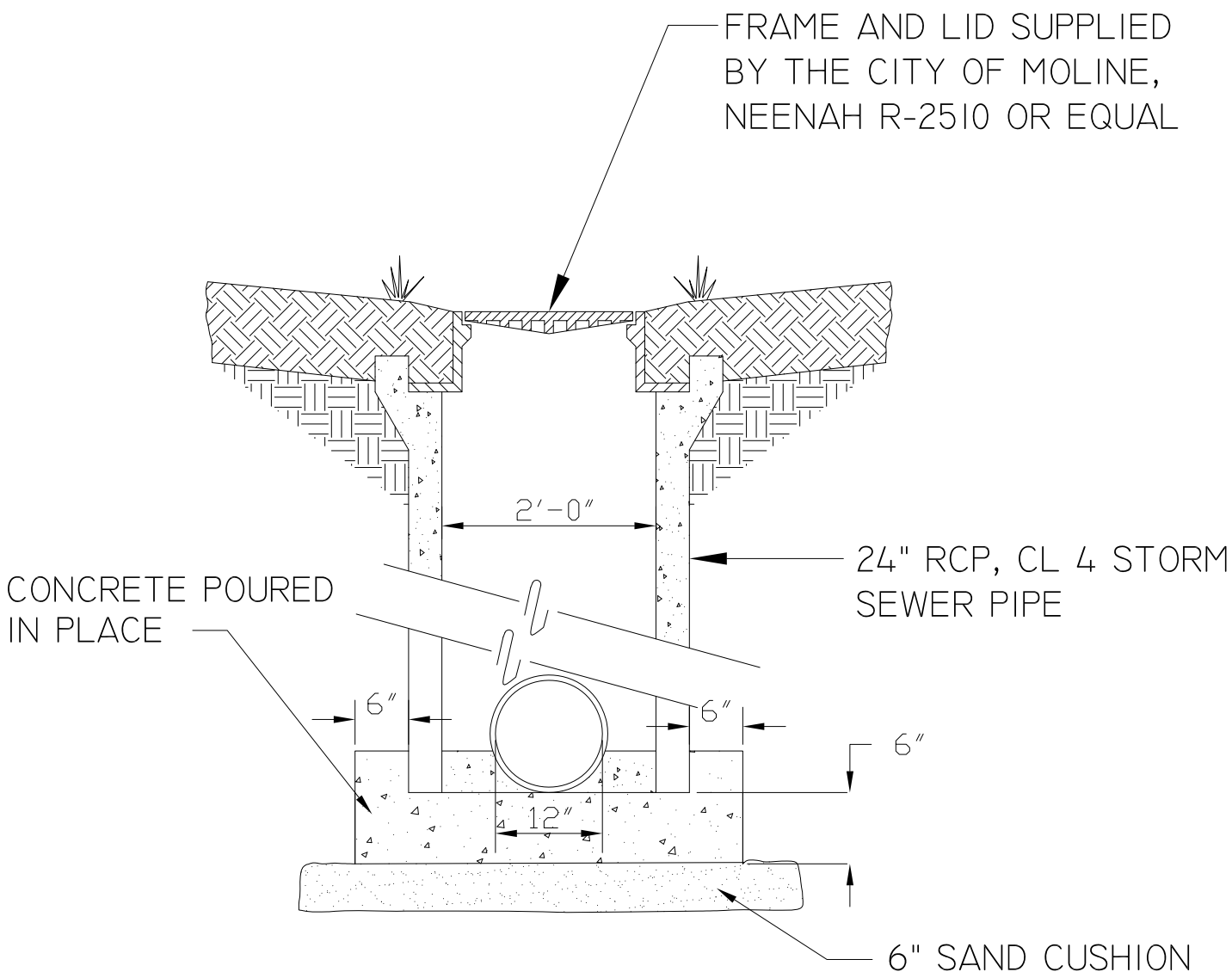


B - B

SEE SEC. 602.07 OF THE CITY OF MOLINE SUPPLEMENTAL SPECIFICATION. FOR ADJUSTMENT SPECIFICATION.

STORM WATER ALLEY CATCH BASIN

DATE	CITY OF MOLINE	
10/11	STANDARD	#24

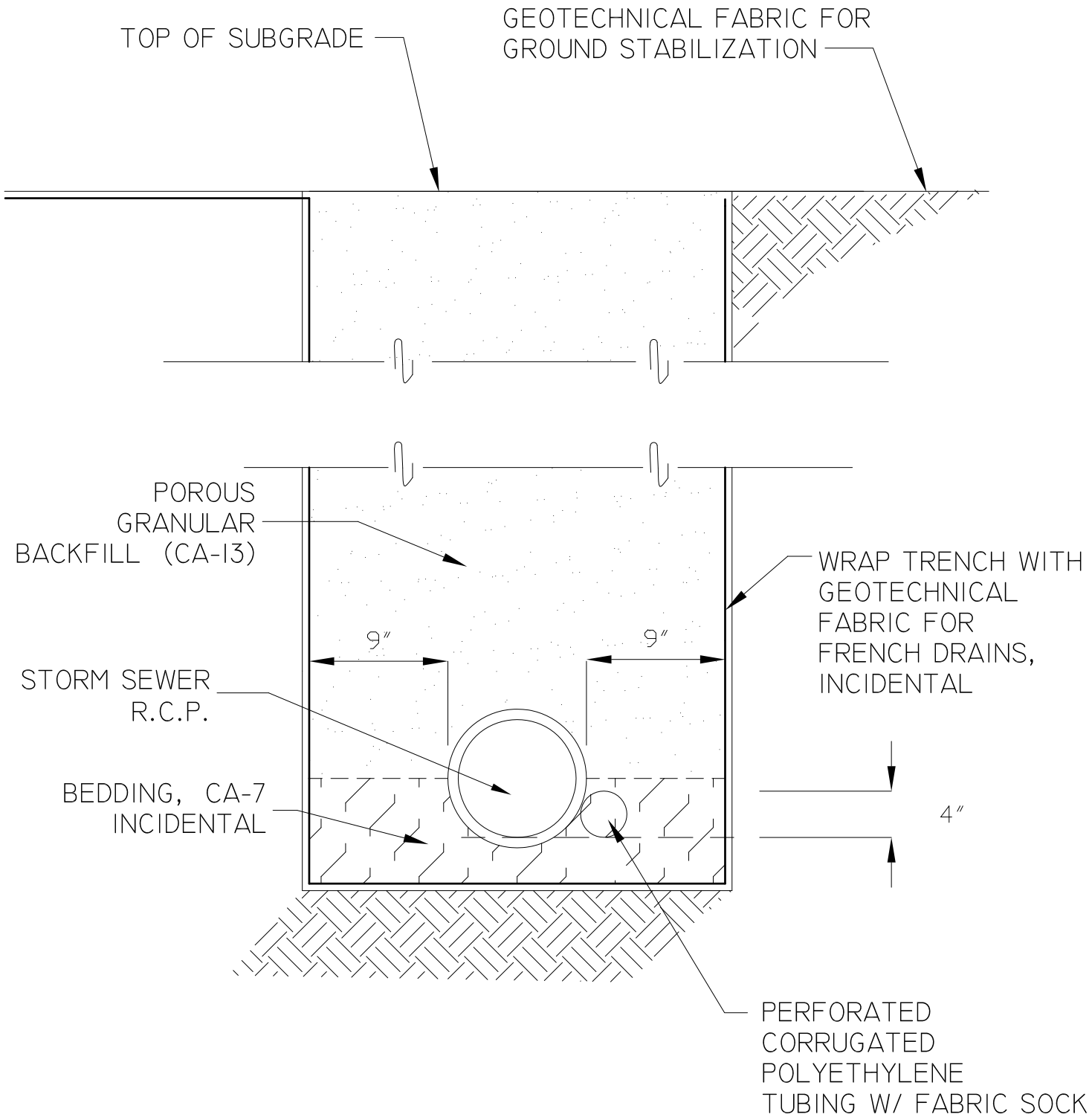


INLET SPECIAL TY "A"

NOT TO SCALE

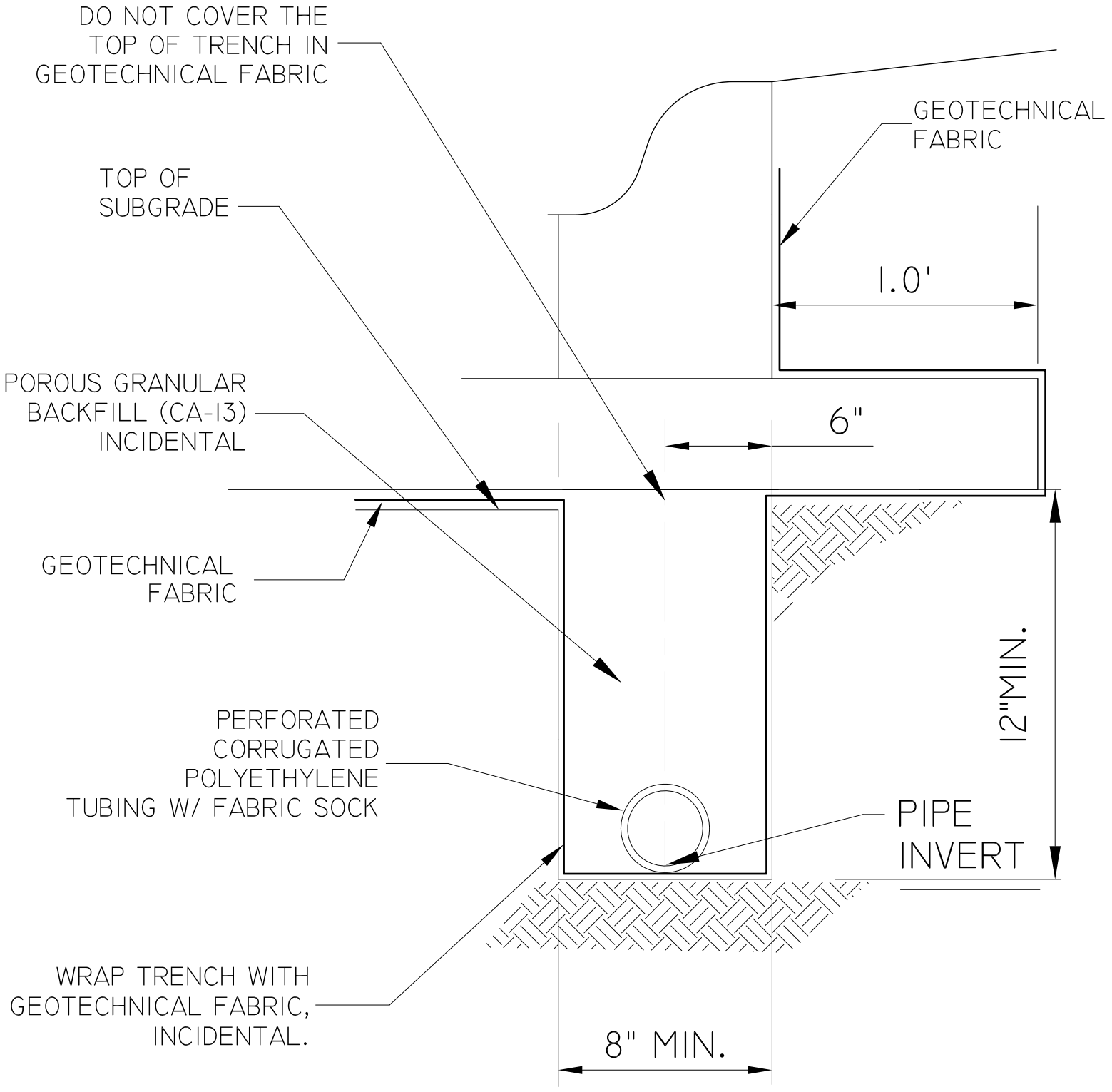
STRUCTURE SHALL INCLUDE A 6 FT. LENGTH OF PERFORATED, CORRUGATED, POLYETHYLENE TUBING, 4", CONNECTED TO STRUCTURE, ENCASED IN A FABRIC ENVELOPE & PLACED ALONG PIPE BOTTOM UPSTREAM OF STRUCTURE.

INLET SPECIAL TY "A" DETAIL		
DATE 01/17	CITY OF MOLINE STANDARD	#25

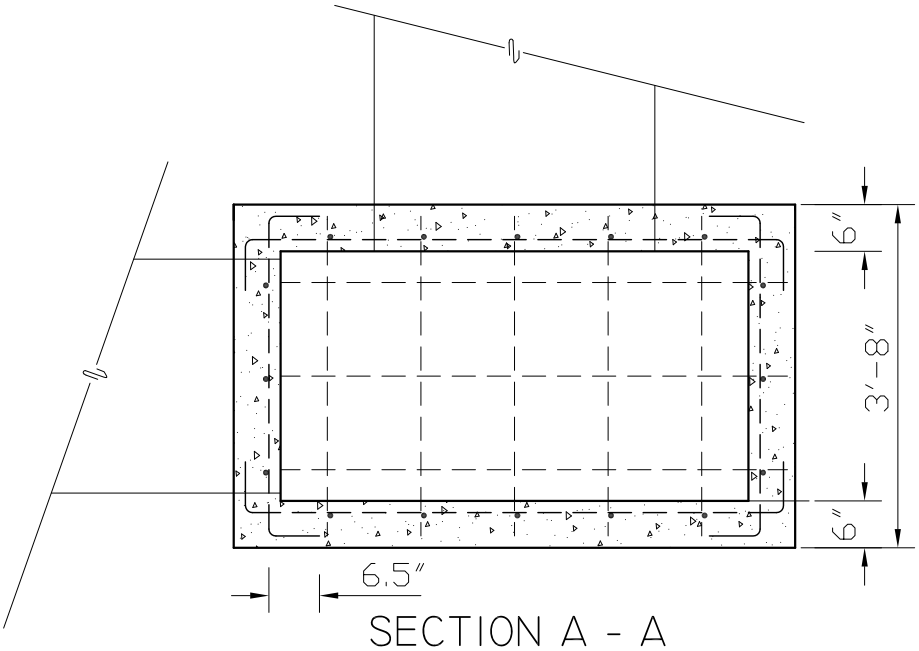


PIPE UNDERDRAIN DETAIL		
DATE 12/05	CITY OF MOLINE STANDARD	#26

PROTECT POROUS BACKFILL
FROM CONTAMINATION



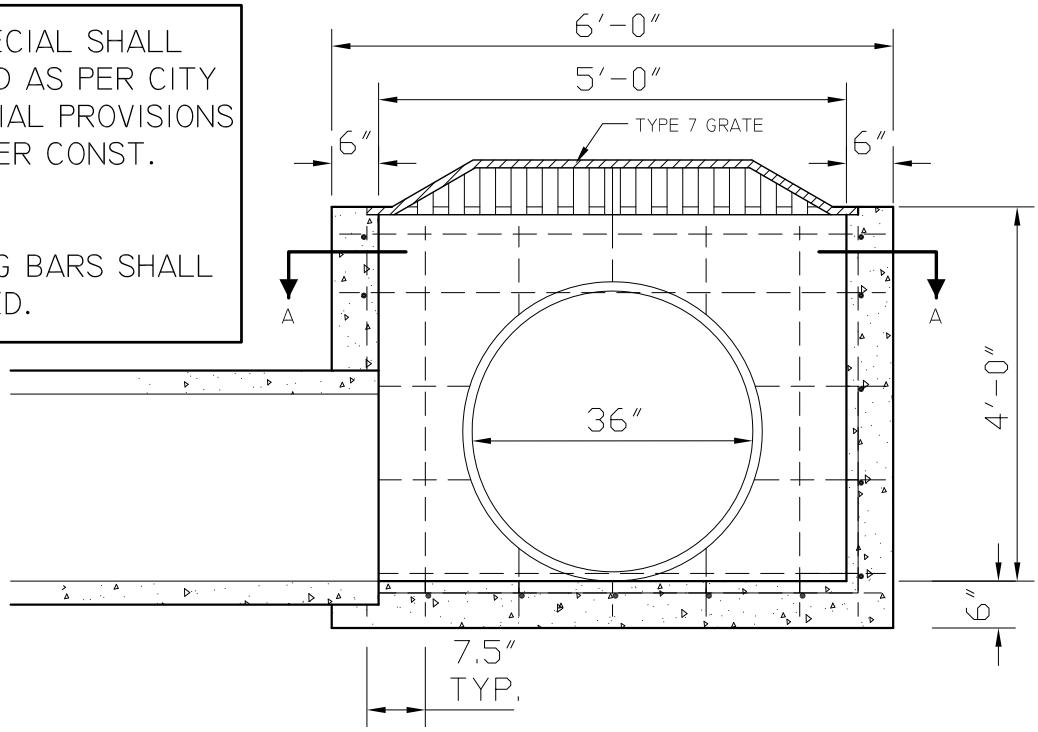
PIPE UNDERDRAIN DETAIL		
DATE 01/17	CITY OF MOLINE STANDARD	#27



SECTION A - A

INLET TY "B" SPECIAL SHALL BE CONSTRUCTED AS PER CITY OF MOLINE SPECIAL PROVISIONS FOR STORM SEWER CONST. "INLETS"

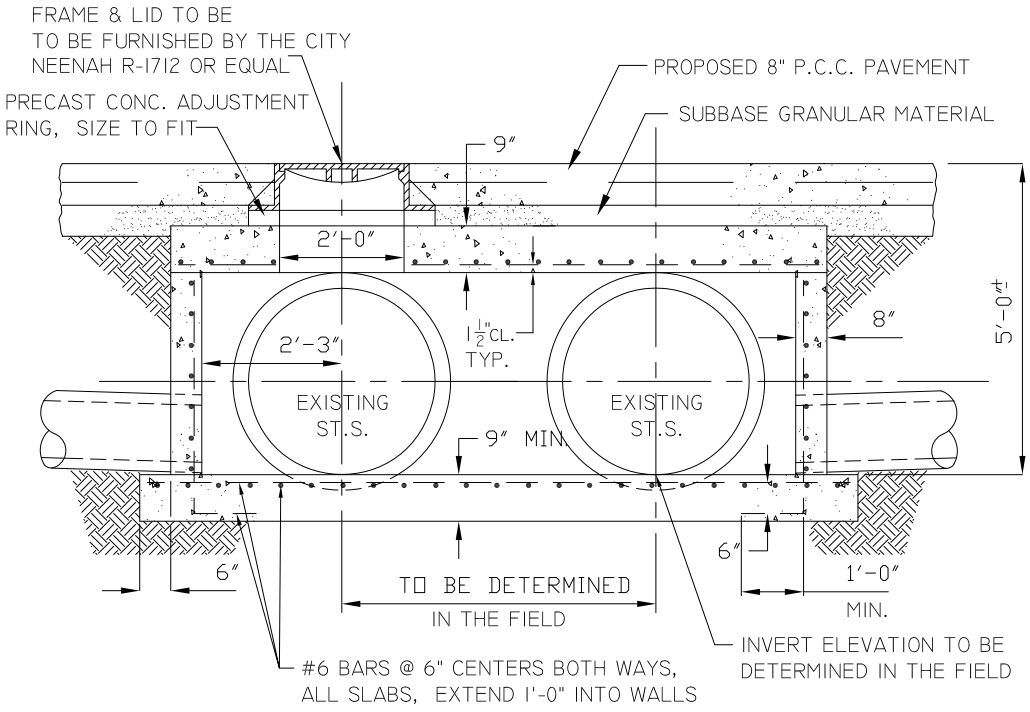
ALL REINFORCING BARS SHALL BE EPOXY COATED.



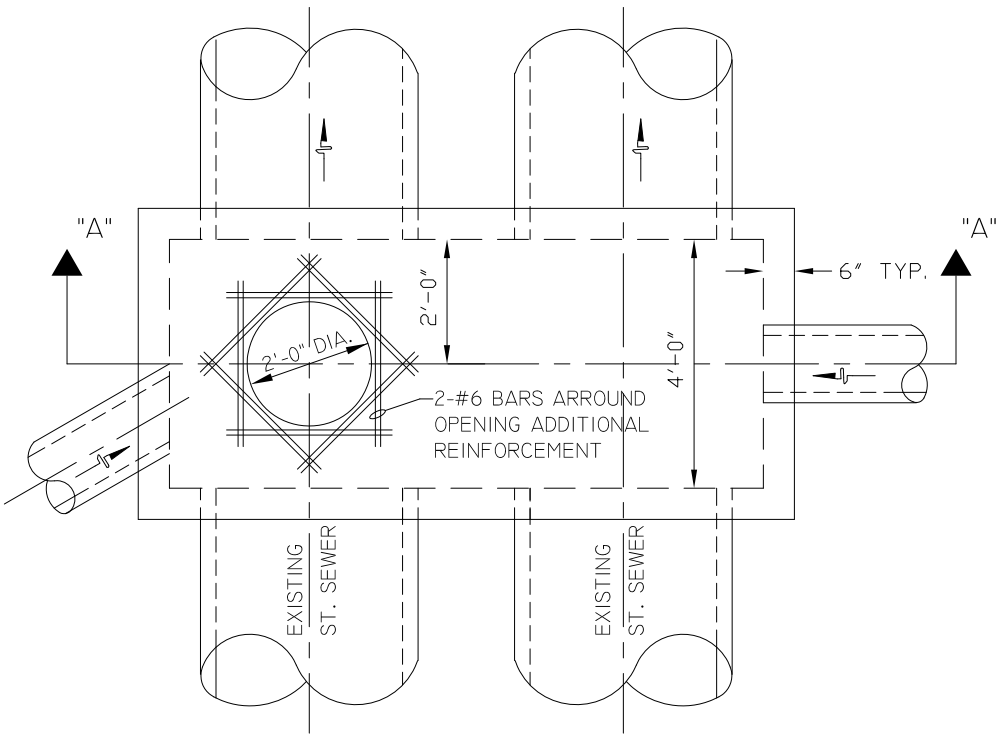
INLET TY "B" SPECIAL DETAIL

STRUCTURE SHALL INCLUDE A 6 FT. LENGTH OF PERFORATED, CORRUGATED, POLYETHYLENE TUBING, 4", CONNECTED TO STRUCTURE, ENCASED IN A FABRIC ENVELOPE & PLACED ALONG PIPE BOTTOM UPSTREAM OF STRUCTURE.

INLET TY "B" SPECIAL DETAIL		
DATE 7/03	CITY OF MOLINE STANDARD	#28



SECTION "A" - "A"

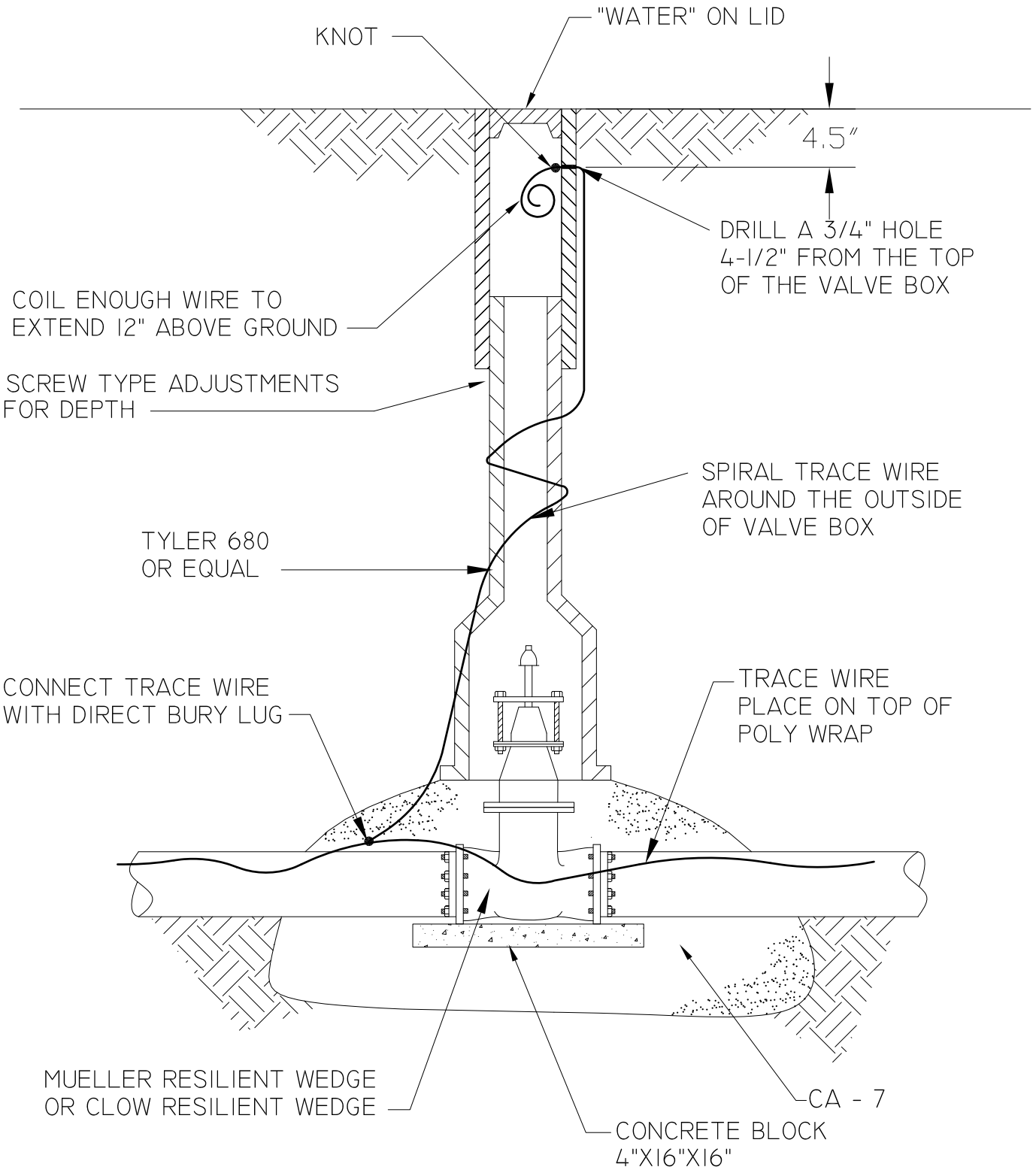


NOTE:
ALL REINFORCING BARS SHALL BE EPOXY COATED.

FRAME AND LID TO BE FURNISHED BY THE CITY.

STORM VAULT STRUCTURE

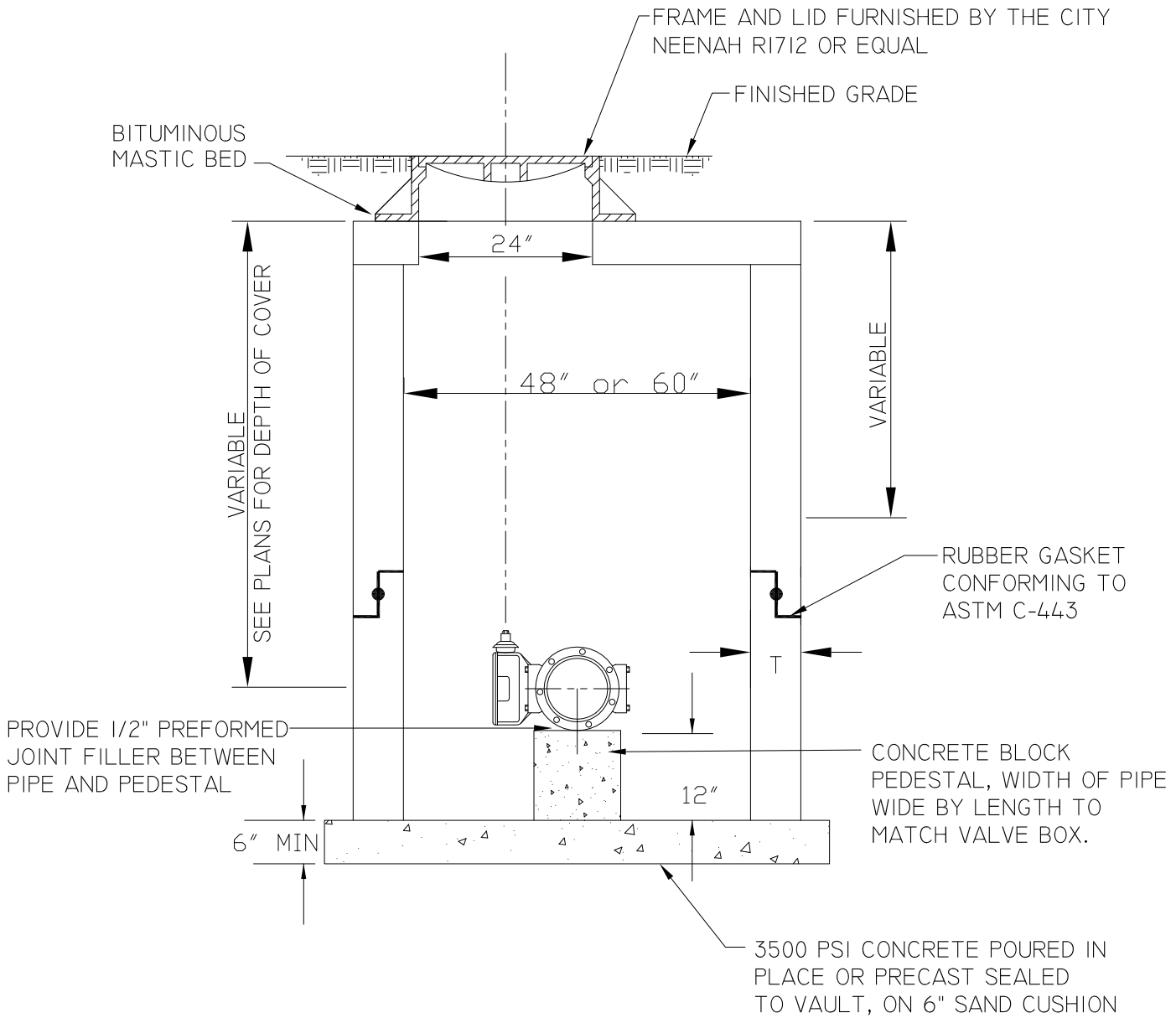
DATE	CITY OF MOLINE	#29
01/17	STANDARD	



GATE VALVE BOX INSTALLATION

DATE	CITY OF MOLINE	
1/10	STANDARD	#30

MATERIAL WALL THICKNESS
PRE-CAST CONC.- MIN. 1/12 OF INSIDE DIAMETER
CAST-IN-PLACE CONC. MIN. 8"



NOTE:

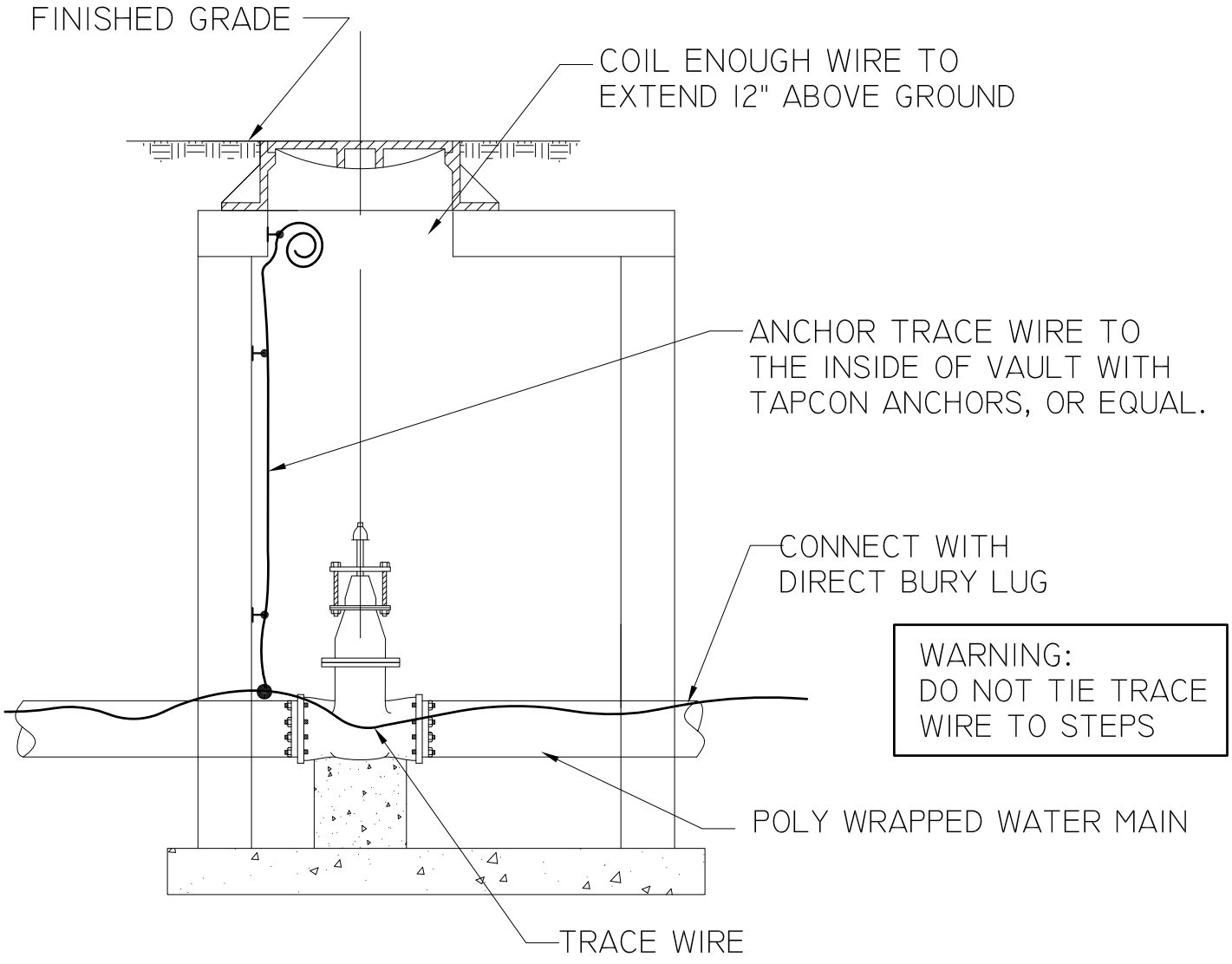
VALVE VAULT DIA. SHALL BE 48" FOR 8" OR LESS VALVES AND 60" FOR LARGER VALVES

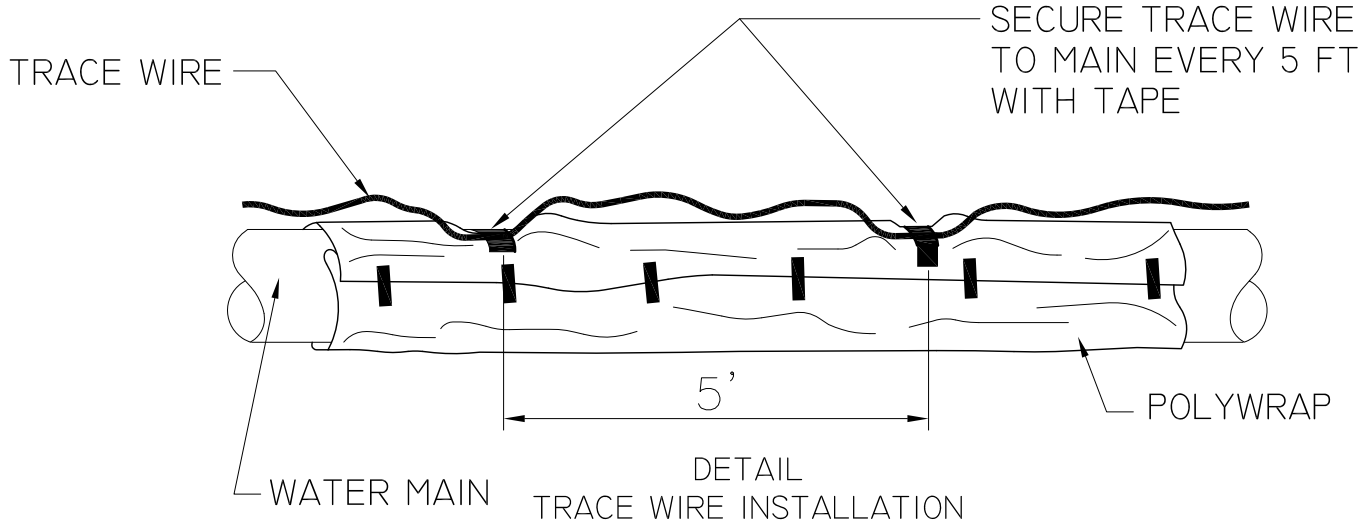
FRAMES AND LIDS FURNISHED BY THE CITY

FRAMES AND LIDS SHALL BE LOCATED OVER CENTER OF OPERATING NUT

TYPICAL VALVE VAULT DETAIL

DATE	CITY OF MOLINE	
01/17	STANDARD	#31

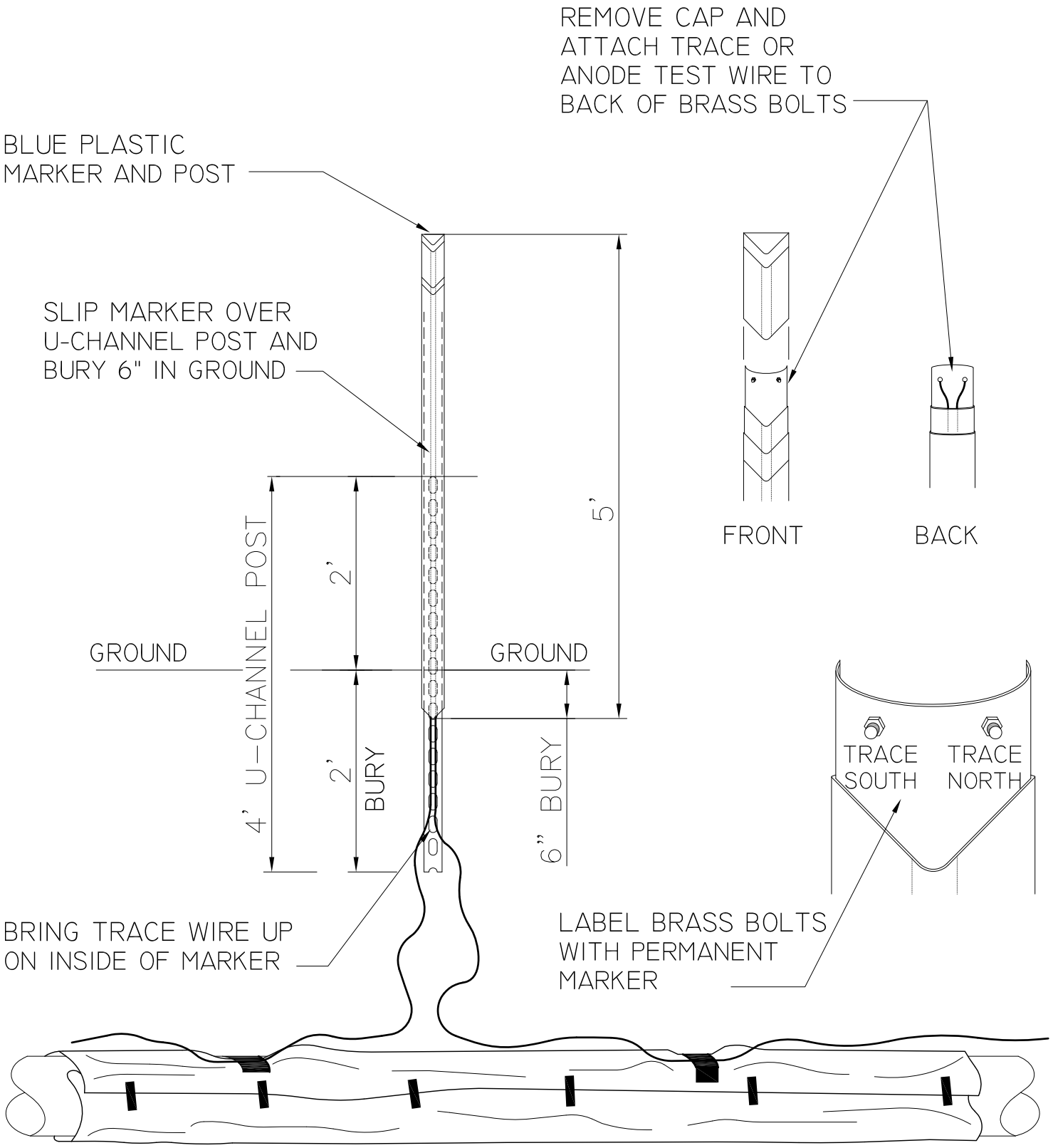




DETAIL
TRACE WIRE INSTALLATION

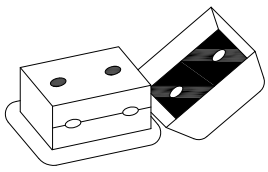
TRACE WIRE DETAIL

DATE	CITY OF MOLINE	
10/11	STANDARD	#32

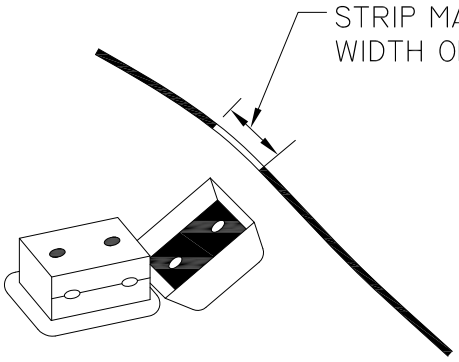


NOTE:
IF MARKER IS USED ONLY TO MARK THE MAIN LOCATION AND NOT BRING UP THE TRACE WIRE, USE THE BLUE MARKERS WITHOUT THE TRACE WIRE CONNECTORS.

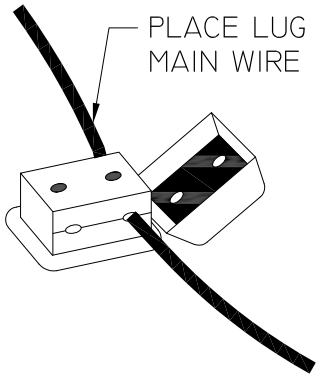
TRACE WIRE MARKER POST		
DATE 1/10	CITY OF MOLINE STANDARD	#33



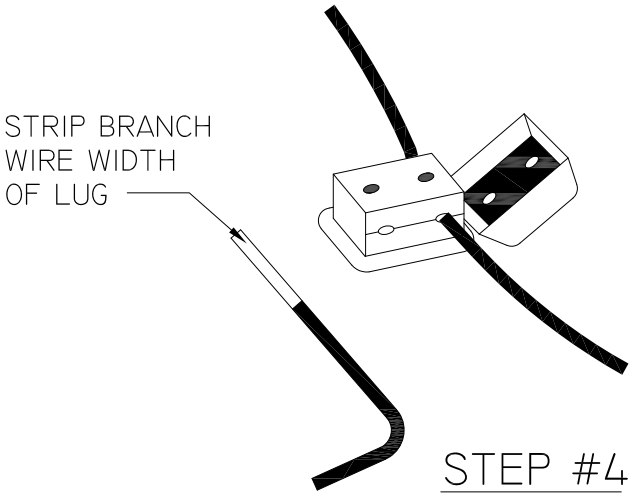
STEP #1



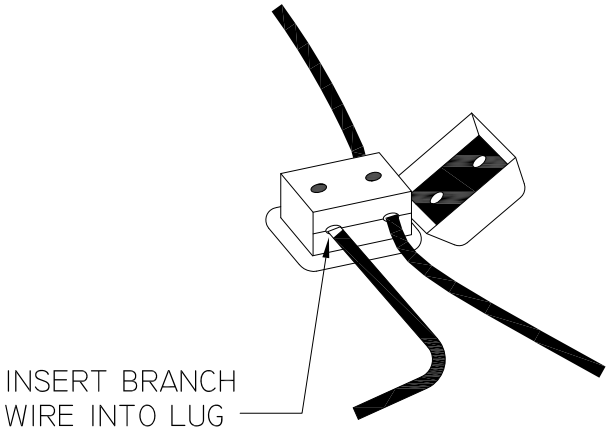
STEP #2



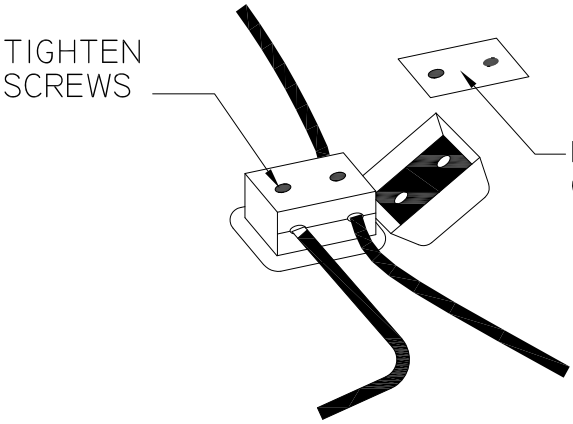
STEP #3



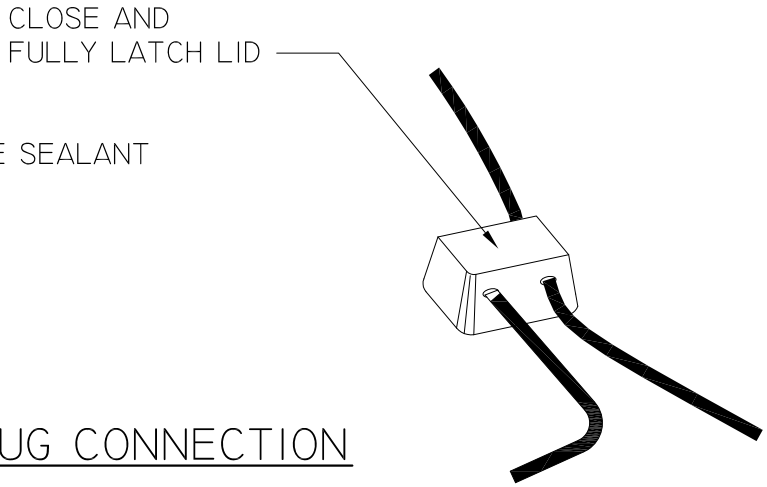
STEP #4



STEP #5

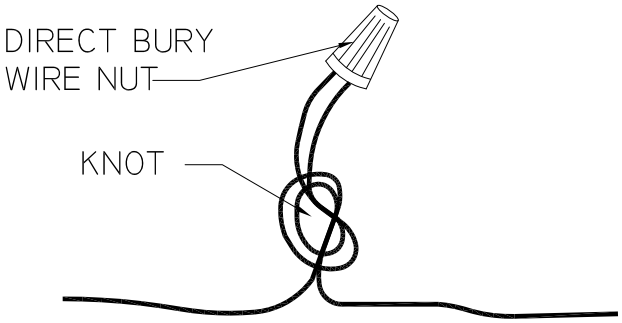


STEP #6



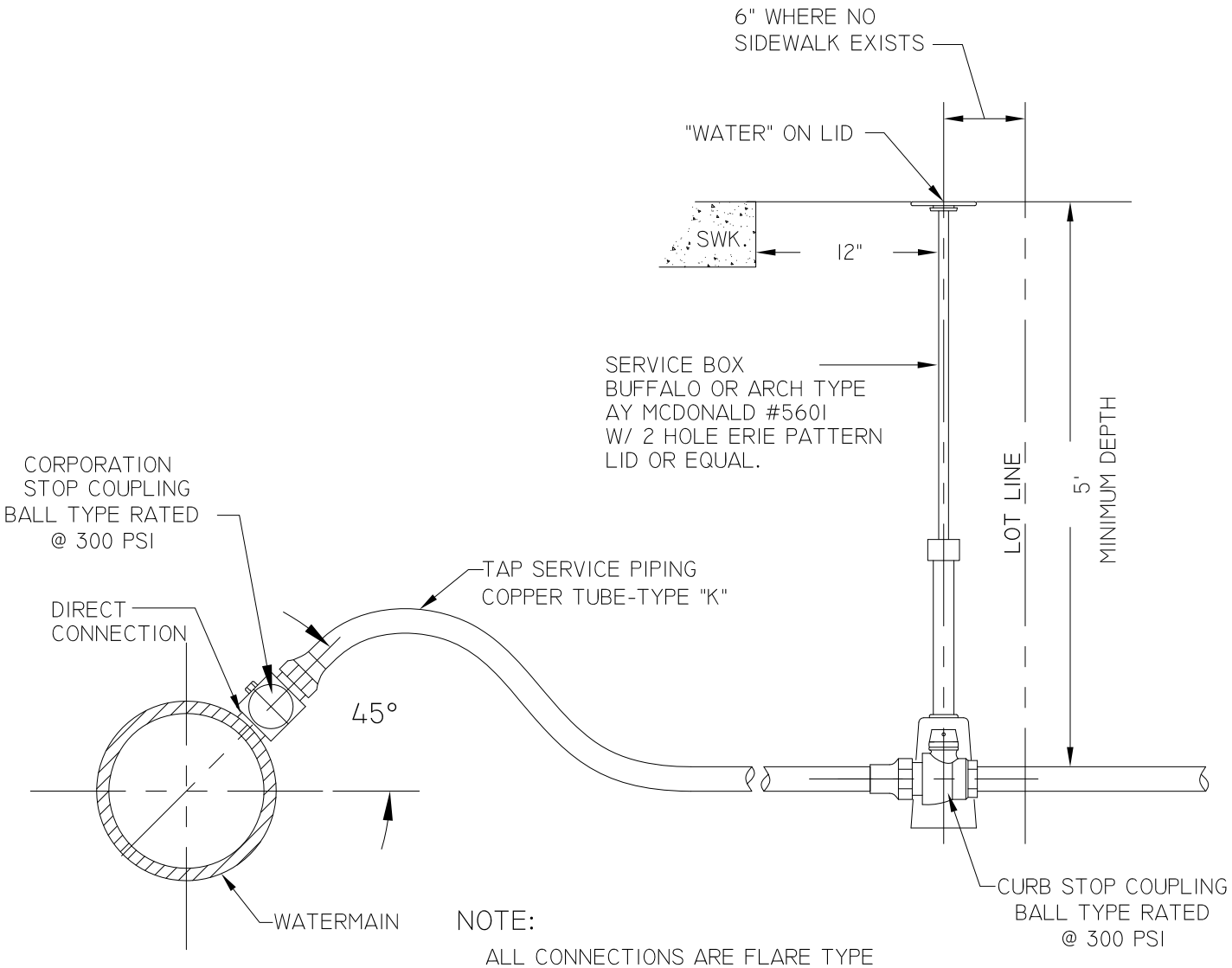
STEP #7

LUG CONNECTION



WIRE NUT CONNECTION

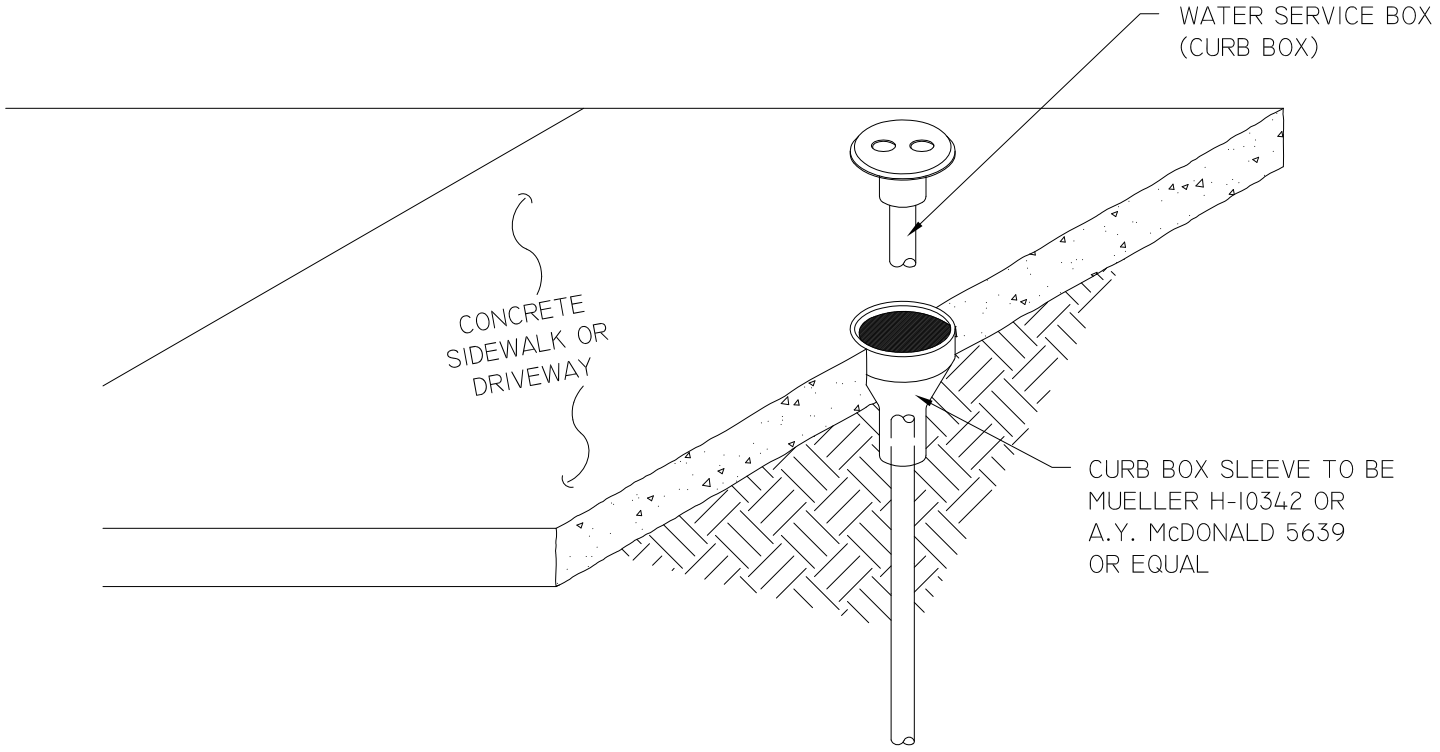
TRACER WIRE DIRECT BURY CONNECTION		
DATE 1/10	CITY OF MOLINE STANDARD	#34



NOTE:

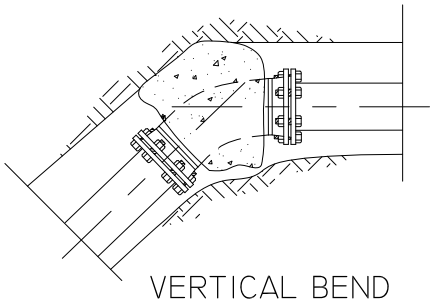
Each water service pipe shall be connected to the water main through a brass corporation stop. The main shall be tapped at an angle of 45 degrees with the vertical, and the stop must be turned so that the T-handle will be on the top. Any damage, tears, cuts, etc. of the polyethylene wrap shall be repaired after tapping and prior to backfilling.

DIRECT TAP SERVICE PIPING (COPPER)		
DATE 12/05	CITY OF MOLINE STANDARD	#35

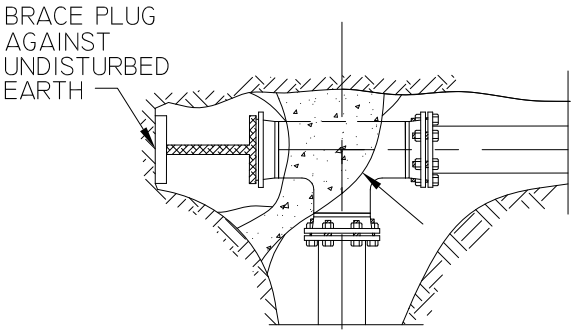


CURB BOX AND SLEEVE

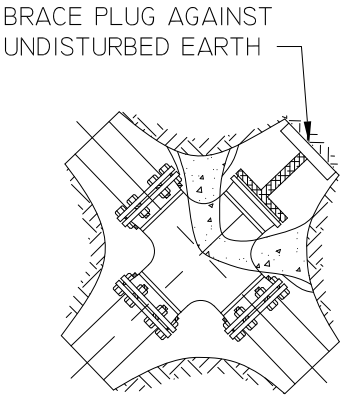
DATE	CITY OF MOLINE	#36
10/95	STANDARD	



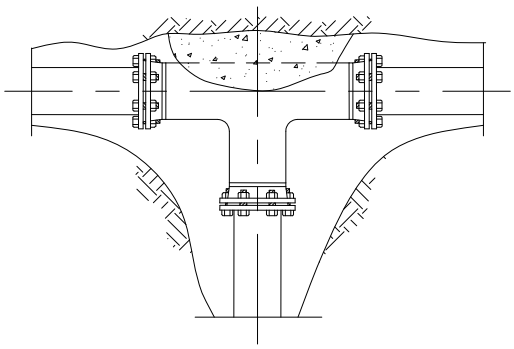
VERTICAL BEND



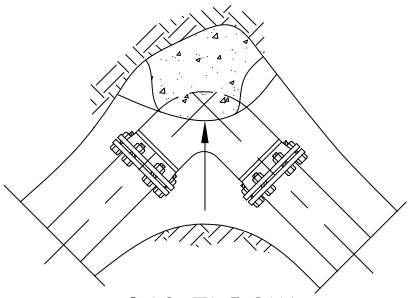
PLUGGED TEE



PLUGGED CROSS



TEE



90° ELBOW

NOTES:

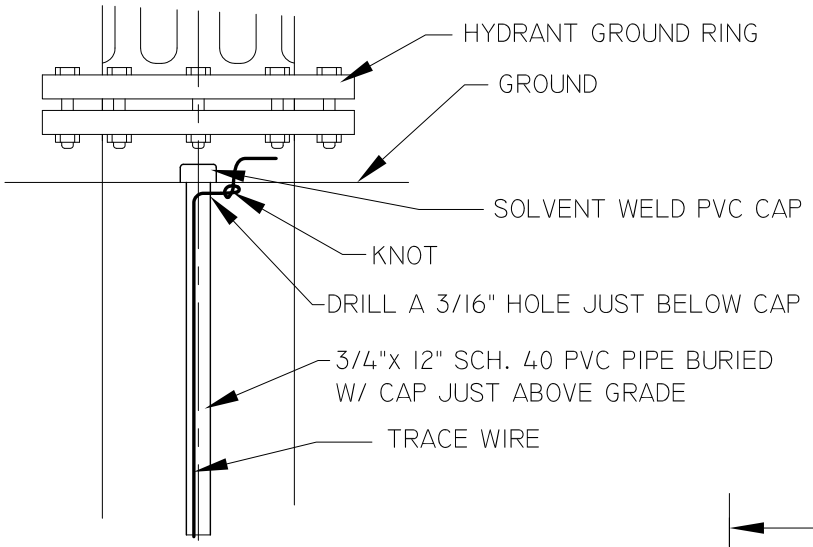
ALL BLOCKS BEAR AGAINST UNDISTURBED EARTH.

ARROWS INDICATE DIRECTION OF THRUST.

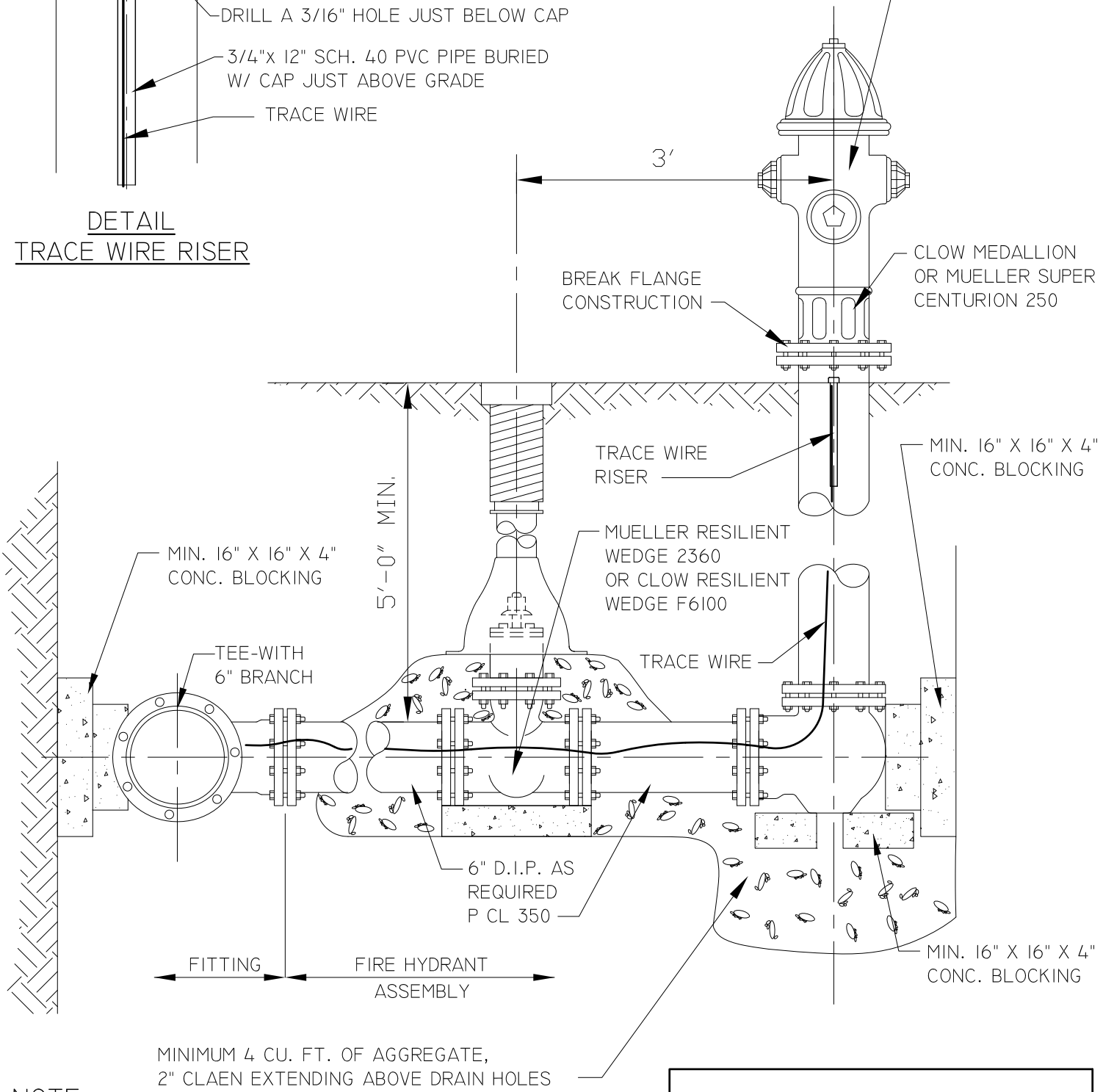
ALL BLOCKS TO BE 3500 P.S.I. CONCRETE.

ALL FITTINGS SHOWN IN PLAN EXCEPT VERTICAL BEND.

THRUST BLOCK INSTALLATIONS		
DATE 2/96	CITY OF MOLINE STANDARD	#37



DETAIL
TRACE WIRE RISER

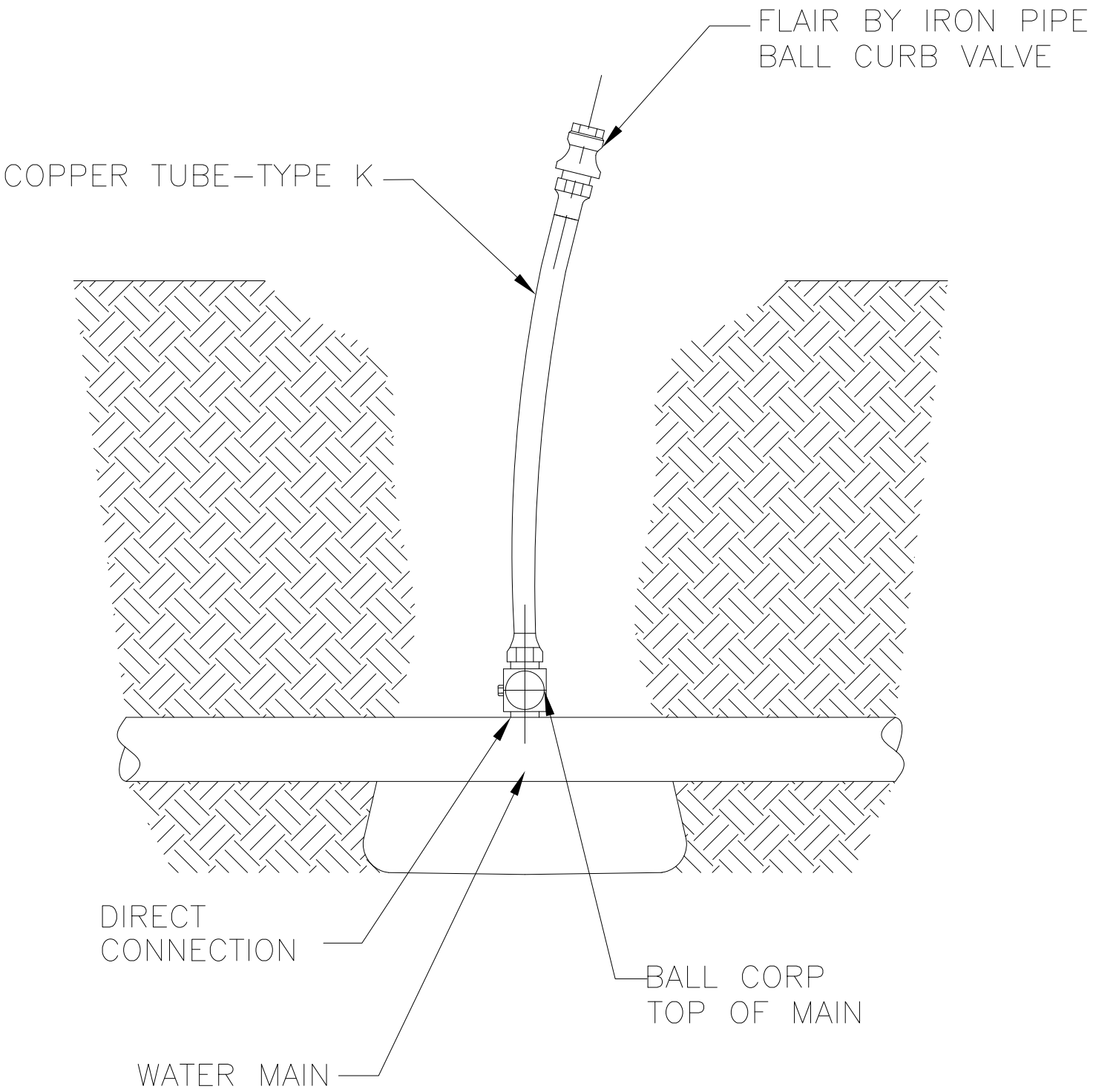


NOTE:
HYDRANT CONNECTIONS SHALL BE MADE WITH MJ FIELD LOK JOINTS.

SEE GATE VALVE DETAIL#30 FOR TRACER WIRE INSTALLATION ON HYDRANT VALVE

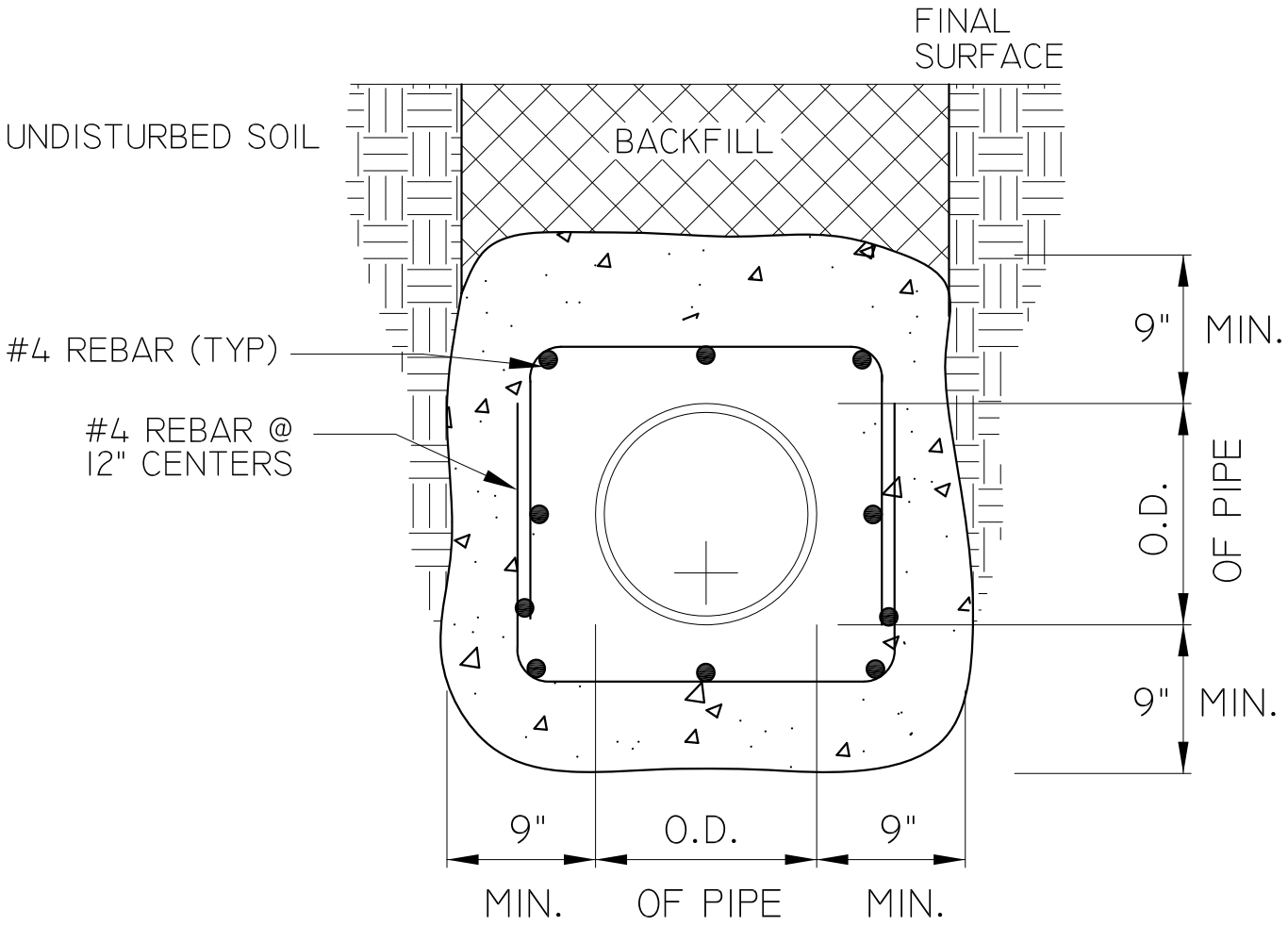
FIRE HYDRANT ASSEMBLY

DATE	CITY OF MOLINE	
1/10	STANDARD	#38



STANDARD TEST CONNECTION

DATE	CITY OF MOLINE	
2/09	STANDARD	#39



NOTES:

1. CONCRETE SHALL BE PLACED ON UNDISTURBED SOIL

2. REBAR SHALL HAVE A A MINIMUM OF 4" OF CONCRETE COVER

2. PIPE LARGER THAN 12" I.D., MINIMUM COVER SHALL BE 12" WITH #5 REBAR

3. CONTRACTOR SHALL PREVENT PIPE FROM FROM FLOATATION OR DEFLECTION DURING ENCASEMENT PLACEMENT

CONCRETE ENCASEMENT DETAIL		
DATE 9/11	CITY OF MOLINE STANDARD	#40