

**City of Hillsboro**  
**2016 Pavement Management Program**  
**Contract #20552222-6102**

**Schedule "B": Slurry Seals**  
**Schedule "C": Micro-Surfacing**  
**Schedule "D": Alley Overlays & AC**  
**Replacements**  
**Schedule "E": Overlays**



**Engineering Division**  
**150 E Main Street, Fourth Floor**  
**Hillsboro, OR 97123**  
**Phone: 503-681-6416**



City of Hillsboro, Oregon  
**Invitation to Bid – Public Improvement**

**2016 Pavement Management Program: Slurry Seals, Micro-Surfacing, and Overlays  
ITB No. 20552222-6102**

<b>Bids Due:</b>	<b>Due Date and Time:</b> Not Later than 2:00:00 PM Pacific Time, <b>May 12, 2016</b> . Bid Closing is the Due Date and Time shown above. Late Bids shall be rejected.  <b>First Tier Subcontractor Disclosure:</b> Not later than 4:00:00 PM Pacific Time, May 12, 2016.	
<b>Submit Bids to:</b>	<b>City of Hillsboro</b> Brad Albert, Project Manager Public Works – Engineering Division 150 East Main Street, Fourth Floor Hillsboro, Oregon 97123 All bid documents shall be submitted in hard copy to address above no later than the Due Date and Time. Electronic or e-mailed bids shall be rejected.	
<b>Contact:</b>	<b>Direct Bidding/Technical questions to:</b> ITB Contact: Brad Albert Email: <a href="mailto:brad.albert@hillsboro-oregon.gov">brad.albert@hillsboro-oregon.gov</a> Phone: 503-681-6234	<b>For copies of Documents:</b> Contact: Public Works Dept., Engineering Division Phone: 503-681-6146 Website: <a href="http://www.hillsboro-oregon.gov/PublicWorksITB">http://www.hillsboro-oregon.gov/PublicWorksITB</a>
<b>Request Deadline:</b>	<b>For all substitution, clarification and change requests as well as solicitation protests:</b> Not later than 5:00 PM Pacific Time, <b>May 6, 2016</b>	
<b>Prevailing Wages:</b>	This project is a Public Work and subject to ORS 279C.800 – ORS 279C.870 including but not limited to: payment of prevailing wages, reporting and public works bond.	
<b>Bidder Prequalification</b>	Bidder Prequalification is not required	
<b>Pre-bid Conference:</b>	No pre-bid conference will be held.	
<b>Public Bid Opening:</b>	A Public Bid Opening to be held at the following time and location: 2:00PM, May 12, 2016. Public Works – Engineering Division, 150 East Main St, Fourth Floor, Hillsboro, OR 97123	

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## ATTACHMENT A:

### FORM OF CONTRACT, GENERAL CONDITIONS SUPPLEMENTARY CONDITIONS (IF ANY)

## PART B:

### DRAWINGS AND SPECIFICATIONS

#### LIST OF DRAWINGS:

- SCHEDULE "B": SLURRY SEAL MAPBOOK
- SCHEDULE "B": CITY OF SHERWOOD MAP AND SPREADSHEETS
- CITY OF OREGON CITY SCHEDULE "B": SLURRY SEALS AND SCHEDULE "C": MICRO-SURFACING MAPS & SPREADSHEETS
- SCHEDULE "C": MICRO-SURFACING MAPBOOK
- SCHEDULE "D": ALLEY OVERLAYS & AC REPLACEMENTS
- SCHEDULE "E": OVERLAYS

#### TECHNICAL SPECIFICATIONS:

- GENERAL SPECIFICATIONS
- SCHEDULE "B": SLURRY SEAL SPECIFICATIONS
- SCHEDULE "C": MICRO-SURFACING SPECIFICATIONS
- SCHEDULE "D": ALLEY OVERLAYS & AC REPLACEMENTS SPECIFICATIONS
- SCHEDULE "E": OVERLAYS SPECIFICATIONS

This Invitation Bid Document is comprised of all Part A and Part B documents, including, but not limited to: instructions, forms, drawings and specifications. The drawings and specifications pertaining to this ITB are hereby incorporated by reference.

## SCHEDULE

<b>ITB ISSUED</b>	<b>April 27, 2016</b>
<b><u>REQUEST DEADLINE</u> FOR: SUBSTITUTION, CLARIFICATION, OR CHANGE AND SOLICITATION PROTEST DEADLINE</b>	<b>May 6, 2016</b>
<b>LAST ADDENDA ISSUED</b>	<b>NOT LATER THAN 72 HOURS PRIOR TO BIDS DUE</b>
<b>BIDS DUE</b>	<b>See Page 1</b>
<b>FIRST-TIER SUBCONTRACTOR DISCLOSURE</b>	<b>See Page 1</b>
<b>ANTICIPATED CONTRACT START</b>	<b>July 1, 2016</b>
<b>ANTICIPATED FINAL COMPLETION</b>	<b>Schedule "B": Sept. 1, 2016 Schedule "C": Sept. 1, 2016 Schedule "D": Sept. 30, 2016 Schedule "E": Sept. 30, 2016</b>

**NOTE: The City reserves the right to deviate from this schedule.**

## ADVERTISEMENT

CITY OF HILLSBORO  
Public Works, Engineering Division  
Invitation to Bid (ITB) – Public Improvement  
2016 Pavement Management Program: Slurry Seals, Micro-Surfacing, and Overlays & AC Replacements  
No. 20552222-6102

Bids due and Bid Closing Date and Time: **May 12, 2016** 2:00 PM  
First Tier Subcontractor Disclosure due: Not later than **May 12, 2016** 4:00 PM

The City of Hillsboro seeks sealed bids from qualified firms able to provide the following work required to install:

***Schedule "B" – Slurry Seals:*** *Furnish all labor, equipment, and material required to complete the preparation and placement of approximately 367,551 square yards of asphalt emulsion slurry seal, including striping and associated work. Joint Cooperative Procurement with City of Sherwood and City of Oregon City.*

***Schedule "C" – Micro-Surfacing:*** *Furnish all equipment, materials, and labor required to complete preparation and placement of approximately 71,735 square yards of asphalt emulsion Micro-Surfacing, including striping and associated work. Joint Cooperative Procurement with City of Oregon City.*

***Schedule "D" – Alley Overlays & AC Replacements:*** *Furnish all equipment, materials, and labor required to complete the preparation and placement of approximately 703 tons of asphalt concrete, including excavation, pavement repair, grinding, striping, and associated work.*

***Schedule "E" – Overlays:*** *Furnish all equipment, materials, and labor required to complete the preparation and placement of approximately 4,260 tons of asphalt concrete, including excavation, pavement repair, grinding, sidewalk ramp replacement, striping, and associated work.*

There is no pre-qualification process for this ITB. A bidder responsibility form will be required as part of the process. Late bids will be rejected as non-responsive.

Sealed bids will be received by Brad Albert, Project Manager at: 150 E. Main St, 4<sup>th</sup> Floor, Hillsboro, Oregon 97123. Questions about this ITB may be directed to the Contact: Brad Albert at 503-681-6234 or Brad.albert@hillsboro-oregon.gov.

ITB documents may be obtained at <http://hillsboro-oregon.gov/PublicWorksITB>. Hard copy ITB documents may be obtained at 150 E. Main St, 4<sup>th</sup> Floor, Hillsboro, Oregon 97123, for \$20.00 (non-refundable) plus postage for mailing. This ITB is for construction of a Public Work subject to ORS 279C.800 to 279C.870 (prevailing wage law).

The City of Hillsboro reserves the right to reject any bid not in compliance with all prescribed public contracting procedures and requirements and may reject for good cause all bids upon a finding of the City of Hillsboro that it is in the public interest to do so and at its sole option may waive any minor informalities in any bid [ORS 279C365(1)].

**PART A:**

**SECTION 1- SUMMARY AND INSTRUCTIONS TO BIDDERS**

**1.01. BRIEF SUMMARY OF THE WORK**

A. The City requests sealed Bids to provide the following work required to install:

***Schedule "B" – Slurry Seals:*** *Furnish all labor, equipment, and material required to complete the preparation and placement of approximately 367,551 square yards of asphalt emulsion slurry seal, including striping and associated work. Joint Cooperative Procurement with City of Sherwood and City of Oregon City.*

***Schedule "C" – Micro-Surfacing:*** *Furnish all equipment, materials, and labor required to complete preparation and placement of approximately 71,735 square yards of asphalt emulsion Micro-Surfacing, including striping and associated work. Joint Cooperative Procurement with City of Oregon City.*

***Schedule "D" – Alley Overlays & AC Replacements:*** *Furnish all equipment, materials, and labor required to complete the preparation and placement of approximately 703 tons of asphalt concrete, including excavation, pavement repair, grinding, striping, and associated work.*

***Schedule "E" – Overlays:*** *Furnish all equipment, materials, and labor required to complete the preparation and placement of approximately 4,260 tons of asphalt concrete, including excavation, pavement repair, grinding, sidewalk ramp replacement, striping, and associated work.*

B. ENGINEER'S PROJECT ESTIMATE:

***Schedule "B": Slurry Seals*** ***\$625,000 to \$675,000***

***Schedule "C": Micro-Surfacing*** ***\$575,000 to \$625,000***

***Schedule "D": Alley Overlays & AC Replacements*** ***\$175,000 to \$200,000***

***Schedule "E": Overlays*** ***\$850,000 to \$900,000***

**1.02. IMPORTANT ITB EVENTS**

A. PRE-BID CONFERENCE

No pre-bid conference will be held.

B. RECEIPT OF BIDS

Sealed bids ("Bids") will be received at the location, Due Date and Time specified on page 1 of this document.

C. BID CLOSING

Bid Closing is shown as the Due Date and Time on page 1 of this document. Bids received after Bid Closing will be considered Late. The City will not accept Offers after Bid Closing.

D. FIRST-TIER SUBCONTRACTOR DISCLOSURE

The first-tier subcontractor disclosure form is due at the time and date shown on page 1 of this document. Failure to submit first-tier subcontractor disclosure form by this due date and time may result in Bid rejection.

E. PUBLIC BID OPENING

The Public Bid Opening will be held at the location, time and date shown on page 1 of this document.

**1.03. BID REQUIREMENTS**

<b>Bid Requirements Checklist</b>		
The following is a listing of Bid submission components		
	Signed Bid Form – all pages	Submit with Bid
	Bid Security	Submit with Bid
	Bidder Responsibility Information Form – all pages	Submit with Bid
	First-Tier Subcontractor Disclosure	Submit as per page 1
	If bidding Schedule “C”: Micro-Surfacing – Special Spec #4	Submit with Bid
	Any additional items specified in Supplementary Instructions to Bidders.	Submit with Bid

*The Bid Requirements checklist is provided for the Bidder’s convenience. Bidder is advised to thoroughly review ITB documents to be certain that it has met all requirements and included all required documents, forms and information in its Bid. In the event of a conflict between the Bid Requirements Checklist and other ITB Documents, other ITB Documents shall take precedence.*

**A. FIRST-TIER SUBCONTRACTOR DISCLOSURE**

As per the form of first-tier subcontractor disclosure set forth in ORS 279C.370, Bidder shall submit to the City a disclosure of the first-tier subcontractors that:

- (a) Will be furnishing labor or will be furnishing labor and materials in connection with the public improvement contract; and
- (b) Will have a contract value that is equal to or greater than five percent of the total project Bid or \$15,000, whichever is greater, or \$350,000 regardless of the percentage of the total project base bid. Bidder must submit this documentation in accordance with Section 1, 1.08 and Section 3, 3.4.

**B. BID SECURITY**

Bid security shall accompany each Bid exceeding \$100,000 as per Section 1, 1.08, F.

**C. OREGON CONSTRUCTION CONTRACTORS BOARD**

Bidders shall be licensed with the Oregon Construction Contractors Board prior to bidding on this project.

**D. BIDDER’S QUALIFICATIONS AND RESPONSIBILITY**

Each Bidder shall submit a completed Bidder’s Responsibility Information Form along with its Bid. The Bidder’s Responsibility Information Form will be used to evaluate the qualifications of any Bidder whose Bid is under consideration for Contract Award (in addition to Bidder Pre-qualification, if applicable). Bidder’s responses to requirements in Supplementary Instruction to Bidders may also be utilized in this evaluation.

Prior to award and execution of a Contract, the City will evaluate whether the apparent successful Bidder meets the applicable standards of responsibility identified in ORS 279C.375 and COH-49-0390. See also COH-49-0440(1)(c)(H). In doing so, the City may investigate Bidder and request information in addition to that already required in this document, when the City, in its sole discretion, considers it necessary or advisable. Submission of a signed Bid shall constitute approval for the City to obtain any information that the City deems necessary to conduct the evaluation.

Bids will be evaluated to identify the lowest responsive Bid submitted by a responsible Bidder which is not otherwise disqualified. (Refer to ORS 279C.375 and COH-49-0390. See also COH-49-0440(1)(c)(H)).

The City may postpone the award of the Contract after announcement of the apparent successful Bidder in order to complete its investigation and evaluation. Failure of the apparent successful Bidder to demonstrate

responsibility shall render the Bidder non-responsible and shall constitute grounds for Bid rejection, as required under COH-049-0390.

Any Bidder who fails to submit a complete Bidder Responsibility Information Form will be deemed to be non-responsive and will not be considered for Award of Contract.

If a Bidder is found not to be responsible, documentation of the reasoning will be sent to the Oregon Construction Contractor's Board (OCCB). Such documentation will be based upon the criteria set forth in ORS 279C.375(3).

#### 1.04. CONTRACT REQUIREMENTS

##### A. PREVAILING WAGES

The selected Contractor and its subcontractors shall pay the applicable prevailing wages to their workers as required by ORS 279C.840. This ITB and the resulting Contract are subject to the following BOLI wage rate requirements and the prevailing wage rates set forth in the following booklets:

- (a.) The "Prevailing Wage Rates for Public Works Contracts in Oregon" dated January 1, 2016 and any applicable amendments to these rates.
- (b.) The "PWR Apprenticeship Rates" dated January 1, 2016 and any applicable amendments to these rates.

The complete publications may be found online at the BOLI website at: [http://www.oregon.gov/boli/WHD/PWR/Pages/pwr\\_state.aspx](http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx) and are incorporated by reference.

##### B. DAVIS BACON ACT – FEDERALLY FUNDED CONTRACTS

This project is subject to the Davis-Bacon Act (40 U.S.C. 3141 et seq.), Federal Department of Labor Prevailing Wages. Yes:  No: . If Yes, see Attachment B for applicable Prevailing Wage Rate information.

##### C. CONTRACT, BONDS AND INSURANCE

The successful Bidder must enter into a Contract with the City in the form included here as Attachment A. Agreement Form. The successful Bidder must obtain and maintain insurance and bonding as per Section 1, 1.11 A., Section 3, 3.7 Performance Bond, 3.8 Labor and Materials Payment Bond, and 3.6 Agreement Form. The successful Bidder shall obtain a Payment Bond and a Performance Bond issued by a surety which is authorized to transact surety business in the State of Oregon and which has an A.M. Best "A" or better rating.

##### D. WARRANTY BONDING

The selected Contractor will be required to provide the City a Warranty Bond.

YES:  NO:

"A Warranty Bond in the form provided herein as "3.9 Warranty Bond" is required for this project and must be provided by the Contractor before the final payment on the contract is issued by the City. The warranty security furnished by the Contractor for the work performed will be ten percent (10%) of the original contract amount. This security is to guarantee replacement and repair of the public improvements, provided by the Contractor under the contract, for a period of one (1) year following the issuance of the written Notice of Substantial Completion.

#### 1.05. AVAILABILITY OF ITB DOCUMENTS

ITB documents may be obtained through area plan centers and on the City's website at [www.hillsboro-oregon.gov/PublicWorksITB](http://www.hillsboro-oregon.gov/PublicWorksITB). Hard copy ITB documents may be obtained (\$20 non-refundable) or viewed at the City of Hillsboro, Public Works, Engineering Division, Hillsboro Civic Center, 150 E Main St, 4<sup>th</sup> Floor, Hillsboro, OR 97123.

Bidders obtaining documents from a plan center or other third party are advised that the City recognizes as plan holders only those bidders who have purchased documents from the City or those who have contacted the City at 503-681-6146 and requested to be placed on the plan holder's list.

#### **1.06. ITB/PROJECT CONTACT**

All questions, requests for clarification, requests for change, requests for substitution and any solicitation protests must be addressed to the ITB Contact shown on page 1 of this document.

#### **1.07. SOLICITATION PROTEST; REQUEST FOR CHANGE; REQUEST FOR CLARIFICATION; REQUEST FOR BRAND NAME/PRODUCT SUBSTITUTION**

A. PROCEDURE: Questions and clarification requests must be directed to the contact shown on page 1 of this ITB. The appropriate means of seeking changes to provisions of this ITB are through (a) requests for approval of an "approved equivalent" (b) requests for changes to contractual terms, Specifications, or Plans; and (c) protests of contractual terms, Specifications, or Plans.

Any Offer/Bid response that includes non-approved alternate product brands or products, that takes exception to the Specifications or Plans or contractual terms of the ITB may be deemed non-responsive and may be rejected.

B. METHOD OF SUBMITTING REQUESTS FOR CHANGES TO THIS ITB: Emailed or mailed requests must be marked as follows:

(a) Bid Request for Substitution Request (Request for Clarification, Request for Change, or Protest, whichever is applicable)

(b) ITB Number

Requests must be received by the contact listed on Page 1 of the ITB, in writing, either in hardcopy or by email, no later than the Request Deadline on the Schedule shown on Page 2 of the ITB. Unless this specific deadline is extended by subsequent Addenda, no requests for substitution, requests for clarification, requests for change, or protests pertaining to provisions contained in the originally-issued ITB will be considered after the date specified herein.

C. REQUEST FOR APPROVAL OF AN "APPROVED EQUIVALENT": Bidders shall provide the named product unless another is approved through a request for approval of an "or approved equal" or an "or approved equivalent, or a product exemption has been issued (ORS 279C.345). Other brands of equal quality, merit and utility will be considered upon proper submittal of the request with appropriate documentation:

(a) Requests must provide all of the information necessary for the City to determine product acceptability.

(b) Failure to provide sufficient information with the request will cause the request to be considered not equivalent.

(c) Any product subsequently approved for substitution will be listed on an Addenda issued by the City and posted on ORPIN.

(d) Bidders are advised to use the "Substitution" form for such requests. (Section 3, 3.3A).

D. REQUEST FOR CLARIFICATION: Any Bidder who finds discrepancies in, or omissions from, any provision of the ITB, Plans, Specifications, or Contract Documents, or has doubt as to the meaning, shall make a request for clarification in writing, to the contact listed on Page 1 of the ITB. To be considered, the request for clarification must be received by the Request Deadline as specified in 1.06 B.

E. REQUEST FOR CHANGES TO CONTRACTUAL TERMS OR SPECIFICATIONS OR PLANS: Any Bidder may submit a request for changes to contractual terms, Plans, or Specifications, in writing, to the contact listed on Page 1 of the ITB. To be considered, the request for changes must be received by the Request Deadline specified in 1.06 B. above. The request must include the specific changes requested, and the reason for requested changes supported by factual documentation, and any proposed changes.

- F. PROTEST OF CONTRACT TERMS AND CONDITIONS OR SPECIFICATIONS: Any Bidder may submit a protest of solicitation terms and conditions, in writing, in accordance with COH-049-0260 to the contact listed on Page 1 of the ITB. To be considered, the protest must be received by the deadline specified in 1.07 B. above. The protest shall include the legal and factual grounds for the protest, a description of the resulting prejudice to the Bidder if the protest is not granted, and a statement of the relief or changes proposed.
- G. RESPONSE TO REQUESTS FOR CLARIFICATION: Clarifications, whether verbal, or in writing, or included in an addendum as "*clarification*", do not change Plans, Specifications, contractual terms, or procurement requirements of an ITB. If a request for clarification raises an issue that the City determines should be handled by formally amending the ITB, the City will do so only by announcing such a change in an Addendum, not through information identified as a "clarification."
- H. RESPONSE TO REQUESTS FOR BRAND APPROVAL, REQUESTS FOR SUBSTITUTION, REQUESTS FOR CHANGE, AND PROTESTS: The City shall promptly respond to each properly-submitted written request for brand approval, request for substitution, request for change, and protest no less than 72 hours before Closing. Where appropriate, the City will issue ITB revisions via Addendum posted on the City website and send to all parties on the plan holders list via fax and certified mail.  
  
Failure to protest solicitation terms and conditions, Contract terms and conditions or Specifications, as indicated in this section, precludes appeal or protest of a decision to award based upon such solicitation terms and conditions, Contract terms and conditions, or Specifications.
- I. PROTEST OF ADDENDUM: Requests for clarification, requests for change and protests of Addendum must be received by the time and date specified in the Addendum or they will not be considered.

## **1.08. OFFER FORMAT AND BID SUBMISSION**

### **A. FORMS TO BE USED**

Bids shall be submitted on unaltered Bid Forms furnished by the City, or on exact duplicates thereof. Bids shall be made in accordance with all instruction, requirements and specification to be considered. All blanks on Bid Forms shall be completed in ink or typewritten. Alterations and erasures shall be initialed by the signatory of the Bid.

A Bidder shall not make their Bid contingent upon the City's acceptance of Specifications, Plans or Contract terms that conflict with or are in addition to those in the ITB documents.

### **B. REQUIRED SIGNATURES**

Bids shall be signed in ink, with the signer's name typed or printed in the space provided. Where Bidder is a corporation, Bids shall be signed with the legal name of the corporation and the legal signature of an officer authorized to bind the corporation to a contract. Digital signatures are not acceptable. At least one Bid submitted by Bidder must bear an original signature.

### **C. NUMBER OF COPIES**

Bidders shall submit one (1) original Bid.

### **D. SEALED BIDS**

Sealed Bids will be received at the location shown on page 1 and by the Contact shown on page 1. ). All Bids shall be time stamped no later than the Due Date and Time shown on page 1.

Bids must be submitted in a sealed envelope appropriately marked with the Bid Title, Bid Number, and the name of the Bidder.

It is the sole responsibility of the Bidder to assure that the Bid is delivered and time stamped at the location shown on page 1 by the deadline specified. All late Bids shall be rejected.

### **E. STATE OCCB REGISTRATION REQUIREMENTS**

Bidders shall be licensed with the Oregon Construction Contractors Board prior to bidding on this project. Failure to comply with this requirement shall result in Bid rejection. Bidders shall insert Bidder's current, valid registration number and expiration date thereof in the spaces provided on the Bid Form. Landscaping

contractors and all subcontractors participating in this project shall be licensed respectively, by the State Landscape Contractors Board, as required by ORS 671.530 and the Oregon Construction Contractors Board, as required by ORS 701.026, at the time they propose to engage in subcontract work. Any Bid received from a Bidder identified by the Oregon Construction Contractors Board as ineligible to hold public contracts in accordance with ORS 701.227 shall be disqualified from consideration.

F. BID SECURITY: Each Bid exceeding \$100,000 shall be accompanied by Bid security in the form of:

- (a) a Bid bond as set forth in Section 3,
- (b) an irrevocable letter of credit issued by an insured institution as defined in ORS 706.008, or
- (c) a certified check or cashier's check,

Such Bid security must be in an amount equal to ten percent (10%) of the total amount of the submitted Bid, which has been executed in favor of the City of Hillsboro, 150 E. Main St., Hillsboro OR 97123.

Bid security of the successful Bidder will be returned or released after the Bidder's written Contract, Performance Bond, Payment Bond, and required certificates of insurance have been promptly and properly executed, delivered to, and accepted by the City. If the successful Bidder fails to (1) promptly and properly execute the Contract, (2) furnish a good and sufficient Performance Bond and a good and sufficient Payment Bond, and/or (3) furnish required certificates of insurance within seven (7) calendar days of the written notification of intent to award a Contract, then the City may cash the check, draw under the letter of credit or otherwise collect under the Bid security.

The City reserves the right to retain the Bid security of the next two (2) lowest Bidders until the successful Bidder has been awarded a Contract or until no more than 60 days after Bid opening, whichever is shorter. Bid security of all other Bidders will be returned as soon as practicable after Bid opening.

G. MODIFICATION OR WITHDRAWAL OF BID

After submittal, Bids may be modified or withdrawn on written request received from Bidders prior to the Bid Closing. Modifications shall be sealed and submitted in same manner as the Bid. Offers may also be withdrawn in person before Closing upon presentation of appropriate identification and evidence of authorization to act for Bidder to the Contact listed on page 1 of this ITB.

Bids may not be modified or withdrawn after closing except as provided in ORS 279C and City's Public Contracting Rules.

H. DURATION OF BIDS

Each Bid shall be irrevocable for a period of 60 days from the date of Bid. Award of a Contract to any Bidder shall not constitute rejection of any other Bid.

The City may request that Bidders extend, in writing, the time during which the City may consider their Bids. If a Bidder agrees to such an extension, the Bid shall continue as a firm Offer, irrevocable, valid and binding on the Bidder for the agreed upon extension period.

I. RESIDENT BIDDER

Bidder shall indicate on the Bid Form whether Bidder is a "resident bidder" as defined in ORS 279A.120. A "nonresident bidder" means a Bidder who has neither paid unemployment taxes nor income taxes in the State of Oregon during the 12 calendar months immediately preceding submission of its Bid, nor has a business address in the State of Oregon.

In determining the lowest responsive Bidder for this Work, a percentage may be added to the Bid of a non-resident Bidder equal to the percentage, if any, of the preference given to that Bidder in the state in which the Bidder resides. This percentage, if utilized, shall not be added to the dollar value of Contract to be awarded as a result of this ITB.

J. LIST OF FIRST-TIER SUBCONTRACTORS

In accordance with ORS 279C.370, Bidders are required to complete and submit the first-tier subcontractor disclosure form, provided as Section 3, form 3.4, within two (2) hours of the Bid Closing Date and time.

K. ACCEPTANCE OF CONDITIONS/SITE VISITATION

The Bidder, by making a Bid, represents that:

- (a) The Bidder has read and understands the Bid documents and the Bid is made in accordance with the Bid documents.
- (b) The Bidder has visited each project site, become familiar with the local conditions under which the Work is to be performed, and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.
- (c) The Bid is based upon the materials, equipment, systems, required by the Bid documents without exceptions.

L. RESERVATIONS

1. The City reserves the following rights:

- (a) To reject all Bids.
- (b) To reject any Bid not in compliance with all prescribed public bidding procedures and requirements, including the requirement to demonstrate the Bidder's responsibility under ORS 279C.375(3)(b), and to reject for good cause any or all Bids upon a finding that it is in the public interest to do so.
- (c) To reject Bids which it determines to be non-responsive.
- (d) To reject Bids upon the City's finding that the Bidder:
  - i. Has been declared ineligible under ORS 279C.860 by the Commissioner of Bureau of Labor and Industries
  - ii. Has been identified by the Oregon Construction Contractors Board as ineligible to hold public contracts in accordance with ORS 701.227; or
  - iii. Is not responsible.
- (e) To waive any informalities in Bids submitted.
- (f) In the event two or more Bidders quote identical amounts for the same Work, to award the contract by drawing lots between such Bidders or by such other means as it deems appropriate.
- (g) To return the Bid unopened, in the event only one Bid is received.

M. ASBESTOS ABATEMENT

Work to be performed under the contract will not require the Bidder or any subcontractors to be licensed for asbestos abatement work under ORS 468A.720.

**1.09. BID EVALUATION**

A. BID EVALUATION CRITERIA

Bids will be evaluated to identify the lowest responsive Bid submitted by a responsible Bidder and not otherwise disqualified. (Refer to COH-049-0390 and 137-049-0440). Adjustments made to account for reciprocal preferences will be for Bid evaluation purposes only. No such adjustments shall operate to amend a Bid or any Contract awarded pursuant thereto.

B. RESPONSIVENESS:

To be considered responsive, the Bidder must substantially comply in all material respects with applicable solicitation procedures and requirements and the solicitation documents. In making such evaluation, City may waive minor informalities and irregularities.

C. RESPONSIBILITY:

Prior to award of a Contract, City will evaluate whether the apparent successful Bidder meets the applicable standards of responsibility identified in COH-049-0390. See also, COH-049-0440(1)(C)(h). In doing so, City may investigate Bidder and request information in addition to that already required in the ITB, when City in its sole discretion, considers it necessary or advisable.

D. OREGON PREFERENCE:

Awards shall be subject to preference for goods or services that have been produced or manufactured in Oregon, if price, fitness, availability and quality are otherwise equal (ORS 279A.120); See also; COH-046-0300.

E. RECIPROCAL PREFERENCE:

Solely for the purpose of evaluating offers, City will add a percent increase to the Bid of a non-resident Bidder equal to the percent, if any, of the preference given to the Bidder in the state in which the Bidder resides. For example, if the Bidder is from a state that grants a ten (10) percent preference to local Bidders, City will add ten (10) percent to that Bidder's Bid price. (COH-046-0310).

F. PROCESSING OF BIDS:

Neither the release of a Bid Security, nor acknowledgment that the selection process is complete (whether by posting of a Bid tabulation sheet, issuance of notice intent to award, or otherwise), shall operate as a representation by City that any Bid submitted was complete, sufficient, lawful in any respect, or otherwise in substantial compliance with the ITB requirements.

G. WITHDRAWAL BY CITY OF BID ITEMS PRIOR TO AWARD:

City reserves the right to delete Bid items. The deletion of one or more Bid items will not affect the method of award.

H. NOTICE OF INTENT TO AWARD

The Notice of Intent to Award shall serve as notice to all Bidders that the City intends to make a contract award.

**1.10. PROTEST OF INTENT TO AWARD**

A. PROTEST OF INTENT TO AWARD

Adversely affected or aggrieved Bidders shall have **seven (7) calendar** days from the date of the Notice of Intent to Award within which to file a written protest of award. Protests received after that date will not be considered. Protests must specify the grounds upon which the protest is based.

1. Protests must be sent to:

Purchasing Manager  
Finance Department  
City of Hillsboro  
150 E. Main St.  
Hillsboro, OR 97123

2. In order to be an adversely affected or aggrieved Bidder, the Bidder must claim to be eligible for award of the Contract as the lowest responsible and responsive Bidder and that any and all lower Bids are ineligible to receive Contract award.
3. An actual Bidder who is adversely affected or aggrieved by the award of the Contract to another Bidder may protest award, in writing, within the timeline established. The written protest shall state the grounds upon which the protest is based. No protest of award shall be considered after the deadline.
4. Pursuant to COH-049-0260, no protest against award shall be considered because of the content of Bid Specifications, Plans, or contract Terms after the deadline established for submitting protests of Bid Specifications, Plans or Contract Terms.

B. RESPONSE TO INTENT-TO-AWARD PROTESTS:

The City Manager will respond in writing to intent-to-award protests submitted by adversely-affected or aggrieved Bidders. City may also respond to intent-to-award protests submitted by other Bidders for purposes of clarification. However, any response provided by City is not intended to, and shall not in and of itself

constitute, confirmation that the bidder is, in fact, adversely affected or aggrieved, and therefore entitled to protest an intent to award, or that the protest was timely filed.

C. AWARD

After expiration of the intent-to-award protest period, and resolution of all protests, City will proceed with final award. (If City receives only one Bid, City may dispense with the intent-to-award protest period and proceed with award of a Contract.)

**1.11. INFORMATION TO BE PROVIDED BY THE SUCCESSFUL BIDDER: CONTRACT, BONDS AND INSURANCE**

A. CONTRACTOR CONTRACT EXECUTION

Within 10 days after receipt of Notice of Intent to Award, the successful Bidder shall be prepared to execute the Contract provided by the City. The City contract form is provided as Part A, Attachment A. of this ITB. At the same time, the successful Bidder shall furnish City: a Performance Bond, a Payment Bond, and all required Certificates of Insurance. Prior to starting work under the Contract, the selected Bidder shall provide a performance bond and a payment bond each issued by a surety satisfactory to the City, in an amount equal to the full dollar value of the Contract for the faithful performance of the Contract and all provisions thereof.

B. CITY CONTRACT EXECUTION

After receipt and acceptance of the properly executed Contract, Performance Bond, Payment Bond, and Certificates of Insurance, the City will execute the Contract and issue a Notice to Proceed. No work shall be performed until the Contract is fully executed and a written Notice to Proceed is issued.

C. FAILURE TO EXECUTE

A successful Bidder who fails to execute the Contract or furnish the Performance Bond, Payment Bond and provide Certificates of Insurance in the time and manner indicated herein shall forfeit its Bid security.

D. PUBLIC WORKS BOND

Before starting Work the successful Bidder shall file with the Oregon Construction Contractors Board, and maintain in full force and effect, the separate public works bond required by ORS 279C.836, unless otherwise exempt under those provisions. The successful Bidder shall also include in every subcontract a provision requiring the subcontractor to have a public works bond filed with the Oregon Construction Contractors Board before starting Work, unless otherwise exempt, and shall verify that the subcontractor has filed a public works bond before permitting the subcontractor to start Work.

A disadvantaged, minority, women or emerging small business enterprise certified under ORS 200.055 may, for up to four years after certification, elect not to file a public works bond as required under Section 279C.836 (1). If a business enterprise elects not to file a public works bond, the business enterprise shall give the Oregon Construction Contractors Board written verification of the certification and written notice that the business enterprise elects not to file the bond.

Questions regarding the public works bond may be directed to BOLI at the BOLI website ([www.oregon.gov/BOLI](http://www.oregon.gov/BOLI)) or at the following address:

Bureau of Labor and Industries  
Wage and Hour Division  
Prevailing Wage Unit  
800 N.E. Oregon Street, #32  
Portland, Oregon 97232

E. JOINT VENTURE/PARTNERSHIP INFORMATION

The successful Bidder, if a Joint Venture/Partnership, shall provide a copy of the joint venture agreement or partnership agreement evidencing authority to Offer and enter into the resulting Contract that may be awarded, together with corporate resolutions (if applicable) evidencing corporate authority to participate as a joint venture or partner. A contact person must also be designated for purposes of receiving all notices and communications under the Contract. All partners and joint venture members will be required to sign the awarded Contract.

**1.12. COMPLIANCE WITH LAW**

The selected Contractor shall be required to comply with the City's standard construction contract provisions as provided in Attachment A. In addition, the selected contractor shall comply with and require its subcontractors to comply with all applicable provisions of federal, state and local laws, statutes, ordinances, codes, orders, rules and regulations which pertain to the work specified in this ITB.

**1.13. MINORITY-OWNED, WOMEN-OWNED AND EMERGING SMALL BUSINESSES (MWESB)**

Minority-owned, Women-owned and Emerging Small Businesses (MWESB) are encouraged to respond to this ITB. All Bidders are encouraged to contact and seek sub-bids from MWESB subcontractors. MWESB subcontractors are encouraged to attend any pre-proposal conferences.

**PART A:**

**SECTION 2 - SUPPLEMENTARY INSTRUCTIONS TO BIDDERS**

This section is not applicable to this ITB.

**PART A:**  
**SECTION 3 - FORMS**

### 3.1 BID FORM

BID FORM (PAGE 1 OF 6)

CITY OF HILLSBORO, OREGON

INVITATION TO BID NO. 20552222-6102

2016 Pavement Management Program: Slurry Seals, Micro-Surfacing, and Overlays & AC Replacements

The undersigned hereby certifies that Bidder: <Insert Bidder name>, <CCB#>

1. Has the authority and/or responsibility to submit a Bid and to represent the organization in all phases of this Bid process.
2. The information is true and accurate to the best of their knowledge.
3. Shall furnish, in strict compliance with the Bid and Contract Documents for the above-referenced Project, all labor, materials, equipment, apparatus, appliances, tools, transportation, and other facilities and services necessary to perform the Work described therein, and to perform said Work in strict compliance therewith, for the amounts set forth in this Bid.
4. Is a  Resident Bidder,  Non-Resident Bidder, as defined in ORS 279A.120

A "non-resident bidder" is a Bidder who has neither paid unemployment taxes nor income taxes in the State of Oregon during the 12 calendar months immediately preceding submission of this Bid, nor has a business address in the State of Oregon.

In determining the lowest responsive Bidder for this Work, a percentage may be added to the Bid of a non-resident Bidder equal to the percentage, if any, of the preference given to that Bidder in the state in which the Bidder resides. This percentage, if utilized, will not be added to the dollar value of the contract to be awarded as a result of this ITB.

5. Understands any false statement may disqualify this Bid from further consideration or be cause for contract termination.
6. Has read, understands and agrees to be bound by all terms and conditions herein.
7. Understands by submitting this Bid, the undersigned certifies conformance to the applicable Federal Acts, Executive Orders and Oregon Statutes and Regulations concerning Affirmative Action toward equal employment opportunities. All information and reports required by the Federal or Oregon State Governments, having responsibility for the enforcement of such laws, shall be supplied to the City upon request for purposes of investigation to ascertain compliance with such acts, regulations, and orders.
8. Acknowledges Receipt of Addenda No's. \_\_\_\_\_ through \_\_\_\_\_ inclusive.

Please check the applicable box regarding Bid security:

- Bid security in form of cashier's check , certified check , Bid bond in the form set forth in Section 3., 3.2 , irrevocable letter of credit issued by an insured institution as defined in ORS 706.008  (check applicable clause) in the amount of ten percent (10%) of the total amount of the submitted Bid, which has been executed in favor of City of Hillsboro, 150 E. Main St. , Hillsboro OR 97123, is enclosed.
- Bid Price is for \$100,000 or less; therefore, Bid security is not required.



**2016 PAVEMENT MANAGEMENT PROGRAM (#20552222-6102)  
SCHEDULE "C": MICRO-SURFACING**

The bidder proposes to furnish all equipment, materials, and labor required to complete preparation and placement of approximately **71,735** square yards of asphalt emulsion Micro-Surfacing, including striping and associated work.

ITEM #	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1.	Move-in, Bond, Insurance, Clean-up				
	A. City of Hillsboro	L.S.	All		
	B. City of Oregon City	L.S.	All		
2.	Traffic Control and Public Notification				
	A. City of Hillsboro	L.S.	All		
	B. City of Oregon City	L.S.	All		
3.	Portable Changeable Message Sign	EA.	12		
4.	Street Preparation and Application of Type III Micro-Surfacing	Sq. Yd.	71,735		
5.	Install/Replace Pavement Markings per Manual of Uniform Traffic Control Devices				
	A. Thermoplastic Left Turn Arrow	EA.	31		
	B. Thermoplastic Right Turn Arrow	EA.	4		
	C. Thermoplastic Bicycle Symbol w/Arrow	EA.	12		
	D. Thermoplastic Railroad Crossing	EA.	1		
	E. Thermoplastic ADA Accessible Parking Symbol	EA.	1		
	F. ONLY symbol	EA.	2		
	G. School Legend	EA.	1		
	H. Reflective two-way raised pavement markers				
	a. Yellow	EA.	630		
	b. Blue	EA.	23		
	c. White	EA.	128		
	d. Red/White	EA.	10		
	I. 4" Wide Yellow Stripe, Thermoplastic	L.F.	22,629		
	J. 4" Wide White Stripe, Thermoplastic	L.F.	2,838		
	K. 8" Wide White Stripe, Thermoplastic	L.F.	14,805		
	L. 12" Wide White Stripe, Thermoplastic	L.F.	2,587		
				<b>TOTAL</b>	

METHOD OF AWARD: Award shall be made to the lowest responsive and responsible bidder for the total of the items selected for award. Award shall be made to one bidder and one bidder only. The City reserves the right to withdraw any items(s) from award if it is in the best interest of the City to do so.



**BID FORM (PAGE 5 OF 6)**

**2016 PAVEMENT MANAGEMENT PROGRAM (#20552222-6102)  
SCHEDULE "E": OVERLAYS**

The bidder proposes to furnish all equipment, materials, and labor required to complete the preparation and placement of approximately **4,260 tons** of asphalt concrete including pavement repair, grinding, approximately 57 sidewalk ramp replacements, striping, and associated work.

<b>ITEM #</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>QUANTITY</b>	<b>UNIT PRICE</b>	<b>AMOUNT</b>
1	Move-in, Bond, Insurance, Clean Up, All Streets	L.S.	All		
2	Traffic Control (including temporary lane marking) and Public Notification, All Streets	L.S.	All		
3	Portable Changeable Message Signs (PCMS)	EA	6		
4	Street Preparation (including surface cleaning, removal of thermoplastic tape and reflective markers, and de-vegetation), all streets	L.S.	All		
5	Utility Adjustments				
	A. Manholes	EA.	42		
	B. Water Valves	EA.	43		
	C. Gas Valves	EA.	7		
	D. Catch Basin	EA.	26		
6	Reconstruct Existing Manhole	EA.	4		
7	Survey Monument Boxes				
	A. Adjust Survey Monument Box	EA.	1		
	B. New Survey Monument Box	EA.	1		
8	2" Depth Grind	SQ.YD.	10,225		
9	3" Depth Grind	SQ.YD.	18,430		
10	Asphalt Concrete Removal and Preparation	SQ.YD.	150		
11	Asphalt Concrete Replacement	Ton	30		
12	2" Level 2, 1/2" Dense Graded Asphalt Concrete	Ton	1,150		
13	3" Level 2, 1/2" Dense Graded Asphalt Concrete	Ton	3,110		
14	Subgrade Stabilization	CY.YD.	100		
15	Install/Replace Pavement Markings per Manual of Uniform Traffic Control Devices				
	A. 4" Yellow, Cold Tape Inlay	LF	2,109		
	B. 12" White, Cold Tape Inlay	LF	1,306		
	C. 8" White, Cold Tape Inlay	LF	1,896		
	D. 4" White, Cold Tape Inlay	LF	1,789		
	E. Reflective two-way yellow raised pavement markers	EA.	131		
	F. Reflective two-way blue raised hydrant pavement markers	EA.	14		
16	Concrete Sidewalk	S.F.	275		
17	Remove/Replace Sidewalk Ramps w/Truncated Domes	EA.	57		
18	Remove/Replace Residential PCC Driveway	S.F.	96		
19	Remove/Replace Commercial PCC Driveway	S.F.	950		
20	Concrete Standard Curb	LF	57		
21	Traffic Signal Loops	EA.	3		
				<b>TOTAL</b>	

METHOD OF AWARD: Award shall be made to the lowest responsive and responsible bidder for the total of the items selected for award. Award shall be made to one bidder and one bidder only. The City reserves the right to withdraw any items(s) from award if it is in the best interest of the City to do so.

Bidder Name: \_\_\_\_\_

BID FORM (PAGE 6 OF 6)

**REPRESENTATIONS AND CERTIFICATIONS**

Bidder shall submit 3.5 Bidder’s Responsibility Information Form as per Section 1, 1.03 along with the Bid Form and any other required Bid submittals.

BIDDER’S EMPLOYERS FEDERAL TAX IDENTIFICATION NUMBER (EIN) < >

OR

SOCIAL SECURITY IDENTIFICATION NUMBER < >

State of Oregon Certified Minority-owned, Women-owned or Emerging Small Business  YES  NO

IF YES, PROVIDE CERTIFICATION NUMBER < >

The undersigned hereby certifies under penalty of perjury that to the best of my knowledge the Bidder does not discriminate in its employment practices with regard to race, creed, age, religious affiliation, sex, disability, sexual orientation, or national origin. Nor has Bidder or will Bidder discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is:

- A minority-owned, women-owned, or emerging small business enterprise certified under ORS 200.055, or
- A business enterprise that is owned or controlled by or that employs a disabled veteran, as defined in ORS 408.225.

If awarded, the Bidder (Contractor) agrees to be bound by and will comply with the provisions of 279C.838, 279.840 or 40 U.S.C. 3141 to 3148.

The undersigned hereby certifies under penalty of perjury that to the best of my knowledge the Bid was prepared independently from all other Bidders, and without collusion, fraud, or other dishonesty.

The Bid submitted is in response to the specific language contained in the ITB, and Bidder has made no assumptions based upon either (a) verbal or written statements not contained in the ITB, or (b) any previously-issued ITB, if any.

The undersigned hereby certifies that Bidder has the authority and/or responsibility to submit a Bid and to represent the Bidder in all phases of this Bid process.

Bidder’s (Company) Name: < >

Date: < >

CCB#: < >

Signature \_\_\_\_\_

Name < >

Title < >

Street Address < >

City < >

State < > Zip < >

Phone < >

E-Mail < >

**FAILURE TO COMPLETE, SIGN AND SUBMIT THIS FORM MAY BE CAUSE FOR BID REJECTION. ELECTRONIC SIGNATURES NOT ACCEPTED.**



### **3.3 SUBSTITUTION REQUESTS**

#### **REQUEST FOR BRAND NAME/PRODUCT SUBSTITUTION**

##### **3.01. SUBSTITUTION REQUEST**

- A. During Bidding, the City will consider written Substitution Requests received up to the Request Deadline shown on page 2 of this ITB. Requests received after that time **will not** be considered.
- B. Submit a written request using the substitution request form included on the next page. Submit the form in hard copy or by email to the contact on page 1 of this ITB by the Request Deadline.
- C. Prepare separate requests for each product.
- D. Combined requests may not be considered.
- E. In making Substitution Requests, Bidder represents:
  - 1. Bidder has personally investigated proposed product or method, and determined that it is equal or superior in all respects to that specified.
  - 2. Bidder will provide the same guarantee for substitution as for product or method specified.
  - 3. Bidder will coordinate installation of accepted substitution into Work, making such changes as may be required for Work to be completed in all respects.
  - 4. Bidder waives all claims for additional costs related to substitutions which consequently become apparent.
- F. All accepted substitutions will be confirmed by inclusion in an addendum. Items not appearing in such addendum shall be deemed rejected.

##### **3.02. SUBSTITUTION REQUEST FORM**

- A. The Substitution Request Form is included on the next page.

City of Hillsboro

3.3A SUBSTITUTION REQUEST FORM

TO: 2016 Pavement Management Program: Slurry Seals, Micro-Surfacing, and Overlays & AC Replacements

ITB NUMBER/TITLE: < >

SPECIFIED < >  
ITEM/PRODUCT:

Page No. [ ]

Item/Product No. [ ]

Description [ ]

PROPOSED SUBSTITUTION:

Attached data includes manufacturer’s product description, specifications, drawings, photographs, performance and test data, and includes, when requested by the City, one (1) sample adequate for evaluation of the request including identification of applicable data portions.

Attached data also includes the description of changes to Contract Documents and the requirements of the proposed substitution for proper installation.

The undersigned certifies the following items, unless modified by attachments, are correct:

1. Proposed substitution does not affect dimensions shown (only if supplied with Bid documents).
2. Undersigned pays for changes to building/equipment design, including engineering design, detailing, and proposed substitution has no adverse effect on other trades, construction schedule, or specified warranty requirements.
3. Maintenance and service parts are available locally or are readily obtainable for the proposed substitution.

Undersigned further certifies function, appearance, and quality of proposed substitution are equivalent or superior to specified item.

Undersigned agrees, if this page is reproduced, terms and conditions for substitutions found in Bidding Documents apply to this proposed substitution.

Request Submitted by:

Name (Printed or typed)

Signature

Vendor Name

Street Address

City, State, Zip

Date

Telephone Number

Email

Fax Number

Architect Approval:

<input type="checkbox"/> Approved	<input type="checkbox"/> Approved as noted
<input type="checkbox"/> Not Approved	<input type="checkbox"/> Received too late
By _____	
Date _____	
Remarks:	

For use by: City Staff

<input type="checkbox"/> Approved	<input type="checkbox"/> Approved as noted
<input type="checkbox"/> Not Approved	<input type="checkbox"/> Received too late
By _____	
Date _____	
Remarks:	

**City of Hillsboro**

**3.4 FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM**

TITLE/PROJECT NAME: 2016 Pavement Management Program: Slurry Seals, Micro-Surfacing, and Overlays & AC Replacements

ITB #: 2055222-6102

BID CLOSING DATE: May 12, 2016

TIME: 2:00PM

**This form must be submitted at the location specified in the Invitation to Bid on the advertised Bid Closing Date and within two hours after the advertised Bid Closing Time ("Disclosure Deadline").** List below the name of each subcontractor that will be furnishing labor or will be furnishing labor and materials and that is required to be disclosed, the category of work and the dollar value of the subcontract. Enter the word "NONE" if there are no first-tier subcontractors subject to disclosure. ATTACH ADDITIONAL SHEETS IF NECESSARY.

NAME	CATEGORY OF WORK	DOLLAR VALUE
1.		\$
2.		\$
3.		\$

The above listed first-tier subcontractor(s) are providing labor or labor and materials with a Dollar Value equal to or greater than:

- a. 5% of the total project Bid, or \$15,000, whichever is greater. [If the Dollar Value is less than 15,000.00, do not list the subcontractor above.]; or
- b. \$350,000 regardless of the percentage of the total Contract Price.

FAILURE TO SUBMIT THIS FORM BY THE DISCLOSURE DEADLINE WILL RESULT IN A NON-RESPONSIVE BID AND SUCH NON-RESPONSIVE BID WILL NOT BE CONSIDERED FOR AWARD.

Bids which are submitted by Bid Closing, but for which the disclosure submittal has not been made by the specified deadline, are NOT Responsive and shall NOT be considered for Contract award.

**Form submitted by (Bidder Name):** < \_\_\_\_\_ >

**CCB#:** < \_\_\_\_\_ >

Contact Name and phone number: CONTACT SHOWN ON PAGE 1 OF THIS ITB.

Deliver Form to Agency: CITY OF HILLSBORO, DEPARTMENT, CONTACT AND ADDRESS AS SHOWN ON PAGE 1 OF THIS ITB.

Person Designated to Receive form: CONTACT SHOWN ON PAGE 1 OF THIS ITB.

Agency's Address: 150 E Main St. Hillsboro, OR 97123

UNLESS OTHERWISE STATED IN THE ORIGINAL SOLICITATION, THIS DOCUMENT SHALL NOT BE FAXED. IT IS THE RESPONSIBILITY OF BIDDERS TO SUBMIT THIS DISCLOSURE FORM AND ANY ADDITIONAL SHEETS, WITH THE BID NUMBER AND PROJECT NAME CLEARLY MARKED, AT THE LOCATION INDICATED BY THE SPECIFIED DISCLOSURE DEADLINE. SEE INSTRUCTIONS TO BIDDERS.

**City of Hillsboro**  
**3.5 BIDDER'S RESPONSIBILITY INFORMATION FORM**

**BIDDER MUST COMPLETE ALL PAGES OF THIS FORM.**

**Bidder Name:**                      **CCB #:**

**This form is designed for electronic use. It may also be completed by hand. Use additional pages as needed to provide full and complete responses.**

1. **EXPERIENCE:** List the number of years Bidder has been operating its business under its current license. If Bidder's business has been in continuous existence under a current active license and a previous license number, then identify the previous license number. List and briefly describe a minimum of Insert three (3) or another reasonable number of projects similar projects performed by Bidder in the past Insert five (5) years or another reasonable time period years that best characterize Bidder's capabilities. Include relevant data such as the type of work involved and project dates. Describe how Bidder meets this experience requirement (use separate sheet if additional space is needed):
  
2. **LAWSUITS/JUDGMENTS:** Within the past 5 years, has Bidder had any lawsuits filed against it involving contract disputes? For the purposes of this request, "lawsuits" include requests for arbitration and "judgments" includes arbitration awards. YES / NO If "YES" indicate dates and ultimate resolution of suit (with regard to judgments, include jurisdiction and date of final judgment or dismissal.)
  
3. **BANKRUPTCY:** Within the past 36 months, has Bidder filed a bankruptcy action, filed for reorganization, made a general assignment of assets for the benefit of creditors, or had an action for insolvency instituted against it? YES / NO If "YES" supply filing dates, jurisdictions, type of action, ultimate resolution, and dates of judgment or dismissal, if applicable.
  
4. **LAWSUITS BY CREDITORS:** Within the past 24 months, has Bidder had any lawsuits filed against it by creditors? YES / NO If "YES" indicate dates and ultimate resolution of suit (with regard to judgments include jurisdiction and date of final judgment or dismissal).
  
5. **OREGON CONSTRUCTION CONTRACTORS BOARD LICENSING:** Is Bidder licensed with the Oregon Construction Contractors Board at the time Bidder submits a Bid for the Work under this ITB? YES / NO If "YES" indicate Oregon Construction Contractors Board license number and expiration date.
  
6. **ABILITY TO PERFORM WITHIN TIME SPECIFIED:** List the project titles, original contract time and change order extensions for three specific projects in the past five (5) years. Bidder shall document that it achieved substantial completion of such three projects of similar size and scope within no more than 105% of the final contracted time for completion (including change ordered adjustments). If the Bidder cannot document three such projects, the Bidder may submit alternative documentation of one or more similar projects where the Bidder did not achieve substantial completion within 105% of the final contract time, a calculation of the total percentage of time over the final contract time necessary to achieve substantial completion, and an explanation as to why the required additional time was beyond the Bidder's control.

**City of Hillsboro**

**3.5 BIDDER'S RESPONSIBILITY INFORMATION FORM**

**BIDDER MUST COMPLETE ALL PAGES OF THIS FORM.**

**Bidder Name:**

7. DEBARMENT: Has Bidder been debarred by any public agency within the past two (2) years?  
YES / NO If "YES" identify the public agencies.
  
8. NON-COMPLETION: Has Bidder failed to complete a contract in the last five (5) years? YES / NO If "YES" identify the project(s).
  
9. COMPLETION BY SURETY: Has Bidder ever defaulted on a contract forcing a surety to suffer a loss? YES / NO If "YES" identify the project(s).
  
10. SUSPENSION, DISMISSAL, DEFAULT: Has Bidder been suspended, dismissed or declared in default from a project during the last five (5) years? YES / NO If "YES" identify the project(s) and the type of action taken against Bidder.
  
11. BONDABILITY REQUIREMENT: For the project described under this ITB, Bidder shall obtain payment bond and performance bond issued by a surety which is authorized to transact surety business in the State of Oregon and which has an A.M. Best "A" or better rating. YES / NO If "YES" identify name of surety, contact name, address, phone number, & email address.
  
12. LIENS AND SURETY CLAIMS: Have there been any liens or surety claims against Bidder's company on any contracts which have been performed or are in the course of being performed?  
YES / NO If "YES" identify the project and explain the nature of the claims.
  
13. REVOKED LICENSE: Has Bidder's company or any key person in the company, had a license revoked by the Oregon Construction Contractors Board? YES / NO If "YES" explain the underlying reason for the revocation of the license.
  
14. CRIMINAL OFFENSE: Has Bidder's company or any key person in the company been convicted of a crime involving fraud, material misrepresentation or any crime involving the awarding of a contract for a government construction project or the bidding or performance of a government contract? YES / NO
  
15. DEMAND ON PERFORMANCE BOND: In the last five years, has an owner ever made a demand on your performance bond?  
YES / NO

**City of Hillsboro**  
**3.5 BIDDER'S RESPONSIBILITY INFORMATION FORM**

**BIDDER MUST COMPLETE ALL PAGES OF THIS FORM.**

**Bidder Name:**

16. TERMINATION OF BONDING/INSURANCE COVERAGE: In the last five years, has a surety or insurance company terminated your or your company's existing bonding and/or insurance coverage due to excessive claims history and/or nonpayment of premiums? YES / NO

17. CITATIONS OR ENFORCEMENT ACTIONS. Within the last five years, have you or your company been cited or subject to any enforcement action for violation of any applicable law or regulations related to its performance of a prior construction contract? For the purposes of this section, "applicable law or regulations" includes without limitation, any building, zoning, environmental, site development, or Oregon Public Contracting Code regulations with which a prior project was required to comply, including non-discrimination regulations and prevailing wage requirements.

Answer Yes or No. If Yes: please state the date, nature, and final resolution of every such citation or enforcement action.

18. BONDING. What is the largest contract you have had bonded through the surety company named in Question #11 above? Please identify the project name, the nature of the project, the date of the project and the original contract price.

19. BIDDER INSURANCE

Provide Liability Insurance Certificate showing that your company is covered by liability insurance in amounts required in the sample contract (Attachment A). Prior to contract execution, Successful Bidder must provide City all Insurance Certificates as specified in 1.11.

20. WORKER'S COMPENSATION: CARRIER-INSURED EMPLOYER OR SELF-INSURED EMPLOYER.

Does your company qualify as a carrier-insured employer or self-insured employer under [ORS 656.407](#)?

Answer Yes or No. If Yes, indicate which:

If No, has your company elected coverage under [ORS 656.128](#)?

City of Hillsboro

3.5 BIDDER'S RESPONSIBILITY INFORMATION FORM

BIDDER MUST COMPLETE ALL PAGES OF THIS FORM.

Bidder Name:

21. BIDDER REFERENCES FOR COMPARABLE PROJECTS IN SIZE AND SCOPE

Bidder shall provide a list of three different project references with their Bid that can be contacted regarding the quality of workmanship and service that the Bidder provided on projects of comparable size and scope within the past 5 years. Bidder must provide all information requested below and may use either the form provided in this section or their own form. PLEASE NOTE: If a different form is used, it must still include ALL information required below, including a project description.

<b>Project Reference #1</b>
Name and Dates of Project:
Project Location:
Project Description:
Contact Person #1 Name:
Contact Person #1 Firm Name:
Contact Person #1 Phone, Email:
Contact Person #2 Name:
Contact Person #2 Firm Name:
Contact Person #2 Phone, Email:
<b>Project Reference #2</b>
Name and Dates of Project:
Project Location:
Project Description:
Contact Person #1 Name:
Contact Person #1 Firm Name:
Contact Person #1 Phone, Email:
Contact Person #2 Name:
Contact Person #2 Firm Name:
Contact Person #2 Phone, Email:
<b>Project Reference #3</b>
Name and Dates of Project:
Project Location:
Project Description:
Contact Person #1 Name:
Contact Person #1 Firm Name:
Contact Person #1 Phone, Email:
Contact Person #2 Name:
Contact Person #2 Firm Name:
Contact Person #2 Phone, Email:

Failure to submit the above-required information to the satisfaction of the City may render the Bid non-responsive.

**City of Hillsboro**

**3.6 FORM OF AGREEMENT AND LIQUIDATED DAMAGES**

**1.01. FORM OF AGREEMENT**

- A. The Contract between the Owner and the selected contractor for the Work of this project, will be executed on the City of Hillsboro Large Construction Contract and General Conditions. This is the City’s required “Form of Agreement”.
- B. A sample copy of the Contract is attached as Attachment A.
- C. Do not sign or complete this sample contract.

**1.02. LIQUIDATED DAMAGES**

- A. Liquidated damages are addressed in the “Miscellaneous Provisions” section of the City’s sample contract. Liquidated damages for each schedule is listed below:

<b>Contract</b>	<b>Liquidated Damages per Day</b>
Schedule “B”: Slurry Seals	\$700
Schedule “C”: Micro-Surfacing	\$700
Schedule “D”: Alley Overlays & AC Replacements	\$1,000
Schedule “E” : Overlays	\$1,000

**City of Hillsboro**  
**3.7 FORM OF PERFORMANCE BOND**

**Bond No.** \_\_\_\_\_ **Bond Value: \$** \_\_\_\_\_ **Invitation to Bid No.** \_\_\_\_\_

Principal: _____	<b>Surety:</b> _____	<b>Obligee:</b> City of Hillsboro
Address: _____	Address: _____	Address 150 E. Main St.
Phone: _____	Phone: _____	Hillsboro, OR 97123
		Phone (503) 681-6100

**Agreement: Principal has entered into a contract ("Contract") with Obligee for the following Project:** \_\_\_\_\_

We, \_\_\_\_\_ as Principal, and the above identified Surety, authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto the Obligee the sum of (Total Penal Sum of Bond) \$ \_\_\_\_\_.

and

WHEREAS, the Principal has entered into a contract with the Obligee, the plans, specifications, terms and conditions of which are contained in the above-referenced Solicitation;

WHEREAS, the terms and conditions of the contract, together with applicable plans, standard specifications, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Performance Bond by reference, whether or not attached to the contract (all hereafter called "Contract"); and

WHEREAS, the Principal has agreed to perform the Contract in accordance with the terms, conditions, requirements, plans and specifications, and all authorized modifications of the Contract which increase the amount of the work, the amount of the Contract, or constitute an authorized extension of the time for performance, notice of any such modifications hereby being waived by the Surety:

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal herein shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things undertaken by Contractor to be performed under the Contract, including without limitation warranty and maintenance work required under the Contract, upon the terms set forth therein, and within the time prescribed therein, or as extended as provided in the Contract, with or without notice to the Sureties, and shall indemnify and save harmless the Obligee, its officers, employees and agents, against any direct or indirect damages or claim of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Principal or its subcontractors, and shall in all respects perform said contract according to law, then this obligation is to be void; otherwise, it shall remain in full force and effect.

Nonpayment of the bond premium will not invalidate this bond nor shall the Obligee be obligated for the payment of any premiums.

This bond is given and received under authority of ORS Chapter 279C, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, WE HAVE CAUSED THIS INSTRUMENT TO BE EXECUTED AND SEALED BY OUR DULY AUTHORIZED LEGAL REPRESENTATIVES.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

**PRINCIPAL:** \_\_\_\_\_

By: \_\_\_\_\_  
 \_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Official Capacity

**Attest:** \_\_\_\_\_  
 Corporation Secretary

**SURETY:** \_\_\_\_\_

BY ATTORNEY-IN-FACT:  
*[Power-of-Attorney must accompany each surety bond]*

\_\_\_\_\_  
 Name

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Address

\_\_\_\_\_  
 City State Zip

\_\_\_\_\_  
 Phone Fax

**City of Hillsboro**  
**3.8 FORM OF LABOR AND MATERIAL PAYMENT BOND**

**Bond No.** \_\_\_\_\_ **Bond Value: \$** \_\_\_\_\_ **Invitation to Bid No.** \_\_\_\_\_

Principal: _____	Surety: _____	<b>Obligee:</b> City of Hillsboro
Address: _____	Address: _____	Address 150 E. Main St.
Phone: _____	Phone: _____	Hillsboro, OR
		Phone (503) 681-6100

**Agreement: Principal has entered into a contract ("Contract") with Obligee for the following Project:** \_\_\_\_\_

We, \_\_\_\_\_ as Principal, and the above identified Surety, authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto the Obligee the sum of (Total Penal Sum of Bond) \$\_\_\_\_\_.

and

WHEREAS, the Principal has entered into a contract with the Obligee, the plans, specifications, terms and conditions of which are contained in above-referenced Solicitation;

WHEREAS, the terms and conditions of the contract, together with applicable plans, standard specifications, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Payment Bond by reference, whether or not attached to the contract (all hereafter called "Contract"); and

WHEREAS, the Principal has agreed to perform the Contract in accordance with the terms, conditions, requirements, plans and specifications, and schedule of contract prices which are set forth in the Contract and any attachments, and all authorized modifications of the Contract which increase the amount of the work, or the cost of the Contract, or constitute authorized extensions of time for performance of the Contract, notice of any such modifications hereby being waived by the Surety:

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things by it undertaken to be performed under said Contract and any duly authorized modifications that are made, upon the terms set forth therein, and within the time prescribed therein, or as extended therein as provided in the Contract, with or without notice to the Sureties, and shall indemnify and save harmless the Obligee, its officers, employees and agents, against any claim for direct or indirect damages of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Contractor or its subcontractors, and shall promptly pay all persons supplying labor, materials or both to the Principal or its subcontractors for prosecution of the work provided in the Contract; and shall promptly pay all contributions due the State Industrial Accident Fund and the State Unemployment Compensation Fund from the Principal or its subcontractors in connection with the performance of the Contract; and shall pay over to the Oregon Department of Revenue all sums required to be deducted and retained from the wages of employees of the Principal and its subcontractors pursuant to ORS 316.167, and shall permit no lien nor claim to be filed or prosecuted against the Obligee on account of any labor or materials furnished; and shall do all things required of the Principal by the laws of the State of Oregon, then this obligation shall be void; otherwise, it shall remain in full force and effect.

Nonpayment of the bond premium will not invalidate this bond nor shall the Obligee be obligated for the payment of any premiums.

This bond is given and received under authority of ORS Chapter 279C, the provisions of which hereby are incorporated into this bond and made a part hereof. For the purposes of this bond, a claimant is any person who has a right of action against the bond under ORS 279C.600. A claimant's right of action on this bond and limitations on the institution of an action shall be governed by ORS 279C.380.

IN WITNESS WHEREOF, WE HAVE CAUSED THIS INSTRUMENT TO BE EXECUTED AND SEALED BY OUR DULY AUTHORIZED LEGAL REPRESENTATIVES:

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_

PRINCIPAL: \_\_\_\_\_

By: \_\_\_\_\_

Signature

Official Capacity

Attest: \_\_\_\_\_

Corporation Secretary

SURETY: \_\_\_\_\_

BY ATTORNEY-IN-FACT: \_\_\_\_\_

*[Power-of-Attorney must accompany each surety bond]*

Name

Signature

Address

City

State

Zip

Phone

Fax

City of Hillsboro

3.9 FORM OF WARRANTY BOND

BOND NO. \_\_\_\_\_

PREMIUM NO. \_\_\_\_\_

PROJECT NO. \_\_\_\_\_ PROJECT NAME: \_\_\_\_\_

WHEREAS, the City of Hillsboro (hereafter "City") and \_\_\_\_\_ (hereafter "Contractor") have entered into a contract ("Contract") dated \_\_\_\_\_, 20\_\_\_\_, whereby Contractor agreed to install and complete certain designated public improvements as a condition of, relating to, at Contractor's own expense and which Contract is hereby referred to and made a part hereof; and

WHEREAS, Contractor is required under the terms of the Contract to furnish warranty security for the work performed pursuant to the Contract in the amount of ten percent (10%) of the original amount of the contract to guarantee replacement and repair of the improvements as described in the Contract for a period of one year following the issuance of the Notice of Substantial Completion.

NOW, THEREFORE, we, Contractor, and ("Surety"), are held and firmly bound unto City in the penal sum of \_\_\_\_\_ (\$\_\_\_\_\_) lawful money of the United States, for the payment of which we bind ourselves, our heirs, successors, executors, and administrators, jointly and severally.

The condition of this obligation is such that if Contractor shall indemnify City for all loss that City may sustain by reason of any defective materials or workmanship which become apparent during the period of one year from and after acceptance of the improvements by the City Council of City, then this obligation shall be null and void; otherwise, this obligation shall remain in full force and effect.

As a part of the obligation secured hereby and in addition to the face amount specified, costs and reasonable expenses and fees shall be included, including reasonable attorneys' fees incurred by City in successfully enforcing the obligation, all to be taxed as costs and included in any judgment rendered.

Surety shall provide City with thirty (30) days' written notice of Contractor's default prior to Surety terminating, suspending or revoking the bond.

In witness whereof, this instrument has been duly executed by Contractor and Surety on \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Contractor

\_\_\_\_\_  
Surety

By \_\_\_\_\_

\_\_\_\_\_  
Attorney-in-Fact

State of OREGON  
County of \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Signed or attested before me on \_\_\_\_\_, 20\_\_ by \_\_\_\_\_

\_\_\_\_\_  
Notary Public – State of Oregon

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**ATTACHMENT A  
PUBLIC IMPROVEMENT CONTRACT  
between  
CITY OF HILLSBORO, OREGON  
and  
FULL, LEGAL NAME OF CONTRACTOR**

**Contract No.**

This Public Improvement Contract ("Contract") is made by the City of Hillsboro, Oregon and Full, legal name of Contractor ("Contractor") to provide construction services on the following Project Name ("Project"), briefly described below:

Insert brief description of the Project

The parties agree as follows:

**CONTRACTOR DATA**

**Full Business Name:** Full legal name of Contractor

**Contractor Contact Person:**

**Address:**

**City, State, ZIP:**

**Business Telephone:**

**Facsimile:**

**Email:**

**Oregon CCB License Number:**

Contractor certifies under penalty of perjury that Contractor is a:

- Sole Proprietor
- Corporation
- Limited Liability Company
- Partnership
- Other [describe: \_\_\_\_\_]

## TERMS AND CONDITIONS

1. **Work.** Contractor shall execute fully the Work described by the Contract Documents, unless specifically indicated in the Contract Documents to be the responsibility of others. "Work" means the construction and any related services required by or reasonably inferable from the Contract Documents, whether completed or partially completed, including (except as otherwise expressly stated in this Contract) all other labor, materials, equipment, tools, permits, fees, licenses, facilities, taxes, transportation, supervision, temporary constructions of every nature, and all other services, management, and facilities of every nature whatsoever necessary to fulfill Contractor's duties by executing and completing this Contract within the Contract Time. The Work may constitute the whole or a part of the Project.
2. **Effective Date and Termination Date.** The effective date of this Contract shall be the Contract Start Date identified in section 2.a. or the date on which each Party has signed this Contract, whichever is later. Unless earlier terminated as provided below, the termination date shall be the Contract End Date, subject to extension as provided in the Contract Documents.

### Offer and Contract Dates

- a. Contract Start Date

#### "Work" Time Dates

- a. Anticipated Notice to Proceed Date
- b. Anticipated Substantial Completion Date
- c. Anticipated Final Completion Date
- d. Contract End Date
- e. "Work" Time in Calendar Days

PLEASE NOTE: Contractor shall not commence Work under this Contract until the Notice to Proceed has been issued.

3. **Enumeration of Contract Documents.** The "Contract Documents" include the following:
  - a. This Contract with these Terms and Conditions.
  - b. **EXHIBIT A:** City's General Conditions to the Contract - included in this form
  - c. **EXHIBIT B:** Insurance Requirements - included in this form
  - d. **EXHIBIT C:** BOLI Prevailing Wage Rates: Indicate "BOLI Prevailing Wage Rates version xx incorporated by reference
  - e. **EXHIBIT D:** Contractor's Bid Response
  - f. **EXHIBIT E:** Project Manual
  - g. **EXHIBIT F:** Drawings
  - h. **EXHIBIT G:** Addenda
  - i. **EXHIBIT H:** Additional Documents. List any additional documents which are a part of this contract or remove this Exhibit Reference.

4. **Contract; Contract Documents; Entire Agreement.** This Contract and the other Contract Documents forms the entire and integrated agreement between the parties. Unless the context requires otherwise, any reference to the "Contract" includes the Contract Documents.

5. **The Contract Time.** Contractor shall achieve Substantial Completion of the Work under this Contract within consecutive calendar days ("Contract Time") from the date specified in City's Notice to Proceed, subject to adjustments of this Contract Time as provided in the Contract Documents.

6. **The Contract Total**

- a. The Contract Total is **\$0**. The Contract Total is the total amount payable by the City to Contractor for the completion of the Work in its entirety under the Contract Documents.
- b. The following bid alternates are included in the Contract Total: List or refer to Exhibit
- c. Unit prices if any: List or refer to Exhibit
- d. Allowances included in the Contract Total, if any: List or refer to Exhibit
- e. Notwithstanding any other provision of this Contract or the Contract Documents, the Contract Total includes all construction contingencies for existing site conditions other than for pre-existing Hazardous Materials. Contractor is thoroughly acquainted with and has inspected the Project site without restriction, understands the potential risks in this construction Work, and accepts the full risk of construction contingencies to complete the Work within the Contract Time and Contract Total set out in this Agreement.

7. **Progress Payments.**

- a. The Contractor will submit an application for payment to the City Representative as provided in the General Conditions. The City Representative may require the Contractor to simultaneously submit an application for payment to the Design Professional working on the Project.
- b. Each application for payment shall be for one calendar month ending on the last day of the month.
- c. Payments are due and payable 30 days following receipt of the Contractor's complete Application for Payment or 15 days from the date after payment is approved by the City Representative, whichever is earlier. Payments due and unpaid under the Contract shall bear interest from the date payment is due at the rate set forth in ORS 279C.570(2).
- d. The amount of each progress payment shall be determined as provided in the General Conditions, less retainage of 5% pursuant to ORS 279C.550 to 279C.565, ORS 701.420 and 701.430, and less liquidated damages, if any.

**8. Designation of Representatives.**

- a. The City's Representative is: Name and Contact Information
- b. The Contractor's Representative is: Name and Contact Information
- c. A party may change its designated representative upon 30 days written notice to the other party.

**9. Notice and Communications.**

- a. Notices and communications between the parties to this Contract may be sent to the following addresses:

**City:**  
City of Hillsboro  
Department  
Address  
Hillsboro, OR Zipcode

**Contractor:**  
Name  
Company Name  
Address  
City, State, Zipcode

- b. The party giving notice will provide notice in writing, dated and signed by the party giving notice or by a duly authorized representative of that party. Notice is not effective for any purpose whatsoever unless served in one of the following manners:
- c. If notice is given by personal delivery, it is deemed delivered on the day of delivery.
- d. If notice is given by overnight delivery service, it is deemed delivered one (1) day after date deposited, as indicated by the delivery service.
- e. If notice is given by depositing same in United States mail, enclosed in a sealed envelope, it is deemed delivered three days after date deposited, as indicated by the postmarked date.
- f. If notice is given by registered or certified mail with postage prepaid, return receipt requested, it is deemed delivered on the day the notice is signed for.

**10. Independent Contractor Status.** By its signature on this contract, Contractor certifies that the service or services to be performed under this Contract are those of an independent contractor as defined in ORS 670.600, and that Contractor is solely responsible for the work performed under this Contract. Contractor represents and warrants that Contractor, its subcontractors, employees, and agents are not "officers, agents, or employees" of the City within the meaning of the Oregon Tort Claims Act (ORS 30.260 through 30.300). Contractor shall be responsible for all federal, state, and local taxes and any and all fees applicable to payments for services under this Agreement.

**11. Request for Taxpayer Identification Number.** Contractor must be a current vendor with the City or must submit a completed "Request for Taxpayer Identification Number and Certification" (Form W-9) with this signed Contract. Payment information will be reported to the Internal Revenue Service under the name and TIN or SSN provided by Contractor. Contractor shall be responsible for all federal, state, and local taxes and any fees applicable to payments for Work under this Contract.

**12. Compliance With Applicable Law.** Contractor shall comply with all federal, state, and local laws applicable to the Work under this Contract, and all regulations and administrative rules established pursuant to those laws, including without limitation, the following requirements of the Oregon Public Contract Code:

- a. ORS 279A.110 (Non-discrimination Certification): Contractor shall certify that Contractor has not discriminated 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.), or a business that is owned or controlled by, or employs a disabled veteran (as defined in ORS 408.225).

- b. ORS 279C.380 (Performance and Payment Bonds): Unless exempted by the City in writing pursuant to the City's local public contracting rules, prior to starting work under this Contract, Contractor or its Subcontractor shall execute and deliver to City a good and sufficient performance bond, in a form acceptable to City, in a sum equal to 100% of the construction portion of the Contract Price, and Contractor or its Subcontractor shall execute and deliver to City a good and sufficient payment bond, in a form acceptable to City, in a sum equal to 100% of the construction portion of the Contract Price, solely for the protection of claimants under ORS 279C.600.
- c. ORS 279C.505 (Prompt Pay Requirement, Liens, Taxes, and Drug Testing): Contractor shall make payment promptly, as due, to all persons supplying to such Contractor labor or material for the performance of the Work provided for in such Contract; pay all contributions or amounts due the Industrial Accident Fund from such Contractor or Subcontractor incurred in the performance of the Contract; not permit any lien or claim to be filed or prosecuted against the state or a county, school district, municipality, municipal corporation or subdivision thereof, on account of any labor or material furnished; and pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167. Contractor shall further demonstrate that an employee drug testing program is in place.
- d. ORS 279C.510 (Recycling/Composting): If this Contract includes demolition work, the Contractor shall salvage or recycle construction and demolition debris, if feasible and cost-effective. If this Contract includes lawn or landscape maintenance, the Contractor shall compost or mulch yard waste material at an approved site, if feasible and cost-effective.
- e. ORS 279C.515 (Failure to Pay Promptly): If Contractor fails, neglects, or refuses to make prompt payment of any Claim for labor or services furnished to the Contractor or a Subcontractor by any person in connection with this Contract as such Claim becomes due, the City may pay such Claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due the Contractor by reason of this Contract. The payment of a Claim in the manner authorized in this section shall not relieve the Contractor or the Contractor's surety from any obligation with respect to any unpaid Claims. Unless the payment is subject to a good-faith dispute as defined in ORS 279C.580, if Contractor or any first-tier Subcontractor fails to pay any Claim for materials or labor furnished under this Contract within 30 days after being paid by City, interest shall be due on such claim as specified in ORS 279C.515(2) at the end of the 10-day period that payment is due under ORS 279C.580(4). A person with any such unpaid Claim may file a complaint with the Construction Contractor's Board unless the complaint is subject to a good-faith dispute as defined in ORS 279C.580.
- f. ORS 279C.520 and 279C.540 (Hours of Labor, Holidays, and Overtime): Except as otherwise provided in an applicable collective bargaining agreement with a labor organization, Contractor shall not employ and shall require that its Subcontractors not employ any person to perform construction work for more than ten hours in any one day, or 40 hours in any one week, except in cases of necessity, emergency, or where the public policy absolutely requires it, and in such cases, except in cases of Contracts for personal services as defined in ORS 279A.055, the laborer shall be paid at least time and a half pay:
  - 1. For all overtime in excess of eight hours a day or 40 hours in any one week when the work week is five consecutive days, Monday through Friday; and
  - 2. For all overtime in excess of ten hours a day or 40 hours in any one week when the work week is four consecutive days, Monday through Friday; and
  - 3. For work performed on Saturday and on any legal holiday specified in any applicable collective bargaining agreement or ORS 279C.540(1)(b).
  - 4. The requirement to pay at least time and a half for all overtime worked in excess of 40 hours in any one week shall not apply to individuals who are excluded under ORS 653.010 to 653.261 or under 29 U.S.C. Section 201 to 209 from receiving overtime. Contractor shall and shall require its Subcontractors to give notice in writing to their employees who work under this Contract, either at the time of hire or before commencement of Work on the Contract, or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that the employees may be required to work.

- g. ORS 279C.525 (Notice of Environmental Regulations): State law requires that solicitation documents for a public improvement contract make specific reference to federal, state, and local agencies that have enacted ordinances, rules, or regulations dealing with the prevention of environmental pollution or the preservation of natural resources that may affect the performance of this Contract. These agencies include, but are not limited to:
1. Federal Agencies: Department of Agriculture, Forest Service, Soil and Water Conservation Service, Coast Guard, Department of Defense, Army Corps of Engineers, Department of Emergency, Federal Energy Regulatory Commission, Environmental Protection Agency, Department of Health and Human Services, Department of Housing and Urban Development, Solar Energy and Energy Conservation Bank, Department of Interior, Bureau of Land Management, Bureau of Indian Affairs, Bureau of Mines, Bureau of Reclamation, Geological Survey, Minerals Management Service, U.S. Fish and Wildlife Service, Department of Labor, Mine Safety and Health Administration, Occupational Safety and Health Administration, Department of Transportation, Federal Highway Administration, and Water Resources Council.
  2. State Agencies: Department of Administrative Services, Department of Agriculture, Soil and Water Conservation Commission, Columbia River Gorge Commission, Department of Energy, Department of Environmental Quality, Department of Fish and Wildlife, Department of Forestry, Department of Geology and Mineral Industries, Department of Human Resources, Department of Consumer and Business Services, Land Conservation and Development Commission, Department of Parks and Recreation, Division of State Lands, and Department of Water Resources.
  3. Local Agencies: City councils, county courts, county boards of commissioners, metropolitan service district councils, design commissions, historic preservation commissions, planning commissions, development review commissions, special district boards of directors, and other and special governmental agencies such as Tri-Met, urban renewal agencies, and Port districts.
  4. Tribal Governments.
- h. ORS 279C.530 (Payment for Medical Care and Workers' Compensation): Contractor shall promptly, as due, make payments to any person, co-partnership, association, or corporation furnishing medical, surgical, and hospital care or other needed care and attention, incident to sickness or injury, to the employees of such Contractor, of all sums which the Contractor agrees to pay for such services and all moneys and sums which the Contractor collected or deducted from the wages of employees pursuant to any law, contract, or agreement for the purpose of providing or paying for such service. All employers, including the Contractor, that employ subject workers who work under this Contract in the State of Oregon shall comply with ORS 656.017 and provide the required workers' compensation coverage, unless such employers are exempt under ORS 656.126. Contractor shall ensure that each of its Subcontractors complies with these requirements.
- i. ORS 279C.545 (Time Limitations on Claims for Overtime): Construction workers employed by the Contractor or its Subcontractor shall be foreclosed from the right to collect for any overtime under this Contract unless a claim for payment is filed with the Contractor or Subcontractor within 90 days from the completion of the Contract, providing the Contractor or Subcontractor has:
1. Caused a circular clearly printed in blackface pica type and containing a copy of this section to be posted in a prominent place alongside the door of the timekeeper's office or in a similar place which is readily available and freely visible to any or all workers employed on the Work; and
  2. Maintained such circular continuously posted from the inception to the completion of the Contract on which workers are or have been employed.
- j. ORS 279C.580(3) (Prompt Payment of First-Tier Subcontractors): Contractor shall include in each subcontract for property or services with a first-tier Subcontractor a clause that obligates the Contractor to pay the first-tier Subcontractor for satisfactory performance under its subcontract within ten days out of such amounts as are paid to the Contractor by the City. Contractor shall also include in each subcontract a clause that states that if the Contractor fails to pay any claim for materials or labor furnished under this Contract within 30 days after being paid by City, interest shall be due on such claim as specified in ORS 279C.515(2) at the end of the ten-day period that payment is due under ORS 279C.580(3). Contractor shall require each first-tier Subcontractor to include a payment clause and interest clause conforming to the requirements of ORS 279C.580 in each of its subcontracts, and to require each of its Subcontractors to include a similar clause in each contract with a lower-tiered subcontractor or supplier.

- k. ORS 279C.605 (Notice of Claim on Bond): Any person claiming a right of action under ORS 279C.600 must file a notice of claim as provided in ORS 279C.605.
- l. ORS 279C.800 to 279C.870 (Payment of Prevailing Wage Required):
1. The hourly rate of wage to be paid by Contractor or any Subcontractor to workers in each trade or occupation required for the public works employed in the performance of this Contract shall not be less than the specified minimum rate of wage in accordance with ORS 279C.838 and ORS 279C.840 for each trade or occupation as defined by the Commissioner of the Oregon Bureau of Labor and Industries in the applicable publication entitled Definitions of Covered Occupations for Public Works Contracts in Oregon available at [http://www.boli.state.or.us/BOLI/WHD/PWR/pwr\\_state.shtml](http://www.boli.state.or.us/BOLI/WHD/PWR/pwr_state.shtml).
  2. This contract is subject to the prevailing wage rates published as specified in the City's Invitation to Bid document included in this contract as Exhibit Insert Exhibit letter or number.
  3. Contractor and all Subcontractors shall keep the prevailing wage rates for this Project posted in a conspicuous and accessible place in or about the Project.
  4. The City shall pay a fee to the Commissioner of the Oregon Bureau of Labor and Industries as provided in ORS 279C.825. The fee shall be paid to the Commissioner under the administrative rule of the Commissioner.
  5. If Contractor or any Subcontractor also provides for or contributes to a health and welfare plan or a pension plan, or both, for its employees on the Project, it shall post notice describing such plans in a conspicuous and accessible place in or about the Project. The notice shall contain information on how and where to make claims and where to obtain future information.
- m. ORS 279C.836 (Public Works Bond Required): Contractor shall:
1. File a public works bond with the Construction Contractors Board pursuant to ORS 279C.836 before starting work on the Project, unless exempt under ORS 279C.836(2), (7) or (8); and
  2. Include in every subcontract a provision requiring the Subcontractor to file a public works bond with the Construction Contractors Board pursuant to ORS 279C.836 before starting work on the Project, unless exempt under ORS 279C.836(2), (7) or (8).
- n. ORS 279C.845 (Prevailing Wage Certification; Additional Retainage):
1. Contractor and every Subcontractor shall file certified statements with City in writing in the form prescribed by the Commissioner of the Bureau of Labor and Industries, certifying the hourly rate of wage paid each worker whom Contractor or Subcontractor has employed upon such public work, and further certifying that no worker employed upon such public work has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the Contract, which certificate and statement shall be verified by the oath of Contractor or Contractor's surety or Subcontractor or Subcontractor's surety that Contractor and any Subcontractor has read such statement and certificate and knows the contents thereof, and that the same is true to Contractor or Subcontractor's knowledge. The certified statements shall set out accurately and completely the payroll records for the prior week including the name and address of each worker, the worker's correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid.
  2. The certified statement shall be delivered or mailed by Contractor or Subcontractor to City. Certified statements for each week during which the Contractor or Subcontractor employs a worker upon the public work shall be submitted once a month, by the fifth business day of the following month. Information submitted on certified statements may be used only to ensure compliance with the provisions of ORS 279C.800 to 279C.870. Notwithstanding any other provision of this Contract and in addition to any other retainage required under this Contract, the City shall retain 25% of any amount earned by the Contractor until the Contractor has filed the certified statements with the City as required by this Section. The City will pay the retainage required under this Section within 14 days after Contractor files the certified statements required by this Section.
  3. Contractor and each Subcontractor shall preserve the certified statements for a period of three years from the date of completion of the Contract.
- o. ORS 671.560, 701.026 (Landscape/Construction Contractors License Required): If Contractor is performing work as a landscape contractor as defined in ORS 671.520(2), Contractor must have a current, valid landscape contractor's license issued under ORS 671.560. If Contractor is performing work as a Contractor as defined in ORS 701.005(2), Contractor must have a current, valid construction contractor's license issued under ORS 701.026. Contractor shall further certify

that all Subcontractors performing Work described in ORS 701.005(2) are registered with the Construction Contractors Board or licensed by the State Landscaping Contractor's Board as required by the above-noted statutes before they commence Work under this Contract. Contractor shall maintain in effect all licenses, permits, and certifications required for the performance of the Work. Contractor shall notify City immediately if any license, permit, or certification required for performance of this Contract shall cease to be in effect for any reason.

- p. SB 675 (Oregon Tax Law Compliance): Contractor must, throughout the duration of this Contract and any extensions, comply with all tax laws of this state and all applicable tax laws of any political subdivision of this state. Contractor (to the best of Contractor's knowledge, after due inquiry), for a period of no fewer than six calendar years preceding the date of this Contract, faithfully has complied with:
- (i) All tax laws of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318;
  - (ii) Any tax provisions imposed by a political subdivision of this state that applied to Contractor, to Contractor's property, operations, receipts, or income, or to Contractor's performance of or compensation for any work performed by Contractor;

Contractor has the power and authority to enter into and perform this Contract. The persons executing this Contract on behalf of Contractor have the actual authority to bind Contractor to the terms of this Contract.

**CONTRACTOR**

**CITY**

Full, legal name of Contractor

City of Hillsboro

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature  
Printed name of signer

\_\_\_\_\_  
Printed Name and Title

Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

CITY OF HILLSBORO  
PUBLIC IMPROVEMENT CONTRACT  
GENERAL CONDITIONS

November 19, 2015

Sample

**I) General Provisions.**

- i) Contract Documents.** The “Contract Documents” are enumerated in Item 3. (“Enumeration of Contract Documents”) of the Public Improvement Contract between City and Contractor (“Contract”) and consist of the Contract, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, additions or deletions to, material changes in, or general interest explanations of a Solicitation Document (“Addenda”) (other than Addenda relating to bidding requirements) issued prior to the bid, other documents listed in the Contract, and Modifications issued after execution of the Contract. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all. Performance by Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.
- ii) Contract Schedule.** The “Contract Schedule” is the graphical representation of the practical plan for carrying out the Work and completing the Work within the Contract Time as set forth in the Contract Documents. The Contract Schedule provides a list of intended events and times to complete each event as set forth in the Contract Documents.
- iii) Drawings.** The “Drawings” are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.
- iv) Knowledge.** The terms “knowledge,” “recognize” and “discover” their respective derivatives and similar terms in the Contract Documents, when used in reference to the Contractor, means that which the Contractor knows or should know, recognizes or should recognize and discovers or should discover. Analogously, the expression “reasonably inferable” and similar terms in the Contract Documents means reasonably inferable by a contractor familiar with the Project and exercising the care, skill and diligence required of the Contractor by the Contract Documents.
- v) Modification.** A “Modification” is

  - 1) a written amendment to this Contract signed by both parties;
  - 2) a Change Order;
  - 3) a Construction Change Directive; or
  - 4) a written order for a minor change in the Work issued by the Architect.
- vi) Organization of Drawings and Specifications.** “Organization of Drawings and Specifications” into divisions, sections, articles, or otherwise arranged will not control Contractor in dividing the Work among subcontractors or in establishing the extent of Work to be performed by any trade subcontractor.
- vii) Project.** The “Project” is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by City and by separate Contractors.
- viii) Project Site.** The “Project Site” is the property upon which the Project lies and City’s property that surrounds the Project, extending to the City’s property boundary.
- ix) Specifications.** The “Specifications” are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards, and workmanship for the Work and performance of related services.

## II) City's Responsibilities.

- i) Authorized Representative. City shall designate a person in writing to be the authorized representative with express authority, to the extent permitted by law, to bind and communicate on behalf of City with respect to all matters requiring City's approval or authorization ("City Representative"). The term "City" includes City Representative.
- ii) Contract Administration. City shall provide contract administrative services for the Project through City's authorized representative. The City Representative may engage and delegate authority to such additional staff and professional and technical consultants as City deems necessary to assist in perform its administrative tasks. Contractor shall direct all Project communications to City and in accordance with the Contract Documents, or as City directs in writing.
  - 1) City may engage professional architects or engineers to assist City during construction of the Project to interpret technical contract provisions and to determine the amount, quality, acceptability, and fitness of the Work. Such architects or engineers will be authorized to act on behalf of City only to the extent expressly provided in the Contract Documents or as City otherwise directs in writing.
  - 2) City may engage a consulting construction manager to provide Project administrative services on City's behalf. Such construction manager will be authorized to act on behalf of City to the extent expressly provided in the Contract Documents or as City otherwise directs in writing.
  - 3) City may retain certain project inspectors to monitor compliance with Drawings and Specifications for the Project, as well as applicable codes and ordinances. Such project inspectors will be authorized to act on behalf of City to the extent expressly provided in the Contract Documents or as City otherwise directs in writing.
- iii) Access to the Work. City and its designated representatives shall have free access to the Work at all times. Contractor shall not carry on Work except with the knowledge of City and its designated representatives. City may require special inspection or testing of any portion of the Work, whether it has been fabricated, installed, or fully completed. Inspection or observation of Work shall not relieve Contractor from any obligation to fulfill the Contract.
- iv) Right to Stop or Reject Work. City may reject Work that fails to conform to the Contract Documents, as determined by City. If Contractor fails to promptly correct such defective Work, City may issue a written order directing Contractor to stop the Work, or designated portion thereof, until the cause for such order is eliminated. The right of City to stop the Work shall not give rise to a duty on the part of City, or any of its representatives, to discover nonconforming Work or to exercise the right to stop the Work for the benefit of Contractor or any other person or entity.
- v) Permits and Access. Except for permits and fees that are Contractor's responsibility under the Contract Documents, City shall secure and pay for all other necessary approvals, easements, assessments and charges required to complete the Work..
- vi) Subsurface Surveys. City shall make available to Contractor, and Contractor shall study, the results of such test borings and information that City has concerning subsurface conditions and site geology. Contractor shall inform City of any other site investigation, analysis, study, or test conducted by or for Contractor or its agents and shall make the results available to City upon City's request.
- vii) City's Rights. The rights stated in this section and elsewhere in the Contract Documents are cumulative and do not limit any rights City may have under the Contract Documents, at law or in equity. Without limiting the generality of the foregoing sentence, any right City has under the Contract Documents to compel Contractor to fix defective Work, up to and including any warranty period the Contract Documents may establish, does not operate to shorten or otherwise limit statutes of limitations applicable to the Work.

### III) Contractor's Responsibilities.

#### i) General Responsibilities.

- 1) Authorized Representative. Contractor shall designate a person in writing to be the authorized representative with express authority to bind and communicate on behalf of Contractor with respect to all matters requiring Contractor's approval or authorization ("Contractor Representative"). The term "Contractor" means the Contractor or the Contractor Representative.
- 2) Materials, Equipment, and Services. The Contractor will provide all labor, materials, equipment, and services necessary to complete the Work, all of which will be provided in full accord with the Contract Documents.
- 3) Supervision and Coordination. Unless otherwise expressly provided in the Contract Documents, the Contractor will be solely responsible for the supervision and coordination of the Work, including the construction means, methods, techniques, sequences, and procedures utilized.
- 4) Project Correspondence. Contractor shall provide City with a copy of all written communications between Contractor and City's consultants at the same time as that communication is made to such consultants, including, without limitation, all requests for information, correspondence, submittals, notices, and change order proposals. Contractor shall confirm oral communications in writing.
- 5) Project Boundary. Contractor shall confine operations at the site to areas permitted by law, ordinances, permits, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.
- 6) Taxes. Contractor shall pay all applicable taxes for the Work provided by Contractor that are legally applicable at the time the bid is submitted, whether or not yet effective or merely scheduled to go into effect.
- 7) Permits, Fees and Notices. Except as otherwise provided in the Contract Documents, Contractor shall secure and pay for all permits, licenses, and certificates that are the Contractor's responsibility under the Contract Documents and that are necessary for prosecution of Work before the date of the commencement of the Work or before the permits, licenses, and certificates are legally required to continue the Work without interruption. Contractor shall obtain and pay, when legally required, for all licenses, permits, inspections, and inspection certificates required by any authority having jurisdiction over any part of the Work included in the Contract. Contractor shall deliver all final permits, licenses, and certificates to City before demand is made for final payment.

#### ii) Worksite Conditions.

- 1) Benchmarks and Monuments. Contractor shall protect and preserve established benchmarks and monuments and shall not change locations of benchmarks and monuments without City's prior written approval. Contractor shall replace any benchmarks or monuments that are lost or destroyed subsequent to proper notification of City and with City's approval.
- 2) Field Verification. Prior to the commencement of the Work, Contractor shall review the Project Site with City in detail and identify the area of the Work, staging areas, connections or interfacing with existing structures and operations, and restrictions on the Work site area. Contractor shall ensure that all forces on the Project Site are instructed about the acceptable working and staging areas and restrictions on use of the site. Contractor, with advance consent of City, shall erect such barriers and devices as are necessary to restrict access within the Work site to authorized areas and to prevent unauthorized access to non-Work areas.

- 3) Utility Locates. Contractor will be responsible to locate existing utilities and underground facilities that are indicated in the Contract Documents or that are known or reasonably should be known to exist in proximity to the Work. Contractor shall provide timely notice and locate requests with any affected utility or through contact with appropriate notification centers before commencing excavation or demolition Work that Contractor knows or reasonably should know is in proximity to such utilities or facilities. Contractor assumes the sole risk and will be responsible for all delay and expense arising out of Contractor's failure to do so. Contractor acknowledges that utility companies and other third parties owning or managing facilities that may need to be relocated are not City's agents and do not act for the City.

iii) Responsibility for Performance.

- 1) Before beginning the Work, Contractor shall examine and compare the drawings and specifications with information furnished by City that are Contract Documents, relevant filed measurements made by the Contractor, and any visible conditions at the worksite affecting the Work.
- 2) Reporting Inconsistencies. Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations, but Contractor shall promptly report any nonconformity it discovers to City. Contractor will be liable to City for damages if it fails, in the exercise of normal diligence, to recognize any error, inconsistency, omission or difference between field conditions and the Contract Documents. Contractor shall promptly report any errors, inconsistencies, or omissions it discovers, as a request for information, in such a form as City or Architect may require. Contractor will not be entitled to any modification in Contract Total or Contract Time solely by the request for information. Contractor shall carefully study and compare all Contract Documents, including Drawings, Specifications, and other instructions and shall at once report, in writing to City any error, inconsistency, or omission that Contractor or its employees or subcontractors may discover. In the event of an inconsistency within or between parts of the Contract Documents, or between the Contract Documents and applicable law, and regardless of whether Contractor reports the inconsistency to the City, the Contractor must: (i) provide the better quality or greater quantity of Work; or (ii) comply with the more stringent requirement as applicable.
- 3) Unnecessary Inquiries. Contractor is liable for costs incurred by City for professional services for interpretations or decisions of matters where the information sought is equally available to the party making the request.

iv) Construction Materials and Supplies.

- 1) Quantities of Materials. Contractor shall provide materials in sufficient quantities on hand at such times as to insure uninterrupted progress of Work and shall store materials properly and protect materials as required.
- 2) Complete Assembly. For all materials and equipment specified or indicated in the Drawings, Contractor shall provide all labor, materials, equipment, and services necessary for complete assemblies and complete working systems, functioning as intended. Contractor shall furnish incidental items not indicated on Drawings, nor mentioned in the Specifications, that can be legitimately and reasonably inferred to belong to the Work described, or necessary in good practice to provide a complete assembly or system, as though itemized here in every detail. In all instances, Contractor shall install material and equipment in strict accordance with each manufacturer's most recent published recommendations and specifications. Contractor shall be responsible for appropriately sequencing the Work and for verification of suitability of prior work before subsequent construction activities.
- 3) Timely Ordering of Materials. Contractor shall coordinate submittal approvals and place orders for materials and/or equipment so that delivery of same will be made without delays to the Work. Contractor shall, upon City's reasonable request, provide documentary evidence that orders have been placed.

- 4) No Right to Lien. Contractor warrants good title to all material, supplies, and equipment installed or incorporated in Work and agrees upon completion of all Work to deliver the site to City, together with all improvements and appurtenances constructed or placed thereon by it, and free from any claims, liens, or charges. Because City's property is public property, Contractor and any person, firm, or corporation furnishing any materials or labor for any Work covered by this Contract, will not have any right to lien any portion of the Project Site or any improvement or appurtenance thereon.
- 5) Storage. Contractor and its subcontractors shall obtain City approval before delivering or storing materials or tools on City's premises. Upon approval, Contractor shall store materials and tools so that they do not hamper the operation of equipment or persons and do not present a fire or safety hazard.

v) Construction Personnel and Supervision.

- 1) Supervision. During progress of the Work, Contractor shall keep on the Project Site, and at all other locations where any Work related to this Contract is being performed, a competent project manager, construction superintendent and staff, who are employees of Contractor, to whom City does not object and at least one of whom is fluent in English, written and verbal. Contractor shall provide efficient supervision to the Work, using its best skill and attention. Before commencing the Work, Contractor shall give written notice to City of the name of its project manager and construction superintendent. Contractor is bound by all directions given to Contractor's project manager and/or construction superintendent as if such direction was given to Contractor.
- 2) Replacement of Supervision. Contractor shall not otherwise remove or replace the construction superintendent or project manager for any reason, including their need to work on other projects, or to take extended vacations, without submitting thirty (30) days' written notice to City. If Contractor's project manager, construction superintendent, or support staff member is no longer employed by Contractor, Contractor shall provide City with notice of the termination of the employment relationship and shall consult with City with respect to replacement personnel.
- 3) Discipline and Removal. Contractor shall at all times enforce strict discipline and good order among its subcontractors and employees and shall not employ or work any unfit person, or anyone not skilled in work assigned to that person. City may require Contractor to permanently remove unfit persons from Project Site. Contractor shall not employ any person whom City may deem incompetent or unfit on the Project except with the prior written consent of City. City may require removal and replacement of any or all construction superintendents or project managers upon ten (10) days' notice to Contractor.
- 4) Acts or Omissions. Contractor is responsible to City for acts and omissions of Contractor's employees, subcontractors and their agents and employees, and other persons or entities performing portions of the Work for or on behalf of Contractor or any of its subcontractors.
- 5) Identification Badges. The Contractor and its subcontractors, and the employees and the agents of any of them shall comply with City's policies and requirements to obtain, display, and return identification badges at any time while they are present on City's property.

vi) Contractor's Construction Master Schedule.

- 1) Schedule Required. Within no more than ten (10) days of being awarded the Contract, and before commencing the Work, Contractor shall prepare and submit to City for City's approval a construction master schedule for the Work. The construction schedule shall be in a detailed precedence-style critical path method (CPM) type format, which will include any interim dates that are critical in insuring the timely completion of the Work as provided in the Contract Documents. City shall provide approval or comment on the submitted schedule within seven (7) days. Contractor shall be responsible for amending construction schedule in response to City comments.

- 2) Logic. Schedule shall use retained logic during the development and updating of the schedule. Any function that would cause the retained logic of the logic network to be overridden is prohibited unless approved, in writing and in advance, by the Architect and City.
- 3) Schedule shall include: date of Notice to Proceed, date of Substantial Completion, and date of Final Completion in accordance with Contract Documents.
- 4) Schedule Maintenance. The schedule shall not exceed the Contract Time for the Work. Contractor shall revise and update the schedule at appropriate intervals, no greater than monthly, or as required by City or the conditions of the Work and Project. Should the Contractor fail to meet any scheduled date as shown on the current Construction Progress Schedule, the Contractor shall promptly notify the City, and if requested, be required at its own expense to submit within five (5) days of the request an updated Construction Progress Schedule. If the Contractor's progress indicates to the City that the Work will not be Substantially Completed within the Contract Time, the Architect and City may require the Contractor develop a Recovery Schedule that adequately demonstrates how the Contractor will, at its own expense, increase its work force and/or working hours to bring the actual completion dates of the activities into conformance with the Construction Progress Schedule and Substantial Completion within the Contract Time. Neither the City nor the Architect will, however, be obligated to review the substance or sequence of the Construction Progress Schedule or otherwise determine whether it is correct, appropriate or attainable.
- 5) Submittal Schedule. Contractor shall prepare and keep current, for City's review and acceptance, a schedule of submittals that is coordinated with the construction schedule and allows City and its consultants reasonable time to review submittals and to provide information necessary for procurement and installation of Work for which allowances are provided under the Contract Documents. City may require Contractor to include preparation of Contract submittals as a line item payment in the schedule of values.
- 6) Execution of Schedule. Contractor shall perform the Work in general accordance with the most recent schedules submitted to and accepted by City. Contractor shall indicate in the schedule updates any Work that is not proceeding according to the schedule and shall provide a written plan of action to bring the Work into compliance with the schedule or to otherwise ensure that the Work will be completed within the Contract Time.

**vii) Documents and Records.**

- 1) Record Documents. Contractor shall update at least weekly, at the Project Site, or at such other location as City may authorize in writing, one legible copy of all Contract Documents annotated with all changes ("Record Documents"), including but not limited to Addenda, RFIs, ASIs, and Change Orders. Contractor shall also maintain on site a complete record and copy of all approved submittals, shop drawings and product samples. Failure to update in a timely manner as required by this section may result in withholding payment by City. Contractor shall keep these documents in good order and available to City's consultants or representatives and all authorities having jurisdiction. Contractor shall coordinate with City's representatives and consultants and shall submit its verified report(s) according to Oregon law or as required by authorities having jurisdiction. The Contractor shall submit the completed and finalized project record to City in accordance with the contract documents prior to Final Acceptance.

- 2) Daily Job Reports. Contractor shall maintain at least one (1) set of reports on the Project prepared by Contractor's employee(s) present on site, and which includes following information: a brief description of all Work performed on that day; a summary of all pertinent events and/or occurrences on that day including records of all tests and inspections; a list of all subcontractor(s) working on that day; a list of each Contractor employee working on that day; the total hours worked for each employee; a complete list of all equipment on the Project that day, whether in use or not; the time Work commenced and ended; weather conditions; accidents or injuries; and Work progress made for that day ("Daily Job Reports"). Contractor shall keep the Daily Job Reports current and in good order and shall make current copies available to City upon request.
- 3) Maintenance of Records after Final Payment. Contractor shall make available at its office at all reasonable times the materials described in this paragraph for the examination, audit, or reproduction until six (6) years after final payment under this Contract: (a) all Daily Job Reports or other Project records of Contractor's project manager(s), construction superintendent(s), and/or project foreperson(s); (b) all certified payroll records and/or related documents including, without limitation, payroll, payment, timekeeping and tracking documents; (c) all books, estimates, records, contracts, documents, bid documents, bid cost data, subcontract job cost reports, and other data of Contractor, any subcontractor, and/or supplier, including computations and projections related to bidding, negotiating, pricing, or performing the Work or Contract modification, in order to evaluate the accuracy, completeness, and currency of the cost, manpower, coordination, supervision, or pricing data at no additional cost to City. These documents may be duplicative and/or be in addition to any bid documents held in escrow by City.
- 4) Submittals. Contractor shall submit shop drawings, product data, samples and mock ups as required by the Contract Documents that have been verified and coordinated with the requirements of the Work and of the Contract Documents. Contractor shall not perform any portion of the Work until the submittals for that portion have been approved by City.
- 5) Professional Design Services. City will not require Contractor to perform professional services which constitute the practice of architecture, engineering, or surveying unless such services are specifically required by the Contract Documents as a part of the Work or unless Contractor must provide such services in order to carry out Contractor's responsibilities under the Contract. City shall specify performance and design criteria that such professional services must satisfy.
- 6) Ownership of Documents. All copies of Drawings, Specifications, and copies of other incidental architectural and engineering work, or copies of other Contract Documents furnished by City or generated by Contractor, including those in electronic form, are the property of City.
- 7) Copyright and License. Neither Contractor nor any subcontractor, or material or equipment supplier, will own or claim a copyright in the documents prepared by the City's consultants. City hereby grants Contractor, subcontractors, sub-subcontractors, and material or equipment suppliers a limited license to use applicable portions of the Drawings and Specifications prepared for the Project in the execution of their Work under the Contract Documents.
- 8) Royalties, Licenses and Copyrights. Contractor shall obtain and pay, when required by law, all royalties and license fees necessary for prosecution of Work before the earlier of the date of the commencement of the Work or the date the license is legally required to continue the Work without interruption. Contractor shall defend suits or claims of infringement of patent, copyright, or other rights and shall hold City, City's consultants, and City's representatives harmless and indemnify them from loss on account of claims for infringement to the extent Contractor knew, or with reasonable diligence should have known, that the use of a specified design, process, or product would constitute infringement.

- 9) Intellectual Property. The review by City or Architect of any method of construction, invention, appliance, process, article, device, or material of any kind is limited to a review for adequacy for the Work and is not approval for use by Contractor in violation of any patent or other rights of any person or entity.

**viii) Tests and Inspections.**

- 1) Tests, inspections and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules and regulations or lawful orders of public authorities.
- 2) Unless otherwise provided, Contractor shall arrange for such tests, inspections, and approvals, and shall bear the associated costs. Contractor shall notify City of scheduled tests and/or inspections and approvals, so that City or its designated representative may be present for such procedures, which presence shall be at City's expense.
- 3) Contractor shall not incorporate any material into the Work that has not satisfied all testing, inspection, or approval requirements of the Contract Documents.
- 4) Contractor shall secure and promptly deliver required certificates of testing, inspection or approval to City, unless otherwise provided by the Contract Documents.
- 5) If testing, inspection, or approval required by the Contract Documents, or otherwise required by City, reveal failure of the Work to comply with requirements of the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation of City's costs, shall be at Contractor's expense.

**ix) Work Under the Contract.**

- 1) Defective Work. At City's sole option, Contractor shall repair or replace any and all Work, together with any other Work that may be displaced in doing so, that may prove defective in workmanship and/or materials within a one (1) year period from Substantial Completion of the Work without expense whatsoever to City. In the event Contractor fails to commence and diligently pursue such replacements or repairs within ten (10) days after being notified in writing, Contractor hereby acknowledges and agrees that City may correct such defects, without voiding any guarantee or warranty, at Contractor's expense. Payment shall become due upon City's demand, and shall be an obligation secured by Contractor's performance bond.
- 2) Correction of Work. If, in the opinion of City, defective Work creates an exigent or dangerous condition or requires immediate correction or attention to prevent injury to persons or property or to prevent interruption of City operations, City may, upon making a good faith attempt to notify Contractor, proceed to make some or all replacements or repairs as may be reasonably required in the circumstances. The costs of such work will be charged against Contractor and shall become due upon City's demand.
- 3) Manufacturer's Warranties. The above provisions do not in any way limit the guarantees on any items for which a longer guarantee is specified or on any items for which a manufacturer gives a guarantee for a longer period. Contractor shall furnish to City all appropriate guarantee or warranty certificates as indicated in the Specifications or upon request by City. Contractor shall obtain and preserve for the benefit of City, manufacturer's warranties on material, fixtures, and equipment incorporated into the Work. Contractor shall furnish City with all guarantee or warranty certificates as indicated in the Specifications or upon City's request.
- 4) Cutting and Patching. Contractor shall do all cutting, fitting, patching, and preparation of Work as required to make its several parts come together properly, to fit it to receive, or be received by work of other Contractors, and to coordinate tolerances to various pieces of work, showing upon, or reasonably implied by, the Drawings and Specifications for the completed structure, and shall conform them as City may direct.

- 5) Alteration of Work by Contractor or Others. Contractor shall not endanger any Work performed by it or anyone else by cutting, excavating, or otherwise altering Work and shall not cut or alter Work of any other Contractor except with consent of City.
  - 6) Cleaning up. Contractor shall keep the Project Site and surrounding area, including public rights of way, free from dust, mud, dirt, or accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work, Contractor shall clean the site, streets, and sidewalks and shall remove from the Project waste materials, rubbish, Contractor's tools, construction equipment, machinery, and surplus materials.
  - 7) Access to Work. Contractor shall provide City and its representatives access to the Work in preparation and progress wherever located.
- x) Allowances.
- 1) Contractor shall include all allowances stated in the Contract Documents in the Contract Total. Unless the Contract Documents provide otherwise, Contractor shall include in the Contract Total, separate from allowances, amounts necessary to cover the cost of materials and equipment delivered at the site and all required taxes, less applicable trade discounts, Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance. City shall adjust the Contract Total through a Change Order whenever costs are more than allowances. City shall provide a Change Order amount that reflects the difference between the actual cost and the allowance.
- xi) Warranty.
- 1) Contractor warrants to City and Architect that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. Contractor's warranty excludes remedy for damage or defect caused by abuse, modifications not executed by Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by Architect or City, Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.
  - 2) Contractor guarantees all work against defects in material or workmanship for a period of one (1) year from the date of substantial completion.
  - 3) If, after 10 days' notice, Contractor fails to proceed to cure any breach of this warranty, City may have the defects corrected and Contractor and its surety shall be liable for all expenses incurred. In case of an emergency, where, in the opinion of City or Architect, delay would cause serious loss or damage, corrective work may be undertaken without advance notice to Contractor; but Contractor and its surety shall remain liable for all expenses incurred. The remedies stated in this subsection are not exclusive, but are cumulative of any other remedies City may have.
  - 4) Contractor shall assign, and shall obtain from subcontractors and assign, all manufacturers' warranties to City and all guarantees and warranties of goods supplied under this Contract shall be deemed to run to the benefit of City. Contractor shall provide City with all manufacturers' warranty documentation and operations and maintenance manuals not later than the date of Final Acceptance of the Work by the City.

#### IV) Subcontractors.

- i) Subcontractor Disclosure. Contractor shall provide City a list of all subcontractors and major suppliers with a name, address, telephone and fax numbers, Oregon license number(s), classification, and monetary value of each subcontract for labor, material, or equipment. If City objects, City shall promptly provide a written notice of objection. Contractor shall not contract with a proposed person or entity to which City reasonably objects or that is ineligible to receive a subcontract under ORS 279C.860, and shall procure a replacement subcontractor that is acceptable to City. City shall provide a Change Order before commencement of substitute subcontractor's Work for the increase or decrease in the Contract Total and Contract Time occasioned by such change, unless the subcontractor is ineligible under ORS 279C.860, and Contractor shall be fully responsible for performance of the substituted subcontractor under the Contract Documents. Contractor shall be solely responsible to determine whether any proposed subcontractor is eligible.
- ii) Pass-Through. Contractor shall require each subcontractor, by written agreement, to be bound to Contractor by terms of this Contract to the extent it applies to the Work performed by subcontractor. Contractor shall provide copies of subcontract agreements upon City's request.
- iii) No Waiver. City's consent or failure to object to any subcontractor does not relieve Contractor of any obligations under this Contract and is not a waiver of any provisions of this Contract. A waiver is not effective unless it is in writing and is signed by the City.
- iv) Substitution and Assignment. Contractor shall not, without City's written consent:
  - 1) Substitute any person as a subcontractor in place of the subcontractor designated in the original bid.
  - 2) Permit any Subcontract to be assigned or transferred, or allow any portion of the Work to be performed by anyone other than the subcontractor listed in the original bid; or
  - 3) Sublet or subcontract any portion of the Work in excess of one-half of one percent (1/2 of 1%) of Contractor's total bid as to which his original bid did not designate a subcontractor.
- v) Coordination of Work. Contractor shall coordinate the trades, subcontractors, sub-subcontractors and material or equipment suppliers working on the Project.
- vi) Subcontractor Dispute Resolution. Contractor shall settle any difference between Contractor and its subcontractor(s) or between subcontractors.
- vii) Assignment. Contractor shall include assignment provisions in each subcontract as indicated in the termination provisions set forth in these General Conditions.
  - 1) Contingent Assignment of Subcontractors. Contractor shall assign to City each subcontract agreement for a portion of the Work provided that:
    - (A) Assignment is effective only after termination of this Contract by City for cause or stoppage of the Work by City, and only for those subcontract agreements which City accepts in its sole discretion by notifying the subcontractor and Contractor in writing; and
    - (B) Assignment is subject to the prior rights of the surety, if any, obligated under bond relating to this Contract.
  - 2) Upon such assignment, if the Work has been suspended for more than thirty (30) days, City shall equitably adjust subcontractor's compensation for increases in cost resulting from the suspension.
- viii) Prompt Payment of Subcontractors. Contractor shall promptly pay subcontractors as required by the Contract.

**V) Construction by City.**

- i) Other Contractors. City may let other contractors perform work with its own forces, in connection with the Project. Contractor shall afford other contractors reasonable opportunity for introduction and storage of materials and execution of their work and shall properly coordinate and connect the Work with the work of other contractors. If Contractor claims that delay or additional cost is involved because of such action by City, Contractor shall make such claim in the manner provided in the Contract Documents.
  - 1) Contractor shall protect the work of other contractors that it encounters while working on the Project.
  - 2) If any part of Contractor's Work depends upon completion of the work of City or others for proper execution, Contractor shall inspect and promptly report to City any discrepancy or defective condition in such work. Contractor's failure to inspect and report will be deemed acceptance of all work of others as fit and proper for reception of Contractor's Work. Contractor is liable for damages for work of others that Contractor failed to inspect, except for defects that were not discoverable and may develop in City's or any other contractor's work after execution of Contractor's Work.
- ii) Mutual Responsibility. Contractor shall reimburse City for costs incurred by City which are payable to a separate contractor because of delays, improperly timed activities or defective construction of Contractor. City shall reimburse Contractor for costs incurred by Contractor because of delays, improperly timed activities, and damage to the Work or defective construction of a separate contractor.
- iii) City's Right to Clean Up. If a dispute arises among Contractor, separate contractors and City as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, City may clean up and the City shall allocate the cost among those responsible.

**VI) Changes in the Work.**

- i) Change Orders.
  - 1) Change Order. A document prepared by the City Representative and signed by the City, the City Representative, the Architect, and the Contractor assigned designee, stating their agreement upon all of the following: (1) a change in the Work; (2) the amount of the adjustment in the Contract Total, including all costs, overhead and profit, if any; and (3) the extent of the adjustment in the Contract Time, if any, issued after the effective date of the Agreement.
  - 2) A Proposed Change Order (PCO) is a document prepared by the Contractor to seek additional compensation and/or time from the City. The Contractor shall provide a written PCO narrative explaining its reasons for requesting additional compensation or time. The written PCO narrative shall reference all related schedule activities and contract specification sections and drawings directly pertaining to the PCO, include all costs, overhead and profit.

- 3) Change Pricing. In the absence of applicable unit prices or other agreement, the changed work will be priced in accordance with the following provisions:
- (A) In no case shall the sum of the individual markups applied to a General Contractor's Modification exceed fifteen percent (15%), regardless of the number of Subcontractor tiers involved in performing the Work.
  - (B) The total combined mark-up for a Subcontractor and his lower-tier Subcontractor shall not exceed ten percent (10%). Costs of tax and insurance shall not be marked up.
  - (C) For work perform by a subcontractor, the subcontractor will receive 10% markup for direct costs. The General Contractor shall receive a five percent (5%) of the subcontractor's direct costs for processing.
  - (D) For self-performed work by the General Contractor, the markup shall equal fifteen percent (15%) of the direct cost as defined herein.
  - (E) Bonding may be increased a maximum of one percent (1%) provided the Contractor demonstrates to the City a requirement to increase bonding.
  - (F) If the net value of a change results in a credit from the Contractor or subcontractor, the credit shall be the actual net cost, plus five percent (5%) for overhead and profit. When both additions and credits covering related work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase or decrease, if any, with respect to the change.
- 4) Equipment Costs:
- (A) The allowance for equipment costs (both rental as well as Contractor-owned equipment) shall be based on actual and verified rental company rates. Hourly, daily, weekly, or monthly rates shall be used, whichever is lower. Hourly rates including operator shall not be used. Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for determination of applicable rental rates.
  - (B) The actual time to be paid for equipment shall be the time that the equipment is in productive operation on the Work under Contract Modification. In computing the hourly rental of equipment, any time less than thirty (30) minutes shall be considered one-half (1/2) hour. No payment will be made for time while equipment is inoperative due to breakdown, or for non-workdays. In addition, the rental time shall not include the time required to move the equipment to and from the project site. No mobilization or demobilization will be allowed for equipment already on site. If such equipment is not moved by its own power, then loading and transportation costs will be paid in lieu of rental time thereof. However, neither moving time nor loading and transportation costs will be paid if the equipment is used on the Project Site in any other way than upon the work directly related to the Contract Modification.
- 5) Small Tools. Individual pieces of equipment having a replacement value of two thousand dollars (\$2,000) or less shall be considered to be small tools or small equipment, and no payment will be made since the costs of these tools and equipment is included as part of the markup for overhead and profit defined herein.
- 6) Labor rates will not be recognized when in excess of the applicable prevailing wage rate pursuant to ORS 279C.800 to 279C.870 or wage established in any applicable collective bargaining agreement, whichever is higher. The costs for all supervision, including general superintendents and foreman, shall be included in the markup defined herein. Working foreman will be considered a direct cost if the individual is on the project site only installing Work under Contract Modification with no other work being performed at the time. A breakdown of the payroll rates for each trade used for Contract Modifications shall be furnished to the City within thirty (30) calendar days of the Contract Notice to Proceed.

- 7) Premium Time Rate. Shall be the difference between the Overtime Hourly Rate and Straight Time Rate per specific trade and classification as more fully defined herein. City will pay taxes on the Premium Time Rate only. The Premium Time Rate shall be paid without overhead and profit calculated against the differential.
  - 8) Material costs directly required for the performance of the Contract Modification. Such costs may include the cost of transportation. If a trade reduction by an actual supplier is available to the Contractor, it shall be credited to the City. If the materials are obtained from a supplier or source owned wholly by or in part by the Contractor, payment thereof will not exceed the current wholesale price for the materials. The term trade reduction includes the concept of cash discounting.
  - 9) Agreement on Change Order. Agreement on any Change Order is a final settlement of all matters relating to the change in the Work that is the subject of the Change Order, including, but not limited to, all direct and indirect costs associated with such change and any and all adjustments to the Contract Total and the construction schedule.
  - 10) Additional Credits. Contractor shall credit all trade discounts, rebates, refunds, and returns from the sale of surplus material to City
  - 11) Cost Accounting Records. Contractor shall provide all cost accounting records to City upon City's request.
- ii) Construction Change Directives. A Construction Change Directive is a written order signed by City, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Total or Contract Time, or both. City may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract, the Contract Total and Contract Time being adjusted accordingly. City and Contractor may use a Construction Change Directive in the absence of total agreement on the terms of a Change Order. Upon receipt of a Construction Change Directive, Contractor shall promptly proceed with the change in Work directed and shall advise City of Contractor's agreement or disagreement with the proposed method, if any, provided in the Construction Change Directive for adjustment in the Contract Total or Contract Time.
- 1) Force Account. When a definite price has not been agreed upon in advance and it is to be paid on a force account basis, City may establish a not-to-exceed budget. Contractor shall submit daily all direct costs necessarily incurred and paid for labor, material, equipment, permit fees, taxes, and increased costs of bonds and insurance related to the Work for approval by City. Contractor shall not exceed the budget unless City specifically authorizes the overrun in writing. City shall pay only for actual costs verified in the field by City on a daily basis. When City and Contractor reach agreement upon the adjustment for price and time, Contractor and City shall prepare and execute an appropriate Change Order.
  - 2) Negotiating Changes. If City and Contractor are unable to agree upon change order terms, or if in the opinion of City the Work must proceed before an agreement can be negotiated, City may order Contractor to proceed with the changes, and Contractor shall comply. In such event, Contractor shall keep detailed daily records as to all labor employed in connection with the changes. Contractor's records will itemize costs for labor, materials, equipment rental, and transportation. Contractor shall submit the records for approval to the City. If Contractor fails to keep such records, all such Work will be deemed to have been performed at Contractor's own expense. City and Contractor shall attempt to negotiate fair and reasonable adjustments to the Contract for changes in the Work. Contractor shall submit to City all evidence in support of Contractor's proposals.
  - 3) Markup. No fee or other markup of any kind will be applicable to any premium portion of wages, taxes, or related benefits. In the event of addition or deletion of like items in a change order or change directive, the like item quantity will be summed and the unit prices or the percentage fee will be applied to the total.

- 4) Written Authorization Required. In no event shall Contractor proceed with changes in the Work without a written order from City to so proceed. City will be under no obligation to pay for unauthorized extra, additional, or changed Work performed by Contractor without a written Change Order, Construction Change Directive, or other written order to proceed duly authorized and executed by City.
- 5) Minor Changes. Contractor shall promptly carry out minor changes in the Work issued through written order of City's representative, through the authority granted to it by City, not involving adjustment in the Contract Total or extension of the Contract Time, and not inconsistent with the intent of the Contract Documents.

## VII) Time.

- i) Time is of the Essence. Time limits stated in the Contract Documents are of the essence of the Contract. Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.
- ii) No Work Without Insurance. Contractor shall not, except by written direction by City, prematurely commence operations on the site or elsewhere prior to the effective date of insurance to be furnished by City and Contractor. The date of commencement of the Work is not changed by the effective date of insurance.
- iii) Notice to Proceed. City shall issue a Notice to Proceed within a reasonable time following the date of execution of this Contract. To the maximum extent permitted by law, Contractor is not entitled to additional compensation as a result of a postponement of the issuance of Notice to Proceed. The Parties acknowledge the sole remedy for the Contractor in such circumstances is an extension of Contract Time to achieve Substantial Completion.
- iv) Working Hours. Contractor shall perform Work during regular working hours as permitted by City. Contractor shall, when required to achieve Substantial Completion within the Contract Time, Work outside of regular working hours such as evenings and/or weekends at no additional cost to City. Contractor shall perform all evening and/or weekend work only upon City's advance approval and in compliance with all applicable rules, regulations, laws, and local ordinances including, without limitation, all noise and light limitations.
- v) Delays and Extensions of Time.
  - 1) Float and Slack. Float or slack is the amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any activity in the schedule. Any float time to activities not on the critical path shall belong to the Project, and may be used by the Project to optimize its construction process. Any float time between the end of the final construction activity and the final completion date shall belong to the City, and may be used by the City in determining if additional contract days are to be awarded for changes in the contract or for delays to the contract caused by the City. The Contractor will not be entitled to any adjustment in the Contract Time, the Construction Schedule, or the Contract Total, or to any additional payment of any sort by reason of the City's use of float time between the end of the final construction activity and the final completion date or by reason of the loss or use of any float time, including time between the Contractor's anticipated completion date and end of the Contract Time, whether or not the float time is described as such on the Construction Progress Schedule.
  - 2) Adverse Weather. Contract Time is determined with consideration given to the average climate weather conditions prevailing in the County in which the Project is located during any given month as published by the National Oceanic and Atmospheric Administration (NOAA) and averaged over the past 10 years. Contractor may request a time extension for adverse weather if it causes delays that unreasonably increase the labor required to complete the scheduled tasks on the day affected by adverse weather not reasonably anticipated. Contractor shall not be allowed an increase in Contract Total for the delay. Contractor shall work additional days if necessary at no cost to City, irrespective of adverse weather, to maintain access and the Contract Schedule, and to protect the Work from the effects of Adverse Weather.

- 3) Extensions of Time. Extensions of Contract Time will be permitted for a delay only to the extent the delay: (1) is not caused or could not have been anticipated by the Contractor; (2) could not be limited or avoided by the Contractor's timely notice to the City of the delay or reasonable likelihood that a delay will occur; and (3) is of a duration not less than one day.. Such occurrences may include industry-wide labor dispute, fire, unavoidable casualties, adverse weather conditions not reasonably anticipated, or other occurrences that City determines may justify delay. Any extension the City grants will be net of any delays caused by or due to the fault or negligence of Contractor, and net of any contingency or "float" allowance included in the Progress Schedule. Contractor will not be allowed an increase in Contract Total for an extension of Contract Time. The Contractor shall be deemed to have control over the supply of labor, materials, equipment, methods, techniques and over the Contractor's subcontractors and suppliers.
- 4) Requests for Extension. Contractor shall submit requests for extension of time in writing and shall include (a) the duration of the activity relating to changes in the Work and the resources, including manpower, equipment, and material, required to perform the activities within the stated duration; (b) specific logical ties to the Contract Schedule for the proposed change showing the activities that are affected by the change and/or delay; and (c) recovery schedule.

#### **VIII) Protection of Persons, Property, and the Environment**

- i) Safety Program. Contractor shall initiate, maintain, and supervise all safety precautions and programs in connection with performance of the Contract. Contractor is solely and completely responsible for conditions of the Work site, including safety of all persons and property during performance of the Work, including the property of third-parties and real and personal property outside the Project area. This requirement will apply continuously and is not limited to normal working hours.
- ii) City's Policies. This Contract and all individual contracts and purchase orders incorporate by this reference City's safety policies current as of the date of commencement of Work, which have been or will be made available to Contractor.
- iii) Subcontractor Safety. Contractor shall review with all subcontractors the methods, materials, tools, and equipment to be used to verify their compliance with all safety standards and laws and Contractor shall comply with them, to ensure safe, hazard-free conditions for all persons visiting or working on the entire Project Site and City's adjoining facilities. Contractor shall implement and maintain a safety program that is specifically adapted for the Project and complies with all applicable requirements of Oregon OSHA. Contractor shall furnish a copy of the safety program to City before commencing Work.
- iv) MSDS Sheets. Contractor shall provide Material Safety Data Sheets to City for all chemicals used on the Project Site as required by law.
- v) Safety Coordinator. Contractor shall designate a responsible member of its organization on the Project, whose duty is to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety, and health of workers. Contractor shall report the name and position of person so designated to City.
- vi) Correction of Unsafe Conditions. Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Contractor shall correct violations promptly upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health.
- vii) Personal Protection Equipment. Contractor's personnel and all workers shall wear personal protective equipment at all times. Contractor shall maintain supplies of protective equipment sufficient to properly equip all employees and visitors.

- viii) Safety Devices. Contractor shall take, and require subcontractors to take, all reasonably necessary precautions for safety of workers on the Project. Contractor shall furnish, erect, and properly maintain at all times, all necessary safety devices, safeguards, construction canopies, signs, nets, barriers, lights, and watchmen for protection of workers and the public and shall post danger signs warning against hazards created by such features in the course of the Work.
- ix) Barricades and Signage. Contractor shall post necessary warning signs and barricades to ensure the safety of all occupants. Contractor shall not display any signs not required by law or the Contract Documents without City's prior written approval.
- x) Labeling of Containers. Contractor shall ensure proper labeling of substances on the Project Site.
- xi) Storage. Contractor shall confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits, or directions of City, and shall not interfere with the Work or unreasonably encumber the Project Site or overload any structure with materials. Contractor shall enforce all instructions of City regarding signs, advertising, fires, and smoking, and require that all workers comply with all regulations while on Project Site
- xii) Protection of Work. Contractor shall protect the Work, including stored materials and equipment, from all damage or harm, including damage from heat, cold, rain, snow, wind, flooding, and dampness. Contractor shall provide and maintain temporary roofs, window and door coverings, enclosures, or other construction reasonably required to protect the Work at all times during the course of construction. Contractor shall take all additional steps reasonably necessary, or as directed by City, to protect the Project, the Site, and the Work from damage associated with anticipated extreme weather events. Contractor shall not be entitled to additional payment or time to the extent its costs or delays would have been avoided if Contractor had complied.
- xiii) Protection of Existing Structures. Contractor shall protect existing structures, walks, curbs, pavements, roads, trees, landscaping, survey markers, monuments, or other devices marking property boundaries or corners, and/or improvements in working areas, utilities, and adjoining property (including, without limitation, protection from settlement or loss of lateral support). Contractor shall replace same at his expense with same kind, quality, and size of Work or item if temporary removal is necessary, or damage occurs due to the Work.
- xiv) Water Quality. Contractor shall comply with all applicable water quality laws and regulations, including permitting, monitoring, and reporting of storm water discharge applicable to the Work, at no additional cost to City. Contractor shall indemnify and hold City harmless from loss, cost, or liability arising out of Contractor's violation of such laws or regulations.
- xv) Neighborhood Impacts. Contractor shall take all reasonable precautions to protect neighborhood property from damage or nuisance associated with the Work. Contractor shall promptly respond to complaints by neighbors or authorities concerning impacts to neighboring properties and public facilities and shall be solely responsible for cleaning, repair, or replacement of property soiled or damaged by Contractor's operations and settlement of claims or demands of neighbors associated with conduct of its personnel.
- xvi) Housekeeping. Contractor shall maintain good housekeeping practices to reduce the risk of fire damage and shall make a fire extinguisher, fire blanket, and/or fire watch, as applicable, available at each location where cutting, braising, soldering, and/or welding is being performed or where there is an increased risk of fire.
- xvii) Security and Site Access. Contractor shall ensure that all existing or operating systems, utilities, existing on-site services and access avenues are on and in operating condition before leaving the Project Site each day. If any system, utility, or access avenue is not operable, Contractor shall notify City before Contractor leaves the Project Site that day.

**IX) Hazardous Materials.**

- i) With respect to Hazardous Materials to be used during the course of the Work, the Contractor will implement and enforce a program to inventory and properly store and secure all Hazardous Materials that may be used or present on the Project site, maintain available for inspection at the Project site all material safety data sheets, and comply with all regulations required by law for the storage, use, and disposal of Hazardous Materials. The program must provide for notification of all personnel of potential chemical hazards. Review of these hazards must be included in the Contractor's safety training program. The Contractor shall submit to the City a list of all Hazardous Materials to be brought by the Contractor or its Subcontractors onto the City's property, including the purpose for their use on the Project.
- ii) In the event of a release or discovery of a preexisting release of Hazardous Materials, or if it is foreseeable that injury or death to persons may occur because of any material or substance (including without limitation Hazardous Materials) encountered on the Project site, the Contractor shall immediately (a) stop the Work or the portion of the Work affected; (b) notify the City orally and in writing; and (c) protect against exposure of persons to the Hazardous Materials. The Contractor shall provide all written warnings, notices, reports, or postings required at law or by contract for the existence, use, release, or discovery of Hazardous Materials.
- iii) With respect to any Hazardous Materials or other material or substance reported to the City under the above that was not introduced to the Project site by the Contractor or its Subcontractors of any tier, the City shall obtain the services of a qualified environmental consultant to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to verify it to be rendered harmless. Unless otherwise required by the Contract Documents, the City shall furnish in writing to the Contractor and Architect the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. The Contractor and the Architect will promptly reply to the City in writing stating whether or not either has reasonable objection to the persons or entities proposed by the City. If either the Contractor or Architect has an objection to a person or entity proposed by the City, the City shall propose another to whom the Contractor and the Architect have no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the City and Contractor. By Change Order, the Contract Time may, subject to agreement by the City and the Contractor, be extended appropriately and the Contract Total shall be increased in the amount of the Contractor's reasonable additional costs of shut-down, delay and start-up, which adjustments shall be accomplished as provided in the Contract.
- iv) With respect to any Hazardous Materials or other material or substance reported to the City under the above that was introduced to the Project site by the Contractor or its Subcontractors of any tier, the Contractor shall be responsible to carry out the duties of (a) proposing to the City and the Architect a qualified environmental consultant; (b) obtaining and paying for the services of the environmental consultant; and (c) verifying that the material is rendered harmless, as otherwise set forth in the above. The Contractor will not be entitled to an increase in the Contract Total if the Contractor or its Subcontractors of any tier are responsible for the condition requiring the testing of the material and the stoppage of the Work. Remediation work must be conducted by properly qualified contractors approved in advance by the City. Generally, the City may at its option contract directly with environmental consultants, and remediation contractors, regardless of whether the work will be performed at the Contractor's expense.

- v) To the extent permitted by the Oregon Constitution and the Oregon Tort Claims Act, the City shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants and the agents and employees of the Contractor, Subcontractors, Architect, and Architect's consultants from and against claims, damages, losses and expenses, including without limitation attorney fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance was not introduced to the Project site by the Contractor or its Subcontractors of any tier, presents the risk of bodily injury or death, and has not been rendered harmless. No indemnification provided by the City under this Section will be required to indemnify the Contractor, Subcontractors, or their employees or agents to the extent of liability for death or bodily injury to persons or damage to property caused in whole or in part by the Contractor's own negligence, but will require indemnity to the extent of the fault of the City or its agents or representatives.
- vi) To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the City, the City's Representatives, and the employees of the City from and against claims, damages, losses, and expenses, including without limitation attorney fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance was introduced to the Project site by the Contractor or its Subcontractors of any tier, presents the risk of bodily injury or death, and has not been rendered harmless. No indemnification provided by the Contractor under this Section will be required to indemnify the City or its agents or representatives to the extent of liability for death or bodily injury to persons or damage to property caused in whole or in part by the City's own negligence, but will require indemnity to the extent of the fault of the City or its agents or representatives.
- vii) Hazardous Materials are any substance defined or designated as being radioactive, infectious, hazardous, dangerous, or toxic by any federal, state, or local statute, regulation, or ordinance presently in effect or subsequently enacted. For purposes of Article 9, the term "introduce" means the physical placement or transportation of Hazardous Materials in or on the Project site regardless of whether the Hazardous Material was specified, required, or otherwise addressed in the Contract Documents.

**X) Insurance and Bonds.**

- i) Contractor's Insurance. Contractor shall procure, prior to commencement of Work, and maintain for the duration of this Contract, or such longer time as may be provided, insurance against claims for injuries to persons or damages to property that may arise from or in connection with the performance of the Work by Contractor, its agents, representatives, employees and subcontractors as set forth in the Contract Documents. Contractor's liabilities, including but not limited to Contractor's indemnity obligations, under this Contract, will not be deemed limited in any way to the insurance coverage required herein. Maintenance of insurance coverage is a material requirement of this Contract and Contractor's failure to maintain or renew coverage or to provide evidence of renewal during the term of this Contract, as required or when requested, may be treated as a material breach.
- ii) Performance Bond and Payment Bond. Contractor shall provide a performance bond and a payment bond as required by the Contract prior to start of Work.

**XI) Uncovering and Correction of Work.**

- i) Uncovering of Work. If a portion of the Work is covered without Project Inspector and/or Architect approval or not in compliance with the Contract Documents, Contractor shall, if required in writing by City, Project Inspector, or Architect, uncover the Work for observation and replace it at Contractor's expense without change in Contract Total or Contract Time.

- ii) Correction of Work. Contractor shall, at its own expense, promptly correct Work that is rejected by City, Architect, or any governmental authority or otherwise fails to conform to the requirements of the Contract Documents, regardless of when it is discovered and regardless of whether the Work is fabricated, installed or completed. Contractor shall pay for all additional testing, inspection, or other compensation including City and Architect's additional services required for the correction of Work.
- iii) Correction of Work after Substantial Completion. If, after Substantial Completion, any Work is not in accordance with the requirements of the Contract Documents, City shall provide Contractor with written notice to correct the Work promptly after discovery of the condition. Contractor shall correct the nonconforming Work within a reasonable time after receipt of notice.

## **XII) Rights and Remedies.**

- i) No Waiver. The duties and obligations imposed by the Contract Documents and rights and remedies available are in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law. No action or failure to act by any party shall constitute a waiver of a right or duty afforded the party under this Contract, nor does any act or omission constitute approval of or acquiescence in a breach, except as may be specifically agreed in writing.
- ii) Independent Contractor.
  - 1) Contractor is engaged as an independent Contractor. Although City reserves the right: (a) to determine (and modify) the delivery schedule for the Work; and (b) to evaluate the quality of the completed performance, City cannot and will not control the means or manner of Contractor's performance, nor provide any tools or equipment for the performance of the Work, except as provided elsewhere in this Contract. Contractor shall determine the appropriate means and manner of performing the Work.
  - 2) Contractor is wholly responsible for the manner in which it and its subcontractors perform the Work required of it by the Contract Documents. City may monitor Contractor's activities to determine compliance with the terms of this Contract.
  - 3) Contractor shall pay all federal, state and local taxes applicable to compensation or payments paid to Contractor under this Contract and, unless Contractor is subject to backup withholding, City shall not withhold from such compensation or payments any amount(s) to cover Contractor's tax obligations.
  - 4) Contractor is not an employee of the federal government or the State of Oregon.
  - 5) Contractor is not a contributing member of the Public Employees Retirement System.
  - 6) Neither Contractor, nor any of Contractor's subcontractors, agents or employees are "officers," "employees," or "agents" of City or any of City's employees or agents, as those terms are used in ORS 30.265. Contractor bears exclusive responsibility for the acts of its employees as they relate to the services to be provided during the course and scope of their employment. Contractor, its subcontractors, agents, and its employees are not entitled to any rights or privileges of City employees.

## **XIII) Compliance With Laws.**

- i) Contractor shall comply with all laws, codes, regulations, and applicable requirements imposed by governmental authorities having jurisdiction over the Work, including but not limited to, environmental, zoning, building code, public contracting, and other related laws.

- ii) Environmental Mitigation. Contractor shall comply with all applicable mitigation measures, if any, adopted by any public agency with respect to this Project pursuant to the environmental protections laws of the State of Oregon.
- iii) Work Performed Illegally. Contractor will bear all costs arising from Work performed that it knew, or through exercise of reasonable care should have known, was contrary to any applicable laws, ordinance, rules, or regulations.
- iv) Prior Approvals. Contractor shall obtain approval of material, processes, or procedures by the Oregon state agencies or other body or agency where required by the Specifications or Drawings.

#### **XIV) Claims and Disputes.**

- i) Claim. A Claim is a demand or assertion by a party seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time, or other relief with respect to the terms of the Contract. Claim includes other disputes and matters in question between City and Contractor arising out of or relating to the Contract. Parties will initiate Claims only by written notice. The party making the Claim is responsible for substantiating the Claim.
- ii) Time to Initiate Claim. The party making a Claim shall initiate the Claim within fourteen (14) days after the occurrence of the event giving rise to such Claim or within fourteen (14) days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. The party making the Claim shall submit written notice to the other party that identifies the known bases for each Claim and the nature and amount of relief sought.
- iii) Written Notice of Claim. If Contractor claims that any instructions issued after the effective date of this Contract, by Drawings or otherwise, involve extra costs, Contractor will be entitled to reimbursement for such extra costs only to the extent Contractor so notifies City in writing before proceeding to execute the affected Work and within five (5) days after receipt of such instructions. Claims and demands for any other cause, whatsoever, by Contractor against City must be served in writing upon City within five (5) days from the occurrence of the cause giving rise to the claim. Timely compliance with the written claim requirements of this Contract is a condition precedent to Contractor's right to payment on account of any claim and failure to provide such written claim or demand or notice will constitute a waiver of such claim.
- iv) No Work Stoppage. Contractor shall proceed diligently with performance of this Contract and City shall continue to make payments in accordance with the Contract Documents pending final resolution of a Claim, except as otherwise agreed in writing or provided for in this Contract.
- v) Differing Site Conditions. A party shall give notice to the other party promptly, and in no event later than five (5) days after first observation, before conditions encountered at the site are disturbed that are: (a) subsurface or otherwise concealed physical conditions that differ materially from those indicated on the Contract Documents; or (b) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents. The parties shall promptly investigate such conditions, and if they differ materially and cause an increase or decrease in the cost of or time required for performance of any part of the Work, City will propose an equitable adjustment in the Contract Total, Contract Time, or both. If City does not find that the conditions differ materially and cause an increase or decrease in the cost of or time required for performance of any part of the Work, City will notify Contractor in writing. If Contractor disputes City's determination, Contractor shall proceed with the Work and may initiate a Claim no later than twenty one (21) days after receiving notice of the decision.

- vi) Claim for Additional Cost. Contractor shall file a Claim for additional cost under this section if Contractor believes additional cost is involved for reasons including: (a) City's written interpretation of the Contract Documents; (b) City's order to stop Work where Contractor is not at fault; (c) written order for a minor change in Work issued by City's consultant or representative; (d) failure of payment by City; (e) termination of Contract by City; (f) City's suspension; or (g) other reasonable grounds.
- vii) Claim for Delay. If Contractor wishes to make a Claim for a delay, written notice shall be given within fourteen (14) calendar days of the occurrence of the event giving rise to the delay. Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary. Contractor will not be entitled to additional Contract Time for delays that do not affect the critical path of the Work.
- viii) Claim for Additional Time (Adverse Weather). If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction. Contractor shall not be entitled to additional compensation for delays caused by adverse weather conditions or any causes beyond City's control. If the Oregon Office of Emergency Management orders Contractor to halt the Work for reasons beyond Contractor's control and that were not reasonably anticipated, the Contract Time shall be equitably extended by Change Order, but only on condition that Contractor provides City with written notice of the delay in accordance with the notice requirements of this Contract.
- ix) Claim for Injury or Damage to Person or Property. If any person suffers physical injury or property damage arising from the Work, regardless of the cause, the party shall immediately give notice of such injury or damage, whether or not insured, to City and Contractor with sufficient detail to enable City and any other party affected to investigate the matter.
- x) Acceptance of Claim. Upon timely receipt of a properly completed Claim and all documentation and/or evidence necessary to substantiate the Claim, City shall evaluate the Claim and provide Contractor with its written decision either accepting the Claim (in whole or in part) or rejecting the Claim (in whole or in part) within twenty (20) days. Should City reject the Claim in whole or in part, City shall generally explain the reasons for such rejection.
- xi) Mediation. Contractor and City agree that any dispute that may arise under the Contract will be submitted to a mediator agreed to by both parties as soon as such dispute arises, but in any event prior to commencement of arbitration or litigation. This provision shall be specifically enforceable in any arbitral or judicial proceeding through stay or abatement of the proceeding upon petition of a party. Mediation shall be conducted in Portland, Oregon, and the mediation fee and expenses shall be shared equally by the parties who agree to exercise their best efforts in good faith to resolve all disputes in mediation.

#### **XV) Termination or Suspension by Contractor.**

- i) Termination by Contractor for Work Stoppage. Contractor may terminate this Contract if the Work is stopped for a period of thirty (30) consecutive days through no act or fault of Contractor, subcontractor, or sub subcontractor, or their agents or employees, or any other persons or entities performing portions of the Work under direct or indirect contract with Contractor, for any of the following reasons: (a) issuance of an order of a court or other public authority having jurisdiction which requires all Work to be stopped; (b) an act of government, such as a declaration of a national emergency which requires all Work to be stopped; (c) because the Architect has not issued a Certificate of Payment and has not notified Contractor of the reason for withholding certification, or because City has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or (d) City failed to furnish to Contractor reasonable evidence that financial arrangements have been made to fulfill City's obligations under this Contract.

- ii) Termination by Contractor for Work Interruption. Contractor may terminate this Contract if, through no act or fault of Contractor, subcontractor, or sub subcontractor, or their agents or employees, or any other persons or entities performing portions of the Work under direct or indirect contract with Contractor, repeated suspensions, delays or interruptions of the entire Work by City constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365 day period, whichever is less, or if Work is stopped for a period of sixty (60) consecutive days.
- iii) Compensation. Contractor may recover from City payment for Work executed and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery including reasonable profit and overhead if it provides seven (7) days' written notice to Architect and City prior to termination for the reasons set forth above.

**XVI) Termination or Suspension by City.**

- i) Termination by City for Cause. City may terminate Contract and/or terminate Contractor's right to perform the Work of this Contract without prejudice to any other rights or remedies by providing seven (7) days' written notice to Contractor and Contractor's surety if Contractor:
  - 1) refuses or fails to execute the Work or any separable part with sufficient diligence to ensure its completion within the time specified or any extension;
  - 2) persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
  - 3) fails to make payment to subcontractors in accordance with respective agreements;
  - 4) persistently disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction;
  - 5) files a petition for relief as a debtor, or a petition is filed against Contractor without its consent, and the petition is not dismissed within sixty (60) days;
  - 6) makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency; or
  - 7) is otherwise guilty of a substantial breach of a provision of the Contract Documents or fails to observe the training, safety, and other precautions including City's policies and Contractor's own safety policies for the Project.
- ii) City's Right to Take Possession. Upon termination for cause, City may take possession of the site and of all materials, equipment, tools, and construction equipment and machinery on the site owned by Contractor, accept assignment of subcontracts, and finish the Work by whatever reasonable method City may deem expedient. Upon request, City shall provide Contractor a detailed accounting of the costs incurred in finishing the Work.
- iii) Compensation. Contractor will not be entitled to receive further payment until the Work is finished. If the unpaid balance of the Contract Total exceeds City's costs to finishing the Work, including compensation for City's consultants and representatives for services made necessary by Contractor's default, and other damages incurred by City which have not been expressly waived, City shall pay the excess to Contractor. If City's costs and damages exceed the unpaid balance, Contractor shall pay the difference to City.

- iv) Suspension for Convenience. City may, without cause, order Contractor in writing to suspend, delay, or interrupt the Work in whole or in part for such period of time as City may determine. City shall adjust Contract Total and Contract Time for increases in the cost (including profit) and time caused by the suspension, delay, or interruption referenced in Section 16.3.1, so long as the performance would not have been suspended, delayed, or interrupted by another cause for which Contractor is responsible and City has not already made or denied another equitable adjustment under another provision of this Contract for the suspension, delay, or interruption.
- v) Termination for Convenience. City may terminate all or part of this Contract for City's convenience at any time and without cause. Contractor shall, upon written notice of such termination, cease operations as directed by City, take actions necessary to protect and preserve the Work, and terminate all existing subcontracts and purchase orders that are not required to perform the Work up to the effective date of termination and the portion of Work not terminated, and enter into no further subcontracts or purchase orders for the portion of this Contract that was terminated. City shall pay Contractor for Work executed and costs reasonably incurred by reason of such termination, along with reasonable overhead and profit on the Work completed. City will not pay profit or overhead allocable to Work which is not performed at the time of termination. If the City terminates Contractor for cause and a court or other tribunal finds that City did not have cause to terminate Contractor, then the court or other tribunal will deem the City's termination a termination for convenience under this section.

## **XVII) Payments and Completion**

- i) Contract Total. The Contract Total is stated in the Contract, and including authorized adjustments, is the total amount payable by City to Contractor for performance of Work under the Contract Documents.
- ii) Schedule of Values. Prior to submission of the first Application for Payment, Contractor shall submit a preliminary schedule of values for all of the Work, including quantities and prices of items aggregating the Contract Total and subdividing the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Contractor shall include, at a minimum: (a) overhead and profit; (b) supervision; (c) general conditions; (d) layout; (e) mobilization; (f) scheduling; (g) submittals; (h) bonds and insurance; (i) close-out documentation; (j) demolition; (k) installation; (l) rough-in; (m) finishes; (n) testing; and (o) punch list and acceptance ("Schedule of Values").
- iii) Applications for Payment. Contractor shall submit an itemized and notarized application for payment for operations completed in accordance with the Schedule of Values and reflecting applicable retainage ("Application for Payment"). Applications for Payment shall be prepared using forms provided by the City. Contractor shall submit data substantiating Contractor's right to payment where required, such as copies of requisitions from subcontractors and material suppliers, Construction Change Directives, Change Orders, and/or force account information. Contractor shall provide:
  - 1) The amount paid to the date of the Application for Payment to Contractor, all its subcontractors, and all others furnishing labor, material, or equipment for this Contract;
  - 2) The amount being requested by Contractor on its own behalf and separately stating the amount requested on behalf of each of the subcontractors and all others furnishing labor, material, or equipment for this Contract;
  - 3) The balance that is due to each of such entities after payment is made;
  - 4) Certification that the Record Documents are current;
  - 5) Itemized breakdown of Work done for the purpose of requesting partial payment;
  - 6) Updated construction schedule;

- 7) Additions and subtractions from the Contract Total and Contract Time;
  - 8) Total of retainage held;
  - 9) Material invoices, evidence of equipment purchases, rentals, and other support City may request;
  - 10) Percentage complete of Contractor's Work by line item;
  - 11) A Schedule of Values updated from the preceding Application for Payment; and
  - 12) Contractors' Certified Payroll.
- iv) Waivers and Releases.** Contractor shall submit conditional waivers and releases upon progress payment from Contractor and each subcontractor of any tier and supplier to be paid from current progress payment along with an unconditional waiver and release upon progress payment from Contractor and each subcontractor of any tier that received payment from the previous progress payment. Contractor shall certify as follows: "Contractor warrants title to all Work performed and materials purchased as of the date of the payment application; and Contractor warrants that all Work performed and materials purchased as of the date of the payment application are free and clear of liens, claims, security interests, or encumbrances in favor of any persons or entities making a claim by reason of having provided labor, materials, or equipment relating to the Work, except those of which City has been informed."
- v) False Claims.** Contractor is subject to the False Claims Act set forth under ORS Chapter 180 for information provided with any Application for Payment.
- vi) Certificates for Payment.**
- 1) City shall review the Contractor's Application for Payment within a reasonable time after receipt not to exceed seven (7) days for the purpose of determining that it is properly submitted. City shall either return the Application for Payment to Contractor with a document setting forth the reasons why the Application for Payment is not proper, or shall issue a Certificate for Payment for the amounts properly due.
  - 2) City's issuance of a Certificate for Payment is a representation by City, based upon City's evaluation of the Work and the data comprising the Application for Payment, that Contractor is entitled to payment in the amount certified because the Work has progressed to the point indicated and that the quality of the Work is in accordance with the Contract Documents. City's approval of the certified Application for Payment is based on Contractor complying with all requirements for a fully complete and valid certified Application for Payment.
- vii) Decisions to Withhold Certification.**
- 1) City shall notify Contractor in writing if any amounts are not due, and the reasons for withholding certification in whole or in part. If Contractor and City cannot agree on a revised amount, City shall promptly issue a Certificate for Payment for the amount for which City determines that Contractor is entitled to payment. City may withhold Certificate for Payment or nullify the whole or part of a Certificate for Payment previously issued, to such extent as may be reasonably necessary to protect City from loss for which Contractor is responsible, including loss resulting from acts and omissions because of defective Work not remedied, third party claims filed or reasonable evidence indicating probable filing of such claim unless security acceptable to City is provided by Contractor, failure of Contractor to make payments properly to subcontractors or for labor, materials, or equipment, reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Total, damage to City or another contractor, reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay, persistent failure to carry out the Work in accordance with the Contract Documents, or failure to maintain Record Documents.

- 2) Contractor shall not receive any interest on any retainage or amounts withheld due to the failure of Contractor to perform in accordance with the Contract Documents.
- 3) City may apply any withheld amount to pay outstanding claims or obligations on behalf of Contractor, without prior judicial determination of the claim or obligation. If any payment is made by City, that amount is deemed a payment made under this Contract by City to Contractor.
- 4) City shall promptly issue a Certificate for Payment for amounts previously withheld when the reasons for withholding certification are removed.

**viii) Progress Payments.**

- 1) City shall make payment in the manner and within the time provided in the Contract Documents. City may withhold the portion of any progress payment for which certified payroll statements have not been received until such certified statements are submitted.
- 2) Contractor shall promptly pay each subcontractor, upon receipt of payment from City, out of the amount City paid to Contractor on account of each subcontractor's portion of the Work. Contractor shall, by written agreement, require each subcontractor to make payments to sub-subcontractors in a similar manner.
- 3) City may issue joint checks made payable to Contractor, subcontractor(s) and material or equipment suppliers. Joint check payees are responsible for the allocation and disbursement of funds included as part of any such joint check payment. Joint check payment does not create a contract, rights, or obligations between City and any subcontractor or material or equipment supplier.
- 4) Certificate for Payment, progress payment, or partial or entire use or occupancy of the Project does not constitute acceptance of Work not in accordance with the Contract Documents.

**ix) Substantial Completion.**

- 1) Substantial Completion. Substantial completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that City can occupy or utilize the Work for its intended purpose.
- 2) Punch List. When Contractor considers the Work or a designated portion of the Work to be substantially complete, Contractor shall prepare and submit to City a comprehensive list of items to be completed or corrected prior to final payment ("Punch List"). The Punch List does not alter Contractor's responsibility to complete the Work in accordance with the Contract Documents.
- 3) Certificate of Substantial Completion. Upon receipt of Contractor's Punch List, City shall make an inspection to determine whether the Work or designated portion thereof is substantially complete. If City determines that the Work is not substantially complete, City shall notify Contractor of any Work to be completed in accordance with the Contract Documents before the Work or designated portion can be certified as such, and Contractor shall complete all such items. Upon determining that the Work or designated portion thereof is substantially complete, City and Contractor shall execute a Certificate of Substantial Completion.
- 4) Commencement of Warranty. Contractor's general and special warranties shall be effective as of the date that the Work is deemed finally complete.
- 5) Close-Out Documentation. Contractor shall assemble for City's approval within thirty (30) days of Substantial Completion all close-out documentation as required by the Contract Documents, including the required number of copies of operating, maintenance, and warranty data from all manufacturers whose equipment is installed in the Work, and Record Documents of the Work.

x) Final Completion.

- 1) The Work will be deemed finally complete when all conditions set out in the Contract Documents are satisfied and City accepts such Work. Final completion is achieved when all punchlist work is complete, all close-out documentation has been received, all final testing, equipment calibration and training have been completed, and the Contractor is entitled to Final Payment. Unless special circumstances exist that are defined at the time of Punch List creation, Contractor shall achieve Final Completion within 45 days of Substantial Completion.
- 2) Final Inspection. When Contractor considers all of the Punch List Work to be complete, Contractor shall notify City which shall inspect such Work.
- 3) Final Application for Payment. If City finds the Punch List Work complete and acceptable under the Contract Documents, City shall notify Contractor, who shall then submit its Final Application for Payment.
- 4) Payment of Retainage. City shall make payment of retainage applying to such Work or designated portion thereof after receiving all Close Out Documentation, an affidavit that bills for indebtedness connected with the Work for which City's property might be encumbered have been satisfied; a certificate to indicate that insurance required by the Contract Documents shall remain in force after final payment is in effect and will not be cancelled or expire until thirty (30) days' prior written notice is given to City and that Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents; the consent of surety to final payment; and valid waivers of all construction lien claims, bond claims, and other claims by Contractor and each subcontractor in a form acceptable to City.
- 5) Bond in Lieu of Waiver. If a subcontractor refuses to furnish a release or waiver required by City, Contractor may furnish a bond satisfactory to City to indemnify City against such lien. If such lien remains unsatisfied after payments are made, Contractor shall refund to City all money that City may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.
- 6) Delay in Final Completion. City shall make payment of the balance due for any portion of the Work fully completed and accepted if final completion is materially delayed through no fault of Contractor or by issuance of Change Orders affecting final completion. In the event that final completion is not accomplished within thirty (30) days after the date of Substantial Completion due to any fault of Contractor, City may withhold from the final payment 150 percent of the reasonable cost to complete the unfinished Work and to attain final completion. In the event Contractor fails to complete the Work necessary to attain final completion after forty five (45) days from Substantial Completion, City may, without waiving other remedies it may have, complete the Work and deduct the actual cost thereof from the funds withheld.
- 7) Contractor's Waiver of Claims. Contractor's acceptance of final payment constitutes a waiver of claims except those previously made in writing and identified by Contractor as unsettled at the time of final Application for Payment.

## **XVIII) Indemnity and Liability.**

- i) To the fullest extent permitted by Oregon law, Contractor shall indemnify, defend with legal counsel reasonably acceptable to City, and hold harmless City and its consultants and separate contractors, and their respective council members, board members, officers, representatives, agents, trustees, volunteers, and employees, in both individual and official capacities (“Indemnitees”), against all suits, claims, damages, losses, and expenses, including but not limited to attorney’s fees, caused by, arising out of, resulting from, or incidental to, the performance of the Work under this Contract by Contractor, its subcontractors, vendors, or suppliers, including, without limitation, any such suit, claim, damage, loss, or expense attributable to, without limitation, bodily injury, sickness, disease, death, alleged patent violation or copyright infringement, or to injury to or destruction of tangible property (including damage to the Work itself) including the loss of use resulting therefrom, except to the extent caused by the sole negligence, active negligence, or willful misconduct of the Indemnitees, and/or to any extent that would render these provisions void or unenforceable. This agreement and obligation of Contractor will not be construed to negate, abridge, or otherwise reduce any right or obligation of indemnity that would otherwise exist as to any party or person described herein. This indemnification, defense, and hold harmless obligation includes any failure or alleged failure by Contractor to comply with any provision of law, any failure or alleged failure to timely and properly fulfill all of its obligations under the Contract Documents in strict accordance with their terms.
- ii) Contractor shall fully indemnify, defend, and hold harmless City, and each person, entity, firm, or agency that owns or has any interest in adjacent property in any action arising out of any agreement between Contractor and adjacent property owners that is made for the purpose of entering upon the adjacent property to perform the Work. Contractor shall obtain City’s approval of the form and content of the agreement prior to the commencement of any Work on or about the adjacent property.
- iii) Severability of Indemnity Provisions. Contractor shall give prompt notice to City in the event of any injury (including death), loss, or damage included herein. Without limitation of the provisions herein, if Contractor’s agreement to indemnify, defend, and hold harmless the Indemnitees as provided herein against liability for damage arising out of bodily injury to persons or damage to property caused by or resulting from the negligence of any of the Indemnitees will to any extent be or be determined to be void or unenforceable, it is the intention of the parties that these circumstances will not otherwise affect the validity or enforceability of Contractor’s agreement to indemnify, defend, and hold harmless the rest of the Indemnitees, as provided herein, and in the case of any such suits, claims, damages, losses, or expenses caused in part by the default, negligence, or act or omission of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, and in part by any of the Indemnitees, Contractor shall be and remain fully liable on its agreements and obligations herein to the full extent permitted by law.
- iv) In any and all claims against any of the Indemnitees by any employee of Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, Contractor’s indemnification obligation herein shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any subcontractor under workers’ compensation acts, disability benefit acts, or other employee benefit acts, unless it is limited by ORS 30.140.
- v) Contractor’s defense and indemnification obligations survive the completion of Work, including any warranty period and/or termination of this Contract.

## **XIX) Security**

- i) **Security**. Contractor shall not use or disturb City's property, materials or documents except for the purpose of responding to City's request for proposal or invitation to bid or pursuant to completion of the Work under this Contract. Contractor shall treat all documents as confidential and shall not disclose such documents without approval from City. Any unauthorized disclosure of documents or removal of City property will be deemed a substantial breach of this Contract. Contractor shall bear sole responsibility for any liability including, but not limited to, attorneys' fees, resulting from any action or suit brought against City as a result of Contractor's willful or negligent release of information, documents, or property contained in or on City property. City hereby deems all information, documents, and property contained in or on City property privileged and confidential.
- ii) **Employee Removal**. At City's request, Contractor shall immediately remove any employee from all City properties in cases where City determines in its sole discretion that removal of that employee is in City's best interests.

## **XX) Miscellaneous Provisions.**

- i) **Non-Appropriation; Adequate Funding**. City shall, at Contractor's written request, prior to commencement of Work, provide Contractor with reasonable evidence that financial arrangements have been made to fulfill City's obligations under the Contract. If payment for Work under this Contract extends into City's next fiscal year, City's obligation to pay for such Work is subject to approval of future city council appropriations to fund this Contract. Continuation of this Contract at specified levels is specifically conditioned on adequate funding under City's budget adopted in June of each year. City may adjust the Work provided for in this Contract in accordance with funding levels adopted by the City Council.
- ii) **Law and Venue**. Any dispute under this Contract or related to this Contract is governed by all provisions of the Oregon Constitution and laws of Oregon governing, controlling, or affecting City, or the property, funds, operations, or powers of City, which are incorporated herein by reference. This Contract is deemed to include any provision that the law requires to be included. Any litigation arising out of this Contract shall be conducted in in the Circuit Court for Washington County, Oregon. The Contractor consents to the personal jurisdiction of this court.
- iii) **Severability**. If any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions are not affected, and the rights and obligations of the parties are construed and enforced as if this Contract did not contain the particular term or provision held to be invalid.
- iv) **No Waiver**. The failure of City in any one or more instances to insist upon strict performance of any of the terms of this Contract or to exercise any option herein conferred is not a waiver or relinquishment to any extent of the right to assert or rely upon any such terms or option on any future occasion. No action or failure to act by City, Architect, or Construction Manager waives any right or duty afforded City under this Contract, nor does action or failure to act constitute an approval of or acquiescence in any breach, except as specifically agreed in writing.
- v) **Non-discrimination**. Contractor shall comply with all applicable federal, state and local laws, rules and regulations regarding nondiscrimination in employment because of race, color, ancestry, national origin, religion, sex, marital status, age, medical condition, or disability.

- vi) No Third Party Beneficiaries. City and Contractor are the only parties to this Contract and are the only parties entitled to enforce its terms. Nothing in this Contract provides any benefit or right, directly or indirectly, to third persons unless they are individually identified by name in this Contract and expressly described as intended beneficiaries of this Contract. The Contract Documents shall not be construed to create a contractual relationship of any kind: (a) between Contractor and City's representatives or consultants, (b) between City and a subcontractor or a sub-subcontractor, (c) between City and a supplier; or (d) between any persons or entities other than City and Contractor.
- vii) Media Contacts. Contractor shall issue no news release, press release, or other statement to members of the news media or any other publication regarding this Agreement or the Project within one (1) year of Project completion without City's prior written authorization. Contractor shall not post or publish any textual or visual representations of the Project without approval of City.
- viii) Successors in Interest. This Contract will bind, and inure to the benefit of, the parties, their successors, and approved assigns, if any.
- 1) Contractor shall not assign all or any part of this Contract including, without limitation, any services or money to become due under this Contract without the prior written consent of City. Assignment without City's prior written consent is null and void. Any assignment of money due or to become due under this Contract is subject to a prior lien for services rendered or material supplied for performance of Work called for under this Contract in favor of all persons, firms, or corporations rendering services or supplying material to the extent that claims are filed pursuant to Oregon law, and is also subject to deductions for liquidated damages or withholding of payments as determined by City in accordance with this Contract. Contractor shall not assign or transfer in any manner to a subcontractor or supplier the right to prosecute or maintain an action against City.
  - 2) Contractor shall first notify City prior to any change in the name or legal nature of Contractor's entity. City shall determine if Contractor's intended change is permissible while performing this Contract.
- ix) Liquidated Damages.
- 1) Failure to complete the Project by the specified time will result in damages to the City. The parties to this contract agree that establishing the exact amount of damages the City will incur will be difficult. In order to compensate the City, the parties to this contract have estimated the amount the City would be damaged for every calendar day completion is delayed. Consequently, the Contractor agrees to pay the City the sum of \$200 per day, not as a penalty but as liquidated damages, for each day elapsed beyond the Substantial Completion date set forth in the bid document. The total liquidated damages shall be deducted from the final payment due the Contractor. The City may waive its right to claim part or all of the liquidated damages due under this provision, but such full or partial waiver shall not negate or abridge any other right of action the City may have to enforce the provisions of this Contract. Contractor will not contest such sums as being other than a reasonable measure of delay damages in the event those damages become payable under these provisions.
- x) Workers' Compensation.
- 1) All employers, including Contractor, that employ subject workers who work under this contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. This shall include Employer's Liability Insurance with coverage limits of not less than \$1,000,000 for each accident. Contractors who perform the Work without the assistance or labor of any employee need not obtain such coverage if the Contractor certifies so in writing. Contractor shall ensure that each of its Subcontractors complies with these requirements. The Contractor shall require proof of such Workers' Compensation by receiving and keeping on file a certificate of insurance from each Subcontractor or anyone else directly employed by either the Contractor or its Subcontractors.

EXHIBIT B

CITY OF HILLSBORO, OREGON  
PUBLIC IMPROVEMENT CONTRACT  
INSURANCE REQUIREMENTS

1. Contractor shall maintain all insurances required of it by law. In addition, the Contractor shall maintain the following:
- a. **Required Coverage.** Without waiver of any other requirement of the Contract Documents, the Contractor will provide, pay for, and maintain in full force and effect at all times during the performance of the Work until final acceptance of the Work or for such further duration as required, the following policies of insurance issued by a responsible carrier. All of the Contractor's insurance carriers shall be rated A VII or better by A.M. Best's rating service, unless otherwise approved by the City.
    - 1. Workers' Compensation. Workers' compensation coverage sufficient to meet statutory liability limits.
    - 2. Employer's Liability. The Contractor shall purchase and maintain employer's liability insurance in addition to its workers' compensation coverage with at least the minimum limits in section **b.** below.
    - 3. Commercial General Liability. The Contractor shall purchase and maintain commercial general liability ("CGL") insurance for off-site exposures on an occurrence basis, written on ISO Form CG 00 01 (12/04 or later) or an equivalent form approved in advance by the City. CGL coverage shall include all major coverage categories including bodily injury, property damage and products/completed operations coverage. The CGL insurance will also include the following: (1) separation of insureds; (2) incidental medical malpractice; and (3) per-project aggregate for premises operations.
    - 4. Professional Liability/Errors and Omissions. To the extent that the Contractor accepts design or design/build responsibilities, the Contractor shall purchase and maintain professional liability/errors and omissions insurance or cause those Subcontractors providing design services do so.
    - 5. Automobile Liability. The Contractor shall purchase and maintain automobile liability insurance with coverage for owned, hired, and non-owned vehicles on ISO form CA 00 01 or an equivalent form approved in advance by the City. The automobile liability insurance shall include pollution liability coverage resulting from vehicle overturn and collision.
  - b. **Limits.** The insurance required by this exhibit shall be written for at least the limits of liability specified in this Section or required by law, whichever is greater.

Workers' Compensation.	Statutory Limits
Employer's Liability.	
Each Accident:	\$1,000,000
Each Bodily Injury Disease:	\$1,000,000
Aggregate Bodily Injury Disease:	\$1,000,000
Commercial General Liability.	
Each Occurrence:	\$1,000,000
General Aggregate:	\$2,000,000
Product/Completed Operations:	\$2,000,000
Personal & Advertising Injury:	\$1,000,000
Fire Damage Limit:	\$100,000
Medical Expense Limit:	\$5,000
Automobile Liability.	
Combined Single Limit:	\$1,000,000

Professional Liability/Errors & Omissions.

Single Limit:	\$1,000,000
Aggregate:	\$1,000,000

- c. **Additional Insureds.** The Contractor's third-party liability insurance policies shall include the City and its officers, employees, and agents as additional insureds. The policy endorsement must extend premises operations and products/completed operations to the additional insureds. The additional insured endorsement for the CGL insurance must be written on ISO Form CG 20 10 (11/85), a CG 20 37 (07/04) together with CG 20 33 (07/04), or the equivalent; but shall not use the following forms: CG 20 10 (10/93) or CG 20 10 (03/94).
- d. **Joint Venture.** If the Contractor is a joint venture, the joint venture shall be a named insured for the liability insurance policies.
- e. **Primary Coverage.** The Contractor's insurance shall be primary insurance coverage and may not seek contribution from any insurance or self-insurance carried by the City or the Architect including any property damage coverage carried by the City. Contractor's insurance shall apply separately to each insured against whom a claim is made or suit is brought. The Contractor's insurance shall not include any cross-suit exclusion or preclude an additional insured party from asserting a claim as a third party.
- f. **Contractor's Failure to Maintain Insurance.** If the Contractor for any reason fails to maintain required insurance coverage, such failure shall be deemed a material breach of the Contract and the City, at its sole discretion, may suspend or terminate the Contract pursuant to Section 108.11 of the General Conditions. The City may, but has no obligation to, purchase such required insurance, and without further notice to the Contractor, the City may deduct from the Contract Total any premium costs advanced by the City for such insurance. Failure to maintain the insurance coverage required by this exhibit shall not waive the Contractor's obligations to the City.
- g. **Certificates of Insurance.** Prior to commencement of the Work, and before bringing any equipment or construction equipment on to the project site, the Contractor shall provide Certificates of Insurance, to the City Representative, for the insurance policies required by this contract.
  - 1. Additional Certificates. To the extent that the Contractor's insurance coverage's are required to remain in force after final payment and are reasonably available, an additional certificate evidencing continuation of such coverage shall be submitted with the final Application for Payment. Information concerning reduction of coverage on account of revised limits or claims paid under the general aggregate, or both, shall be furnished by the Contractor with reasonable promptness in accordance with the Contractor's information and belief.
  - 2. Prohibition Until Certificates Received. The City shall have the right, but not the obligation, to prohibit the Contractor and its Subcontractors from entering the Project site until the required certificates (or other competent evidence that insurance has been obtained in complete compliance with this exhibit) are received and approved by the OCIP Administrator and or City.
  - 3. Deductibles/Self-Insured Retentions. Payment of deductibles or self-insured retentions is a Cost of the Work within the Guaranteed Maximum Price and does not justify a Change Order. Satisfaction of all self-insured retentions or deductibles will be the sole responsibility of the Contractor.
- h. **Subcontractors Insurance.** The Contractor shall cause each Subcontractor to purchase and maintain in full force and effect policies of insurance as specified in this exhibit, except for coverage limits, which will be agreed upon between the City and the Contractor. The Contractor will be responsible for the Subcontractors' coverage if the Subcontractors fail to purchase and maintain the required insurance. When requested by the City, the Contractor will furnish copies of certificates of insurance establishing coverage for each Subcontractor.
- i. **Limitations on Coverage.**
  - 1. No insurance provided by the Contractor under this exhibit will be required to indemnify the City, the Architect, or their employees or agents to the extent of liability for death or bodily injury to persons or damage to property caused in whole or in part by their own negligence, but will require indemnity to the extent of the fault of the Contractor or its agents, representatives, or Subcontractors.

2. The obligations of the Contractor under this exhibit shall not extend to the liability of the Architect or its consultants for (1) the preparation or approval of maps, Drawings, opinions, reports, surveys, Change Orders, designs, or specifications, or (2) the giving or failure to give directions or instructions, to the extent that the directions, or failure to provide directions, are the cause of the injury or damage.
3. By requiring insurance, the City does not represent that coverage and limits will necessarily be adequate to protect the Contractor. Insurance in effect or procured by the Contractor will not reduce or limit the Contractor's contractual obligations to indemnify and defend the City for claims or suits that result from or are connected with the performance of the Contract.

**2. PROPERTY INSURANCE:**

- a. **Builder's Risk:** (For new construction or building additions) During the term of this Contract, the Contractor shall maintain in force, at its own expense, Builder's Risk insurance on an all risk form, including earthquake and flood, for an amount equal to the full amount of the Contract. Any deductible shall not exceed \$50,000 for each loss, except the earthquake and flood deductible shall not exceed 2 percent of each loss or \$50,000, whichever is more. The policy will include as loss payees the City, the Contractor and its Subcontractors as their interests may appear.
- b. **Builder's Risk Installation Floater:** (For other than new construction) The Contractor shall obtain, at the Contractor's expense, and keep in effect during the term of this Contract, a Builder's Risk Installation Floater for coverage of the Contractor's labor, materials and equipment to be used for completion of the Work performed under this Contract. The minimum amount of coverage to be carried shall be equal to the full amount of the Contract. This insurance shall include as loss payees the City, the Contractor and its Subcontractors as their interests may appear.
- c. Such insurance shall be maintained until the City has occupied the facility.
- d. Contractor must provide insurance for its own machinery, tools, equipment, or supplies that are not to become a part of the Project.

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**SPECIAL SPECIFICATIONS**  
**GENERAL: ALL SCHEDULES**  
2016 Pavement Management Program  
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**1. Quantities and Schedule of Contract Prices**

Each bid schedule (Schedule "B", "C", "D", and "E") shall be a separate contract for award. Contractors may bid one or all of the schedules.

The quantities set forth in this contract are approximate only, and the right is reserved by the City to make such increases or decreases in the quantities as may be necessary to satisfactorily complete the work and to maintain the contract within the Pavement Management Program Budget (subject to approval of the 2016/2017 Fiscal Year Budget). Such modification will not entitle the contractor to renegotiate the unit prices. Actual payment for work done under these contracts will be made at the unit prices set forth in the Contractor's proposal. It is neither implied nor expressly agreed that the actual amount of work to be done and paid for will correspond therewith. The City reserves the right to reject any or all bids or schedules.

**2. Joint Cooperative Procurement**

This is a joint cooperative procurement as authorized in ORS 279A.210. The City of Hillsboro is the administrative contracting agency. The City of Sherwood and City of Oregon City are participating agencies in this solicitation. Each public agency utilizing this bid will issue a contract, including performance/payment and warranty bonds from contractor, binding only their agency. Each contract is between the contractor and the individual agency with no liability to the City of Hillsboro.

**City of Sherwood:** Additional Slurry Seal work consisting of the preparation and application of approximately 100,474 square yards of type II slurry seal, including the replacement of pavement markings. Map and spreadsheets attached.

**City of Oregon City:** Additional Slurry Seal and Micro-Surfacing work consisting of the preparation and application of approximately 43,217 square yards of type II slurry seal, approximately 21,684 square yards of type III micro-surfacing, including the replacement of pavement markings. Maps and spreadsheets attached.

**3. Time of Award**

The anticipated time of award for this contract is **June 7, 2016** at the City of Hillsboro Council meeting to be held at 7:00pm in the Civic Center Auditorium, located at 150 E Main Street, Hillsboro, OR 97123.

**4. Standard Specifications**

All work shall conform to the current City of Hillsboro *Design and Construction Standards*, the Oregon Department of Transportation *Oregon Standard Specifications for Highway Construction* (2008), and Clean Water Services *Design and Construction Standards for Sanitary Sewer and Surface Water Management* (June 2007). All traffic control and pavement markings shall be in accordance with the *Manual of Uniform Traffic Control Devices (MUTCD)*, 2009 Edition and the *Oregon Temporary Traffic Control Handbook (OTTCH)*, December 2011. The documents referenced above are hereby made part of these specifications.

**5. Document Notice to Bidders**

A Warranty Bond requirement has been added, which is found under Section 1.04, subsection D of the Invitation to Bid.

**6. Construction Notices to Bidders**

There will be construction projects on major roadways adjacent to the City Limits that may cause delays in traveling to complete the work on this contract. The Oregon Department of Transportation project information can be found at <http://www.oregon.gov/ODOT/HWY/REGION1/pages/tvhwypaving/index.aspx>.

**SPECIAL SPECIFICATIONS**  
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There are also projects on Brookwood/Hwy 26, Cornelius Pass Rd (Evergreen-Hwy 26), and Baseline (Brookwood-231<sup>st</sup> Ave). There may be delays to your construction activities due to traffic delays through the work zones.

A citywide map of the maintenance work for this contract is posted on the website for reference in coordinating any adjacent work at [www.hillsboro-oregon.gov/PMPsummercontract](http://www.hillsboro-oregon.gov/PMPsummercontract).

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**SPECIAL SPECIFICATIONS**  
**SCHEDULE "B": SLURRY SEALS**  
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**1. Time of Construction**

Work contemplated in this contract may not commence until July 1, 2016. All work contemplated shall be completed on or before September 1, 2016, including striping.

**2. Preconstruction Conference**

After the execution of the contract, but prior to the notice to proceed, a pre-construction conference between the contractor, all subcontractors and the City shall be held at the City of Hillsboro Civic Center (150 E Main Street, Fourth Floor, Hillsboro, OR 97123). The contractor shall be represented, at a minimum, by a principle of the firm and the superintendent of the project. ***The contractor shall provide the following for the Engineer's approval prior to/at the preconstruction conference:***

- a. Preliminary work schedule. At a minimum, the work schedule shall include the locations by day, when notification will be placed for each day (keeping in mind requirements in Section 5 – Traffic Control and Public Notification), striping removal, and striping replacement.
- b. Traffic control plans.
- c. Signed original laboratory report of tests and proposed mix design covering the specific materials to be used on the project.

**3. Scope**

This schedule consists of furnishing all labor, equipment, and materials necessary for the preparation and application of one or more layers of slurry seal consisting of latex modified emulsified asphalt, water, aggregate, and additives on a prepared asphalt pavement as shown or directed. The cured slurry seal shall have a homogeneous appearance, fill all cracks, and adhere firmly to the surface.

**4. Areas of Work**

The areas of work are shown in the attached maps and spreadsheets. Do not place slurry seal on any portion of a concrete roadway or bridge deck.

**5. Traffic Control and Public Notification**

The contractor shall provide adequate signing and Oregon certified flaggers to ensure the work zone is properly identified in compliance with the *Manual of Uniform Traffic Control Devices*, 2009 Edition (MUTCD) and the *Oregon Temporary Traffic Control Handbook*, December 2011 (OTTCH).

All flaggers shall have:

- a. The mental and physical ability to provide timely, clear, and positive guidance.
- b. A sense of responsibility for safety of public and work crew.
- c. A neat appearance.
- d. A courteous but firm manner.
- e. Completed an approved work zone traffic control course within the past three (3) years and be able to provide evidence of completion to the Project Inspector upon request. (Oregon certified flagger.)
- f. Two-way radios with extra batteries.
- g. Shall not use personal cell phones while working on the job site.
- h. Shall be able to communicate effectively with the general public, Contractor, and Project Inspector.

Detailed traffic control plans shall be supplied to the Engineer at the preconstruction meeting. Standard traffic control plans may work for many locations. Specific traffic control plans will be submitted for NE Cory Street (adjacent to Glencoe Road, WashCo), NE Lenox Street (adjacent to Glencoe Road, WashCo), NW Rachel Street (adjacent to N 1<sup>st</sup> Avenue, WashCo), SE Montego Street (adjacent to SE Brookwood Avenue), and SE 45<sup>th</sup> Avenue (adjacent to TV Highway, ODOT). The plans shall include, but not be limited to all construction signing, flagger locations, types and locations of traffic control devices, construction phasing, method for maintaining traffic signal functions, detours, and accommodations for pedestrian, bicycle, and transit facilities. No work can commence until the traffic control plans have been approved.

**SPECIAL SPECIFICATIONS**  
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The Contractor shall erect and maintain all construction signs, warning signs, detour signs, and other traffic control devices necessary to warn and protect the public at all times from injury or damage as a result of the Contractor's operations. No work shall be done on or adjacent to any traveled way until all necessary signs and traffic control devices are in place.

SE 45<sup>th</sup> Avenue (at TV Highway) abut Oregon Department of Transportation (ODOT) roadways. The contractor shall coordinate traffic control and obtain any necessary permits through ODOT by contacting Jim Nelson at 971-673-2942 or [james.a.nelson@odot.state.or.us](mailto:james.a.nelson@odot.state.or.us).

NE Lenox Street (at Glencoe Road), NE Cory Street (at Glencoe Road), NE Rachel Street (at N 1<sup>st</sup> Avenue), SE 49<sup>th</sup> Avenue (at Witch Hazel), SE Montego Street (at Brookwood), NE 49<sup>th</sup> Avenue (at Baseline), NE 55<sup>th</sup> Avenue (at Baseline), NE 69<sup>th</sup> Avenue (at Baseline), NE 72<sup>nd</sup> Avenue (at Baseline), NE Autumnwood Terrace (at Quatama), NE Danbury Avenue (at Quatama), NE 74<sup>th</sup> Avenue (at Quatama), NE Kalahari Ridge Avenue (at Quatama), NE Rockridge Place (at Quatama), and NW 210<sup>th</sup> Avenue (at Quatama) abut Washington County roadways. The contractor shall coordinate traffic control and obtain any necessary permits through Washington County by contacting Aaron Clodfelter at 503-846-7632 or [Aaron.Clodfelter@co.washington.or.us](mailto:Aaron.Clodfelter@co.washington.or.us).

Any permits required by ODOT or Washington County to complete the work are the responsibility of the contractor. The contractor shall submit permits for review a minimum of one week prior to beginning work. A copy of the permits shall be submitted to the City's Engineer prior to beginning work. If a permit is not required, the contractor will submit written documentation from ODOT or Washington County stating the permit is not required. Permits shall be considered incidental to the traffic control bid item.

Thirty-six (36) hours prior to starting work on any given group of streets, the contractor is responsible for notifying the Washington County Consolidated Communications Agency (503-629-0111) of any traffic impairment. Notification shall include the exact location of work and the times when work will be performed, stating time of day and the date of street closure. A means of emergency access will be maintained at all times in all work zones.

Work shall be performed in a manner that will minimize inconvenience to businesses and the public. The contractor shall at no time close any intersection. Cul-de-sacs and dead ends shall have access restored within 4 hours. ***For all non-residential accesses, at least one lane of the access shall remain open for bi-directional traffic flow unless an alternate access is available. The contractor shall provide the necessary flaggers, barricades and appropriate signage to maintain these accesses.***

The contractor shall provide such barricades as required to close the street to protect the uncured slurry from vehicular traffic. When specified, the contractor shall provide such flaggers and barricades as required to protect the uncured slurry seal from vehicular traffic. Where necessary as directed and approved by the Inspector, the contractor shall spread a thin pathway of sand across the fresh slurry at pedestrian crossings and high traffic street intersections to allow traffic to cross perpendicular to the mat. Any damage to the uncured slurry shall be the responsibility of the contractor.

The City shall provide the contractor "NO PARKING" signs for use in posting streets in advance of slurry sealing. Streets may be posted "NO PARKING" between the hours of 7:00 AM and 5:00 PM. Posted parking prohibitions shall be restricted to one working day. Parking prohibitions proposed outside of the listed time frame or for more than one working day, must have prior approval, in writing, from the Engineer. Streets not completed must be rescheduled.

**SPECIAL SPECIFICATIONS**  
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Signs should be placed no less than thirty-six (36) hours or no more than seventy-two (72) hours prior to commencement of work. These "NO PARKING" signs shall be mounted by the contractor on a suitable pedestal, e.g. tripod, barricade, etc., provided by the contractor. Signs shall be posted every 100 feet on both sides of the street affected. At the completion of all work, all used "NO PARKING" signs shall be appropriately disposed of by the contractor. At the end of the project, any **unused** "NO PARKING" signs shall be returned to the Engineer.

The City shall also provide the contractor with door-knob notices in sufficient quantities which will further serve to advise the general public of the pending parking restrictions. These notices will also provide general information. ***The notices shall be left on or at the front door of each dwelling, apartment unit, or tenant of a commercial unit abutting any of the streets on the list. The notices will also need to be placed on any front door where the only access to the roadway is being affected (i.e. a cul-de-sac, alley, private street, etc. that enters onto a roadway being slurried).*** This should be done at the same time the "NO PARKING" signs are first placed in the area. Each day, prior to commencement of work, the contractor shall verbally contact, whenever possible, the residents to notify them of impending work. Notification shall be given enough in advance to allow residents to move personal vehicles prior to work beginning. At the end of the project, any **unused** door hangers shall be returned to the City Project Manager.

The contractor shall log the posting of the "NO PARKING" signs and door hangers in order for towing to occur for slurry seals. The log will be submitted on a weekly basis to the Inspector and contain the following minimum information:

- Street Name
- Location (From and To)
- Date Posted
- Time Posted
- Posted By

Payment for traffic control shall be lump sum and shall include all labor, permits, equipment, and materials necessary to coordinate and comply with current MUTCD, OTTCH and City standards.

***City of Sherwood:*** Requires door hanger notification posted a minimum of 48 hours prior to commencement of work. The City of Sherwood will provide door hangers.

***City of Oregon City:*** Requires door hanger notification posted no less than thirty-six (36) hours or no more than seventy-two (72) hours prior to commencement of work. The City of Oregon City will provide door hangers. The contractor will provide "NO PARKING" signs which shall contain the information and follow the template below:

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<p><b>CAUTION</b></p> <p>Roadway Work Scheduled</p> <p><b>Date:</b> _____</p> <p>7 AM to 5 PM</p> <p><b>NO PARKING and ROAD CLOSED</b> on this date.          Obstructions in this <b>TOW AWAY ZONE</b> will be removed          at owner's expense (OCMC 10.08).  <a href="http://www.orcity.org">www.orcity.org</a>  <i>[contractor name and phone number]</i></p>
--

These signs are only for reference for City of Oregon City

**6. Materials**

**6.1. Emulsified Asphalt:** The asphalt emulsion shall be homogenous and shall be a latex modified cationic quick-setting asphalt emulsion. The latex polymer material shall be co-milled with the emulsion solution. The emulsion manufacturer shall certify that the emulsion contains a minimum of **2.5-3% latex solids** based on the weight of asphalt (asphalt residual) within the emulsion for each load. The emulsified asphalt shall be within ±1% of the design emulsion content.

The LMCQS-1h latex modified quick setting asphalt emulsion shall meet the following requirements when tested according to AASHTO T59:

TEST	SPECIFICATION
Saybolt Viscosity, seconds at 77°F (25°C)	15-50
Residue from Distillation, Mass (Weight)%	<b>60% minimum</b>
Sieve Test, % Retained on No. 20 (850µm) Sieve	0.1 maximum
Particle Charge, Electroplate	Positive
Settlement (Storage Stability), 24 hour	1% maximum
Cement Mixing Test	(informational)

The residue shall pass the following specifications:

TEST	SPECIFICATION
Penetration at 77°F(25°C), 3.5 ounces (100 grams), 5 seconds.	40-90 minimum
Solubility in CS <sub>2</sub> or TCE	97.5 minimum
Softening Point (ring & ball) Degrees F.	130 minimum
Ductility at 77°F (25°C), inch (cm)	15.7 (40) minimum

***Each load of emulsified asphalt shall be accompanied with a Certificate of Analysis/Compliance to assure that it meets specification and is the same as that used in the mix design.***

**SPECIAL SPECIFICATIONS**  
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**6.2. Aggregate:**

**6.2.1. General:** The aggregate used shall be clean, angular, durable, well graded, and uniform. It shall be resistant to abrasion and free from lamination, weak cleavages, and undesirable weathering. The aggregate shall consist of broken stone, crushed gravel, slag, or a combination thereof. To assure the material is totally crushed, 100 percent of the parent aggregate shall be larger than the largest stone in the gradation to be used.

**6.2.2. Laboratory Evaluation:** Aggregate shall meet the following test requirements:

TEST	SPECIFICATION
Abrasion Resistance, AASHTO T96	35% Maximum
Soundness, AASHTO T104	Using Na <sub>2</sub> SO <sub>4</sub>
	Using MgSO <sub>4</sub>
Sand Equivalent, AASHTO T176	<b>60 Minimum</b>

**6.2.3. Grading:** Percentage composition by weight of the aggregate shall conform with the following gradation prior to the addition of any mineral fillers such as cement or lime. The percentage of aggregate passing any two successive sieves shall not change from one end of the specified range to the other end. The finished product shall be clean, uniform in quality and free from wood, bark, roots and other deleterious materials.

SIEVE	TYPE I % PASSING	TYPE II % PASSING	STOCKPILE TOLERANCE
3/8" (9.55mm)	100	100	0
No. 4 (4.75 mm)	100	90-100	± 5%
No. 8 (2.36 mm)	90-100	65-90	± 5%
No. 16 (1.18mm)	65-90	45-70	± 5%
No. 30 (600 µm)	40-65	30-50	± 5%
No. 50 (300 µm)	25-42	18-30	± 4%
No. 100 (150 µm)	15-30	10-21	± 3%
No. 200 (75 µm)	10-20	5-15	± 2%

**6.3. Mineral Filler:** Portland cement, hydrated lime, limestone, dust, fly ash or other approved filler meeting the requirements of ASTM D242 shall be used if required by the mix design. They shall be considered as part of the dry aggregate.

**6.4. Water:** Water used with the slurry mixture shall be potable, reasonably free from oil, dirt, silt and harmful salts. The Contractor shall ensure that the water planned for use shall be compatible with the slurry mix. 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.

When water is obtained from City fire hydrants, the contractor is required to obtain all necessary permits and meters from the City of Hillsboro Water Department. Cost of the permits and water shall be incidental to the unit bid prices for slurry seal. For information regarding necessary permits and fees, contact the Water Department at 503-615-6700.

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**6.5. Additives:** Additives may be used to accelerate or retard the break-set of the slurry seal or to improve the resulting finished surface only when their quantity can be metered. The use of additives in the slurry mix (or individual materials) shall be made initially in quantities predetermined by the mix design with field adjustments, if required after approval by the City Project Manager.

**7. Job Mix Formula (JMF)**

At the preconstruction conference, the contractor shall submit a signed original slurry seal mix design incorporating the aggregate and asphalt materials to be used on the project. Percentages of each individual mix material required shall be shown on the mix design report. The mix design shall be developed using the specific materials and same aggregate gradation that will be used for this project and that the treated area will be opened to traffic within 2-3 hours after placement. Previous mix designs shall not be accepted unless authorized by the City Project Manager. After the mix design has been approved, no substitution will be permitted unless first tested and approved by the laboratory preparing the mix design and then approved by the City Project Manager. Water, not exceeding 11% by mass (weight) to asphalt emulsion, shall be used to develop a good mix. **No work will begin prior to acceptance and approval of the mix design submittal.**

**7.1. Laboratory Evaluation:** Have the mix design prepared and tested by a laboratory which has experience in designing emulsified asphalt slurry seal surfacing. Determine the proportion of component materials and perform tests shown in Section 6.

**7.2. Mix Design Tests:**

TEST	DESCRIPTION	SPECIFICATION
ISSA TB-106	Slurry Seal Consistency	<b>0.79 – 1.18 inches (2-3 cm)</b>
ISSA TB-139	Wet Cohesion, 30 minute set 60 minute set	12 kg-cm Minimum 20 kg-cm Minimum
ISSA TB-114	Wet striping	Pass (90% minimum)
ISSA TB-100	Wet-Track Abrasion Loss, One hour soak	75 g/ft <sup>2</sup> (807 g/m <sup>2</sup> ) Maximum
ISSA TB-113	Mix Time @ 77°F (25°C)*	Controllable to 180 seconds minimum

\* The mixing test and set time should be done at the highest temperature expected during construction.

The wet track test is used to determine the minimum asphalt content required in a slurry seal system.

The mixing test is used to predict how long the material will be mixed in the machine 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. The report shall clearly show the proportions of aggregate, the minimum and maximum proportions of mineral filler and water, additive usage, and asphalt emulsion based on the dry weight (mass) of the aggregate.

All the component materials used in the mix design shall be representative of the materials proposed for use on the project.

Show the percentages of each individual material required in the laboratory report. Adjustments may be required during the construction, based on the field conditions. The Engineer will give final approval of such adjustments.

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**7.3. Component Materials:** The Engineer will approve the mix design, all slurry seal materials and methods prior to use. The component materials shall be within the following limits:

COMPONENT MATERIALS	LIMITS
Residual Asphalt	Type I: 10-16% Type II: 7.5-13.5% (based on dry weight of aggregate)
Mineral Filler	<b>0.0-3.0%</b> (based on dry weight of aggregate)
Additives	As needed.
Water	As needed to achieve proper mix consistency. Total mix liquids shall not exceed the loose aggregate voids. Use ISSA T106 to check optimum liquids.

**8. Tolerances and Limits**

Tolerances for individual materials as well as the slurry seal mixture during production are as follows:

- After the designed residual asphalt content is determined, a plus or minus one percentage point by weight of dry aggregate will be permitted.
- The percentage of aggregate passing each sieve shall be within the stockpile tolerance range as stated in 6.2.3.
- The percentage of aggregate passing shall not go from the high end to the low end of the specified range of any two successive sieves.
- The slurry consistency shall not vary more than plus or minus 2 inches (50 mm) from the job mix formula after field adjustments.
- The rate of application, once determined by the Engineer, shall not vary more than plus or minus 2 lbs/yd<sup>2</sup> (1.0 kg/m<sup>2</sup>) while remaining within the design application rates.

**9. Protection of Work Materials**

**9.1. Stockpiling Materials:** The contractor shall be fully responsible for the location of, and obtaining permission to use, stockpile sites. The contractor shall make his own arrangements for its use and assume full responsibility for its rental, preparation, maintenance, and cleanup in a manner satisfactory to the City and the property owner. Precautions shall be taken to ensure that stockpiles do not become contaminated with oversized rock, clay, silt, or excessive amounts of moisture. Segregation of aggregate will not be permitted. Aggregate samples will be taken from field stockpile locations, prior to any addition of mineral fillers. ***Contractor shall be responsible to verify and secure all necessary approvals, permits and land use approvals prior to commencing work.***

**9.2. Emulsion Storage:** The contractor shall provide suitable storage facilities for the asphalt emulsion so as to prevent water from entering the asphalt. An acceptable heating system shall be provided if necessary to prevent the emulsified asphalt from freezing, but the asphalt shall not be heated to a temperature greater than 130° F.

**SPECIAL SPECIFICATIONS**  
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**10. Quality Control**

Quality Assurance testing and inspection will be provided by the City of Hillsboro. Quality Control will be the Contractor's responsibility. Acceptance samples of the aggregate, asphalt emulsion, and slurry seal mixture (taken directly from the mixing unit) shall be taken by the contractor in the presence of the Project Inspector on a random basis with no cost to the City. A minimum of one (1) sample of the aggregate, asphalt emulsion, and slurry seal mixture will be taken each day of use. If any changes are made during the day an additional sample of the micro-surfacing mixture will be taken. Testing containers will be provided by the City. These samples will be tested, at the Contractor's expense if the City Project Engineer deems it necessary, based on the finished appearance and/or quality of quantitative measurements made during the proportioning of the slurry seal components while mixing and placing. The responsibility for ensuring that the work is constructed in strict conformance with the plans, specifications, and other Contract documents resides solely with the Contractor.

**11. Equipment**

All equipment, tools, and machines used in performance of this work shall be maintained in satisfactory working condition at all times to ensure a high-quality product.

**11.1. Mixing Equipment:** The machine(s) shall be specifically designed and manufactured to lay slurry seal. Mix slurry seal in continuous pug mill mixers; a self-propelled machine specifically designed and manufactured to accurately deliver and proportion the aggregate, emulsified asphalt, mineral filler, control setting additive and water to a revolving blade mixer that discharges the thoroughly mixed product on a continuous flow basis. Concrete transit mixer trucks shall not be used. Minimum slurry seal machine size shall be 7 cubic yards (5.35 m<sup>3</sup>). In the case of equipment failure have a minimum of two machines on site with another off site for immediate backup. The machine shall be capable of mixing materials at pre-set proportions regardless of the speed of the machine and without changing machine settings. During placement of the slurry, the equipment shall not exceed 180 feet per minute.

The mixing machine shall be equipped with an approved fine feeder that provides an accurate metering device or method to introduce a predetermined proportion of mineral filler into the mixer at the same time and location that the aggregate is fed. Use the fine feeder whenever added mineral filler is a part of the aggregate blend.

**11.1.1. Proportioning Devices:** Calibrate and properly mark individual volume or mass (weight) controls, such as revolution counters or similar devices, for proportioning each material to be added to the mix (i.e., aggregate, mineral filler, additive, emulsified asphalt and water). They shall be accessible for ready calibration and so placed that the Engineer may determine the amount of each material used at any time. Instruct the Engineer how to calculate the application rate per square yard (square meter) utilizing the Contractor's proportioning devices.

The Contractor shall allow the Engineer to use the recorders and measuring facilities of the slurry seal unit to determine application rates, asphalt emulsion content, mineral filler and additive quantities for a single load.

**11.1.2. Calibration:** Calibrate, in the presence of the Project Inspector, each slurry mixing unit to be used on the Project prior to construction. Previous calibration documentation covering the exact materials to be used may be accepted by Project Inspector provided they were made during the **previous 60 days**. The documentation shall include an individual calibration of each material at various settings, which can be related to the machines metering devices. No machine will be allowed to work on the Project until the calibration has been completed and/or accepted. **Any equipment replacement affecting material proportioning requires that the machine be recalibrated.**

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**11.1.3. Spreading Equipment – Spreader Box:** Attach to the mixer machine a mechanical type squeegee distributor equipped with flexible material that is in contact with the pavement surface to prevent the loss of slurry from the distributor. Adjust the distributor to prevent the loss of slurry on varying grades and crown and to assure uniform spread. 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. There shall be a steering device and a flexible strike-off. The spreader box shall have suitable means to side shift to compensate for variations in the pavement width. Keep the spreader box reasonably clean, and do not allow buildups of asphalt and aggregate. Only one tail rubber will be allowed. Any type of drag used shall be subject to approval by the Engineer and kept in a completely flexible condition at all times. The drag shall not leave a rough surface texture. The drag shall be cleaned or replaced as necessary to ensure that slurry mix accumulations do not cause scores or streaks.

The slurry seal spreader box in use shall be clean and free of slurry seal and emulsion at the start of each work shift.

## **12. Construction**

**12.1. Hours of Work:** General hours of work shall be limited to 7:00 AM to 5:00 PM Monday through Friday. Work outside these hours, including Saturdays must be approved by the Project Manager or City's authorized representative. Under no circumstances will work be allowed on Sundays or Holidays. Work is not permitted near schools at times when students are arriving or departing. Hours of work may also be affected on those roadways abutting other agency roadways. ***Slurry seal shall be applied only between the hours of 8:00 AM and 3:00 PM and must be able to support traffic by 5:00 PM.*** Permission to work outside these hours may be granted on a case-by-case basis upon application to the Project Engineer. The Contractor has full responsibility for confining operations, *including striping*, to these hours and obtaining any needed waivers.

The contractor will need to schedule work so as not to interfere with the events below, including any event detour routes:

- Tuesday Market – Tuesday afternoon to evening generally located on Main between 1<sup>st</sup> and 4<sup>th</sup> and on 2<sup>nd</sup>/3<sup>rd</sup> Avenues between Washington and Lincoln Street;
- Saturday Market – Saturday mornings generally located on Main between 1<sup>st</sup> and 4<sup>th</sup> and on 2<sup>nd</sup>/3<sup>rd</sup> Avenues between Washington and Lincoln Street;
- Washington County Fair – July 28<sup>th</sup>-31<sup>st</sup> located at the Washington County Fairgrounds;
- 2016 Oregon International Air Show – August 5<sup>th</sup>-7<sup>th</sup> located at the Hillsboro Airport (may affect access around the airport due to sterile corridors for jet teams);
- Celebrate Hillsboro – July 16<sup>th</sup> generally located on Main between 1<sup>st</sup> and 4<sup>th</sup> and on 2<sup>nd</sup>/3<sup>rd</sup> Avenues between Washington and Lincoln Street;
- Tour de Cure – July 30<sup>th</sup> located around Amberglen Park area and Rock Creek Trail;
- Or any other special events.

**12.2. Weather Limitations:** Do not apply the slurry seal if either the pavement or air temperature is below 50°F (10°C) and falling and/or when the weather forecast exceeds 40 percent probability of rainfall. The slurry seal may be applied when both the pavement and air temperature are above 45°F (7°C) and rising. Do not apply if there is a danger that the finished product will freeze before 24 hours. Do not apply when weather conditions prolong opening to traffic beyond a reasonable time (2-3 hours).

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Do not apply in the rain. Replace slurry damaged by rain after application according to the Specifications, and as determined by Engineer, at no additional cost. Clean the street of all remaining slurry mix materials prior to re-application.

Adjust the rate of application of the fog spray during the day to suit temperatures, surface texture, humidity and dryness of pavement surface. Do not spray additional water into the spreader box.

**12.3. Preparation of Surface:**

**12.3.1. Street Equipment and Procedure:** The existing pavement shall be swept with a vacuum sweeper with blowers until it is free from dirt or other foreign matter such as moss, weeds, oil spots, etc. Areas inaccessible to the vacuum sweeper shall be cleaned by hand, pressure spray, or other equipment as necessary to thoroughly clean the roadway. Finish sweeping no more than 24 hours prior to application of the slurry seal. If there is a delay of more than 48 hours between sweeping and slurry sealing caused by weather conditions or other unforeseen circumstances, re-sweep as determined by the Engineer, at no additional cost to the Agency. Payment for street preparation shall be incidental to the unit prices for slurry seal.

**12.3.2. Concrete Surfaces:** The contractor shall be responsible to cover and protect any concrete surfaces to keep them clean from tracking or placement of slurry seal material. Care shall be taken to ensure *straight* lines along the edges of the concrete surfaces, without overrun onto the concrete. If any material or tracking occurs on the concrete surfaces, the contractor shall be responsible for the removal of any slurry seal on the concrete surface by suitable methods at no additional cost. Hot pressurized water may be used for removing excess slurry seal as long as precaution has been taken to not allow waste to enter storm water inlets. Payment for protection of concrete surfaces is considered incidental to the unit prices for slurry seal.

**12.3.3. Auxiliary Equipment:** Hand squeegees, hand drags, shovels, an asphalt distributor, and other support and safety equipment shall be provided as necessary to perform the work. Containers shall be required for disposal of waste slurry.

**12.3.4. Utility Covers:** The contractor shall be responsible for verifying utility locations in the field and taking necessary precautions to protect all existing utilities. Protect manholes, valve boxes, catch basins, survey monument boxes, drop inlets and other service entrances from the slurry seal by a suitable method. Clean these covers as quickly as possible after the application of the slurry seal and definitely prior to the final set. If necessary, clean slurry residual from the interior of the utilities.

**12.3.5. Tack Coat:** When slurry seal is placed over a brick or Portland cement concrete surface, a highly absorbent asphalt surface, over an asphalt surface where the exposed aggregate has become polished and slick, use a tack coat of emulsified asphalt of the same type and grade specified for the slurry seal. Consult with the slurry seal supplier to determine dilution stability. The tack coat may consist of one part emulsified asphalt to one part 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 to 0.10 gal/yd<sup>2</sup>. The tack coat shall be allowed to cure sufficiently before the application of slurry seal.

**12.3.6. Pavement Markings:** Before slurry seal is to be applied to any area, remove all reflector buttons, thermoplastic markings, cold tape markings, and paint markings so that at least 90% of the pavement marking materials are removed by any approved process (i.e., hydro-blasting, grinding, or shot blasting) that leaves no damage to the underlying pavement or a scar depth that is no greater than 1/8" deep.

If the pavement markings are removed using a dry mechanical abrasion process, a positive means to control airborne dust is required with use of a dust collector attached to the removal equipment.

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Accumulation of heavier debris, accumulated piles of any debris on the surface or from the right-of-way as a result from the removal operation shall be collected and disposed of in accordance with applicable Federal, State, and Local regulations, at no additional cost. If pavement markings are removed using water blasting, the truck mounted water blaster shall be capable of simultaneously vacuuming the spent water and debris as it progresses, leaving the pavement clean.

Temporary markings may need to be installed per Section 14 as determined by the Inspector/Engineer. ***Pavement markings shall not be removed more than 7 days in advance of the slurry seals. Slurry work will be shut down if the pavement markings have not been removed.*** Payment for removal of pavement markings is considered incidental.

**12.4. General:** The surface shall be wetted by fogging ahead of the slurry box, if required by local conditions. Apply water used in wetting the surface at such a rate that the entire surface is damp with no apparent flowing water in front of the slurry box. The slurry mixture shall be of the desired consistency upon leaving the mixer. Do not add additional elements. Carry a sufficient amount of slurry in all parts of the spreader at all times so that complete coverage is obtained. Do not allow rippling, lumping, balling, or unmixed aggregate in the spreader box. Do not allow segregation of the emulsion and aggregate fines from the coarse aggregates. If the coarse aggregate settles to the bottom of the mix, remove the slurry from the pavement. Do not allow excessive breaking of the emulsion in the spreader box. Do not leave streaks, such as caused by oversized aggregate, in the finished pavement. Maximum mixing time in the pugmill shall be four minutes.

**12.5. Application Rate:** The slurry seal mixture shall be of proper consistency at all times so as to provide the application rate required by the surface condition. The average application rate shall be 10 to 12 lb/yd<sup>2</sup> for Type I slurry and 12 to 18 lb/yd<sup>2</sup> for Type II slurry. Application rates are affected by the unit weight of the aggregate, the gradation of the aggregate and the demand of the surface to which the slurry seal is being applied. ISSA TB112 gives a method to determine expected application rates.

**12.6. Joints:** Construct a uniform line along the edge and a good seal at curb lines. Construct the flow line at curbs to allow storm drainage flow to catch basins without bonding along the curb line. In the case of a concrete gutter, cover the gutter line joint with the slurry seal, but do not overlap onto the gutter. Remove any overlap, as determined by the Engineer, at no additional cost. Streets that have been recently slurry sealed that cross this Project shall not be slurry sealed again. The slurry joints and panels shall be straight, neat and uniform and follow the contour of the existing curb or concrete gutter. Unless otherwise approved, the overlap of joints will not exceed 2 inches and shall be feathered. Floating (adding additional water other than what is required for the approved mix design) of the emulsion or slurry mixture in the pugmill and/or spreader box to cover or overlap missed areas will be prohibited. At street intersections at the beginning and ending of work segments, the slurry shall be neatly spread or trimmed to a straight line defined by the near curb lines of the street adjacent to the work.

**12.7. Handwork:** Use approved squeegees to spread slurry in areas not accessible to the slurry mixer. Limit handwork at the beginning and end of the panels to prevent segregation of the rock from the emulsion and to minimize cosmetic drag mop marks and/or defects in the finished product. The same type finish as applied by the spreader box shall be required. Complete handwork prior to setting of the slurry.

**12.8. Curing:** The rate of curing of the slurry seal shall be such that a street may be opened to traffic within 4 hours after application without tracking or damage to the surface. Protect the area for the full curing period with suitable barricades or markers. The street will be opened to traffic only when approved by the project inspector. The Contractor will be responsible for any damage to the slurry seal due to

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traffic or other, prior to specific notice to open a particular street. Repair all damage to the slurry, to the satisfaction of the Engineer, at no additional cost to the Agency.

**12.9. Dust Control:** The contractor shall assume all responsibility for dust control and shall furnish labor and materials to prevent the creation of dust damage and nuisance to persons and property. Any claim resulting there from shall be the responsibility of the contractor. Dust control shall be considered incidental to the unit prices for slurry seal.

**12.10. Patching and Correction of Defects:** Defects such as raveling, lack of uniformity, or other imperfections caused by faulty workmanship shall be corrected and new work shall not be started until such defects have been remedied.

All improper workmanship and defective materials resulting from overheating, improper handling or application, shall be removed from the roadway by the contractor and be replaced with approved materials and workmanship at no expense to the contracting agency. The area of the repair shall be approved by the Engineer.

**12.11. Cleanup:** The contractor shall be fully responsible for maintenance and clean up of excess aggregate materials and emulsion from streets, driveways, sidewalks, curbs, gutters, manholes, water valves, etc. within 48 hours after application of slurry seal. Payment for cleanup will be included under the lump sum item "Move in, Bond, Insurance, and Clean-Up."

**13. Measurement**

The accepted quantities of slurry seal will be paid for at the Contract unit price per square yard for the item "Street Preparation and Application of Type II Asphalt Emulsion Slurry Seal". Payment will be payment in full for furnishing and placing all materials and furnishing all equipment, labor, and incidentals necessary to complete the work as specified.

**14. Striping, Marking, and Reflectorization**

All stop bars, crosswalks and special markings shall be replaced at original locations. ***The contractor is responsible for pre-marking replacement locations.*** The contractor shall notify Brad Eckland (503-615-6562), Hillsboro's City Assistant Public Works Superintendent or designee a minimum of **48 hours** for verifying layout prior to installing any material or to obtain assistance in re-establishing marking locations for the City of Hillsboro. City of Oregon City does not have any striping on their slurry seal. City of Sherwood contact person for striping inquiries is Lynn Johnson (503-925-2311).

All long lines shall be spray or ribbon liquid thermoplastic at 90 mils thick and all legends and transverse markings high skid pre-formed fused thermoplastic at 90 mils thick unless otherwise indicated on the bid sheet.

The contractor shall provide and maintain temporary pavement markings in accordance with the MUTCD Part VI for the duration of the project. Temporary pavement markings, most often reflective tabs or reflective foil back tape, will be placed every one hundred (100) feet on the fog line, every forty (40) feet on the center line, and every twenty (20) feet on centerline and lane lines at intersections and in some cases double striping may be required. The reflective foil back tape shall be used to mark out stop bars, crosswalks, and directional arrows where needed. The temporary markings shall match the existing markings and are installed to help guide motorist and pedestrians until the permanent markings can be installed. All temporary striping/markings shall be removed at the time that the permanent striping is being installed. ***If temporary tabs are used, the contractor shall cut the tabs to remove. Pulling of the tabs is prohibited as it***

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***causes damage to the freshly laid material.*** Temporary pavement markings with placing and maintaining shall be considered incidental to the project.

The roadway shall be swept clean prior to placement of permanent pavement markings. The sweeping shall be considered incidental and included in the appropriate bid item. The contractor shall replace or install all crosswalks, stop bars, turn arrows, bicycle symbols, yellow centerline, white fog line/bike lane, storage lines, parking lines, two-way and one-way-reflective raised pavement markers. ***Permanent pavement markings shall be reinstalled no sooner than 7 days and no later than 14 days after slurry placement.***

The comments on the spreadsheets list the stop bars and crosswalks, but the quantity is under the 12" white line item.

**15. Coordination**

The contractor will need to coordinate slurry seals on the following. Schedules will be forthcoming once obtained.

- NE 4<sup>th</sup> Avenue with the Micro-Surfacing project on Grant.
- NE Lincoln Street with the Micro-Surfacing project on 32<sup>nd</sup>.
- SE 61<sup>st</sup> Drive and SE 67<sup>th</sup> Avenue with the Overlay project including curb ramp replacements on Drake.
- SE Creek Court with the Micro-Surfacing project on Rood Bridge.

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**1. Time of Construction**

Work contemplated in this contract may not commence until July 1, 2016. All work contemplated shall be completed on or before September 1, 2016, including striping.

**2. Preconstruction Conference**

After the execution of the contract, but prior to the notice to proceed, a pre-construction conference between the contractor, all subcontractors and the City shall be held at the City of Hillsboro Civic Center (150 E Main Street, Fourth Floor, Hillsboro, OR 97123). The contractor shall be represented, at a minimum, by a principle of the firm and the superintendent of the project. ***The contractor shall provide the following for the Engineer's approval prior to/at the preconstruction conference:***

- a. Preliminary work schedule. At a minimum, the work schedule shall include the locations by day, when notification will be placed for each day (keeping in mind requirements in Section 6 – Traffic Control and Public Notification), striping removal, and striping replacement.
- b. Traffic control plans.
- c. Signed original laboratory report of tests and proposed mix design covering the specific materials to be used on the project.

**3. Scope**

This schedule consists of furnishing all labor, equipment, and materials necessary for the preparation and application of one or more layers of micro-surfacing consisting of polymer modified asphalt emulsion, aggregate, mineral filler, set-control additives, and water and spreading the mixture on a prepared asphalt pavement as shown or directed. The micro-surfacing mix should be capable of being spread in variably thick cross-sections (wedges, wheel path depressions, scratch courses and surfaces) which, ***after 10 minute set time***, curing for initial controlled cross traffic consolidation, resist deformation throughout the entire design tolerance of bitumen content and variable thickness to be encountered. *The micro-surfacing mix shall be capable of being stacked in multiple lifts without bleeding.*

**4. System**

The Contractor shall use a ***crew and have a proven representative that has placed micro-surfacing with a performance period of two (2) years minimum*** and a performance reference letter from the owner it was placed for. The representative shall provide the City of Hillsboro with references and resume stating the experience of the crew and proven representative. The contractor shall have a designated representative with complete authority to represent the contractor's interest and to supervise their staff and subcontractors. This person shall be present on-site continuously during the project and be equipped with a cell phone that is available 24 hours per day, seven days per week for responding to changes in scope of work, scheduling, emergencies and City directives. **The requirements of this section shall be submitted with the bid documents at time of bid.**

**5. Areas of Work**

The areas of work are shown in the attached maps and spreadsheets. Do not place micro-surfacing on any portion of a concrete roadway or bridge deck.

**6. Traffic Control and Public Notification**

The contractor shall provide adequate signing and Oregon certified flaggers to ensure the work zone is properly identified in compliance with the *Manual of Uniform Traffic Control Devices*, 2009 Edition (MUTCD) and the *Oregon Temporary Traffic Control Handbook*, December 2011 (OTTCH).

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All Oregon certified flaggers shall have:

- a. The mental and physical ability to provide timely, clear, and positive guidance.
- b. A sense of responsibility for safety of public and work crew.
- c. A neat appearance.
- d. A courteous but firm manner.
- e. Completed an approved work zone traffic control course within the past three (3) years and be able to provide evidence of completion to the Project Inspector upon request.
- f. Two-way radios with extra batteries.
- g. Shall not use personal cell phones while working on the job site.
- h. Shall be able to communicate effectively with the general public, Contractor, Project Inspector.

The flaggers shall know the street system within the surrounding area before directing any traffic. The Contractor shall supply maps of the area if necessary to all flaggers on the job site. The contractor shall have adequate flaggers at each intersection, and shall not use the wait for pilot car signs or road closed signs, unless pre-approved by the Engineer/Inspector for each intersection pertaining to the project.

***Detailed traffic control plans shall be supplied to the Engineer at the preconstruction meeting for each project site.*** The plans shall include, but not be limited to all construction signing, flagger locations, types and locations of traffic control devices, construction phasing, method for maintaining traffic signal functions, detours, and accommodations for pedestrian, bicycle, and transit facilities. Roadways shall remain open to traffic flow unless otherwise approved in writing by the Engineer. No work can commence until the traffic control plans have been approved.

The Contractor shall erect and maintain all construction signs, warning signs, detour signs, and other traffic control devices necessary to warn and protect the public at all times from injury or damage as a result of the Contractor's operations. No work shall be done on or adjacent to any traveled way until all necessary signs and traffic control devices are in place.

NW Jackson Street (at 1<sup>st</sup> Ave), NE Shute Road (at Cornell Road), NW 206<sup>th</sup> Avenue (at Cornell Road), SE Davis Road (at River Road), and SE Morgan Road (at Minter Bridge Road) abut Washington County roadways. The contractor shall coordinate traffic control and obtain any necessary permits through Washington County by contacting Aaron Clodfelter at 503-846-7632 or [Aaron.Clodfelter@co.washington.or.us](mailto:Aaron.Clodfelter@co.washington.or.us).

NW Jackson Street abut Portland & Western Railroad tracks. The contractor shall coordinate traffic control and obtain any necessary permits/flagging agreements and scheduling through Portland & Western Railroad by contacting Dennis Hannahs at 1-503-508-7440 or [dhannahs@gwrr.com](mailto:dhannahs@gwrr.com).

Any permits required by Washington County or Portland & Western Railroad to complete the work are the responsibility of the contractor. The contractor shall submit permits for review a minimum of one week prior to beginning work. A copy of the permits shall be submitted to the City's Project Engineer prior to beginning work. If a permit is not required, the contractor will submit written documentation from Washington County or Portland & Western Railroad stating the permit is not required. Permits shall be considered incidental to the traffic control bid item.

Thirty-six (36) hours prior to starting work on any given group of streets, the contractor is responsible for notifying the Washington County Consolidated Communications Agency (503-629-0111) of any traffic impairment. Notification shall include the exact location of work and the times when work will be performed, stating time of day and the date of street closure. A means of emergency access will be maintained at all times in all work zones.

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Work shall be performed in a manner that will minimize inconvenience to businesses and the public. Where roadway width allows, the Contractor shall provide and maintain a minimum of one (1) paved travel lane in each direction, each at least 11 feet wide at all times during the course of construction for the roadways on this project. If the roadway width does not allow two lanes of travel, the contractor must maintain bi-directional travel with flaggers and/or pilot cars.

The contractor shall place Portable Changeable Message Signs (PCMS) a minimum of one (1) week prior to work on NE Grant Street, NE Shute Road, NW 206<sup>th</sup> Avenue. PCMS locations shall not block travel lanes, bike lanes, or sidewalks and should be located within 500 feet of the work zone. The following messages shall be displayed on the PCMS: "ROAD WORK", "M/DD TO M/DD" (dates), "EXPECT DELAYS".

The contractor shall at no time close any intersection. Cul-de-sacs and dead ends adjacent to the project site shall have access restored within 4 hours. ***For all business, transit station, hospital, stadium, school, jail, parks and shopping center accesses, at least one lane of the access shall remain open for bi-directional traffic flow unless an alternate access is available. The contractor shall provide the necessary flaggers, barricades and appropriate signage to maintain these accesses.***

The contractor shall provide such barricades as required to close the street to protect the uncured micro-surfacing from vehicular traffic. When specified, the contractor shall provide such flaggers and barricades as required to protect the uncured micro-surfacing from vehicular traffic. Where necessary, the contractor shall spread a thin pathway of sand across the fresh micro-surfacing at pedestrian crossings and high traffic street intersections to allow traffic to cross perpendicular to the mat as directed and approved by the Inspector. Any damage to the uncured micro-surfacing shall be the responsibility of the contractor.

The City shall provide the contractor "NO PARKING" signs for use in posting streets in advance of micro-surfacing. Streets may be posted "NO PARKING" between the hours of 7:00 AM and 5:00 PM. Posted parking prohibitions shall be restricted to one working day. Parking prohibitions proposed outside of the listed time frame or for more than one working day, must have prior approval, in writing, from the Engineer. Streets not completed must be rescheduled.

Signs should be placed no less than thirty-six (36) hours or no more than seventy-two (72) hours prior to commencement of work. These "NO PARKING" signs shall be mounted by the contractor on a suitable pedestal, e.g. tripod, barricade, etc., provided by the contractor. Signs shall be posted every 100 feet on both sides of the street affected. At the completion of all work, all used "NO PARKING" signs shall be appropriately disposed of by the contractor. At the end of the project, any ***unused*** "NO PARKING" signs shall be returned to the Engineer.

The City shall also provide the contractor with door-knob notices in sufficient quantities which will further serve to advise the general public of the pending parking restrictions. These notices will also provide general information. ***The notices shall be left on or at the front door of each dwelling, apartment unit, or tenant of a commercial unit abutting any of the streets on the list.*** The notices will also need to be placed on any front door where the only access to the roadway is being affected (i.e. a cul-de-sac, alley, private street, etc. that enters onto a roadway being micro-surfaced). This should be done at the same time the "NO PARKING" signs are first placed in the area. Each day, prior to commencement of work, the contractor shall verbally contact, whenever possible, the residents to notify them of impending work. Notification shall be given enough in advance to allow residents to move personal vehicles prior to work beginning. At the end of the project, any ***unused*** door hangers shall be returned to the Engineer.

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The contractor shall log the posting of the "NO PARKING" signs and door hangers in order for towing to occur for micro-surfacing. The log will be submitted on a weekly basis to the Inspector and contain the following minimum information:

- Street Name
- Location (From and To)
- Date Posted
- Time Posted
- Posted By

Payment for traffic control shall be lump sum and shall include all labor, equipment excluding PCMS, and materials necessary to coordinate and comply with current MUTCD, OTTCH and City standards. Payment for PCMS shall be on a per unit basis including all labor, equipment, and materials necessary to coordinate and comply with current MUTCD, OTTCH and City standards.

**City of Oregon City:** Requires door hanger notification posted no less than thirty-six (36) hours or no more than seventy-two (72) hours prior to commencement of work. The City of Oregon City will provide door hangers. The contractor will provide "NO PARKING" signs which shall contain the information and follow the template below:

<p style="font-size: 24pt; font-weight: bold; margin: 0;">CAUTION</p> <p style="font-weight: bold; margin: 0;">Roadway Work Scheduled</p> <p style="font-size: 24pt; font-weight: bold; margin: 0;">Date: _____</p> <p style="margin: 0;">7 AM to 5 PM</p> <p style="font-weight: bold; margin: 10px 0 0 0;">NO PARKING and ROAD CLOSED on this date.</p> <p style="margin: 0 0 0 0;">Obstructions in this <b>TOW AWAY ZONE</b> will be removed at owner's expense (OCMC 10.08).</p> <p style="margin: 0 0 0 0;"><a href="http://www.orcity.org">www.orcity.org</a></p> <p style="margin: 0 0 0 0;">[contractor name and phone number]</p>
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These signs are only for reference for City of Oregon City

**7. Materials**

**7.1. Emulsified Asphalt:** The asphalt emulsion shall be homogenous and shall be a polymer modified quick-setting, quick-traffic cationic asphalt emulsion. The polymer material shall be co-milled with the emulsion solution. The emulsion manufacturer shall certify that the emulsion contains a minimum of 4% polymer solids based on the weight of asphalt (asphalt residual) within the emulsion. The emulsified asphalt shall be within  $\pm 1\%$  of the design emulsion content.

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The PMCQS-1h polymer modified quick-setting, quick-traffic cationic asphalt emulsion shall conform to the following requirements when tested in accordance with the specified test method:

TEST ON EMULSION	TEST METHOD	SPECIFICATION
Viscosity, Saybolt Fural at 77°F (25°C), sec	AASHTO T59	16-90 sec
Storage Stability Test, 24 Hour, %	AASHTO T59	1% Max.
Settlement, % 5 day	AASHTO T59	5% Max.
Distillation	AASHTO T59	3% Max.
Residue after Distillation	AASHTO T59	64% Min.

TEST ON RESIDUE	TEST METHOD	SPECIFICATION
Penetration at 77°F (25°C), 100g, 5 seconds.	AASHTO T49	40-90
Ductility at 77°F (25°C), 5cm/min.cm	AASHTO T51	60 Min.
Softening Point, R & B, Degrees F.	AASHTO T53	142° Min.
Polymer Content % (Solid polymer content based on weight of asphalt)	AASHTO T53	4% Min.
Or Tortional Recovery	CTM 332	20% Min.

***Each load of emulsified asphalt shall be accompanied with a Certificate of Analysis/Compliance to assure that it meets specification and is the same as that used in the mix design.***

**7.2. Aggregate:** The mineral aggregate used shall be of the type and grade specified for the particular use of micro-surfacing. The aggregate shall be 100% crushed stone such as granite, slag, limestone or other high quality aggregate. The material shall be free from vegetable matter and other deleterious substances. All aggregate shall be free of caked lumps and oversize particles.

**7.2.1. Laboratory Evaluation:** Aggregate shall conform to the following additional requirements:

TEST	TEST METHOD	SPECIFICATIONS
Sand Equivalent	ASTM D2419	65 Min.
Plasticity	ASTM D4398	Non-plastic
Soundness	ASTM C88	<b>15% Max.</b> using Na <sub>2</sub> SO <sub>4</sub> <b>25% Max.</b> using MgSO <sub>4</sub>
Abrasion Resistance	ASTM C131	<b>30% Max.</b> at 500 revolutions on gradation D
Durability Index	CAL TEST 229	70 Min.

**7.2.2. Grading:** Percentage composition by weight of the aggregate shall conform to the following gradation and in accordance with **AASHTO T27 and T11**. The percentage of aggregate passing any two successive sieves shall not change from one end of the specified range to the other end. The finished product shall be clean, uniform in quality and free from wood, bark, roots and other deleterious materials.

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SIEVE	TYPE III % PASSING	STOCKPILE TOLERANCE
3/8" (9.55mm)	100	0
No. 4 (4.75 mm)	70-90	± 2%
No. 8 (2.36 mm)	45-70	± 2%
No. 16 (1.18mm)	28-50	± 2%
No. 30 (600 µm)	19-34	± 2%
No. 50 (300 µm)	12-25	± 2%
No. 100 (150 µm)	7-18	± 2%
No. 200 (75 µm)	5-15	± 2%

**7.3. Mineral Filler:** Mineral filler shall be any recognized brand of non-air entrained Portland Cement or hydrated lime that is free of lumps. The type and amount of mineral filler needed shall be determined by the laboratory mix design and will be considered as part of the mineral gradation requirement. An increase or decrease of less than one-percent (1%) may be permitted when the micro-surfacing is being placed if it is found to be necessary for better consistency or set times.

**7.4. Water:** Water shall be of such quality that the asphalt will not separate from the emulsion before the micro-surfacing is in place on the pavement. If the contractor elects to obtain water from City fire hydrants, the contractor is required to obtain all necessary permits and meters from the City of Hillsboro Water Department. Cost of the permits and water shall be incidental to the unit bid prices for micro-surfacing. For information regarding necessary permits and fees, contact the Water Department at 503-615-6700.

**7.5. Additives:** Per the mix design for the micro-surfacing.

**8. Mix Design**

***At the preconstruction conference, the Contractor shall submit to the Engineer for approval a signed original laboratory report of tests and a signed original proposed mix design covering the specific materials to be used on the project.*** The mix design shall include a certification from the emulsion manufacturer that the materials meet the job specification. Previous mix designs shall not be accepted unless authorized by the Engineer. **No work will begin prior to acceptance and approval of the mix design submittal.**

The tests and mix design shall be performed by a laboratory capable of performing the applicable International Slurry Surfacing Association (ISSA) tests. The proposed micro-surfacing mixture shall conform to the requirements specified when tested in accordance with the following tests:

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TEST	DESCRIPTION	SPECIFICATION
ISSA TB-109	Excess Asphalt	538 g/m <sup>2</sup> (50 g/ft <sup>2</sup> ) maximum
ISSA TB-139	Wet Cohesion, 30 minutes (set time)	12 kg-cm minimum
	60 minutes (traffic time)	20 kg-cm minimum (or near spin)
ISSA TB-114	Wet striping	Pass (90% minimum)
ISSA TB-100	Wet-Track Abrasion, One hour soak, loss	538 g/m <sup>2</sup> (50 g/ft <sup>2</sup> ) maximum
	Six day soak, loss	807 g/m <sup>2</sup> (75 g/ft <sup>2</sup> ) maximum
ISSA TB-147A	Lateral Displacement	5% maximum
	Specific Gravity after 1,000 cycles @ 125 lbs.	2.10 maximum
ISSA TB-144	Classification Compatibility	11 Grade Points Minimum (AAA, BAA)
ISSA TB-113	Mix Time @ 77°F (25°C)	Controllable to 120 seconds minimum

The original laboratory report shall be signed by the laboratory that performed the tests and mix design and shall show the results of the test on individual materials, comparing their values to those required by the specifications. The report shall clearly show the proportions of aggregate, filler, water (minimum and maximum), set control additive, and asphalt solids content (minimum and maximum) based on the dry weight of aggregate. The laboratory shall also report the quantitative effects of moisture content on the unit weight of the aggregate (bulking effect). The mix design will further show recommended changes in cement, water and additive proportions for high temperature weather conditions by reporting proportions of materials required for 60 seconds of mix time.

All the component materials used in the mix design shall be representative of the materials proposed by the Contractor to be used on the project.

Once the proportion of materials to be used are approved by the Engineer, no substitute of other materials will be permitted unless the materials proposed for substitution are first tested and a laboratory report is submitted for the substituted design as specified above. Substituted materials shall not be used until the mix design for those materials is approved by the Engineer.

**9. Proportioning**

Aggregate, mineral fillers, asphalt emulsions, water and additives including set-control agent if used, shall be proportioned by volume utilizing the mix design approved by the Project Engineer. If more than one kind of aggregate is used, the correct amount of each kind of aggregate to produce the required grading shall be proportioned separately, prior to adding the other materials of the mixture, in a manner that will result in a uniform and homogenous aggregate blend.

The percentages of each individual material required shall be shown in the laboratory report. Adjustments may be required during the construction, based on field conditions. The component materials shall be within the following limits:

COMPONENT MATERIALS	LIMITS
Residual Asphalt	5.5% to 10.5% by dry weight of aggregate
Mineral Filler	0% to 3% by dry weight of aggregate
Polymer Content	Minimum 4% solids based on bitumen weight content
Additives	As needed.
Water	As required to produce proper mix consistency

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The completed mixture, after addition of water and any set-control agent, shall be such that the micro-surfacing mixture has proper workability and a) will permit traffic without pilot car assisted traffic control on the micro-surfacing within one (1) hour after placement, and b) will prevent development of bleeding, raveling, separation or other distresses within 15 days after placing the micro-surfacing. However, when ambient temperatures are below 77°F (25°C) traffic may not be permitted on the micro-surfacing until it has sufficiently cured. The time for sufficient curing shall be mutually agreed upon between the Contractor and the Engineer.

The Contractor shall furnish an aggregate moisture determination from the stockpile prior to placing the micro-surfacing and shall be retested if weather conditions have changed the aggregate moisture content appreciably. Aggregate moisture will be accounted for in determining the aggregate/bitumen ratio to be used during placement.

The aggregate shall be proportioned using a belt feeder operated with an adjustable cutoff gate. The height of the gate opening shall be readily determinable. The emulsion shall be proportioned by a positive displacement pump. Any variance rate emulsion pump, if used, shall be calibrated and sealed in its calibrated condition.

The deliver rate of aggregate and emulsion per revolution of the aggregate feeder shall be calibrated at the appropriate gate settings for each mixer-spreader truck used on the project in accordance with these special provisions.

The aggregate belt feeder shall deliver aggregate to the pugmill with such volumetric consistency that the deviation for any individual aggregate delivery rate check-run shall not exceed 2.0% of the mathematical average of three (3) runs of at least three (3) tonnes in duration each. The emulsion pump shall deliver emulsion to the pugmill with such volumetric consistency that the deviation for any individual delivery rate check-run shall be within 2.0% of the mathematical average of three (3) runs of at least 300 gallons each in duration. The water pump shall deliver water to the pugmill with such volumetric consistency that the deviation for any individual delivery rate check-run shall be within 2.0% of the mathematical average of three (3) runs of at least 300 gallons each in duration.

The emulsion storage located immediately before the emulsion pump shall be equipped with a device, which will automatically shut down the power to the emulsion pump and aggregate belt feeder when the emulsion level is lowered sufficiently to expose the pump suction line.

A temperature-indicating device shall be installed in the emulsion storage tank at the pump suction level. The device shall indicate temperature of the emulsion and shall be accurate to within 5°F.

The maximum temperature of emulsion contained in the mixer-spreader truck emulsion storage tank shall be 120°F.

The belt delivering the aggregate to the pugmill shall be equipped with a device to monitor the depth of the aggregate being delivered to the pugmill. Said device for monitoring the depth of aggregate shall automatically shut down the power to the aggregate belt feeder whenever the depth of the aggregate is less than the target depth of flow. A second device shall be located where it will monitor movement of the aggregate belt by detecting revolutions of the belt feeder. The device for monitoring no flow or belt movement, as the case may be, shall automatically shut down the power to the aggregate belt when the aggregate belt movement is interrupted. This second device will not be required where the aggregate delivery belt is an integral part of its drive chain. To avoid erroneous shutdown by normal fluctuation, a delay of three (3) seconds between sensing and shutdown of the operation will be permitted.

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**10. Protection of Work Materials**

**10.1. Stockpiling Materials:** The contractor shall be fully responsible for the location of, and obtaining permission to use, stockpile sites. The contractor shall make his own arrangements for its use and assume full responsibility for its rental, preparation, maintenance, and cleanup in a manner satisfactory to the City and the property owner. Precautions shall be taken to ensure that stockpiles do not become contaminated with oversized rock, clay, silt, or excessive amounts of moisture. Stockpiles shall be placed in an area that drains readily. Segregation of aggregate will not be permitted. Aggregate samples will be taken from field stockpile locations, prior to any addition of mineral fillers. ***Contractor shall be responsible to verify and secure all necessary approvals, permits and land use approvals prior to commencing work.***

**10.2. Emulsion Storage:** The contractor shall provide suitable storage facilities for the asphalt emulsion so as to prevent water from entering the asphalt. An acceptable heating system shall be provided if necessary to prevent the emulsified asphalt from freezing, but the asphalt shall not be heated to a temperature greater than 120°F.

**11. Quality Control**

Quality Assurance testing and inspection will be provided by the City of Hillsboro. Quality Control will be the Contractor's responsibility. Acceptance samples of the aggregate, asphalt emulsion, and micro-surfacing mixture (taken directly from the mixing unit) shall be taken by the contractor in the presence of the Project Inspector on a random basis with no cost to the City. A minimum of one (1) sample of the aggregate, asphalt emulsion, and micro-surfacing mixture will be taken each day of use. If any changes are made during the day an additional sample of the micro-surfacing mixture will be taken. Testing containers will be provided by the City. These samples will be tested, at the Contractor's expense if the Engineer deems it necessary, based on the finished appearance and/or quality of quantitative measurements made during the proportioning of the micro-surfacing components while mixing and placing. The responsibility for ensuring that the work is constructed in strict conformance with the plans, specifications, and other Contract documents resides solely with the Contractor.

**12. Equipment**

All equipment, tools, and machines used in performance of this work shall be maintained in satisfactory working condition at all times to ensure a high-quality product. The Engineer/Inspector shall stop work if insufficient equipment and tools are not available to properly place the material.

***Descriptive information with photos on the micro-surfacing mixing and applying equipment to be used shall be submitted by the Contractor not more than two days following intent to award of the contract.*** The City will review the descriptive information with photos and will advise the Contractor within 5 days regarding approval. Approval of the equipment will be based on its reliability and capability for completing the work satisfactorily without undue delay.

**12.1. Mixing Equipment:** The machine(s) shall be specifically designed and manufactured to lay micro-surfacing. The micro-surfacing shall be mixed in continuous twin-shaft pugmill mixers of adequate size and power for the type of micro-surfacing to be placed. All indicators required in the section entitled "Proportioning" shall be in working order prior to commencing mixing and spreading operations.

Mixer-spreader trucks shall be equipped to proportion emulsion, water, aggregate, and set-control additives by volume. All rotating and reciprocating equipment on mixer-spreader trucks shall be covered with metal guards. The mixer-spreader truck shall not be operated unless all low-flow and no-flow

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devices and revolution counters are in good working condition and functioning and all metal guards are in place. All indicators by these special provisions shall be visible while walking alongside the mixer-spreader truck.

**A Continuous Machine shall be used on Arterial/Collector streets, and either a Continuous Machine or Truck Mounted Machine shall be used on residential streets based on Engineer's determination. For this contract, all streets receiving micro-surfacing are considered arterial/collector streets and will require the use of a Continuous Machine.** A continuous machine is capable of loading materials while continuing to lay micro-surfacing, thereby minimizing construction joints. The continuous-run machine shall be equipped to provide the operator with full control of the forward and reverse speeds during application. It shall be equipped with opposite-side driver stations to assist in alignment. The self-loading device, opposite-side driver stations, and forward and reverse speed controls shall be of original-equipment-manufacturer design.

Aggregate feeders shall be connected directly to the drive on the emulsion pump. The drive shaft of the aggregate feeder shall be equipped with a revolution counter reading to the nearest one-tenth of a revolution. The machine shall be equipped with a hydraulically controlled steel pugmill gate for positive discharge and/or shutoff operations. Discharge from the pugmill shall be controlled by a chute or other suitable mechanical device.

**12.1.1. Proportioning Devices:** Calibrate and properly mark individual volume or weight controls for proportioning each material to be added to the mix (i.e., aggregate, mineral filler, additive, emulsified asphalt and water). They shall be accessible for ready calibration and so placed that the Engineer may determine the amount of each material used at any time. Instruct the Engineer/Inspector how to calculate the application rate per square yard utilizing the Contractor's proportioning devices.

**12.1.2. Calibration:** Calibrate, in the presence of the Project Inspector, each mixing unit to be used on the Project prior to construction. Previous calibration documentation covering the exact materials to be used may be accepted by the Inspector provided that no more than 60 days have lapsed. The documentation shall include an individual calibration of each material at various settings, which can be related to the machines metering devices. **Any component 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 completed and/or accepted.*

**12.2 Spreading Equipment – Spreader Box:** The micro-surfacing mixture shall be agitated and spread uniformly by means of twin-shafted paddles or spiral augers fixed in the spreader box conforming to the following requirements. The spreader box shall be capable of spreading a traffic lane width up to 14 feet and shall have strips of flexible rubber belting or similar material on each side of the spreader box and in contact with the pavement to positively prevent loss of micro-surfacing from the ends of the box. The micro-surfacing spreader box shall have suitable means provided to side shift the box to compensate for variations in the pavement geometry. Spreader box skids shall be maintained in such a manner as to prevent chatter (wash boarding) in the finished mat.

The spreader box shall have a double strike-off blade design at the rear of the box. The first strike-off blade shall be made of steel or stiff rubber and the second strike-off blade (attached to the first blade) shall be made of a flexible material. Rear flexible strike-off blades shall make close contact with the pavement, and shall be capable of being adjusted to the various crown shapes so as to apply a uniform micro-surfacing coat. A secondary strike-off blade attached to the rear of the spreader box

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(located behind the double strike-off blades at the rear of the spreader box) shall be provided and shall be adjustable. ***It shall be designed, installed and operated such that a uniform texture (free of streaking) is achieved in the finished surface of the micro-surfacing.***

Flexible fabric drags attached to the rear of the spreader box **will not** be allowed. Strike-off blades (rubber) shall be cleaned or changed daily if problems with cleanliness, and longitudinal scouring occur.

**12.3 Spreading Equipment – Wheel Path Depression (Rut) Box:** The wheel path depression box shall be designed as a double chambered box with adjustable screens to regulate depth and shall have a width of between 5-feet and 6-feet. Hydraulic augers set at an angle shall move the mixed material from the rear to the front of the filling chamber. The augers shall push the larger aggregate into the center, deeper section of the wheel path depression and send the fine material toward the edges of the pass to act as a mastic and for feathering down the longitudinal joint along the wheel path.

The micro-surfacing spreader box in use shall be clean and free of micro-surfacing and emulsion, at the start of each work shift.

Micro-surfacing mixture, to be spread in areas inaccessible to the controlled spreader box, may be spread by other methods approved by the Project Engineer.

**12.4 Auxiliary Equipment:** Hand squeegees, hand drags, shovels, an asphalt distributor, and other support and safety equipment shall be provided as necessary to perform the work. Containers shall be required for disposal of waste slurry.

### **13. Construction**

**13.1. Hours of Work:** General hours of work shall be limited to 7:00AM to 5:00PM Monday through Friday, unless otherwise approved by the Project Manager. Under no circumstances will work be allowed on Sundays or Holidays. Work is not permitted near schools at times when students are arriving or departing. Hours of work may also be affected on those roadways abutting other agency roadways. ***Micro-surfacing shall be applied only between the hours of 9:00AM and 3:00PM and must be able to support traffic by 5:00PM.*** Permission to work outside these hours may be granted on a case-by-case basis upon application to the Engineer. The Contractor has full responsibility for confining operations, *including striping*, to these hours and obtaining any needed waivers.

The contractor will also need to schedule work so as not to interfere with the events below, including any event detour routes:

- Tuesday Market – Tuesday afternoon to evening generally located on Main between 1<sup>st</sup> and 4<sup>th</sup> and on 2<sup>nd</sup>/3<sup>rd</sup> Avenues between Washington and Lincoln Street;
- Saturday Market – Saturday mornings generally located on Main between 1<sup>st</sup> and 4<sup>th</sup> and on 2<sup>nd</sup>/3<sup>rd</sup> Avenues between Washington and Lincoln Street;
- Washington County Fair – July 28<sup>th</sup>-31<sup>st</sup> located at the Washington County Fairgrounds;
- 2016 Oregon International Air Show – August 5<sup>th</sup>-7<sup>th</sup> located at the Hillsboro Airport (may affect access around the airport due to sterile corridors for jet teams);
- Celebrate Hillsboro – August 8<sup>th</sup> generally located on Main between 1<sup>st</sup> and 4<sup>th</sup> and on 2<sup>nd</sup>/3<sup>rd</sup> Avenues between Washington and Lincoln Street;
- Tour de Cure – July 30<sup>th</sup> located around Amberglen Park area and Rock Creek Trail;

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- Or any other special events.

**13.2. Weather Limitations:** Do not apply the micro-surfacing if either the pavement or air temperature is below 50°F (10°C) and falling and/or when the weather forecast exceeds 40 percent probability of rainfall. The micro-surfacing may be applied when both the pavement and air temperature are above 45°F (7°C) and rising. Do not apply if there is a danger that the finished product will freeze before 24 hours. Do not apply when weather conditions prolong opening to traffic beyond a reasonable time. Do not apply in the rain. Replace micro-surfacing damaged by rain after application according to the Specifications, and as determined by the Engineer, at no additional cost. Clean the street of all remaining micro-surfacing mix materials prior to re-application.

**13.3. Preparation of Surface:**

**13.3.1. Street Equipment and Procedure:** Immediately prior to applying the micro-surfacing, the existing pavement surface shall be cleared of all loose materials, dirt, grease/oil spots, or other foreign matter such as moss, weeds, etc. Cleaning the streets shall be accomplished by a vacuum sweeper with blowers. Areas inaccessible to the vacuum sweeper shall be cleaned by hand, pressure spray, or other equipment as necessary to thoroughly clean the roadway. If water is used, cracks shall be allowed to dry thoroughly before micro-surfacing. The Inspector shall approve the surface preparation prior to micro-surfacing. No dry aggregate either spilled from the lay-down machine or existing on the road, will be permitted. Finish sweeping no more than 24 hours prior to application of the micro-surfacing. If there is a delay of more than 24 hours between sweeping and micro-surfacing caused by weather conditions or other unforeseen circumstances, re-sweep as determined by the Engineer, at no additional cost to the Agency. Payment for street preparation shall be incidental to the unit prices for micro-surfacing.

**13.3.2. Concrete Surfaces:** The contractor shall be responsible to cover and protect any concrete surfaces to keep them clean from tracking or placement of micro-surfacing material. Care shall be taken to ensure *straight* lines along the edges of the concrete surfaces, without overrun onto the concrete. If any material or tracking occurs on the concrete surfaces, the contractor shall be responsible for the removal of any micro-surfacing on the concrete surface by suitable methods at no additional cost. Hot pressurized water may be used for removing excess micro-surfacing as long as precaution has been taken to not allow waste to enter storm water inlets. Payment for protection of concrete surfaces is considered incidental to the unit prices for micro-surfacing.

**13.3.3. Utility Covers:** The contractor shall be responsible for verifying utility locations in the field and taking necessary precautions to protect all existing utilities. Protect manholes, valve boxes, catch basins, survey monument boxes, drop inlets and other service entrances from the micro-surfacing by a suitable method. Clean these covers as quickly as possible after the application of the micro-surfacing and definitely prior to the final set. If necessary, clean micro-surfacing residual from the interior of the utilities. ***The City reserves the right to stop work if previous streets have not been cleaned and utilities uncovered in a timely manner.*** Payment for the necessary protective measures of utilities/service entrances is considered incidental to the unit prices for micro-surfacing.

**13.3.4. Pavement Markings:** Before micro-surfacing is to be applied to any area, remove all reflector buttons, thermoplastic markings, cold tape markings, and paint markings so that at least 90% of the pavement marking materials are removed by any approved process (i.e.,

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hydro-blasting, grinding, or shot blasting) that leaves no damage to the underlying pavement or a scar depth that is no greater than 1/8" deep.

If the pavement markings are removed using a dry mechanical abrasion process, a positive means to control airborne dust is required with use of a dust collector attached to the removal equipment. Accumulation of heavier debris, accumulated piles of any debris on the surface or from the right-of-way as a result from the removal operation shall be collected and disposed of in accordance with applicable Federal, State, and Local regulations, at no additional cost. If pavement markings are removed using water blasting, the truck mounted water blaster shall be capable of simultaneously vacuuming the spent water and debris as it progresses, leaving the pavement clean.

Temporary markings may need to be installed per Section 17 as determined by the Inspector/Engineer. **Pavement markings shall not be removed more than 7 days in advance of micro-surfacing. Micro-surfacing will be shut down if the pavement markings have not been removed.** Payment for removal of pavement markings is considered incidental.

**13.3.5. Tack Coat:** When micro-surfacing is placed over a brick or Portland cement concrete surface, a highly absorbent asphalt surface, over an asphalt surface where the exposed aggregate has become polished and slick or over milled asphalt, use a tack coat of emulsified asphalt of the same type and grade specified for the micro-surfacing. Consult with the micro-surfacing supplier to determine dilution stability. The tack coat may consist of one part emulsified asphalt to 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 to 0.15 gal/yd<sup>2</sup>. The tack coat shall be allowed to cure sufficiently before the application of micro-surfacing. A tack coat is not required between the leveling/scratch course and the surface course provided the surface course is placed within 30 days of the leveling/scratch course or if the Engineer determines that excessive tracking of material is evident.

**13.4. Leveling (Scratch Course):** When required on the plans, before the final surface course is placed, use preliminary micro-surfacing materials to fill minor ruts, utility cuts, depressions in the existing surface, etc. Conduct leveling/scratch course as directed by the plans and Engineer/Inspector. Construct each leveling/scratch course by utilizing a full width spreader box with a stiff strike-off and applying only what the surface demands for leveling. Open the leveling/scratch course to traffic at least 24 hours prior to the beginning of any surfacing. Ensure all materials, mixture composition, equipment, and construction procedures meet the specifications of this contract.

**13.5. General:** The surface shall be wetted by fogging ahead of the spreader box, if required by local conditions. Apply water used in wetting the surface at such a rate that the entire surface is damp with no apparent flowing water in front of the spreader box. The micro-surfacing mixture shall be of the desired consistency upon leaving the mixer. Do not add additional elements. Carry a sufficient amount of material in all parts of the spreader at all times so that complete coverage is obtained. Overloading of the spreader shall be avoided. Do not allow lumping, balling, or unmixed aggregate in the spreader box.

No streaks, such as those caused by oversized aggregate or micro-surfacing build-up/balls or improper installation of secondary strike-off blades, shall be left in the finished surface. If excess streaking develops, the job will be stopped until the Contractor proves to the Project Engineer that the situation has been corrected. Excessive streaking is defined as more than four (4) drag marks

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greater than one-half (1/2) inch wide and four (4) inches long, or one (1) inch wide and three (3) inches long, in any 30 yd<sup>2</sup> area. No transverse ripples or longitudinal streaks of one-fourth (1/4) inch in depth will be permitted, when measured by placing a ten (10) foot straight edge over the surface.

- 13.6. Application Rate:** The micro-surfacing mixture shall be of proper consistency at all times so as to uniformly spread on the existing surface within the application rate specified herein. When placing full lane width passes, micro-surfacing mixture shall be spread at a rate within 25-30 pounds of dry aggregate per square yard. The exact rate will be determined by the Engineer after taking into account the surface demand of the pavement, the size of the largest particles of aggregate and using the specific weight of the aggregate determined in the mix design. The completed spread will be within 10% of the rate determined by the mix design.

When wheel path depressions have a cross section that is deformed one-half (1/2) inch or more, the individual wheel paths must first be filled utilizing a wheel path depression box meeting the requirements of these special provisions. Filling of wheel path depressions shall be accomplished using Type III aggregate. Wheel path depression spread rates will vary with depression depth. Maximum single application for wheel path depressions shall be 1½ inches. Greater depth may require multiple applications in each depression.

Wheel path depression repair shall be constructed with a slight crown to permit initial traffic compaction of the micro-surfacing. At least 12 hours of traffic compaction shall be allowed on freshly filled wheel path depressions before additional lifts are applied as surface courses.

***The contractor shall supply a summary of the aggregate counter, oil and application rate used each day to the Engineer on the project.***

- 13.7. Joints and Lines:** Longitudinal joints shall correspond with the ***edges of traffic lanes***. The Project Engineer may permit other patterns of longitudinal joints, if such patterns will not adversely affect the quality of the finished product, as determined by the Engineer. Construct the flow line at curbs to allow storm drainage flow to catch basins without bonding along the curb line. In the case of a concrete gutter, cover the gutter line joint with the micro-surfacing, but do not overlap onto the gutter. Remove any overlap, as determined by the Engineer, at no additional cost.

Longitudinal joints common to two driving lanes shall be butt joints with overlaps not to exceed three (3) inches. Building paper shall be placed at transverse joints, over previously placed micro-surfacing, or other suitable methods, approved by the Engineer, used to avoid double placement of micro-surfacing. Hand tools shall be available in order to remove spillage. Excess buildup, uncovered areas, ridges, or bumps in the finished surface shall not be permitted. ***Care shall be taken near sidewalk ramps to ensure a smooth transition free of trip hazards.***

Care shall be taken to ensure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide a good appearance. If necessary, a suitable material will be used to mask off the end of streets to provide straight lines. Edge lines shall not vary by more than ±2 inches horizontal variance in any 96 feet of length.

- 13.8. Mix Stability:** The micro-surfacing shall possess sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture shall be uniform and homogeneous during and following mixing and spreading. It shall be free of excess water and emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate. Under no

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circumstances shall water be sprayed directly into the lay-down box while laying micro-surfacing material.

**13.9. Handwork:** Areas which cannot be reached with the mixing machine shall be surfaced using approved hand squeegees to provide complete and uniform coverage. Limit handwork at the beginning and end of the panels to prevent segregation of the aggregate from the emulsion. If necessary, the area to be hand worked shall be lightly dampened prior to mix placement. Care shall be exercised to leave no unsightly appearance and/or defects in the finished product from handwork. The same type finish as applied by the spreader box shall be required.

**13.10. Curing:** The rate of curing of the micro-surfacing shall be such that a street may be opened to traffic within one (1) hour after application without tracking or damage to the surface. Adequate means shall be provided to protect the micro-surfacing from damage by traffic until such time that the mixture had cured sufficiently so that the micro-surfacing will not adhere to and be picked up by the tires of vehicles. The street will be opened to traffic only when approved by the Inspector. The Contractor will be responsible for any damage to the micro-surfacing due to traffic or other, prior to specific notice to open a particular street. Repair all damage to the micro-surfacing, to the satisfaction of the Engineer, at no additional cost to the Agency.

**13.11. Dust Control:** The contractor shall assume all responsibility for dust control and shall furnish labor and materials to prevent the creation of dust damage and nuisance to persons and property. Any claim resulting wherefrom shall be the responsibility of the contractor. Dust control shall be considered incidental to the unit prices for micro-surfacing.

**13.12. Patching and Correction of Defects:** Defects such as raveling, lack of uniformity, or other imperfections caused by faulty workmanship shall be corrected and new work shall not be started until such defects have been remedied.

All improper workmanship and defective materials resulting from overheating, improper handling or application, shall be removed from the roadway by the contractor and be replaced with approved materials and workmanship at no expense to the contracting agency. The area of the repair shall be approved by the Engineer.

**13.13. Cleanup:** The contractor shall be fully responsible for maintenance and clean up of excess aggregate materials and emulsion from streets, driveways, sidewalks, curbs, gutters, manholes, catch basins, water valves, etc. within 48 hours after application of micro-surfacing. Payment for cleanup will be included under the lump sum item "Move in, Bond, Insurance, and Clean-Up."

**14. Test Strip**

The Contractor shall construct a test strip *a minimum of 24 hours prior to start of any work* to be evaluated by the Engineer. The test strip shall be 500 feet to 750 feet long and shall consist of all the application courses specified, and shall be constructed at the same time of day or night that the full production will be applied. The test strip may be constructed in two days or nights when multiple course applications are specified. The set time shall be 10 minutes, with controlled cross traffic and resist deformation throughout the entire test strip. Ensure that the micro-surfacing test strip is capable of carrying normal traffic within one (1) hour after application without any damage occurring.

The Engineer will evaluate the completed test strip after 24 hours of traffic to determine if the mix design and placement procedures are acceptable. An additional 24 hours may be required when multiple courses

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are placed. Full production may begin after the Engineer accepts the test section. If the mix design or the placement procedures are determined by the Engineer to be unacceptable, the test strip shall be rejected, the Contractor shall make modifications and a new test strip shall be constructed. Test strips which have been rejected by the Engineer shall be paid for by the Contractor and shall be considered part of the contract work. If ordered by the Engineer, test strips rejected shall be removed and shall be at the Contractor's expense. The Engineer will determine how many test strips will be allowed.

**15. Measurement and Payment**

The accepted quantities of micro-surfacing will be paid for at the Contract unit price per square yard for the item "Street Preparation and Application of Type III Micro-Surfacing". Payment will be payment in full for furnishing and placing all preparation; mixing and applying these materials; and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified herein.

**16. Striping, Marking, and Reflectorization**

All stop bars, crosswalks and special markings shall be replaced at original locations. ***The contractor is responsible for pre-marking replacement locations on all streets (striping layout).*** The contractor shall notify Brad Eckland (503-615-6562), Hillsboro's Assistant Public Works Superintendent or designee a minimum of **48 hours** for verifying layout prior to installing any material or for any questions on re-establishing marking locations. The contractor will need to contact the designated City of Oregon City representative for their approval of striping layout on their project. All long lines shall be spray or ribbon liquid thermoplastic at 90 mils thick and all legends and transverse markings high skid pre-formed fused thermoplastic at 90 mils thick unless otherwise indicated on the bid sheet.

The contractor shall provide and maintain temporary pavement markings in accordance with the MUTCD Part VI for the duration of the project. Temporary pavement markings, most often reflective tabs or reflective foil back tape, will be placed every one hundred (100) feet on the fog line, every forty (40) feet on the center line, and every twenty (20) feet on centerline and lane lines at intersections and in some cases double striping maybe required. The reflective foil back tape shall be used to mark out stop bars, crosswalks, and directional arrows where needed.

Consideration will be given to installing the temporary tabs prior to placement of material to use as layout guides. However, care will be taken so the tabs do not get pulled off the roadway by equipment and become a cause of streaking or other issues. The tabs will need to be clean of material so that they are visible after placement of micro-surfacing. The City retains the right to require removal of the tabs prior to placement of material if problems arise.

The temporary markings shall match the existing markings and are installed to help guide motorist and pedestrians until the permanent markings can be installed. ***All temporary striping/markings shall be removed at the time that the permanent striping is being installed. If temporary tabs are used, the contractor shall cut the tabs to remove. Pulling of the tabs is prohibited as it causes damage to the freshly laid material.*** Temporary pavement markings with placing and maintaining shall be considered incidental to the project.

The roadway shall be swept clean prior to placement of permanent pavement markings. The sweeping shall be considered incidental and included in the appropriate bid item. The contractor shall replace or install all crosswalks, stop bars, turn arrows, bicycle symbols, yellow centerline, white fog line/bike lane, storage lines, parking tees or lines, ADA accessible parking stall symbols, two-way and one-way-reflective raised pavement markers. ***Permanent pavement markings shall be reinstalled no sooner than 7 days and no later than 14 days after micro-surfacing placement.***

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The comments on the spreadsheets list the stop bars and crosswalks, but the quantity is under the 12" white line item.

**17. Coordination**

The contractor will need to coordinate micro-surfacing on the following. Schedules will be forthcoming once obtained.

- NE Grant Street with the Slurry Seal project on NE 4<sup>th</sup> Avenue.
- NE 32<sup>nd</sup> Avenue with the Slurry Seal project on NE Lincoln Street.
- SE Rood Bridge Road with the Slurry Seal project on SE Creek Court.

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**1. Time of Construction**

Work on this contract may not commence until July 1, 2016. All work contemplated in this contract shall be completed by September 30, 2016. ***All work on SE Walnut Street, NE 9<sup>th</sup> Avenue, and NE Lincoln Street needs to be completed by September 2, 2016.***

**2. Preconstruction Conference**

After the execution of the contract, but prior to the notice to proceed, a pre-construction conference between the contractor, all subcontractors, and the City shall be held at a mutually acceptable time at the City of Hillsboro Civic Center (150 E Main Street, Fourth Floor, Hillsboro, OR 97123). The contractor shall be represented, at a minimum, by a principle of the firm and the superintendent of the project. ***The contractor shall provide the following for the City Engineer's approval prior to/at the preconstruction conference:***

- a. Preliminary work schedule. At a minimum, the work schedule shall include the locations, ramp/concrete work, grinding, and overlay with striping.
- b. Traffic control plans.
- c. Tack coat submittal.
- d. List of sources of materials with certificate of compliance and mix design.
- e. Concrete mix submittal.

**3. Scope**

This schedule consists of furnishing all labor and materials necessary to remove and replace defective pavement with asphalt concrete, upgrading sidewalk ramps, cold planning/grinding, overlaying streets with asphalt concrete, and striping.

**4. Areas of Work**

Areas of work are shown on the enclosed maps, spreadsheets, and drawings included in this document.

**5. Hours of Work**

General hours of work shall be limited to 7:00AM to 5:00PM Monday through Friday, unless otherwise approved by the Project Manager. ***Grinding and paving work shall only be allowed between the hours of 8:00AM and 5:00PM.*** Under no circumstances will work be allowed on Sundays or Holidays. Work on SE Walnut Street shall be limited to 9:00AM to 4:00PM Monday through Friday. ***Work will not be permitted near schools at times when students are arriving or departing.*** Hours of work may be affected by permit requirements for those roadways abutting other agency roadways. Permission to work outside these hours may be granted on a case-by-case basis upon application to the Engineer. The Contractor has full responsibility for confining operations to these hours and obtaining any needed waivers.

The contractor will also need to schedule work so as not to interfere with the events below, including any event detour routes:

- Tuesday Market – Tuesday afternoon to evening generally located on Main between 1<sup>st</sup> and 4<sup>th</sup> and on 2<sup>nd</sup>/3<sup>rd</sup> Avenues between Washington and Lincoln Street;
- Saturday Market – Saturday mornings generally located on Main between 1<sup>st</sup> and 4<sup>th</sup> and on 2<sup>nd</sup>/3<sup>rd</sup> Avenues between Washington and Lincoln Street;
- Washington County Fair – July 28<sup>th</sup>-31<sup>st</sup> located at the Washington County Fairgrounds;
- 2016 Oregon International Air Show – August 5<sup>th</sup>-7<sup>th</sup> located at the Hillsboro Airport (may affect access around the airport due to sterile corridors for jet teams);
- Celebrate Hillsboro – July 16<sup>th</sup> generally located on Main between 1<sup>st</sup> and 4<sup>th</sup> and on 2<sup>nd</sup>/3<sup>rd</sup> Avenues between Washington and Lincoln Street;
- Tour de Cure – July 30<sup>th</sup> located around Amberglen Park area and Rock Creek Trail;
- Or any other special events.

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**6. Coordination**

The contractor will need to coordinate the Overlay and sidewalk ramp upgrades on SE Drake Street with the Schedule "C": Slurry Seal project due to abutting work. Ideally would want this work completed prior to slurry seal.

SE Drake Street has Century High School, which the contractor will need to coordinate with any activities at the school grounds.

NE 9<sup>th</sup> Avenue and NE Lincoln Street has Lincoln Street Elementary School, which the contractor will need to coordinate with any activities at the school grounds.

SE Drake Street has several dead end streets and apartment complexes that access SE Drake Street. The contractor will need to make sure to communicate with all residents and maintain necessary access, including emergency access.

The area of SE 49<sup>th</sup> Court only has access in/out off SE Brookwood Avenue. The contractor will need to make sure to communicate with all residents and maintain necessary access, including emergency access.

**7. Traffic Control and Public Notification**

The contractor shall provide adequate signing and Oregon certified flaggers to ensure the work zone is properly identified in compliance with the *Manual of Uniform Traffic Control Devices*, 2009 Edition (MUTCD) and the *Oregon Temporary Traffic Control Handbook*, December 2011 (OTTCH).

All Oregon certified flaggers shall have:

- a. The mental and physical ability to provide timely, clear, and positive guidance.
- b. A sense of responsibility for safety of public and work crew.
- c. A neat appearance.
- d. A courteous but firm manner.
- e. Completed an approved work zone traffic control course within the past three (3) years and be able to provide evidence of completion to the Project Inspector upon request.
- f. Two-way radios with extra batteries.
- g. Shall not use personal cell phones while working on the job site.
- h. Shall be able to communicate effectively with the general public, Contractor, Project Inspector.

***Detailed traffic control plans shall be supplied to the Engineer at the preconstruction meeting for each project site.*** The plans shall include, but not be limited to all construction signing, flagger locations, types and locations of traffic control devices, and construction phasing, method for maintaining traffic signal functions, detours, and accommodations for pedestrian, bicycle, and transit facilities. Roadways shall remain open to traffic flow unless otherwise approved in writing by the Engineer. No work can commence until the traffic control plans have been approved.

The Contractor shall erect and maintain all construction signs, warning signs, detour signs, and other traffic control devices necessary to warn and protect the public at all times from injury or damage as a result of the Contractor's operations. No work shall be done on or adjacent to any traveled way until all necessary signs and traffic control devices are in place.

SE Walnut Street (at SE 10<sup>th</sup> Avenue) abuts Oregon Department of Transportation (ODOT) roadway. The contractor shall coordinate traffic control and obtain any necessary permits through ODOT by contacting Jim Nelson at 971-673-2942 or [james.a.nelson@odot.state.or.us](mailto:james.a.nelson@odot.state.or.us).

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NE Lincoln Street (at Cornell Road) and SE Thrush Avenue (at River Road) abut Washington County roadways. The contractor shall coordinate traffic control and obtain any necessary permits through Washington County by contacting Aaron Clodfelter at 503-846-7632 or [Aaron.Clodfelter@co.washington.or.us](mailto:Aaron.Clodfelter@co.washington.or.us). WASHCO's "General Construction/Signs" application for the right-of-way permit can be found at [www.co.washington.or.us/LUT/Divisions/Operations/Permits/row-permits.cfm](http://www.co.washington.or.us/LUT/Divisions/Operations/Permits/row-permits.cfm).

Any permits required by ODOT or Washington County to complete the work are the responsibility of the contractor. The contractor shall submit for permits a minimum of one week prior to work beginning for review. A copy of the permits shall be submitted to the City's Engineer prior to beginning work. If a permit is not required, the contractor will submit written documentation from ODOT or Washington County stating the permit is not required. Permits shall be considered incidental to the traffic control bid item.

Thirty-six (36) hours prior to starting work on any given group of streets, the contractor is responsible for notifying the Washington County Consolidated Communications Agency (503-629-0111) of any traffic impairment. Notification shall include the exact location of work and the times when work will be performed, stating time of day and the date of work. A means of emergency access will be maintained at all times in all work zones.

The contractor shall place Portable Changeable Message Signs (PCMS) a minimum of one (1) week prior to work on SE Walnut Street and SE Drake Street. PCMS locations shall not block travel lanes, bike lanes, or sidewalks and should be located within 500 feet of the work zone. The following messages shall be displayed on the PCMS: "ROAD WORK", "M/DD TO M/DD" (dates), "EXPECT DELAYS".

The City shall provide the contractor "NO PARKING" signs for use in posting streets in advance of the Alley Overlays, AC Replacements, and Overlays. Streets may be posted "NO PARKING" between the hours of **7:00 AM and 5:00PM**. Parking prohibitions proposed outside of the listed time frame, must have prior approval, in writing, from the Engineer.

Signs should be placed no less than thirty-six (36) hours or no more than seventy-two (72) hours prior to commencement of work. These "NO PARKING" signs shall be mounted by the contractor on a suitable pedestal, e.g. tripod, barricade, etc., provided by the contractor. Signs shall be posted every 100 feet on both sides of the street affected. At the completion of all work, all used "NO PARKING" signs shall be appropriately disposed of by the contractor.

Because these parking restrictions are an inconvenience to residents and businesses, and in order to ensure voluntary compliance, should it be necessary to reschedule work due to inclement weather or other uncontrollable circumstances, signing shall be corrected to reflect revised dates or removed in accordance with the minimum and maximum posting time limits as outlined in the previous paragraph. At the completion of all work, all *used* "NO PARKING" signs shall be appropriately disposed of by the contractor. At the end of the project, any *unused* "NO PARKING" signs shall be returned to the Inspector/City.

For streets and alleys that will be overlaid, the City shall also provide the contractor with door-knob notices in sufficient quantities which will further serve to advise the general public of the pending parking restrictions and planned work. These notices will also provide general information. ***The notices shall be left on or at the front door of each dwelling, apartment unit, or tenant of a commercial unit abutting any of the streets on the list.*** The notices will also need to be placed on any front door where the only access to the roadway is being affected (i.e. a cul-de-sac, alley, private street, etc. that enters onto a roadway being overlaid). This should be done at the same time the "NO PARKING" signs are first placed in the area. Each day, prior to commencement of work, the contractor shall verbally contact, whenever possible, the residents to notify them of impending work. Notification shall be given enough in

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advance to allow residents to move personal vehicles prior to work beginning. If work is rescheduled for any reason, the "NO PARKING" signs and notifications need to be appropriately corrected in a timely manner to reflect the change. At the completion of all work, all *used* door hangers shall be appropriately disposed of by the contractor. At the end of the project, any *unused* door hangers shall be returned to the Inspector/City.

The contractor shall log the posting of the "NO PARKING" signs and door hangers in order for towing to occur for overlays. The log will be submitted on a weekly basis to the Inspector and contain the following minimum information:

- Street Name
- Location (From and To)
- Date Posted
- Time Posted
- Posted By

Payment for traffic control shall be lump sum and shall include all labor, permits, equipment, and materials necessary to coordinate and comply with current MUTCD, OTTCH and City standards.

**8. Hot Mix Asphalt Concrete (HMAC)**

**8.1. Materials:**

- 8.1.1. General:** Only materials conforming to the specifications shall be incorporated in the work. The materials shall be manufactured, handled, and used in a workmanlike manner. All asphaltic concrete to be used in this project shall comply with Oregon's Standard Specifications for Construction (2008), Section 00745 – Hot Mixed Asphalt Concrete (HMAC) and contained in subsections 00745.10 to 00745.12 **and including AASHTO T112 (test for friable particles).**
- 8.1.2. Binder:** The asphalt binder shall be PG 64-22 or an approved alternative. Payment for the binder shall be considered incidental to the unit price of A.C.
- 8.1.3. Aggregates:** The aggregates used in the surface mixes shall have a maximum aggregate size of 0.5 inches and shall meet the gradations for dense graded mixes given in Section 00745.12 of the Oregon Standard Specifications for Construction. The aggregate material shall consist of sound, tough, durable particles, free from adherent films of matter that would prevent thorough coating and bonding with the bituminous material and be free from clay balls, organic matter, man-made debris, and other deleterious substances. Deleterious substances are defined as clay/silt lumps, shale, soft, friable, or laminated particles, vegetable/organic matter, or other objectionable material. ***Each aggregate size group shall have no more than 0.5% clay lumps and friable particles as determined by AASHTO T112.***
- 8.1.4. Mix Design:** The mix design shall conform to the general requirements given in Section 00745 referenced above. The mix design shall be performed by a certified laboratory technician.
- 8.1.5. Mixing and Proportioning:** Asphalt concrete shall be hot plant mixed and shall be furnished from the plant at a temperature not to exceed 325° F (163° C). The mixing temperature shall be selected based on the temperature-viscosity of the binder and shall be included in the mix design.

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The Contractor may use warm mix asphalt concrete (WMA) as a substitute for HMA on all paving as an option upon approval by the Engineer. WMA will be subject to all requirements for HMA in Section 00745, except as modified in these special provisions.

**00745.01 Abbreviations:** Add WMA – Warm Mix Asphalt Concrete

**00745.02 Definitions:** Add Warm Mix Asphalt Concrete (WMA) – An asphalt concrete mix following all the requirements of HMA except that through the use of additives or processes it is mixed and placed at lower temperatures. The term WMA shall be used interchangeably with HMA except in subsection 00745.49(a-1).

**00745.11(b) Asphalt Cement Additives:** Add the following to the end of this subsection:

For Warm Mix Asphalt Concrete (WMA) the additives or processes listed on the following table, or approved equal, shall be used on this contract.

<b>WMA Technology</b>	<b>Process Type</b>	<b>Supplier</b>
Advera (Synthetic Zeolite)	Foaming Process	PQ Corporation
Aspha-Min (Synthetic Zeolite)	Foaming Process	Aspha-Min
Evotherm	Chemical Additive	Mead/Westvaco Asphalt Innovations
Redi-Set WMX	Chemical Additive	Akzo Nobel Surfactants, Inc.
Sasobit	Organic Additive	Sasol Wax Americas, Inc.
Plant Foaming Equipment	Foaming Process	Various Suppliers

**00745.43(b) Temperatures:** Add the following – For WMA, complete breakdown and intermediate compaction before the WMA temperature drops below the threshold recommended by the additive supplier or equipment manufacturer. The temperature thresholds during the process and for placement shall be provided as part of the mix design submittal if using WMA for approval.

**8.1.6. Tack Coat:** The tack coat shall conform to Section 00730 Asphalt Tack Coat of the Oregon Standard Specifications of Construction and the manufacturer's specifications. Manufacturer's Specifications shall be provided to the City at the preconstruction conference.

**8.1.7. Submittals:** The Contractor shall furnish a list of all materials, including the AC mix design along with laboratory tests and certificates of compliance. Submittals must be submitted no later than the preconstruction conference. All material submittals must reference compliance with the requirements of these specifications. The contractor shall be responsible for all costs associated with preparing submittals, laboratory testing, and providing the required mix design.

***The mix design report shall be within 6 months of the project start date and from the same material sources as used on this project. The Contractor will have their asphalt supplier provide mix samples for oven calibration to the City's tester at no cost.***

**8.1.8. Sampling & Testing:** Sampling and testing shall comply with Oregon's Standard Specifications for Construction, Section 00745. The City will obtain daily samples of materials to be used in the work and test such samples for the purpose of verifying the job mix gradation and asphalt content. Normally the sampling point will be the same as for process control (QC) or the point of manufacture. The owner shall also have the right to inspect sources of materials to be used. All sampling and testing will be performed by certified laboratory technicians including those tests performed by or for the owner (QA).

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If the testing results show the material out of specification, the backup sample will be tested. The City and contractor will agree to either have the City's tester conduct the retest or have the retest conducted by a third party tester. If a third party tester is chosen, the contractor will have their asphalt supplier provide mix samples for oven calibration at no cost. The costs associated with the testing of the backup sample will be split between the City and the contractor. If the backup sample test results are within specification, the material will be accepted and the full bid price will be paid. If the backup sample is out of specification, it will be the expense and responsibility of the contractor to resolve and repair any areas out of specification, including and up to removal and replacement.

**8.2. Construction:**

**8.2.1. General:** Asphalt concrete shall be delivered in a thoroughly blended condition and shall be spread by an asphalt paving machine in such a manner as to avoid segregation during the placing operations. Areas inaccessible to spreading and compaction equipment may be paved by such methods as may be approved by the City. All mixtures shall be spread at a temperature not less than 275° F (135° C), and not greater than 325° F (163° C). Initial rolling shall be performed immediately after placement. Pneumatic rollers will not be allowed. Specific compaction temperatures shall be determined using the temperature-viscosity curve of the binder provided in the mix design. Asphalt concrete should not be placed when the atmospheric temperature is below 50° F (10° C) and/or raining.

**8.2.2. Load Restrictions for Construction Vehicles and Equipment:** The contractor shall not use vehicles with rear drop axles in which raising the drop axle would cause the vehicle to exceed legal load limits.

**8.2.3. Overlay Cleaning:** All surfaces to be overlaid shall be swept clean by the contractor no more than 24 hours in advance of paving. The contractor shall remove vegetation prior to washing or sweeping. The contractor shall use vacuum street sweepers that are self-propelled equipment with rotating brooms and brushes that are capable of loosening dirt and debris from the road surface. In those areas where dirt and debris cannot be removed with sweeping alone, washing of the surface will be required.

Water used shall be from any domestic supply approved by the City. When water is obtained from the City fire hydrants, the contractor shall obtain all necessary bulk water permits and meters from the Water Department. Cost of the permit and water shall be considered incidental to the unit bid prices. For more information regarding necessary permits and fees call the Water Department at 503-615-6700.

**8.2.4. Tack Coat:** Treat all paved surfaces on and against which HMAC is to be placed with an asphalt tack coat according to Oregon's Standard Specifications for Construction, Section 00730 – Emulsified Asphalt Tack Coat, including all vertical surfaces of existing pavement, curbs, gutters, and construction joints. Shields protecting curb faces shall be provided and used during tacking of curb faces. Immediately before applying the tack coat, clean and dry the surface to be tacked. Remove all material, loose or otherwise, that will reduce adhesion of the tack by brooming, flushing with water or other approved methods.

When pavement reinforcement fabric is to be used, application of tack coating will be modified to comply with the fabric manufacturer's specifications.

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In all instances, tack coat must be allowed to cure or "break" prior to the application of any fabric or asphaltic concrete. Payment for tack coat will be considered incidental to the unit price for asphaltic concrete.

**8.2.5. Pre-Leveling/Base Lift:** Those areas designated by the mapbook/Inspector as requiring pre-leveling, such as depressions, ruts, holes, or uneven surfaces, shall be brought to grade after cleaning and tack coating, prior to overlaying. These areas shall then receive a surface coating of tack prior to overlay. Payment for pre-level or base lifts will be on a per ton basis, per lift price of the individual project being overlaid (i.e. if the project calls for a 3" Level 2, 1/2" dense graded overlay the pre-level/base lift will be paid under that particular bid item and if the project calls for a 2" Level 3, 1/2" dense graded overlay the pre-level/base lift will be paid under that particular bid item, etc.) with all other costs incidental. Only work that is approved by the Engineer will be subject to payment.

**8.3. Workmanship:**

**8.3.1. Compaction:** For normal pavements, asphalt concrete shall be compacted to an average relative density of 92.0 percent of the maximum theoretical unit weight (Rice Gravity) for first lift, single lifts and all other applications. The theoretical maximum unit weight will be determined from production samples of the asphalt concrete on the project. Tests will be run at random locations to verify compaction. Compaction of the mix will be determined by use of a nuclear density gauge. The contractor will provide density testing for the completed sub-lots and will submit results to the Project Manager by the end of the working shift. The City's tester will perform additional random density testing at a minimum of 5 shots per roadway for acceptance.

The contractor shall notify the Engineer/Inspector immediately when the average density does not meet 92% or exceeds 95%. An investigation will be initiated to determine if the results indicate that a problem with the mix is developing before laying any more material. Take all actions necessary to resolve compaction problems. Do not resume paving until allowed by the Engineer.

Take immediate corrective measures when the specified compaction density is not being achieved. At the Engineer's discretion, corrective measures may include removing and replacing areas that fail to comply with compaction requirements.

The contractor shall provide sufficient personnel and manual compacting equipment to perform all handwork compaction in unison with the initial compaction rolling. If the handwork compaction begins to lag for whatever reason, the contractor shall cease paving operations until the handwork compaction is caught up with the rest of the paving operation. Finish rolling shall be started after the pavement has cooled sufficiently to permit removal of the roller marks and shall be continued as necessary to produce a pavement free of indentations, marks, or ridges.

**8.3.2. Thickness:** The compacted total thickness of any course, other than leveling courses, shall have an average thickness at least equaling the designated thickness. The minimum thickness at any location shall not be less than the specified thickness minus 1/4 inch (6.5 mm)

**8.3.3. Finished Surface:** The completed surface shall be thoroughly compacted, smooth, and free from ruts, humps, depressions, irregularities, rock pockets, excessive course aggregate, and roller marks.

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Any ridges, indentations, or other objectionable marks left in the surface of the asphalt concrete, shall be eliminated by rolling or other means. The use of any equipment that leaves ridges, indentations, or other objectionable marks in the asphalt concrete shall be discontinued.

Areas of handwork at joints and miscellaneous structures shall match the smooth surface texture of all other areas of the new pavement. ***Care shall be taken not to broadcast at longitudinal joints.*** Course aggregate removed during raking shall not be returned to the finished mat surface. Cold course aggregate shall not be reused, but discarded. Finished areas of asphalt concrete adjacent to concrete drainage facilities shall be placed in such a manner that the finished surface is no greater than ¼ inch (65 mm) higher than and no lower than flush with the facility.

Take immediate corrective measures when segregation or non-uniform surface texture is occurring in the finished mat. If segregation continues to occur, stop production until a plan for providing uniform surface texture is approved by the Engineer.

Remove and replace any HMAC that is loose, broken, mixed with dirt, shows visually too much or too little asphalt, or is defective in any way.

Upon completion of paving, all joints shall be sealed using a combination of approved emulsified asphalt and sand with a minimum of 4.0 inches overlap of the two surfaces. The newly paved surface will be protected from traffic until it has sufficiently cooled and has been properly cured.

**8.3.4. Roof Drains:** The contractor shall keep all curb and/or edge of road drains (roof drains) clear of HMAC.

**8.3.5. Payment:** Payment for asphalt shall be based on a unit price per ton for furnishing and placing all materials, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified.

## **9. Grinding**

**9.1. Full Width:** For the streets specified, full width grinding of existing asphalt for the full street width shall be done to the depth specified in the bid. Any asphaltic concrete left in place next to the curb or curb and gutter that cannot be removed by the grinder shall be removed by other means. All full width grinding shall be completed no more than **72 hours** in advance of overlay. Payment for this work shall be by the square yard under the specified depths. ***All grind butt joints will be saw cut for an even vertical edge for the full width of street.*** Cost of saw cutting shall be considered incidental to the "2 inch Depth Grind" and "3 inch Depth Grind" bid item.

**9.2. Temporary Wedges:** At the end of work day at locations where drop offs exceed 1 inch, temporary wedges which can be readily removed prior to continuation of work shall be placed at vehicle crossings. The wedges shall be no less than 3.0 feet in width and shall be constructed with regard to the posted speed limits for the area. Appropriate signing indicating "Bump" shall be maintained at the location of the wedge(s) until work resumes. Payment for this work shall be incidental to the unit prices for grinding and the signage included in the "Traffic Control" bid item.

**9.3. Curb Inlets and Catch Basins:** The contractor shall be responsible for protecting all curb inlets and catch basin from debris during the grinding process in accordance with Clean Water Services standards. The contractor shall also be responsible for removing any grinding debris that enters curb inlets or catch basins. Payment for this work shall be incidental to the unit prices for grinding.

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**10. Asphalt Concrete Removal (Excavation) and Preparation**

After all required pavement grinding is complete; areas of defective pavement shall be designated and marked by the Inspector for replacement. These areas shall be saw cut by the contractor in rectangular sections. Saw cuts shall be made 1.0 foot beyond the damaged pavement area. Slurry from saw cutting shall be contained, removed from the site, and shall not come in contact with any wetland, waterway, or catch basins. Cost of saw cutting shall be considered incidental to the "Asphalt Concrete Removal and Preparation" bid item. Excavation shall consist of the removal of all defective bituminous material and any underlying concrete pavement, if present.

Edge cracking or damage associated with removal shall be repaired at the contractor's expense. All materials removed by the contractor shall become the property of the contractor and must be removed from the job site and disposed of in a legal manner. No provisions for on-site storage of spoils will be made.

Prior to the street overlay, defective pavement shall be replaced with a minimum of 5" of Level 2, 1/2" dense graded asphalt or match the existing asphalt surface, whichever is greater. The depths for the AC Replacement areas will also be replaced with a minimum depth of 5" of Level 2, 1/2" dense graded asphalt or match the existing asphalt surface, whichever is greater. Asphalt replacement shall be subject to the compaction requirements in Section 8.3.1. In areas where defective pavement has been replaced, the finished surface shall match the line, grade, and elevation of the existing surface. Where the width of the replacement section exceeds 4.5 feet, an approved strike off assembly shall be used and shall be capable of providing a uniform surface, free of defects or irregularities.

**11. Base Preparation**

Base preparation will be required after grinding as directed by the Engineer/Inspector. Once the grinding is complete the contractor will re-grade and roll the area to compact any loose material and obtain a level surface prior to placing the asphalt concrete lift. Payment will be considered incidental and included in the appropriate bid item.

**12. Surveying**

The City Engineering Division will provide all construction surveying required for this project. A minimum of **48 hours** notice shall be provided for any staking required. ***A minimum of one (1) week notice shall be provided for any marking of limits within the alleys.*** Contact Mike Filicky (503-681-6294), the City Surveyor for all construction survey issues.

**13. Subgrade Stabilization**

Over excavation as directed by the Engineer/Inspector is due to failures of existing base and subgrade. This work will require utility locates, which is the responsibility of the contractor. Telephone numbers for utility notification:

Oregon Utility Notification Center  
City of Hillsboro

1-800-332-2344 or 503-232-1987  
503-615-6509 (48 Hours notice)

**ATTENTION:** Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center.

Removal and disposal of excavated material shall include earth, organic material, concrete, rock, asphalt, metal, and pipe to the specified depth or as directed by the Engineer in the field. Excavation to subgrade

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must be made in a manner that will not damage the subgrade. No vehicles, including construction equipment shall be allowed to drive on the exposed subgrade. ***Base rock shall be installed as quickly as possible to facilitate the reopening of the roadway to traffic.*** Any damage to subgrade caused by the contractor shall be repaired at the contractor's expense. Subgrade testing will not be required.

All excavated material shall become the property of the contractor. The cost of hauling and dumping shall be considered incidental and included in the appropriate bid item. The contractor shall not stockpile on the roadway or within the public right-of-way at any time during construction. All material shall be disposed of off-site in a legal manner.

Place Mirafi 500x (or approved equal) woven subgrade geotextile and backfill according to Oregon's Standard Specifications for Construction, Section 00331 with 1" minus base rock conforming to Section 2630 at the specified compacted depth or as directed by the Engineer.

This work, as directed by the Engineer in the field, shall be constructed measured and paid by the cubic yard measured in place according to Oregon's Standard Specifications for Construction, Section 00331 "Subgrade Stabilization" bid item, and shall include all materials including geotextile, backfill, equipment, labor, and incidentals needed to complete the work.

**14. Adjustment of Structures**

The contractor shall be responsible for adjusting all manholes, survey monument boxes, water valve boxes, catch basins, cleanouts, or other structures which will not otherwise be to finished grade upon completion of paving. Payment for the adjustment of these structures will be on a per unit basis. There are survey pins/spikes that will require the installation of a new survey monument box. Detail drawing attached. Payment for the new structures will be on a per unit basis.

For those structures owned and maintained by utility companies, the contractor will be responsible for coordinating the adjustment with the appropriate company. Adjustment of utility company structures will be considered incidental to the unit bid prices.

The contractor shall be responsible for adjusting all catch basin grates which, after overlay, would result in a catch basin depth of over two (2) inches from street grade. The contractor may taper the edges of the asphalt overlay to all catch basins in circumstances where the catch basin depth will not exceed two (2) inches.

For sewer and storm system manholes, adjustment will be made using concrete grade adjustment rings and a high strength non-shrink quick set grouting. The grout shall be capable of setting in 15 minutes and ready for traffic in an hour. Any manholes with existing steel/iron adjustment rings shall have those rings removed and replaced with concrete grade adjustment rings and a high strength non-shrink quick set grouting.

The cleanouts may be raised to grade physically or with steel/iron riser rings.

Valve boxes shall not transmit shock or stress to the valve and shall be centered and plumb over the wrench nut of the valve, with the box cover flush with the surface of the finished pavement or such other level as may be directed. The contractor shall adjust existing valve boxes to finish grade as required for paving. Existing valve boxes that cannot be adjusted shall be removed. The contractor shall obtain a replacement valve box provided by the City of Hillsboro Water Department and install as required by contacting Water Operations at 503-615-6700. If the top of the valve nut is more than 4 feet below finished grade, contact the City of Hillsboro Water Department Operations to install a valve stem extension.

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**15. Reconstruct Existing Manhole Frame**

Manholes as directed by the Engineer/Inspector will require the reconstruction of existing manhole frames and grade rings. Sawcut and remove existing asphalt as needed to complete the work. Remove existing manhole lid, casting, and any damaged concrete grade rings, and loose or damaged grout. Take care to ensure that no materials fall into the manhole or pipes. Any materials that enter the manhole must be promptly removed. Replace all damaged grade rings and set in non-shrink grout. If the casting and lid are in good condition they may be reinstalled. If the casting is damaged, or does not fit well with the lid, the casting or lid will need to be replaced. The reconstructed manhole frame should be set to final paving grade without the use of metal paving risers. If the existing frame already included a riser, it shall be removed and the frame adjusted to work without the riser. AC pavement removed to complete this work shall be restored to the original depth. All materials and workmanship for the manhole frame reconstruction shall comply with Clean Water Services Design and Construction Standards.

Payment for reconstruction of existing manhole frame shall be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified on a unit price per each, in place.

**16. Jointing**

Cold joints on all overlays shall be reduced to the shortest lengths possible. At the end of the working day, all work performed shall be completed with a transverse joint. *Location of the transverse joint must be approved by the Inspector.*

Temporary wedges shall be placed at these joints, which can be readily removed prior to continuation of work. The wedges shall be no less than 3.0 feet in width and shall be constructed with regard to the posted speed limits for the area. Appropriate signing indicating "Abrupt Edge" or "Bump" shall be maintained at the location of the wedge(s) until work resumes.

No longitudinal cold joints will be allowed to remain exposed for more than 3.5 hours without the adjacent panel being paved. Sealing of these joints must meet the satisfaction of the Inspector.

**17. Striping, Markings, and Reflectorization**

All striping including stop bars, crosswalks, and special markings, such as arrows and word stencils, shall be replaced at original locations unless directed by the Engineer. ***The contractor is responsible for re-establishing and pre-marking the centerline, lane lines, crosswalks, stop bars, legends and special markings of all areas overlaid.*** The contractor shall contact Brad Eckland (503-615-6562), the City Assistant Public Works Superintendent or designee a minimum of **48 hours** for verifying layout prior to installing any material or for any questions on re-establishing striping and markings.

All markings shall be reflective 3M 380 AW cold tape inlay or approved equal unless otherwise indicated on the bid sheet. Inlaid cold tape shall be placed and rolled at pavement surface temperatures between 120 to 150 degrees Fahrenheit with a finishing roller at a speed of 2 to 3 miles per hour. ***This project requires cold tape inlay to be placed at time of overlay. If the striping materials are not on site for the paving project, the paving will be delayed until the material is available. This delay will not be considered an act to allow the contractor to go over the required 72 hour window from time of grind to time of paving the roadway back.***

The contractor shall replace or install all yellow centerline, white lane lines, white fog line, crosswalks, stop bars, turn arrows, bicycle symbols, two-way and one-way retro-reflective raised pavement markers as indicated on the mapbooks and spreadsheets. The use of torches to place the markers is prohibited near the cold tape inlay.

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If the street is ground out and the overlay cannot be placed by the end of the work day, temporary pavement markings in accordance with the MUTCD Part VI shall be placed by the contractor on lane lines, centerlines, stop bars or any other markings as directed by the Project Manager and maintained until the paving occurs. Temporary pavement markings, most often reflective tabs or reflective foil back tape, will be placed every one hundred (100) feet on the fog line, every forty (40) feet on the center line, and every twenty (20) feet on centerline and lane lines at intersections and in some cases double striping may be required. The reflective foil back tape shall be used to mark out stop bars, crosswalks, and directional arrows where needed. The temporary markings shall match the existing markings and are installed to help guide motorist and pedestrians until the permanent markings can be installed. Centerline markers shall be yellow and lane line markers shall be white. No project area shall be left for the day without re-establishing, at a minimum, temporary stop lines, centerline and lane lines. All temporary striping/markings shall be removed at the time of paving. Temporary pavement markings with placing and maintaining shall be considered incidental to the project.

The comments on the spreadsheets list the stop bars and crosswalks as informational and the quantity is under the 12" white line item.

**18. Traffic Signal Detector Loops**

The traffic signal detector loops located on SE Walnut Street (at SE 10<sup>th</sup> Avenue) are under ODOT's jurisdiction. Removal and replacement of these loops will require an ODOT Right-of-Way permit and will be coordinated with ODOT by contacting Jim Nelson at 971-673-2942 or [james.a.nelson@odot.state.or.us](mailto:james.a.nelson@odot.state.or.us) a minimum of **one week** prior to deactivation of loops. Any costs associated with the permits will be considered incidental to the appropriate bid item.

The contractor will be responsible for protecting all traffic signal detector loop pockets. If the loop pockets are damaged during the construction activities, the contractor will be responsible for their replacement at no cost to the City.

Because it is an inconvenience to the traveling public detector loops WILL be replaced within 8 calendar days from the day paving is completed. An extension may be granted only for events that delay the installation that are due to weather or other Acts of Nature.

**19. Sidewalk Ramps w/Truncated Domes, Concrete Sidewalk, PCC Driveways, and Curb/Gutter**

Sidewalk ramps will be removed and replaced with a new ramp to meet ADA standards, including the truncated dome standard at the locations indicated in the following table or as directed by the Engineer. Refer to the attached ODOT drawings for guidance on ADA requirements. The truncated domes shall be a wet set product, black in color and installed per manufacturer's instructions. The exception to the black color on the truncated domes will be on the ramp at Turner/Cornell Road, which will be yellow as requested by Washington County. ***The contractor shall limit the time each sidewalk ramp is disrupted to 7 days.*** Consideration will be given for changes in weather conditions.

The ramp areas to be replaced with a new ramp and truncated dome panel shall be removed to the nearest joint or shall be saw cut and may include curb/gutter. Some areas of sidewalk adjacent to the ramp removal/replacement will need to be removed (to the nearest joint or shall be saw cut) and replaced to better match existing sidewalk in eliminating any potential trip hazard. Any slurry created by saw cutting shall be contained, removed from the site, and shall not come in contact with any wetland, waterway, or catch basins. All material removed shall become the property of the contractor and disposed of in a legal manner.

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The southwest and northwest corner ramps on NE Lincoln Street at NE Cornell Road as well as the southeast and southwest corner ramps on SE Thrush Avenue at SE River Road abuts a Washington County roadway. The contractor shall coordinate traffic control and obtain any necessary no-cost right-of-way permits through Washington County by contacting Aaron Clodfelter at 503-846-7632 or [Aaron.Clodfelter@co.washington.or.us](mailto:Aaron.Clodfelter@co.washington.or.us). The County's "General Construction/Signs" application for the right-of-way permit can be found at <http://www.co.washington.or.us/LUT/Divisions/Operations/Permits/row-permits.cfm>.

Removal and replacement of any curb/gutter as part of the ramp replacement shall be considered incidental and included in the appropriate bid item. Some ramps will require a landscape retaining curb at the property line. The installation of this retaining curb is considered part of the ramp replacement and shall be considered incidental and included in the appropriate bid item. Landscaping shall be restored to an as good or better condition as determined by the Engineer.

TEMP	SEC ID	STREET LOCATION	CORNER LOCATION	REPLACE RAMP	D/W (SQFT)	CURB	REPLACE SIDEWALK (SQFT)	Notes
A4	A1600A	SW Connell Ave @ Walnut st	NE & NW	2				
B3	B1200	NE 9 <sup>th</sup> @ Jackson St	SW & SE	2				
B3	U1208	Lincoln St @ Cornell Lincoln @ 9th	NW & SW NE(2)/SE(2) SW(2)/NW(1)	2 7				1 WV (SW)
B3	A1312	NE 9 <sup>th</sup> Ave			96	43		905 E Main St
B4	Q1630	SE Walnut St @ 6 <sup>th</sup>	NW(2)/NE(2) SW(2)/SE(2)	8			200	
B4	R1634	SE Walnut St @ 7 <sup>th</sup>	SW(2) SE(2)	4				
B4	S1636	SE Walnut St @ 8 <sup>th</sup>	SW(2)/SE(2) NE(2)/NW(2)	8		12		Preserve Historic Concrete Landing on NE Corner
B4	T1640	SE Walnut St @ 9 <sup>th</sup>	SW(2)/SE(2) NW(2)/NE(2)	8				2 WV (SE) 1 WV (NE)
C5	2306	SE Thrush St @ Meadow SE Thrush St @ River Rd	NW(1)/NE(2) SE(1) SW(1)/SE(1)	4 2				2 Water Valves in Ramp
F5	C2326A	SE Drake St			518		75	Moorecroft Apt Commercial D/W
F5	A3083C	SE Drake St @ 61 <sup>st</sup> Ave	SW(1)/NW(1) NE(1)	3				
F5	C2326C	SE Drake St @ Century Blvd	SW(1)/SE(1) NW(1)/NE(1)	4				
F5	D3384D	SE Drake St @ 67 <sup>th</sup>	SE(1)/NE(1) NW(1)	3				
F5	D3384B	SE Drake St			432			Commercial D/W at School
<b>TOTALS</b>				57	1046	55	275	

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Payment for retrofit and replacement of ramps with truncated domes shall be on a per unit basis with saw cutting, removal, curb/gutter and landscape retaining curb/restoration being considered incidental. Sidewalk will be removed and replaced at the locations indicated in the table, or as directed by the Inspector/Engineer. Payment for concrete sidewalk replacement shall be on a square foot basis including labor, saw cutting, removal, landscape restoration, materials, and base rock.

The PCC residential and commercial driveways will need to be removed and replaced according to City of Hillsboro standards. Standard details are attached at the end of these specifications. PCC driveways shall be removed to the nearest joint or shall be saw cut. Any slurry created by saw cutting shall be contained, removed from the site, and shall not come in contact with any wetland, waterway, or catch basins. All material removed shall become the property of the contractor and disposed of in a legal manner. Construct driveways 18 feet and wider in two separate pours to maintain access to the property. ***Driveways shall be opened to light vehicle traffic within 5 days of placing concrete. This may require a high early concrete mix design.*** The sidewalk section of all driveways shall comply with current ADA regulations.

The curb in front of the driveways is included in the square footage quantity of the driveway removal and replacement item. Payment for removal and replacement of PCC driveways shall be on a square foot basis with saw cutting and removal being considered incidental.

***All sidewalk ramps, sidewalks, driveways, curb and curb/gutter work shall be completed at least 5 days prior to the grinding for overlays. If the contractor damages any of the concrete work during the overlay, they will be responsible for repairing at the contractor's expense.***

**20. Sanitary Facilities**

The contractor shall provide proper on-site sanitary facilities for its employees.

**21. Asphalt Cement Material Price Escalation/De-escalation**

An asphalt cement escalation/de-escalation clause will be in effect during the life of the contract. The City reserves all of its rights under the contract, including, but not limited to, its rights for suspension of the work and termination of the contract under the City of Hillsboro Standard Terms & Conditions for Public Improvement Contracts Part VI. Section J, and this escalation/de-escalation provision shall not limit those rights.

**a. Monthly Asphalt Cement Material Price (MACMP)** – The Monthly Asphalt Cement Material Price (MACMP) will be established by the City each month. For information regarding the calculation of the MACMP, and for the actual MACMP, go to the ODOT website at: [http://www.oregon.gov/ODOT/HWY/ESTIMATING/pages/asphalt\\_fuel.aspx](http://www.oregon.gov/ODOT/HWY/ESTIMATING/pages/asphalt_fuel.aspx). If the City selected index ceases to be available for any reason, the City in its discretion will select and begin using a substitute price source or index to establish the MACMP each month. The MACMP will apply to all asphalt cement including but not limited to paving grade, polymer modified, and emulsified asphalts, and recycling agents. The City does not guarantee that asphalt cement will be available at the MACMP.

**b. Base Asphalt Cement Material Price (Base)** – The Base asphalt cement material price for this Project is the MACMP published on the ODOT website for the month immediately preceding the bid opening date.

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**c. Monthly Asphalt Cement Adjustment Factor** – The Monthly Asphalt Cement Adjustment Factor will be determined each month as follows:

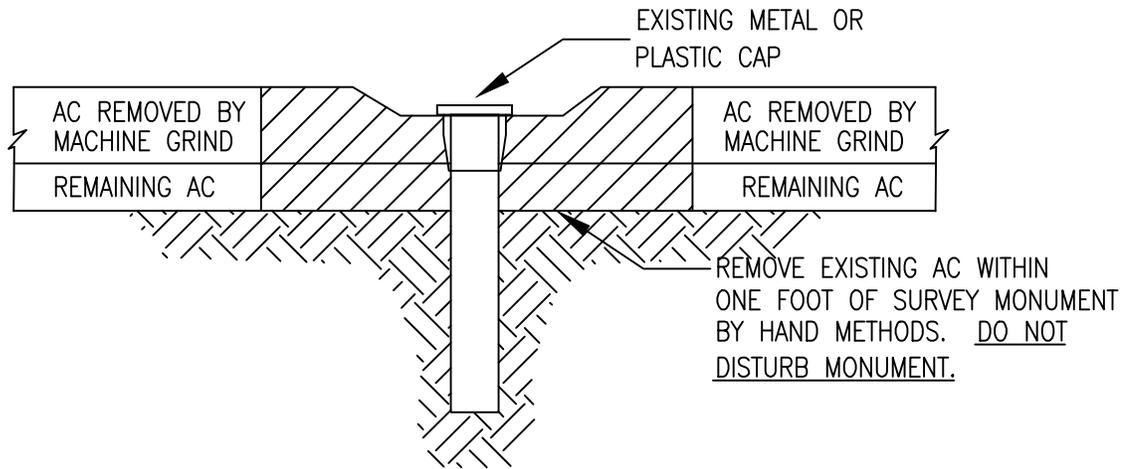
- If the MACMP is within  $\pm 10\%$  of the Base, there will be no adjustment.
- If the MACMP is more than 110% of the Base, then:  
Adjustment Factor = (MACMP) – (1.10 x Base)
- If the MACMP is less than 95% of the Base, then:  
Adjustment Factor = MACMP) – (0.90 x Base)

**d. Asphalt Cement Price Adjustment** – A price adjustment will be made for the items containing asphalt cement listed below. The price adjustment as calculated in (c) above will use the MACMP for the month the asphalt is incorporated into the Project. The price adjustment will be applied to the quantity of asphalt cement calculated from quality control testing performed according to Oregon's Standard Specifications for Construction, Section 00745 and will be adjusted to exclude the asphalt cement contained in RAP (recycled asphalt pavement). The percentage of asphalt cement contained in RAP shown in the JMF (job mix formula) will be used for the adjustment.

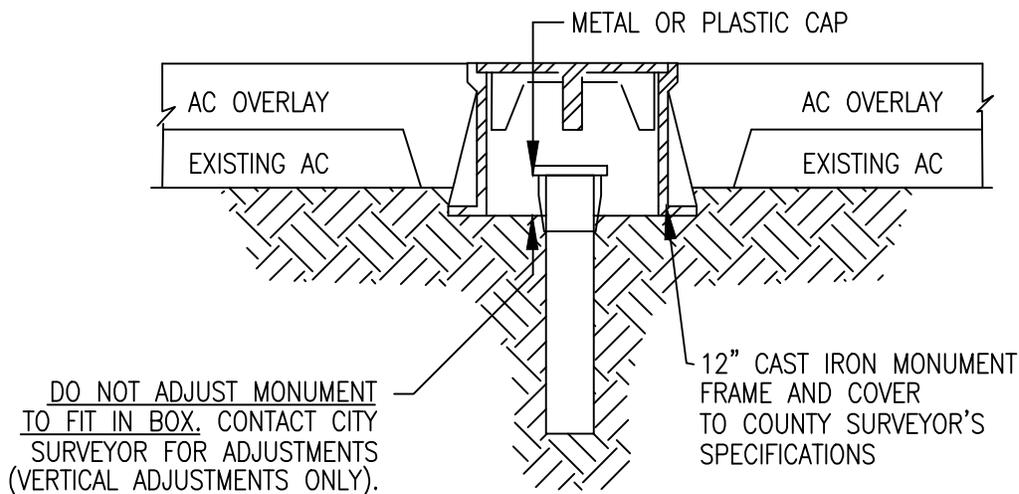
The Pay Items for which price adjustments will be made under these Special Provisions are:

- Asphalt Concrete Replacement
- 2" Level 2, 1/2" Dense Graded Asphalt Concrete
- 3" Level 2, 1/2" Dense Graded Asphalt Concrete

# EXISTING SURVEY MONUMENT



# MONUMENT BOX INSTALLATION



PHONE: 503.681.6146 | FAX: 503.681.6245  
150 E MAIN ST | 4TH FLOOR | HILLSBORO, OR 97123-4089

## CENTERLINE SURVEY MONUMENT BOX RETROFIT FOR OVERLAYS

FILE NAME: PW- SURVEY MON BOX.DWG

### VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL  
DRAWING



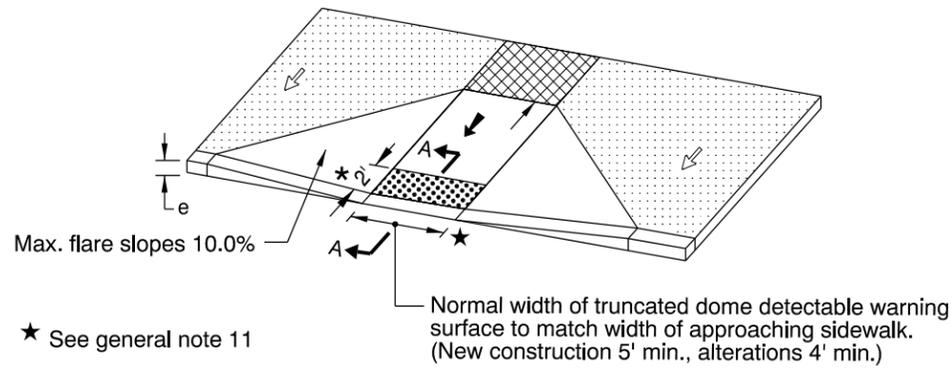
IF NOT ONE INCH ON THIS SHEET,  
ADJUST SCALES ACCORDINGLY

SHEET NO.

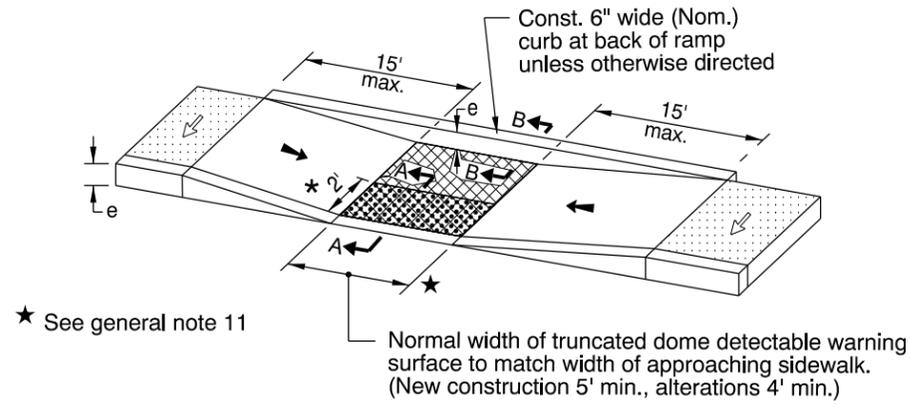
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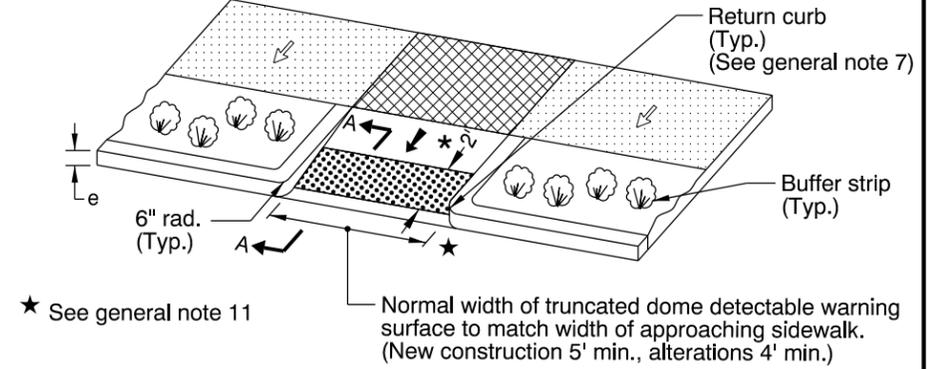
rd755.dgn 15-JAN-2016



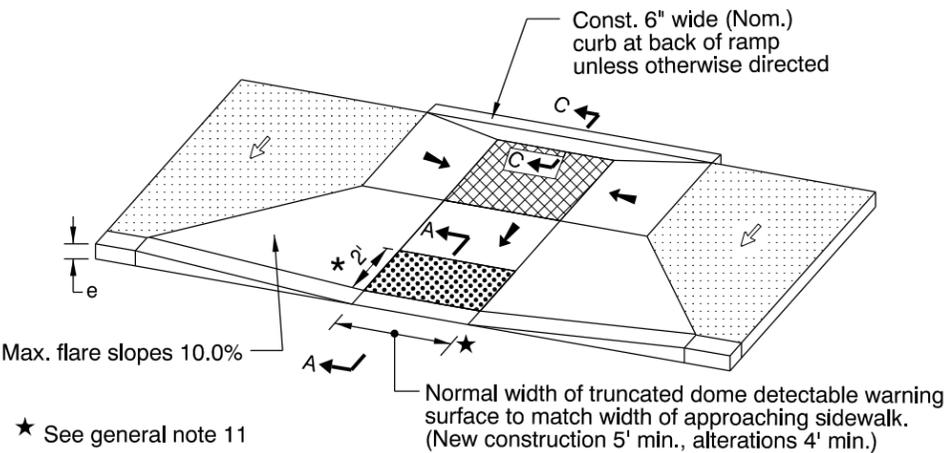
**PERPENDICULAR SIDEWALK RAMP DETAIL**  
(Use "Parallel Sidewalk Ramp Detail" or "Combination Sidewalk Ramp Detail" when reqd. turning space cannot be obtained)



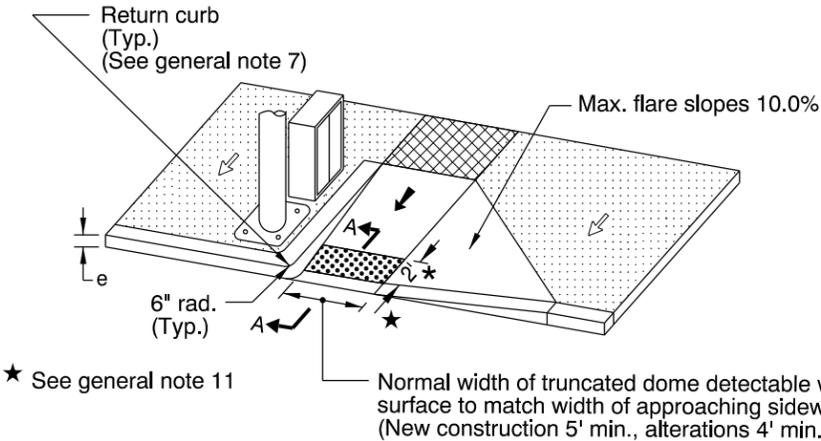
**PARALLEL SIDEWALK RAMP DETAIL**



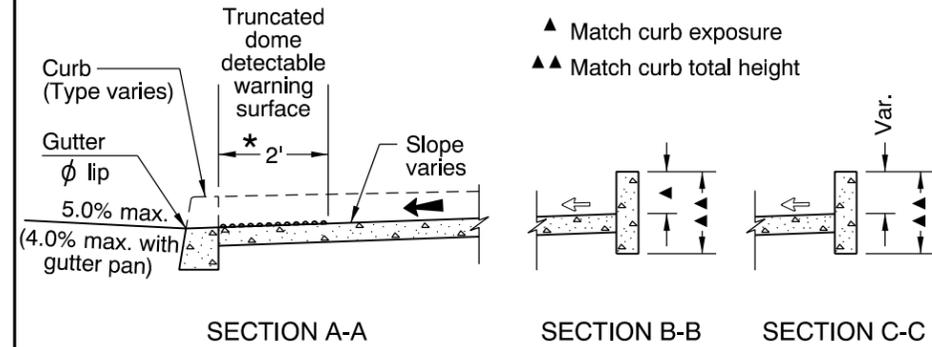
**PERPENDICULAR SIDEWALK RAMP DETAIL (THROUGH BUFFER STRIP)**



**COMBINATION SIDEWALK RAMP DETAIL**



**PERPENDICULAR SIDEWALK RAMP DETAIL (WITH SINGLE FLARE)**  
(Use "Parallel Sidewalk Ramp Detail" or "Combination Sidewalk Ramp Detail" when reqd. turning space cannot be obtained)



- Sidewalk
- Turning space  
Min. level area 4' x 4'  
4' x 5' when constrained (with longer dimension in direction of ramp travel).  
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) is considered level.
- Truncated dome detectable warning surface
- Slope 1.5% max. (Max. 2.0% finished surface slope)  
(Normal sidewalk cross slope)
- Slope 7.5% max. (Max. 8.3% finished surface slope)  
(Ramp length 15' max.)
- \* 2' See general note 5

**GENERAL NOTES FOR ALL DETAILS:**

1. Sidewalk ramp details are based on United States Access Board Standards.
2. See Std. Drgs. RD700 & RD701 for curbs. See Std. Drg. RD720 for sidewalks. See Std. Drgs. TM503 & TM530 for crosswalk markings, widths, etc.
3. Tooled joints are required at all sidewalk ramp slope break lines.
4. Sidewalk curb ramp slopes shown are relative to the true level horizon (Zero bubble).
5. Place truncated dome detectable warning surface in the lower 2' adjacent to traffic of throat of ramp only. For details not shown, see Std. Drg. RD759.
6. Side flares that are not part of the path of travel may be any slope.
7. Return curb may be provided in lieu of flared slope only if protected from cross travel by landscaping or fixed barrier.

8. For the purpose of this drawing, a curb ramp is considered "perpendicular" if the angle between the longitudinal axis of the ramp and a line tangent to the curb at the ramp center is 75° or greater.
9. Ramps for paths intersecting a roadway should be full width of path, excluding flares. When a ramp is used to provide bicycle access from a roadway to a sidewalk, the ramp should be 8' wide.
10. For sidewalk ramp placement options, see Std. Drgs. RD756 & RD757.
11. Check the gutter flow depth at ramp locations to assure that the design flood does not overtop the back of sidewalk at ramp. If overtopping occurs place an inlet at upstream side of ramp or perform other approved design mitigation.
12. Only use details allowed by jurisdiction.
13. Site conditions normally require a project specific design. See project plans for details not shown.

CALC. BOOK NO.     N/A     BASELINE REPORT DATE     15-JAN-2016    

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

**OREGON STANDARD DRAWINGS**

**SIDEWALK RAMP DETAILS**

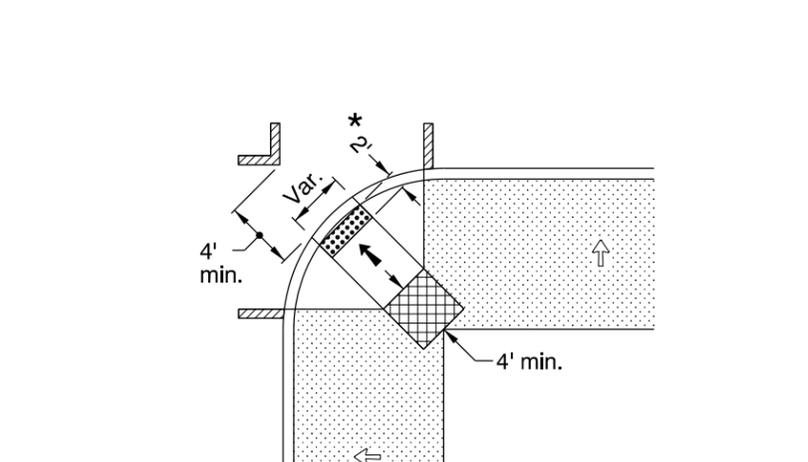
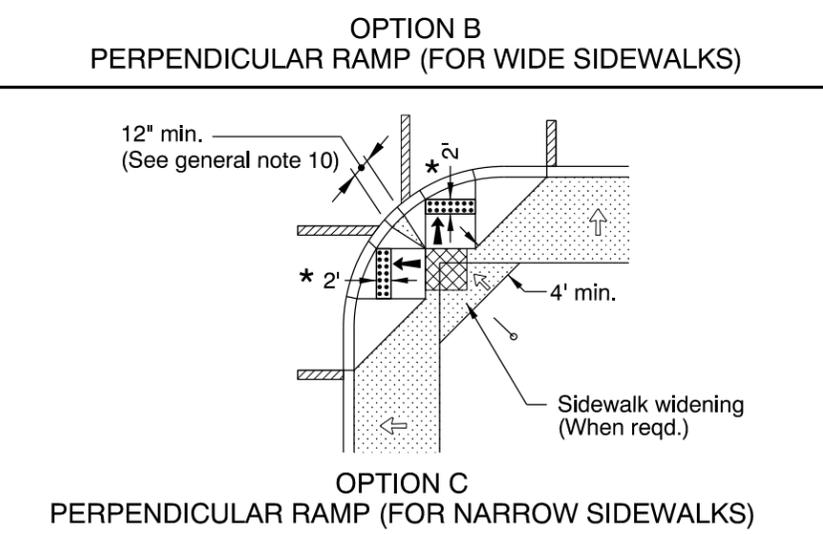
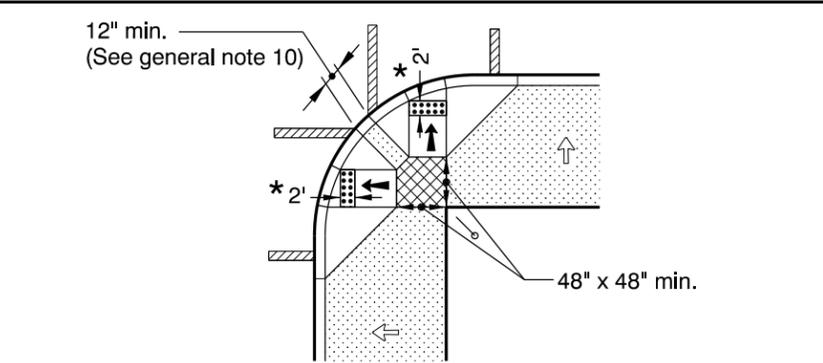
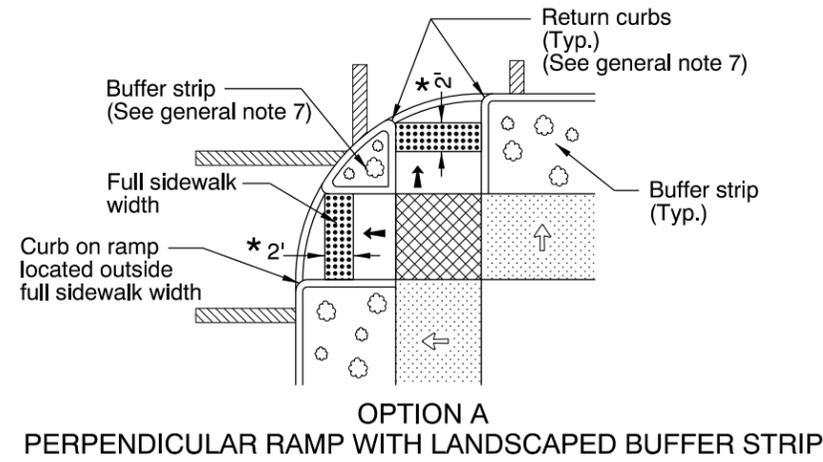
2015

DATE	REVISION DESCRIPTION
01-2015	REVISED & ADDED NOTES
07-2015	ADDED DETAIL & REVISED NOTES
01-2016	REVISED & ADDED NOTES

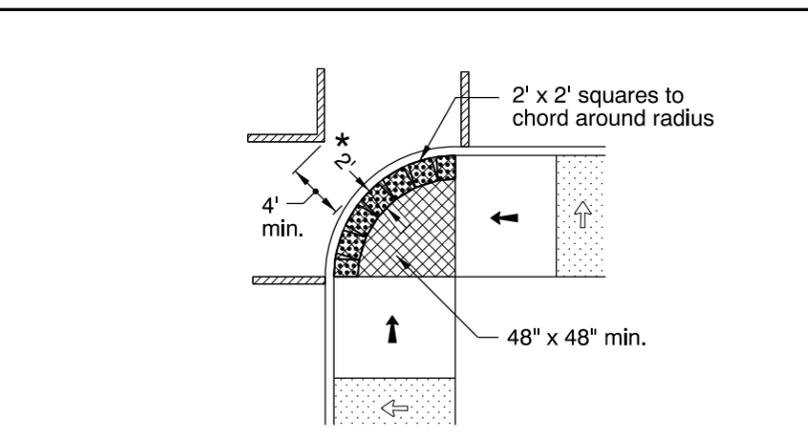
*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*

RD755

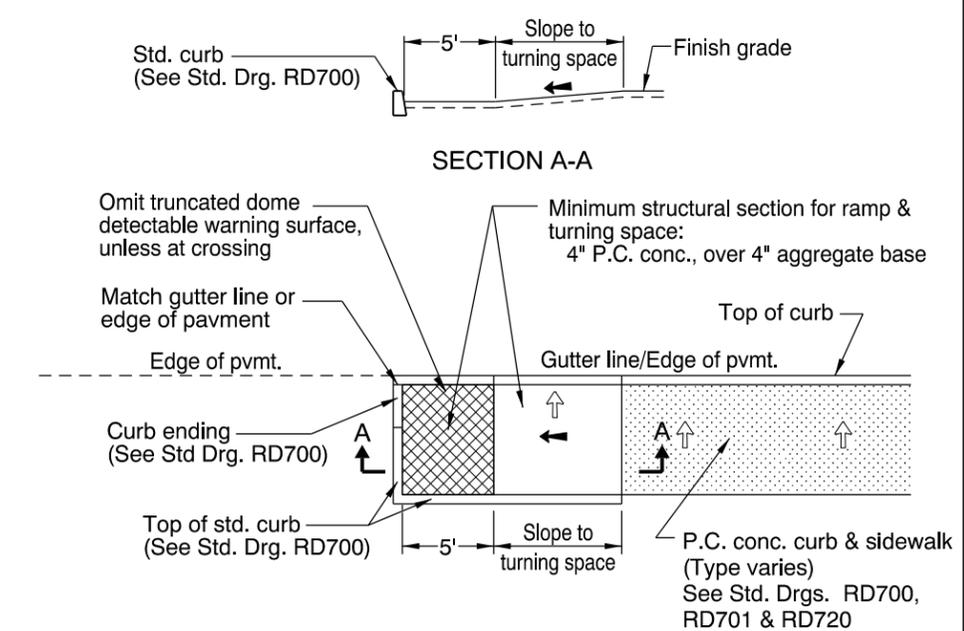
rd756.dgn 15-JAN-2016



**OPTION D**  
**DIAGONAL RAMP (FOR WIDE SIDEWALKS)**  
 Use in alterations only and when site constraints prohibit installing two ramps



**OPTION E**  
**DIAGONAL-PARALLEL RAMP (FOR SIDEWALK WIDTHS ≥ RADIUS)**  
 Use in alterations only and when site constraints prohibit installing two ramps



**OPTION F**  
**SIDEWALK RAMP AND TURNING SPACE (FOR ENDS OF SIDEWALKS)**

- Marked or intended crossing location
- Sidewalk
- Turning space  
 Min. level area 4' x 4'  
 4' x 5' when constrained (with longer dimension in direction of ramp travel).  
 For the purposes of this application, a max. 2.0% finished surface slope (for drainage) is considered level.
- Truncated dome detectable warning surface
- Slope 1.5% max.  
 (Max. 2.0% finished surface slope)  
 (Normal sidewalk cross slope)
- Slope 7.5% max.  
 (Max. 8.3% finished surface slope)  
 (Ramp length 15' max.)
- \* 2' See general note 5

- GENERAL NOTES FOR ALL DETAILS:**
- Sidewalk ramp details are based on United States Access Board Standards.
  - See Std. Drgs. RD700 & RD701 for curbs. See Std. Drg. RD720 for sidewalks. See Std. Drgs. TM503 & TM530 for crosswalk markings, widths, etc. See Std. Drg. RD755 for sidewalk ramp details.
  - Tooled joints are required at all sidewalk ramp slope break lines.
  - Sidewalk curb ramp slopes shown are relative to the true level horizon (Zero bubble).
  - Place truncated dome detectable warning surface in the lower 2' adjacent to traffic of throat of ramp only. For details not shown, see Std. Drg. RD759.
  - Side flares that are not part of the path of travel may be any slope. Check the gutter flow depth to assure that the design flood does not overtop the back of sidewalk. If overtopping occurs place an inlet at upstream side or perform other approved design mitigation.

- Return curb may be provided in lieu of flared slope only if protected from cross travel by landscaping or fixed barrier.
- For the purpose of this drawing, a curb ramp is considered "perpendicular" if the angle between the longitudinal axis of the ramp and a line tangent to the curb at the ramp center is 75° or greater.
- Ramps for paths intersecting a roadway should be full width of path, excluding flares. When a ramp is used to provide bicycle access from a roadway to a sidewalk, the ramp should be 8' wide.
- When 2 curb ramps are immediately adjacent as in Options B & C, the curb exposure (e) between the adjacent side flares may range between 3" and full design exposure.
- Only use options allowed by jurisdiction.
- See project plans for details not shown.
- See Traffic Standard Drawings for signal pole and pedestrian pedestal details.

CALC. BOOK NO.   N/A  

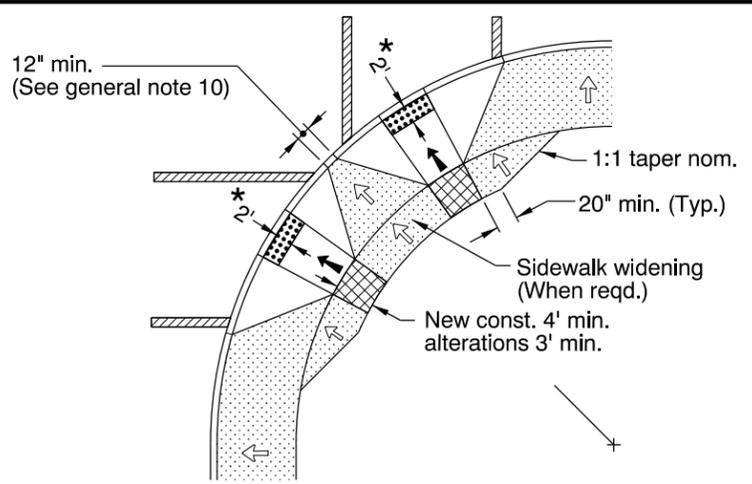
*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*

BASELINE REPORT DATE <u>  15-JAN-2016  </u>	
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
<b>OREGON STANDARD DRAWINGS</b>	
<b>SIDEWALK RAMP PLACEMENT OPTIONS</b>	
<b>SMALL RADII</b>	
2015	
DATE	REVISION DESCRIPTION
01-2015	REVISED DRAWING TITLE, DETAILS & NOTES
07-2015	REARRANGED DETAILS & REVISED NOTES
01-2016	REVISED DETAIL & NOTES

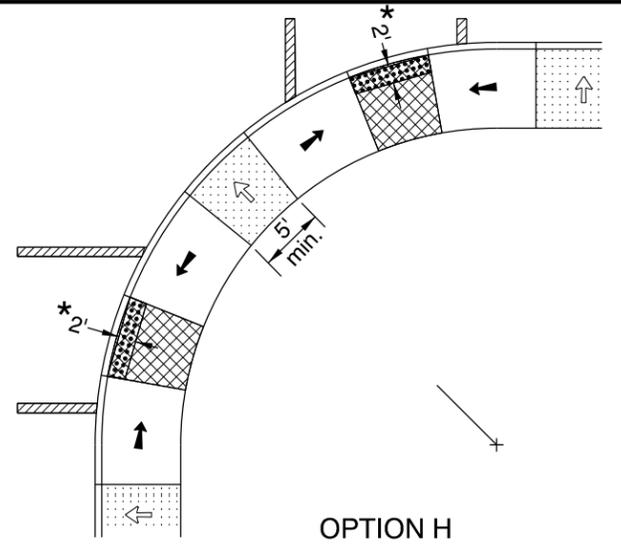
RD756

rd757.dgn 15-JAN-2016

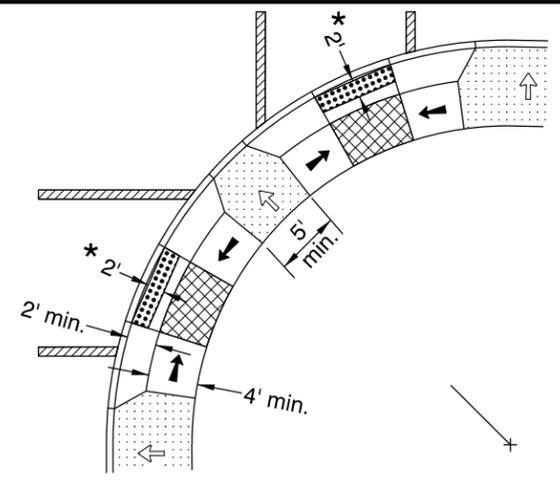
RD757



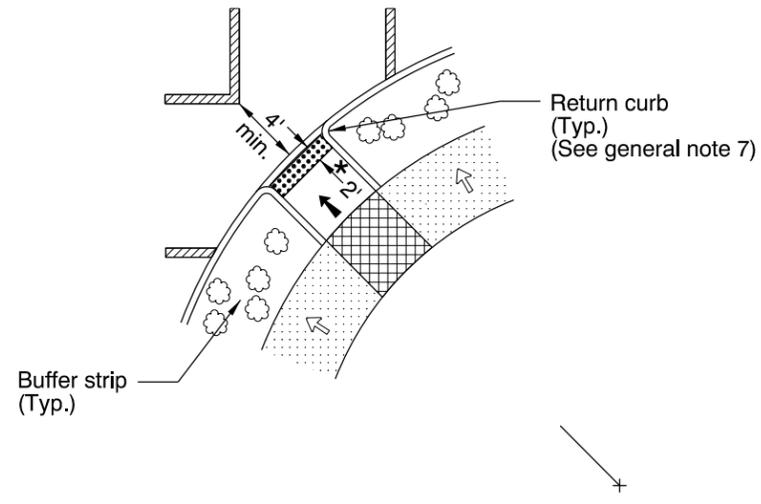
**OPTION G**  
PERPENDICULAR RAMPS (FOR NARROW SIDEWALKS)



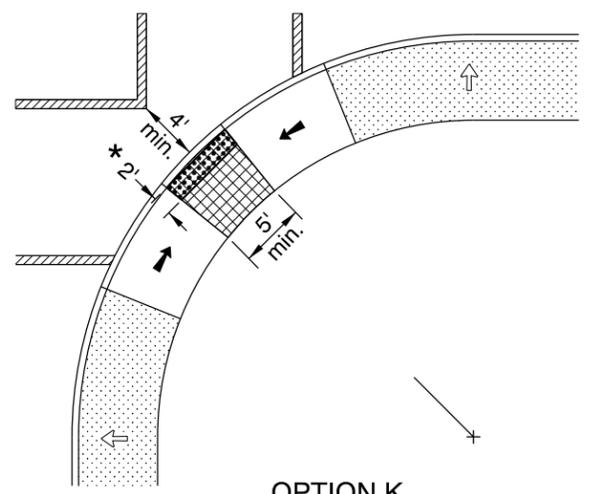
**OPTION H**  
PARALLEL RAMPS (FOR NARROW SIDEWALKS)



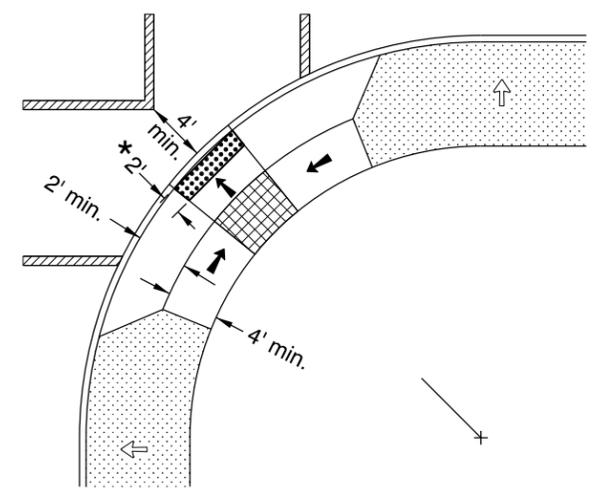
**OPTION I**  
COMBINATION RAMPS (FOR WIDE SIDEWALKS)



**OPTION J**  
DIAGONAL RAMP WITH LANDSCAPED BUFFER STRIP  
Use in alterations only and when site constraints prohibit installing two ramps



**OPTION K**  
DIAGONAL-PARALLEL RAMP (FOR NARROW SIDEWALKS)  
Use in alterations only and when site constraints prohibit installing two ramps



**OPTION L**  
DIAGONAL-COMBINATION RAMP (FOR WIDE SIDEWALKS)  
Use in alterations only and when site constraints prohibit installing two ramps

Marked or intended crossing location	Turning space Min. level area 4' x 4' 4' x 5' when constrained (with longer dimension in direction of ramp travel). For the purposes of this application, a max. 2.0% finished surface slope (for drainage) is considered level.	Truncated dome detectable warning surface	Slope 7.5% max. (Max. 8.3% finished surface slope) (Ramp length 15' max.)
Sidewalk		Slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)	* 2' See general note 5

**GENERAL NOTES FOR ALL DETAILS:**

- Sidewalk ramp details are based on United States Access Board Standards.
- See Std. Drgs. RD700 & RD701 for curbs. See Std. Drg. RD720 for sidewalks. See Std. Drgs. TM503 & TM530 for crosswalk markings, widths, etc. See Std. Drg. RD755 for sidewalk ramp details.
- Tooled joints are required at all sidewalk ramp slope break lines.
- Sidewalk curb ramp slopes shown are relative to the true level horizon (Zero bubble).
- Place truncated dome detectable warning surface in the lower 2' adjacent to traffic of throat of ramp only. For details not shown, see Std. Drg. RD759.
- Side flares that are not part of the path of travel may be any slope. Check the gutter flow depth to assure that the design flood does not overtop the back of sidewalk. If overtopping occurs place an inlet at upstream side or perform other approved design mitigation.

- Return curb may be provided in lieu of flared slope only if protected from cross travel by landscaping or fixed barrier.
- For the purpose of this drawing, a curb ramp is considered "perpendicular" if the angle between the longitudinal axis of the ramp and a line tangent to the curb at the ramp center is 75° or greater.
- Ramps for paths intersecting a roadway should be full width of path, excluding flares. When a ramp is used to provide bicycle access from a roadway to a sidewalk, the ramp should be 8' wide.
- When 2 curb ramps are immediately adjacent as in Option G, the curb exposure (e) between the adjacent side flares may range between 3" and full design exposure.
- Only use options allowed by jurisdiction.
- See project plans for details not shown.
- See Traffic Standard Drawings for signal pole and pedestrian pedestal details.

CALC. BOOK NO.   N/A  

*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*

BASELINE REPORT DATE   15-JAN-2016  

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

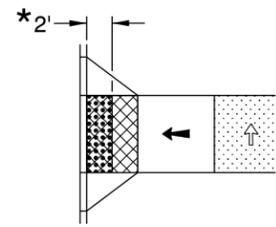
**OREGON STANDARD DRAWINGS**  
**SIDEWALK RAMP PLACEMENT OPTIONS**  
**LARGE RADII**

2015

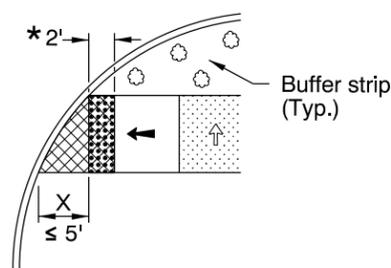
DATE	REVISION DESCRIPTION
01-2015	REVISED DRAWING TITLE, DETAILS & NOTES
07-2015	REVISED NOTES
01-2016	REVISED & ADDED NOTES

rd759.dgn 15-JAN-2016

RD759



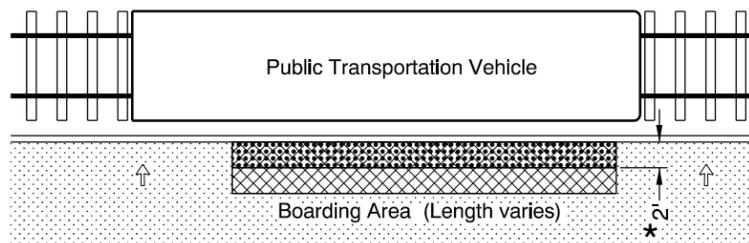
When distance "X" is less than 5', truncated dome detectable warning surface shall be placed perpendicular to the path of travel.



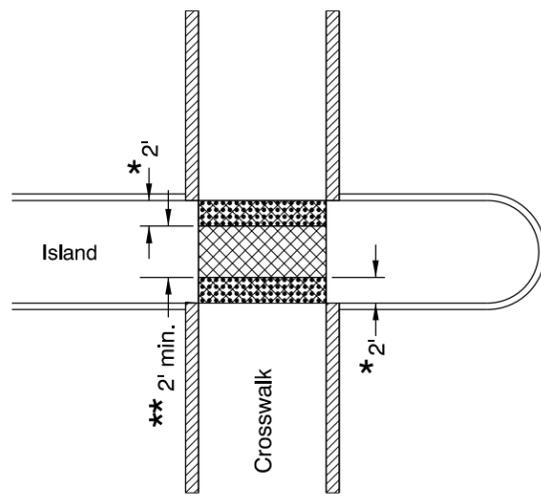
When distance "X" is greater than 5', truncated dome detectable warning surface shall be placed parallel to the bottom of curb ramp.

PLACEMENT ON SIDEWALK RAMP

- Marked or intended crossing location
- Sidewalk
- Turning space  
Min. level area 4' x 4'  
4' x 5' when constrained (with longer dimension in direction of ramp travel).  
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) is considered level.
- Truncated dome detectable warning surface
- Slope 1.5% max.  
(Max. 2.0% finished surface slope)  
(Normal sidewalk cross slope)
- Slope 7.5% max.  
(Max. 8.3% finished surface slope)  
(Ramp length 15' max.)
- \* 2' See general note 3

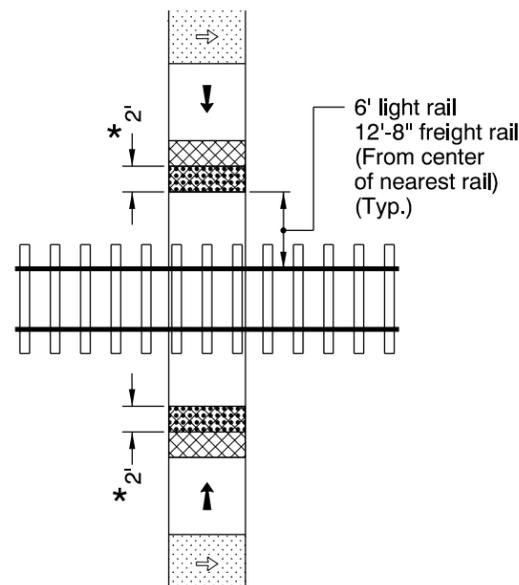


PLACEMENT ON PUBLIC TRANSPORTATION PLATFORM



\*\* Omit truncated dome detectable warning surfaces if less than 2'

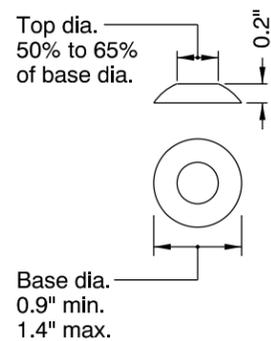
PLACEMENT ON CROSSING ISLAND



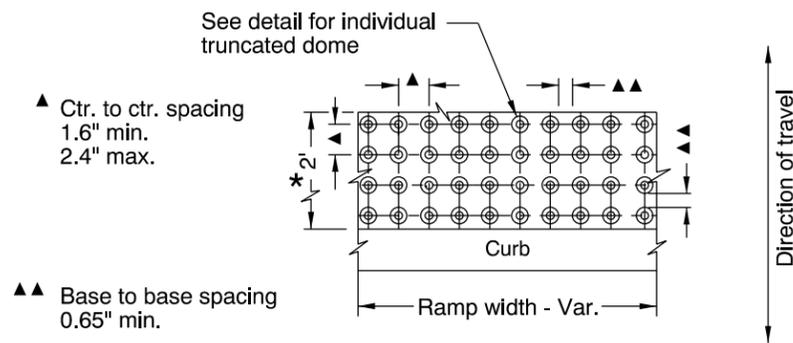
PLACEMENT AT RAIL CROSSING

GENERAL NOTES FOR ALL DETAILS:

1. Truncated dome detectable warning surface details & locations are based on United States Access Board Standards.
2. See Std. Drgs. RD700 & RD701 for curbs. See Std. Drg. RD720 for sidewalks. See Std. Drgs. TM503 & TM530 for crosswalk markings, widths, etc. See Std. Drg. RD705 for islands.
3. Place truncated dome detectable warning surface in the lower 2' adjacent to traffic of throat of ramp only, unless otherwise shown. Arrange domes using square in-line pattern only. Color to be safety yellow if no color specified in construction note. All products on an installation to be identical.
4. Truncated dome detectable warning surface shall be used where the pedestrian access route meets the street, in the following locations:
  - a) Sidewalk ramps (See Std. Drgs. RD755, RD756, & RD757).
  - b) Crossing islands (Accessible Route Islands), (See Std. Drg. RD710).
  - c) Rail crossings (See detail).
5. Where public transportation stations (rail, bus, etc.) use platform boarding, truncated dome detectable warning surface shall be placed along the full edge length of the station, when not protected by platform screens or guards.
6. Truncated dome detectable warning surface shall not be used on the following locations:
  - a) Midblock sidewalk transitions (See Std. Drg. RD756).
  - b) Standard concrete driveways (See Std. Drgs. RD725, RD730, RD735, RD740, RD745, & RD750).
  - c) Parking lots.
7. Only use details allowed by jurisdiction.
8. See project plans for details not shown.



TRUNCATED DOME DETAIL



TRUNCATED DOME PATTERN

TRUNCATED DOME DETECTABLE WARNING SURFACE

CALC. BOOK NO. N/A BASELINE REPORT DATE 15-JAN-2016

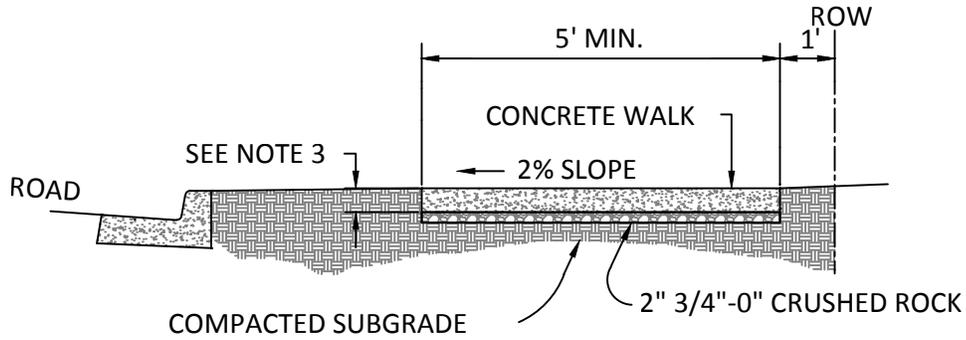
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS  
TRUNCATED DOME  
DETECTABLE WARNING SURFACE  
DETAILS & LOCATIONS

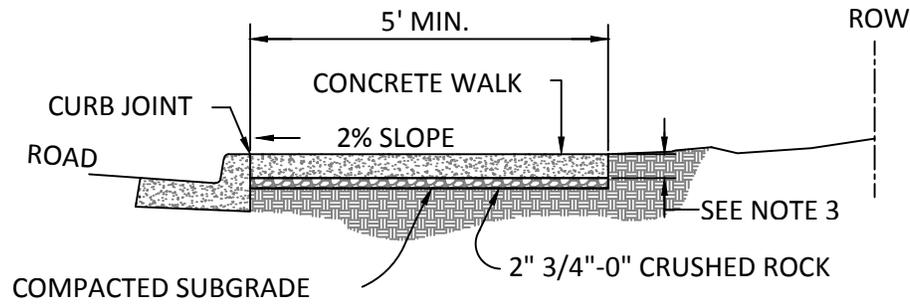
2015

DATE	REVISION DESCRIPTION
01-2015	REVISED DETAILS & NOTES
07-2015	REVISED NOTES
01-2016	REVISED & ADDED NOTES

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.



SIDEWALK LOCATED AT PROPERTY LINE



SIDEWALK LOCATED AT CURB

NOTES:

1. CONCRETE SHALL BE 3000 P.S.I. AT 28 DAYS. BATCH MIX TICKETS SHALL BE MADE AVAILABLE AT INSPECTOR'S REQUEST.
2. PANELS SHALL BE 5 FEET LONG.
3. SIDEWALK THICKNESS SHALL BE A MINIMUM OF 5 1/2" THROUGH DRIVEWAY SECTIONS AND 3 1/2" ELSEWHERE.
4. WEEPHOLES IN CURBS SHALL BE EXTENDED TO THE BACK OF SIDEWALK WITH 3" I.D. SCH. 40 PVC AND COUPLER AT 2%± SLOPE.
5. A MINIMUM 24" WIDE SECTION OF TRUNCATED DOMES SHALL BE INSTALLED ON BOTH SIDES OF SIGNALIZED COMMERCIAL OR INDUSTRIAL DRIVEWAYS, OR AS DETERMINED BY THE CITY ENGINEER.



PHONE: 503.681.6146 | FAX: 503.681.6245  
 150 E MAIN ST | 4TH FLOOR | HILLSBORO, OR 97123-4089

STANDARD SIDEWALK

VERIFY SCALES  
 BAR IS ONE INCH ON ORIGINAL DRAWING  
 0 1"  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SHEET NO.  
**PW-080**  
 PROJECT NO.

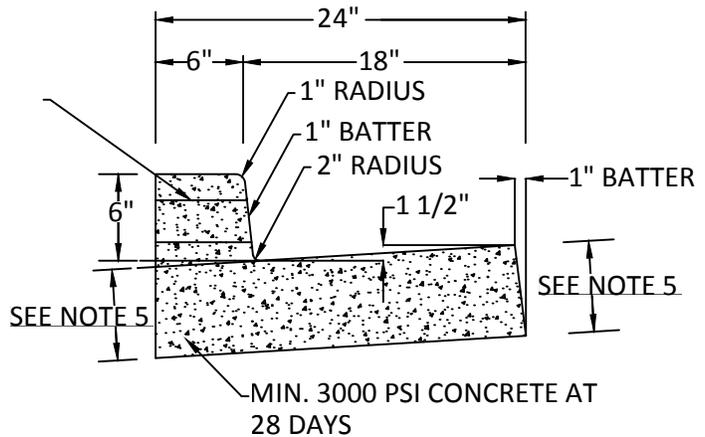
FILE NAME: PW-080.DWG

PLOT DATE: 5/29/2013 4:56 PM

## CURB AND GUTTER

NTS

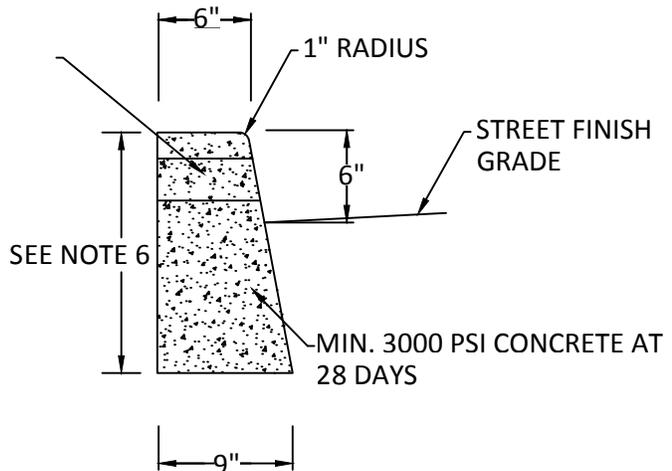
WEEPHOLE - 3" I.D. SCH 40 PVC OR EQUAL WITH  
COUPLING BEHIND BACK OF CURB



## STANDARD CURB

NTS

WEEPHOLE - 3" I.D. SCH 40 PVC OR EQUAL WITH  
COUPLING BEHIND BACK OF CURB



## NOTES

1. EXPANSION JOINTS SHALL BE PROVIDED AT EACH POINT OF TANGENCY OF THE CURB MATERIAL, PRE-MOLDED, NON-EXTRUDING, WITH A MIN. THICKNESS OF 1/2".
2. CONTRACTION JOINTS SHALL BE A MINIMUM OF 2" DEEP, SPACED A MAXIMUM OF 15 FT. APART, AND MATCH PCC STREET SLAB JOINTS.
3. BASE ROCK 1-1/2" MINUS, COMPACTED TO 95% AASHTO T-180 - SHALL BE TO SUBGRADE OF STREET STRUCTURE OR 4" IN DEPTH, WHICHEVER IS GREATER, EXTENDING 1' BEHIND CURB.
4. SLOPE OF GUTTER SHALL NOT EXCEED 5% AT WHEELCHAIR ACCESS RAMP.
5. GUTTER THICKNESS SHALL MATCH THICKNESS OF AC OR PCC/AC PAVEMENT THICKNESS, WHERE THICKNESS EXCEEDS SIX INCHES.
6. THE HEIGHT OF THE STANDARD CURB SHALL MATCH THE AC OR PCC/AC PAVEMENT THICKNESS PLUS THE CURB EXPOSURE WHEN GREATER THAN 16".



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150 E MAIN ST | 4TH FLOOR | HILLSBORO, OR 97123-4089

STANDARD CURB

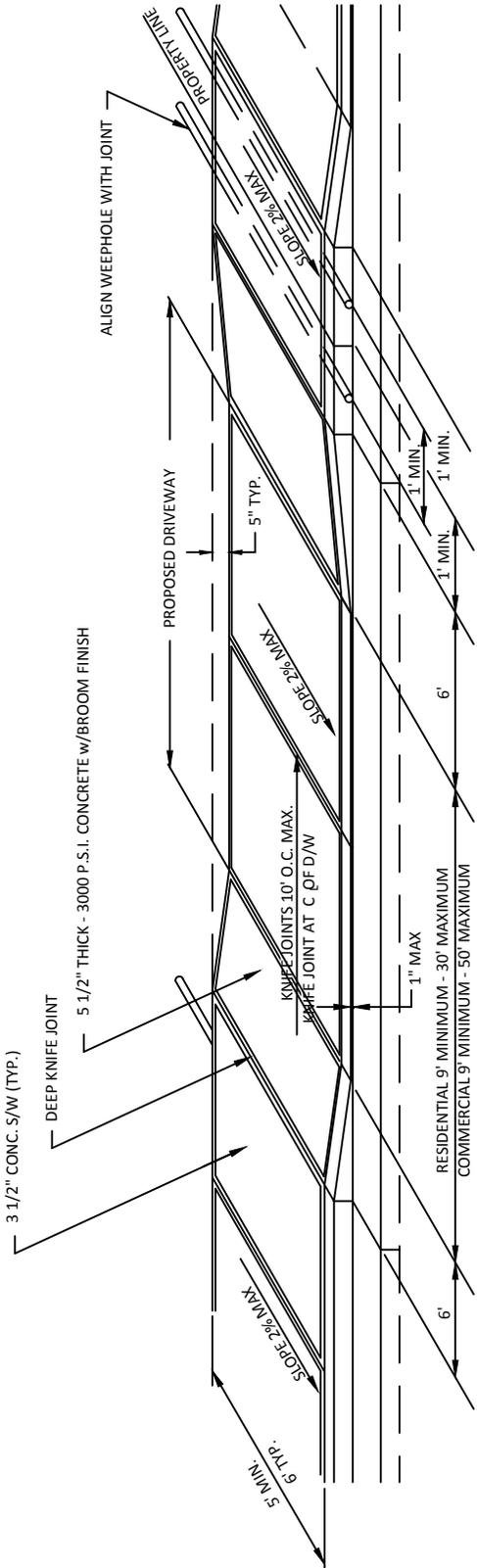
VERIFY SCALES  
BAR IS ONE INCH ON ORIGINAL  
DRAWING  
0 1"  
IF NOT ONE INCH ON THIS SHEET,  
ADJUST SCALES ACCORDINGLY

SHEET NO.  
PW-070

PROJECT NO.

FILE NAME: PW-070.DWG

PLOT DATE: 6/4/2013 4:54 PM



**NOTES:**

1. USE CONCRETE MIX WITH MINIMUM 3000PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. COMPACT SUBGRADE UNTIL FIRM AND UNYIELDING AND INSTALL A MINIMUM OF 2" OF COMPACTED 3/4"-0 AGGREGATE BASE ROCK.
3. SAWCUT ALL CONCRETE AND ASPHALT. REMOVE ENTIRE CURB OR CURB AND GUTTER FOR NEW DRIVEWAYS ON EXISTING STREETS.
4. INSTALL 24" TRUNCATED DOME PANEL ACROSS ENTIRE WIDTH OF SIDEWALK ON BOTH SIDES OF COMMERCIAL DRIVEWAYS. SEE DWG. RD-759 FOR ADDITIONAL TRUNCATED DOME REQUIREMENTS.
5. DRIVEWAY SHALL COMPLY WITH ALL ADA REQUIREMENTS.
6. ALIGN KNIFE JOINT OVER WEEPHOLE.
7. COMMERCIAL DRIVEWAYS MAY REQUIRE ADDITIONAL REINFORCEMENT.
8. SEE SIDEWALK DETAIL FOR FINISHING REQUIREMENTS.



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 150 E MAIN ST | 4TH FLOOR | HILLSBORO, OR 97123-4089

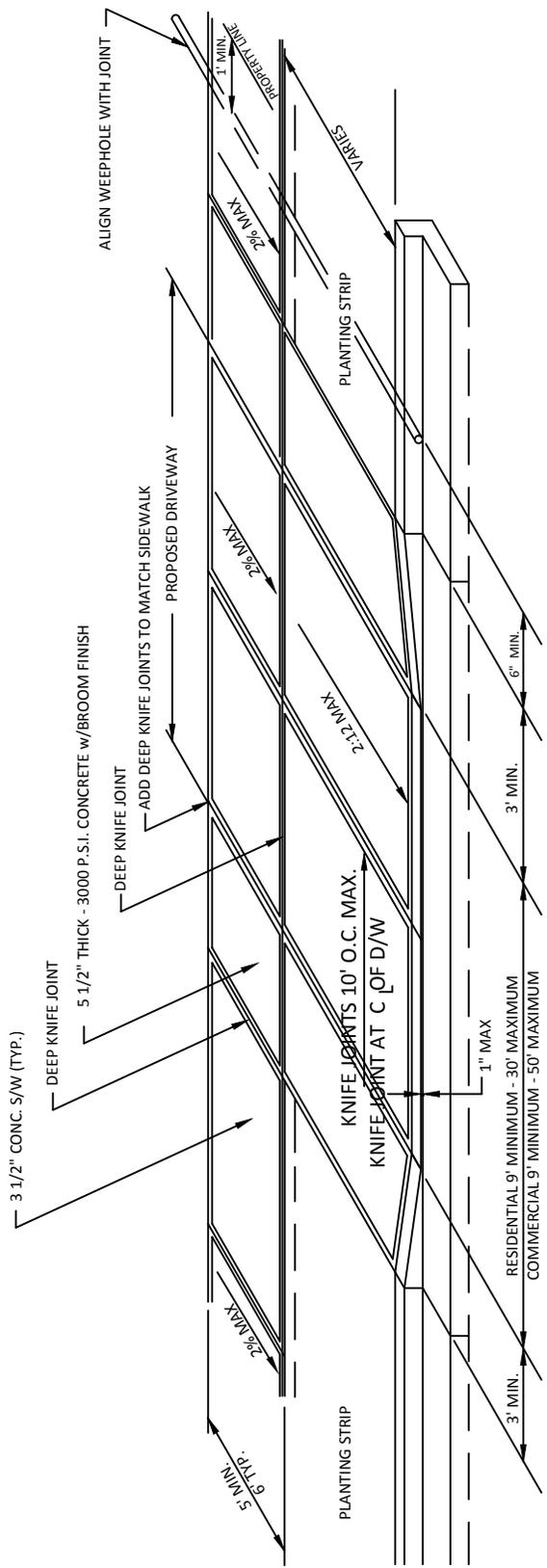
STANDARD DRIVEWAY  
 SIDEWALK LOCATED AT CURB

VERIFY SCALES  
 BAR IS ONE INCH ON ORIGINAL DRAWING  
 0 1"  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SHEET NO.  
 PW-030  
 PROJECT NO.

FILE NAME: PW-030.DWG

PLOT DATE: 4/19/2013 8:14 AM



**NOTES:**

1. USE CONCRETE MIX WITH MINIMUM 3000PSI COMPRESSIVE STRENGTH AT 28 DAYS
2. COMPACT SUBGRADE UNTIL FIRM AND UNYIELDING AND INSTALL A MINIMUM OF 2" OF COMPACTED 3/4"-0 AGGREGATE BASE ROCK.
3. SAWCUT ALL CONCRETE AND ASPHALT. REMOVE ENTIRE CURB OR CURB AND GUTTER FOR NEW DRIVEWAYS ON EXISTING STREETS.
4. INSTALL 24" TRUNCATED DOME PANEL ACROSS ENTIRE WIDTH OF SIDEWALK ON BOTH SIDES OF COMMERCIAL DRIVEWAYS. SEE DWG. RD-759 FOR ADDITIONAL TRUNCATED DOME REQUIREMENTS.
5. DRIVEWAY SHALL COMPLY WITH ALL ADA REQUIREMENTS.
6. ALIGN KNIFE JOINT OVER WEEPHOLE.
7. COMMERCIAL DRIVEWAYS MAY REQUIRE ADDITIONAL REINFORCEMENT.
8. SEE SIDEWALK DETAIL FOR ADDITIONAL REQUIREMENTS.



PHONE: 503.681.6146 | FAX: 503.681.6245  
 150 E MAIN ST | 4TH FLOOR | HILLSBORO, OR 97123-4089

**STANDARD DRIVEWAY**

SIDEWALK LOCATED AT PROPERTY LINE

FILE NAME: PW-040.DWG

VERIFY SCALES  
 BAR IS ONE INCH ON ORIGINAL DRAWING  
 0 1"  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

SHEET NO.  
**PW-040**  
 PROJECT NO.

PLOT DATE: 5/29/2013 4:07 PM

**City of Hillsboro**  
**2016 Pavement Management Program**  
**Contract #20552222-6102**

**Schedule "B": Slurry Seals**



**Engineering Division**  
**150 E Main Street, Fourth Floor**  
**Hillsboro, OR 97123**  
**Phone: 503-681-6416**



# Slurry Seal

## OVERVIEW

March 2016

### Legend

-  SS16
-  SS16\_GRID
-  Park
-  City Limits

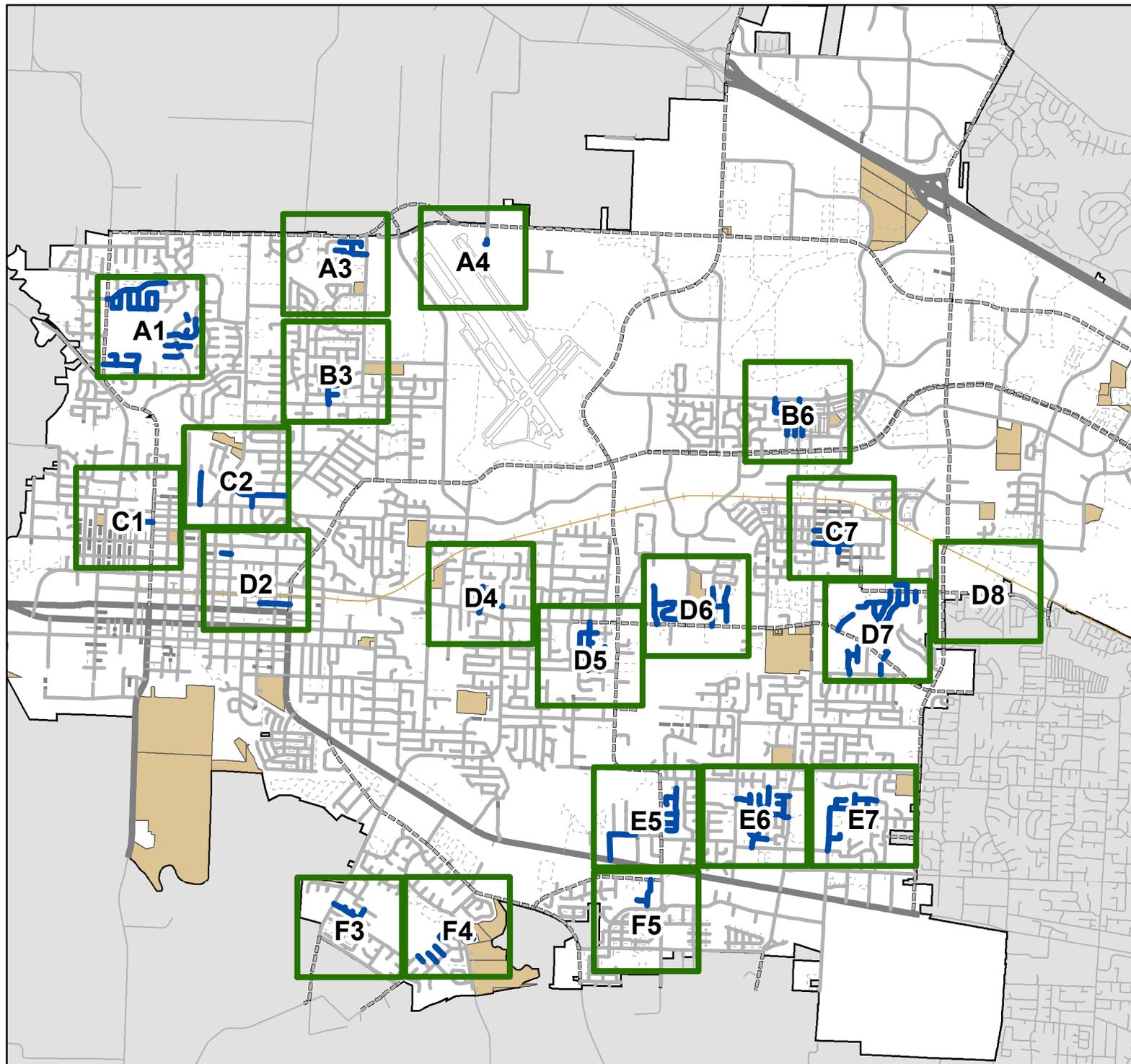
### Roadway Jurisdiction (Within City Limits)

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail



1 inch = 4,000 feet

**DISCLAIMER**  
This map was derived from several databases. The City cannot accept responsibility for any errors. Therefore, there are no warranties for this product. However, notification of errors would be appreciated.



**Template SS TOTALS**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

TEMPLATE TOTALS	AREA (SQYD)	EXISTING UTILITIES & SURVEY							RPMS			THERMOPLASTIC PAVEMENT MARKINGS									
		MANHOLE	CATCHBASIN	WATER VALVE	GAS VALVE	CLEAN OUT	SURVEY PIN	SURVEY MON BOX	BLUE	WHITE	YELLOW	STOP BAR	STD X-WALK	HI-VIS X-WALK	4" YELLOW (LF)	12" WHITE (LF)	8" WHITE (LF)	LEFT TURN ARROW (EA)	RIGHT TURN ARROW (EA)	BIKE SYMBOL	SCHOOL LEGEND
A1	39,918	60	52	10	0	1	44	1	19	0	4	4	1	1	140	303	0	0	0	0	0
A3	9,763	18	12	16	0	0	11	0	6	0	0	1	0	0	0	18	0	0	0	0	0
A4	926	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B3	6,767	9	7	1	0	0	0	0	1	0	0	1	0	0	0	19	0	0	0	0	0
B6	11,085	23	35	4	0	0	7	0	11	0	0	3	0	0	0	26	0	0	0	0	0
C1	874	1	2	4	1	0	0	0	1	0	0	1	0	0	0	12	0	0	0	0	0
C2	8,409	6	5	0	0	0	0	0	2	0	0	2	0	0	0	42	0	0	0	0	0
C7	7,232	7	2	11	1	0	0	0	1	0	0	5	0	1	0	169	0	0	0	0	3
D2	2,006	2	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D4	5,760	6	8	0	0	0	0	0	1	0	0	4	0	0	0	64	0	0	0	0	0
D5	14,279	25	23	7	0	0	18	1	6	0	0	5	0	0	0	85	0	0	0	0	0
D6	20,987	80	33	24	0	0	16	21	17	0	6	3	0	0	156	54	0	0	0	0	0
D7	25,088	86	52	54	0	1	52	6	18	7	33	9	0	0	800	162	1009	6	2	4	0
D8	251	1	2	0	0	0	2	0	0	0	0	1	0	0	0	12	0	0	0	0	0
E5	14,703	21	22	10	1	0	15	1	9	0	0	2	0	0	0	49	0	0	0	0	0
E6	22,736	59	40	23	0	0	42	0	12	0	0	7	0	4	0	876	0	0	0	0	0
E7	15,963	27	26	6	0	0	19	0	8	0	0	2	0	0	0	26	0	0	0	0	0
F3	4,965	8	7	3	0	0	0	0	3	0	0	1	0	0	0	22	0	0	0	0	0
F4	8,340	22	14	11	0	0	5	10	5	0	0	2	0	6	0	30	0	0	0	0	0
F5	3,810	4	3	4	0	0	6	0	3	0	0	1	0	0	0	20	0	0	0	0	0
<b>TOTALS</b>	<b>223,860</b>	<b>466</b>	<b>351</b>	<b>191</b>	<b>3</b>	<b>2</b>	<b>237</b>	<b>40</b>	<b>123</b>	<b>7</b>	<b>43</b>	<b>54</b>	<b>1</b>	<b>12</b>	<b>1,096</b>	<b>1,989</b>	<b>1,009</b>	<b>6</b>	<b>2</b>	<b>4</b>	<b>3</b>

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

# Slurry Seal A1

March 2016

## Legend

- SS16
- SS16\_GRID
- Park
- City Limits

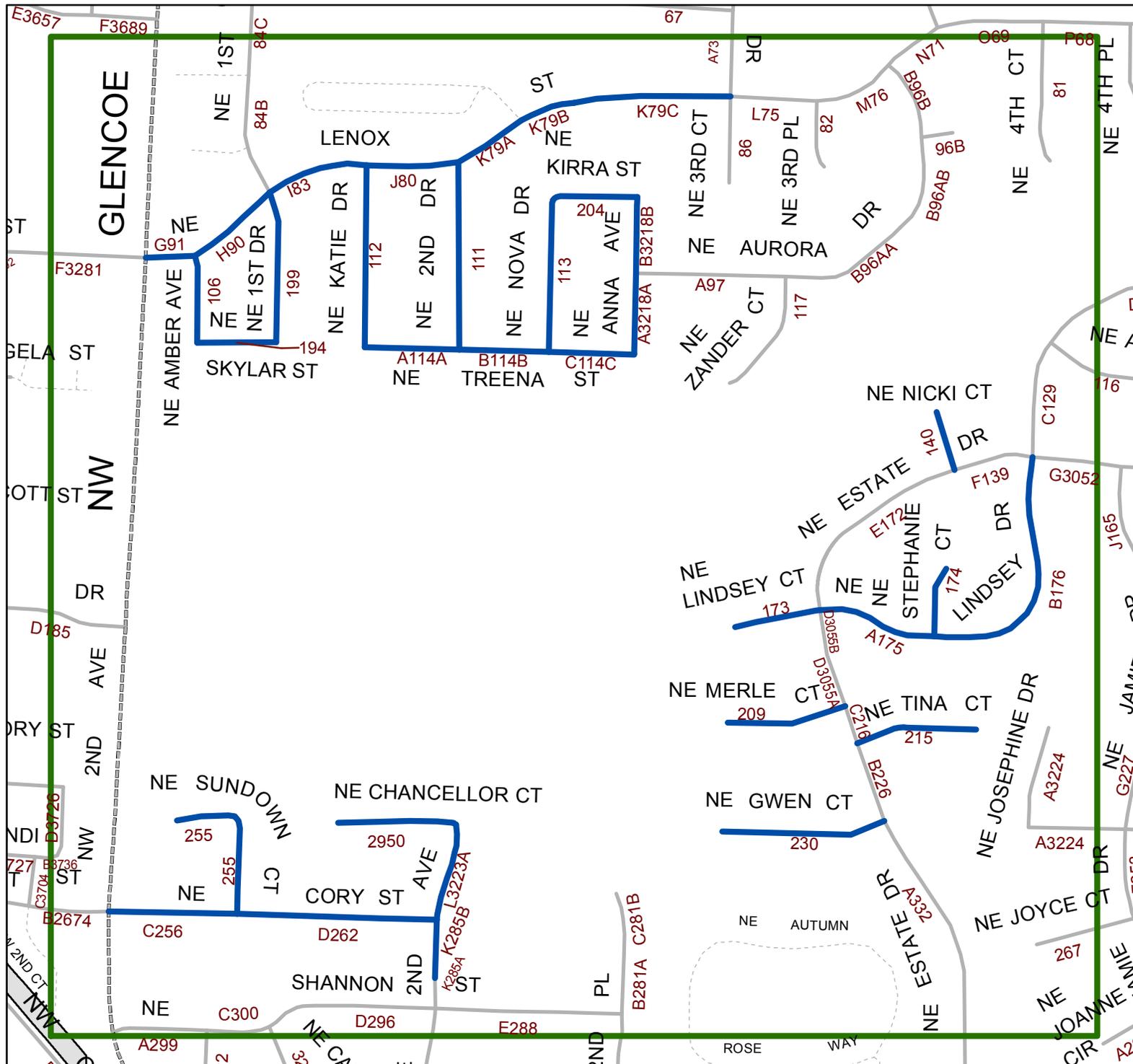
## Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



1 inch = 400 feet

DISCLAIMER  
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**Template A1**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY					RPMS		THERMOPLASTIC PAVEMENT MARKINGS				GARBAGE DAY	NOTES			
								MANHOLE	CATCHBASIN	WATER VALVE	CLEAN OUT	SURVEY PIN	SURVEY MON BOX	BLUE	YELLOW	STOP BAR	STD X-WALK	HI-VIS X-WALK			4" YELLOW (LF)	12" WHITE (LF)	
J80	NE LENOX ST	C/L KATIE DR	C/L 2ND DR	270	33	0.0	990	1	0	0	0	2	0	1	0	0	0	0	0	0	0	TUESDAY	DIGOUT: Sani MH at Lenox/2nd Ave NEEDS REPAIR
204	NE KIRRA ST	NOVA DR	ANNA AVE	240	29	0.0	773	2	0	0	0	3	0	1	0	0	0	0	0	0	0	TUESDAY	
H90	NE LENOX ST	C/L AMBER AVE	C/L 1ST DR	282	34	0.0	1065	3	0	0	0	3	0	0	0	0	0	0	0	0	0	TUESDAY	
G91	NE LENOX ST	E/S GLENCOE RD	C/L AMBER AVE	125	36	0.0	500	1	2	1	0	3	0	0	0	1	0	0	0	0	20	TUESDAY	
B3218B	NE ANNA AVE	C/L AURORA DR	KIRRA ST	217	29	0.3	839	1	0	0	0	0	0	0	0	0	0	0	0	0	0	TUESDAY	
106	NE AMBER AVE	SKYLAR ST	S/S LENOX ST	237	30	0.3	930	2	2	0	0	1	0	1	0	0	0	0	0	0	0	TUESDAY	
199	NE 1ST DR	SKYLAR ST	S/S LENOX ST	430	30	0.3	1573	2	3	1	0	2	0	1	0	0	0	0	0	0	0	TUESDAY	
194	NE SKYLAR ST	AMBER AVE	1ST DR	223	30	0.0	743	1	1	0	0	1	0	0	0	0	0	0	0	0	0	TUESDAY	
112	NE KATIE DR	TREENA ST	S/S LENOX ST	519	29	0.3	1812	1	2	0	0	2	0	1	0	0	0	0	0	0	0	TUESDAY	
111	NE 2ND DR	N/S TREENA ST	S/S LENOX ST	520	29	0.0	1676	2	4	2	0	0	0	1	0	0	0	0	0	0	0	TUESDAY	
A114A	NE TREENA ST	KATIE DR	C/L 2ND DR	276	30	0.0	920	2	0	0	0	1	0	0	0	0	0	0	0	0	0	TUESDAY	
113	NE NOVA DR	N/S TREENA ST	KIRRA ST	440	30	0.0	1467	2	4	0	0	1	0	1	0	0	0	0	0	0	0	TUESDAY	
B114B	NE TREENA ST	C/L 2ND DR	C/L NOVA DR	269	29	0.0	867	1	1	0	0	1	0	0	0	0	0	0	0	0	0	TUESDAY	
A3218A	NE ANNA AVE	TREENA ST	AURORA DR	233	29	0.3	890	2	0	0	0	2	0	1	0	0	0	0	0	0	0	TUESDAY	
C114C	NE TREENA ST	C/L NOVA DR	ANNA AVE	259	30	0.0	863	3	1	0	0	0	0	1	0	0	0	0	0	0	0	TUESDAY	
140	NE NICKI CT	N/S ESTATE DR	CUL DE SAC (N)	85	30	1.0	842	2	1	0	0	0	1	0	0	0	0	0	0	0	0	TUESDAY	
173	NE LINDSEY CT	W/S ESTATE DR	CUL DE SAC	177	30	1.0	1148	1	1	0	0	0	0	1	0	1	0	0	0	0	16	TUESDAY	
174	NE STEPHANIE CT	N/S LINDSEY DR	CUL DE SAC	120	30	1.0	958	1	2	0	0	1	0	0	0	0	0	0	0	0	0	TUESDAY	
A175	NE LINDSEY DR	E/S ESTATE DR	C/L STEPHANIE CT	335	30	0.0	1117	3	1	3	0	2	0	1	0	1	0	0	0	0	17	TUESDAY	
B176	NE LINDSEY DR	C/L STEPHANIE CT	S/S ESTATE DR	746	30	0.0	2487	6	5	2	0	4	0	1	0	1	0	0	0	0	16	TUESDAY	
183	NE LENOX ST	C/L 1ST DR	C/L KATIE DR	311	34	0.0	1175	1	0	1	0	2	0	1	0	0	0	0	0	0	0	TUESDAY	
209	NE MERLE CT	W/S ESTATE DR	CUL DE SAC	282	30	1.0	1498	1	3	0	0	1	0	0	0	0	0	0	0	0	0	TUESDAY	
2950	NE CHANCELLOR CT	2ND AVE	CUL DE SAC (W)	321	30	1.3	1768	2	0	0	0	1	0	1	0	0	0	0	0	0	0	TUESDAY	
230	NE GWEN CT	W/S ESTATE DR	CUL DE SAC	404	30	1.0	1905	2	3	0	0	1	0	1	0	0	0	0	0	0	0	TUESDAY	
255	NE SUNDOWN CT	N/S CORY ST	CUL DE SAC	411	30	1.3	2068	3	2	0	0	5	0	1	0	0	0	0	0	0	0	TUESDAY	
L3223A	NE 2ND AVE	C/L CORY ST	N/S CHANCELLOR CT	286	30	0.0	953	2	3	0	0	0	0	0	0	0	0	0	0	0	0	TUESDAY	
D262	NE CORY ST	C/L SUNDOWN CT	W/S 2ND AVE	573	30	0.0	1910	1	3	0	1	1	0	1	0	0	0	0	0	0	0	TUESDAY	
K285B	NE 2ND AVE	PVMNT CHNG (N)	C/L CORY ST	137	30	0.0	457	2	2	0	0	1	0	0	0	0	0	0	0	0	0	TUESDAY	
K79A	NE LENOX ST	C/L 2ND	C/L SCHOOL DW	190	33	0.0	697	1	3	0	0	1	0	2	0	0	0	0	0	0	0	TUESDAY	
K79B	NE LENOX ST	C/L SCHOOL DW	PVT CHNG (W P/L #271)	174	33	0.0	638	2	0	0	0	0	0	0	0	0	0	1	0	160	TUESDAY	2-LANE HI-VIS X-WALK	
K79C	NE LENOX ST	PVT CHNG (W P/L #271)	W/S 3RD	458	33	0.0	1679	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TUESDAY	
C256	NE CORY ST	E/S GLENCOE RD	C/L SUNDOWN CT	342	30	0.0	1140	2	1	0	0	1	0	0	4	0	1	0	140	74	TUESDAY	2-LANE X-WALK	
215	NE TINA CT	E/S ESTATE DR	CUL DE SAC	304	30	1.0	1572	2	2	0	0	1	0	0	0	0	0	0	0	0	0	TUESDAY	
<b>TEMPLATE TOTALS</b>								39,918	60	52	10	1	44	1	19	4	4	1	1	140	303		

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# Slurry Seal A3

March 2016

## Legend

-  SS16
-  SS16\_GRID
-  Park
-  City Limits

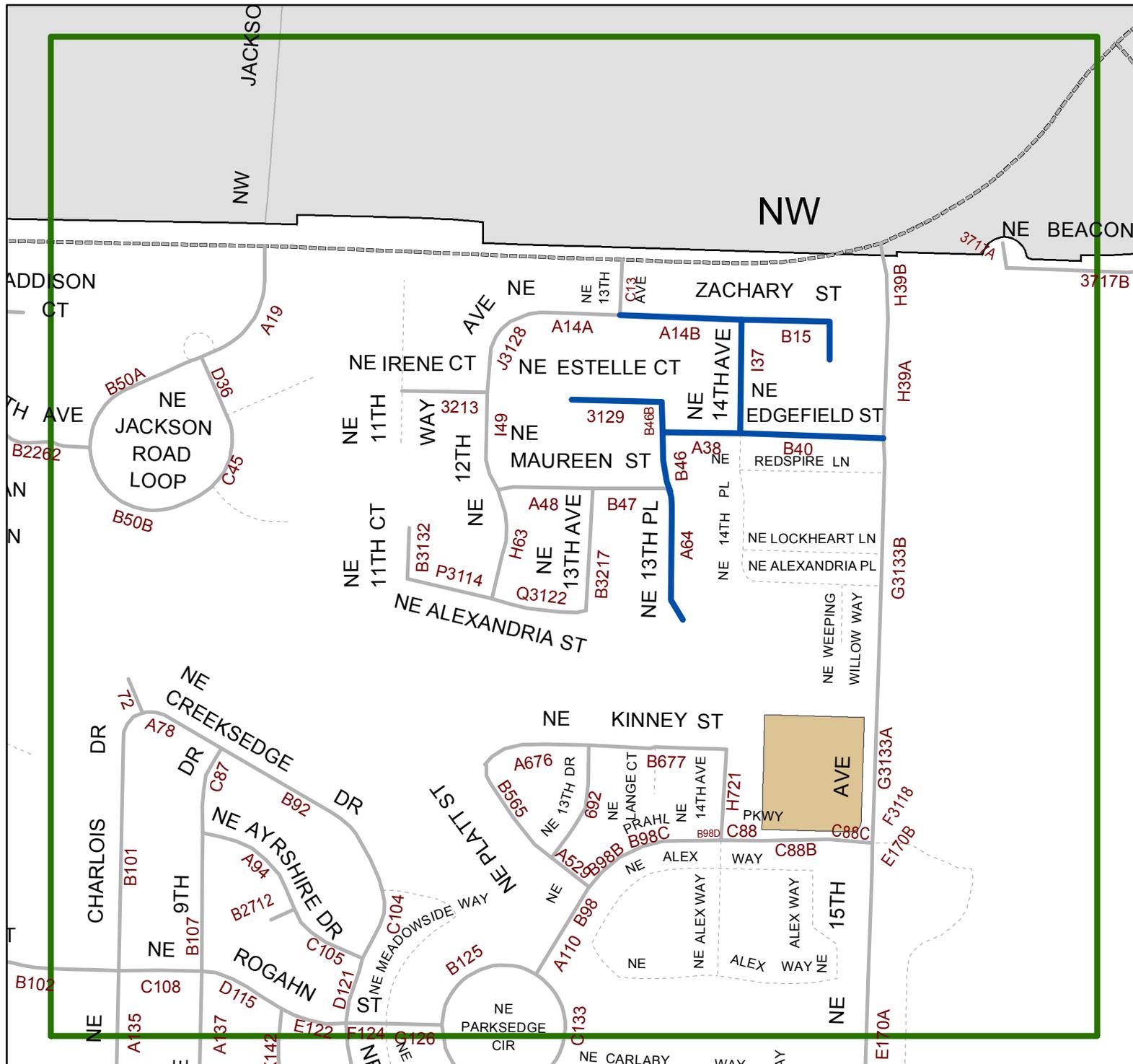
## Roadway Jurisdiction (Within City Limits)

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail



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**Template A3**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY				THERMOPLASTIC PAVEMENT MARKINGS		GARBAGE DAY	NOTES	
								MANHOLE	CATCHBASIN	WATER VALVE	SURVEY PIN	RPMS	12" WHITE (LF)			
A14B	NE ZACHARY ST	E/S 13TH AVE	C/L 14TH AVE	344	29	0.0	1108	2	2	0	0	0	0	0	THURSDAY	
B15	NE ZACHARY ST	C/L 14TH AVE	CUL DE SAC (E)	302	30	1.5	1844	2	1	2	2	2	0	0	THURSDAY	
3129	NE ESTELLE CT	CDS (W)	E/S 13TH PL	152	30	1.0	1065	3	1	2	3	0	0	0	THURSDAY	
B46B	NE 13TH PL	C/L EDGEFIELD ST	N/S ESTELLE CT	73	33	0.5	547	1	0	0	1	1	0	0	THURSDAY	
B46	NE 13TH PL	C/L MAUREEN ST	C/L EDGEFIELD ST	172	29	0.0	554	1	1	3	1	0	0	0	THURSDAY	
A64	NE 13TH PL	C/L NE MAUREEN ST	CUL DE SAC (S)	300	29	1.0	1525	6	2	2	3	1	0	0	THURSDAY	
I37	NE 14TH AVE	N/S EDGEFIELD ST	S/S ZACHARY ST	307	30	0.0	1023	0	2	2	0	2	0	0	THURSDAY	
A38	NE EDGEFIELD ST	E/S 13TH PL	C/L 14TH AVE	221	30	0.0	737	1	1	3	0	0	0	0	THURSDAY	
B40	NE EDGEFIELD ST	C/L 14TH AVE	W/S 15TH AVE	408	30	0.0	1360	2	2	2	1	0	1	18	THURSDAY	
<b>TEMPLATE TOTALS</b>							<b>9,763</b>	<b>18</b>	<b>12</b>	<b>16</b>	<b>11</b>	<b>6</b>	<b>1</b>	<b>18</b>		

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# Slurry Seal A4

March 2016

## Legend

-  SS16
-  SS16\_GRID
-  Park
-  City Limits

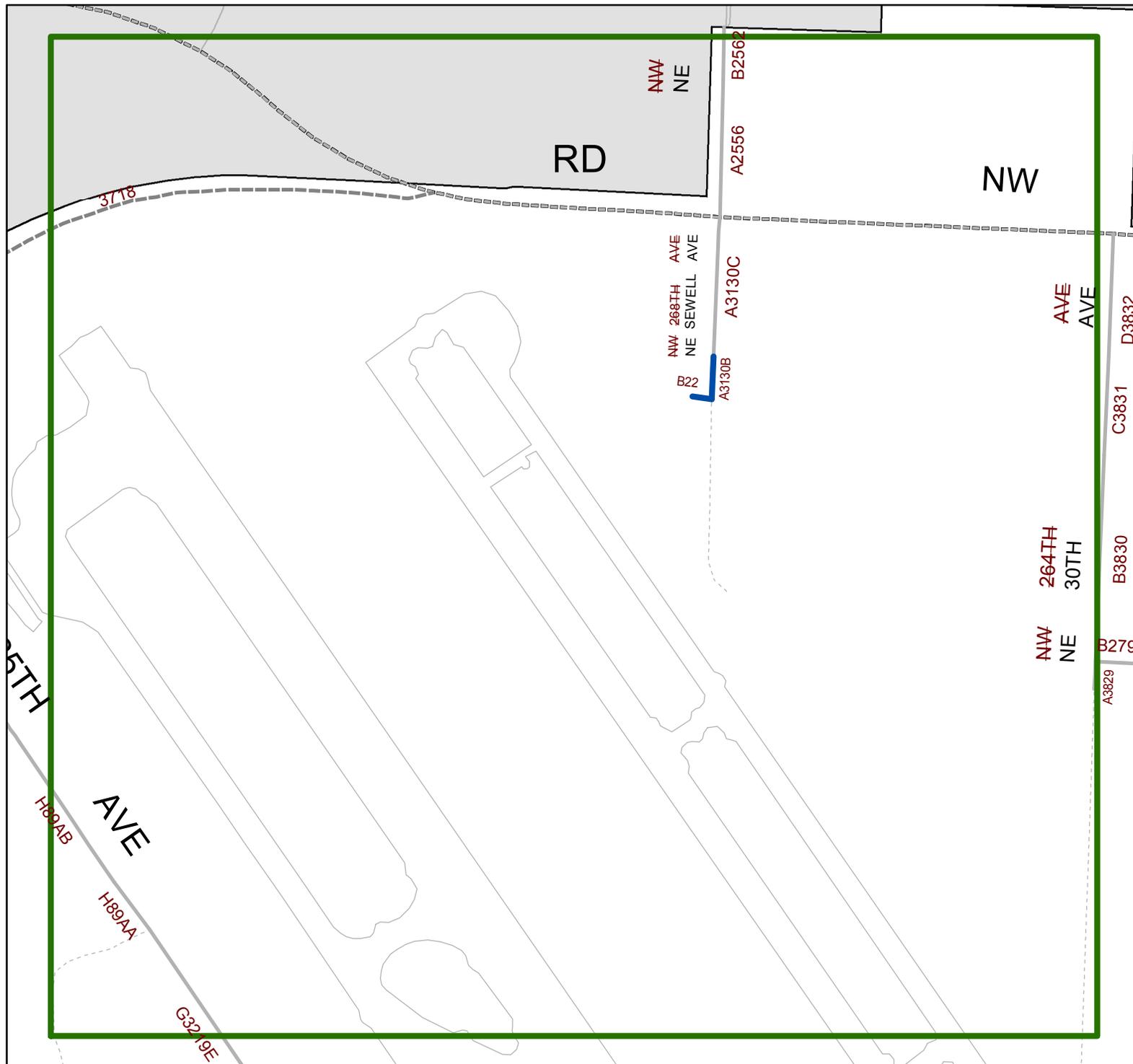
## Roadway Jurisdiction (Within City Limits)

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail



1 inch = 400 feet

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**Template A4**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES	GARBAGE DAY	NOTES
								MANHOLE		
B22	NE SEWELL AVE	W/S SEWELL	END (SPUR)	0	0	1.0	558	0	MONDAY	
A3130B	NE SEWELL AVE	GATE (S)	PVMT CHANGE	174	19	0.0	367	1	MONDAY	
<b>TEMPLATE TOTALS</b>							<b>926</b>	<b>1</b>		

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2016 Pavement Management Program  
Project#20552222-6102

# Slurry Seal B3

March 2016

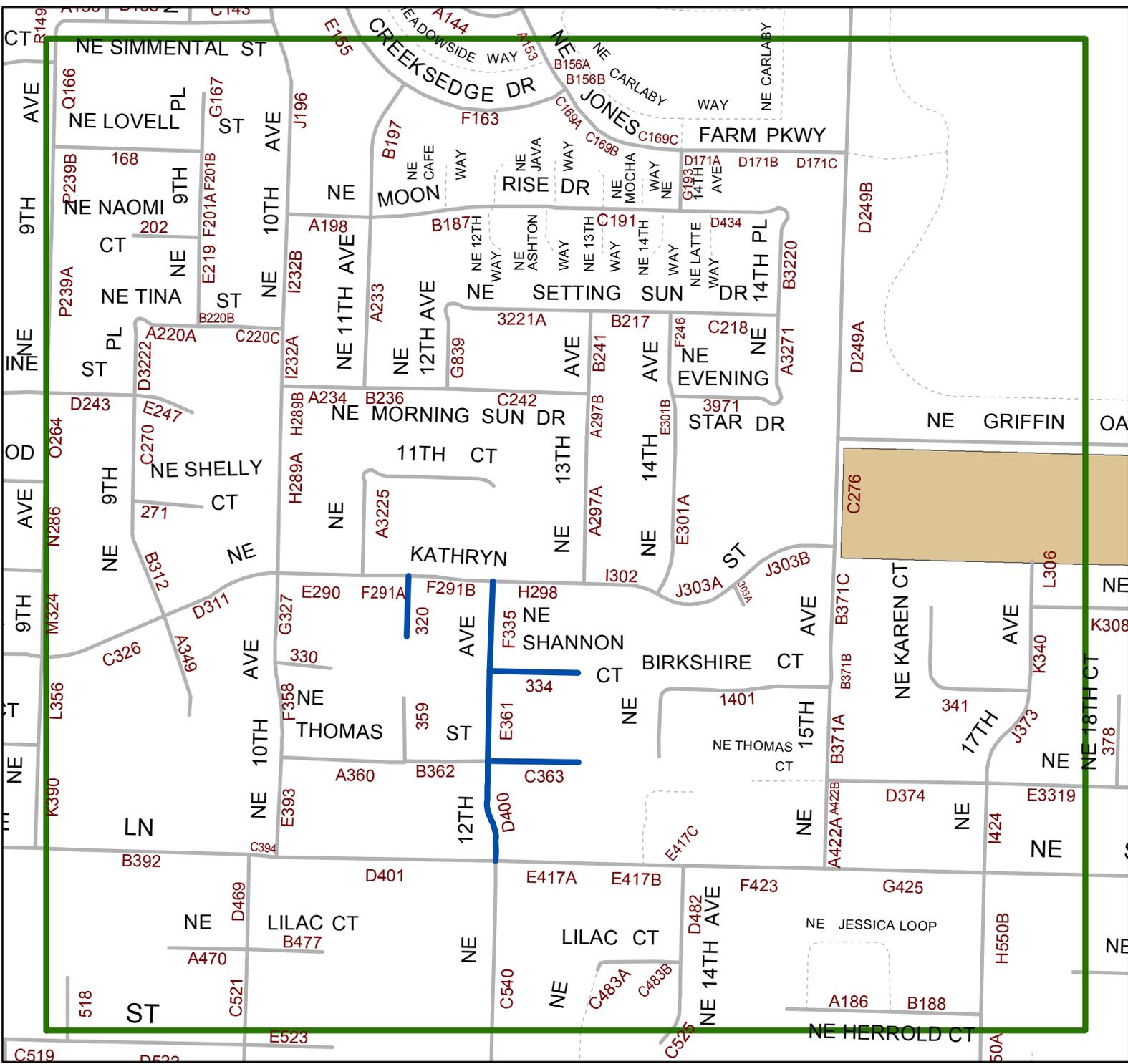
## Legend

- SS16
- SS16\_GRID
- Park
- City Limits
- Roadway Jurisdiction (Within City Limits)**
- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



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**Template B3**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY			RPMS	THERMOPLASTIC PAVEMENT MARKINGS		GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	WATER VALVE		BLUE	STOP BAR		
320	NE KATHRYN ST (SPUR E)	S/S KATHRYN ST	CUL DE SAC	79	36	1.0	874	1	0	0	0	0	0	THURSDAY	
334	NE SHANNON CT	E/S 12TH AVE	CUL DE SAC	200	36	1.0	1358	1	0	0	0	0	0	THURSDAY	
F335	NE 12TH AVE	C/L SHANNON CT	S/S KATHRYN ST	243	36	0.0	972	0	1	1	0	0	0	THURSDAY	
E361	NE 12TH AVE	C/L THOMAS ST	C/L SHANNON CT	263	36	0.0	1052	3	2	0	1	0	0	THURSDAY	
C363	NE THOMAS ST	E/S 12TH AVE	CUL DE SAC	201	36	1.0	1362	1	1	0	0	0	0	THURSDAY	
D400	NE 12TH AVE	N/S SUNRISE LN	C/L THOMAS ST	287	36	0.0	1148	3	3	0	0	1	19	THURSDAY	
<b>TEMPLATE TOTALS</b>							<b>6,767</b>	<b>9</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>19</b>		

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# Slurry Seal B6

March 2016

## Legend

-  SS16
-  SS16\_GRID
-  Park
-  City Limits

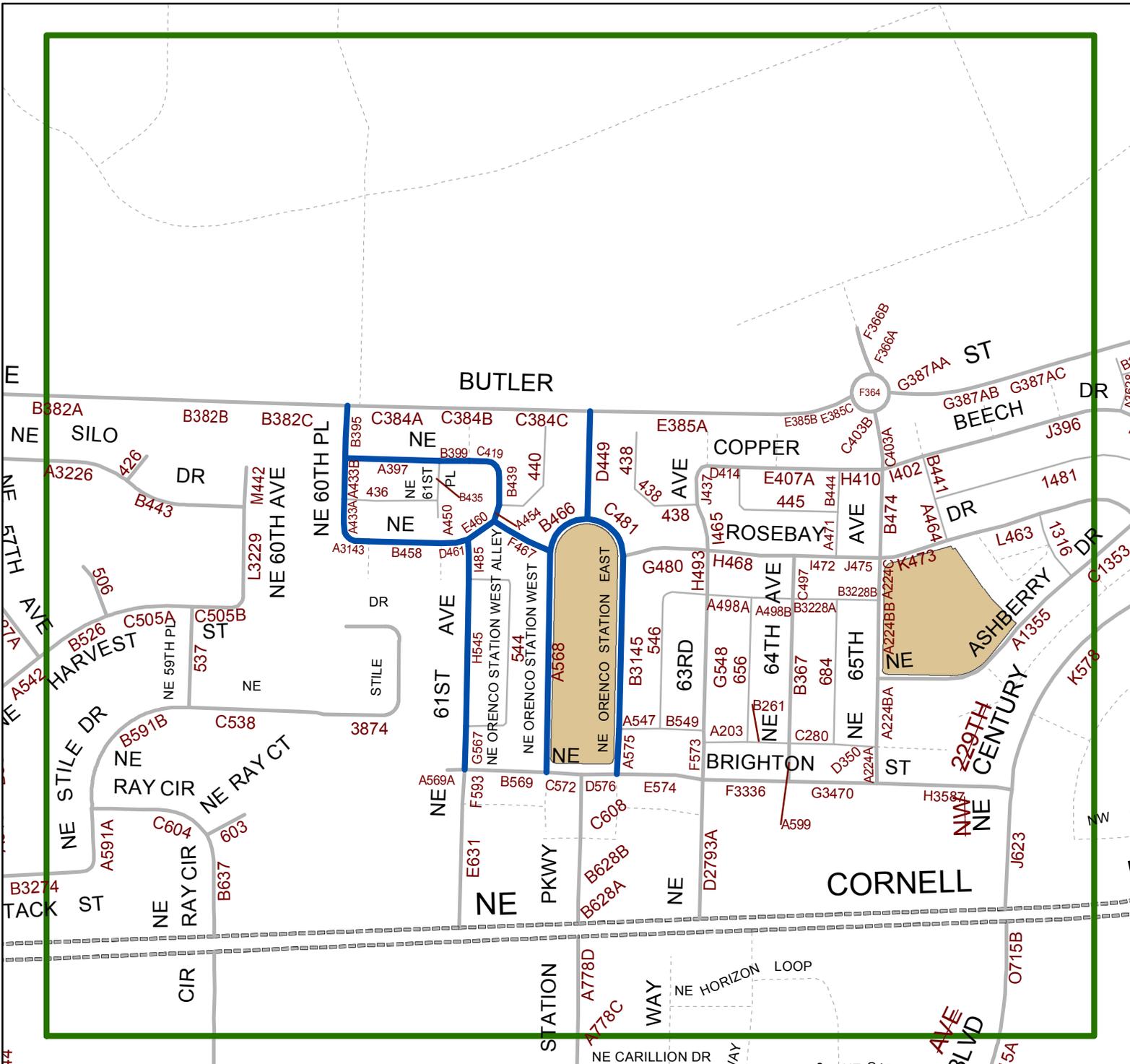
## Roadway Jurisdiction (Within City Limits)

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail



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**Template B6**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQVD)	EXISTING UTILITIES & SURVEY				RPMS		THERMOPLASTIC PAVEMENT MARKINGS		GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	WATER VALVE	SURVEY PIN	BLUE	STOP BAR	12" WHITE (LF)			
B395	NE 60TH PL	C/L COPPERBEECH DR	N/S BUTLER RD	132	24	0.0	352	1	2	0	0	0	1	8	TUESDAY		
A397	NE COPPERBEECH DR	E/S 60TH PL	C/L COPPERBEECH ALY	261	24	0.0	696	1	4	0	0	0	0	0	TUESDAY		
B399	NE COPPERBEECH DR	C/L COPPERBEECH ALY	C/L PVT DR (W)	91	24	0.0	243	0	0	0	0	1	0	0	TUESDAY		
C419	NE COPPERBEECH DR	C/L PVT DRIVE (W)	C/L 61ST PL	65	24	0.0	173	0	0	0	0	0	0	0	TUESDAY		
A433B	NE 60TH PL	C/L 60TH-COPPERBEECH ALY	C/L COPPERBEECH DR	125	24	0.0	333	1	2	0	2	1	0	0	TUESDAY		
B439	NE 61ST PL	C/L 61ST ALY	C/L COPPERBEECH DR	138	24	0.0	368	0	2	0	0	0	0	0	TUESDAY		
A454	NE 61ST PL	C/L ROSEBAY DR	C/L 61ST ALY	48	24	0.0	128	0	0	0	0	1	0	0	TUESDAY		
A433A	NE 60TH PL	C/L ROSEBAY DR	C/L 60TH-COPPERBEECH ALY	105	24	0.0	280	0	2	0	0	0	0	0	TUESDAY		
A3143	NE ROSEBAY DR	C/L 60TH PL	C/L PVT DRIVE (S)	67	24	0.0	179	2	0	0	0	0	0	0	TUESDAY		
E460	NE ROSEBAY DR	C/L 61ST AVE	C/L 61ST PL	99	24	0.0	264	1	0	0	0	0	0	0	TUESDAY		
D461	NE ROSEBAY DR	C/L PVT DR (E)	C/L 61ST AVE	78	24	0.0	208	0	1	0	0	0	0	0	TUESDAY		
B466	NE ORENCO STATION WEST PKWY	C/L ROSEBAY DR	C/L ORENCO STATION PKWY	170	24	0.0	453	1	2	1	1	1	0	0	TUESDAY		
F467	NE ROSEBAY DR	E/S 61ST PL	W/S ORENCO STA. WEST	170	24	0.0	453	2	2	0	0	0	0	0	TUESDAY		
C481	NE ORENCO STATION EAST PKWY	C/L NE ROSEBAY DR	C/L NE ORENCO STATION PKWY	178	24	0.0	475	1	1	3	0	0	0	0	TUESDAY		
I485	NE 61ST AVE	C/L 61ST ALY (INT N)	S/S ROSEBAY DR	117	24	0.0	312	2	2	0	0	0	0	0	TUESDAY		
H545	NE 61ST AVE	C/L 61ST ALY (INT S)	C/L 61ST ALY (INT N)	434	24	0.0	1157	3	2	0	0	2	0	0	TUESDAY		
B3145	NE ORENCO STATION EAST PKWY	C/L BRIGHTON-ROSEBAY ALY	C/L ROSEBAY DR	505	24	0.0	1347	3	4	0	1	1	0	0	TUESDAY		
G567	NE 61ST AVE	N/S BRIGHTON DR	C/L 61ST ALY (INT S)	122	24	0.0	325	1	2	0	1	0	1	9	TUESDAY		
A568	NE ORENCO STATION WEST PKWY	N/S BRIGHTON DR	C/L ROSEBAY DR	631	24	0.0	1683	3	3	0	0	2	0	0	TUESDAY		
A575	NE ORENCO STATION EAST PKWY	N/S BRIGHTON DR	C/L BRIGHTON-ROSEBAY ALY	120	24	0.0	320	0	2	0	1	1	0	0	TUESDAY		
B458	NE ROSEBAY DR	C/L PVT DRIVE (W)	C/L PVT DRIVE (E)	214	24	0.0	571	0	0	0	0	1	0	0	TUESDAY		
D449	NE ORENCO STATION PKWY	N/S ORENCO STATION E/W	S/S BUTLER RD	287	24	0.0	765	1	2	0	1	0	1	9	TUESDAY		
<b>TEMPLATE TOTALS</b>							<b>11,085</b>	<b>23</b>	<b>35</b>	<b>4</b>	<b>7</b>	<b>11</b>	<b>3</b>	<b>26</b>			

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2016 Pavement Management Program  
Project#20552222-6102

# Slurry Seal C1

March 2016

## Legend

-  SS16
-  SS16\_GRID
-  Park
-  City Limits

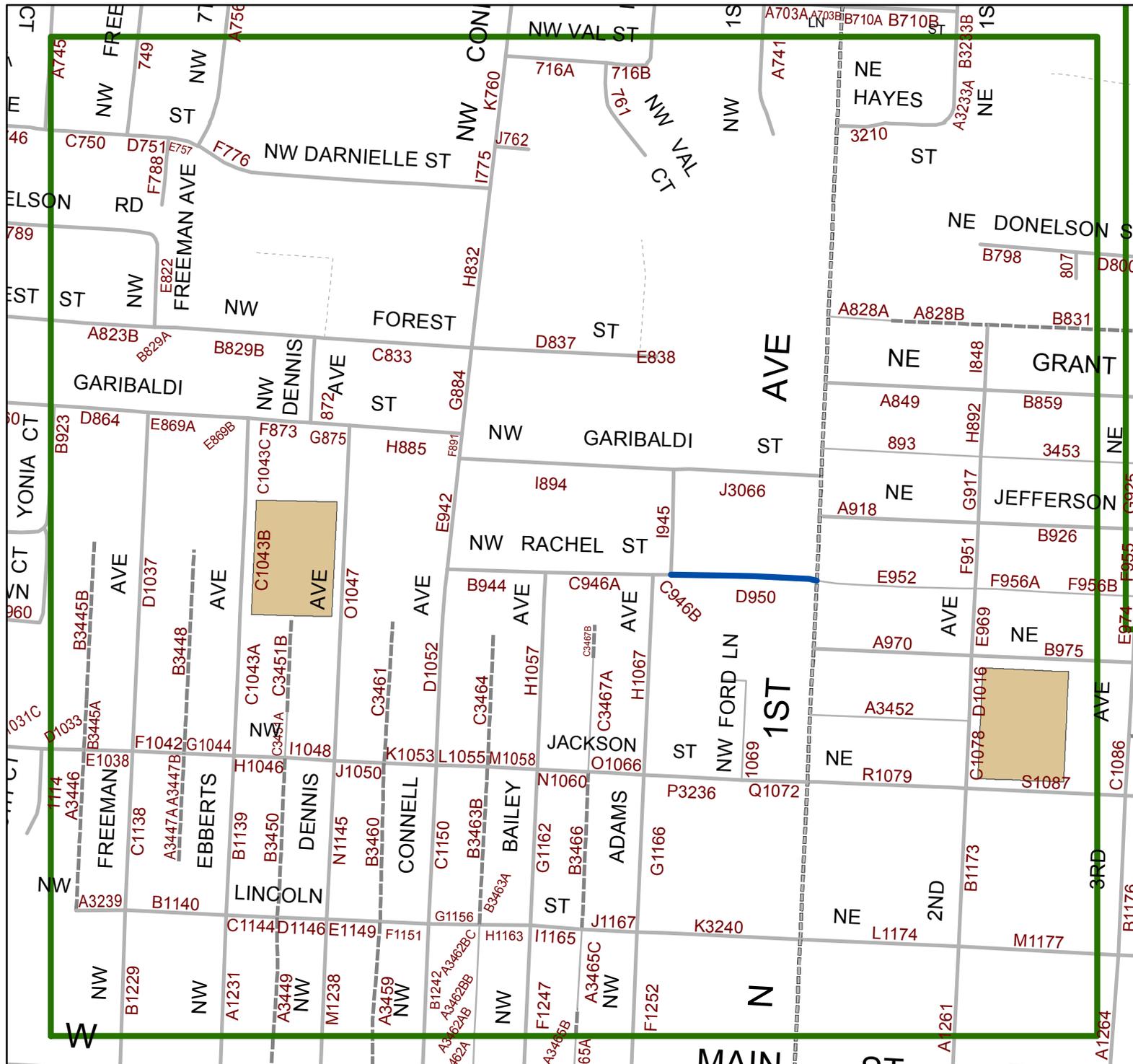
## Roadway Jurisdiction (Within City Limits)

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail



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**Template C1**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY				RPMS	THERMOPLASTIC PAVEMENT MARKINGS	GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	WATER VALVE	GAS VALVE				
D950	NW RACHEL ST	END PAVE (W)	W/S 1ST AVE	342	23	0.0	874	1	2	4	1	1	12" WHITE (LF)	TUESDAY	
<b>TEMPLATE TOTALS</b>							<b>874</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>12</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

# Slurry Seal C2

March 2016

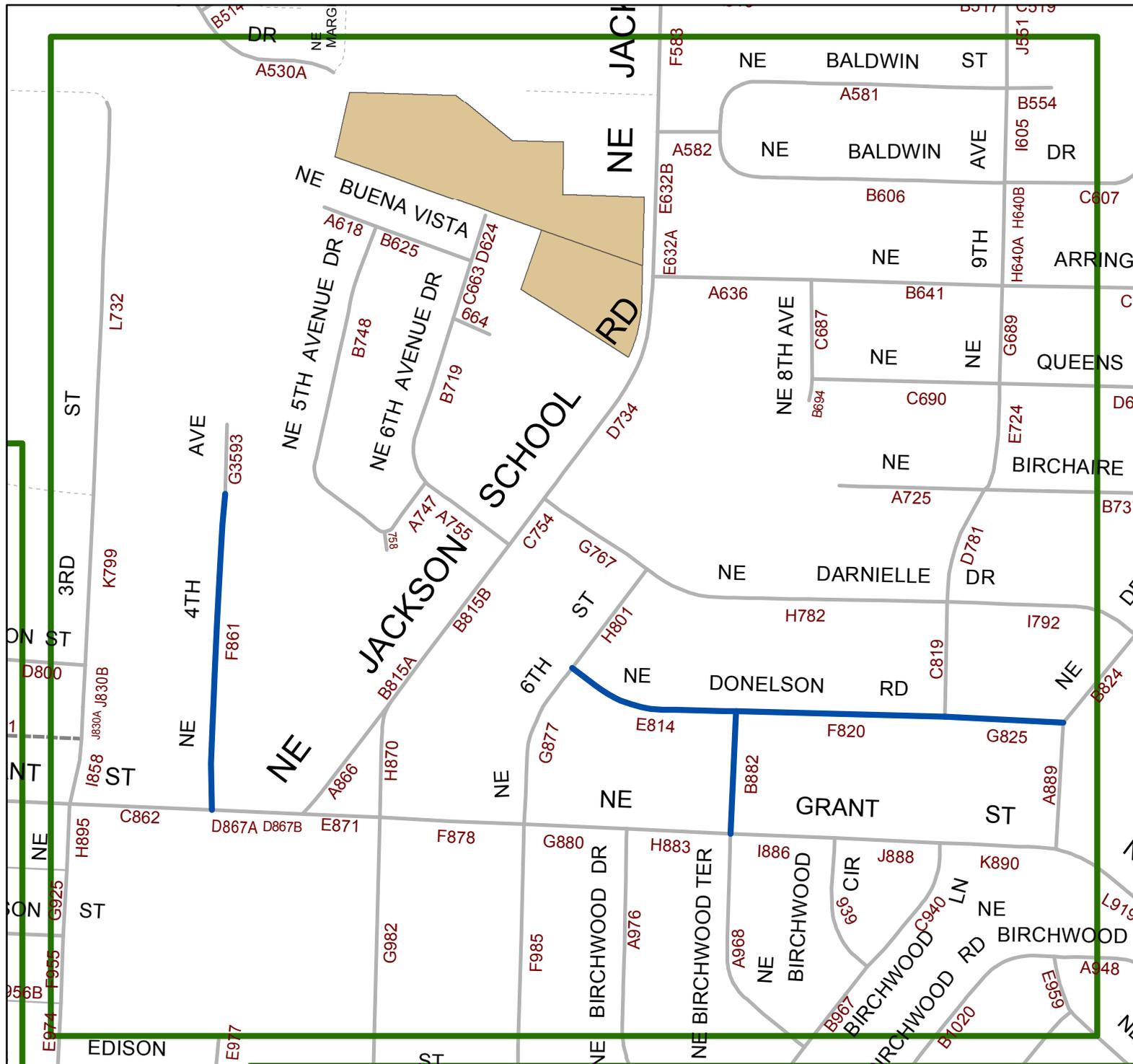
## Legend

- SS16
  - SS16\_GRID
  - Park
  - City Limits
- ### Roadway Jurisdiction (Within City Limits)
- City Roadway
  - City Alley
  - Unimproved City ROW
  - County Road
  - State Highway
  - Private
  - Light Rail



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**Template C2**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES &		RPMS		THERMOPLASTIC PAVEMENT MARKINGS		GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	BLUE	STOP BAR	12" WHITE (LF)			
F861	NE 4TH AVE	N/S GRANT ST	PAVEMENT CHANGE	824	24	0.0	2197	1	0	1	1	12	MONDAY		
E814	NE DONELSON RD	E/S 6TH AVE	C/L BIRCHWOOD TER	493	32	0.0	1753	2	0	1	0	0	THURSDAY		
B882	NE BIRCHWOOD TER	20' (N) of S/S GRANT ST	S/S DONELSON RD	306	32	0.0	1088	0	2	0	1	15	THURSDAY		
F820	NE DONELSON RD	C/L BIRCHWOOD TER	C/L 9TH AVE	611	32	0.0	2172	2	1	0	0	0	THURSDAY		
G825	NE DONELSON RD	C/L 9TH AVE	W/S DELSEY RD	337	32	0.0	1198	1	2	0	1	15	THURSDAY	8x8 DIGOUT on corner of 9th	
<b>TEMPLATE TOTALS</b>							<b>8,409</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>3</b>	<b>42</b>	<b>0</b>		

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2016 Pavement Management Program  
Project#20552222-6102

# Slurry Seal C7

March 2016

## Legend

- SS16
- SS16\_GRID
- Park
- City Limits

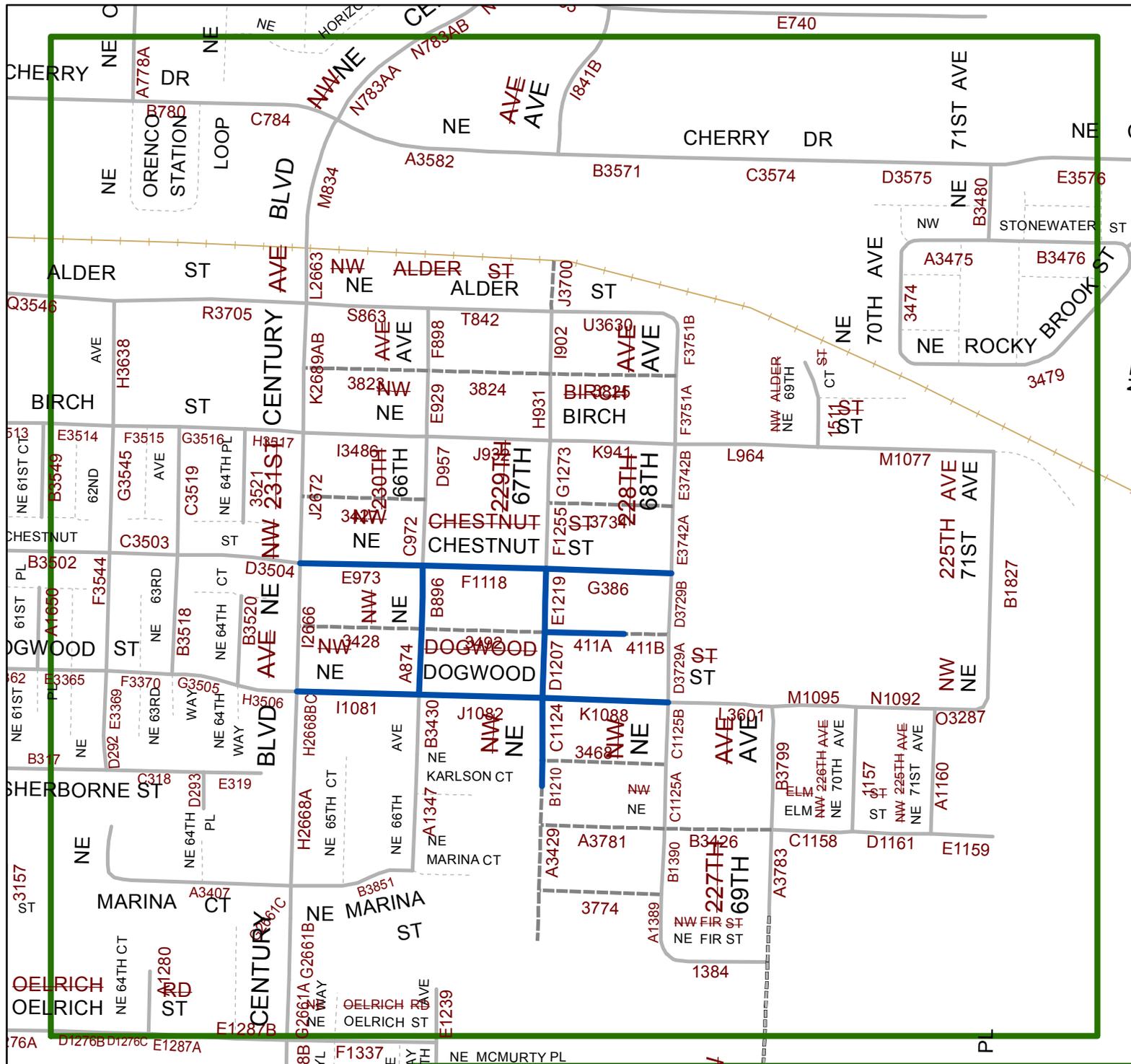
## Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



1 inch = 400 feet

DISCLAIMER  
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**Template C7**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES		RPMS		THERMOPLASTIC PAVEMENT MARKINGS				GARBAGE DAY	NOTES
								CATCHBASIN	WATER VALVE	BLUE	STOP BAR	HI-VIS X-WALK	12" WHITE (LF)	SCHOOL LEGEND			
E973	NW CHESTNUT ST	E/S 231ST AVE	C/L 230TH AVE	350	20	0.0	778	0	1	0	1	0	14	0	WEDNESDAY		
F1118	NW CHESTNUT ST	C/L 230TH AVE	C/L 229TH AVE	362	20	0.0	804	0	1	0	0	0	0	0	WEDNESDAY		
G386	NW CHESTNUT ST	C/L 229TH AVE	W/S 228TH AVE	353	21	0.0	824	0	1	0	0	0	1	1	WEDNESDAY		
I1081	NW DOGWOOD ST	E/S 231ST AVE	C/L 230TH AVE	350	26	0.0	1011	0	2	0	1	0	14	0	WEDNESDAY		
J1082	NW DOGWOOD ST	C/L 230TH AVE	C/L 229TH AVE	359	22	0.0	878	0	3	0	0	0	0	1	WEDNESDAY		
C1124	NW 229TH AVE	ALLEY EAST	S/S DOGWOOD ST	189	21	0.0	441	0	0	0	1	0	12	0	WEDNESDAY		
E1219	NW 229TH AVE	C/L ALLEY	S/S CHESTNUT ST	178	16	0.0	316	0	0	0	0	0	0	0	WEDNESDAY		
D1207	NW 229TH AVE	N/S DOGWOOD ST	C/L ALLEY	172	16	0.0	306	0	0	0	1	0	18	0	WEDNESDAY		
411A	HB ALLEY (CHESTNUT/DOGWOOD)	E/S 229TH AVE	END PVMNT	226	12	0.0	301	1	0	0	0	0	0	0	WEDNESDAY		
B896	NW 230TH AVE	C/L ALLEY	S/S CHESTNUT ST	180	22	0.0	440	0	1	0	0	0	0	0	WEDNESDAY		
A874	NW 230TH AVE	N/S DOGWOOD ST	C/L ALLEY	180	22	0.0	440	0	0	0	1	0	11	0	WEDNESDAY		
K1088	NW DOGWOOD ST	C/L 229TH AVE	W/S 228TH AVE	249	22	0.0	609	0	0	0	0	1	100	1	WEDNESDAY		
B1210	NW 229TH AVE	END (S)	ALLEY EAST	36	21	0.0	84	1	2	1	0	0	0	0	WEDNESDAY		
<b>TEMPLATE TOTALS</b>							<b>7,232</b>	<b>2</b>	<b>11</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>169</b>	<b>3</b>			

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2016 Pavement Management Program  
Project#20552222-6102

# Slurry Seal D2

March 2016

## Legend

- SS16
- SS16\_GRID
- Park
- City Limits

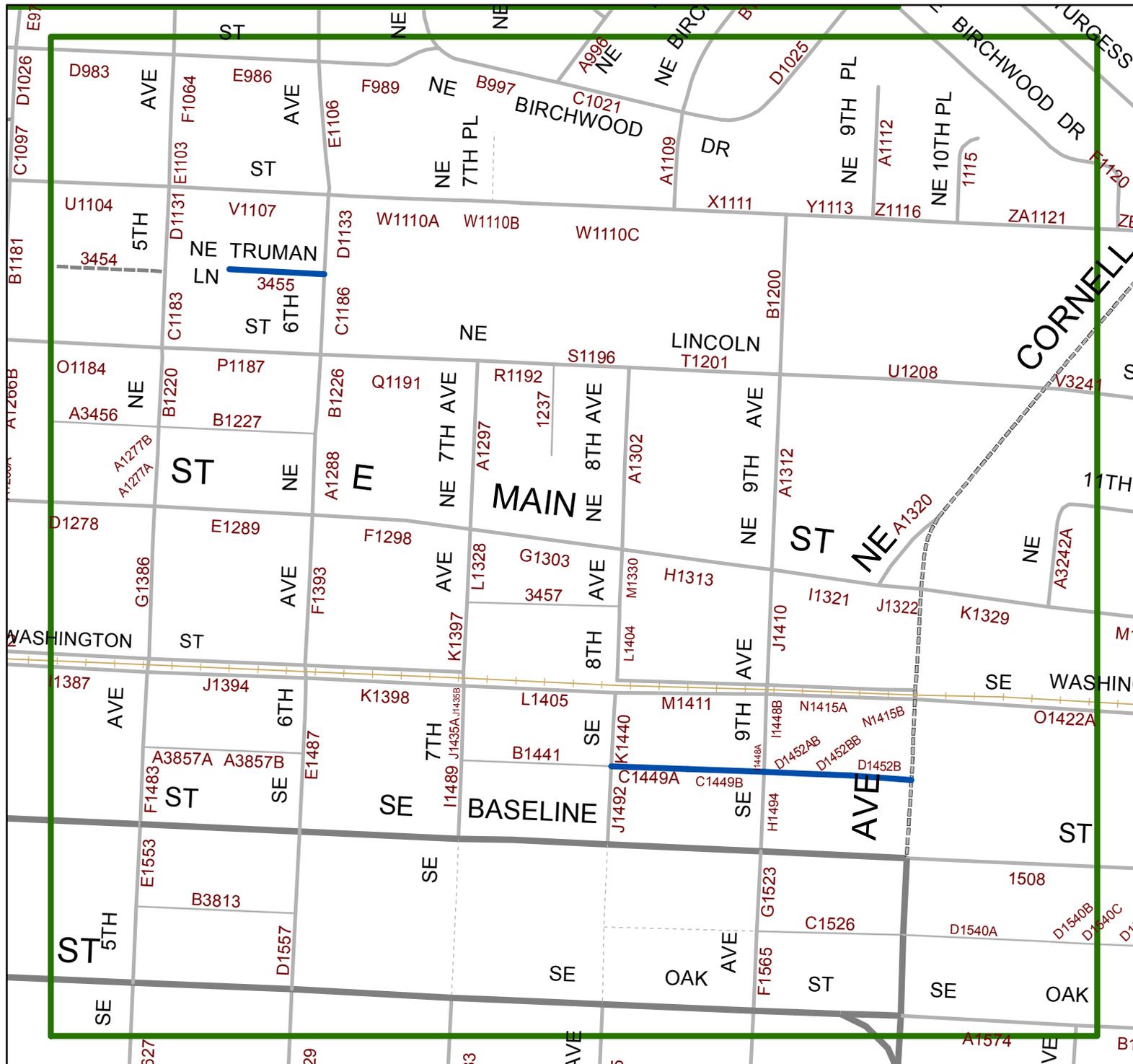
## Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



1 inch = 400 feet

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**Template D2**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES			GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	WATER VALVE		
3455	NE TRUMAN LN	W/S 6TH	END (W)	247	16	0.0	439	1	2	0	MONDAY	
D1452AB	HB ALLEY (BASELINE/WASHINGTON)	E/S 9TH AVENUE	END CURB BOTH	66	20	0.0	147	0	0	0	MONDAY	
D1452B	HB ALLEY (BASELINE/WASHINGTON)	BEG CURB BOTH	W/S 10TH AVE	123	20	0.0	273	0	1	3	MONDAY	
C1449A	HB ALLEY (BASELINE/WASHINGTON)	E/S 8TH AVE	BEG CURB BOTH	191	18	0.0	382	0	1	0	MONDAY	4" DEEP; PCC TO COVER; CHECK W/CHEVRON ON DIGOUT
C1449B	HB ALLEY (BASELINE/WASHINGTON)	BEG CURB BOTH	W/S 9TH AVE	185	20	0.0	411	1	2	0	MONDAY	PCC TO COVER AT END
D1452BB	HB ALLEY (BASELINE/WASHINGTON)	END CURB BOTH	BEG CURB BOTH	159	20	0.0	353	0	0	0	MONDAY	
<b>TEMPLATE TOTALS</b>							<b>2,006</b>	<b>2</b>	<b>6</b>	<b>3</b>		

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2016 Pavement Management Program  
Project#20552222-6102

# Slurry Seal D4

March 2016

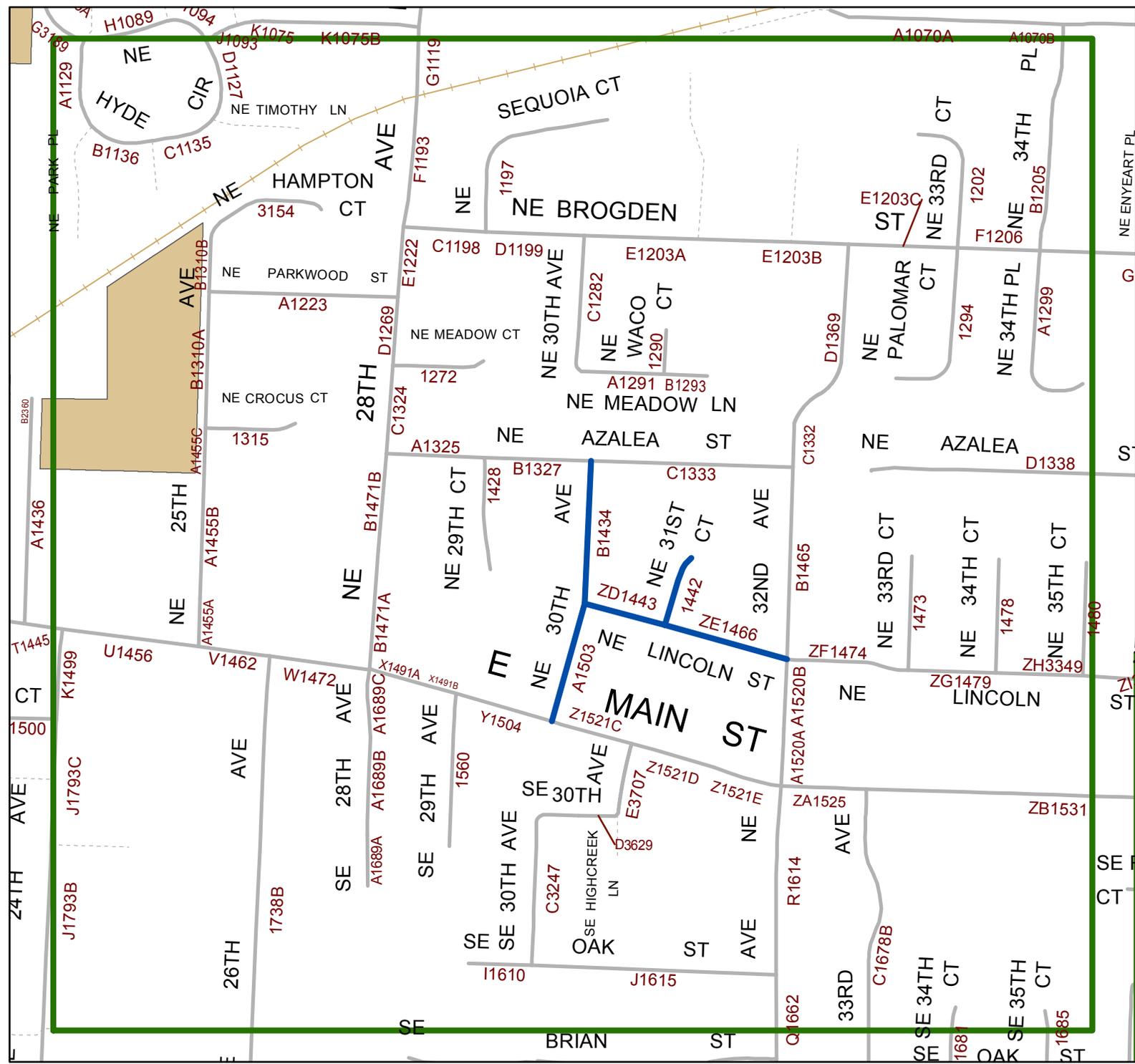
## Legend

- SS16
- SS16\_GRID
- Park
- City Limits
- Roadway Jurisdiction (Within City Limits)**
- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



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**Template D4**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES		RPMS	THERMOPLASTIC PAVEMENT MARKINGS		GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN		BLUE	STOP BAR		
B1434	NE 30TH AVE	C/L LINCOLN ST	S/S AZALEA ST	398	32	0.0	1415	1	1	0	1	15	WEDNESDAY	
1442	NE 31ST CT	N/S LINCOLN ST	CUL DE SAC (N)	142	32	1.0	1063	1	2	0	0	0	WEDNESDAY	
ZD1443	NE LINCOLN ST	E/S 30TH AVE	C/L 31ST CT	231	32	0.0	821	0	2	1	1	16	WEDNESDAY	
ZE1466	NE LINCOLN ST	C/L 31ST CT	W/S 32ND AVE	352	32	0.0	1252	2	2	0	1	16	WEDNESDAY	
A1503	NE 30TH AVE	N/S E MAIN ST	C/L LINCOLN ST	340	32	0.0	1209	2	1	0	1	17	WEDNESDAY	
<b>TEMPLATE TOTALS</b>							<b>5,760</b>	<b>6</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>64</b>		

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**Template D5**  
**Schedule "B": Slurry Seals**  
2016 Pavement Management Program  
#20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQ/D)	EXISTING UTILITIES & SURVEY					RPMS		THERMOPLASTIC PAVEMENT MARKINGS		GARBAGE DAY	NOTES	
								MANHOLE	CATCHBASIN	WATER VALVE	SURVEY PIN	SURVEY MON BOX	BLUE	STOP BAR	12" WHITE (LF)				
1637	SE 41ST AVE (SPUR)	E/S 41ST AVE	CUL DE SAC (E)	22	51	1.0	683	1	2	0	1	0	0	0	0	0	0	WEDNESDAY	
E1638	SE 41ST AVE	C/L 41ST AVE (SPUR)	C/L RUSSELL ST	282	30	0.0	940	2	0	0	1	0	1	0	0	0	0	WEDNESDAY	
C3755	SE 43RD AVE	OAK ST (MAILBOX)	DEAD END (N)	169	29	0.0	545	1	0	0	1	0	0	0	0	0	0	WEDNESDAY	
D1699	SE 41ST AVE	C/L OAK ST	C/L 41ST AVE (SPUR)	303	29	0.0	976	2	3	0	0	0	0	0	0	0	0	WEDNESDAY	
N1701A	SE OAK ST	E/S 41ST AVE	43RD AVE (MAILBOX)	454	29	0.0	1463	3	4	3	4	0	2	0	0	0	0	WEDNESDAY	
F1594	SE 41ST AVE	C/L RUSSELL ST	S/S EAST MAIN ST	296	30	0.0	987	2	0	0	3	0	0	1	19	0	0	WEDNESDAY	
B1595B	SE RUSSELL ST	E/S 41ST AVE	PAVEMENT CHANGE (E)	203	30	0.0	677	0	2	3	0	0	0	1	16	0	0	WEDNESDAY	
A1595A	SE RUSSELL ST	E/S 40TH AVE	W/S 41ST AVE	227	30	0.0	757	1	2	0	2	1	0	1	16	0	0	WEDNESDAY	
G3290	SE 40TH AVE	S/S WALNUT ST	N/S RUSSEL ST	750	30	0.8	2919	6	4	0	3	0	2	0	0	0	0	WEDNESDAY	
C1744	SE 41ST AVE	C/L WALNUT ST	C/L OAK ST	242	30	0.0	807	1	0	0	0	0	0	0	0	0	0	WEDNESDAY	
ZL3352	SE WALNUT ST	W/S 40TH AVE	W/S 41ST AVE	238	29	0.0	767	2	2	0	1	0	0	0	0	0	0	WEDNESDAY	
3348	SE WALNUT CT	W/S 42ND PL	DEAD END (E)	148	29	0.3	616	1	2	0	0	0	1	0	0	0	0	WEDNESDAY	
ZM1748	SE WALNUT ST	E/S 41ST AVE	CUL DE SAC (E)	25	51	1.0	700	1	2	0	1	0	0	0	0	0	0	WEDNESDAY	
B1771	SE 41ST AVE	N/S CEDAR ST	C/L WALNUT ST (W)	253	30	0.0	843	2	0	1	1	0	0	1	17	0	0	WEDNESDAY	
3347	SE 42ND PL	N/S CEDAR ST	S/S WALNUT CT	180	30	0.0	600	0	0	0	0	0	0	1	17	0	0	WEDNESDAY	
<b>TEMPLATE TOTALS</b>							<b>14,279</b>	<b>25</b>	<b>23</b>	<b>7</b>	<b>18</b>	<b>1</b>	<b>6</b>	<b>5</b>	<b>85</b>				

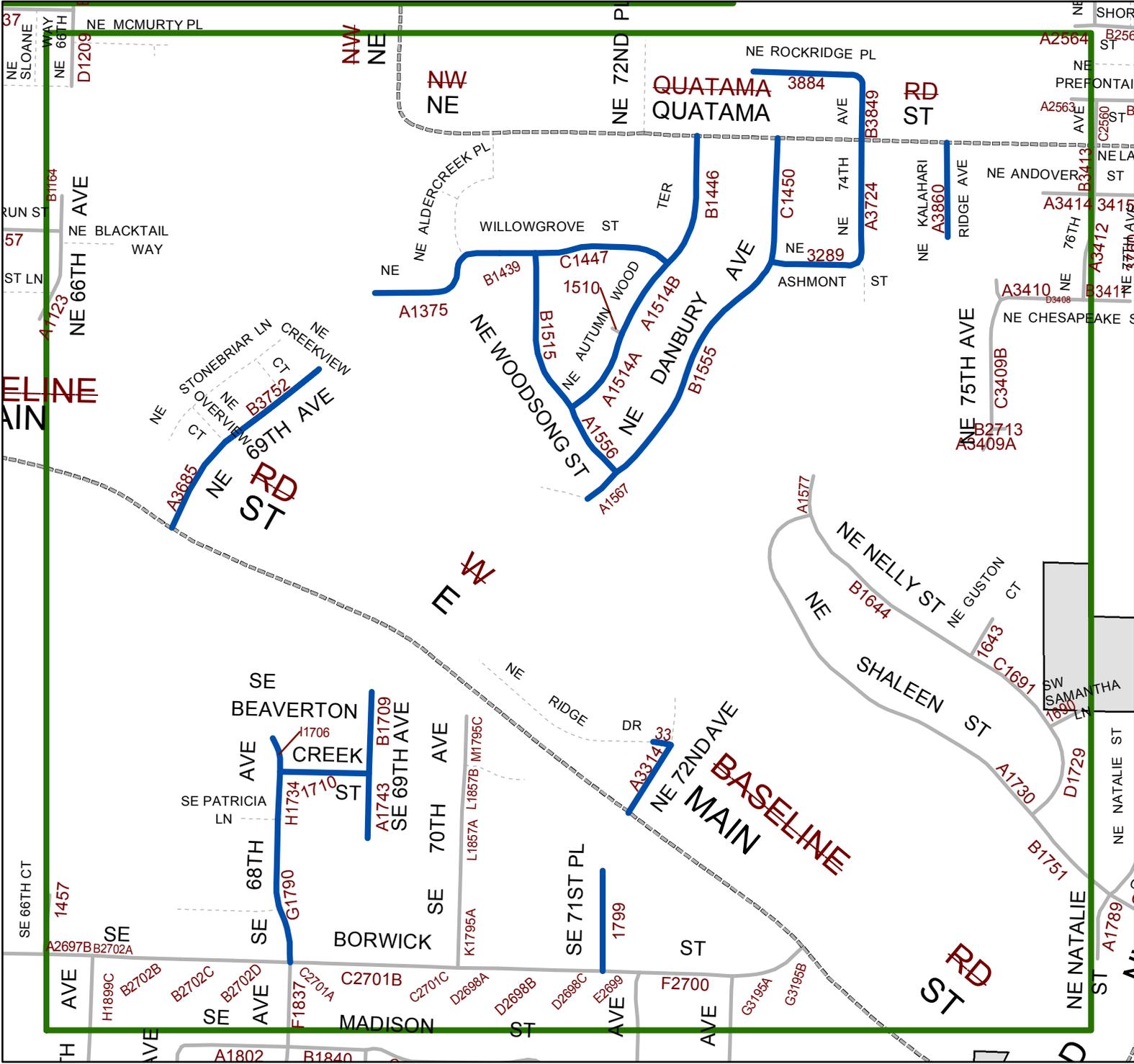
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**Template D6**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY					RPMS		THERMOPLASTIC PAVEMENT MARKINGS			GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	WATER VALVE	SURVEY PIN	SURVEY MON BOX	BLUE	YELLOW	STOP BAR	4" YELLOW (LF)	1.2" WHITE (LF)		
D1453C	NE CANDLEWOOD PL	C/L SCHOELER CIR (E)	W/S 53RD AVE	151	27	0.0	453	2	2	0	0	3	0	0	1	0	16	WEDNESDAY	
C1453B	NE CANDLEWOOD PL	C/L SCHOELER CIR (W)	C/L SCHOELER CIR (E)	336	27	0.0	1008	5	1	0	0	3	1	0	0	0	0	WEDNESDAY	
B1453B	NE CANDLEWOOD PL	BEGIN MOUNTABLE CURB	C/L SCHOELER CIR (W)	436	27	0.0	1308	8	2	0	0	4	1	0	0	0	0	WEDNESDAY	
A1453	NE CANDLEWOOD PL	E/S 49TH AVE	BEGIN MOUNTABLE CURB	98	30	0.0	327	0	0	1	0	0	0	0	0	0	0	WEDNESDAY	
B1454	NE 49TH AVE	C/L CANDLEWOOD PL	CUL DE SAC (N)	486	30	1.0	2178	5	3	0	1	0	1	0	0	0	0	WEDNESDAY	
A1552	NE 49TH AVE	N/S W BASELINE RD	C/L CANDLEWOOD PL	584	30	0.0	1947	7	2	0	1	0	2	6	1	156	19	WEDNESDAY	
1194	NE SCHOELER CIR	S/S CANDLEWOOD PL (W)	S/S CANDLEWOOD PL (E)	1830	31	0.0	6303	22	10	2	3	9	3	0	0	0	0	WEDNESDAY	
A2889	NE 55TH AVE	N/S BASELINE RD	30' (S) C/L ERNEST ST	509	30	0.0	1697	6	4	8	2	0	3	0	1	0	19	WEDNESDAY	
2600	NE ERNEST ST	E/S 55TH AVE	W/S 57TH AVE	314	25	0.0	872	2	2	3	0	0	1	0	0	0	0	WEDNESDAY	
B2570	NE 57TH AVE	64' (N) C/L ERNEST ST	PAVEMENT CHANGE	475	25	0.0	1319	11	2	5	6	0	3	0	0	0	0	WEDNESDAY	
C2955	NE 55TH AVE	(S) P/L # NEW HOME	C/L AZORES	240	34	0.0	907	2	0	1	1	1	0	0	0	0	0	WEDNESDAY	
B2922	NE 55TH AVE	BEG PCC N/S ERNEST	(S) P/L # NEW HOME	49	34	0.0	185	4	2	2	0	0	1	0	0	0	0	WEDNESDAY	
D3042	NE 55TH AVE	C/L AZORES	31' N OF N P/L #219	245	34	0.0	926	1	2	0	0	1	0	0	0	0	0	WEDNESDAY	
A2553B	NE 57TH AVE	WIDTH CHANGE	30 (S) C/L ERNEST	268	23	0.0	685	3	0	1	1	0	1	0	0	0	0	WEDNESDAY	
A2553A	NE 57TH AVE	CDS	WIDTH CHANGE	113	25	1.0	872	2	1	1	1	0	0	0	0	0	0	WEDNESDAY	
<b>TEMPLATE TOTALS</b>							<b>20,987</b>	<b>80</b>	<b>33</b>	<b>24</b>	<b>16</b>	<b>21</b>	<b>17</b>	<b>6</b>	<b>3</b>	<b>156</b>	<b>54</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

# Slurry Seal D7

March 2016

## Legend

- SS16
- SS16\_GRID
- Park
- City Limits

## Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



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**Template D8**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY			THERMOPLASTIC PAVEMENT MARKINGS		GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	SURVEY PIN	STOP BAR	12" WHITE (LF)		
3190	NW 210TH AVE	N/S QUATAMA RD	N/S NOELLE WAY (PVT)	94	24	0.0	251	1	2	2	1	12	WEDNESDAY	
<b>TEMPLATE TOTALS</b>							<b>251</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>12</b>		

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2016 Pavement Management Program  
Project#20552222-6102

# Slurry Seal E5

March 2016

## Legend

- SS16
- SS16\_GRID
- Park
- City Limits

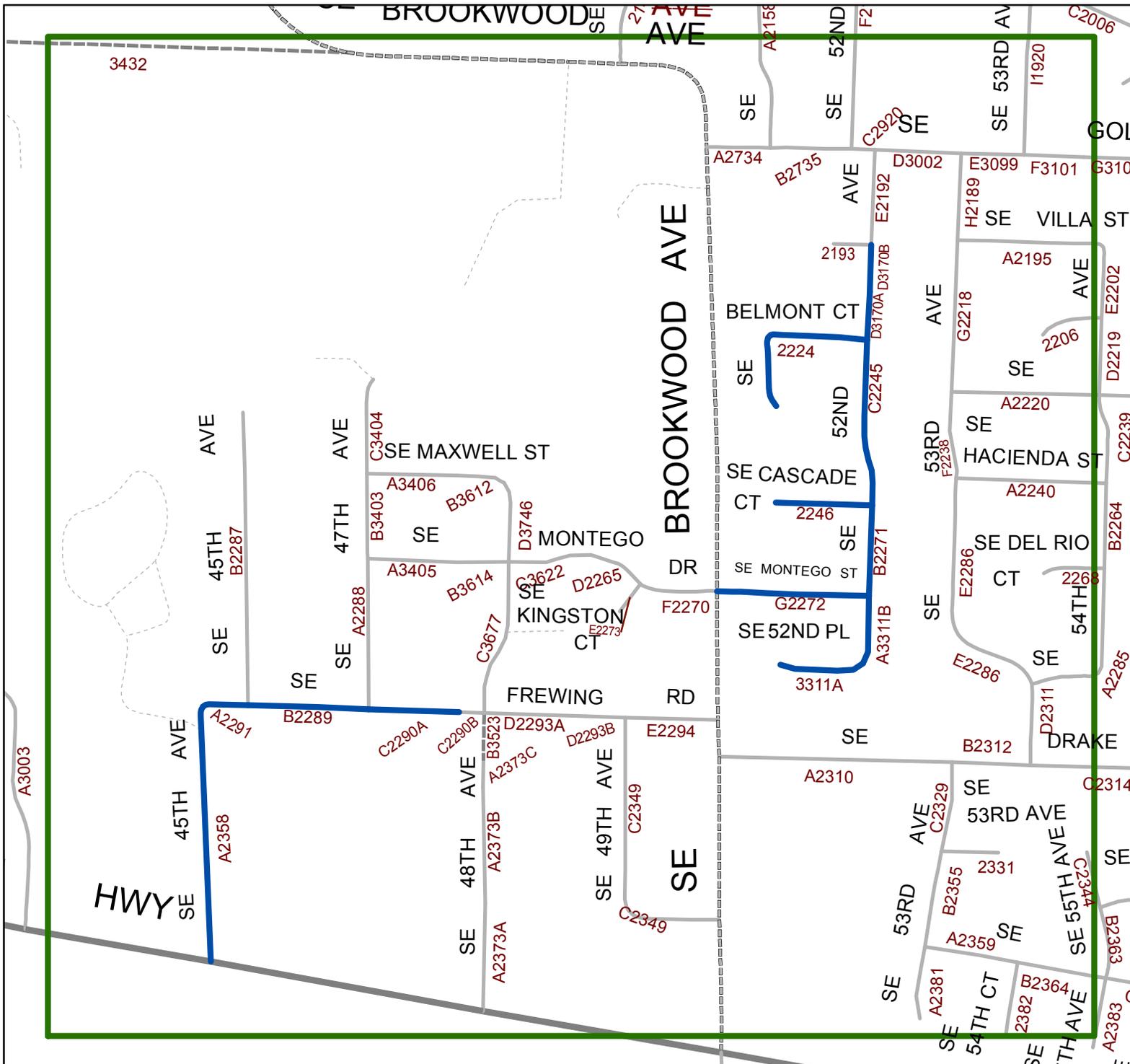
## Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



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**Template E5**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY						RPMS		THERMOPLASTIC PAVEMENT MARKINGS		GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	WATER VALVE	GAS VALVE	SURVEY PIN	SURVEY MON BOX	BLUE	STOP BAR	12" WHITE (LF)			
2224	SE BELMONT CT	W/S 52ND AVE	CDS (S)	412	30	1.3	2071	4	3	2	0	5	0	1	0	0	0	MONDAY	
C2245	SE 52ND AVE	C/L CASCADE CT	C/L BELMONT CT	497	30	0.0	1657	3	2	1	0	3	0	1	0	0	0	MONDAY	
2246	SE CASCADE CT	W/S 52ND AVE	CDS (W)	210	30	1.0	1258	1	3	2	0	1	0	0	0	0	0	MONDAY	
B2271	SE 52ND AVE	C/L MONTEGO ST	C/L CASCADE CT	264	30	0.0	880	3	2	0	0	1	0	1	0	0	0	MONDAY	
G2272	SE MONTEGO ST	E/S BROOKWOOD AVE	W/S 52ND AVE	408	33	0.0	1496	1	4	0	0	1	0	1	1	22	0	MONDAY	
A3311B	SE 52ND AVE	52ND PL	C/L MONTEGO	159	29	0.0	512	1	1	1	0	1	0	0	0	0	0	MONDAY	
3311A	SE 52ND AVE	CDS	52ND AVE	238	29	1.0	1325	3	1	2	0	2	0	1	0	0	0	MONDAY	
C2290A	SE FREWING RD	C/L 47TH AVE	10' (W) BEG C/G (N)	253	22	0.0	618	0	0	0	0	0	0	0	0	0	0	FRIDAY	
D3170A	SE 52ND AVE	C/L BELMONT CT	END GUTTER	131	30	0.0	437	1	0	0	0	1	0	0	0	0	0	MONDAY	
D3170B	SE 52ND AVE	END GUTTER	16' (S) C/L 52ND SPUR	123	32	0.0	437	1	2	0	0	0	1	0	0	0	0	MONDAY	
B2289	SE FREWING RD	C/L 45TH AVE (E. INT)	C/L 47TH AVE	347	22	0.0	848	1	0	0	0	0	0	1	0	0	0	FRIDAY	
A2291	SE FREWING RD	W/S 45TH AVE (W INT.)	C/L 45TH AVE (E INT.)	145	22	0.0	354	1	0	0	0	0	0	0	0	0	0	FRIDAY	
A2358	SE 45TH AVE	N/S TV HWY	S/S FREWING RD	702	36	0.0	2808	1	4	2	1	0	0	3	1	27	0	FRIDAY	
<b>TEMPLATE TOTALS</b>							<b>14,703</b>	<b>21</b>	<b>22</b>	<b>10</b>	<b>1</b>	<b>15</b>	<b>1</b>	<b>9</b>	<b>2</b>	<b>49</b>			

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**Template E6**  
**Schedule "B": Slurry Seals**  
2016 Pavement Management Program  
#20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY				RPMS	THERMOPLASTIC PAVEMENT MARKINGS			GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	WATER VALVE	SURVEY PIN		BLUE	STOP BAR	HI-VIS X-WALK		
B2303	SE 61ST DR	C/L SIERRA ST	C/L HACIENDA ST	768	29	0.0	2475	6	3	0	2	1	0	1	140	WEDNESDAY	2-LANE HI-VIS X-WALK
B2308	SE SIERRA ST	E/S 61ST DR	W/S 61ST PL	296	29	0.0	954	2	4	3	3	0	0	1	260	WEDNESDAY	2-LANE HI-VIS X-WALK
A2203	SE GOBOES CT	C/L 63RD AVE	CDS (W)	152	30	1.0	1065	2	1	2	1	1	0	0	0	WEDNESDAY	DO IS TEMP PATCH AROUND WATER VALVES - CHECK W/OPS
B2205	SE GOBOES CT	C/L 63RD AVE	W/S CENTURY BLVD	134	30	0.0	447	3	2	0	1	0	1	0	15	WEDNESDAY	
D2212	SE 60TH AVE	C/L BLOSSOM ST	CDS	96	29	1.0	868	3	1	2	1	0	0	0	0	WEDNESDAY	
2213	SE BLOSSOM ST	E/S IMLAY AVE	W/S 60TH AVE	382	29	0.0	1231	5	3	0	3	1	1	0	17	WEDNESDAY	
C2221	SE 63RD AVE	C/L WICKER CT	S/S GOBOES CT	217	30	0.0	723	1	1	0	0	0	0	0	0	WEDNESDAY	
2222	SE WICKER CT	W/S 63RD AVE	CDS (W)	138	30	1.0	1018	1	2	2	1	1	0	0	0	WEDNESDAY	
D2229	SE 61ST DR	C/L 61ST CT	PVMT CHNG	571	29	0.0	1840	3	3	0	2	2	0	0	0	WEDNESDAY	
2230	SE 61ST CT	W/S 61ST DR	CDS (N)	377	29	1.0	1773	4	3	3	2	1	0	0	0	WEDNESDAY	
C2234	SE 60TH AVE	42' N C/L HACIENDA ST	C/L BLOSSOM ST	269	29	0.0	867	3	2	0	2	1	0	0	0	WEDNESDAY	
C2241	SE 61ST DR	C/L HACIENDA ST	C/L 61ST CT	142	29	0.0	458	3	0	0	3	0	0	0	0	WEDNESDAY	
C2242	SE HACIENDA ST	E/S 60TH AVE	W/S 61ST DR	285	29	0.0	918	2	1	3	3	0	1	0	13	WEDNESDAY	
D2247	SE HACIENDA ST	E/S 61ST DR	C/L 62ND AVE	444	29	0.0	1431	3	2	4	3	1	1	0	17	WEDNESDAY	
B2249	SE 63RD AVE	N/S HACIENDA ST	C/L WICKER CT	346	30	0.0	1153	3	1	0	1	0	1	0	15	WEDNESDAY	
E2250	SE HACIENDA ST	C/L 62ND AVE	C/L 63RD AVE	233	29	0.0	751	2	0	0	2	0	0	0	0	WEDNESDAY	
F2253	SE HACIENDA ST	C/L 63RD AVE	W/S CENTURY BLVD	143	29	0.0	461	0	2	1	1	0	1	0	25	WEDNESDAY	
A2323	SE 61ST DR	N/S DRAKE ST	C/L SIERRA ST	318	29	0.0	1025	4	2	0	2	1	1	1	154	WEDNESDAY	2-LANE HI-VIS X-WALK
E3353	SE 61ST DR	CHANGE PVMNT	S/S GOLDEN ST	112	29	0.0	361	1	3	3	0	0	0	0	0	WEDNESDAY	
A2248	SE 60TH AVE	E/S 61ST DR	42' (N) C/L HACIENDA ST	906	29	0.0	2919	8	4	0	9	2	0	1	220	WEDNESDAY	2-LANE HI-VIS X-WALK
<b>TEMPLATE TOTALS</b>							<b>22,736</b>	<b>59</b>	<b>40</b>	<b>23</b>	<b>42</b>	<b>12</b>	<b>7</b>	<b>4</b>	<b>876</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.

# Slurry Seal E7

March 2016

## Legend

-  SS16
-  SS16\_GRID
-  Park
-  City Limits

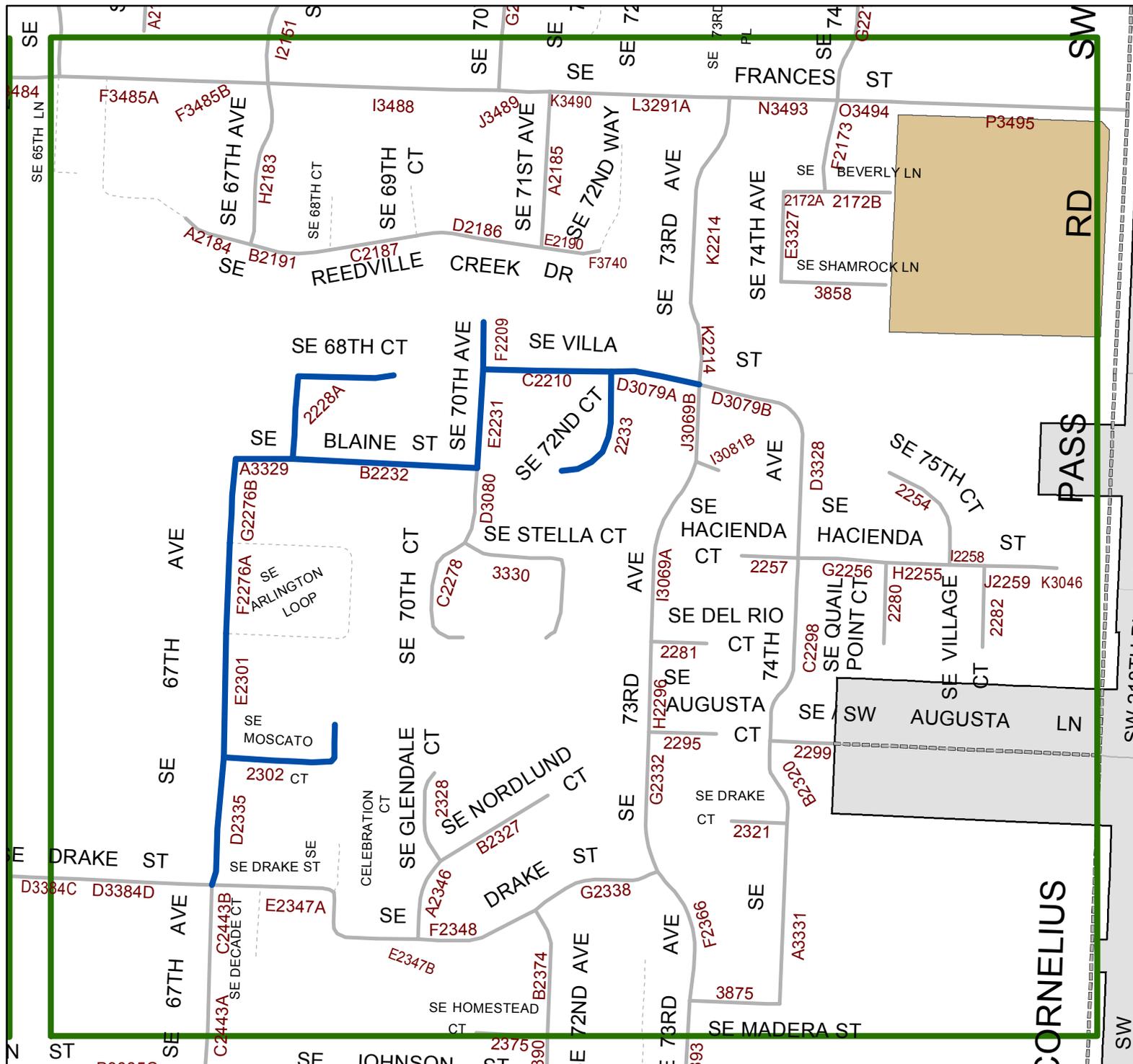
## Roadway Jurisdiction (Within City Limits)

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail



1 inch = 400 feet

**DISCLAIMER**  
This map was derived from several databases. The City cannot accept responsibility for any errors. Therefore, there are no warranties for this product. However, notification of errors would be appreciated.



**Template E7**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY				RPMS		THERMOPLASTIC PAVEMENT MARKINGS	GARBAGE DAY	NOTES		
								MANHOLE	CATCHBASIN	WATER VALVE	SURVEY PIN	BLUE	STOP BAR	1.2" WHITE (LF)				
E2301	SE 67TH AVE	C/L MOSCATO CT	C/L ARLINGTON LP (S. INT)	367	30	0.0	1223	2	1	0	3	1	0	0	0	0	WEDNESDAY	
2302	SE MOSCATO CT	E/S 67TH AVE	CDS (NE)	359	30	1.3	1894	2	3	1	3	1	0	0	0	0	WEDNESDAY	
F2209	SE 70TH AVE	C/L VILLA ST	DEAD END (N)	137	33	0.0	502	3	2	0	0	0	0	0	0	0	WEDNESDAY	
C2210	SE VILLA ST	E/S 70TH AVE	C/L 72ND CT	366	30	0.0	1220	1	2	0	0	1	0	0	0	0	WEDNESDAY	
D3079A	SE VILLA ST	C/L 72ND CT	W/S 73RD AVE	244	30	0.0	813	2	2	0	1	1	1	13	0	0	WEDNESDAY	
2228A	SE 68TH CT	N/S BLAINE ST	CDS (E)	457	30	1.3	2221	3	2	0	4	1	0	0	0	0	WEDNESDAY	
A3329	SE BLAINE ST	67TH AVE	C/L 68TH CT	159	30	0.0	530	2	2	0	0	0	0	0	0	0	WEDNESDAY	
E2231	SE 70TH AVE	S/S BLAINE ST	C/L VILLA ST	313	33	0.0	1148	4	1	0	1	0	0	0	0	0	WEDNESDAY	
B2232	SE BLAINE ST	C/L 68TH CT	W/S 70TH AVE	524	30	0.0	1747	2	4	0	0	0	0	0	0	0	WEDNESDAY	
2233	SE 72ND CT	S/S VILLA ST	CDS (S)	304	30	1.0	1572	1	4	2	2	0	0	0	0	0	WEDNESDAY	
G2276B	SE 67TH AVE	C/L ARLINGTON LP (N. INT)	BLAINE ST	257	30	0.3	996	2	1	0	0	0	0	0	0	0	WEDNESDAY	
F2276A	SE 67TH AVE	C/L ARLINGTON LP (S. INT)	C/L ARLINGTON LP (N. INT)	267	30	0.0	890	2	2	2	1	1	0	0	0	0	WEDNESDAY	
D2335	SE 67TH AVE	N/S DRAKE ST	C/L MOSCATO CT	362	30	0.0	1207	1	0	1	4	2	1	13	0	0	WEDNESDAY	
<b>TEMPLATE TOTALS</b>							<b>15,963</b>	<b>27</b>	<b>26</b>	<b>6</b>	<b>19</b>	<b>8</b>	<b>2</b>	<b>26</b>				

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

# Slurry Seal F3

March 2016

## Legend

- SS16
- SS16\_GRID
- Park
- City Limits

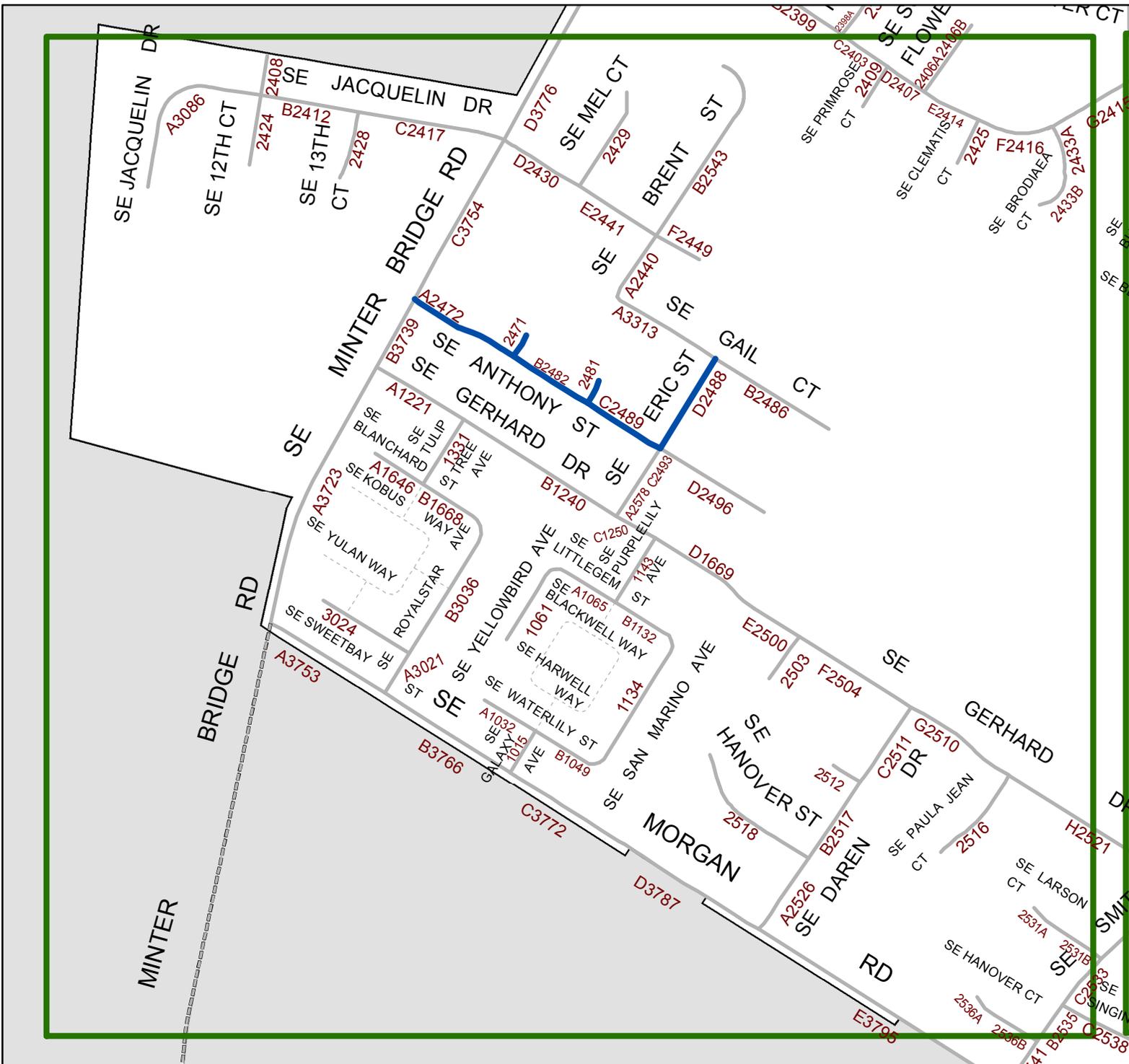
## Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



1 inch = 400 feet

DISCLAIMER  
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However, notification of errors would be appreciated.



**Template F3**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY			RPMS		THERMOPLASTIC PAVEMENT MARKINGS		GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	WATER VALVE	BLUE	STOP BAR	12" WHITE (LF)			
2471	SE ANTHONY ST (SPUR W)	N/S ANTHONY ST	CUL DE SAC	0	0	1.0	558	1	1	0	0	0	0	0	FRIDAY	
A2472	SE ANTHONY ST	E/S MINTER BRIDGE RD	C/L ANTHONY ST (SPUR W)	324	30	0.0	1080	3	3	3	1	1	22		FRIDAY	
2481	SE ANTHONY ST (SPUR E)	N/S ANTHONY ST	CUL DE SAC	0	0	1.0	558	1	1	0	0	0	0	0	FRIDAY	
B2482	SE ANTHONY ST	C/L ANTHONY ST (SPUR W)	C/L ANTHONY ST (SPUR E)	246	30	0.0	820	0	0	0	1	0	0	0	FRIDAY	
D2488	SE ERIC ST	N/S ANTHONY ST	S/S GAIL CT	280	32	0.0	996	0	1	0	0	0	0	0	FRIDAY	
C2489	SE ANTHONY ST	C/L ANTHONY ST (SPUR E)	31' (E) C/L ERIC ST	286	30	0.0	953	3	1	0	1	0	0	0	FRIDAY	
<b>TEMPLATE TOTALS</b>							<b>4,965</b>	<b>8</b>	<b>7</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>22</b>			

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



**Template F4**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY					RPMS		THERMOPLASTIC PAVEMENT MARKINGS	GARBAGE DAY	NOTES
								MANHOLE	CATCHBASIN	WATER VALVE	SURVEY PIN	SURVEY MON BOX	BLUE	STOP BAR	12" WHITE (LF)		
E2497	SE ROOD BRIDGE RD (SPUR)	E/S ROOD BRIDGE RD	CUL DE SAC	60	32	1.0	772	0	1	0	0	1	1	1	15	FRIDAY	
2501	SE CREEK CT	E/S ROOD BRIDGE RD	CUL DE SAC	204	32	1.0	1284	0	1	0	0	1	0	1	15	FRIDAY	
B2549	SE PALMIRE CT	PAVEMENT CHANGE	END (W)	226	29	0.0	728	4	2	3	2	2	1	0	0	FRIDAY	
A2514	SE BRADLEY CT	W/S SINGING WOODS DR	PAVEMENT CHANGE	262	32	0.0	932	0	2	0	0	0	1	0	0	FRIDAY	
B2551	SE BRADLEY CT	PAVEMENT CHANGE	CUL DE SAC	28	32	1.0	658	4	2	2	1	1	0	0	0	FRIDAY	
A2523	SE CONRAD CT	W/S SINGING WOODS DR	PAVEMENT CHANGE	265	32	0.0	942	0	1	0	0	0	0	0	0	FRIDAY	
B2550	SE CONRAD CT	PAVEMENT CHANGE	CUL DE SAC	23	32	1.0	640	3	2	2	1	1	1	0	0	FRIDAY	
B2552	SE RADCLIFF CT	PAVEMENT CHANGE	CUL DE SAC	548	30	1.0	2385	11	3	4	1	4	1	0	0	FRIDAY	
<b>TEMPLATE TOTALS</b>							<b>8,340</b>	<b>22</b>	<b>14</b>	<b>11</b>	<b>5</b>	<b>10</b>	<b>5</b>	<b>2</b>	<b>30</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



**Template F5**  
**Schedule "B": Slurry Seals**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	EXISTING UTILITIES & SURVEY				THERMOPLASTIC PAVEMENT MARKINGS		GARBAGE DAY	NOTES	
								MANHOLE	CATCHBASIN	WATER VALVE	SURVEY PIN	RPMS	STOP BAR			12" WHITE (LF)
B2454	SE 49TH AVE	C/L STEWART CT	S/S WITCHHAZEL RD	618	30	0.0	2060	3	2	1	3	2	1	20	FRIDAY	
2455	SE STEWART CT	W/S 49TH AVE	CUL DE SAC (W)	246	29	1.0	1351	0	1	3	2	1	0	0	FRIDAY	
A2462	SE 49TH AVE	C/L STEWART CT	DEAD END (S)	124	29	0.0	400	1	0	0	1	0	0	0	FRIDAY	
<b>TEMPLATE TOTALS</b>							<b>3,810</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>3</b>	<b>1</b>	<b>20</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.

# **City of Sherwood 2016 Slurry Seals**

## **Schedule "B": Slurry Seals Map and Spreadsheets**

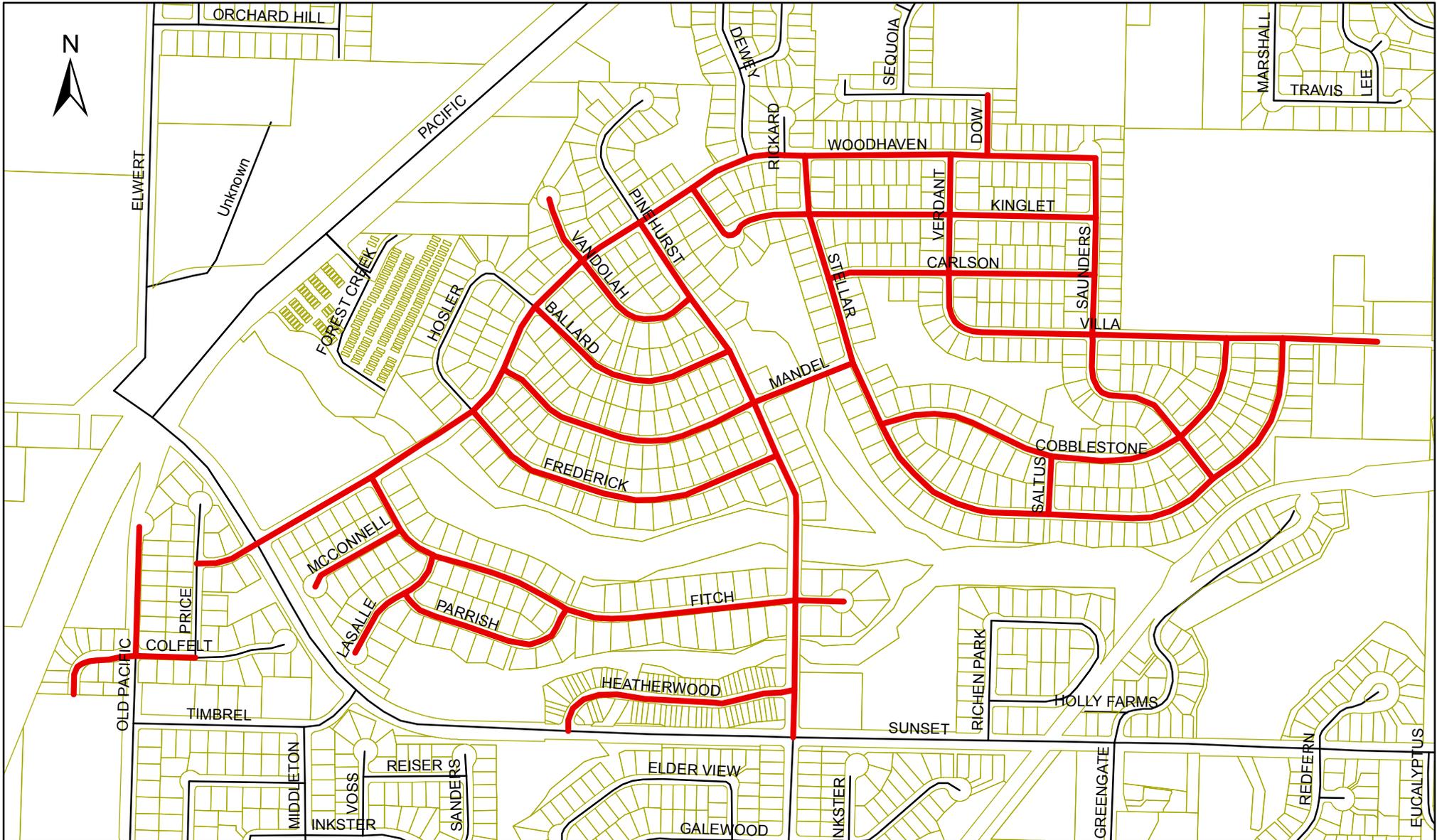




# Sherwood Slurry Seal 2016

## Legend

-  Slurry Seal 2016
-  Taxlots
-  Streets





## 2016 City of Sherwood Slurry Seal

<u>Road Name:</u>	<u>From:</u>	<u>To:</u>	<u>Class</u>	<u>Length Feet:</u>	<u>Width Feet:</u>	<u>Area Sq. Yds.</u>	<u>Blue Buttons:</u>	<u>PCI:</u>
Colfelt Lane	Price Ter	Old Pacific HWY	RES	253	25	706	1	81
Colfelt Lane	Old Pacific HWY	S dead end Barracade	RES	375	25	918	1	82
Dow Drive	Woodhaven Dr	Temp dead end N	RES	259	25	718	1	85
Fitch Dr	Parrish Ln	Pinehurst Dr	RES	985	25	2735	1	89
Fitch Dr	Parrish Ln	Lasalle Ln	RES	617	25	1715	1	78
Fitch Dr	McConnell Ct	Woodhaven Dr	RES	256	25	711	1	78
Fitch Ct	Pinehurst Dr	Cul-de-sac	RES	206	25	573	1	88
Fredrick Ln	Woodhaven Dr	Pinehurst Dr	RES	1457	27	4370	3	88
Kinglet Dr	Woodhaven Dr	StellarDr	RES	629	25	1747	2	85
Kinglet Dr	StellarDr	Verdant Ter	RES	598	25	1662	2	89
Kinglet Dr	Verdant Ter	Saunders Dr	RES	623	25	1732	2	90
LaSalle Ln	Parrish Ln	Fitch Dr	RES	211	27	632		88
Mandel Ln	Woodhaven Dr	Pinehurst Dr	RES	1191	27	3575	3	87
Mandel Ln	Pinehurst Dr	StellarDr	RES	455	27	1366		89
Heatherwood Ln	Pinehurst Dr	Sunset Blvd	RES	1069	25	2968	4	87
McConnell Ct	Cul-de-sac S	Fitch Dr	RES	442	27	1327	1	75
Old Hwy 99	Colfelt Lane	Cul-de-sac	RES	548	25	1522	1	76
Parrish Ln	Lasalle Ln	Fitch Dr	RES	818	27	2454	2	82
Pinehurst Dr	Mandel Ln	Fredrick Ln	RES	246	29	792	1	79
Pinehurst Dr	Fredrick Ln	Fitch Dr	RES	635	29	2047	1	76
Saunders Dr	Woodhaven Dr	Kinglet Dr	RES	254	25	705		86
Saunders Dr	Kinglet Dr	Carlson St	RES	242	25	672		89
Saunders Dr	Carlson St	Villa Dr	RES	255	25	708	1	88
Saunders Dr	Villa Dr	Cobblestone Dr	RES	666	25	1850	1	89



## 2016 City of Sherwood Slurry Seal

<u>Road Name:</u>	<u>From:</u>	<u>To:</u>	<u>Class</u>	<u>Length Feet:</u>	<u>Width Feet:</u>	<u>Area Sq. Yds.</u>	<u>Blue Buttons:</u>	<u>PCI:</u>
Saunders Dr	Cobblestone Dr	StellarDr	RES	224	25	623		89
StellarDr	Woodhaven Dr	Kinglet Dr	RES	248	25	690		87
StellarDr	Kinglet Dr	Carlson St	RES	289	25	802		87
StellarDr	Carlson St	Mandel Ln	RES	371	25	1032	2	89
StellarDr	Mandel Ln	Cobblestone Dr	RES	286	25	794		87
StellarDr	Cobblestone Dr	Saltus Ter	RES	876	25	2432	2	88
StellarDr	Saltus Ter	Saunders Dr	RES	753	25	2092	2	88
StellarDr	Saunders Dr	Villa Dr	RES	712	25	1977	2	87
Vandolah Ln	Cul-de-sac	Woodhaven Dr	RES	301	27	902		90
Vandolah Ln	Woodhaven Dr	Pinehurst Dr	RES	600	27	1800		90
Verdant Ter	Carlson St	Kinglet Dr	RES	249	25	692	1	90
Verdant Ter	Kinglet Dr	Woodhaven Dr ped path	RES	256	25	710		89
Villa Rd	dead end at Stella	Stellar Dr	RES	403	25	1120		88
Villa Rd	Verdant Ter	Saunders Dr	RES	807	25	2242	1	90
Villa Rd	StellarDr	Cobblestone Dr	RES	574	25	1594	1	90
Villa Rd	Saunders Dr	Cobblestone Dr	RES	807	25	2242	1	90
Woodhaven Dr	Sunset Blvd	Fitch Dr	RES	563	37	2316	2	75
Woodhaven Dr	Fitch Dr	Hosler Way	RES	515	37	2119	1	74
Woodhaven Dr	Hosler Way	Mandel Ln	RES	226	28	702		78
Woodhaven Dr	Price Ter	Sunset Blvd	RES	275	25	765	1	79
Woodhaven Dr	Mandel Ln	Ballard Ln	RES	296	28	921	1	84
Woodhaven Dr	Ballard Ln	Vandolah Ln	RES	283	28	880	1	83
Woodhaven Dr	Pinehurst Dr	Kinglet Dr	RES	266	28	828	1	86
Woodhaven Dr	Kinglet Dr	Dewy Dr	RES	270	28	841	1	83
Woodhaven Dr	Dewy Dr	Rickard Pl	RES	158	28	491	1	87
Woodhaven Dr	Rickard pl	Stellar Dr	RES	86	28	268		84



## 2016 City of Sherwood Slurry Seal

<b>Road Name:</b>	<b>From:</b>	<b>To:</b>	<b>Class</b>	<b>Length Feet:</b>	<b>Width Feet:</b>	<b>Area Sq. Yds.</b>	<b>Blue Buttons:</b>	<b>PCI:</b>
Woodhaven Dr	StellarDr	Verdant Ter	RES	621	25	1724	3	83
Woodhaven Dr	Verdant Ter	Dow Dr	RES	157	25	435		84
Woodhaven Dr	Dow Dr	Saunders Dr	RES	460	25	1277	2	91
Ballard Ln	Woodhaven Dr	Pinehurst Dr	RES	968	27	2903	1	84
Cobblestone Dr	Stellar Dr	Saltus Ter	RES	767	25	2131	2	88
Cobblestone Dr	Saltus Ter	Saunders Dr	RES	572	25	1590	2	84
Cobblestone Dr	Saunders Dr	Villa Dr	RES	484	25	1344	1	81
Carlson St	Verdant Ter	Saunders Dr	RES	620	25	1721	2	84
Carlson St	Stellar Dr	Verdant Ter	RES	515	25	1431	1	87
Fitch Dr	McConnell Ct	Lasalle Ln	RES	177	25	493	1	74
LaSalle Ln	Parrish Ln	EOR	RES	339	27	1018	1	73
Pinehurst Dr	Woodhaven Dr	Vandolah Ln	RES	387	29	1246	1	81
Pinehurst Dr	Vandolah Ln	Ballard Ln	RES	280	29	902	1	77
Pinehurst Dr	Ballard Ln	Mandel Ln	RES	243	29	783	1	80
Pinehurst Dr	Heatherwood Ln	Fitch Dr	RES	380	29	1225	1	77
Pinehurst Dr	Sunset Blvd	Heatherwood Ln	RES	203	29	655		78
Saltus Ter	Stellar Dr	Cobblestone Dr	RES	248	22	605		83
Colfelt Ln	Price Ter	Cul-de-sac	RES	425	25	1069	1	74
Old Hwy 99	Timbrel	Colfelt Ln	RES	281	25	798	1	61
Price Ter	Colfelt Lane	Woodhaven Dr.	RES	421	25	1111	1	77
Price Ter	Woodhaven Dr	Cul-de-sac	RES	265	25	700	1	72
Hosler	Fredrick Ln	Ballard Ln	RES	961	27	2883	1	89
Pinehurst Dr	Woodhaven Dr	Cul-de-sac	RES	637	25	1770	1	80
Ricard Ct	Woodhaven Dr	Cud-de- sac	RES	209	25	580		80

## ***YOUR STREET WILL BE CLOSED***

The City of Sherwood Public Works Department has scheduled your street for improvement. Please park all vehicles on adjacent road ways by 7:00 am. Vehicles left on the street will be towed at the owner's expense.

## ***THIS IS A TEMPORARY CLOSURE***

JUL 7 0 2014

### **\*Work Scheduled—Slurry Seal\***

The street work will provide one and possibly more of the following improvements:

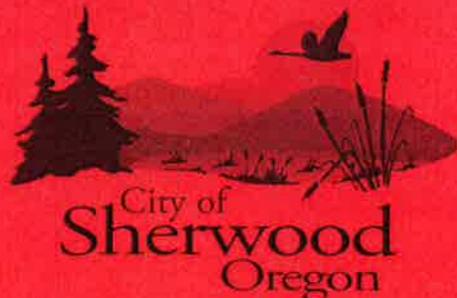
- Smoother driving surface
- Better street drainage
- A waterproof layer to prevent water from reaching underlying material to prevent potholes and other such roadway failures
- Reduce surface distress caused by aging asphalt
- Reduce street maintenance costs

#### ***\*Some helpful hints for a smooth operation\****

The slurry/ crack seal is very messy and does not cleanup easily. It will stick to your shoes, clothing, car and carpet if walked or driven upon! It will require 4 to 6 hours to solidify before the surface is ready for traffic. Please keep small children and pets inside during this time. In addition, please avoid any water entering the street the night before expected sealing. It is very important the street surface be dry.

Thank you for your cooperation.

# PLEASE READ



Within 48 hours road construction will begin on your street or on an adjacent street in your neighborhood. Please read the reverse side for details on:

- parking restrictions
- potential hazards
- type of work
- dates of closure

**No Parking on street**  
**No Driving on street**  
**No Walking on street**  
**No Biking on street**



For a list of roads

call 503 625-5722

visit [sherwoodoregon.gov/publicworks](http://sherwoodoregon.gov/publicworks)

**City of Oregon City  
2016 Slurry Seals & Micro-Surfacing**

**Schedule "B": Slurry Seals  
Schedule "C": Micro-Surfacing  
Maps and Spreadsheets**



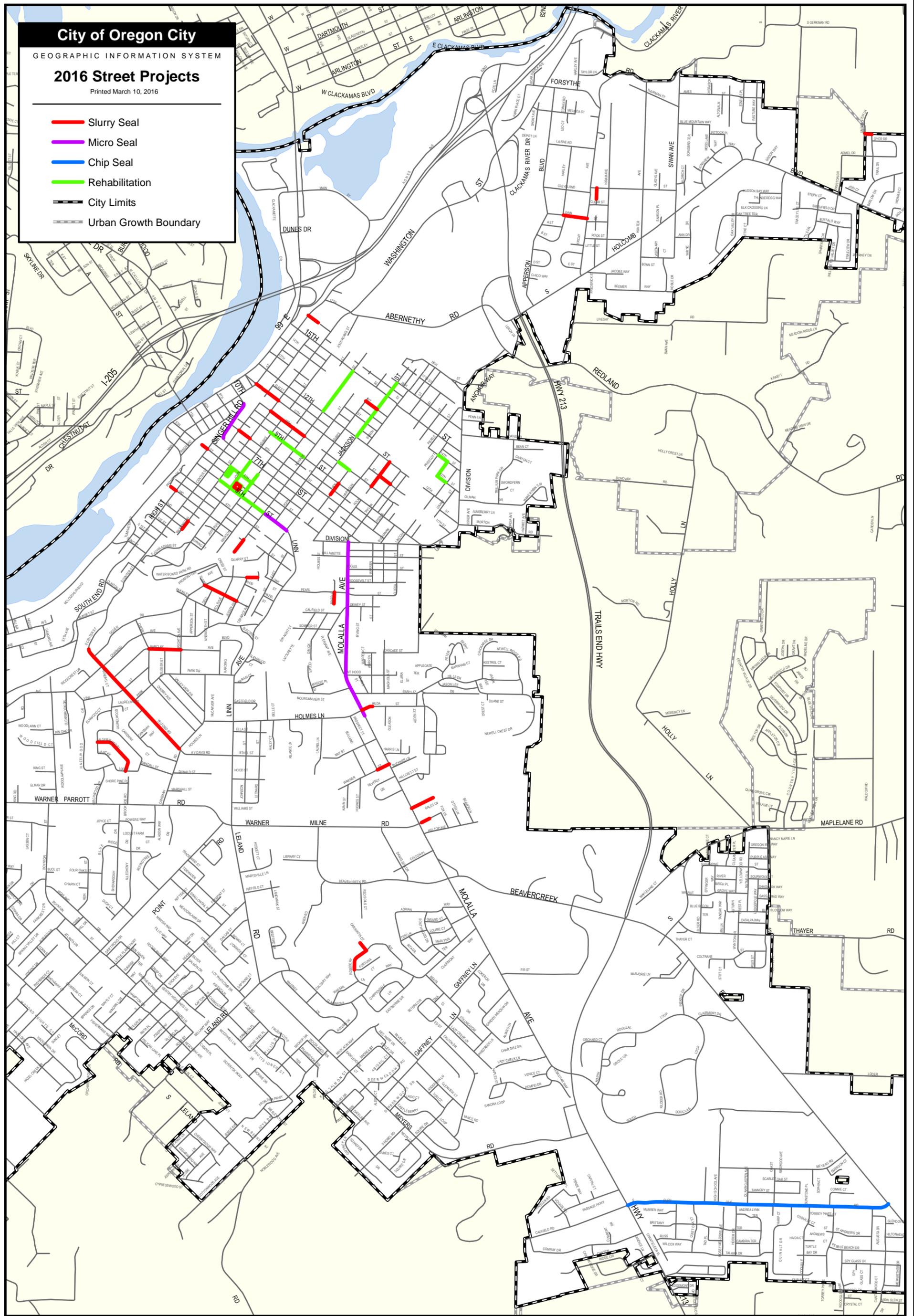
# City of Oregon City

GEOGRAPHIC INFORMATION SYSTEM

## 2016 Street Projects

Printed March 10, 2016

-  Slurry Seal
-  Micro Seal
-  Chip Seal
-  Rehabilitation
-  City Limits
-  Urban Growth Boundary



The City of Oregon City makes no representations, express or implied, as to the accuracy, completeness and timeliness of the information displayed. This map is not suitable for legal, engineering, or surveying purposes. Notification of any errors is appreciated.



Please recycle with colored office grade paper.

City of Oregon City  
P.O. Box 3040  
625 Center St  
Oregon City, OR 97045  
503-657-0891 phone  
503-657-6629 fax  
[www.ocity.org](http://www.ocity.org)



Plot date: March 10, 2016  
Plot name: PMUF - 2016 Projects Map - 20160310 - 11x17P.pdf  
Map name: PMUF - 2016 Projects Map - 20160310 - 11x17P.mxd

# City of Oregon City

GEOGRAPHIC INFORMATION SYSTEM

## 2016 Oregon City Preventative Pavement Maintenance Slurry Seal Projects

Printed March 10, 2016

-  Slurry Seal  
(Length = 11,943 ft Area = 41,606 sq yds)
-  City Limits
-  Urban Growth Boundary

# Sheet S1

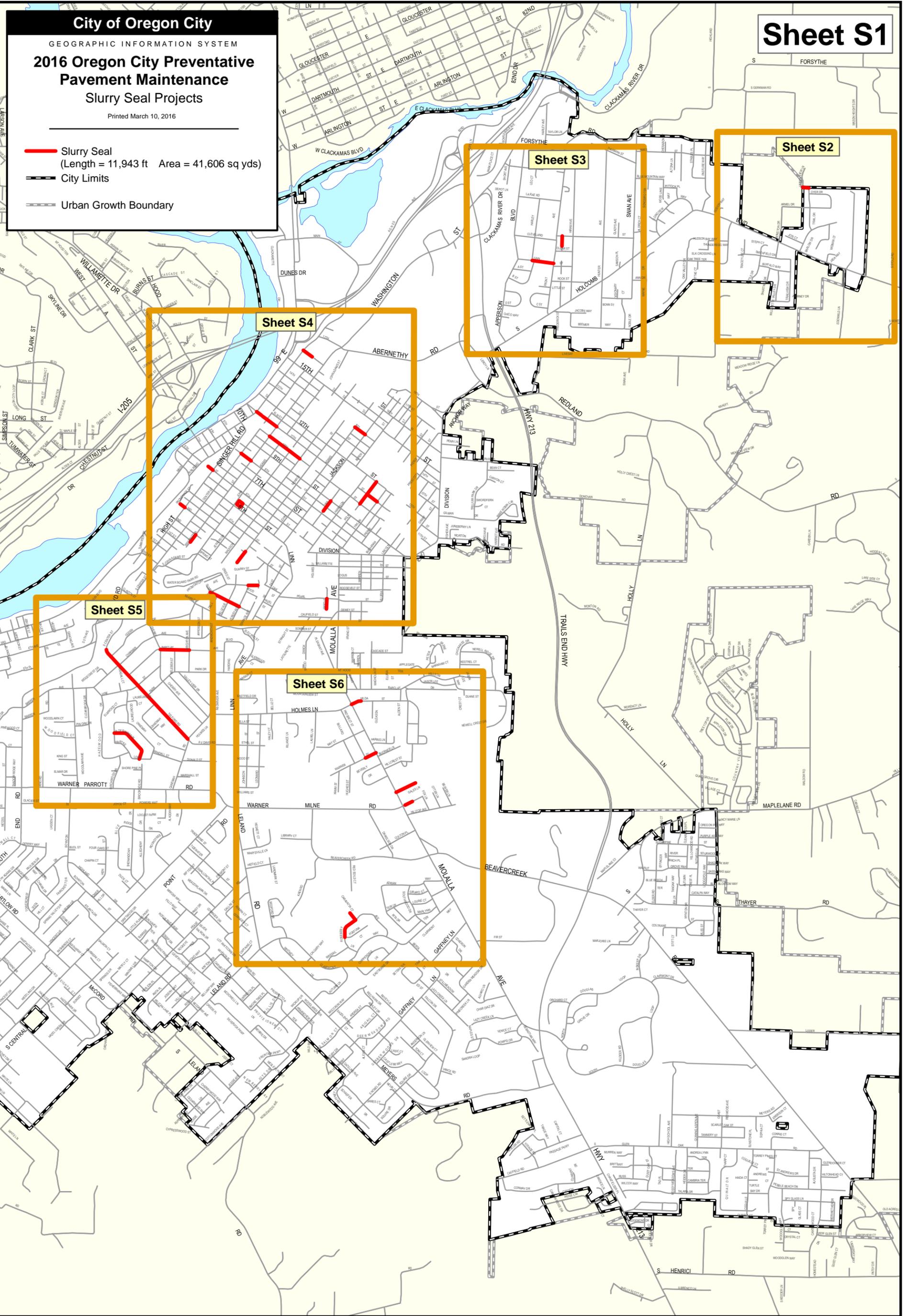
### Sheet S2

### Sheet S3

### Sheet S4

### Sheet S5

### Sheet S6



The City of Oregon City makes no representations, express or implied, as to the accuracy, completeness and timeliness of the information displayed. This map is not suitable for legal, engineering, or surveying purposes. Notification of any errors is appreciated.



0 0.25 0.5 1 Miles

0 1,000 2,000 4,000 6,000 Feet

City of Oregon City  
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Oregon City, OR 97045  
503-657-0891 phone  
503-657-6629 fax  
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# City of Oregon City

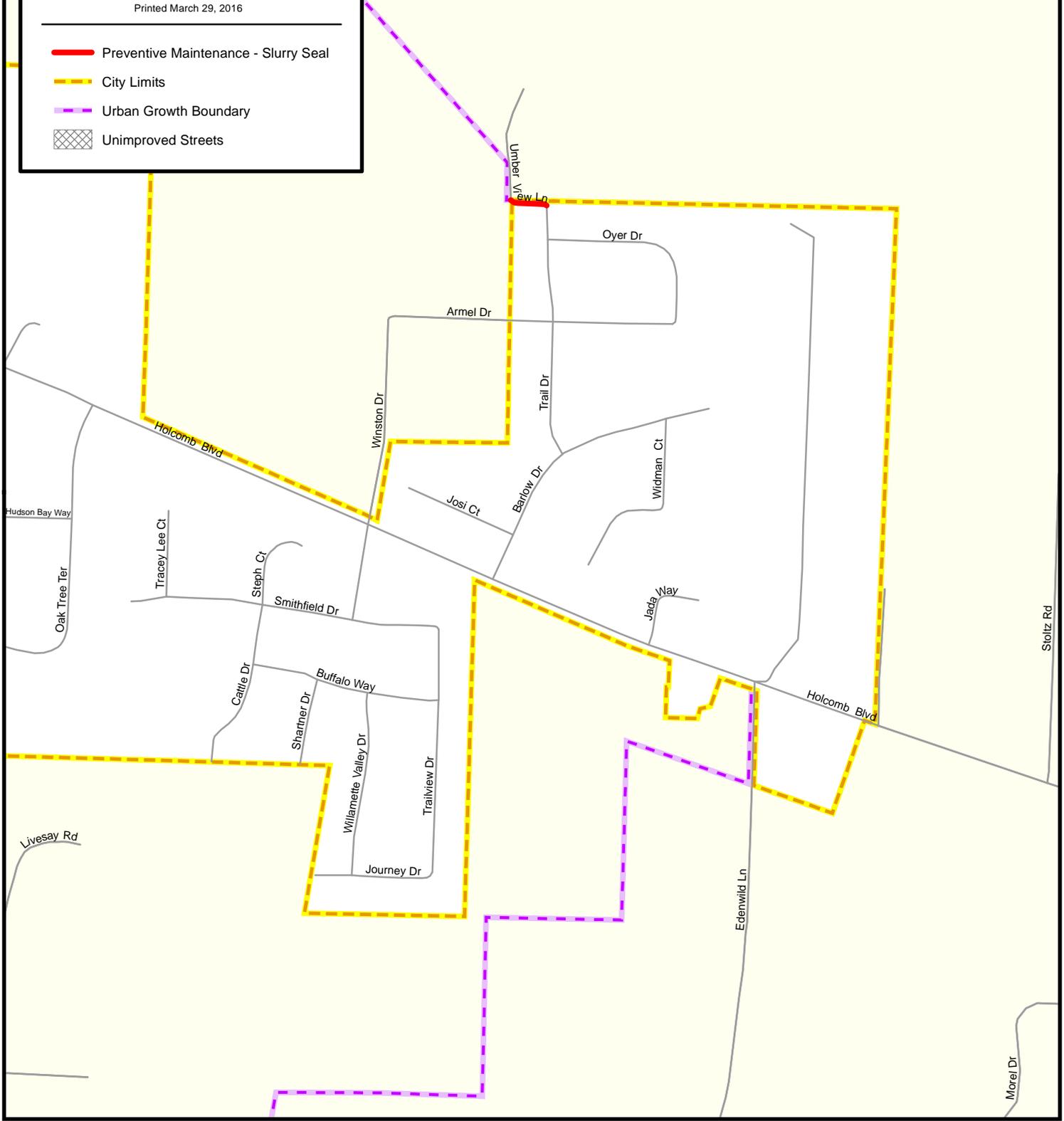
# Sheet S2

GEOGRAPHIC INFORMATION SYSTEM

## Schedule B Slurry Seals

Printed March 29, 2016

-  Preventive Maintenance - Slurry Seal
-  City Limits
-  Urban Growth Boundary
-  Unimproved Streets



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0 250 500 1,000 Feet

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# City of Oregon City

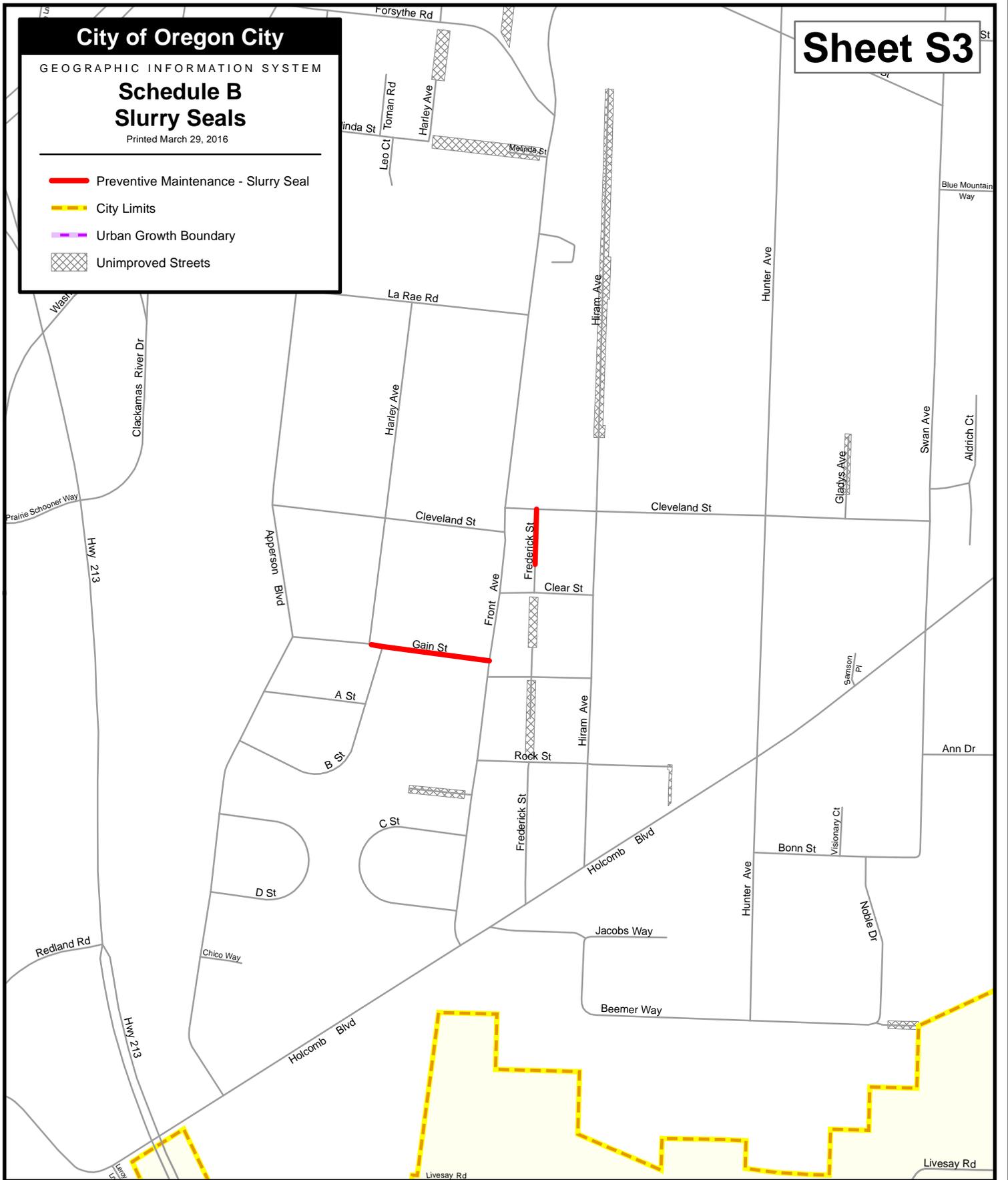
GEOGRAPHIC INFORMATION SYSTEM

## Schedule B Slurry Seals

Printed March 29, 2016

-  Preventive Maintenance - Slurry Seal
-  City Limits
-  Urban Growth Boundary
-  Unimproved Streets

# Sheet S3



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0 250 500 1,000 Feet

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# City of Oregon City

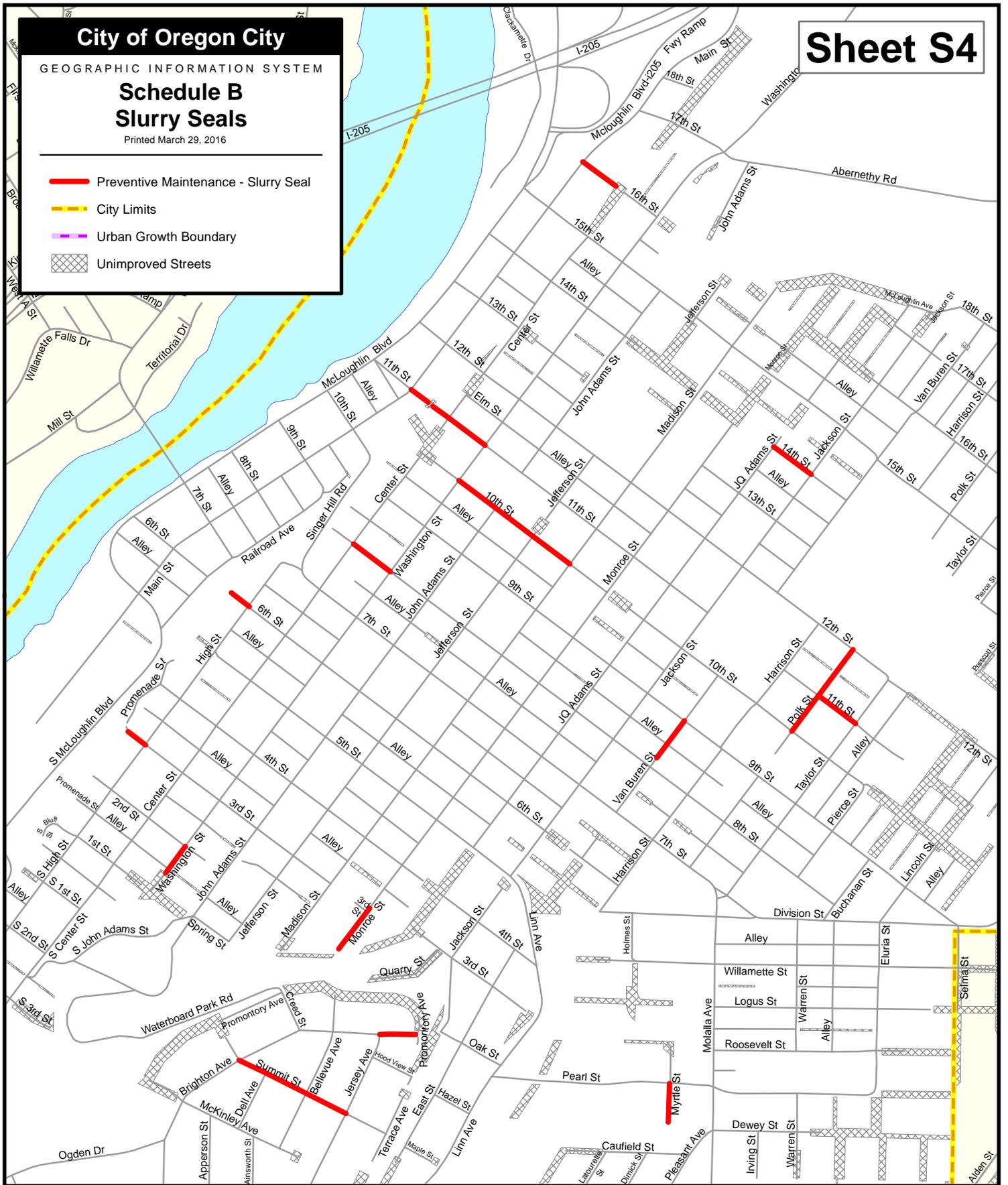
GEOGRAPHIC INFORMATION SYSTEM

## Schedule B Slurry Seals

Printed March 29, 2016

-  Preventive Maintenance - Slurry Seal
-  City Limits
-  Urban Growth Boundary
-  Unimproved Streets

# Sheet S4



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0 250 500 1,000 Feet

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503-657-6629 fax  
[www.orcity.org](http://www.orcity.org)



# City of Oregon City

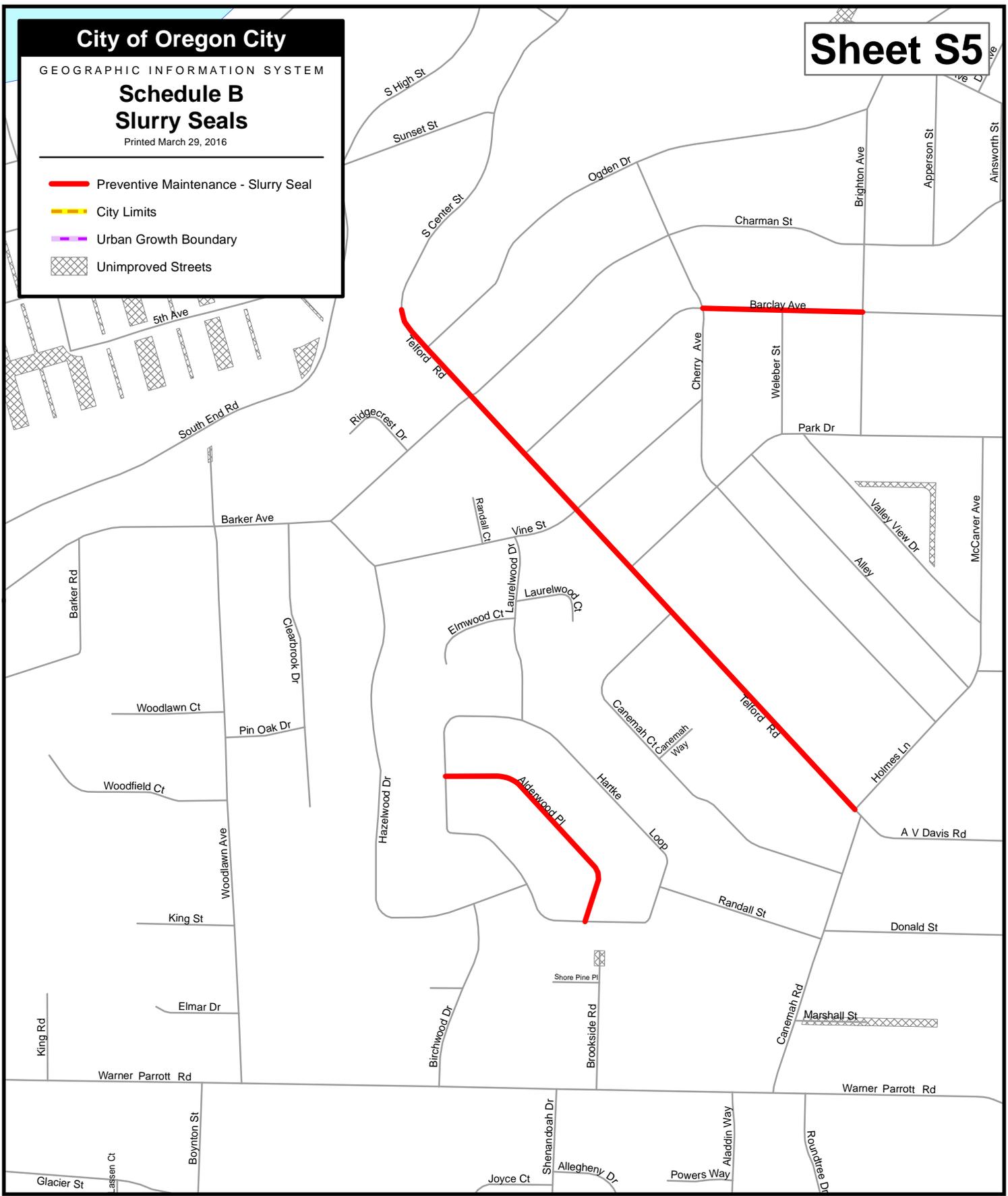
# Sheet S5

GEOGRAPHIC INFORMATION SYSTEM

## Schedule B Slurry Seals

Printed March 29, 2016

-  Preventive Maintenance - Slurry Seal
-  City Limits
-  Urban Growth Boundary
-  Unimproved Streets



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# City of Oregon City

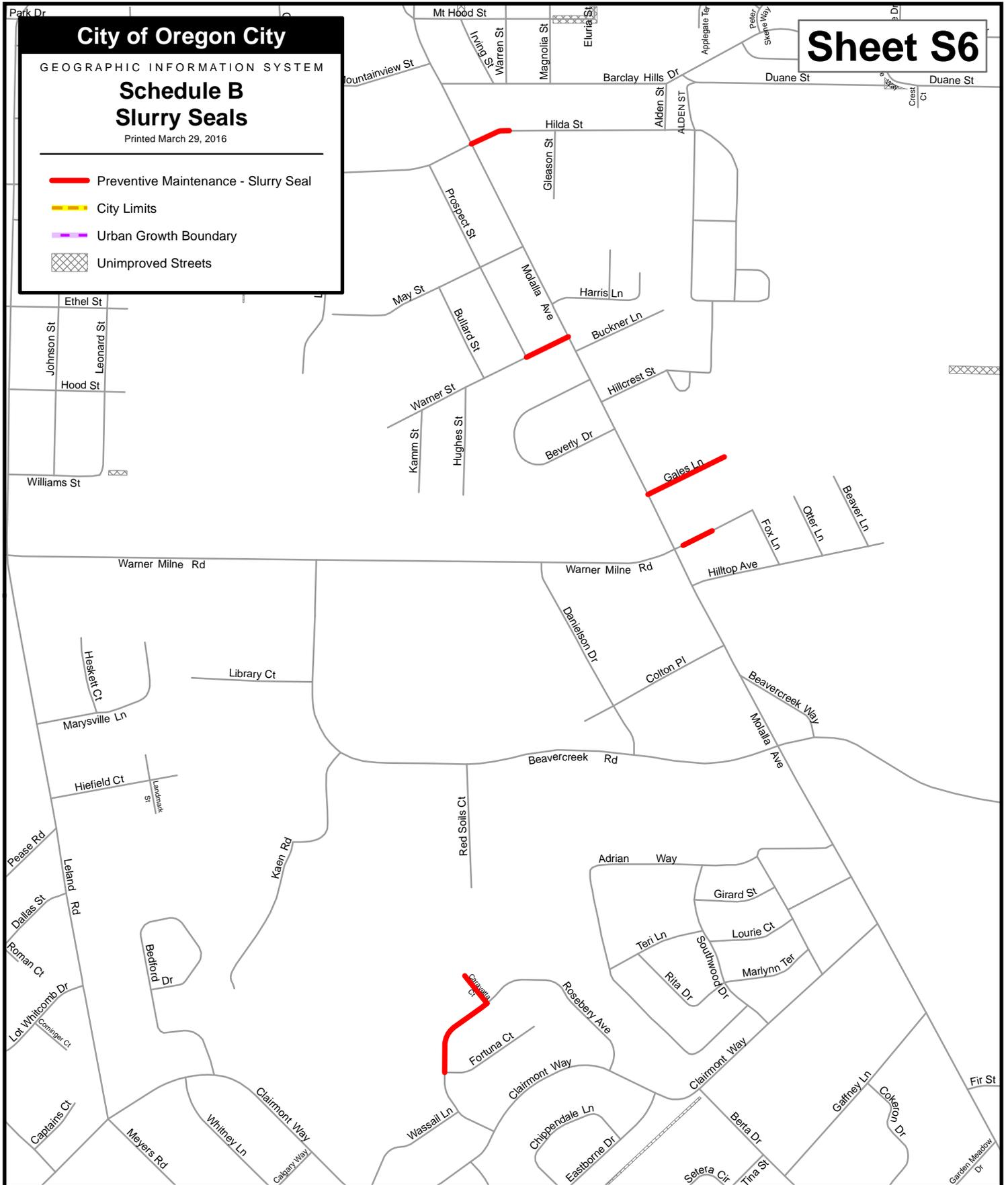
GEOGRAPHIC INFORMATION SYSTEM

## Schedule B Slurry Seals

Printed March 29, 2016

-  Preventive Maintenance - Slurry Seal
-  City Limits
-  Urban Growth Boundary
-  Unimproved Streets

# Sheet S6



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0 250 500 1,000 Feet

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503-657-6629 fax  
[www.ocity.org](http://www.ocity.org)



### SLURRY SEAL TYPE 11 APPLICATION SPREADSHEET

Project Street	From	To	Length	Width	Sq Ft	Extra Sq Ft	Total Sq Ft	Total Sq Yds	STSECIDKEY
10TH ST	WASHINGTON ST	MADISON ST	815	36	29,340	0	29,340	3,260	10THST_020
11TH ST	MAIN ST	RR TRACKS	272	22	5,984	0	5,984	665	11THST_010
11TH ST	RR TRACKS	WASHINGTON ST	380	36	13,680	0	13,680	1,520	11THST_020
11TH ST	TAYLOR ST	Polk	126	40	5,040	0	5,040	560	11THST_050
14TH ST	JACKSON ST	JQ ADAMS ST	273	28	7,644	0	7,644	849	Part of 14THST_030
16TH ST	MAIN ST	RR TRACKS	240	36	8,640	0	8,640	960	16THST_010
3RD ST	MCCLOUGHLIN PROMENADE	HIGH ST	129	38	4,902	0	4,902	545	03RDST_005
6TH ST	MCCLOUGHLIN PROMENADE	HIGH ST	134	35	4,690	0	4,690	521	06THST_015
8TH ST	CENTER ST	WASHINGTON ST	270	29	7,830	0	7,830	870	08THST_020
ALDERWOOD PL	HARTKE LOOP	HARTKE LOOP	951	32	30,432	0	30,432	3,381	ALDRWD_010
BARCLAY AVE	CHERRY AV	BRIGHTON AV	622	29	18,038	0	18,038	2,004	BARCLY_020
BRIGHTON AV	JERSEY AV	END (PROMONTORY AV)	202	17	3,434	0	3,434	382	CARAVT_010
CARAVATTA CT	Entirety		193	32	6,176	1,798	7,974	886	FREDRI_030
FREDERICK ST	BEG OF PAVE (N OF CLEAR)	CLEVELAND ST	217	20	4,340	0	4,340	482	GAINST_010
GAIN ST	HARLEY AVE	S. FRONT ST	466	22	10,252	0	10,252	1,139	GALES_010
GALES LN	MOLALLA AV	END	465	27	12,555	0	12,555	1,395	HILDA_010A
HILDA ST	MOLALLA AV	200 FT E. OF MOLALLA AV	222	30	6,660	0	6,660	740	MONROE_005
MONROE ST	DEAD END S	HOUSE #228	299	37	11,063	0	11,063	1,229	MYRTLE_020
MYRTLE ST	PEARL ST	STH END	226	17	3,842	0	3,842	427	POLKST_020
POLK ST	12TH ST	10TH ST	598	25	14,950	0	14,950	1,661	BRIGHT_030
ROSEBERY AVE	CARAVATTA CT	FORTUNA CT	484	32	15,488	0	15,488	1,721	Part of ROSEBR_020
SUMMIT ST	BRIGHTON AV	JERSEY AV	699	35	24,465	0	24,465	2,718	SUMMIT_010
TELFORD RD	S CENTER ST	OGDEN DR	2,444	36	87,984	0	87,984	9,776	TELFDR_005
TELFORD RD	OGDEN DR	HOLMES LN	182	23	4,186	0	4,186	465	TELFDR_010, TELFRD_020
UMBER VIEW LN	TRAIL DR	SUMMER VIEW LN	136	15	2,040	407	2,447	272	KAYLYN_010
VAN BUREN ST	54' E/O 8TH ST	9TH ST	271	25	6,775	0	6,775	753	VANBRN_015
WARNER MILNE RD	50' E/O MOLALLA AV	PIZZA HUT DRIVEWAY	177	36	6,372	0	6,372	708	Part of WARNML_030
WARNER ST	MOLALLA AV	PROSPECT ST	255	30	7,650	0	7,650	850	WARNER_010
WASHINGTON ST	DEAD END S. OF 2ND	2ND ST	195	40	7,800	0	7,800	867	WSHNTN_005
PIONEER CENTER PARKING	5TH ST	JOHN ADAMS ST	125	116	14,500	0	14,500	1,611	
<b>Total</b>					<b>386,752</b>	<b>2,205</b>	<b>388,957</b>	<b>43,217</b>	

# City of Oregon City

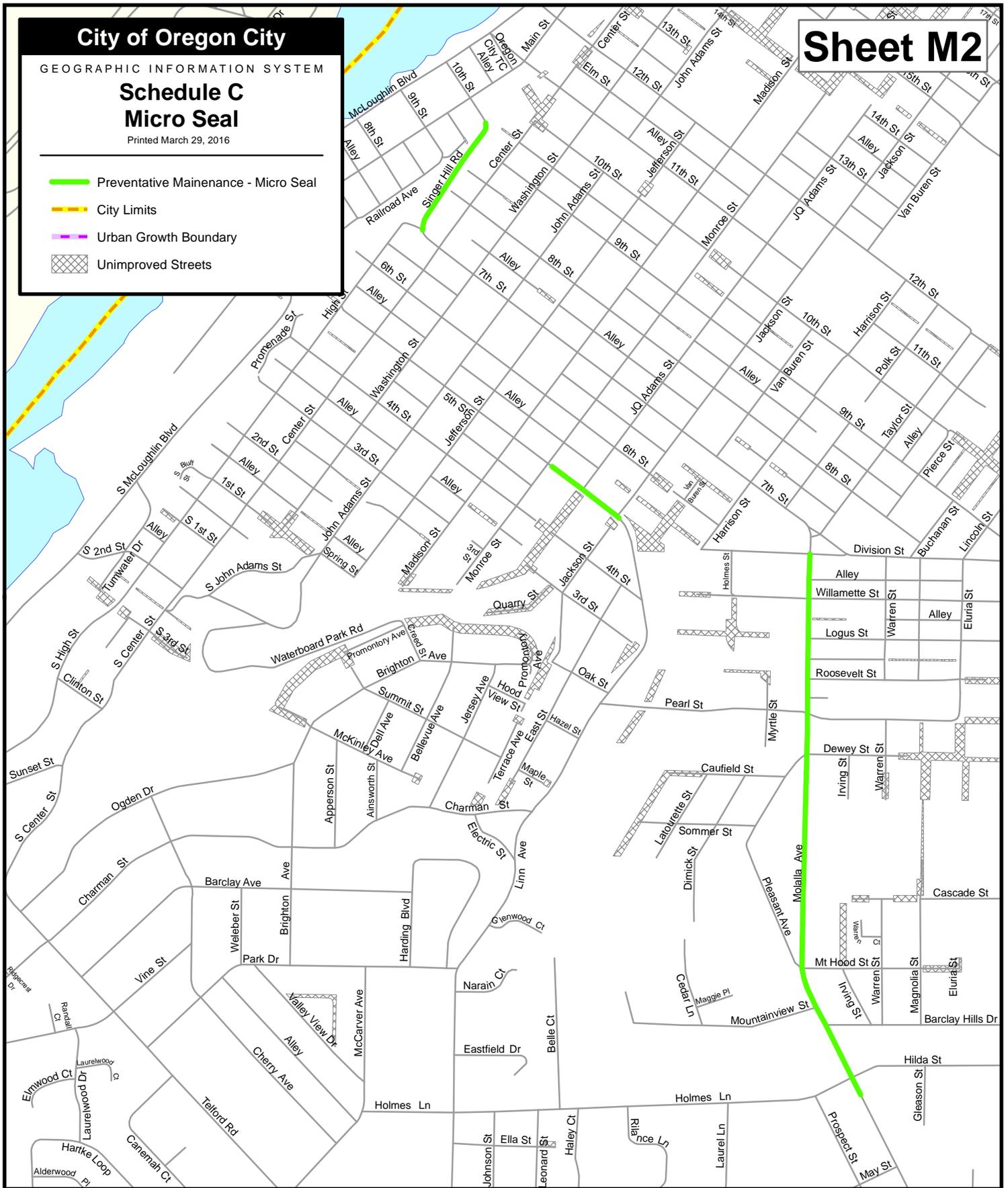
# Sheet M2

GEOGRAPHIC INFORMATION SYSTEM

## Schedule C Micro Seal

Printed March 29, 2016

-  Preventative Maintenance - Micro Seal
-  City Limits
-  Urban Growth Boundary
-  Unimproved Streets



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0 250 500 1,000 1,500 Feet

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## MICRO-SEAL TYPE 111 APPLICATION SPREADSHEET

Project Street	From	To	Length	Width	Sq Ft	Extra Sq Ft	Total Sq Ft	Total Sq Yds	STSECIDKEY
5th St	50' East of Monroe St	Jackson St	532	40	21,280	0	21,280	2,364	Part of 05THST_030
Molalla Ave	Division St	120' south of Holmes Lane	3,469	43	149,167	981	150,148	16,683	MOLALA_010, MOLALA_020, MOLALA_030, part of MOLALA_040
Singer Hill Rd	7th St	10th St	791	30	23,730	0	23,730	2,637	SINGRH_010
<b>Total</b>					<b>194,177</b>	<b>981</b>	<b>195,158</b>	<b>21,684</b>	

**City of Hillsboro**  
**2016 Pavement Management Program**  
**Contract #20552222-6102**

**Schedule "C": Micro-Surfacing**



**Engineering Division**  
**150 E Main Street, Fourth Floor**  
**Hillsboro, OR 97123**  
**Phone: 503-681-6416**



# Micro-Surfacing

## OVERVIEW

March 2016

### Legend

-  MS16
-  MS16\_GRID
-  Park
-  City Limits

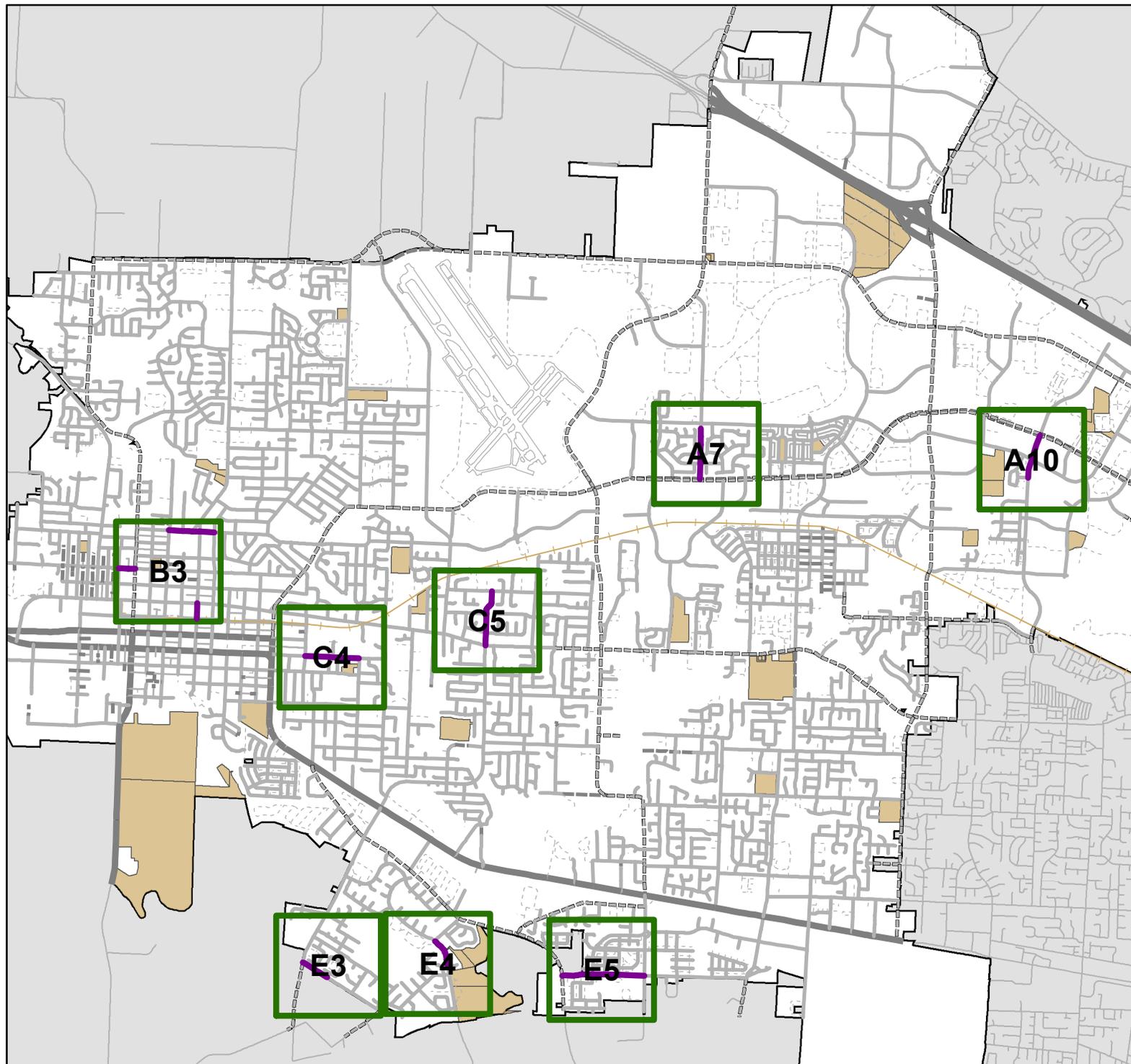
### Roadway Jurisdiction (Within City Limits)

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail



1 inch = 4,000 feet

**DISCLAIMER**  
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**Template MS TOTALS**  
**Schedule "C": Micro-Surfacing**  
 2016 Pavement Management Program  
 #20552222-6102

TEMPLATE	AREA (SQYD)	EXISTING UTILITIES & SURVEY						RPMS				THERMOPLASTIC PAVEMENT MARKINGS													
		MANHOLE	CATCHBASIN	WATER VALVE	GAS VALVE	PGE MH	SURVEY PIN	BLUE	WHITE	YELLOW	RED/WHITE	STOP BAR	STD X-WALK	HI-VIS X-WALK	4" YELLOW (LF)	12" WHITE (LF)	4" WHITE (LF)	8" WHITE (LF)	LEFT TURN ARROW (EA)	RIGHT TURN ARROW (EA)	BIKE SYMBOL	HANDICAP LEGEND	ONLY SYMBOL	RxR XING	SCHOOL LEGEND
A7	7492	4	8	4	2	3	0	0	10	92	0	0	1	0	2781	140	0	143	3	2	0	0	2	0	0
A10	5923	2	0	4	1	0	0	3	18	73	0	0	3	0	2760	369	0	2680	10	0	4	0	0	0	0
B3	8516	11	8	9	3	0	0	4	0	27	10	5	2	1	407	398	1061	0	0	0	0	1	0	1	0
C4	5882	10	4	20	1	0	0	4	0	34	0	1	1	0	350	96	0	0	0	0	0	0	0	0	0
C5	6045	12	4	1	1	0	0	4	6	10	0	0	2	0	238	175	0	77	2	0	0	0	0	0	0
E3	2385	2	2	3	0	0	0	1	0	0	0	1	0	0	0	14	0	0	0	0	0	0	0	0	0
E4	2441	2	1	1	1	0	2	1	0	20	0	1	0	0	1556	20	1340	251	0	0	0	0	0	0	0
E5	11367	20	15	21	0	0	3	6	44	124	0	1	1	1	4804	313	0	4382	16	2	8	0	0	0	1
<b>TEMPLATE TOTALS</b>	<b>50051</b>	<b>63</b>	<b>42</b>	<b>63</b>	<b>9</b>	<b>3</b>	<b>5</b>	<b>23</b>	<b>78</b>	<b>380</b>	<b>10</b>	<b>9</b>	<b>10</b>	<b>2</b>	<b>12896</b>	<b>1525</b>	<b>2401</b>	<b>7533</b>	<b>31</b>	<b>4</b>	<b>12</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



**Template A7**  
**Schedule "C": Micro-Surfacing**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	EXISTING UTILITIES					RPM		TERMOPLASTIC PAVEMENT MARKINGS							GARBAGE DAY	NOTES
							MANHOLE	CATCHBASIN	WATER VALVE	GAS VALVE	PGE MH	WHITE	YELLOW	STD X-WALK	4" YELLOW (LF)	12" WHITE (LF)	8" WHITE (LF)	LEFT TURN ARROW (EA)	RIGHT TURN ARROW (EA)	ONLY SYMBOL		
C503B	NW SHUTE RD	BEG C/G (E)	BEG PCC	119	46	608	1	1	0	0	0	1	10	0	358	0	15	1	0	0	THURSDAY	
C503A	NW SHUTE RD	C/L SADDLE ST	BEG C/G (E)	427	44	2088	0	2	0	0	0	0	30	0	808	0	0	0	0	0	THURSDAY	
A642	NW SHUTE RD	N/S CORNELL RD	C/L FARMCREST ST	434	44	2122	2	2	4	2	1	9	31	1	1119	140	128	2	2	2	THURSDAY	3-LANE X-WALK
B584A	NW SHUTE RD	C/L FARMCREST ST	PVMT CHNG @ 304 FT NORTH	306	44	1496	1	2	0	0	1	0	16	0	436	0	0	0	0	0	THURSDAY	
B584B	NW SHUTE RD	304 N OF C/L FARMCREST ST	C/L SADDLE ST	241	44	1178	0	1	0	0	1	0	5	0	60	0	0	0	0	0	THURSDAY	
<b>TOTALS</b>						<b>7492</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>10</b>	<b>92</b>	<b>1</b>	<b>2781</b>	<b>140</b>	<b>143</b>	<b>3</b>	<b>2</b>	<b>2</b>		

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# Micro-Surfacing

## A10

March 2016

### Legend

- MS16
- MS16\_GRID
- Park
- City Limits

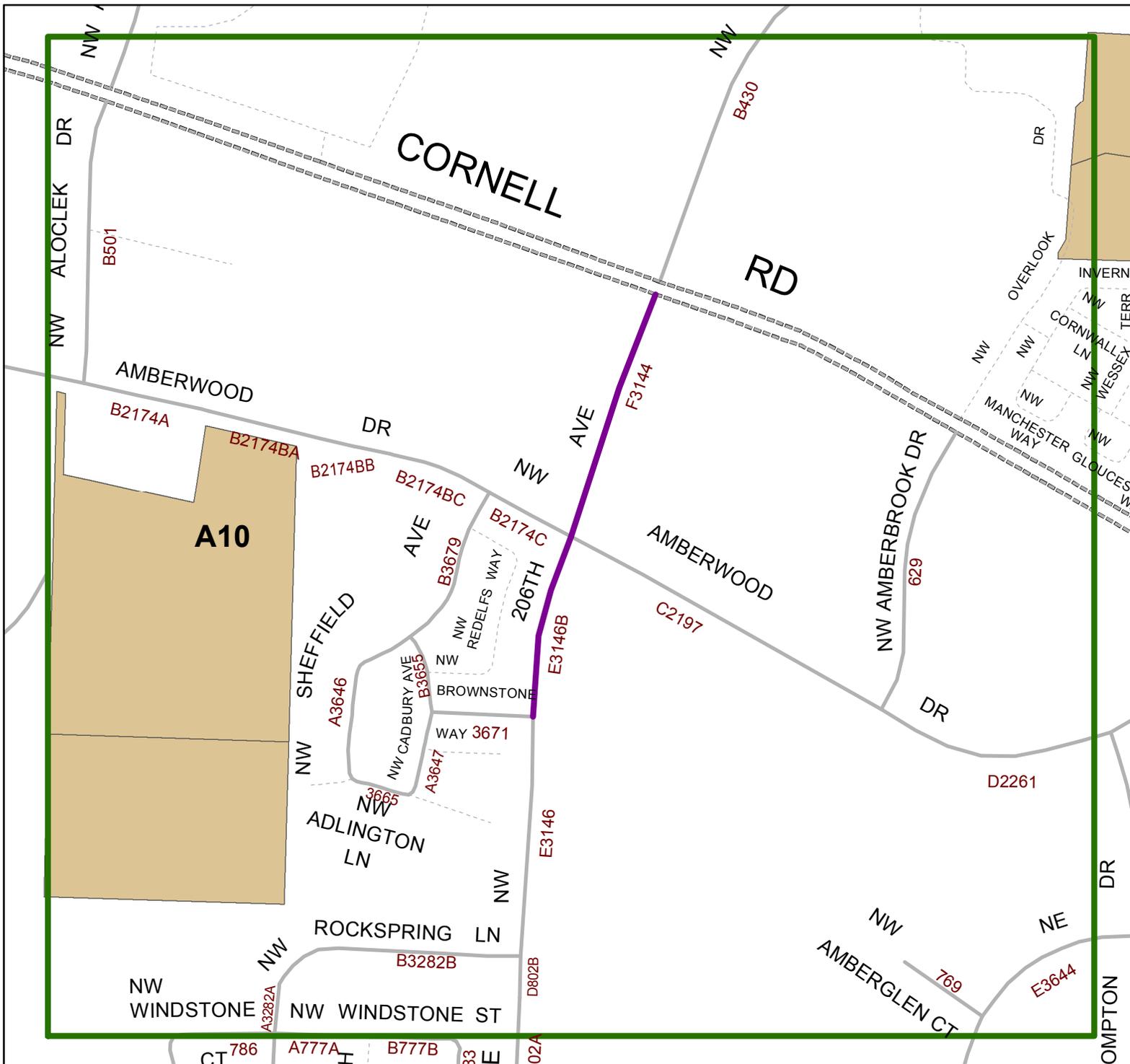
### Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



1 inch = 400 feet

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**Template A10**  
**Schedule "C": Micro-Surfacing**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	EXISTING UTILITIES			RPMS			TERMOPLASTIC PAVEMENT MARKINGS						GARBAGE DAY	NOTES
							MANHOLE	WATER VALVE	GAS VALVE	BLUE	WHITE	YELLOW	STD X-WALK	4" YELLOW (LF)	12" WHITE (LF)	8" WHITE (LF)	LEFT TURN ARROW (EA)	BIKE SYMBOL		
F3144	NW 206TH AVE	C/L AMBERWOOD DR	S/S CORNELL RD (PCC)	717	40	3239	2	2	0	1	12	43	1	1524	207	1539	6	2	WEDNESDAY	3-LANE X-WALK
E3146B	NW 206TH AVE	70FT S OF C/L BROWNSTONE	C/L AMBERWOOD DR	604	40	2684	0	2	1	2	6	30	2	1236	162	1141	4	2	WEDNESDAY	3-LANE X-WALK = 2 (ONE IS EAST)
<b>TOTALS</b>						<b>5923</b>	<b>2</b>	<b>4</b>	<b>1</b>	<b>3</b>	<b>18</b>	<b>73</b>	<b>3</b>	<b>2760</b>	<b>369</b>	<b>2680</b>	<b>10</b>	<b>4</b>		

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2016 Pavement Management Program  
Project#20552222-6102

# Micro-Surfacing B3

March 2016

## Legend

- MS16
- MS16\_GRID
- Park
- City Limits

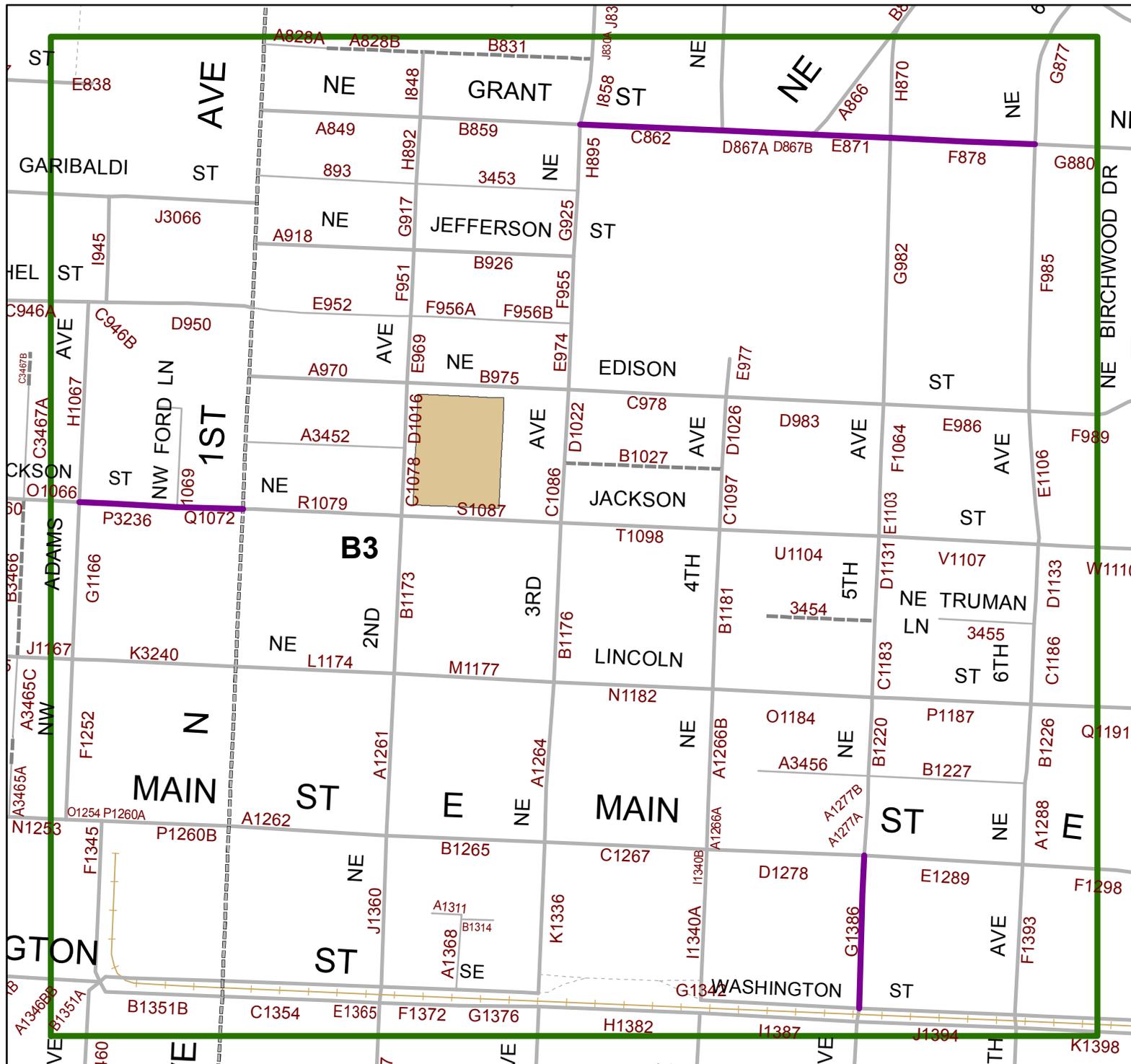
## Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



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**Template B3**  
**Schedule "C": Micro-Surfacing**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQ.YD)	EXISTING UTILITIES				RPMS			TERMOPLASTIC PAVEMENT MARKINGS							GARBAGE DAY	NOTES		
							MANHOLE	CATCH-BASIN	WATER VALVE	GAS VALVE	BLUE	YELLOW	RED/WHITE	STOP BAR	STD X-WALK	HI-VIS X-WALK	4" YELLOW (LF)	12" WHITE (LF)	4" WHITE (LF)	HANDICAP LEGEND			R/R XING	
E871	NE GRANT ST	C/L JACKSON SCHOOL RD	C/L 5TH AVE	204	36	816	1	1	0	0	0	4	0	1	0	0	50	18	0	0	0	MONDAY		
F878	NE GRANT ST	C/L 5TH AVE	60'(W) W/S 6TH AVE	362	36	1448	1	1	0	0	0	9	0	1	0	0	90	18	0	0	0	MONDAY		
C862	NE GRANT ST	E/S 3RD AVE	C/L 4TH AVE	388	44	1897	1	2	2	0	0	8	0	0	1	0	138	74	552	0	0	MONDAY	2-LANE X-WALK	
D867A	NE GRANT ST	C/L 4TH AVE	WIDTH CHNG/ (W) P/L #421	211	44	1032	1	1	0	0	1	5	0	0	0	0	63	0	253	0	0	MONDAY		
D867B	NE GRANT ST	WIDTH CHNG/(W) P/L #421	C/L NE JACKSON SCHOOL RD	81	36	324	1	0	0	0	0	1	0	0	0	1	20	144	0	0	0	MONDAY	2-LANE HI-VIS X-WALK	
G1386	SE 5TH AVE	N/S WASHINGTON ST	S/S E MAIN ST	407	36	1628	3	0	7	1	3	0	10	1	1	0	46	104	256	1	0	MONDAY	PARKING T's = 22 X 5FT (INCL IN 4"W); CHECK STRIPING AFTER CONVERSION; ASSESS ADA STALLS	
P3236	NW JACKSON ST	E/S R/R TRACKS	C/L FORD LN	188	34	710	2	0	0	2	0	0	0	1	0	0	0	26	0	0	1	TUESDAY	STOP BARS ARE FOR RR	
Q1072	NW JACKSON ST	C/L FORD LN	W/S 1ST AVE	175	34	661	1	3	0	0	0	0	0	1	0	0	0	14	0	0	0	TUESDAY	IN DO: SANI MH REPAIR & R = 1; 12"W=25FT	
<b>TOTALS</b>							<b>8516</b>	<b>11</b>	<b>8</b>	<b>9</b>	<b>3</b>	<b>4</b>	<b>27</b>	<b>10</b>	<b>5</b>	<b>2</b>	<b>1</b>	<b>407</b>	<b>398</b>	<b>1061</b>	<b>1</b>	<b>1</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

# Micro-Surfacing C4

March 2016

## Legend

- MS16
- MS16\_GRID
- Park
- City Limits

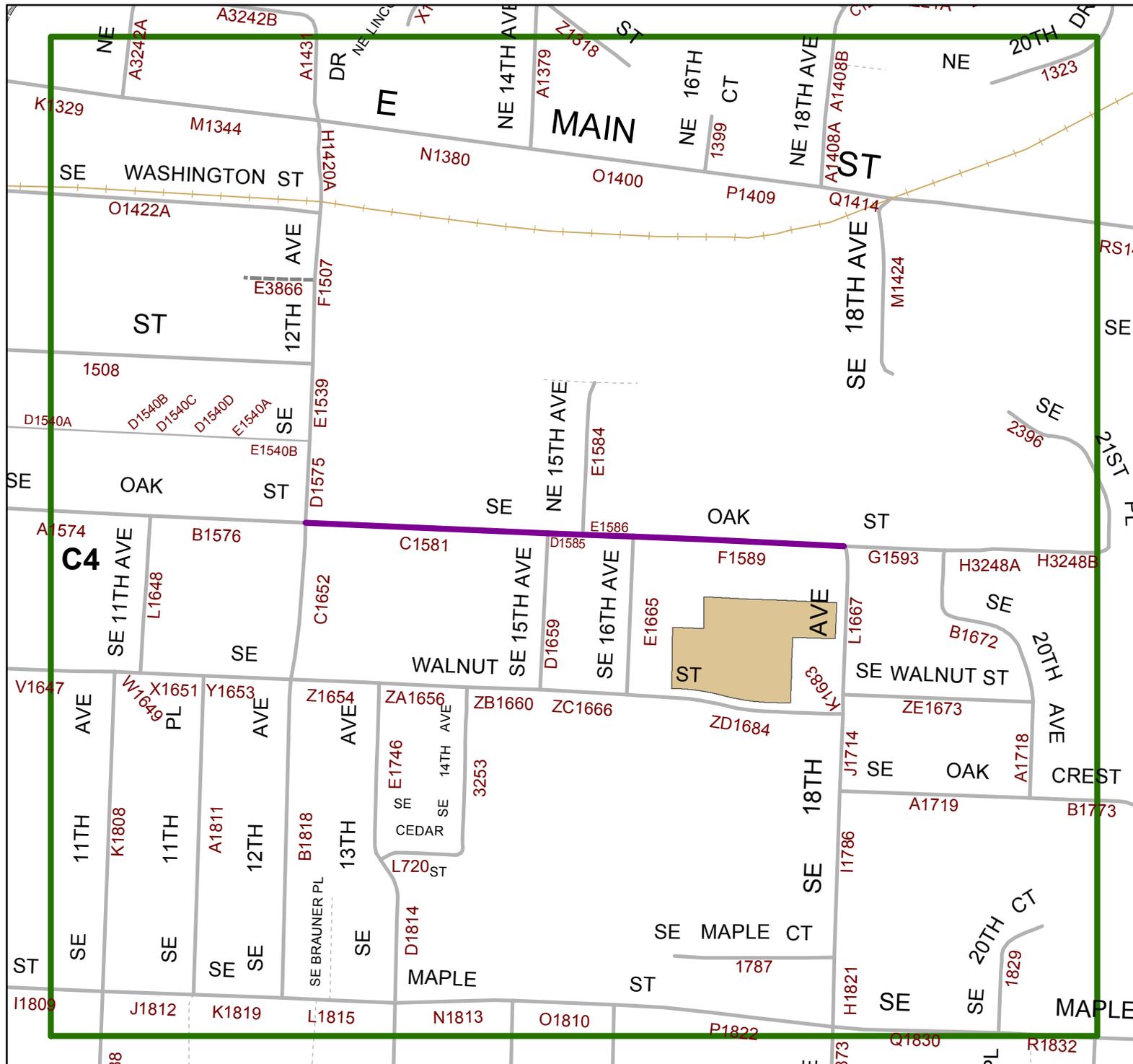
## Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



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**Template C4**  
**Schedule "C": Micro-Surfacing**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	EXISTING UTILITIES				RPMS		TERMOPLASTIC PAVEMENT MARKINGS			GARBAGE DAY	NOTES	
							MANHOLE	CATCHBASIN	WATER VALVE	GAS VALVE	BLUE	YELLOW	STOP BAR	STD X-WALK	4" YELLOW (LF)			12" WHITE (LF)
D1585	SE OAK ST	C/L 15TH AVE (W) INT	C/L 15TH AVE (E) INT	102	34	385	1	0	0	0	0	2	0	0	10	0	MONDAY	
E1586	SE OAK ST	C/L 15TH AVE (E) INT	C/L 16TH AVE	148	34	559	1	0	4	0	0	2	0	0	30	0	MONDAY	
F1589	SE OAK ST	C/L 16TH AVE	W/S 18TH AVE	614	34	2320	3	1	9	1	2	14	1	0	150	16	MONDAY	
C1581	SE OAK ST	E/S 12TH ST	C/L 15TH AVE (W) INT	693	34	2618	5	3	7	0	2	16	0	1	160	80	MONDAY	2-LANE X-WALK
<b>TOTALS</b>						<b>5882</b>	<b>10</b>	<b>4</b>	<b>20</b>	<b>1</b>	<b>4</b>	<b>34</b>	<b>1</b>	<b>1</b>	<b>350</b>	<b>96</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

# Micro-Surfacing C5

March 2016

## Legend

- MS16
- MS16\_GRID
- Park
- City Limits

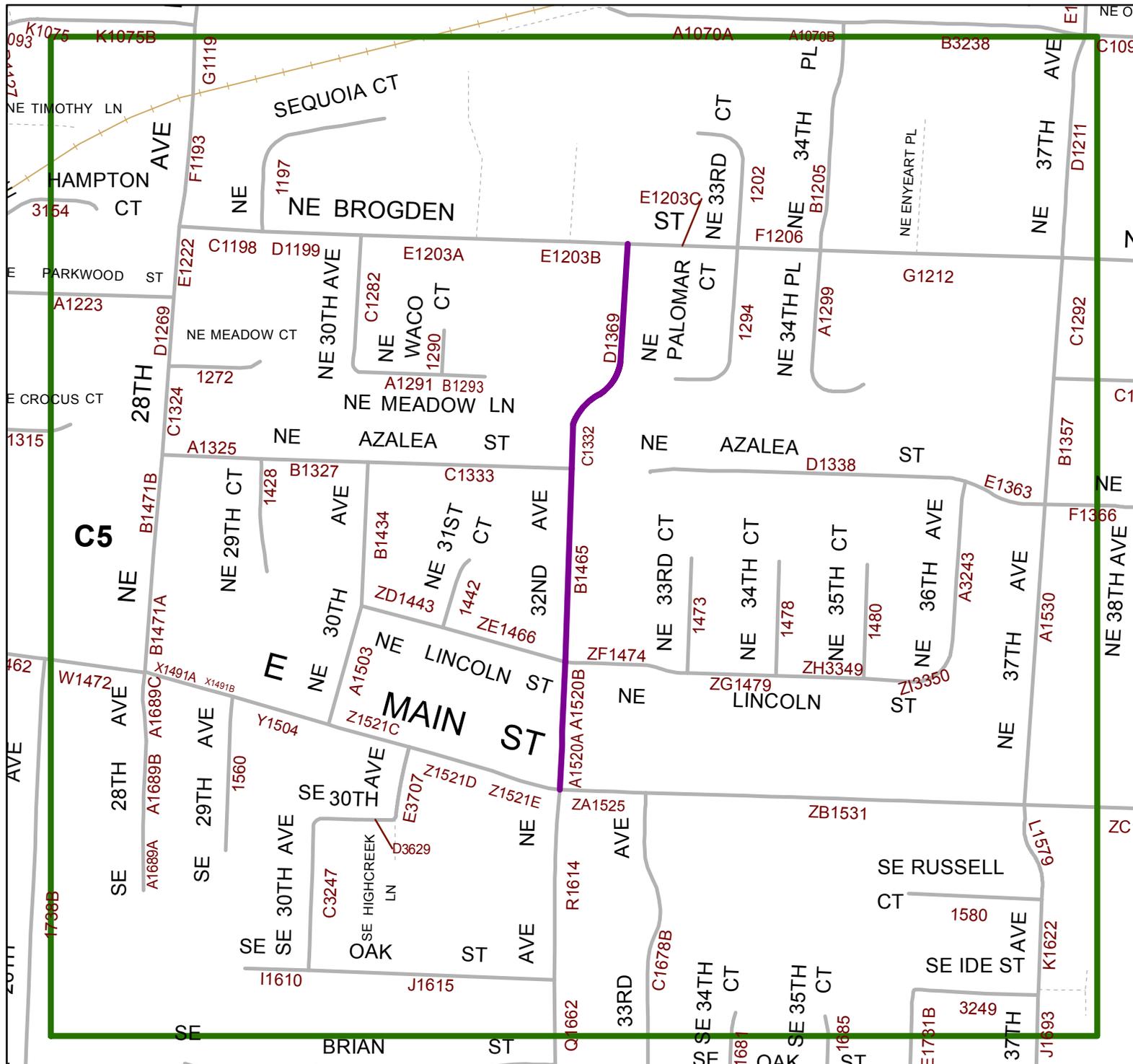
## Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



1 inch = 400 feet

DISCLAIMER  
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However, notification of errors would be appreciated.







**Template E3**  
**Schedule "C": Micro-Surfacing**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	EXISTING UTILITIES			RPMS	STIC PAVEMENT		GARBAGE DAY	NOTES
							MANHOLE	CATCHBASIN	WATER VALVE		STOP BAR	12" WHITE (LF)		
A3753	SE MORGAN RD	E/S MINTER BRIDGE RD	C/L ROYALSTAR AVE	377	27	1131	0	0	0	0	1	14	FRIDAY	1-LANE STOP
B3766	SE MORGAN RD	C/L ROYALSTAR AVE	W/S GALAXY AVE	418	27	1254	2	2	3	1	0	0	FRIDAY	
<b>TOTALS</b>						<b>2385</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>14</b>		

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2016 Pavement Management Program  
Project#20552222-6102

# Micro-Surfacing E4

March 2016

## Legend

- MS16
- MS16\_GRID
- Park
- City Limits

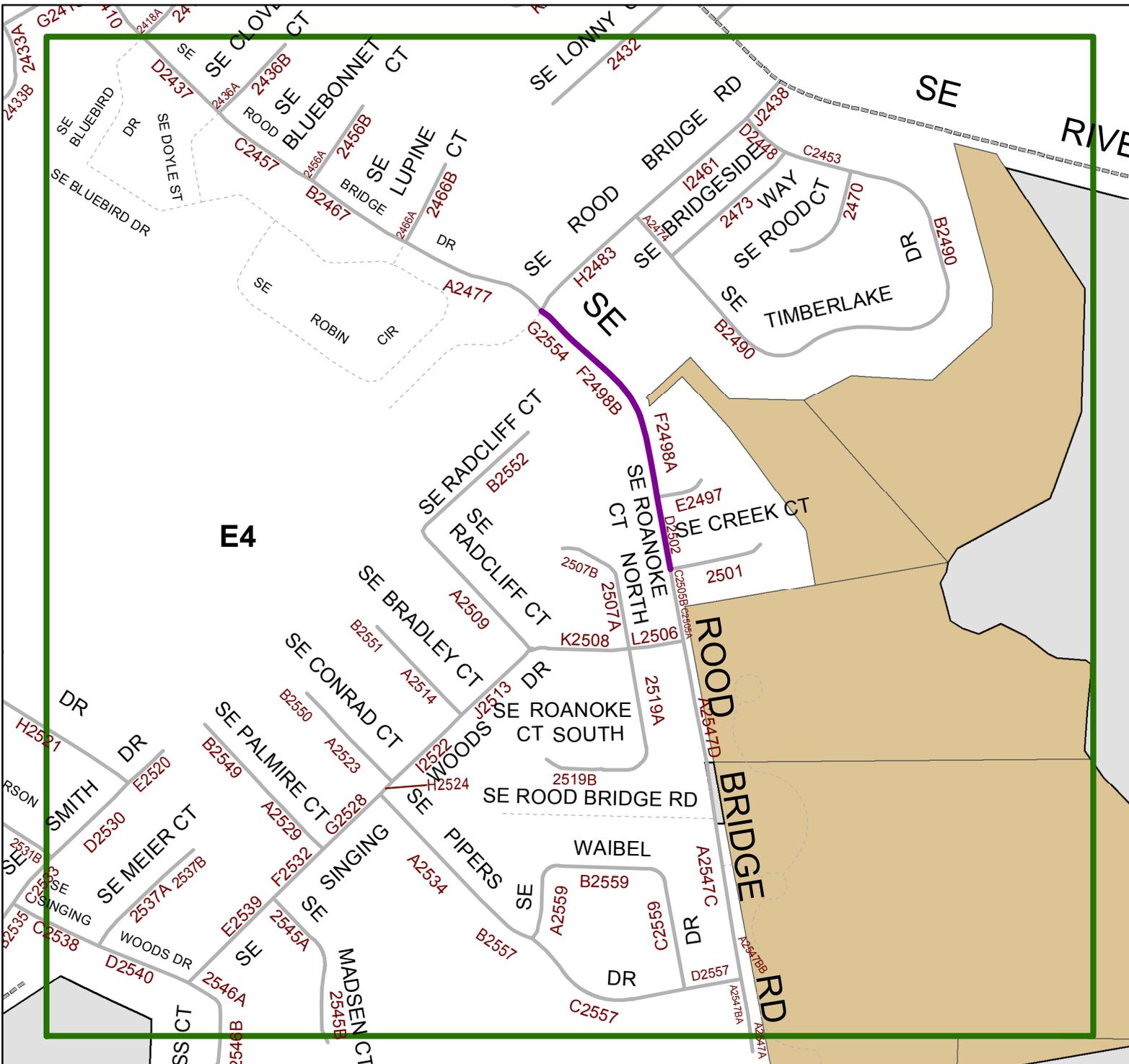
## Roadway Jurisdiction (Within City Limits)

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail



1 inch = 400 feet

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**Template E4**  
**Schedule "C": Micro-Surfacing**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	EXISTING UTILITIES					RPM		TERMOPLASTIC PAVEMENT MARKINGS					GARBAGE DAY	NOTES
							MANHOLE	CATCHBASIN	WATER VALVE	GAS VALVE	SURVEY PIN	BLUE	YELLOW	STOP BAR	4" YELLOW (LF)	12" WHITE (LF)	4" WHITE (LF)	8" WHITE (LF)		
							D2502	SE ROOD BRIDGE RD	N/S CREEK CT	C/L ROOD BRIDGE SPUR	195	22	513	0	0	0	0	0		
G2554	SE ROOD BRIDGE RD	BEG C/G (N)	E/S ROOD BRIDGE (SCH ENT)	168	22	447	0	0	1	0	0	4	1	336	20	321	0	FRIDAY	1-LANE STOP	
F2498B	SE ROOD BRIDGE RD	BEGIN C/G (S)	END C/G (N)	211	35	852	2	1	0	1	1	0	5	0	422	0	211	211	FRIDAY	
F2498A	SE ROOD BRIDGE RD	C/L ROOD BRIDGE (SPUR)	BEGIN C/G (S)	254	22	628	0	0	0	0	1	0	6	0	464	0	446	40	FRIDAY	
<b>TOTALS</b>						<b>2441</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>20</b>	<b>1</b>	<b>1556</b>	<b>20</b>	<b>1340</b>	<b>251</b>		

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# Micro-Surfacing E5

March 2016

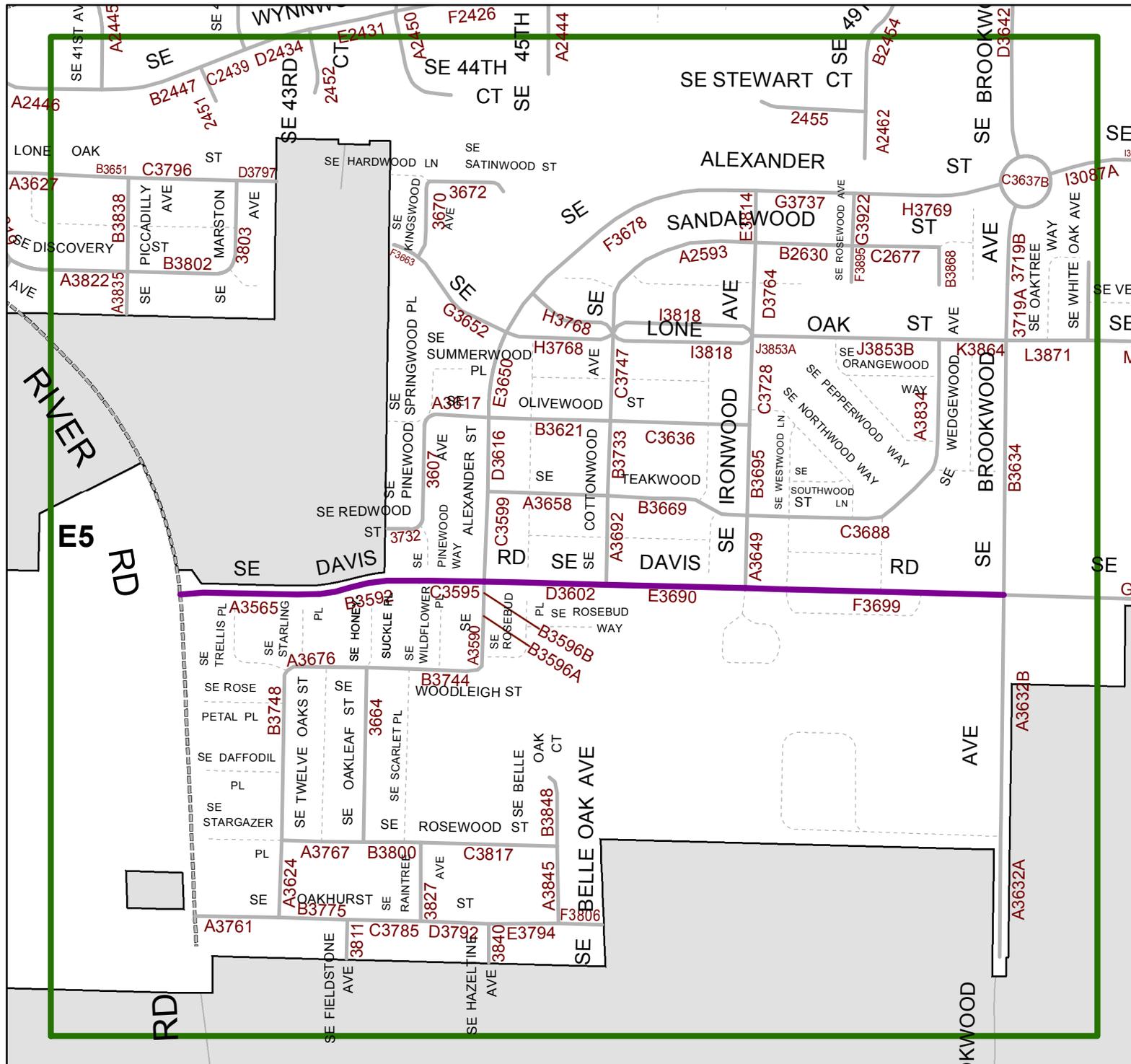
## Legend

- MS16
  - MS16\_GRID
  - Park
  - City Limits
- ### Roadway Jurisdiction (Within City Limits)
- City Roadway
  - City Alley
  - Unimproved City ROW
  - County Road
  - State Highway
  - Private
  - Light Rail



1 inch = 400 feet

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**Template E5**  
**Schedule "C": Micro-Surfacing**  
 2016 Pavement Management Program  
 #20552222-6102

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	EXISTING UTILITIES				RPMS			TERMOPLASTIC PAVEMENT MARKINGS										GARBAGE DAY	NOTES
							MANHOLE	CATCHBASIN	WATER VALVE	SURVEY PIN	BLUE	WHITE	YELLOW	STOP BAR	STD X-WALK	HI-VIS X-WALK	4" YELLOW (LF)	12" WHITE (LF)	8" WHITE (LF)	LEFT TURN ARROW (EA)	RIGHT TURN ARROW (EA)	BIKE SYMBOL	SCHOOL LEGEND		
D3602	SE DAVIS RD	C/L ALEXANDER ST	C/L COTTONWOOD AVE	357	44	1745	5	2	7	1	1	8	22	0	0	0	662	0	442	4	0	2	0	THURSDAY	
A3565	SE DAVIS RD	E/S RIVER RD	BEGIN MEDIAN	365	44	1784	2	3	4	0	1	20	30	0	1	0	934	107	826	2	2	1	1	FRIDAY	3-LANE X-WALK
C3595	SE DAVIS RD	END MEDIAN	C/L ALEXANDER ST	184	44	900	2	0	3	1	1	8	8	0	0	0	304	0	400	2	0	1	0	THURSDAY	
B3592	SE DAVIS RD	BEGIN MEDIAN	END MEDIAN	308	32	1095	4	2	1	0	0	0	4	0	0	0	616	0	616	0	0	0	0	FRIDAY	
E3690	SE DAVIS RD	C/L COTTONWOOD AVE	C/L IRONWOOD AVE	405	44	1980	3	2	3	1	1	0	20	0	0	0	880	0	704	2	0	2	0	THURSDAY	
F3699	SE DAVIS RD	C/L IRONWOOD AVE	W/S BROOKWOOD AVE	740	44	3863	4	6	3	0	2	8	40	1	0	1	1408	206	1394	6	0	2	0	THURSDAY	2-LANE STOP; 3-LANE HI-VIS
<b>TOTALS</b>						<b>11367</b>	<b>20</b>	<b>15</b>	<b>21</b>	<b>3</b>	<b>6</b>	<b>44</b>	<b>124</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>4804</b>	<b>313</b>	<b>4382</b>	<b>16</b>	<b>2</b>	<b>8</b>	<b>1</b>		

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**City of Hillsboro**  
**2016 Pavement Management Program**  
**Contract #20552222-6102**

**Schedule "D": Alley Overlays &  
AC Replacements**



**Engineering Division**  
**150 E Main Street, Fourth Floor**  
**Hillsboro, OR 97123**  
**Phone: 503-681-6416**



## OVERVIEW

March 2016

# Alley Overlays & AC Replacements

### Legend

-  AC REPLACEMENTS
-  ALLEY OVERLAY

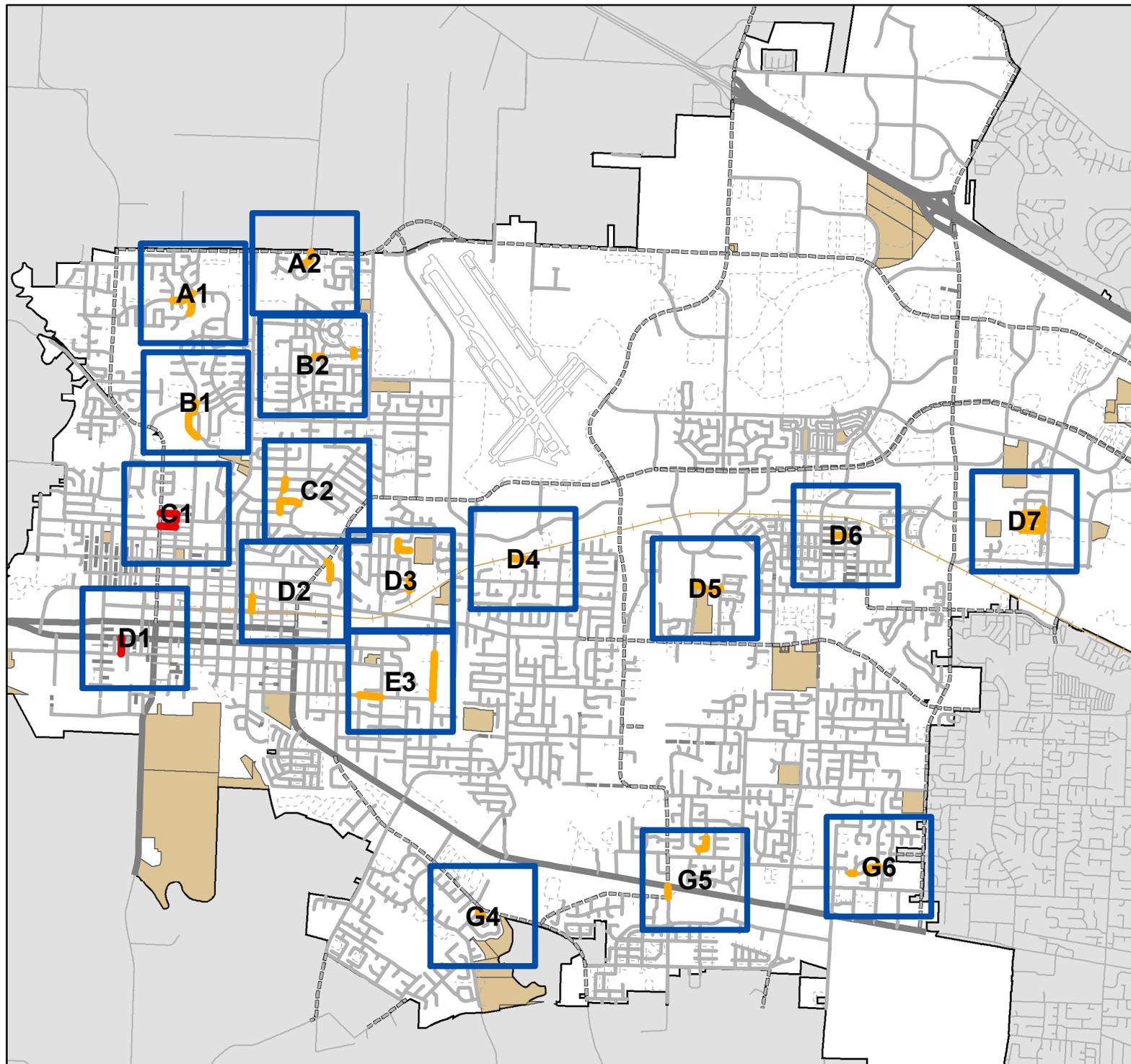
### Roadway Jurisdiction

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail
-  Template Boundary
-  Park
-  City Limits



1 inch = 4,000 feet

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**Template Totals**  
**Schedule "D": Alley Overlays and AC Replacements**  
 2016 Pavement Management Program  
 #20552222-6102

TEMPLATE #	AC REMOVE (SQYD)	AC REPLACE (TON)	MH SANI	MH STM	CB	WV	GV	CO	PIN	MON	NOTES
A1	212	59.50	1								
A2	15	4.22									
B1	35	9.78									
B2	63	17.69								1	
C1		174.83	1			2		4			ALLEYS
C2	209	58.72									
D1	408	82.84	2	1	1		1	3			ALLEYS
D2	466	131.06									
D3	73	20.44									
D4	114	32.03									
D5	14	3.84	1	1							
D6	31	8.81									
D7	209	58.81	1						1		
E3	329	92.66									
G4	9	2.50									
G5	23	6.37									
G6	95	26.75									
<b>TOTALS</b>	<b>2304</b>	<b>790.85</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>1</b>	

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Totals



# Template A1

## Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
N71	NE LENOX ST	C/L AURORA DR	C/L SUNBURST AVE	51.78	14.56	(11X8) mh in digout (27X14)	
B96AB	NE AURORA DR	PAVEMENT CHANGE	C/L SPUR	49.78	14.00	(28X16)	
L75	NE LENOX ST	W/S KASTER DR	C/L 3RD PL	72.67	20.44	(18X15) (23X12) (12X9)	
M76	NE LENOX ST	C/L 3RD PL	C/L AURORA DR	37.33	10.50	(12X10) (24X9)	
<b>TEMPLATE TOTALS</b>				<b>211.56</b>	<b>59.50</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.

# A2

March 2016

## Alley Overlays & AC Replacements

### Legend

-  AC Replacements
-  Alley Overlays

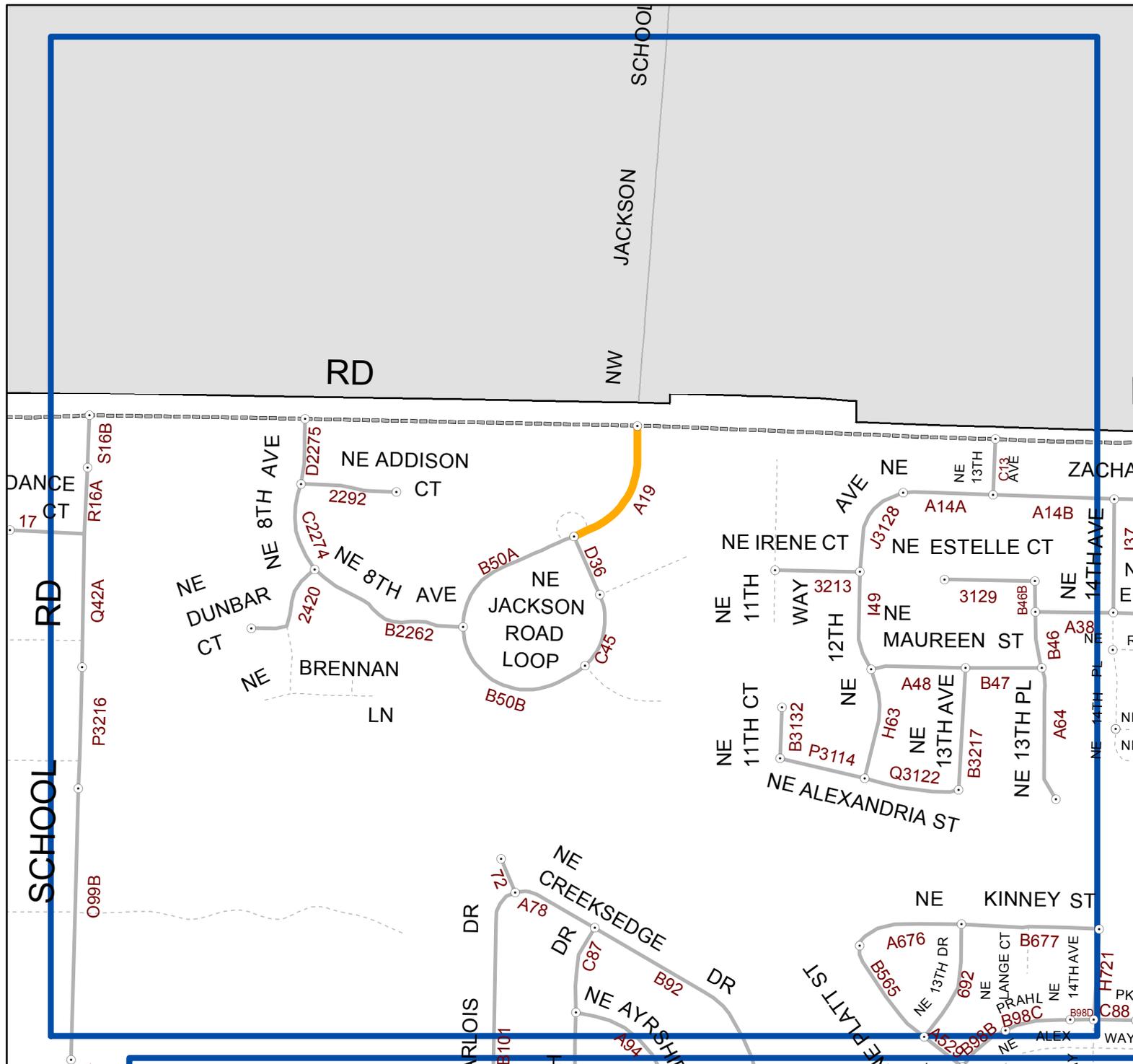
### Roadway Jurisdiction

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail
-  MAP GRID
-  Park
-  City Limits



1 inch = 400 feet

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## Template A2

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program

#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
A19	NE JACKSON LOOP	S/S NW EVERGREEN RD	C/L NE JACKSON LOOP RD	15.00	4.22	(3X3) (9X10) (3X12)	
<b>TEMPLATE TOTALS</b>				<b>15.00</b>	<b>4.22</b>		

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2016 Pavement Management Program  
Project#20552222-6102

**B1**

March 2016

# Alley Overlays & AC Replacements

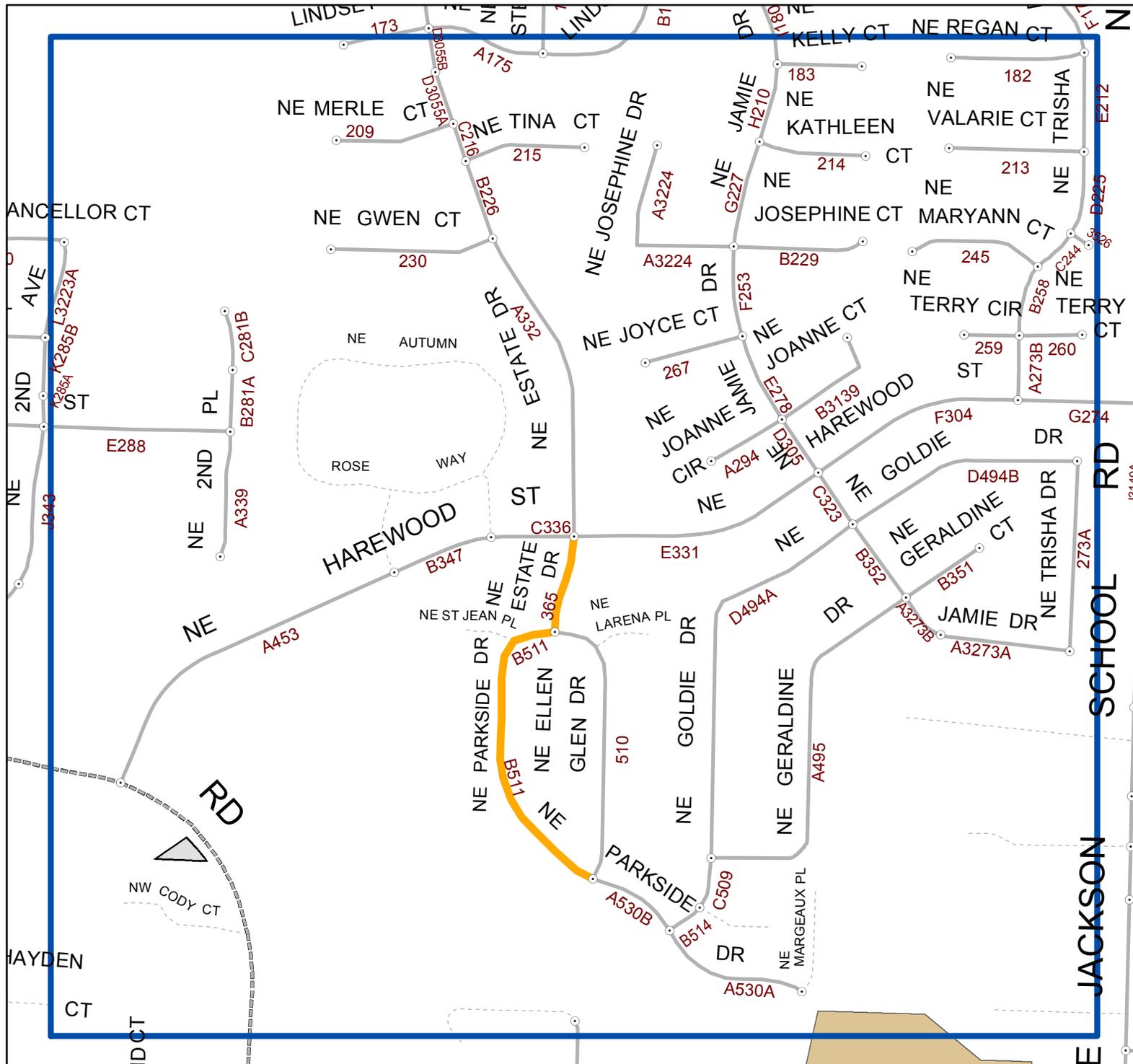
## Legend

- AC Replacements
- Alley Overlays
- Roadway Jurisdiction**
  - City Roadway
  - City Alley
  - Unimproved City ROW
  - County Road
  - State Highway
  - Private
  - Light Rail
- MAP GRID
- Park
- City Limits



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# Template B1

## Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
365	NE ESTATE DR	N/S GLEN ELLEN DR	15ft S of S/S HAREWOOD ST	32.11	9.03	(17X17)	
B511	NE PARKSIDE DR	C/L GLEN ELLEN DR (S INT)	ESTATE DR	2.67	0.75	(4X6)	
<b>TEMPLATE TOTALS</b>				<b>34.78</b>	<b>9.78</b>		

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## B2

March 2016

# Alley Overlays & AC Replacements

### Legend

-  AC Replacements
-  Alley Overlays

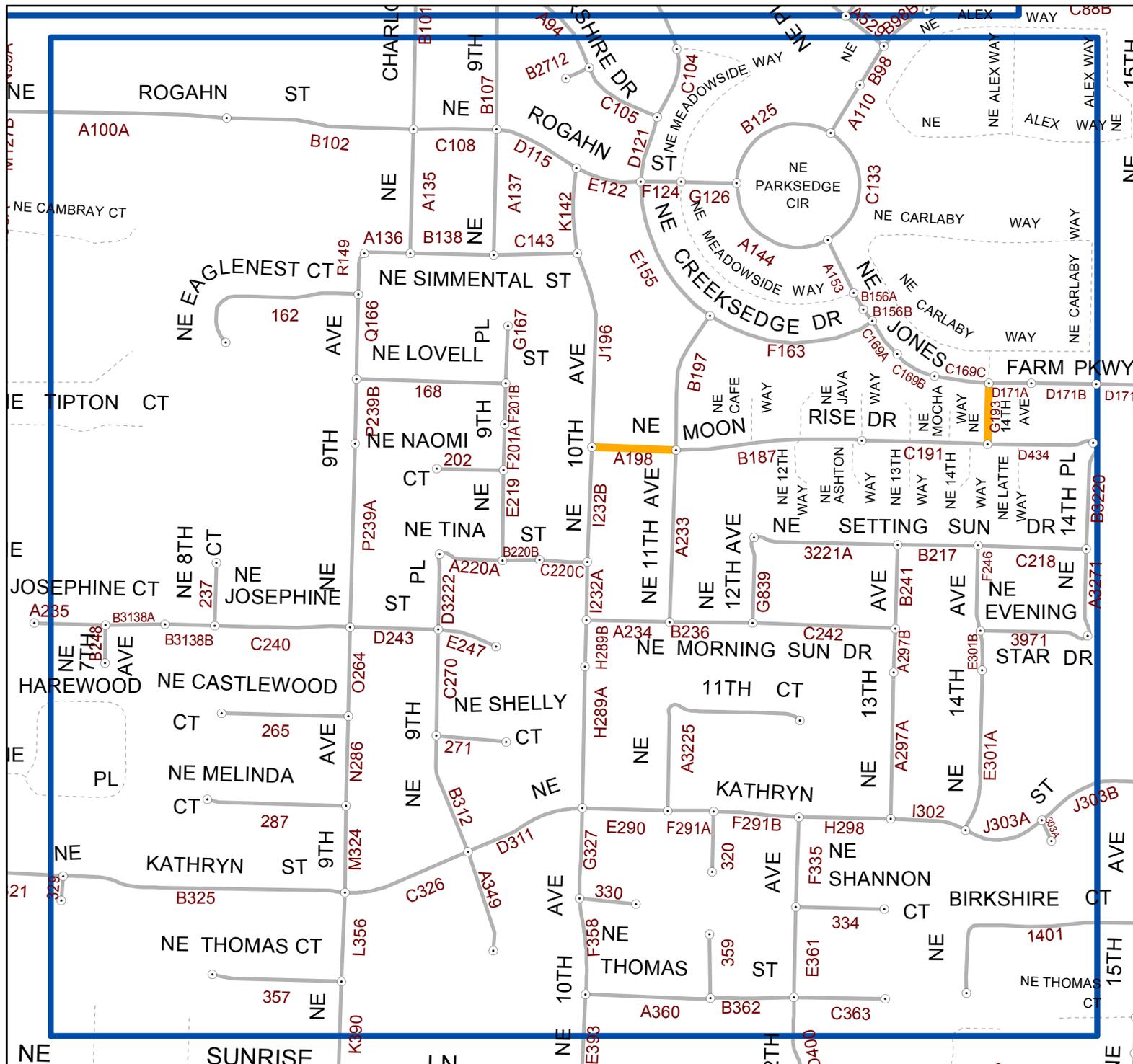
### Roadway Jurisdiction

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail
-  MAP GRID
-  Park
-  City Limits



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## Template B2

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
A198	NE MOONRISE DR	NE 10TH AVE	NE 11TH AVE	16.67	4.69	(10X15) MON IN DO	
G193	NE 14TH AVE	N/S NE MOON RISE DR	S/S NE JONES FARM PKWY	46.22	13.00	(15X16) (11X16)	
<b>TEMPLATE TOTALS</b>				<b>62.89</b>	<b>17.69</b>		

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**Template C1**  
**Schedule "D": Alley Overlays and AC Replacements**  
 2016 Pavement Management Program  
 #20552222-6102

**ALLEY OVERLAYS**

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	AC REPLACE (TON)	WATER VALVE	MH SANI	CO	COMMENTS
I848	NE 2nd AVE	GRANT ST	GRANT/DONELSON ALLEY	177	21	413	46.46	1			May need base prep 12"W =9
A828A	HB ALLEY	1ST AVE	END PAVEMENT C/L CHURCH LOT	159	15	265	29.81	1			May need base prep
A828B	HB ALLEY	END PAVEMENT C/L CHURCH LOT	W/S 2ND AVE	267	12	356	40.05		1	4	May need base prep
893	HB ALLEY	1ST AVE	2ND AVE	390	12	520	58.50				May need base prep
<b>TOTALS</b>						1554	174.83	2	1	4	

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# C2

March 2016

## Alley Overlays & AC Replacements

### Legend

-  AC Replacements
-  Alley Overlays

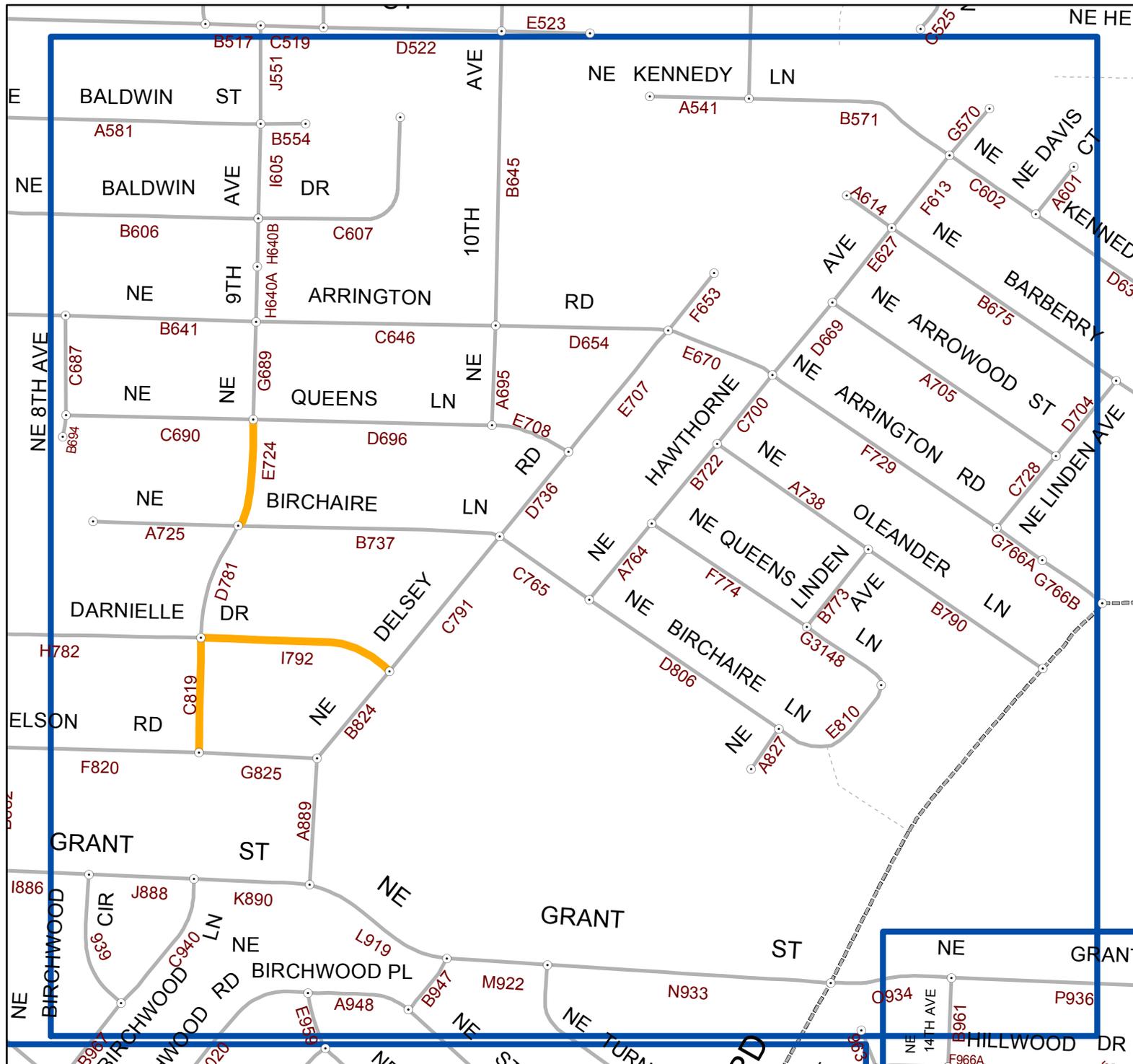
### Roadway Jurisdiction

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail
-  MAP GRID
-  Park
-  City Limits



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## Template C2

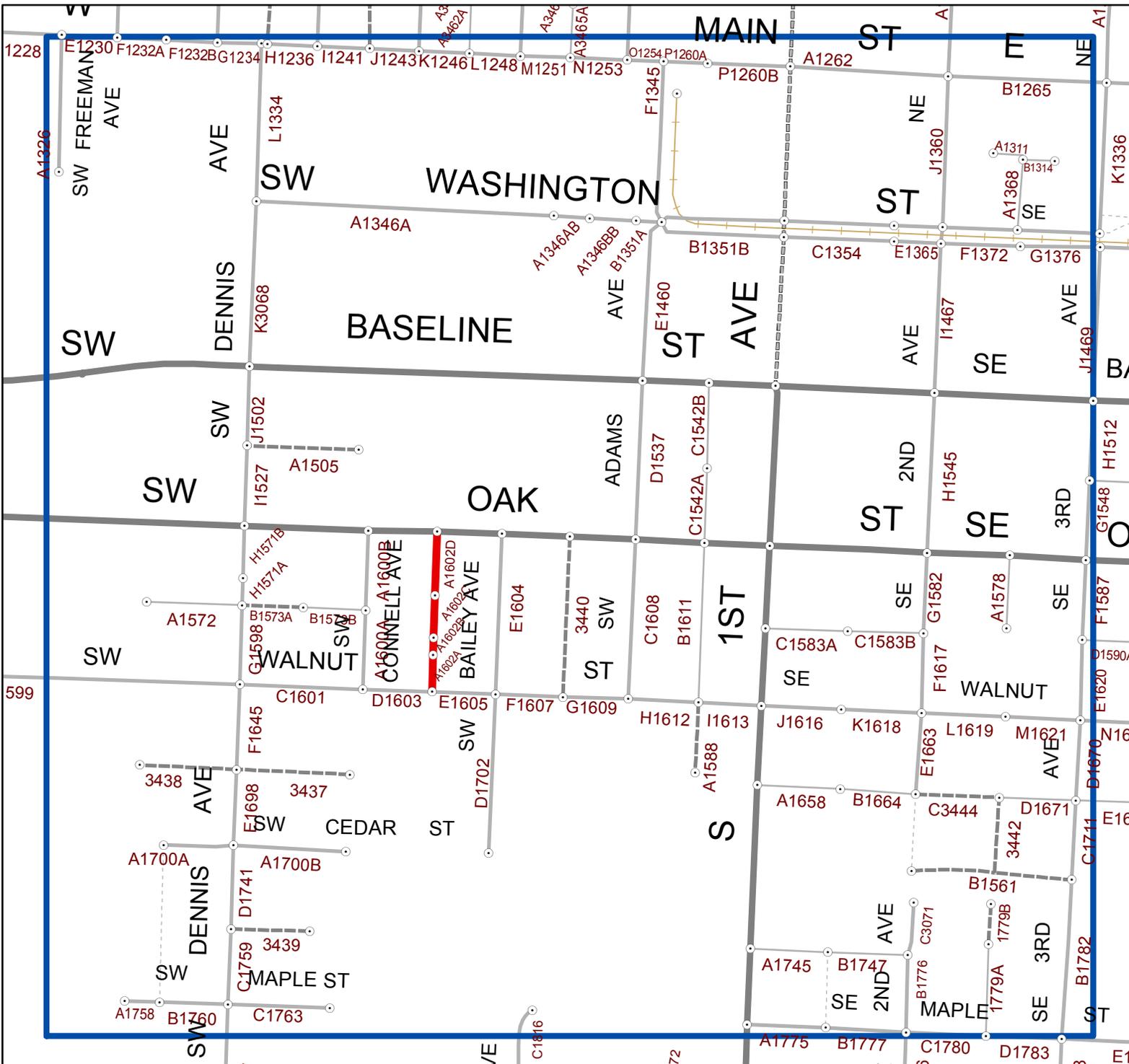
### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
E724	NE 9TH AVE	C/L BIRCHAIRE LN	C/L QUEENS LN	8.00	2.25	(6X12)	
I792	NE DARNIELLE DR	E/S 9TH AVE	W/S DELSEY RD	186.78	52.53	(23X15) (28X18) (52X16)	
C819	NE 9TH AVE	N/S DONELSON RD	C/L DARNIELLE DR	14.00	3.94	(6X21)	
<b>TEMPLATE TOTALS</b>				<b>208.78</b>	<b>58.72</b>		

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2016 Pavement Management Program  
Project#20552222-6102

**D1**

March 2016

# Alley Overlays & AC Replacements

## Legend

- AC Replacements
- Alley Overlays

## Roadway Jurisdiction

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail
- MAP GRID
- Park
- City Limits



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**Template D1**  
**Schedule "D": Alley Overlays and AC Replacements**

2016 Pavement Management Program  
 #20552222-6102

**ALLEYS OVERLAYS**

SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	AC REMOVE (SQYD)	AC REPLACE (TON)	MH SANI	MH STORM	CO	GAS VALVE	CATCH BASIN	COMMENTS
A1602A	HB ALLEY	N/S WALNUT	BEG AC	77	15	128		14.44						May need baseb prep
A1602B	HB ALLEY	BEG AC	END AC	51	15	85	85	9.56	1		1	1		Remove 85 SY Asphalt / May need base prep
A1602C	HB ALLEY	END AC	BEG AC	120	15	200		22.50						May need baseb prep
A1602D	HB ALLEY	BEG AC	S/S OAK	153	19	323	323	36.34	1	1	2		1	Remove 323 SY Asphalt / May need base prep
TOTALS						736	408	82.84	2	1	3	1	1	

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2016 Pavement Management Program  
Project#20552222-6102

**D2**

March 2016

# Alley Overlays & AC Replacements

## Legend

- AC Replacements
- Alley Overlays

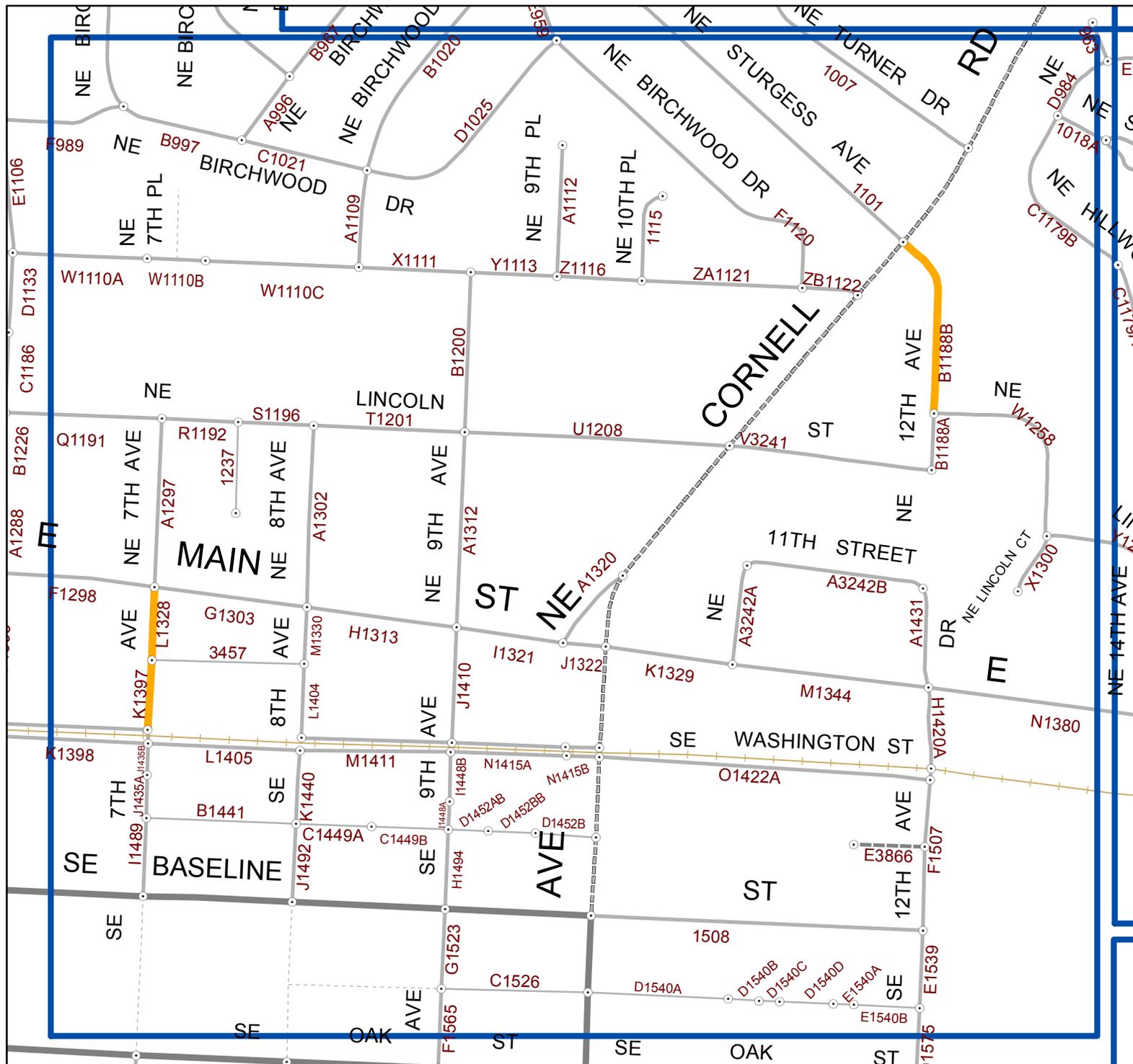
## Roadway Jurisdiction

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail
- MAP GRID
- Park
- City Limits



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## Template D2

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
K1397	SE 7TH AVE	N/S WASHINGTON ST	HB ALLEY	144	40.44	(48x15) (82X7) IN DO 4" Y=18, YRPM=1	
L1328	SE 7TH AVE	HB ALLEY	EAST MAIN ST	167	46.87	(50X30) IN DO 4"Y=10, YRPM=2	
B1188B	NE 12TH AVE	C/L LINCOLN ST (N INT)	E/S CORNELL RD	156	43.75	(60X20) (20X10)	
<b>TEMPLATE TOTALS</b>				<b>466</b>	<b>131.06</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.

### D3

March 2016

# Alley Overlays & AC Replacements

## Legend

- AC Replacements
- Alley Overlays

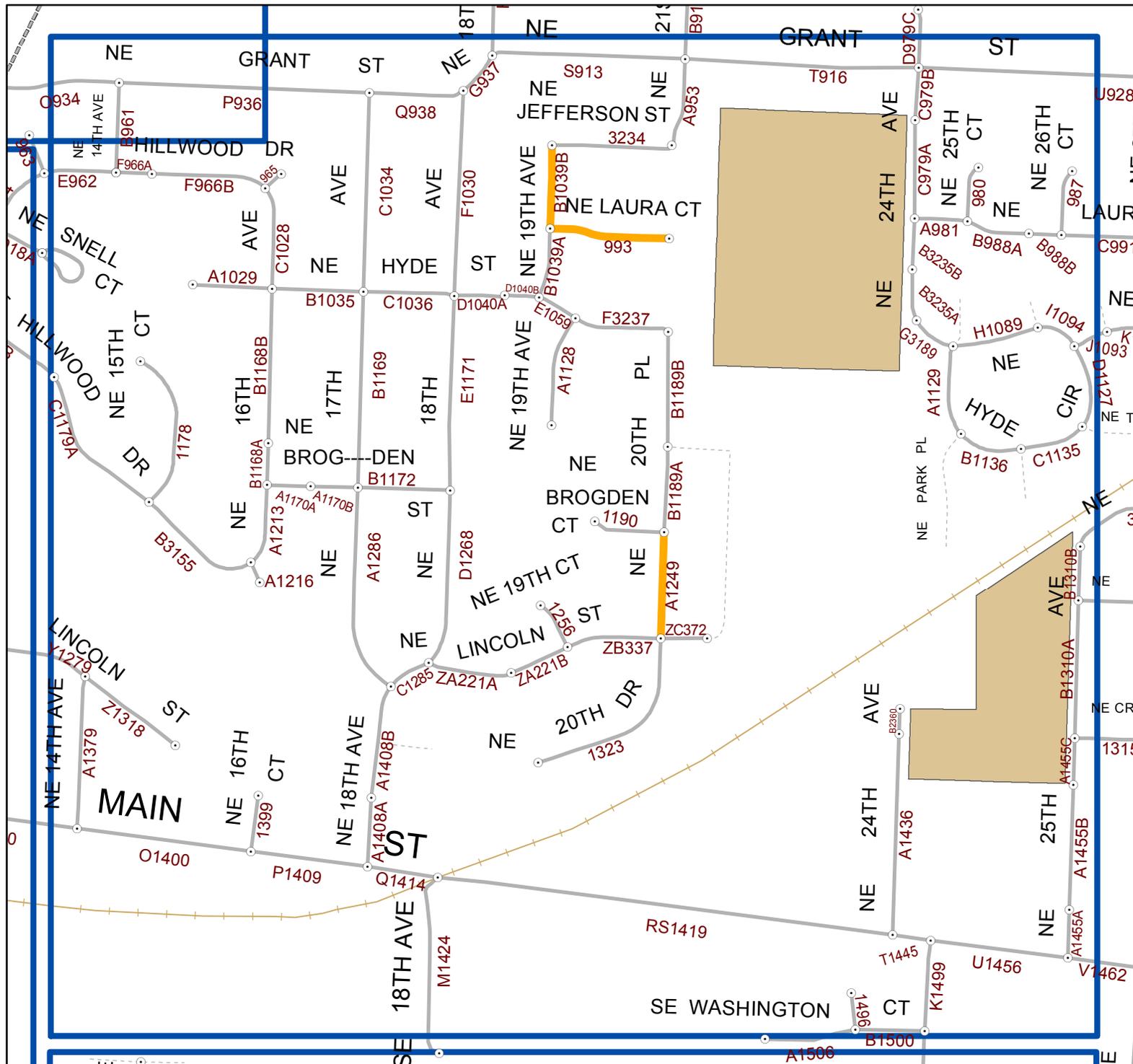
## Roadway Jurisdiction

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail
- MAP GRID
- Park
- City Limits



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## Template D3

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
B1039B	NE 19TH AVE	LAURA CT	25 S OF JEFFERSON ST	16.67	4.69	(9X15) (3X5)	
A1249	NE 20TH PL	N/S LINCOLN ST	BROGDEN CT	4.44	1.25	(5X8) 12" W=8'	
993	NE LAURA CT	19TH AVE	CUL DE SAC (E)	14.22	4.00	(9X12) (4X5)	
M76	NE LENOX ST	C/L 3RD PL	C/L AURORA DR	37.33	10.50	(12X10) (24X9)	
<b>TEMPLATE TOTALS</b>				<b>72.67</b>	<b>20.44</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

**D4**

March 2016

# Alley Overlays & AC Replacements

## Legend

- AC Replacements
- Alley Overlays

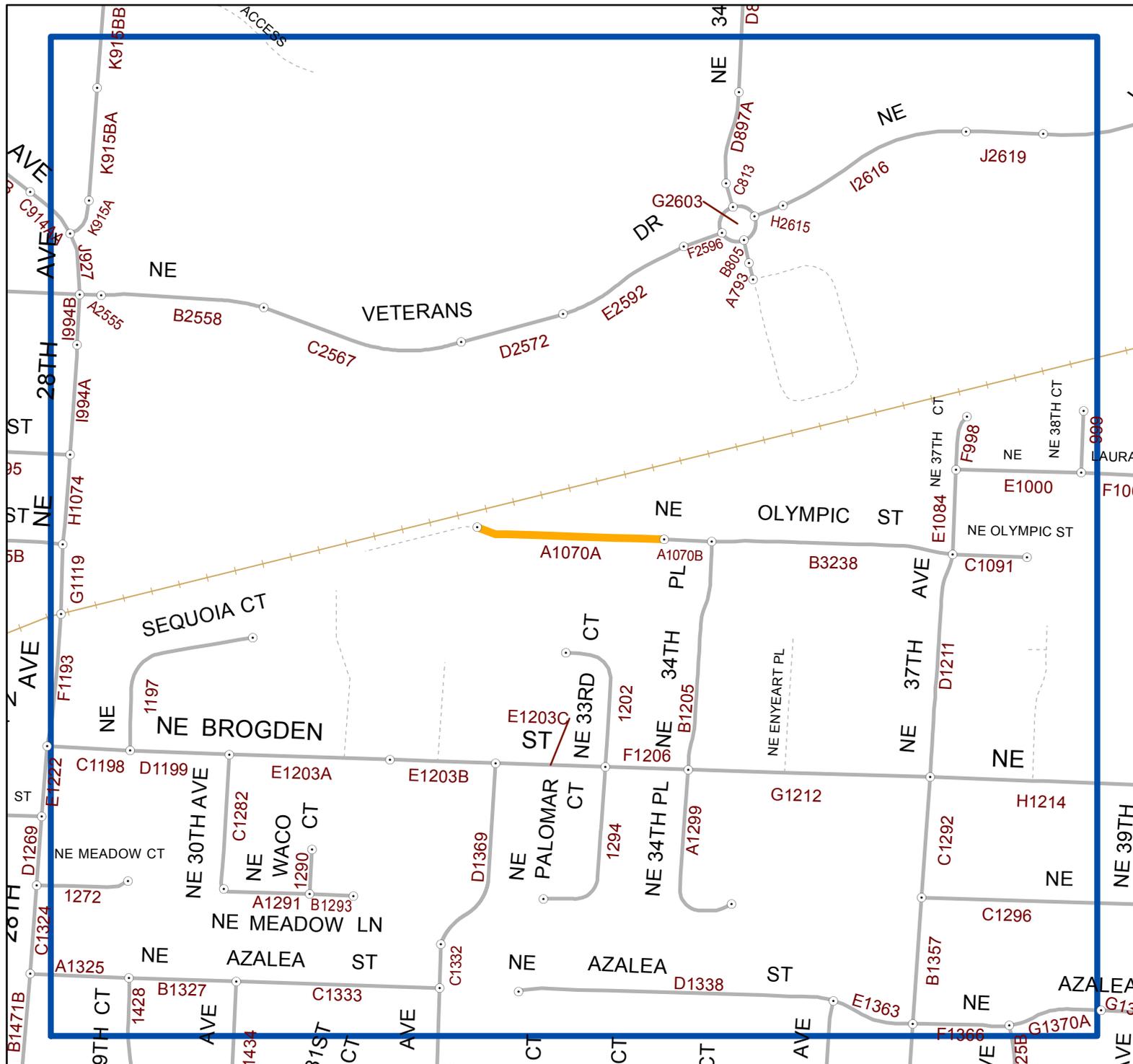
## Roadway Jurisdiction

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail
- MAP GRID
- Park
- City Limits



1 inch = 400 feet

DISCLAIMER  
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## Template D4

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program

#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
A1070A	NE OLYMPIC ST	PAVE CHNG/#3387	CUL DE SAC (W)	113.89	32.03	(14X67) (6X10) (3X9)	
<b>TEMPLATE TOTALS</b>				<b>113.89</b>	<b>32.03</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



## Template D5

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
A3084A	NE HIDDEN CREEK DR	E/S NE 53RD AVE	END MEDIAN	8.22	2.31	(5X5) (7X7) STM MH	RECON STM MH IN 7X7 DO
A3084B	NE HIDDEN CREEK DR	END MEDIAN	W/S NE CADDIS/HIDDENC	5.44	1.53	(7X7) SANI MH	RECON SANI MH IN 7X7 DO
<b>TEMPLATE TOTALS</b>				<b>13.67</b>	<b>3.84</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

**D6**

March 2016

# Alley Overlays & AC Replacements

## Legend

- AC Replacements
- Alley Overlays

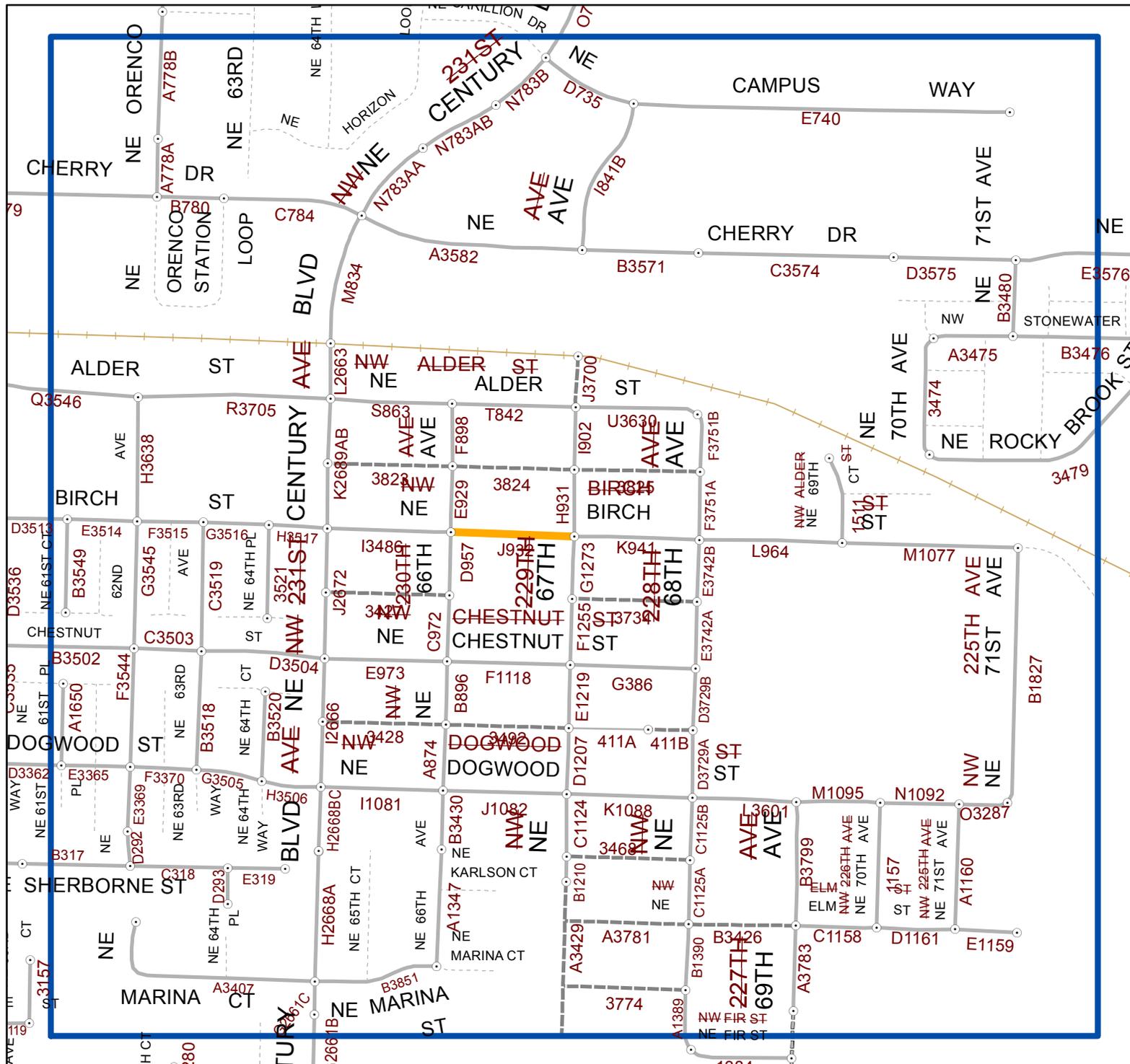
## Roadway Jurisdiction

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail
- MAP GRID
- Park
- City Limits



1 inch = 400 feet

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## Template D6

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
J932	NW BIRCH ST	E/S NW 230TH AVE	W/S NW 229TH AVE	31.33	8.81	(14X18) (3X10)	
<b>TEMPLATE TOTALS</b>				<b>31.33</b>	<b>8.81</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.

# D7

March 2016

## Alley Overlays & AC Replacements

### Legend

- AC Replacements
- Alley Overlays

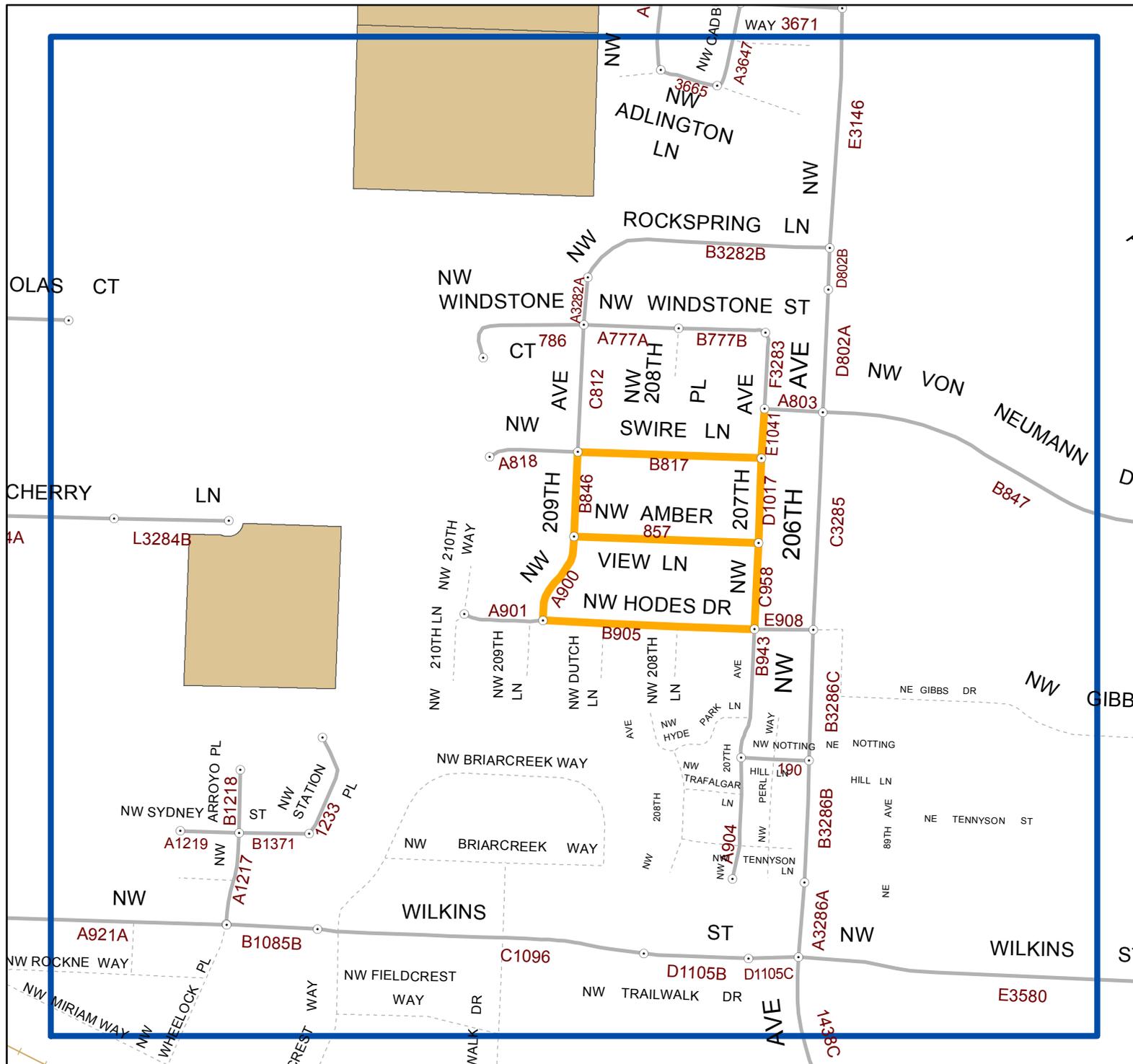
### Roadway Jurisdiction

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail
- MAP GRID
- Park
- City Limits



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## Template D7

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
E1041	NW 207TH AVE	C/L NW SWIRE LN	C/L NW VON NEUMANN DR	20.22	5.69	(13X14)	
B817	NW SWIRE LN	C/L NW 209TH AVE	W/S NW 207TH AVE	41.67	11.72	(5X45) (10X15)	
B846	NW 209TH AVE	NW AMBER VIEW LN	NW SWIRE LN	26.67	7.50	(24X10)	
D1017	NW 207TH AVE	C/L NW AMBER VIEW LN	C/L NW SWIRE LN	34.44	9.69	(5X14) (5X16) (5X32) SANI MH IN DO	
857	NW AMBER VIEW LN	E/S NW 209TH AVE	W/S NW 207TH AVE	26.67	7.50	(12X20)	
A900	NW 209TH AVE	NW HODES DR	NW AMBER VIEW LN	23.33	6.56	(42X5) pin and blue rpm in do	
C958	NW 207TH AVE	N/S NW HODES DR	C/L NW AMBER VIEW LN	33.33	9.37	(6X50)	
B905	NW HODES DR	C/L NW 209TH AVE	C/L NW 207TH AVE	2.78	0.78	(5X5)	
<b>TEMPLATE TOTALS</b>				<b>209.11</b>	<b>58.81</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

**E3**

March 2016

# Alley Overlays & AC Replacements

## Legend

AC Replacements

Alley Overlays

## Roadway Jurisdiction

City Roadway

City Alley

Unimproved City ROW

County Road

State Highway

Private

Light Rail

MAP GRID

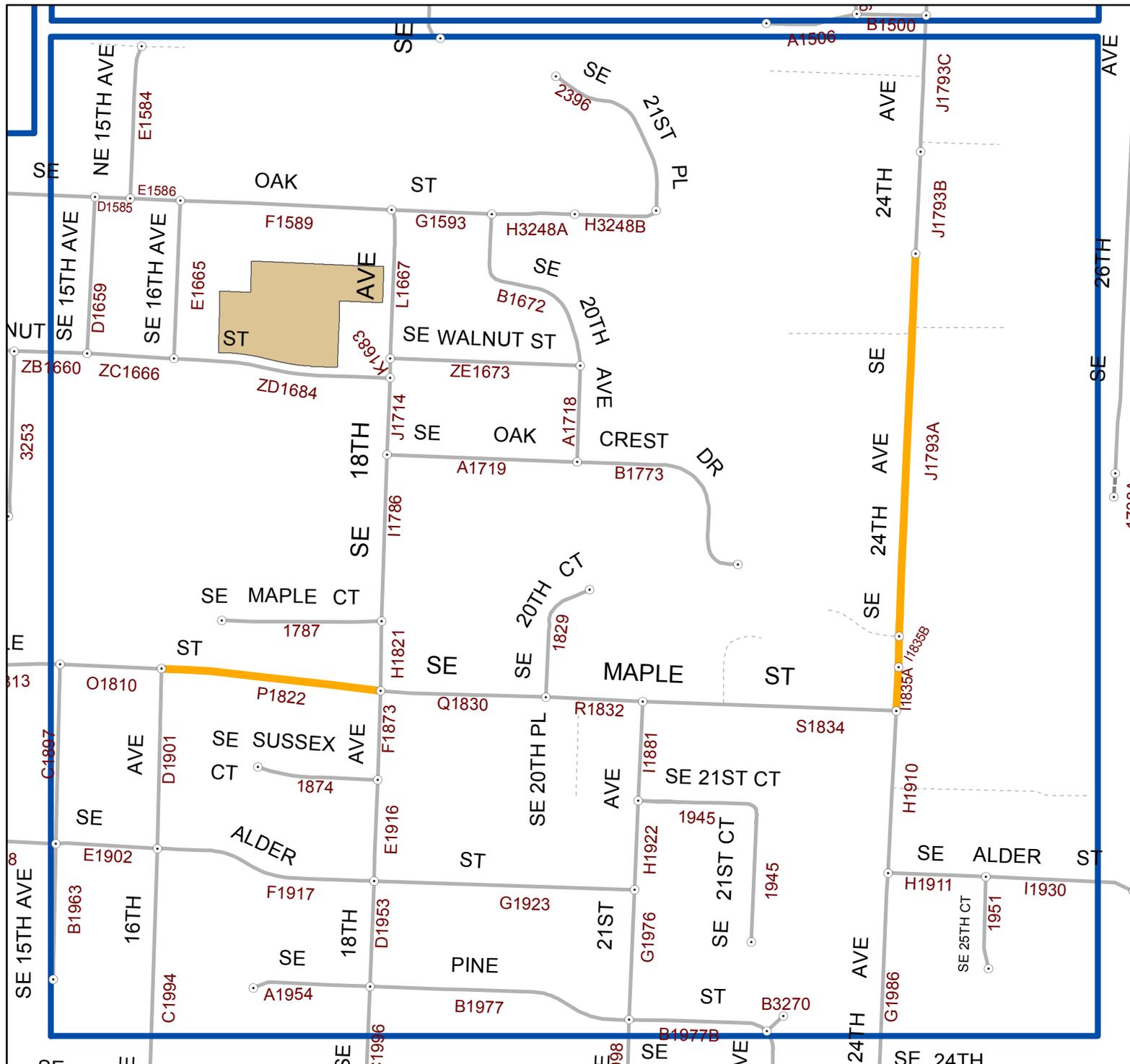
Park

City Limits



1 inch = 400 feet

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## Template E3

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
I1835B	SE 24TH AVE	WIDTH CHNG (N) P/L #685	PVT RD	10.00	2.81	(15X6)	
I1835A	SE 24TH AVE	S/S MAPLE ST	WIDTH CHNG (N) P/L #685	177.78	50.00	(100X16)	
P1822	SE MAPLE ST	W/S 16TH AVE	C/L 18TH AVE	131.67	37.03	(72X5) (16X18) (7X15) (18X24)	
J1793A	SE 24TH AVE	PVT RD	BEG C/G (E)	10.00	2.81	(15X6)	
<b>TEMPLATE TOTALS</b>				<b>329.44</b>	<b>92.66</b>		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



**Template G4**  
**Schedule "D": Alley Overlays and AC Replacements**  
 2016 Pavement Management Program  
 #20552222-6102

**AC REPLACEMENTS**

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
D2448	SE TIMBERLAKE DR	BRIDGESIDE WAY	ROOD BRIDGE RD	8.89	2.50	(5X16)	
<b>TEMPLATE TOTALS</b>				<b>8.89</b>	<b>2.50</b>		

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2016 Pavement Management Program  
Project#20552222-6102

**G5**

March 2016

# Alley Overlays & AC Replacements

## Legend

- AC Replacements
- Alley Overlays

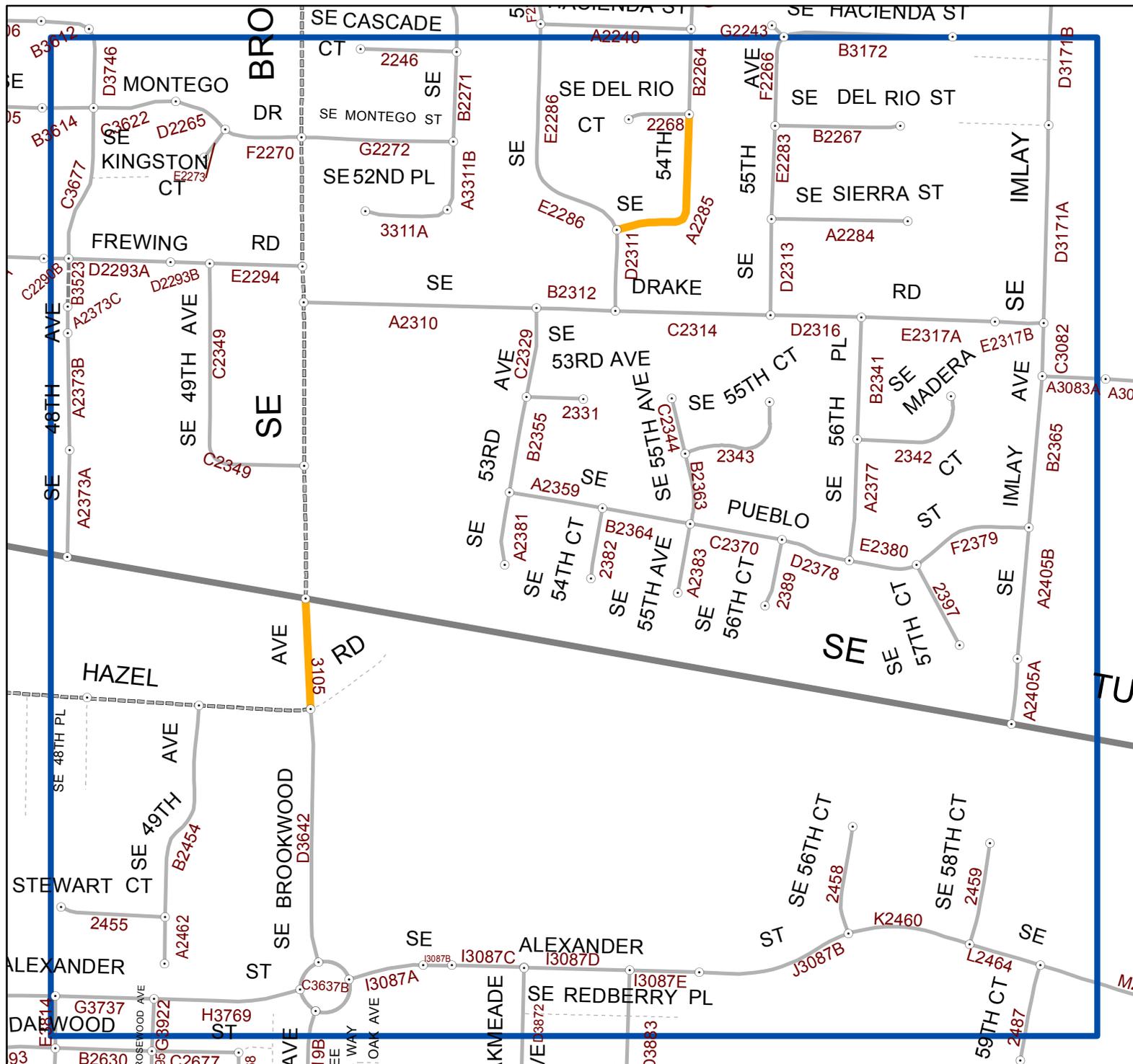
## Roadway Jurisdiction

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail
- MAP GRID
- Park
- City Limits



1 inch = 400 feet

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## Template G5

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
A2285	SE 54TH AVE	53RD AVE	DEL RIO CT	8.11	2.28	(6X8) sink hole (5X5) sink hole	
3105	SE BROOKWOOD AVE	C/L WITCH HAZEL ST (W)	S/S TV HWY	14.56	4.09	(15X2) (20X4) (7X3)	
<b>TEMPLATE TOTALS</b>				<b>22.67</b>	<b>6.37</b>		

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## Template G6

### Schedule "D": Alley Overlays and AC Replacements

2016 Pavement Management Program  
#20552222-6102

#### AC REPLACEMENTS

SECTION ID	STREET	FROM	TO	AC REMOVE (SQYD)	AC REPLACE (TON)	AC REMOVAL SIZE (FT)	COMMENTS
G2338	SE DRAKE ST	72ND AVE	73RD AVE	86.22	24.25	(9X8) (8X11) (14X28) (14X16)	
E2347B	SE DRAKE ST	PVMT CHNG	NORDLUND CT	8.89	2.50	(8X10)	
<b>TEMPLATE TOTALS</b>				<b>95.11</b>	<b>26.75</b>		

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**City of Hillsboro**  
**2016 Pavement Management Program**  
**Contract #20552222-6102**

**Schedule "E": Overlays**



**Engineering Division**  
**150 E Main Street, Fourth Floor**  
**Hillsboro, OR 97123**  
**Phone: 503-681-6416**



# Overlay

OVERVIEW

March 2016

## Legend

### Treatment

 2" FWG, 2" Overlay

 3" FWG, 3" Overlay

### Roadway Jurisdiction

 City Roadway

 City Alley

 Unimproved City ROW

 County Road

 State Highway

 Private

 Light Rail

 Template Boundary

 Park

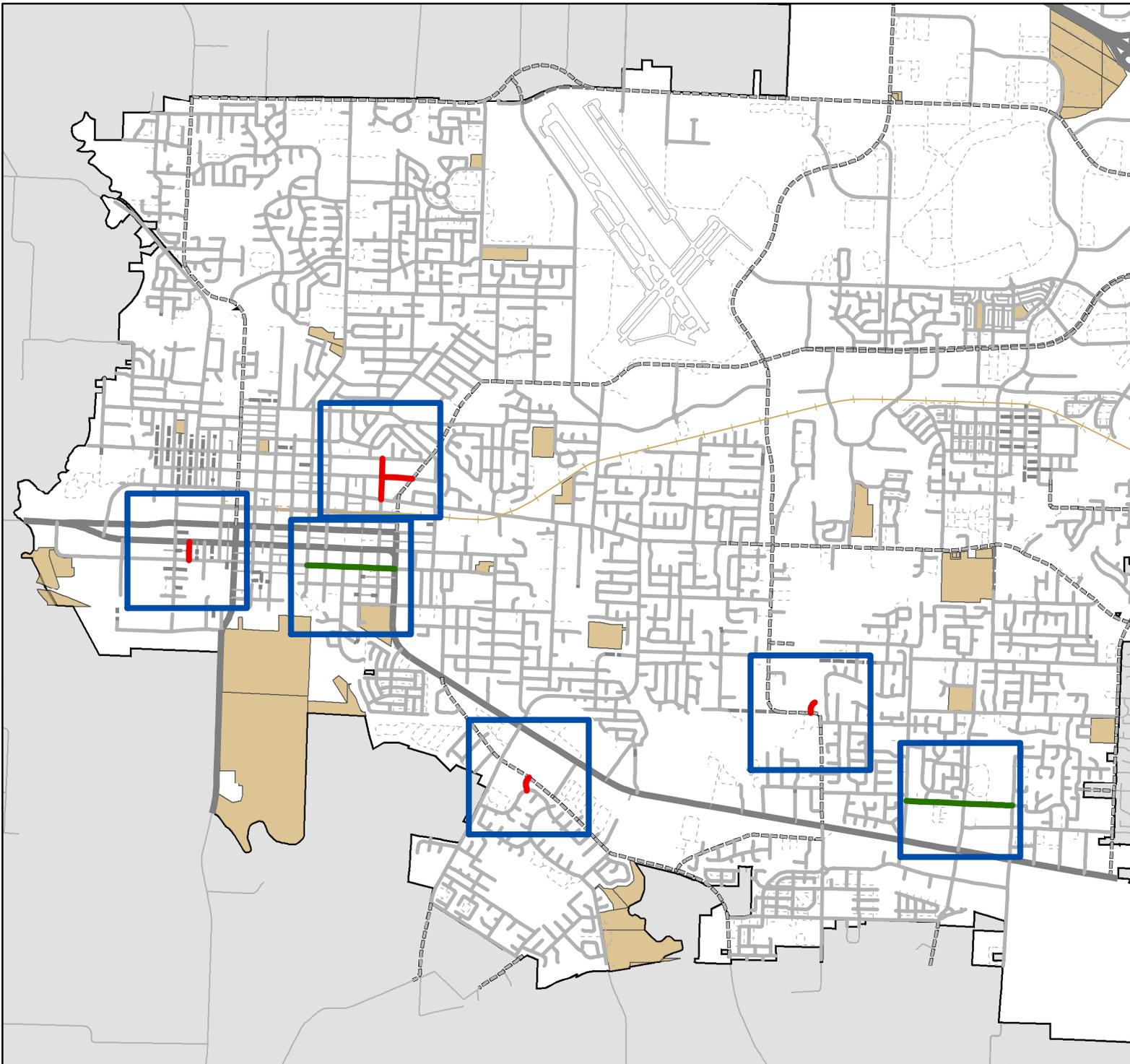
 City Limits



1 inch = 3,500 feet

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**Template OVERVIEW**  
**Schedule "E": Overlays**  
 2016 Pavement Management Program  
 #20552222-6102

TEMPLATE	AREA (SQYD)	BASE WORK					UTILITY ADJUSTMENTS					SURVEY		RPM'S		PAVEMENT MARKINGS							
		SUBGRADE STABILIZATION (CU.YD.)	2" FULL WIDTH GRIND (SQ.YD.)	2" AC OVERLAY (TONS - LEVEL 2, 1/2" DENSE GRADED ASPHALT)	3" FULL WIDTH GRIND (SQ.YD.)	3" AC OVERLAY (TONS - LEVEL 2, 1/2" DENSE GRADED ASPHALT)	STORM MANHOLES	SANITARY MANHOLES	GTE MANHOLE	WATER VALVES	GAS VALVES	CATCH BASIN	ADJUST MONUMENT BOX	NEW MONUMENT BOX	BLUE RPM	YELLOW RPM	12" WHITE (LF), INLAY	8" WHITE (LF), INLAY	4" WHITE (LF), INLAY	4" YELLOW (LF), INLAY	STOP BAR	STANDARD CROSSWALK	BIKE
A4	1,416		1,416	159.30					2	1	3			1		76				1	1		
B3	7,104		7,104	799.20			3	2	6	1	5			2	20	412		504	303	1	4		
B4	9,118				9,118	1,538.70	5	5	1	12	2	11		3	54	569		300	200	2	8		
C5	1,296		1,296	145.80				1			2			1		29				2			
E5	506		506	56.91				1															
F5	9,311				9,311	1,571.31	7	13	4	23	3	5	1	1	7	57	220	1896	985	1606	6	1	8
TOTALS	28752	0	10322	1161.21	18,430	3110.01	15	20	7	43	7	26	1	1	14	131	1306	1896	1789	2109	12	14	8

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

# Overlay A4

March 2016

## Legend

### Treatment

-  2" FWG, 2" Overlay
-  3" FWG, 3" Overlay

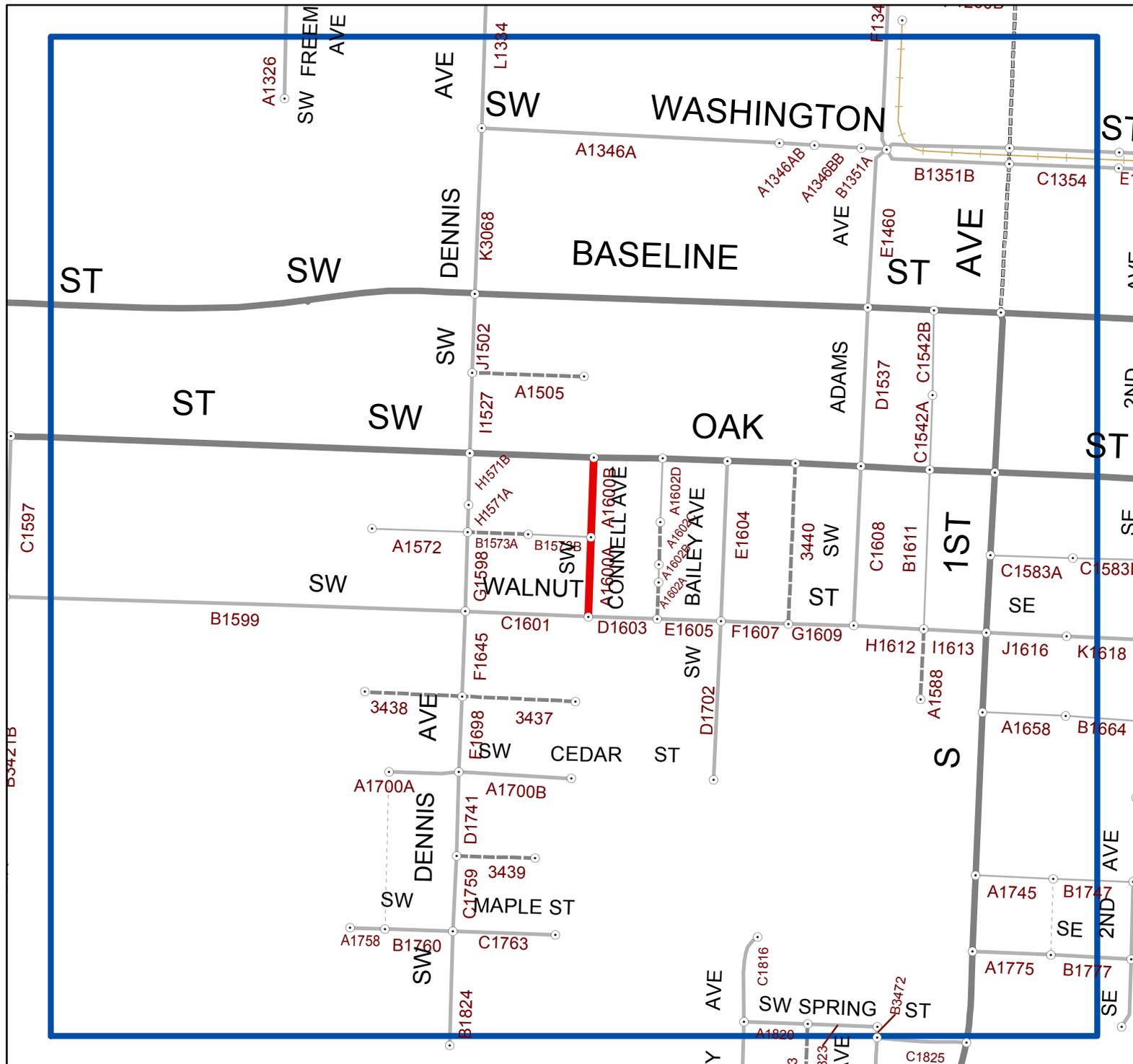
### Roadway Jurisdiction

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail
-  Template Boundary
-  Park
-  City Limits



1 inch = 400 feet

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**Template A4**  
**Schedule "E": Overlays**  
 2016 Pavement Management Program  
 #20552222-6102

TEMPLATE	SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	BASE WORK			UTILITY ADJUSTMENTS				PAVEMENT MARKINGS			COMMENTS
								SUBGRADE STABILIZATION (CU.YD.)	2" FULL WIDTH GRIND (SQ.YD.)	2" AC OVERLAY (TONS - LEVEL 2, 1/2" DENSE GRADED ASPHALT)	WATER VALVES	GAS VALVES	CATCH BASIN	BLUE RPM	12" WHITE (LF), INLAY	STOP BAR	STANDARD CROSSWALK	
A4	A1600B	SW CONNELL AVE	C/L ALLEY	S/S OAK	214	30	713		713	80.2125	1		1		64		1	
A4	A1600A	SW CONNELL AVE	N/S WALNUT ST	C/L ALLEY	211	30	703		703	79.0875	1	1	2	1	12	1		ADA RAMPS @ WALNUT =NE 1, NW 1 RAISE CB'S 4"
TOTALS							1416		1416	159.3	2	1	3	1	76	1	1	

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2016 Pavement Management Program  
Project#20552222-6102

# Overlay B3

March 2016

## Legend

### Treatment

-  2"FWG, 2" Overlay
-  3" FWG, 3" Overlay

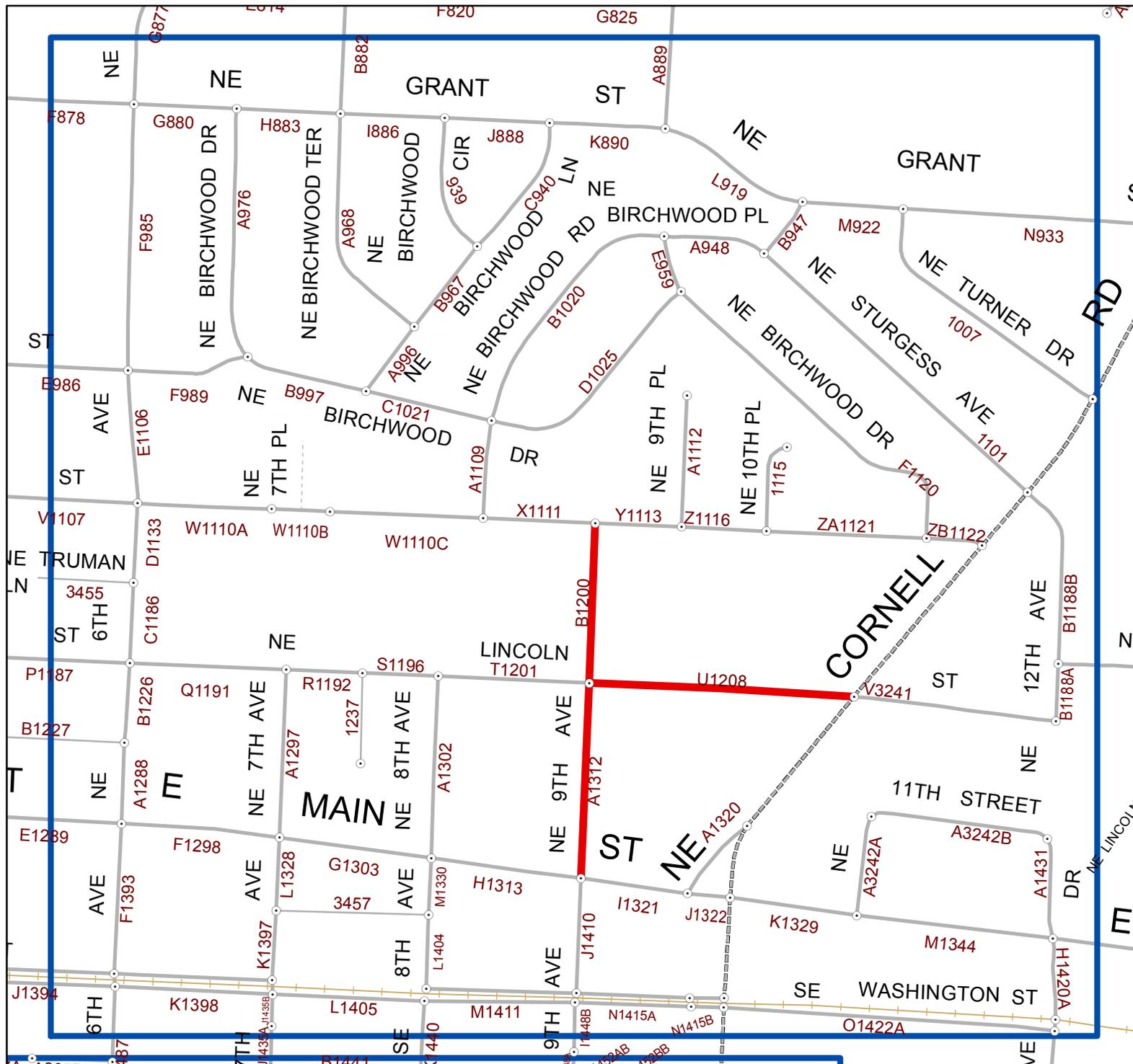
### Roadway Jurisdiction

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail
-  Template Boundary
-  Park
-  City Limits



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**Template B3**  
**Schedule "E": Overlays**  
 2016 Pavement Management Program  
 #20552222-6102

TEMPLATE	SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	BASE WORK		2" AC OVERLAY (TONS - LEVEL 2, 1/2" DENSE GRADED ASPHALT)	UTILITY ADJUSTMENTS					RPM'S		PAVEMENT MARKINGS			COMMENTS		
								SUBGRADE STABILIZATION (CU, YD.)	2" FULL WIDTH GRIND (SQ. YD.)		STORM MANHOLES	GTE MANHOLE	WATER VALVES	GAS VALVES	CATCH BASIN	BLUE RPM	YELLOW RPM	12" WHITE (LF), INLAY	4" WHITE (LF), INLAY	4" YELLOW (LF), INLAY		STOP BAR	STANDARD CROSSWALK
B3	B1200	NE 9TH AVE	C/L LINCOLN ST	S/S JACKSON ST	448	43	2140		2140	240.8	1	1						193	504	85		2	ADD 2 ADA STALLS [NORTH AND SOUTH ENDS] ADA RAMP @ JACKSON =SW 1, SE 1
B3	U1208	NE LINCOLN ST	C/L 9TH AVE	W/S CORNELL RD	725	36	2900		2900	326.25			4		2	1	20	117		208	1	1	ADA RAMPS @ CORNELL= NW 1, SW 1 ADA RAMPS @ 9TH= NE 2, SE 2, SW 2, NW 1 CURB=43' D/W=1 @ 8x12
B3	A1312	NE 9TH AVE	N/S EAST MAIN ST	C/L LINCOLN ST	553	32	2064		2064	232.15	2	1	2		3	1		102		10		1	ADDED AREA=19X44, 2X20
TOTALS							7104	0	7104	799.2	3	2	6	1	5	2	20	412	504	303	1	4	

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



**Template B4**  
**Schedule "E": Overlays**  
2016 Pavement Management Program  
#20552222-6102

TEMPLATE	SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	BASE WORK		3" AC OVERLAY (TONS - LEVEL 2, 1/2" DENSE GRADED ASPHALT)	UTILITY ADJUSTMENTS					RPM'S & BUTTON		PAVEMENT MARKINGS			COMMENTS			
								SUBGRADE STABILIZATION (CU.YD.)	3" FULL WIDTH GRIND (SQ.YD.)		STORM MANHOLES	SANITARY MANHOLES	GTE MANHOLE	WATER VALVES	GAS VALVES	CATCH BASIN	BLUE RPM	YELLOW RPM	12" WHITE (LF), INLAY	4" WHITE (LF), INLAY		4" YELLOW (LF), INLAY	STOP BAR	STANDARD CROSSWALK
B4	Q1630	SE WALNUT ST	E/S 5TH AVE 46'EAST OF C/L	C/L 6TH AVE	421	36	1795		1795	302.85	1	2		1		5		11	141		100		2	ADA RAMPS @ 6TH NW=2, SW=2 ADDED AREA=15X36, 12X38
B4	R1634	SE WALNUT ST	6TH AVE	7TH AVE	462	36	1944		1944	328.13	2	1		4		2		11	182	110			3	ADA RAMPS @7TH SW=2, SE=2 ADD2D AREA= 15X28, 14X32 CURB=12'
B4	S1636	SE WALNUT ST	C/L 7TH AVE	C/L8TH AVE	445	36	1780		1780	300.38	1	1		2	2	2		11	96	100		2	1	ADA RAMPS @ 8TH SW=2, SE=2 NE=2, NW=2 ADDED AREA=16X32, 15X31
B4	U1641	SE WALNUT ST	C/L 9TH AVE	W/S 10TH AVE	387	40	1720		1720	290.25	1		1			2	2	10		90				LOOPS=3 LOOP POCKETS=2
B4	T1640	SE WALNUT ST	C/L8TH AVE	C/L 9TH AVE	441	36	1879		1879	317.10			1	5			1	11	150		100		2	ADA RAMPS @ 9TH SW=2, SE=2, NW=2, NE=2 ADDED AREA 13X37, 15X37
TOTALS							9118	0	9118	1538.70	5	5	1	12	2	11	3	54	569	300	200	2	8	

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

# Overlay C5

March 2016

## Legend

### Treatment

- 2"FWG, 2" Overlay
- 3" FWG, 3" Overlay

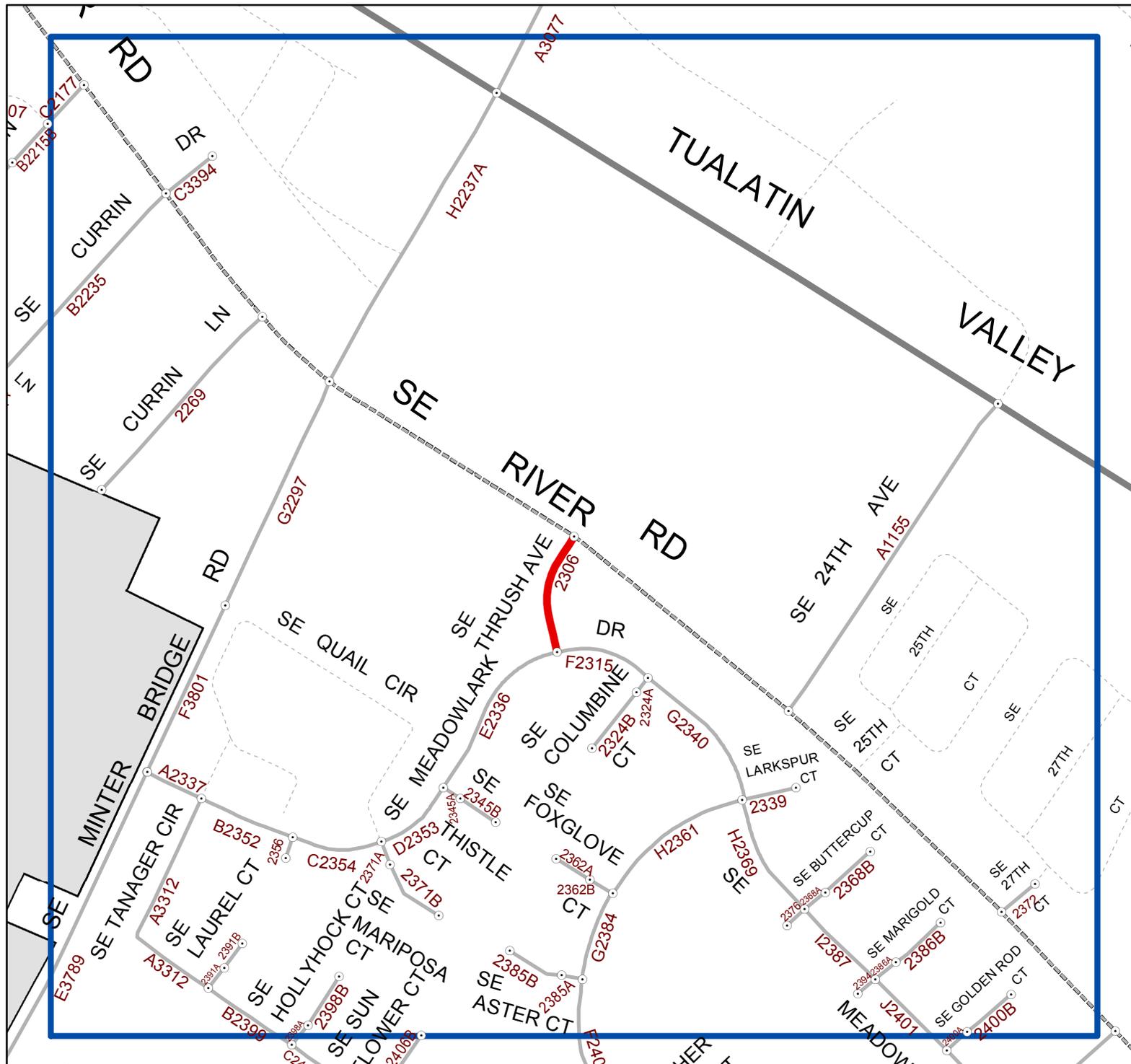
### Roadway Jurisdiction

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail
- Template Boundary
- Park
- City Limits



1 inch = 400 feet

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**Template C5**  
**Schedule "E": Overlays**  
 2016 Pavement Management Program  
 #20552222-6102

TEMPLATE	SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	BASE WORK		2" AC OVERLAY (TONS - LEVEL 2, 1/2" DENSE GRADED ASPHALT)	UTILITYS		RPM'S	MARKINGS		COMMENTS
								SUBGRADE STABILIZATION (CU. YD.)	2" FULL WIDTH GRIND (SQ. YD.)		SANITARY MANHOLES	CATCH BASIN	BLUE RPM	12" WHITE (LF), INLAY	STOP BAR	
C5	2306	SE THRUSH ST	MEADOWLARK AVE	RIVER RD	324	36	1296		1296	145.8	1	2	1	29	2	ADA RAMPS=@ MEADOW LARK NW,1 NE2, SE1 @ RIVER RD SW1, SE1 TWO WATER VALVES IN RAMP
TOTALS							1296	0	1296	145.8	1	2	1	29	2	

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

# Overlay E5

March 2016

## Legend

### Treatment

-  2"FWG, 2" Overlay
-  3" FWG, 3" Overlay

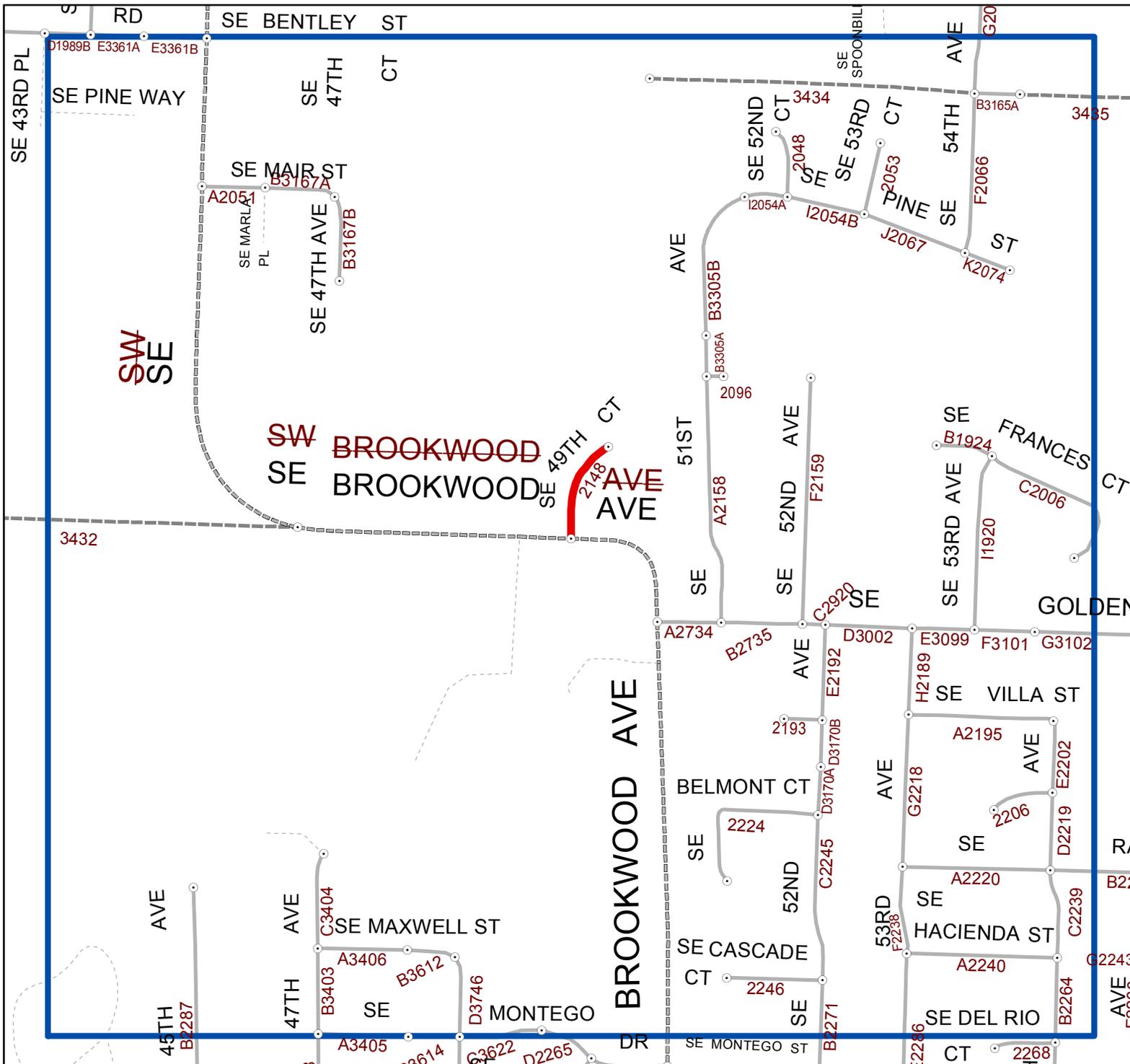
### Roadway Jurisdiction

-  City Roadway
-  City Alley
-  Unimproved City ROW
-  County Road
-  State Highway
-  Private
-  Light Rail
-  Template Boundary
-  Park
-  City Limits



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**Template E5**  
**Schedule "E": Overlays**  
 2016 Pavement Management Program  
 #20552222-6102

TEMPLATE	SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	CDS?	AREA (SQYD)	BASE WORK			UTILITYS		COMMENTS
									SUBGRADE STABILIZATION (CU.YD.)	2" FULL WIDTH GRIND (SQ.YD.)	2" AC OVERLAY (TONS - LEVEL 2, 1/2" DENSE GRADED ASPHALT)	SANITARY MANHOLES		
E5	2148	SE 49TH CT	BROOKWOOD AVE	CDS (NE)	157	29	1	506		506	56.91	1		
TOTALS								506	0	506	56.91	1		

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.



2016 Pavement Management Program  
Project#20552222-6102

# Overlay F5

March 2016

## Legend

### Treatment

- 2"FWG, 2" Overlay
- 3" FWG, 3" Overlay

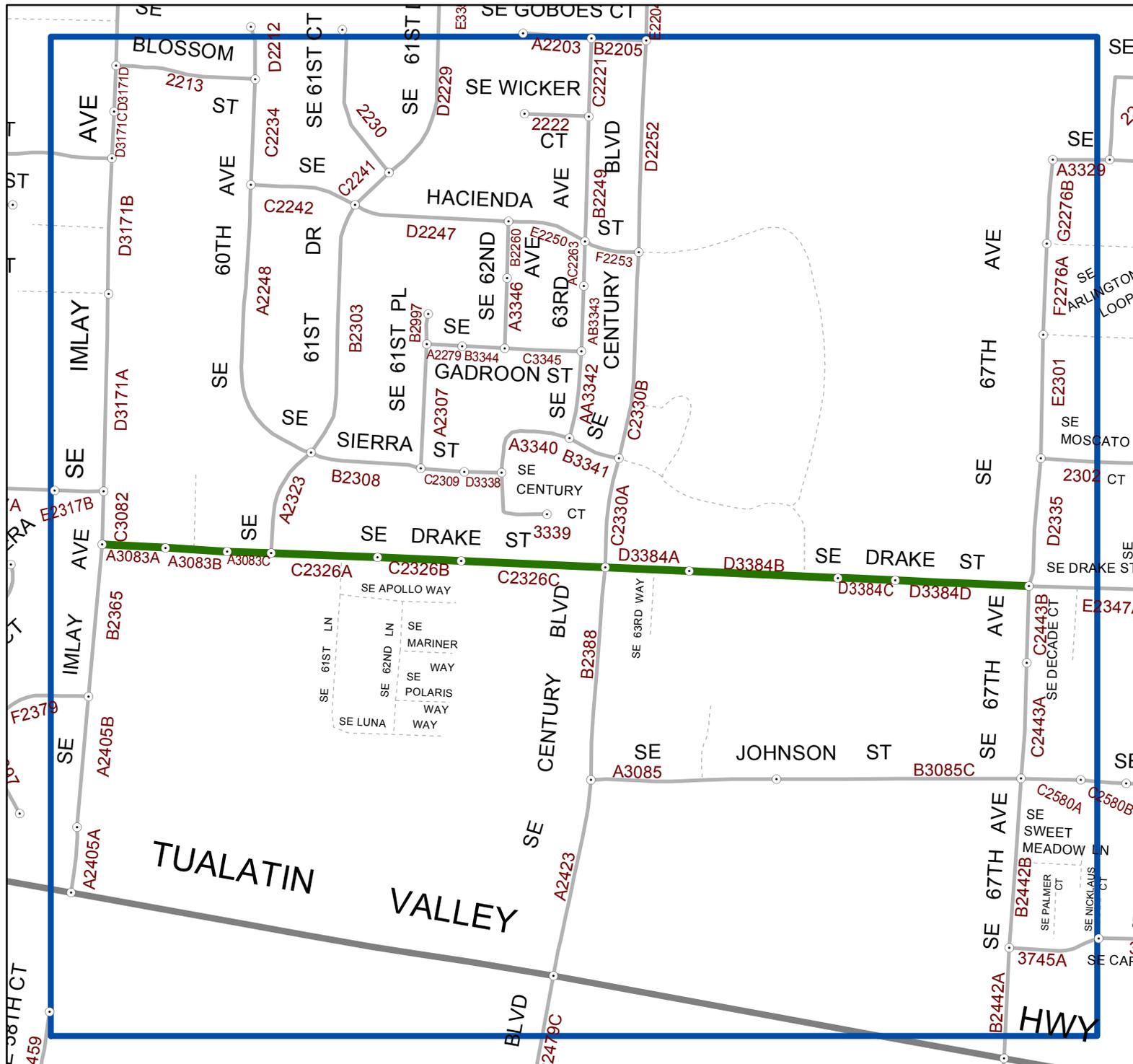
### Roadway Jurisdiction

- City Roadway
- City Alley
- Unimproved City ROW
- County Road
- State Highway
- Private
- Light Rail
- Template Boundary
- Park
- City Limits



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The City cannot accept responsibility for any errors.  
Therefore, there are no warranties for this product.  
However, notification of errors would be appreciated.



**Template F5**  
**Schedule "E": Overlays**  
 2016 Pavement Management Program  
 #20552222-6102

TEMPLATE	SECTION ID	STREET	FROM	TO	LENGTH	WIDTH	AREA (SQYD)	BASE WORK			UTILITY ADJUSTMENTS						SURVEY		RPM'S		PAVEMENT MARKINGS						COMMENTS										
								SUBGRADE STABILIZATION (CU.YD.)	3" FULL WIDTH GRIND (SQ.YD.)	3" AC OVERLAY (TONS - LEVEL 2, 1/2" DENSE GRADED ASPHALT)	STORM MANHOLES	SANITARY MANHOLES	GTE MANHOLE	WATER VALVES	GAS VALVES	CATCH BASIN	ADJUST MONUMENT BOX	NEW MONUMENT BOX	BLUE RPM	YELLOW RPM	1/2" WHITE (LF), INLAY	8" WHITE (LF), INLAY	4" WHITE (LF), INLAY	4" YELLOW (LF), INLAY	STOP BAR	STANDARD CROSSWALK		BIKE									
F5	C2326B	SE DRAKE ST	END G/C (N)	BEGIN C/G (N)	253	28	842		842	142.16																											ADDED AREA= @#6137 6X32 @#7 6X16 @#6215 7X30
F5	C2326A	SE DRAKE ST	C/L 61ST DR	END C/G (N)	302	33	1107		1107	186.86	1	2	1	5	2	1			1																	D/W=1 @ 14 X37 S/W=5X15	
F5	A3083B	SE DRAKE ST	BEG C/G (N)	W/C (BEND NORTH)	176	38	743		743	125.40	2																										
F5	A3083A	SE DRAKE ST	E/S IMLAY AVE	BEG C/G (N)	170	23	450		450	76.01		1													17		11									ADDED AREA=6X24 @#5851	
F5	A3083C	SE DRAKE ST	W/C (BEND NORTH)	C/L 61ST DR	141	34	603		603	101.70	1	1													14											ADA RAMPS @61ST-SW 1, NW 1, NE 1	
F5	C2326C	SE DRAKE ST	BEGIN C/G (N)	W/S CENTURY BLVD	395	33	1448		1448	244.41		1	1	10		1					2	13	45	342	152											ADA RAMPS @CENTURY	
F5	D3384D	SE DRAKE ST	END C/G (S)	E/S 67TH AVE	443	27	1417		1417	239.06	1	2	1	5	1	1				1	22	52	380	740											ADA RAMPS @ 67TH= SE 1, NE 1, NW 1		
F5	D3384C	SE DRAKE ST	BEGIN C/G (S)	END C/G (S)	166	34	627		627	105.83	1	1				1						6			342											ADDED AREA= 19X36, 7X15	
F5	D3384B	SE DRAKE ST	END C/G (S)	BEGIN C/G (S)	432	27	1296		1296	218.70		1	1	1							2	11			432											D/W @ SCHOOL=14X48	
F5	D3384A	SE DRAKE ST	E/S CENTURY BLVD	END C/G (S)	212	33	777		777	131.18	1	4		1							1	5	92	400			400										
<b>TOTALS</b>							9311		9311	1571.31	7	13	4	23	3	5	1	1	7	57	220	1896	985	1606	6	1	8										

Note: Sections that are on the edge of a template were generally assigned to the template where the Section ID is displayed. Check adjacent templates if quantity information is missing.