

City of Springfield Public Improvement Project

Invitation to Bid for:

**P21058
Downtown Parking Modifications**

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
PROJECT NO. P21058
DOWNTOWN PARKING MODIFICATIONS

MANDATORY PRE-BID MEETING

Date: June 12, 2012
Time: 2:30P.M.
Location: City of Springfield
City Hall
Library Meeting Room
225 Fifth Street
Springfield, OR 97477

BID OPENING

Date: June 26,2012
Time: 2:00 P.M.
Location: City of Springfield
City Hall
Jesse Maine Room
225 Fifth Street
Springfield, OR 97477

The deadline for submission of questions prior to bid opening is June 20, 2012 at 5 p.m. as specified in Section 3.3 of the Instruction to Bidders.

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 **26th day of June, 2012** and opened at 2:05 p.m. the same day at City Hall, for the construction of the following public works improvement project in the City of Springfield:

Project No. P21058

Title: DOWNTOWN PARKING MODIFICATIONS

Description: RESTRIPING AND RECONFIGURING ON STREET AND OFF STREET PARKING

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 **\$25** and are available for viewing at this location. Bid documents available on line at http://www.springfield-or.gov/Pubworks/Current_PW_Projects.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 **June 12, 2012 at 2:30 P.M. in Library Meeting Room** meeting room.

All questions should be addressed to Terri White, Engineering Assistant, at 541-726-3628 or twhite@springfield-or.gov. The deadline for submission of questions regarding this Invitation to Bid is June 20, 2012 at 5 p.m. 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.

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 May 29, 2012 and June 5, 2012
Register Guard Publishing May 29, 2012 and June 5, 2012

TABLE OF CONTENTS

State and Local Funding

1. Project Cover
2. Engineer's Seal
3. Table of Contents
4. Invitation to Bidders
5. Instruction to Bidders
6. Contract Form
7. Bid Item List/Terms, Declarations and Bid Submittal
8. First-Tier Subcontractor Disclosure Form
9. Financial Responsibility Form
10. Certificate of Compliance with Prevailing Wage Laws
11. Minority, Women and Emerging Small Business/Disadvantaged Business Enterprise Form
12. Bid Bond Sample
13. Performance Bond Form Sample
14. Payment Bond Form Sample
15. Statutory Public Works Bond Sample
16. List of Contractors Ineligible to Receive Public Works Contracts
17. Special Provisions
18. *Construction Plans and Drawings
19. *Standard Construction Specifications and Standard Drawings
20. *Addenda, if any

**Separate Contract Documents*



Bid Item List

Project No. P21058
Project Title: Downtown Parking Modifications

Bid Items:

Item No.	Description	Approx. Quantity	Per	Unit Price	Total Price Extension
On-Street Base Bid Items:					
0061	Temporary Traffic Control	1	L.S.		
0224-A	Install 4-inch White Plastic Stripe – ‘L’	464	EACH		
0225-B	Install 4-inch White Plastic Stripe – ‘T’	172	EACH		
0234-A	Paint Yellow Curbs Top (2 Coats)	7,000	L.F.		
0238	Lead Paint Disposal Costs	1	L.S.		
0239	Lab Testing for Lead Paint	1	EACH		
0245	Remove Street Signs and Posts in ROW	175	EACH		
0607	Remove Yellow Curb Paint	10.900	L.F.		
0617-A	Remove 4-inch Plastic Pavement Markings	2,150	L.F.		
0670	Install Sign Base and Pole in ROW	109	EACH		
0670-A	Install Sign Pole in Existing Bases in ROW	76	EACH		
On-Street Project Base Bid Item Total					
Bid Option 1 – Add SE Parking Lot:					
0075	Common Excavation	11	C.Y.		
0086	Aggregate Base Rock ¾ -0	20	TON		
0190	6-inch Non Reinforced Concrete Flat 2500 PSI	220	S.F.		
0197	Saw-cut	50	L.F.		
0198	Remove Existing Extruded Curbs	68	L.F.		
0200	Install Extruded 6-inch Concrete Curb	35	L.F.		
0221	Install Traffic Straight Arrows	2	EACH		
0222	Remove Traffic Marking Arrows - Plastic	3	EACH		
0223	Install Traffic Turn Arrows	1	EACH		
0228	Remove Parking Stall Text - Plastic	27	EACH		
0229	Remove Parking “No Parking” Text - Plastic	1	EACH		
0231	Paint 4-inch White Stripe	1,711	L.F.		
0232	Remove Paint 4-inch White Stripe	1,484	L.F.		
0235	Remove Traffic Striping - Plastic	50	L.F.		
0241	Remove All Signs	3	EACH		
0545	4-inch A.C. Paving	36	S.Y.		
0598	Remove Concrete Parking Stops	33	EACH		
0599	Reinstall Salvaged Concrete Parking Stops	10	EACH		
0600	Install New Concrete Parking Stops	42	EACH		
Bid Option 1 Total					
1001	Slurry Seal Additive to Option 1 SE Parking Lot	1,875	S.Y.		
Bid Option 1 with Slurry Seal Additive Total					

Bid Option 2 – Add SW Parking Lot					
0221	Install Traffic Straight Arrows	5	EACH		
0222	Remove Traffic Marking Arrows - Plastic	3	EACH		
0223	Install Traffic Turn Arrows	6	EACH		
0228	Remove Parking Stall Text - Plastic	23	EACH		
0229	Remove Parking "No Parking" Text - Plastic	1	EACH		
0230	Remove ADA Stencil - Plastic	2	EACH		
0231	Paint 4-inch White Stripe	1,757	L.F.		
0232	Remove Paint 4-inch White Stripe	1,525	L.F.		
0234	Install ADA Stencil - Plastic	2	EACH		
0235	Remove Traffic Striping - Plastic	50	L.F.		
0241	Remove All Signs	14	EACH		
0242	Remove All Wood Sign Posts and Base	2	EACH		
0243	Remove All Metal Sign Posts and Base	5	EACH		
0598	Remove Concrete Parking Stops	40	EACH		
0599	Reinstall Salvaged Concrete Parking Stops	10	EACH		
0600	Install New Concrete Parking Stops	42	EACH		
			Bid Option 2 Total		
1002	Slurry Seal Additive to Option 2 SW Parking Lot	2,635	S.Y.		
			Bid Option 2 with Slurry Seal Additive Total		
Bid Option 3 – Add NW Parking Lot					
0221	Install Traffic Straight Arrows		EACH		
0222	Remove Traffic Marking Arrows - Plastic		EACH		
0223	Install Traffic Turn Arrows		EACH		
0228	Remove Parking Stall Text - Plastic		EACH		
0229	Remove Parking "No Parking" Text - Plastic		EACH		
0230	Remove ADA Stencil - Plastic		EACH		
0231	Paint 4-inch White Stripe		L.F.		
0232	Remove Paint 4-inch White Stripe		L.F.		
0234	Install ADA Stencil - Plastic		EACH		
0235	Remove Traffic Striping - Plastic		L.F.		
0241	Remove All Signs		EACH		
0243	Remove All Metal Sign Posts and Base		EACH		
0598	Remove Concrete Parking Stops		EACH		
0599	Reinstall Salvaged Concrete Parking Stops		EACH		
0600	Install New Concrete Parking Stops		EACH		
			Bid Option 3 Total		
1003	Slurry Seal Additive to Option 3 NW Parking Lot	1,555	S.Y.		
			Bid Option 3 with Slurry Seal Additive Total		
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 P21058 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 \$500 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 60 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.

Addendum Number	Addendum 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 as described in the Instruction to Bidders Section 5.1 Submittal and Form of Bid.

SPECIAL PROVISIONS

Downtown Parking Modification P21058

NOTE: All work shall be in accordance with the City of Springfield Standard Construction Specifications (<http://www.springfield-or.gov/pubworks/specs/specs.htm>) unless otherwise specified herein.

PART A – GENERAL

A1. Project Overview

Special Note: The goal of this project is to accomplish as much work as the budget will allow with the intent to accomplish all of work shown on the plans. Note that the plans for this contract consist of two plan sets titled as follows:

- A. *Downtown On-Street Parking Plan* sheets 1-11
- B. *City Hall Parking Lot Redesign Project* sheets 1-8

The project has been divided into four parts with part one as the Base Bid project which will be constructed. The remaining three parts are Optional Bid “packages” (Optional Bid 1, Optional Bid 2 and Optional Bid 3) that may or may not be included in the contract award. The Base Bid and Optional Bid “packages” are described below:

1. *Base Bid* - On street modifications as depicted on the plans titled *Downtown On-Street Parking Plan* – Base construction project.
2. *Optional Bid 1* - S.E. Parking Lot as depicted on plan sheet 2 of 8 of the plans titled *City Hall Parking Lot Redesign Project*.
3. *Optional Bid 2* - S.W. Parking Lot as depicted on plan sheets 3 and 5 of 8 of the plans titled *City Hall Parking Lot Redesign Project*.
4. *Optional Bid 3* - N.W. Parking Lot as depicted on plan sheets 4 and 6 of 8 of the plans titled *City Hall Parking Lot Redesign Project*.

The slurry seal work shown on the Bid Item List for each Optional Bid “package” is an Additive Bid item for that Optional Bid “package” and may or may not be include in the contract at award. The notes, details, and specifications shown on the plans titled *City Hall Parking Lot Redesign Project* shall apply all of the applicable work within each Optional Bid “package” regardless of which plan sheet includes the notes, details and specifications.

This project consists of constructing pavement and traffic control modifications to both on-street and off-street parking areas in downtown Springfield. The project area is bounded by Mill Street on the west, 10th Street on the east, B Street on the north and South A Street on the south as described in the attached plans and specifications. In general this involves two distinct parking types:

1. On-Street Parking Modifications include:
 - a. Removal, and reapplication of pavement and curb markings
 - b. Removal, and reinstallation of street sign bases and poles

- c. Exact locations for reinstallation and reapplication will be marked for the Contractor by the City of Springfield.
2. Off-Street Parking Modification include Optional Bids 1-3:
- a. Removal of concrete wheel stops
 - b. Removal of concrete curb and planting bed.
 - c. Construct new curb and pavement.
 - d. Slurry seal lots (THIS IS BID AS AN ADDITIVE BID ITEM UNDER EACH OPTIONAL BID 1-3). It will be added to the project as budget allows.
 - e. Restripe parking lots
 - f. Install/Reinstall wheel stops and provide additional stops as necessary.
 - g. Removal of and reinstallation of all parking lot sign bases and poles.
 - h. Exact locations for reinstallation and reapplication will be marked for the Contractor by the City of Springfield.

A2. Overall Project Description and Scope of Work

1. Operations will include but not limited to: the work described above and in the attached plans and specifications, protection of the public from operations, and protection of materials and features within the work area that remain. All work shall be done in accordance with the highest standards of practice in the industry.
2. Codes and Standards: All work shall be furnished in conformance with all applicable codes, statutes and standards that apply to this work including but not limited to:
 - a. 2010 Oregon Structural Specialty code or current edition thereof.
 - b. Any applicable Federal, State, or City of Springfield Codes, Standards and Ordinances, including these contract documents and City of Springfield Standard Construction Specifications (current edition and most recent revision)
 - c. Contractor is responsible for acquiring and paying for all permits (Except ODOT Permit), scheduling necessary inspections and providing traffic control plans to ODOT and the City of Springfield. The City of Springfield will obtain required ODOT permitting. Pioneer Parkway and Main Street are the locations where ODOT permits are required.
3. The Contractor shall determine tools and equipment necessary for execution of project. The Contractor shall determine the materials and labor necessary to furnish adequate protection for surfaces and objects inside and outside the work area and for adjoining work that could be damaged by preparation and/or work activities. Care shall be taken not to damage any of the existing asphalt or concrete during the work. Any damage shall be repaired at the Contractor's sole expense.
4. All work performed shall carry a minimum 1-year warranty from date of acceptance by City Council on materials and workmanship.
5. Contractor is responsible for leaving the site in a neat and clean condition during and after the project. This will include clean up of all debris, safe and sanitary disposal of all material, containers, etc. generated during completion of the project. Further, Contractor shall remove waste and trash generated by their work. This shall be done at the end of each work day. Take all standard professional precautions to avoid contamination of the environment as required by law and to protect the public from operations. Contractor shall prepare and submit for approval a plan for containment that outlines how Contractor will keep contaminants, waste and debris out of the City's Storm Water

system. This shall include such items as barriers, catch basin liners, dams, vacuuming, etc. to keep debris and contaminants out of the storm water system.

6. Work on Saturdays and/or Sundays may be required to avoid crowd conflicts between Contractors and business patrons/staff. Contractors shall work with the City to adjust the schedule to accommodate the work and special events or activities being held while the work is being completed.
7. Work within Two (2) blocks of 5th and “A” Streets shall occur from Saturday to Thursday and not on Fridays in order to NOT disturb the “Friday Farmer’s Market”.
8. Note: “Brand Name or Equal Specification” means a specification that uses one or more manufacturers’ names, 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 a specification authorizes bidders or proposers to offer goods or services that are equivalent or superior to those brands named or described in the specifications. The City shall determine if the proposed substitution is equal or superior based on submittals given to us during the proposal process. All Contractors will be notified of the “equal or superior substitution” prior to submitting their proposals, allowing everyone to bid the approved alternate product if desired.
9. Painting over existing markings to obliterate the markings is not permitted.

PART B – CONSTRUCTION

Note: See traffic Section C for additional special provisions.

ON-STREET

- B1. Curb Repair – No Bid Item** Spalling, broken or damaged curb shall be reported to the field engineer for determination as to whether or not repair, removal and replacement (by others) is to be done on the damaged area. This item is for the repair of curb that has pre-existing damage and does not cover damage caused by the Contractor in the course of performing this work.

OFF-STREET

- B2. Common Excavation – Bid Item 0075** as shown in sheet 2 of “*City Hall Parking Lot Redesign Project*” plans and note 5.
- a. Saw-cut (see bid item 0197) and remove ragged edge of surrounding pavement. Cut enough to allow at least 2’ of pavement beyond where the curb was removed unless it crosses into another material. In that event use the material break as the edge of repair.
 - b. Remove debris and dig out any plants, mulch, topsoil and other deleterious material a minimum depth of one foot below paving.

Measurement and Payment shall be per CUBIC YARD.

- B3. Schedule with City Maintenance/Field Engineer** to have the off-street parking lot closed. Contractor shall close the lot either the night before or early the day of work to assure that it is empty.

- B4. Remove Traffic Marking Arrows – Plastic – Bid Item 0222
Remove Parking Stall Text – Plastic – Bid Item 0228
Remove Parking “No Parking” Text – Plastic – Bid Item 0229
Remove Traffic Striping – Plastic – Bid Item 0235**

The bid items listed above shall be removed as described in Special Provision C5 for paint and Special Provision C6 for plastic below.

Measurement and Payment for Bid Items 0222, 0228, 0229 shall be per EACH and Bid Item 0235 shall be per LINEAR FOOT.

- B5. Remove Concrete Parking Stops – Bid Item 0598** in parking lots under buildings.
- Remove any loose rebar or stakes used to hold wheel stops in place.
 - If stakes are tight and will damage pavement during removal Contractor shall either drive the stake to just below the pavement surface ¼” min, or cut the stake just below the pavement surface.
 - Salvage for reinstallation where practical and when undamaged.

Measurement and Payment shall be per EACH stop.

- B6. Reinstall Salvaged Concrete Parking Stops – Bid Item 0599** reinstall *salvaged* stops in new locations as shown on plans.

Measurement and Payment shall be per EACH installed.

- B6. Install New Concrete Parking Stops – Bid Item 0600** as shown on plans.

Measurement and Payment shall be per EACH installed.

- B7. Remove Existing Extruded Curbs – Bid Item 0198** as shown on sheet 7 of *City Hall Parking Lot Redesign Project* plans. Saw-cut as required.

Measurement and Payment shall be per LINEAR FOOT.

- B8. Install Extruded 6-inch Concrete Curb – Bid Item 0200** as shown on sheet 7 of *City Hall Parking Lot Redesign Project* plans.

Measurement and Payment shall be per LINEAR FOOT.

- B9. Saw-cut – Bid Item 0197** as indicated on plans A.C. or concrete removal where adjoining material will remain.

Measurement and Payment shall be per LINEAR FOOT.

- B10. Aggregate Base Rock 3/4-0 – Bid Item 0086** Place as shown on plans in excavated area to be paved at 12” depth in 6” lifts compacted. See standard spec. 305.

Measurement and Payment shall be per TON placed and compacted.

B11. 4-inch A.C. Paving – Bid Item 0545 as shown on plans. See Standard. Spec. 310. AC shall be placed in (2) 2” lifts, compacted, Level 2, 1/2-Inch Dense HMAC as defined in the ODOT Standard Specifications for Construction.

Measurement and Payment shall be per SQUARE YARD placed and compacted.

B12. 6-inch Non Reinforced Concrete Flat 2500 PSI – Bid Item 0190 as shown on plans. New concrete island as shown on page 7 of 8 of the “City Hall Parking Redesign Project” plans shall be 6-inch thick non reinforced 2500 psi concrete. Concrete is to be placed over existing asphalt between boundaries of extruded curb and have a broom finish.

Measurement and Payment shall be per SQUARE FOOT placed.

B13. Paint 4-inch White Stripe – Bid Item 0231 as shown on plans and meet the following;

1. Painting shall be applied when pavement treatment (if used) has cured to the manufacturer’s specifications and to the manufacturers specifications for the paint. The Contractor shall then layout and paint the parking lots according to the plans. Contractor shall call for inspection of surface condition and paint location placement prior to painting.
2. The paint shall be installed using paint that conforms to the Oregon Standard Specifications for Construction 2008 Edition, Section 00850 – Common Provisions for Pavement Markings, and Section 00860 – Longitudinal Pavement Markings – Paint. White paint shall be listed on the current QPL with the State of Oregon. The Contractor shall submit a materials list for approval prior to construction.
3. All space delineation stripes, and hatch marks shall be 4-inch wide white stripes.
4. Allow paint to dry per manufacturer’s specifications and prior to re-opening lot for use.

Measurement and Payment shall be per LINEAR FOOT.

B14. Slurry Seal Additive to Options 1,2 and 3 – Bid Items 1001, 1002, 1003 shall represent additional *options* to the project and will be added to the contract as budget allows at the sole discretion of the City. Type I Slurry Seal is to be placed on the three parking lots in the plan set according to the “Slurry Seal Specifications” below at the end of these Specials Provisions. The Slurry Seal Additive Option may be added or deleted from the contract by the City prior to contract award, or by change order following contract award, without penalty or negotiation.

1. When the A.C. paving is complete, the entire parking lot surface shall be cleaned by washing, sweeping, blowing, vacuuming, or other methods recommended by the crack and seal coatings manufacturer, as necessary to remove moisture, dirt, grease, oils, acids, laitance, curing compound of Portland cement concrete, or other foreign matter that would reduce the bond between the pavement and crack sealing and slurry sealing materials.
2. Crack sealing will be done by the city maintenance division prior to slurry seal. The Contractor shall coordinate and verify prior to placing slurry seal that all crack sealing has been completed. The joints of new paving, all rebar and stake holes and significant (over ¼” wide) pavement cracks shall be sealed with approved crack sealing material according to City of Springfield Standard Specifications and manufacturer’s instructions.

3. When the crack sealing compound has cured according to manufacturer's specifications, Contractor shall Slurry Seal all asphalt surfaces in the parking lot.
4. All Slurry Sealing shall be done as described in the specifications and manufacturer's instructions.
 - a. **Slurry Seal shall be Type 1** as detailed in the Specifications as follows at the end of the special provisions herein.
 - b. **Slurry Seal shall be bid as an Additive Bid Item for the parking lots only. Bid Items 1001, 1002, 1003** shall be bid as an Additive Bid Item for each parking lot separately.

Measurement and Payment shall be per SQUARE YARD.

Note: See additional specifications below for Slurry Seal Specifications.

B15. Remove All Signs – Bid Item 0241

Remove All Wood Sign Posts and Base – Bid Item 0242

Remove All Metal Sign Posts and Base – Bid Item 0243

Signs, sign poles, and sign bases as shown on plans "City Hall Parking Redesign Project" for the bid items listed above shall be removed. The signs shall be given to the City's Maintenance Division. Metal sign posts may be removed in a manner that will cause the least disturbance to the pavement. If posts are cut then they shall be ground down below surface and filled with crack sealant. Wood posts shall be removed, saw cut edges, patched with an approved A.C. patch and crack sealed.

Measurement and Payment shall be per EACH removed.

- B16. Install ADA Stencil Plastic – Bid Items 0234** See item C2 under traffic for installation of Heat Fused Pavement Marking. See "Pavement Marking Stencil" layout sheet at end of this document for sizing and configurati.

Measurement and Payment shall be per EACH installed.

PART C: TRAFFIC CONTROL

- C1. Temporary Traffic Control - Bid Item 0061** This item shall include the submission of a traffic control plan 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 Manual on Uniform Traffic Control Devices (including the Oregon Supplements) and the Oregon State Highway Division's "Signing and Flagging Standards for Short-Term Work Zones." The plan must illustrate changes in lane usage, locations and types of traffic control devices, and shall encompass advanced warning for all intersecting streets.

- *Traffic Control Plan:* A traffic control plan must be submitted for all projects in the public right-of-way no later than three (3) working days before work begins. If this plan is not received and approved prior to starting, the field 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. 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.

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. Temporary traffic control signs shall be constructed of **'Soft'** (fabric) type material. Signs shall be mounted on 'flexible' (spring-loaded) sign stands. All hard signs (wood, metal, and plastic-card) must only be mounted on approved barricades or posts.

- *Temporary Parking Removal:* This project will require the temporary removal of on-street parking to accomplish curb paint removal and curb painting. The Contractor shall be responsible to coordinate the placement, and removal of 'No Parking' zones within the project area. The Contractor shall provide, and place 'No Parking' signs, mounted on Type I Barricades to identify parking zones that will be closed to public use. These 'No Parking' signs shall be labeled with the date(s) and time(s) the parking will be closed for construction work. *The Contractor shall submit a separate Traffic Control Plan (TCP) to the traffic engineer detailing the projected date(s) that each zone will be posted 48 hours in advance of the project activity.*
- *Work Zone Limits and TCP:* The Contractor shall submit a separate Traffic Control Plan (TCP) to the traffic engineer detailing the projected date(s) and times that each zone will be posted 48 hours in advance of the project activity. Curb paint or parking zone removal **shall be staged in limited zones** to reduce the impact on the public. The Contractor shall develop the separate Traffic Control Plan (TCP) to outline these limited zones. These zones shall be restricted to the removal and/or installation operations to **one side of a street block** before proceeding to another location. Vehicle and pedestrian safety shall be maintained, and impacts to business and homeowners shall be a top priority. The Contractor shall identify any **areas of concern** on the TCP that could be damaged due to his operations and discuss these areas with the traffic engineer for approval to proceed prior to such operations.
- *Existing Signage:* 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.
- *Construction Zone Work Hours:* Unless otherwise directed by the Engineer, normal right-of-way construction work zones with active project operations are to be conducted between the hours of **8:15 am to 4:15 pm daily**. Other circumstances, such as holidays, special events, or other construction) may affect the work zone hours. Any deviation of these work zone hours must be approved by the field engineer prior to construction. Traffic signals or other traffic control devices that need to be turned off by City of Springfield personal shall be requested to the field engineer 48 hours in advance of this activity. Traffic signals that need to be 'reconfigured' due to construction activities that effect lane usage need to be coordinated with the traffic engineer 72 hours prior to any lane closures.
- *Business Access:* Contractor shall take reasonable steps to provide public access to any business that is blocked, partially blocked, or difficult to access or confusing in any way for the traveling public due to operations of the Contractor. The Contractor shall provide adequate traffic control and signs to clarify the alternate or existing access available to the business. Measurement and payment of traffic control devices for temporary business access shall be cost incidental to Bid Item No. 0061, Temporary Traffic Control.

- *Detours:* If a detour established by the Contractor causes or may cause difficulty or confusion regarding access to a business, adequate directional signs shall be provided to direct the traveling public to the business. Measurement and payment of traffic control devices for detours shall be cost incidental to Bid Item No. 0061, Temporary Traffic Control.
- *Measurement and Payment:* Payment shall be LUMP SUM for this bid item.

**C2. Install 4-inch White Plastic Stripe – ‘L’ - Bid Item 0224-A
Install 4-inch White Plastic Stripe – ‘T’ - Bid Item 0225-B
Install Traffic Straight Arrows – Bid Item 0221
Install Traffic Turn Arrows – Bid Item 0223**

The bid items listed above shall include all labor, materials, and equipment to install heat fused retro reflective thermoplastic pavement markings (ODOT - Type ‘B’ Preformed, Fused Thermoplastic Film) as detailed on the plans (ON STREET PARKING STRIPING DETAIL 1), and as described in the specifications. Thermoplastic materials must be approved by the traffic engineer prior to installation.

- *Scope:* This work shall consist of providing all labor, traffic control, material and equipment necessary to install thermoplastic pavement markings as shown on the plans or as directed by the engineer. Layout of all pavement marking will be provided by the City of Springfield.
- *Materials:* Retro reflective thermoplastic preformed pavement markings material shall be suitable for adhering to asphalt and concrete pavements by means of heat fusion. The thermoplastic material must conform to AASHTO M249-79 (86) with the exception of the relevant differences due to the material being preformed. The markings shall contain a minimum of 30% glass spheres homogeneous blended throughout the material with a securely bonded protruding exposed layer of beads that provide immediate retro-reflectivity. The markings shall have average minimum retro reflective intensities of 250 millicandelas for white and 150 millicandelas for yellow as measured with a Mirolux retro-reflectometer. The material shall have a minimum skid resistance value of 45 BPN. The material shall have a thickness of 125mm, and 90mm for Bike Lane Markings. Qualified pavement material shall meet or exceed the standards and specifications of the registered brand products) known as “PreMark” manufactured by Flint Trading Inc., or approved equal.
- *Installation:* The markings shall be applied in accordance with the manufacture’s recommendations on clean and dry surfaces. New concrete surfaces must be sandblasted to entirely remove curing compound. Marking configuration shall be in accordance with the “Manual on Uniform Traffic Control Devices”.
- Markings specified for newly paved asphalt concrete surfaces, shall be capable of being applied, as the original permanent marking, on the day the surface is paved.
- The preformed thermoplastic material shall be fused to the pavement by means of a propane torch which is recommended by the product manufacture and approved by the City.
- *Measurement and Payment:* Payment shall be for EACH, heat fused, parking marking installed and accepted by the Engineer.

C3. Paint Yellow Curbs Top (2 Coats) - Bid Item 234-A This item shall include all labor, materials and equipment to paint curbing yellow as shown on the plans, as described in these specifications, or as directed by the field engineer.

- *Scope:* This work shall consist of painting the top, horizontal surface (5-6”) of designated curbing yellow. The curb side face shall remain free of paint. Spray nozzle control(s), and shrouding shall be used as necessary to maintain a precise surface line. Layout for all curb marking will be provided by the City of Springfield.
- *Materials:* Materials for this bid item shall conform to the Oregon Standard Specifications for Construction 2008 Edition, Section 00850 – Common Provisions for Pavement Markings, and Section 00860 – Longitudinal Pavement Markings – Paint. Yellow paint shall be listed on the current QPL with the State of Oregon. The Contractor shall submit a materials list for approval of the traffic engineer prior to construction.
- *Equipment & Installation:* Equipment and installation requirements for this bid item shall conform to the Oregon Standard Specifications for Construction 2008 Edition, Section 00850 – Common Provisions for Pavement Markings, and Section 00860 – Longitudinal Pavement Markings – Paint. The Contractor shall submit the type of equipment proposed for this work for approval of the traffic engineer prior to construction. All curbs shall receive two coats of paint.
- *Measurement and Payment:* Payment shall be per LINEAR FOOT of yellow curb paint installed and accepted by the field engineer.

C4. Remove Street Signs and Posts in ROW – Bid Item 0245 This item shall include all labor, materials, and equipment to remove a street sign pole and sign(s) as shown on the plans, described in these specifications, or as directed by the field engineer.

- *Scope:* This work shall consist of removing an existing street sign assembly, and delivering it to the City of Springfield Maintenance yard located at 201 S. 18th Street. The Contractor shall contact the Sign/Signal Maintenance Supervisor, Keith Miyata at (541) 726-4612 to arrange for delivery of all removed signs. Signs delivered to the Maintenance yard shall be sorted, and organized by type (pipe, wood, or metal channel) as directed by Mr. Miyata. All signs mounted on 2” pipe sleeve that are removed shall required a 2” Countersunk Brass Tap Plug (Part #PFEP53K) to be installed in the abandoned sign base. The City of Springfield will supply these plugs to the Contractor.
- *Materials:* A 2” Countersunk Brass Tap Plug (Part# PFEP53K) shall be supplied by the City, and installed by the Contractor in each 2” pipe sign base that has a sign removed.
- *Equipment:* The Contractor shall use equipment/tools necessary to remove street signs in a safe a professional manner. The Contractor shall submit the type of equipment proposed for this work for approval of the field engineer prior to construction.
- *Measurement and Payment:* Payment shall be for EACH street sign assembly removed, delivered, and accepted by the field engineer.

**C5. Remove Paint 4-inch White Stripe – Bid Item 0232
Remove Yellow Curb Paint – Bid Item 0607**

The bid items listed above shall include all labor, materials and equipment to remove, transport, and safely dispose of, curb/stripping paint on City streets and parking lots using one or more of the following method(s) as detailed on the plans, these specifications, or as directed by the field engineer.

- *Scope:* The work consists of providing all labor, traffic control, material and equipment necessary to remove **90% or more** of the existing paint markings as indicated on the drawings or as directed by the field engineer without damage to the curb or surrounding area. The Contractor will have the choice of two types of Paint Removal methods, and shall determine the best method, or combination of methods to remove curb paint and present his removal plan to the field engineer for approval prior to beginning the project.

Method ‘A’ - Ultra-High Pressure Water Jetting

- *Equipment:* Paint removal shall be performed with field engineer approved, ultra-high pressure water jetting equipment capable of removing 90% or more of the existing paint. The equipment shall be capable of operating at a minimum of 26,000-psi water pressure with water flow rates not exceeding 3.5 gallons per minute. The removal jetting head shall be a minimum of 8 inches wide, and contain 16 or more jet nozzles. The removal head must be capable of rotating at least 1,500 rpm. The equipment shall be capable of removing 500 feet of curb paint in an 8-hour period, and may be mobile based, or truck mounted. The removal shall leave the surface clean and ready to accept new curb paint if required. Any significant damage to the curbing surface or surrounding area caused by the Contractor’s operation shall be repaired at the Contractor’s expense. The field engineer shall approve any repair methods and procedures prior to any Contractor’s repair work. Protective shrouding shall be incorporated on the jetting system to eliminate damage to any surrounding plant, roadway, and/or sidewalk area. All equipment shall be operated to remove curb markings in the same direction as the traffic flow.
- *Materials:* Water shall be potable water obtained from a fire hydrant, municipal source or well. Lake or river water will not be allowed. The use of chemicals, abrasive materials, grinders, detergents or salt water will not be allowed.
- *Waste Removal:* Removal of all curb paint residue shall be by accomplished by a high performance vacuum system. The vacuum system may be self propelled or trailer mounted and must be capable of removing, transporting and storing waste materials at a rate of 850 cubic feet of air per minute through a 4” diameter suction hose. The Contractor shall install approved ‘bio-bag’ filters at all storm drain curb inlets for each curb line section that is in active curb paint removal. The ‘bio-bags’ shall be removed as each zone is completed.

Removed paint shall be stored and contained in bags or drums. Once all the paint waste/debris has been containerized, a hazardous waste determination must be done on the waste. Analytical testing must be done using EPA approved methodology. Lead based paint residue is considered to be a hazardous waste if the concentration of lead is 5 ppm or greater using the Toxicity Characteristic Leaching Procedure (TCLP). If the paint residue analytical result for lead is 5 ppm or greater, the waste must be disposed of at an ODEQ permitted hazardous waste disposal facility. If the paint residue analytical result for lead is less than 5 ppm, the waste may be disposed of in a ODEQ permitted municipal waste or construction debris disposal facility and shall be incidental to the paint removal.

Testing for lead shall be done at an environmental lab using EPA approved methodology.

- *Quality Control:* Prior to the start of the work, the Contractor shall perform a test removal at a location designated by the field engineer using a 15-foot section of painted curbing to demonstrate the quality of the paint removal. The field engineer shall determine by close visual inspection if 90% or more of the curb paint has been removed.

- **Measurement and Payment:** The unit of measurement shall be per LINER FOOT of paint removed by this method, and accepted by the field engineer. *See Bid Item 0238 for Lead Paint Disposal Costs and Bid Item 0239 for Lab Testing for Lead Paint.*

Method ‘B’ - High Pressure Water Jetting / Grinding

- **Equipment:** Paint removal shall be performed with an approved, high- pressure, and hot water/steam jetting equipment, capable of removing 90% or more of the existing paint. The equipment shall be capable of operating at a minimum of 2,500-psi water pressure to a maximum of 7,000 psi, with water flow rates not exceeding 1.5 gallons per minute. The equipment shall be capable of hot water or steam jetting with a minimum water temperature of 180F degrees. The equipment shall be capable of removing 500 feet of curb paint in an 8-hour period. The equipment used for paint removal may be mobile based, or truck mounted. The removal shall leave the surface clean and ready to accept new paint if required. Grinding shall not damage the surface below a depth of 1/8 inch. Any significant damage to the curb/pavement surface caused by the Contractor’s operation shall be repaired at the Contractor’s expense. The field engineer shall approve any repair methods and procedures prior to any Contractor’s repair work. Protective shrouding shall be incorporated on the jetting system to eliminate damage to any surrounding plant, roadway, and/or sidewalk area.
- **Materials:** Water shall be potable water obtained from a fire hydrant, municipal source or well. Lake or river water will not be allowed. The use of chemicals, abrasive materials, grinders, detergents or salt water will not be allowed.
- **Waste Removal:** Removal of all curb paint residue shall be by accomplished by a high performance vacuum system. The vacuum system may be self propelled or trailer mounted and must be capable of removing, transporting and storing waste materials at a rate of 850 cubic feet of air per minute through a 4” diameter suction hose. The Contractor shall supply, and install approved ‘bio-bag’ filters at all storm drain curb inlets for each curb line section that are under active curb paint removal. The ‘bio-bags’ shall be removed as each zone is completed.

Removed paint shall be stored and contained in bags or drums. Once all the paint residue/debris has been containerized, a hazardous waste determination must be done on it. Analytical testing must be done using EPA approved methodology. Lead based paint residue is considered to be a hazardous waste if the concentration of lead is 5 ppm or greater using the Toxicity Characteristic Leaching Procedure (TCLP). If the paint residue analytical result for lead is 5 ppm or greater, it must be disposed of at an ODEQ permitted *hazardous waste disposal facility*. If the paint residue analytical result for lead is less than 5 ppm, it may be disposed of in a ODEQ permitted *municipal waste or construction debris disposal facility*” and shall be incidental to the paint removal and Special Testing for lead shall be done at an environmental lab using EPA approved methodology.

- **Quality Control:** Prior to the start of the work, the Contractor shall perform a test removal at a location designated by the field engineer using a 15-foot section of painted curbing to demonstrate the quality of the paint removal. The field engineer shall determine by close visual inspection if 90% or more of the curb paint has been removed.
- **Measurement and Payment:** The unit of measurement shall be per LINEAR FOOT of paint removed by this method, and accepted by the field engineer. *See Bid Item 0238 for Lead Paint Disposal Costs and Bid Item 0239 for Lab Testing for Lead Paint.*

C6. Remove 4” Plastic Pavement Markings - Bid Item 0617-A This item shall include all labor, materials and equipment to remove, and safely dispose of plastic pavement markings (Type B

Thermoplastic Parking 'T' & 'L') on City streets using pressure water jetting, captive shot blasting, propane heat, and/or surface grinding, as detailed on the plans, these specifications, or as directed by the field engineer.

- *Scope:* The work consists of providing all labor, traffic control, material and equipment necessary to remove 90% or more of the existing white, thermo plastic pavement markings as indicated on the drawings or as directed by the field engineer without damage to the roadway surface using one or more of the removal systems indicated. The Contractor will have the choice of which type(s) of plastic markings removal method(s), and shall determine the best method or combination of methods for removal. The Contractor shall present his plan to the field engineer for review and approval prior to beginning the project.
- *Equipment:* Plastic Pavement Marking removal shall be performed with an approved method. These methods may include water jetting (both ultra-high and high pressure), captive shot blasting, and/or thermo heating. The equipment shall be capable of removing a minimum of 500 feet of plastic markings in an 8-hour period. The equipment used for removal may be mobile based, or truck mounted. The removal shall leave the surface clean and ready to accept a new markings if required. Protective shrouding may need to be incorporated on the removal system(s) to eliminate damage to any surrounding plant, roadway, and/or sidewalk area. All equipment shall be operated to remove plastic markings in the same direction as the traffic flow.
- *Materials:* If water is used, it shall be potable water obtained from a fire hydrant, municipal source or well. Lake or river water will not be allowed. The use of chemicals, detergents or salt water will not be allowed
- *Waste Removal:* Removal of all material waste shall be by accomplished by a high performance vacuum system if water jetting is used. The vacuum system may be self propelled or trailer mounted and must be capable of removing, transporting, and storing waste materials at a rate of 850 cubic feet of air per minute through a 4" diameter suction hose. The Contractor shall install approved 'bio-bag' filters at all storm drain curb inlets for each curb line section that are under active curb paint removal.
- *Quality Control:* Prior to the start of the work, the Contractor shall perform a test removal at a location designated by the field engineer to demonstrate the quality of the plastic removal. The field engineer shall determine if 90% or more of the curb paint has been removed.
- *Measurement and Payment:* The unit of measurement shall be per LINEAR FOOT of plastic pavement markings removed and accepted by the field engineer.

C7. Install Sign Base and Pole in ROW - Bid Item 0670 This item shall include all labor, materials, and equipment to install a street sign base unit as detailed on City of Springfield Standard Drawing 5-18 (SD5-18) and as shown on the plans, described in these specifications, or as directed by the Engineer.

- *Scope:* This work shall consist of constructing a sign base/pole assembly to include all materials required for the base foundation, and a 9-1/2 ft. x 2" galvanized pipe with a galvanized pipe cap. The Contractor will be responsible to drill two (2) 5/16" sign mounting holes in each assembly. The City will supply a drilling template for this work. *All necessary signs and sign mounting hardware will be supplied, and installed by the City.*
- *Measurement and Payment:* Payment shall be for EACH sign base and pole unit installed and accepted by the field engineer.

- C8. Install Sign Pole in Existing Bases in ROW - Bid Item 0670-A** This item shall include all labor, materials, and equipment to install a street sign pole as detailed on City of Springfield Standard Drawing 5-18 (SD5-18) and as shown on the plans, described in these specifications, or as directed by the Engineer.
- *Scope:* This work shall consist of providing, and installing a 9-1/2 ft. x 2” galvanized pipe with a galvanized pipe cap in sign bases as shown on the plans or as directed by the Engineer. The Contractor will be responsible to drill two (2) 5/16” sign mounting holes in each assembly. The City will supply a drilling template for this work. All necessary signs, and sign mounting hardware will be supplied, and installed by City of Springfield personal.
 - *Measurement and Payment:* Payment shall be for EACH sign pole installed and accepted by the field engineer.
- C9. Lead Paint Disposal Costs - Bid Item 0238** This item includes the additional costs to legally transport and dispose of hazardous waste generated from this project to an ODEQ permitted hazardous waste disposal facility at Arlington, Oregon that would include;
- \$75.00 Profile filing (one time)**
 - \$235 per ton bulk (Dump truck) material fee**
 - Hazardous waste permitted hauler (Transportation costs)**
 - All additional costs associated with the disposal**
- Note:** This is an “*as required*” bid item and will only be paid upon necessity and based on lab test results (TCLP) provided to the city. Contractor shall provide copies of all paperwork prior to payment to the City.
- *Measurement and Payment:* Payment shall be LUMP SUM.
- C10. Lab Testing for Lead Paint - Bid Item 0239** This item includes the analytical testing done using EPA approved methodology to determine if the concentration of lead is 5 ppm or greater using the Toxicity Characteristic Leaching Procedure (TCLP). Test results shall be returned to the project manager prior to payment.
- *Measurement and Payment:* Payment shall be EACH for one test or as directed by the field engineer.

Continued Next Page

SLURRY SEAL SPECIFICATIONS

MATERIALS

1. EMULSIFIED ASPHALT

The emulsified asphalt, and emulsified asphalt residue, shall meet the requirements of AASHTO M 140 or ASTM D 977 for SS-1 or SS-1h. For CSS-1, CSS-1h, or CQS-1h, it shall meet the requirements of AASHTO M 208 or ASTM D 2397.

Each load of emulsified asphalt shall be accompanied with a Certificate of Analysis/Compliance to indicate that the emulsion meets the specifications.

2. AGGREGATE

A. GENERAL

The mineral aggregate used shall be the type specified for the particular application requirements of the slurry seal. The aggregate shall be crushed stone such as granite, slag, limestone, chat, or other high-quality aggregate, or combination thereof. To assure the material is 100 percent crushed, the parent aggregate will be larger than the largest stone in the gradation to be used.

B. QUALITY TESTS

The aggregate should meet agency specified polishing values and these minimum requirements:

TEST	TEST METHOD		SPECIFICATION
	AASHTO	ASTM	
Sand Equivalent Value of Soils and Fine Aggregate	T 176	D 2419	45 Minimum
Soundness of Aggregates by Use of Sodium Sulfate of Magnesium Sulfate ¹	T 104	C 88	15% Maximum w/Na ₂ SO ₄ 25% Maximum w/MgSO ₄
Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine ¹	T 96	C 131	35% Maximum

The abrasion test is run on the parent aggregate.

C. GRADATION

When tested in accordance with AASHTO T 27 (ASTM C 136) and AASHTO T 11 (ASTM C 117), the mix design aggregate gradation shall be within one of the following

	SIEVE SIZE	TYPE I PERCENT PASSING	TYPE II PERCENT PASSING	TYPE III PERCENT PASSING	STOCKPILE TOLERANCE FROM THE MIX DESIGN GRADATION
3 / 8	(9.5 mm)	100	100	100	
# 4	(4.75 mm)	100	90 -100	70 -90	± 5%
# 8	(2.36 mm)	90 -100	65 -90	45 -70	± 5%
# 16	(1.18 mm)	65 -90	45 -70	28 -50	± 5%
# 30	(600 um)	40 -65	30 -50	19 -34	± 5%
# 50	(330 um)	25 -42	18 -30	12 -25	± 4%
#100	(150 um)	15 -30	10 -21	7 -18	± 3%
#200	(75 um)	10 -20	5 -15	5 -15	± 2%

bands or approved by the field engineer:

The gradation of the aggregate stockpile shall not vary by more than the stockpile tolerance from the mix design gradation (indicated in the table above) while also remaining within the specification gradation band. The percentage of aggregate passing any two successive sieves shall not change from one end of the specified range to the other end.

The aggregate will be accepted at the job location or stockpile based on five gradation tests sampled according to AASHTO T 2 (ASTM D 75). If the average of the five tests is within the stockpile tolerance from the mix design gradation, the material will be accepted. If the average of those test results is out of specification or tolerance, the Contractor will be given the choice to either remove the material or blend additional aggregate with the stockpile material to bring it into compliance. Materials used in blending must meet the required aggregate quality test specifications in Section 2B before blending and must be blended in a manner to produce a consistent gradation. Aggregate blending may require a new mix design.

Screening shall be required at the stockpile if there are any problems created by oversized materials in the mix.

Type I. This aggregate gradation is used to fill surface voids, address moderate surface distresses, and provide protection from the elements. The fineness of this mixture provides the ability for some crack penetration.

Type II. This aggregate gradation is used to fill surface voids, address more severe surface distresses, seal, and provide a durable wearing surface.

Type III. This aggregate gradation provides maximum skid resistance and an improved wearing surface.

3. MINERAL FILLER

Mineral fillers such as Portland Cement, limestone dust, fly ash, and others shall be

considered as part of the blended aggregate and shall be used in minimum required amounts. They shall meet the gradation requirements of ASTM D242. Mineral fillers shall only be used if needed to improve the workability of the mix or gradation of the aggregate and shall be done initially in quantities predetermined by the mix design. Field adjustments if required, shall be approved by the City after review of the mix design. The laboratory shall also determine if a mineral filler is required, and if so, how much should be used. Test samples shall be made and tested on a Wet Track Abrasion Machine.

Typical use levels are normally 0.0 - 3.0 percent and may be considered part of the aggregate gradation.

4. WATER

The water shall be free of harmful salts and contaminants. If the quality of the water is in question, it should be submitted to the laboratory with the other raw materials for the mix design.

5. ADDITIVES

Additives may be used to accelerate or retard the break/set of the slurry seal. Appropriate additives, and their applicable use range, should be approved by the laboratory as part of the mix design with field adjustments if required, after approval by the City.

LABORATORY EVALUATION

1. GENERAL

Sources of all materials shall be selected prior to the time the materials are required for use in the work. The Contractor shall submit a signed mix design covering the specific materials to be used on the project. This design will be performed by a laboratory which has experience in designing Emulsified Asphalt Slurry Seal Surfacing. After the mix design has been approved, no material substitution will be permitted unless approved by the City.

ISSA can provide a list of laboratories experienced in slurry seal design.

2. MIX DESIGN

Compatibility of the aggregate, emulsified asphalt, water, mineral filler and other additives shall be evaluated in the mix design. The mix design shall be completed using materials consistent with those supplied by the Contractor for the project. Recommended tests and values are as follows:

TEST	ISSA TB NO.	SPECIFICATION
Mix Time @ 77 °F (25 °C)	TB 113	Controllable to 180 Seconds Minimum
Slurry Seal Consistency	TB 106	0.79 – 1.18 inches (2.0 – 3.0 cm)
Wet Cohesion @ 30 Minutes Minimum (Set) @ 60 Minutes Minimum (Traffic)	TB 139 (For quick-traffic systems)	12 kg-cm Minimum 20 kg-cm or Near Spin Minimum
Wet Stripping	TB 114	Pass (90% Minimum)
Wet-Track Abrasion Loss One-hour Soak	TB 100	75 g/ft ² (807 g/m ²) Maximum
Excess Asphalt by LWT Sand Adhesion	TB 109 (Critical in heavy-traffic areas)	50 g/ft ² (538 g/m ²) Maximum

The Wet Track Abrasion Test is performed under laboratory conditions as a component of the mix design process. The purpose of this test is to determine the minimum asphalt content required in a slurry seal system. The Wet Track Abrasion Test is not recommended as a field quality control or acceptance test. ISSA TB 136 describes potential causes for inconsistent results of the Wet Track Abrasion Test.

The mixing test is used to predict the time the material can be mixed before it begins to break. The laboratory should verify that mix and set times are appropriate for the climatic conditions expected during the project.

The laboratory shall also report the quantitative effects of moisture content on the unit weight of the aggregate (bulking effect) according to AASHTO T19 (ASTM C29). The report must clearly show the proportions of aggregate, mineral filler (if used) and emulsified asphalt based on the dry weight of the aggregate.

The percentages of each individual material required shall be shown in the laboratory report. Based on field conditions, adjustments within the specific ranges of the mix design may be required.

The component materials shall be designed within the following limits:

COMPONENT MATERIALS	SUGGESTED LIMITS
Residual Asphalt	Type I: 10 -16% Type II: 7.5 -13.5% Type III: 6.5 -12% (Based on dry weight of aggregate)
Mineral Filler	0.0 -3.0% 1.0 (Based on dry weight of aggregate)
Additives	As needed
Water	As required to produce proper mix consistency

3. MIX TOLERANCES

Tolerances for the slurry seal mixture are as follows:

- a. After the residual asphalt content is determined, a variation $\pm 1\%$ by weight of dry aggregate will be permitted.
- b. The slurry consistency, as determined according to ISSA TB No. 106, shall not vary more than $\pm 0.2''$ (± 0.5 cm) from the job mix formula after field adjustments.
- c. The rate of application shall not vary more than ± 2 lb/yd² (± 1.1 kg/m²) when the surface texture does not vary significantly.

EQUIPMENT

1. GENERAL

All equipment, tools, and machines used in the application of slurry seal shall be maintained in satisfactory working condition at all times.

2. MIXING EQUIPMENT

The machine shall be specifically designed and manufactured to apply slurry seal. The material shall be mixed by an automatic-sequenced, self-propelled, slurry seal mixing machine

of either truck-mounted or continuous-run design. Continuous-run machines are those that are equipped to self-load materials while continuing to apply slurry seal. Either type machine shall be able to accurately deliver and proportion the mix components through a mixer and to discharge the mixed product on a continuous-flow basis. Sufficient storage capacity for all mix components is required to maintain an adequate supply to the proportioning controls.

Appropriate equipment shall be used for the type work to be done.

If continuous-run equipment is used, the machine shall provide the operator with full control of the forward and reverse speeds during application of the slurry seal. It shall be equipped with a self-loading device and opposite-side driver stations. The self-loading device, opposite-side driver stations, and forward and reverse speed controls shall be of original-equipment manufacturer design.

3. PROPORTIONING DEVICES

Individual volume or weight controls for proportioning mix components shall be provided and properly labeled. These proportioning devices are used in material calibration to determine the material output at any time.

4. SPREADING EQUIPMENT

The mixture shall be placed uniformly by means of a spreader box attached to the paver and mechanically equipped, if necessary, to agitate and spread the material evenly throughout the box. With some quick-set systems, mechanical agitation may extend mix time. The slurry seal mixture shall have the proper consistency as it enters the spreader box. Spraying of additional water into the spreader box will not be permitted.

A front seal shall be utilized to ensure no loss of the mixture at the road contact point. The rear seal shall act as final strike-off and shall be adjustable. The spreader box and rear seal shall be designed and operated to provide uniform mix consistency behind the box. The spreader box shall have suitable means to side shift to compensate for variations in the pavement width. A burlap drag or other approved screed may be attached to the rear of the spreader box to provide a highly textured uniform surface. A drag stiffened by hardened slurry is ineffective and should be replaced immediately.

5. AUXILIARY EQUIPMENT

Suitable surface preparation equipment, traffic control equipment, hand tools, and other support and safety equipment necessary to perform the work shall be provided by the Contractor.

CALIBRATION

Each mixing unit to be used in performance of the work shall be calibrated in the presence of the inspector prior to the start of the project. Previous calibration documentation covering the exact materials to be used may be acceptable, provided the calibration was performed during the previous 60 days. The documentation shall include an individual calibration of each material at various settings, which can be related to the machine's metering devices. Any equipment replacement affecting material proportioning requires that the machine be recalibrated. No machine will be allowed to work on the project until the calibration has been accepted. ISSA Inspector's Manual describes a method of machine calibration. ISSA Contractors and/or machine manufacturers may also provide methods of machine calibration.

WEATHER LIMITATIONS

The slurry seal shall not be applied if either the pavement or air temperature is below 50°F (10°C) and falling, but may be applied when both pavement and air temperatures are above 45°F (7°C) and rising. No slurry seal shall be applied when there is the possibility of freezing temperatures at the

project location within 24 hours after application. Application will not be permitted if weather conditions or forecast indicates rain, thundershowers, or high humidity conditions, (such as fog) would prevail before the slurry has cured, or if morning dew is evident. The mixture shall not be applied when weather conditions prolong opening to traffic beyond a reasonable time.

NOTIFICATION AND TRAFFIC CONTROL

1. NOTIFICATION

Homeowners and businesses affected by the paving shall be notified at least one day in advance of the surfacing. Should work not occur on the specified day, a new notification will be distributed. The notification shall be posted in written form, stating the time and date that the surfacing will take place. If necessary, signage alerting traffic to the intended project should be posted.

2. TRAFFIC CONTROL

Traffic control devices shall be in accordance with agency requirements and, if necessary, conform to the requirements of the Manual on Uniform Traffic Control Devices. Opening to traffic does not constitute acceptance of the work.

In areas that are subject to an increased rate of sharp-turning vehicles, additional time may be required for a more complete cure of the slurry seal mat to prevent damage. Tire marks may be evident in these areas after opening but typically diminish over time with rolling traffic.

SURFACE PREPARATION

1. GENERAL

Prior to applying the slurry seal, loose material, oil spots, vegetation, and other objectionable material shall be removed. Any standard cleaning method will be acceptable. If water is used, cracks shall be allowed to dry thoroughly before slurry surfacing. Manholes, valve boxes, drop inlets and other service entrances shall be protected from the slurry seal by a suitable method. The city shall approve the surface preparation prior to surfacing.

2. TACK COAT

Normally, tack coat is not required unless the surface to be covered is extremely dry and raveled or is concrete or brick. If required, the emulsified asphalt should be SS, CSS, or the slurry seal emulsion. Consult with the slurry seal emulsion supplier to determine dilution stability. The tack coat may consist of one part emulsified asphalt/three parts water and should be applied with a standard distributor. The distributor shall be capable of applying the dilution evenly at a rate of 0.05-0.15 gal/yd² (0.23-0.68 l/m²). The tack coat shall be allowed to cure sufficiently before the application of slurry seal. If a tack coat is to be required, it must be noted in the project plans.

3. CRACKS

The city shall provide crack sealing prior to construction.

APPLICATION

1. GENERAL

If required, it is recommended that a test strip be placed in conditions similar to those expected

to be encountered during the project. The surface may be wetted with water ahead of the spreader box. The rate of application of the water spray shall be adjusted during the day to suit temperature, surface texture, humidity, and dryness of the pavement. Pooling or standing water shall be avoided. The slurry seal shall be of the desired consistency upon exiting the mixer. A sufficient amount of material shall be carried in all parts of the spreader box at all times so that complete coverage is achieved. Overloading of the spreader shall be avoided. No lumping, balling, or unmixed aggregate shall be permitted. Significant streaks, such as those caused by oversized aggregate or broken mix, shall not be left in the finished surface. If excessive streaking occurs, the job will be stopped until the cause of the problem has been corrected. Some situations may require screening the aggregate prior to loading it into the units going from the stockpile area to the jobsite.

2. RATE OF APPLICATION

The slurry seal mixture shall be of the proper consistency at all times so as to provide the application rate required by the surface condition. The average application rate shall be in accordance with the following table:

AGGREGATE TYPE	LOCATION	SUGGESTED APPLICATION RATE
Type I	Parking Areas Urban and Residential Streets Airport Runways	8 -12 lb/yd ² (4.3 -6.5 kg/m ²)
Type II	Urban and Residential Streets Airport Runways	10 -18 lb/yd ² (5.4 -9.8 kg/m ²)
Type III	Primary and Interstate Routes	15 -22 lb/yd ² (8.1 -12.0 kg/m ²)

Suggested application rates are based upon the weight of dry aggregate in the mixture. Application rates are affected by the unit weight and gradation of the aggregate and the demand of the surface to which the slurry seal is being applied.

3. JOINTS

No excess buildup, uncovered areas, or unsightly appearance shall be permitted on longitudinal or transverse joints. The Contractor shall provide suitable equipment to produce a minimum number of longitudinal joints throughout the project. When possible, a longitudinal joint shall not be placed in a wheel path. Less than full box width passes will be used only as required. If less than full box width passes are used, they shall not be the last pass of any paved area. A maximum of 6” (15.2 cm) shall be allowed for overlap of longitudinal joints.

4. MIXTURE

The slurry seal shall possess sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading. It shall be free of excess liquids which create segregation of the aggregate. Spraying of additional water into the spreader box will not be permitted.

5. HANDWORK

Areas which cannot be accessed by the mixing machine shall be surfaced using hand squeegees to provide complete and uniform coverage. If necessary, the area to be handworked shall be lightly dampened prior to mix placement. Handwork shall exhibit the same finish as that applied by the spreader box and shall be completed prior to final surfacing.

6. LINES

Care shall be taken to apply straight lines along curbs, shoulders, and intersections. No run-off

on these areas will be permitted. Roofing felt or heavy plastic may be used to begin or end a pull cleanly. This also provides for easy removal of excess slurry.

7. ROLLING

Parking areas should be rolled by a self-propelled, 10-ton (maximum) pneumatic tire roller equipped with a water spray system. All tires should be inflated per manufacturer's specifications. Rolling shall not start until the slurry has cured sufficiently to avoid damage by the roller. Areas which require rolling shall receive a minimum of two (2) full coverage passes.

8. CLEAN UP

All utility access areas, gutters and intersections, shall have the slurry seal removed as specified by the inspector. The Contractor shall remove any debris associated with the performance of the work on a daily basis.

QUALITY CONTROL

1. INSPECTION

Inspectors assigned to projects must be familiar with the materials, equipment and application of slurry seal. Local conditions and specific project requirements should be considered when determining the parameters of field inspection.

Proper mix consistency should be one of the major areas of inspector concern. If mixes are too dry, streaking, lumping and roughness will be present in the mat surface. Mixes applied too wet will flow excessively and not hold straight lane lines. Excessive liquids may also cause an asphalt-rich surface with segregation.

2. MATERIALS

To account for aggregate bulking, it is the responsibility of the Contractor to check stockpile moisture content and to set the machine accordingly. At the inspector's discretion, material tests may be run on representative samples of the aggregate and emulsion. Tests will be run at the expense of the Contractor and results shall be presented to the City immediately.

3. SLURRY SEAL

If required, representative samples of the slurry seal may be taken directly from the slurry unit(s). Consistency (ISSA TB No. 106) and residual asphalt content (ASTM D2172) tests shall be run on the samples as directed by the inspector. Please note that the consistency test may not be applicable to certain

Quick-Set and Quick-Traffic systems because of erratic results due to setting characteristics. If this test is run, it must be performed immediately after the sample is taken. Tests will be run at the expense of the Contractor and results shall be presented to the City immediately. Data obtained from the proportioning devices on the slurry seal unit may be used to determine individual material quantities and application rate.

4. NON-COMPLIANCE

If any two successive tests fail on the stockpile aggregate, the job shall be stopped. If any two successive tests on the mix from the same machine fail, the use of the machine shall be suspended. It will be the responsibility of the Contractor, at his expense, to prove to the city that the problems have been corrected.

See **City of Springfield Standard Construction Specifications** current edition for additional requirements. If there is a contradiction then the more stringent shall apply or as directed by the engineer.

Measurement and Payment shall be per square yard placed.

APPENDIX A

AGENCIES

AASHTO: American Association of State Highway and Transportation Officials

ASTM: American Society for Testing and Materials

ISSA: International Slurry Surfacing Association

TEST METHODS

EMULSIFIED ASPHALT

AASHTO TEST NO.	ASTM TEST NO.	TEST
M 140	D 977	Standard Specification for Emulsified Asphalt
M 208	D 2397	Specification for Cationic Emulsified Asphalt
T 40	D 140	Sampling Bituminous Materials
T 59	D 244	Test Methods and Practices for Emulsified Asphalts
T 59	D 6997	Distillation of Emulsified Asphalt

AGGREGATE AND MINERAL FILLER

AASHTO TEST NO.	ASTM TEST NO.	TEST
T 176	D 2419	Sand Equivalent Value of Soils and Fine Aggregate
T 104	C 88	Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
96	C 131	Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine (This test should be performed on the parent rock that is used for crushing the finer gradation Micro Surfacing material.)
T 27	C 136	Sieve Analysis of Fine and Coarse Aggregates
T 11	C 117	Test Method for Materials Finer than 75 μ m (No. 200) Sieve in Mineral Aggregates by Washing
T 2	D 75	Sampling Aggregates
M 17	D 242	Mineral Filler for Bituminous Paving Mixtures
T 19	C 29	Bulk Density ("Unit Weight") and Voids in Aggregate

APPENDIX A

TEST METHODS (CONTINUED)

SLURRY SEAL SYSTEM

ISSA TEST NO.	Test
TB 100	Test Method for Wet Track Abrasion of Slurry Surfaces
TB 101	Guide for Sampling Slurry Mix for Extraction Test
TB 106	Measurement of Slurry Seal Consistency
TB 109	Test Method for Measurement of Excess Asphalt in Bituminous Mixtures by Use of a Loaded-Wheel Tester
TB 111	Outline Guide Design Procedure for Slurry Seal
TB 112	Method of Estimate Slurry Seal Spread Rates and To Measure Pavement Macrotecture
TB 113	Trial Mix Procedure for Slurry Seal Design
TB 114	Wet Stripping Test for Cured Slurry Seal Mixes
TB 115	Determination of Slurry Seal Compatibility
TB 139	Method of Classified Emulsified Asphalt, Aggregate Mixtures by Modified Cohesion Test Measurement of Set and Cure Characteristics
A105	Design, Testing, and Construction of Slurry Seal

NOTES:

ASTM D 3910, Standard Practice for Design, Testing, and Construction of Slurry Seal, is a combined reference of the ISSA Test Bulletins listed above.

ASTM D 2172, Standard Test Methods for Quantitative Extraction of Bitumen From Bituminous Paving Mixtures, is referenced in Section 12.3.

CITY OF SPRINGFIELD

LANE COUNTY, OREGON

CITY HALL PARKING REDESIGN PROJECT

PROJECT NO. 21058

PROJECT TEAM

Brian Barnett, PE, PTOE
City Traffic Engineer

Jim Polston
Project Manager

Michael Liebler, PE
Project Design Engineer



VICINITY MAP

NOT TO SCALE

DRAWING INDEX

- Sheet 01 Title (This Sheet)
- Sheet 02 SE Parking Striping Layout
- Sheet 03 SW Parking Striping Layout
- Sheet 04 NW Parking Striping Layout
- Sheet 05 SW Parking Signage Layout
- Sheet 06 NW Parking Signage Layout
- Sheet 07 Construction Details
- Sheet 08 Construction Details

City of Springfield

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



EXPIRES 12-31-13

SHEET

1 of 8

Revision/Issue Number	Drawn By	Date
1	MTL	4/10

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

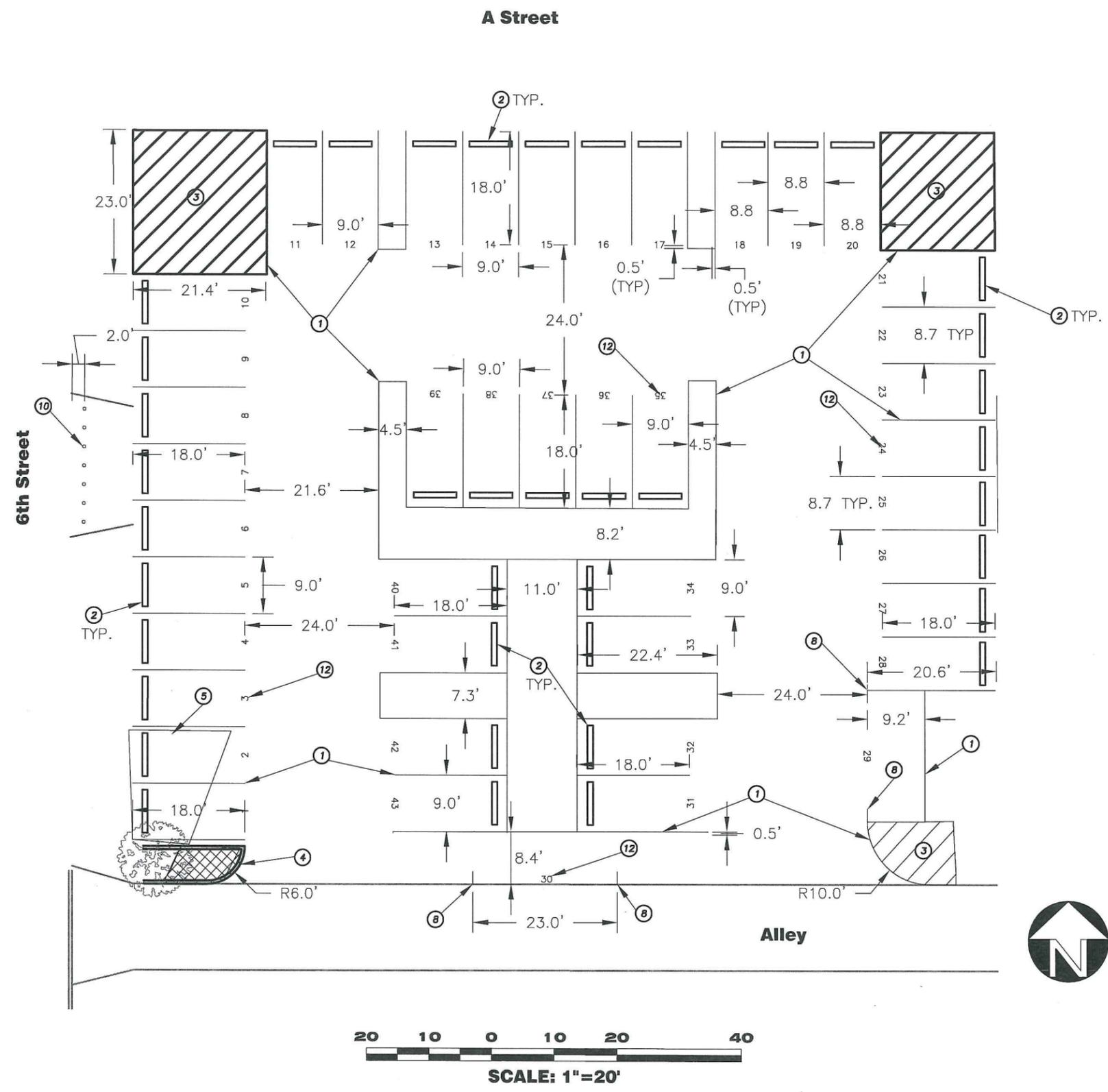
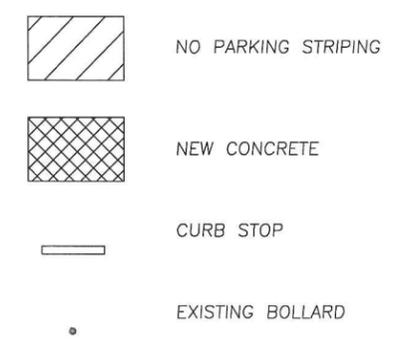
THE CONTRACTOR SHALL BE RESPONSIBLE
 FOR DETERMINING UTILITY LOCATIONS PRIOR TO
 BEGINNING OF CONSTRUCTION.
 THESE PLANS MAY NOT SHOW ALL UTILITIES OR
 THE CORRECT LOCATIONS.

GENERAL CONSTRUCTION NOTES:

- Remove and reuse all existing curb stops.
- Remove and preserve/retain all parking lot signage.
- All parking lot striping shall be centered at a minimum of one half foot from all column edges.

CONSTRUCTION NOTES:

- Install 4 in white parking stripe. Verify striping layout with project engineer and inspector prior to installation.
- Install parking curb stops 2 feet from back of stalls. Reuse existing salvaged curbs stops and install new where directed by City of Springfield project manager.
- Install 4 in white no parking striping
- Install new 6 in extruded curb and concrete island. Existing tree and associated landscaping area to remain. Fill remnant landscaping area with bark mulch. See City of Springfield standard drawing 3-5 and Detail Sheet 7.
- Remove existing curbed landscape island. Existing tree to remain. Replace island with AC in new parking area.
- Install 4 in white parallel parking striping. See Detail Sheet 7.
- Install flexible tubular markers at 3 ft intervals. Coordinate delivery of tubular markers with city project manager prior to installation.
- Install 6 in parking numbers centered in the middle back of each parking stall as shown on this sheet.



City Hall Parking Lot Redesign SE Parking Striping Layout

City of Springfield

PUBLIC WORKS / ENGINEERING
 225 FIFTH STREET, SPRINGFIELD, OR 97477
 PHONE (541) 728-3753 FAX (541) 736-1021
 INTERNET www.ci.springfield.or.us



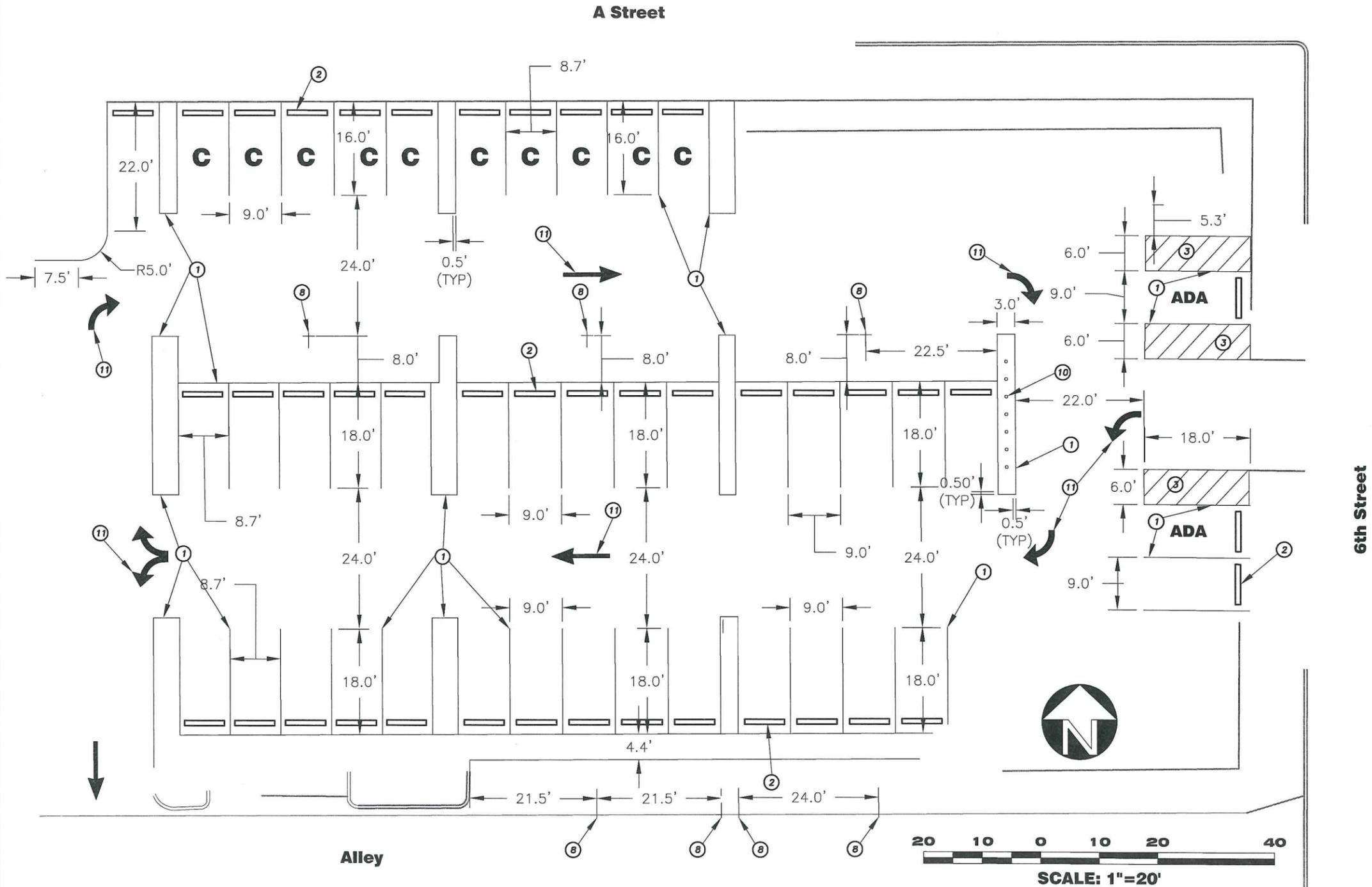
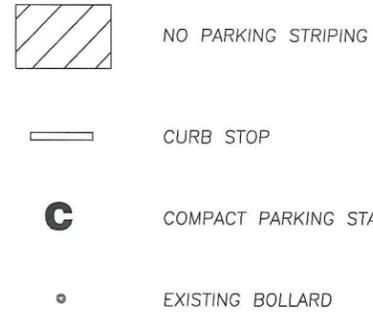
EXPIRES 12-31-13

GENERAL CONSTRUCTION NOTES:

- Remove and reuse all existing curb stops.
- Remove and preserve/retain all parking lot signage
- All parking lot striping shall be centered at a minimum of one half foot from all column edges.

CONSTRUCTION NOTES:

- ① Install 4 in white parking stripe. Verify striping layout with project engineer and inspector prior to installation.
- ② Install parking curb stops 2 feet from back of stalls. Reuse existing salvaged curbs stops and install new where directed by City of Springfield project manager.
- ③ Install 4 in white no parking striping
- ④ Install 4 in white parallel parking striping. See Detail Sheet 7.
- ⑩ Install flexible tubular markers at 3 ft intervals. Coordinate delivery of tubular markers with city project manager prior to installation.
- ⑪ Install pavement marking arrow.



Revision/Issue Number	Drawn By	Date
1	MTL	4/10

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.

**City Hall Parking Lot Redesign
 SW Parking Striping Layout**

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.us

EXPIRES 12-31-13

Revision/Issue Number	Drawn By	Date
1	MTL	4/10

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.

City Hall Parking Lot Redesign NW Parking Striping Layout

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.us



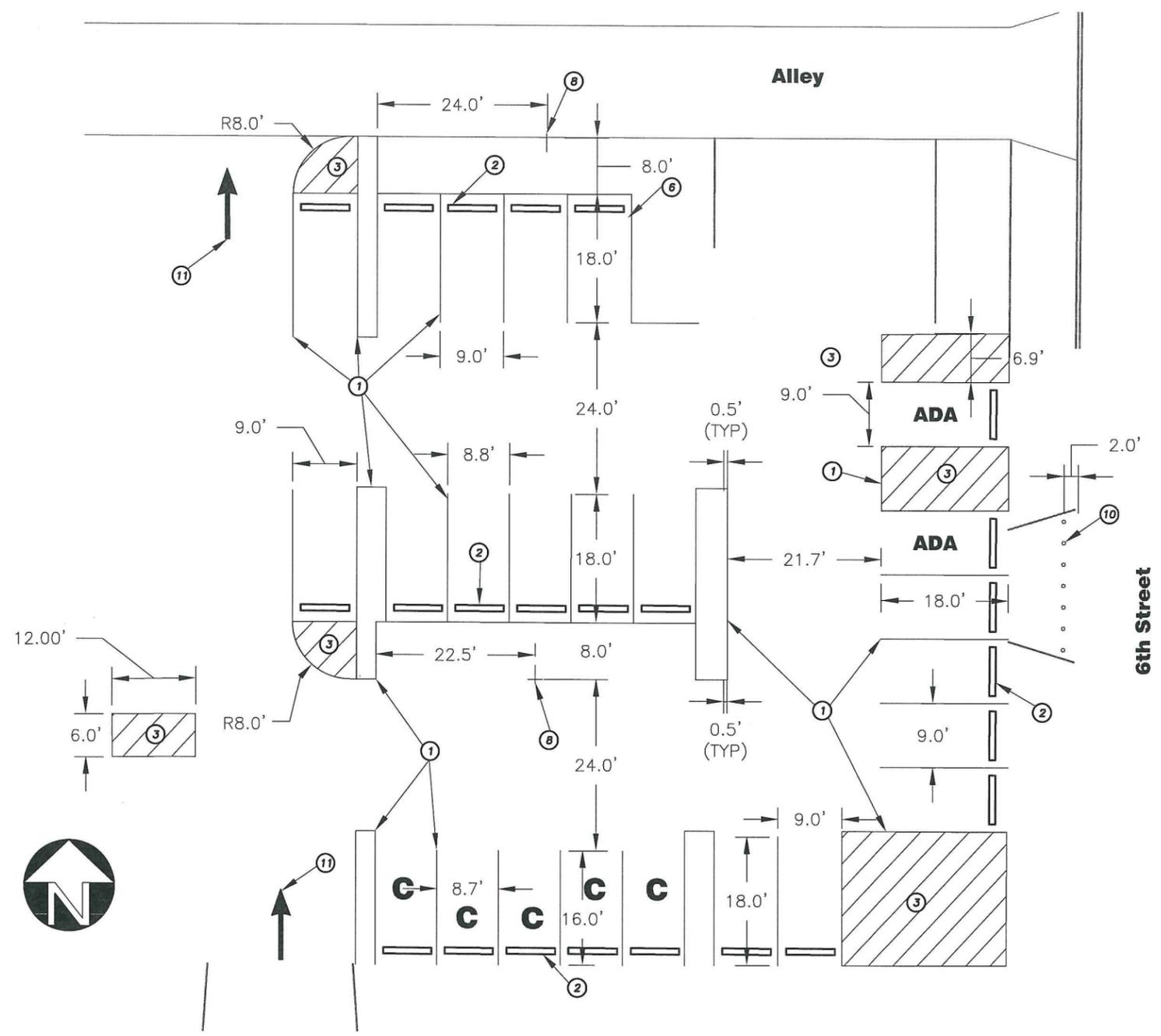
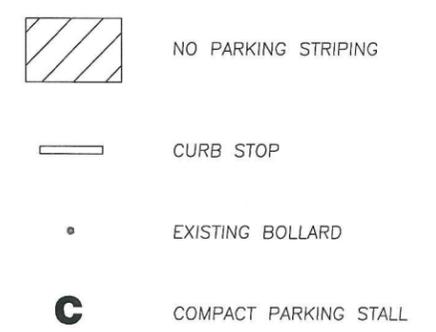
EXPIRES 12-31-13

GENERAL CONSTRUCTION NOTES:

- Remove and reuse all existing curb stops.
- Remove and preserve/retain all parking lot signage
- All parking lot striping shall be centered at a minimum of one half foot from all column edges.

CONSTRUCTION NOTES:

- ① Install 4 in white parking stripe. Verify striping layout with project engineer and inspector prior to installation.
- ② Install parking curb stops 2 feet from back of stalls. Reuse existing salvaged curb stops and install new curb stops where directed by City of Springfield project manager.
- ③ Install 4 in white no parking striping
- ⑥ Remove existing bollard.
- ⑧ Install 4 in white parallel parking striping. See Detail Sheet 7.
- ⑩ Install flexible tubular markers at 3 ft intervals. Coordinate delivery of tubular markers with city project manager prior to installation.
- ⑪ Install pavement marking arrow.



GENERAL CONSTRUCTION NOTES:

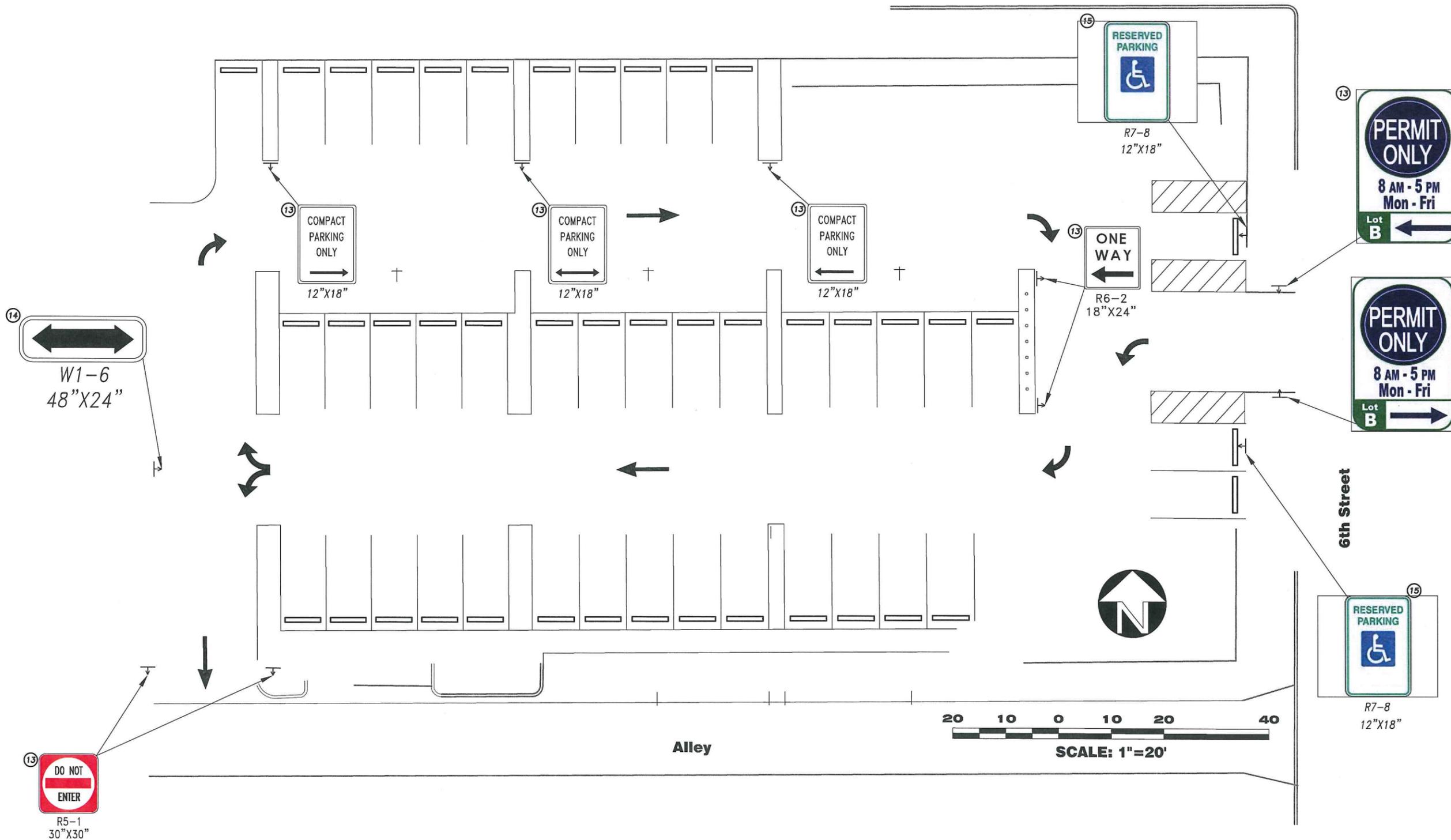
All parking lot signage shall comply with design and retroreflectivity requirements under the current version of the Manual of Uniform Traffic Control Devices (M.U.T.C.D) where applicable. Parking lot signage shall be supplied by the City of Springfield. Coordinate with project manager for sign delivery.

CONSTRUCTION NOTES:

- ⑬ Install parking lot sign at 6 feet from surface of lot to bottom of the sign.
- ⑭ Install parking lot sign at 3.5 feet from surface of lot to the bottom of the sign.
- ⑮ Install ADA parking lot sign at 7 feet from surface of lot to bottom of sign. Install sign foundation and post per City of Springfield Std. Dwg. 5-18.

→ Proposed Sign.

A Street



Revision/Issue Number	Drawn By	Date
1	MTL	4/10

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.

**City Hall Parking Lot Redesign
 SW Parking Signage Layout**

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.us



EXPIRES 12-31-13

Revision/Issue Number	Drawn By	Date
1	MTL	4/10

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.

**City Hall Parking Lot Redesign
 NW Parking Signage Layout**

City of Springfield

PUBLIC WORKS / ENGINEERING
 225 FIFTH STREET, SPRINGFIELD, OR 97477
 PHONE (541) 728-3753 FAX (541) 736-1021
 INTERNET www.ci.springfield.or.us

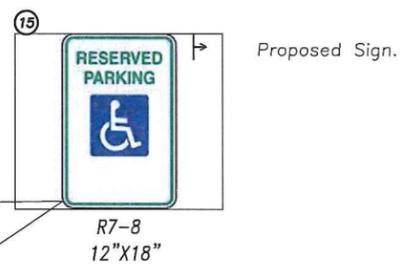
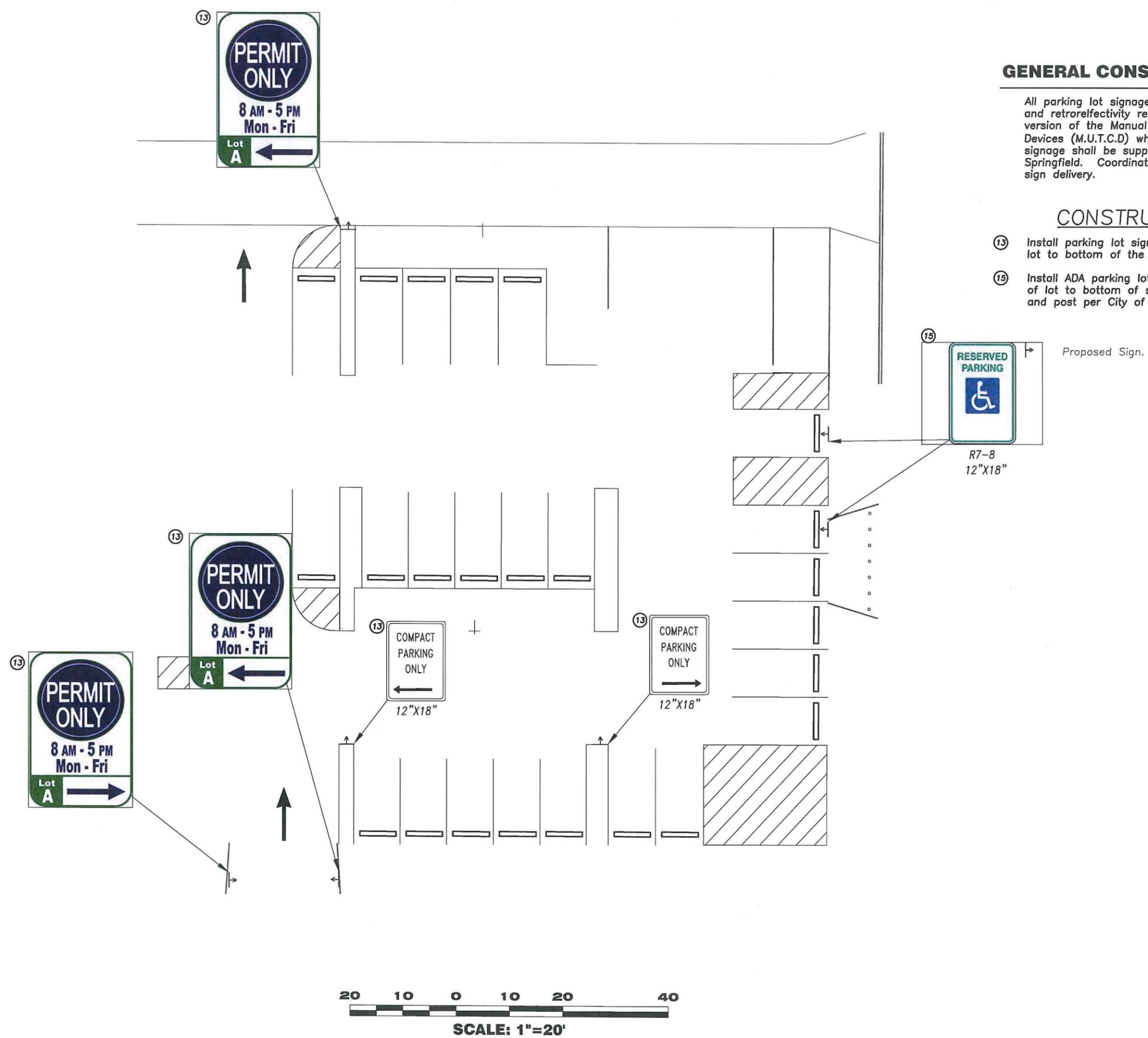
REGISTERED PROFESSIONAL
 ENGINEER
 19,697PE
 OREGON
 MAY 5, 1998
 BRIAN F. BARNETT
 EXPIRES 12-31-13

GENERAL CONSTRUCTION NOTES:

All parking lot signage shall comply with design and retroreflectivity requirements under the current version of the Manual of Uniform Traffic Control Devices (M.U.T.C.D) where applicable. Parking lot signage shall be supplied by the City of Springfield. Coordinate with project manager for sign delivery.

CONSTRUCTION NOTES:

- 13 Install parking lot sign at 6 feet from surface of lot to bottom of the sign.
- 15 Install ADA parking lot sign at 7 feet from surface of lot to bottom of sign. Install sign foundation and post per City of Springfield Std. Dwg. 5-18.



Revision/Issue Number	Drawn By	Date
1	MTL	4/10

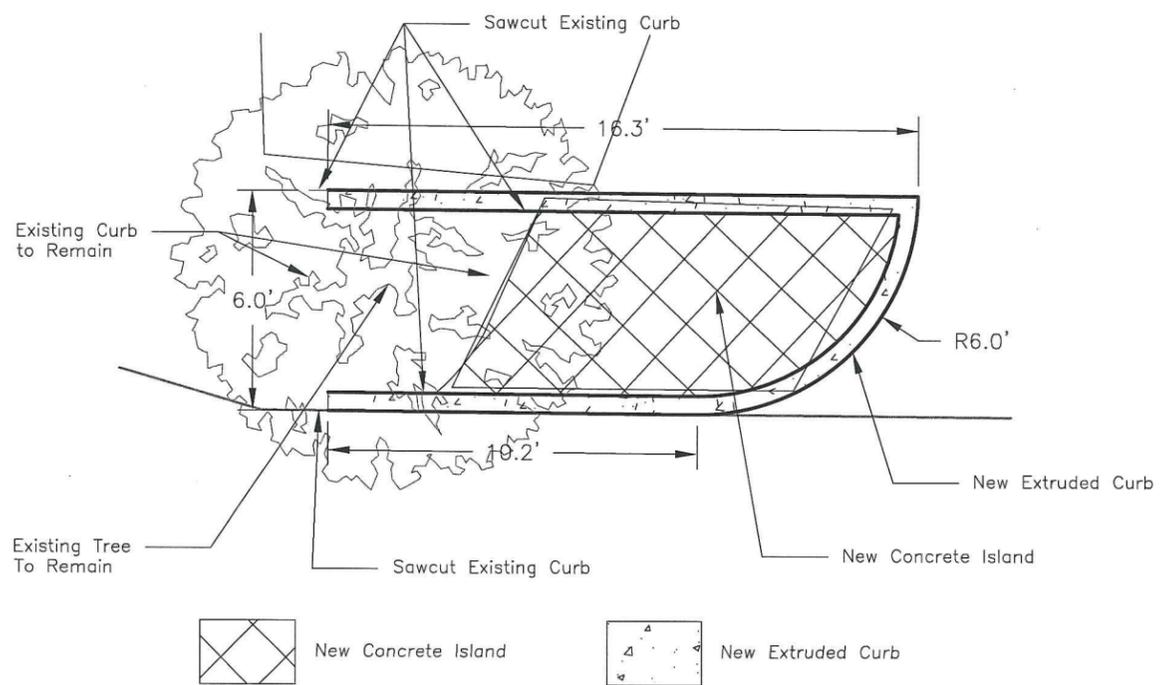
NOTE:

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

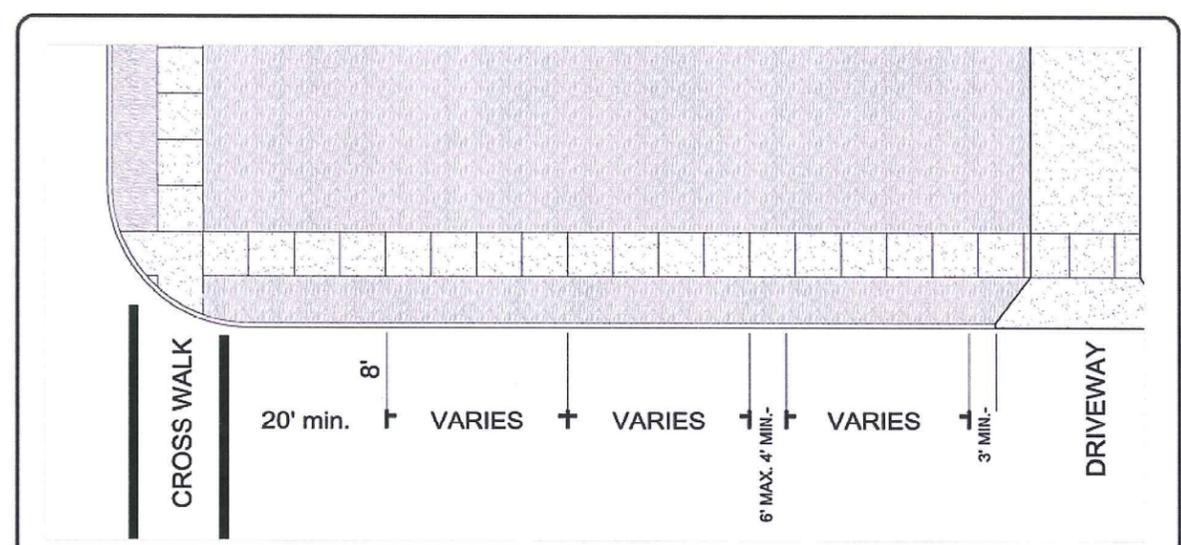
THE CONTRACTOR SHALL BE RESPONSIBLE
FOR DETERMINING UTILITY LOCATIONS PRIOR TO
BEGINNING OF CONSTRUCTION.
THESE PLANS MAY NOT SHOW ALL UTILITIES OR
THE CORRECT LOCATIONS.

**City Hall Parking Lot Redesign
Construction Details**

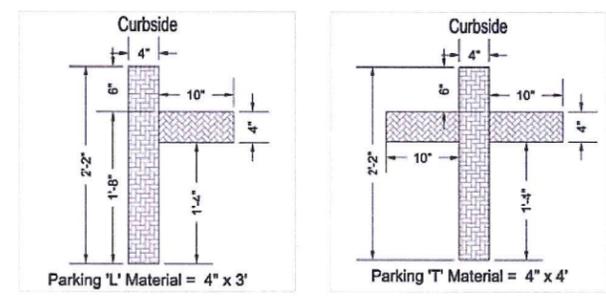
City of Springfield
PUBLIC WORKS / ENGINEERING
225 FIFTH STREET, SPRINGFIELD, OR 97477
PHONE (541) 726-3753 FAX (541) 736-1021
INTERNET www.ci.springfield.or.us



Concrete Island Detail



TYPICAL STRIPING - STALL LAYOUT



TYPICAL STRIPING DETAIL

- NOTES:**
- A. PARKING STALLS TO BE SET BACK 20' FROM CROSS WALK. (PAINTED OR IMPLIED)
 - B. EXISTING MARKINGS TO BE REMOVED PRIOR TO NEW INSTALLATION.
 - C. NEW PAVEMENT MARKINGS TO BE INSTALLED TO MANUFACTURER'S SPECIFICATIONS.
 - D. VERIFY DIMENSIONS AND LOCATIONS PRIOR TO CONSTRUCTION.
 - E. INSTALL MARKINGS AT APPROVED LOCATIONS.
 - F. INSTALL MARKINGS TO ODOT SPECIFICATION 00867 TYPE 'B' PRE-FORMED THERMOPLASTIC FILM.

NO	REVISION	DATE	BY	APPR

CITY OF SPRINGFIELD
DEPT. OF PUBLIC WORKS

**ON STREET PARKING
STRIPING DETAIL**

1

EXPIRES 12-31-13

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 CONTRACTOR AND THE CITY'S PUBLIC WORKS MAINTENANCE DEPARTMENT PRIOR TO HOEK UP. CONTACT MIKE RISLEY (726-3615) OR DENNY WRIGHT (736-1010) 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 CONSULTING 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 CONFERENCE 24 HOURS PRIOR TO PAVING. CONTACT DENNY WRIGHT (736-1010).
- M. ALL JOINTS BETWEEN EXISTING AND NEW ASPHALT PAVING SHALL BE SEALED WITH POLYMERIZED ASPHALT AND SANDED 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 LAKE 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. SEE EROSION CONTROL PLAN.
- 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.
- Z. THE CONTRACTOR SHALL VERIFY EACH EXISTING SANITARY AND STORM CONNECTION.

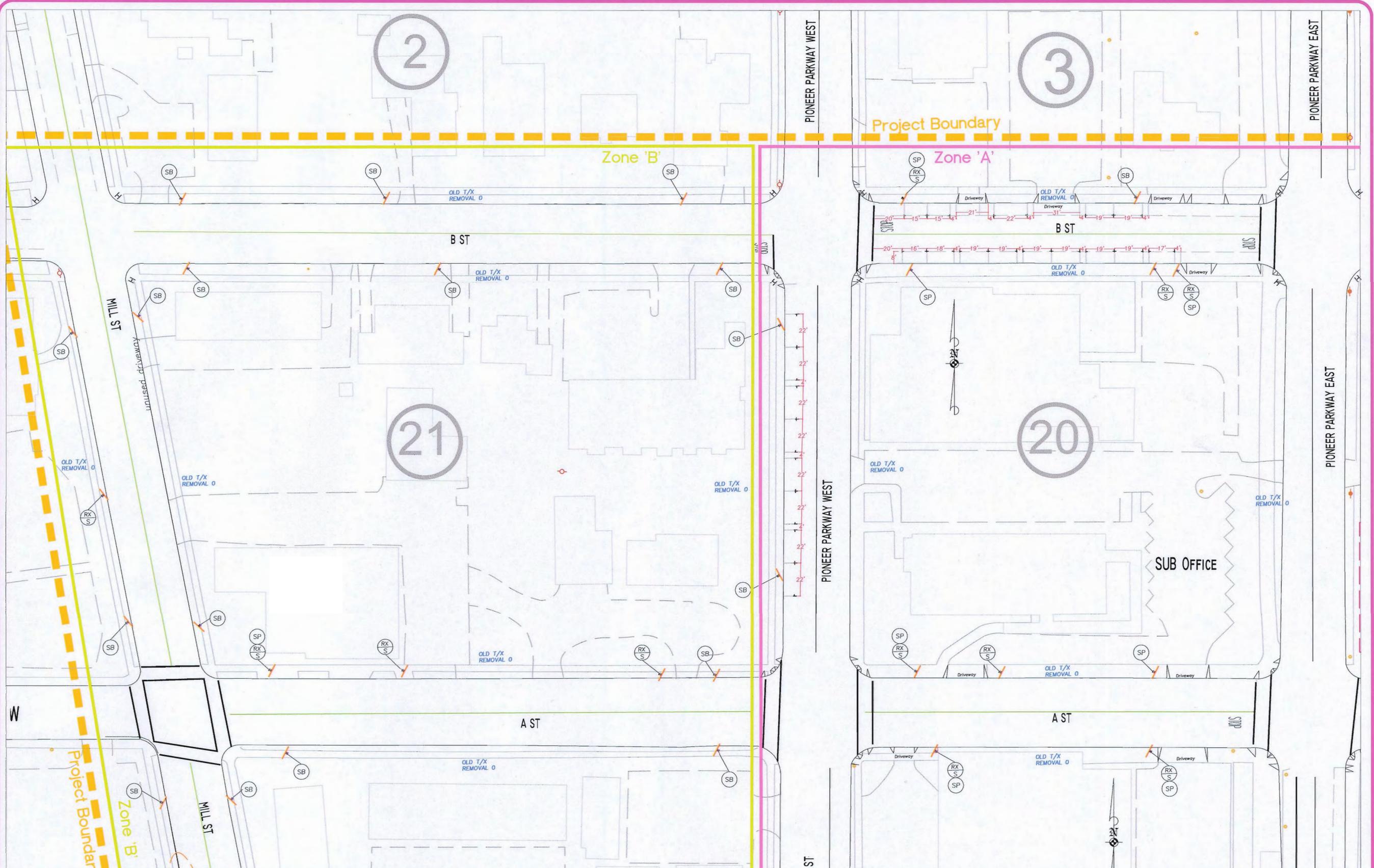


NOTE:
 UTILITY LOCATIONS ARE APPROXIMATE
 DO NOT
 SCALE OR LOCATE UTILITY LINES OR MAINS
 FROM THESE DRAWINGS
 CALL FOR UTILITY LOCATES
 1-800-332-2344
 THE CONTRACTOR SHALL BE RESPONSIBLE
 FOR DETERMINING UTILITY LOCATIONS PRIOR TO
 BEGINNING OF CONSTRUCTION.
 THESE PLANS MAY NOT SHOW ALL UTILITIES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

SHEET INDEX

TITLE SHEET	pg. 1
ON-STREET PARKING PLAN	pg. 2-10
EROSION CONTROL	pg. 11

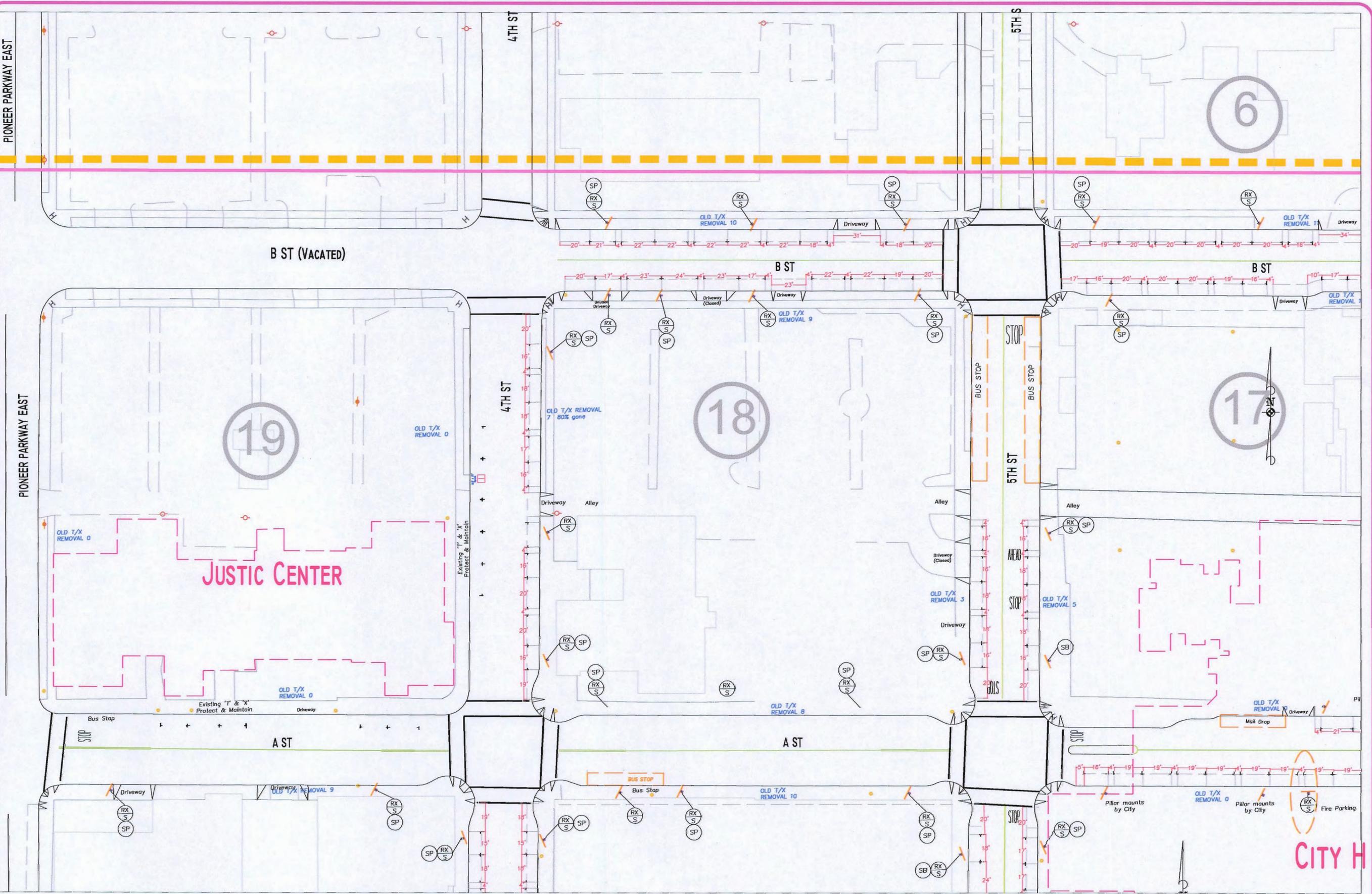
PROJ # P21058	Downtown On-Street Parking Plan - Title Sheet -			SCALE: 1"=40'	NO REVISION	DATE BY APPR.
SHEET # 1-11				DATE: 3/8/12	DRAWN BY: TAC	CHECKED BY: BFB



**** LEGEND NOTES ****

- Remove existing street sign/pole (Bid Item No. 245).
- Install sign base and pole (Bid Item No. 670).
- Install sign pole (Bid Item No. 670-A).
- ** Parking Removal Notes ****
- 'OLD T/X REMOVAL'**
- XX# = Number markings for Removal
- XX% = Percent remaining on Roadway.

PROJ # P21058 SHEET # 2-11	<h2 style="margin: 0;">Downtown On-Street Parking Plan</h2>	<p style="font-size: small; margin: 0;">Engineering & Transportation Services Division</p>	<p style="font-size: x-small; margin: 0;">REGISTERED PROFESSIONAL ENGINEER 19,697PE OREGON MAY 5, 1998 BRIAN F. BARNETT EXPIRES 12-31-12</p>	SCALE: 1"=40' DATE: 3/8/12 DRAWN BY: TAC DESIGNED BY: DRB CHECKED BY: BFB FILE: P21058 On Street Parking.dwg	NO REVISION DATE BY APPR.
---	---	--	--	---	----------------------------------

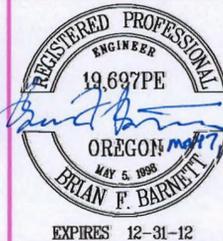


**** LEGEND NOTES ****

-  Remove existing street sign/pole (Bid Item No. 245).
 -  Install sign base and pole (Bid Item No. 670).
 -  Install sign pole (Bid Item No. 670-A).
- ** Parking Removal Notes ****
 "OLD T/X REMOVAL"
 XX# = Number markings for Removal
 XX% = Percent remaining on Roadway.

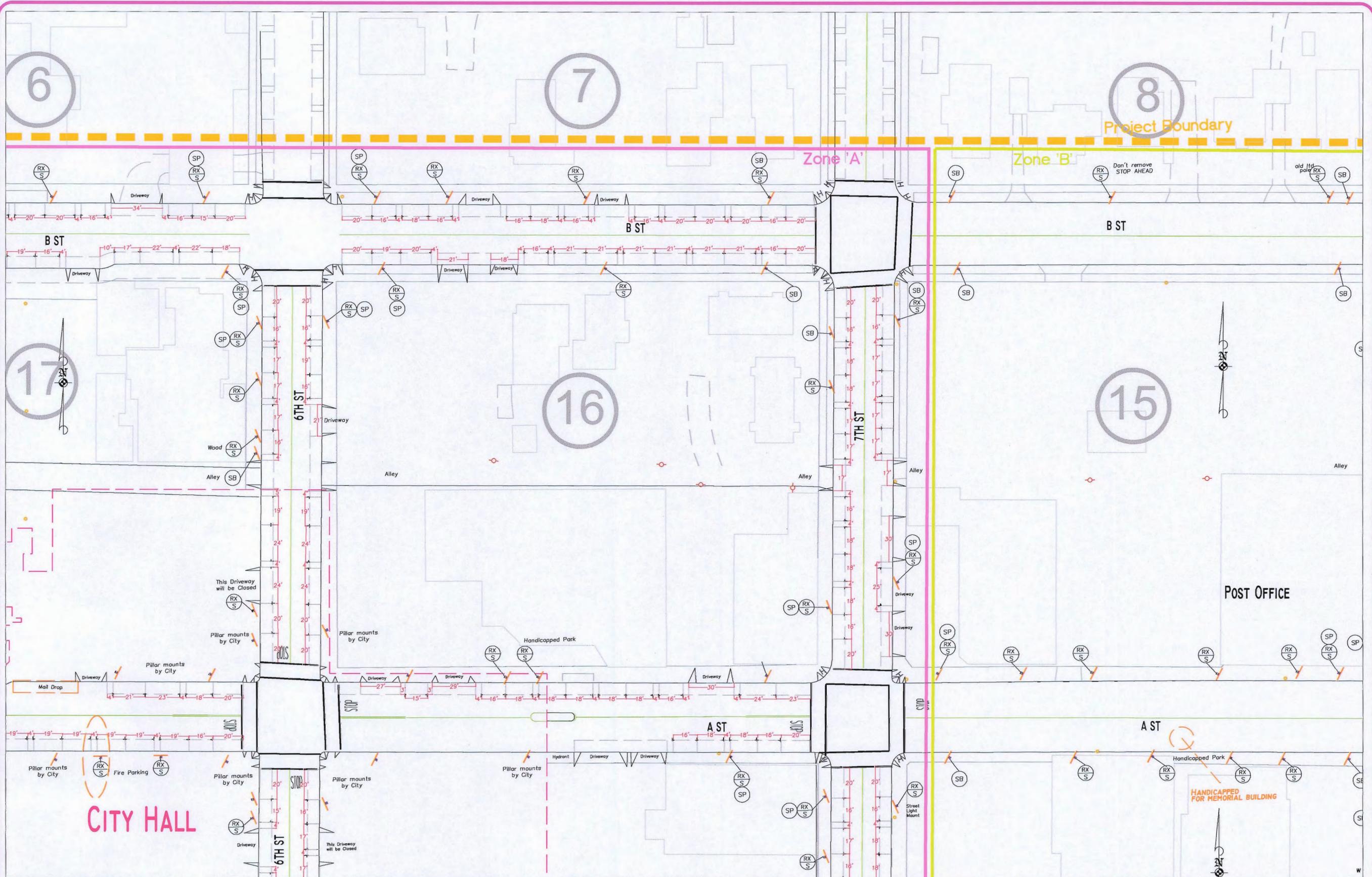
PROJ #
P21058
SHEET #
3-11

Downtown On-Street Parking Plan



SCALE: 1"=40'
 DATE: 3/8/12
 DRAWN BY: TAC
 DESIGNED BY: DRB
 CHECKED BY: BFB
 FILE: P21058 On Street Parking.dwg

NO	REVISION	DATE	BY	APPR.

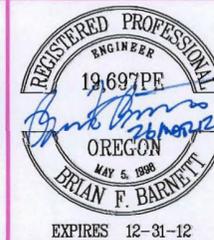


** LEGEND NOTES **

-  Remove existing street sign/pole (Bid Item No. 245).
-  Install sign base and pole (Bid Item No. 670).
-  Install sign pole (Bid Item No. 670-A).

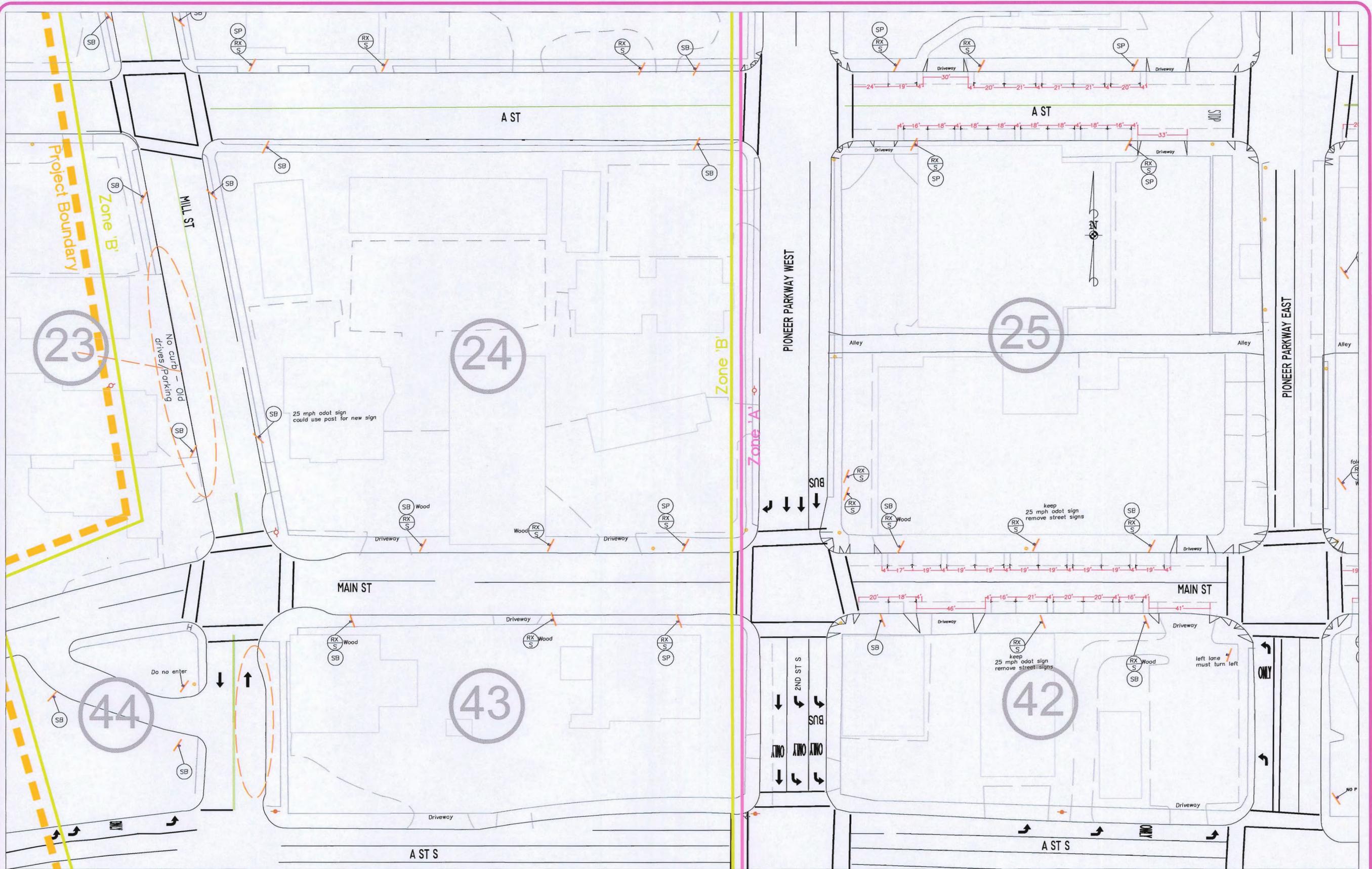
PROJ #
P21058
SHEET #
4-11

Downtown On-Street Parking Plan



SCALE: 1"=40'
DATE: 3/8/12
DRAWN BY: TAC
DESIGNED BY: DRB
CHECKED BY: BFB
FILE: P21058 On Street Parking.dwg

NO	REVISION	DATE	BY	APPR.

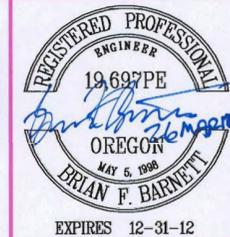


**** LEGEND NOTES ****

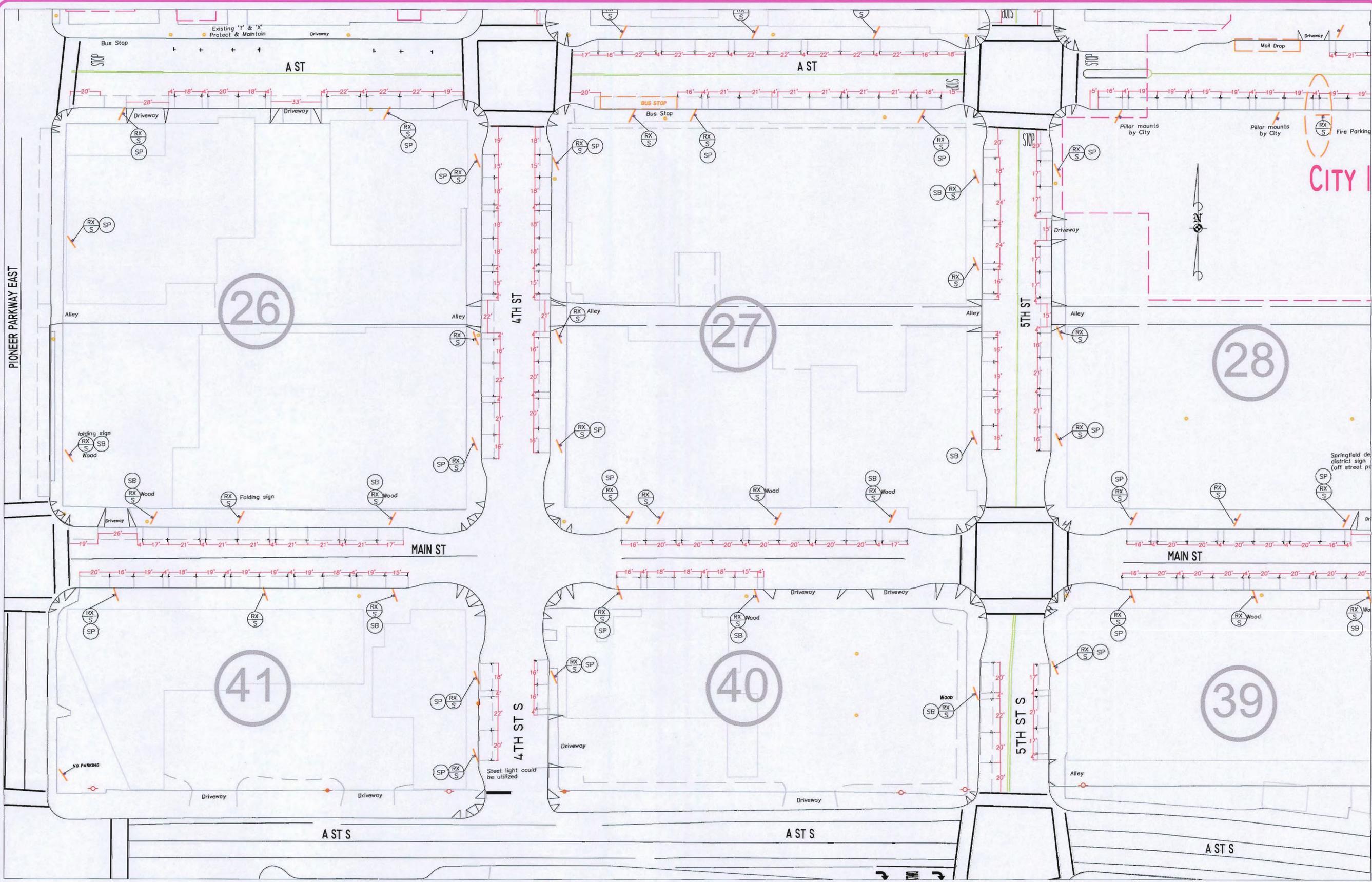
-  Remove existing street sign/pole (Bid Item No. 245).
-  Install sign base and pole (Bid Item No. 670).
-  Install sign pole (Bid Item No. 670-A).

PROJ #
P21058
SHEET #
6-11

Downtown On-Street Parking Plan



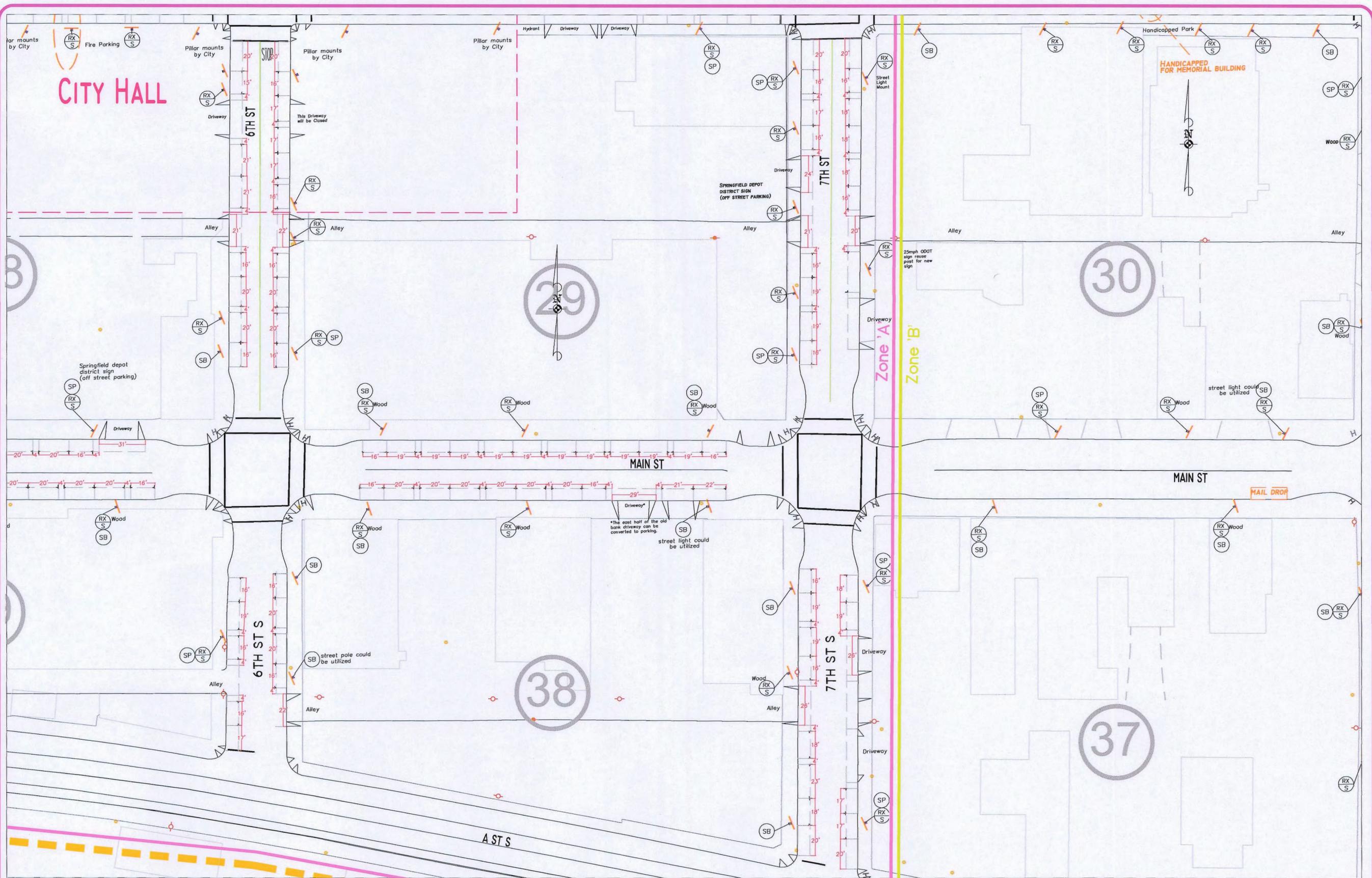
SCALE: 1"=40'	NO	REVISION	DATE	BY	APPR.
DATE: 3/8/12					
DRAWN BY: TAC					
DESIGNED BY: DRB					
CHECKED BY: BFB					
FILE: P21058 On Street Parking.dwg					



**** LEGEND NOTES ****

-  Remove existing street sign/pole (Bid Item No. 245).
-  Install sign base and pole (Bid Item No. 670).
-  Install sign pole (Bid Item No. 670-A).

PROJ # P21058	<h2 style="margin: 0;">Downtown On-Street Parking Plan</h2>			SCALE: 1"=40' DATE: 3/8/12 DRAWN BY: TAC DESIGNED BY: DRB CHECKED BY: BFB FILE: P21058 On Street Parking.dwg	NO REVISION DATE BY APPR.
SHEET # 7-11					

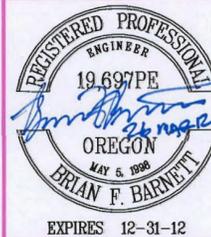


**** LEGEND NOTES ****

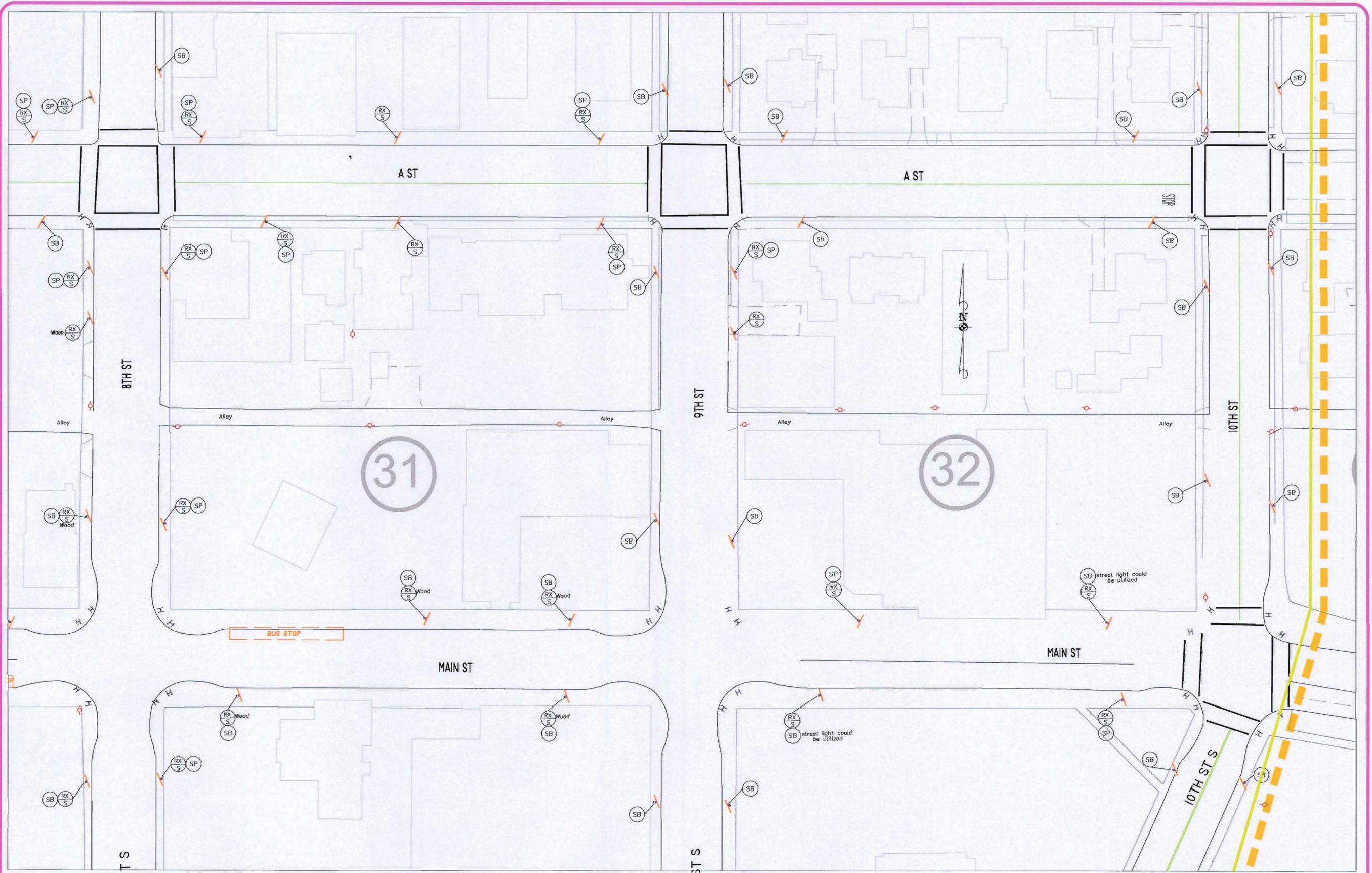
-  Remove existing street sign/pole (Bid Item No. 245).
-  Install sign base and pole (Bid Item No. 670).
-  Install sign pole (Bid Item No. 670-A).

PROJ #
P21058
SHEET #
8-11

Downtown On-Street Parking Plan



SCALE: 1"=40'	NO REVISION	DATE	BY	APPR.
DATE: 3/8/12				
DRAWN BY: TAC				
DESIGNED BY: DRB				
CHECKED BY: BFB				
FILE: P21058 On Street Parking.dwg				

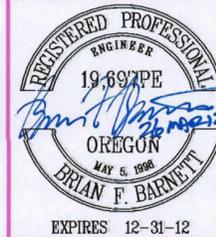


**** LEGEND NOTES ****

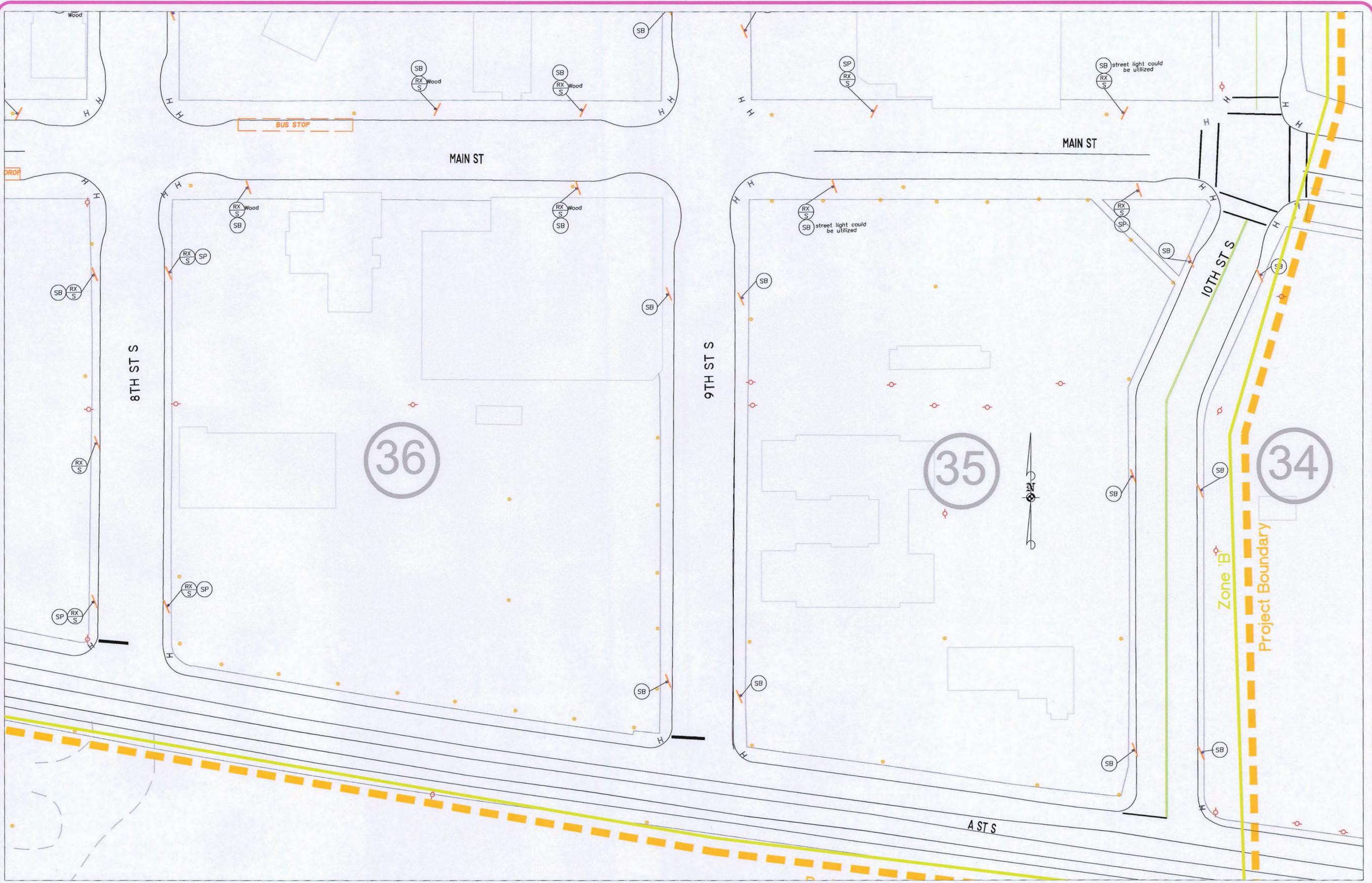
-  Remove existing street sign/pole (Bid Item No. 245).
-  Install sign base and pole (Bid Item No. 670).
-  Install sign pole (Bid Item No. 670-A).

PROJ #
P21058
SHEET #
9-11

Downtown On-Street Parking Plan

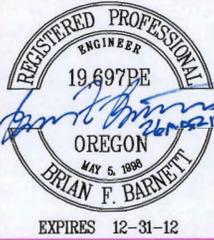


SCALE: 1"=40'	NO REVISION	DATE	BY	APPR.
DATE: 2/3/8/12				
DRAWN BY: TAC				
DESIGNED BY: DRB				
CHECKED BY: BFB				
FILE: P21058 On Street Parking.dwg				



**** LEGEND NOTES ****

-  Remove existing street sign/pole (Bid Item No. 245).
-  Install sign base and pole (Bid Item No. 670).
-  Install sign pole (Bid Item No. 670-A).

PROJ # P21058	<h2 style="margin: 0;">Downtown On-Street Parking Plan</h2>			SCALE: 1"=40' DATE: 3/8/12 DRAWN BY: TAC DESIGNED BY: DRB CHECKED BY: BFB FILE: P21058 On Street Parking.dwg	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 5%;">NO</th> <th style="width: 5%;">REVISION</th> <th style="width: 5%;">DATE</th> <th style="width: 5%;">BY</th> <th style="width: 5%;">APPR.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO	REVISION	DATE	BY	APPR.															
NO	REVISION	DATE	BY	APPR.																					
SHEET # 10-11																									

NOTES:

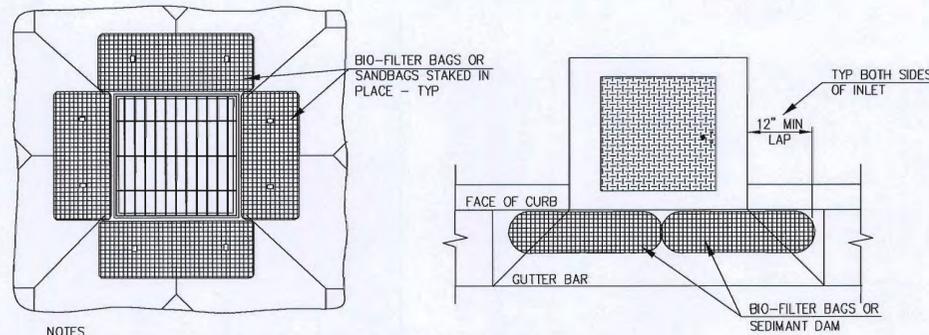
1. PLACE INLET/CATCH BASIN PROTECTION AT EXISTING FIXTURES (SEE DETAIL ON SHEET E2).

GENERAL NOTES:

1. CONCRETE WASHOUTS ARE NOT PROVIDED ON THIS PROJECT
2. SAW CUTTING SLURRY IS TO BE 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

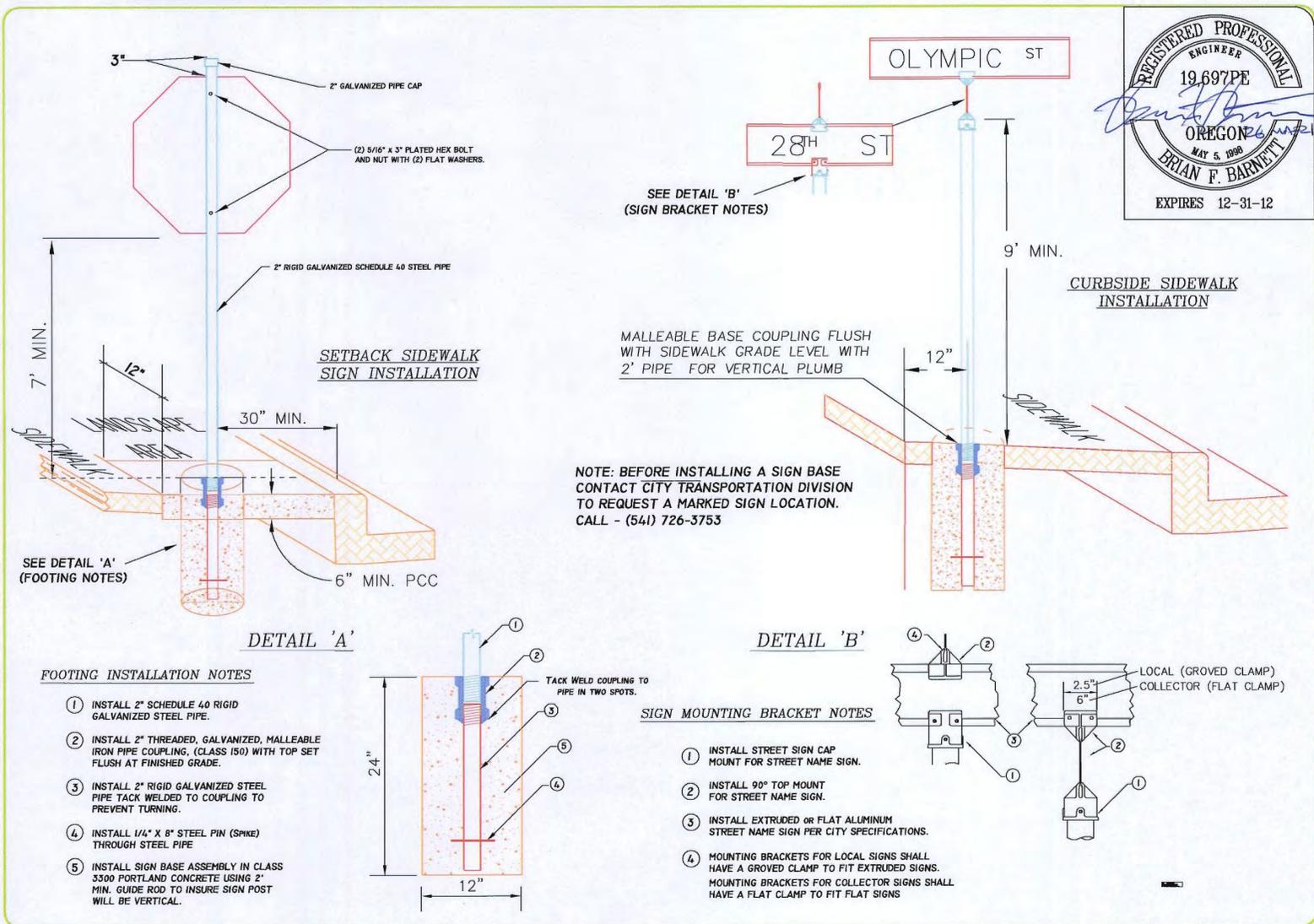
- Approval of this Erosion and Sedimentation Control Plan (ESCP) does not constitute an approval of permanent road or drainage design (e.g., size and location of roads, pipes, restrictors, channels, retention facilities, utilities, etc.).
- Approval of this ESCP does not relieve the permit holder and/or the contractor from all other permitting requirements. Prior to beginning construction activities, all other necessary approvals shall be obtained.
- An inspection of the erosion control measures by City LDP staff is required prior to any ground disturbance on the site.
- 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-laden water does not leave the site.
- 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.
- 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.
- 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.
- 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).
- 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.
- 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.).
- A supply of materials necessary to meet compliance and implement the LDP or other best management erosion practices under all weather conditions shall be maintained at all times on the construction site.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- Where straw mulch for temporary erosion control is required, it shall be applied at a minimum thickness of two to three inches.
- 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).



- 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

ROADWAY SIGN DETAIL

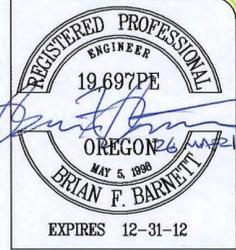


FOOTING INSTALLATION NOTES

1. INSTALL 2" SCHEDULE 40 RIGID GALVANIZED STEEL PIPE.
2. INSTALL 2" THREADED, GALVANIZED, MALLEABLE IRON PIPE COUPLING (CLASS 150) WITH TOP SET FLUSH AT FINISHED GRADE.
3. INSTALL 2" RIGID GALVANIZED STEEL PIPE TACK WELDED TO COUPLING TO PREVENT TURNING.
4. INSTALL 1/4" X 8" STEEL PIN (SPIKE) THROUGH STEEL PIPE.
5. INSTALL SIGN BASE ASSEMBLY IN CLASS 3500 PORTLAND CONCRETE USING 2" MIN. GUIDE ROD TO INSURE SIGN POST WILL BE VERTICAL.

SIGN MOUNTING BRACKET NOTES

1. INSTALL STREET SIGN CAP MOUNT FOR STREET NAME SIGN.
2. INSTALL 90° TOP MOUNT FOR STREET NAME SIGN.
3. INSTALL EXTRUDED OR FLAT ALUMINUM STREET NAME SIGN PER CITY SPECIFICATIONS.
4. MOUNTING BRACKETS FOR LOCAL SIGNS SHALL HAVE A GROVED CLAMP TO FIT EXTRUDED SIGNS. MOUNTING BRACKETS FOR COLLECTOR SIGNS SHALL HAVE A FLAT CLAMP TO FIT FLAT SIGNS.



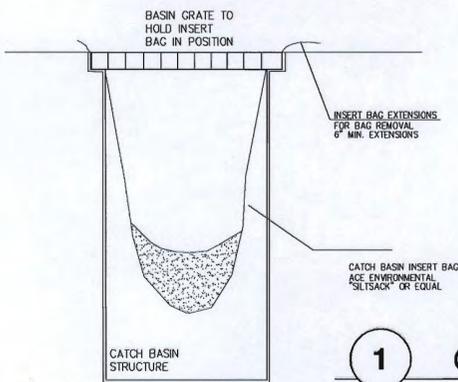
NO.	DATE	BY	REVISION	DATE	BY	APPR.
1	4/24/12	DRB	STANDARD	4/24/12	DRB	
2	7/01/12	DRB	STANDARD	7/01/12	DRB	
3	5/11/12	DRB	STANDARD	5/11/12	DRB	
4	8/11/12	DRB	STANDARD	8/11/12	DRB	
5			STANDARD			

CITY OF SPRINGFIELD
DEPT. OF PUBLIC WORKS
TRANSPORTATION DIVISION
225 FIFTH STREET
SPRINGFIELD, OR 97477
(541) 726-3753

ROADSIDE SIGN INSTALLATION DETAIL

STANDARD DRAWING
5-18

INLET PROTECTION



1 CATCH BASIN INSERT BAG

PROJ #
P21058
SHEET #
11-11

Downtown On-Street Parking Plan - Erosion Plan -



SCALE: 1"=40'
DATE: 3/8/12
DRAWN BY: TAC
DESIGNED BY: DRB
CHECKED BY: BFB
FILE: P21058 On Street Parking.dwg

NO.	REVISION	DATE	BY	APPR.