

City of Springfield Public Improvement Project

Invitation to Bid for:

**P21037
10th and N Sewer Upgrade – Phase 1**

The information provided is an abridged version of the complete Invitation to Bid and is provided for review and informational purposes only. To submit a bid for consideration, a complete set of bid documents is required.

A complete set of bid documents may be viewed or purchased at the address shown below:

**City of Springfield
Development and Public Works Department
Engineering and Transportation Division
225 Fifth Street
NW Quad
Springfield, OR 97477**

Contact: Jolie Smith at 541-726-3687 of jsmith@springfield-or.gov



**City of Springfield
Engineering and Transportation Division**

SPECIFICATIONS

for

P21037

10th and N Sewer Upgrade – Phase 1

MANDATORY PRE-BID MEETING

Date: May 8, 2012

Time: 1:30 p.m.

Location: City of Springfield

City Hall

Room: Jesse Maine Room

225 Fifth Street

Springfield, OR 97477

BID OPENING

Date: May 16, 2012

Time: 2:00 p.m.

Location: City of Springfield

City Hall

Room: Library Meeting Room

225 Fifth Street

Springfield, OR 97477

This Project is funded in full or in part by:

- State Funds
- Neither State nor Federal Funds

Please Take Note: All information required must be submitted as directed.

For your Bid to be considered responsive by the City of Springfield you must include all documents included in the Invitation to Bid with your Bid. Additionally, any addendums or revisions must be acknowledged and submitted with your Bid. *The only exception to this is any full size plans or drawings which are not required to be submitted as a part of your Bid.*

All documents requesting information must be completed in full and signed where appropriate. *The only exceptions to this requirement are the sample Performance Bond, Payment Bond, Statutory Public Works Bond and Contract documents which are provided here as a reference. However, if you are awarded the Bid, you will be required to submit fully executed copies of these documents upon request.*

A complete description of submittal requirements can be found in the Instruction to Bidders document included in this request for bid under the heading; **5. Bid.**

CITY OF SPRINGFIELD, OREGON
Invitation to Bidders

Public Works Improvement Project

Sealed bids will be received at the office of the Finance Director, Robert Duey at the City of Springfield Finance Department, 225 Fifth Street, Springfield, OR 97477, until 2:00 p.m. Local Time, the 16th day of May, 2012 and opened at 2:05 p.m. the same day, for the construction of the following public works improvement project in the City of Springfield:

Project No. P21037 Title: 10th and N Sewer Upgrade – Phase 1

Description: Place 2,156 linear feet of new 24-inch sanitary sewer by open cut method and 248 linear feet of 24-inch sanitary sewer by boring and jacking. Remove 6,600 linear feet of asbestos cement pipe and place 5,850 linear feet of 8-inch sanitary sewer pipe, 1,200 linear feet of 6-inch sanitary sewer laterals and 37 sanitary sewer manholes by open-cut method. Reconstruct 660 linear feet of residential City street and 20 linear feet of concrete storm channel.

Bid documents are available from the Department of Public Works, City of Springfield, 225 Fifth Street, Springfield, OR 97477, for a non-refundable fee of \$50.00 and are available for viewing at this location. Bid documents available on line at <http://www.springfield-or.gov/RFP/PAGE.HTM> and those on file at plan centers are incomplete and cannot be used to submit bids. The 1994 edition, as most recently amended, of the City's Standard Construction Specifications, with subsequent revisions, are available for a fee of \$40.00 or can be viewed on-line at <http://www.springfield-or.gov/pubworks/specs/specs.htm>.

A **MANDATORY** pre-bid meeting will be held on May 8th, 2012 at 1:30 p.m. in the Jesse Maine meeting room.

All questions should be addressed to Terri White, Engineering Assistant, at 541-726-3628 or twhite@springfield-or.gov. Contact with any other City officials may be grounds for disqualification of bid.

No bid will be received or considered by the City unless the bidder has a current, valid certificate of registration issued by the Construction Contractor's Board as defined in ORS 701.005 and/or a valid landscape contractors license as defined in ORS 671.520 by the State Landscape Contractor's Board, as applicable, at the time the bid is made and unless the bid contains a statement by the bidder as part of his/her bid that the provisions required by ORS 279C.838 through ORS 279C.870 shall be included in his/her contract. In accordance with ORS 279C.365, the City of Springfield will require that each bid must contain a statement as to whether the bidder is a resident bidder, as defined in ORS 279A.120.

It has been determined that this project contains asbestos containing material. As such, the City will require that the contractor and/or sub-contractor performing this work shall be licensed under ORS 468A.720.

The City of Springfield encourages contractors, sub-contractors and vendors who are minority, woman-owned and emerging small businesses to participate in City projects.

The City of Springfield may reject any or all bids not in compliance with all prescribed public bidding procedures and requirements, including the requirement to demonstrate the bidder's responsibility under ORS 279C.375, or waive minor irregularities not affecting substantial rights and may reject for good cause any or all bids upon a finding of the City of Springfield it is in the public interest to do so and accept such bids that in the opinion of the Springfield City Council are in the best interest of the City.

Bids will be accepted and awarded in accordance with the City of Springfield's document on general conditions and standard specifications for public works construction.

Note: If applicable to this project, the First-Tier Subcontractor Form must be completed in full and submitted by the specified deadline or the bid will be rejected.



ROBERT J. DUEY
Finance Director

Published: Daily Journal April 23, 2012 and April 30, 2012
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Bid Item List

Project No. P21037
Project Title: 10th and N St Sewer Upgrade – Phase 1

Bid Items:

Item No.	Description	Approx. Quantity	Per	Unit Price	Total Price Extension
052	Remove Trees	40	D.F.		
060	Mobilization	1	L.S.		
061	Traffic Control	1	L.S.		
063	Clearing	1	L.S.		
064	Erosion Control	1	EACH		
065	Construction Entrance	15	L.S.		
066	Lawn and Landscaping Restoration	1	L.F.		
069	Remove 6-inch AC Water Pipe	40	L.F.		
070	Remove AC Sewer Pipe	6600	C.Y.		
071	Excavation/backfill for AC Pipe Removal	600	C.Y.		
073	Excavation Below Grade	100	TON		
075	Common Excavation	900	TON		
086	Aggregate Surface Restoration	70	S.Y.		
089	Aggregate Base 1 1/2 - 0	1400	TON		
101	Geotextile Fabric	2700	S.Y.		
103	Asphalt Pavement Restoration	70	TON		
104	A.C. In Place Class C	500	TON		
120	6 inch Concrete Driveway	2500	S.F.		
121	8 inch Reinforced Concrete Driveway	570	S.F.		
132	Concrete Curb and Gutters	1800	L.F.		
137	4 inch Concrete Sidewalk	3000	S.F.		
141	Handicap Ramps	720	S.F.		
142	Truncated Domes for Handicap Ramps	12	EACH		
153	Chain Link Fence	2200	L.F.		
155	Wood Fence	1200	L.F.		
158	Replace Street Signs	4	EACH		
197	Saw-Cutting Existing Surface	18000	L.F.		
202	Remove and Replace Jersey Barrier with Fence	20	L.F.		
256	6-inch ASTM D3034 SDR 35 Sanitary Sewer	1200	L.F.		
257	8-inch ASTM D3034 SDR 35 Sanitary Sewer	5800	L.F.		
263	24-inch ASTM F679 Sanitary Sewer	2250	L.F.		
271	2-Way Lateral Cleanout 6-inch	137	EACH		
272	Traffic-Rated Cleanout Box and Cover	20	EACH		
273	Plastic Cleanout Box and Cover	117	EACH		
274	8-inch Cleanout with Traffic-Rated Cover	4	EACH		
277	New 48-inch Sanitary Sewer Manhole 0-8 ft Depth	27	EACH		
277a	Add Depth to 48-inch Manhole	40	L.F.		
278	New 60-inch Sanitary Sewer Manhole	5	EACH		
279	New 72-inch Sanitary Sewer Manhole	1	EACH		

Item No.	Description	Approx. Quantity	Per	Unit Price	Total Price Extension
279a	New 84-inch Sanitary Sewer Manhole	2	EACH		
280	New 96-inch Sanitary Sewer Manhole	2	EACH		
281	Traffic-Rated Manhole Collar	20	EACH		
283	Siphon System Complete	1	L.S.		
287	Bore and Jack for 24-inch Pipe	248	L.F.		
288	Bore and Jack for 24-inch Pipe Through Rock	10	L.F.		
297	10-inch ASTM D3034 Storm Sewer	300	L.F.		
300	15-inch ASTM D3034 Storm Sewer	30	L.F.		
331	Catch Basin	4	EACH		
332	Curb Inlet Catch Basin Type 2 1/2 A	4	EACH		
457	6-inch x 8-inch x 8-inch ASTM D3034 Tee	137	EACH		
458	8-inch x 24-inch x 24-inch ASTM F679 Tee	2	EACH		
460	10-inch x 15-inch x 15-inch ASTM D3034 Storm Tee	6	EACH		
461	Connect 10-inch PVC Storm Pipe to Manhole	2	EACH		
861	Controlled Density Fill	700	C.Y.		
862	Private Property Documentation	1	L.S.		
Project Bid Item Total:				\$	

Terms, Declarations and Bid Submittal

Bidder's Understanding

Bidders shall determine for themselves all the conditions and circumstances affecting the projected cost of the proposed work by personal examination of the site, Contract documents, and by such other means they may deem to be necessary. It is understood and agreed that in the event the City has obtained information from data at hand regarding underground or other conditions or obstructions depicted in the Contract documents, there is no expressed or implied agreement that such conditions are fully or correctly shown, and the Bidder must take into consideration the possibility that conditions affecting the cost or quantity of work may differ from those indicated.

The Bidder is familiar with and is satisfied as to all federal, state and local laws and regulations that may affect cost, progress, and performance of the work.

Bid

The undersigned Bidder having examined the Specifications and Contractual Documents and having satisfied themselves as to all conditions to be encountered, hereby proposes to furnish all labor, material and equipment and perform all work necessary to complete Project No P21037 in accordance with this bid, the Contract Plans, City of Springfield Standard Construction Specifications, 1994 Edition, and all subsequent modifications, the Special Provisions, and all other Contractual Documents at the prices and on the terms herein contained.

The unit price bids are submitted with the understanding that the quantities stated are approximate and are given only as the basis of calculation for comparison of bids and determining that the unit prices are balanced and that final payment for all unit price bid items will be based on actual quantities.

It is understood that in the instance of a discrepancy between the unit price and the extension (total price extension) the unit price shall govern. The extension shall be determined by multiplying the unit price by the number of units (approximate quantity).

Bid Guarantee

As required by ORS 279C.365(4) each bid shall be accompanied by a Bid Bond, cash, or a certified or cashier's check written upon a bank in good standing, payable to the Finance Director of the City of Springfield, Oregon, in an amount equal to at least 10 percent of the total amount of the Bid. Bid Bonds shall be issued by a surety company registered to issue bonds in the State of Oregon, and utilizing a bond form acceptable to the City. The City will accept AIA Document A310-2010. The Bid Bond may not be altered.

Such Bid Guarantee shall be forfeited and become the property of the City in case the Bidder shall fail or neglect to furnish a satisfactory Performance Bond and a satisfactory Payment Bond issued by a viable bond company acceptable to the City as required by ORS 279C.380 and to execute the Contract within ten (10) days (Saturday, Sunday, and holidays excepted) after receiving Contract from the City for execution, otherwise the Bid Guarantee accompanying this bid shall be returned to the Bidder. For information regarding Performance and Payment Bond requirements see City of Springfield Contract document, Section 5. City Bonding.

Bid Acceptance Period

This bid will remain subject to acceptance for a period of 60 days after the bid opening, or for such longer period of time that the Bidder may agree to in writing upon request of the City.

Liquidated Damages

The City of Springfield and the Contractor agree that; (a) the amounts so fixed are reasonable forecasts of just compensation for the harm that is caused by the breach; (b) the harm that is caused by the breach is one that is incapable of or very difficult of accurate estimation; and, (c) the amount so fixed is not fixed as a penalty to coerce performance of the Contract but is rather intended to be a genuine pre-estimation of injury to the City of Springfield in lieu of performance within the contract time by the Contractor.

a. Delay

It is agreed by the City of Springfield and by the Contractor that the need exists for a damage provision in the event the Contractor fails to complete the work within the Contract time specified, or any extension thereof, by the City of Springfield. The City of Springfield and the Contractor further agree that the Contractor shall be liable to the City of Springfield for fixed, agreed and liquidated damages for each and every calendar day of delay in the amount of \$1,000 per day in accordance with Subsection 108.07 of the Standard Construction Specifications.

b. Failure to Report Spills

The contractor also agrees to liquidated damages in the amount of \$500.00 per incident for failure to report sewage spills plus an amount sufficient to reimburse the City for any civil and administrative penalties paid by the City as a result of the contractor's failure to report. Failure to report sewage spills may subject the City to (1) civil penalties of up to \$32,500.00 per day of violation pursuant to Section 309(d) of the Clean Water Act, 33 U.S.C. § 1319(d); (2) administrative penalties of up to \$11,000.00 per day for each violation, pursuant to Section 309(g) of the Clean Water Act, 33 U.S.C. § 1319(g); or (3) civil action in federal court for injunctive relief pursuant to Section 309(b) of the Clean Water Act, 33 U.S.C. § 1319(b).

Contract Time of Completion

The contractor shall not begin work under this bid until written Notice to Proceed has been received. The contractor shall complete the work under this bid within 120 consecutive working days from the date of actual commencement of work or the date occurring ten days after the date of the Notice to Proceed, whichever occurs first, or such other starting date as is fixed by the Notice to Proceed.

The contractor shall apply for any extensions of time as specified in Subsection 108.06 of the Standard Construction Specifications.

Certifications

The undersigned Bidder hereby certifies that:

- 1.) If awarded the contract, they shall fully comply with all provisions regarding the prevailing wage rates as required by ORS 279C.800 to 279C.870 and/or 40 U.S.C. 2762 as applicable.
- 2.) They, and any subcontractors performing work on the project in question, have in place and will maintain an employee drug testing program that is in compliance with ORS 279C.505.
- 3.) They have not, and will not, discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is a minority, women or emerging small business enterprise certified under ORS 200.055 as required by ORS 279A.110.
- 4.) No Contractor, Subcontractor or any firm, corporation, partnership or association in which the Contractor or Subcontractor has a financial interest who appears on the List of Contractors Ineligible to Receive Public Works Contracts, as established by the Bureau of Labor and Industries, will perform work under this Contract, as specified in ORS 279C.860.
- 5.) The Bidder shall have a current, valid certificate of registration issued by the Construction Contractor's Board as defined in ORS 701.005(2) and/or a valid landscape contractor's license as defined in ORS 671.520(2) by the State Landscape Contractor's Board, as applicable, in place at the time the bid is presented.
- 6.) All Subcontractors shall have a current, valid certificate of registration issued by the Construction Contractor's Board as defined in ORS 701.005(2) and/or a valid landscape contractors license as defined in ORS 671.520(2) by the State Landscape Contractor's Board, as applicable in place prior to performing any work under the Contract.

Bid Addenda

All Addenda issued are considered to be part of the specifications of the Invitation to Bid and, as such, are as incorporated into the Contract as specified in Section 104.02 of the Standard Construction Specifications. By signing below, I acknowledge the receipt of the following Addenda documents and certify that the specifications contained in each have been considered and incorporated into the bid as presented. All Addenda must be included with the bid submitted.

Addenda Number	Addenda Date

Declarations

The undersigned Bidder declares that the only persons or parties interested in the bid are those named herein, that this bid is, in all respects, fair and without fraud, that it is made without collusion with any official of the City, and that the bid is made without any connection or collusion with any person submitting another bid on this project.

I have read, fully understand, and agree that as Bidder I, and all Subcontractors, will comply with all of the terms and conditions of the contract for which this bid is presented. By signing below I attest that I am an officer or a duly authorized representative of the business listed below and that I possess the legal authority to submit this bid for consideration.

Bidder's Signature _____

Bidder's Name *(Please Print)* _____

Title _____

Business Name _____

Business Address _____

City _____ State _____ Zip _____

Phone Number _____ Cell Phone _____

E-mail Address _____ Fax Number _____

Date _____

The award of this Contract shall be made to the responsible Bidder with the lowest responsive bid.

Special Provisions and Additional Technical Specifications

P21037

Section A: Special Provisions

Section B: Measurement and Payment

Section C: Private Property Condition Documentation and Owner Approval

Section D: Site Preparation

Section E: Sewage Diversion and Bypass Pumping

Section F: AC Pipe Removal

Section G: Traffic Control

Section H: Casing Pipe - Boring and Jacking

Section I: Pavement and Surface Restoration

Standard Drawings

Supplemental Information:

Homeowner Approval and release Form

Traffic Control Plan Criteria

ODOT Permit

Settlement and Obligations Summary

**P21037
SECTION A**

SPECIAL PROVISIONS

PART 1 GENERAL

These Special Provisions supplement and amplify certain sections of the City of Springfield, Oregon, "Standard Construction Specifications" (<http://www.springfield-or.gov/pubworks/specs/specs.htm>). The "Standard Construction Specifications" shall apply except as modified herein. These Special Provisions and additional technical specifications may contain occasional requirements not pertinent to the project. However, these specifications shall apply in all particulars insofar as they are applicable to this project.

1.1 Applicable Standard Specifications

The 1994 version of the City of Springfield, Oregon, "Standard Construction Specifications" (including all revisions at date of bid opening), apply except as may be modified herein. In the case of discrepancy, unless noted otherwise herein, the more restrictive provisions shall apply.

1.2 Scope of Work

NOTE: "Brand Names or Equal Specification" means a specification that uses one or more manufacturers' names, makes, catalog numbers or similar identifying characteristics to describe the standard of quality, performance, functionality or other characteristics needed to meet the contracting agency's requirements. Such specification authorizes bidders or proposers to offer goods or services that are equivalent or superior to those brands named or described in the specification.

The work to be performed under these specifications and drawings consists of the following:

Place 2,156 linear feet of new 24-inch sanitary sewer by open cut method and 248 linear feet of 24-inch sanitary sewer by boring and jacking. Remove 6,600 linear feet of asbestos cement pipe and place 5,850 linear feet of 8-inch sanitary sewer pipe, 1,200 linear feet of 6-inch sanitary sewer laterals and 37 sanitary sewer manholes by open-cut method. Reconstruct 660 linear feet of residential City street and 20 linear feet of concrete storm channel.

The above general outline of principal features of the work does not in any way limit the responsibility of the CONTRACTOR(s) to perform all work and furnish all

equipment, labor and materials required by the specifications and drawings. The drawings and specifications shall be considered and used together. Anything appearing as a requirement of either shall be accepted as applicable to both even though not so stated therein or shown.

No attempt has been made in these specifications or drawings to segregate work covered by any trade or subcontract under one specification. Such segregation and establishment of subcontract limits will be solely a matter of specific agreement between the CONTRACTOR and its subcontractors and shall not be based upon any inclusion, segregation or arrangement in or of these specifications.

1.3 Permits and Licenses

The CONTRACTOR shall comply with all permit conditions, provisions and limitations. Such conditions and requirements are hereby made a part of these specifications, as fully and completely as though the same were fully set forth herein. The CONTRACTOR shall examine the permit(s) granted by any city, county and state agencies. Failure to do so will not relieve the CONTRACTOR from compliance with the requirements stated therein.

- A. The City has obtained a DEQ 1200-CA NPDES permit for the work. A copy of that permit is available for viewing at the City of Springfield. CONTRACTOR shall accommodate all special inspections required thereof, all at no additional expense to the OWNER beyond prices as bid.

1.4 DEQ and EPA Requirements

It is the Policy of the City of Springfield that there will be full compliance with the City's wastewater NPDES permit and that there shall be no spillage of raw sewage during the construction phase of this project. In the event that this Policy is inadvertently violated, the CONTRACTOR shall immediately notify the Project Inspector of the spill. Notification is the process that ensures that the appropriate entities are informed of a release of raw sewage. If the Contractor is unable to contact the Inspector, the Contractor shall notify the Collection System Compliance Officer or his Designee.

City Inspector:	Denny Wright, 541-736-1010
Collection System	
Compliance Officer:	Brian Conlon, 541-726-3753
Designee:	Mike Risley, 541-726-3615

The representative of the City of Springfield shall report the sewage spill within 24 hours to the Oregon **Department of Environmental Quality** and any other

appropriate entities. A spill contained in an excavation is still considered a spill and must be reported.

Failure by the CONTRACTOR to report a spill to the appropriate City representative will result in liquidated damages in the amount of \$500.00 per incident plus an amount sufficient to reimburse the City for any civil and administrative penalties paid by the City as a result of the CONTRACTOR's failure to report as described in the Unit Price Bid Proposal for this contract. The CONTRACTOR is to take every reasonable measure to avoid any spills during construction.

1.5 Prevention, Containment and Clean-up of Sanitary Sewer Spills

The CONTRACTOR shall have on site a sewage spill kit and provide to the Engineer a written **Prevention, Containment and Clean-up Plan** for spilled sewage at the **Pre-Construction Meeting**. The **Plan** shall describe how the Contractor will prevent spillage during construction, the equipment and materials on site, and the methods to be used to contain and clean up spilled sewage. Approval of the **Prevention, Containment and Clean-up Plan** does not relieve the CONTRACTOR of responsibility for preventing spills or properly containing and cleaning up any spills.

1.6 Site Investigation and Physical Data

The CONTRACTOR acknowledges that it is satisfied as to the nature and location of the work and the general and local conditions, including but not limited to those bearing upon transportation, disposal, handling and storage of materials, availability of water, roads, groundwater, access to the sites, coordination with other contractors, and conflicts with pipelines, structures and other contractors. Information and data furnished or referred to herein is provided for information only. Any failure by the CONTRACTOR to become acquainted with the available information and existing conditions will not be a basis for relief from successfully performing the work and will not constitute justification for additional compensation.

The CONTRACTOR shall verify the locations and elevations of existing pipelines, structures, grades and utilities, prior to construction. The OWNER assumes no responsibility for any conclusions or interpretations made by the CONTRACTOR on the basis of the information made available.

1.7 Interferences, Obstructions and Sewer Crossings

At certain places, power, light and telephone poles may interfere with excavation and the operation of the CONTRACTOR's equipment. Necessary arrangements shall be made with utility companies for moving or maintaining such poles. The utility company affected by any such interference shall be notified by the CONTRACTOR.

within two working days thereof so that the necessary moving or proper care of poles and appurtenances may have appropriate attention.

All utility company costs resulting from stabilization of utility poles will be paid by the City. Also see section 1.27 for more information.

1.8 Work Hour Limitations

All work shall be conducted between the hours of 7:00 a.m. and 6:00 p.m. on weekdays. Requests for variations in work hours shall be made in writing and shall be submitted to the ENGINEER for approval by the city council before any after hour work can occur. Work on Saturdays and Sundays must be approved by the ENGINEER.

See also Section G, Traffic Control, of these Special Provisions and Additional Technical Specifications for time limitations on Q Street.

1.9 Record Drawings

CONTRACTOR shall maintain at the site one set of specifications, full size drawings, shop drawings, equipment drawings and supplemental drawings which shall be corrected as the work progresses to show all changes made. Drawings shall be available for inspection by the ENGINEER. Upon completion of the contract and prior to final payment, specifications and drawings shall be turned over to the ENGINEER.

1.10 Competent Person Designation

CONTRACTOR shall designate a qualified and experienced "competent person" at the site whose duties and responsibilities shall include enforcement of Oregon - OSHA regulations regarding excavations, the prevention of accidents, and the maintenance and supervision of construction site safety precautions and programs.

See also Section F, AC Pipe Removal, of these Special Provisions and Additional Technical Specifications for Competent Person Designation as it relates to asbestos cement pipe removal.

1.11 Vehicle Parking

The vehicles of the CONTRACTOR's and subcontractors' employees shall be parked in accordance with local parking ordinances.

1.12 Street Cleanup

Refer to Erosion Control Notes on plan sheets.

1.13 Reconnection of Private Sewer Laterals

All private sewer laterals temporarily disconnected for sewer work shall be reconnected by 6:00 PM on the same day. CONTRACTOR will document size and type of private sewer lateral connected to by address.

1.14 Survey Services

The City of Springfield shall provide survey services as required and as described in Section 105.09 and 105.10 of the Standard Construction Specifications

1.15 Order of Work

CONTRACTOR shall schedule work such that all construction and restoration north of Quinalt Street is completed before October 15, 2012, including the channel reconstruction and bore/receiving pit for the Highway 126 crossing.

CONTRACTOR shall schedule work such that any work and restoration started within the right of way is complete by October 15, 2012, including curb and gutter, sidewalk, asphalt, driveways, etc.

CONTRACTOR shall provide a 2-week notice to Springfield Utility Board - Electric Division to allow for temporary relocation of the transformer on the utility pole located at 10th Street and Q Street.

1.16 On-Site Sanitary Facilities

The CONTRACTOR shall provide and maintain sanitary facilities for its employees and its subcontractors' employees that will comply with the regulations of the local and State Departments of Health and as directed by the ENGINEER.

1.17 Private Roads and Driveways

See City of Springfield's Standard Construction Specifications section 107.13

1.18 Erosion and Sedimentation Control

Temporary construction site erosion control measures shall be designed and constructed in accordance with the City's NPDES 1200-CA Permit, copy available from the City. Work shall not commence until the approved erosion and sedimentation control measures are in place. Refer to Erosion and Sediment Control notes on plan sheets.

Dewatering of trenches and other excavation shall be managed in accordance with Section 401.3.04 of the Standard Construction Specifications and the Erosion Control Standard Notes on the Plan Sheets.

1.19 Compaction Testing

Refer to City of Springfield's Standard Construction Specifications section 405.3 for trench compaction. No native backfill shall be used during the construction of this project.

Compaction for base rock in street reconstruction is covered in section 305.3.06.

1.20 Limits of the Work and Storage of Spoils

The limits of the site which may be used for construction, storage, materials handling, parking of vehicles and other operations related to the project include the public rights-of-way subject to permission of the public owner of that right-of-way. The limits of work may also include the permanent easements on private property. Permanent easements are a minimum of 10 feet wide, centered on the pipeline. Such easements exist also when the pipeline lies less than seven feet from private property. The CONTRACTOR is to work within the limits of the permanent easements and public rights-of-way.

All easement areas may be accessed from public rights-of-way; however, if the CONTRACTOR desires to access easements through private property it is the CONTRACTOR'S responsibility to coordinate such access with the property owner and to complete associated surface restoration to the satisfaction of the property owner. Prior to final payment, the CONTRACTOR shall obtain a release from the property owner on the Approval and Release form included in the Supplementary Information Section confirming that the installation and site restoration work is satisfactory to the property owner. All releases shall be submitted to the ENGINEER. See sections B, C, and D of these specifications for more details.

The CONTRACTOR shall ascertain to what extent the width, status and special conditions attached to easements may have on its operations, and all costs resulting there from shall be included and absorbed in the unit prices of the CONTRACTOR's bid. CONTRACTOR shall coordinate with private property owners and businesses as required. Landscaping, surface restoration and fence restoration work shall commence within 72 hours following piping installation and other construction work in that area. Temporary fencing shall be provided continuously until such private fencing is properly restored.

A temporary construction easement has been granted for this project at the southern 55 feet of the empty lot at the Northwest corner of 10th and Q Streets. The temporary

easement shall be restored to original grades with erosion control measures in place by the CONTRACTOR by December 31, 2012.

A second set of temporary construction easements are located on the panhandle driveway that serves 970 T Street. The permanent easement in that location is the center 18 feet of the driveway, with an additional 4 feet of temporary construction easement on either side of the permanent easement. **NOTE: Full driveway width restoration will be completed within this area.** See *Agency Obligations* located within the *Settlement and Obligations Summary* sheets in the Supplemental Information section for more information.

1.21 Sewage Diversion and By-Pass Pumping

Refer to Section E, Sewage Diversion and By-pass Pumping, of these Special Provisions and Additional Technical Specifications.

1.22 Field Changes, Lateral Connection Locations

Changes to lateral connection locations may be allowed during the course of work in order to avoid interference with certain unforeseen obstructions. Such changes may be allowed on a case by case basis as approved by the ENGINEER. The CONTRACTOR shall locate existing laterals in the field to be reconnected, and propose new main connection locations to the ENGINEER for approval. The ENGINEER will endeavor to make prompt decisions on such matters. CONTRACTOR shall anticipate a minimum of 72 hours for any decision requiring significant change.

1.23 Oregon Products

CONTRACTOR's attention is directed to the provisions of Oregon Law, ORS 279A.120 regarding the preference for products that have been manufactured or produced in Oregon. CONTRACTOR shall use Oregon-produced or manufactured materials with respect to common building materials such as cement, sand, crushed rock, gravel, plaster, etc., and Oregon-manufactured products in all cases where price, fitness, availability and quality are otherwise equal.

1.24 *Replace the 6th paragraph of Section 109.07 of the Standard specifications:*

“Progress payment will be made by Owner on a monthly basis not later than the 20th day of the subsequent month of the work performed, except that, additional days may be required when a payment is accompanied by one or more of the following: an extension of completion time, change order or extra bill. Payment may be made via

use of the checks or warrants at the option of Owner for the amount of the approved estimate, less retainage.”

With:

“Progress payment will be made by Owner on a monthly basis not later than the 20th day of the subsequent month of the work performed, except that, additional days may be required when the Contractor fails to submit accurate certified payroll reports, which are in compliance with ORS279C.845, when due, or a payment is accompanied by one or more of the following: an extension of completion time, change order or bill. If the Contractor fails to submit acceptable certified payroll reports when due, the progress payment may be made up to fourteen (14) days after the date the certified payroll in question is received by the Owner. Payment may be made via use of the checks or warrants at the option of Owner for the amount of the approved estimate, less retainage.”

1.25 Salvage and Debris

Unless otherwise indicated on the drawings or in the specifications, all castings, pipe, equipment, demolition debris, fences, trees, shrubs, spoil or any other discarded material or equipment shall become the property of the CONTRACTOR and shall be salvaged or disposed of in a manner compliant with applicable Federal, State and local laws and regulations governing disposal of such waste products. No burning of debris or any other discarded material will be permitted. The CONTRACTOR shall perform any demolition for the completion of this project and shall salvage and recycle all construction and demolition debris as is feasible and cost effective, in accordance with ORS 279C.510.

1.26 Emergency Maintenance Supervisor

The CONTRACTOR shall submit to the ENGINEER the names, addresses and telephone numbers of at least two employees responsible for performing emergency maintenance and repairs when the CONTRACTOR is not working. These employees shall be designated, in writing by the CONTRACTOR, to act as its representatives and shall have full authority to act on its behalf. At least one of the designated employees shall be available for a telephone call any time an emergency arises.

1.27 Utility Properties and Service

In areas where the CONTRACTOR’s operations are adjacent to or near a utility and such operations may cause damage which might result in significant expense, loss and inconvenience, the operations shall be suspended until all arrangements necessary for the protection thereof have been made by the CONTRACTOR.

The CONTRACTOR shall notify all utility offices which may be affected by the construction operation at least 48 hours in advance. Before exposing any utility, the utility having jurisdiction shall grant permission and may oversee the operation. Should service of any utility be interrupted due to the CONTRACTOR's operation, the proper authority shall be notified immediately. It is of the utmost importance that the CONTRACTOR cooperates with the said authority in restoring the service as promptly as possible. Any costs shall be borne by the CONTRACTOR.

In the event that SUB electrical is needed to suspend their power poles during construction, all costs shall be borne by the CITY. The CONTRACTOR shall notify SUB Electric two working days before the poles must be held.

Utilities which may be impacted include the following:

Electric	Springfield Utility Board (SUB)
Water	Springfield Utility Board (SUB)
Telephone	Qwest Communications
Gas	Northwest Natural
Cable	Comcast
Sanitary Sewer	City of Springfield
Storm Sewer	City of Springfield
Street Lighting	City of Springfield
Traffic Signals	City of Springfield
Highways	ODOT
Fiber Optics	Sprint

1.28 Coordination with Collection System Customers

The City of Springfield will assume responsibility for initial notifications to and coordination with all sewage collection system customers connected to the sewer to be rehabilitated whose building sewer laterals will be out of service during construction. It is the CONTRACTOR's responsibility to, no less than 24 hours prior to interruption of service, conduct notifications to customers in writing via door hangers or U.S. mail.

1.29 Submittals

The CONTRACTOR shall provide shop drawings, schedules and such other drawings as may be necessary for the prosecution of the work in the shop and in the field as required by the contract documents or ENGINEER's instruction.

Within 14 days after award of the contract, the CONTRACTOR shall submit to the ENGINEER a proposed list of manufacturers, suppliers, and subcontractors and a schedule of specific target dates for the submission and return of shop drawings required by the contract documents. Said list and schedule shall be updated and re-

submitted when requested by the ENGINEER. All shop drawings for interrelated items shall be scheduled for submission at the same time. Not less than 1 week shall be allocated to each submittal for processing by the ENGINEER. At least six (6) copies of all submittals shall be provided to the ENGINEER. Four copies of all submittals will be kept by the ENGINEER. If the CONTRACTOR requests that more than two (2) copies be returned, then the CONTRACTOR shall submit the appropriate quantity of submittals.

The ENGINEER will review shop drawings to determine compliance with the design concept of the project and return them to the CONTRACTOR within the period established in the shop drawings schedule. The ENGINEER may hold shop drawings in cases where partial submission cannot be reviewed until the complete submission has been received or where shop drawings cannot be reviewed until correlated items affected by them have been received. When such shop drawings are held, the ENGINEER will advise the CONTRACTOR in writing that the shop drawing submitted will not be reviewed until shop drawings for all related items have been received.

The CONTRACTOR shall submit to the ENGINEER, for review, six copies each of such shop drawings, electrical diagrams and catalog information for fabricated items and manufactured items required for construction. The ENGINEER will review the submitted data and shop drawings, and will make notations thereon indicating "No Exception Taken", "Make Corrections Noted", "Rejected", "Revise and Resubmit", or "Submit Specified Item". The ENGINEER will then return two copies of the submitted data and shop drawings to the CONTRACTOR. The ENGINEER's review of submittals and shop drawings is not a check of any dimension or quantity, and will not relieve the CONTRACTOR from responsibility for errors of any sort in the submittals and shop drawings.

When shop drawings and/or submittals are required to be revised or corrected and resubmitted, the CONTRACTOR shall make such revisions and/or corrections and resubmit those items or other materials in the same manner as specified above.

Submitted data shall be sufficient in detail for determination of compliance with the Contract Documents. Color samples for all items for which colors are to be selected shall be submitted at the same time. No equipment or material for which listings, drawings, or descriptive material is required shall be installed until the CONTRACTOR has received review from the ENGINEER.

Regardless of corrections made in or review given to the drawings by the ENGINEER, the CONTRACTOR shall be responsible for the accuracy of such drawings and for their conformity to the drawings and specifications. The CONTRACTOR shall check all submittals before submitting them to the ENGINEER and shall stamp its approval on all copies of the shop drawing documents. Any

submittals received by the ENGINEER which do not bear the CONTRACTOR's approval shall be returned without review. If more than two submissions are required to meet the project specifications, the cost of reviewing these additional submissions may be charged directly against the CONTRACTOR and the OWNER may withhold the funds necessary to cover these costs.

Materials and equipment shall be ordered a sufficient time in advance to allow time for reviews, and shall be available on the job when needed. Last minute review will not be given for inferior substitutes for material or equipment.

Required submittals include items listed below. List is provided for CONTRACTOR convenience only and may not be complete in all respects. CONTRACTOR shall provide all submittals required, whether or not specifically listed herein.

- A. Schedules – See section 108.01 of the Standard Specifications. The CONTRACTOR shall coordinate with the ENGINEER and SPRINGFIELD UTILITY BOARD (SUB) the schedule for the work within 10th Street South of Highway 126. The CONTRACTOR shall provide a 3-week notice to allow SUB to complete water reconstruction work on 10th Street from Quinalt Street to Pleasant Street.
- B. Shop Drawings -- The CONTRACTOR shall provide shop drawings, schedules and such other drawings as may be necessary for the prosecution of the work in the shop and in the field as required by the contract documents or ENGINEER's instruction. Shop drawings will be required for the 4 combined flow manholes.
- C. Erosion Control Plan
- D. Materials Lists
- E. CONTRACTOR Contact Persons
- F. Material Safety Data Sheet
- G. Traffic Control Plan
- H. Miscellaneous Materials and Other Submittals (See Specifications)
- I. Spill Containment and Cleanup Plan
- J. Sanitary Sewer By-Pass Pumping and Diversion Plan.

1.30 Not used

1.31 Noise Limitations

All applicable City, County ordinances and State regulations shall be complied with.

END OF SECTION

P21037
SECTION B

MEASUREMENT AND PAYMENT

PART 1 GENERAL

Measurement and payment will be on a unit price basis in accordance with the prices set forth in the proposal for individual work items. Where work is required but does not appear as a separate item in the proposal, the cost for that work shall be included and absorbed in the unit prices named in the proposal. CONTRACTOR shall make a careful assessment when preparing the bid.

- | <u>Item No.</u> | <u>Description</u> |
|-----------------|---|
| 052. | <u>Remove Trees</u> : Measurement and payment for this item is by diameter-foot (D.F.) at breast height (4.5 feet above base of tree). |
| 060. | <u>Mobilization</u> : Payment for this item is lump sum (L.S.). See section 201 of the Standard Specifications. |
| 061. | <u>Traffic Control</u> : Payment for traffic control, maintenance and protection including all coordination, materials, labor and equipment, as required, will be on a lump sum (L.S.) basis, complete. Refer to section 202 of the Standard Specifications and to Section G, Traffic Control, of these Special Provisions and Additional Technical Specifications. |
| 063. | <u>Clearing</u> : Refer to section 203 of the Standard Specifications. Payment for clearing, including cutting, removal, transport and disposal of trees of less than 1 foot diameter, stumps, tree limbs, plants, shrubs, vines, planters shall be on a lump sum (L.S.) basis, complete. |
| 064. | <u>Erosion Control</u> : Refer to Erosion Control Standard Notes on the Plan Sheets. Payment for Erosion control is on a lump sum (L.S.) basis except for Construction Entrance which is on item 065. |
| 065. | <u>Construction Entrance</u> : Construction entrances to prevent tracking in the street will be constructed as per the detail in the Contract Plans, in the easement, and at locations as directed by the Engineer. Measurement and payment is on a per EACH basis. |
| 066. | <u>Lawn and Landscaping Restoration</u> : Payment for restoration of lawn and landscaping to the satisfaction of the Engineer, the City and the property owner will be paid for on |

a Lump Sum (L.S.) basis. Payment will be made for this item for work associated with new gravity sewer pipes, service laterals, manholes, and appurtenances as shown on the plans and included in the specifications. The pay area for surface restoration will be those areas disturbed within the limits of the easements and public rights-of-way. The work associated with this item consists of lawn and landscaping restoration including restoring irrigation systems, lawns, shrubs, bushes, trees, gardens, hedges, bark dust, ornamental vegetation, flower beds, and landscaping structures such as raised beds, within the authorized work areas. Lawn and landscaping restoration outside of the above described pay area will be considered incidental to the work. Refer to Standard Drawing 4-16 for further detail. No native material will be used as backfill during this project. Lawn seed shall be commercial lawn seed appropriate for this area and approved by the engineer. All work performed will conform to the requirements set forth in ORS 279C.510.

069. Remove 6-inch AC Water Pipe: Measurement and payment for removal of asbestos cement water pipe shall be by Linear Foot (L.F.). See section F: AC Pipe Removal of these Special Provisions and Additional Technical Specifications.
070. Remove AC Sewer Pipe: Measurement and payment for removal of asbestos cement sewer pipe shall be by Linear Foot (L.F.). This Item pays only for removal, handling and disposal of AC pipe. Excavation and backfill will be paid as part of regular pipework in Items 256, 257 and 258, or as excavation/backfill under item 071 where no new 8-inch pipe will be installed in 10th St. See section F: AC Pipe Removal of these Special Provisions and Additional Technical Specifications.
071. Excavation/backfill for AC Pipe Removal: Measurement and payment for the excavation and backfill for the removal of AC pipe where no new pipe will be installed (primarily in 10th Street) shall be by Linear Foot (L.F.). Price includes excavation, and backfill with granular material as per Standard Drawing 4-16. AC pipe removal shall be covered under item 070.
073. Excavation Below Grade: Payment for excavation below grade shall be per cubic yard (C.Y.) for the removal of unsuitable subgrade material and replacement as per Section 301.3.11 of the Standard Specifications.
075. Common Excavation: Payment for Common Excavation for the street reconstruction is by cubic yard (C.Y.).
086. Aggregate Surface Restoration: Payment for aggregate surface restoration will be on a per TON basis. Aggregate surfaces shall be restored after new sewer pipe has been placed and backfilled. Payment shall be based on the quantities on load tickets collected by the inspector. This item is to be used primarily to resurface the Pleasant street alley between 9th and 10th streets but also to restore miscellaneous graveled areas. Refer to Standard Drawing 4-16 for further detail.

089. Aggregate Base 1 ½ - 0: Payment for aggregate base rock shall be by on a per TON basis. Payment shall be based on the quantities on load tickets collected by the inspector.
101. Geotextile Fabric: Payment for geotextile fabric placed over subgrade shall be by the square yard (S.Y.).
103. Asphalt Pavement Restoration: Payment for asphalt pavement restoration shall be on a per TON basis. This item is to be used for final restoration of pavement at trench excavations. Furnishing and installing **temporary** paving or its maintenance during construction is considered to be incidental work and no additional payment will be made. Saw cutting shall be paid for under a separate pay item. All other work incidental to trench surfacing replacement shall be included in bid price stated. No additional payment will be made for surface damaged or otherwise removed outside pay width limit. Refer to Standard Drawing 4-16 for further detail. Asphalt for the reconstruction of 10th Street is covered under Item 104.
- All asphalt pavement restoration under this bid item is Level 2, Class C mix except for within the Q Street right of way, where it is Level 3, Class C mix.
104. A.C. In Place Class C: Payment for Asphalt Concrete in place shall be by the TON for the 10th Street reconstruction.
120. 6 inch Concrete Driveway: Refer to Standard Drawing 3-19, 3-20, and 3-21 for Residential Driveway (unreinforced). Measurement and payment is by the Square Foot (S.F.) for 6-inch thick residential driveway complete.
121. 8 inch Concrete Driveway: Refer to Standard Drawing 3-22, 3-23, 3-24, 3-25 and 3-26 for Industrial Reinforced Driveway. Measurement and payment is by the Square Foot (S.F.) for 8-inch thick driveway with reinforcing steel complete.
132. Concrete Curb and Gutters: Measurement and payment for concrete curb and gutters shall be by Linear Foot (L.F.) and shall include rebar dowelling at the connection to existing curb and gutter. Dowelling shall be two, 12-inch long #4 deformed bars drilled 6 inches into the existing gutter pan and secured with epoxy, and shall be incidental to the curb and gutter work.
137. 4 inch Concrete Sidewalk: This item is to be used to replace sidewalks and miscellaneous concrete 4 inch thick. See Standard Drawing 3-12 for City sidewalks. Measurement and payment is by the Square Foot (S.F.).
141. Handicap Ramps: Handicap ramps shall be paid per Square Foot (S.F.) including ramps, side curbs on ramps, required landings, and ramped walk up to standard sidewalk.

142. Truncated Domes for Handicap Ramps: Truncated domes on handicap ramps shall be paid per EACH for truncated dome panels 2-feet by 4-feet in size.
153. Chain Link Fence: Payment will be on Linear Foot (L.F.) basis for the total length of new chain link fence installed. Refer to section 315 of the Standard Specifications.
155. Wood Fence: Payment will be on Linear Foot (L.F.) basis for the total length of new wood fence installed. Refer to section 315 of the Standard Specifications.
158. Replace Street Signs: Payment for street signs will be per EACH and will include removal of sign and replacement of sign base as per Standard Drawing 5-18. Sign pole and street signs will be furnished and placed by City Maintenance crews.
197. Saw-Cutting Existing Surface: Measurement and payment for saw cutting existing surfacing shall include the total sawed length of the initial trench width cuts and the total sawed length of the subsequent tee-cuts as shown on the standard trench detail. Payment for saw cutting existing surfacing, which includes AC and concrete surfaces is by the Linear Foot (L.F.). Refer to Standard Drawing 4-16.
202. Remove and Replace Jersey Barrier with Fence: Measurement and payment for removing and replacing the Jersey barrier shall be by Linear Foot (L.F.) complete with chain link fence as per plan sheet.
256. 6-inch ASTM D3034 SDR 35 Sanitary Sewer: Payment for furnishing and installing ASTM D3034, SDR 35 PVC sanitary sewer laterals includes: excavation of a trench and removal of the existing lateral; installation of a new lateral; connection of the new lateral to the existing lateral or installation of a cap if there is no existing lateral; trench backfill; connecting couplings and fittings (unless payment is provided for in other items); handling of sewage during construction; disposal of the existing lateral piping and excavated material; plugging of laterals abandoned in place; and all other incidental work and materials. Surface restoration will be paid for under other pay items. Payment will be on a Linear Foot (L.F.) basis for the total length of new sanitary sewer service laterals installed, complete by backfill class, without respect to depth. The pay length will be the length of new sanitary sewer lateral pipe installed as measured from the center of the new sanitary sewer main to the end of the new lateral at its point of connection to the existing lateral. Backfill classes shall be compacted granular backfill (imported). CDF backfill where required under paved streets will be paid under Item 861.

NOTE: Contractor to verify all existing sanitary sewer laterals are active prior to installing new tee connections for lateral lines.

NOTE: This item is subject to material price escalation/de-escalation, see part 2 of this section.

257. 8-inch ASTM D3034 SDR 35 Sanitary Sewer: Payment for furnishing and installing 8-inch PVC sanitary sewer main line will be on a Linear Foot (L.F.) basis and will include: excavation of a trench and removal of the existing main, installation of 8-inch sewer line, trench backfill using granular backfill, connecting couplings and fittings (unless payment is provided for in other items) testing, handling of sewage during construction, disposal of the existing main line piping and excavated material and all other incidental work and materials. Surface restoration will be paid for under other pay items. PVC pipe will consist of 8-inch ASTM D3034, SDR 35 for open cut locations. Payment will be on a Linear Foot basis for the total length of the new sanitary sewer main installed, complete. The pay length will be the length of new pipe installed as measured from center of manhole to center of manhole. CDF backfill where required will be paid under Item 861.

NOTE: This item is subject to material price escalation/de-escalation, see part 2 of this section.

263. 24-inch ASTM F679 Sanitary Sewer: Payment for furnishing and installing 24-inch PVC sanitary sewer main line will be on a Linear Foot (L.F.) basis and will include: excavation of a trench, installation of 24-inch sewer line, trench backfill using granular backfill, connecting couplings and fittings (unless payment is provided for in other items) testing, handling of sewage during construction, disposal of the excavated material and all other incidental work and materials. Surface restoration will be paid for under other pay items. PVC pipe will consist of 24-inch ASTM F679 for open cut locations. Payment will be on a Linear Foot basis for the total length of the new sanitary sewer main installed, complete. The pay length will be the length of new pipe installed as measured from center of manhole to center of manhole. CDF backfill where required will be paid under Item 861.

NOTE: This item is subject to material price escalation/de-escalation, see part 2 of this section.

271. 2-Way Lateral Cleanout 6-inch: Payment for furnishing and installing 2-way PVC cleanouts, risers, plugs, and connecting couplings shall be on a per EACH basis, complete. See detail in Plan Sheets.
272. Traffic Rated Cleanout Box and Cover: Payment for furnishing and installing traffic-rated cast iron frame and cover in a concrete ring shall be on a per EACH basis, complete. See detail in Plan Sheets.
273. Plastic Cleanout Box and Cover: Payment for plastic box and cover shall be on a per EACH basis, complete. The plastic frame and cover to be used is manufactured by Dura Plastic Products, Inc. Model Number 101, or approved equal.
274. 8-inch Cleanout with Traffic-Rated Cover: Payment for 8-inch Cleanout with Traffic-Rated Cover shall be per EACH.

277. New 48-inch Sanitary Sewer Manhole 0-8 ft Depth: Payment for furnishing and installing manholes 0-8 feet in depth shall be per EACH.
- 277a. Add Depth to 48-inch Manhole: Measurement and payment for additional depth of manhole shall be by Linear Foot (L.F.).
278. New 60-inch Sanitary Sewer Manhole: Payment for furnishing and installing 60-inch diameter manholes shall be per EACH.
279. New 72-inch Sanitary Sewer Manhole: Payment for furnishing and installing 72-inch diameter manholes shall be per EACH.
- 279a. New 84-inch Sanitary Sewer Manhole: Payment for furnishing and installing 84-inch diameter manholes shall be per EACH.
280. New 96-inch Sanitary Sewer Manhole: Payment for furnishing and installing 96-inch diameter manholes shall be per EACH.
281. Traffic-Rated Manhole Collar: Payment for Traffic-Rated Manhole Collar as shown on the Plan Sheets shall be per EACH.
283. Siphon System Complete: Payment for siphon system (STA 21+31 to 21+82) including concrete channel demolition and restoration, excavation, 10-inch C900 SDR 25 pipe section, 18-inch C905 SDR 25 pipe section, pipe bedding and backfill, structure backfill, and any other related work not covered by other items shall be by Lump Sum (L.S.). Manholes, Jersey Barrier work and controlled density fill are paid under other items.
287. Bore and Jack for 24-inch Pipe: Measurement and payment for boring and jacking a 42-inch steel casing and placing a 24-inch ASTM 679 sanitary sewer carrier pipe under Highway 126 shall be by Linear Foot (L.F.). See Section H of these Special Provisions and Additional Technical Specifications.
288. Bore and Jack for 24-inch Pipe Through Rock: Measurement and payment for boring and jacking a 42-inch steel casing through rock and placing a 24-inch ASTM 679 sanitary sewer carrier pipe under Highway 126 shall be by Linear Foot (L.F.). See Section H of these Special Provisions and Additional Technical Specifications.
297. 10-inch ASTM D3034 Storm Sewer: Measurement and payment for 10-inch storm sewer shall be by Linear Foot (L.F.) and shall include: excavation of a trench and removal of the existing storm sewer where it conflicts with trenching for sanitary sewer, installation of new 10-inch storm sewer line as shown in plans, trench backfill

using granular backfill, connecting couplings and fittings (unless payment is provided for in other items), video inspection and handling of storm water.

300. 15-inch ASTM D3034 Storm Sewer: Measurement and payment for 15-inch storm sewer shall be by Linear Foot (L.F.) and shall include: excavation of a trench and removal of the existing storm sewer where it conflicts with trenching for sanitary sewer, installation of 15-inch storm sewer line, trench backfill using granular backfill, connecting couplings and fittings (unless payment is provided for in other items), video inspection, and handling of storm water.
331. Catch Basin: Measurement and payment for new catch basins shall be per EACH and shall include all materials, connectors and labor to install and connect the catch basins. See Standard Drawing 4-11.
332. Curb Inlet Catch Basin Type 2 1/2A: Measurement and payment for new curb inlets shall be per EACH and shall include all materials, connectors and labor to install and connect the curb inlet catch basins. See Standard Drawing 4-9.
457. 6-inch X 8-inch X 8-inch ASTM D3034 Tee: Payment for PVC Tee's shall be per EACH.
458. 8-inch X 24-inch X 24-inch ASTM F679 Tee: Payment for PVC Tee's shall be per EACH.
460. 10-inch X 15-inch X 15-inch ASTM D3034 Storm Tee: Payment for PVC Tee's for stormwater pipe shall be per EACH. Payment for this item shall include all labor and fittings to excavate, cut the existing 15-inch concrete pipe, install the tee and connect the concrete pipe to the tee.
461. Connect 10-inch PVC Storm Pipe to Manhole: Payment for connecting PVC storm pipe to manhole shall include all labor and materials to remove the existing concrete pipe and connect the new pipe and shall be per EACH.
861. Controlled Density Fill: CDF shall be measured and paid by the Cubic Yard (C.Y.) for manholes and other excavations in paved streets. CDF is required for the top two feet of backfill below the paved surface. Refer to Section 405.2.04 of the Standard Specifications.
862. Private Property Documentation: Payment for photographic documentation of pre-construction and post-construction conditions on all private properties and obtaining approvals and releases from all private property owners shall be on a Lump Sum (L.S.) basis, complete.

PART 2 MATERIAL PRICE ESCALATION/DE-ESCALATION

Certain Pay Items in this project will be subject to the requirements of material price escalation/de-escalation as follows:

2.1 PVC Material Price Escalation/De-Escalation Clause

A PVC escalation/de-escalation clause will be in effect during the life of the Contract.

A. Monthly PVC Materials Value (MV) and Base PVC Materials Value (BV)

The Monthly PVC Materials Value (MV) will be established by McGraw-Hill Engineering News Record (ENR) from the monthly published price for 8-inch diameter PVC sewer pipe for Seattle, Washington.

The Base PVC Materials Value (BV) for this Project will be the MV published in the month of the bid opening in ENR magazine. The MV and BV will be available at the ENR website at:

<http://enr.construction.com/>

If the selected index ceases to be available for any reason, the ENGINEER in its discretion will select and begin using a substitute price source or index to establish the MV each month. The ENGINEER makes no guarantee that PVC material will be available at any stated or implied materials price.

B. Monthly PVC Materials Price Adjustment

A PVC price adjustment evaluation will be made for the PVC pipe. No adjustments will be made using the BV or MV until such time as they are listed as final values by ENR. The price adjustment as calculated in this provision for the PVC pipe will use the MV for the month that the pipe is ordered from the pipe manufacturer/supplier, thus establishing a price for the pipe. The CONTRACTOR shall submit copies of invoices from the pipe manufacturer/supplier that shows the date the materials were ordered, the quantities of pipe materials and the price of the pipe. A price adjustment for the PVC pipe will be considered as per the above. A price adjustment for the PVC Pay Items will only be made if the MV for the month that the pipe is purchased differs by more than 5% from the BV. A PVC materials price adjustment will be made for the PVC pipe Pay Items identified below only.

The Monthly PVC Materials Price Adjustment will be determined as follows:

- If the MV is within 5% ± of the BV, there will be no adjustment.

- If the MV is more than 105% of the BV, then:

$$PA = (((MV-BV) \div BV) - 0.05) \times ((BV \div MV) \times (PIP))$$

- If the MV is less than 95% of the BV, then:

$$PA = (((MV-BV) \div BV) + 0.05) \times ((BV \div MV) \times (PIP))$$

Where:

- PA = Price Adjustment, dollars
 MV = Monthly PVC Materials Value from ENR for 8-inch diameter PVC sewer pipe for Seattle, Washington for the month determined above
 BV = Base PVC Materials Value from ENR for 8-inch diameter PVC sewer pipe for Seattle, Washington from month of the bid opening
 PIP = Amount paid for PVC pipe material only, based on invoices provided by the CONTRACTOR, for the month for which the adjustment is made

C. PVC Materials Pay Items

A PVC material price adjustment for fluctuations in the cost of PVC will apply only to the major PVC usage Pay Items shown in the following list:

PAY ITEM DESCRIPTION

6-inch ASTM D3034 SDR 35 Sanitary Sewer

8-inch ASTM D3034 SDR 35 Sanitary Sewer

24-inch ASTM F679 Sanitary Sewer

- D. Regardless of the number of Pay Items listed, the PVC price escalation/de-escalation clause (and program) contained in this Section are included in this Contract and are the only PVC price escalation/de-escalation clause (and program) that apply to this Contract.

END OF SECTION

**P21037
SECTION C**

**PRIVATE PROPERTY CONDITION DOCUMENTATION AND
OWNER APPROVAL**

PART 1 GENERAL

1.1 Description

This work consists of providing photographic documentation of pre-construction and post-construction conditions on all private properties and obtaining approvals and releases from all private property owners who may be impacted by the construction of the project.

1.2 Photographic Documentation of Pre-Construction and Post-Construction Conditions

The CONTRACTOR shall provide to the ENGINEER photographic documentation of pre-construction and post-construction conditions on all private properties. The CONTRACTOR shall provide to the ENGINEER digital photos of each area of work on private properties sufficient to document the conditions prior to the start of the CONTRACTOR'S work and immediately after completion of the CONTRACTOR'S work. Submit all photos to the ENGINEER by Line and Street Address in an organized manner on compact discs before Final Payment.

1.3 Not Used

1.4 Property Owner Approval and Release

Prior to final payment, the CONTRACTOR shall obtain a release from the property owner on a form prepared by the ENGINEER confirming that the site restoration work is satisfactory to the property owner. All releases shall be submitted to the ENGINEER before Final Payment.

CONTRACTOR shall show that at least two attempts were made to secure property owner approval sign-off. A list of affected property owners by address shall be submitted showing attempts made and status of property owner approval sign-off.

END OF SECTION

P21037
SECTION D

SITE PREPARATION

PART 1 GENERAL

1.1 Description

Work includes all demolition and clearing indicated on the plans or required for completion of work specified elsewhere.

1.2 Site Conditions

- A. Existing Conditions - CONTRACTOR shall determine extent of work requirements and limitations before proceeding with work. See Section C, Private Property Condition Documentation and Owner Approval.

- B. Protection - Protect existing site improvements, trees and shrubs against cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of roots by stockpiling construction materials, excavated materials, excess foot or vehicular traffic and parking of vehicles within drip line. Provide temporary guards, as necessary, to protect trees and vegetation to be left standing. Repairable damage to trees designated to remain shall be made by a professional tree surgeon approved by the ENGINEER. Cost shall be borne by the CONTRACTOR.

- C. Existing Utilities - Before starting any site work, call One Call for utility locates and to notify utility agencies; disconnect or arrange for disconnection of utilities (if any) affected by required work. Keep all active utilities intact and in continuous operation.

PART 2 PRODUCTS

2.1 Ownership of Existing Materials

All materials, equipment, items and debris involved, occurring or resulting from demolition, clearing and grubbing work shall become the property of the CONTRACTOR at the place of origin except as otherwise indicated.

2.2 Wound Paint

Emulsified asphalt formulated for use on damaged plant tissues, as approved by the ENGINEER.

PART 3 EXECUTION

3.1 Workmanship

Perform work in accordance with recognized standard and efficient methods. Operators of equipment shall be conscientious and skilled.

3.2 Clearing

- A. Clearing - Remove trees, saplings, snags, stumps, shrubs, brush, vines, grasses, weeds and other vegetative growth within the work area zone except those trees and shrubs noted to remain or as directed by the ENGINEER. Clearing shall be performed in such a manner as to remove all evidence of the presence of vegetative growth from the surface of the project site as required for construction and shall be inclusive of sticks, branches, grasses and weeds, except as otherwise indicated.
- B. The CONTRACTOR shall remain within the easement lines at all times.
- C. Except in areas to be excavated, all holes resulting from the clearing and grubbing operations shall be backfilled and compacted in accordance with the applicable sections of these Specifications.

3.3 Preservation and Trimming of Trees, Shrubs and Other Vegetation

The CONTRACTOR shall avoid injury to trees, shrubs, vines, plants, grasses and other vegetation growing outside of the areas to be cleared and grubbed and those trees and shrubs designated to be preserved. Provide protection for roots and limbs over 1-1/2-inch diameter cut during construction operations. Coat the cut faces with emulsified asphalt. Temporarily cover exposed roots with wet burlap to prevent roots from drying out; cover with earth as soon as possible.

3.4 Landscaped Areas

When necessary for the completion of the proposed work crosses private property or landscaped areas, the CONTRACTOR shall excavate the topsoil separately and pile it on the opposite side of the trench from the subsoil and shall conduct his work in a manner that will restore original conditions as nearly as practicable. All shrubs or plants shall be balled by experienced workers, carefully handled and watered, and replaced in their original positions without damage. Sod shall be handled in a similar manner. Wherever sod cannot be saved and restored, the ground must be reseeded and cared for until a stand of grass is reestablished. Plants or shrubs killed or destroyed must be paid for by the CONTRACTOR. Unless otherwise specified, any

resulting voids shall be thoroughly checked for drainage and backfilled imported material compacted to the density of the adjacent soil.

See Section B, Measurement and Payment, and City of Springfield Standard Specifications for lawn and landscaping restoration. All costs incurred by the CONTRACTOR shall be absorbed in the unit prices of his bid unless otherwise specified.

3.5 Demolition, Removal and Disposal

Remove from the project site all debris, materials, equipment and items found thereon and materials and debris resulting from the work of demolition except as otherwise indicated. All existing improvements designated on the Plans or specified to be removed including but not limited to structures, pipelines, walls, footings, foundations, slabs, pavements, curbs, fencing and similar structures occurring above, at, or below existing ground surface shall be included in the demolition work.

- A. Removal - All material resulting from demolition and clearing and trimming operations shall be removed from the project site and disposed of in a lawful manner. No burning of debris or any other discarded material will be permitted. Materials placed on property of private property OWNERS shall be by written permission only.
- B. Clean-up - During the time that the work is in progress, the CONTRACTOR shall maintain the site in a neat and orderly condition. All refuse, broken pipe, excess fill material, cribbing and debris shall be removed as soon as practicable. Should the work not be maintained in a satisfactory condition, the OWNER may cause the work to stop until the clean-up of the work has been done to the satisfaction of the ENGINEER. The work will not be considered complete or the final payment certificate issued until all rubbish, unused material, or equipment shall have been removed and the premises left in a condition satisfactory to the OWNER and the ENGINEER.

END OF SECTION

P21039
SECTION E

SEWAGE DIVERSION AND BY-PASS PUMPING

PART 1 GENERAL

1.1 Description

This Section includes the work necessary for sewage diversion and by-pass pumping as needed for construction on existing active sewage facilities.

1.2 Requirements

A. The CONTRACTOR shall submit a "Sewage Diversion and By-Pass Pumping Plan" to the ENGINEER prior to the start of construction. Under no circumstances shall sewage be allowed to flow or leak onto the ground surface, into gutters or onto streets, over sidewalks, or into storm inlets. All diverted sewage shall be discharged back to the existing sanitary sewer system. The Sewage Diversion and By-Pass Pumping Plan shall outline the CONTRACTOR's proposed method of handling all sewage flow during all elements of construction. The plan shall show all flow inputs (connections) in the work area and how the flow from each connection will be managed. Flow inputs shall be confirmed by the contractor during initial field surveys and television inspections. The contractor shall provide complete diversion regardless of flow rate. Additionally the plan shall contain, at a minimum, a plan view of each proposed diversion on a site map and the individual components of the diversion including but not limited to:

1. Pumps: type, size and placement
2. Diversion pipe: size, type, and placement
3. Power supply to pumps
4. Method of damming the flow
5. Facilities for redundancy

B. When necessary to provide for the construction on an existing sewer system, the flow shall be diverted by the use of pumps to a manhole downstream of the construction. The CONTRACTOR shall have adequate pumps and piping or alternative methods to divert flow to the downstream sewer lines. The pumping or transportation capacity shall be sufficient to maintain normal sewage flows plus additional flows that may occur during a rainstorm.

- C. Sewage diversion piping shall be buried or arranged such that the piping is protected from traffic loads, traffic is maintained at driveways and roadways, and sidewalks are free of obstruction unless otherwise approved by the ENGINEER. All sewage diversion piping shall be water-tight. Surface restoration that is required for installing sewage diversion piping and other appurtenances is incidental to the sewage diversion and by-pass pumping pay item.
- D. The CONTRACTOR shall use critically silenced generators and pump units with hospital-grade mufflers and shall meet or exceed the requirements of any local noise ordinances. Such approved generators and accompanying pumps shall be continuously monitored while in operation and shall be placed to minimize disturbances to residential areas. If necessary to meet noise ordinances, sound baffles and temporary sound walls shall be installed to deflect sound from generators and bypass-pumps away from residential areas or as directed by the ENGINEER. No variance from any local noise ordinances will be allowed unless the CONTRACTOR secures a noise variance at no additional expense to the OWNER.
- E. Diversion of all sewage flow shall be maintained at all times. The CONTRACTOR shall provide a qualified operator who is capable of making emergency repairs or who is able to mobilize forces to handle power, pump or other problems. This operator shall be on site immediately near the pumping system at all times. The CONTRACTOR shall be responsible for continuity of sewer service to each facility connected to the section of the sewer being impacted during the execution of the work. Diversion pumping equipment and piping shall be tested for leaks prior to pumping sewage. Leak testing shall be performed any time the diversion pumping system is disassembled, reassembled and/or modified. No leaks in the diversion piping shall be permitted. Only potable water shall be used for leak testing of pipes. Diversion pipes shall be cleaned and disinfected prior to disassembly and the liquid shall be discharged into an existing sanitary sewer. Service connections or laterals shall not be disconnected or plugged overnight. Service must be restored to service connections or laterals within the normal work day.
- F. Each sewage diversion pump shall be powered by a dedicated power generator and shall operate as a single pumping unit. For system redundancy, the CONTRACTOR shall have on site an equivalent back-up sewage pumping unit for each pumping operation.
- G. Flow diversion piping and pumps shall be free of leaks. Leaking pipes and pumps shall be replaced immediately. Sewage spills shall be cleaned up immediately. If a sewage release occurs during any sewage diversion activity, the CONTRACTOR shall be responsible for taking immediate action to cease, contain, and clean up the release, and to notify the proper authorities. The

CONTRACTOR shall have sufficient equipment and materials at the work site to cease, contain and cleanup any sewage release that occurs during diversion operations and will be responsible for all costs associated with sewage spill cleanup including associated fines. The CONTRACTOR shall be responsible for cleanup, repair, property damage costs and claims.

H. No sewage diversion operations may proceed unless the CONTRACTOR has, at the work site, the following items:

1. Dry granular lime, of sufficient quantities, to be spread on any release for purposes of disinfectant. A 10% bleach solution may also be used as a disinfectant. Disinfectants may not be directly applied to any surface waters, streams, creeks, etc.
2. Equipment to secure the area of sewage release and isolate the public from accessing the release site. As a minimum this shall include barricades and caution tape.
3. The equipment and materials on hand to stop the release and repair the failed item.
4. Equipment and materials to clean the site, rake up solid debris and to dispose of material properly.

I. In case of sewage release during diversion operations, the CONTRACTOR shall immediately contact the following authorities notifying them of the release:

1. City of Springfield On-Site Project Inspector
2. If the Project Inspector is not capable of being immediately notified, then contact the City of Springfield Collection System Compliance Officer or their Designee. Those individuals are:
 - a) Collection System Compliance Officer – Brian Conlon – Phone: 541-726-3753
 - b) Designee – Mike Riskey – Phone: 541-726-3615

The representative of the City of Springfield shall report the sewage spill within 24 hours to the Oregon Department of Environmental Quality and any other appropriate entities. Even if a sewage spill or release is contained within an excavation, the spill or release must be reported.

Failure by the CONTRACTOR to report a spill or release to the appropriate City representative will result in liquidated damages in the amount of \$500.00 per

incident plus an amount sufficient to reimburse the City for any civil and administrative penalties paid by the City as a result of the CONTRACTOR's failure to report as described above.

J. The CONTRACTOR shall be responsible for providing the following information to the authorities in case of a spill or release:

1. Release location
2. Date and time release found or started and time stopped
3. Release flow rate and estimated total volume
4. Receiving stream, if any
5. Action taken to stop release
6. Cause of release
7. Clean-up actions taken
8. Any other information as requested by relevant authorities

K. Upon completion of construction, all flow diversion piping and pumps and related facilities shall be removed and all affected areas restored to their prior condition.

END OF SECTION

P21037
SECTION F
AC PIPE REMOVAL

SECTION 1: SCOPE

1.1.00 DESCRIPTION

The work addressed in this section is the removal of approximately 5,500 linear feet of asbestos cement sewer pipe and an additional 40 linear feet of asbestos-cement water pipe. The work shall include permits, mobilization of equipment, insurance coverage, bonding, preparation of job site, security measures, temporary traffic control, and clean-up necessary for satisfactory completion of work under this item. Excavation and backfill for the 40 linear feet of AC water line and for approximately 500 linear feet of AC sewer in 10th street will be paid under item 071. The excavation and backfill for most of the AC sewer pipe removal will be paid for as part of the new pipe installation.

SECTION 2: PIPE REMOVAL

This section covers removing, handling, transporting, and disposal of asbestos containing materials, see ORS 468A.700 to 468A.760.

2.1.00 GENERAL

The Contractor shall be fully responsible for the quality and performance of all work required to be furnished by him/her and shall correct any defect in work or material in compliance with the provisions of the Contract and to the satisfaction of the Engineer.

2.2 HANDLING

Handling of pipe shall be in accordance with the requirements of the Lane Regional Air Protection Agency. All pipe and accessories shall be handled in such a manner as to insure removal from the trench without causing the pipe to shatter, crumble, be pulverized, or release free asbestos fibers.

Contractor shall remove and dispose of all asbestos containing materials encountered. Contractor is responsible for proper identification, handling, and disposal of asbestos materials. Contractor shall provide properly trained and certified workers and shall be prepared to deal with both friable and non-friable forms of asbestos pipe. Permit and permit fees related to this work shall be the Contractors responsibility. Contractor is solely responsible for pursuing work in a way that is consistent with all

state, local, and federal rules, regulations, and guidelines. An asbestos management plan shall be provided to engineer five days prior to the preconstruction conference addressing the following:

- Personnel training and experience
- Subcontracted specialists including contact information
- Anticipated work scope and contingency measures
- Worker safety and OSHA compliance
- LRAPA Permitting and compliance
- Plan for removal and disposal of friable material
- Plan for removal and disposal of non-friable material.

2.3 DISPOSAL OF MATERIAL

The Contractor shall remove all asbestos contaminated excavated material from the project site for disposal at a landfill licensed to handle asbestos waste.

2.4 CAPPING WATER LINE

After the section of AC water line is removed, the contractor shall cap the ends of the remaining pipe with cement grout.

NOTE: An inspection is required by Springfield Utility Board for the capping of the existing water line. Contact Ladd Boyce at (541) 501-0749 to schedule an inspection.

SECTION G

TRAFFIC CONTROL

PART 1 GENERAL

1.1 Summary

This item shall include the submission of a traffic control plan (TCP) for work within the public right-of-way during all phases of work. The plan shall show each individual phase of the project with a schedule and map showing placement and description of each temporary traffic control device. The plan shall comply with the current Manual on Uniform Traffic Control Devices (including the Oregon Supplements) and the current Oregon Department of Transportation "Oregon Temporary Traffic Control Handbook." The plan must illustrate changes in lane usage, locations, and types of traffic control devices, and shall encompass advanced warning for all intersecting streets.

1.2 Related Specifications

- A. Springfield Standard Construction Specifications
- B. Manual on Uniform Traffic Control Devices for Streets and Highways

1.3 Submittals

- A. Traffic Control Plan: Traffic Control Plan(s) (TCP) shall be submitted for all projects in the public right-of-way no later than two (2) weeks before work begins and **shall be submitted using the attached City of Springfield TCP submittal form.** If this plan is not received and approved prior to starting, the Engineer reserves the right to shut down all work at the contractors expense (with a written stop work order to follow within 24 hours) until a plan has been approved and implemented. Any sidewalk closures or detours shall also be noted and submitted with the traffic control plan.

PART 2 PRODUCTS

2.1 Equipment

- A. The devices to be furnished and used by the Contractor and their placement shall conform to the requirements indicated on the plans. Cases, conditions, and details not covered on the plans shall conform to the applicable provisions of Part IV of the Manual on Uniform Traffic Control Devices for Streets and Highways (M.U.T.C.D.), including the current Oregon Supplements.

PART 3 EXECUTION

3.1. Temporary Traffic Control

- A. No work shall be permitted until the area has been signed as per the approved Traffic Control Plan. The signing shown on the traffic control plan is the minimum required signing. All signs, barricades, cones, flaggers, and other such "devices" to warn, safeguard, protect, guide, and inform the public and the workers during the life of the project shall be furnished, constructed, installed, maintained, moved and removed by the Contractor.
- B. The Contractor has the obligation to determine how to construct the project and control traffic throughout the area during the construction period with a proper TCP. Traffic detours must follow arterials and/or collectors. Lane shifts and lane reductions will be allowed.
- C. Proposed traffic control may include plans for single lane operations on Q Street with appropriate signage and flaggers. Full movement bi-directional operation of Q Street shall be restored and maintained thru the facilities PM peak period of 4:00pm to 6:00 pm for all days of the week.
- D. All work areas shall be properly controlled for pedestrian and bicycle safety in addition to standard vehicle traffic and shall comply with the standards stated above. All relevant government agencies shall be notified with relative permits and documentation provided for detours and road work to be performed.

3.2 Signing

- A. Existing Signing: All existing guide signs, warning signs, and regulatory signs shall be maintained at locations readily visible to the traveling public throughout the life of the project, or until new signs replacing them are installed, whichever occurs first.
- B. Construction Signing: All temporary construction signs when not in use shall be either covered or moved so as not to be seen by the traveling public. If construction signing is left in effect when there is no need, the Contractor has 2 hours after notification to cover or move these signs. If the Contractor has not taken care of the signs beyond 2 hours of notification, the Engineer reserves the right to have City of Springfield employee/s move or cover the signs and bill the Contractor for time and materials (1 hour minimum).

C. Measurement and payment of traffic control devices for temporary business access shall be considered as incidental to the construction of the work and all costs thereof shall be included in the various contract prices in the bid forms.

D. Project Information Signage:

The CONTRACTOR shall furnish and install project information signs in accordance with the following requirements:

1. For a project located on a confined site such as a reservoir, pumping station, well house, treatment plant, or similar facility, one project information sign shall be required. For a project located on a public right of way such as a pipeline project, a project information sign shall be installed facing each direction of traffic at each location where traffic is entering the work area.
2. A submittal for the project information sign(s) shall be prepared for the ENGINEER'S approval prior to fabrication.
3. The CONTRACTOR shall install the project information sign(s) at location(s) as directed by the ENGINEER.
4. No construction work shall commence on the project site until the project information signs are installed.
5. The CONTRACTOR shall maintain the signs through the duration of the project.
6. The cost of furnishing, installing and maintaining the project information signs shall be included in the CONTRACTOR's bid item for traffic control. (Bid Item #061 Lump Sum) A minimum of two project information signs shall be considered for bidding purposes.

The project information sign(s) shall be constructed of 3/4-inch thick plywood with a finish grade of veneer on the sign face. The sign(s) shall be sized as necessary to accommodate the required project information. The sign(s) shall be securely attached to a minimum of two 4-inch square treated wood posts for each 4-foot by 8-foot panel. The sign(s) shall be installed such that the top of the sign is approximately 10 feet above grade or as necessary to permit proper public viewing. The wood posts shall be buried at least 3 feet below grade. Provide adequate supports for the sign(s) as site conditions dictate. The sign(s) shall have black letters on a white background and they shall be the product of a commercial sign manufacturer or supplier. Logos shall be color. The letters shall be at least 4-inches in height.

The sign(s) will contain basic project information including: Project name, estimated project duration, project construction cost, project OWNER's name and OWNER's contact and phone number, ENGINEER's name, CONTRACTOR's name, OWNER's and ENGINEER's company logos, the CONTRACTOR's logo if the CONTRACTOR so desires, any funding agency logo(s) along with any required wording from those agencies. The logos shall be sized such that they are visible from a distance approved by the ENGINEER. The OWNER, ENGINEER and funding agencies will provide electronic images of their logos for the CONTRACTOR's use in developing the signs.

END OF SECTION

P21037
SECTION H
CASING PIPE – BORING AND JACKING

PART 1 GENERAL

1.1 Description

- A. Work under this section includes all labor, equipment and materials required for constructing cased crossings by boring and jacking as shown on the Plans. The CONTRACTOR shall furnish and install steel casings, carrier pipe, sand fill, and grout, complete and in place, all in accordance with these provisions and as shown on the Plans.

- C. The CONTRACTOR shall be responsible for maintaining the specified line and grade of the casing and carrier pipe.

- D. The plans and these specifications indicate a specific type (bored/jacked), size, wall thickness and other required characteristics of casing to be installed at the crossing. The CONTRACTOR may propose to install casing type and size other than those specified on the plans and in these specifications. No changes will be allowed without the prior approval of the ENGINEER. If the CONTRACTOR receives approval by the ENGINEER to install casing type and size other than those specified on the plans and in these specifications, it is the CONTRACTOR's responsibility to ensure that casing type and size are fully compatible with project constraints, including traffic control, project work limits, roadway and utility system shut down requirements, work hour limitations, and adjacent structures.

1.2 Reference Specifications, Codes, and Standards

ANSI/AWS D1.1, Structural Welding Code

ANSI/AWWA C200, Standards for Steel Water Pipe (6 inches and larger)

ODOT Permit 05M4307 (Attached)

1.3 Submittals

- A. The CONTRACTOR shall submit Shop Drawings of casings. Shop Drawings shall include the following:

1. Casing installation schedules, including excavation, pipeline installation, and backfill operations.
 2. Material list, including diameter, thickness, and class of steel casings and the type of insulators to be used.
 3. Method of sand fill installation and quality assurance.
- B. The CONTRACTOR shall submit a plan to be approved by the ENGINEER for preventing loss-of-ground, settlement and surface deflection during all casing installation and related work. This plan shall also include the CONTRACTOR's method for monitoring surface settlement and surface deflection of existing ground above the casing alignment during all casing installation and related work.
- C. The CONTRACTOR shall furnish a certified affidavit of compliance for all pipe and other products or materials furnished under this Section which shall include the physical and chemical properties of all steel.

1.4 Quality Assurance

- A. The CONTRACTOR shall give the ENGINEER one (1) week advance notice prior to the start of any excavation.
- B. All work shall be performed in the presence of the ENGINEER, unless the ENGINEER has granted prior approval to perform such work in their absence.
- C. All shop and field welding procedures used to fabricate steel casings shall be prequalified under the provisions of ANSI/AWS D1.1. Welding procedures shall be required for, but not necessarily limited to, longitudinal and girth or special welds for pipe cylinders, casing joint welds, reinforcing plates and grout coupling connections.
- D. All welding shall be done by skilled welders, welding operators, and tackers who have had adequate experience in the type of materials, welds, and positions to be used. Welders shall be qualified under the provisions of ANSI/AWS D1.1 by an independent local, approved testing agency prior to commencing work on the casing or pipeline. Machines and electrodes similar to those used in the work shall be used in qualification tests. The CONTRACTOR shall furnish all materials and bear the expense of qualifying welders.

1.5 Safety

It shall be the CONTRACTOR's responsibility to see that the work is done in conformance with all applicable federal, state, and local safety requirements.

1.6 Definitions

- A. Boring Through Unclassified Material: With respect to tunneling, boring and jacking, the above term is defined as all excavation, regardless of type, character, composition or condition of the material encountered and shall further include all debris, junk, broken concrete, and all other material. All excavation shall be unclassified unless provided for otherwise elsewhere in these specifications.

- B. Boring Through Rock: With respect to tunneling, boring and jacking, the above term is defined as the removal of rock by systematic and continuous drilling and splitting, or the necessary use of special rock cutting heads as demonstrated to the ENGINEER for rock removal. Rock is defined as material which, by actual demonstration, cannot be reasonably excavated with standard equipment and shall be considered where 50 percent or more of the cross-sectional face requires removal as described above. The above term shall be understood to indicate a method of removal and not a geological formation.

PART 2 PRODUCTS

2.1 General

The CONTRACTOR shall use the types of materials as designed and specified herein for all required cased crossing construction.

2.2 Casing

- A. Tunneled/bored/jacked casings shall be steel as shown on the drawings or herein specified.

- B. The steel casing pipe shall be the minimum diameter and wall thickness shown on the plans or herein specified and shall be furnished complete with welded joint ends. The casing shall conform to ANSI/AWWA C200. Larger pipe diameter or greater wall thickness may be substituted at the CONTRACTOR's option and with the approval of the ENGINEER. All CONTRACTOR proposals for changing the casing and appropriate insulator modifications shall be submitted to the ENGINEER for approval prior to installation. It shall be

the CONTRACTOR's responsibility to provide casings with a wall thickness capable of withstanding jacking stresses.

- C. The steel casing shall be fabricated in sections with field-welded full penetration butt weld joints. It shall be the CONTRACTOR's responsibility to provide joints capable of withstanding jacking stresses.

2.4 Casing Insulators

The carrier pipe shall be installed with casing insulators banded to it for guides and support as shown on the plans. Insulators shall be a minimum of 12 inches wide. A minimum of three (3) insulators shall be installed on each pipe length at a maximum spacing of eight (8) feet unless closer spacing is recommended by the manufacturer. The casing insulator shall be constructed of heat-fused plastic coated galvanized steel with built up PVC lining and multi-segmented to attach firmly around the pipeline. Insulators shall be fabricated for a carrier-pipe-centered configuration with a minimum of two (2) skids on top and two (2) on the bottom. Insulator skids shall be sized to provide clearance of carrier pipe bell coupling, or retainer gland and not more than 1-1/2 inch of clearance from the top skids to the inside top of the casing. The casing insulators shall be M-12 Series, as manufactured by Calpico, Inc. or approved equal. Insulators shall be sized to fit and attach to the carrier pipe material including any identified special coatings without damage.

2.5 Sand

Sand filling is to be fine dry clean sand. The sand shall be thoroughly washed and reasonably free of clay, loam, shale, alkali, vegetable matter, and other deleterious matter occurring either free or as a coating on the particles.

2.6 Cement Grout

Cement grout shall consist of one (1) part Portland Cement, three (3) parts clean, well-graded sand and a minimum amount of water.

2.7 Carrier Pipe

Carrier pipe shall be as provided for elsewhere in these specifications.

PART 3 EXECUTION

3.1 General

- A. Unless otherwise provided, the CONTRACTOR shall furnish and install all fittings, closure pieces, jointing materials and all appurtenances as shown and as required to provide a complete and workable installation. All fabrication and testing shall comply with the requirements listed herein.
- B. The CONTRACTOR's attention is directed to the site plans which show the close proximity of adjacent structures and utilities to the proposed boring and casing areas. The CONTRACTOR shall be responsible for providing all shoring as may be required to maintain a safe excavation and shall at all times provide sufficient support and protection for existing structures and utilities, all at no additional expense to the OWNER. The CONTRACTOR shall keep the size of boring, jacking, receiving, and push pits to a minimum.
- C. The CONTRACTOR shall carefully study the plans and specifications applicable to the work involved, contact the ENGINEER of any irregularities or difficulties, and become familiarized with the conditions, nature of excavation, and difficulties involved with installing pipe and casings.
- D. Failure on the part of the CONTRACTOR to properly assess the factors, conditions and difficulties involved in the performance of the work will not entitle extra compensation of any kind, nor relieve any obligation for executing all details of the work as specified and planned. The CONTRACTOR shall assess push pits associated with open trench installed casings, as well as boring, jacking, and receiving pits.
- E. Prior to moving the bore machine from the project, the CONTRACTOR shall verify that the installed casings are of sufficient length to facilitate construction of all drawing details. The plans identify the approximate casing length only. It is solely the CONTRACTOR's responsibility to field verify that the casing ends terminate at a location which will facilitate the construction of all drawing details.
- F. The CONTRACTOR shall monitor surface settlement and surface deflection of existing ground above the casing alignment during all casing installation and related work.

3.2 Installation of Casings

- A. Allowable grade deviations in horizontal and vertical alignments shall be no greater than 0.1 feet per 100 feet in any direction over the length of the casing

to a maximum deviation of 0.25 feet.

- B. The CONTRACTOR shall backfill all pits excavated for casings with compacted material (select backfill, native or imported as required for adjacent trench or as otherwise specified or shown on the drawings) once construction is completed. Backfill shall be placed and compacted in accordance with the Typical Trench Detail as shown on the Plans and the City of Springfield, Standard Construction Specifications.
- C. Compensation will be made for the casing installation as defined in the measurement and payment provisions located elsewhere in these specifications and regardless of the material encountered - unclassified material and rock material.

3.3 Installation of Carrier Pipe

- A. Installation of carrier pipe shall be in accordance with ANSI/AWWA C600. All joints of the carrier pipe within the casing shall be push-on or restrained joints as shown on the plans and shall be in accordance with the specification sections for the type of pipe material installed. Application of any coatings to the interior and exterior joints shall be performed in accordance with the requirements provided for elsewhere in these specifications.
- B. Installation of insulators onto carrier pipe and the subsequent installation of carrier pipe shall not damage, rupture or tear any carrier pipe or coatings. In the event of such damage, the CONTRACTOR shall repair or replace pipe or coating systems.
- C. Testing of carrier pipe shall be performed in accordance with the City of Springfield, Standard Construction Specifications.

3.4 Installation of Sand Fill

Following the ENGINEER's review of the casing and carrier pipe grade and alignment, the CONTRACTOR shall fill the annular space between the carrier pipe and casing pipe with dry sand. The sand shall be air blown into the annular space in a manner, which assures no voids around the carrier pipe. Prior to commencing this work, the CONTRACTOR shall submit to the ENGINEER for approval, the proposed method of installing the fill sand and of verifying no voids. The CONTRACTOR shall not mix sand from different geological sources. The carrier pipe shall be filled with water, or other measures shall be taken to prevent movement of the carrier pipe prior to installing sand fill. Air blown sand operations shall meet DEQ and Lane Regional Air Protection Agency Requirements.

3.5 Applications of Cement Grout

After installation of the carrier pipe and sand fill, the ends of the casing pipe shall be sealed with cement grout to prevent moisture from entering the casing. The cement grout shall consist of one (1) part Portland cement, three (3) parts clean, well-graded sand and a minimum amount of water. Cement grout plugs shall extend a minimum of 12-inches into casings.

3.6 Grouting of Voids around Casing Pipe

- A. The CONTRACTOR shall immediately notify the ENGINEER during jacking and boring operations of any situation resulting in or expected to result in the creation of voids external to the casing pipe. Upon ENGINEER's approval, voids outside the casing pipe shall be noted and recorded for subsequent filling with cement grout.

- B. After the casing has been jacked into position, pressure grout to fill all noted voids, as approved by the ENGINEER. Grout shall be applied outside the casing pipe through 1-inch grout holes drilled through the casing pipe at the spring line (both sides) and the crown. Hole spacing shall be as required for each noted void area. Grout filling shall proceed as follows:
 - 1. Start grouting at the springline hole at one end.
 - 2. Pump grout until grout appears in the grout hole at the crown.
 - 3. Start grouting the opposite springline hole and proceed until grout appears at the crown.
 - 4. Grout through the crown hole until grout appears in one of the next set of holes.
 - 5. Plug the holes.
 - 6. Move to the next set of holes and repeat grouting sequence until grout has been applied in all the holes.
 - 7. Finish grouting the last set of holes when grout can no longer be pumped into the crown. Grouting commenced in any approved area shall be completed without stopping.

PART 4 SPECIAL INSURANCE REQUIREMENTS

4.1 Insurance

- A. ODOT requires the following conditions for insurance to cover boring and jacking under Highway 126:
 - 1. Minimum \$500,000.00 General Liability
 - 2. State of Oregon (or Oregon Department of Transportation) listed as certificate holder
 - 3. State of Oregon (or Oregon Department of Transportation) listed as additional insured. 30 day written notice of cancellation.
- B. For more information, see Section 7, Insurance – Public Liability and Property Damage of the Contract.
- C. The cost of this insurance shall be considered incidental to bid items 287 and 288.

END OF SECTION

P21037
SECTION I

PAVEMENT AND SURFACE RESTORATION

PART 1 GENERAL

1.1 Scope

This section covers the work necessary to furnish and install asphalt concrete pavement restoration for trenches and roadway paving. All work shall conform to the specifications of this Section, Lane County Standards and City of Springfield Standard Specifications except as modified herein. In the case of discrepancy the more stringent provisions shall apply.

1.2 Reference Standards

- A. Refer to the revised 1994 City of Springfield Standard Construction Specifications, Section 310 Asphalt Concrete Pavement, and Section 407 Resurfacing Trench Areas, with 1998 revisions. The following temporary amendments to the City of Springfield Standard Construction Specifications will also apply.

- B. Refer to the latest version of the Oregon Department of Transportation (ODOT) Standard Specifications for Construction, Section 00745 – Hot Mixed Asphalt Concrete (HMAC).

- C. Refer to the revised 1994 City of Springfield Standard Construction Specifications, Section 317 Permanent Traffic Control, with 1998 revisions and the Plans for pavement marking, striping and legend requirements.

1.3 Submittals

Job mix Certification from Lane County Materials Laboratory.

1.4 HMAC Mix Classifications

Where “Class C” mix is identified on the Plans and in the City of Springfield Standard Construction Specifications, it is understood to be Level 2, 1/2-Inch Dense HMAC and Level 3, 1/2-Inch Dense HMAC, respectively, as defined in the ODOT Standard Specifications for Construction.

PART 2 PRODUCTS

2.1 Replace the City of Springfield Standard Construction Specifications, Sub-Section 310.2.00 MATERIALS with the ODOT Standard Specifications for Construction Sub-Sections 00745.10 through 00745.30 as modified below.

00745.10 Aggregate - In the paragraph that begins "Provide and stockpile...", remove the words "and RAP aggregates".

Add the following paragraph:

Production crushing and stockpiling of aggregate for use in HMAC will be at the sole discretion of the Contractor in accordance to Section 00165 of these Special Provisions.

00745.10(a-1) Separated Sizes – Delete the third sentence from the first paragraph.

00745.10(a-2) Scalping – Delete this subsection.

00745.10(b-2) Separated Sizes – Delete this subsection.

00745.10(b-3) Grading – Delete all but the first sentence of this subsection.

00745.10(c-2) Separated Sizes – Delete this subsection.

00745.10(c-3) Grading – Delete all but the first sentence of this subsection.

00745.10(c-4) Combination of Fine Aggregate for Testing – Delete this subsection.

00745.10(f) Aggregate Production Quality Control – Delete the second sentence.

00745.10(g) Preproduced Aggregate – Replace this subsection, except for the subsection number and title, with the following:

The material shall meet the requirements of 00745.10.

00745.11(a) Asphalt Cement – Add the following:

Use PG 70-22 grade asphalt for dense graded HMAC; or grade approved by Engineer.
Use PG 64-22ER for open graded HMAC, or grade approved by Engineer.

In addition to the requirements in the ODOT Standard Specifications for Asphalt Materials, the PG 64-22ER grade for HMAC shall meet the following limit when tested according to AASHTO T 301 "Standard Method of Test for Elastic Recovery Test of Asphalt Materials by Means of Durometer". The samples will be conditioned per AASHTO T 240 "Standard Method of Test for Effect of Heat and Air on a Moving Film of Asphalt (RTFOT) prior to testing per AASHTO T 301. The specified Temperature for section 3.3 of the AASHTO T 301 procedure shall be 77°F.

% Elastic Recovery – **50** minimum.

00745.11(b) Asphalt Cement Additives - Replace this subsection, except for the subsection number and title, with the following:

Use standard recognized asphalt cement additive products of known value for the intended purpose and approved for use on the basis of laboratory tests. Asphalt cement additives shall have no deleterious effect on the asphalt material and be completely miscible. Do not use silicones as an additive. Add the following asphalt cement additives when required by the JMF:

Anti-stripping asphalt cement additives to prevent stripping or separation of asphalt coatings from aggregates to satisfy the TSR specified in 00745.13.

Asphalt cement admixtures used to aid in the mixing or use of asphalt mixes or for experimental purposes.

00745.13(a) Contractor Provided JMF – Delete first paragraph and add the following: A CMDT will prepare, sign and submit a JMF to the Engineer for each mixture according to ODOT Contractor Mix Design Guidelines for Asphalt Concrete. The Engineer will verify the performance characteristics of all Contractor provided JMF. Submit material samples for verification testing no later than March 1 of the calendar year of the anticipated use of HMAC mixture. Furnish representative samples of materials to be used in the JMF verification testing as follows:

<u>Materials</u>	<u>Amount</u>
New Coarse Aggregate	100 lbs *
New Fine Aggregate	100 lbs
Reclaimed Asphalt Concrete	45 lbs
Hydrated Lime	5 lbs
Mineral Filler	5 lbs
Asphalt Cement (without antistrip)	3 gal in 1-qt cans
Antistrip Additive	1 qt

*If coarse or fine aggregate is in multiple stockpiles, divide the submittal evenly between stockpiles.

Verification testing will use Gyratory compaction methods.

00745.13(b) JMF Requirements – Add the following:

A request for an adjustment to the JMF targets may be made to the Engineer by the Contractor's CAT-II. The requested change will be reviewed and documented by the Engineer. If acceptable, a revised JMF will be allowed. Clearly document the subplot test for which the adjusted targets are in effect. Adjustments for gradation shall not exceed the tolerances specified below. Adjustments for AC content shall be within 0.5% of the original JMF, but shall not exceed the requirements of 00745.03. Regardless of these tolerances, the adjusted JMF shall be within the mixture specification control points of 00745.12. If a redesign of the mixture becomes necessary, submit a new JMF according to the requirements of the Specifications.

Aggregate Passing Sieve Size	(%) From JMF
No. 4	+/- 2
No. 8	+/- 1
No. 30	+/- 1
No. 200	+/- 0.5

Field adjustments will not be made unless the change produces material of equal or better quality. Adjustments beyond these limits will require development of a new JMF according to 00745.13(b). The adjusted JMF, plus or minus the allowed tolerances, shall be within the broadband limits specified in 00745.12(b).

00745.13(c) Performance Test – Delete this subsection.

00745.14 Tolerances and Limits - Replace the tolerance list with the following tolerance list:

Gradation	Dense-Graded HMAC Type				Open-Graded HMAC Type		
	1"	3/4"	1/2"	3/8"	3/4"	1/2"	ATPB
1 1/2"	JMF ± 5%*						
1"	90 - 100%	JMF ± 5%*			99 - 100%		99 - 100%
3/4"	JMF ± 5%	90 - 100%	JMF ± 5%*		85 - 96%	99 - 100%	85 - 95%
1/2"	JMF ± 5%	JMF ± 5%	90 - 100%	JMF ± 5%*	55 - 71%	90 - 98%	35 - 68%
3/8"***	-	-	-	90 - 100%	-	-	-
No. 4	JMF ± 5%	JMF ± 5%	JMF ± 5%	JMF ± 5%	JMF ± 5%	JMF ± 5%	JMF ± 5%
No. 8	JMF ± 4%	JMF ± 4%	JMF ± 4%	JMF ± 4%	JMF ± 4%	JMF ± 4%	JMF ± 4%
No. 16**	-	-	-	-	-	-	-
No. 30	JMF ± 4%	JMF ± 4%	JMF ± 4%	JMF ± 4%	JMF ± 4%	JMF ± 4%	-
No. 50**	-	-	-	-	-	-	-
No. 100**	-	-	-	-	-	-	-
No. 200	JMF ± 2.0%	JMF ± 2.0%	JMF ± 2.0%	JMF ± 2.0%	JMF ± 2.0%	JMF ± 2.0%	JMF ± 2.0%

* Maximum not to exceed 100%

** Report percent passing sieve when no tolerance is listed

In the "Constituent of Mixture" table; Moisture content at time of discharge test, delete "WAQTC TM6" and replace with "AASHTO T329; or AASHTO T255, Microwave method".

00745.16 HMAC Production QC/QA – Delete subsections (a) and (b) in their entirety and add the following:

Quality control sampling and testing by the Contractor, as defined by the Standard Specifications, is suggested but not required. The Contractor is advised to perform sufficient testing to insure compliance to the material requirements.

00745.16(c) Quality Assurance and Acceptance – Replace this subsection, except for the subsection number and title, with the following:

The Engineer, according to Section 00165.40 and the following, will perform acceptance sampling and testing of HMAC:

(1) Random Sampling – Random sampling of HMAC shall be performed by Lane County according to the following:

(a) Grade Samples – A minimum of one grade sample from each lot or subplot after placing and before rolling. Samples will not be taken within 1 foot of the edge of the panel. Samples will be obtained according to AASHTO T168.

(b) Plant Samples – A minimum of one sample from each lot or subplot from the discharge of the paving plant mixer and before placing into a storage silo or hopper when:

- The nominal compacted thickness as shown on the typical section of the plans, for an entire pavement panel will be less than 1 1/2 inches.
- The paving panel being placed is less than 8 feet wide.
- Paving miscellaneous areas, such as driveways, approaches, guardrail flares, and areas of restricted width or limited length.
- Paving temporary surfacing or leveling courses.
- Paving open-graded mixtures.

(c) Moisture Samples – Moisture samples will be taken from the discharge of the paving plant mixer a minimum once each day, or as directed.

(d) Partial Sublots – Each day, at the end of the production shift, regardless of the project size, the quantity exceeding the 750-ton subplot increment by 250 ton, or less, shall be represented by the previous 750-ton subplot. If the quantity exceeds the 750-ton subplot increment by more than 250 ton, the quantity shall be considered an independent subplot.

(2) Testing – HMAC testing shall be performed by the Engineer according to the following:

(a) Asphalt Cement Content – Test according to “Asphalt Content by Ignition Method, Lane County Procedure” (a modified AASHTO T308). The test procedure is available from the Project Manager.

(b) Aggregate Gradation – Test according to AASHTO T27 test method.

(c) Moisture Content – Test according to AASHTO T255 test method, Microwave Method.

(d) Compaction – Acceptance testing for compaction will be according to Section 00745.49. For any failing subplot of pavement, the Contractor may request one new backup compaction test on the same day. New nuclear gauge tests will be obtained at new randomly selected sites. The average of these five new nuclear density tests will constitute the backup in-place density of the subplot. The higher of the original and backup test results will prevail.

The Engineer may test any area that appears defective in compaction and require further compaction or corrective action on any area that does not meet specifications.

(e) Backup Testing – If the gradation test result of the sieve analysis varies from the JMF by 1.5 times or more from the tolerance limits specified in 00745.14, a backup sample from the random grade sample will be tested. The test result, which yields the highest CPF for that subplot, will be used. If the original and backup test results yield the same CPF, the original test results will be used.

(f) Minimum Pay Factor for Each Constituent – Stop production when the pay factor for any constituent with a weighting factor greater than 1 falls below 0.75. Resume production when the Engineer accepts a plan for correction.

00745.17 Small Quantity Acceptance – Replace this subsection, except for the subsection number and title, with the following:

When the quantity of HMAC on a Project is less than 1,750 tons or less than three test results are obtained, the Engineer may accept the HMAC according to Section 00745.16(c) of these Special Provisions. The test results will be evaluated in accordance to 00745.95(a) of these Special Provisions.

00745.17(b) Outside Specifications Limits – Replace the first sentence with the following: If a subplot sample test result for any constituent is 1.5 times or more outside the specification limit, the Engineer will have the backup sample tested.

00745.17(b-2) Backup Out of Specification – Replace this subsection, except for the subsection number and title, with the following:

If the backup sample test results are out of specification, an adjustment will be calculated according to 00745.95(a-1). The test results that produce the lowest Cumulative Weighted Deviation will be used in the price adjustment calculation.

00745.17(b-3) In Place Samples – Delete this subsection:

00745.24(a) Steel-Wheeled Rollers - Replace this subsection with the following subsection:

(a) Steel-Wheeled Rollers - Provide steel-wheeled rollers with a minimum gross static weight as follows:

	Level 1 and Level 2	Level 3	Level 4
Breakdown and Intermediate	8 ton	10 ton	12 ton
Finish	6 ton	8 ton	10 ton

PART 3 EXECUTION

3.1 Replace the City of Springfield Standard Construction Specifications, Sub-Section 310.3.00 CONSTRUCTION with the ODOT Standard Specifications for Construction Sub-Sections 00745.40 through 00745.93 as modified below.

00745.40 Season and Temperature Limitations In the table, for Surface Temperature of Dense Graded Mixes 2 inches to 2 1/2 inches, replace "50 °F" with 40 °F".

00745.46 Control of Line and Grade - Add the following paragraphs to the end of this subsection:

The Contractor shall establish references at reasonable intervals for line and grade control of placement operations for the following:

- Before placing each leveling lift.
- Before placing the top base course for new construction.

If grade controls are established, line and grade for the top base course of new construction and top leveling lift shall be within 1/2 inch of existing line and grade.

00745.48(c) Placing – Add the following:

The Engineer will establish leveling locations and paving needs.

Paving equipment used shall be sized appropriately for the size roads listed in the contract. Equipment that is either undersize or oversize for the intended work, which will not produce satisfactory workmanship, will be replaced with appropriately sized equipment.

Change the reference in the last paragraph from 00745.16(b-1) to 00745.13(b) of these Special Provisions.

00745.49 Compaction, QC – Add the following:

The QC program as described in this section of the Standard Specifications will not be used. The Engineer will perform acceptance compaction testing using procedures as modified or added in these Special Provisions. The Contractor is responsible to perform sufficient compaction testing to insure minimum compaction requirements have been attained.

00745.49(b) Normal Pavement (Nominal Thickness 2 inch or Greater) – Replace the subsection heading with the following:

00745.49(b) Normal Pavement (Nominal Thickness 1 1/2 inch or Greater)

00745.49(b-1) General - In the paragraph that begins "Compliance with the density...", replace the sentence that begins "Use the MAMD method..." with the following sentence:

Use the MAMD method of compaction measurement.

Replace the paragraph that begins "For Level 3 and Level 4..." with the following two paragraphs:

For Level 2, Level 3, and Level 4 mixes, construct a control strip at the beginning of work on each JMF on the project according to ODOT TM306. The purpose of the control strip is to determine the maximum density that can be achieved for the JMF, paving conditions, and equipment on the project. Additional control strips are necessary when there is a change in compaction equipment or when JMF targets are adjusted according to 00745.16(b-1-a). The Engineer may waive the control strip for irregular areas or areas too small to establish a reasonable roller pattern.

Stop paving if three consecutive control strips fail to achieve the specified density. Take all actions necessary to resolve compaction problems. Do not resume paving until allowed by the Engineer.

Add the following to the third paragraph:

Pneumatic tired roller will be required on Level 2 HMAC, unless waived by the Engineer.

00745.49(b-2) Random Testing – Delete reference to "QC" in the first sentence.

00745.49(b-2-a) Testing – Add the following:

Sanding of test locations will not be required.

00745.49(b-2-b) Core Correlations of Nuclear Gauge Readings – Replace this subsection, except for the subsection number and title, with the following:

Core correlation of the nuclear gauge readings is not required. If core correlations are requested, and approved, determine the core correlation factors according to WAQTC TM8 and ODOT TM327. Cut the required cores and patch the core holes with dense graded HMAC.

The party requesting core correlations will pay the costs of coring and lab testing of cores. The costs of nuclear gauge testing performed by each party will be paid by each party.

00745.49(b-3) Moving Average Maximum Density (MAMD) Method - Replace the MAMD list with the following list:

Course of Construction	HMAC
First HMAC lift less than 3 inches placed on aggregate base	91.0 *
All other	92.0

* If any part of the width of a lift at a station requires 91.0%, then the entire width of that lift at that station shall be 91.0%

Delete the last paragraph of this subsection.

00745.49(b-4) Control Strip Method - Delete this subsection.

00745.49(b-5) Test Results – Renumber this subsection to b-4, delete the sentence and replace with the following:

The Engineer will provide density test results to the Contractor by the middle of the following work shift.

00745.49(c) Thin Pavement – Replace this subsection, except for the subsection number and title, with the following:

Compaction to a specified density will not be required for leveling, patches, or where the nominal compacted thickness of a course of dense graded mixtures will be less than 1 1/2 inches. Perform breakdown and intermediate rolling until the entire surface has been compacted by at least four coverages of the roller(s). Perform additional coverages, as directed, to obtain finish rolling of the HMAC. In areas where pre-leveling is greater than 1 1/2 inches, the HMAC shall be compacted to a minimum of 91.0 of the JMF's most recent Maximum Density result.

00745.70 Pavement Smoothness - Replace this subsection with the following subsection:

00745.70 Pavement Smoothness - Construct the pavement wearing surface of travel lanes to a profile that does not deviate from longitudinal and transverse smoothness more than the specified limits of 00745.73.

Perform smoothness testing under the supervision of the Engineer with equipment furnished and operated by the Contractor at the Contractor's expense. Complete all required smoothness testing no later than seven calendar days following final completion of all travel lane paving on the Project. The Contractor accepts the risk that the smoothness may be affected by exposure to traffic between the date the travel lanes are paved and the date the smoothness testing is completed. If the Contractor elects to perform smoothness measurements on a day other than the day the pavement is placed, additional traffic control required for smoothness measurement, and not required for other work, will be at the Contractor's expense.

Add the following subsection:

00745.72 Smoothness Testing Equipment - Furnish all equipment and supplies for determining smoothness.

(a) Straightedge - Provide one 12 foot straightedge.

(b) Rolling Straightedge – Provide one 12 foot rolling straightedge capable of measuring, on an exaggerated scale, deviations in the paved surface, at the center of the scale, to accuracy of 0.002 foot or less. If requested by the Engineer, the Contractor shall demonstrate the accuracy of the measuring device by setting the equipment up on a flat surface and passing the sensing mechanism over an item of known height. In all cases, the equipment shall be subject to acceptance by the Engineer.

Add the following subsection:

00745.73 Smoothness Testing and Surface Tolerances - Test according to the following:

(a) General - Test the base and wearing courses with a 12 foot straightedge and a 12 foot rolling straightedge as directed.

(b) Base Course Surface Test:

(1) Transverse - Test with the 12 foot straightedge perpendicular to the centerline, as directed. The pavement surface shall not vary by more than 0.02 foot.

(2) Longitudinal - Test with the 12 foot rolling straightedge parallel to the centerline, as directed. The pavement surface shall not vary by more than 0.02 foot.

(c) Wearing Course Surface Test:

(1) Transverse - Test with the 12 foot straightedge perpendicular to the centerline, as directed. The pavement surface shall not vary by more than 0.02 foot.

(2) Longitudinal - Test with the 12 foot rolling straightedge over the full width of travel lanes for the entire length of the project, or as directed by the Engineer. The pavement surface shall not vary by more than 0.015 foot.

(3) Transverse Joints - Test with the 12 foot straightedge parallel to the centerline, as directed. The pavement surface shall not vary by more than 0.02 foot.

(d) Utility Appurtenances - If the Contractor is required to construct or adjust utility appurtenances, such as manhole covers and valve boxes, the pavement surface shall not vary by more than 0.02 foot.

(e) Shoulders and Paved Medians - Test the base and wearing course with the 12 foot straightedge parallel to and perpendicular to the centerline for shoulders and paved medians. The pavement surface shall not vary by more than 0.02 foot.

00745.75 Correction of Pavement Roughness - Replace this subsection with the following subsection:

00745.75 Correction of Pavement Roughness - Should testing described in 00745.73 show the pavement does not conform to the prescribed limits of deviation, the following shall apply:

(a) General - The Contractor, under the supervision of the Engineer, is responsible for locating areas that require corrective work.

(b) Base Course - If the requirements of 00745.73(b) are not met, correct according to one of the following and retest.

(1) Cold Plane Removal - Profile with equipment meeting the requirements of Section 00620.20 to a maximum depth of 0.03 foot.

(2) Grinder - Profile with abrasive grinder(s), equipped with a cutting head comprised of multiple diamond blades to a maximum depth of 0.03 foot.

(c) Wearing Course - After the Contractor has located and staked all individual deviations exceeding 0.02 foot, the Engineer and the Contractor shall meet at a mutually agreed upon time and drive the Project together. Each deviation will be evaluated during the drivethrough to determine what corrective work will be required. Disagreements will be resolved by the Engineer.

Correct all individual deviations identified for corrective work during the drive-through and any transverse joint that exceeds the requirements of 00745.73(c-3) by one of the methods listed below to the specified limits.

(1) Remove and Replace - Remove and replace the wearing surface lift. Removal and replacement is required when in the opinion of the Engineer a durable long-term repair of the defect cannot be accomplished by conventional means.

(2) Grind - Profile with abrasive grinder(s) equipped with a cutting head comprised of multiple diamond blades to a maximum depth of 0.3 inch and apply an emulsion fog seal as directed.

Under the observation of the Engineer, retest each location requiring corrective work according to 00745.73 with a 12 foot rolling straightedge to verify that the deviation has been corrected to within the 0.02 foot tolerance. Perform all corrective work and surface tolerance testing at the Contractor's expense, including traffic control.

(d) Utility Appurtenances – If the requirements of 00745.73(d) are not met, the Contractor shall perform sawcutting, removal and readjustment of the utility appurtenance(s) to the required elevation(s) and/or perform other corrective measures to the satisfaction of the Engineer.

(e) Time Limit - Complete correction of all surface roughness within 14 calendar days following notification, unless otherwise directed.

00745.80 Measurement – Delete this section and add the following:

The accepted quantities of HMAC will be measured by the ton according to Section 00190. No separate measure will be made for the asphalt cement used in the asphalt concrete mixture. No deduction will be made for lime or any other additive used in the mixture.

The quantities of HMAC shown in the Schedule of Items were computed on the basis of aggregates having a Specific Gravity of 2.65. The provisions of 00140.20 and 00195.20 will apply.

00745.90 Payment - Add the following paragraph to the end of this subsection:

No separate or additional payment will be made for asphalt cement used in the mixture.

00745.93 Other Items – Add to the fifth bulleted item:

No payment will be made for anti-stripping additives required to supplement the JMF to attain minimum mixture performance characteristics. If anti-stripping additives are required by the contract, payment will be at the unit bid price included in the schedule of items.

3.2 A PRE-PAVING MEETING SHALL BE REQUIRED 48 HOURS PRIOR TO PAVING.

3.3 Trip tickets shall normally be given to the ENGINEER by the end of the day delivery is made, but in no event shall they be given to the ENGINEER later than 12 noon the following calendar day (Saturday, Sunday, and legal holidays excluded). Trip tickets will be considered as valid only when received by the ENGINEER in accordance with this special provision. All other requirements of the above referenced sub-sections shall apply.

3.4 GEOTEXTILE INSTALLATION – In the event that the City’s wet weather construction standard is invoked on this project, refer to Standard Construction Specification 301.1.01 General, the use of geotextile fabric and an additional eight (8) inches of rock substructure will be required. Where specified, geotextile shall be woven and conform to Standard Construction Specification for Subgrade Geotextile. CONTRACTOR shall comply with Standard Construction Specification 308, Geotextile Installation. Payment shall be incidental to the pavement Bid Items.

3.5 After the final saw cut is made for the trench “Tee Cut” (see trench detail on Drawings), in areas where the remaining strip of existing asphalt is less than three feet in width, the remaining strip of existing asphalt shall be removed and replaced as follows:

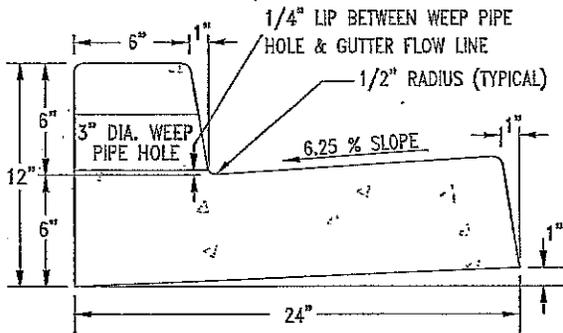
A. If remaining strip of asphalt is less than 6 inches thick, remove asphalt and base material to 6 inches below final grade, compact base and place 6-inch thick Level 3, 1/2” Dense, HMA. Place asphalt in 3 inches maximum lifts.

B. If remaining strip of asphalt is greater than 6 inches thick, remove full depth of asphalt, place compacted 3/4” – 0 crushed rock to 6 inches below final grade, then place 6-inch thick Level 3, 1/2” Dense, HMA. Place asphalt in 3-inch maximum lifts.

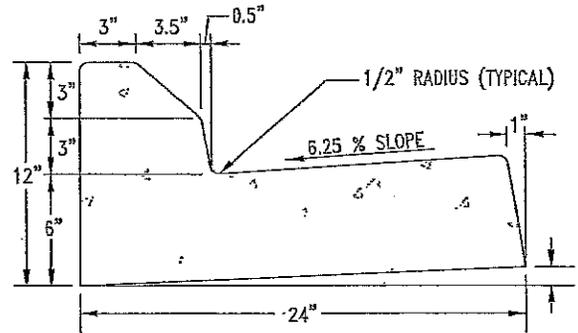
END OF SECTION

STANDARD DRAWINGS

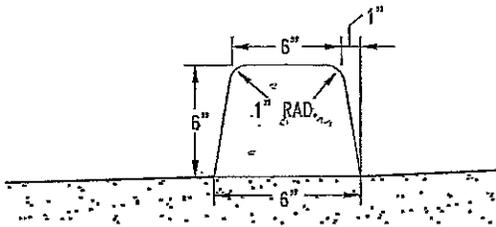
STANDARD CURB & GUTTER



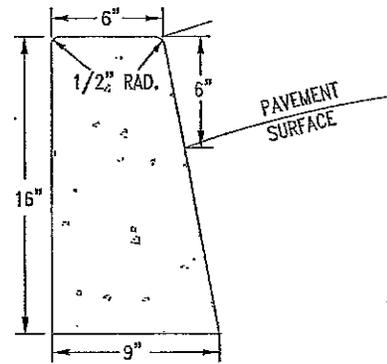
MOUNTABLE CURB & GUTTER



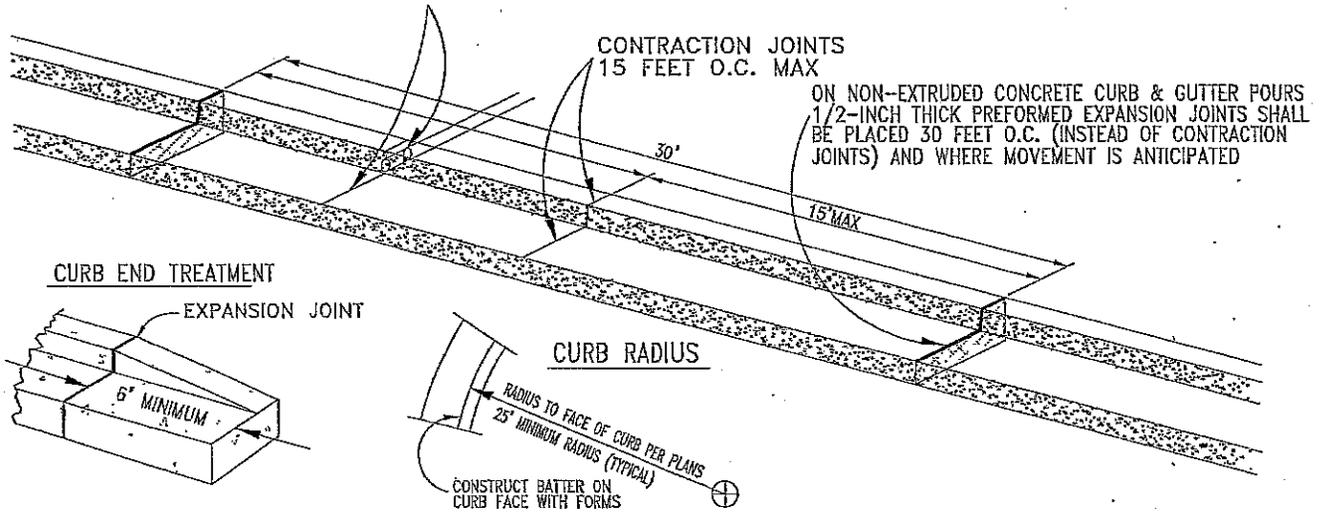
EXTRUDED CURB



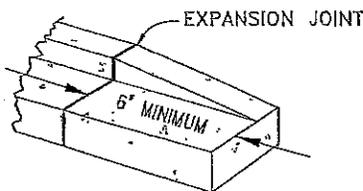
FULL DEPTH CURB



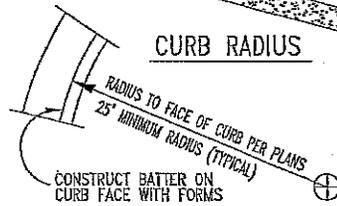
WEEP HOLES SHALL BE PLACED AT 75' O.C. OR AS OTHERWISE SPECIFIED REFER TO STD DWG. 3-XX FOR INSTALLATION DETAILS. IN NEW CONSTRUCTION, PLACE CONTRACTION JOINT OVER & IN FRONT OF PIPE



CURB END TREATMENT



CURB RADIUS



NOTES

- * WHERE CONCRETE PAVEMENT WILL BE USED, CONTRACTION JOINTS SHALL BE PLACED TO MATCH TRANSVERSE CONTRACTION JOINT LOCATIONS IN STREET PAVEMENT AND 24" #5 REBAR TIE BARS SHALL BE PLACED IN GREEN CONCRETE.
- * CURB AND GUTTER SURFACES SHALL HAVE A BROOM FINISH PARALLEL TO THE LENGTH OF THE CURB
- * SIDEWALKS, ACCESS RAMPS, AND RESIDENTIAL DRIVEWAYS SHALL BE 3000 PSI FIELD STRENGTH (3450 PSI LAB STRENGTH) 6.0 SACK MIX CONCRETE
- * CURBS & COMMERCIAL DRIVEWAYS SHALL BE 3500 PSI FIELD STRENGTH (4025 PSI LAB STRENGTH) 6.3 SACK MIX CONCRETE

NO.	REVISION	DATE	BY	APPR.

CITY OF SPRINGFIELD
SPRINGFIELD



DEPT. OF PUBLIC WORKS

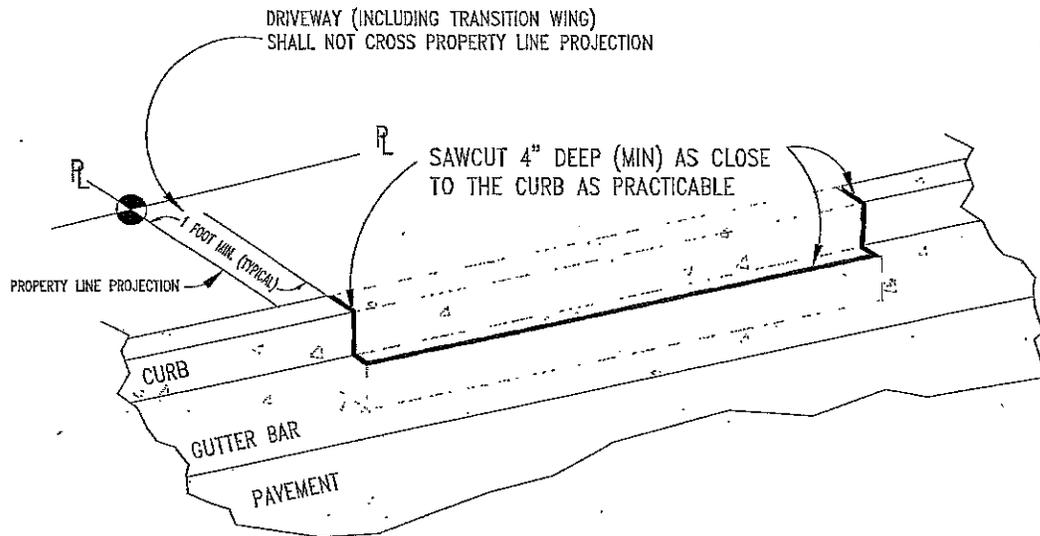
CURB & GUTTER

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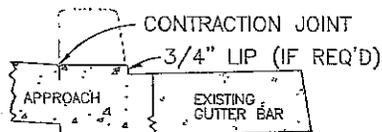
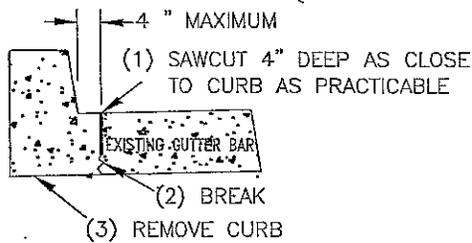
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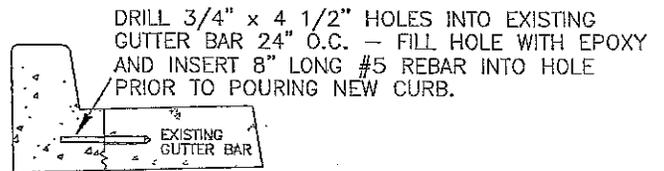
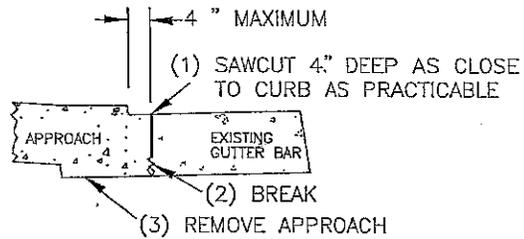
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**CURB REMOVAL
FOR DRIVEWAY OR RAMP PLACEMENT**



**CURB REPLACEMENT
WITH STANDARD CURB**



NOTES

- * EXISTING GUTTER BAR SHALL NOT BE REMOVED WITHOUT PRIOR APPROVAL BY THE CITY
- * CURB CUT WIDTH SHALL BE IN ACCORDANCE WITH PERMIT
- * ALTERNATIVELY, CURB CUTS MAY BE SAWED USING THE "PRECISION CUT" METHOD OR EQUIVALENT
- * SIDEWALKS, ACCESS RAMPS, AND RESIDENTIAL DRIVEWAYS SHALL BE 3000 PSI FIELD STRENGTH (3450 PSI LAB STRENGTH) 6.0 SACK MIX CONCRETE
- * CURBS & COMMERCIAL DRIVEWAYS SHALL BE 3500 PSI FIELD STRENGTH (4025 PSI LAB STRENGTH) 6.3 SACK MIX CONCRETE

NO	REVISION	DATE	BY	APPR.

CITY OF SPRINGFIELD
SPRINGFIELD

DEPT. OF PUBLIC WORKS

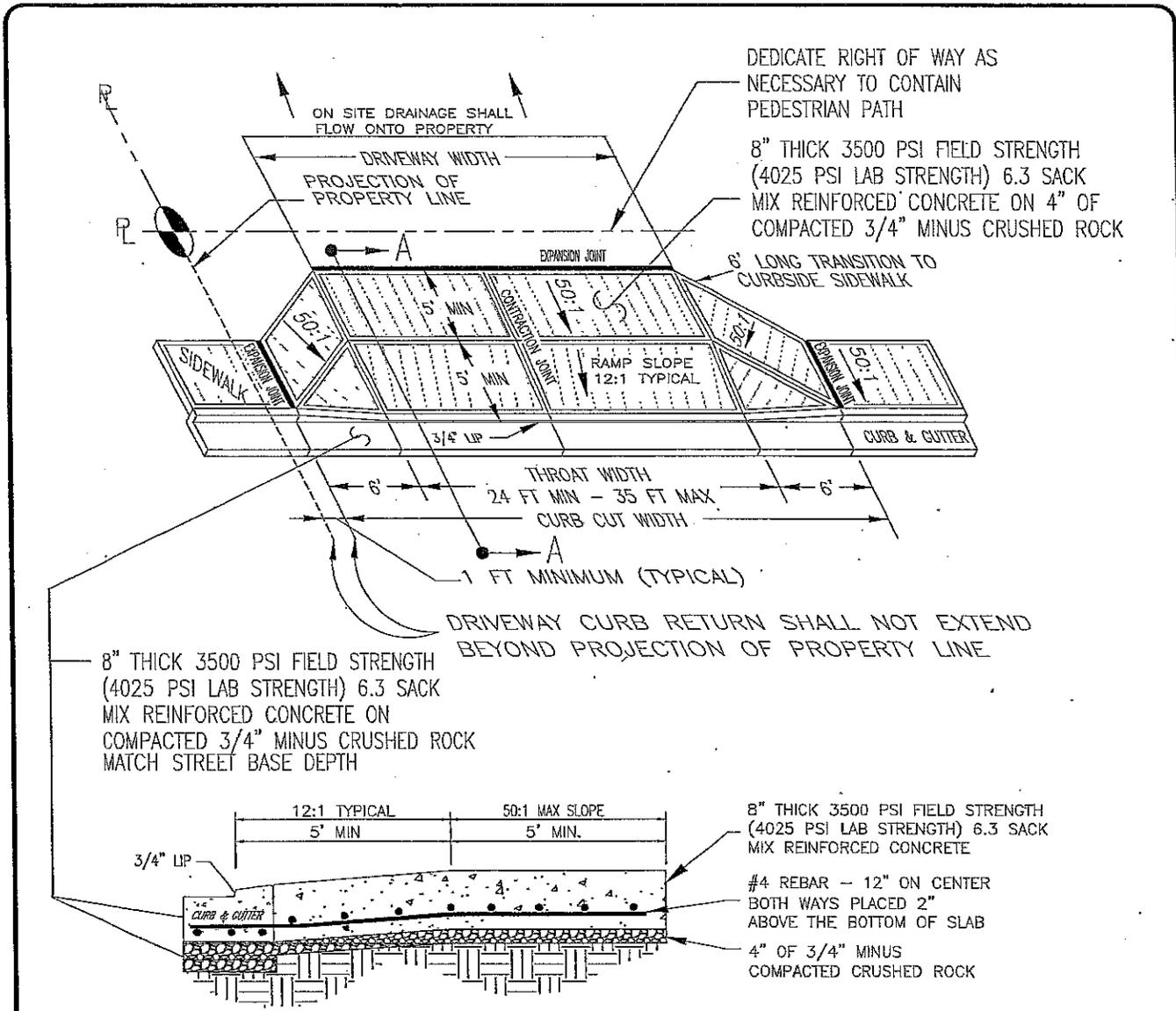
**CURB
REMOVAL & REPLACEMENT**

Al Peroutka City Engineer 2003

**STANDARD
DRAWING**

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2003



SECTION A - A

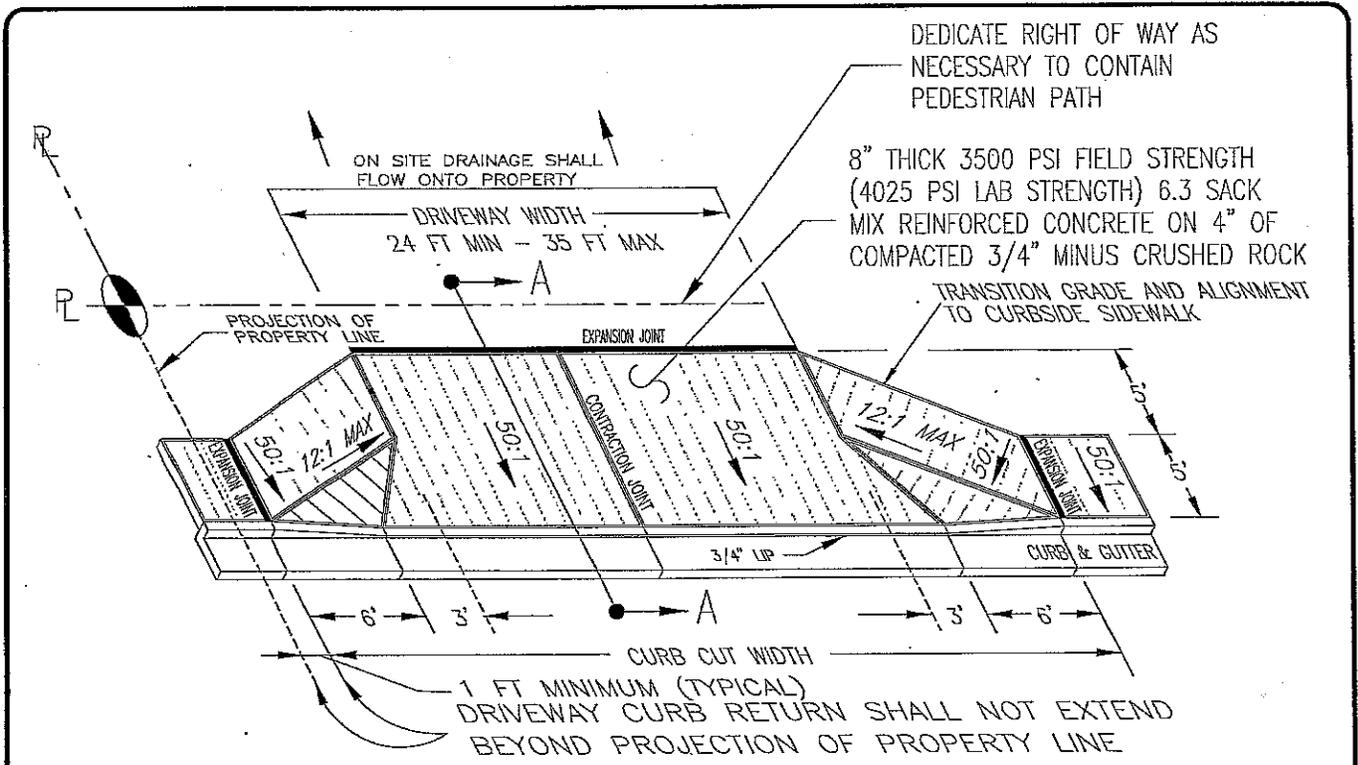
NOTES

- * NO ABOVE-GROUND FACILITIES (FIRE HYDRANTS, POWER POLES, CATCH BASINS, VALVES, J-BOXES, ETC.) SHALL BE PERMITTED WITHIN THE APRON OR RAMP AREA
- * DRIVEWAY (THROAT) WIDTH SHALL BE BETWEEN 24 FEET (MINIMUM) AND 35 FEET (MAXIMUM) IN ACCORDANCE WITH CITY PERMITS.
- * ALL SURFACES SHALL HAVE A BROOM FINISH.
- * REFER TO STANDARD DRAWING 3-XX FOR CURB CUT DETAILS
- * CONCRETE WITHIN APPROACH SHALL BE 8" THICK (MIN) CONCRETE ON 4" OF 3/4" MINUS CRUSHED ROCK.
- * REINFORCEMENT IS REQUIRED, USE #4 REBAR - 12" ON CENTER - BOTH WAYS - PLACED 2" ABOVE THE BOTTOM OF THE SLAB
- * A CONTRACTION (SCORE) JOINT SHALL BE ADDED IN THE CENTER OF THE APRON.
- * SIDEWALKS, ACCESS RAMPS, AND RESIDENTIAL DRIVEWAYS SHALL BE 3000 PSI FIELD STRENGTH (3450 PSI LAB STRENGTH) 6.0 SACK MIX CONCRETE
- * CURBS & COMMERCIAL DRIVEWAYS SHALL BE 3500 PSI FIELD STRENGTH (4025 PSI LAB STRENGTH) 6.3 SACK MIX CONCRETE

SIDEWALK ACCESS RAMP NOTES

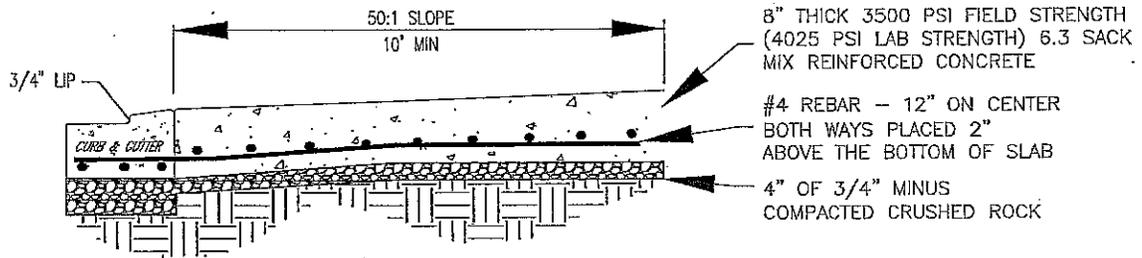
THIS DRIVEWAY APPROACH MAY NOT BE USED AS A SIDEWALK ACCESS RAMP.

NO	REVISION	DATE	BY	APPR	 <p>CITY OF SPRINGFIELD SPRINGFIELD DEPT. OF PUBLIC WORKS</p>	<p>COMMERCIAL DRIVEWAY APRON CURBSIDE SIDEWALK</p> <p>KEN VOGENEY City Engineer 2010</p>	<p>STANDARD DRAWING 3-22</p>



8" THICK 3500 PSI FIELD STRENGTH
(4025 PSI LAB STRENGTH) 6.3 SACK
MIX REINFORCED CONCRETE ON
COMPACTED 3/4" MINUS CRUSHED ROCK
MATCH STREET BASE DEPTH

SECTION A - A



NOTES

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SIDEWALK ACCESS RAMP NOTES

THIS DRIVEWAY APPROACH MAY NOT BE USED AS A SIDEWALK ACCESS RAMP.

NO	REVISION	DATE	BY	APPR.

CITY OF SPRINGFIELD
SPRINGFIELD



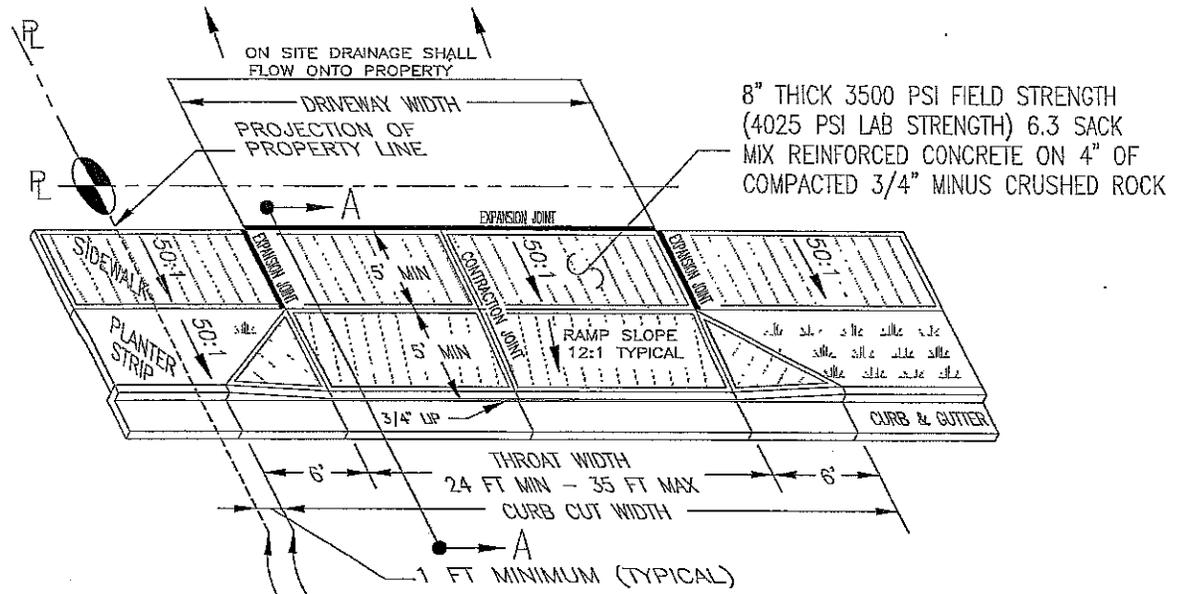
DEPT. OF PUBLIC WORKS

COMMERCIAL DRIVEWAY APRON
CURBSIDE SIDEWALK

Ken Vogeny City Engineer 2010

STANDARD
DRAWING

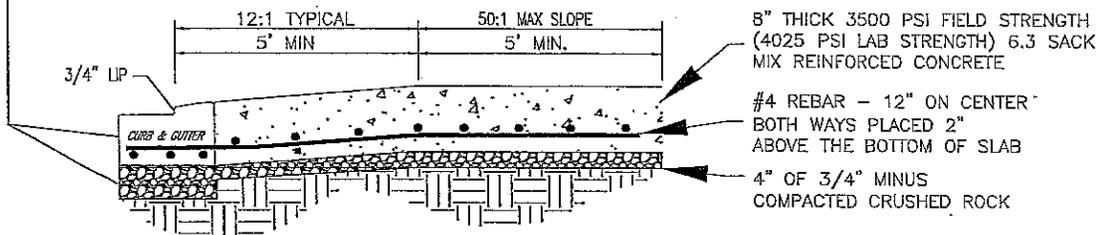
3-23



DRIVEWAY CURB RETURN SHALL NOT EXTEND BEYOND PROJECTION OF PROPERTY LINE

8" THICK 3500 PSI FIELD STRENGTH (4025 PSI LAB STRENGTH) 6.3 SACK MIX REINFORCED CONCRETE ON COMPACTED 3/4" MINUS CRUSHED ROCK MATCH STREET BASE DEPTH

SECTION A - A



NOTES

- * NO ABOVE-GROUND FACILITIES (FIRE HYDRANTS, POWER POLES, CATCH BASINS, VALVES, J-BOXES, ETC.) SHALL BE PERMITTED WITHIN THE APRON OR RAMP AREA
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SIDEWALK ACCESS RAMP NOTES

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NO.	REVISION	DATE	BY	APPR.

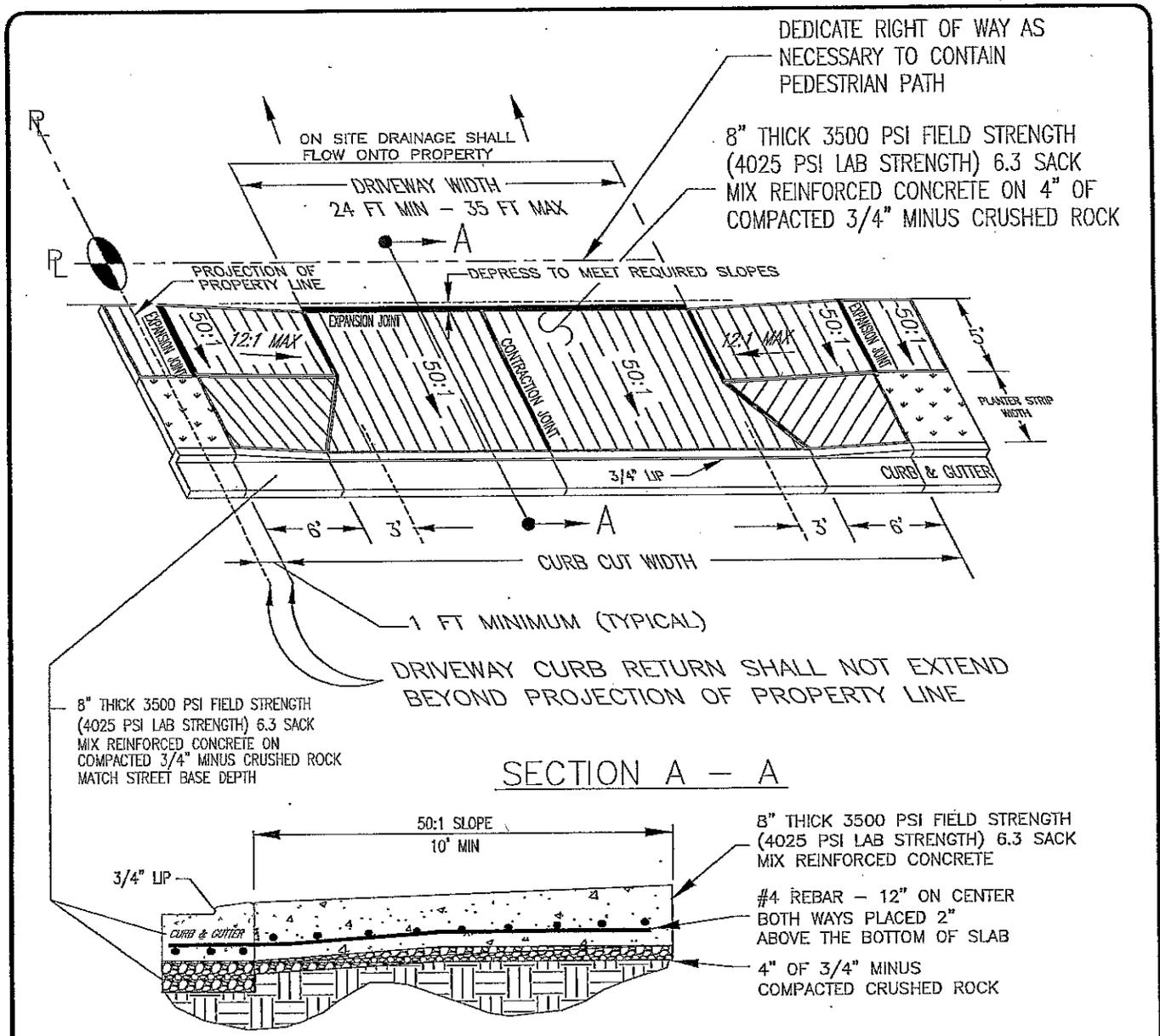


COMMERCIAL DRIVEWAY APRON
SETBACK SIDEWALK

Ken Vogeney City Engineer 2010

STANDARD
DRAWING

3-24



NOTES

- * NO ABOVE-GROUND FACILITIES (FIRE HYDRANTS, POWER POLES, CATCH BASINS, VALVES, J-BOXES, ETC.) SHALL BE PERMITTED WITHIN THE APRON OR RAMP AREA
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SIDEWALK ACCESS RAMP NOTES

THIS DRIVEWAY APPROACH MAY NOT BE USED AS A SIDEWALK ACCESS RAMP.

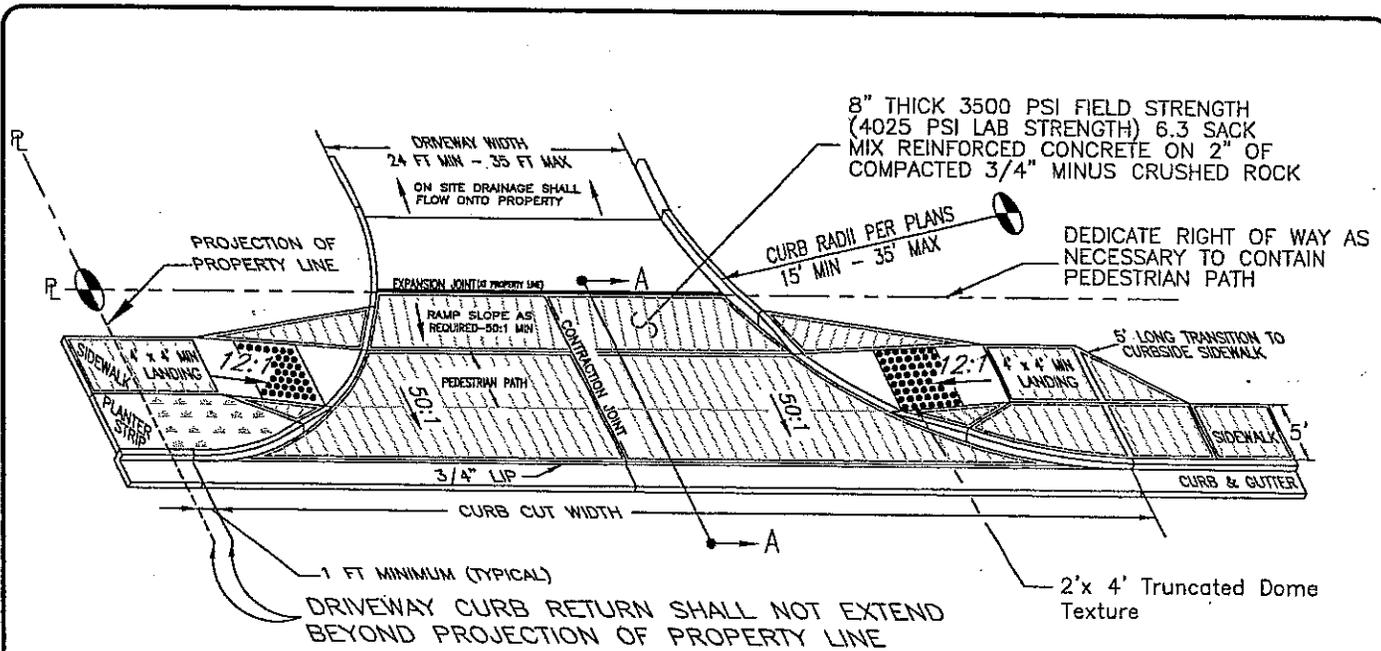
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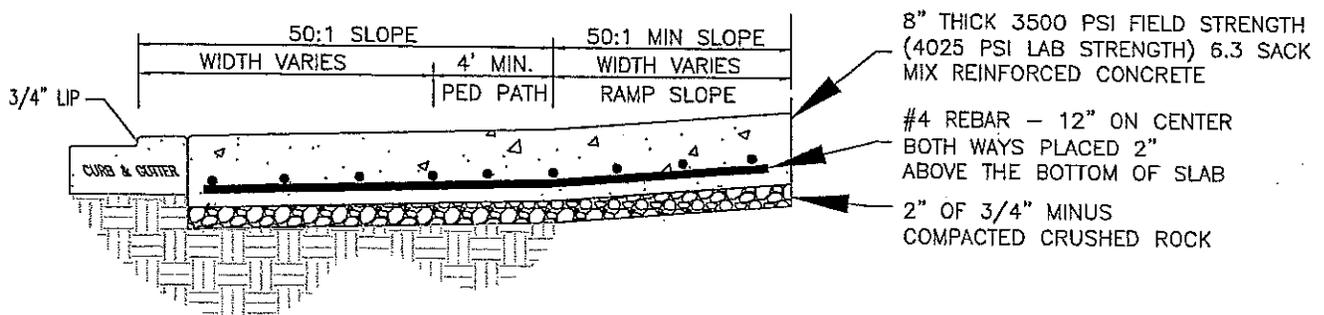
**COMMERCIAL DRIVEWAY APRON
SETBACK SIDEWALK**

Ken Voveney City Engineer 2010

STANDARD DRAWING
3-25



SECTION A - A



NOTES

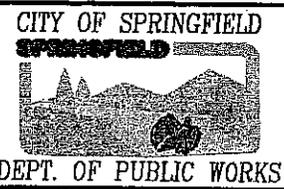
- * THIS DRAWING SHOWS SIDEWALK ACCESS RAMPS FOR ILLUSTRATION PURPOSES ONLY. REFER TO DRAWINGS 3-14 THROUGH 3-16 FOR SIDEWALK ACCESS RAMP DETAILS.
- * NO ABOVE-GROUND FACILITIES (FIRE HYDRANTS, POWER POLES, CATCH BASINS, VALVES, J-BOXES, ETC.) SHALL BE PERMITTED WITHIN THE APRON OR RAMP AREA
- * THIS DRIVEWAY SHALL BE APPROVED FOR USE BY THE CITY PRIOR TO CONSTRUCTION. REFER TO STANDARD DRAWINGS 3-XX AND 3-XX FOR COMMERCIAL DRIVEWAY DETAILS.
- * DRIVEWAY (THROAT) WIDTH SHALL BE BETWEEN 24 FEET (MINIMUM) AND 35 FEET (MAXIMUM) IN ACCORDANCE WITH CITY PERMITS.
- * ALL SURFACES SHALL HAVE A BROOM FINISH EXCEPT FOR SIDEWALK ACCESS RAMPS WHICH SHALL BE TEXTURED WITH RAISED DIAMOND PATTERN.
- * REFER TO STANDARD DRAWING 3-7 FOR CURB CUT DETAILS
- * CONCRETE WITHIN APPROACH SHALL BE 8" THICK (MIN) CONCRETE ON 2" OF 3/4" MINUS CRUSHED ROCK.
- * REINFORCEMENT IS REQUIRED. USE #4 REBAR - 12" ON CENTER - BOTH WAYS - PLACED 2" ABOVE THE BOTTOM OF THE SLAB
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SIDEWALK ACCESS RAMP NOTES

THIS DRIVEWAY APPROACH MAY NOT BE USED AS A SIDEWALK ACCESS RAMP.
 * REFER TO STANDARD DRAWINGS 3-14 THROUGH 3-16 FOR SIDEWALK ACCESS RAMP DETAILS.

V:\CITYSPEC\Standard Drawings - Revised\3-26.dwg, 06/06/2003 10:09:14 AM

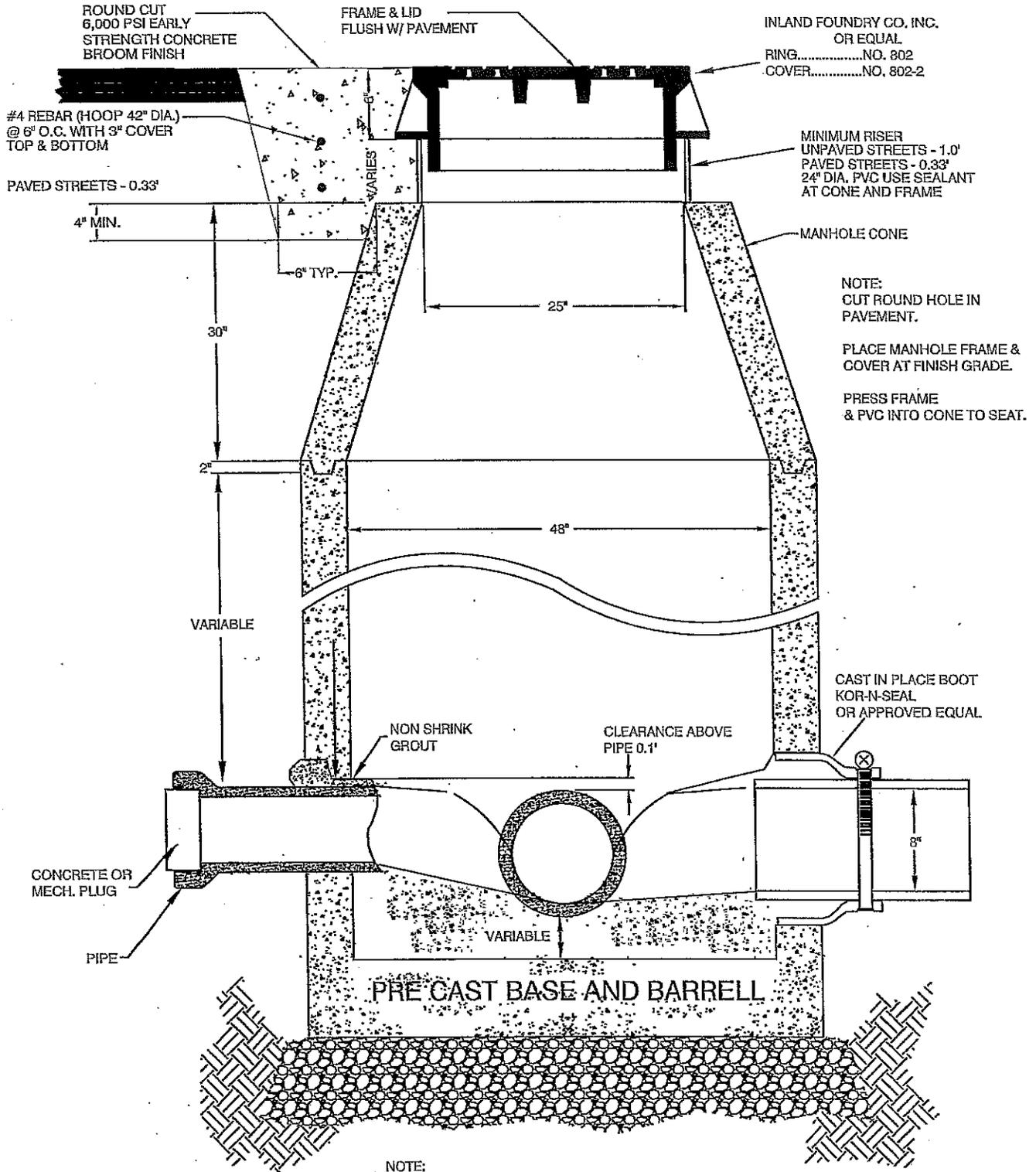
NO	REVISION	DATE	BY	APPR.



COMMERCIAL DRIVEWAY APRON
 CURB RETURN DRIVEWAY

Al Peroutka
 Al Peroutka City Engineer 2003

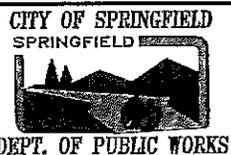
STANDARD DRAWING
 3-26
 2003



NOTE:

1. ALL PIPE CONNECTIONS TO MANHOLES SHALL BE CORE DRILLED UP TO 12".
2. ALL PIPE CONNECTIONS GREATER THAN 12" SHALL BE CONNECTED AS DIRECTED BY (CITY) ENGINEER IN THE FIELD, OR, BY STAMPED DRAWING APPROVED BY THE CITY ENGINEER.

NO.	REVISION	DATE	BY	APPR.
1	Updated Drawing	7/08	JLP	



STANDARD MANHOLE

Ken Vogney

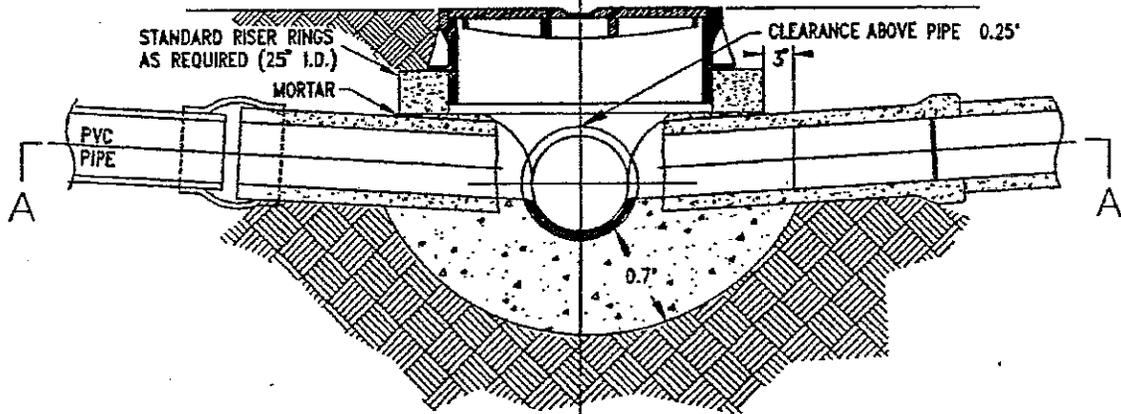
City Engineer

2008

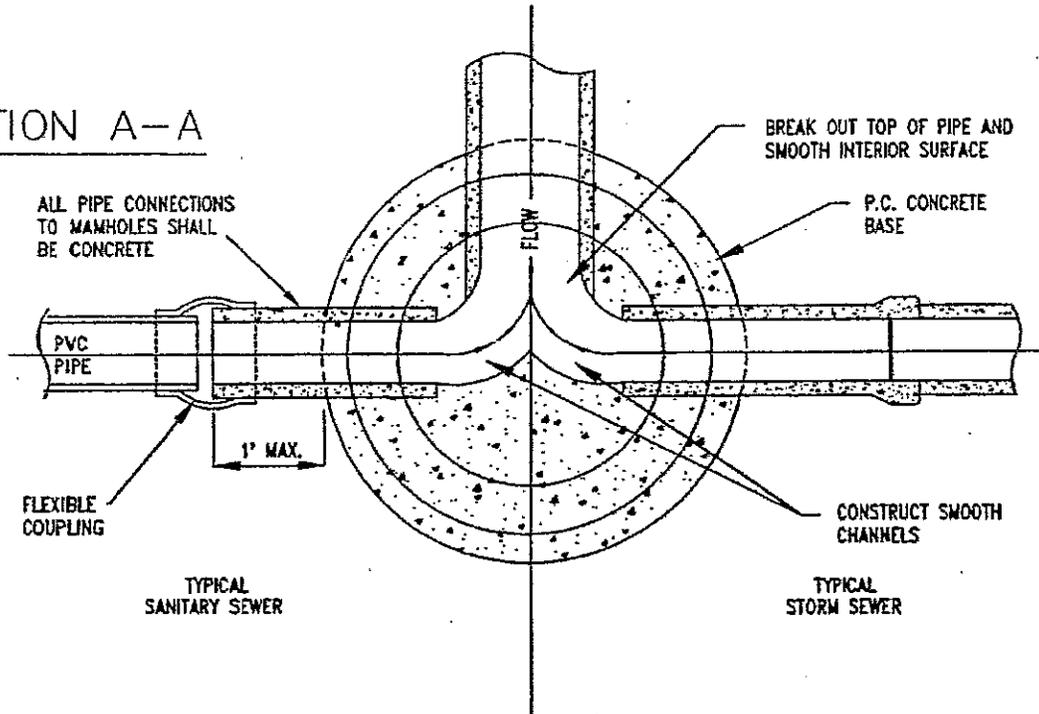
STANDARD
DRAWING

4-1

COVER AND FRAME
 INLAND FOUNDRY CO. INC.
 OR EQUAL
 RINGNO. 802
 COVER.....NO. 802-2



SECTION A-A



NO.	REVISION	DATE	BY	APPR.

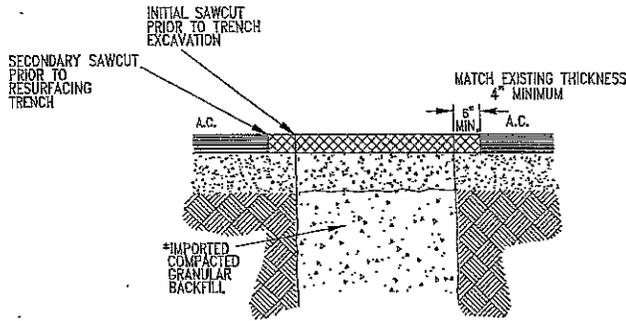
CITY OF SPRINGFIELD
 DEPT. OF PUBLIC WORKS

225 FIFTH STREET
 SPRINGFIELD, OR. 97477

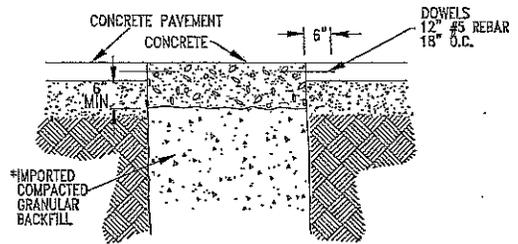
SHALLOW MANHOLE

STANDARD
 DRAWING

4-3

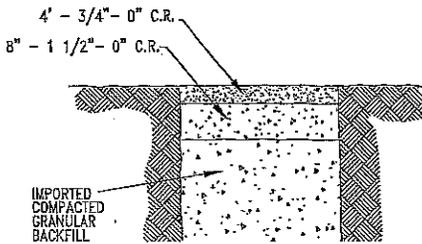


T - A
ASPHALT PAVED STREETS

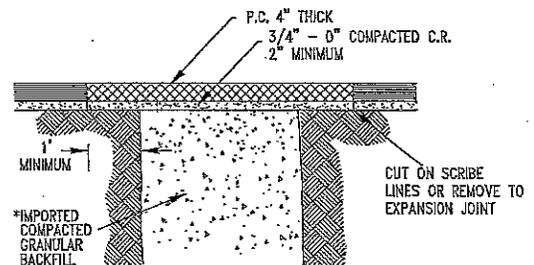


T - B
CONCRETE PAVED STREETS

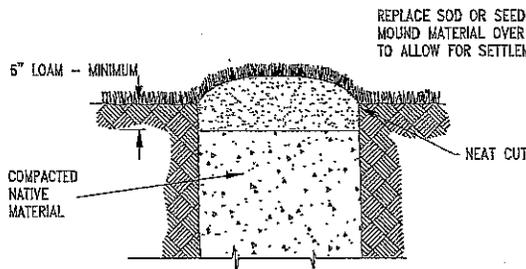
* CUTS CROSSING THE STREET OR WITHIN THE TRAVEL LANES MUST BE BACKFILLED WITH CONTROLLED DENSITY FILL (CDF)



T - C
UNPAVED STREETS AND ALLEYS



T - D
SIDEWALK AREAS



T - E
UNTRAVELED AREAS (LAWN)

NOTES:

- 1 ALL A.C. AND P.C. SURFACES SHALL BE SAWCUT
- 2 GRANULAR MATERIAL AS DIRECTED BY THE ENGINEER
- 3 CONSTRUCT PIPE BEDDING AS SHOWN ON STD. DWG. 4-1
- 4 SEE SPECIFICATIONS, SECTION 405, BACKFILL: NATIVE AND IMPORTED

NO.	REVISION	DATE	BY	APPR.

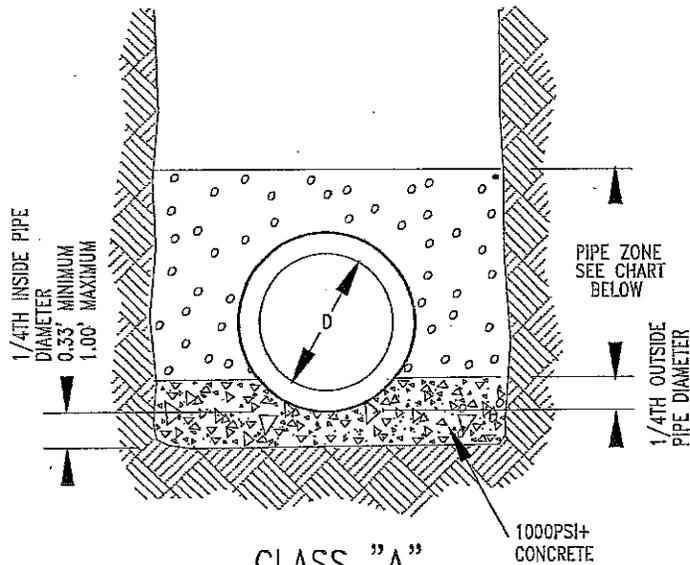
CITY OF SPRINGFIELD
DEPT. OF PUBLIC WORKS

225 FIFTH STREET
SPRINGFIELD, OR. 97477

SURFACE RESTORATION OVER
TRENCH EXCAVATION

STANDARD
DRAWING

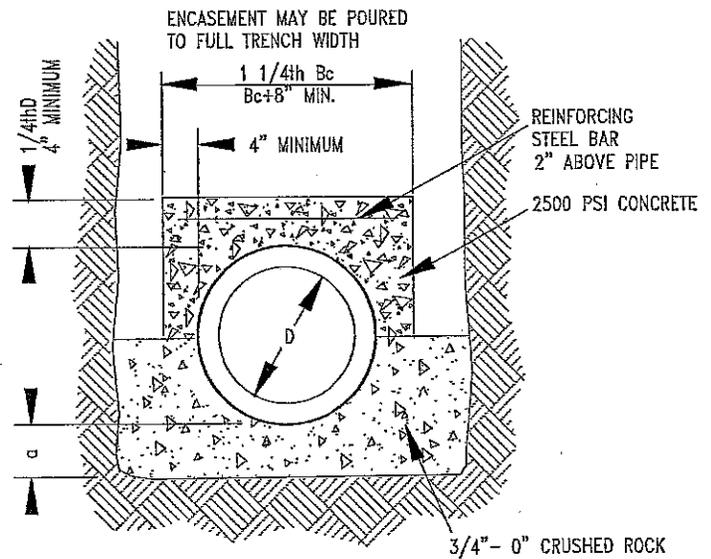
4-16



CLASS "A"
LOAD FACTOR 3.0

PIPE ZONE MATERIAL SHALL BE:

SANITARY SEWER TIGHT JOINT PIPE PLASTIC PIPE	STORM SEWER OPEN JOINTED PIPE PERFORATED PIPE
PEA ROCK BLEND SAND CRUSHED ROCK	ROUND ROCK (PEA ROCK) 3/8" MIN. DIAMETER 3/4" MAX. DIAMETER



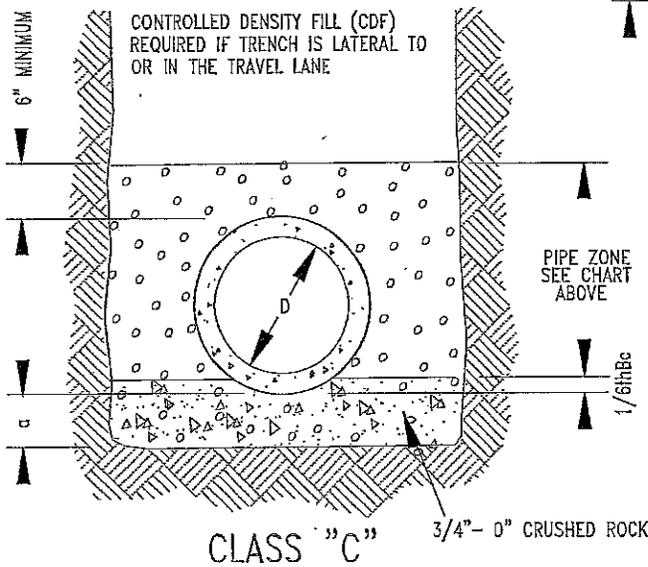
LOAD FACTORS

REINFORCED P = 1.00%	4.8
REINFORCED P = 0.40%	3.4
PLAIN	2.8

CLASS "B"

- Bc - OUTSIDE DIAMETER OF PIPE
- D - NOMINAL PIPE SIZE
- a - FILL BELOW PIPE (SEE TABLE)
- P - AREA OF TRANSVERSE STEEL IN THE CRADLE OR ARCH EXPRESSED AS A PERCENTAGE OF AREA OF CONCRETE AT INVERT OR CROWN.

D	a MINIMUM
0 - 27"	3"
30" - 60"	4"
66" +	6"



CLASS "C"

NO.	REVISION	DATE	BY	APPR.

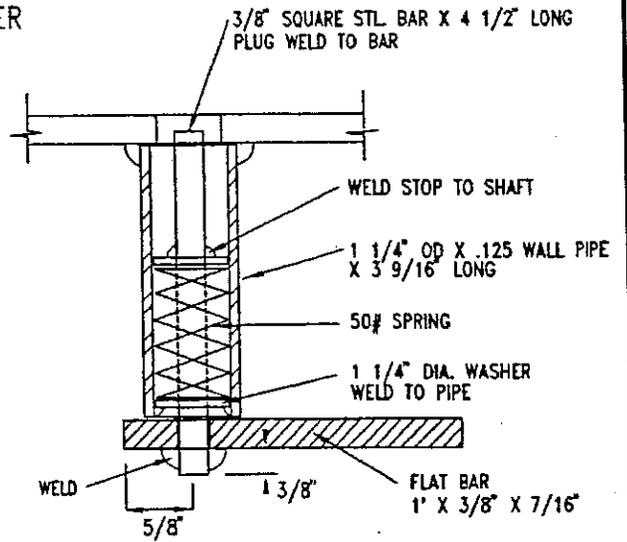
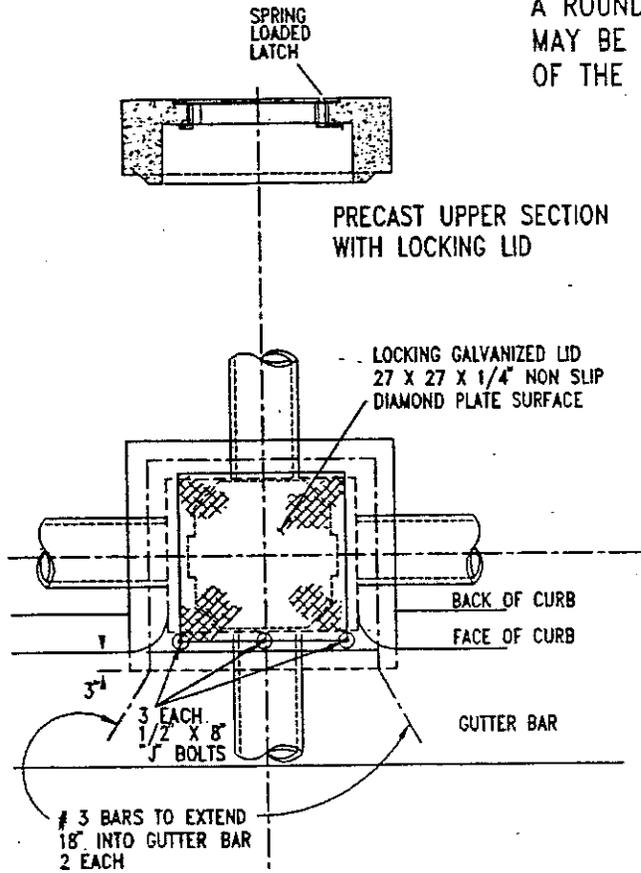
CITY OF SPRINGFIELD
DEPT. OF PUBLIC WORKS

225 FIFTH STREET
SPRINGFIELD, OR. 97477

TYPICAL
PIPE ZONE AND PIPE BEDDING

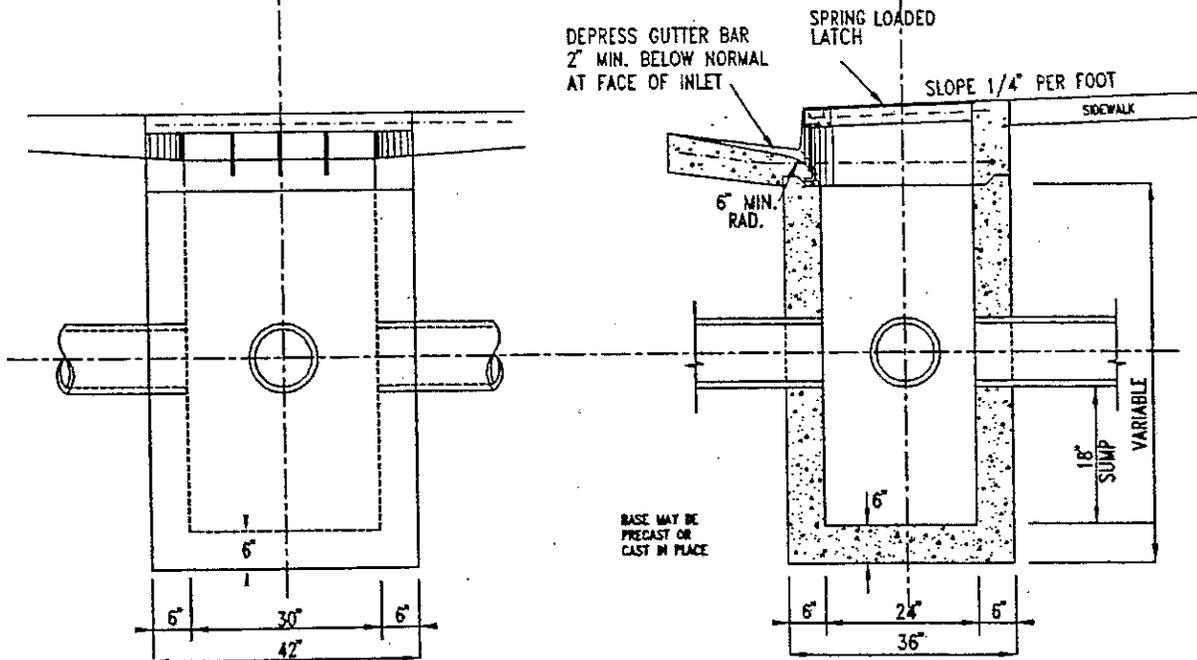
STANDARD
DRAWING
4-17

A ROUND MANHOLE TYPE LID
MAY BE USED WITH APPROVAL
OF THE ENGINEER



SPRING LOADED LATCH

- ALL CONCRETE SHALL BE MIN. 3500 PSI COMPRESSIVE STRENGTH AT 28 DAYS
- UPPER SECTION TO BE 48" STORM DRAIN INLET BY WALTS CONCRETE COMPANY OR EQUAL



REVISION	DATE	BY	APPR.

CITY OF SPRINGFIELD
DEPT. OF PUBLIC WORKS

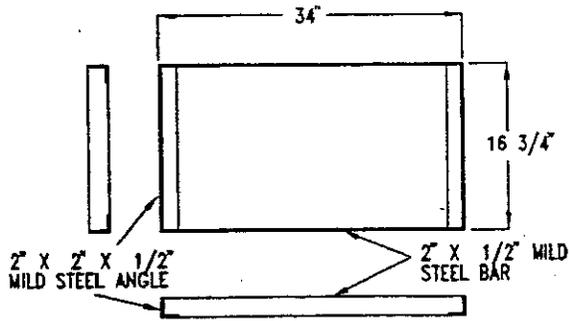
225 FIFTH STREET
SPRINGFIELD, OR. 97477

CURB INLET CATCH BASIN
TYPE 2 1/2A

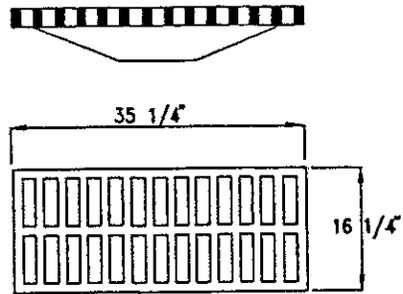
STANDARD
DRAWING

4-9

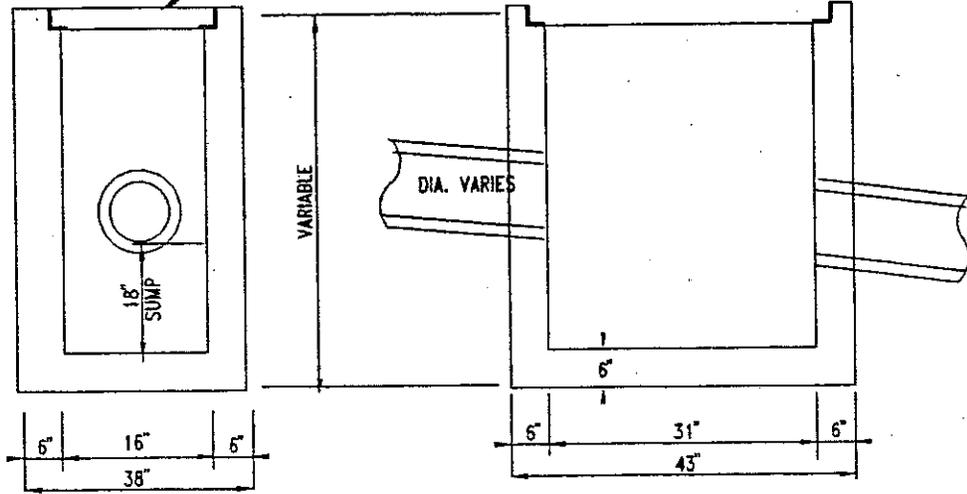
*BICYCLE PROOF
GRATE FRAME
AS APPROVED BY ENGINEER.



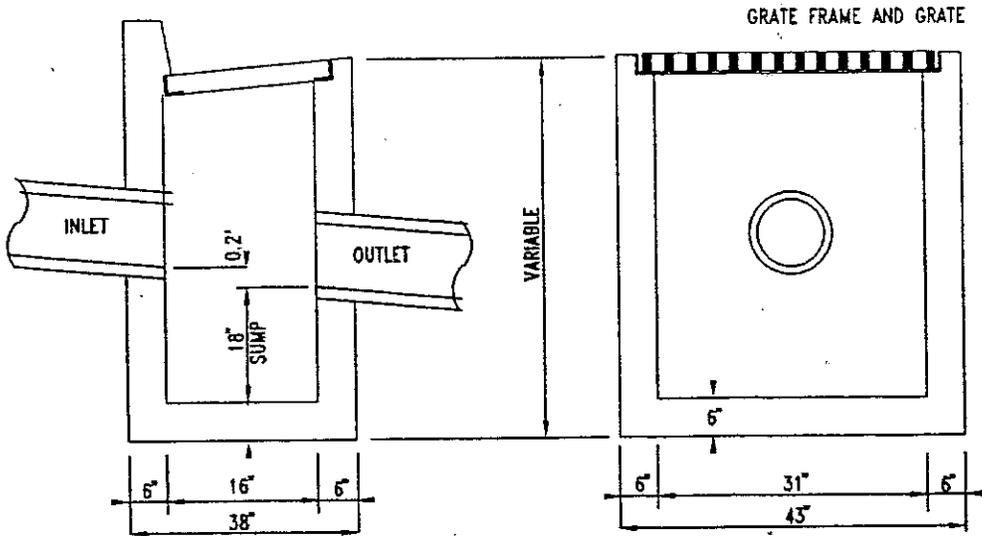
FABRICATED STEEL FRAME



GRATE FRAME AND GRATE



AREA DRAIN CATCH BASIN



STREET DRAIN CATCH BASIN

NO.	REVISION	DATE	BY	APPR.

CITY OF SPRINGFIELD
DEPT. OF PUBLIC WORKS

225 FIFTH STREET
SPRINGFIELD, OR. 97477

CATCH BASIN

STANDARD DRAWING
4-11

SUPPLEMENTAL INFORMATION

APPROVAL AND RELEASE
10TH AND N SEWER UPGRADE – PHASE 1
(PROJECT NO. P21037)
CITY OF SPRINGFIELD, OR

Site Address: _____

I/We hereby accept the restoration work performed on my/our property by (Name of Contractor). The work has been performed to my/our satisfaction and I/we release (Name of Contractor) and the City of Springfield from any further obligations with respect to this work.

Owner Name: _____

Date: _____

Signature: _____

Owner Name: _____

Date: _____

Signature: _____

City of Springfield – Traffic Control Plan (TCP)

PROJECT NAME: _____ CITY PROJECT#: _____

PROJECT ENGINEER: _____ PHONE: _____

PRIME CONTRACTOR: _____ PHONE: _____

SUB CONTRACTOR: _____ PHONE: _____

TCP SUPERVISOR: _____ PHONE: _____

WORK HOURS: _____ START DATE: _____ END DATE: _____

EQUIPMENT: _____

TRAFFIC IMPACT: _____

TRAFFIC SIGNAL TURN OFF/ON: _____

**CRITERIA for CITY of SPRINGFIELD - TRAFFIC CONTROL PLAN
SUBMITALS**

Submit your Traffic Control Plan (TCP) with the following information on 8.5" x 11" or 11" x 17" paper. **Fill out and include this form with your TCP.**

- 1) The TCP shall be a legible hand drawing, or a computer aided design with the following information:
 - a. A vicinity map, a north arrow, road names, intersection/driveway access points, curb lines, the work zone, and any special features (buildings, access points, sight obstructions) that could affect the TCP.
 - b. Location(s) where the TCP will be active. - This can be a 'line drawing' of the work zone(s) and/or a map that clearly indicates where traffic control devices will be placed, including spacing and cone tapers.
 - c. Attachments of the appropriate traffic control diagram(s) as shown in the current MUTCD and/or the ODOT - Oregon Temporary Traffic Control Handbook that reflect the work zone may be included as a standard reference.

TCP - CITY APPROVAL: _____ DATE: _____

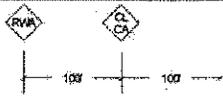
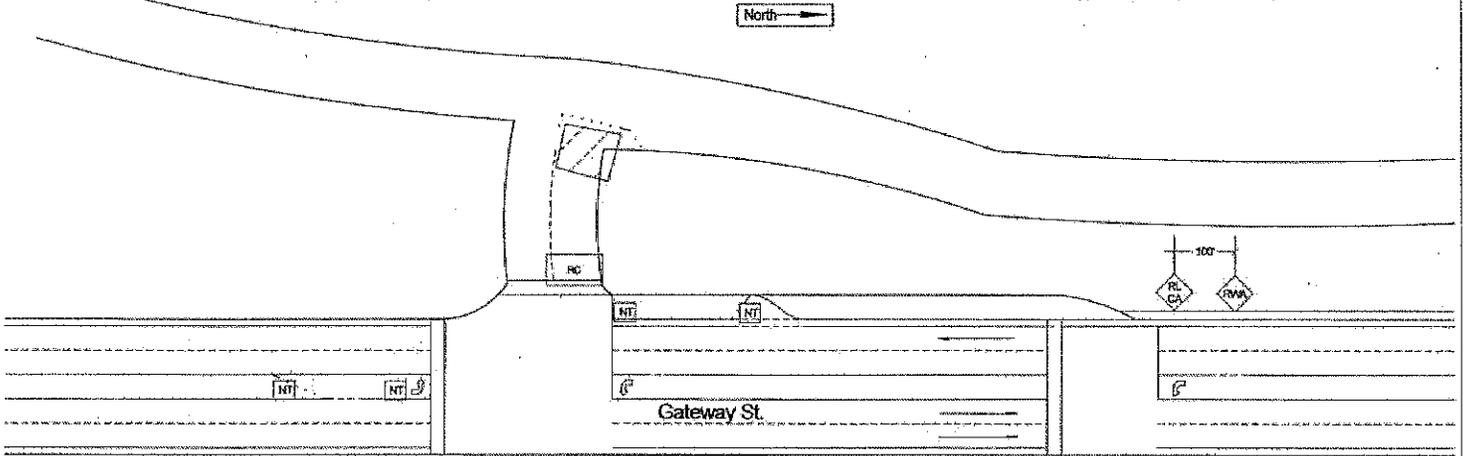
SPECIAL CONDITIONS:

Traffic Control Plan - Example

Traffic Control Plan: LTD Gateway Station
 Owner: LTD
 Architect: Rowel Brokaw Architects
 Contractor: Brown Contracting, Inc.

Gateway Mall

This traffic control plan to be used while replacing concrete paving at mall entrance. Traffic control to close entrance to mall.



*** APPROVED with listed Conditions ***

1. All signs shall be 'Soft' type on Flexible stands.
 2. Northbound Left Turn shall be disabled during construction. Contractor shall call City Transportation (726-3683) 48 hr. prior to closure to pull Phase 5 load switch and have contractor 'bag' northbound left turn arrows.
 3. Contractor shall contact City when project is near completion to open left turn lane.
- Dean Bishop - 726-3683

- | | | | |
|--|-------------------------------|--|-------------------------------|
| | Road Work Ahead | | Work Zone |
| | Right Lane Closed Ahead | | Delineators, 20' spacing typ. |
| | Center Lane Closed Ahead | | Posted Speed: 35 MPH |
| | No Left Turn or No Right Turn | | |
| | Road Closed Barricade | | |



**APPLICATION AND PERMIT TO OCCUPY OR
PERFORM OPERATIONS UPON A STATE HIGHWAY**

See Oregon Administrative Rule, Chapter 734, Division 55

PERMIT NUMBER

05M40307

CLASS: KEY#

GENERAL LOCATION				PURPOSE OF APPLICATION (TO CONSTRUCT/OPERATE/MAINTAIN)			
HIGHWAY NAME AND ROUTE NUMBER OR-126 / 227 / Eugene-Springfield				<input type="checkbox"/> POLE LINE	TYPE	MIN. VERT. CLEARANCE	
HIGHWAY NUMBER 227	COUNTY Lane			<input type="checkbox"/> BURIED CABLE	TYPE		
BETWEEN OR NEAR LANDMARKS HWY 228 & MOHAWK BLVD.				<input checked="" type="checkbox"/> PIPE LINE	TYPE Sanitary sewer		
HWY. REFERENCE MAP AML	DESIGNATED FREEWAY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		IN U.S. FOREST <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<input type="checkbox"/> NON-COMMERCIAL SIGN	FEE AMOUNT \$0.00	
APPLICANT NAME AND ADDRESS CITY OF SPRINGFIELD ATTN: KYLE GREENE 225 5th ST SPRINGFIELD, OR 97477				<input type="checkbox"/> MISCELLANEOUS OPERATIONS AND/OR FACILITIES AS DESCRIBED BELOW. FOR ODOT USE ONLY BOND REQUIRED: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO REFERENCE: OAR 734-55-035(2) AMOUNT OF BOND \$0.00 INSURANCE REQUIRED: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO REFERENCE: OAR 734-55-035(1) SPECIFIED COMP. DATE 02/16/2013			

DETAIL LOCATION OF FACILITY (For more space attach additional sheets)

MILE POINT	TO	MILE POINT	ENGINEERS STATION	ENGINEERS STATION TO	SIDE OF HWY OR ANGLE OF CROSSING	DISTANCE FROM		BURIED CABLE OR PIPE		SPAN LENGTH
						CENTER OF PVMT	R/W LINE	DEPTH/VERT.	SIZE AND KIND	
5.36			227+30		90°	VARIES	VARIES	10' MIN	24" PVC PIPE/CASING	XXX

DESCRIPTION AND LOCATION OF NON-COMMERCIAL SIGNS OR MISCELLANEOUS OPERATIONS FACILITIES

SPECIAL PROVISIONS (FOR MORE SPACE ATTACH ADDITIONAL SHEETS)

- TRAFFIC CONTROL REQUIRED YES [OAR 734-55-025(6)] NO
- OPEN CUTTING OF PAVED OR SURFACED AREAS ALLOWED? YES [OAR 734-55-100(2)] NO [OAR 734-55-100(1)]
- ◆ AT LEAST 48 HOURS BEFORE BEGINNING WORK, THE APPLICANT OR HIS CONTRACTOR SHALL NOTIFY THE DISTRICT REPRESENTATIVE AT TELEPHONE NUMBER: 541-686-7626 OR FAX A COPY OF THIS PAGE TO THE DISTRICT OFFICE AT: N/A SPECIFY TIME AND DATE IN THE SPACE BELOW.
- ◆ A COPY OF THIS PERMIT AND ALL ATTACHMENTS SHALL BE AVAILABLE AT THE WORK AREA DURING CONSTRUCTION.
- ◆ ATTENTION: Oregon Law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (503) 232-1987.
CALL BEFORE YOU DIG 1-800-332-2344

COMMENTS - ODOT USE ONLY

PERMIT AND PERMISSION TO INSTALL 24" SANITARY SEWER PIPELINE WITHIN ODOT RIGHT OF WAY. WORK TO INCLUDE HORIZONTAL DIRECTIONAL DRILLING FROM QUINALT ST. TO Q ST. ALSO, INSTALLATION OF NEW 60" S.S. M.H. NORTH SIDE OF W.B. HWY 227, BEHIND GUARDRAIL.
SEE ATTACHED GENERAL & SPECIAL PROVISIONS

IF THE PROPOSED APPLICATION WILL AFFECT THE LOCAL GOVERNMENT, THE APPLICANT SHALL ACQUIRE THE LOCAL GOVERNMENT OFFICIAL'S SIGNATURE BEFORE ACQUIRING THE DISTRICT MANAGER'S SIGNATURE.

LOCAL GOVERNMENT OFFICIAL SIGNATURE <i>X Kenneth J. Vegoney</i>		TITLE City Engineer	DATE 2/17/12
APPLICANT SIGNATURE <i>X Kyle Greene</i>	APPLICATION DATE 2/17/2012	TITLE CIVIL ENGINEER	TELEPHONE NO. 541-726-5750
DISTRICT MANAGER OR REPRESENTATIVE <i>X [Signature]</i>			APPROVAL DATE 2-22-12

734-3457(2-08)

GENERAL / SPECIAL PROVISIONS
CITY OF SPRINGFIELD
EUGENE – SPRINGFIELD HWY (OR 126 / 105), MP 5.36

05M40307

"APPLICANT/PERMITTEE SHALL BE RESPONSIBLE AND LIABLE FOR (1) INVESTIGATING PRESENCE/ABSENCE OF ANY LEGALLY PROTECTED OR REGULATED ENVIRONMENTAL RESOURCE(S) IN THE ACTION AREA; (2) DETERMINING ANY AND ALL RESTRICTIONS OR REQUIREMENTS THAT RELATE TO THE PROPOSED ACTIONS, AND COMPLYING WITH SUCH, INCLUDING BUT NOT LIMITED TO THOSE RELATING TO HAZARDOUS MATERIAL(S), WATER QUALITY CONSTRAINTS, WETLAND, ARCHEOLOGICAL OR HISTORIC RESOURCE(S), STATE AND FEDERAL THREATENED OR ENDANGERED SPECIES, ETC.; (3) COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, RULES AND ORDINANCES, WHETHER ENVIRONMENTAL IN NATURE OR OTHER, PERTAINING TO THE PROPOSED ACTION, AND OBTAINING ALL REQUIRED AND NECESSARY PERMITS AND APPROVALS.

IF APPLICANT/PERMITTEE IMPACTS A LEGALLY PROTECTED/ REGULATED RESOURCE, APPLICANT/PERMITTEE SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SUCH IMPACT, INCLUDING, BUT NOT LIMITED TO ALL COSTS OF MITIGATION AND REHABILITATION, AND SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS ODOT FOR SUCH IMPACTS AND BE RESPONSIBLE AND LIABLE TO ODOT FOR ANY COSTS OR CLAIMS THAT ODOT MAY HAVE." DIRECT QUESTIONS FOR ENVIRONMENTAL CONCERNS TO LOCAL ODOT CONTACT, DENNIS JOLL AT 541-686-7526.

ORS 570.670 STATES: "CONTRACTORS DUTY TO CLEAN MACHINERY BEFORE MOVING, WEED INFESTED RESIDUE NOT TO BE MOVED; NO PERSON OPERATING OR HAVING CONTROL OF ANY MACHINERY SHALL MOVE SAID MACHINERY OVER ANY PUBLIC ROAD WITHOUT FIRST THOROUGHLY CLEANING IT."

NOTHING IN THIS PERMIT IS INTENDED TO GRANT RIGHTS OR IMPLY APPROVAL NOT FALLING WITHIN THE AUTHORITY AND JURISDICTION OF ODOT. IT IS THE RESPONSIBILITY OF THE APPLICANT TO DETERMINE THE NEED FOR AND TO OBTAIN SUCH LICENSES, PERMITS OR OTHER FORM OF APPROVAL WHICH MAY BE REQUIRED BY OTHER STATE AGENCIES, FEDERAL AGENCIES, CITIES AND/OR COUNTIES OF OREGON, UTILITY OR RAILROADS. OAR 734-055-055.

SPECIAL PROVISIONS

CONSTRUCTION TO BE ACCORDING TO APPROVED PLANS. ANY CHANGES TO THE PLAN SHALL BE REVIEWED BY ODOT PRIOR TO CONSTRUCTION.

ALL SLOPES, DITCHES AND TRENCHLINES SHALL BE RESTORED TO THAT CONDITION PRIOR TO CONSTRUCTION. ADEQUATE COMPACTION OF TRENCHLINE IS REQUIRED TO INSURE ABSENCE OF SINKAGE.

NO VEHICLES TO BE PARKED ON THE PAVED SHOULDER OR ANY PAVED PORTION OF THE HIGHWAY.

IF, AT ANY TIME, SETTLEMENT OR ROADBED STRESS OCCURS DURING THE PROJECT, WORK WILL STOP AND REPAIRS SHALL BE STARTED IMMEDIATELY. AT THIS TIME, IMMEDIATELY CONTACT DISPATCH AT (503) 378-2299.

PERMITTEE /CONTRACTOR ACCEPT RESPONSIBILITY FOR PAVEMENT STRESS OR SETTLEMENT FOR A PERIOD OF 2 YEARS.

CONSTRUCTION WITHIN THE VEGETATION BETWEEN THE GUARDRAIL AND FENCE, ON THE SOUTH SIDE OF THE HIGHWAY SHALL BE DONE WITH MINIMAL REMOVAL OF SAID VEGETATION. REPLANTING OF LIKE VEGETATION SHALL BE ACCORDING TO OREGON STANDARD SPECIFICATION 01040.41 AND 01040.70

A MINIMUM OF A 3 FOOT PERIMETER AROUND ABOVE GROUND FACILITIES (TO INCLUDE, BUT NOT LIMITED TO PEDESTALS) IS TO BE MAINTAINED AND MOWED SO THAT FACILITIES ARE VISIBLE. FACILITIES THAT ARE NOT VISIBLE MAY BECOME DAMAGED DUE TO DEPARTMENT MAINTENANCE. THE APPLICANT SHALL INDEMNIFY AND HOLD HARMLESS THE STATE OF OREGON, THE COMMISSION, THE DEPARTMENT AGAINST ANY AND ALL DAMAGES, CLAIMS, DEMANDS, ACTIONS, CAUSES OF ACTION, COSTS AND EXPENSES OF WHATSOEVER NATURE MAY OCCUR TO FACILITIES UNMAINTAINED, AS DESCRIBED HERON.

APPLICANT MUST CALL FOR UTILITY LOCATES BEFORE DIGGING (1-800-332-2344). YOU MAY BE HELD LIABLE FOR DAMAGES. PRE-MARKING OF EXCAVATION AREAS IS REQUIRED. APPLICANT SHALL CALL BRIAN PARKS (541/953-6967) FOR ELECTRICAL LOCATES WITHIN ODOT RW.



**GENERAL PROVISIONS
FOR POLELINE, PIPELINE, BURIED CABLE,
AND MISCELLANEOUS PERMITS**

05M40307

Revised May 2010

APPLICANT: CITY OF SPRINGFILED	HIGHWAY: 227	MP: 5.36
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All checked (☒) provisions apply.

WORKSITE

- ☒ 1. Permittee must call for utility locates before digging ("Call Before You Dig!" 1-800-332-2344) per Oregon Administrative Rules (Chapter 952, Division 1). You may be held liable for damages. Premarking of excavation areas is required.
- ☒ 2. Permittee shall have a copy of this permit and all attachments at the work site. They shall be available to the District Manager or representative at their request.
- ☐ 3. Permittee shall acknowledge, in writing, receipt and review of Oregon Administrative Rules (Chapter 734, Division 55) governing miscellaneous facilities and operations on the highway right of way as the governing provisions of permit or agreement. Copies of this rule may be obtained from any district maintenance office.
- ☐ 4. Permittee shall review the Oregon Administrative Rules (Chapter 734 Division 55) governing miscellaneous facilities and operations on the highway right of way as the governing provisions of this permit or agreement. Web site: http://arcweb.sos.state.or.us/rules/OARS_700/OAR_734/734_055.html.
- ☒ 5. Access control fence must be maintained during construction and restored to its original or better condition after construction is complete.
- ☒ 6. The permittee shall not use state highway right of way to display advertising signs or merchandise of any kind.
- ☒ 7. The stopping and parking of vehicles upon state highway right of way for the maintenance of adjoining property or in furtherance of any business transaction or commercial establishment is strictly prohibited.
- ☐ 8. All grass and small brush within the work area shall be rotary or flail mowed to ground level prior to the beginning of work to facilitate clean up.
- ☒ 9. Disturbed areas shall be reseeded with grass native to the area in an appropriate seeding time.
- ☒ 10. The spreading of mud or debris upon any state highway is strictly prohibited and violation shall be cause for immediate cancellation of the permit. Clean up shall be at the applicant's expense. The highway shall be cleaned of all dirt and debris at the end of each work day, or more frequently if so determined by the District Manager or representative.
- ☒ 11. Permittee shall replace any landscape vegetation or fences that are destroyed. Any damage that is not fully recovered within 30 days (weather permitting) shall be replaced by ODOT at the expense of the permittee. A "plant establishment" shall be understood to be part of the planting work to assure satisfactory growth of planted materials. The plant establishment period will begin when the original planting and all landscape construction has been completed and approved. The length of the establishment period will be one calendar year or as defined in the permit Special Provisions.
- ☐ 12. Permittee shall install and maintain landscaped area as shown on the attached drawings. Planting shall be limited to low-growing shrubs, grass or flowers that do not attain sufficient height to obstruct clear vision in any direction. The Oregon Department of Transportation (ODOT) shall have the right to remove said landscaping at any time such removal may appear to be in the public interest, without liability or loss, injury, of damage or any nature whatsoever.

TRAFFIC

13. During construction or maintenance, the work area shall be protected in accordance with the current Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration, U.S. Department of Transportation, and the Oregon Department of Transportation supplements thereto. Flaggers must have a card or certificate indicating their completion of an approved work zone traffic control course. All traffic control devices shall be maintained according to the American Traffic Safety Services Association (ATSSA), Quality Standards for Work Zone Traffic Control Devices handbook.
14. Permittee shall provide a detailed traffic control plan for each phase of the work, showing signs and cones. Plans shall be reviewed by Oregon Department of Transportation in advance of construction or maintenance.
15. All damaged or removed highway signs shall be replaced by the permittee. Installation shall be according to MUTCD standards or ODOT specifications, and shall be completed as soon as possible but no later than the end of the work shift.
16. No lane restrictions are permitted on the roadway during the hours of darkness, on weekends, or between 6:00 AM and 9:00 AM, or 3:00 PM and 6:00 PM (Monday through Friday) without prior approval by ODOT.
17. Hours of work shall be NO DAYTIME LANE CLOSURES, NIGHT WORK ONLY.

DRAINAGE

18. On-site storm drainage shall be controlled within the permitted property. No blind connections to existing state facilities are allowed.
19. Excavation shall not be done on ditch slopes. Trench excavation shall either be at ditch bottom or outside ditch area. (Minimum depth at bottom of ditch shall be 36 inches; minimum depth outside of ditch shall be 42 inches)
20. Only earth or rock shall be used as fill material and shall slope so as not to change or adversely affect existing drainage. Fine grade and seed the finished fill with native grasses to prevent erosion.
21. A storm drainage study stamped by an Oregon Registered Professional Engineer (PE) is required. The study must meet standards of the National Pollution Discharge Elimination Systems (NPDES) when any of the following conditions apply:
- Whenever a four inch pipe is inadequate to serve the developed area,
 - development site is one acre or larger in size and directly or indirectly affects state facilities,
 - or as directed by the District Manager or representative.
22. Permittee shall provide on-site retention for storm water runoff that exceeds that of the undeveloped site.
23. All water discharged to an ODOT drainage system must be treated prior to discharge. All requests for connection to an ODOT storm system must meet any requirements of the National Pollutant Discharge Elimination System (NPDES). This may include local jurisdiction approval of on-site water quality treatment facilities and/or development of an operation and maintenance plan for any on-site water quality treatment facility, as determined by local jurisdiction.

EXCAVATION / CONSTRUCTION

24. The following ODOT documents and any supplements and subsequent revisions thereto, where applicable and not otherwise superseded by the permit language herein, but only to the extent that they provide standards and performance requirements for work to be performed under the permit, shall be incorporated for use in the permit:
- "Oregon Standard Specifications for Construction (2008)". ODOT shall have authority over acceptance of all materials and workmanship performed under this permit as stated in Section 00150.00 of the "Oregon Standard Specifications for Construction (2008)."
- For additional Supplemental and Special Provisions please refer to:
http://www.oregon.gov/ODOT/HWY/SPECS/standard_specifications.shtml Standard Specification books are available on this site.
25. Open cutting of pavement is allowed in areas specifically approved by District Manager or representative.
26. Trench backfill shall be according to the attached typical drawing, marked as Exhibit A.

27. Open cutting of the highway is allowed with construction in accordance with OAR 734-55-0100. All excavation in paved areas shall be backfilled and the roadway surface patched before the end of each shift. In special cases where steel plates are allowed, said plates shall be pinned and a temporary cold patch applied to the edges. The permittee shall be fully responsible for monitoring and maintenance of temporary patching and steel plating.
28. Compaction tests shall be required for each open cut per Oregon Standard Specification for Construction. Compaction tests shall be conducted once for every 300 lineal feet per lift of continuous trench according to the Manual of Field Test Procedures (MFTP), published by ODOT. Percent Compaction shall be 95%. At the discretion of the District Manager or representative, results of compaction test shall be provided to District Manager or representative at applicants' expense.
29. Control Density Fill (CDF) shall be used as surface backfill material in place of crushed rock in open trenches that impact the travel portions of the highway. A ¾"-0, or 1"-0 rock will be used for the aggregate. The amount of cement used shall not exceed 3.0% of the total mixture's weight. Maximum compressed strengths must not exceed 250 pounds per square inch (psi).
30. Surface restoration shall be a minimum of eight inches of hot asphalt-concrete (AC), compacted in two inch lifts, or match existing pavement depth, whichever is greater. Sand-seal all edges and joints.
31. All aggregate shall conform to Oregon Standard Specification for Construction, Section 02630 - Base Aggregate.
32. Any area of cut or damaged asphalt shall be restored in accordance with the included attachment "T-Cut Typical Section" drawing. For a period of two years following the patching of paved surface, permittee shall be responsible for the condition of permittee's pavement patches, and during that two year period shall repair to District Manager or representative satisfaction any of the patches which become settled, cracked, broken, or otherwise faulty.
33. An overlay to seal an open-cut area shall be completed prior to the end of the construction season, or when minimum temperature allows per "Oregon Standard Specification for Construction (2008)" and any subsequent revisions thereto. Typical overlay shall be 1.5 inches deep and cover the affected area from edge of pavement to edge of pavement, and taper longitudinally at a fifty feet to one inch (50' : 1") ratio. Taper may be adjusted by the District Manager as required. For a period of two years following this patching of the surface, the permittee shall be responsible for the condition of said pavement patches, and during that time shall repair to the District Manager or representative's satisfaction any of the patches which become settled, cracked, broken or otherwise faulty.
34. Highway crossings shall be bored or jacked. Bore pits shall be located behind ditch line or in areas satisfactory to the District Manager or representative. Unattended pits shall either be protected by a six-foot fence, backfilled, or steel plated and pinned.
35. Permittee shall install a "tracer wire" or other similar conductive marking tape or device, if installing any non-conductive, unlocatable underground facility, in order to comply with Oregon Utilities Coordination Council (OUCC), per OAR 952-01-0070 (6).
36. Trench backfill outside of ditch line or in approved areas can be native soil compacted at optimum moisture in twelve inch layers to 90% or greater of the maximum density.
37. Native material that is found to be unsatisfactory for compaction shall be disposed of off the project and granular backfill used.
38. Trench backfill in rock slope or shoulder shall be crushed 1"-0 or ¾"-0 size rock compacted at optimum moisture in eight-inch layers. Compaction tests shall be conducted according to the Manual of Field Test Procedures (MFTP), published by ODOT. Percent compaction shall be 95%. At the discretion of the District Manager or representative, results of compaction tests shall be provided to District Manager or representative at applicant's expense.
39. Where excavation is on fill slope steeper than a two to one (2:1) ratio, slope protection shall be provided using four-inch size rock laid evenly to a minimum depth of twelve inches.
40. No more than 300 feet of trench longitudinally along the highway shall be left open at any one time and no trench shall be left in an open condition overnight.
41. Areas of disturbed cut and fill slopes shall be restored to a condition suitable to the District Manager or representative. Areas of erosion to be inlaid with an acceptable riprap material.

42. All underground utilities shall be installed with three-foot or more of horizontal clearance from existing or contract plans guardrail posts and attachments. All non-metallic water, sanitary and storm sewer pipe shall have an electrically conductive insulated Number 12-gauge copper tracer wire the full length of the installed pipe using blue wire for water and green for storm and sanitary sewer piping.
43. Any area of cut or damaged concrete shall be restored in accordance with the attached Typical Section-Pipe Section under sidewalk.
44. Utility markers and pedestals shall be placed as near the highway right-of-way line as practical. In no case shall pedestals and line markers be located within the highway maintenance area.
45. No cable plowing is allowed within the lateral support of the highway asphalt (i.e. at six feet lower than the edge of the asphalt, no plowing within nine feet of the edge of the asphalt).
46. Review by ODOT Bridge Engineers is required for all proposed bridge and structure attachments and for utility or any facilities to be installed within sixteen feet of bridge foundations, supports, walls or related, or within the influence zone of bridge facilities.

MISCELLANEOUS

47. Permittee shall be responsible and liable for (1) investigating presence/absence of any legally protected or regulated environmental resource(s) in the action area; (2) determining any and all restrictions or requirements that relate to the proposed actions, and complying with such, including but not limited to those relating to hazardous material(s), water quality constraints, wetlands, archeological or historic resources(s) state and federal threatened or endangered species, etc.; (3) complying with all federal, state, and local laws, and obtaining all required and necessary permits and approvals.
48. If the permittee impacts a legally protected/regulated resource, permittee shall be responsible for all costs associated with such impact, including, but not limited to all costs of mitigation and rehabilitation, and shall indemnify, and hold ODOT harmless for such impacts and be responsible and liable to ODOT for any associated costs or claims that ODOT may have.
49. Plans are approved by ODOT in general only and do not relieve the permittee from completing construction improvements in a manner satisfactory to ODOT. The District Manager or representative may require field changes. When revisions are made in the field, permittee is responsible to provide "as built" drawings, within 60 days from completion of highway improvements, and shall submit them to the District Office issuing the permit.
50. Permittee shall be responsible for locating and preserving all existing survey monumentation within the work area in accordance with ORS 209.150 and/or 209.155. If monumentation or its accessories are inadvertently or otherwise disturbed or destroyed, applicant shall be responsible for all costs and coordination associated with it's reestablishment by a professional licensed surveyor.

By this signature applicant accepts all checked () provisions (4 pages).

Applicant signature: <i>Theresa Greene</i>	Date: 2/17/2012
--	-----------------

OWNER: Karen J. Chavez
ADDRESS: 970 "T" Street
Springfield, Oregon 97477

PROJECT: Springfield Sewer
PARCEL: 1482-02
PHONE: (541) 741-1708

SETTLEMENT AND OBLIGATIONS SUMMARY

Basis of Settlement

1,253 sq. ft. sanitary sewer easement @ \$0.73/sq. ft. (10% of fee)	\$915
Less:	
201 sq. ft. that is presently encumbered @ \$0.73/sq. ft.	(\$147)
557 sq. ft. Tem. Construction Easement, \$7.25 sq. ft. x 6% x 1/2 year	\$122
Stipend for additional construction season	\$100
6' weeping sequoia	\$125
Relocation and storage costs for 2 recreational vehicles	<u>\$184</u>
Total Compensation	\$1,300

Agency Obligations

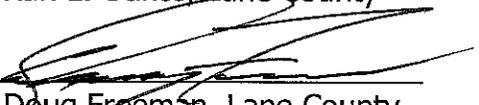
The City of Springfield will, upon completion of installation of the sewer line, replace all effected asphalt paving and concrete with new material. The cedar fencing will either be carefully disassembled and reassembled or new fencing will be installed, dependent upon condition after disassembly. The lawn area will be leveled and re-seeded and the sprinkler lines and heads will be replaced. Any existing underground utilities in the acquisition areas will either be avoided or reconnected during construction. It is the intent of the City to avoid disturbing the existing hedge and cobblestone blocks presently lining the access drive. In the event such disturbance occurs, these items will also be either repaired or replaced.

Seller Obligations

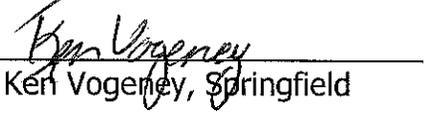
The purchase price includes payment of \$184.00 to relocate Grantor's travel trailer and boat. Both vehicles will be relocated by April 1, 2012; stored for the duration of the project or September 30, 2012, or whichever comes first; and then returned to the site by the Grantor.

Negotiator: 
Karl L. Oakes, Lane County

Dated: 1/06/2012

Reviewed: 
Doug Freeman, Lane County

Dated: 1/6/2012

Approved: 
Ken Vogeney, Springfield

Dated: 1/9/2012

OWNER: Bernard D. Hiatt, Trustee
ADDRESS: 836 "R" Street
Springfield, Oregon 97477

PROJECT: Springfield Sewer
PARCEL: 1482-03
PHONE: (541) 726-1382

SETTLEMENT AND OBLIGATIONS SUMMARY

Basis of Settlement

Original Offer

1,253 sq. ft. sewer easement	\$867
126 sq. ft. temporary easement	\$129
Asphalt, concrete, grass seeding	<u>\$100</u>
Total offer, as per Determination of Value	\$1,100 (r)

Negotiated Settlement, as per the Counteroffer \$1,600

Agency Obligations

All of the existing improvements in the easement areas, including the asphalt pavement, concrete pavement, and ground cover, will be either left undisturbed or they will be replaced or repaired by the contractor.

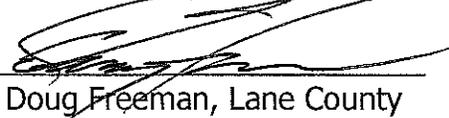
The owner's vacant lot shall not be used for parking or storage during construction

Seller Obligations

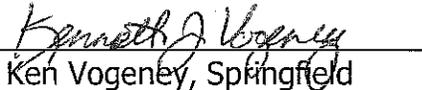
No seller obligations.

Negotiator: 
Karl L. Oakes, Lane County

Dated: 2/21/2012

Reviewed: 
Doug Freeman, Lane County

Dated: 2/21/2012

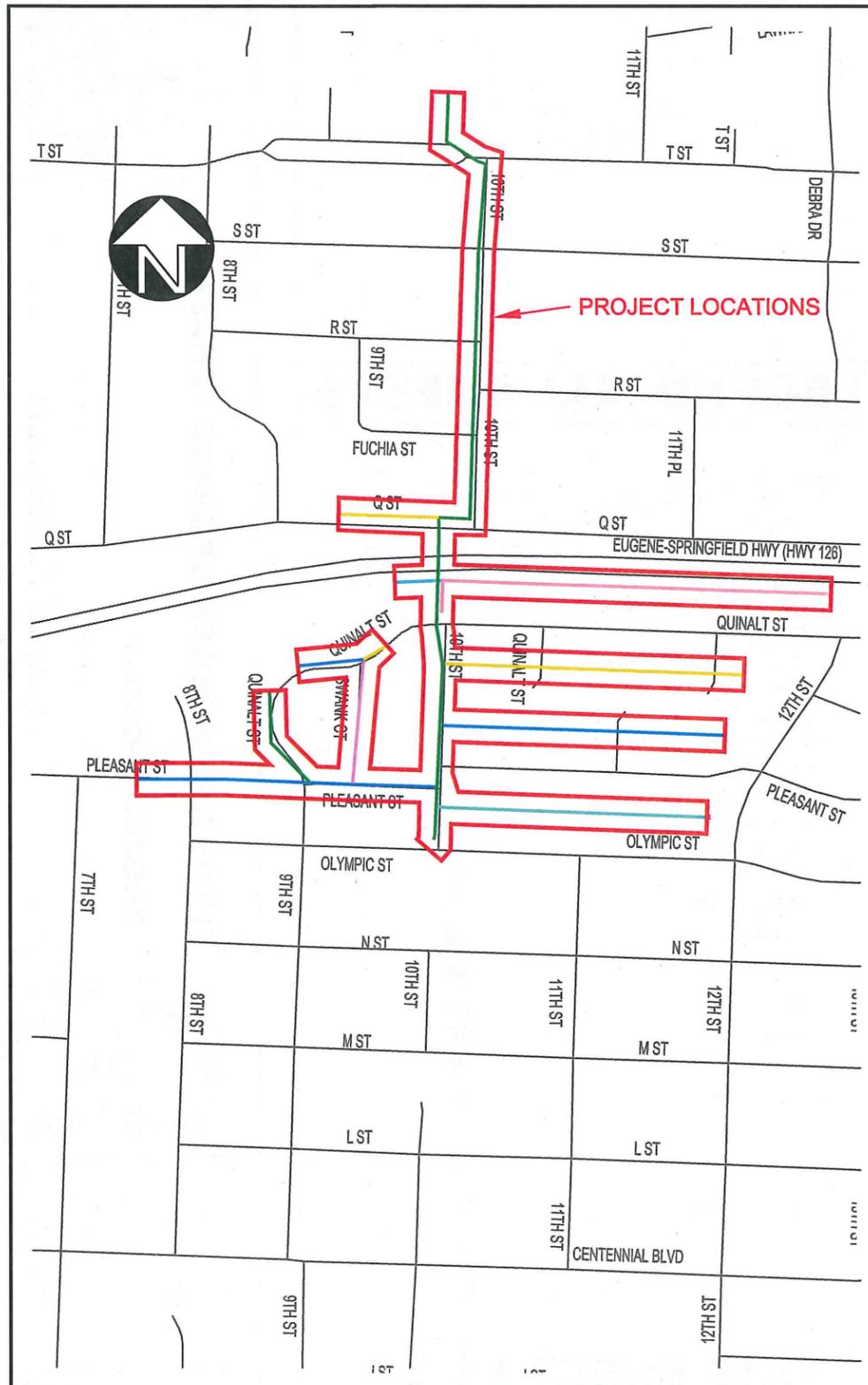
Approved: 
Ken Vogeney, Springfield

Dated: 2/22/2012

10TH AND N SEWER UPGRADE - PHASE 1

CITY PROJECT NO. P21037

VICINITY MAP 1



Scale 1"=1000'

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EROSION NOTES & DETAILS	pg. 4A / 4B	Manhole Frame Detail/Boring and Casing Detail	pg. D2
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Line B - Sta. 1+00-4+00 - P & P	pg. 12A / 12B		
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Line B - Sta. 7+00-10+00 - P & P	pg. 14A / 14B		
Line B - Sta. 10+00-13+10 - P & P	pg. 15A / 15B		
Line C - Sta. 1+00-4+00 - P & P	pg. 16A / 16B		
Line C - Sta. 4+00-7+00 - P & P	pg. 17A / 17B		
Line C - Sta. 7+00-10+54 - P & P	pg. 18A / 18B		
Line D - Sta. 1+00-4+00 - P & P	pg. 19A / 19B		
Line D - Sta. 4+00-7+00 - P & P	pg. 20A / 20B		
Line D - Sta. 7+00-9+89 - P & P	pg. 21A / 21B		
Line E - Sta. 1+00-5+50 - P & P	pg. 22A / 22B		
Line E - Sta. 5+50-9+90 - P & P	pg. 23A / 23B		
Line F - Sta. 1+00-4+00 - P & P	pg. 24A / 24B		
Line F - Sta. 4+00-7+00 - P & P	pg. 25A / 25B		
Line F - Sta. 7+00-10+21 - P & P	pg. 26A / 26B		
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Line L - Sta. 1+00-4+12 - P & P	pg. 32A / 32B		

No.	Revision/Issue	Date

NOTE:

UTILITY LOCATIONS ARE APPROXIMATE
DO NOT
SCALE OR LOCATE UTILITY LINES OR MAINS
FROM THESE DRAWINGS
CALL FOR UTILITY LOCATES
1-800-332-2344

THE CONTRACTOR SHALL BE RESPONSIBLE
FOR DETERMINING UTILITY LOCATIONS PRIOR TO
BEGINNING OF CONSTRUCTION.
THESE PLANS MAY NOT SHOW ALL UTILITIES OR
THE CORRECT LOCATIONS.

10TH AND N SEWER UPGRADE - PHASE 1 PROJECT P21037

City of Springfield
PUBLIC WORKS / ENGINEERING
225 FIFTH STREET, SPRINGFIELD, OR 97477
PHONE (541) 726-3753 FAX (541) 736-1021
INTERNET www.ci.springfield-or.gov

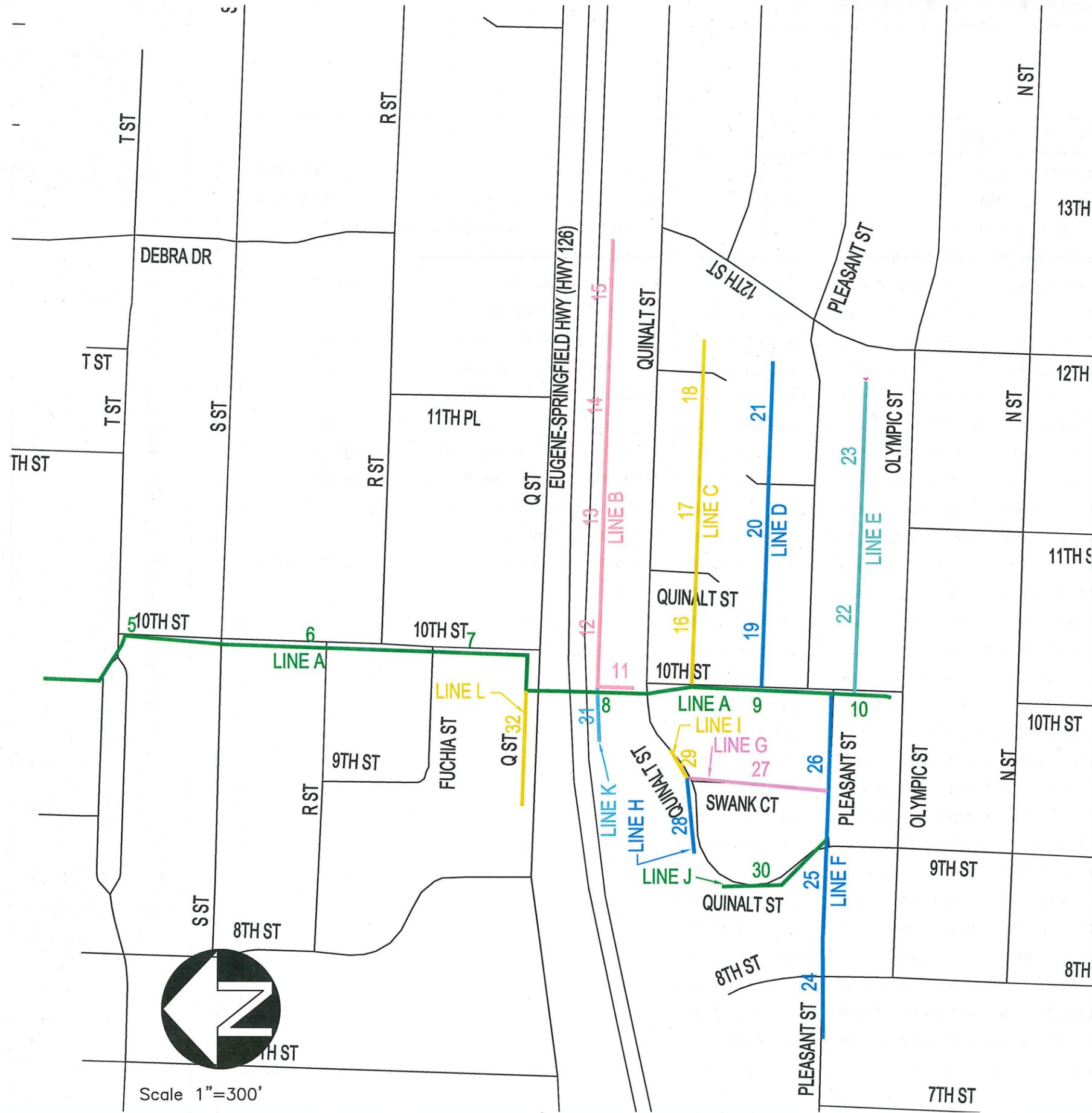


EXPIRES 6/30/12

SHEET

1

LOCATION MAP OF PROJECT



LEGEND- ALL SHEETS

- | | | |
|---------------------------------|---------|-------|
| GAS LINE | — G — | G — |
| FIBER OPTIC (NO. OF CABLES) | — COM — | COM — |
| WATER LINE | — W — | W — |
| POWER (ELECTRIC) | — E — | E — |
| WATER LINE | — W — | W — |
| STORM SEWER (NEW) | — SD — | SD — |
| STORM SEWER (EXISTING) | — SD — | SD — |
| RIGHT OF WAY | — ROW — | ROW — |
| SANITARY SEWER (NEW) | — S — | S — |
| SANITARY SEWER (EXISTING) | — SS — | SS — |
| EASEMENT | — EA — | EA — |
| TEMPORARY CONSTRUCTION EASEMENT | — TCE — | TCE — |
| SANITARY SEWER LATERAL | | |
| GAS VALVE | | ⊗ |
| WATER VALVE | | ⊗ |
| FIRE HYDRANT | | ⊕ |
| WATER METER | | ⊕ |
| UTILITY BOX | | ⊕ |
| POWER POLE/LIGHT | | ⊕ |
| CATCH BASIN | | ⊕ |
| CURB INLET | | ⊕ |
| STORM MANHOLE | | ⊕ |
| SANITARY MANHOLE | | ⊕ |
| MAIL BOX | | ⊕ |
| UTILITY POLE | | ⊕ |
| GUY WIRE | | ⊕ |
| TREE | | ⊕ |
| POWER PEDESTAL | | ⊕ |
| LIGHT POLE | | ⊕ |
| BUSH/HEDGE | | ⊕ |
| TELEPHONE PEDESTAL | | ⊕ |

THIS SHEET ONLY

ASSOCIATED SHEET NUMBER 8

No.	Revision/Issue	Date

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 THESE PLANS MAY NOT SHOW ALL UTILITIES OR
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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

City of Springfield
PUBLIC WORKS / ENGINEERING
 225 FIFTH STREET, SPRINGFIELD, OR 97477
 PHONE (541) 726-3753 FAX (541) 736-1021
 INTERNET www.ci.springfield-or.gov



EXPIRES 4/30/12

SHEET

2

GENERAL CONSTRUCTION NOTES

- A. ALL MATERIALS AND WORKMANSHIP WITHIN THE PUBLIC RIGHT-OF-WAY OR PUBLIC EASEMENTS SHALL MEET CITY OF SPRINGFIELD DEPARTMENT OF PUBLIC WORKS "STANDARD CONSTRUCTION SPECIFICATIONS, 1994" AS AMENDED IN 1998 (OR CURRENT EDITION), IN ADDITION TO THESE PLANS.
- B. OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0100. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (800) 332-2344.
- C. LOCATION AND/OR DEPTH OF EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES FOR UNDERGROUND LOCATION OF FACILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATING OR "POTHOLING". THE "ONE-CALL" NUMBER (800) 332-2344.
- D. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH UTILITY COMPANIES ON THE TIMING OF INSTALLATION OF THEIR FACILITIES.
- E. CONTRACTOR REQUIRED TO NOTIFY UTILITIES OF OPEN TRENCHING FOR THE PROJECT TO ALLOW POSSIBLE COMMUNICATION CABLE INSTALLATION.
- F. THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL DEVICES NECESSARY TO PROTECT AND SAFEGUARD THE PUBLIC AND WORKERS AGAINST INJURY AND PROTECT THE WORK AGAINST DAMAGE. ALL TEMPORARY TRAFFIC CONTROL SIGNING AND DEVICES SHALL BE IN PLACE PRIOR TO BEGINNING WORK. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), CURRENT EDITION, AS SUPPLEMENTED AND AMENDED BY THE OREGON SUPPLEMENTS. FLAGGING SHALL BE PERFORMED AS SHOWN IN THE "OREGON TEMPORARY TRAFFIC CONTROL HANDBOOK FOR OPERATIONS OF THREE DAYS OR LESS", 2006 OR CURRENT EDITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REQUIRED TRAFFIC CONTROL AS FIELD CONDITIONS WARRANT. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN AT THE PRE-CONSTRUCTION CONFERENCE FOR CITY REVIEW AND APPROVAL.
- G. ALL SANITARY AND STORM SEWER CONNECTIONS TO EXISTING CITY OWNED FACILITIES (PIPE, CATCH BASINS, MANHOLES, ETC.) SHALL BE INSPECTED BY THE INSPECTOR PRIOR TO HOOK UP. CONTACT THE INSPECTOR NO LESS THAN 48 HOURS PRIOR TO DESIRED INSPECTION TIME.
- H. BEFORE BACK-FILLING THE END OF A MAINLINE PIPE, NOT ENDING AT A MANHOLE OR A CLEAN OUT, THE CONTRACTOR SHALL PERFORM THE T.V. INSPECTION AS REQUIRED BY THE STANDARD SPECIFICATIONS AND ALLOW THE ENGINEER TO DETERMINE THE EXACT LOCATION AND ELEVATION OF THE END OF THE PIPE.
- I. WHERE CONNECTING TO AN EXISTING PIPE. THE CONTRACTOR SHALL EXPOSE THE END OF THE EXISTING PIPE AND ALLOW THE ENGINEER TO VERIFY EXACT LOCATION AND ELEVATION, CONDITION, AND POSITIVE FLOW BEFORE LAYING ANY NEW PIPE ON THAT SYSTEM.
- J. THE SEWER GRADE SHALL BE PER THE PLANS SPECIFICATIONS AND WITH THE MINIMUM COVER AS SHOWN ON THE PLANS.
- K. THE CONTRACTOR SHALL INSPECT THE SEWER BY T.V. INSPECTION AFTER ALL BACKFILL AND BEFORE THE FINAL LIFT OF ASPHALT PAVING. THE CONTRACTOR SHALL SUPPLY THE CITY WITH A WRITTEN T.V. REPORT AND VIDEO TAPE OR DVD FOR CITY APPROVAL AT LEAST 2 WORKING DAYS BEFORE THE PRE-PAVING MEETING.
- L. CONTRACTOR TO SCHEDULE A PRE-PAVING MEETING 24 HOURS PRIOR TO PAVING. CONTACT THE ENGINEER TO SCHEDULE THE MEETING.

M. ALL JOINTS BETWEEN EXISTING AND NEW ASPHALT PAVING SHALL BE SEALED WITH POLYMERIZED ASPHALT TO PREVENT PICK UP.

N. COMPACTION REQUIREMENTS:

LAYER	RATE	TEST
SUBGRADE	95%	T99
CRUSHED ROCK	95%	T180
ASPHALT (LOCAL)	90%	RICE
ASPHALT (COLLECTOR/ARTERIAL)	92%	RICE

O. CONCRETE COMPRESSIVE STRENGTH REQUIREMENTS (PSI):

CONCRETE USE	FIELD	LABORATORY
SIDEWALK/ADA RAMPS	3000	3450
CURBS/GUTTERS	3500	4025
DRIVEWAYS	3500	4025
PAVEMENT	4000	4600

P. THIS PROJECT SHALL COMPLY WITH THE AMERICAN DISABILITIES ACT REQUIREMENTS SUCH AS INCORPORATION OF DESIGN CRITERIA FOR HANDICAP RAMPS, MAXIMUM PROFILE AND CROSS SECTION SLOPES FOR SIDEWALKS, UPGRADING EXISTING HANDICAP FACILITIES WHERE MAJOR CONSTRUCTION IS OCCURRING, AND BUILDING WARNING FOR OBJECTS IN SIDEWALK SUCH AS CURBING OR LANDSCAPING AROUND MAILBOXES.

Q. CONTRACTOR IS RESPONSIBLE TO OBTAIN APPLICABLE PERMITS FROM OTHER AGENCIES WITH JURISDICTIONS INCLUDING BUT NOT LIMITED TO LANE COUNTY, OREGON DEPARTMENT OF TRANSPORTATION, OREGON DIVISION OF STATE LANDS, THE ARMY CORPS OF ENGINEERS, OR THE DEPARTMENT OF ENVIRONMENTAL QUALITY.

R. ALL IMPROVEMENTS THAT WILL BE PRIVATELY OWNED AND MAINTAINED WILL BE BOUND BY THE CURRENT REQUIREMENTS OF THE STATE OF OREGON STRUCTURAL SPECIALTY CODE, PLUMBING SPECIALTY CODE, AND/OR CITY OF SPRINGFIELD BUILDING DIVISION REQUIREMENTS. CONTRACTOR IS RESPONSIBLE TO OBTAIN APPLICABLE PERMITS FROM OTHER CITY DEPARTMENTS PRIOR TO DOING PRIVATE WORK.

S. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE START OF CONSTRUCTION.

T. STREET TREES: ONLY STREET TREES WITH A MINIMUM TRUNK CALIPER OF 2 IN. MEASURED 6 IN. ABOVE THE ROOT STEM SHALL BE SELECTED FOR PLANTING. REFER TO CHAPTER 6 OF CITY OF SPRINGFIELD ENGINEERING DESIGN STANDARDS AND PROCEDURES FOR APPROVED STREET TREES.

U. A PRE-CONSTRUCTION CONFERENCE IS REQUIRED BEFORE START OF CONSTRUCTION. ALL UTILITIES, CONTRACTORS AND CITY REPRESENTATIVES SHALL HAVE RECEIVED THE FINAL APPROVED PLANS AT LEAST 5 WORKING DAYS PRIOR TO THE PRE CONSTRUCTION CONFERENCE.

V. THE ENGINEER AND/OR CITY HAVE THE RIGHT TO REQUIRE ADDITIONAL WORK NOT SHOWN HEREIN BUT NECESSARY FOR THE SUCCESSFUL COMPLETION OF THE PROJECT.

W. REQUESTS BY THE CONTRACTOR FOR CHANGES SHALL BE APPROVED BY THE ENGINEER AND THE CITY IN WRITING PRIOR TO IMPLEMENTATION.

X. CONTRACTOR SHALL SUBMIT EVIDENCE OF INSURANCE IN ACCORDANCE WITH THE STANDARD SPECIFICATION TO THE CITY FOR APPROVAL PRIOR TO BEGINNING WORK.

Y. CONTRACTOR SHALL BE AWARE IF PAVING IS NOT SCHEDULED OR DOES NOT OCCUR PRIOR TO OCTOBER 15TH, WET WEATHER PROVISIONS INCLUDING ADDITIONAL ROCK SUBSTRUCTURE AND GEOTEXTILE FABRIC SHALL BE USED. REFER TO STANDARD SPECIFICATION SECTION 301.1.01 AND THE TYPICAL CROSS SECTIONS CONTAINED HEREIN FOR DETAILS. ADDITIONAL PROVISIONS SHALL BE AT THE CONTRACTOR'S EXPENSE.

Z. THE CONTRACTOR SHALL VERIFY EACH EXISTING SANITARY AND STORM CONNECTION.

No.	Revision/Issue	Date

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EXPIRES 6/30/17

NOTES:

1. PLACE INLET/CATCH BASIN PROTECTION AT EXISTING FIXTURES (SEE DETAIL ON SHEET 4B.)

GENERAL NOTES:

1. CONCRETE WASHOUTS ARE NOT PROVIDED ON THIS PROJECT
2. SAW CUTTING SLURRY IS TO BE VACUUMED
3. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON (OCTOBER 1 TO APRIL 30) OR SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPTEMBER 30) SHALL BE IMMEDIATELY STABILIZED WITH AN APPROVED ESC METHOD (SEEDING & MULCHING WITH STRAW, BARK, COMPOST, OR PLASTIC COVERING, ETC.).

EROSION CONTROL STANDARD NOTES:

- A. Approval of this Erosion and Sedimentation Control Plan (ESCP) does not constitute an approval of permanent road or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).
- B. Approval of this ESCP does not relieve the permit holder and or the contractor from all other permitting requirements. Prior to beginning construction activities, all other necessary approvals shall be obtained.
- C. An inspection of the erosion control measures by City LDAP staff is required prior to any ground disturbance on the site.
- D. The erosion and sediment control measures shown on the plan are the minimum requirements for anticipated site conditions. During the construction period, these measures shall be upgraded as needed for unexpected storm events and to ensure that sediment and sediment-laden water does not leave the site.
- E. The implementation of the ESCP and the construction, maintenance, replacement, and upgrading of the erosion and sediment control measures is the responsibility of the permit holder and or the contractor until all construction is completed and accepted by the City and vegetation/landscaping is established per the required warranty period.
- F. In the event the ESC facilities identified on the ESCP are not functioning properly, the contractor is responsible for immediately implementing changes to the ESCP as directed by the ESCP engineer or his inspector. The engineer, his inspector or the City may stop all construction activity on site until the erosion problem is corrected and all ESC facilities are functioning properly. If the contractor does not immediately implement changes to the ESCP identified by the ESCP engineer or his inspector, the City may implement the necessary changes and require payment from the contractor prior to project acceptance by the City.
- G. The boundaries of the clearing limits shown on this plan shall be clearly flagged in the field by the engineer prior to construction. During the construction period, no disturbance beyond the flagged clearing limits shall be permitted. The flagging shall be maintained by the permit holder and or the contractor for the duration of construction.
- H. The erosion and sediment control measures on active sites shall be inspected and maintained daily and within the 24 hours after any storm event of greater than 0.5 inches of rain per 24 hour period. Measures shall be inspected by the permit holder and or the contractor after each rainfall and at least daily during prolonged rainfall. Any required repairs or adjustments shall be made immediately. The erosion and sediment control measures on inactive sites shall be inspected a minimum of once every two (2) weeks or within 48 hours following a storm event. Written records shall be kept of weekly reviews of the ESC facilities during the wet season (October 1 to April 30) and of monthly reviews during the dry season (May 1 to September 30).
- I. All erosion and sediment control measures shall be protected from damage at all times. Control measures shall remain in place until permanent or temporary re-vegetation has been stabilized. Any measure that is damaged or destroyed shall be repaired or replaced immediately.
- J. Any areas of exposed soils, including roadway embankments, that will not be disturbed for two days during the wet season (October 1 to April 30) or seven days during the dry season (May 1 to September 30) shall be immediately stabilized with an approved ESC method (seeding & mulching with straw, bark, compost, or plastic covering, etc.).
- K. A supply of materials necessary to meet compliance and implement the LDAP or other best management erosion practices under all weather conditions shall be maintained at all times on the construction site.
- L. No hazardous substances, such as paints, thinners, fuels and other chemicals shall be released onto the site, adjacent properties, or into water features, the City's storm water system, or related natural resources.
- M. Street sweeping shall be performed as needed or when directed by the City inspector to ensure public right-of-ways are kept clean and free of debris. Street flushing is prohibited.
- N. When trucking saturated soils from the site, either water-tight trucks shall be used or loads shall be drained on site until dripping has been reduced to no more than one gallon per hour. Sediment laden water will not be allowed to enter the storm water system
- O. Extracted ground water from excavated trenches shall be disposed of in a suitable manner without damage to adjacent property, public storm water system, water features, and related natural resources. Approval of a dewatering system does not guarantee that it will meet compliance or be acceptable for use in all situations. Modifications to the dewatering system will be required if compliance can not be met. At no time will sediment laden water be allowed to leave the construction site.
- P. At no time shall more than one foot of sediment be allowed to accumulate within a catch basin. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment laden water into the downstream system.
- Q. Any required stabilized construction entrances and roads shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures, such as wash pads, may be required to ensure that all paved areas are kept clean for the duration of the project.
- R. Any permanent flow control facility used as a temporary settling basin shall be modified with the necessary erosion control measures and shall provide adequate storage capacity.
- S. Where straw mulch for temporary erosion control is required, it shall be applied at a minimum thickness of two to three inches.
- T. In preparation of the wet season, all disturbed areas shall be reviewed to identify which ones can be seeded in preparation for the winter rains. A sketch map of those areas to be seeded and those areas to remain uncovered shall be submitted to the City by September 15. The City can require seeding of additional areas in order to protect surface waters, adjacent properties, or drainage facilities. Disturbed areas identified for seeding shall be seeded prior to the beginning of the wet season (October 1).

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

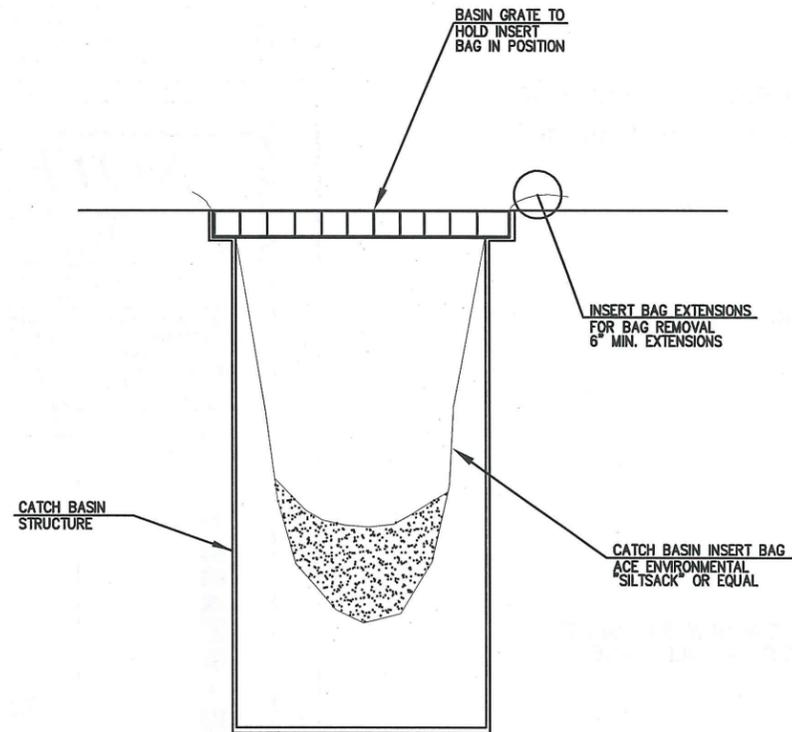
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EXPIRES 6/30/12

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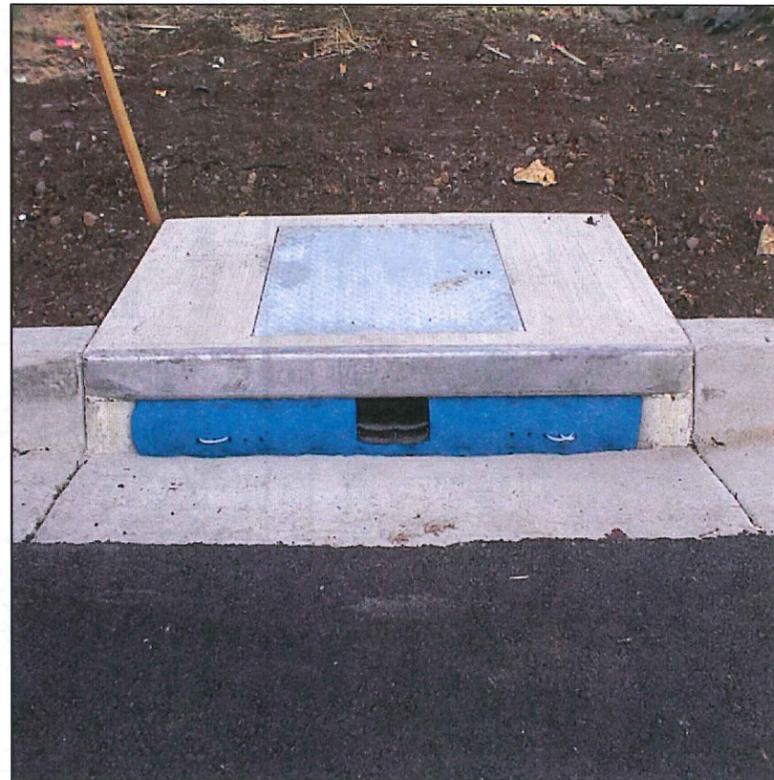
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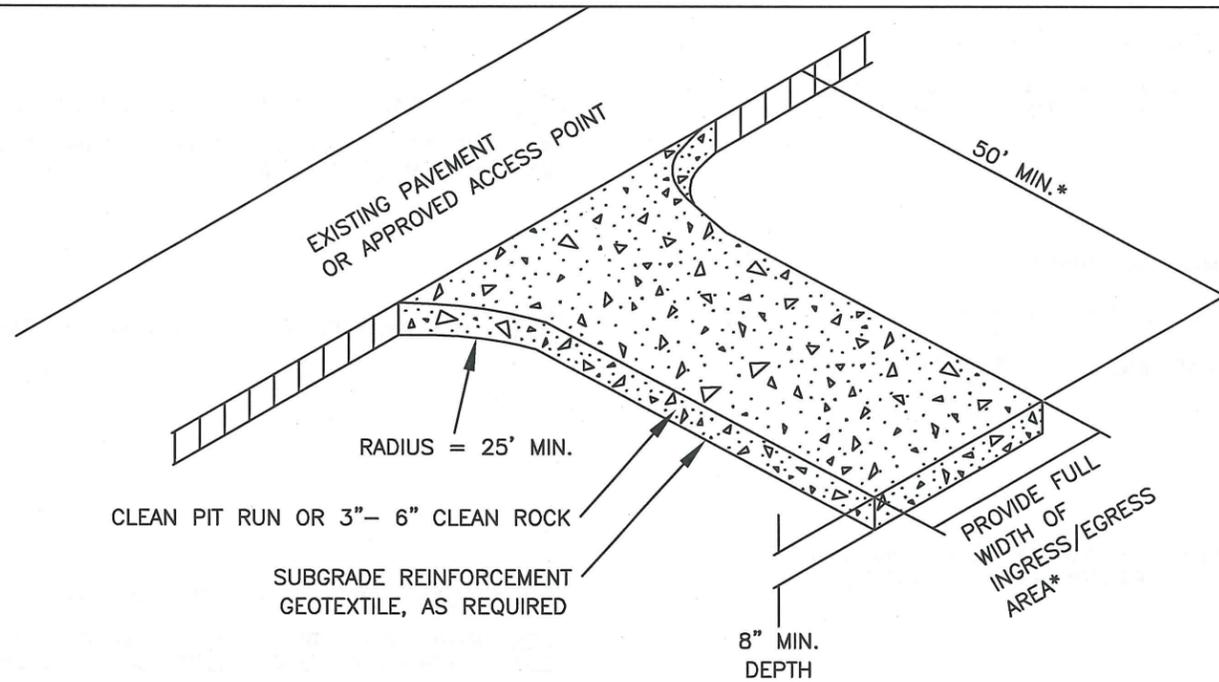
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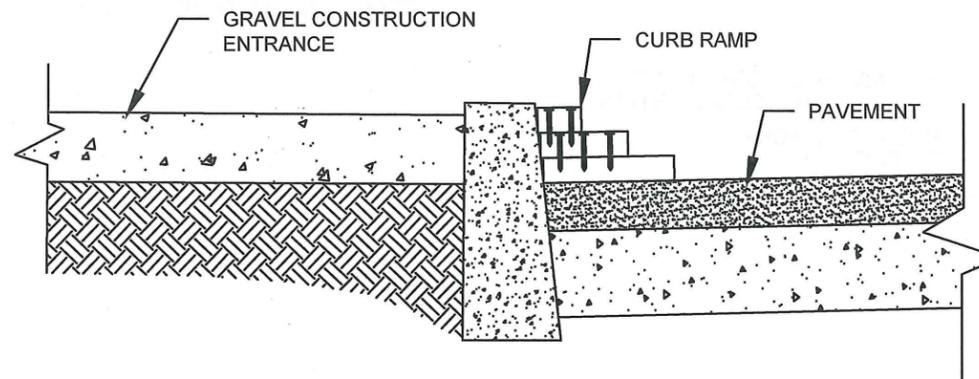
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INLET PROTECTION



*20' MIN. FOR SINGLE FAMILY AND DUPLEX RESIDENTIAL



NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. WHERE RUNOFF CONTAINING SEDIMENT LADEN WATER IS LEAVING THE SITE VIA THE CONSTRUCTION ENTRANCE, OTHER MEASURES SHALL BE IMPLEMENTED TO DIVERT RUNOFF THROUGH AN APPROVED FILTERING SYSTEM.

5. **DIMENSIONS**

SINGLE FAMILY

20' LONG BY 20' WIDE 8" DEEP OF 3/4" MINUS CLEAN ROCK.

COMMERCIAL

50' LONG BY 20' WIDE 3-6" CLEAN ROCK,
GOVERNING AUTHORITY MAY REQUIRE GEOTEXTILE FABRIC TO PREVENT SUB-SOIL PUMPING.

FOR FURTHER INFORMATION
ON DESIGN CRITERIA SEE
CHAPTER 4 OF CLEAN WATER
SERVICES EROSION PREVENTION
AND SEDIMENT CONTROL
PLANNING AND DESIGN MANUAL.

CONSTRUCTION ENTRANCE

Detail Drawing 855

REVISED 12-06



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EXPIRES 6/30/12

SHEET

4B

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.
- ⑤ APPROXIMATE LOCATION OF WATER LINE TO REMAIN AND PROTECT (TYP).
- ⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).
- ⑦ APPROXIMATE LOCATION OF POWER LINE TO REMAIN AND PROTECT (TYP).
- ⑧ APPROXIMATE LOCATION OF COMMUNICATION LINE TO REMAIN AND PROTECT (TYP).
- ⑩ INSTALL 24" PVC ASTM F 679 PIPE(TYP).
EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).
- ⑪ EXISTING SANITARY SEWER PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).
- ⑮ PLACE CONCRETE SADDLE OVER SANITARY SEWER PIPE WITH MINIMUM LENGTH OF 10'. LIMITS TO BE DETERMINED BY ENGINEER IN FIELD. SEE ODOT STANDARD DETAIL DET1355.
- ⑯ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.
- ⑰ MAINTAIN AND PROTECT EXISTING 42" STORM PIPE CROSSING DURING CONSTRUCTION.
- ⑲ EXISTING SANITARY SEWER PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).
- ⑳ INSTALL STANDARD 60" MANHOLE WITH 2' CDF BACKFILL. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ㉑ INSTALL STANDARD 72" MANHOLE WITH 2' CDF BACKFILL. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ㉒ MAINTAIN AND PROTECT EXISTING 24" CONCRETE SANITARY SEWER PIPE.

- ㉓ CONTRACTOR TO RESTORE EXISTING DRIVEWAY IN FULL PANELS AFTER EXCAVATION.
- ㉔ RELOCATE EXISTING SANITARY SEWER CLEAN OUT AND PIPE 8' TO THE EAST TO ACCOMMODATE NEW 24" LINE.
- ㉙ MAINTAIN AND PROTECT EXISTING 42" SANITARY SEWER TRUNK LINE.
- ㉛ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.
- ㉜ REPLACE EXISTING ASPHALT AND CONCRETE DRIVEWAY AFTER NEW 24" SEWER INSTALLATION IS COMPLETE. CONCRETE SHALL BE REPLACED IN FULL PANELS.
- ㉞ REMOVE AND REPLACE EXISTING RESIDENTIAL DRIVEWAY PER CITY OF SPRINGFIELD STANDARD DETAIL 3-21.

- ㉟ REMOVE EXISTING STORM PIPE FOR INSTALLATION OF SANITARY SEWER. REPLACE STORM PIPE WITH 18" PVC ASTM F679 PIPE AFTER SANITARY SEWER PIPE IS COMPLETE.
- ㊱ INSTALL POURED IN PLACE 96" MANHOLE AROUND EXISTING TRUNK SEWER PIPE. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

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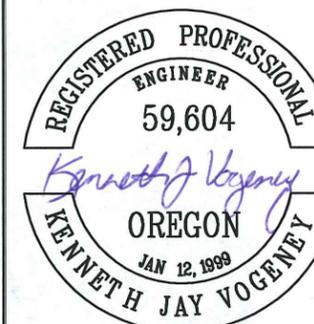
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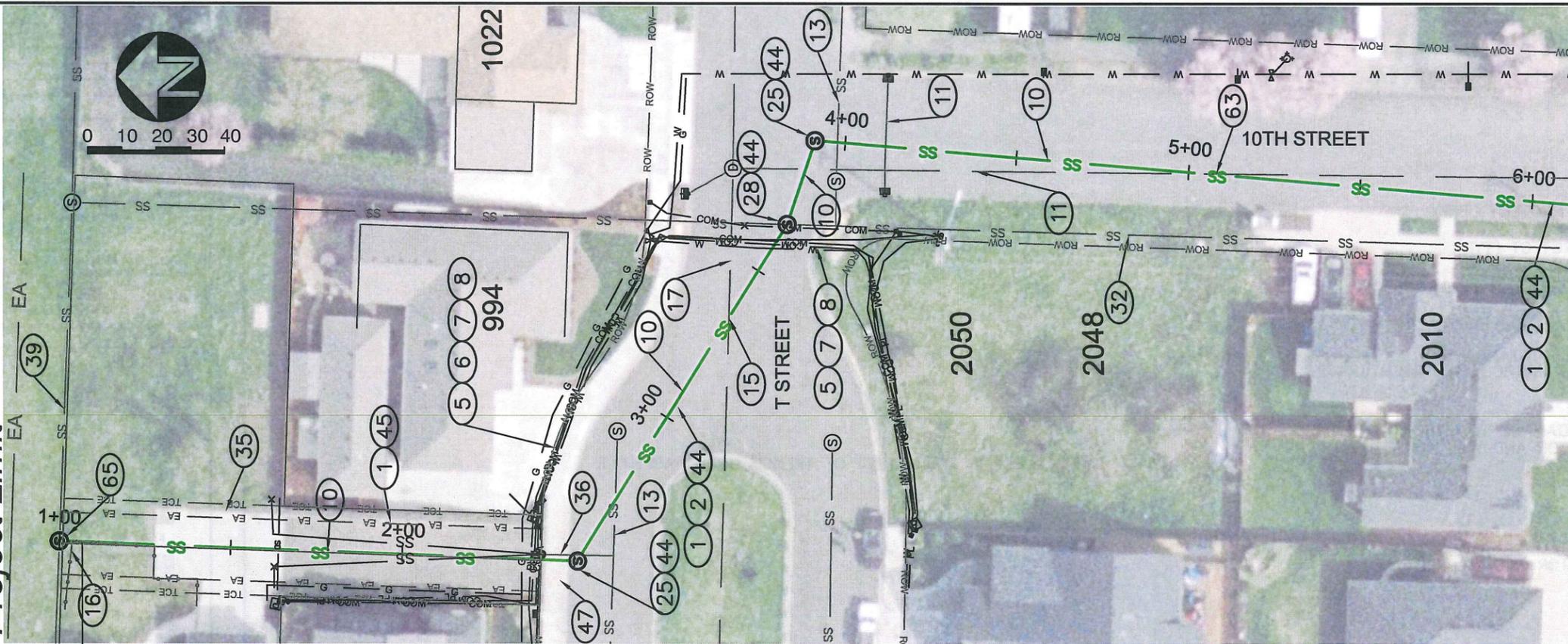


EXPIRES 6/30/12

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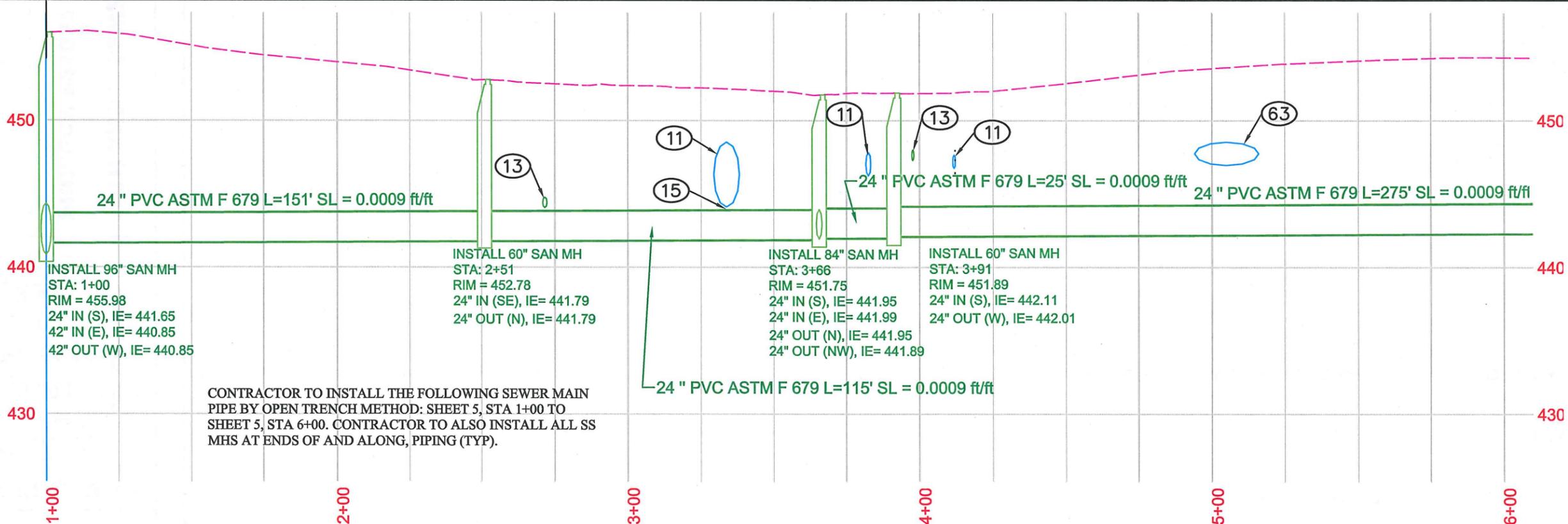
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Project Limit



Line A STA. 1+00-6+00

Horz. Scale 1"=40'



Line A STA. 1+00-6+00

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- ⑦ APPROXIMATE LOCATION OF POWER LINE TO REMAIN AND PROTECT (TYP).
- ⑧ APPROXIMATE LOCATION OF COMMUNICATION LINE TO REMAIN AND PROTECT (TYP).
- ⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ⑩ INSTALL 24" PVC ASTM F 679 PIPE(TYP).
- ⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).
- ⑬ EXISTING SANITARY SEWER PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).

④④ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

- ②⑧ INSTALL COMBINED FLOW MANHOLE. SEE PROFILE FOR SIZE. SEE DETAIL SHEETS D3-D5.
- ③⑩ REMOVE EXISTING MANHOLE.
- ③② MAINTAIN AND PROTECT EXISTING 24" CONCRETE SANITARY SEWER PIPE.

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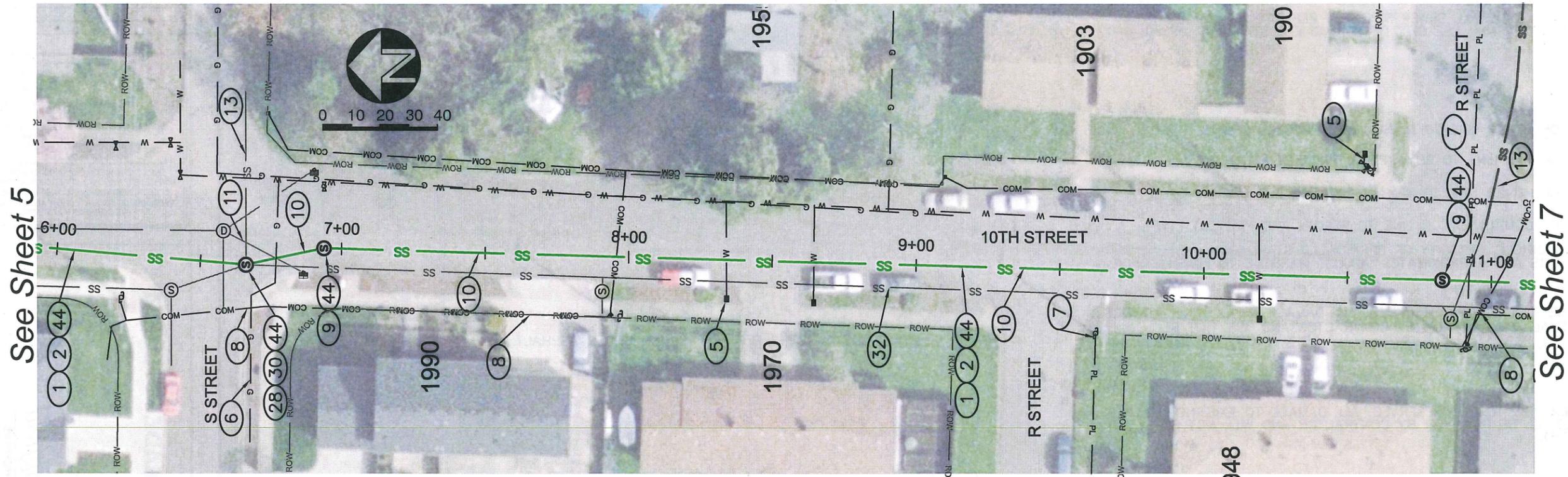
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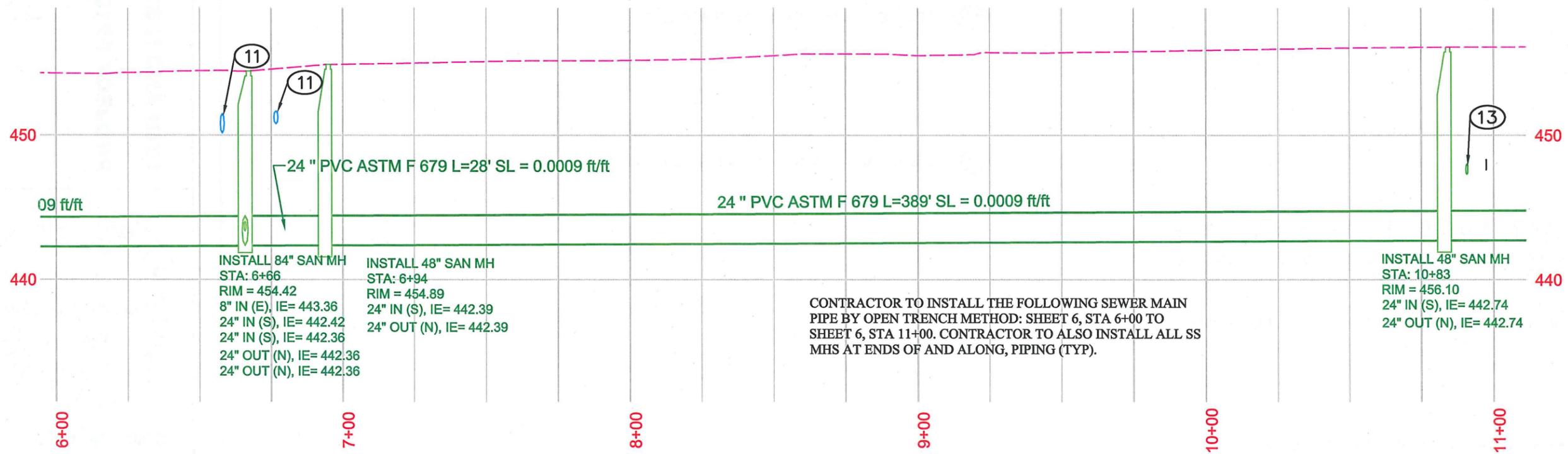
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6A



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Horz. Scale 1"=40'



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EXPIRES 4/30/17

SHEET

6B

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.
- ⑤ APPROXIMATE LOCATION OF WATER LINE TO REMAIN AND PROTECT (TYP).
- ⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).
- ⑦ APPROXIMATE LOCATION OF POWER LINE TO REMAIN AND PROTECT (TYP).
- ⑧ APPROXIMATE LOCATION OF COMMUNICATION LINE TO REMAIN AND PROTECT (TYP).
- ⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ⑩ INSTALL 24" PVC ASTM F 679 PIPE(TYP).
- ⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).
- ⑬ EXISTING SANITARY SEWER PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).
- ②⑤ INSTALL STANDARD 60" MANHOLE WITH 2' CDF BACKFILL. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ②⑥ INSTALL STANDARD 72" MANHOLE WITH 2' CDF BACKFILL. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ②⑧ INSTALL COMBINED FLOW MANHOLE. SEE PROFILE FOR SIZE. SEE DETAIL SHEETS D3-D5.
- ③② MAINTAIN AND PROTECT EXISTING 24" CONCRETE SANITARY SEWER PIPE.

④④ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

⑤② REMOVE EXISTING SANITARY SEWER LINE.

⑤⑥ SEE DETAILS 1 AND 2 ON SHEETS D6 AND D7 FOR ADA RAMP RECONSTRUCTION.

No.	Revision/Issue	Date

NOTE:
 UTILITY LOCATIONS ARE APPROXIMATE
DO NOT
 SCALE OR LOCATE UTILITY LINES OR MAINS
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 CALL FOR UTILITY LOCATES
 1-800-332-2344
 THE CONTRACTOR SHALL BE RESPONSIBLE
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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

City of Springfield

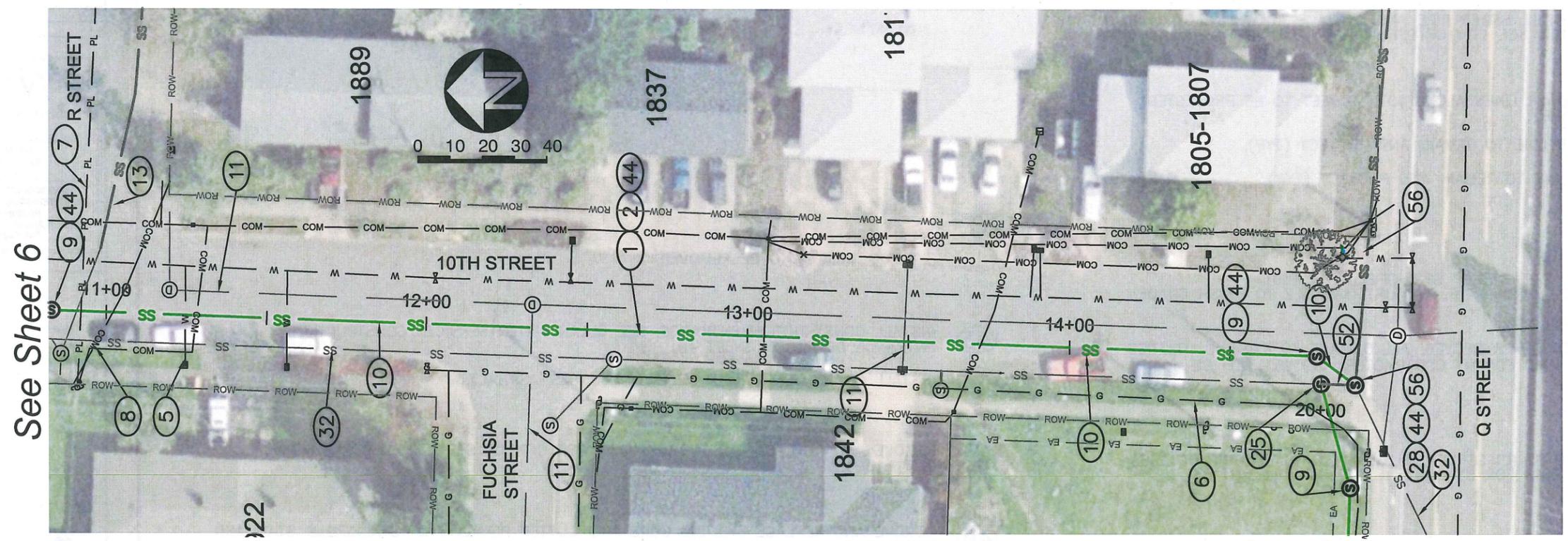
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EXPIRES 4/30/12

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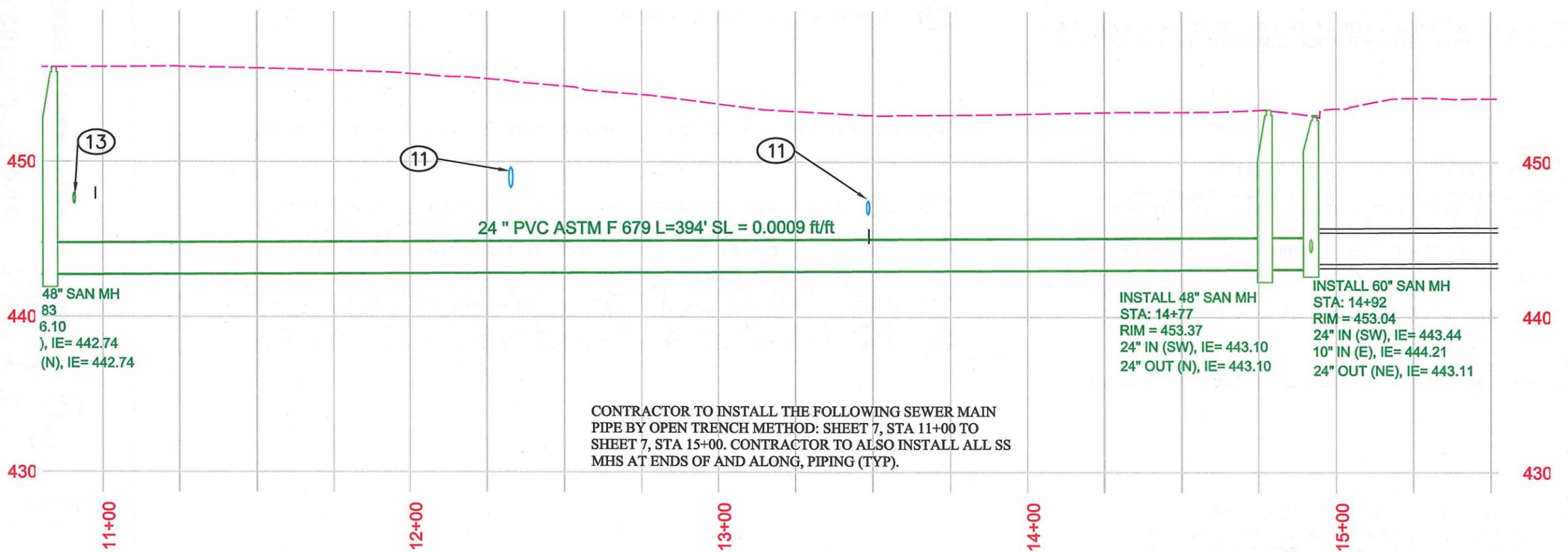
Line A STA. 11+00-15+00

Horz. Scale 1"=40'

See Sheet 8

10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

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CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY OPEN TRENCH METHOD: SHEET 7, STA 11+00 TO SHEET 7, STA 15+00. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

INSTALL 48" SAN MH
 STA: 14+77
 RIM = 453.37
 24" IN (SW), IE= 443.10
 24" OUT (N), IE= 443.10

INSTALL 60" SAN MH
 STA: 14+92
 RIM = 453.04
 24" IN (SW), IE= 443.44
 10" IN (E), IE= 444.21
 24" OUT (NE), IE= 443.11

Line A STA. 11+00-15+00

Horz. Scale 1"=40'



EXPIRES 4/30/12

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.
- ④ UTILITY POLES WITH OVERHEAD POWER LINES ALONG 10TH STREET TO BE PROTECTED. USE CAUTION WHEN WORKING NEARBY.
- ⑤ APPROXIMATE LOCATION OF WATER LINE TO REMAIN AND PROTECT (TYP).
- ⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).
- ⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ⑩ INSTALL 24" PVC ASTM F 679 PIPE(TYP).
- ⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).
- ⑬ EXISTING SANITARY SEWER PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).
- ⑯ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.
- ⑰ APPROXIMATE LOCATION OF EXISTING 30" STEEL EWEB WATER PIPE TO BE PRESERVED. EWEB REQUIREMENT FOR BACKFILL IS 3/4" MINUS CRUSHED ROCK COMPACTED IN MAX 12" LIFTS.
- ⑳ REMOVE AND REPLACE CONCRETE CHANNEL PER DETAIL, SEE SHEET 35.
- ㉓ INSTALL 8" PVC ASTM D 3034 SANITARY SEWER FOR FUTURE SEWER CONNECTION. CAP UPSTREAM END WITH CLEAN OUT AND WATERTIGHT MECHANICAL PLUG AT PROPERTY LINE. INSTALL PAINTED 2"x4" WITH TONE WIRE TO MARK LOCATION.
- ㉔ INSTALL 24" PVC ASTM F 679 SANITARY SEWER PIPE BY BORING AND JACKING METHOD.
- ㉕ INSTALL STANDARD 60" MANHOLE WITH 2' CDF BACKFILL. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ㉖ INSTALL STANDARD 72" MANHOLE WITH 2' CDF BACKFILL. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ㉘ INSTALL COMBINED FLOW MANHOLE. SEE PROFILE FOR SIZE. SEE DETAIL SHEETS D3-D5.
- ㉚ REMOVE EXISTING MANHOLE.
- ㉜ MAINTAIN AND PROTECT EXISTING 24" CONCRETE SANITARY SEWER PIPE.
- ㉝ REMOVE EXISTING SANITARY LINE AND INSTALL NEW 6" PVC ASTM D 3034 SANITARY SEWER PIPE WITH 2 TWO-WAY CLEANOUTS AS SHOWN ON PROFILE. EACH CLEAN OUT SHALL HAVE A WATERTIGHT MECHANICAL PLUG.

- ④① EXISTING TREE(S) TO BE REMOVED.
- ④③ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.
- ④④ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.
- ④⑥ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.
- ④⑧ REMOVE AND REPLACE EXISTING CURB AND GUTTER PER CITY OF SPRINGFIELD STANDARD DETAIL 3-8.
- ⑤① REMOVE AND REPLACE EXISTING MEDIAN BARRIER AND FENCE WITH NEW PER DETAILS ON SHEET 35.
- ⑤② APPROXIMATE LOCATION OF BORE PIT.
- ⑤④ SEE SHEET 34B FOR EXISTING 8" SANITARY SEWER PIPE DEMOLITION AND REMOVAL.
- ⑤⑥ SEE DETAILS 1 AND 2 ON SHEETS D6 AND D7 FOR ADA RAMP RECONSTRUCTION.
- ⑤⑦ WATER LINE TO BE INSTALLED PRIOR TO CONTRACTOR WORK ON THIS SECTION OF 10TH STREET. CONTRACTOR TO COORDINATE WITH SPRINGFIELD UTILITY BOARD.
- ⑤⑧ EXISTING ASBESTOS CEMENT WATERLINE TO BE ABANDONED PRIOR TO CONTRACTOR WORKING IN THIS AREA. CONTRACTOR TO REMOVE PIPE AS NEEDED TO INSTALL NEW SEWER. APPROXIMATE LENGTH OF WATERLINE TO BE REMOVED IS 50 FEET.
- ⑤⑨ REMOVE EXISTING DRIVEWAY AND INSTALL CURBSIDE SIDEWALK WITH FULL HEIGHT CURB AND GUTTER. SEE CITY OF SPRINGFIELD STANDARD DETAILS 3-7 AND 3-12.

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

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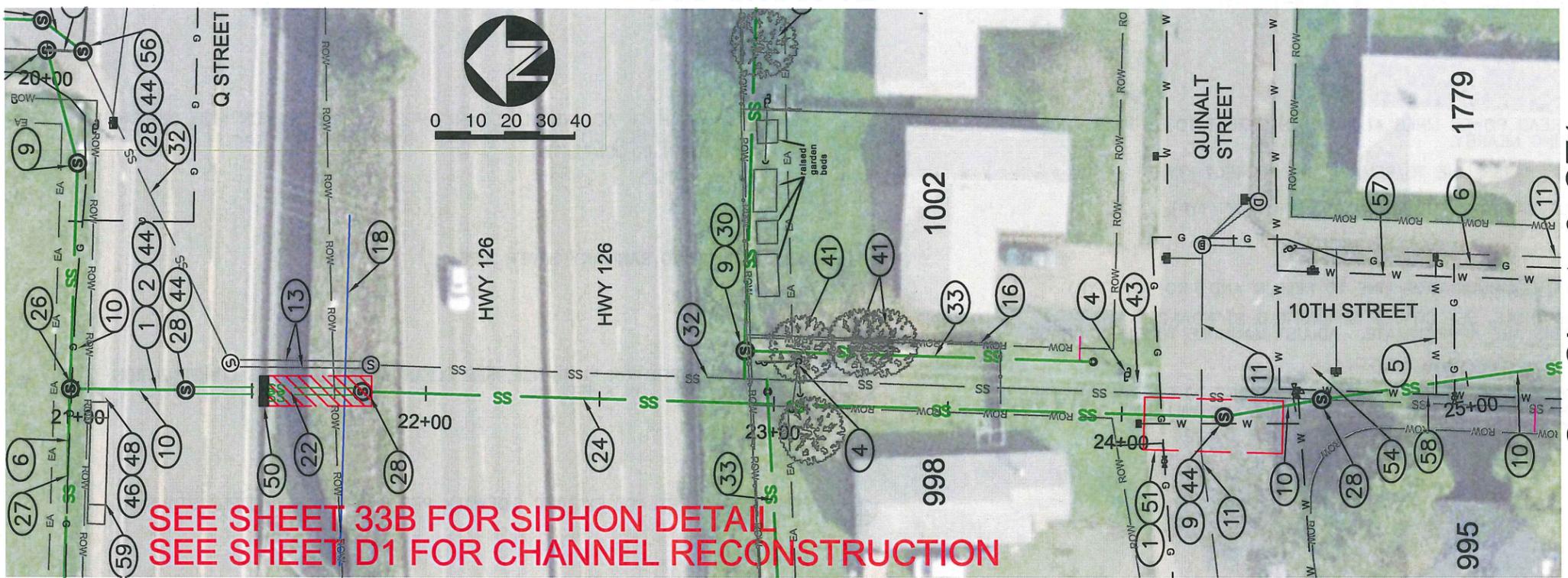


EXPIRES 6/30/12

See Sheet 7

See Sheet 12

See Sheets 9, ST1



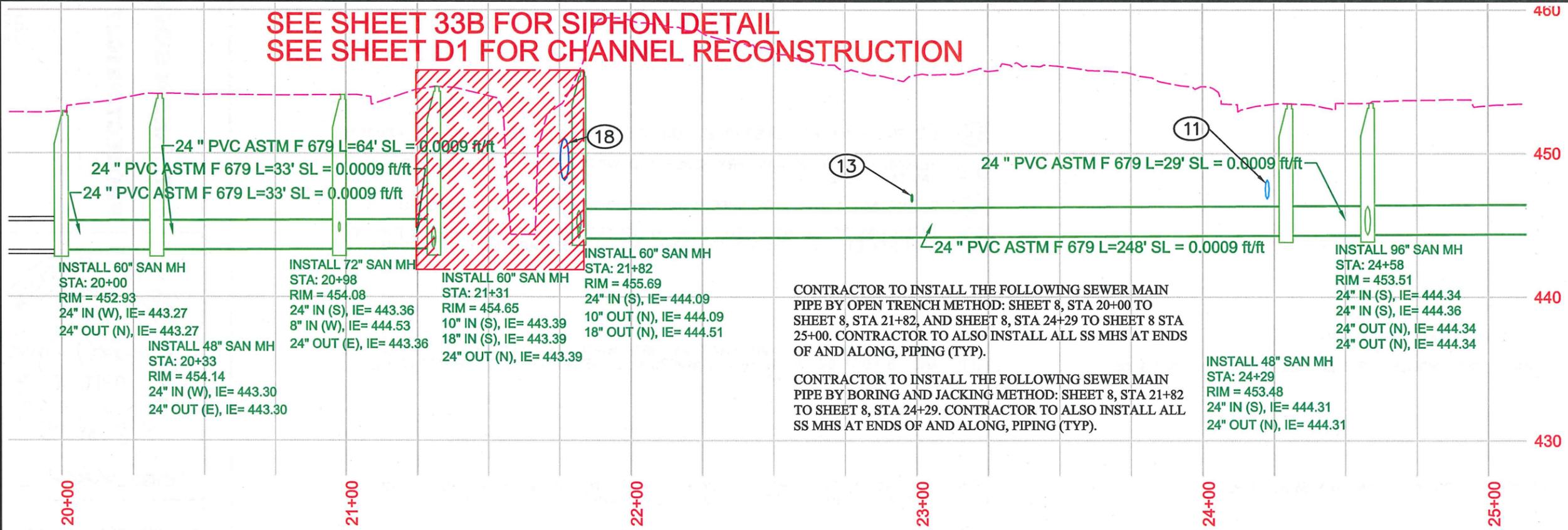
SEE SHEET 33B FOR SIPHON DETAIL
SEE SHEET D1 FOR CHANNEL RECONSTRUCTION

See Sheet 32
Line A STA. 20+00-25+00

See Sheet 31

Horz. Scale 1"=40'

SEE SHEET 33B FOR SIPHON DETAIL
SEE SHEET D1 FOR CHANNEL RECONSTRUCTION



CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY OPEN TRENCH METHOD: SHEET 8, STA 20+00 TO SHEET 8, STA 21+82, AND SHEET 8, STA 24+29 TO SHEET 8 STA 25+00. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY BORING AND JACKING METHOD: SHEET 8, STA 21+82 TO SHEET 8, STA 24+29. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

Line A STA. 20+00-25+00

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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EXPIRES 6/30/12

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ④ UTILITY POLES WITH OVERHEAD POWER LINES ALONG 10TH STREET TO BE PROTECTED. USE CAUTION WHEN WORKING NEARBY.
- ⑤ APPROXIMATE LOCATION OF WATER LINE TO REMAIN AND PROTECT (TYP).
- ⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).
- ⑧ APPROXIMATE LOCATION OF COMMUNICATION LINE TO REMAIN AND PROTECT (TYP).
- ⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ⑩ INSTALL 24" PVC ASTM F 679 PIPE(TYP).
- ⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).

- ②⑦ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.
- ②⑧ INSTALL COMBINED FLOW MANHOLE. SEE PROFILE FOR SIZE. SEE DETAIL SHEETS D3-D5.
- ③② MAINTAIN AND PROTECT EXISTING 24" CONCRETE SANITARY SEWER PIPE.

③⑦ REMOVE 6' WIDTH OF AC. INSTALL SEWER PIPE AND FILL TRENCH WITH COMPACTED TRENCH BACKFILL PER CITY OF SPRINGFIELD STANDARD DETAIL 4-17 UNTIL STREET RECONSTRUCTION IS COMPLETE.

④⑩ REMOVE EXISTING SANITARY SEWER PIPE.

④③ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.

④⑥ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.

⑤④ SEE SHEET 34B FOR EXISTING 8" SANITARY SEWER PIPE DEMOLITION AND REMOVAL.

⑤⑤ REMOVE EXISTING 8" SANITARY SEWER AND INSTALL NEW 24" PVC ASTM D 3034 SANITARY SEWER.

⑤⑥ SEE DETAILS 1 AND 2 ON SHEETS D6 AND D7 FOR ADA RAMP RECONSTRUCTION.

⑤⑦ WATER LINE TO BE INSTALLED PRIOR TO CONTRACTOR WORK ON THIS SECTION OF 10TH STREET. CONTRACTOR TO COORDINATE WITH SPRINGFIELD UTILITY BOARD.

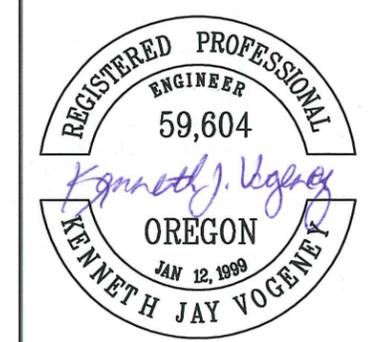
⑥⑩ INSTALL 2" LEVEL 3 C MIX HMA MAT WITH WIDTH MATCHING EXISTING THROAT DEPTH AND 18 FOOT DEPTH. INSTALL COMMERCIAL DRIVEWAY PER CITY OF SPRINGFIELD STANDARD DETAIL 3-24.

⑥④ CONTRACTOR TO REGRADE ALLEY WITH 3/4" MINUS ROCK AFTER TRENCH WORK IS COMPLETE. LIMITS TO BE DETERMINED BY ENGINEER.

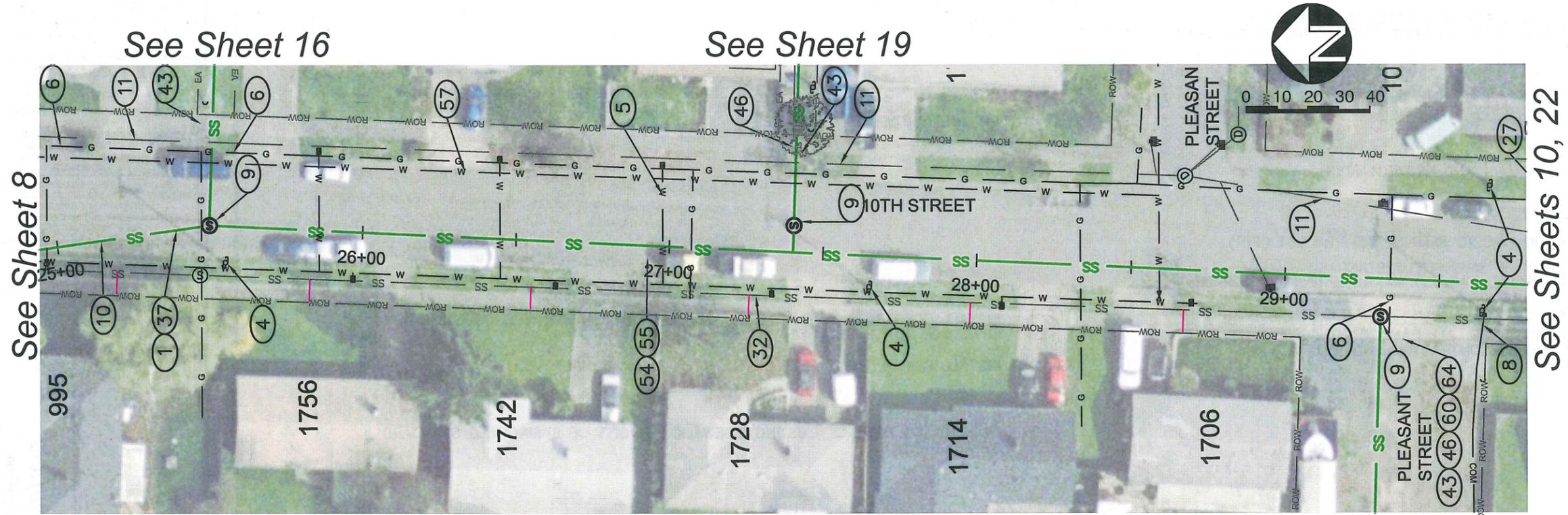
No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1
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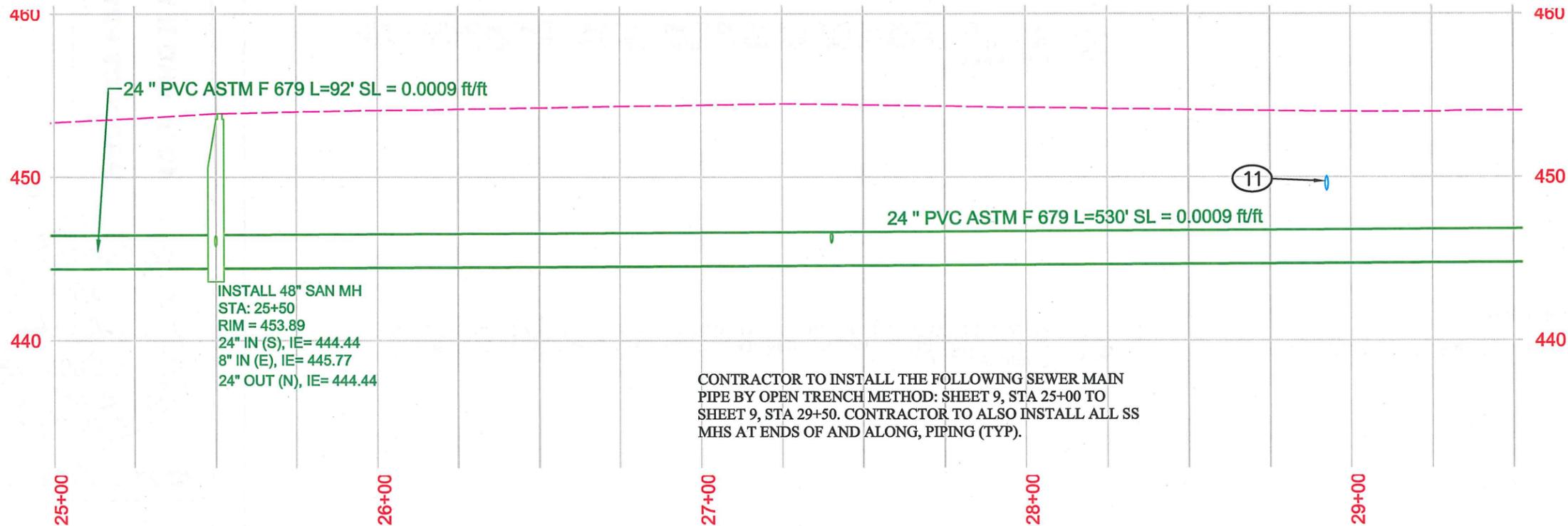


EXPIRES 4/30/12



Line A STA. 25+00-29+50

Horz. Scale 1"=40'



Line A STA. 25+00-29+50

Horz. Scale 1"=40'

CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY OPEN TRENCH METHOD: SHEET 9, STA 25+00 TO SHEET 9, STA 29+50. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

No.	Revision/Issue	Date

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EXPIRES 6/30/12

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.
- ④ UTILITY POLES WITH OVERHEAD POWER LINES ALONG 10TH STREET TO BE PROTECTED. USE CAUTION WHEN WORKING NEARBY.
- ⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).
- ⑧ APPROXIMATE LOCATION OF COMMUNICATION LINE TO REMAIN AND PROTECT (TYP).
- ⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ⑩ INSTALL 24" PVC ASTM F 679 PIPE(TYP).
- ⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).
- ⑬ REMOVE 6' WIDTH OF AC. INSTALL SEWER PIPE AND FILL TRENCH WITH COMPACTED TRENCH BACKFILL PER CITY OF SPRINGFIELD STANDARD DETAIL 4-17 UNTIL STREET RECONSTRUCTION IS COMPLETE.
- ⑬ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.
- ⑭ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.
- ⑮ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.
- ⑰ INSTALL FULL STICK OF PIPE FOR STUBOUT WITH 24" WATERTIGHT MECHANICAL PLUG FROM MANHOLE FOR FUTURE SANITARY SEWER EXTENSION. SEE DETAIL THIS SHEET FOR ANGLE.
- ⑲ REMOVE EXISTING MANHOLE.
- ⑳ MAINTAIN AND PROTECT EXISTING 24" CONCRETE SANITARY SEWER PIPE.
- ㉑ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.
- ㉒ INSTALL COMBINED FLOW MANHOLE. SEE PROFILE FOR SIZE. SEE DETAIL SHEETS D3-D5.
- ㉔ INSTALL 2" LEVEL 3 C MIX HMAC MAT WITH WIDTH MATCHING EXISTING THROAT DEPTH AND 18 FOOT DEPTH. INSTALL COMMERCIAL DRIVEWAY PER CITY OF SPRINGFIELD STANDARD DETAIL 3-24.

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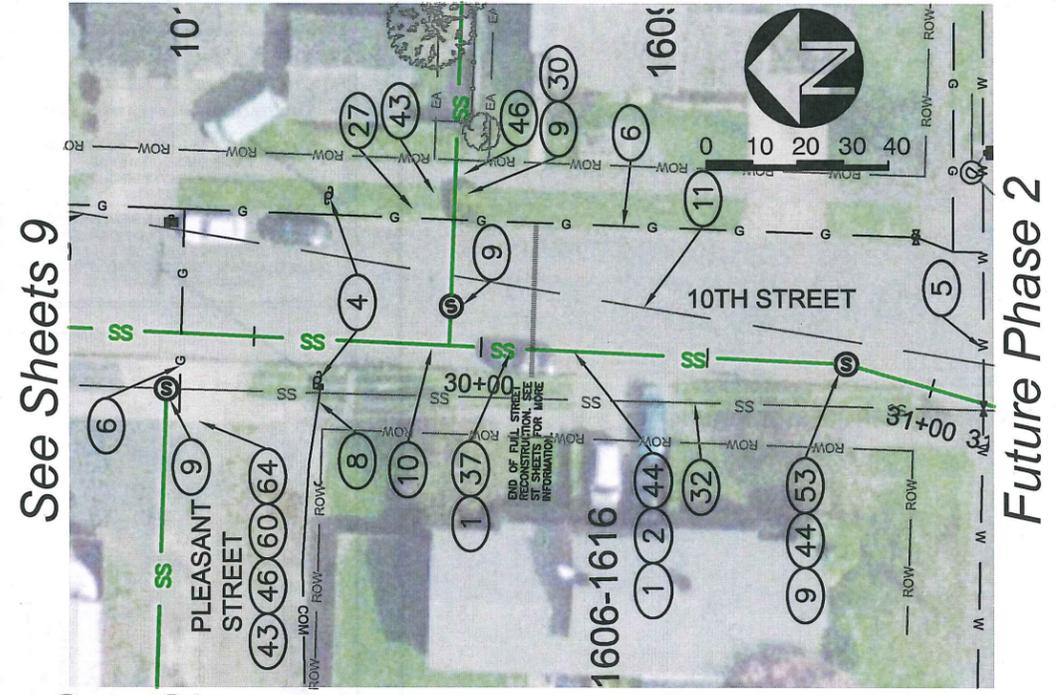


EXPIRES 6/30/12

SHEET

10B

See Sheet 22



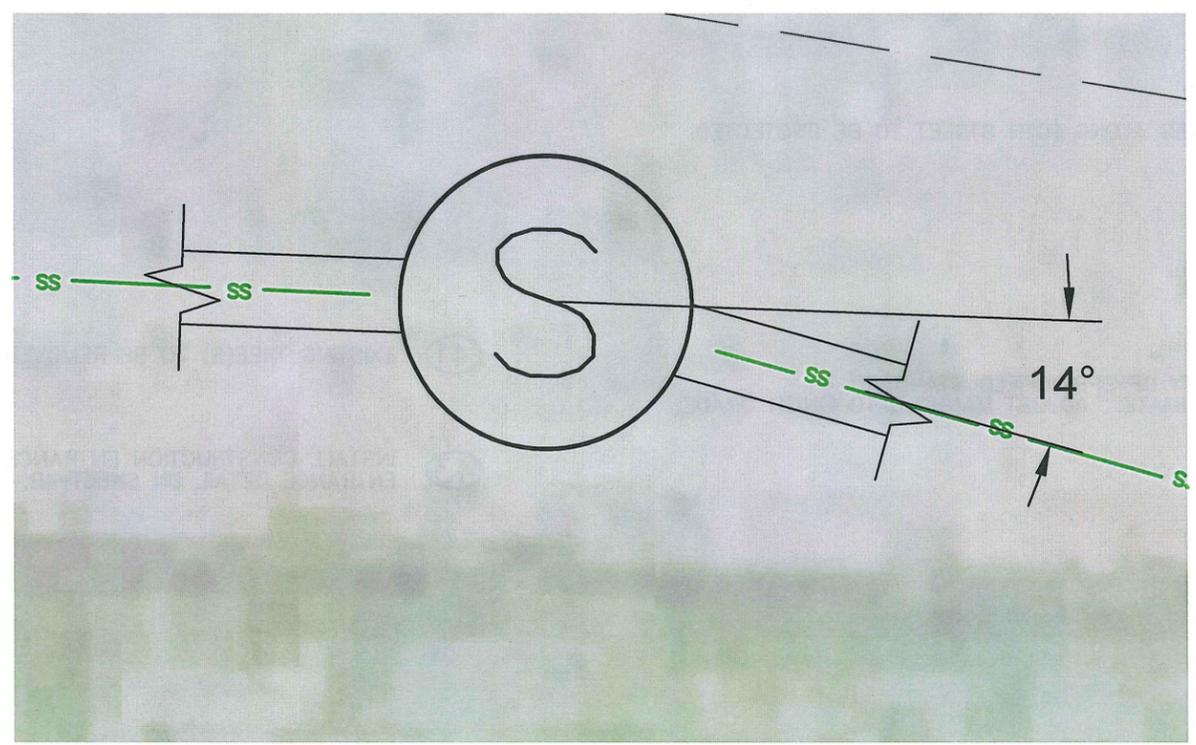
See Sheets 9

Future Phase 2

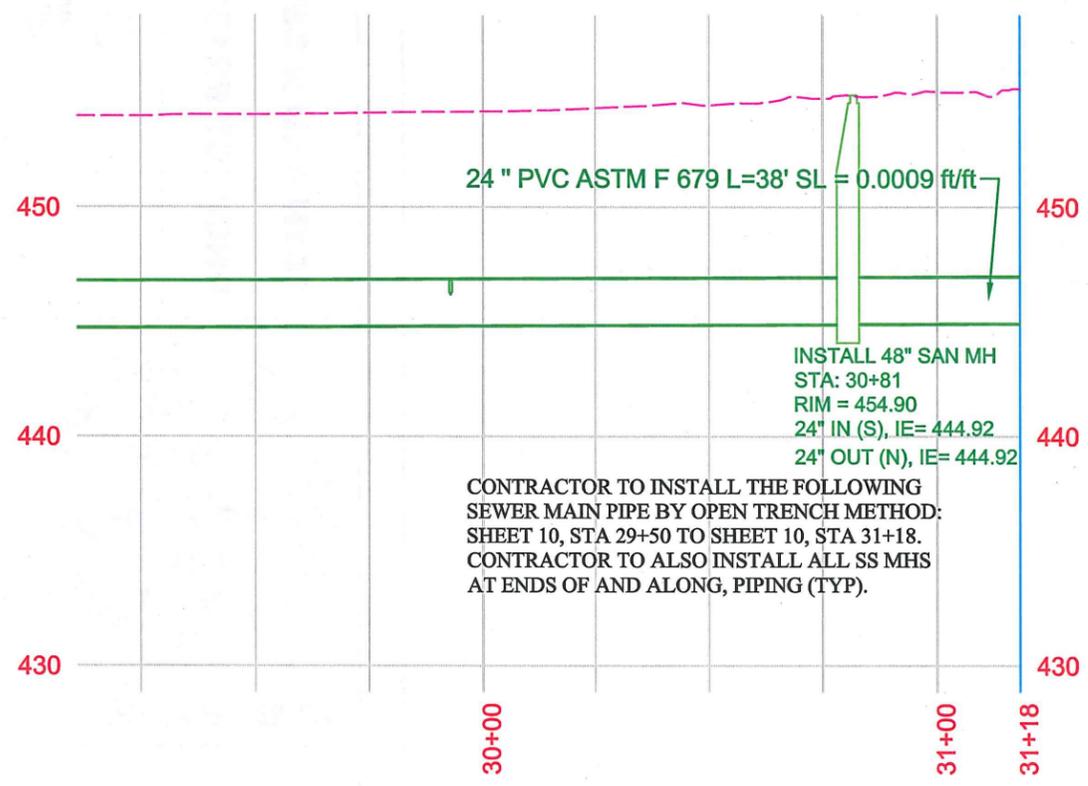
See Sheet 26

Line A STA. 29+50-31+18

Horz. Scale 1"=40'



STA. 30+81 MANHOLE DETAIL



① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).

④ UTILITY POLES WITH OVERHEAD POWER LINES ALONG 10TH STREET TO BE PROTECTED. USE CAUTION WHEN WORKING NEARBY.

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑩ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

⑩ REMOVE EXISTING MANHOLE.

⑩ MAINTAIN AND PROTECT EXISTING 24" CONCRETE SANITARY SEWER PIPE.

⑩ REMOVE EXISTING SANITARY LINE AND INSTALL NEW 6" PVC ASTM D 3034 SANITARY SEWER PIPE WITH 2 TWO-WAY CLEANOUTS AS SHOWN ON PROFILE. EACH CLEAN OUT SHALL HAVE A WATERTIGHT MECHANICAL PLUG.

④ EXISTING TREE(S) TO BE REMOVED.

④ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.

⑤ APPROXIMATE LOCATION OF BORE PIT.

⑤ SEE DETAILS 1 AND 2 ON SHEETS D6 AND D7 FOR ADA RAMP RECONSTRUCTION.

No.	Revision/Issue	Date

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EXPIRES 6/30/12

SHEET

11A

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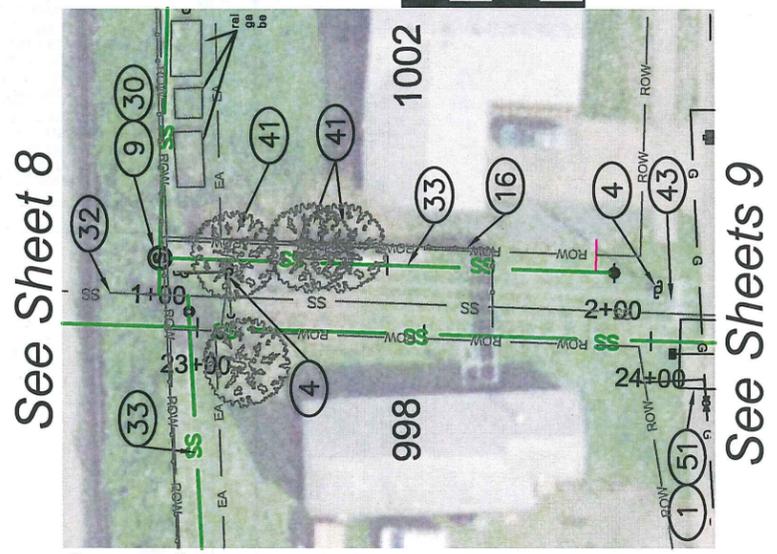
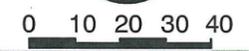


EXPIRES 6/30/12

SHEET
11B



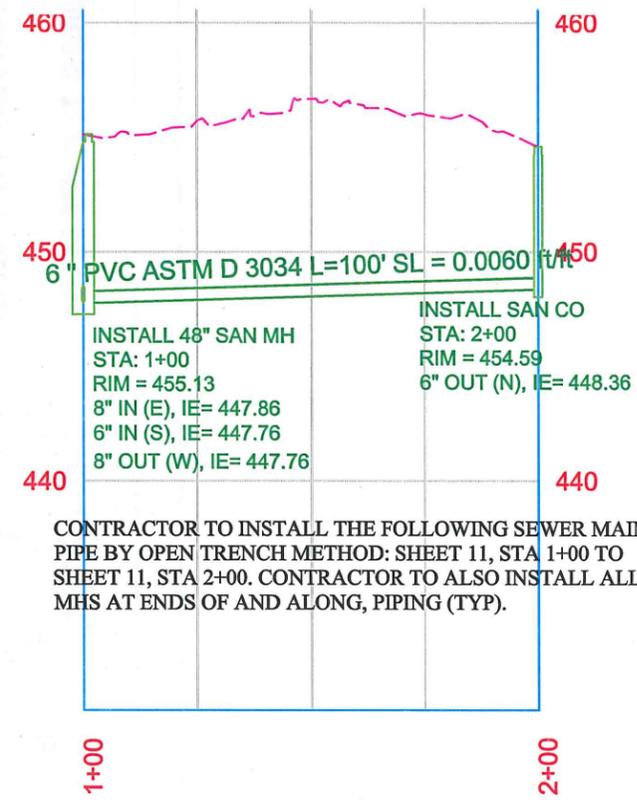
See Sheet 12



See Sheet 31

Line B STA. 1+00-2+00

Horz. Scale 1"=40'



CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN
 PIPE BY OPEN TRENCH METHOD: SHEET 11, STA 1+00 TO
 SHEET 11, STA 2+00. CONTRACTOR TO ALSO INSTALL ALL SS
 MHS AT ENDS OF AND ALONG, PIPING (TYP).

Line B STA. 1+00-2+00

Horz. Scale 1"=40'

④ UTILITY POLES WITH OVERHEAD POWER LINES ALONG 10TH STREET TO BE PROTECTED. USE CAUTION WHEN WORKING NEARBY.

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑩ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

⑰ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

⑳ REMOVE EXISTING MANHOLE.

㉑ MAINTAIN AND PROTECT EXISTING 24" CONCRETE SANITARY SEWER PIPE.

㉒ REMOVE EXISTING SANITARY LINE AND INSTALL NEW 6" PVC ASTM D 3034 SANITARY SEWER PIPE WITH 2 TWO-WAY CLEANOUTS AS SHOWN ON PROFILE. EACH CLEAN OUT SHALL HAVE A WATERTIGHT MECHANICAL PLUG.

㉔ REMOVE EXISTING SANITARY SEWER PIPE.

㉕ EXISTING TREE(S) TO BE REMOVED.

㉖ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

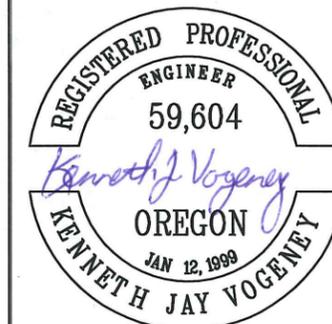
NOTE:

UTILITY LOCATIONS ARE APPROXIMATE
DO NOT
SCALE OR LOCATE UTILITY LINES OR MAINS
FROM THESE DRAWINGS
CALL FOR UTILITY LOCATES
1-800-332-2344

THE CONTRACTOR SHALL BE RESPONSIBLE
FOR DETERMINING UTILITY LOCATIONS PRIOR TO
BEGINNING OF CONSTRUCTION.
THESE PLANS MAY NOT SHOW ALL UTILITIES OR
THE CORRECT LOCATIONS.

10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

City of Springfield
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INTERNET www.ci.springfield-or.gov



EXPIRES 6/30/12

SHEET

12A

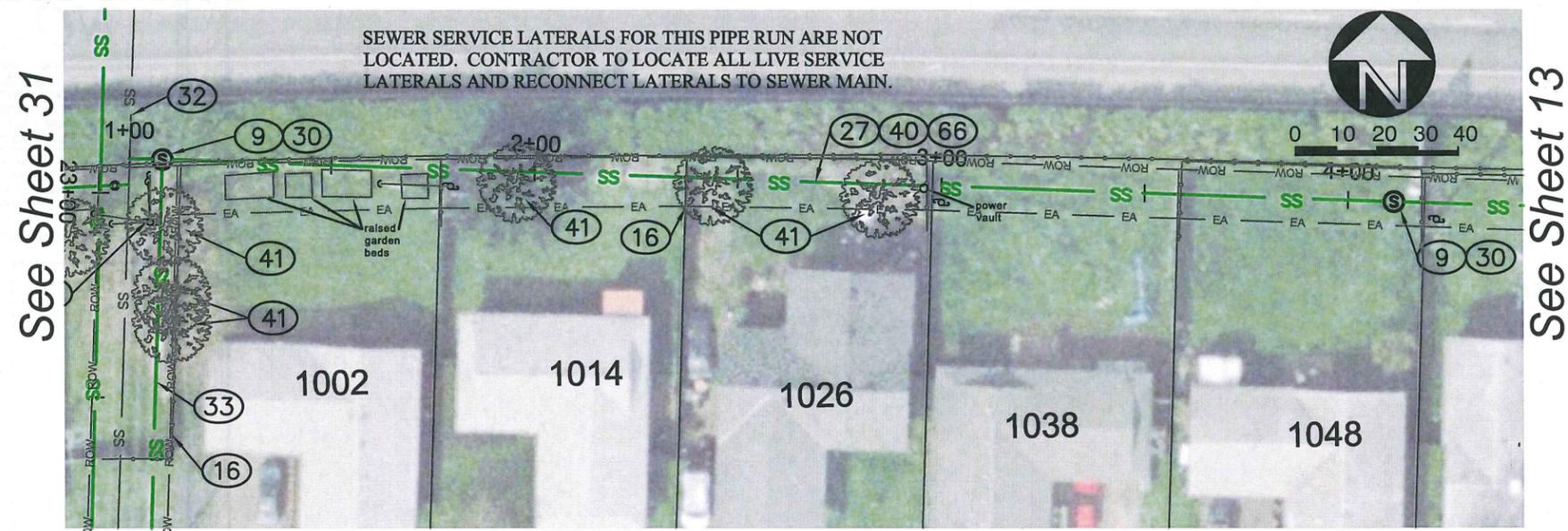
No.	Revision/Issue	Date

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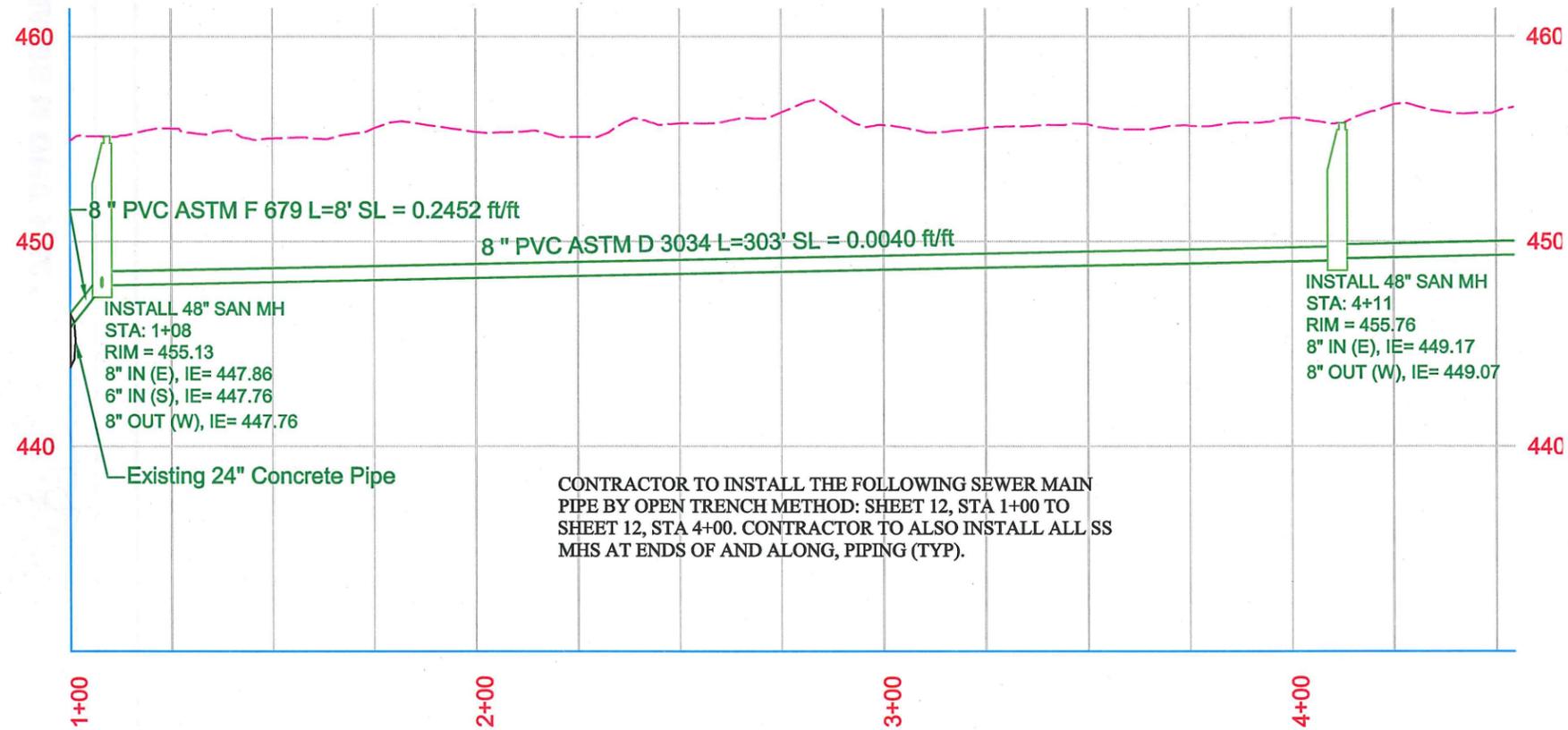
See Sheet 8



See Sheet 8

Line B STA. 1+00-4+00

Horz. Scale 1"=40'



Line B STA. 1+00-4+00

Horz. Scale 1"=40'

10TH AND N SEWER UPGRADE - PHASE 1
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EXPIRES 6/30/12

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD
DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

④⑩ REMOVE EXISTING SANITARY SEWER PIPE.

⑩⑬ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS
COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

⑩⑰ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

⑩⑳ REMOVE EXISTING MANHOLE.

⑩⑶ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

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EXPIRES 6/30/12

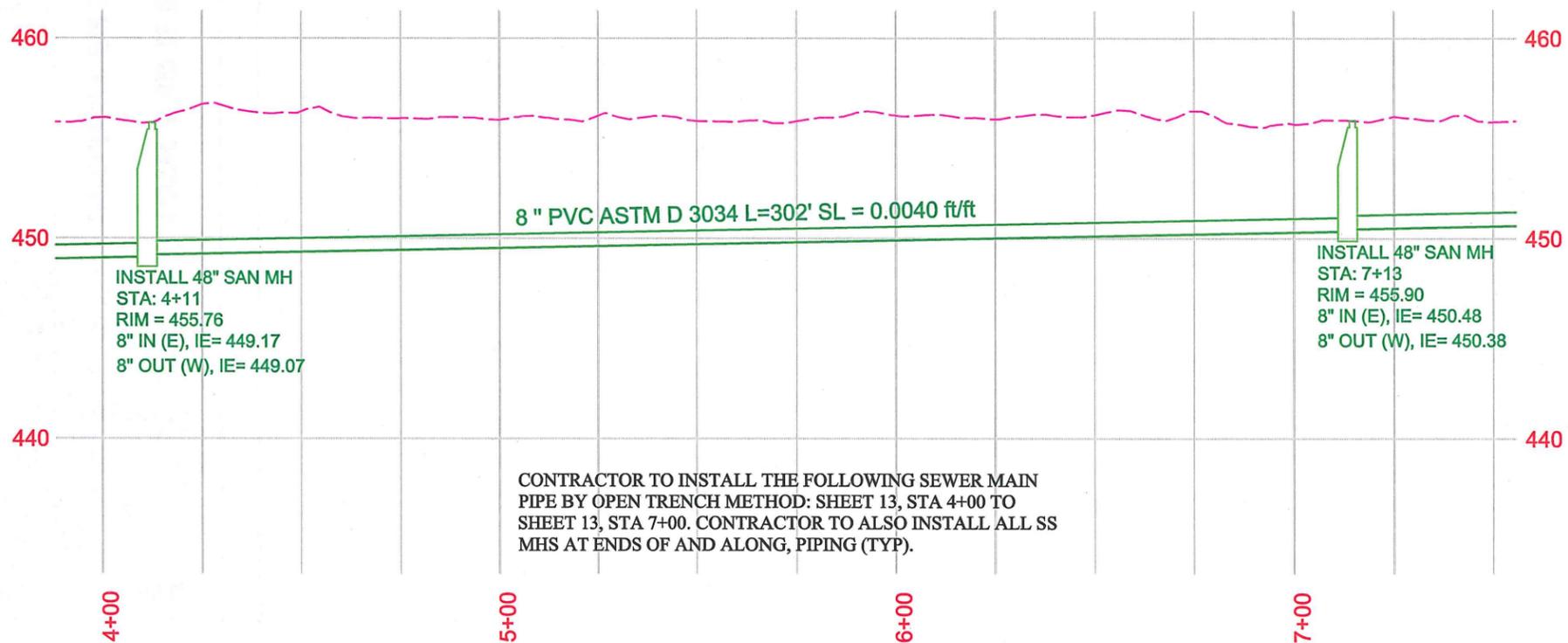
SHEET

13A



Line B STA. 4+00-7+00

Horz. Scale 1"=40'



Line B STA. 4+00-7+00

Horz. Scale 1"=40'

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EXPIRES 6/30/12

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD
DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑩ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS
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⑪ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

⑫ REMOVE EXISTING MANHOLE.

⑬ REMOVE EXISTING SANITARY SEWER PIPE.

⑭ EXISTING TREE(S) TO BE REMOVED.

⑮ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

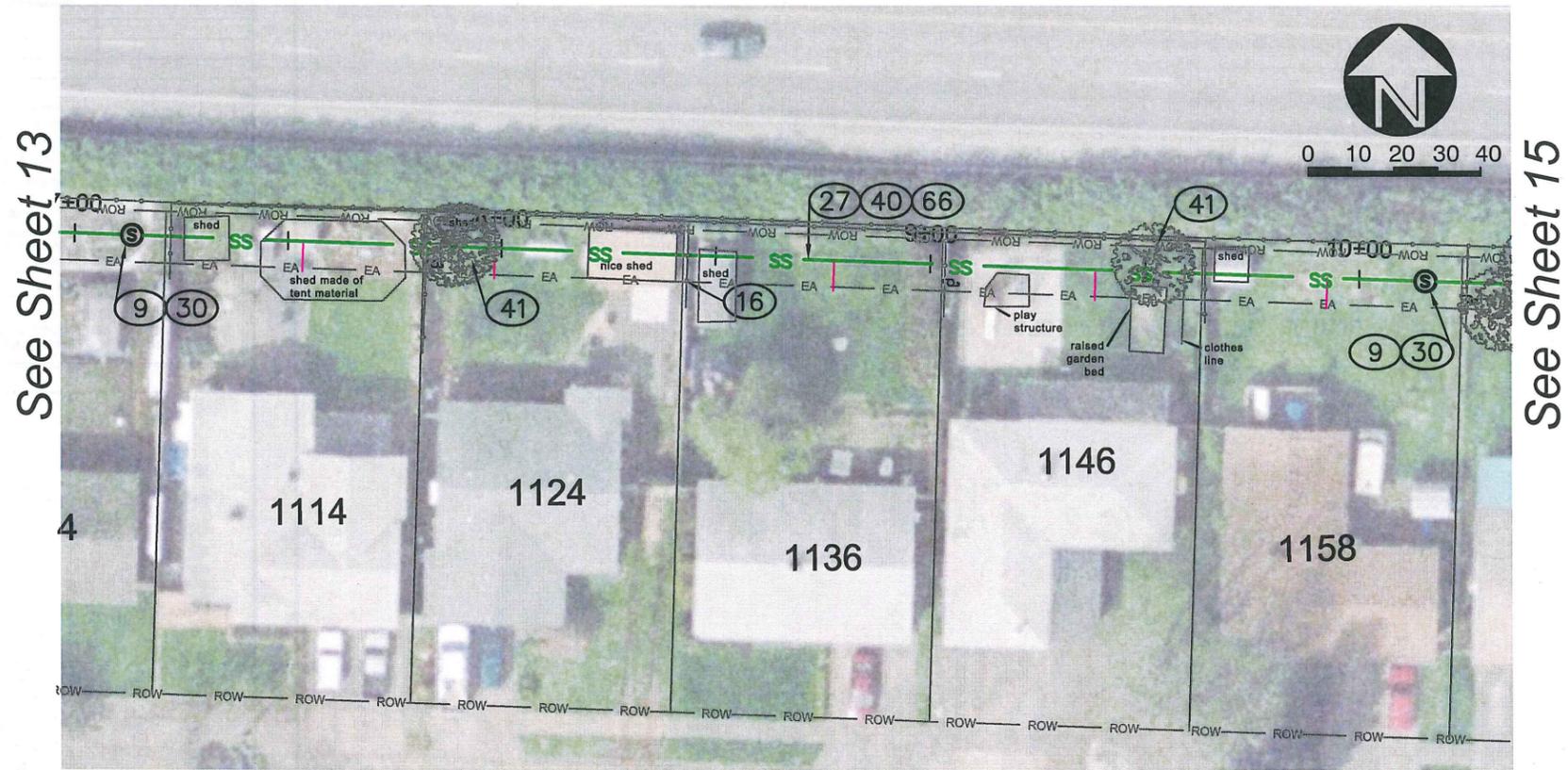
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EXPIRES 6/30/12

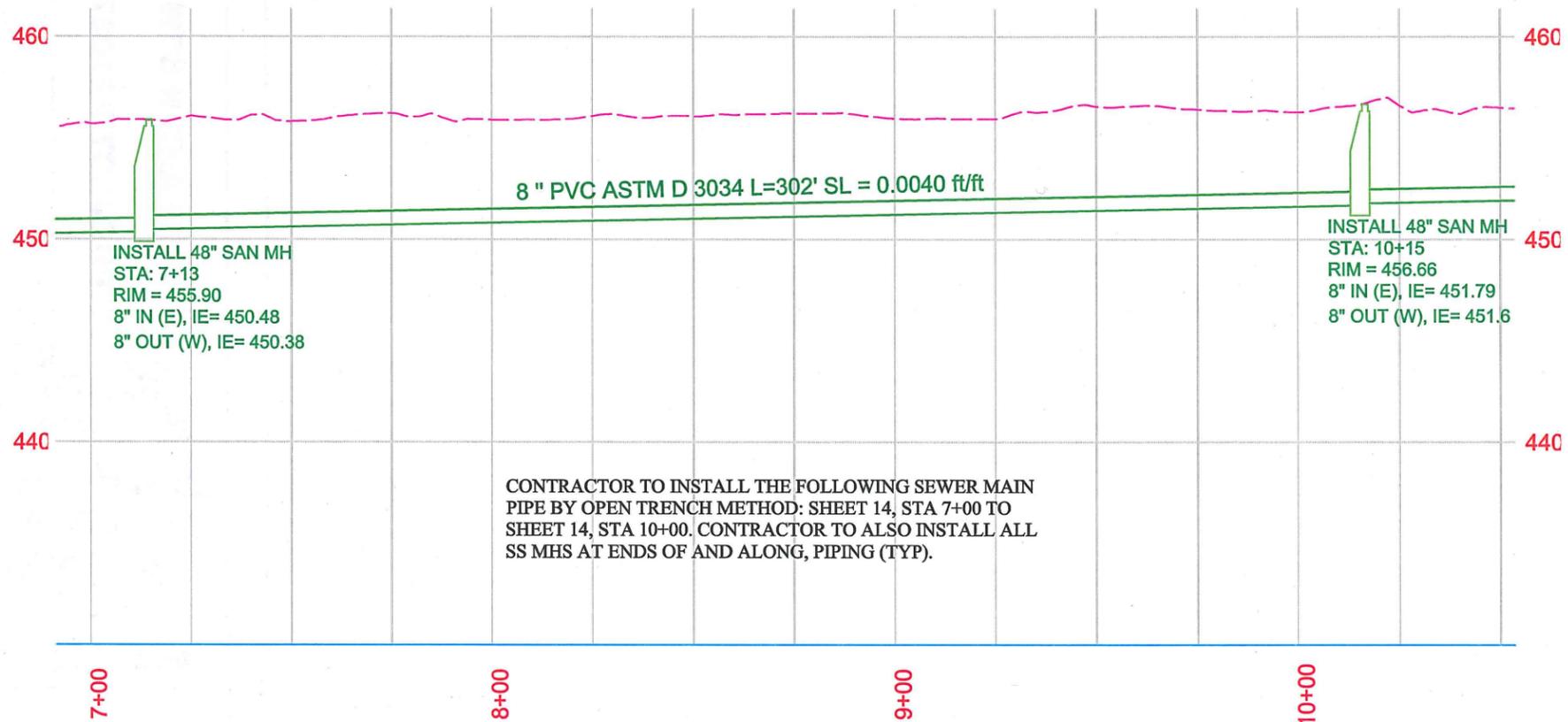
SHEET

14A



Line B STA. 7+00-10+00

Horz. Scale 1"=40'



CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY OPEN TRENCH METHOD: SHEET 14, STA 7+00 TO SHEET 14, STA 10+00. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

Line B STA. 7+00-10+00

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

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EXPIRES 6/30/17

SHEET

14B

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD
DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑬ EXISTING SANITARY SEWER PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES
DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE
REIMBURSED BY CITY (TYP).

⑯ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS
COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

⑳ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

㉑ REMOVE EXISTING MANHOLE.

㉒ REMOVE EXISTING SANITARY SEWER PIPE.

㉓ EXISTING TREE(S) TO BE REMOVED.

㉔ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

NOTE:

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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

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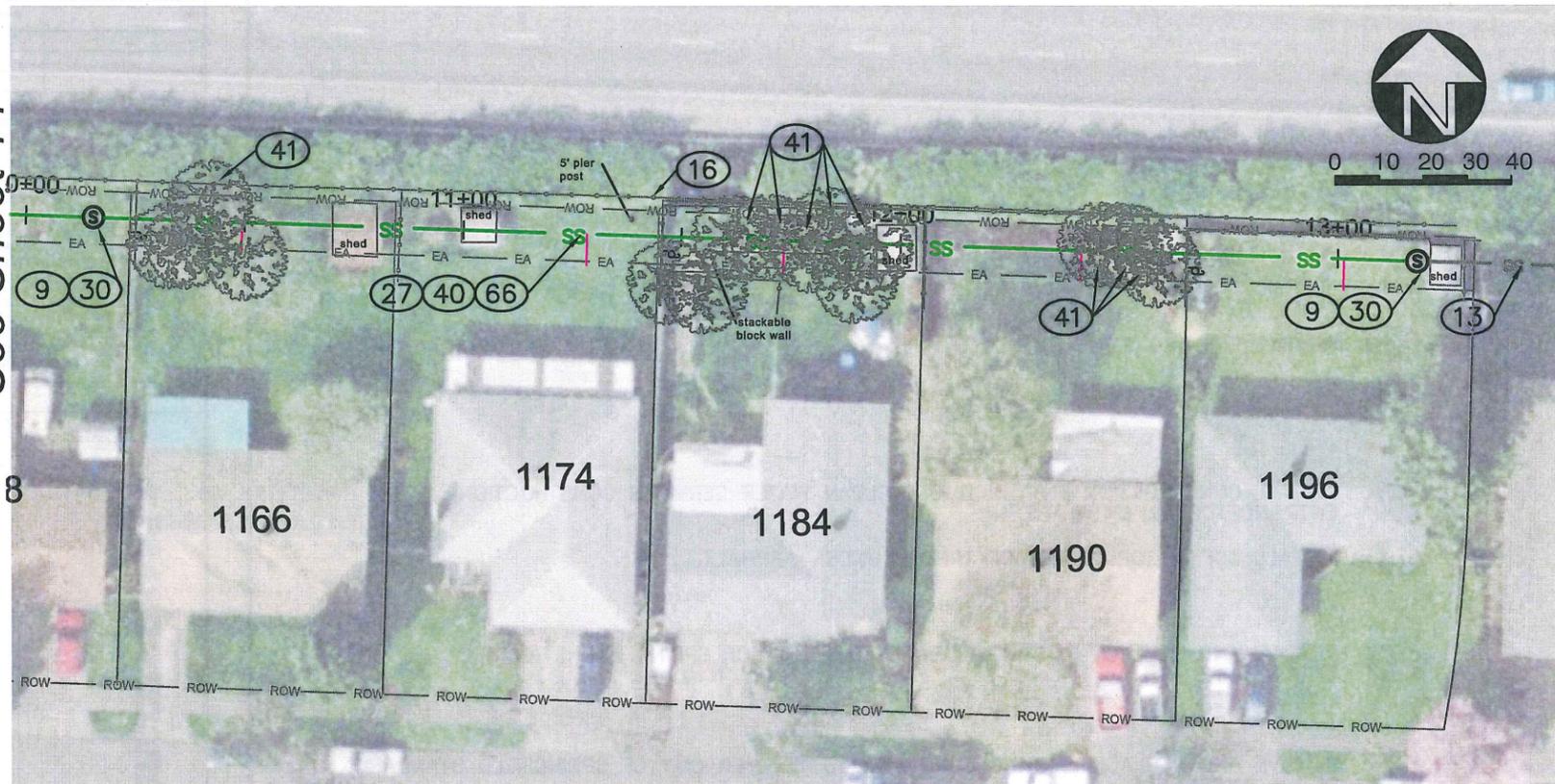


EXPIRES *6/30/12*

SHEET

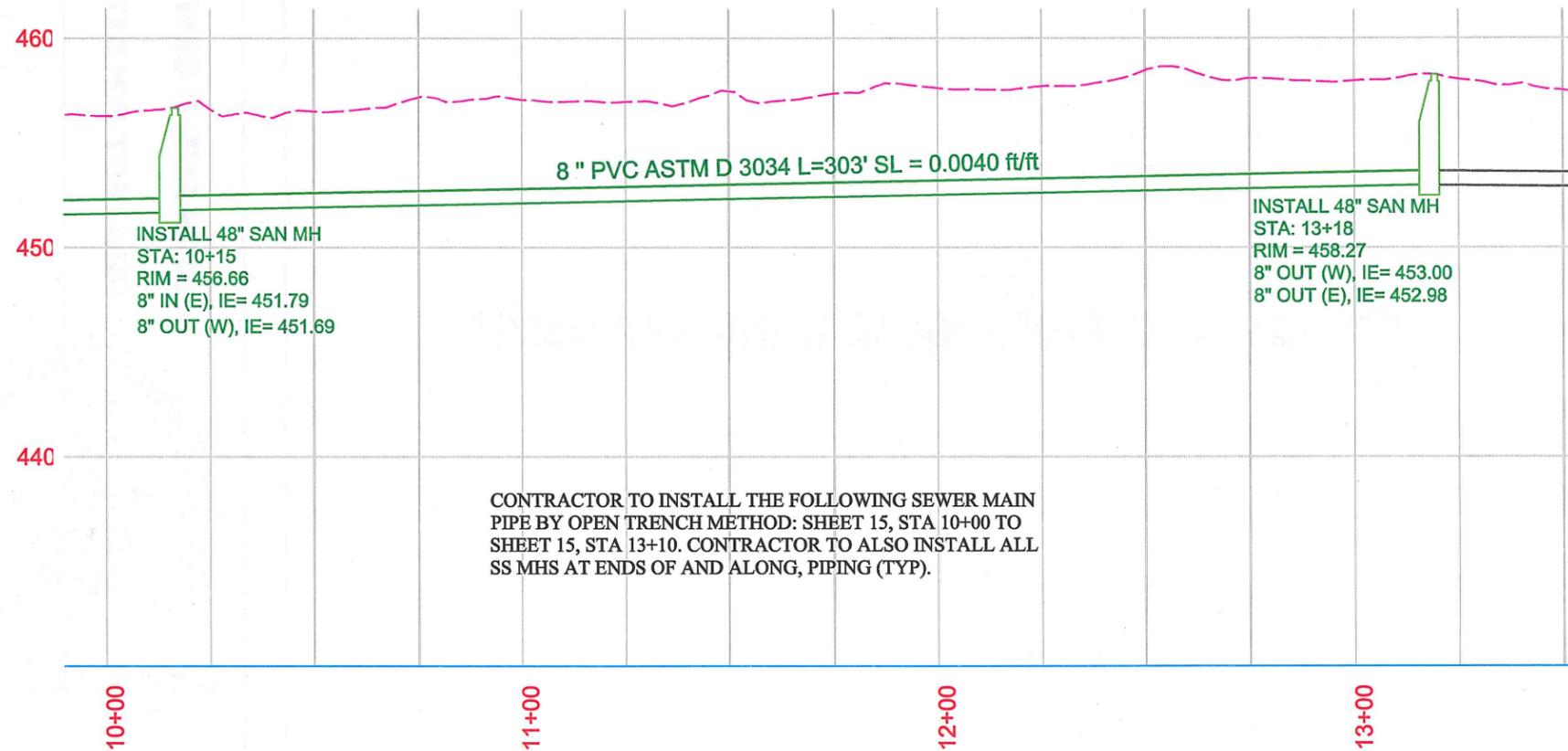
15A

See Sheet 14



Line B STA. 10+00-13+10

Horz. Scale 1"=40'



Line B STA. 10+00-13+10

Horz. Scale 1"=40'

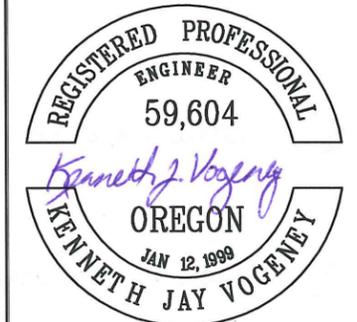
No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

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EXPIRES 6/30/12

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.
- ⑤ APPROXIMATE LOCATION OF WATER LINE TO REMAIN AND PROTECT (TYP).
- ⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).
- ⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.
- ⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).
- ⑯ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.
- ④① REMOVE EXISTING SANITARY SEWER PIPE.
- ④① EXISTING TREE(S) TO BE REMOVED.
- ④③ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.
- ④④ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.
- ④⑥ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.
- ④⑧ REMOVE AND REPLACE EXISTING CURB AND GUTTER PER CITY OF SPRINGFIELD STANDARD DETAIL 3-8.
- ⑤⑦ WATER LINE TO BE INSTALLED PRIOR TO CONTRACTOR WORK ON THIS SECTION OF 10TH STREET. CONTRACTOR TO COORDINATE WITH SPRINGFIELD UTILITY BOARD.
- ②⑦ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.
- ③① REMOVE EXISTING MANHOLE.
- ⑥⑥ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

NOTE:
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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

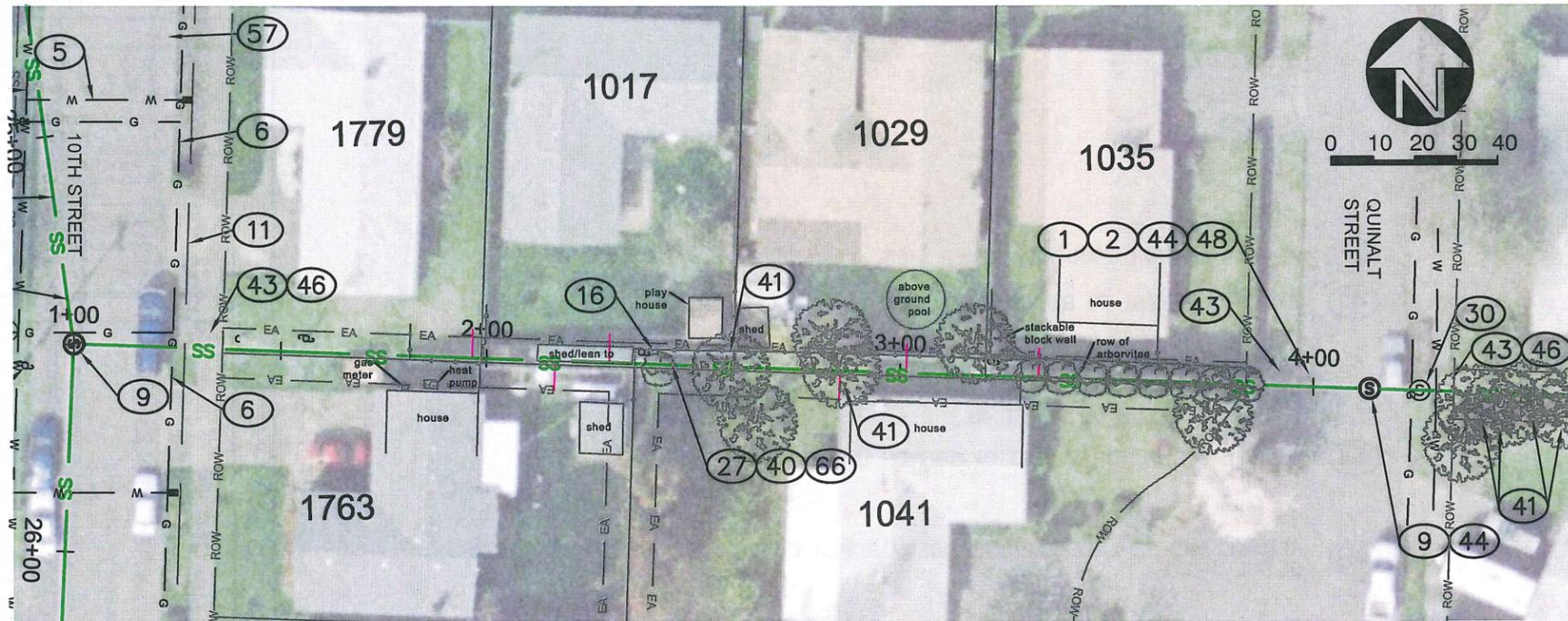
City of Springfield

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 PHONE (541) 726-3763 FAX (541) 736-1021
 INTERNET www.ci.springfield-or.gov



EXPIRES 6/30/12

See Sheets 8

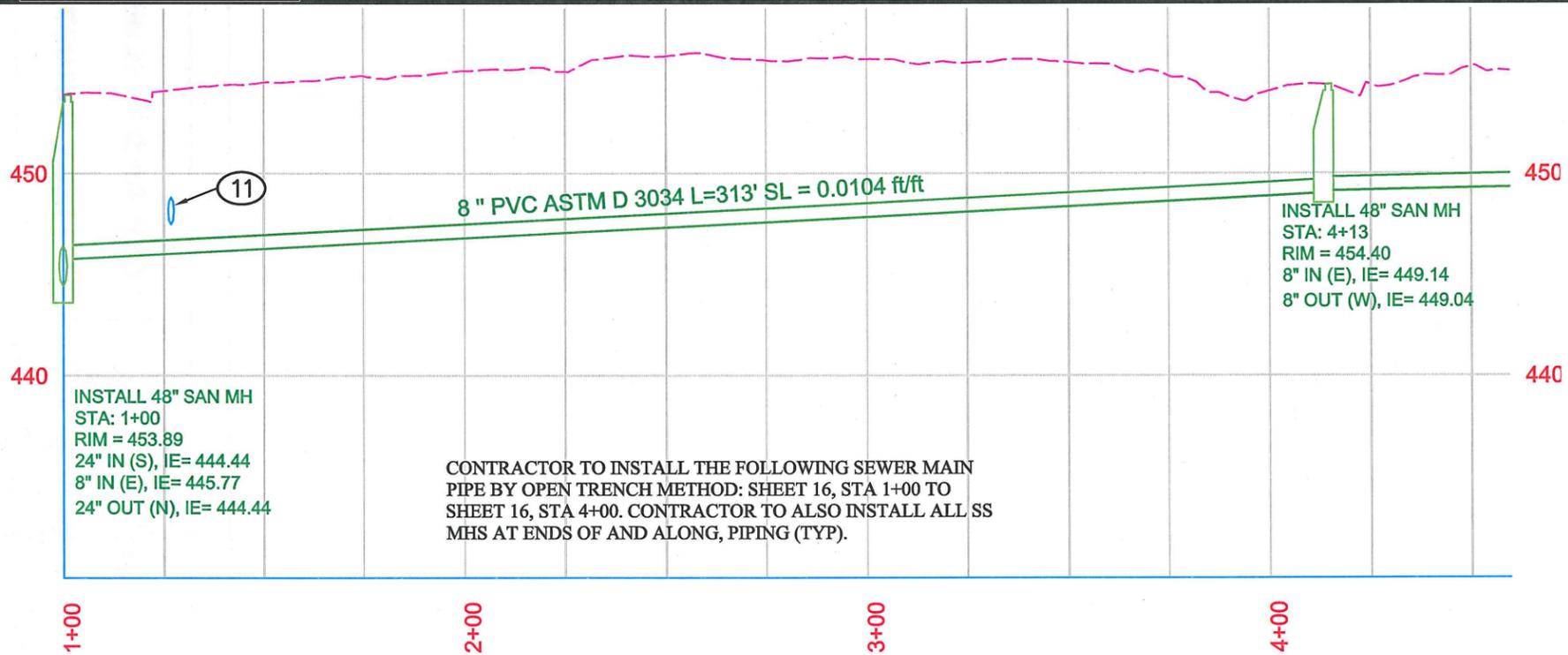


See Sheet 17

See Sheets 9

Line C STA. 1+00-4+00

Horz. Scale 1"=40'



Line C STA. 1+00-4+00

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

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EXPIRES 4/30/12

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD
DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑩ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS
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⑲ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

⑳ REMOVE EXISTING MANHOLE.

㉑ REMOVE EXISTING SANITARY SEWER PIPE.

㉒ EXISTING TREE(S) TO BE REMOVED.

㉔ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION
ENTRANCE DETAIL ON SHEET 4B.

㉕ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

㉖ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD
DETAIL 3-12.

㉗ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

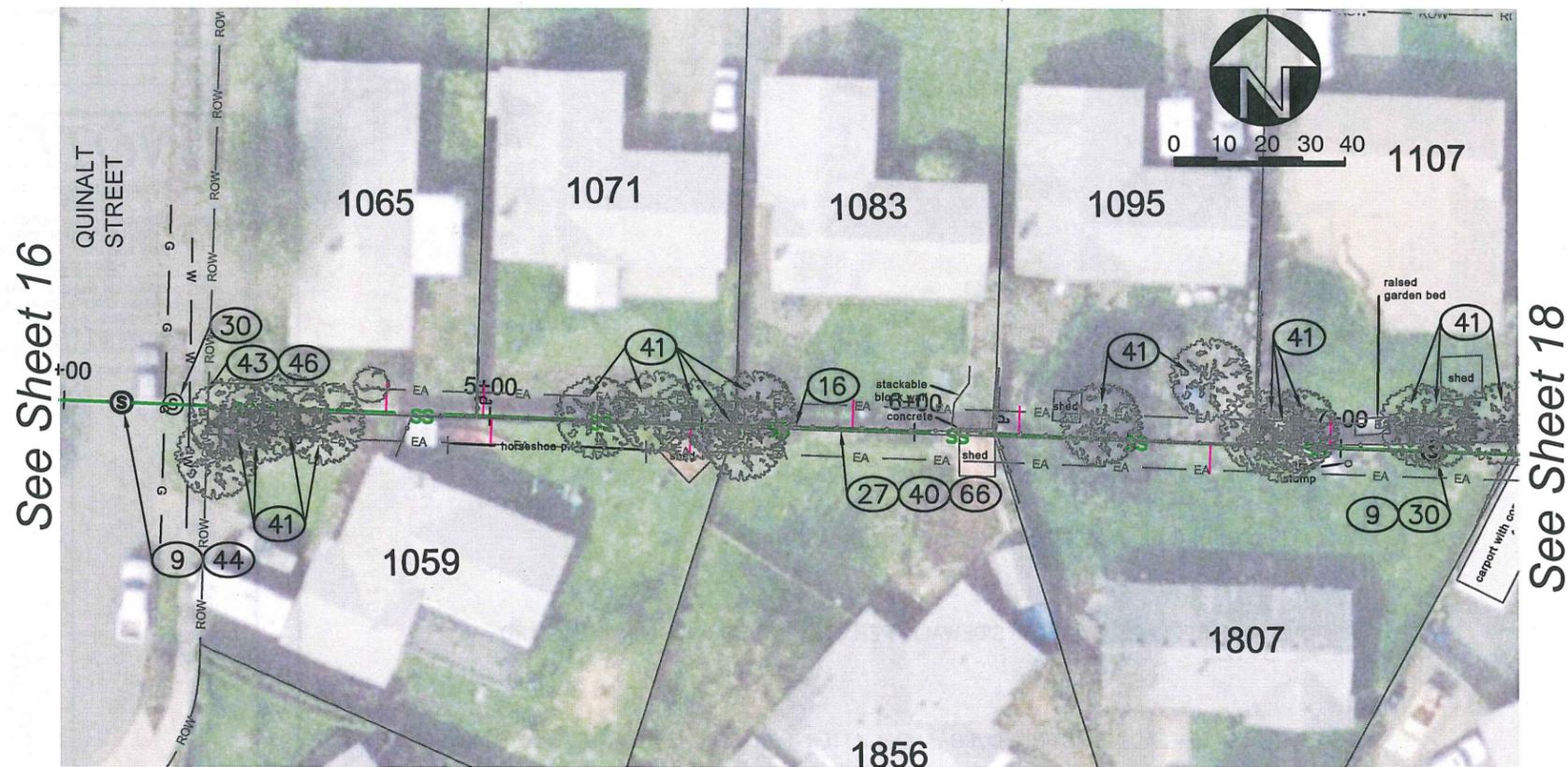
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EXPIRES 6/30/12

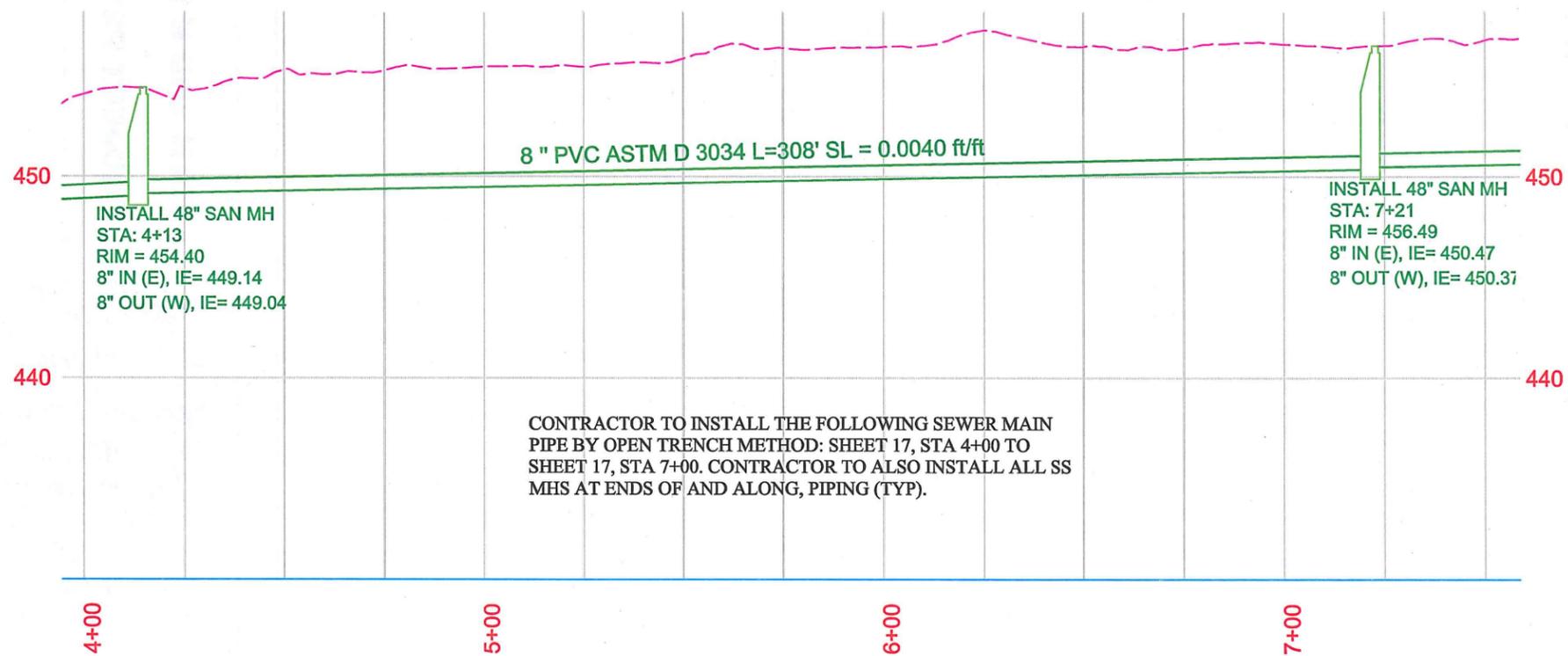
SHEET

17A



Line C STA. 4+00-7+00

Horz. Scale 1"=40'



Line C STA. 4+00-7+00

Horz. Scale 1"=40'

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EXPIRES 6/30/12

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑩ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

⑳ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

㉑ REMOVE EXISTING MANHOLE.

㉒ REMOVE EXISTING SANITARY SEWER PIPE.

㉓ EXISTING TREE(S) TO BE REMOVED.

㉔ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.

㉕ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

㉖ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.

㉗ REMOVE AND REPLACE EXISTING CURB AND GUTTER PER CITY OF SPRINGFIELD STANDARD DETAIL 3-8.

㉘ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

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**10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037**

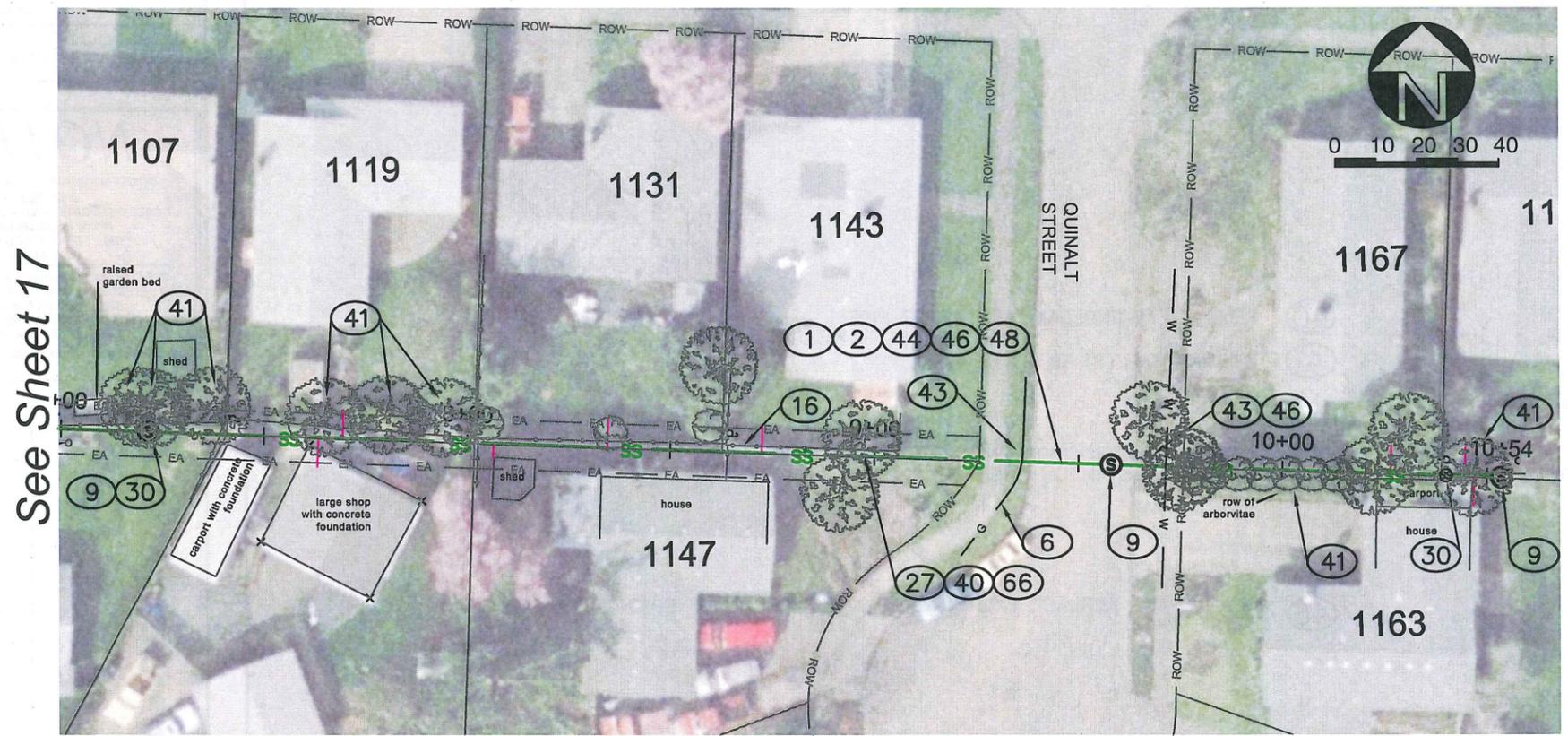
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EXPIRES 6/30/12

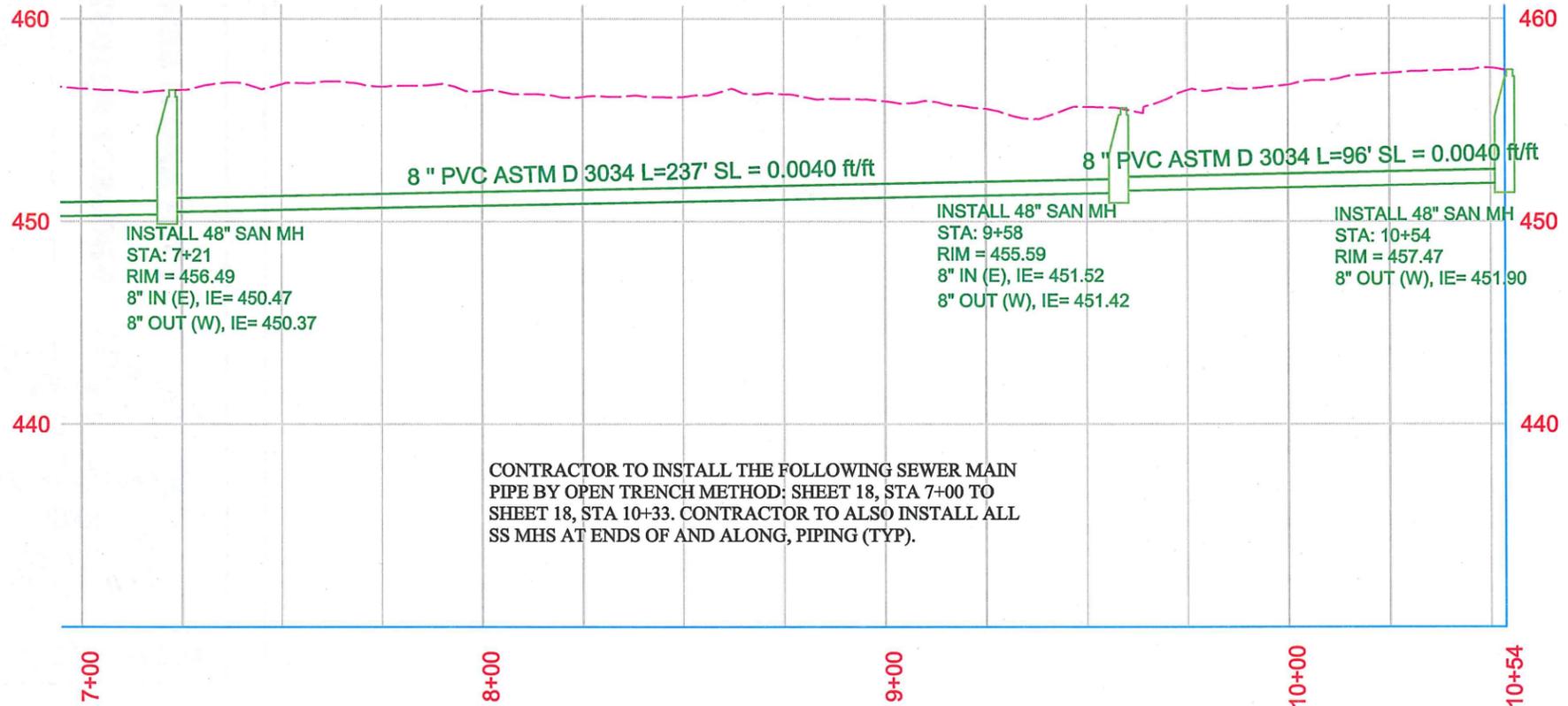
SHEET

18A



Line C STA. 7+00-10+54

Horz. Scale 1"=40'



Line C STA. 7+00-10+54

Horz. Scale 1"=40'

CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY OPEN TRENCH METHOD: SHEET 18, STA 7+00 TO SHEET 18, STA 10+33. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

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EXPIRES 6/30/12

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD
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⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES
DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE
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⑯ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS
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⑳ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

㉑ REMOVE EXISTING MANHOLE.

㉒ REMOVE EXISTING SANITARY SEWER PIPE.

㉓ EXISTING TREE(S) TO BE REMOVED.

㉔ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION
ENTRANCE DETAIL ON SHEET 4B.

㉕ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD
DETAIL 3-12.

㉖ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

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CALL FOR UTILITY LOCATES
1-800-332-2344

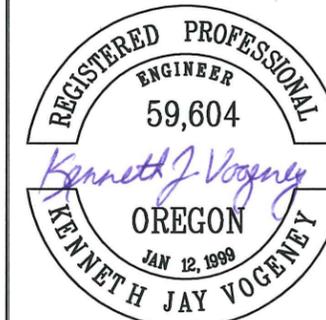
THE CONTRACTOR SHALL BE RESPONSIBLE
FOR DETERMINING UTILITY LOCATIONS PRIOR TO
BEGINNING OF CONSTRUCTION.
THESE PLANS MAY NOT SHOW ALL UTILITIES OR
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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

PUBLIC WORKS / ENGINEERING
225 FIFTH STREET, SPRINGFIELD, OR 97477
PHONE (541) 726-3753 FAX (541) 736-1021
INTERNET www.ci.springfield-or.gov

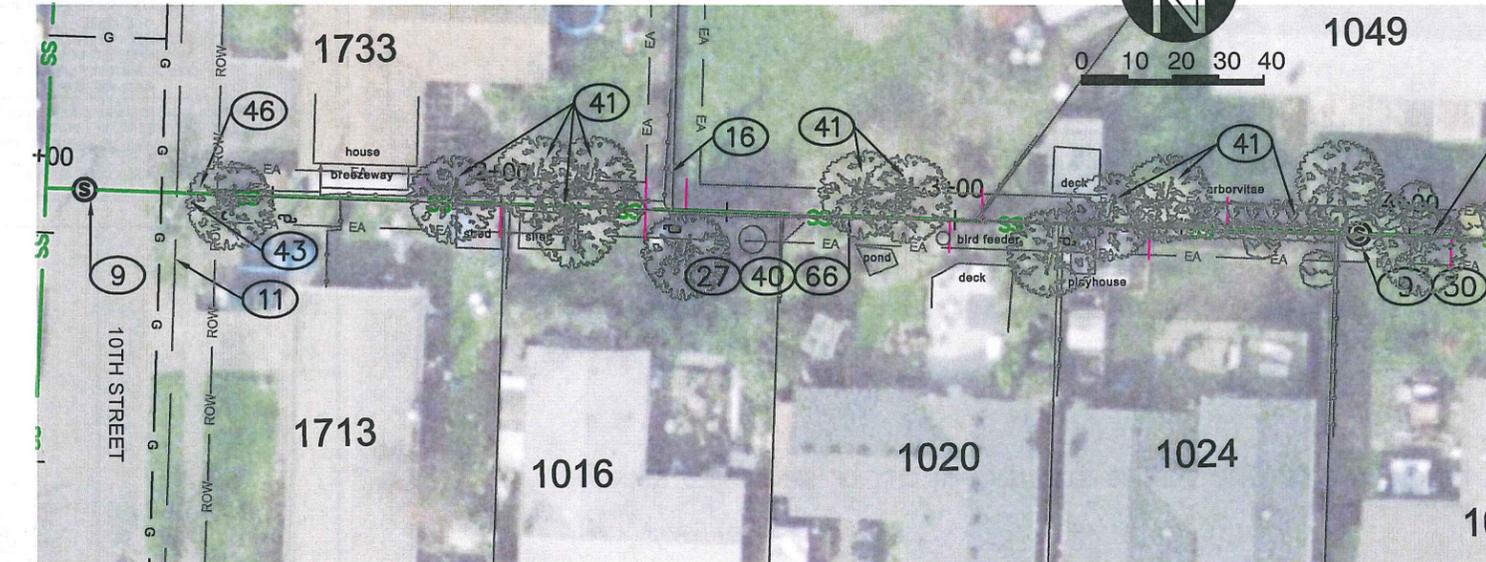


EXPIRES 4/30/12

SHEET

19A

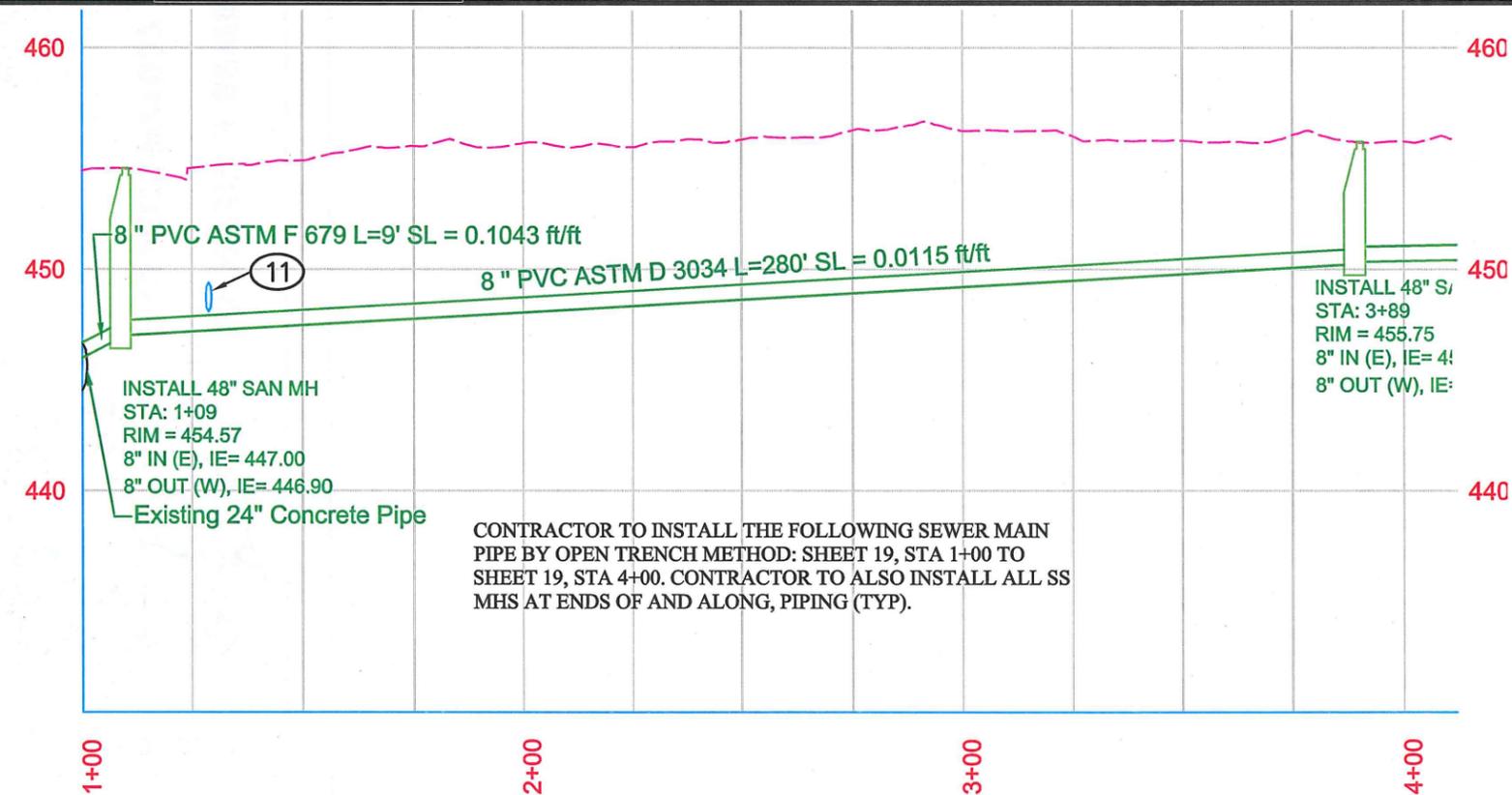
See Sheet 9



See Sheet 9

Line D STA. 1+00-4+00

Horz. Scale 1"=40'



Line D STA. 1+00-4+00

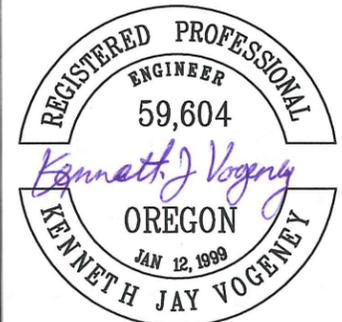
Horz. Scale 1"=40'

No.	Revision/Issue	Date

NOTE:
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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

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EXPIRES 6/30/12

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.

- ⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

- ⑩ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

- ⑳ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

- ㉑ REMOVE EXISTING MANHOLE.

- ㉒ REMOVE EXISTING SANITARY SEWER PIPE.
- ㉓ EXISTING TREE(S) TO BE REMOVED.

- ㉔ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.

- ㉕ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

- ㉖ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.

- ㉗ REMOVE AND REPLACE EXISTING CURB AND GUTTER PER CITY OF SPRINGFIELD STANDARD DETAIL 3-8.

- ㉘ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

NOTE:

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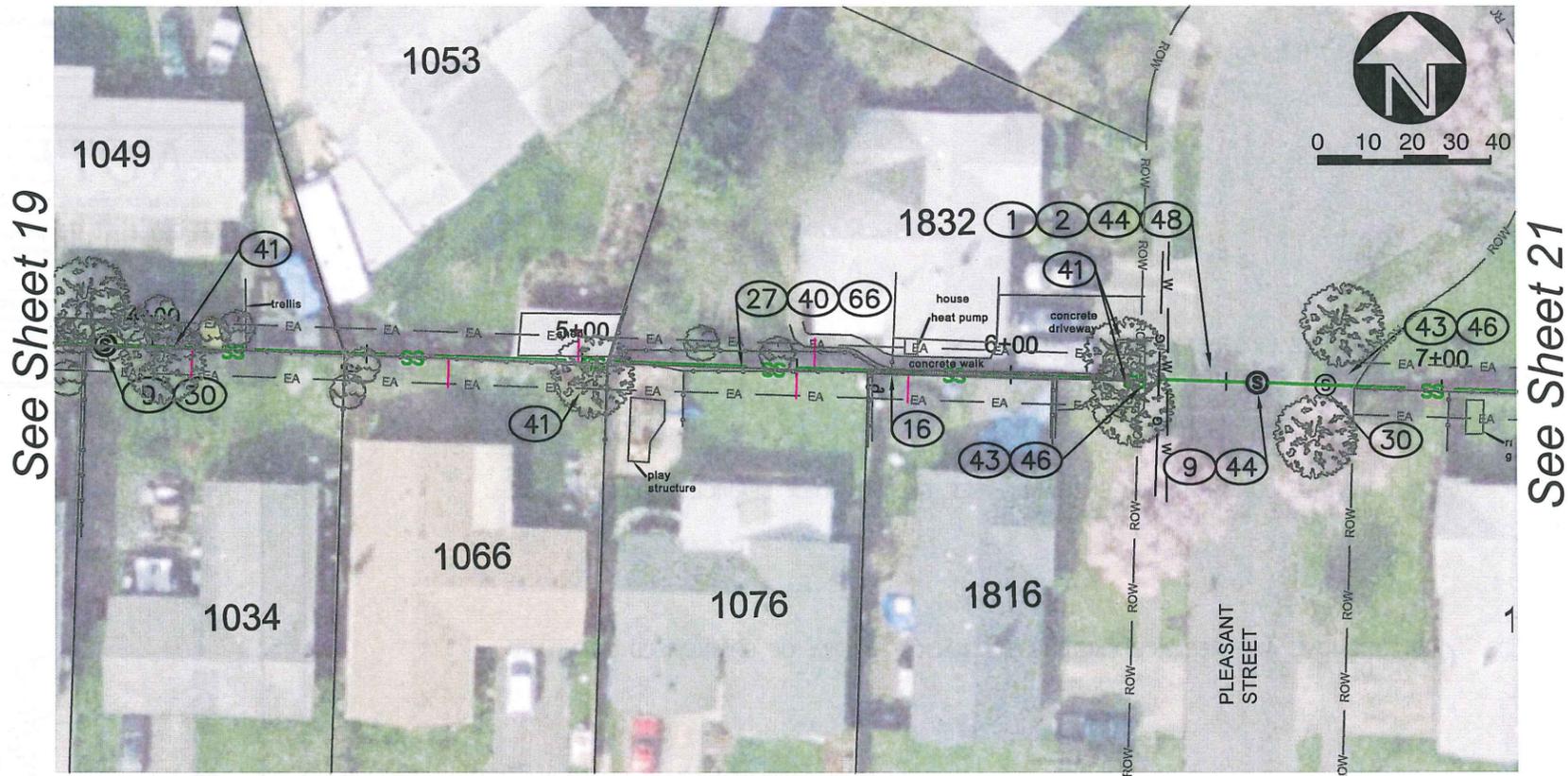
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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

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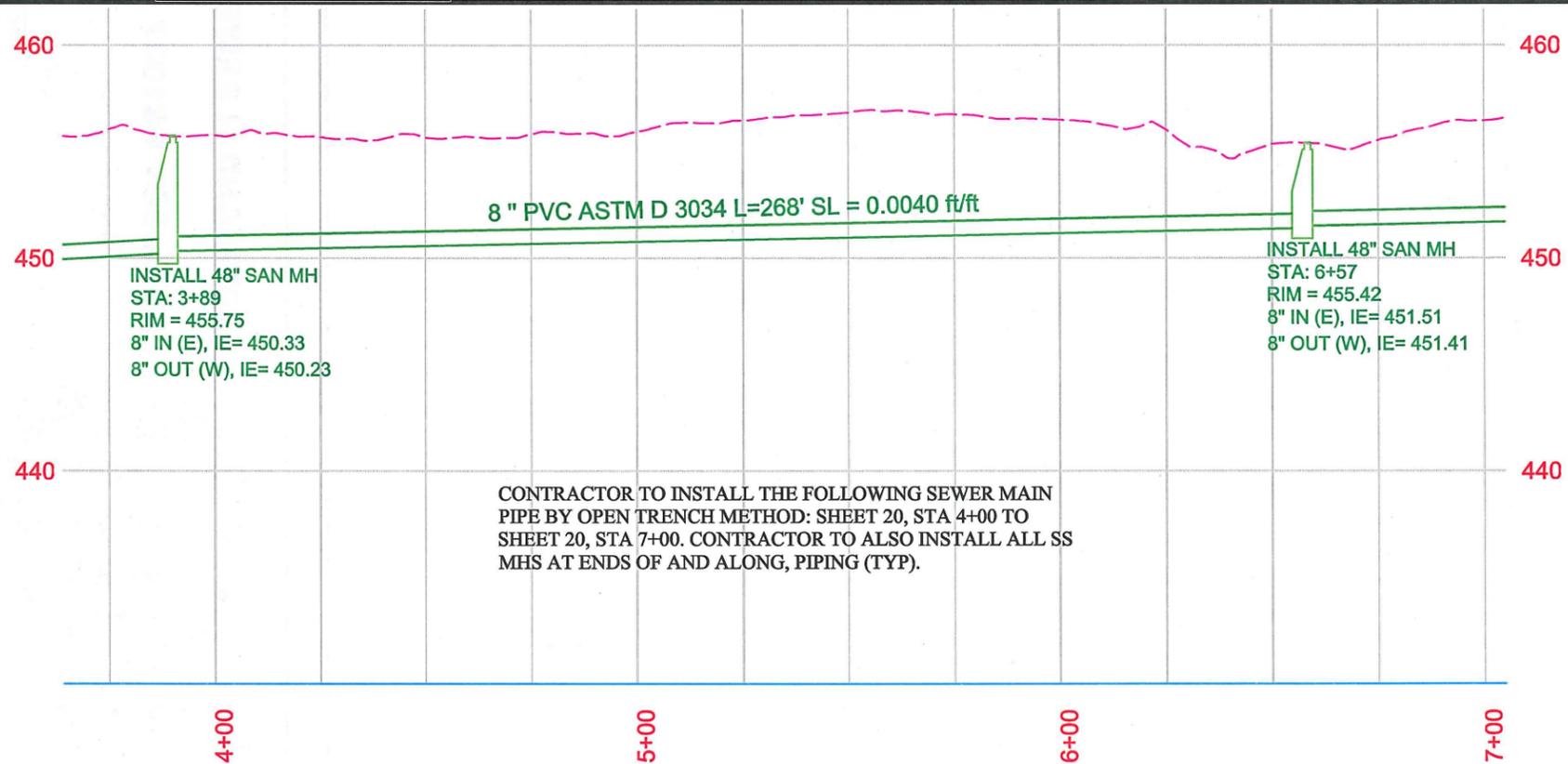


EXPIRES 6/30/12



Line D STA. 4+00-7+00

Horz. Scale 1"=40'



Line D STA. 4+00-7+00

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

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EXPIRES 6/30/12

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD
DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑬ EXISTING SANITARY SEWER PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES
DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE
REIMBURSED BY CITY (TYP).

⑯ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS
COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

⑳ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

㉑ REMOVE EXISTING MANHOLE.

㉒ REMOVE EXISTING SANITARY SEWER PIPE.

㉓ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION
ENTRANCE DETAIL ON SHEET 4B.

㉔ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD
DETAIL 3-12.

㉕ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

NOTE:

UTILITY LOCATIONS ARE APPROXIMATE
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10TH AND N SEWER UPGRADE - PHASE 1

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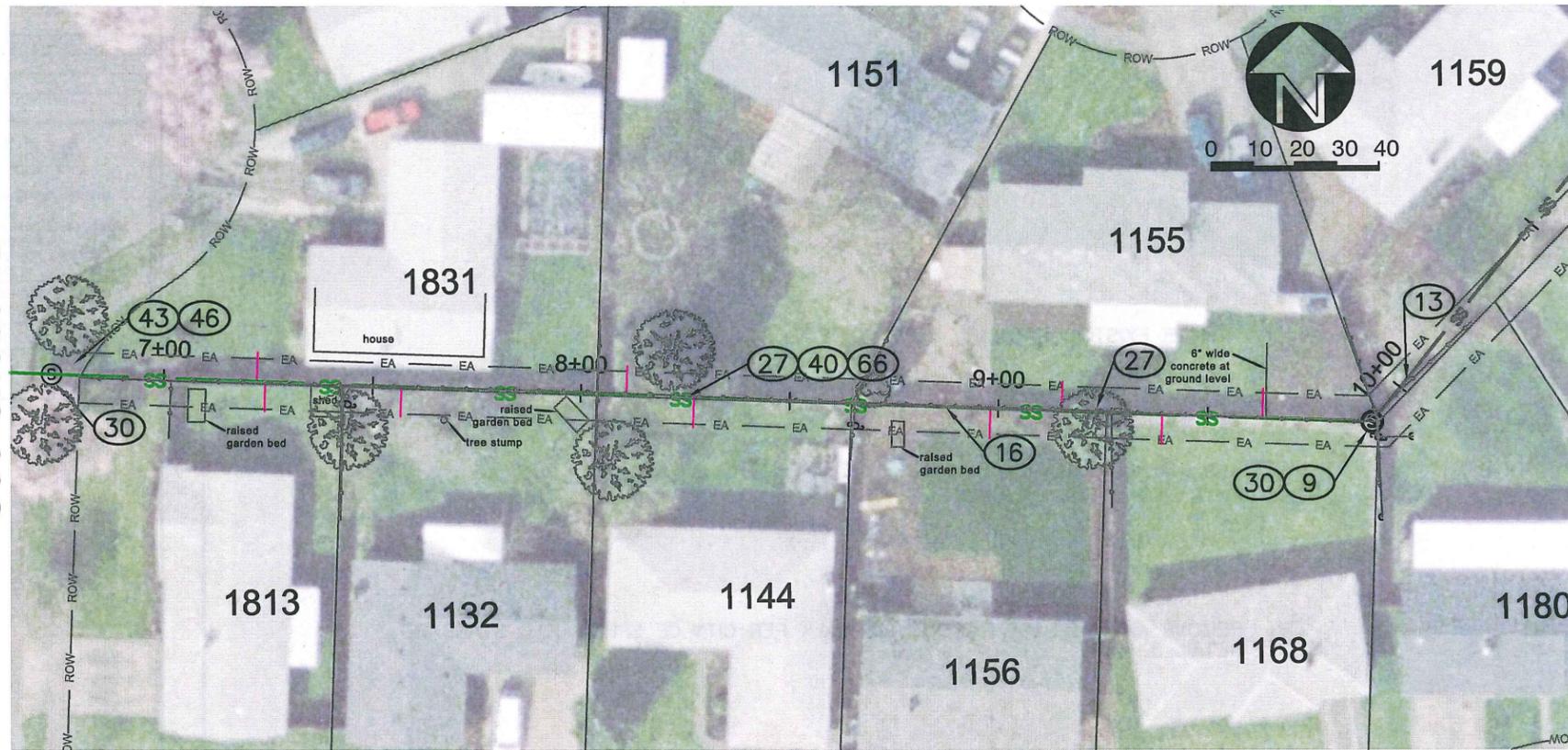


EXPIRES 6/30/12

SHEET

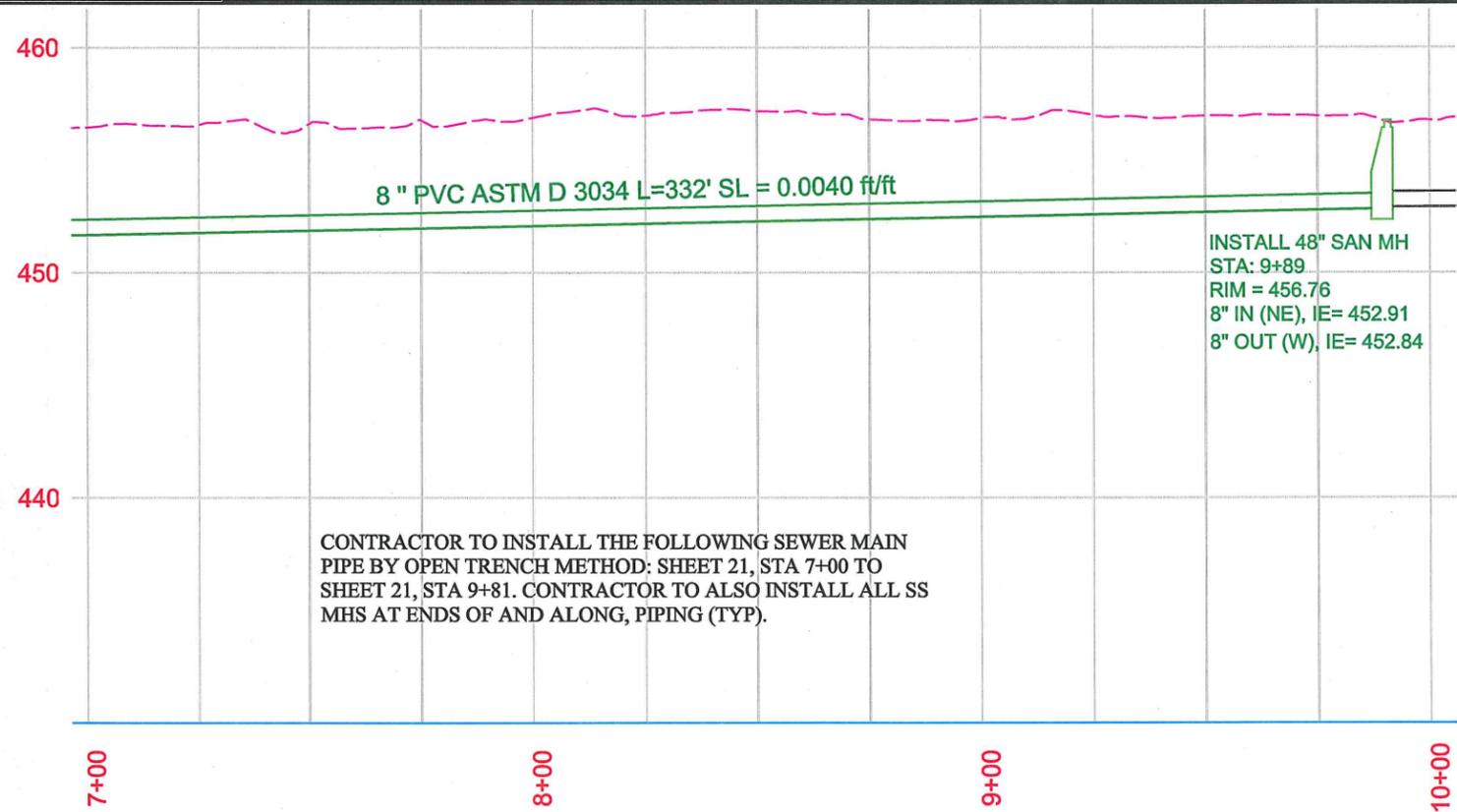
21A

See Sheet 20



Line D STA. 7+00-9+89

Horz. Scale 1"=40'



CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY OPEN TRENCH METHOD: SHEET 21, STA 7+00 TO SHEET 21, STA 9+81. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

INSTALL 48" SAN MH
 STA: 9+89
 RIM = 456.76
 8" IN (NE), IE= 452.91
 8" OUT (W), IE= 452.84

Line D STA. 7+00-9+89

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

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 INTERNET www.ci.springfield-or.gov



EXPIRES 6/30/12

④ UTILITY POLES WITH OVERHEAD POWER LINES ALONG 10TH STREET TO BE PROTECTED. USE CAUTION WHEN WORKING NEARBY.

⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).

⑯ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

⑳ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

㉑ INSTALL COMBINED FLOW MANHOLE. SEE PROFILE FOR SIZE. SEE DETAIL SHEETS D3-D5.

㉓ REMOVE EXISTING MANHOLE.

④⑩ REMOVE EXISTING SANITARY SEWER PIPE.

④⑪ EXISTING TREE(S) TO BE REMOVED.

④⑬ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.

④⑯ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.

⑥⑥ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

NOTE:

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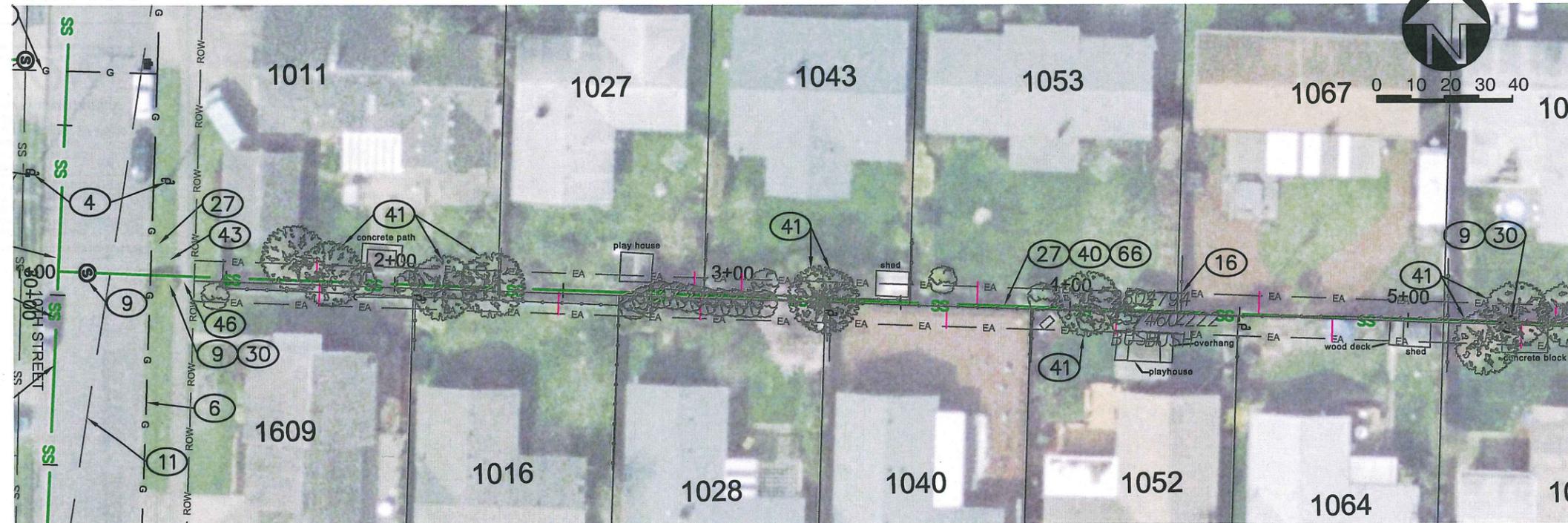
10TH AND N SEWER UPGRADE - PHASE 1
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EXPIRES 6/30/12

See Sheet 9

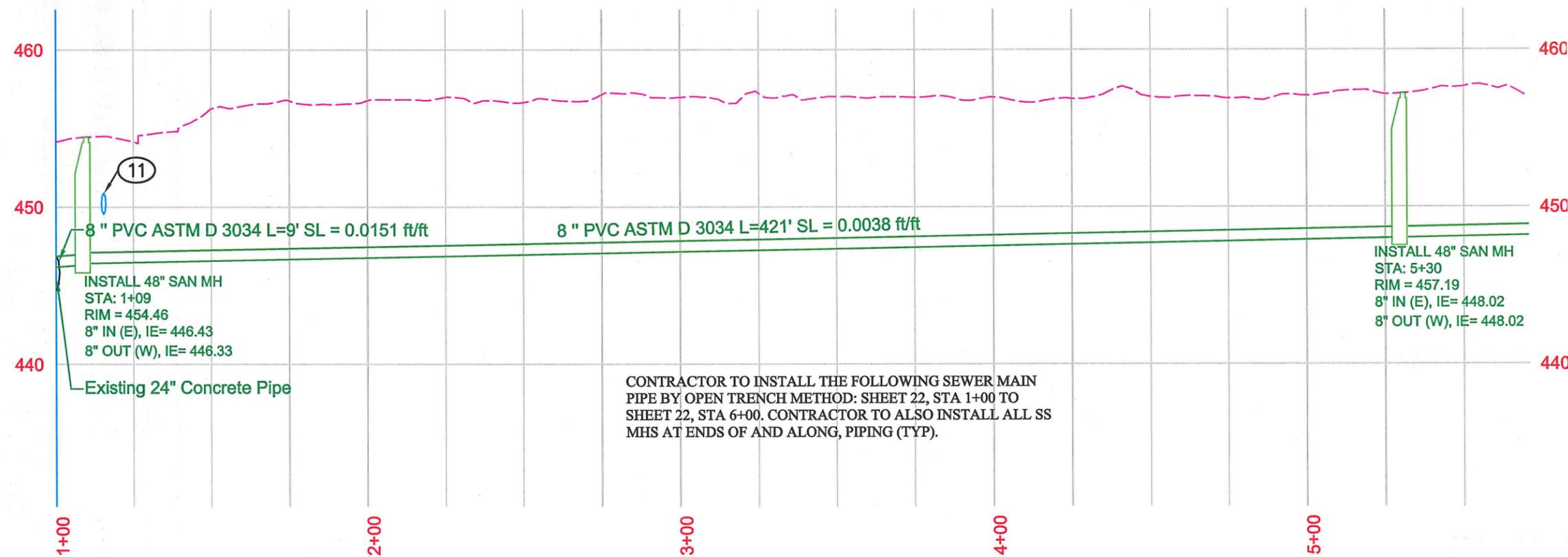


See Sheet 23

See Sheet 10

Line E STA. 1+00-5+50

Horz. Scale 1"=40'



CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY OPEN TRENCH METHOD: SHEET 22, STA 1+00 TO SHEET 22, STA 6+00. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

Line E STA. 1+00-5+50

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

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EXPIRES 6/30/12

SHEET
22B

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD
DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑩ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS
COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

⑪ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

⑫ REMOVE EXISTING MANHOLE.

⑬ REMOVE EXISTING SANITARY SEWER PIPE.

⑭ EXISTING TREE(S) TO BE REMOVED.

⑮ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

NOTE:

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

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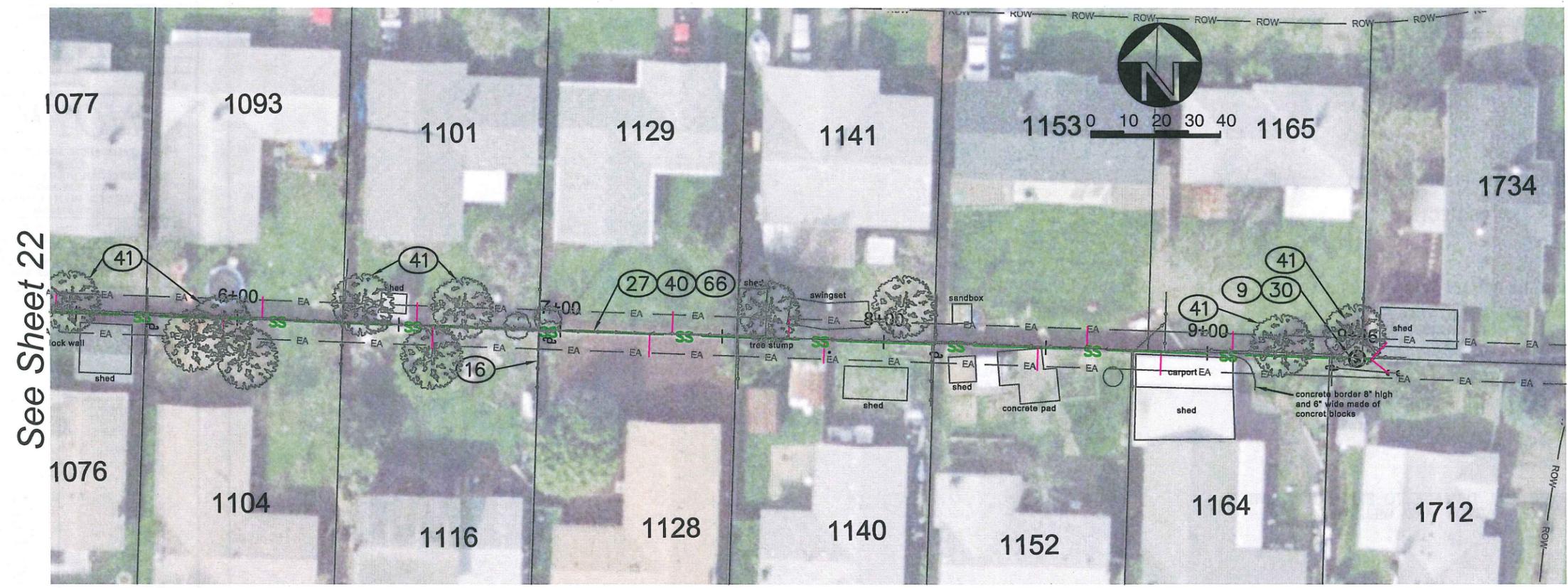
EXPIRES 4/30/12

SHEET

23A

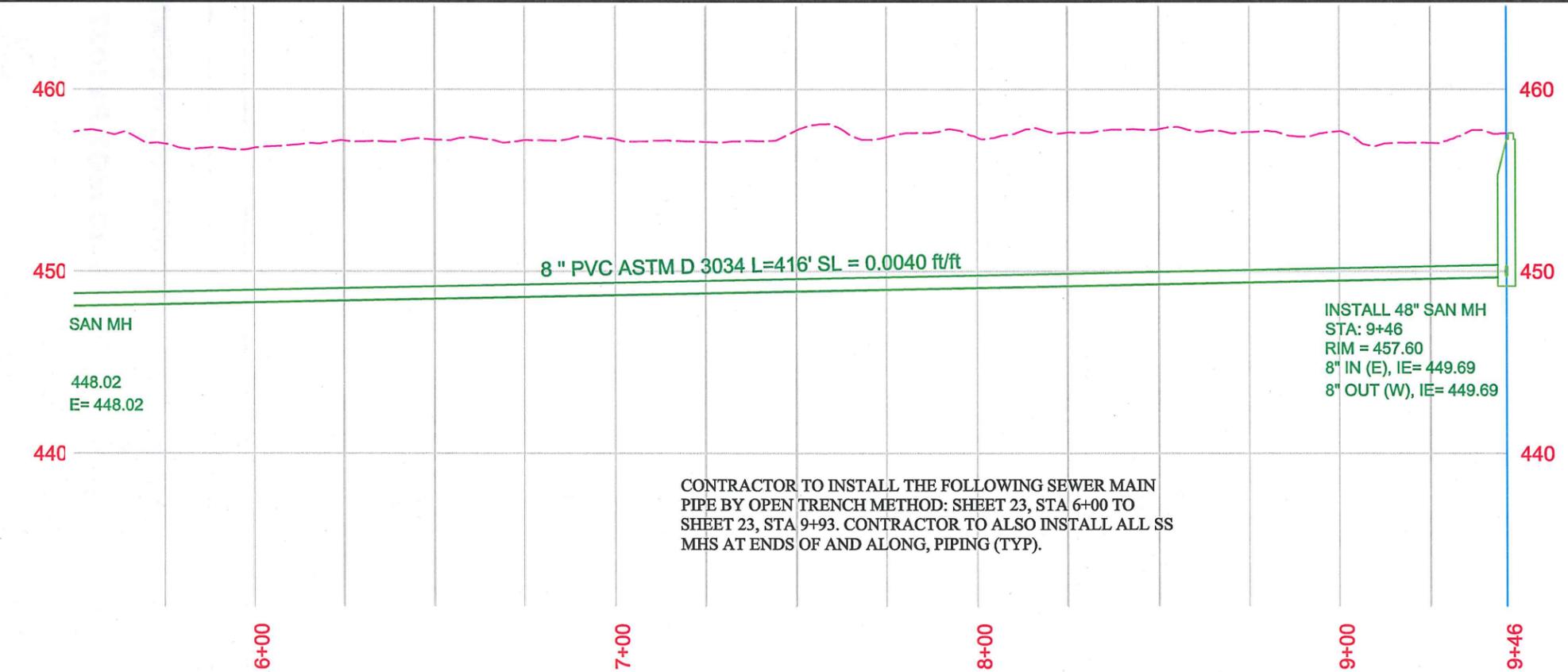
No.	Revision/Issue	Date

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Line E STA. 6+00-9+90

Horz. Scale 1"=40'



Line E STA. 6+00-9+90

Horz. Scale 1"=40'

10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

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EXPIRES 6/30/12

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.

⑤ APPROXIMATE LOCATION OF WATER LINE TO REMAIN AND PROTECT (TYP).

⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).

⑧ APPROXIMATE LOCATION OF COMMUNICATION LINE TO REMAIN AND PROTECT (TYP).

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).

⑬ EXISTING SANITARY SEWER PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).

⑲ CONTRACTOR TO REMOVE EXISTING PIPE CONNECTION TO MANHOLE AND CONNECT NEW 8" PVC ASTM D 3034 PIPE TO EXISTING MANHOLE.

⑳ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

㉓ REMOVE EXISTING MANHOLE.

④① REMOVE EXISTING SANITARY SEWER PIPE.

④③ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.

④④ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

⑥① DISMANTLE EXISTING GUARDRAIL AND REINSTALL AFTER PIPE INSTALLATION IS COMPLETE.

⑥⑥ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

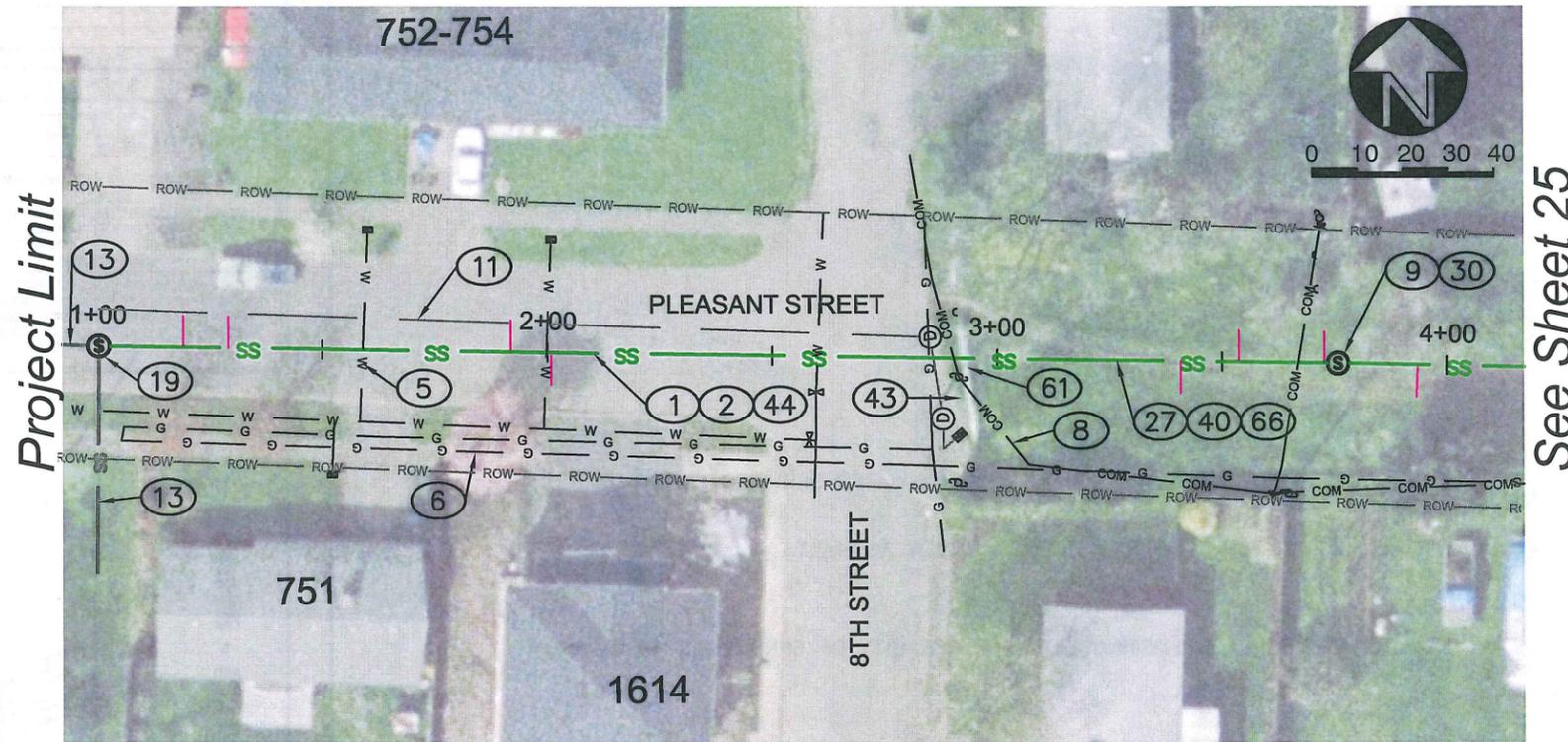
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EXPIRES 6/30/12

SHEET

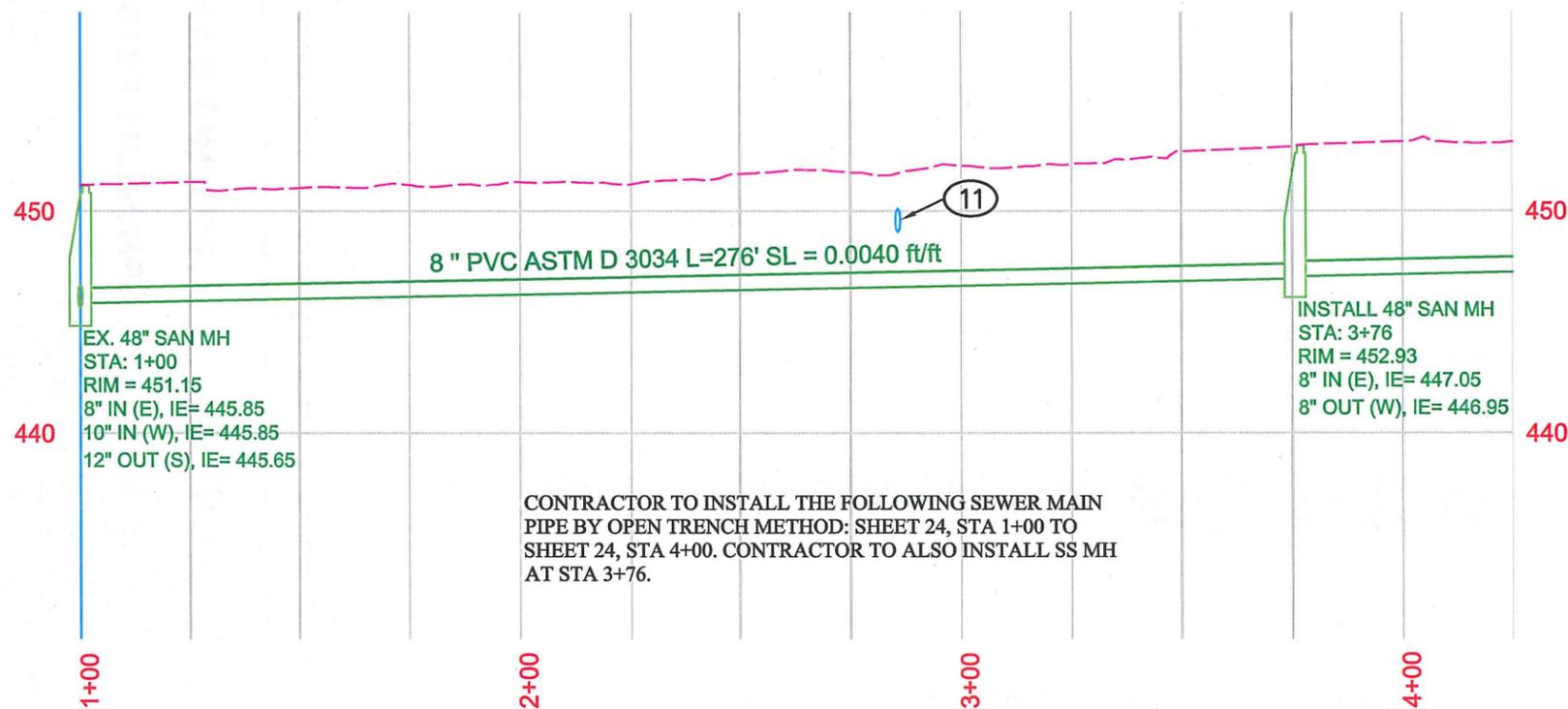
24A



See Sheet 25

Line F STA. 1+00-4+00

Horz. Scale 1"=40'



Line F STA. 1+00-4+00

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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EXPIRES 6/30/12

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.
- ⑤ APPROXIMATE LOCATION OF WATER LINE TO REMAIN AND PROTECT (TYP).
- ⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).
- ⑧ APPROXIMATE LOCATION OF COMMUNICATION LINE TO REMAIN AND PROTECT (TYP).
- ⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

④⑩ REMOVE EXISTING SANITARY SEWER PIPE.

④③ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.

④④ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

④⑥ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.

②⑦ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

⑥⑩ INSTALL 2" LEVEL 3 C MIX HMA MAT WITH WIDTH MATCHING EXISTING THROAT DEPTH AND 18 FOOT DEPTH. INSTALL COMMERCIAL DRIVEWAY PER CITY OF SPRINGFIELD STANDARD DETAIL 3-24.

③⑩ REMOVE EXISTING MANHOLE.

③① REMOVE AND REPLACE EXISTING COMMERCIAL DRIVEWAY PER CITY OF SPRINGFIELD STANDARD DETAIL 3-23.

⑥④ CONTRACTOR TO REGRADE ALLEY WITH 3/4" MINUS ROCK AFTER TRENCH WORK IS COMPLETE. LIMITS TO BE DETERMINED BY ENGINEER.

⑥⑥ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

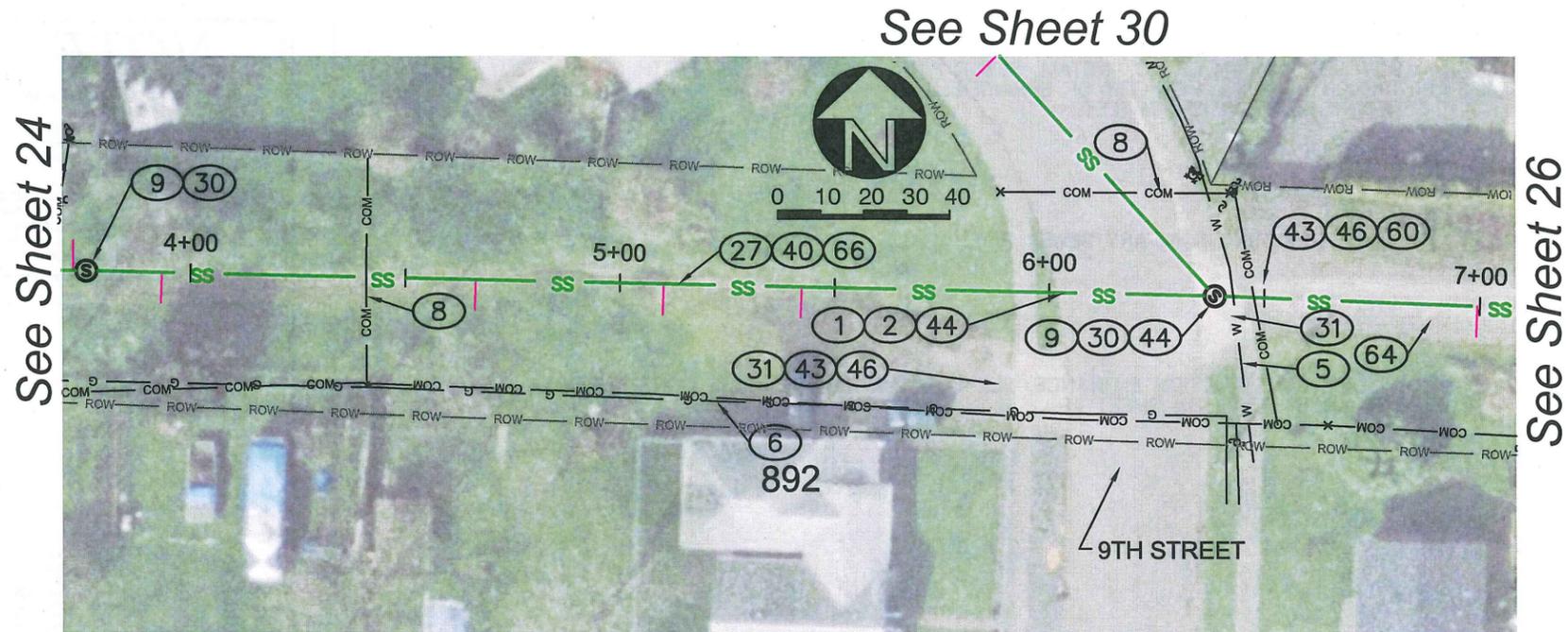
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EXPIRES 6/30/12

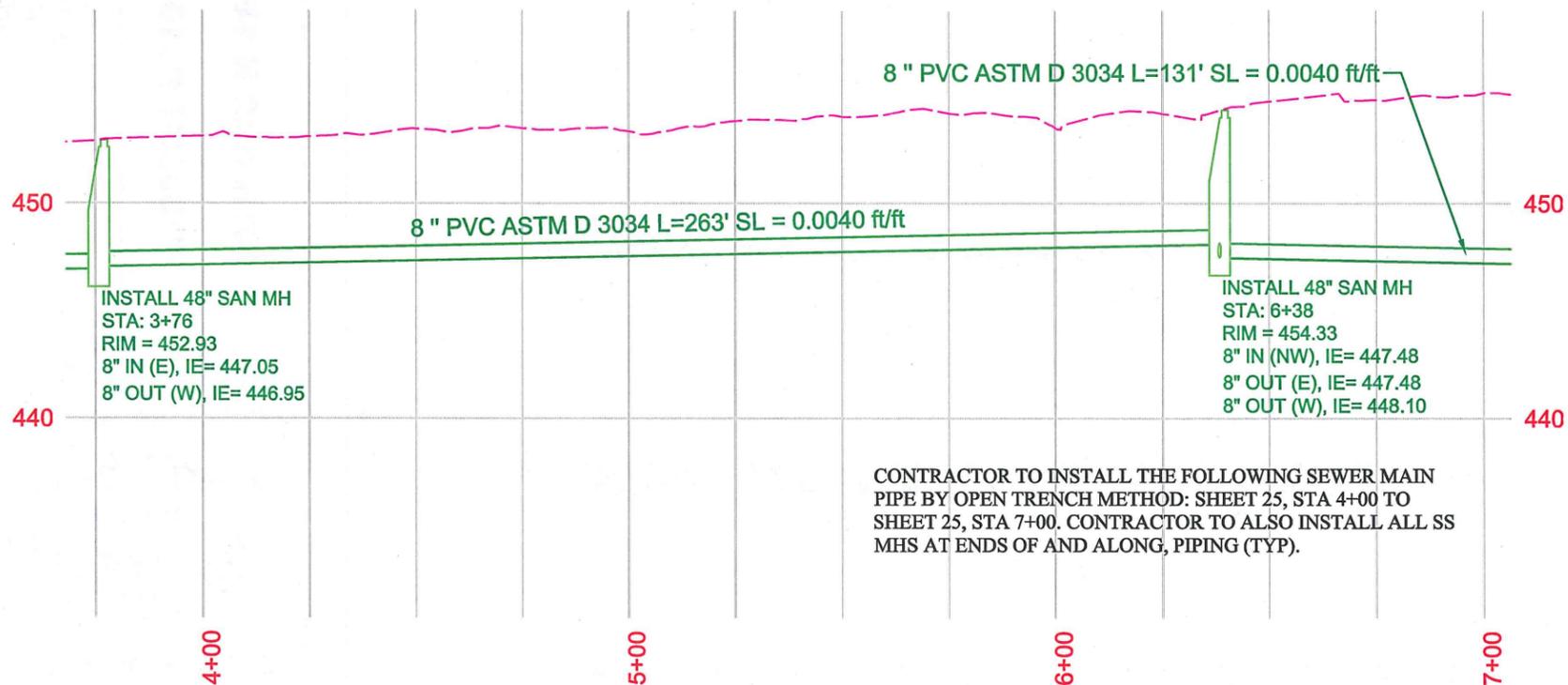
SHEET

25A



Line F STA. 4+00-7+00

Horz. Scale 1"=40'



Line F STA. 4+00-7+00

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

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EXPIRES 1/30/12

	SHEET
	25B

① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).

④ UTILITY POLES WITH OVERHEAD POWER LINES ALONG 10TH STREET TO BE PROTECTED. USE CAUTION WHEN WORKING NEARBY.

⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).

⑧ APPROXIMATE LOCATION OF COMMUNICATION LINE TO REMAIN AND PROTECT (TYP).

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑩ INSTALL 24" PVC ASTM F 679 PIPE(TYP).

⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).

⑯ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

⑳ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

㉑ INSTALL COMBINED FLOW MANHOLE. SEE PROFILE FOR SIZE. SEE DETAIL SHEETS D3-D5.

㉒ REMOVE EXISTING MANHOLE.

㉓ REMOVE 6' WIDTH OF AC. INSTALL SEWER PIPE AND FILL TRENCH WITH COMPACTED TRENCH BACKFILL PER CITY OF SPRINGFIELD STANDARD DETAIL 4-17 UNTIL STREET RECONSTRUCTION IS COMPLETE.

㉔ REMOVE EXISTING SANITARY SEWER PIPE.

㉕ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.

㉖ SEE DETAILS 1 AND 2 ON SHEETS D6 AND D7 FOR ADA RAMP RECONSTRUCTION.

㉗ INSTALL 2" LEVEL 3 C MIX HMAC MAT WITH WIDTH MATCHING EXISTING THROAT DEPTH AND 18 FOOT DEPTH. INSTALL COMMERCIAL DRIVEWAY PER CITY OF SPRINGFIELD STANDARD DETAIL 3-24.

㉘ CONTRACTOR TO REGRADE ALLEY WITH 3/4" MINUS ROCK AFTER TRENCH WORK IS COMPLETE. LIMITS TO BE DETERMINED BY ENGINEER.

㉙ EXISTING PIPE TO BE REMOVED IS ASBESTOS CEMENT PIPE.

No.	Revision/Issue	Date

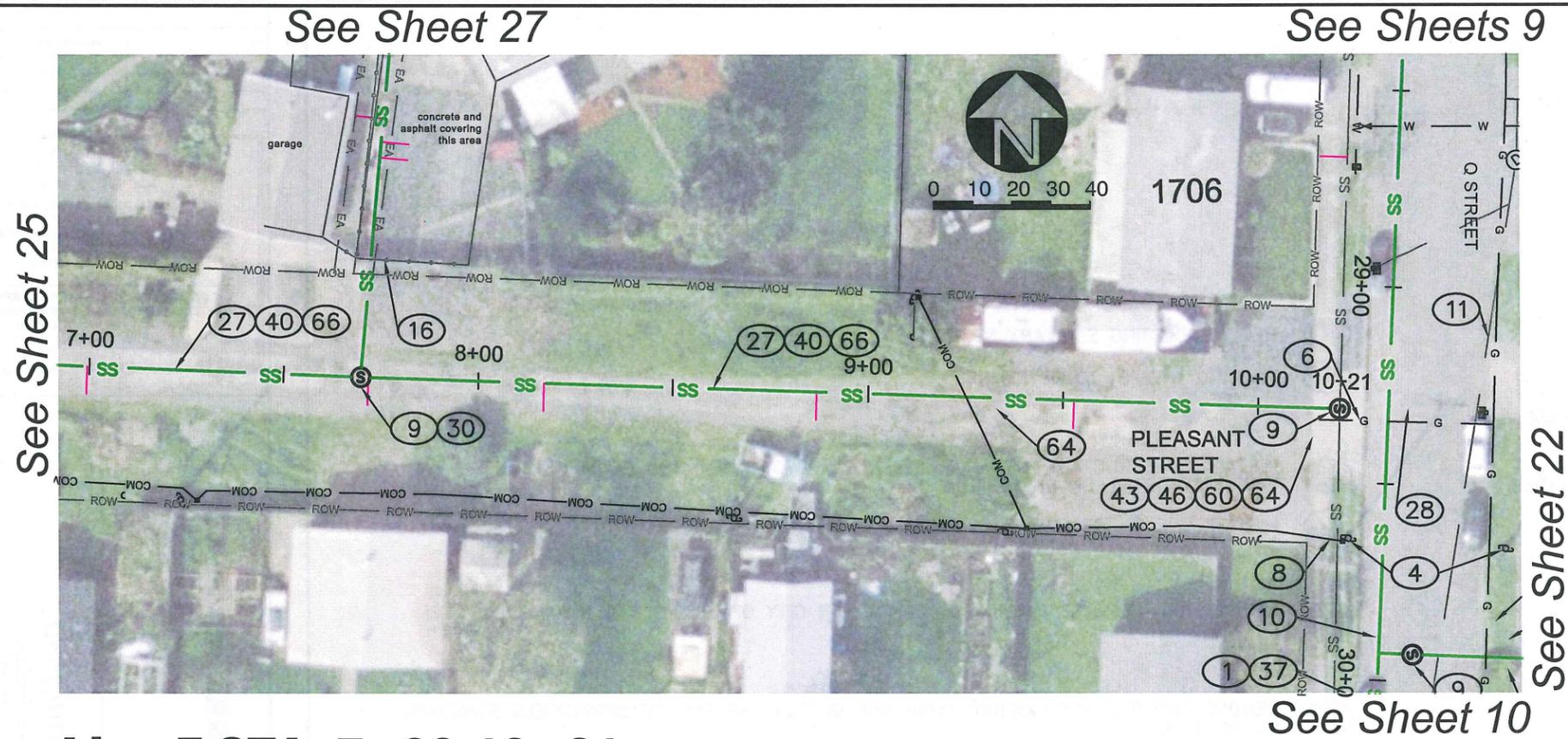
NOTE:
 UTILITY LOCATIONS ARE APPROXIMATE
 DO NOT
 SCALE OR LOCATE UTILITY LINES OR MAINS
 FROM THESE DRAWINGS
 CALL FOR UTILITY LOCATES
 1-800-332-2344
 THE CONTRACTOR SHALL BE RESPONSIBLE
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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

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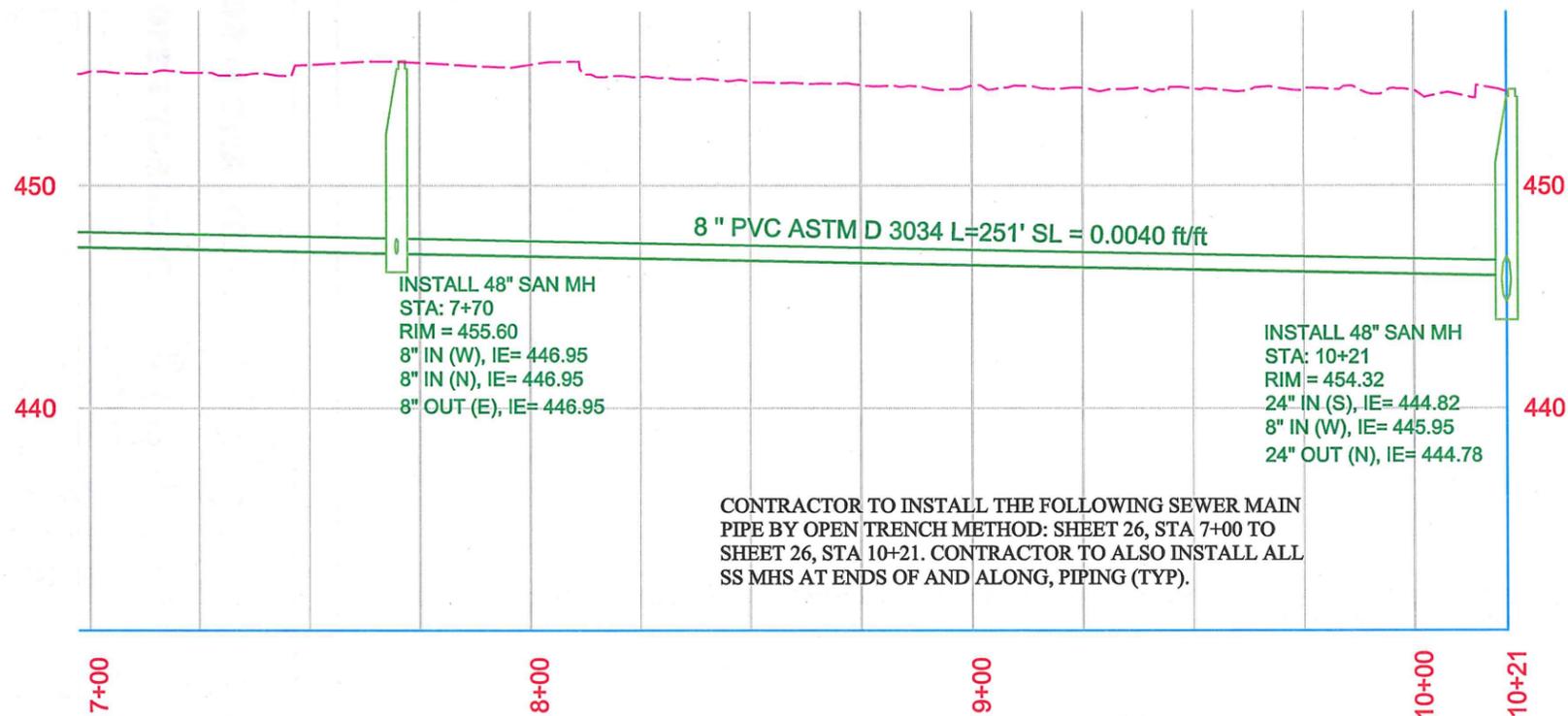


EXPIRES 1/30/17



Line F STA. 7+00-10+21

Horz. Scale 1"=40'



Line F STA. 7+00-10+21

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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EXPIRES 6/30/12

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.

- ⑤ APPROXIMATE LOCATION OF WATER LINE TO REMAIN AND PROTECT (TYP).
- ⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).

- ⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

- ⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).

- ⑯ REPLACE EXISTING FENCE WITH NEW FENCE OF LIKE KIND AFTER PIPE WORK IS COMPLETE, AS NEEDED (TYP). REUSE EXISTING FENCE WHEN POSSIBLE.

- ④① REMOVE EXISTING SANITARY SEWER PIPE.
- ④① EXISTING TREE(S) TO BE REMOVED.

- ④③ INSTALL CONSTRUCTION ENTRANCE, SEE CLEAN WATER SERVICES CONSTRUCTION ENTRANCE DETAIL ON SHEET 4B.
- ④④ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

- ④⑥ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.

- ④⑧ REMOVE AND REPLACE EXISTING CURB AND GUTTER PER CITY OF SPRINGFIELD STANDARD DETAIL 3-8.

⑳ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

㉓ REMOVE EXISTING MANHOLE.

⑥② CONTRACTOR TO COORDINATE WITH NW NATURAL FOR GAS LINE RELOCATION PRIOR TO WORKING IN THIS AREA.

No.	Revision/Issue	Date

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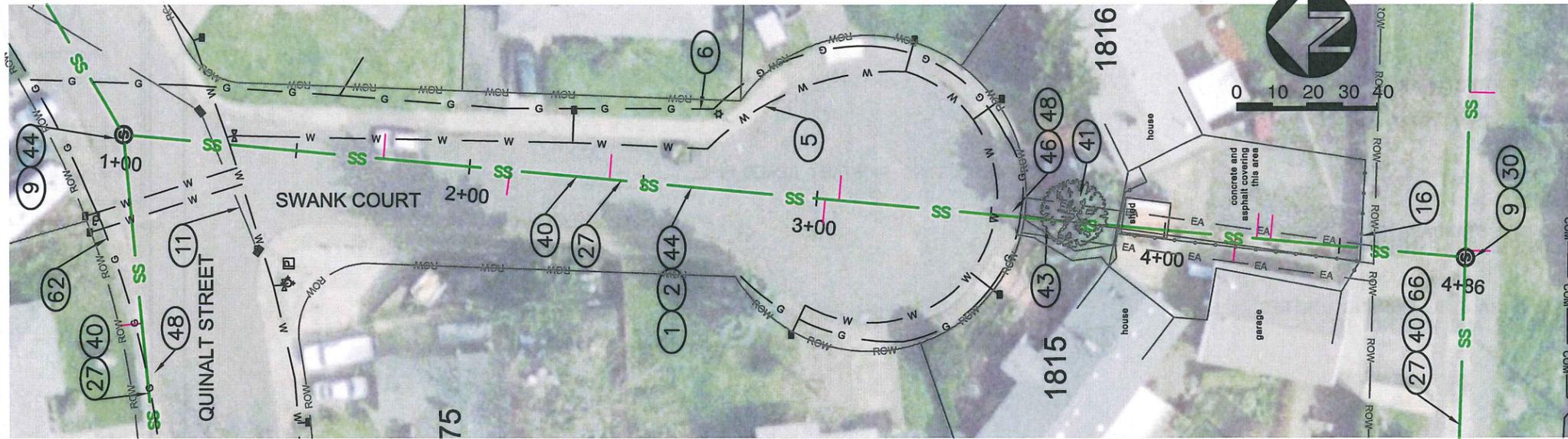
EXPIRES 6/30/12

SHEET

27A

See Sheet 29

See Sheet 26

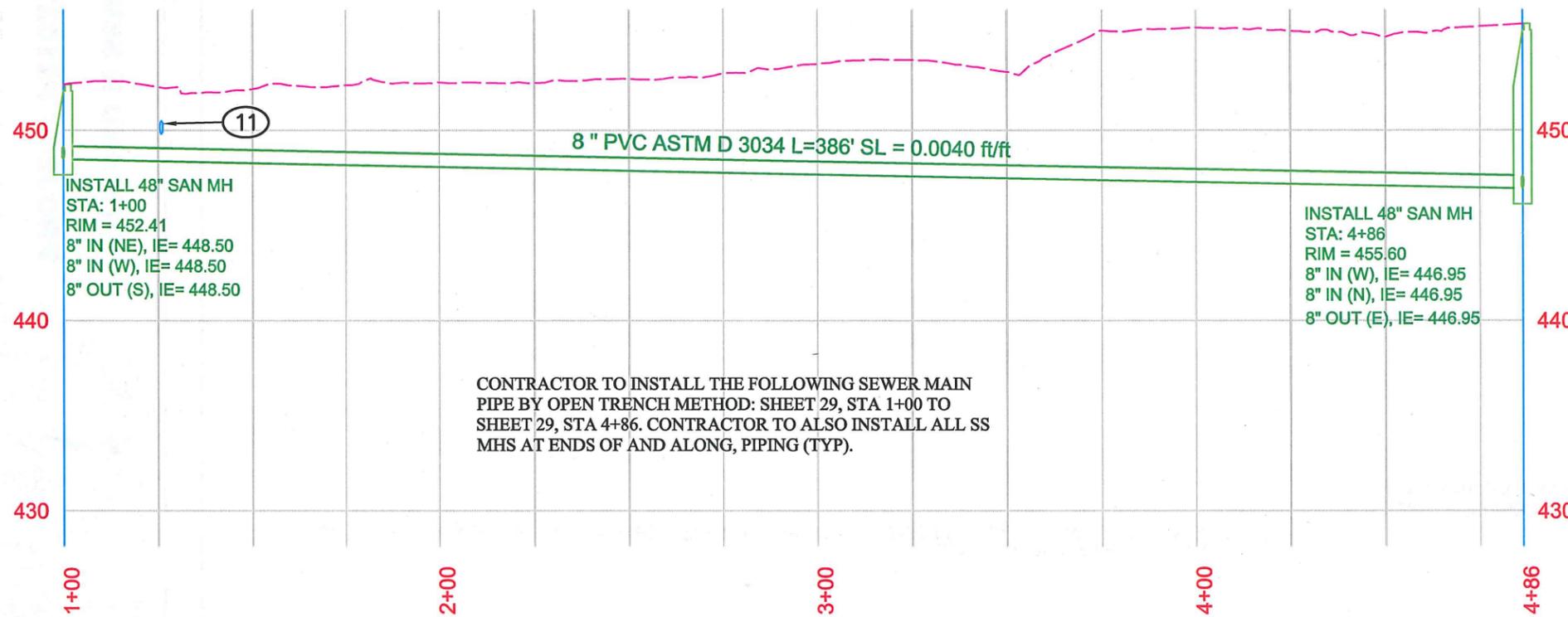


See Sheet 28

See Sheet 25

Line G STA. 1+00-4+86

Horz. Scale 1"=40'



CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY OPEN TRENCH METHOD: SHEET 29, STA 1+00 TO SHEET 29, STA 4+86. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

Line G STA. 1+00-4+86

Horz. Scale 1"=40'

No.	Revision/Issue	Date

NOTE:

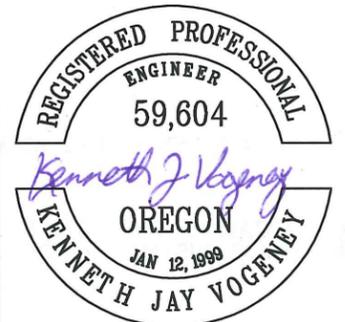
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10TH AND N SEWER UPGRADE - PHASE 1

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EXPIRES 6/30/12

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.

- ⑤ APPROXIMATE LOCATION OF WATER LINE TO REMAIN AND PROTECT (TYP).
- ⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).

④⑩ REMOVE EXISTING SANITARY SEWER PIPE.

④④ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

④⑧ REMOVE AND REPLACE EXISTING CURB AND GUTTER PER CITY OF SPRINGFIELD STANDARD DETAIL 3-8.

④⑨ REMOVE AND REPLACE EXISTING DRIVEWAY PER CITY OF SPRINGFIELD STANDARD DETAIL 3-19.

②⑦ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

②⑨ INSTALL 8" PVC ASTM D 3034 TWO-WAY CLEAN OUT WITH WATERTIGHT MECHANICAL PLUGS. INSTALL TRAFFIC RATED LID IF LOCATED WITHIN ASPHALT OR CONCRETE AREA.

⑥② CONTRACTOR TO COORDINATE WITH NW NATURAL FOR GAS LINE RELOCATION PRIOR TO WORKING IN THIS AREA.

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

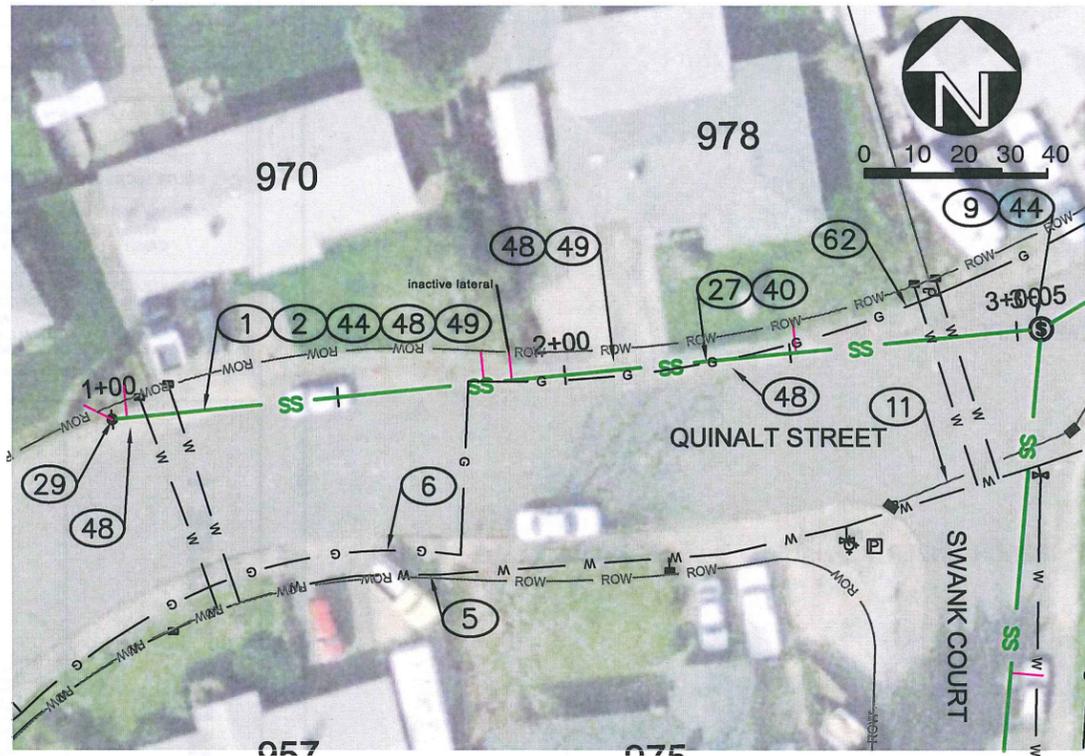
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EXPIRES 6/30/12

SHEET

28A

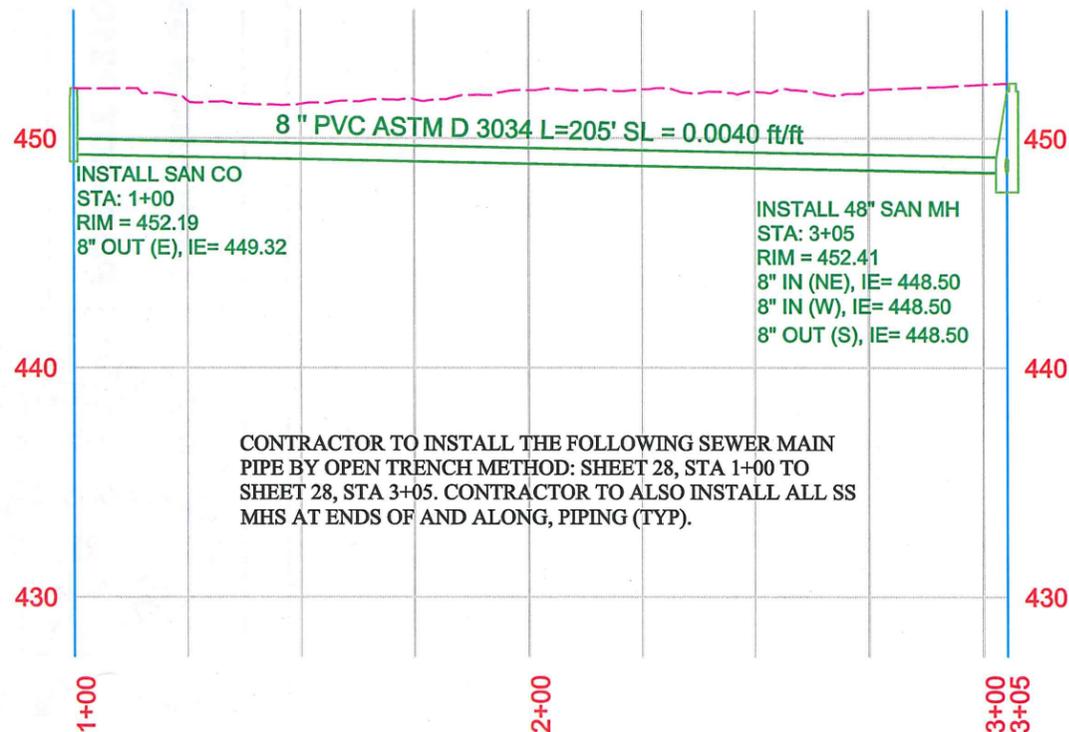


See Sheet 29

See Sheet 27

Line H STA. 1+00-3+05

Horz. Scale 1"=40'



CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY OPEN TRENCH METHOD: SHEET 28, STA 1+00 TO SHEET 28, STA 3+05. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

Line H STA. 1+00-3+05

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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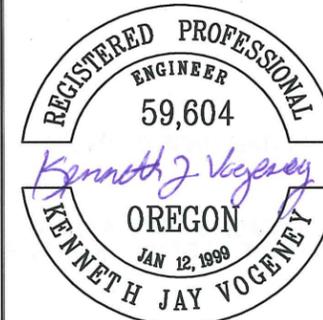
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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

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EXPIRES 6/30/12

SHEET

28B

① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).

② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.

⑤ APPROXIMATE LOCATION OF WATER LINE TO REMAIN AND PROTECT (TYP).

⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

⑪ EXISTING STORM DRAINAGE PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).

④⑩ REMOVE EXISTING SANITARY SEWER PIPE.

④④ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

④⑧ REMOVE AND REPLACE EXISTING CURB AND GUTTER PER CITY OF SPRINGFIELD STANDARD DETAIL 3-8.

②⑦ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

②⑨ INSTALL 8" PVC ASTM D 3034 TWO-WAY CLEAN OUT WITH WATERTIGHT MECHANICAL PLUGS. INSTALL TRAFFIC RATED LID IF LOCATED WITHIN ASPHALT OR CONCRETE AREA.

No.	Revision/Issue	Date

NOTE:

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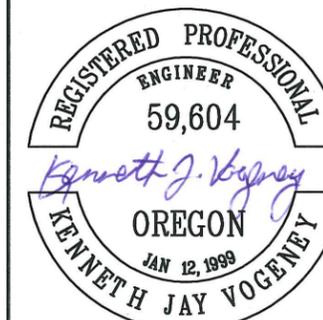
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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

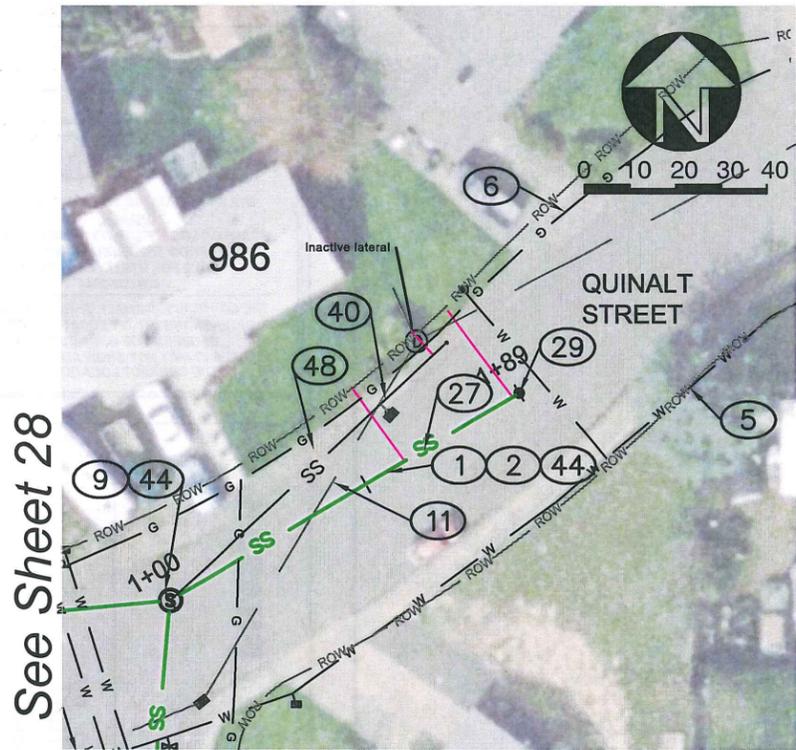
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 INTERNET www.ci.springfield-or.gov



EXPIRES 6/30/12

SHEET

29A

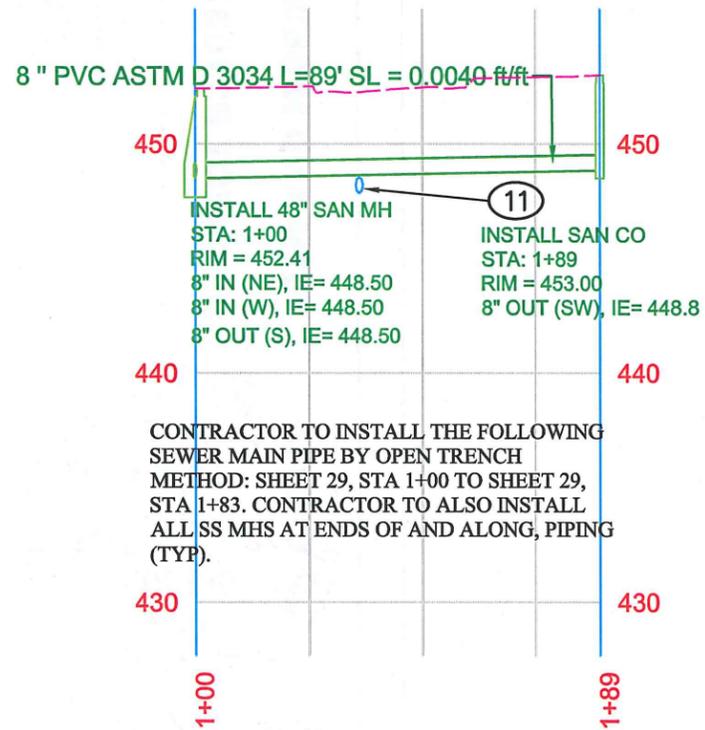


See Sheet 28

See Sheet 27

Line I STA. 1+00-1+89

Horz. Scale 1"=40'



Line I STA. 1+00-1+89

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

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EXPIRES 4/30/12

SHEET

29B

- ① SAWCUT. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 (TYP).
- ② REMOVE MAX 6' WIDTH OF AC. INSTALL SEWER PIPE AND REPLACE AC WITH LANE COUNTY APPROVED LEVEL 2 "C" MIX. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-17.
- ③ EXISTING SANITARY SEWER PIPES AND MANHOLES TO BE REMOVED. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 FOR BACKFILL.

⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).

⑧ APPROXIMATE LOCATION OF COMMUNICATION LINE TO REMAIN AND PROTECT (TYP).

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

④⑩ REMOVE EXISTING SANITARY SEWER PIPE.

④④ INSTALL CDF IN TOP 2 FEET OF TRENCH UNDER ASPHALT.

④⑥ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.

④⑧ REMOVE AND REPLACE EXISTING CURB AND GUTTER PER CITY OF SPRINGFIELD STANDARD DETAIL 3-8.

②⑦ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

②⑨ INSTALL 8" PVC ASTM D 3034 TWO-WAY CLEAN OUT WITH WATERTIGHT MECHANICAL PLUGS. INSTALL TRAFFIC RATED LID IF LOCATED WITHIN ASPHALT OR CONCRETE AREA.

③⑩ REMOVE EXISTING MANHOLE.

No.	Revision/Issue	Date

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EXPIRES 6/30/12

SHEET

30A

No.	Revision/Issue	Date

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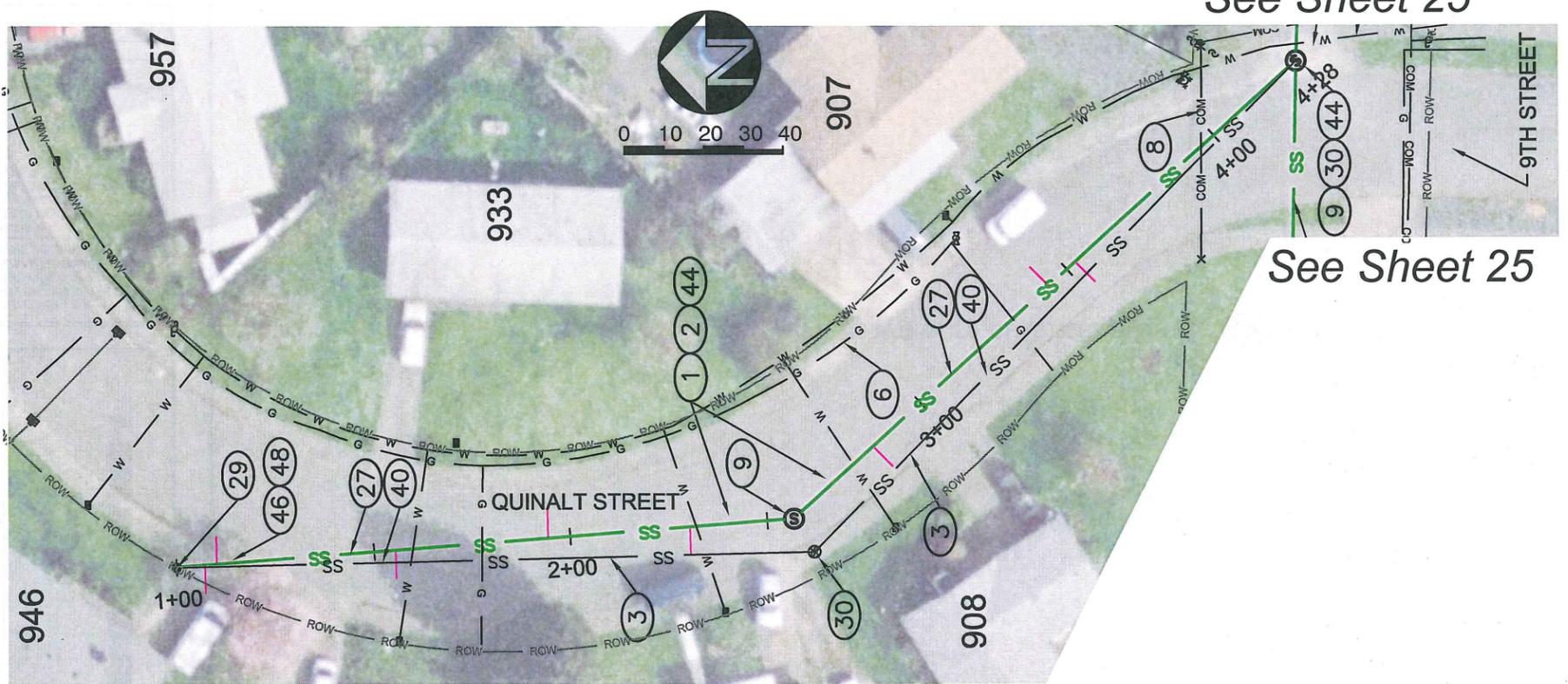
10TH AND N SEWER UPGRADE - PHASE 1

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EXPIRES 6/30/12

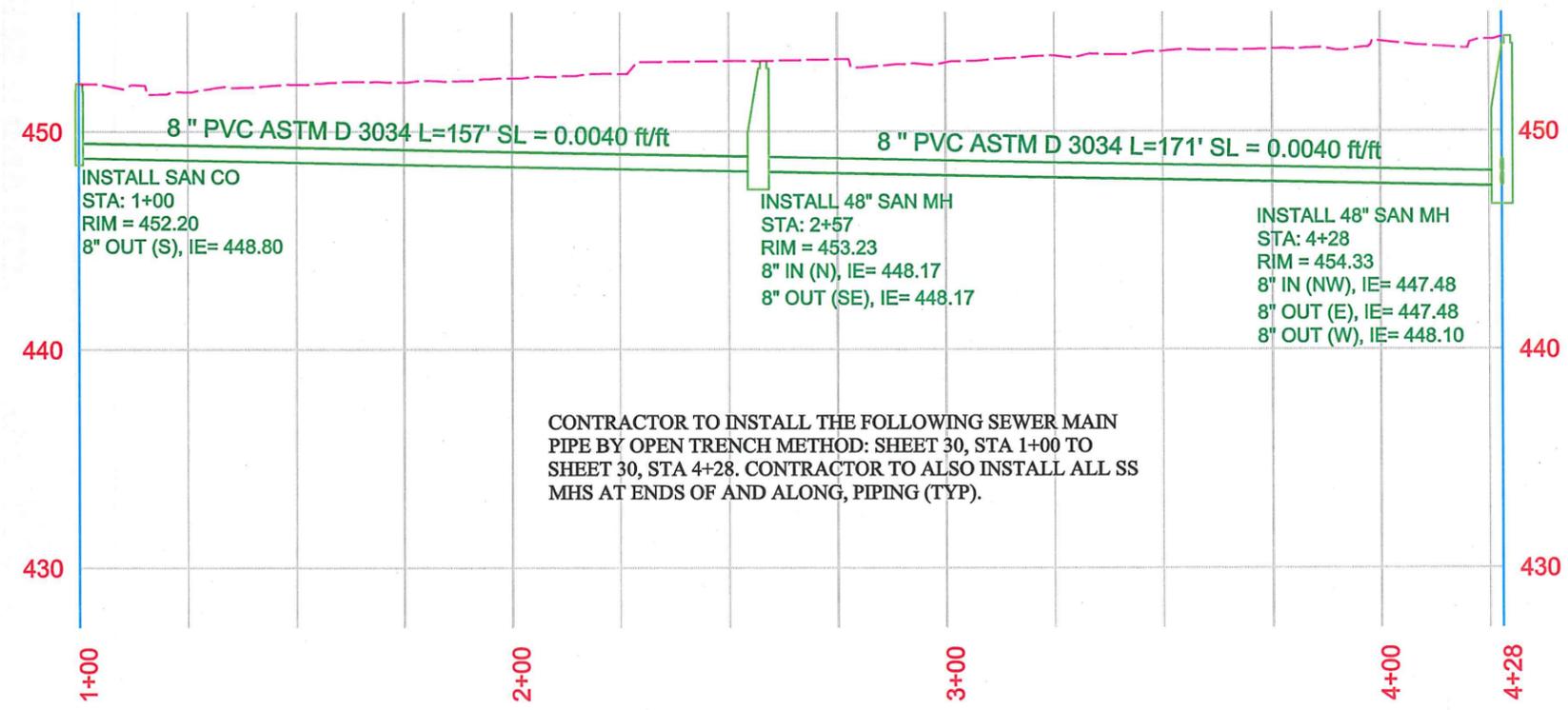


See Sheet 25

See Sheet 25

Line J STA. 1+00-4+28

Horz. Scale 1"=40'



Line J STA. 1+00-4+28

Horz. Scale 1"=40'

SHEET

30B

④ UTILITY POLES WITH OVERHEAD POWER LINES ALONG 10TH STREET TO BE PROTECTED.
USE CAUTION WHEN WORKING NEARBY.

⑨ INSTALL STANDARD 48" MANHOLE, SEE CITY OF SPRINGFIELD STANDARD
DETAIL 4-1. MANHOLE RIMS ARE APPROXIMATE. ADJUST MANHOLE TO FINISH GRADE.

④1 EXISTING TREE(S) TO BE REMOVED.

③0 REMOVE EXISTING MANHOLE.

③2 MAINTAIN AND PROTECT EXISTING 24" CONCRETE SANITARY SEWER PIPE.

③3 REMOVE EXISTING SANITARY LINE AND INSTALL NEW 6" PVC ASTM D 3034 SANITARY
SEWER PIPE WITH 2 TWO-WAY CLEANOUTS AS SHOWN ON PROFILE. EACH CLEAN OUT
SHALL HAVE A WATERTIGHT MECHANICAL PLUG.

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1
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EXPIRES 6/30/12

SHEET

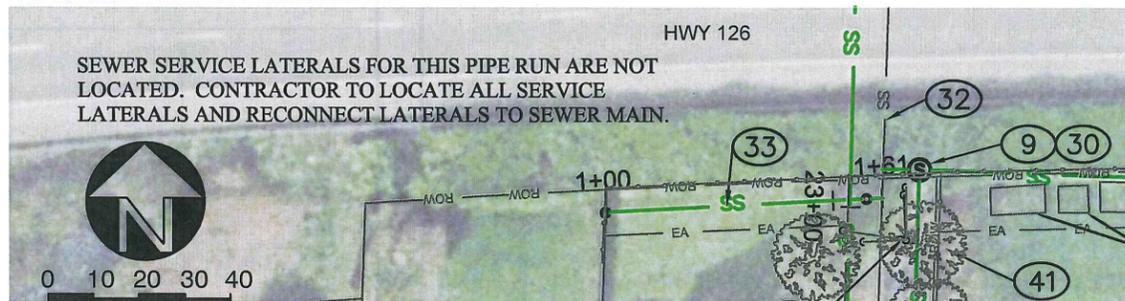
31A

No.	Revision/Issue	Date

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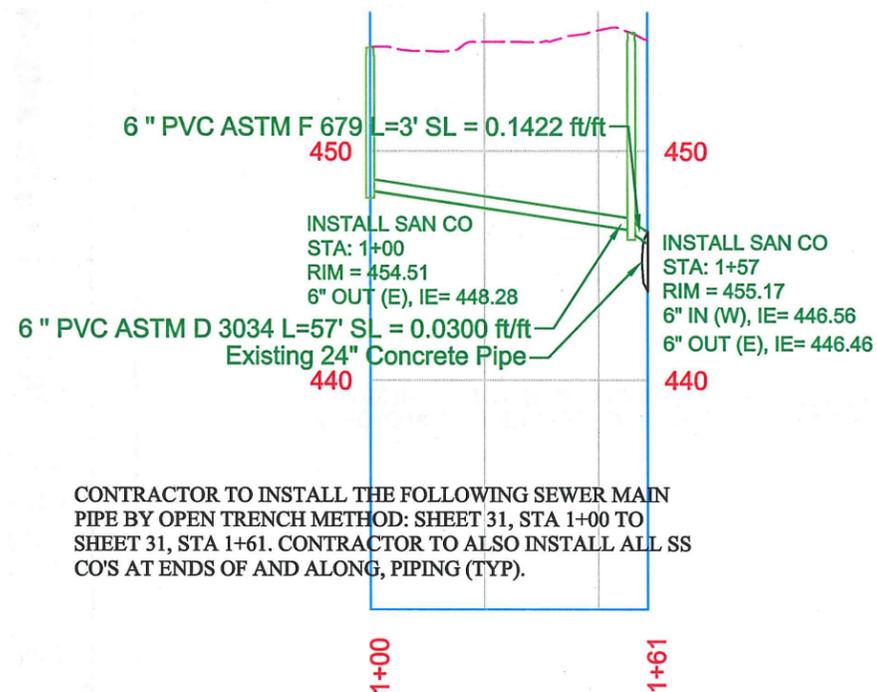
SEWER SERVICE LATERALS FOR THIS PIPE RUN ARE NOT LOCATED. CONTRACTOR TO LOCATE ALL SERVICE LATERALS AND RECONNECT LATERALS TO SEWER MAIN.

See Sheet 11

See Sheet 12

Line K STA. 1+00-1+61

Horz. Scale 1"=40'



Line K STA. 1+00-1+61

Horz. Scale 1"=40'

10TH AND N SEWER UPGRADE - PHASE 1

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EXPIRES 6/30/12

SHEET
31B

④ UTILITY POLES WITH OVERHEAD POWER LINES ALONG 10TH STREET TO BE PROTECTED. USE CAUTION WHEN WORKING NEARBY.

⑥ APPROXIMATE LOCATION OF GAS LINE TO REMAIN AND PROTECT (TYP).

③⑤ CONTRACTOR TO RESTORE EXISTING DRIVEWAY IN FULL PANELS AFTER EXCAVATION.

④⑥ REMOVE AND REPLACE EXISTING SIDEWALK PER CITY OF SPRINGFIELD STANDARD DETAIL 3-12.

④⑧ REMOVE AND REPLACE EXISTING CURB AND GUTTER PER CITY OF SPRINGFIELD STANDARD DETAIL 3-8.

②⑦ INSTALL NEW 8" PVC ASTM D 3034 SANITARY SEWER PIPE.

②⑨ INSTALL 8" PVC ASTM D 3034 TWO-WAY CLEAN OUT WITH WATERTIGHT MECHANICAL PLUGS. INSTALL TRAFFIC RATED LID IF LOCATED WITHIN ASPHALT OR CONCRETE AREA.

⑤⑨ REMOVE EXISTING DRIVEWAY AND INSTALL CURBSIDE SIDEWALK WITH FULL HEIGHT CURB AND GUTTER. SEE CITY OF SPRINGFIELD STANDARD DETAILS 3-7 AND 3-12.

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

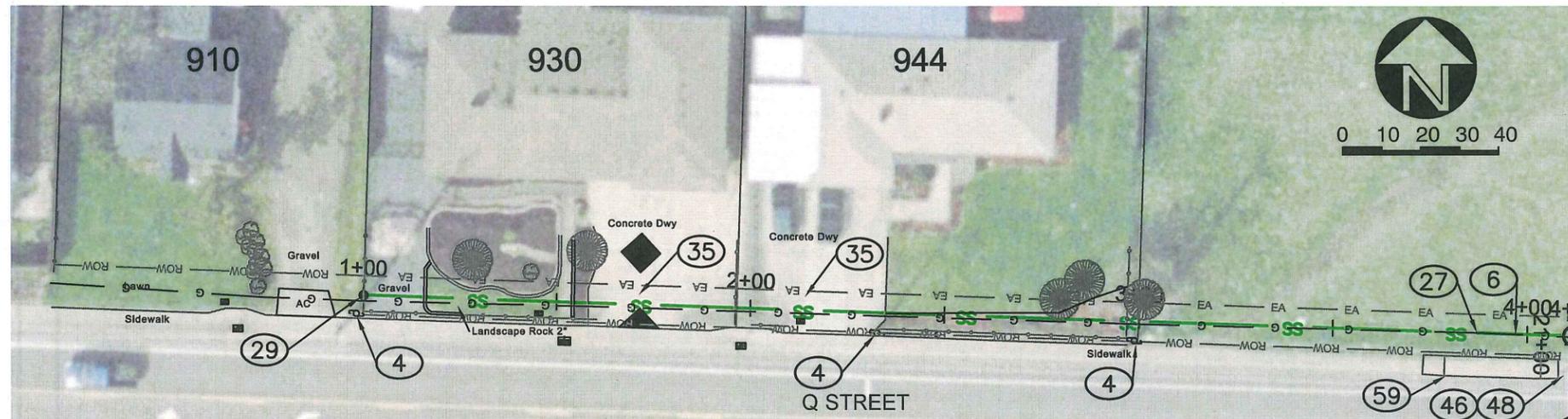
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EXPIRES 6/30/12

SHEET

32A

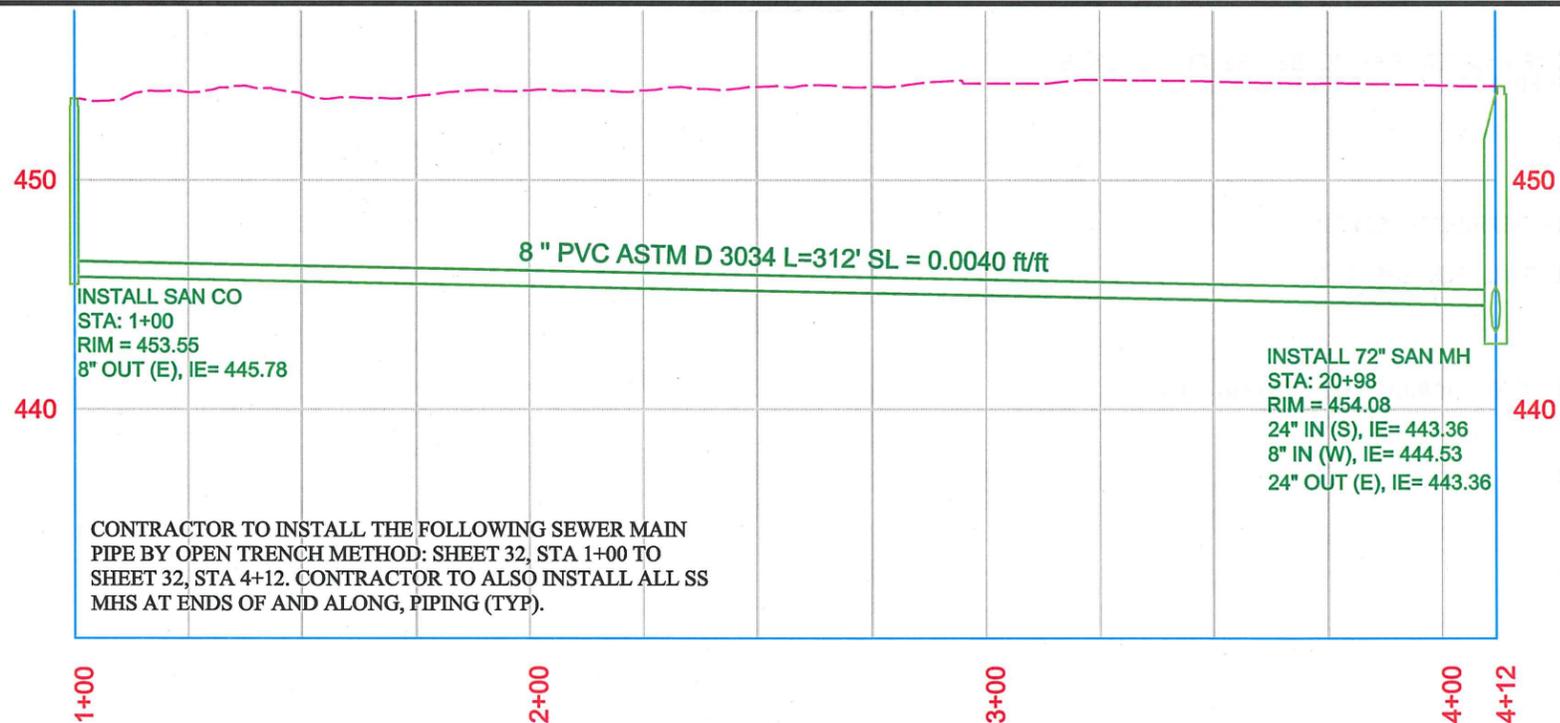


See Sheet 7

See Sheet 8

Line L STA. 1+00-4+12

Horz. Scale 1"=40'



CONTRACTOR TO INSTALL THE FOLLOWING SEWER MAIN PIPE BY OPEN TRENCH METHOD: SHEET 32, STA 1+00 TO SHEET 32, STA 4+12. CONTRACTOR TO ALSO INSTALL ALL SS MHS AT ENDS OF AND ALONG, PIPING (TYP).

Line L STA. 1+00-4+12

Horz. Scale 1"=40'

No.	Revision/Issue	Date

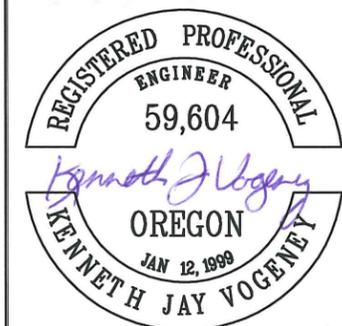
NOTE:

UTILITY LOCATIONS ARE APPROXIMATE
 DO NOT SCALE OR LOCATE UTILITY LINES OR MAINS FROM THESE DRAWINGS
 CALL FOR UTILITY LOCATES
 1-800-332-2344
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING UTILITY LOCATIONS PRIOR TO BEGINNING OF CONSTRUCTION.
 THESE PLANS MAY NOT SHOW ALL UTILITIES OR THE CORRECT LOCATIONS.

10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield
PUBLIC WORKS / ENGINEERING
 225 FIFTH STREET, SPRINGFIELD, OR 97477
 PHONE (541) 726-5753 FAX (541) 736-1021
 INTERNET www.ci.springfield-or.gov



EXPIRES 6/30/12

No.	Revision/Issue	Date

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⑬ EXISTING SANITARY SEWER PIPE TO BE PRESERVED. ALL DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE PAID FOR BY CONTRACTOR AND WILL NOT BE REIMBURSED BY CITY (TYP).

⑤① REMOVE AND REPLACE EXISTING MEDIAN BARRIER AND FENCE WITH NEW PER DETAILS ON SHEET 35.

⑱ APPROXIMATE LOCATION OF EXISTING 30" STEEL EWEB WATER PIPE TO BE PRESERVED. EWEB REQUIREMENT FOR BACKFILL IS 3/4" MINUS CRUSHED ROCK COMPACTED IN MAX 12" LIFTS.

⑳ INSTALL PVC ASTM C900 AND C905 22' BEND FOR DEPRESSED SEWER.

㉑ REMOVE AND REPLACE CONCRETE CHANNEL PER DETAIL, SEE SHEET 35.

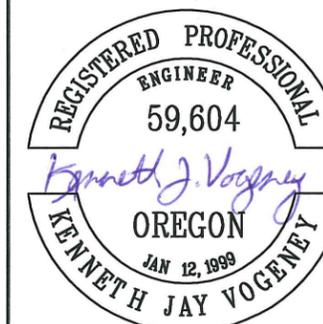
㉒ INSTALL 24" PVC ASTM F 679 SANITARY SEWER PIPE BY BORING AND JACKING METHOD.

10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

PUBLIC WORKS / ENGINEERING
 208 WEST SPRINGFIELD, OR 97477
 PHONE (503) 325-3725
 INTERNET www.cityofspringfield-or.gov



EXPIRES 6/30/12

SHEET

33A

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield
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226 FIFTH STREET, SPRINGFIELD, OR 97477
PHONE (541) 570-3353 FAX (541) 736-1021
INTERNET www.ci.springfield-or.gov



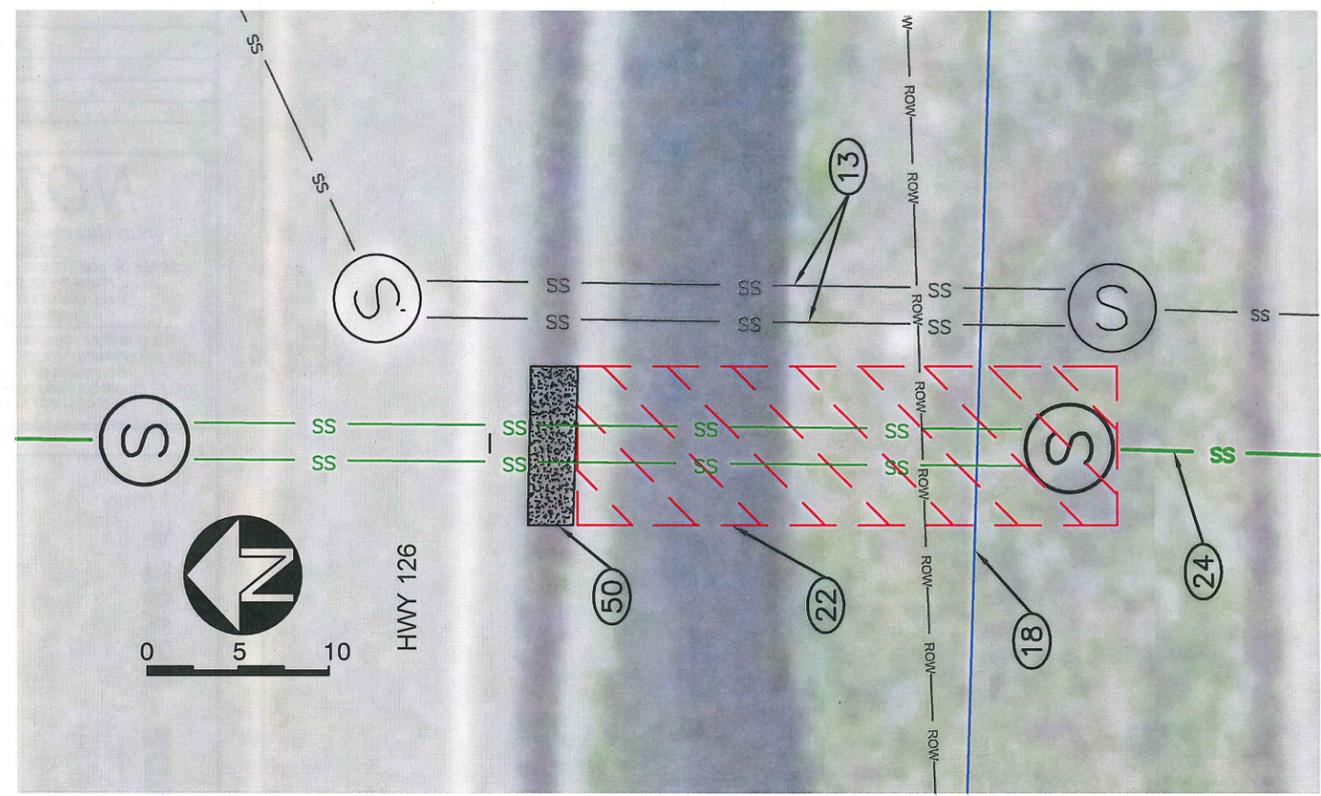
EXPIRES 6/30/12

SHEET
33B

**SEE BRANCH
ENGINEERING DESIGN
FOR CHANNEL SECTION
ON SHEET D1**

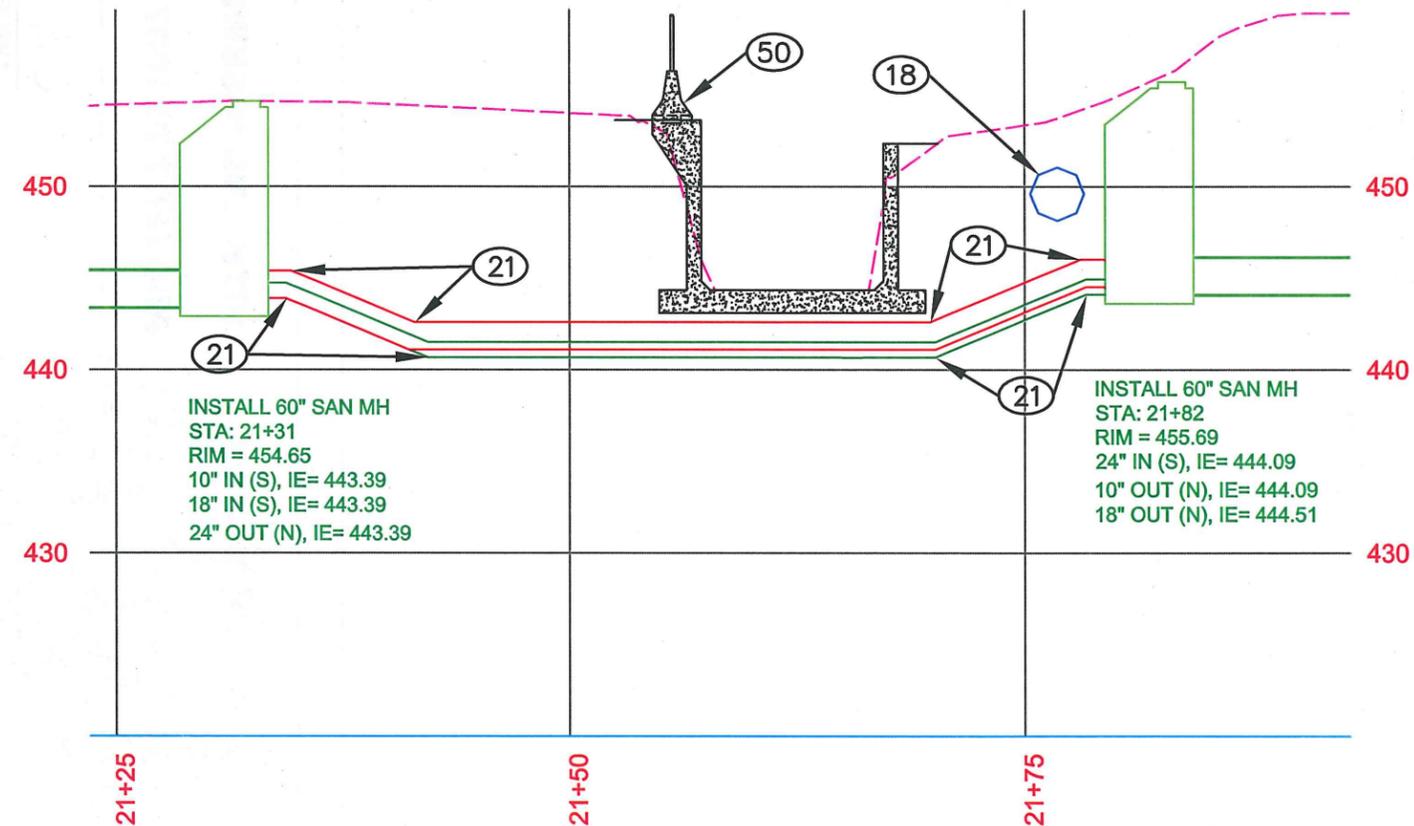
**NOTE: SPECIAL INSPECTION
REQUIRED BY ENGINEER PRIOR
TO POURING CONCRETE FOR
MEDIAN BARRIER**

**NOTE: SEE SPECIAL PROVISIONS
FOR Q STREET ROAD WORK TIME
AND OPERATION LIMITATIONS**



SIPHON - LINE A STA. 21+31-21+82

Horz. Scale 1"=10'



SIPHON - LINE A STA. 21+31-21+82

Horz. Scale 1"=10'

INSTALL 60" SAN MH
STA: 21+31
RIM = 454.65
10" IN (S), IE= 443.39
18" IN (S), IE= 443.39
24" OUT (N), IE= 443.39

INSTALL 60" SAN MH
STA: 21+82
RIM = 455.69
24" IN (S), IE= 444.09
10" OUT (N), IE= 444.09
18" OUT (N), IE= 444.51

③ EXISTING SANITARY SEWER PIPES AND MANHOLES TO BE REMOVED. SEE CITY OF SPRINGFIELD STANDARD DETAIL 4-16 FOR BACKFILL.

③0 REMOVE EXISTING MANHOLE.

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

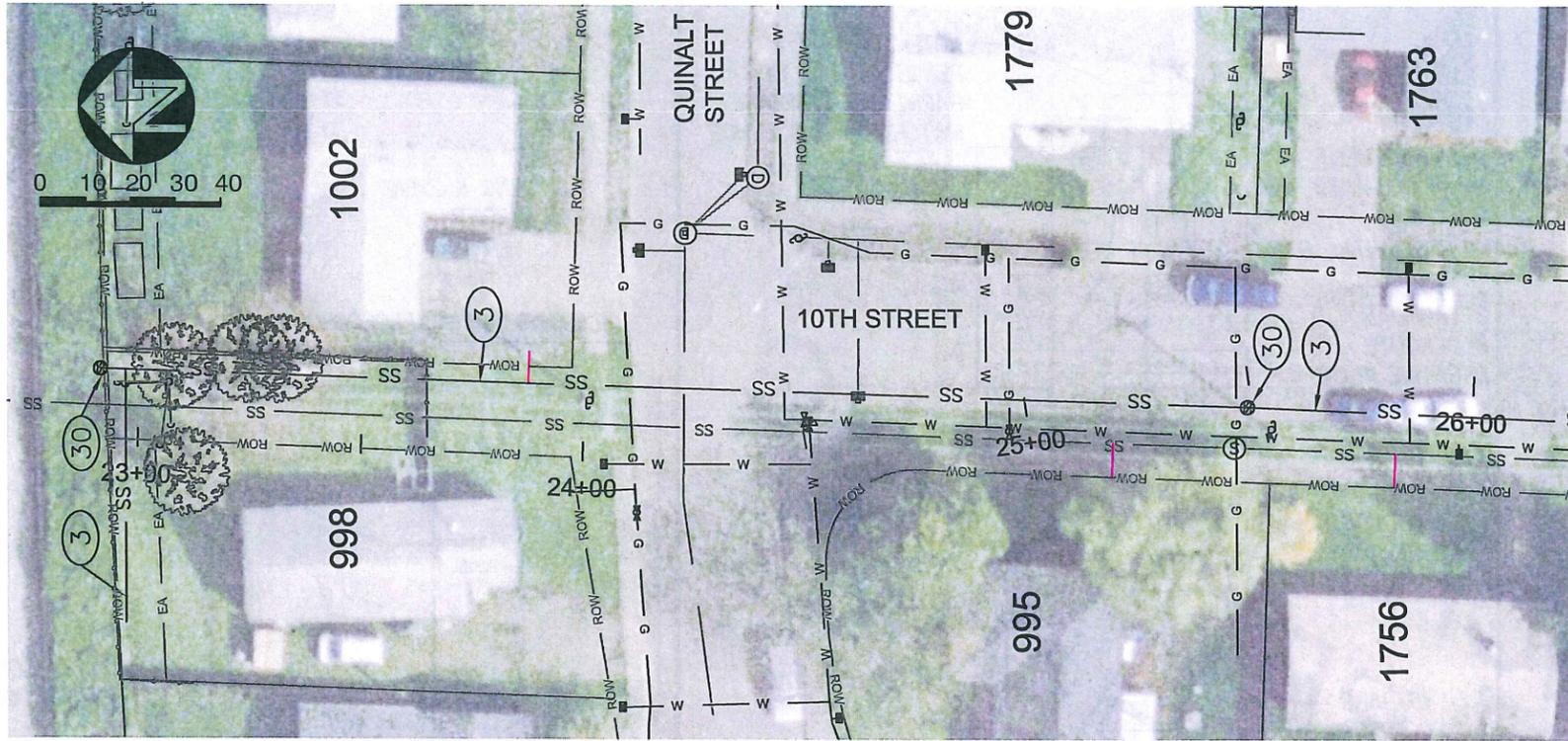
City of Springfield
PUBLIC WORKS / ENGINEERING
225 FIFTH STREET, SPRINGFIELD, OR 97477
PHONE (541) 226-3753 FAX (541) 738-1021
INTERNET www.ci.springfield-or.gov



EXPIRES 4/30/12

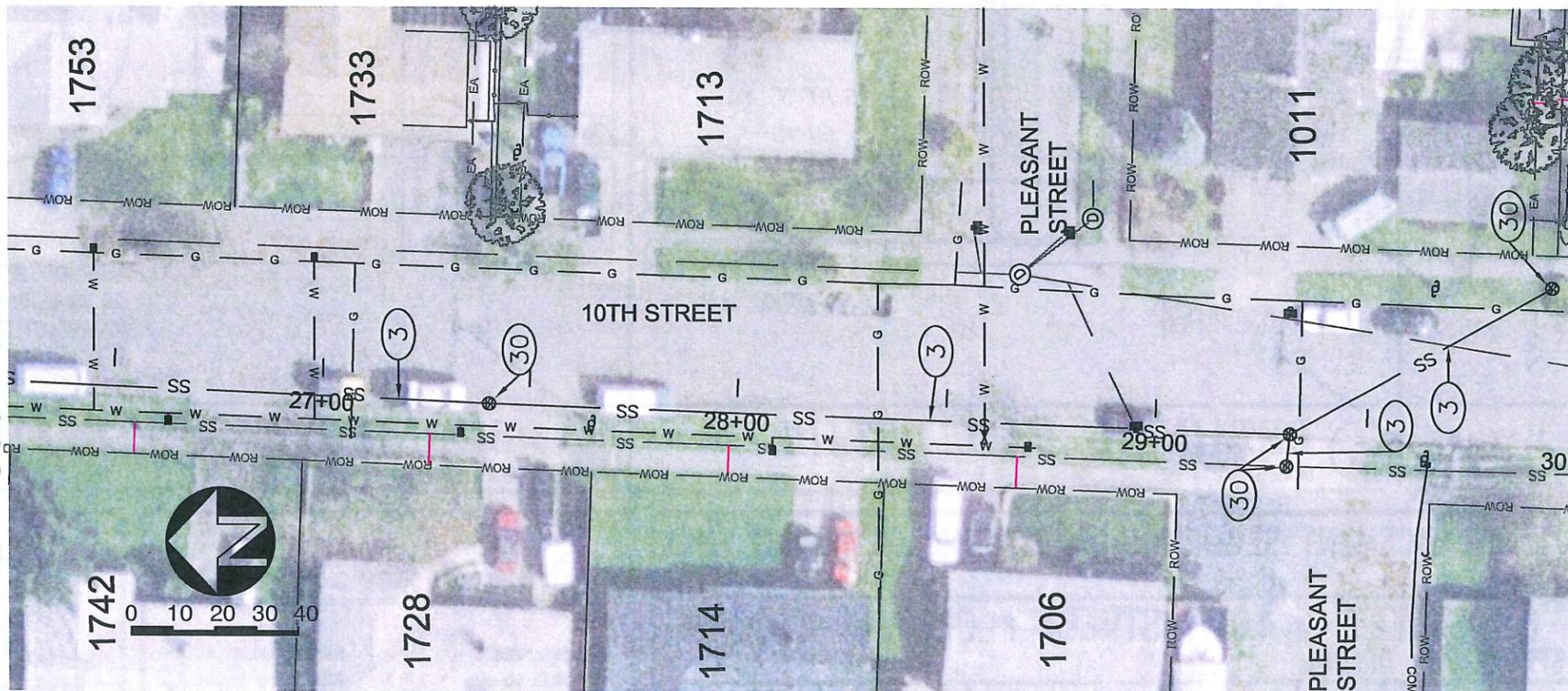
SHEET

34A



10th Street 8 inch Sanitary Sewer Demolition

Horz. Scale 1"=40'



10th Street 8 inch Sanitary Sewer Demolition

Horz. Scale 1"=40'

No.	Revision/Issue	Date

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PROJECT P21037

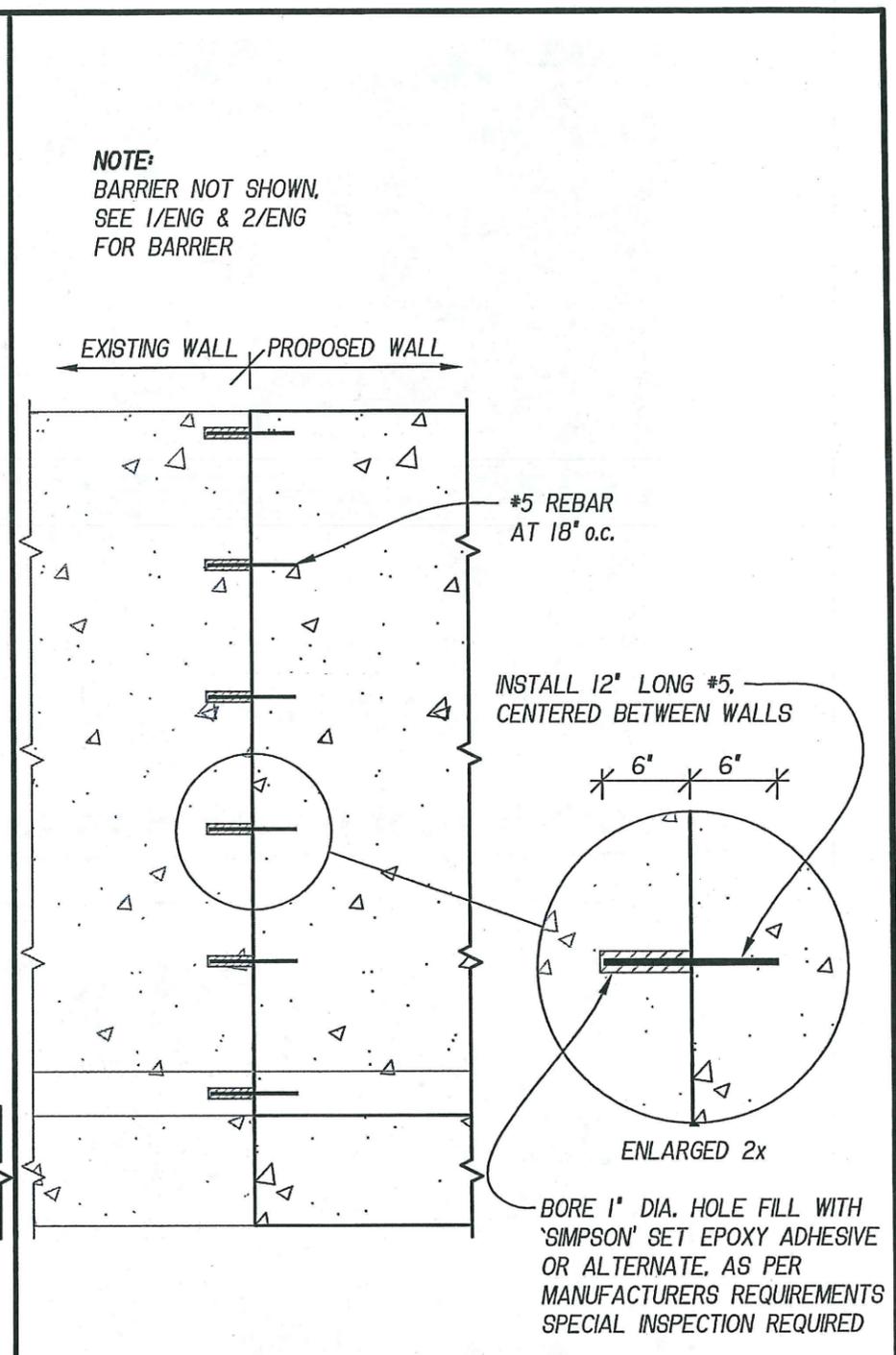
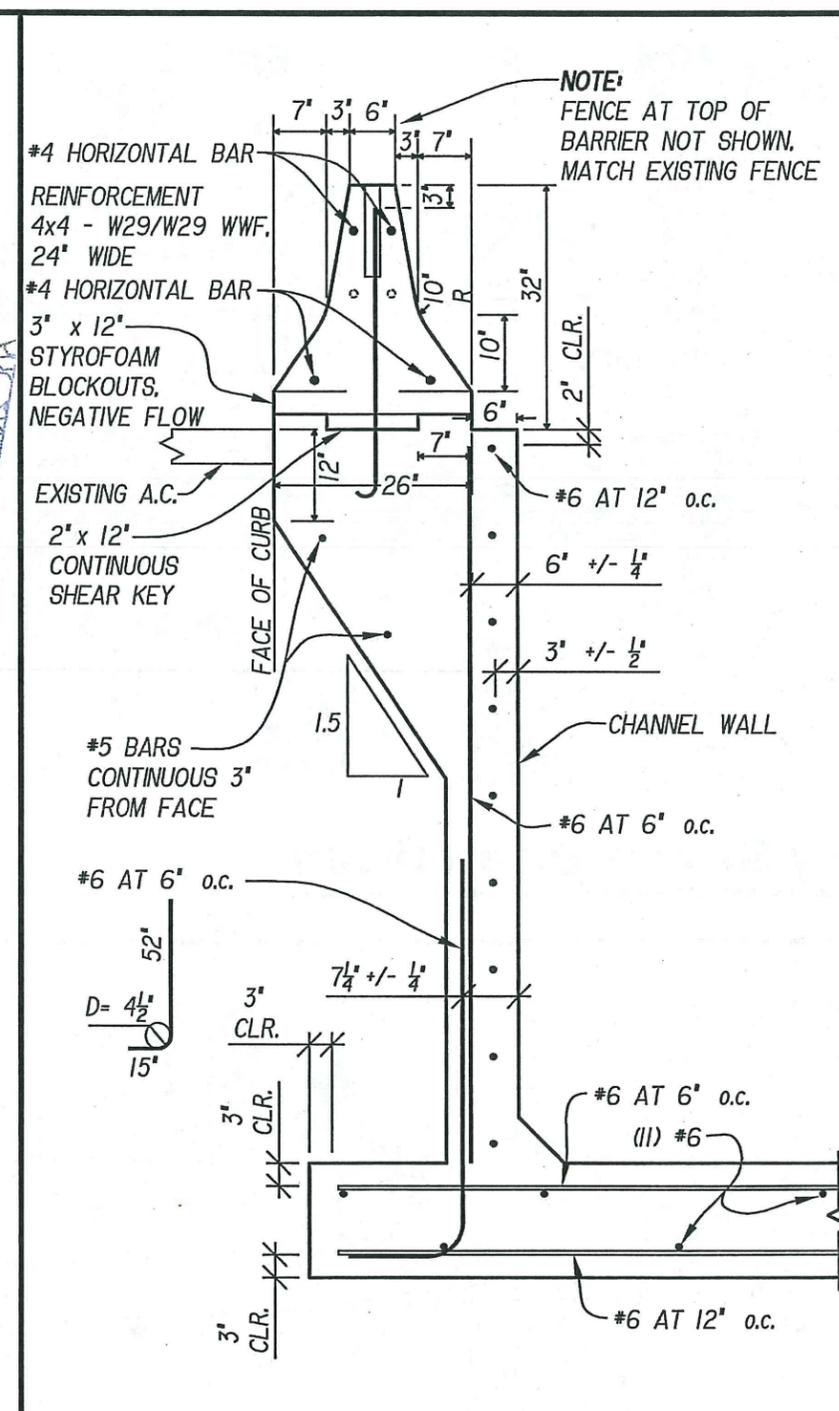
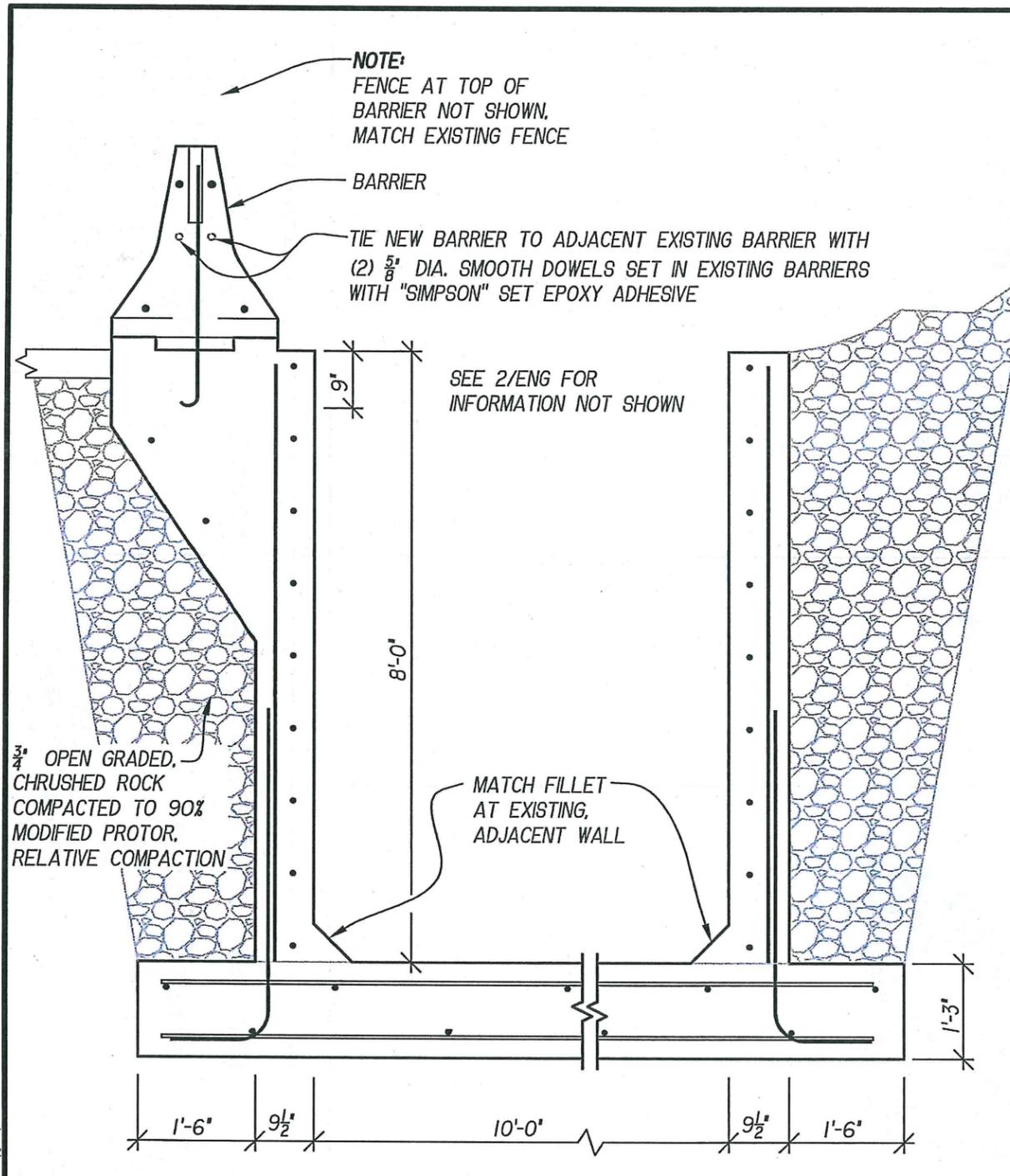
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 225 FIFTH STREET, SPRINGFIELD, OR 97477
 PHONE (541) 726-3765 FAX (541) 736-1021
 INTERNET www.ci.springfield-or.gov



EXPIRES *6/30/12*

SHEET

34B



1 **RETAINING WALL SECTION**

2 **RETAINING WALL DETAIL**
SCALE: 1/2" = 1'-0"

3 **RETAINING WALL ELEVATION**
SCALE: 1/2" = 1'-0"

REPLACEMENT SEGMENT FOR EXISTING RETAINING WALL

"Q" STREET & 10TH STREET FLOODWAY CHANNEL
SPRINGFIELD, OREGON

DATE:	1 FEBRUARY 2012	DATE:	REVISION DESCRIPTION:	BY:
SCALE:	1/2" = 1'-0"	PROJ. NO.	11-106	
DRAWN	JLB	CHK'D	RF	
PAGE	OF			

Branch Engineering, Inc.

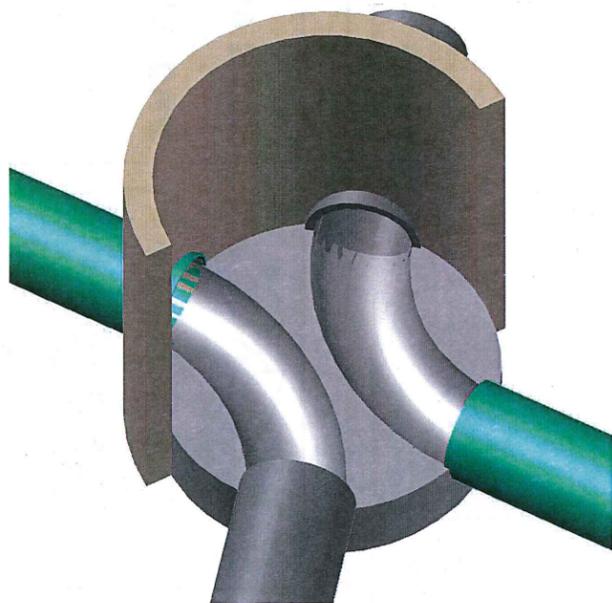
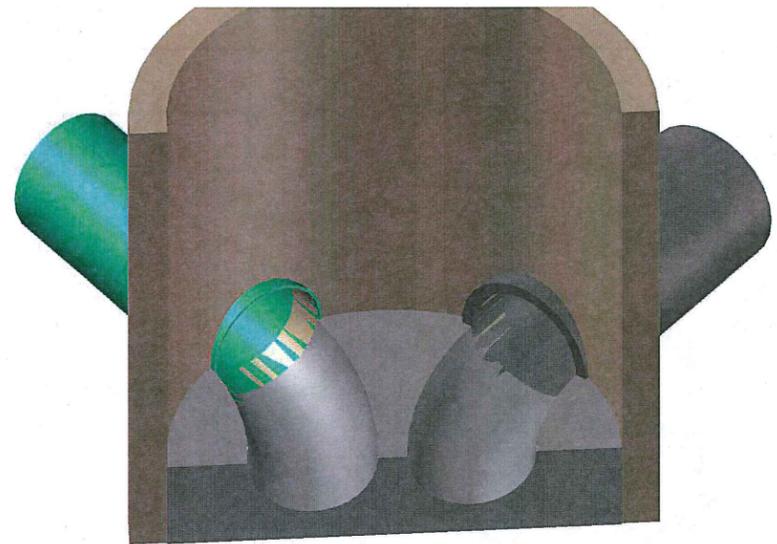
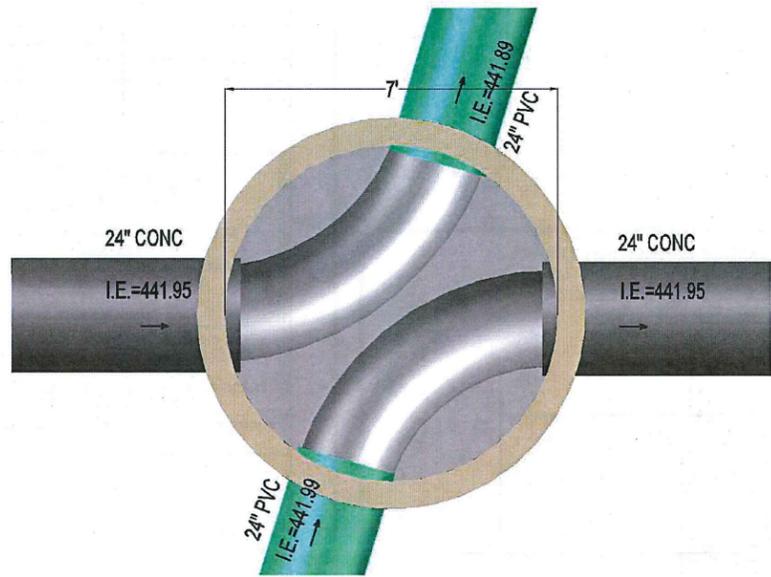
Headquarters
310 Fifth Street
Springfield, Oregon 97477
(541) 746-0637

Salem/Keizer Office
4310 Cherry Avenue N.E.
Salem, Oregon 97303
(503) 779-2577

www.BranchEngineering.com
Civil • Structures • Transportation • Geotechnical • Surveying

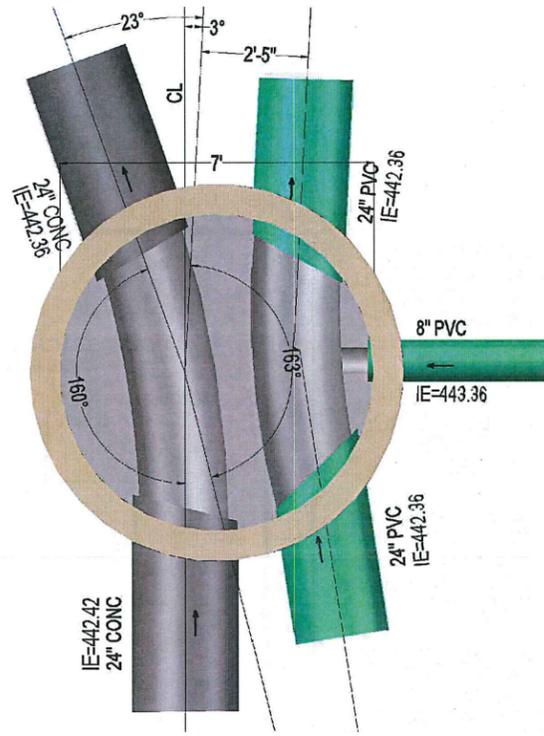
STRUCTURAL REGISTERED PROFESSIONAL ENGINEER
#54805PE
OREGON
JULY 11, 2000
RENE FABRICANT
EXPIRES DECEMBER 31, 2013

Z:\2011\11-106 10th and Q\11-106 DETAILS.dwg, 11X17 LANDSCAPE, 2/13/2012 2:55:30 PM, jrbf, 1:1

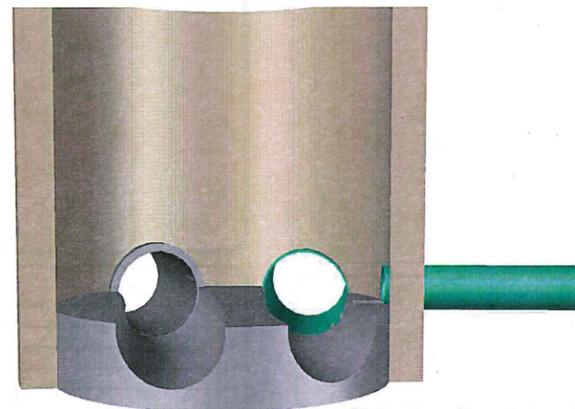
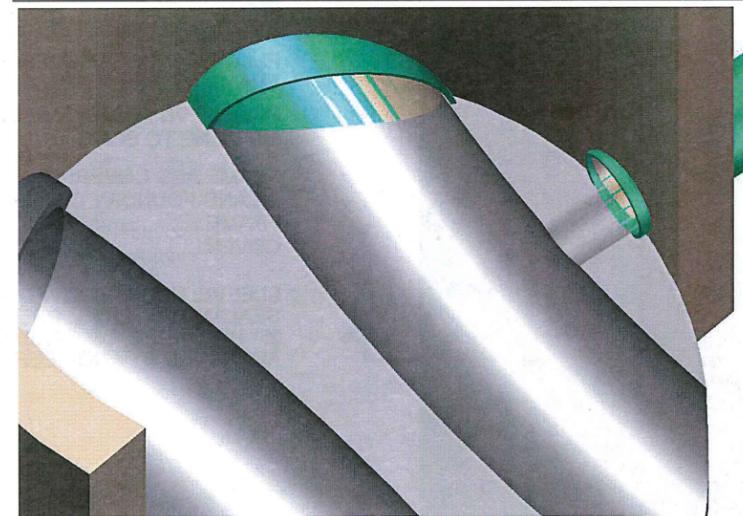


**10TH AND T ST MH
STA. 3+66**

Not to Scale



MH @ 10th & 'S'



**10TH AND S ST MH
STA. 6+66**

Not to Scale

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

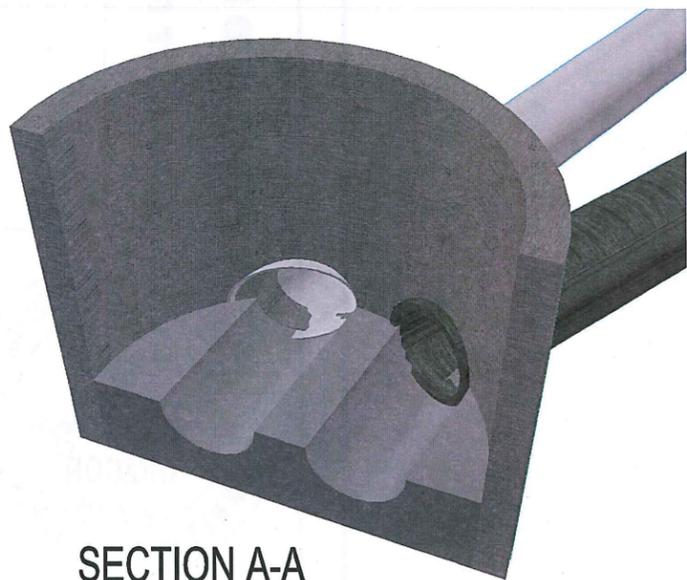
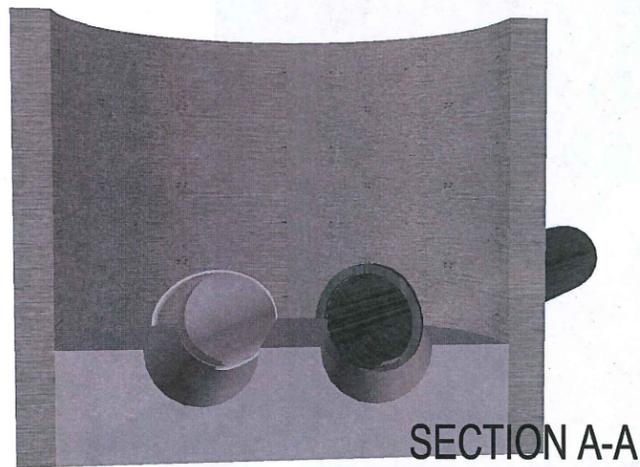
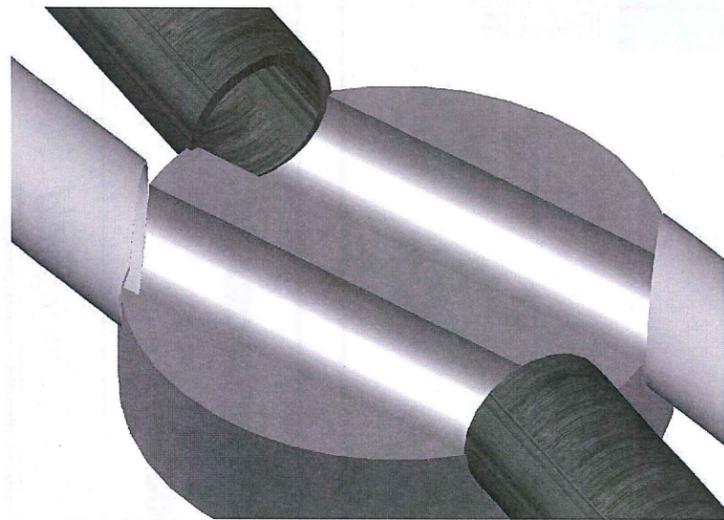
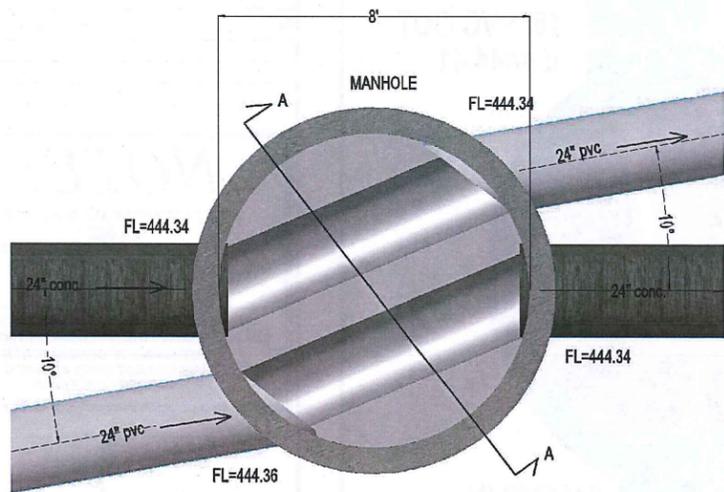
City of Springfield
PUBLIC WORKS / ENGINEERING
225 FIFTH STREET, SPRINGFIELD, OR 97477
PHONE (541) 726-3763 FAX (541) 736-1021
INTERNET www.ci.springfield-or.gov



EXPIRES 6/30/12

SHEET

D3



SECTION A-A

SECTION A-A

**10TH AND QUINALT ST MH
STA. 24+58**

Not to Scale

No.	Revision/Issue	Date

NOTE:

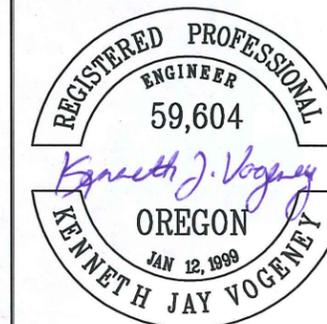
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PROJECT P21037

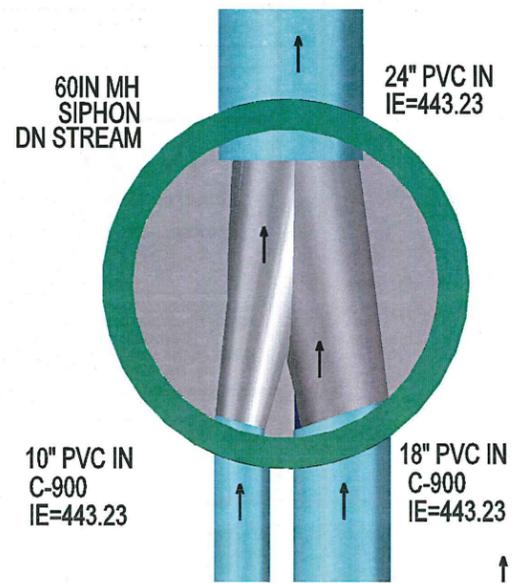
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EXPIRES 6/30/12

SHEET

D4

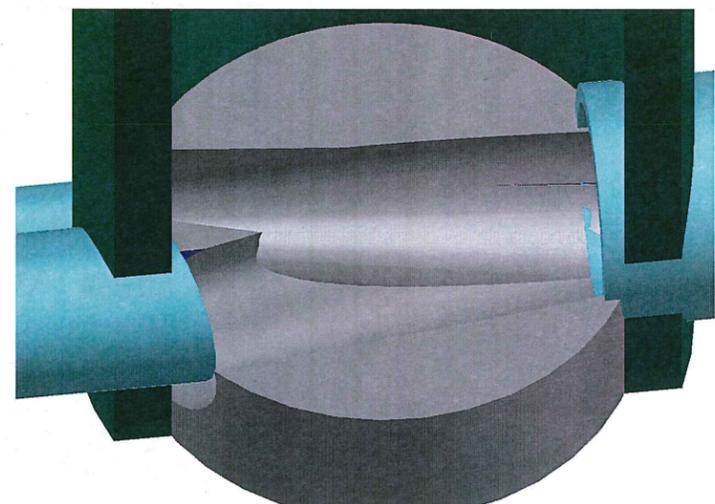


60IN MH
SIPHON
DN STREAM

24" PVC IN
IE=443.23

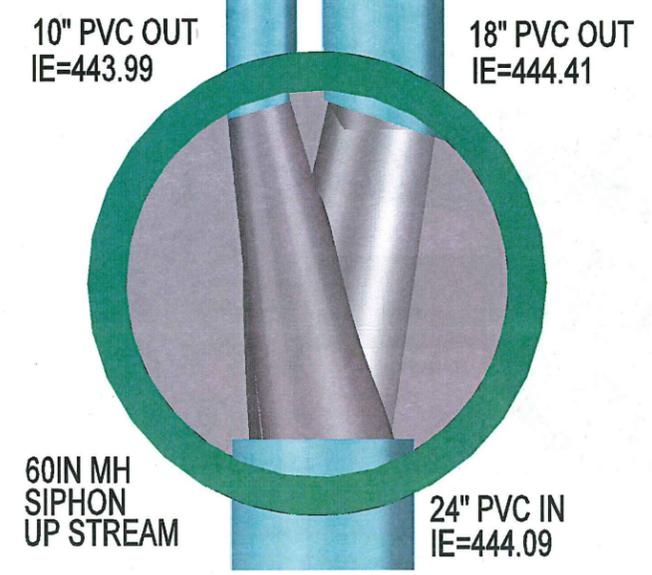
10" PVC IN
C-900
IE=443.23

18" PVC IN
C-900
IE=443.23



**DOWNSTREAM SIPHON MH
STA. 21+31**

Not to Scale

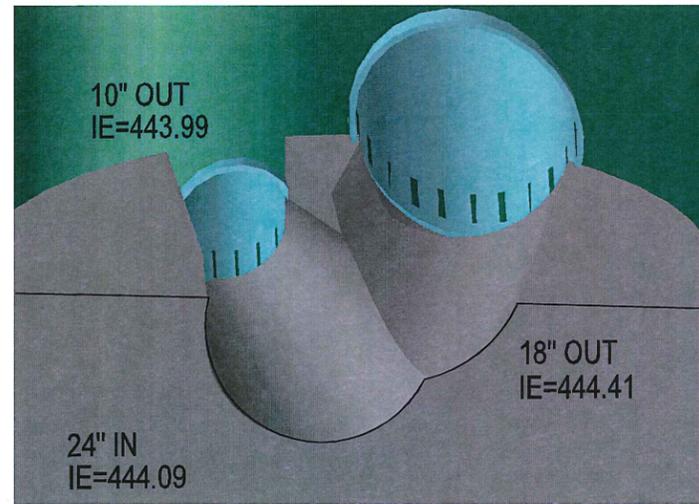
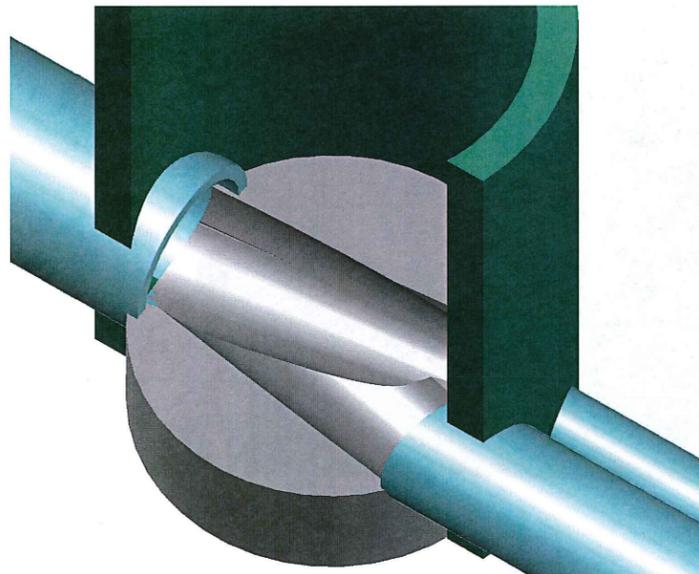


10" PVC OUT
IE=443.99

18" PVC OUT
IE=444.41

60IN MH
SIPHON
UP STREAM

24" PVC IN
IE=444.09



10" OUT
IE=443.99

18" OUT
IE=444.41

24" IN
IE=444.09

**UPSTREAM SIPHON MH
STA. 21+82**

Not to Scale

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**10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037**

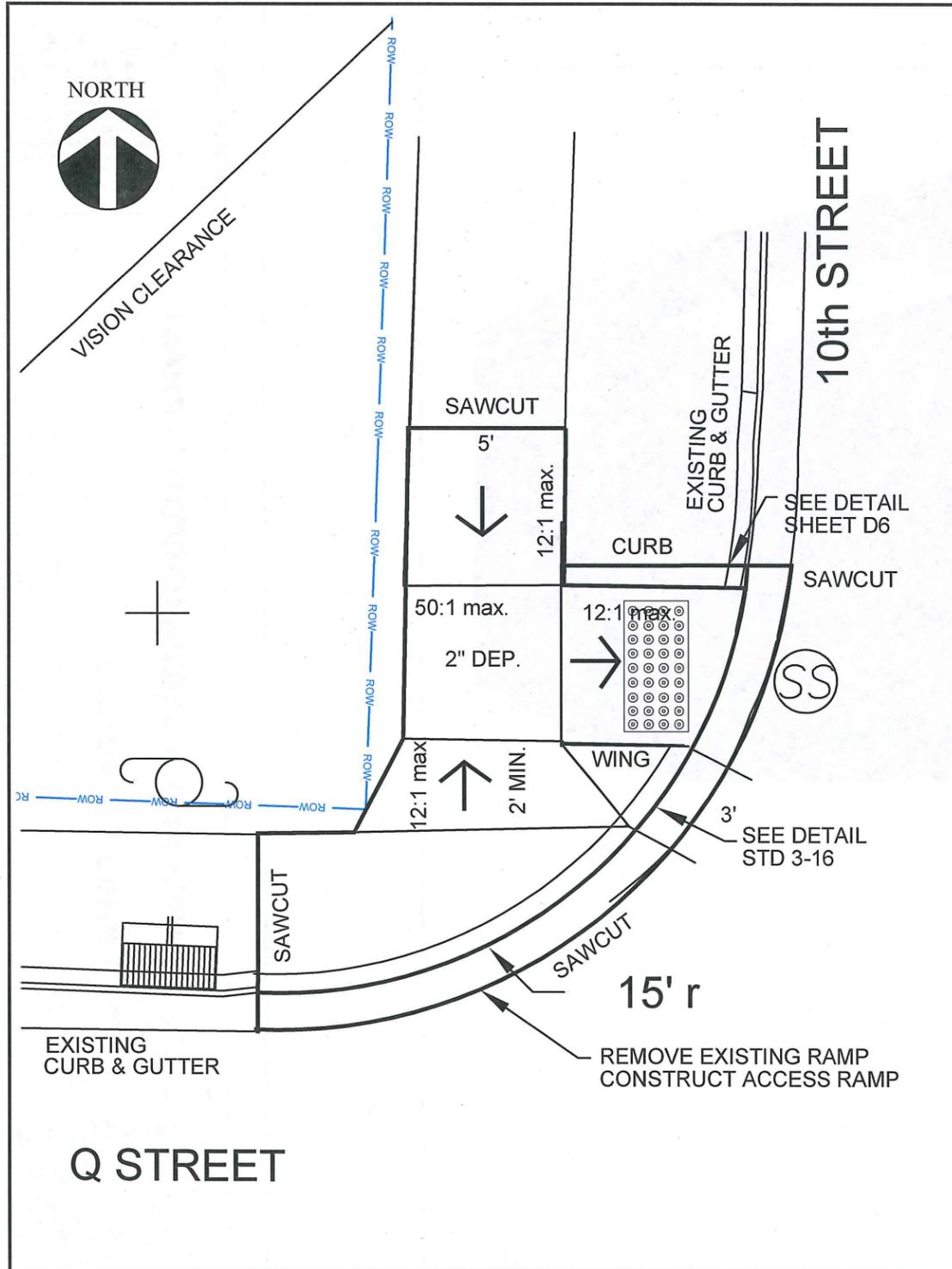
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EXPIRES 4/30/12

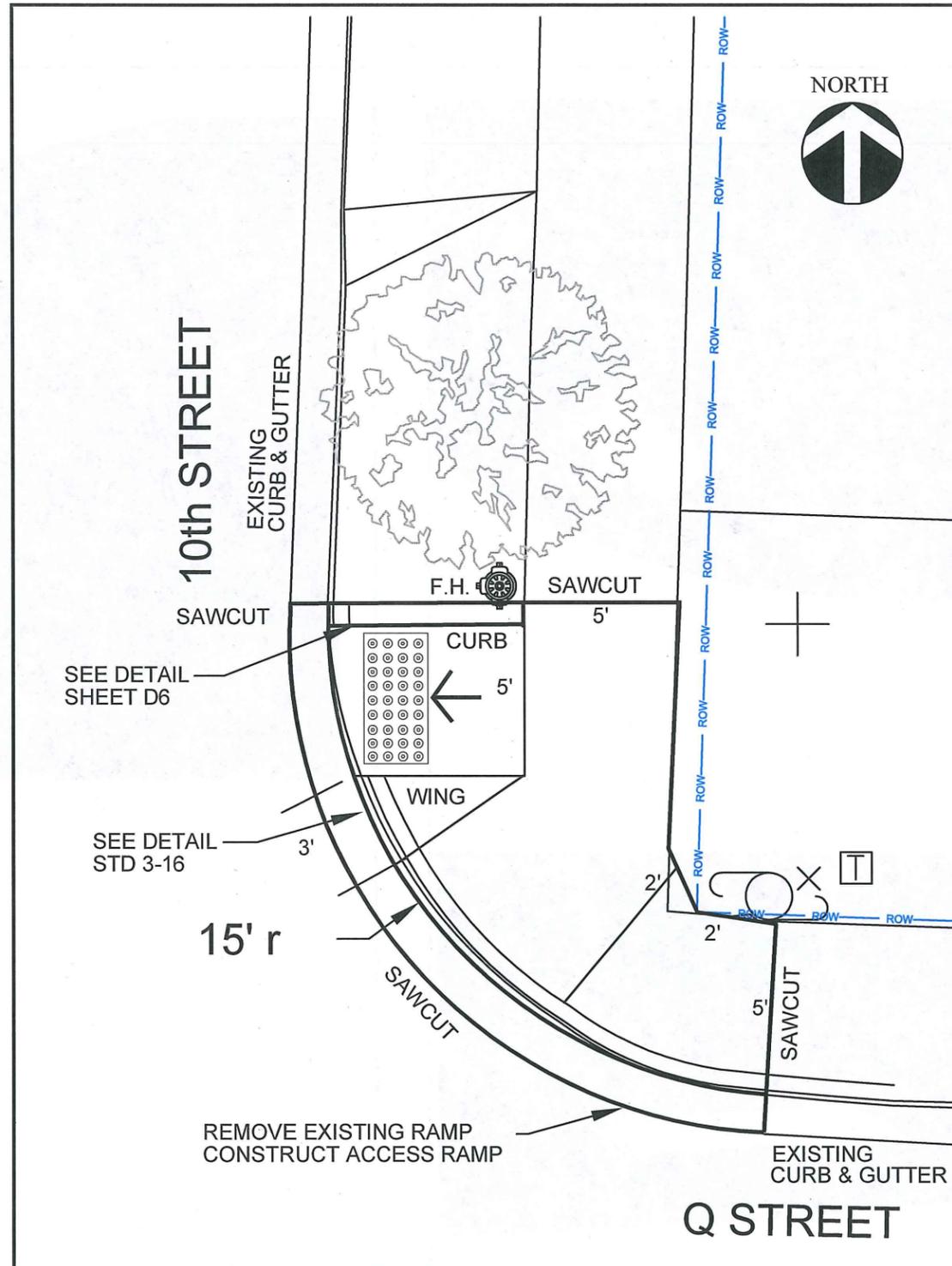
SHEET
D5

REPLACEMENT OF ACCESS RAMPS



NW CORNER 10th & 'Q' STREETS

DETAIL 1



NE CORNER 10th & 'Q' STREETS

DETAIL 2

No.	Revision/Issue	Date

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10TH AND N SEWER UPGRADE - PHASE 1

PROJECT P21037

City of Springfield

PUBLIC WORKS / ENGINEERING
226 FIFTH STREET, SPRINGFIELD, OR 97477
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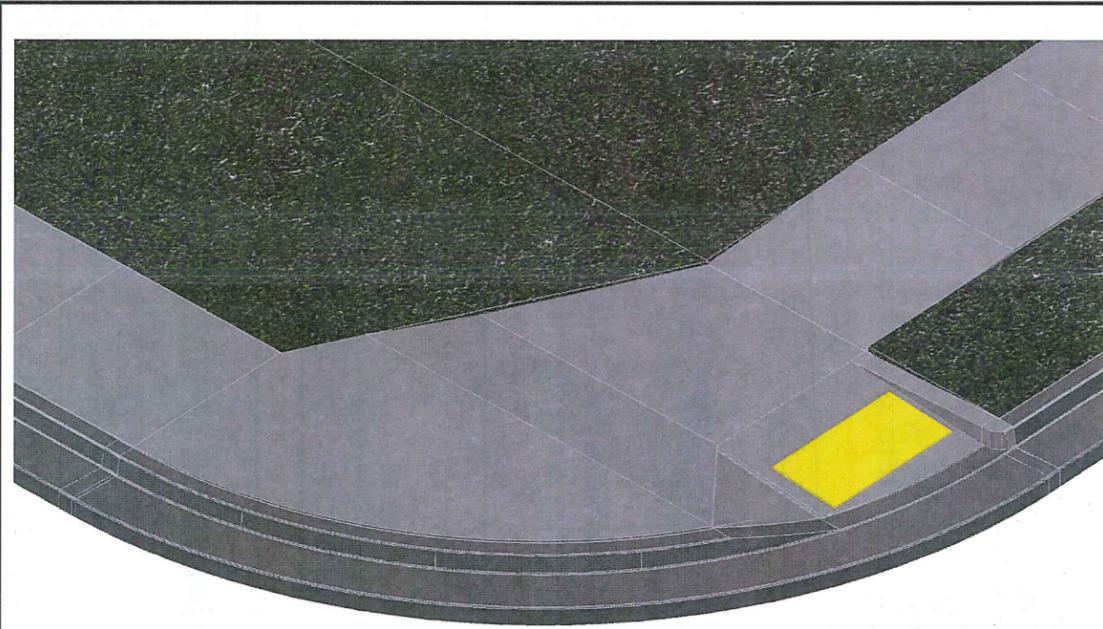


EXPIRES 6/30/12

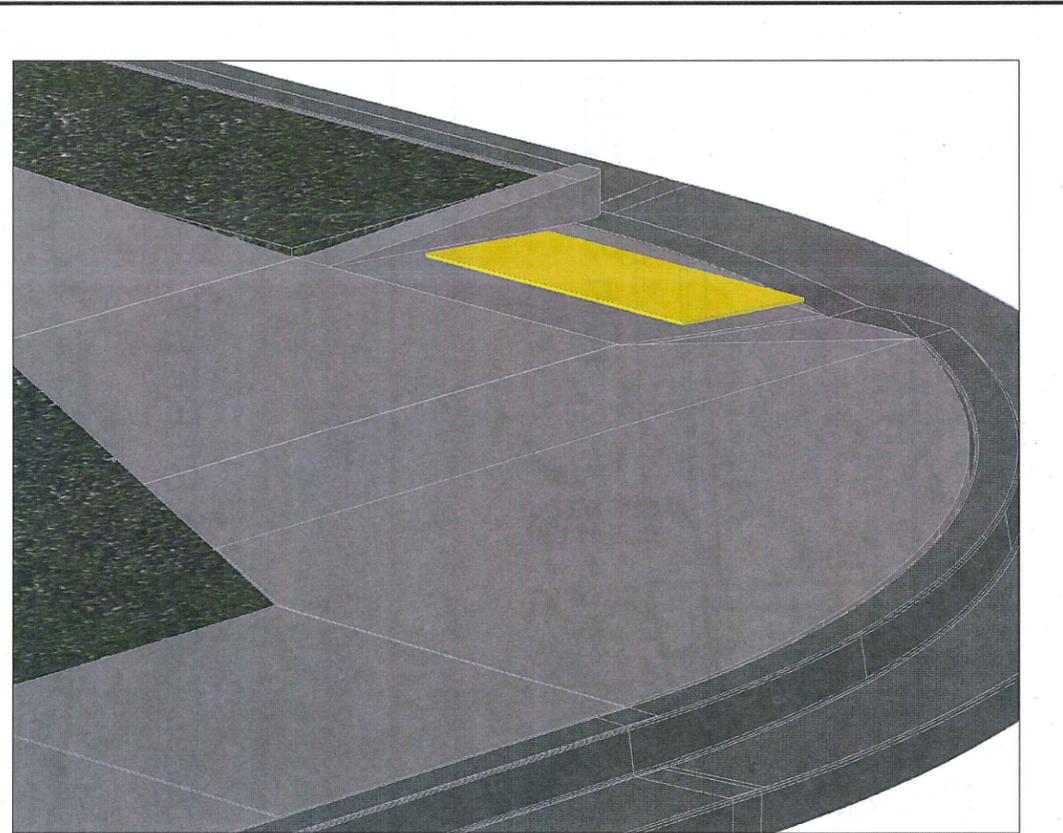
SHEET

D6

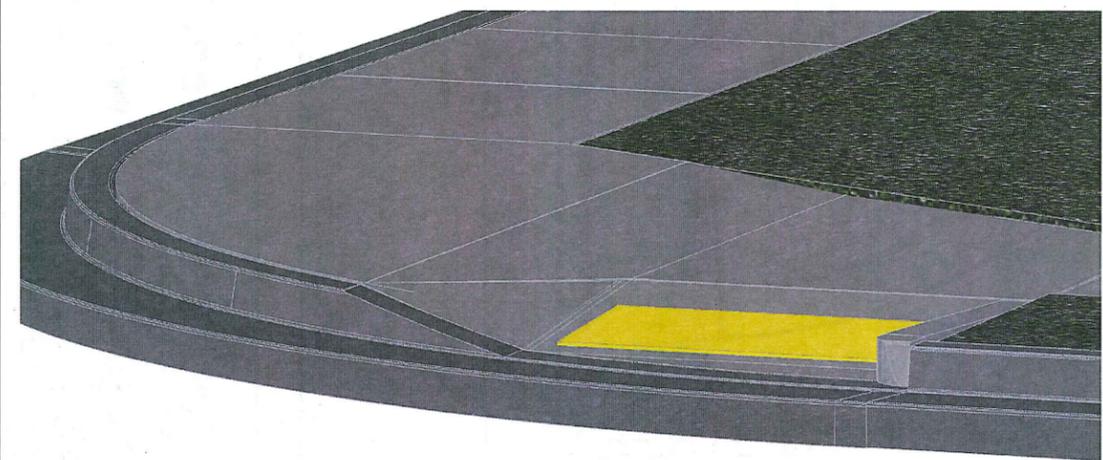
PROJECT DESCRIPTION: REPLACEMENT OF ACCESS RAMPS



NW CORNER 10th & 'Q' STREETS



NW CORNER 10th & 'Q' STREETS



No.	Revision/Issue	Date

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EXPIRES 4/30/12

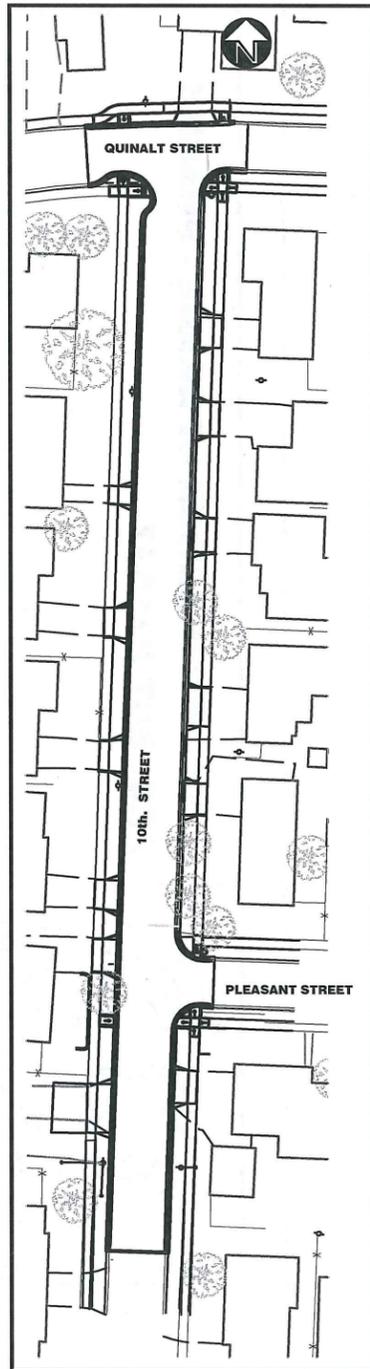
SHEET

D7

10th & 'N' SEWER UPGRADE PHASE 1 P21037

PROJECT DESCRIPTION STREET PAVING

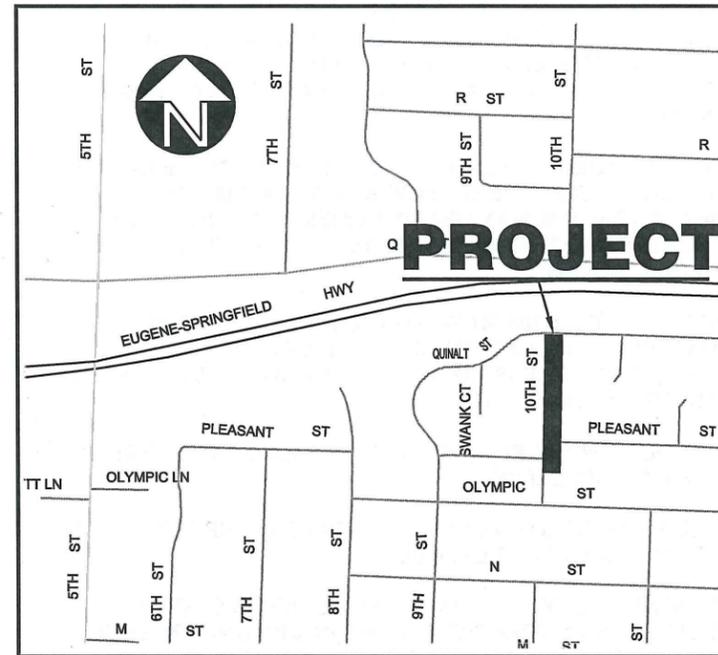
This project will consist of reconstructing a portion of 10th street from south of Pleasant Street to and including a short section of Quinalt Street. There will be some storm sewer work included.



LEGEND

GAS LINE	— GAS — GAS —
WATER LINE	— W — W —
POWER (ELECTRIC)	— E — E —
RIGHT OF WAY	— — — —
SANITARY SEWER (EXISTING)	— WW —
STORM SEWER (NEW)	— SS — SS —
GAS VALVE	⊗
WATER VALVE	⊗
FIRE HYDRANT	⊗
WATER METER	⊗
UTILITY BOX	⊗
POWER POLE/LIGHT	⊗
CATCH BASIN	⊗
CURB INLET	⊗
STORM MANHOLE (NEW)	⊗ (SD) M.H.
SANITARY MANHOLE (EXISTING)	⊗ (SS) M.H.
MAIL BOX	⊗
UTILITY POLE	⊗

VICINITY MAP



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PLAN STA 2+40 - 5+00	pg. ST-4
PLAN STA 5+00 - 6+00	pg. ST-5
BULBOUT DETAIL	pg. ST-6
PROFILE 10th. W. GUTTER 0+00 - 6+00	pg. ST-7
PROFILE 10th CENTER LINE 0+00 - 6+00	pg. ST-8
PROFILE 10th. E. GUTTER 0+00 - 6+00	pg. ST-9
PROFILE CL PLEASANT, QUINALT	pg. ST-10
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EROSION CONTROL	pg. ST-14

10TH AND N SEWER UPGRADE - PHASE 1
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EXPIRES 6/30/12

Scale

SHEET

ST-1

GENERAL CONSTRUCTION NOTES CONTINUED:

- A. ALL MATERIALS AND WORKMANSHIP WITHIN THE PUBLIC RIGHT-OF-WAY OR PUBLIC EASEMENTS SHALL MEET CITY OF SPRINGFIELD DEPARTMENT OF PUBLIC WORKS "STANDARD CONSTRUCTION SPECIFICATIONS, 1994" AS AMENDED IN 1998 (OR CURRENT EDITION), IN ADDITION TO THESE PLANS.
- B. OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0100. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 811 OR (800) 332-2344.
- C. LOCATION AND/OR DEPTH OF EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES FOR UNDERGROUND LOCATION OF FACILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATING OR "POTHOLING". THE "ONE-CALL" NUMBER (800) 332-2344.
- D. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH UTILITY COMPANIES ON THE TIMING OF INSTALLATION OF THEIR FACILITIES.
- E. CONTRACTOR REQUIRED TO NOTIFY UTILITIES OF OPEN TRENCHING FOR THE PROJECT TO ALLOW POSSIBLE COMMUNICATION CABLE INSTALLATION.
- F. THE CONTRACTOR SHALL PROVIDE ALL TRAFFIC CONTROL DEVICES NECESSARY TO PROTECT AND SAFEGUARD THE PUBLIC AND WORKERS AGAINST INJURY AND PROTECT THE WORK AGAINST DAMAGE. ALL TEMPORARY TRAFFIC CONTROL SIGNING AND DEVICES SHALL BE IN PLACE PRIOR TO BEGINNING WORK. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (MUTCD), CURRENT EDITION, AS SUPPLEMENTED AND AMENDED BY THE OREGON SUPPLEMENTS. FLAGGING SHALL BE PERFORMED AS SHOWN IN THE "OREGON TEMPORARY TRAFFIC CONTROL HANDBOOK FOR OPERATIONS OF THREE DAYS OR LESS", 2006 OR CURRENT EDITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REQUIRED TRAFFIC CONTROL AS FIELD CONDITIONS WARRANT. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN AT THE PRE-CONSTRUCTION CONFERENCE FOR CITY REVIEW AND APPROVAL.
- G. ALL SANITARY AND STORM SEWER CONNECTIONS TO EXISTING CITY OWNED FACILITIES (PIPE, CATCH BASINS, MANHOLES, ETC.) SHALL BE INSPECTED BY THE INSPECTOR PRIOR TO HOOK UP. CONTACT THE INSPECTOR NO LESS THAN 48 HOURS PRIOR TO DESIRED INSPECTION TIME.
- H. BEFORE BACK-FILLING THE END OF A MAINLINE PIPE, NOT ENDING AT A MANHOLE OR A CLEAN OUT, THE CONTRACTOR SHALL PERFORM THE T.V. INSPECTION AS REQUIRED BY THE STANDARD SPECIFICATIONS AND ALLOW THE ENGINEER TO DETERMINE THE EXACT LOCATION AND ELEVATION OF THE END OF THE PIPE.
- I. WHERE CONNECTING TO AN EXISTING PIPE. THE CONTRACTOR SHALL EXPOSE THE END OF THE EXISTING PIPE AND ALLOW THE ENGINEER TO VERIFY EXACT LOCATION AND ELEVATION, CONDITION, AND POSITIVE FLOW BEFORE LAYING ANY NEW PIPE ON THAT SYSTEM.
- J. THE SEWER GRADE SHALL BE PER THE PLANS SPECIFICATIONS AND WITH THE MINIMUM COVER AS SHOWN ON THE PLANS.
- K. THE CONTRACTOR SHALL INSPECT THE SEWER BY T.V. INSPECTION AFTER ALL BACKFILL AND BEFORE THE FINAL LIFT OF ASPHALT PAVING. THE CONTRACTOR SHALL SUPPLY THE CITY WITH A WRITTEN T.V. REPORT AND VIDEO TAPE OR DVD FOR CITY APPROVAL AT LEAST 2 WORKING DAYS BEFORE THE PRE-PAVING MEETING.
- L. CONTRACTOR TO SCHEDULE A PRE-PAVING MEETING 48 HOURS PRIOR TO PAVING. CONTACT THE ENGINEER TO SCHEDULE THE MEETING.
- M. ALL JOINTS BETWEEN EXISTING AND NEW ASPHALT PAVING SHALL BE SEALED WITH POLYMERIZED ASPHALT TO PREVENT PICK UP.

- N. COMPACTION REQUIREMENTS:

LAYER	RATE	TEST
SUBGRADE	95%	T99
CRUSHED ROCK	95%	T180
ASPHALT (LOCAL)	90%	RICE
ASPHALT (COLLECTOR/ARTERIAL)	92%	RICE
- O. CONCRETE COMPRESSIVE STRENGTH REQUIREMENTS (PSI):

CONCRETE USE	FIELD	LABORATORY
SIDEWALK/ADA RAMPS	3000	3450
CURBS/GUTTERS	3500	4025
DRIVEWAYS	3500	4025
PAVEMENT	4000	4600
- P. THIS PROJECT SHALL COMPLY WITH THE AMERICAN DISABILITIES ACT REQUIREMENTS SUCH AS INCORPORATION OF DESIGN CRITERIA FOR HANDICAP RAMPS, MAXIMUM PROFILE AND CROSS SECTION SLOPES FOR SIDEWALKS, UPGRADING EXISTING HANDICAP FACILITIES WHERE MAJOR CONSTRUCTION IS OCCURRING, AND BUILDING WARNING FOR OBJECTS IN SIDEWALK SUCH AS CURBING OR LANDSCAPING AROUND MAILBOXES.
- Q. CONTRACTOR IS RESPONSIBLE TO OBTAIN APPLICABLE PERMITS FROM OTHER AGENCIES WITH JURISDICTIONS INCLUDING BUT NOT LIMITED TO LANE COUNTY, OREGON DEPARTMENT OF TRANSPORTATION, OREGON DIVISION OF STATE LANDS, THE ARMY CORPS OF ENGINEERS, OR THE DEPARTMENT OF ENVIRONMENTAL QUALITY.
- R. ALL IMPROVEMENTS THAT WILL BE PRIVATELY OWNED AND MAINTAINED WILL BE BOUND BY THE CURRENT REQUIREMENTS OF THE STATE OF OREGON STRUCTURAL SPECIALTY CODE, PLUMBING SPECIALTY CODE, AND/OR CITY OF SPRINGFIELD BUILDING DIVISION REQUIREMENTS. CONTRACTOR IS RESPONSIBLE TO OBTAIN APPLICABLE PERMITS FROM OTHER CITY DEPARTMENTS PRIOR TO DOING PRIVATE WORK.
- S. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE START OF CONSTRUCTION.
- T. STREET TREES: ONLY STREET TREES WITH A MINIMUM TRUNK CALIPER OF 2 IN. MEASURED 6 IN. ABOVE THE ROOT STEM SHALL BE SELECTED FOR PLANTING. REFER TO CHAPTER 6 OF CITY OF SPRINGFIELD ENGINEERING DESIGN STANDARDS AND PROCEDURES FOR APPROVED STREET TREES.
- U. A PRE-CONSTRUCTION CONFERENCE IS REQUIRED BEFORE START OF CONSTRUCTION. ALL UTILITIES, CONTRACTORS AND CITY REPRESENTATIVES SHALL HAVE RECEIVED THE FINAL APPROVED PLANS AT LEAST 5 WORKING DAYS PRIOR TO THE PRE CONSTRUCTION CONFERENCE.
- V. THE ENGINEER AND/OR CITY HAVE THE RIGHT TO REQUIRE ADDITIONAL WORK NOT SHOWN HEREIN BUT NECESSARY FOR THE SUCCESSFUL COMPLETION OF THE PROJECT.
- W. REQUESTS BY THE CONTRACTOR FOR CHANGES SHALL BE APPROVED BY THE ENGINEER AND THE CITY IN WRITING PRIOR TO IMPLEMENTATION.
- X. CONTRACTOR SHALL SUBMIT EVIDENCE OF INSURANCE IN ACCORDANCE WITH THE STANDARD SPECIFICATION TO THE CITY FOR APPROVAL PRIOR TO BEGINNING WORK.
- Y. CONTRACTOR SHALL BE AWARE IF PAVING IS NOT SCHEDULED OR DOES NOT OCCUR PRIOR TO OCTOBER 15TH, WET WEATHER PROVISIONS INCLUDING ADDITIONAL ROCK SUBSTRUCTURE AND GEOTEXTILE FABRIC SHALL BE USED. REFER TO STANDARD SPECIFICATION SECTION 301.1.01 AND THE TYPICAL CROSS SECTIONS CONTAINED HEREIN FOR DETAILS. ADDITIONAL PROVISIONS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- Z. THE CONTRACTOR SHALL VERIFY EACH EXISTING SANITARY AND STORM CONNECTION.

No.	Revision/Issue	Date
DRAWN: RBK		

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**10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037**

City of Springfield

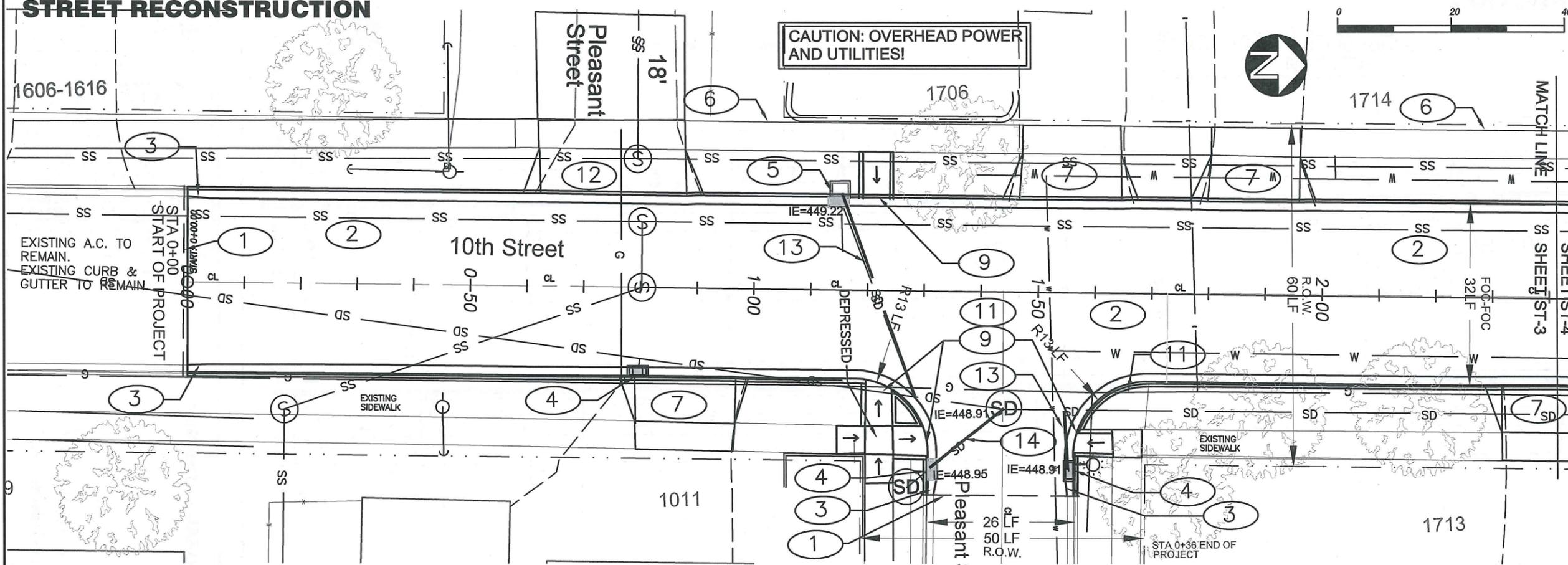
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EXPIRES 6/30/12

Scale	SHEET
	ST-2

STREET RECONSTRUCTION



No.	Revision/Issue	Date
DRAWN: RBK		

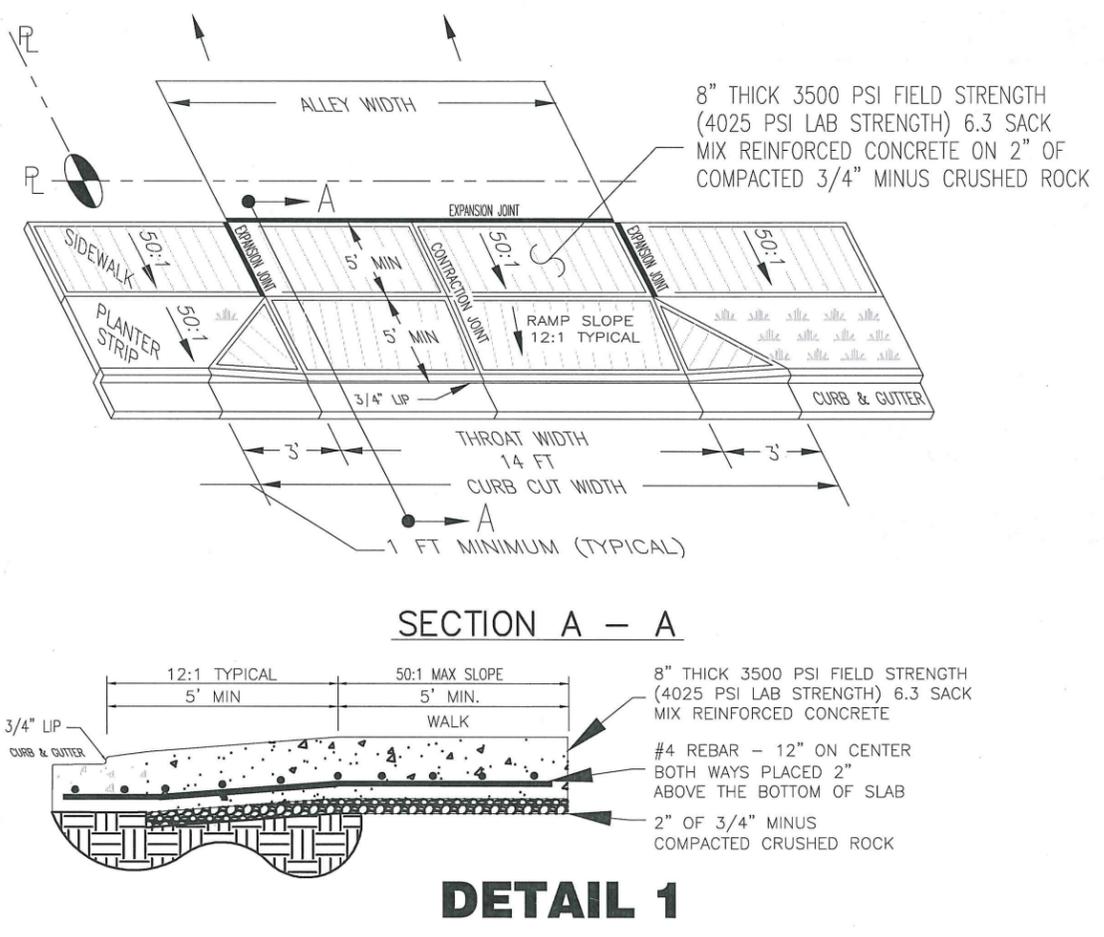
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CONSTRUCTION NOTES

- 1 SAW CUT SEE STD DETAIL 4-16
- 2 REMOVE AND RECONSTRUCT A.C. PAVEMENT AND CURB & GUTTER. CROWN IS AT CENTERLINE. MATCH EXISTING PAVEMENT AT CONNECTIONS. (SEE STD. DETAILS 3-5,3-6)
- 3 TAPER GUTTER FOR 30" TO MATCH EXISTING GUTTER
- 4 REMOVE AND REPLACE CATCH BASIN (SEE STD. DETAIL 4-11)
- 5 REMOVE CATCH BASIN INSTALL CURB INLET 2 1/2A. (SEE STD. DETAIL 4-9)
- 6 REMOVE (SAWCUT) AND RE-CONSTRUCT SIDEWALK AS DIRECTED IN FIELD TO NEAREST PANEL. (SEE STD. DETAIL 3-12)
- 7 REMOVE AND RE-CONSTRUCT EXIST DRIVEWAY APRON. ALLOWABLE WIDTH 12'-24'. SAWCUT @ SIDEWALK. (SEE STD. DETAIL 3-21)
- 9 CONSTRUCT ACCESS RAMP MAX. SLOPE 12:1 CONFIGURATIONS VARY, CONSTRUCT AS SHOWN IN PLAN. USE CURB RETURN ON ALL RAMPS. INSTALL TRUNCATED DOMES. (SEE DETAIL 1 SHEETS ST-11 & ST-12). REMOVE EXISTING ACCESS RAMP WHERE PRESENT. SAWCUT WHERE ADJOINING EXISTING PAVEMENT.
- 11 REMOVE EXISTING ACCESS RAMP
- 12 REMOVE AND RE-CONSTRUCT DRIVEWAY APRON W/COMMERCIAL APRON SEE DETAIL 1 (THIS SHEET) ALLOWABLE WIDTH 14'. PLACE 4" A.C. MAT BEHIND WALK MIN. 18'.
- 13 CONSTRUCT 10" PVC ASTM 3034 STORM PIPE FROM INLET TO EXISTING 18" CONC PIPE. INSERT 18x18x10 TEE W/FLEX CONNECTERS IN 18" PIPE. REMOVE EXISTING CONC. PIPE FROM C.B. TO MAIN PIPE.
- 14 CONSTRUCT 10" PVC ASTM 3034 STORM PIPE FROM INLET TO EXISTING MH, REMOVE EX. 8" PIPES.
- 15 CONSTRUCT SIDEWALK REMOVE EXISTING AS NECESSARY. (SEE STD. DETAIL 3-12)



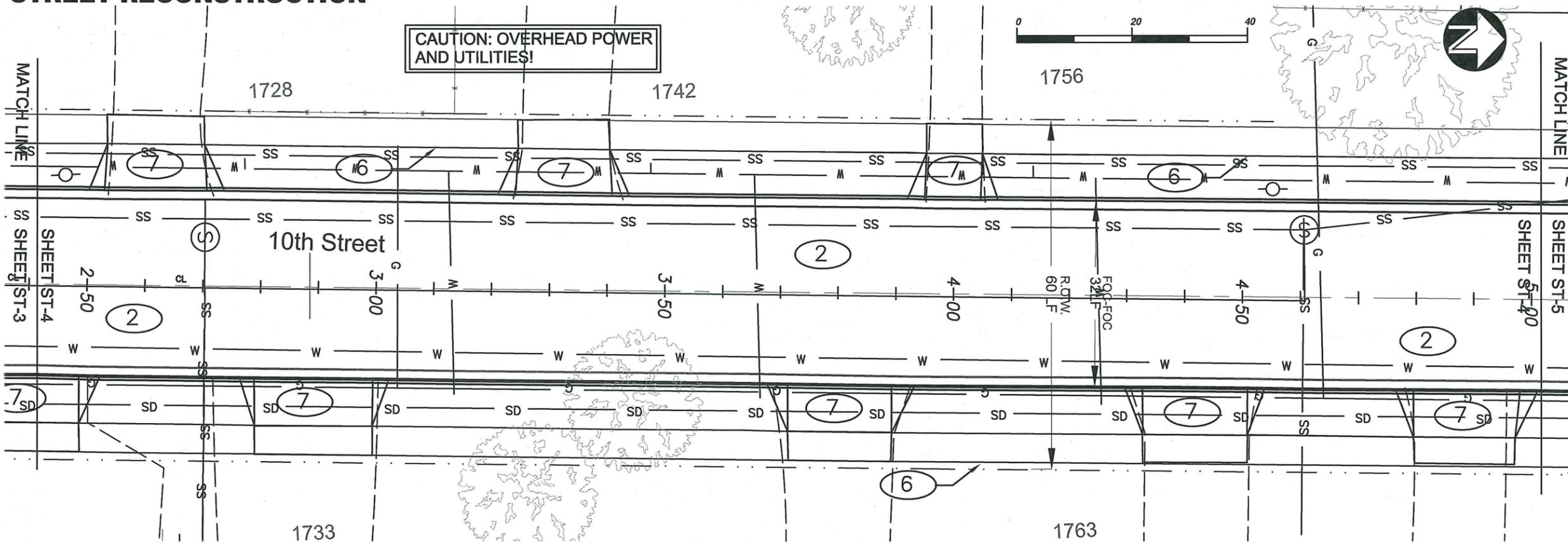
10TH AND N SEWER UPGRADE - PHASE 1
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Scale	SHEET
	ST-3

STREET RECONSTRUCTION



No.	Revision/Issue	Date
DRAWN: RBK		

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CONSTRUCTION NOTES

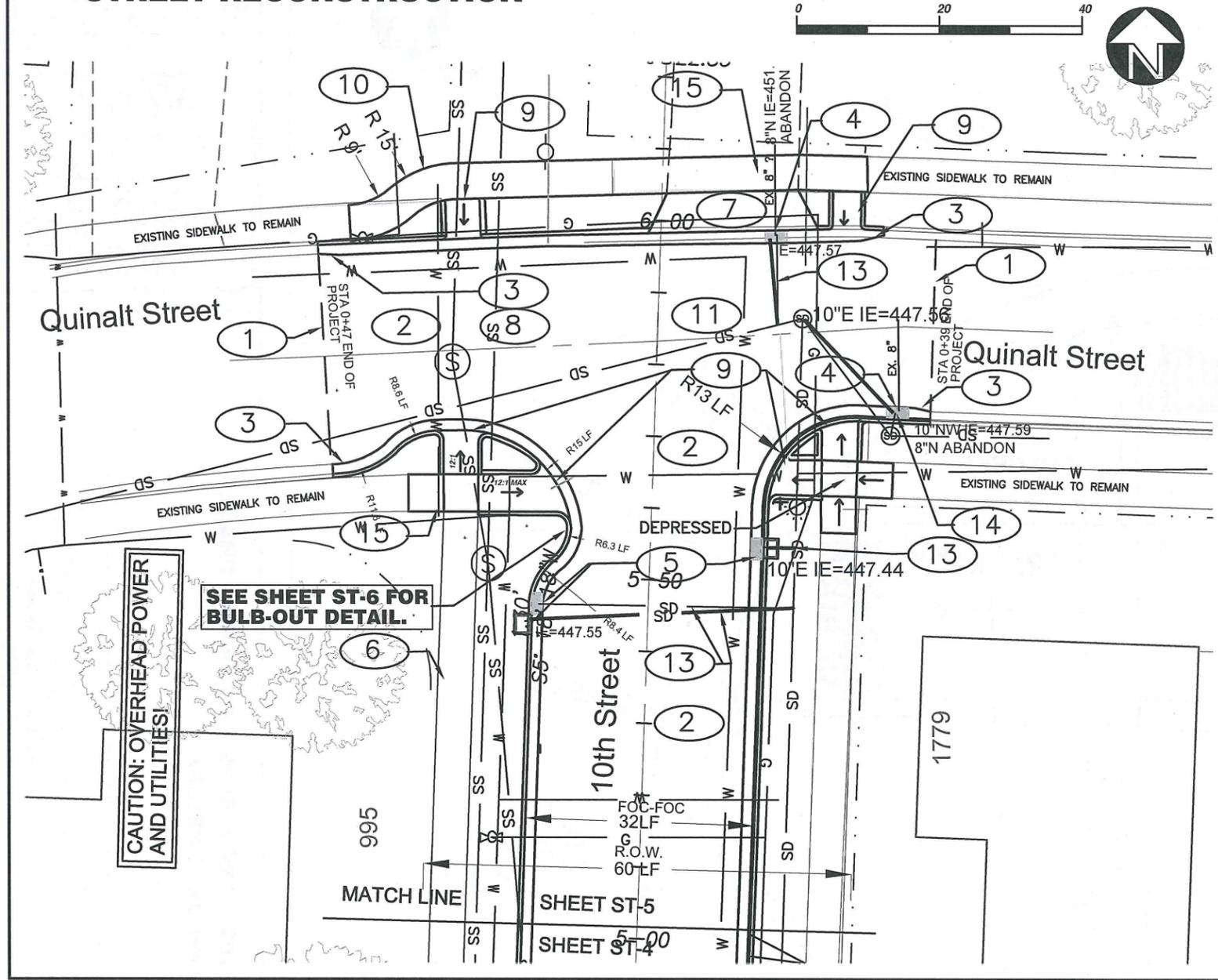
- ② REMOVE AND RECONSTRUCT A.C. PAVEMENT AND CURB & GUTTER. CROWN IS AT CENTERLINE. MATCH EXISTING PAVEMENT AT CONNECTIONS. (SEE STD. DETAILS 3-5,3-6)
- ⑥ REMOVE (SAWCUT) AND RE-CONSTRUCT SIDEWALK AS DIRECTED IN FIELD TO NEAREST PANEL. (SEE STD. DETAIL 3-12)
- ⑦ REMOVE AND RE-CONSTRUCT EXIST DRIVEWAY APRON. ALLOWABLE WIDTH 12'-24'. SAWCUT @ SIDEWALK. (SEE STD. DETAIL 3-21)



EXPIRES 6/30/12

Scale	SHEET
	ST-4

STREET RECONSTRUCTION



CONSTRUCTION NOTES

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- 3 TAPER GUTTER FOR 30" TO MATCH EXISTING GUTTER
- 4 REMOVE AND REPLACE CATCH BASIN (SEE STD. DETAIL 4-11)
- 5 REMOVE CATCH BASIN INSTALL CURB INLET 2 1/2A. (SEE STD. DETAIL 4-9)
- 6 REMOVE (SAWCUT) AND RE-CONSTRUCT SIDEWALK AS DIRECTED IN FIELD TO NEAREST PANEL. (SEE STD. DETAIL 3-12)
- 7 REMOVE AND RE-CONSTRUCT EXIST DRIVEWAY APRON. ALLOWABLE WIDTH 12'-24'. SAWCUT @ SIDEWALK. (SEE STD. DETAIL 3-21)
- 8 REMOVE CURB & GUTTER AS DIRECTED IN FIELD LOCATIONS TO BE DETERMINED IN FIELD.
- 9 CONSTRUCT ACCESS RAMP MAX. SLOPE 12:1 CONFIGURATIONS VARY, CONSTRUCT AS SHOWN IN PLAN. USE CURB RETURN ON ALL RAMP. INSTALL TRUNCATED DOMES. (SEE DETAIL 1 SHEETS ST-11 & ST-12). REMOVE EXISTING ACCESS RAMP WHERE PRESENT. SAWCUT WHERE ADJOINING EXISTING PAVEMENT.
- 10 CONSTRUCT SIDEWALK - TRANSITION FROM CURBSIDE TO SET BACK. (SEE DETAIL 3-12)
- 11 REMOVE EXISTING ACCESS RAMP
- 13 CONSTRUCT 10" PVC ASTM 3034 STORM PIPE FROM INLET TO EXISTING 18" CONC PIPE. INSERT 18x18x10 TEE W/FLEX CONNECTERS IN 18" PIPE. REMOVE EXISTING CONC. PIPE FROM C.B. TO MAIN PIPE.
- 14 CONSTRUCT 10" PVC ASTM 3034 STORM PIPE FROM INLET TO EXISTING MH, REMOVE EX. 8" PIPES.
- 15 CONSTRUCT SIDEWALK REMOVE EXISTING AS NECESSARY. (SEE STD. DETAIL 3-12)

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10TH AND N SEWER UPGRADE - PHASE 1
PROJECT P21037

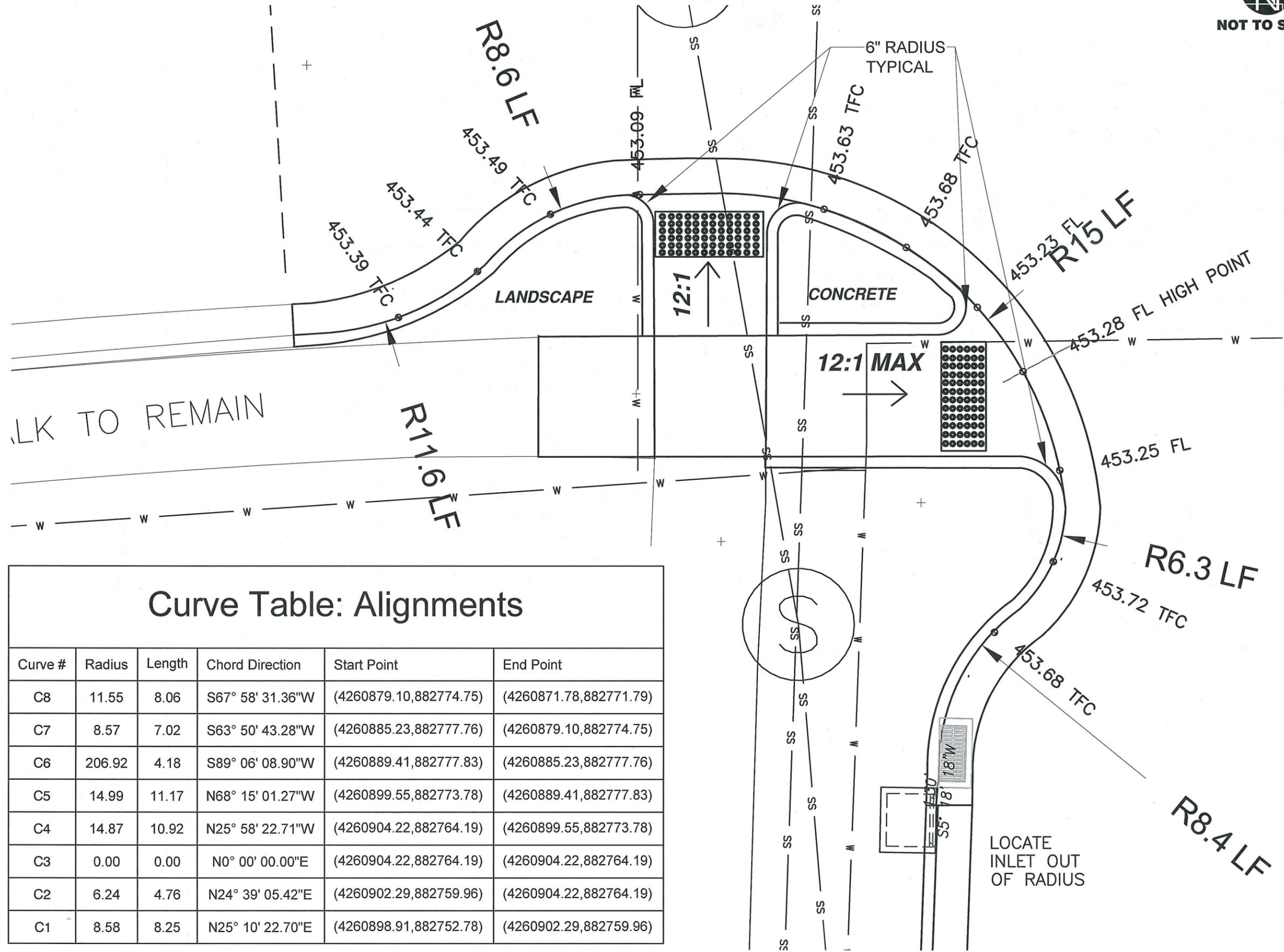
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EXPIRES 6/30/12

Scale	SHEET
	ST-5

STREET RECONSTRUCTION



Curve Table: Alignments

Curve #	Radius	Length	Chord Direction	Start Point	End Point
C8	11.55	8.06	S67° 58' 31.36"W	(4260879.10,882774.75)	(4260871.78,882771.79)
C7	8.57	7.02	S63° 50' 43.28"W	(4260885.23,882777.76)	(4260879.10,882774.75)
C6	206.92	4.18	S89° 06' 08.90"W	(4260889.41,882777.83)	(4260885.23,882777.76)
C5	14.99	11.17	N68° 15' 01.27"W	(4260899.55,882773.78)	(4260889.41,882777.83)
C4	14.87	10.92	N25° 58' 22.71"W	(4260904.22,882764.19)	(4260899.55,882773.78)
C3	0.00	0.00	N0° 00' 00.00"E	(4260904.22,882764.19)	(4260904.22,882764.19)
C2	6.24	4.76	N24° 39' 05.42"E	(4260902.29,882759.96)	(4260904.22,882764.19)
C1	8.58	8.25	N25° 10' 22.70"E	(4260898.91,882752.78)	(4260902.29,882759.96)

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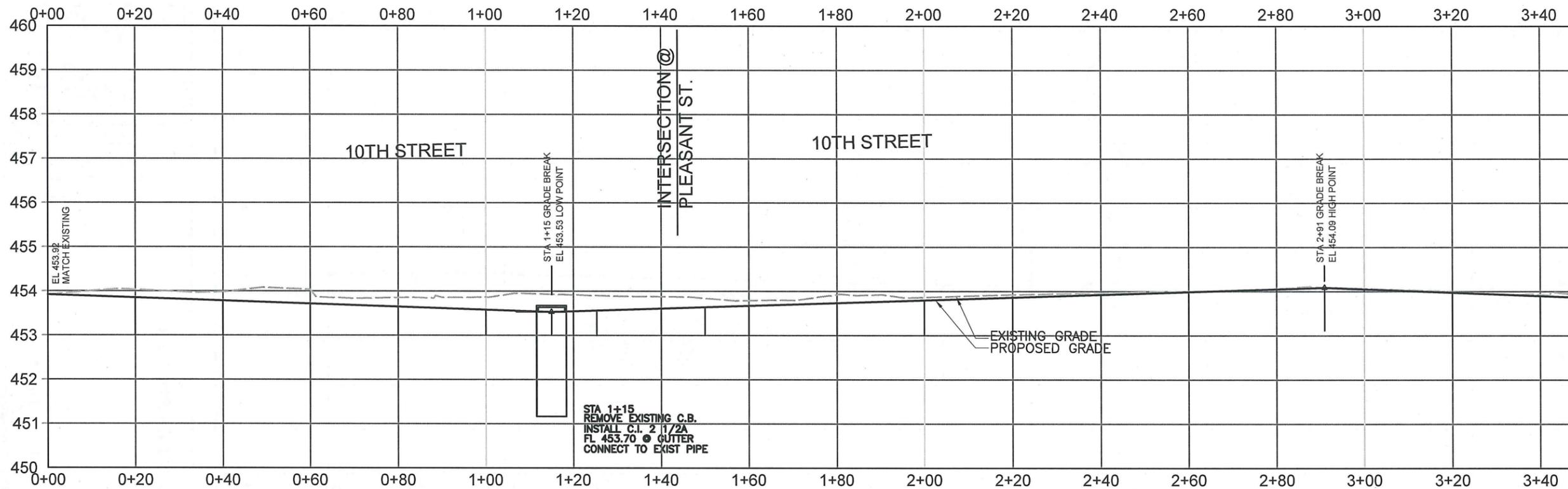


Scale

SHEET
ST-6

WEST GUTTER PROFILE 10th & QUINALT

WEST



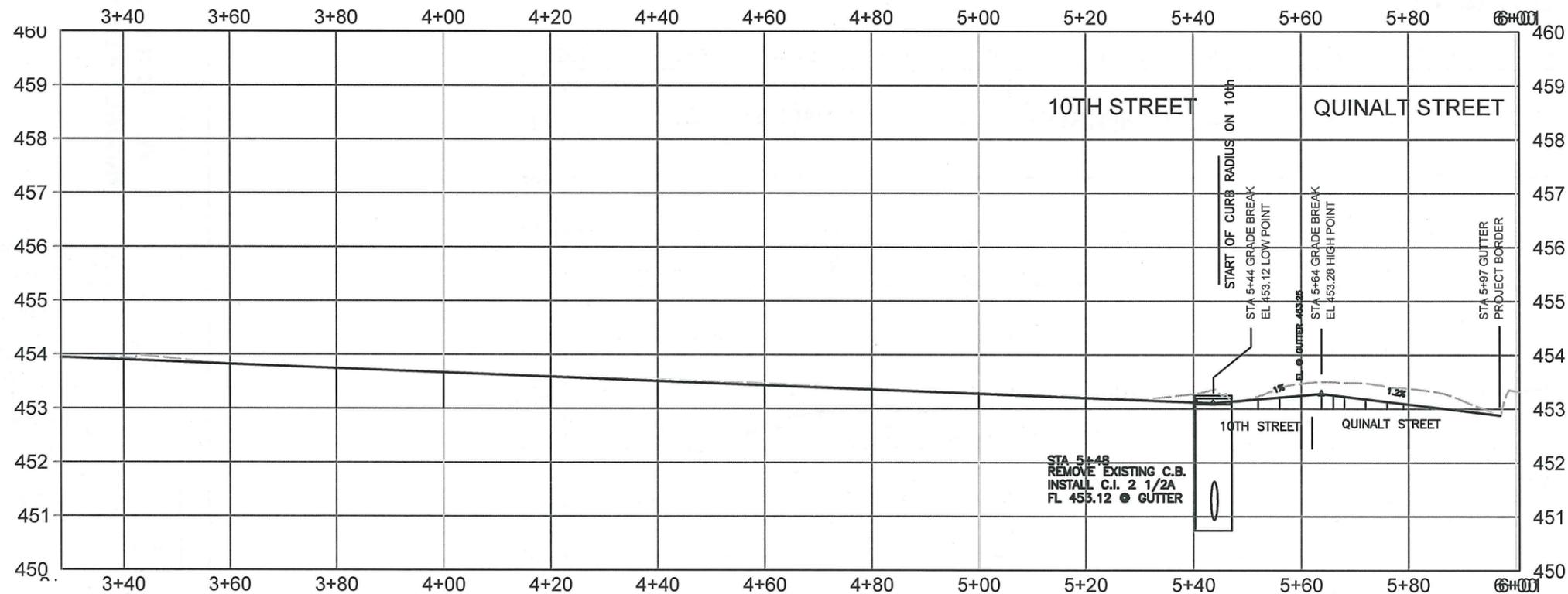
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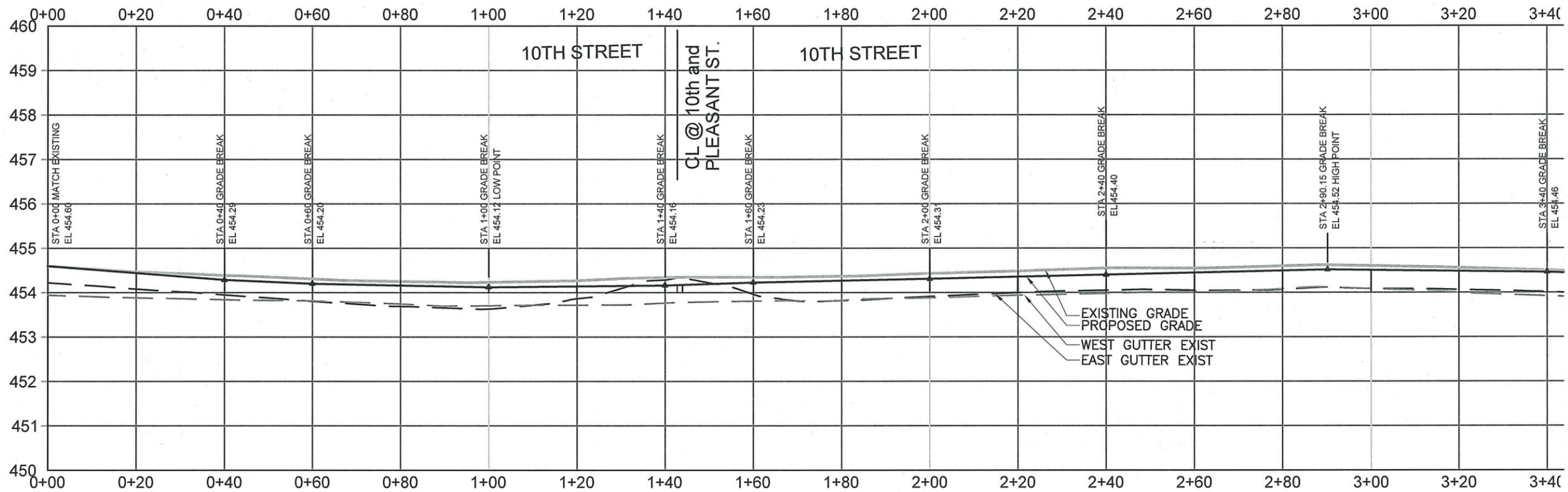
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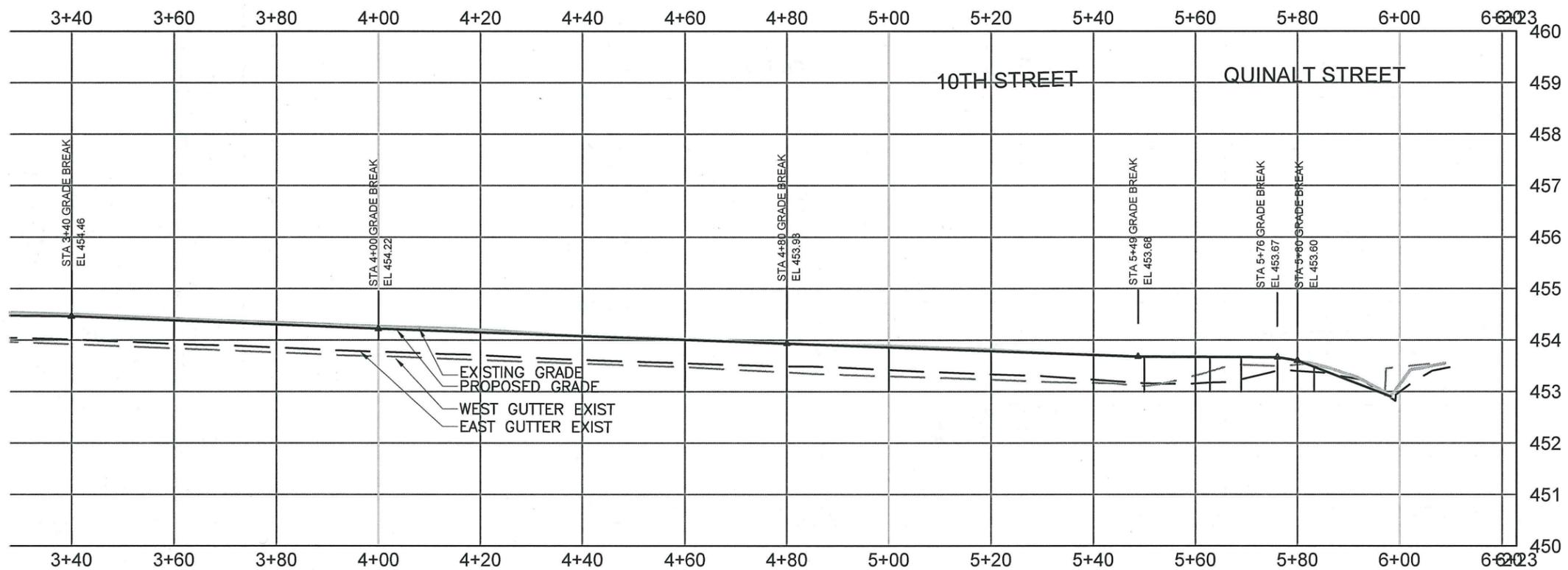
EXPIRES 6/30/12

Scale	SHEET
	ST-7

10th STREET CENTER LINE PROFILE



10th STREET CENTER LINE PROFILE



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DRAWN: RBK		

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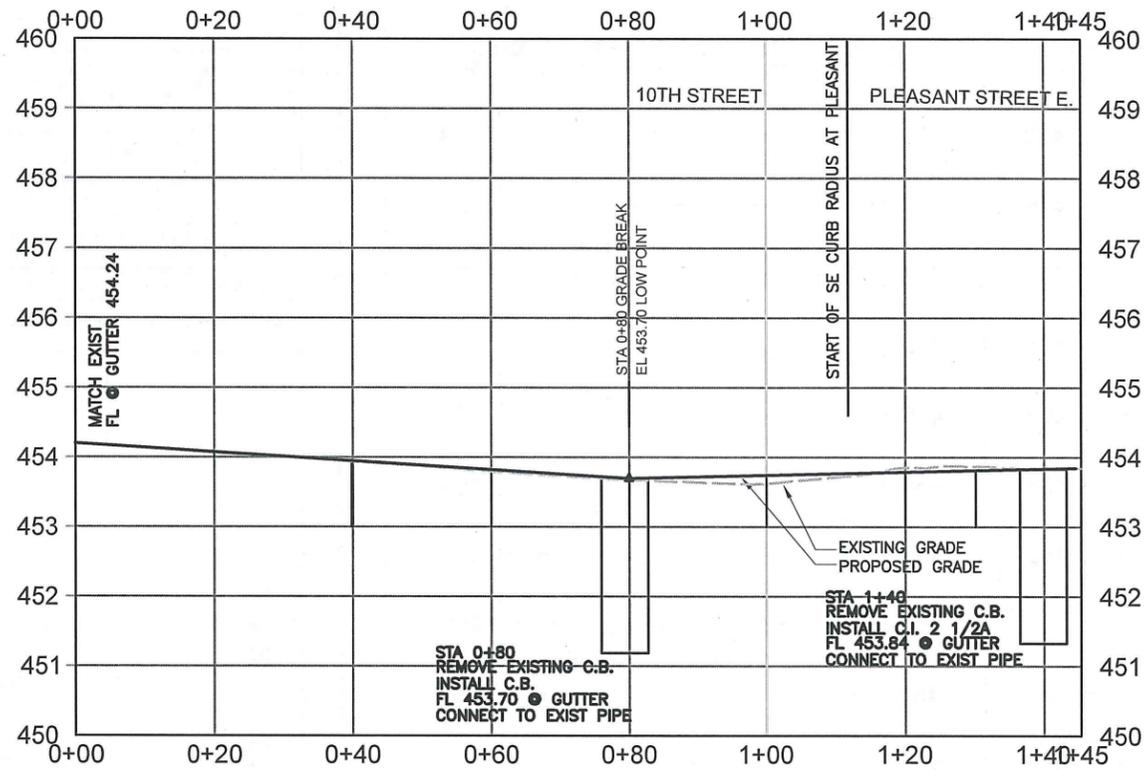
EXPIRES 6/30/12

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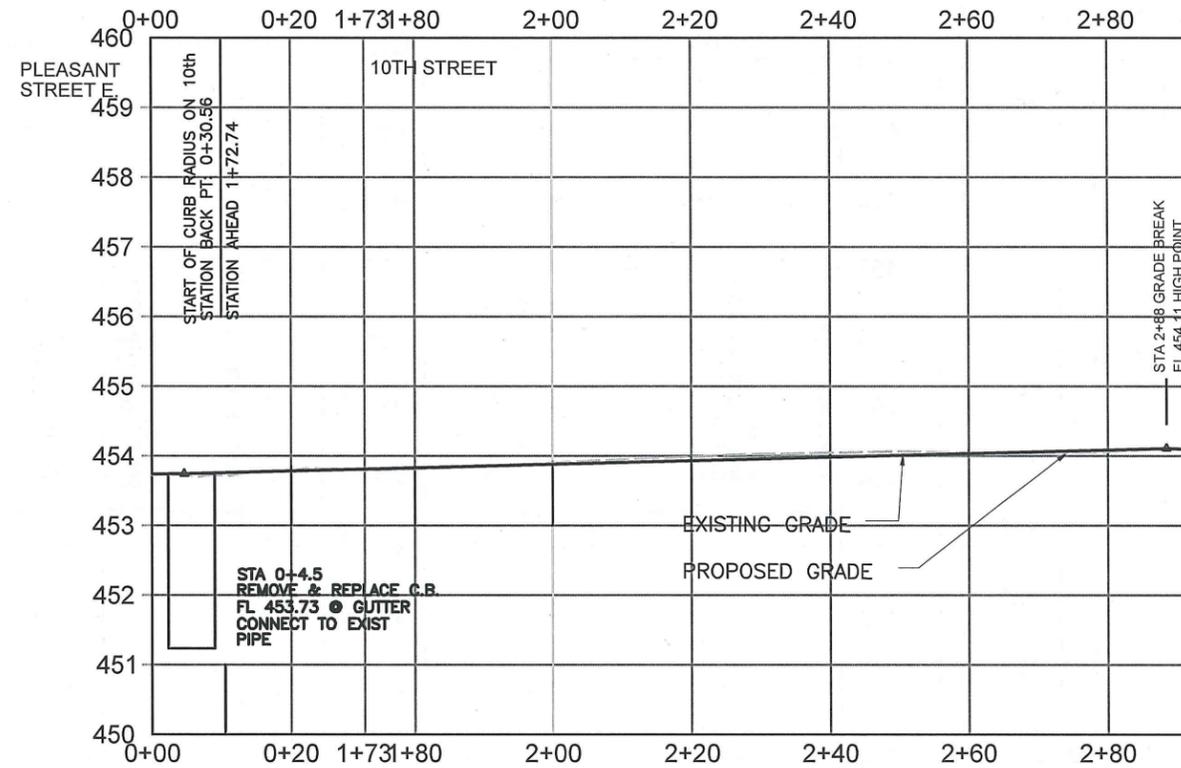
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ST-8

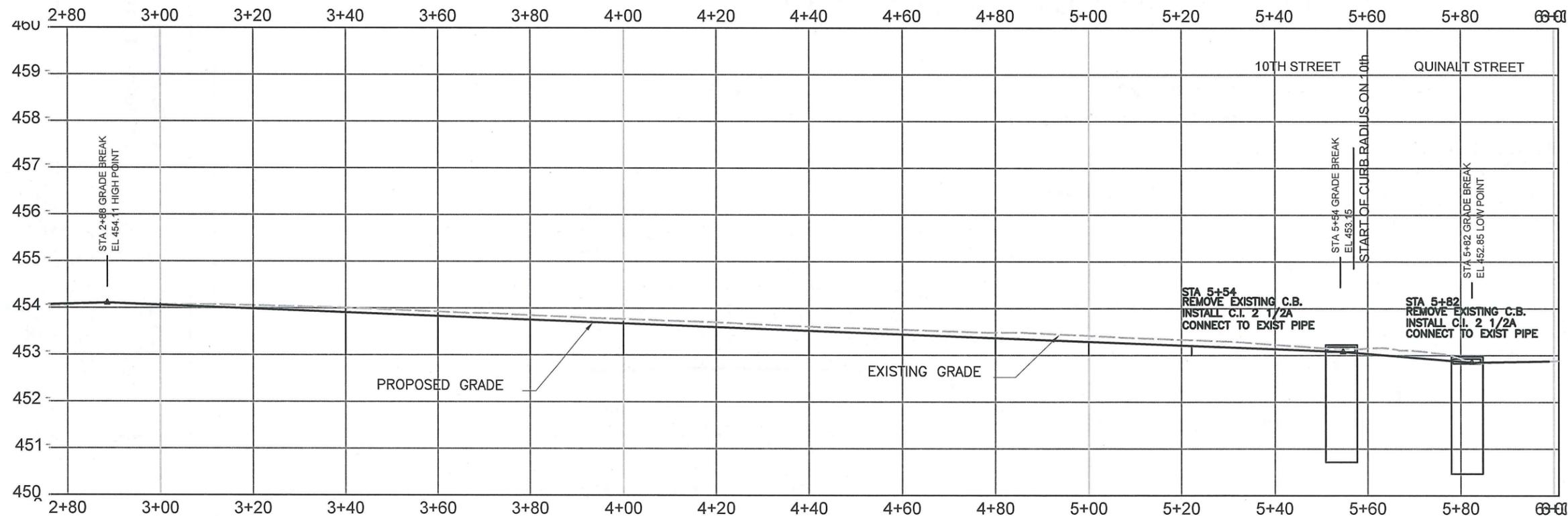
EAST GUTTER PROFILE 10th S. TO PLEASANT



EAST GUTTER PROFILE PLEASANT TO QUINALT



EAST GUTTER PROFILE PLEASANT TO QUINALT



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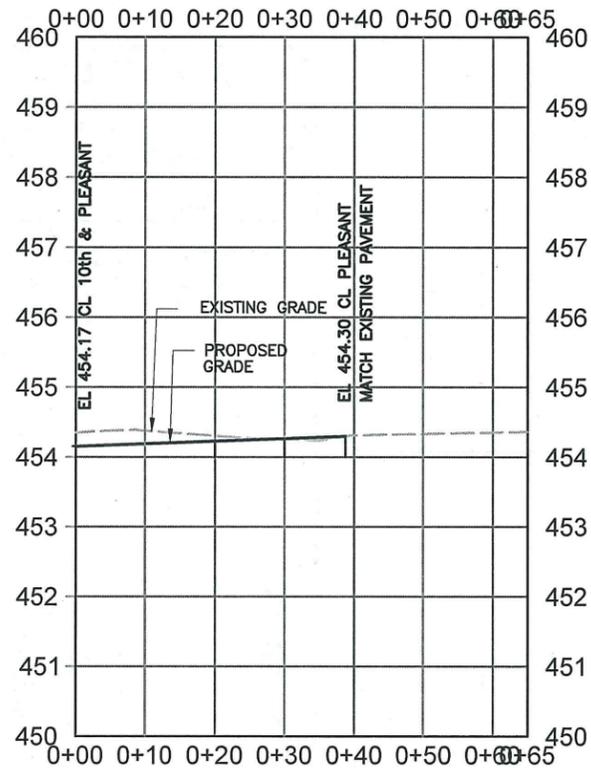
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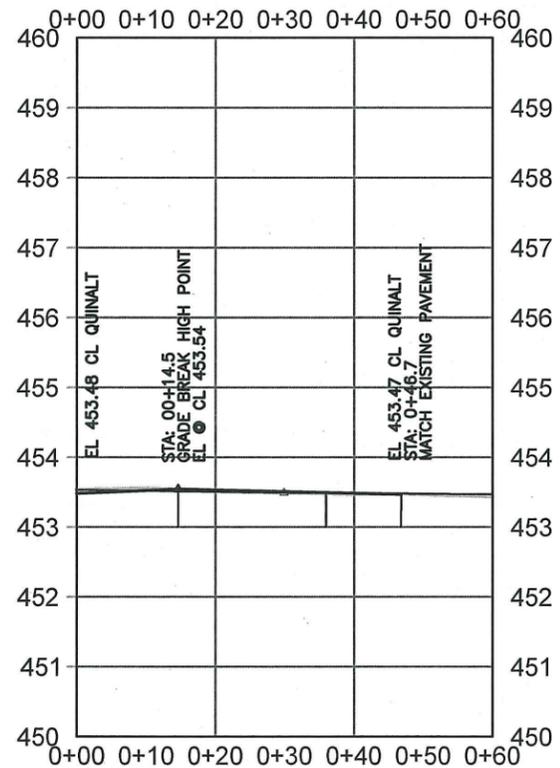
EXPIRES 6/30/12

Scale	SHEET
	ST-9

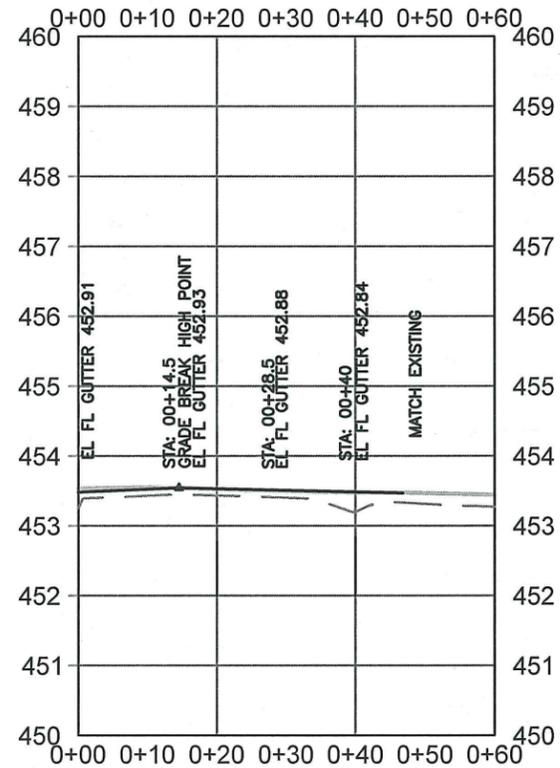
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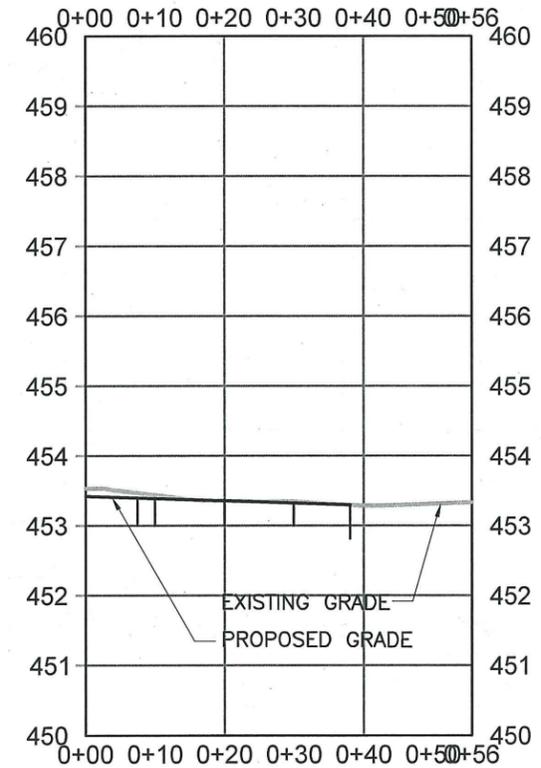
WEST QUINALT PROFILE - CL



WEST QUINALT PROFILE - N



EAST QUINALT PROFILE - CL

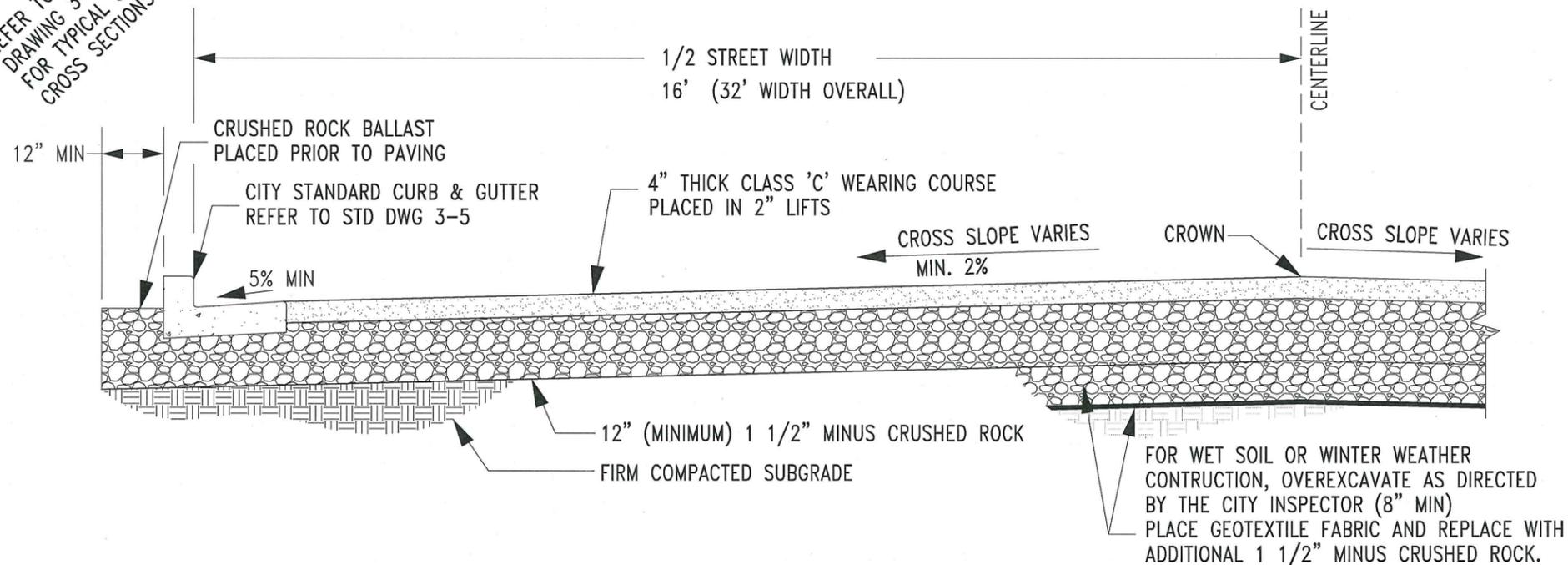


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**TYPICAL STREET CROSS SECTION
 ASPHALT CONCRETE PAVEMENT**

REFER TO STANDARD
 DRAWING 3-12
 FOR TYPICAL SIDEWALK
 CROSS SECTIONS



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EXPIRES 6/30/12

Scale

SHEET

ST-10

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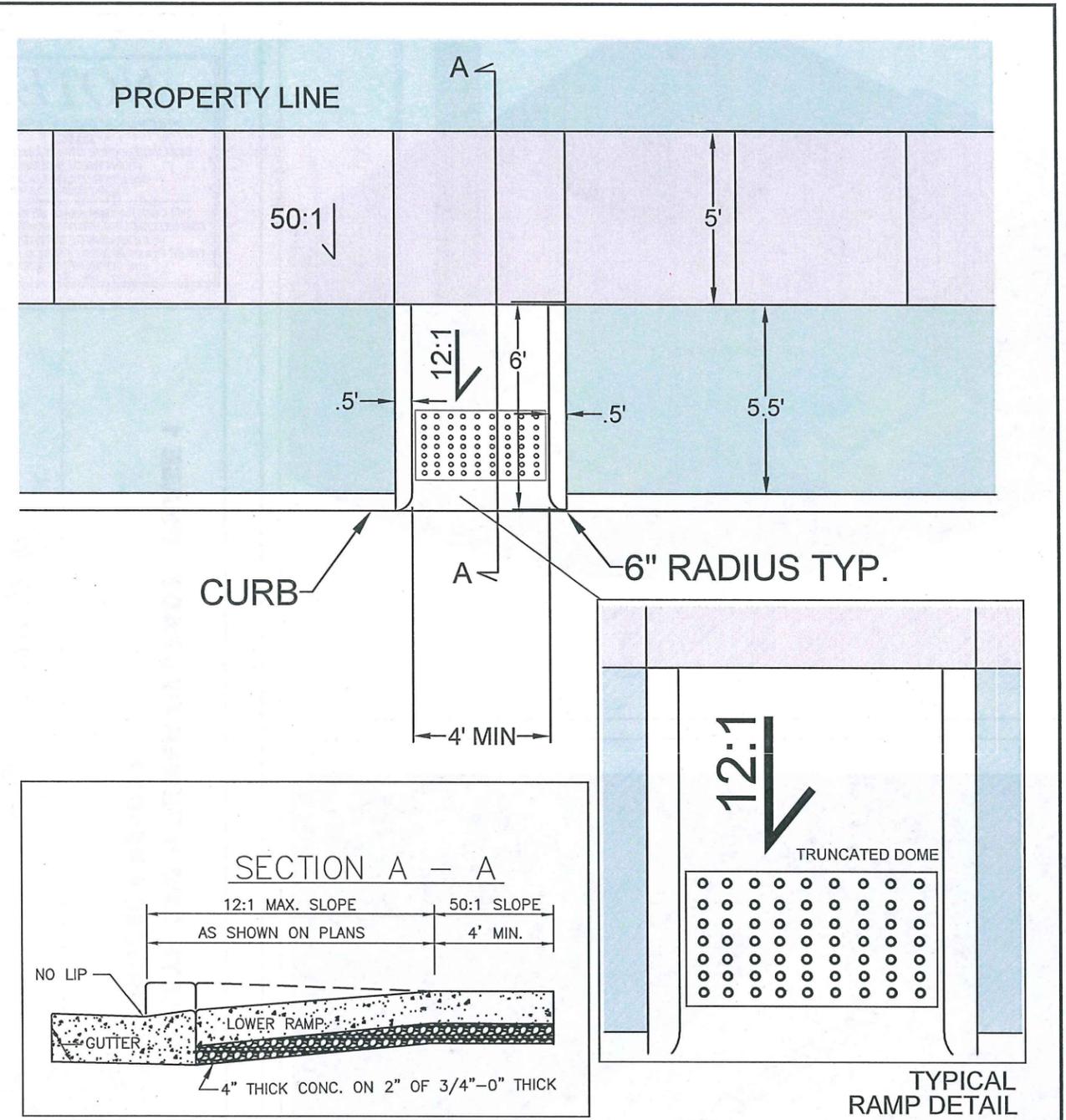
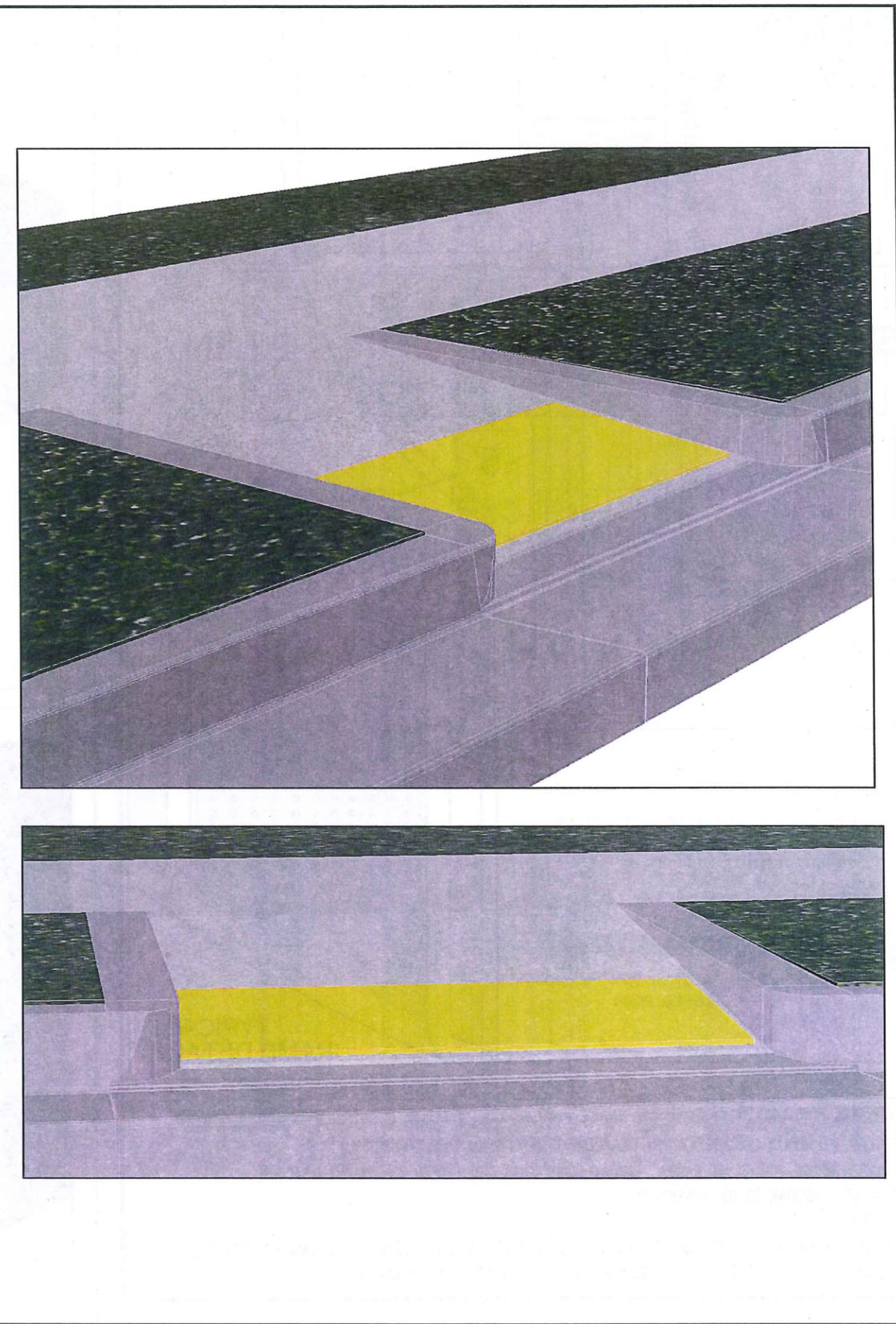


EXPIRES 6/30/12

Scale

SHEET

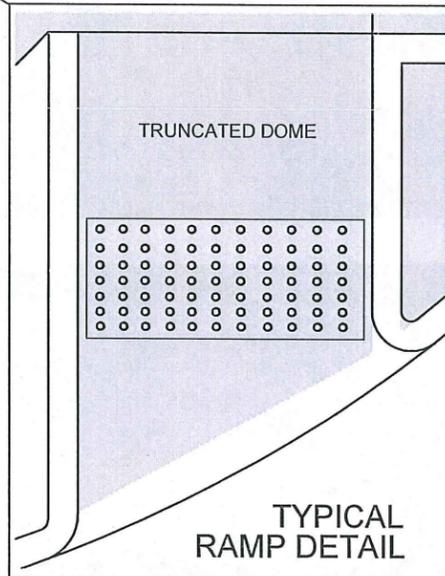
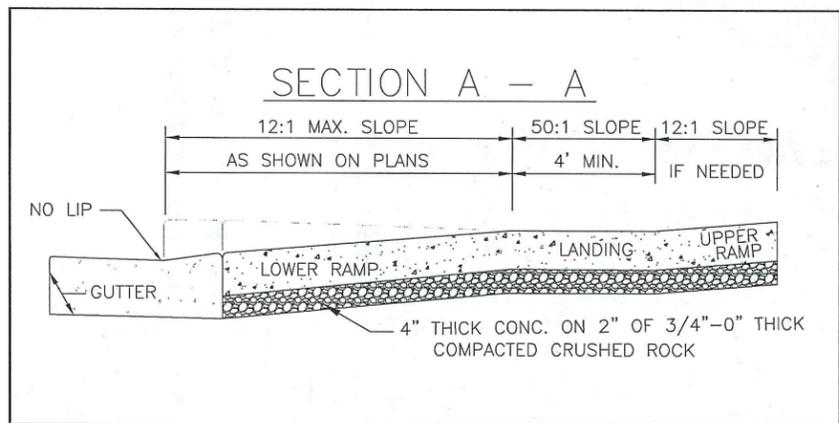
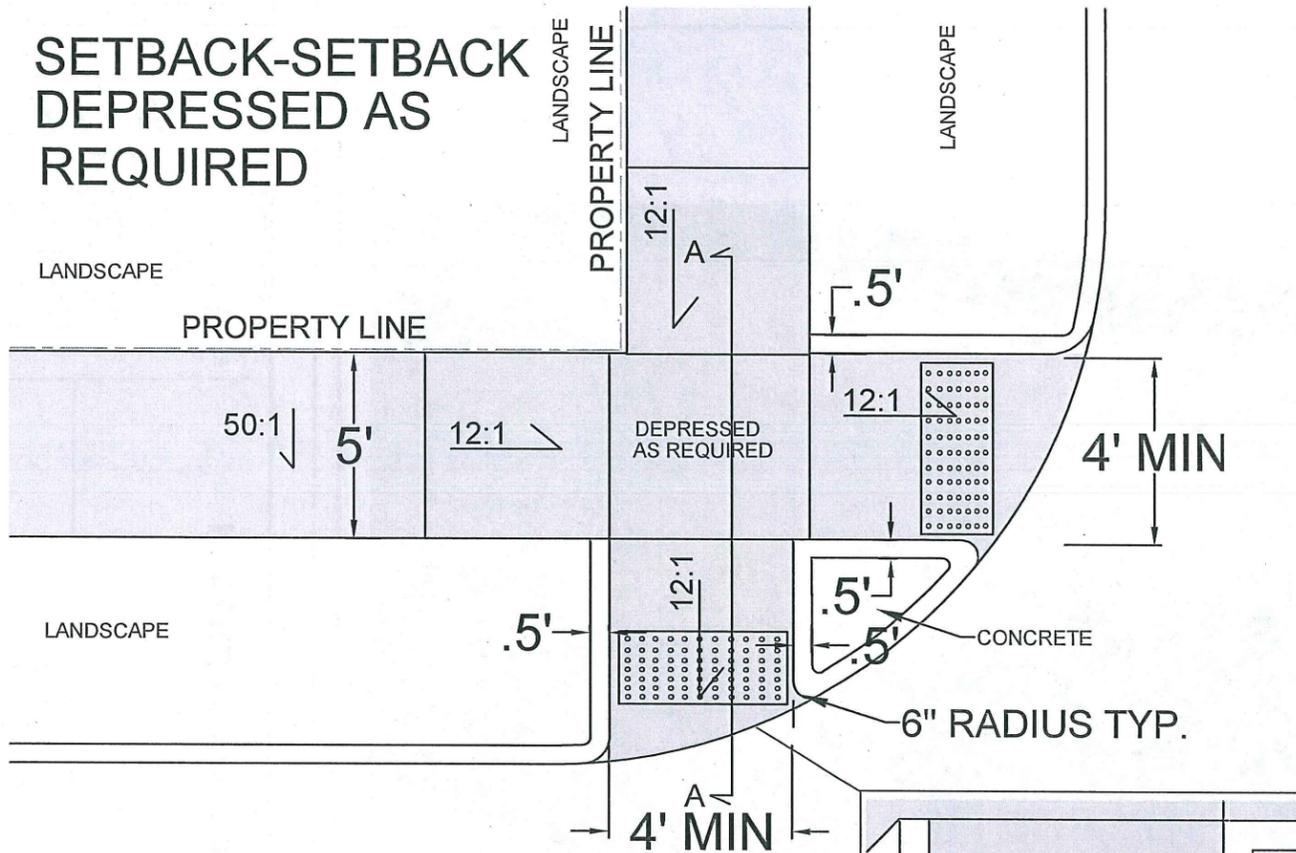
ST-11



- NOTES**
- * NO ABOVE-GROUND FACILITIES (FIRE HYDRANTS, POWER POLES, CATCH BASINS, VALVES, J-BOXES, ETC.) SHALL BE PERMITTED WITHIN THE RAMP AREA
 - * CURB RAMPS AT MARKED CROSSWALKS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS (EXCLUDING CURB TRANSITIONS)
 - * MINIMUM 4' x 4' LANDINGS SHALL BE PLACED AT THE TOP OF ALL RAMPS. LANDING SLOPE SHALL NOT EXCEED 50:1 IN ANY DIRECTION
 - * RAMP SLOPE SHALL NOT EXCEED 12:1 OR LESS RELATIVE TO THE HORIZONTAL
 - * ALL SURFACES SHALL HAVE A BROOM FINISH.
 - * SIDEWALKS, ACCESS RAMPS, AND RESIDENTIAL DRIVEWAYS SHALL BE 3000 PSI FIELD STRENGTH (3450 PSI LAB STRENGTH) 6.0 SACK MIX CONCRETE
 - * CURBS & COMMERCIAL DRIVEWAYS SHALL BE 3500 PSI FIELD STRENGTH (4025 PSI LAB STRENGTH) 6.3 SACK MIX CONCRETE

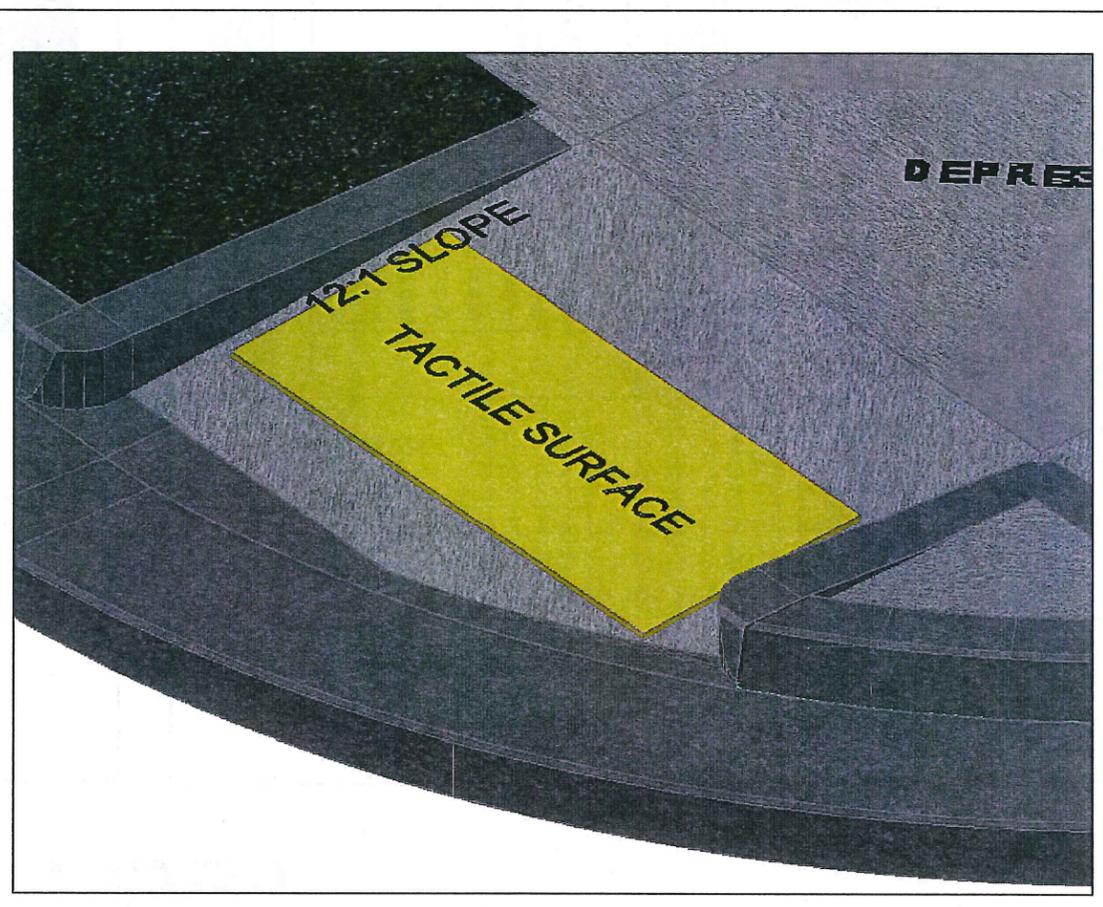
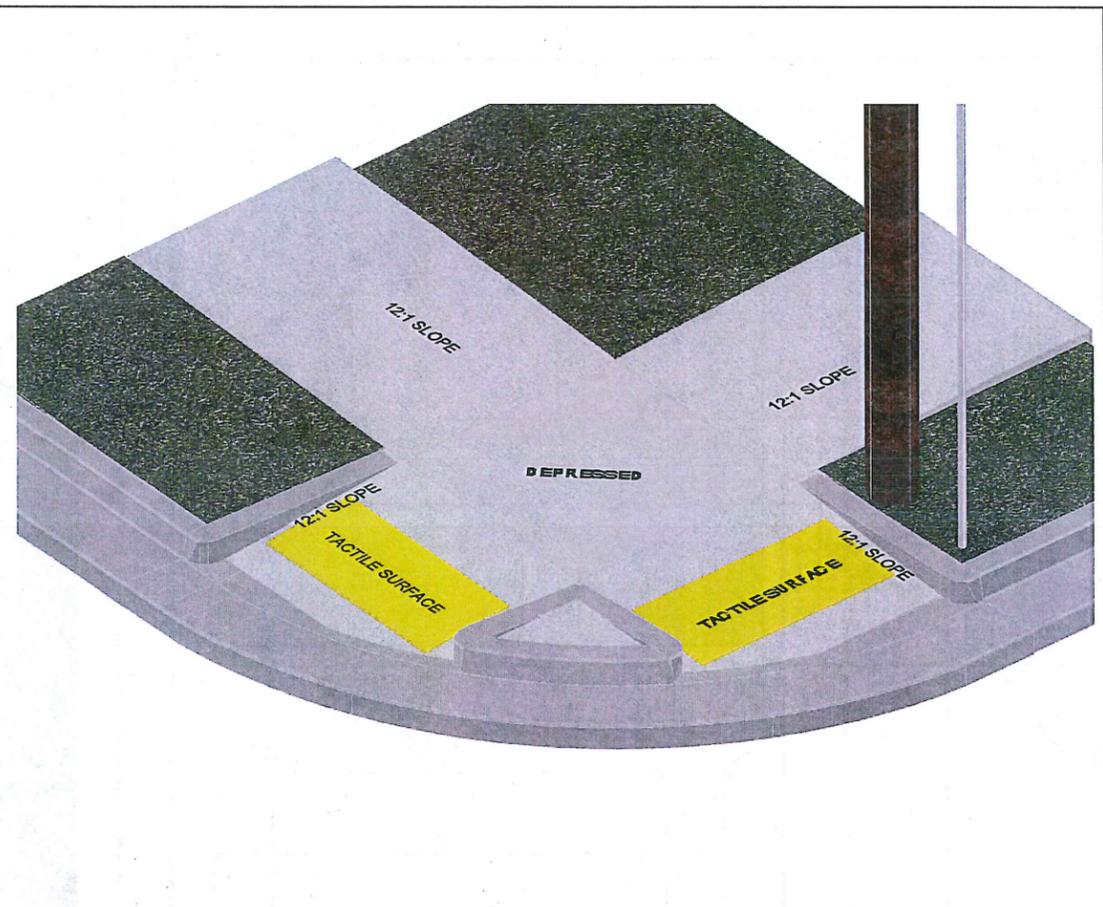
DETAIL 1

SETBACK-SETBACK DEPRESSED AS REQUIRED



- NOTES**
- * NO ABOVE-GROUND FACILITIES (FIRE HYDRANTS, POWER POLES, CATCH BASINS, VALVES, J-BOXES, ETC.) SHALL BE PERMITTED WITHIN THE RAMP AREA
 - * CURB RAMPS AT MARKED CROSSWALKS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS (EXCLUDING CURB TRANSITIONS)
 - * MINIMUM 4' x 4' LANDINGS SHALL BE PLACED AT THE TOP OF ALL RAMPS. LANDING SLOPE SHALL NOT EXCEED 50:1 IN ANY DIRECTION
 - * RAMP SLOPE SHALL NOT EXCEED 12:1 OR LESS RELATIVE TO THE HORIZONTAL
 - * ALL SURFACES SHALL HAVE A BROOM FINISH.
 - * SIDEWALKS, ACCESS RAMPS, AND RESIDENTIAL DRIVEWAYS SHALL BE 3000 PSI FIELD STRENGTH (3450 PSI LAB STRENGTH) 6.0 SACK MIX CONCRETE
 - * CURBS & COMMERCIAL DRIVEWAYS SHALL BE 3500 PSI FIELD STRENGTH (4025 PSI LAB STRENGTH) 6.3 SACK MIX CONCRETE

DETAIL 1

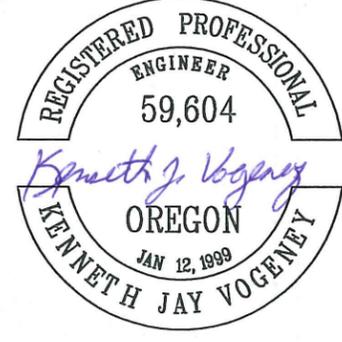


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**10TH AND N SEWER UPGRADE - PHASE 1
 PROJECT P21037**

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 INTERNET www.ci.springfield.or.us



EXPIRES 6/30/12

Scale	SHEET
	ST-12

NOTES:

1. PLACE INLET/CATCH BASIN PROTECTION AT EXISTING FIXTURES (SEE DETAIL ON SHEET E2.)

GENERAL NOTES:

1. CONCRETE WASHOUTS ARE NOT PROVIDED ON THIS PROJECT
2. SAW CUTTING SLURRY IS TO BE VACUMED
3. ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON (OCTOBER 1 TO APRIL 30) OR SEVEN DAYS DURING THE DRY SEASON (MAY 1 TO SEPTEMBER 30) SHALL BE IMMEDIATELY STABILIZED WITH AN APPROVED ESC METHOD (SEEDING & MULCHING WITH STRAW, BARK, COMPOST, OR PLASTIC COVERING, ETC.).

EROSION CONTROL STANDARD NOTES:

- | | |
|--|---|
| <p>A. Approval of this Erosion and Sedimentation Control Plan (ESCP) does not constitute an approval of permanent road or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).</p> <p>B. Approval of this ESCP does not relieve the permit holder and or the contractor from all other permitting requirements. Prior to beginning construction activities, all other necessary approvals shall be obtained.</p> <p>C. An inspection of the erosion control measures by City LDAP staff is required prior to any ground disturbance on the site.</p> <p>D. The erosion and sediment control measures shown on the plan are the minimum requirements for anticipated site conditions. During the construction period, these measures shall be upgraded as needed for unexpected storm events and to ensure that sediment and sediment-laden water does not leave the site.</p> <p>E. The implementation of the ESCP and the construction, maintenance, replacement, and upgrading of the erosion and sediment control measures is the responsibility of the permit holder and or the contractor until all construction is completed and accepted by the City and vegetation/landscaping is established per the required warranty period.</p> <p>F. In the event the ESC facilities identified on the ESCP are not functioning properly, the contractor is responsible for immediately implementing changes to the ESCP as directed by the ESCP engineer or his inspector. The engineer, his inspector or the City may stop all construction activity on site until the erosion problem is corrected and all ESC facilities are functioning properly. If the contractor does not immediately implement changes to the ESCP identified by the ESCP engineer or his inspector, the City may implement the necessary changes and require payment from the contractor prior to project acceptance by the City.</p> <p>G. The boundaries of the clearing limits shown on this plan shall be clearly flagged in the field by the engineer prior to construction. During the construction period, no disturbance beyond the flagged clearing limits shall be permitted. The flagging shall be maintained by the permit holder and or the contractor for the duration of construction.</p> <p>H. The erosion and sediment control measures on active sites shall be inspected and maintained daily and within the 24 hours after any storm event of greater than 0.5 inches of rain per 24 hour period. Measures shall be inspected by the permit holder and or the contractor after each rainfall and at least daily during prolonged rainfall. Any required repairs or adjustments shall be made immediately. The erosion and sediment control measures on inactive sites shall be inspected a minimum of once every two (2) weeks or within 48 hours following a storm event. Written records shall be kept of weekly reviews of the ESC facilities during the wet season (October 1 to April 30) and of monthly reviews during the dry season (May 1 to September 30).</p> <p>I. All erosion and sediment control measures shall be protected from damage at all times. Control measures shall remain in place until permanent or temporary re-vegetation has been stabilized. Any measure that is damaged or destroyed shall be repaired or replaced immediately.</p> | <p>J. Any areas of exposed soils, including roadway embankments, that will not be disturbed for two days during the wet season (October 1 to April 30) or seven days during the dry season (May 1 to September 30) shall be immediately stabilized with an approved ESC method (seeding & mulching with straw, bark, compost, or plastic covering, etc.).</p> <p>K. A supply of materials necessary to meet compliance and implement the LDAP or other best management erosion practices under all weather conditions shall be maintained at all times on the construction site.</p> <p>L. No hazardous substances, such as paints, thinners, fuels and other chemicals shall be released onto the site, adjacent properties, or into water features, the City's storm water system, or related natural resources.</p> <p>M. Street sweeping shall be performed as needed or when directed by the City inspector to ensure public right-of-ways are kept clean and free of debris. Street flushing is prohibited.</p> <p>N. When trucking saturated soils from the site, either water-tight trucks shall be used or loads shall be drained on site until dripping has been reduced to no more than one gallon per hour. Sediment laden water will not be allowed to enter the storm water system</p> <p>O. Extracted ground water from excavated trenches shall be disposed of in a suitable manner without damage to adjacent property, public storm water system, water features, and related natural resources. Approval of a dewatering system does not guarantee that it will meet compliance or be acceptable for use in all situations. Modifications to the dewatering system will be required if compliance can not be met. At no time will sediment laden water be allowed to leave the construction site.</p> <p>P. At no time shall more than one foot of sediment be allowed to accumulate within a catch basin. All catch basins and conveyance lines shall be cleaned prior to paving. The cleaning operation shall not flush sediment laden water into the downstream system.</p> <p>Q. Any required stabilized construction entrances and roads shall be installed at the beginning of construction and maintained for the duration of the project. Additional measures, such as wash pads, may be required to ensure that all paved areas are kept clean for the duration of the project.</p> <p>R. Any permanent flow control facility used as a temporary settling basin shall be modified with the necessary erosion control measures and shall provide adequate storage capacity.</p> <p>S. Where straw mulch for temporary erosion control is required, it shall be applied at a minimum thickness of two to three inches.</p> <p>T. In preparation of the wet season, all disturbed areas shall be reviewed to identify which ones can be seeded in preparation for the winter rains. A sketch map of those areas to be seeded and those areas to remain uncovered shall be submitted to the City by September 15. The City can require seeding of additional areas in order to protect surface waters, adjacent properties, or drainage facilities. Disturbed areas identified for seeding shall be seeded prior to the beginning of the wet season (October 1).</p> |
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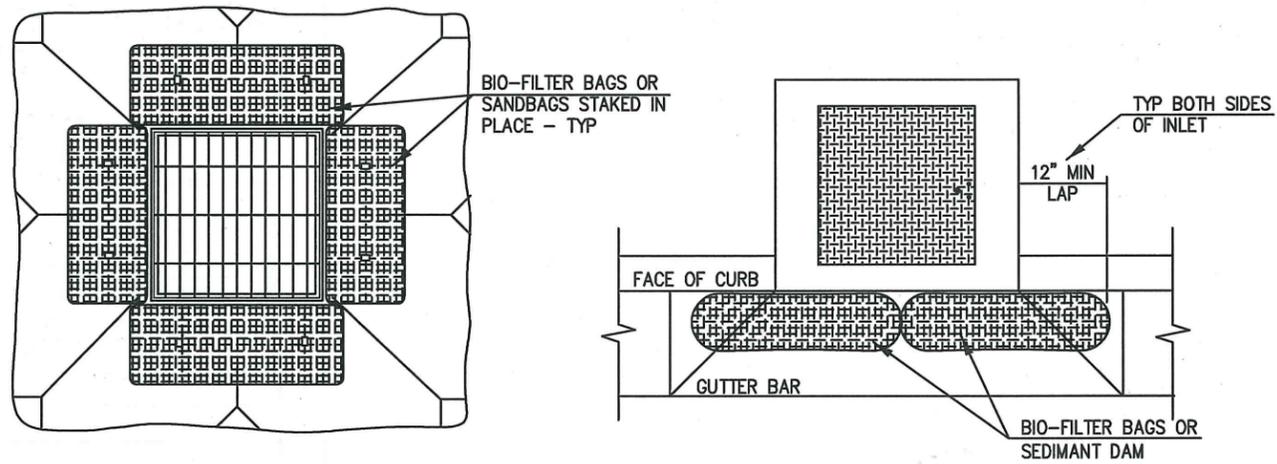


EXPIRES 6/30/12

Scale

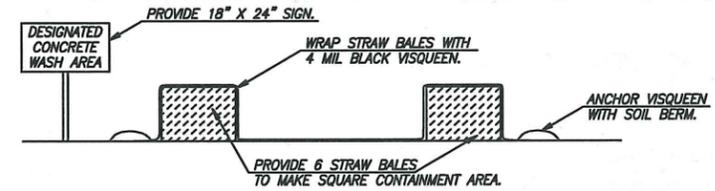
SHEET

ST-13

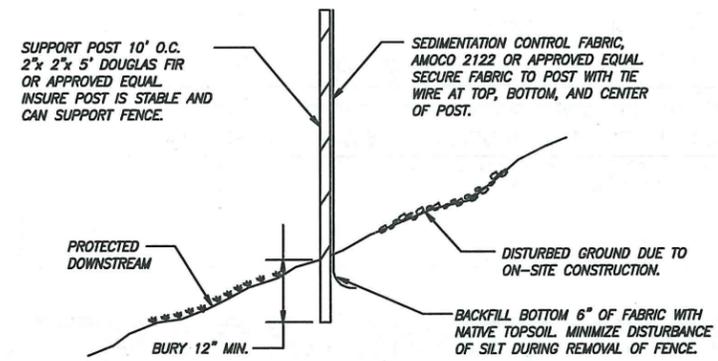


NOTES
 1. PRIOR TO 1st PAVEMENT LIFT, REMOVE BIO-BAG/SANDBAG BARRIERS AND INSTALL BASIN INSERT BAG OR CURB INLET SEDIMENT DAM AT ALL INLET STRUCTURES.

1 DRAINAGE INLET STRUCTURE PROTECTION
 NO SCALE



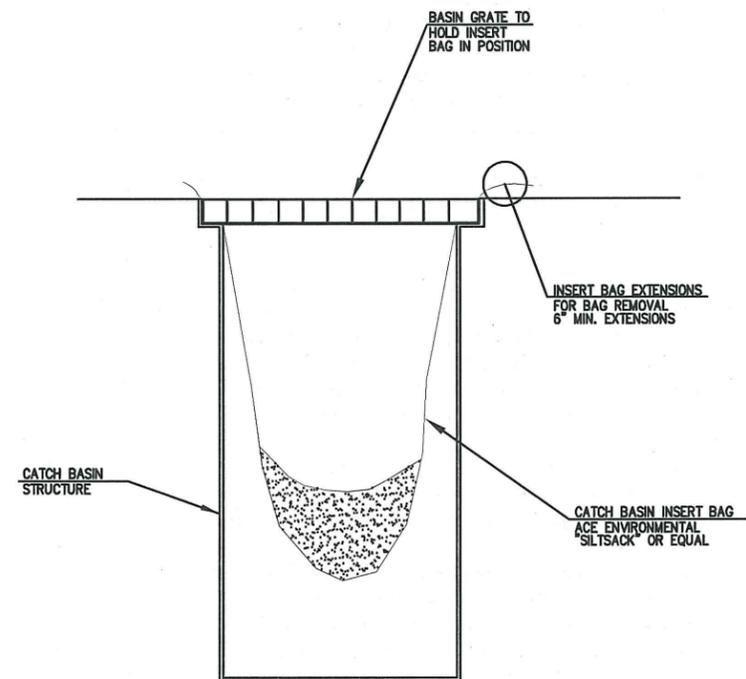
CONCRETE WASH AREA DETAIL
 N.T.S.



SEDIMENTATION CONTROL FABRIC TYPE SILT FENCE
 N.T.S.



INLET PROTECTION



1 CATCH BASIN INSERT BAG
 NO SCALE

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