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INTRODUCTION TO THE SPECIAL PROVISIONS

****** West Richland GSP

The work on this project shall be accomplished in accordance with the Standard Specifications for Road, Bridge and Municipal Construction, 2018 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter “Standard Specifications”). The Standard Specifications, as modified or supplemented by the Amendments to the Standard Specifications and these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

These Special Provisions are made up of both General Special Provisions (GSPs) from various sources, which may have project-specific fill-ins; and project-specific Special Provisions. Each Provision either supplements, modifies, or replaces the comparable Standard Specification, or is a new Provision. The deletion, amendment, alteration, or addition to any subsection or portion of the Standard Specifications is meant to pertain only to that particular portion of the section, and in no way should it be interpreted that the balance of the section does not apply.

The project-specific Special Provisions are not labeled as such. The GSPs are labeled under the headers of each GSP, with the effective date of the GSP and its source. For example:

(May 8, 2016 APWA GSP)
(April 1, 2016 WSDOT GSP)
(****** West Richland GSP)
(******) Notes a revision to a GSP and also notes a Project Specific Special Provision

Also incorporated into the Contract Documents by reference are:

- Manual on Uniform Traffic Control Devices for Streets and Highways, currently adopted edition, with Washington State modifications, if any
- Standard Plans for Road, Bridge and Municipal Construction, WSDOT/APWA, current edition

Contractor shall obtain copies of these publications, at Contractor’s own expense.

DESCRIPTION OF WORK

The project XXXXXX other related work in accordance with the technical specifications, drawings and contract documents.

SECTION 1-01, DEFINITIONS AND TERMS

1-01.3, Definitions

(January 4, 2016 APWA GSP)

Delete the heading Completion Dates and the three paragraphs that follow it, and replace them with the following:

Dates
Bid Opening Date
The date on which the Contracting Agency publicly opens and reads the Bids.

**Award Date**
The date of the formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.

**Contract Execution Date**
The date the Contracting Agency officially binds the Agency to the Contract.

**Notice to Proceed Date**
The date stated in the Notice to Proceed on which the Contract time begins.

**Substantial Completion Date**
The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, any remaining traffic disruptions will be rare and brief, and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract.

**Physical Completion Date**
The day all of the Work is physically completed on the project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date.

**Completion Date**
The day all the Work specified in the Contract is completed and all the obligations of the Contractor under the contract are fulfilled by the Contractor. All documentation required by the Contract and required by law must be furnished by the Contractor before establishment of this date.

**Final Acceptance Date**
The date on which the Contracting Agency accepts the Work as complete.

Supplement this Section with the following:

All references in the Standard Specifications, Amendments, or WSDOT General Special Provisions, to the terms “Department of Transportation”, “Washington State Transportation Commission”, “Commission”, “Secretary of Transportation”, “Secretary”, “Headquarters”, and “State Treasurer” shall be revised to read “Contracting Agency”.

All references to the terms “State” or “state” shall be revised to read “Contracting Agency” unless the reference is to an administrative agency of the State of Washington, a State statute or regulation, or the context reasonably indicates otherwise.

All references to “State Materials Laboratory” shall be revised to read “Contracting Agency designated location”.

All references to “final contract voucher certification” shall be interpreted to mean the Contracting Agency form(s) by which final payment is authorized, and final completion and acceptance granted.

**Additive**
A supplemental unit of work or group of bid items, identified separately in the Bid Proposal, which may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.

**Alternate**
One of two or more units of work or groups of bid items, identified separately in the Bid Proposal, from which the Contracting Agency may make a choice between different methods or material of construction for performing the same work.
**Business Day**
A business day is any day from Monday through Friday except holidays as listed in Section 1-08.5.

**Contract Bond**
The definition in the Standard Specifications for “Contract Bond” applies to whatever bond form(s) are required by the Contract Documents, which may be a combination of a Payment Bond and a Performance Bond.

**Contract Documents**
See definition for “Contract”.

**Contract Time**
The period of time established by the terms and conditions of the Contract within which the Work must be physically completed.

**Notice of Award**
The written notice from the Contracting Agency to the successful Bidder signifying the Contracting Agency’s acceptance of the Bid Proposal.

**Notice to Proceed**
The written notice from the Contracting Agency or Engineer to the Contractor authorizing and directing the Contractor to proceed with the Work and establishing the date on which the Contract time begins.

**Traffic**
Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and equestrian traffic.

**SECTION 1-02, BID PROCEDURES AND CONDITIONS**

1-02.1, Prequalification of Bidders

Delete this Section and replace it with the following:

1-02.1, Qualifications of Bidder
(January 24, 2011 APWA GSP)

Before award of a public works contract, a bidder must meet at least the minimum qualifications of RCW 39.04.350(1) to be considered a responsible bidder and qualified to be awarded a public works project.

1-02.2, Plans and Specifications
(June 27, 2011 APWA GSP)

Delete this section and replace it with the following:

Information as to where Bid Documents can be obtained or reviewed can be found in the Call for Bids (Advertisement for Bids) for the work.

After award of the contract, plans and specifications will be issued to the Contractor at no cost as detailed below:

<table>
<thead>
<tr>
<th>To Prime Contractor</th>
<th>No. of Sets</th>
<th>Basis of Distribution</th>
</tr>
</thead>
</table>

Standard Specification COWR 7-10-18
Additional plans and Contract Provisions may be obtained by the Contractor from the source stated in the Call for Bids, at the Contractor’s own expense.

1-02.5, Proposal Forms
(July 31, 2017 APWA GSP)

Delete this section and replace it with the following:

The Proposal Form will identify the project and its location and describe the work. It will also list estimated quantities, units of measurement, the items of work, and the materials to be furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit prices; extensions; summations; the total bid amount; signatures; date; and, where applicable, retail sales taxes and acknowledgment of addenda; the bidder’s name, address, telephone number, and signature; the bidder’s UDBE/DBE/M/WBE commitment, if applicable; a State of Washington Contractor’s Registration Number; and a Business License Number, if applicable. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the Proposal Form.

The Contracting Agency reserves the right to arrange the proposal forms with alternates and additives, if such be to the advantage of the Contracting Agency. The bidder shall bid on all alternates and additives set forth in the Proposal Form unless otherwise specified.

1-02.6, Preparation of Proposal
(May 17, 2018 APWA GSP)

Supplement the second paragraph with the following:

4. If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.

5. Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid.

Delete the last two paragraphs, and replace them with the following:

If no Subcontractor is listed, the Bidder acknowledges that it does intend to use any Subcontractor to perform those items of work.

The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance form, provided by the Contracting Agency. Failure to return this certification as part of the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law Compliance form is included in the Proposal Forms.

The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign).
A bid by a partnership shall be executed in the partnership name, and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any UDBE requirements are to be satisfied through such an agreement.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture. A copy of the joint venture agreement shall be submitted with the Bid Form if any UDBE requirements are to be satisfied through such an agreement.

1-02.7, Bid Deposit
(March 8, 2013 APWA GSP)

Supplement this section with the following:

Bid bonds shall contain the following:
1. Contracting Agency-assigned number for the project;
2. Name of the project;
3. The Contracting Agency named as obligee;
4. The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;
5. Signature of the bidder’s officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the signature on the bond, and the title of the person must accompany the said signature;
6. The signature of the surety’s officer empowered to sign the bond and the power of attorney.

If so stated in the Contract Provisions, bidder must use the bond form included in the Contract Provisions.

If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.

1-02.9, Delivery of Proposal
(****** West Richland GSP)

Delete this section and replace it with the following:

Each Proposal shall be submitted in a sealed envelope, with the Project Name and Project Number as stated in the Call for Bids clearly marked on the outside of the envelope, or as otherwise required in the Bid Documents, to ensure proper handling and delivery.

The Bidder shall submit to the Contracting Agency a signed “Certification of Compliance with Wage Payment Statutes” document where the Bidder under penalty of perjury verifies that the Bidder is in compliance with responsible bidder criteria in RCW 39.04.350 subsection (1) (g), as required per Section 1-02.14. The “Certification of Compliance with Wage Payment Statutes” document shall be received with the Bid Proposal.

The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any “Supplemental Information” (UDBE confirmations, GFE documentation, or Certification of Compliance with Wage Payment Statutes) that is received after the time specified above, or received in a location other than that specified in the Call for Bids.
1-02.10, Withdrawing, Revising, or Supplementing Proposal
(July 23, 2015  APWA GSP)

Delete this section, and replace it with the following:

After submitting a physical Bid Proposal to the Contracting Agency, the Bidder may withdraw, revise, or supplement it if:

1. The Bidder submits a written request signed by an authorized person and physically delivers it to the place designated for receipt of Bid Proposals, and
2. The Contracting Agency receives the request before the time set for receipt of Bid Proposals, and
3. The revised or supplemented Bid Proposal (if any) is received by the Contracting Agency before the time set for receipt of Bid Proposals.

If the Bidder’s request to withdraw, revise, or supplement its Bid Proposal is received before the time set for receipt of Bid Proposals, the Contracting Agency will return the unopened Proposal package to the Bidder. The Bidder must then submit the revised or supplemented package in its entirety. If the Bidder does not submit a revised or supplemented package, then its bid shall be considered withdrawn.

Late revised or supplemented Bid Proposals or late withdrawal requests will be date recorded by the Contracting Agency and returned unopened. Mailed, emailed, or faxed requests to withdraw, revise, or supplement a Bid Proposal are not acceptable.

1-02.12, Public Opening of Proposal
1-02.12(1), Date of Opening Bids
Section 1-02.12(1) is supplemented with the following:
(****** West Richland GSP)

The City of West Richland will received sealed bids for the XXXXXX, at the Community Development/Public Works Building, 3801 W Van Giesen Ave, West Richland, WA 99353 until XXXXXX at 11:00 am.

1-02.13, Irregular Proposals
(June 20, 2017  APWA GSP)

Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified when so required;
   b. The authorized Proposal form furnished by the Contracting Agency is not used or is altered;
   c. The completed Proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
   d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
   e. A price per unit cannot be determined from the Bid Proposal;
   f. The Proposal form is not properly executed;
   g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable, as required in Section 1-02.6;
   h. The Bidder fails to submit or properly complete an Underutilized Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
i. The Bidder fails to submit written confirmation from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification that they are in agreement with the bidder's UDBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;

j. The Bidder fails to submit UDBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made;

k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or

l. More than one Proposal is submitted for the same project from a Bidder under the same or different names.

2. A Proposal may be considered irregular and may be rejected if:
   a. The Proposal does not include a unit price for every Bid item;
   b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
   c. Receipt of Addenda is not acknowledged;
   d. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
   e. If Proposal form entries are not made in ink.

1-02.14, Disqualification of Bidders (May 17, 2018 APWA GSP, Option A)

Delete this section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1). To assess bidder responsibility, the Contracting Agency reserves the right to request documentation as needed from the Bidder and third parties concerning the Bidder's compliance with the mandatory bidder responsibility criteria.

If the Contracting Agency determines the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1) and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

1-02.15, Pre Award Information (August 14, 2013 APWA GSP)

Revise this section to read:
Before awarding any contract, the Contracting Agency may require one or more of these items or actions of the apparent lowest responsible bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,
3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the work,
4. A breakdown of costs assigned to any bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer,
6. Obtain, and furnish a copy of, a business license to do business in the city or county where the work is located.
7. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

SECTION 1-03, AWARD AND EXECUTION OF CONTRACT
1-03.1, Consideration of Bids
(January 23, 2006 APWA GSP)

Revise the first paragraph to read:

After opening and reading proposals, the Contracting Agency will check them for correctness of extensions of the prices per unit and the total price. If a discrepancy exists between the price per unit and the extended amount of any bid item, the price per unit will control. If a minimum bid amount has been established for any item and the bidder’s unit or lump sum price is less than the minimum specified amount, the Contracting Agency will unilaterally revise the unit or lump sum price, to the minimum specified amount and recalculate the extension. The total of extensions, corrected where necessary, including sales taxes where applicable and such additives and/or alternates as selected by the Contracting Agency, will be used by the Contracting Agency for award purposes and to fix the Awarded Contract Price amount and the amount of the contract bond.

(****** West Richland GSP)
Section 1-03.1 is supplemented with the following:

Bidders are notified that all bids are likely to be rejected if the lowest responsive bid received exceeds the Engineer’s estimate by an unreasonable amount and exceeds available funding limits. In the event all bids are rejected for this reason, this project may be deferred for re-advertising for bids until a more competitive situation exists.

1-03.3, Execution of Contract
(October 1, 2005 APWA GSP)

Revise this section to read:

Copies of the Contract Provisions, including the unsigned Form of Contract, will be available for signature by the successful bidder on the first business day following award. The number of copies to be executed by the Contractor will be determined by the Contracting Agency.

Within 10 calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the
contract by the Contracting Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor shall any work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any work begun outside such areas and for any materials ordered before the contract is executed by the Contracting Agency.

If the bidder experiences circumstances beyond their control that prevents return of the contract documents within 10 calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of $10 additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4, Contract Bond
(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

The successful bidder shall provide executed payment and performance bond(s) for the full contract amount. The bond may be a combined payment and performance bond; or be separate payment and performance bonds. In the case of separate payment and performance bonds, each shall be for the full contract amount. The bond(s) shall:

1. Be on Contracting Agency-furnished form(s);
2. Be signed by an approved surety (or sureties) that:
   a. Is registered with the Washington State Insurance Commissioner, and
   b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Guarantee that the Contractor will perform and comply with all obligations, duties, and conditions under the Contract, including but not limited to the duty and obligation to indemnify, defend, and protect the Contracting Agency against all losses and claims related directly or indirectly from any failure:
   a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform and comply with all contract obligations, conditions, and duties, or
   b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
5. Be accompanied by a power of attorney for the Surety’s officer empowered to sign the bond; and
6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by the president or vice president, unless accompanied by written proof of the authority of the individual signing the bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such effect signed by the president or vice president).

1-03.7, Judicial Review
(July 23, 2015 APWA GSP)

Revise this section to read:
Any decision made by the Contracting Agency regarding the Award and execution of the Contract or Bid rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.05 shall control venue and jurisdiction.

SECTION 1-04, SCOPE OF WORK
1-04.1, Intent of the Contract
1-04.1(2), Bid Items Not Included in the Proposal
Section 1-04.1(2) is supplemented with the following:
(****** West Richland GSP)

All labor, equipment, and materials required for the manufacturing and installation of this project shall be incorporated into the bid items as provided in the bid proposal. Payment for general construction items not listed in the bid proposal are indicative of the fact no such item of work is required for this project, or the items of work not listed are considered as incidental to the bid items listed in the proposal, even though the listed Standard Specifications may call for a separate measurement and payment. Unless the work to be performed is specifically called out in the proposal, measurement and payment for such work shall be included in other applicable items of the proposal.

1-04.2, Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda
(March 13, 2012 APWA GSP)

Revise the second paragraph to read:

Any inconsistency in the parts of the contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):
1. Addenda,
2. Proposal Form,
3. Special Provisions,
4. Contract Plans,
5. Amendments to the Standard Specifications,
6. Standard Specifications,
7. Contracting Agency’s Standard Plans or Details (if any), and
8. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

1-04.3, Pre-Bid Site Inspection
Section 1-04.3 is added as follows:
(****** West Richland GSP)

The Contractor is encouraged to inspect the project site prior to submitting a bid.

SECTION 1-05, CONTROL OF WORK
1-05.4, Conformity With and Deviations from Plans and Stakes
Section 1-05.4 is supplemented with the following:
(****** West Richland GSP)

Contractor Surveying - Roadway
Copies of the Contracting Agency provided primary survey control data are available for the bidder's inspection at the office of the Project Engineer.

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, and grades necessary for the construction of the roadbed, drainage, surfacing, paving, channelization and pavement marking, illumination and signals, guardrails and barriers, and signing. Except for the survey control data to be furnished by the Contracting Agency, calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility.

The Contractor shall inform the Engineer when monuments are discovered that were not identified in the Plans and construction activity may disturb or damage the monuments. All monuments noted on the plans "DO NOT DISTURB" shall be protected throughout the length of the project or be replaced at the Contractor's expense.

Detailed survey records shall be maintained, including a description of the work performed on each shift, the methods utilized, and the control points used. The record shall be adequate to allow the survey to be reproduced. A copy of each day's record shall be provided to the Engineer within three working days after the end of the shift.

The meaning of words and terms used in this provision shall be as listed in "Definitions of Surveying and Associated Terms" current edition, published by the American Congress on Surveying and Mapping and the American Society of Civil Engineers.

The survey work shall include but not be limited to the following:

1. Verify the primary horizontal and vertical control furnished by the Contracting Agency, and expand into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of secondary control to the Contracting Agency. The description shall include coordinates and elevations of all secondary control points.

2. Establish, the centerlines of all alignments, by placing hubs, stakes, or marks on centerline or on offsets to centerline at all curve points (PCs, PTs, and PIs) and at points on the alignments spaced no further than 50 feet.

3. Establish clearing limits, placing stakes at all angle points and at intermediate points not more than 50 feet apart. The clearing and grubbing limits shall be 5 feet beyond the toe of a fill and 10 feet beyond the top of a cut unless otherwise shown in the Plans.

4. Establish grading limits, placing slope stakes at centerline increments not more than 50 feet apart. Establish offset reference to all slope stakes. If Global Positioning Satellite (GPS) Machine Controls are used to provide grade control, then slope stakes may be omitted at the discretion of the Contractor.

5. Establish the horizontal and vertical location of all drainage features, placing offset stakes to all drainage structures and to pipes at a horizontal interval not greater than 25 feet.

6. Establish roadbed and surfacing elevations by placing stakes at the top of subgrade and at the top of each course of surfacing. Subgrade and surfacing stakes shall be set at horizontal intervals not greater than 50 feet in tangent sections, 25 feet in curve sections with a radius less than 300 feet, and at 10-foot intervals in intersection radii with a radius less than 10 feet. Traversely, on residential streets, subgrade and base course are to be
staked on centerline, curb line and at all locations where the roadway slope changes. 40-
foot and wider roadways shall also include quarter crown stakes. GPS may be used
ONLY as a tool for rough grading and will NOT be used as a replacement of stakes.

7. Establish intermediate elevation benchmarks as needed to check work throughout the
project.

8. Curb grade stakes shall be placed at 50-foot intervals on tangents, at alignment changes
and on 25-foot intervals in curves. Curb returns shall be staked with a radius point, P.C.,
mid-point, PT and at catch basins and grade breaks.

9. Provide references for paving pins at 25-foot intervals or provide simultaneous surveying
to establish location and elevation of paving pins as they are being placed.

10. For all other types of construction included in this provision, (including but not limited to
channelization and pavement marking, illumination and signals, guardrails and barriers,
and signing) provide staking and layout as necessary to adequately locate, construct,
and check the specific construction activity.

11. Contractor shall determine if changes are needed to the profiles or roadway sections
shown in the Contract Plans in order to achieve proper smoothness and drainage where
matching into existing features, such as a smooth transition from new pavement to
existing pavement. The Contractor shall submit these changes to the Project Engineer
for review and approval 10 days prior to the beginning of work.

The Contractor shall provide the Contracting Agency copies of any calculations and staking data
when requested by the Engineer.

To facilitate the establishment of these lines and elevations, the Contracting Agency will provide
the Contractor with primary survey control information consisting of descriptions of two primary
control points used for the horizontal and vertical control, and descriptions of two additional primary
control points for every additional three miles of project length. Primary control points will be
described by reference to the project alignment and the coordinate system and elevation datum
utilized by the project. In addition, the Contracting Agency will supply horizontal coordinates for
the beginning and ending points and for each Point of Intersection (PI) on each alignment included
in the project.

The Contractor shall ensure a surveying accuracy within the following tolerances:

<table>
<thead>
<tr>
<th></th>
<th>Vertical</th>
<th>Horizontal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slope stakes</td>
<td>±0.10 feet</td>
<td>±0.10 feet</td>
</tr>
<tr>
<td>Subgrade grade stakes set 0.04 feet below grade</td>
<td>±0.01 feet</td>
<td>±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)</td>
</tr>
<tr>
<td>Item</td>
<td>Accuracy Tolerances</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Stationing on roadway</td>
<td>N/A ±0.1 feet</td>
<td></td>
</tr>
<tr>
<td>Alignment on roadway</td>
<td>N/A ±0.04 feet</td>
<td></td>
</tr>
<tr>
<td>Surfacing grade stakes</td>
<td>±0.01 feet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(±0.5 feet (parallel to alignment))</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(±0.1 feet (normal to alignment))</td>
<td></td>
</tr>
<tr>
<td>Roadway paving pins for</td>
<td>±0.01 feet</td>
<td></td>
</tr>
<tr>
<td>surfacing or paving</td>
<td>±0.2 feet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(±0.1 feet (parallel to alignment))</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(±0.1 feet (normal to alignment))</td>
<td></td>
</tr>
<tr>
<td>Alignment of Water Line</td>
<td>N/A ±0.1 feet</td>
<td></td>
</tr>
<tr>
<td>Invert of Water Line</td>
<td>±0.1 feet</td>
<td></td>
</tr>
<tr>
<td>Waterline Fittings and Valves</td>
<td>N/A ±0.25 feet</td>
<td></td>
</tr>
<tr>
<td>Hydrants</td>
<td>±0.25 feet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>±0.25 feet</td>
<td></td>
</tr>
<tr>
<td>Alignment of Sewer Line</td>
<td>N/A ±0.1 feet</td>
<td></td>
</tr>
<tr>
<td>Invert of Sewer Line</td>
<td>±0.05 feet</td>
<td></td>
</tr>
<tr>
<td>Sewer Fittings and Valves</td>
<td>N/A ±0.25 feet</td>
<td></td>
</tr>
<tr>
<td>Sewer Structures</td>
<td>±0.25 feet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>±0.25 feet</td>
<td></td>
</tr>
<tr>
<td>Alignment of Stormwater Line</td>
<td>N/A ±0.1 feet</td>
<td></td>
</tr>
<tr>
<td>Invert of Stormwater Line</td>
<td>±0.05 feet</td>
<td></td>
</tr>
<tr>
<td>Stormwater Structures</td>
<td>±0.10 feet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>±0.25 feet</td>
<td></td>
</tr>
</tbody>
</table>

The Contracting Agency may spot-check the Contractor’s surveying. These spot-checks will not change the requirements for normal checking by the Contractor.

When staking roadway alignment and stationing, the Contractor shall perform independent checks from different secondary control to ensure that the points staked are within the specified survey accuracy tolerances.

The Contractor shall calculate coordinates for the alignment. The Contracting Agency will verify these coordinates prior to issuing approval to the Contractor for commencing with the work. The Contracting Agency will require up to seven calendar days from the date the data is received.

Contract work to be performed using contractor-provided stakes shall not begin until the stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor of responsibility for the accuracy of the stakes.

Stakes shall be marked in accordance with Standard Plan A10.10. When stakes are needed that are not described in the Plans, then those stakes shall be marked, at no additional cost to the Contracting Agency as ordered by the Engineer.

**Licensed Surveyors**
The Contractor shall be responsible for reestablishing or locating legal survey markers such as GLO monuments or property corner monuments, conduct boundary surveys to determine Contracting Agency right-of-way locations, and obtain, review and analyze deeds and records as necessary to determine these boundaries. The Contracting Agency will provide “rights of entry” as needed by the Contractor to perform the work.
The Contractor shall brush out or clear and stake or mark the right-of-way lines as designated by the Engineer.

The Contractor shall inform the Engineer when monuments are discovered that were not identified in the Plans and construction activity may disturb or damage the monuments. All monuments noted on the plans “DO NOT DISTURB” shall be protected throughout the length of the project or be replaced at Contractors expense.

When required, the Contractor shall prepare and file a Record of Survey map in accordance with RCW 58.09 and provide a recorded copy to the Contracting Agency. The Contracting Agency will provide all existing base maps, existing horizontal and vertical control, and other material available with Washington State Plane Coordinate information to the Contractor. The Contracting Agency will also provide maps, plan sheets, and/or aerial photographs clearly identifying the limits of the areas to be surveyed. The Contractor shall establish Washington State Plane Coordinates on all points required in the Record of Survey and other points designated in the Contract documents.

Existing right of way documentation, existing base maps, existing horizontal and vertical control descriptions, maps, plan sheets, aerial photographs and all other available material may be viewed by prospective bidders at the office of the Project Engineer.

The Contractor shall perform all of the necessary calculations for the contracted survey work and shall provide copies of these calculations to the Contracting Agency. Electronic files of all survey data shall be provided and in a format acceptable to the Contracting Agency.

All survey work performed by the Contractor shall conform to all applicable sections of the Revised Code of Washington and the Washington Administrative Code.

1-05.5, Payment
Section 1-05.5 is supplemented with the following:
(****** West Richland GSP)

“Construction Surveying”, per lump sum.
The lump sum contract price for “Construction Surveying” shall be full pay for all labor, equipment, materials and supervision utilized to perform the work specified, including any resurveying, checking, correction of errors, replacement of missing or damaged stakes, coordination efforts and preparing and submitting “As-Built” drawings.

1-05.7, Removal of Defective and Unauthorized Work
(October 1, 2005 APWA GSP)

Supplement this section with the following:

If the Contractor fails to remedy defective or unauthorized work within the time specified in a written notice from the Engineer, or fails to perform any part of the work required by the Contract Documents, the Engineer may correct and remedy such work as may be identified in the written notice, with Contracting Agency forces or by such other means as the Contracting Agency may deem necessary.

If the Contractor fails to comply with a written order to remedy what the Engineer determines to be an emergency situation, the Engineer may have the defective and unauthorized work corrected immediately, have the rejected work removed and replaced, or have work the Contractor refuses to perform completed by using Contracting Agency or other forces. An emergency situation is any
situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might cause serious risk of loss or damage to the public.

Direct or indirect costs incurred by the Contracting Agency attributable to correcting and remedying defective or unauthorized work, or work the Contractor failed or refused to perform, shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due, or to become due, the Contractor. Such direct and indirect costs shall include in particular, but without limitation, compensation for additional professional services required, and costs for repair and replacement of work of others destroyed or damaged by correction, removal, or replacement of the Contractor’s unauthorized work.

No adjustment in contract time or compensation will be allowed because of the delay in the performance of the work attributable to the exercise of the Contracting Agency’s rights provided by this Section.

The rights exercised under the provisions of this section shall not diminish the Contracting Agency’s right to pursue any other avenue for additional remedy or damages with respect to the Contractor’s failure to perform the work as required.

1-05.11, Final Inspection

Delete this section and replace it with the following:

1-05.11, Final Inspections and Operational Testing
(October 1, 2005 APWA GSP)

1-05.11(1), Substantial Completion Date
When the Contractor considers the work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Contractor’s request shall list the specific items of work that remain to be completed in order to reach physical completion. The Engineer will schedule an inspection of the work with the Contractor to determine the status of completion. The Engineer may also establish the Substantial Completion Date unilaterally.

If, after this inspection, the Engineer concurs with the Contractor that the work is substantially complete and ready for its intended use, the Engineer, by written notice to the Contractor, will set the Substantial Completion Date. If, after this inspection the Engineer does not consider the work substantially complete and ready for its intended use, the Engineer will, by written notice, so notify the Contractor giving the reasons therefor.

Upon receipt of written notice concurring in or denying substantial completion, whichever is applicable, the Contractor shall pursue vigorously, diligently and without unauthorized interruption, the work necessary to reach Substantial and Physical Completion. The Contractor shall provide the Engineer with a revised schedule indicating when the Contractor expects to reach substantial and physical completion of the work.

The above process shall be repeated until the Engineer establishes the Substantial Completion Date and the Contractor considers the work physically complete and ready for final inspection.

1-05.11(2), Final Inspection and Physical Completion Date
When the Contractor considers the work physically complete and ready for final inspection, the Contractor by written notice, shall request the Engineer to schedule a final inspection. The Engineer will set a date for final inspection. The Engineer and the Contractor will then make a final inspection and the Engineer will notify the Contractor in writing of all particulars in which
the final inspection reveals the work incomplete or unacceptable. The Contractor shall immediately take such corrective measures as are necessary to remedy the listed deficiencies. Corrective work shall be pursued vigorously, diligently, and without interruption until physical completion of the listed deficiencies. This process will continue until the Engineer is satisfied the listed deficiencies have been corrected.

If action to correct the listed deficiencies is not initiated within 7 days after receipt of the written notice listing the deficiencies, the Engineer may, upon written notice to the Contractor, take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7.

The Contractor will not be allowed an extension of contract time because of a delay in the performance of the work attributable to the exercise of the Engineer’s right hereunder.

Upon correction of all deficiencies, the Engineer will notify the Contractor and the Contracting Agency, in writing, of the date upon which the work was considered physically complete. That date shall constitute the Physical Completion Date of the contract, but shall not imply acceptance of the work or that all the obligations of the Contractor under the contract have been fulfilled.

1-05.11(3), Operational Testing
It is the intent of the Contracting Agency to have at the Physical Completion Date a complete and operable system. Therefore when the work involves the installation of machinery or other mechanical equipment; street lighting, electrical distribution or signal systems; irrigation systems; buildings; or other similar work it may be desirable for the Engineer to have the Contractor operate and test the work for a period of time after final inspection but prior to the physical completion date. Whenever items of work are listed in the Contract Provisions for operational testing they shall be fully tested under operating conditions for the time period specified to ensure their acceptability prior to the Physical Completion Date. During and following the test period, the Contractor shall correct any items of workmanship, materials, or equipment which prove faulty, or that are not in first class operating condition. Equipment, electrical controls, meters, or other devices and equipment to be tested during this period shall be tested under the observation of the Engineer, so that the Engineer may determine their suitability for the purpose for which they were installed. The Physical Completion Date cannot be established until testing and corrections have been completed to the satisfaction of the Engineer.

The costs for power, gas, labor, material, supplies, and everything else needed to successfully complete operational testing, shall be included in the unit contract prices related to the system being tested, unless specifically set forth otherwise in the proposal.

Operational and test periods, when required by the Engineer, shall not affect a manufacturer’s guaranties or warranties furnished under the terms of the contract.

Add the following new section:

1-05.12(1), One-Year Guarantee Period
(March 8, 2013 APWA GSP)

The Contractor shall return to the project and repair or replace all defects in workmanship and material discovered within one year after Final Acceptance of the Work. The Contractor shall start work to remedy any such defects within 7 calendar days of receiving Contracting Agency’s written notice of a defect, and shall complete such work within the time stated in the Contracting Agency’s notice. In case of an emergency, where damage
may result from delay or where loss of services may result, such corrections may be made by the Contracting Agency’s own forces or another contractor, in which case the cost of corrections shall be paid by the Contractor. In the event the Contractor does not accomplish corrections within the time specified, the work will be otherwise accomplished and the cost of same shall be paid by the Contractor.

When corrections of defects are made, the Contractor shall then be responsible for correcting all defects in workmanship and materials in the corrected work for one year after acceptance of the corrections by Contracting Agency.

This guarantee is supplemental to and does not limit or affect the requirements that the Contractor’s work comply with the requirements of the Contract or any other legal rights or remedies of the Contracting Agency.

1-05.13, Superintendents, Labor and Equipment of Contractor
(August 14, 2013 APWA GSP)

Delete the sixth and seventh paragraphs of this section.

1-05.14, Cooperation with Other Contractors
Section 1-05.14 is supplemented with the following:
(****** West Richland GSP)

No additional compensation will be given to the Contractor for any coordination or delays caused by other nearby construction projects.

1-05.15, Method of Serving Notices
(March 25, 2009 APWA GSP)

Revise the second paragraph to read:

All correspondence from the Contractor shall be directed to the Project Engineer. All correspondence from the Contractor constituting any notification, notice of protest, notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, must be in paper format, hand delivered or sent via mail delivery service to the Project Engineer’s office. Electronic copies such as e-mails or electronically delivered copies of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

Add the following new section:

1-05.16, Water and Power
(October 1, 2005 APWA GSP)

The Contractor shall make necessary arrangements, and shall bear the costs for power and water necessary for the performance of the work, unless the contract includes power and water as a pay item.

(****** West Richland GSP)
When a Capital Improvement Project is administered by the City, the City will provide a water source for dust control, compaction, placement of crushed surfacing, pipe line installation flushing and testing, etc. at available hydrant locations, within the construction area only. The Contractor shall pay a meter deposit to be refunded at the end of the project if the meter is returned undamaged.
Add the following new section:
(****** West Richland GSP)

1-05.18, Record Drawings
The Contractor shall maintain one set of full size plans for Record Drawings, updated with clear and accurate red-lined field revisions on a daily basis, and within 2 business days after receipt of information that a change in Work has occurred. The Contractor shall not conceal any work until the required information is recorded.

This Record Drawing set shall be used for this purpose alone, shall be kept separate from other Plan sheets, and shall be clearly marked as Record Drawings. These Record Drawings shall be kept on site at the Contractor’s field office, and shall be available for review by the Contracting Agency at all times. The Contractor shall bring the Record Drawings to each progress meeting for review.

The preparation and upkeep of the Record Drawings is to be the assigned responsibility of a single, experienced, and qualified individual. The quality of the Record Drawings, in terms of accuracy, clarity, and completeness, is to be adequate to allow the Contracting Agency or Consultant to modify the computer-aided drafting (CAD) Contract Drawings to produce a complete set of Record Drawings for the Contracting Agency without further investigative effort by the Contracting Agency.

The Record Drawing markups shall document all changes in the Work, both concealed and visible. Items that must be shown on the markups include but are not limited to:

- Actual dimensions, arrangement, and materials used when different than shown in the Plans.
- Changes made by Change Order or Field Order.
- Changes made by the Contractor.
- Accurate locations of storm sewer, sanitary sewer, water mains and other water appurtenances, structures, conduits, light standards, vaults, width of roadways, sidewalks, landscaping areas, building footprints, channelization and pavement markings, etc. Include pipe invert elevations, top of castings (manholes, inlets, etc.).

All private projects and when the Contract calls for the Contractor to do the surveying/staking, the applicable tolerance limits include, but are not limited to the following and shall be performed by a licensed surveying company:

<table>
<thead>
<tr>
<th>Description</th>
<th>Vertical</th>
<th>Horizontal</th>
</tr>
</thead>
<tbody>
<tr>
<td>As-built sanitary &amp; storm invert and grate elevations</td>
<td>± 0.01 foot</td>
<td>± 0.01 foot</td>
</tr>
<tr>
<td>As-built monumentation</td>
<td>± 0.001 foot</td>
<td>± 0.001 foot</td>
</tr>
<tr>
<td>As-built waterlines, inverts, valves, hydrants</td>
<td>± 0.10 foot</td>
<td>± 0.10 foot</td>
</tr>
<tr>
<td>As-built ponds/swales/water features</td>
<td>± 0.10 foot</td>
<td>± 0.10 foot</td>
</tr>
<tr>
<td>As-built buildings (fin. Floor elev.)</td>
<td>± 0.01 foot</td>
<td>± 0.10 foot</td>
</tr>
<tr>
<td>As-built gas lines, power, TV, Tel, Com</td>
<td>± 0.10 foot</td>
<td>± 0.10 foot</td>
</tr>
<tr>
<td>As-built signs, signals, etc.</td>
<td>N/A</td>
<td>± 0.10 foot</td>
</tr>
</tbody>
</table>

Making Entries on the Record Drawings:

- Use erasable colored pencil (not ink) for all markings on the Record Drawings, conforming to the following color code:
  - Additions - Red
  - Deletions - Green
• Comments - Blue  
• Dimensions - Graphite  
• Provide the applicable reference for all entries, such as the change order number, the request for information (RFI) number, or the approved shop drawing number.  
• Date all entries.  
• Clearly identify all items in the entry with notes similar to those in the Contract Drawings (such as pipe symbols, centerline elevations, materials, pipe joint abbreviations, etc.).

The Contractor shall certify on the Record Drawings that said drawings are an accurate depiction of built conditions, and in conformance with the requirements detailed above. The Contractor shall submit final Record Drawings to the Contracting Agency. Contracting Agency acceptance of the Record Drawings is one of the requirements for achieving Physical Completion.

Payment for this item will be made on a prorated monthly basis for work completed in accordance with this section up to 75% of the lump sum bid. The final 25% of the lump sum item will be paid upon submittal and approval of the completed Record Drawings set prepared in conformance with these Special Provisions.

SECTION 1-06, CONTROL OF MATERIAL  
1-06.1, Approval of Materials Prior to Use  
Revise the first paragraph of Section 1-06.1 to read as follows:  
(****** West Richland GSP)

Prior to use the Contractor shall notify the City Engineer of all proposed materials. The Contractor shall use the City of West Richland Approved Material List, Qualified Product List (QPL), the Aggregate Source Approval (AS) Database, or the Request for Approval of Material (RAM) form.

The Contractor shall note all deviations from the governing specifications and/or drawings and shall reference the appropriate paragraph of the specification page or of the drawing. If the reason for the deviation from the specifications is not readily apparent, a written explanation shall be included.

The City Engineer's review of the Contractor's submittals shall not relieve the Contractor of the entire responsibility for the correctness of details or dimension. The Contractor shall assume all responsibility and risk for any misfits due to any errors in information submitted by the Contractor. Any fabrications or other work performed in advance of the receipt of approved submittals shall be entirely at the Contractor's expense. The Contractor shall be responsible for the dimensions and the design of adequate connections and details.

Add the following new section:  
(****** West Richland GSP)  

1-06.1(5), Substitute Material and Equipment  
Where reference to proprietary products appear in the Specifications, Standard Plans, or Drawings, it is for the purpose of establishing an acceptable standard of quality or design. Unless a substitute is expressly prohibited, the Contractor may request approval of a substitute for any such proprietary product. Such request must be in writing and must identify the following as appropriate to enable the Engineer to determine the acceptability of the product proposed for substitution.

• Descriptive literature.  
• Specifications.
• Test Reports or Samples.
• Identify variations from the Contract Documents and specified product.
• Identify system limitation that may be detrimental to the successful performance of the completed work.
• Provide revised drawings and/or details if required.

The Contract, if awarded, will be on the basis of material and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. When it is indicated in the Drawings, Standard Plans, or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by the Contractor, if acceptable to the Engineer, application for such acceptance will not be considered by the Engineer until after the "effective date of the Contract". The Engineer shall have the final authority for approving or rejecting the proposed substitute. No substitute product shall be used on the work until written approval has been received from the Engineer.

1-06.6, Recycled Materials
(January 4, 2016 APWA GSP)

Delete this section, including its subsections, and replace it with the following:

The Contractor shall make their best effort to utilize recycled materials in the construction of the project. Approval of such material use shall be as detailed elsewhere in the Standard Specifications.

Prior to Physical Completion the Contractor shall report the quantity of recycled materials that were utilized in the construction of the project for each of the items listed in Section 9-03.21. The report shall include hot mix asphalt, recycled concrete aggregate, recycled glass, steel furnace slag and other recycled materials (e.g. utilization of on-site material and aggregates from concrete returned to the supplier). The Contractor’s report shall be provided on DOT form 350-075 Recycled Materials Reporting.

SECTION 1-07, LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC
1-07.1, Laws to be Observed
(October 1, 2005 APWA GSP)

Supplement this section with the following:

In cases of conflict between different safety regulations, the more stringent regulation shall apply.

The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).

The Contractor shall maintain at the project site office, or other well known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor’s care, persons, including employees, who may have been injured on the project site. Employees should not be permitted to work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor’s care.

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor’s plant, appliances, and methods, and for any damage or injury resulting from their
failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the project site, including safety for all persons and property in the performance of the work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor’s performance does not, and shall not, be intended to include review and adequacy of the Contractor’s safety measures in, on, or near the project site.

1-07.2 State Taxes

Delete this section, including its sub-sections, in its entirety and replace it with the following:

1-07.2, State Sales Tax
(June 27, 2011 APWA GSP)

The Washington State Department of Revenue has issued special rules on the State sales tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2) describes this exception.

The Contracting Agency will pay the retained percentage (or release the Contract Bond if a FHWA-funded Project) only if the Contractor has obtained from the Washington State Department of Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.051). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(1), State Sales Tax — Rule 171
WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used primarily for foot or vehicular traffic. This includes storm or combined sewer systems within and included as a part of the street or road drainage system and power lines when such are part of the roadway lighting system. For work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or other contract amounts, including those that the Contractor pays on the purchase of the materials, equipment, or supplies used or consumed in doing the work.

1-07.2(2), State Sales Tax — Rule 170
WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to, the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.
For work performed in such cases, the Contractor shall collect from the Contracting Agency, retail sales tax on the full contract price. The Contracting Agency will automatically add this sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following exception.

Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit bid item prices or in any other contract amount.

1-07.2(3), Services
The Contractor shall not collect retail sales tax from the Contracting Agency on any contract wholly for professional or other services (as defined in Washington State Department of Revenue Rules 138 and 244).

1-07.6, Permits and Licenses
Section 1-07.6 is supplemented with the following:
(****** West Richland GSP)

The Contractor shall obtain a City of West Richland Street Cut Permit for all work within this contract prior to the start of work. On Capital Improvement Projects administered by the City, the City will waive the permit fee.

The City of West Richland City Council has passed ordinances requiring a Contractor have a City Business License. In accordance with these ordinances, a City of West Richland business license is required prior to conducting business within the City limits.

1-07.16, Protection and Restoration of Property
Section 1-07.16 is supplemented with the following:
(****** West Richland GSP)

The Contractor shall notify the adjacent property owners of the construction activities prior to commencing work. Method of notification shall be submitted to the City Engineer for approval. Additional notifications may be required as the work progresses.

1-07.17 Utilities and Similar Facilities
Section 1-07.17 is supplemented with the following:

(April 2, 2007)
Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification.

The following addresses and telephone numbers of utility companies known or suspected of having facilities within the project limits are supplied for the Contractor’s convenience:

| City of West Richland         | Drew Woodruff | (509)967-5434 |
| Benton Rural Electric        | Kirk Henderson | (509)786-2913 |
| Charter Communications       | Dean Kelley   | (509)222-2665 |
| Cascade Natural Gas          | Glenn Helton  | (509)736-5564 |
| Columbia Irrigation District | Pat Loftus    | (509)586-6118 |
| Frontier Communications      | Marcia Matson | (509)378-5172 |
Section 1-07.17 is supplemented with the following:

The Contractor shall call the Utilities Underground Location Center (811), for field location, not less than two nor more than ten business days before the scheduled date for commencement of excavation which may affect underground utility facilities, unless otherwise agreed upon by the parties involved. A business day is defined as any day other than Saturday, Sunday, or a legal local, State, or Federal holiday. The telephone number for the One Call Center for this project may be obtained from the Engineer. If no one-number locator service is available, notice shall be provided individually to those Contracting Agency’s known to or suspected of having underground facilities within the area of proposed excavation.

No excavation shall begin until all known facilities, in the vicinity of the excavation area, have been located and marked.

1-07.18, Public Liability and Property Damage Insurance
Delete this section in its entirety, and replace it with the following:

1-07.18, Insurance
(January 4, 2016 APWA GSP)

1-07.18(1), General Requirements
A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer’s financial condition.

B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor’s Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.

C. If any insurance policy is written on a claims made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made, and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period (“tail”) or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.

D. The Contractor’s Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency’s insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor’s insurance and shall not contribute with it.
E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.

G. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency.

H. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days’ notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.

I. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.

1-07.18(2), Additional Insured
All insurance policies, with the exception of Workers Compensation, and of Professional Liability and Builder’s Risk (if required by this Contract) shall name the following listed entities as additional insured(s) using the forms or endorsements required herein:

- the Contracting Agency and its officers, elected officials, employees, agents, and volunteers

The above-listed entities shall be additional insured(s) for the full available limits of liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor pursuant to 1-07.18(4) describes limits lower than those maintained by the Contractor.

For Commercial General Liability insurance coverage, the required additional insured endorsements shall be at least as broad as ISO forms CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

1-07.18(3), Subcontractors
The Contractor shall cause each Subcontractor of every tier to provide insurance coverage that complies with all applicable requirements of the Contractor-provided insurance as set forth herein, except the Contractor shall have sole responsibility for determining the limits of coverage required to be obtained by Subcontractors.

The Contractor shall ensure that all Subcontractors of every tier add all entities listed in 1-07.18(2) as additional insureds, and provide proof of such on the policies as required by that section as detailed in 1-07.18(2) using an endorsement as least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency evidence of insurance and copies of the additional insured endorsements of each Subcontractor of every tier as required in 1-07.18(4) Verification of Coverage.
1-07.18(4), Verification of Coverage
The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and endorsements for each policy of insurance meeting the requirements set forth herein when the Contractor delivers the signed Contract for the work. Failure of Contracting Agency to demand such verification of coverage with these insurance requirements or failure of Contracting Agency to identify a deficiency from the insurance documentation provided shall not be construed as a waiver of Contractor’s obligation to maintain such insurance.

Verification of coverage shall include:

1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.
2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as additional insured(s), showing the policy number. The Contractor may submit a copy of any blanket additional insured clause from its policies instead of a separate endorsement.
3. Any other amendatory endorsements to show the coverage required herein.
4. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements – actual endorsements must be submitted.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s). If Builders Risk insurance is required on this Project, a full and certified copy of that policy is required when the Contractor delivers the signed Contract for the work.

1-07.18(5), Coverages and Limits
The insurance shall provide the minimum coverages and limits set forth below. Contractor’s maintenance of insurance, its scope of coverage, and limits as required herein shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the Contracting Agency’s recourse to any remedy available at law or in equity.

All deductibles and self-insured retentions must be disclosed and are subject to approval by the Contracting Agency. The cost of any claim payments falling within the deductible or self-insured retention shall be the responsibility of the Contractor. In the event an additional insured incurs a liability subject to any policy’s deductibles or self-insured retention, said deductibles or self-insured retention shall be the responsibility of the Contractor.

1-07.18(5)A, Commercial General Liability
Commercial General Liability insurance shall be written on coverage forms at least as broad as ISO occurrence form CG 00 01, including but not limited to liability arising from premises, operations, stop gap liability, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract. There shall be no exclusion for liability arising from explosion, collapse or underground property damage.

The Commercial General Liability insurance shall be endorsed to provide a per project general aggregate limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.
Contractor shall maintain Commercial General Liability Insurance arising out of the Contractor's completed operations for at least three years following Substantial Completion of the Work.

Such policy must provide the following minimum limits:
- $1,000,000 Each Occurrence
- $2,000,000 General Aggregate
- $2,000,000 Products & Completed Operations Aggregate
- $1,000,000 Personal & Advertising Injury each offence
- $1,000,000 Stop Gap / Employers’ Liability each accident

1-07.18(5)B, Automobile Liability
Automobile Liability shall cover owned, non-owned, hired, and leased vehicles; and shall be written on a coverage form at least as broad as ISO form CA 00 01. If the work involves the transport of pollutants, the automobile liability policy shall include MCS 90 and CA 99 48 endorsements.

Such policy must provide the following minimum limit:
- $1,000,000 Combined single limit each accident

1-07.18(5)C, Workers’ Compensation
The Contractor shall comply with Workers’ Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

1-07.23, Public Convenience and Safety
1-07.23(1), Construction Under Traffic
(May 2, 2017 APWA GSP)

Revise the third sentence of the second paragraph to read:

Accessibility to existing or temporary pedestrian push buttons shall not be impaired; if approved by the Contracting Agency activating pedestrian recall timing or other accommodation may be allowed during construction.

1-07.24, Rights of Way
(July 23, 2015 APWA GSP)

Delete this section and replace it with the following:

Street Right of Way lines, limits of easements, and limits of construction permits are indicated in the Plans. The Contractor’s construction activities shall be confined within these limits, unless arrangements for use of private property are made.

Generally, the Contracting Agency will have obtained, prior to bid opening, all rights of way and easements, both permanent and temporary, necessary for carrying out the work. Exceptions to this are noted in the Bid Documents or will be brought to the Contractor’s attention by a duly issued Addendum.

Whenever any of the work is accomplished on or through property other than public Right of Way, the Contractor shall meet and fulfill all covenants and stipulations of any easement agreement obtained by the Contracting Agency from the owner of the private property. Copies
of the easement agreements may be included in the Contract Provisions or made available to the Contractor as soon as practical after they have been obtained by the Engineer.

Whenever easements or rights of entry have not been acquired prior to advertising, these areas are so noted in the Plans. The Contractor shall not proceed with any portion of the work in areas where right of way, easements or rights of entry have not been acquired until the Engineer certifies to the Contractor that the right of way or easement is available or that the right of entry has been received. If the Contractor is delayed due to acts of omission on the part of the Contracting Agency in obtaining easements, rights of entry or right of way, the Contractor will be entitled to an extension of time. The Contractor agrees that such delay shall not be a breach of contract.

Each property owner shall be given 48 hours notice prior to entry by the Contractor. This includes entry onto easements and private property where private improvements must be adjusted.

The Contractor shall be responsible for providing, without expense or liability to the Contracting Agency, any additional land and access thereto that the Contractor may desire for temporary construction facilities, storage of materials, or other Contractor needs. However, before using any private property, whether adjoining the work or not, the Contractor shall file with the Engineer a written permission of the private property owner, and, upon vacating the premises, a written release from the property owner of each property disturbed or otherwise interfered with by reasons of construction pursued under this contract. The statement shall be signed by the private property owner, or proper authority acting for the owner of the private property affected, stating that permission has been granted to use the property and all necessary permits have been obtained or, in the case of a release, that the restoration of the property has been satisfactorily accomplished. The statement shall include the parcel number, address, and date of signature. Written releases must be filed with the Engineer before the Completion Date will be established.

SECTION 1-08, PROSECUTION AND PROGRESS
Add the following new section:

1-08.0, Preliminary Matters

Add the following new section:

1-08.0(1), Preconstruction Conference
(October 10, 2008 APWA GSP)

Prior to the Contractor beginning the work, a preconstruction conference will be held between the Contractor, the Engineer and such other interested parties as may be invited. The purpose of the preconstruction conference will be:

1. To review the initial progress schedule;
2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
4. To establish normal working hours for the work;
5. To review safety standards and traffic control; and
6. To discuss such other related items as may be pertinent to the work.
The Contractor shall prepare and submit at the preconstruction conference the following:

1. A preliminary schedule of working drawing submittals;
2. A list of material sources for approval if applicable,
3. 24-Hour Emergency Contact Information, and
4. Dust Control Plan
5. SPCC Plan

Add the following new section:

**1-08.0(2), Hours of Work**  
(December 8, 2014 APWA GSP)

Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. Monday through Friday, exclusive of a lunch break. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

All working hours and days are also subject to local permit and ordinance conditions (such as noise ordinances).

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 5 days prior to the day(s) the Contractor is requesting to change the hours.

If the Contracting Agency approves such a deviation, such approval may be subject to certain other conditions, which will be detailed in writing. For example:

1. On non-Federal aid projects, requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency representatives who worked during such times. (The Engineer may require designated representatives to be present during the work. Representatives who may be deemed necessary by the Engineer include, but are not limited to: survey crews; personnel from the Contracting Agency’s material testing lab; inspectors; and other Contracting Agency employees or third party consultants when, in the opinion of the Engineer, such work necessitates their presence.)

2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.

3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.

4. If a 4-10 work schedule is requested and approved the non working day for the week will be charged as a working day.

5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll.
Revise this section to read:

The Contractor shall submit 4 copies of a Type A Progress Schedule no later than at the preconstruction conference, or some other mutually agreed upon submittal time. The schedule may be a critical path method (CPM) schedule, bar chart, or other standard schedule format. Regardless of which format used, the schedule shall identify the critical path. The Engineer will evaluate the Type A Progress Schedule and approve or return the schedule for corrections within 15 calendar days of receiving the submittal.

1-08.4, Notice to Proceed and Prosecution of the Work

Delete this section in its entirety, and replace it with the following:

1-08.4, Notice to Proceed and Prosecution of Work

Notice to Proceed will be given after the contract has been executed and the contract bond and evidence of insurance have been approved and filed by the Contracting Agency. The Contractor shall not commence with the work until the Notice to Proceed has been given by the Engineer. The Contractor shall commence construction activities on the project site within ten days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor shall diligently pursue the work to the physical completion date within the time specified in the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve the Contractor of the responsibility to complete the work within the time(s) specified in the contract.

When shown in the Plans, the first order of work shall be the installation of high visibility fencing to delineate all areas for protection or restoration, as described in the Contract. Installation of high visibility fencing adjacent to the roadway shall occur after the placement of all necessary signs and traffic control devices in accordance with 1-10.1(2). Upon construction of the fencing, the Contractor shall request the Engineer to inspect the fence. No other work shall be performed on the site until the Contracting Agency has accepted the installation of high visibility fencing, as described in the Contract.

1-08.5, Time for Completion

Section 1-08.5 is supplemented with the following:

(March 13, 1995)
This project shall be physically completed within *** XX *** working days.

1-08.5, Time for Completion

(September 12, 2016 APWA GSP, Option A)

Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following the Notice to Proceed Date.

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3)
remaining for the physical completion of the contract. The statement will also show the nonworking days and any partial or whole day the Engineer declares as unworkable. Within 10 calendar days after the date of each statement, the Contractor shall file a written protest of any alleged discrepancies in it. To be considered by the Engineer, the protest shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of time disputed. By not filing such detailed protest in that period, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

The Engineer will give the Contractor written notice of the completion date of the contract after all the Contractor’s obligations under the contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

1. The physical work on the project must be complete; and
2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a completion date:
   a. Certified Payrolls (per Section 1-07.9(5)).
   b. Material Acceptance Certification Documents
   c. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.
   d. Final Contract Voucher Certification
   e. Copies of the approved “Affidavit of Prevailing Wages Paid” for the Contractor and all Subcontractors
   f. Property owner releases per Section 1-07.24

1-08.9, Liquidated Damages
(August 14, 2013 APWA GSP)

Revise the fourth paragraph to read:

When the Contract Work has progressed to Substantial Completion as defined in the Contract, the Engineer may determine that the work is Substantially Complete. The Engineer will notify the Contractor in writing of the Substantial Completion Date. For overruns in Contract time occurring after the date so established, the formula for liquidated damages shown above will not apply. For overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until the actual Physical Completion Date of all the Contract Work. The Contractor shall complete the remaining Work as promptly as possible. Upon request by the Project Engineer, the Contractor shall furnish a written schedule for completing the physical Work on the Contract.
SECTION 1-09, MEASUREMENT AND PAYMENT
1-09.2(5), Measurement
(May 2, 2017 APWA GSP)

Revise the first paragraph to read:

**Scale Verification Checks** – At the Engineer’s discretion, the Engineer may perform verification checks on the accuracy of each batch, hopper, or platform scale used in weighing contract items of Work.

1-09.9, Payments
(March 13, 2012 APWA GSP)

Delete the first four paragraphs and replace them with the following:

The basis of payment will be the actual quantities of Work performed according to the Contract and as specified for payment.

The Contractor shall submit a breakdown of the cost of lump sum bid items at the Preconstruction Conference, to enable the Project Engineer to determine the Work performed on a monthly basis. A breakdown is not required for lump sum items that include a basis for incremental payments as part of the respective Specification. Absent a lump sum breakdown, the Project Engineer will make a determination based on information available. The Project Engineer’s determination of the cost of work shall be final.

Progress payments for completed work and material on hand will be based upon progress estimates prepared by the Engineer. A progress estimate cutoff date will be established at the preconstruction conference.

The initial progress estimate will be made not later than 30 days after the Contractor commences the work, and successive progress estimates will be made every month thereafter until the Completion Date. Progress estimates made during progress of the work are tentative, and made only for the purpose of determining progress payments. The progress estimates are subject to change at any time prior to the calculation of the final payment.

The value of the progress estimate will be the sum of the following:

1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of work completed multiplied by the unit price.
2. Lump Sum Items in the Bid Form — based on the approved Contractor’s lump sum breakdown for that item, or absent such a breakdown, based on the Engineer’s determination.
3. Materials on Hand — 100 percent of invoiced cost of material delivered to Job site or other storage area approved by the Engineer.
4. Change Orders — entitlement for approved extra cost or completed extra work as determined by the Engineer.

Progress payments will be made in accordance with the progress estimate less:

1. Retainage per Section 1-09.9(1), on non FHWA-funded projects;
2. The amount of progress payments previously made; and
3. Funds withheld by the Contracting Agency for disbursement in accordance with the Contract Documents.
Progress payments for work performed shall not be evidence of acceptable performance or an admission by the Contracting Agency that any work has been satisfactorily completed. The determination of payments under the contract will be final in accordance with Section 1-05.1.

Supplement this section with the following:

Lump sum item breakdowns are not required when the bid price for the lump sum item is less than $20,000.

1-09.11(3), Time Limitation and Jurisdiction
(July 23, 2015 APWA GSP)

Revise this section to read:

For the convenience of the parties to the Contract it is mutually agreed by the parties that any claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that any such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.05 shall control venue and jurisdiction. The parties understand and agree that the Contractor’s failure to bring suit within the time period provided, shall be a complete bar to any such claims or causes of action. It is further mutually agreed by the parties that when any claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court, the Contractor shall permit the Contracting Agency to have timely access to any records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13, Claims and Resolutions

1-09.13(3), Claims $250,000 or Less
(October 1, 2005 APWA GSP)

Delete this Section and replace it with the following:

The Contractor and the Contracting Agency mutually agree that those claims that total $250,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbinding ADR processes, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A, Administration of Arbitration
(July 23, 2015 APWA GSP)

Revise the third paragraph to read:

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency’s headquarters is located, provided that where claims subject to arbitration are asserted against a county, RCW 36.01.05 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.
SECTION 1-10, TEMPORARY TRAFFIC CONTROL

1-10.2(2), Traffic Control Plans
Section 1-10.2(2) is supplemented with the following:
(****** West Richland GSP)

The Contractor shall prepare a Project Traffic Control Plan(s) for the project showing a method of handling traffic. The Traffic Control Plan(s) shall conform to the established standards for plan development in the current edition of the Manual of Uniform Traffic Control Devices (MUTCD), Part 6. All Class A and B construction signs, flaggers, spotters, and other traffic control devices shall be shown on the Traffic Control Plan(s). The Plan(s) shall be submitted for the Engineer’s approval at least ten calendar days in advance of the time the signs and other traffic control devices are scheduled to be installed and utilized. The Contractor shall be solely responsible for submitting all proposed traffic control plans, obtaining the Engineer’s approval, and providing copies of the approved Project Traffic Control Plan(s) to the Traffic Control Supervisor. No work requiring traffic control shall commence until the Traffic Control Plan has been approved by the Engineer. The following guidelines shall be used in development of the Traffic Control Plan(s):

1. All signing shall be as recommended by the MUTCD, the Standard Specifications, and the WSDOT Standard Plans K-1 through K-27.
2. The Contractor shall provide all signs, barricades, flashers, flaggers, etc. necessary to control traffic. All barricades shall be lighted if used outside of daylight hours.
3. The City will not provide traffic control material or labor. In the event the City cannot make contact with the Contractor’s designated personnel during non-working hours, installation of the traffic control facilities or lighted barricades by City forces shall be billed to the Contractor on a time and materials basis.
4. The Contractor shall prepare traffic control plans for Engineer approval prior to closure of all roadways.
5. Traffic Control Plan(s) shall address traffic control for local traffic access and flow during all road closures not shown in the plans as prepared by the Contractor.
6. All submitted Traffic Control Plan(s) shall be on 11”x17” sheets, with legible writing and using MUTCD sign call-outs where applicable. Traffic Control Plan(s) shall show sign locations by station number or distances from identifiable locations (intersections, landmarks, etc.).
7. All road closures shall be shown on the Contractor’s Project Schedule submitted in accordance with Section 1-08.3. The schedule shall show start dates and durations of all road closures.

1-10.4, Measurement

1-10.4(1), Lump Sum Bid for Project (No Unit Items)
Section 1-10.4(1) is supplemented with the following:

(August 2, 2004)
The proposal contains the item “Project Temporary Traffic Control”, lump sum. The provisions of Section 1-10.4(1) shall apply.
SECTION 2-01, CLEARING, GRUBBING, AND ROADSIDE CLEANUP

2-01.1, Description
Section 2-01.1 is supplement with the following:
(****** West Richland GSP)

Clearing and grubbing on this project shall be performed within the following limits:

*** The staked limits of the roadway, sidewalk and ditch catch limits or in utility locations within the City right-of-way, easements, and property lines, when shown on the drawings are based upon existing mapping and may not have been determined by actual survey. Some discrepancies can be expected to occur.

Where shown on the drawings or as designated by the City, the Contractor shall remove and dispose of all debris including but not limited to rock piles, tee posts, boulders, concrete debris, vegetation, trees, bushes, and tree stumps within the City’s right-of-way/access easement or the construction area, unless otherwise noted. The Contractor shall use care as not to damage trees shown on the drawings to be relocated or designated by the City to remain. Some costs associated for items referenced for removal within the construction limits or which conflict with the road improvements as designated by the City shall be considered incidental to an associated bid item or shall be included with an associated bid item where specified in the Section 8-02.3(17), Landscape Restoration.

A waste site has not been provided by the City for the materials cleared and grubbed on the project. All material cleared and grubbed on the project shall be disposed as stated in Section 2-03.3(7)D, Waste Site. ***

SECTION 2-02, REMOVAL OF STRUCTURES AND OBSTRUCTIONS

2-02.3(3), Removal of Pavement, Sidewalks, Curbs, and Gutters
Section 2-02.3(3) is supplemented with the following:
(****** West Richland GSP)

At those locations where cement concrete sidewalk and curb and gutter is to be removed, the Contractor shall sawcut full depth at the nearest joint.

All removed curb and gutter, sidewalk, and pavement shall become the property of the Contractor and disposed at a Contractor provided waste site.

2-02.4, Measurement
Section 2-02.4 is supplemented with the following:
(****** West Richland GSP)

"Removing Asphalt Concrete Pavement", shall be measured by the square yard.
"Removing Cement Concrete Sidewalk", shall be measure by the square yard.
"Removing Cement Concrete Traffic Curb and Gutter", shall be measured by the lineal foot.

2-02.5, Payment
Section 2-02.5 is supplemented with the following:
(****** West Richland GSP)

"Removing Asphalt Concrete Pavement", per square yard. The unit bid price per square yard for "Removing Asphalt Concrete Pavement" shall be full pay for all labor, material, and equipment to sawcut, remove and dispose of material and all other work required to complete the work.
“Removing Cement Concrete Sidewalk”, per square yard.
The unit bid price per square yard for “Removing Cement Concrete Sidewalk” shall be full pay for all labor, material, and equipment to sawcut, remove and dispose of material and all other work required to complete the work.

“Removing Cement Concrete Traffic Curb and Gutter” per lineal foot.
The unit bid price per lineal foot for “Removing Cement Concrete Traffic Curb and Gutter” shall be full pay for all labor, material, and equipment to sawcut, remove and dispose of material and all other work required to complete the work.

SECTION 2-03, ROADWAY EXCAVATION AND EMBANKMENT
2-03.3(7), Disposal of Surplus Material
Section 2-03.3(7) is supplemented with the following:
(****** West Richland GSP)

2-03.3(7)D, Waste Site
A waste site has not been provided as part of the Contract for waste material such as excess pavement, cement concrete and other debris shall be disposed of offsite at a Contractor provided waste site. Disposal and waste sites shall meet all requirements of the governing County District Health Department and Chapter 173-304 WAC. When a waste site exceeds two thousand cubic yards of inert waste and demolition waste during the life of the landfill, the Contractor shall obtain and pay all costs as required to obtain a solid waste handling facility permit from the Health Department when required.

The Contractor shall be responsible to make all arrangements and bear all costs associated for use of Non-Contracting Agency provided waste site(s). The Contractor shall provide to the Contracting Agency a copy of the written and signed agreement with the property owner for use of the property for a waste site. The Agreement shall include at a minimum the following:

1. Name of legal owner of the property.
2. General description and location of the waste site to include all boundaries imposed by the property owner.
3. Haul routes agreed to by the property owner and Contractor.
4. All restrictive dates that the property owner may have for not allowing use of the property for dumping excess materials.
5. All special conditions to include placement of materials, all compaction requirements and finished surfaces of the waste sites imposed by the property owner.

2-03.3(14), Embankment Construction
2-03.3(14)C, Compacting Earth Embankments
Section 2-03.3(14)C is supplemented with the following:
(****** West Richland GSP)

Compacting embankments and excavations shall be by Method “C” as specified under Section 2-03.3(14)C of the Standard Specifications.

2-03.4, Measurement
Section 2-03.4 is supplemented with the following:
(****** West Richland GSP)
If discrepancies are discovered in the ground elevations which will materially affect the quantities of earthwork, the original computations of earthwork quantities will be adjusted accordingly.

Earthwork quantities will be computed, either manually or by means of electronic data processing equipment, by use of the average end area method or by the finite element analysis method utilizing digital terrain modeling techniques.

Copies of the ground cross-section notes will be available for the bidder's inspection, before the opening of bids, at the City Engineer's office.

Upon award of the contract, copies of the original ground cross-sections will be furnished to the successful bidder on request to the City Engineer.

SECTION 2-06, SUBGRADE PREPARATION
2-06.3, Construction Requirements
2-06.3(1), Subgrade for Surfacing
The first and second sentence of item 6, in Section 2-06.3(1) is revised as follows:
("****** West Richland GSP")

Compact the subgrade to a depth of 12 inches. Compaction shall achieve 95 percent of maximum density determined under the tests described in Section 2-03.3(14)D.

2-06.3(2), Subgrade for Pavement
The second sentence of Section 2-06.3(2) is revised as follows:
("****** West Richland GSP")

The Contractor shall compact the subgrade to a depth of 12 inches to 95 percent of maximum density as determined by the compaction control tests for granular materials.

The Contractor shall coordinate with the City to schedule the test of any new underground locate wire. Subgrade will not be approved until the test is completed and approved by the City Engineer.

SECTION 2-07, WATERING
2-07.3, Construction Requirements
Section 2-07.3 is supplemented with the following:
("****** West Richland GSP")

**Dust Control**
The Contractor shall, at all times during construction, maintain proper dust control in accordance with the requirements of the Benton County Clean Air Authority. The Contractor shall be solely responsible for dust control on this project and shall protect the motoring public, adjacent homes, and fields from damage due to dust by whatever means necessary. The Contractor shall have equipment and manpower available at all times including after hours, weekends, and holidays to respond to dust control measures. When directed by the City Engineer, the Contractor shall provide dust control within two hours of such order. Any problems caused due to dust from the construction site will be cause for immediate shut down of operations except dust control. The Contractor shall be responsible for any claims for damages and/or injury and shall protect the City from any and all such claims.
Should City forces be required to respond to a dust control issue or the City must hire a Contractor to provide dust control to the construction site the Contractor shall be charged for all cost incurred by the City.

Water for dust control, compaction of trenches, constructing of subgrade, placing of crushed surfacing, pipeline flushing and testing, etc., will be available at a City of West Richland specified fire hydrant locations at no cost to the Contractor for Public Works Projects. The Contractor shall be responsible for all costs of water on Private projects. The City does not guarantee the locations of the hydrants to be adjacent or within proximity of the project. The Contractor shall contact the City of West Richland to make arrangements for the water and pay all associated costs to include any water fees, providing metering and backflow devices. The Contractor shall be required to meter all water taken from City of West Richland hydrants for use on the project. All cost to provide alternate sources of water for construction shall be the responsibility of the Contractor.

SECTION 2-09, STRUCTURE EXCAVATION
2-09.3, Construction Requirements
Section 2-09.3 is supplemented with the following:
(***** West Richland GSP)

All reference to measurement by the cubic yard for payment of all classes of structure excavation shall be struck. All associated costs for structure excavation shall be included in the associated bid items of work unless otherwise specified.

2-09.3(1)E, Backfilling
Section 2-09.3(1)E paragraph four is revised to read as follows:
(***** West Richland GSP)

Below is a City supplied CDF mix design. The City mix design or the Contractor mix design must be submitted on WSDOT Form 350-040 by the Contractor and utilize ACI 229 as a guide to develop the CDF mix design.

Controlled Density Fill (CDF)
One cubic yard of CDF mix shall consist of:
1750 lbs sand (fine aggregate class 1 or 2),
1750 lbs pea gravel (AASHTO grading No. 8)
230 lbs water
140 lbs cement
8 oz water reducing agent

CDF curing must be approved by the City Inspector prior to any additional backfill.

2-09.4, Measurement and Section 2-09.5 Payment
Section 2-09.4 and 2-09.5 is supplemented with the following:
(***** West Richland GSP)

A separate measurement will not be made for excavated material replaced by imported pipe bedding and trench backfill which shall be removed and disposed of at a Contractor provided waste site.

SECTION 4-04, BALLAST AND CRUSHED SURFACING
4-04.4 and 4-4.5, Measurement and Payment
4-04.4 and 4-04.5 are supplemented with the following:
(***** West Richland GSP)
“Crushed Surfacing Base Course”, per ton.
“Crushed Surfacing Top Course”, per ton.

SECTION 5-04, HOT MIX ASPHALT
5-04.1, Description
Section 5-04.1 is supplemented with the following:
(****** West Richland GSP)

Warm mix asphalt (WMA) is not allowed unless specified in the plans and approved by the City Engineer. Recycled asphalt shingles (RAS) will not be allowed.

5-04.2, Materials
Section 5-04.2 is supplemented with the following:
(****** West Richland GSP)

HMA for pathway paving shall be “Commercial HMA Cl. 3/8-In. PG 64-28”.
HMA for roadway paving shall be either “HMA Cl. 3/8-In. PG 64-28” or “HMA Cl. ½-In PG 64-28” as stated in the associated plans and specifications.

RAP exceeding 20-percent will not be allowed.

ESAL's
The number of ESAL’s for the design and acceptance of the HMA shall be ***3*** million.

(****** West Richland GSP)
Delete Section 5-04.2(1) and replace with the following:

5-04.2(1) How to Get an HMA Mix Design on the QPL
If the contractor wishes to submit a mix design for inclusion in the Qualified Products List (QPL), please follow the WSDOT process outlined in Standard Specification 5-04.2(1).

5-04.2(1)A – Vacant
5-04.2(1)A1, Vacant
5-04.2(1)A2, Vacant
5-04.2(1)B, Vacant
5-04.2(1)C, Vacant

(****** West Richland GSP)
Delete Section 5-04.2(2) and replace with the following:

5-04.2(2) Mix Design – Obtaining Project Approval
No paving shall begin prior to the approval of the mix design by the Engineer.

Nonstatistical evaluation will be used for all HMA not designated as Commercial HMA in the contract documents.
**Commercial** evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, pre-level, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Project Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Project Engineer. The Proposal quantity of HMA that is accepted by commercial evaluation will be excluded from the quantities used in the determination of nonstatistical evaluation.

**Nonstatistical Mix Design:** Fifteen days prior to the first day of paving the contractor shall provide one of the following mix design verification certifications for Contracting Agency review;

- The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of the mix design verification certifications listed below.
- The proposed HMA mix design on WSDOT Form 350-042 with the seal and certification (stamp & signature) of a valid licensed Washington State Professional Engineer.
- The Mix Design Report for the proposed HMA mix design developed by a qualified City or County laboratory that is within one year of the approval date.**

The mix design shall be performed by a lab accredited by a national authority such as Laboratory Accreditation Bureau, L-A-B for Construction Materials Testing, The Construction Materials Engineering Council (CMEC’s) ISO 17025 or AASHTO Accreditation Program (AAP) and shall supply evidence of participation in the AASHTO: resource proficiency sample program.

Mix designs for HMA accepted by Nonstatistical evaluation shall;

- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324, or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.

At the discretion of the Engineer, agencies may accept verified mix designs older than 12 months from the original verification date with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

**Commercial Evaluation:** Approval of a mix design for “Commercial Evaluation” will be based on a review of the Contractor’s submittal of WSDOT Form 350-042 (For commercial mixes, AASHTO T 324 evaluation is not required) or a Mix Design from the current WSDOT QPL or from one of the processes allowed by this section. Testing of the HMA by the Contracting Agency for mix design approval is not required.

For the Bid Item Commercial HMA, the Contractor shall select a class of HMA and design level of Equivalent Single Axle Loads (ESAL’s) appropriate for the required use.

5-04.2(2)A, Vacant

5-04.2(2)B, Vacant

Standard Specification COWR 7-10-18
5-04.3, Construction Requirements
Section 5-04.3 is supplemented with the following:
(****** West Richland GSP)

On private projects where City roadways are being paved, refer to the City HMA Testing and Acceptance criteria for sampling, testing and acceptance requirements (Appendix).

In areas where plans indicate the removal of asphalt only and no removal of existing top course, the Contractor shall protect the structural integrity of the existing rock. Prior to paving, the Contractor shall fine grade and compact existing top course and ensure a smooth transition to the new roadway sections. Costs to repair any damage to the existing top course shall be at the expense of the Contractor to repair to the City Engineer’s approval.

Asphalt Pavement Restoration
Edges damaged shall be sawcut prior to final pavement restoration. The existing pavement and pavement edges shall be prepared in accordance with Section 5-04.3(5)A prior to final restoration.

All restoration shall be completed per City of West Richland Detail 2-8 The entire trench, including pipe zone, shall be backfilled with 5/8” minus crushedsurfacing top course (Imported Trench Backfill) and compacted to 95% AASHTO T180. Trench backfill must be tested and approved prior to paving. The trench shall be paved with 2-inches minimum of HMA Cl. ½ In. PG 64-28 and compacted to 91% density per AASHTO T209.

5-04.3(1), Weather Limitations
The first paragraph of Section 5-04.3(1) is revised with the following:
(****** West Richland GSP)

Do not place HMA for wearing course on any Traveled Way beginning November 1 through April 1 of the following year, without written concurrence from the City Engineer. No paving activities shall be allowed if the wind speeds are in excess of 10 mph.

5-04.3(3), Pavers
Section 5-04.3(3) is supplemented with the following:
(****** West Richland GSP)

Paving equipment used on mainline paving must be able to pave a width of 22-feet in one paving pass.

5-04.3(3)D, Material Transfer Device or Material Transfer Vehicle
Section 5-04.3(3)D is supplemented with the following:
(****** West Richland GSP)

A material transfer device/vehicle will be required on all mainline paving.

5-04.3(9)B1, Mixture Statistical Evaluation – Lots and Sublots
Revise the third sentence of paragraph three of Section 5-04.3(9)B1 with the following:
(****** West Richland GSP)

• For mixture lot in progress with a mixture CPF less than 0.85, a new mixture lot will begin at the Contractor’s request after the Engineer
is satisfied that material conforming to the Specifications can be produced. See also Section 5-043(11)F.

5-04.3(9)B5, Mixture Statistical Evaluation – Pay Factors
Revised the last sentence of the second paragraph of Section 5-04.3(9)B5 with the following:
(****** West Richland GSP)

Unless otherwise specified, the maximum CPF for HMA mixture shall be 1.0.

5-04.3(9)B6, Mixture Statistical Evaluation – Price Adjustment
Revised the second sentence of the second paragraph of Section 5-04.3(9)B6 with the following:
(****** West Richland GSP)

CPF = Composite Pay Factor for a given lot of mixture (maximum is 1.0).

5-04.3(10)C1, HMA Compaction Statistical Evaluation – Lots and Sublots
Revised the first sentence of the fourth paragraph of Section 5-04.3(10)C1 with the following:
(****** West Richland GSP)

- For a compaction lot in progress with a compaction CPF less than 0.85, a new compaction lot will begin at the Contractor’s request at the Engineer is satisfied that material conforming to the Specifications can be produces. See also Section 5-04.3(11)F.

5-04.3(10)C2, HMA Compaction Statistical Evaluation – Acceptance Testing
Replace the last paragraph of Section 5-04.3(10)C2 with the following:
(****** West Richland GSP)

Nuclear density gauge with no correlation will be used for acceptance testing of pavement density. Requests for retesting shall follow Section 5-04.3(10)C4, HMA Statistical Compaction – Requests for Retesting.

5-04.3(10)C3, HMA Statistical Compaction – Price Adjustments
Revised the second line of paragraph four of Section 5-04.3(10)C3 with the following:
(****** West Richland GSP)

CPF = Composite Pay Factor for the compaction lot (maximum is 1.0).

5-04.3(11)C, Rejection Without Testing (Mixture or Compaction)
The last paragraph of Section 5-04.3(11)C is revised as follows:
(****** West Richland GSP)

If the CPF for the reject material is less than 0.85, no payment will be made for the rejected material; in addition, the cost of sampling and testing shall be borne by the Contractor. If the CPF is greater than or equal to 0.85, the cost of sampling and testing will be borne by the Contracting Agency. If the material is rejected before
placement and the CPF is greater or equal to 0.85, compensation for the rejected material will be at a CPF of 0.85. If rejection occurs after placement and the CPF is greater than or equal to 0.85, compensation for the rejected material will be at the calculated CPF with an addition of 25 percent of the unit Contract price added for the cost of removal and disposal.

**5-04.3(11)F, Rejection – A lot in Progress (Mixture or Compaction)**
The last sentence of Section 5-043(11)F is revised as follows: (****** West Richland GSP)

3. either the PF_i for any constituent (or the CPF) of a mixture or compaction lot in progress is less than 0.85.

**5-04.3(11)G, Rejection – An Entire Lot (Mixture or Compaction)**
Section 5-04.3(11)G is revised as follows: (****** West Richland GSP)

An entire lot with a CPF of less than 0.85 will be rejected.

**5-04.3(12), Joints**
Section 5-04.3(12) is supplemented with the following: (****** West Richland GSP)

The HMA overlay shall be feathered to produce a smooth riding connection to the existing pavement.

HMA utilized in the construction of the feathered connections shall be modified by eliminating the coarse aggregate from the mix at the Contractor's plant or the commercial source or by raking the joint on the roadway, to the satisfaction of the Engineer.

**5-04.3(12)A2, Longitudinal Joints**
Section 5-04.3(12)A2 is supplemented with the following: (****** West Richland GSP)

The through lanes of travel shall be paved continuously such that no longitudinal joints exist within the through lanes. Widened areas beyond the through lanes such as tapers and right/left turn lanes shall be paved after the paving for the through lanes is complete.

**5-04.3(13), Surface Smoothness**
The second sentence of Section 5-04.3(13) is revised to read: (****** West Richland GSP)

The completed surface of the wearing course shall not vary more than 1/4 inch from the lower edge of a 10-foot straightedge placed on the surface parallel to centerline.

**5-04.4, Measurement**
Section 5-04.4 is supplemented with the following: (****** West Richland GSP)

“Asphalt Pavement Restoration” shall be measured per square yard. Pay width shall be 4-feet unless otherwise pre-approved by the City Engineer. Any asphalt over the designated pay width not pre-approved by the City Engineer or due to the Contractors negligence will not be measure for payment.
5-04.5, Payment
Section 5-04.5 is supplemented with the following:
(***** West Richland GSP)

“Asphalt Pavement Restoration”, per square yard.
The unit contract price per square yard for “Asphalt Pavement Restoration” shall be full pay to provide all labor, equipment and materials to restore the pavement to include HMA in accordance with the plans and specifications.

SECTION 7-04, STORM SEWERS
7-04.2, Materials
Section 7-04.2 is supplemented with the following:
(***** West Richland GSP)

Unless otherwise specified in the special provisions or on the plans, all storm sewers shall be solid wall PVC.

Materials shall meet the requirements of the Standard Details.

7-04.3, Construction Requirements
Section 7-04.3 is supplemented with the following:
(***** West Richland GSP)

Storm sewer pipe shall be stubbed into the catch basins and storm manholes 2-inches minimum when a 90 degree bend is to be attached.

90 degree bends when used in catch basins and manholes shall be attached to the storm sewer with a 3/8” diameter stainless steel lag screw 1-1/2” long with ½” hex head.

The Contractor has the option of using ductile iron pipe as specified in Section 9-30.1 or covering the pipe and trench with Controlled Density Fill (CDF) per Section 2-09.3(1)E if the installation of storm sewer pipe will have less than 18-inches of cover to finish grade.

7-04.3(1)A, General
Section 7-04.3(1)A is supplemented with the following:
(***** West Richland GSP)

The requirements of Section 7-17.3(2)E and 7-17.3(2)H shall apply to all storm sewers that exceed 100 linear feet.

7-04.3(1)E, Low Pressure Air Test for Storm Sewers Constructed of Air Permeable Materials
Section 7-04.3(1)E is deleted and replaced with the following:
(***** West Richland GSP)

Low pressure air testing shall be per Section 7-17.3(2)E.

7-04.4 and 7-04.5, Measurement and Payment
Section 7-04.4 and 7-04.5 are revised to read as followings:
(***** West Richland GSP)
Measurement and payment shall be on a lineal foot basis for the various sizes and types of storm sewer pipe called out in the proposal. Payment shall include all material, excavation, connections to existing piping and drywells, bends, pipe installation, testing, bedding, general excavation backfill, etc. as required to complete the installation.

No measurement or payment will be made for 90 Degree Bends and shall be considered incidental to an associated bid item.

SECTION 7-05, MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS

7-05.1, Description
Section 7-05.1 is supplemented with the following:
(***** West Richland GSP)

The work shall also include construction of percolation trenches and storm drain manholes.

7-05.2, Materials
Section 7-05.2 is supplemented with the following:
(***** West Richland GSP)

Materials shall meet the requirements of the City of West Richland Materials List and Standard Details.

All ductile iron for the following items shall be domestic products made in the USA: pipe fittings, valve boxes, rings and covers, lids, grates, and monument frame and covers.

Gravel Backfill for Percolation Trenches 9-03.12(5)
Percolation Trench Perforated Pipe 9-05.2(8)
Ladder Rungs 9-12.3

7-05.3, Construction Requirements
Section 7-05.3 is supplemented with the following:
(***** West Richland GSP)

**Sewer Manholes**
Sewer manholes shall be furnished and installed per City of West Richland Standard Detail 3-2A, 3-2B or 3-2C and must have a pre-cast base unless otherwise specified in the plans or these specifications. Pre-cast concrete cones shall be eccentric and all manhole joints shall be made with flexible gaskets or a positive self-sealing mastic. Install ladder rungs over mainline inlet pipe and rotate cone accordingly. Sewer manhole sections shall have rubber “A-Lock” gaskets and shall be grouted and troweled to a smooth finish. All pipe inlets and outlets shall be grouted.

Sewer manholes shall have the channelization and manhole bases covered by a rigid material such as ¾” plywood or better. This cover shall remain in place until construction is complete and the manhole castings are grouted and then shall be removed along with all the debris prior to acceptance of construction.

Channels shall be made to conform to sewer or storm grade and shall be brought together smoothly with well-rounded junctions, satisfactory to the City Engineer. Channel sides shall be carried up vertically to the crown elevation of the various pipes and the concrete shelf between channels shall be smoothly finished and warped evenly with slopes to drain.

**Storm Drain Manholes**
Storm drain manholes shall be furnished and installed in accordance with City of West Richland Standard Detail 5-3. When channelized, storm drain manholes shall have precast bases unless otherwise approved by the City Engineer. When not channelized, a sump of 2-feet shall be maintained. Storm drain manholes shall meet all other requirements set for sewer manholes.

**Catch Basins**
Catch basins shall be pre-cast concrete and furnished and installed per City of West Richland Standard Detail 5-1. No drain hole shall be located in the base of the catch basin. The catch basin shall be placed on 6-inches of crushed surfacing top course.

The Contractor shall supply and install a manufactured sediment trap in each catch basin and secure the top under the grate of the new catch basin. Additional bags may be required on existing catch basins near and downstream of the project as specified in the plans and these specifications. The Contractor shall periodically check and clean out any sediment collected in the sediment trap and replace damaged filter bags. Following completion of the construction project, the Contractor shall remove the sediment traps from the catch basins and clean all catch basin sumps.

On developer and private projects, catch basins shall be protected as specified above. Where site work, building construction, home construction, etc., will be proceeding after the street construction is complete the Contractor shall reinstall sediment traps after cleaning of the sumps.

**Connection to Storm Structures**
Storm sewer pipe shall be trimmed flush inside of the catch basins and storm manholes except where 90-degree bends are to be installed. When bends are to be installed, storm pipe shall be stubbed into the catch basin 2-inches (minimum) in order for the bend to be attached to the storm pipe. All pipes shall be grouted smooth to the wall of the catch basin.

90-degree bends (oil/water separators) shall be installed on all storm structure outlet pipes prior to percolation trenches, drywells, swales or ponds. The City Engineer reserves the right to add additional locations if deemed necessary.

**Percolation Trenches**
Percolation trenches shall be furnished and installed in accordance with City of West Richland Standard Detail 5-4. Percolation trenches shall be installed at the width, depth and length specified in the plans. When the plans specify, a 90-degree bend shall be installed on the inlet pipe to the percolation trench. A 7-lineal foot section of 12-inch storm sewer pipe shall connect the storm drain manhole to the percolation trench and the percolation trench with gravel backfill shall be constructed to within 5-feet of the storm manhole as shown in the City of West Richland Standard Details. Storm sewer pipe shall be attached to 12-inch percolation trench perforated pipe. Geo-Textile fabric shall cover all sides of the trench and shall have a minimum of 36-inches overlap.

The Contractor shall use extreme caution while excavating and installing percolation trenches to ensure equipment and construction practices do not compact the trench bedding surface as this will directly impact the trenches ability to infiltrate water.

**Drywells**
Drywells shall be furnished and installed in accordance with City of West Richland Standard Detail 5-5 and 5-6 as indicated in the plans. The plans may indicate extra depth be added to the standard drywell depth. Eccentric precast cone shall be aligned to provide direct access to the opening in the drywell structure. When using angular gravel backfill for drywell rock envelops, the Contractor shall use caution to not rip fabric. The Contractor shall carefully place rock in the rock envelope and shall not allow rock to drop a distance in excess of 4-feet. Any observed damage to fabric during rock placement will require removal and replacement.
All structures installed inside an existing roadway shall be backfilled with Imported Trench Backfill.

7-05.3(1), Adjustment Manholes and Catch Basins to Grade
Section 7-05.3(1) is supplemented with the following:
(****** West Richland GSP)

The Contractor shall be responsible for referencing the locations of all manholes prior to paving activities.

New manholes and drywells shall include final adjustment to ring and cover per City of West Richland Standard Detail 3-4. When manholes and drywells are located in HMA, patching or paving shall be completed prior to final adjustment unless otherwise approved by the City Engineer.

7-05.3(3), Connections to Existing Manholes
Section 7-05.3(3) is supplemented with the following:
(****** West Richland GSP)

Core drilling shall be the only method used to connect to existing manholes. Hammering, chipping and similar wall penetration procedures will not be allowed unless approved by the City Engineer. Connection will be by an “O” ring rubber gasket meeting ASTM C-478 in a manhole coupling equal to the Johns-Manville asbestos-cement collar, or utilizing a conical type flexible seal equal to Kore-N-Seal. The existing base shall be chipped out and new channels formed as required to form channels similar to those shown in the City of West Richland Standard Details.

7-05.3(4), Drop Manhole Connection
Section 7-05.3(4) is supplemented with the following:
(****** West Richland GSP)

Drop manhole connections shall be installed in accordance with City of West Richland Standard Detail 3-5A.

Add the following new section:
(****** West Richland GSP)

7-05.3(5), Saddle Manhole
The Contractor shall excavate completely around the existing pipe. The manhole base shall be poured in-place with Commercial Class 4000 cement concrete over 4-inches of compacted crushed surfacing top course. Existing pipe shall be supported with concrete blocks while the base is poured. Channels for new inlets pipes shall be formed into the base or cored in after the manhole structure is complete.

The top of the existing pipe shall be cut open after the base concrete has cured. The Contractor may choose to bypass pump the saddle manhole location. A bypass pumping plan must be submitted to the City Engineer for approval 5 working days prior to the proposed work. When inside an existing roadway all excavated material shall be removed and disposed of at an authorized Contractor provide disposal site. All backfill shall be crushed surfacing top course meeting the requirements of Section 9-03.9(3) and compacted in 2-foot lifts to 95% maximum density per AASHTO T180.
7-05.4, Measurement
Section 7-05.4 is supplemented with the following:
(****** West Richland GSP)

There will be no separate measurement for excavation and backfill in the construction of sewer pipe and manholes unless otherwise stated in the plans and specifications. All costs for excavation and backfill shall be included in an associated bid item.

“Shallow Manhole”, shall be measured per each.
“Standard Storm Drain Manhole __ In. Diam.”, shall be measured per each.
“Percolation Trench”, shall be measured per linear foot.
“Precast Concrete Drywell, __Feet Depth”, shall be measured per each. Depth shall indicate the depth of the perforated barrel.

“Modified Drywell”, shall be measured per each.
“__In. Drop Connection”, shall be measured per vertical foot. Measurement shall be from the cleanout rim to the invert in the manhole base.

“Saddle Manhole”, shall be measured per each.
No measurement will be made for ADS 90-degree bends and shall be considered incidental to an associated bid item.

7-05.5, Payment
Section 7-04.5 is supplemented with the following:
(****** West Richland GSP)

“Manhole __In. Diam. Type __”, per each.
“Shallow Manhole”, per each.
The unit contract price per each for “Manhole __In. Diam. Type __” and “Shallow Manhole” shall be full pay for all labor, material, and equipment to complete the work required to construct the manhole including frames, covers, ladder rungs, adjustment of ring and cover to finished grade and all other incidental work required to complete the work.

“Standard Storm Drain Manhole __ In. Diam.”, per each.
The unit contract price per each for “Standard Storm Drain Manhole __In. Diam.” Shall be full pay for all labor, material, and equipment to complete the work required to construct the manhole including frames, covers, ladder rungs, adjustment of ring and cover to finished grade and all other incidental work required to complete the work as specified.

“Percolation Trench”, per linear foot.
The unit contract price per each for “Percolation Trench” shall be full pay to provide all labor, materials, equipment, trench excavation, backfill, compaction, drain rock, filter fabric, perforated pipe, storm drain pipe, fittings and all other items and work required to complete the work as specified in the plans.

“Precast Concrete Drywell, __Feet Depth”, per each.
“Modified Drywell”, per each.
The unit contract price per each for “Precast Concrete Drywell, __Feet Depth” and “Modified Drywell” shall be full pay for all labor, materials, and equipment necessary to construct the drywell in accordance with the plans and specifications including final adjustments to finished grade.

Catch Basin bid items shall also include the cost associated with furnishing, installing and maintaining catch basin filter bags.
"__In. Drop Connection", per vertical foot.
The unit contract price per vertical foot for "__In. Drop Connection" shall be full pay for all labor, materials, and equipment and all other incidentals necessary to complete the construction in accordance with the plans and specifications including final adjustment to finished grade.

"Saddle Manhole", per each.
The unit contract price per vertical foot for "__In. Drop Connection" shall be full pay for all labor, materials, and equipment and all other incidentals necessary to construct the manhole in accordance with the plans and specifications including final adjustment to finished grade.

SECTION 7-08, GENERAL PIPE INSTALLATION REQUIREMENTS

7-08.1, Description
Section 7-08.1 is supplemented with the following:
(****** West Richland GSP)

Work shall include imported trench backfill.

Section 7-09.3(7)A, Dewatering of Trench and Section 7-09.3(7)B, Rock Excavation shall apply to Section 7-08, General Pipe Installation Requirements.

7-08.2, Materials
Section 7-08.2 is supplemented with the following:
(****** West Richland GSP)

Imported Trench Backfill 9-03.9(3), Crushed Surfacing Top Course
Gravel Backfill for Pipe Zone Bedding 9-03.9(3), Crushed Surfacing Top Course

7-08.3, Construction Requirements
Section 7-08.3 is supplemented with the following:
(****** West Richland GSP)

The plans may identify locations requiring “Dig and Verify”. Where specifically called for on the plans, or as directed by the Engineer, the Contractor shall “Dig and Verify” existing utilities, connection points and existing inverts. All required “Dig and Verify” shall be completed prior to any Contractor activities at each improvement location. Any discrepancies found as the result of the “Dig and Verify” shall be immediately reported to the Engineer. Unless otherwise directed by the Engineer, the Contractor shall backfill and compact the locations where the “Dig and Verify” was completed. If “Dig and Verify” is located in roadway prism, crushed surfacing top course shall be used for backfill.

All trench backfill around pipe when within an existing roadway shall be imported trench backfill.

7-08.3(1)A, Trenches
Section 7-08.3(1)A is supplemented with the following:
(****** West Richland GSP)

All sewer trenches shall be over excavated 4-inches below the invert of the sewer pipe. The sewer trench shall be backfilled to the bottom of the pipe zone with gravel backfill for pipe zone bedding and compacted to form a uniformly dense, unyielding foundation.
Trenches for storm sewer pipes where material at trench bottom is found to be unsuitable, select well graded native material from the construction site may be used if approved by the City Engineer as stated in Section 7-08.3(1).

Trenches over excavated by the fault of the Contractor shall be backfilled with gravel backfill for pipe zone bedding to the bottom of the pipe zone and compacted to form a uniformly dense, unyielding foundation at the expense of the Contractor.

When the pipe will cross under an AC water main a section of the AC water main shall be removed and replaced with a section of City approved C900 PVC water pipe prior to excavating under the water main. The length of the replacement is estimated to span the trench and to a minimum of five feet from each side of the trench. After completion of the excavation and backfill, the repair couplings shall remain firmly on undisturbed ground or the Contractor will be required to replace the water repair.

7-08.3(1)B, Shoring
Section 7-08.3(1)B is supplemented with the following:
(****** West Richland GSP)

The Contractor shall provide all labor, equipment materials and all other incidentals necessary to meet the requirements of the Washington Industrial Safety and Health Act, Chapter 49.17 RCW, including all requirements for trench, structure and related excavation shoring and safety systems.

7-08.3(1)C, Bedding the Pipe
Section 7-08.3(1)C is supplemented with the following:
(****** West Richland GSP)

Pipe zone bedding shall satisfy the requirements of City of West Richland Standard Detail 4-2.

Sewer pipe shall always be bedded with 4-inches of gravel backfill for pipe zone bedding.

Storm sewer pipe may be bedded with well graded clean earth or sand, free from clay, frozen lumps, pavement chunks, roots, rocks or lumps larger than 1-inch or moisture in excess of that permitting required compaction. If no satisfactory material meeting the criteria exists on site, imported bedding or gravel backfill for pipe zone bedding shall be used.

7-08.3(2)B Pipe Laying - General
Section 7-08.3(2)B is supplemented with the following:
(****** West Richland GSP)

The Contractor shall be responsible for locating and protecting existing utilities as per Section 1-07.17. The Contractor shall make any advance explorations as necessary (even though not specifically identified on the drawings) in order to properly plan the installation of the pipe to the design line and grade and to achieve a uniform grade and horizontal alignment.

The water, sewer, and storm drain mains are typically shown in the profile as well as on the plan view. Other utilities are typically shown in plan view only except at crossings. Some omissions and inaccuracies should be expected. Critical locations
should be field located ahead of time and Call-Before-You-Dig procedures should be implemented in all cases. Any discrepancies shall be reported to the Engineer prior to commencing with the work.

The plans may identify locations requiring “Dig and Verify”. Where specifically called out on the plans, or as directed by the City Engineer the Contractor shall “Dig and Verify” existing utilities, connection points and existing inverts. All required “Dig and Verify” shall be completed prior to any contractor activities at each improvement location. Any discrepancies found as the result of the “Dig and Verify” shall be immediately reported to the City Engineer. Unless otherwise directed by the City Engineer, the Contractor shall backfill and compact locations where the “Dig and Verify” was completed.

7-08.3(2)J, Transition Couplings
Add the following section:
(****** West Richland GSP)

When non-rigid transition couplings (i.e. Fernco couplings) are used for connections to existing sewer or storm pipe, the inclusion of controlled density fill will be required to prevent excessive settlement. Non-rigid couplings are only allowed on pipes 6-inches and smaller. Use of sewer repair couplings are required on pipes larger than 6-inches and do not require the use of controlled density fill.

7-08.3(3), Backfilling
The first two paragraphs of Section 7-08.3(3) are deleted and replaced with the following:
(****** West Richland GSP)

Placement of pipe zone and trench backfill shall satisfy the requirements of City of West Richland Standard Detail 4-2. Trenches shall be backfilled as soon after the pipe laying as possible.

Pipe zone backfill material in new roadways and areas outside of existing roadways shall be well graded clean earth or sand, free from clay, frozen clumps, pavement chunks, roots, rocks or clumps larger than 1-inch or moisture in excess of that permitting required compaction.

The fourth and fifth paragraphs are deleted and replaced with the following:

Backfill above the pipe zone shall be accomplished in such a manner that the pipe will not be shifted out of position nor damaged by impact or overloading. If the pipe is being placed in a new embankment, backfill above the pipe zone shall be placed in accordance with Section 2-03.3(14)C, Method C. Material excavated from the trench shall be used for backfill above the pipe zone, except material containing organic material, frozen lumps, wood, pavement chunk, or rocks larger than 6-inches in maximum dimension shall not be used. Materials determined by the City Engineer to be unsuitable for backfill at the time of excavation shall be removed and replaced with imported backfill material.

Section 7-08.3(3) is supplemented with the following:

All pipe zone and trench backfill shall be imported trench backfill when pipe is being installed inside an existing roadway. Imported trench backfill shall be placed in horizontal layers no more than 6-inches thick and compacted to 95-percent maximum density per AASHTO T180. No native material will be allowed.
7-08.4, Measurement
Section 7-08.4 is supplemented with the following:
(****** West Richland GSP)

“Shoring - Trench Safety Systems” shall be measured per linear foot.

All trench excavation shall be unclassified and a separate measurement will not be made for excavation, cement concrete and asphalt pavement sawcutting, dewatering, finishing and installing bedding, and backfill for pipelines. All costs for excavation, cement concrete and asphalt pavement sawcutting, dewatering, furnishing and installing bedding and backfill for pipelines and fittings including marking tape and tracer wire shall be incidental to the pipe installation except as follows:

“Imported Trench Backfill” shall be measured per cubic yard.

If no bid item exists for imported backfill or gravel backfill for pipe zone bedding it shall be considered incidental to an associated bid item.

No measurement will be made for pipe bedding for sewer pipe and shall be considered incidental to an associated bid item.

No measurement will be made for gravel backfill for pipe zone bedding for over-excavated trenched.

No measurement shall be made for “Dig and Verify”.

There will be no measurement for dewatering unless specified in these specifications and shall be considered incidental to the work being performed.

7-08.5, Payment
Section 7-08.5 is supplemented with the following:
(****** West Richland GSP)

“Shoring - Trench Safety Systems”, per linear foot. The unit Contract price per linear foot for “Shoring - Trench Safety Systems” for all trenches 4-foot or greater in depth measured through structures shall be full compensation for furnishing all labor, equipment, materials and all other incidentals to meet the requirements of the Washington Industrial Safety and Health Act, Chapter 49.17 RCW and Chapter 396-155 WAC, including all other applicable local contracting agency and federal laws and regulations.

“Imported Trench Backfill”, per cubic yard. The unit contract price per cubic yard for “Imported Trench Backfill” shall be full pay for all materials, equipment and labor to remove and dispose of native material, backfill and compact the backfill zone of trench with crushed surfacing top course as detailed in the Plans.

SECTION 7-09, WATER MAINS
7-09.1, Description
Section 7-09.1 is supplemented with the following:
(****** West Richland GSP)

Work shall include installing and compacting imported trench backfill.

Add the following Section:
(****** West Richland GSP)
7-09.1(11)F, Imported Trench Backfill
Imported trench backfill includes materials from invert of pipe extending up to the underside of the pavement or surfacing materials. Imported trench backfill shall only be used when inside an existing roadway prism or when specified in the plans.

7-09.2, Materials
Section 7-09.2 is supplemented with the following:
(****** West Richland GSP)

Materials shall meet the requirements of the Standard Details.

Gravel Backfill for Pipe Zone Bedding 9-03.9(3), Crushed Surfacing Top Course
Imported Trench Backfill 9-03.9(3), Crushed Surfacing Top Course
Blow Off Assemblies In accordance with the details in the Plans.
Controlled Density Fill 2-09.3(1)E

All water main shall be AWWA C900 PVC DR18, C905 PVC DR 18, or Ductile Iron Class 50. PVC pipe shall not be over 2 years (24 months) old and shall not be sun faded.

All ductile iron for the following shall be domestic products made and stamped in the USA: pipe fittings, bolts, accessory kits, valve boxes, rings and covers, lids, grates, and monument frames and covers.

All wetted materials, including rubbers, plastics, adhesives, lubricants, etc. must meet NSF Standard 61 Lead Leach Limit of allowable lead at 5ppb maximum.

Tracer Wire
Tracer wire shall be 12 gauge solid copper wire, 600V, with blue UF insulator and nominal thickness of 0.060".

Pipe Zone Backfill (In new roadways or outside of roadway prism)
Pipe zone backfill for water pipe shall be well graded clean earth or sand, free from clay, frozen lumps, pavement chunks, roots, rocks or lumps larger than 1-inch or moisture in excess of that permitting required compaction. Materials determined by the City Engineer to be unsuitable for backfill at the time of excavation shall be removed and replaced with approved imported backfill material.

Trench Backfill (In new roadways or outside of roadway prism)
Water pipe may be backfilled above the pipe zone with select native material excavated from the trench except organic material, frozen lumps, wood, pavement chunks, or rocks larger than 6-inches in maximum dimension shall not be used. Materials determined by the City Engineer to be unsuitable for backfill at the time of excavation shall be removed and replaced with approved imported backfill material.

Fittings
Fittings for ductile iron and PVC pipe shall be cast or ductile iron. Cast iron fittings shall conform to the quality and wall thickness specified in the American Standard for “Gray Iron and Ductile Iron Fittings, 3-inch through 48-inch for Water and Other Liquids”. All cast iron fittings, 12-inches in diameter or larger, shall be lined with cement mortar in accordance with the requirements of the American Standard for “Cement Mortar Lining for Cast Iron and Ductile Iron Pipe and Fittings for Water” (AWWA C104).
Ductile iron fittings shall be compact or standard bell and spigot, mechanical joint, or flanged as required on the plans. Standard fittings shall be in accordance with AWWA C110, “Gray Iron and Ductile Iron Fittings, 3-inch through 48-Inch for Water and Other Liquids”. Ductile iron compact fittings may be used in sizes through 12-inches. The fittings shall conform to all requirements of AWWA Standard C153 for ductile iron compact fittings 3-inch through 12-inch. The bell and spigot joints shall be rubber gasket sealed joints in accordance with AWWA C111. Ductile iron fittings, 12-inches inside diameter or greater, shall be mortar lined in accordance with AWWA C104.

Connections between pipe and fitting, or pipe and valve shall be flexible coupling, “Ring-Tite”, “Fluid-Tite”, or an approved equal, except for installation of a cut-in tee where flanged coupling adapters shall be used to connect the tee to an existing main.

7-09.3, Construction Requirements
7-09.3(1), General
Section 7-09.3(1) is supplemented with the following:
(****** West Richland GSP)

All existing tees, blow offs, valves and miscellaneous fittings removed as part of construction are to be salvaged and shall remain the ownership of the City unless directed otherwise. No existing materials may be re-used unless specified in the plans or specifications.

7-09.3(5), Grade and Alignment
The first sentence of the third paragraph of Section 7-09.3(5) is deleted and replaced with the following:
(****** West Richland GSP)

The depth of trenching for water mains shall be such as to give a minimum cover of 42-inches over the top of the pipe unless otherwise specified in the plans or specifications.

7-09.3(7), Trench Excavation
Section 7-09.3(7) is supplemented with the following:
(****** West Richland GSP)

The Contractor shall provide all labor, equipment materials and all other incidentals necessary to meet the requirements of the Washington Industrial Safety and Health Act, Chapter 49.17 RCW, including all requirements for trench, structure and related excavation shoring and safety systems.

The Contractor shall be responsible for locating and protecting existing utilities as per Section 1-07.17. The Contractor shall make any advance explorations as necessary (even though not specifically identified on the drawings) in order to verify connection requirements, properly plan the installation of the pipe to the design line and grade, and achieve a uniform grade and horizontal alignment.

Sewer and storm drain mains are typically shown in the profile as well as on the plan view. Other utilities are typically shown in plan view only except at crossings. Some omissions and inaccuracies should be expected. Critical locations shall be field located ahead of time and Call-Before-You-Dig procedures should be implemented in all cases. Any discrepancies shall be reported to the Engineer prior to commencing with the work.

7-09.3(8), Removal and Replacement of Unsuitable Materials
Delete the first and second paragraph of Section 7-09.3(8) and replace with the following:

(****** West Richland GSP)

If when excavating the trench for water mains, the bottom of the trench exposes peat, soft clay, quicksand, silty soils, find sandy soils or other unsuitable foundation material, such material shall be removed to the depth directed by the City Engineer and backfilled with gravel backfill for pipe zone bedding.

Materials removed from the trench that is unsuitable for pipe zone and/or trench backfill shall be removed and hauled to a waste site. If suitable material is not available within the limits of the project for backfilling the trench, the Contractor shall furnish pipe zone and trench backfill meeting the material requirements of City of West Richland Standard Details and Section 7-09.2.

7-09.3(9), Bedding the Pipe
Section 7-09.3(9) is deleted and replaced with the following:

(****** West Richland GSP)

The Contractor may use existing trench material if it meets the material requirements stated in Section 7-09.2 for pipe zone backfill. If material is not present on-site meeting these requirements, the Contractor may import material meeting the requirements or use gravel backfill for pipe zone. Bedding shall be rammed and tamped around the pipe to 95-percent maximum density by approved hand held tools, so as to provide firm and uniform support for the full length of the pipe, valves, and fittings. Care shall be taken to prevent any damage to the pipe or its protective coating.

7-09.3(10), Backfilling Trenches
Section 7-09.3(10) is deleted and replaced with the following:

(****** West Richland GSP)

Pipe zone backfill and trench backfill material in new roadways and areas outside of the existing roadway prism shall meet the requirements of City of West Richland Standard Details and Section 7-09.2.

Pipe zone backfill shall be defined as the area from invert of pipe to 12-inches over the top of the pipe. Pipe zone backfill material when in an existing roadway shall be imported trench backfill. Backfill shall be brought up simultaneously on each side of the pipe to the top of the pipe zone and compacted in a manner to avoid damaging or disturbing the completed pipe.

Trench backfill shall be placed by dumping backfill into the trench by any method at the option of the Contractor, and shall be compacted as specified in Section 7-09.3(11).

All pipe zone and trench backfill shall be imported trench backfill when pipe is being installed inside an existing roadway.

7-09.3(11), Compaction of Backfill
Section 7-09.3(11) is suppmented with the following:

(****** West Richland GSP)

Backfill above the pipe zone shall be accomplished in such a manner the pipe will not be shifted out of position nor damaged by impact or overloading.

7-09.3(12), General Pipe Installation
Section 7-09.3(12) is supplemented with the following:

(****** West Richland GSP)

The Contractor shall be responsible for locating and protecting existing utilities as per Section 1-07.17. The Contractor shall make any advance explorations as necessary (even though not specifically identified on the drawings) in order to verify connection requirements, properly plan the installation of the pipe to the design line and grade, and achieve a uniform grade and horizontal alignment.

Sewer and storm drain mains are typically shown in profile as well as on the plan view. Other utilities are typically shown in plan view only, except at crossings. Some omissions and inaccuracies should be expected. Critical locations shall be field located ahead of time and Call-Before-You-Dig procedures should be implemented in all cases. Any discrepancies shall be reported to the Engineer prior to commencing with the work.

The Plans may identify locations requiring “Dig and Verify.” Where specially called for on the Plans, or as directed by the Engineer the Contractor shall “Dig and Verify” existing utilities, connection points and existing inverts. A “Dig and Verify” shall be completed prior all Contractor activities that may be impacted or be affected by the findings of the verification. Any discrepancies found as the result of the “Dig and Verify” shall be immediately reported to the Engineer. Unless otherwise directed to the Engineer, the Contractor shall backfill and compact location where the “Dig and Verify” was completed.

When pipe will cross under an AC water main a section of the AC water main shall be removed and replaced with a section of City Standard C900 PVC water pipe prior to excavating under the water main. The length of replacement is estimated to span the trench and to a minimum of five feet from each side of the trench. After completion of the excavation and backfill, the repair couplings shall remain firmly on undisturbed ground or the Contractor will be required to replace the water repair.

7-09.3(15), Laying Pipe on Curves

Section 7-09.3(15) is supplemented with the following:

(****** West Richland GSP)

Pipe may be deflected 50-percent of the manufacture’s recommendations at pipe joints only. Bending of pipe will not be allowed.

7-09.3(19)A, Connections to Existing Mains

Section 7-09.3(19)A is supplemented with the following:

(****** West Richland GSP)

The Contractor shall coordinate with the City of West Richland a minimum of 3 working days prior to all shut downs required for water main construction. The Contractor shall not operate any water valves.

Cut-in tees shall be in accordance with the requirements of City of West Richland Standard Detail 4-5.

All connections to existing water mains including live taps are to be completed by the Contractor with the supervision of the City water division maintenance personnel. The Contractor shall supply all fittings, couplings and adaptors that may be required for all connections to the existing mains in addition to adequate de-watering pump(s) and trench shoring. The Contractor shall be responsible for all
installation work, including locating, excavating, backfilling and installing thrust blocks at each point of connection.

The City will allow an initial single connection to an existing water main for loading and flushing of new water mains. This connection will require the installation of a new in-line isolation valve between the existing and new water mains. This valve shall only be operated by City Personnel. All other proposed connections shall be terminated within 10-feet of the proposed connection point and temporarily terminated with a temporary blow-off. Temporary blow-off shall be 2-inch for water mains up to 8-inches. A 4-inch blow-off shall be used for 10-inch water mains and larger.

No live taps will be allowed on existing AC waterlines. When connection is required (tee, cross), fitting must be cut in. A full stick of C900 PVC waterline must be installed in each direction of fitting along length of existing AC waterline. PVC shall be connected to AC waterline with

At connection points to existing mains the Contractor shall have installed, sterilized, flushed and tested, per Sections 7-09.3(23) and 7-09.3(24), the new main up to a maximum 10 feet within the connection point to the existing main. The pipe used to complete the connection shall be swabbed and bagged per these Standard Specifications. The Contractor shall "Dig and Verify" the pipe material type, size, location and elevation of the tie-in prior to installing the new waterline. The new pipe should be installed at a location and elevation per these Standard Specifications to facilitate a smooth transition to the existing line.

The Contractor shall notify all water users affected by a planned water shutdown a minimum of 48-hours in advance of the shutdown. The notification shall be in writing. **NO TIE-INS WILL BE SCHEDULED FOR THE FIRST WORKING DAY AFTER A WEEKEND OR HOLIDAY**

7-09.3(20), Detectable Marking Tape
Section 7-09.3(20) is supplemented with the following:

(****** West Richland GSP)

All waterlines shall be marked with detectable marking tape.

Add the following new section:

(****** West Richland GSP)

7-09.3(20)A, Tracer Wire
The Contractor shall install a tracer wire on all water mains including fire hydrant mains. Tracer wire shall be attached to the top of the water pipe by use of an industrial adhesive tape (i.e. Duct Tape) at a minimum of 3 locations within a 20-foot length. Tape shall extend from spring line to spring line across the top of the pipe. The tracer wire shall be installed per City of West Richland Standard Detail 4-3. Bare wire contact points shall be provided at valve boxes, air release and blow-off locations.

7-09.3(21), Concrete Thrust Blocking
Section 7-09.3(21) is supplemented with the following:

(****** West Richland GSP)
No bag concrete mix will be allowed for concrete thrust blocks.

7-09.3(22), Blowoff Assemblies
Section 7-09.3(22) is supplemented with the following:
(****** West Richland GSP)

Blowoff assemblies shall be constructed at the locations shown in the plans and in accordance to the City of West Richland Standard Detail 4-1A and 4-1B. City of West Richland Standard Detail 4-1A (2-Inch Blowoff) shall be used on water mains 8-inches or smaller. City of West Richland Standard Detail 4-1B (4-inch Blowoff) shall be used on all water mains 10-inch or larger.

The Contractor shall supply the City Inspector the new blowoff cap and will be re-issued from the City a modified cap which will be painted blue and have a nut welded on the top for easy installation and removal.

7-09.3(23), Hydrostatic Pressure Testing
Section 7-09.3(23) is supplemented with the following:
(****** West Richland GSP)

Hydrostatic Pressure Tests shall not be performed until Section 7-09.3(24) has been completed and acceptable results have been obtained.

All fire hydrants within the area being tested shall be tested in the wide open condition.

The first paragraph in Section 7-09.3(23) is deleted in its entirety and replaced with the following:

Water main and appurtenances shall be tested under a hydrostatic pressure of 150 psi with zero (0) allowable leakage. The Contractor shall submit a testing plan identifying the sections of pipe to be tested at the Pre-Construction Conference. Sections tested shall normally be limited to 1,500 feet.

All additional fittings required for the testing, including temporary blowoff assemblies and joint restraints not identified on the Plans and shown in the proposal shall be furnished by the Contractor for the hydrostatic pressure tests.

The seventh, eighth and ninth paragraphs of Section 7-09.3(23) are replaced with the following:

Tests of water main sections shall be for a period one hour after reaching test pressure.

Allowable leakage: None

Add the following Section:
(****** West Richland GSP)

7-09.3(23)D, Building Fire Line Test Procedures
1. **Pressure Test**: Test for 2 hours at 200 PSI. If a loss, refer, to allowable leakage description on Contractor’s Material and Test Certificate for Underground Piping Form as required by the latest edition of the NFPA Standard.
2. **Flush**: After the underground fire line passes the pressure test the flushing of the pipe from the main to the flange can be scheduled. All debris that is in the
underground pipe must be flushed clear. A burlap bag is required to collect debris from the pipe.

3. **Flow Test:** When all debris has been flushed and the pipe is flowing clear, flow test must be taken to assure the pipe is flowing the minimum gallons per minute:
   - 4" Pipe – 390 GPM
   - 6" Pipe – 880 GPM
   - 8" Pipe – 1560 GPM

Flow from the flange must be directed in a safe manner as not to flood the surrounding area. The Contractor will conduct the flow test with a City representative present. The contractor shall supply a pedo gauge and measure the flow.

If the flushing can be completed without reducing the pipe size and the P.I. valve open completely, then gauging the flow for GPM will not be required.

4. **Health Sample:** The City Water Department shall obtain a health sample per the requirements of the City Standard Specifications.

5. **Soft Seat Check Valve:** If a soft seat check valve is required, the Contractor must contact the City Cross Connection Specialist to inspect the valve prior to installation.

**7-09.3(24), Disinfection of Water Mains**
Section 7-09.3(24) is supplemented with the following:
(****** West Richland GSP)

The City uses AWWA Standard C651 as a guideline for disinfection of water mains.

**7-09.3(24)A, Flushing**
Section 7-09.3(24)A is supplemented with the following:
(****** West Richland GSP)

Dry calcium chloride shall be used for disinfection of the pipes unless an alternate has been approved by the City Engineer.

Temporary blowoffs used for flushing shall be a minimum of 2-inches for water mains 8-inches and less and a minimum of 4-inches blowoff for water mains 10-inches and larger.

The City shall perform all water line flushing. In addition, the City will meter the water at the point of discharge. The Contractor shall submit a flushing plan identifying the sections of pipe to be flushed at the pre-construction conference. The plan shall identify the location of the water source for the water line flushing and location where the flushed water will be discharged.

Only one connection to the City water main is allowed until satisfactory health samples and pressure tests have been approved by the City. All fittings required for the testing, including temporary blow-off assemblies, joint restraints and discharge hoses not identified on the plans shall be furnished by the Contractor for the water line flushing. The Contractor shall schedule all water line flushing with the City of West Richland a minimum of 3 working days in advance.

The City will operate all valves during the flushing operation.
The fifth paragraph shall be deleted in its entirety.

No water from flushing will be permitted in the sanitary sewer system.

The Contractor shall be fully responsible for damage resulting from flushing water.

**7-09.3(24)N, Final Flushing and Testing**

Section 7-09.3(24)N is supplemented with the following:

(****** West Richland GSP)

After flushing has been accomplished to the satisfaction of the City of West Richland Water Supervisor, a bacteriological test will be performed by City personnel. Testing shall correspond to each length of water main to be hydrostatic tested. Should the initial treatment result in an unsatisfactory bacteriological test, the chlorination process procedure shall be repeated by the Contractor until satisfactory results are obtained. The Contractor will be responsible to reimburse the City for all incurred costs including labor for additional testing as a result of initial failed tests.

Add the following Section

(****** West Richland GSP)

**7-09.3(24)P, Loading**

The Contractor shall schedule with the City to load the water main once the water main, hydrants, temporary blowoffs, testing ports, etc., have been installed. A minimum of 2-working days’ notice shall be given for scheduling loading the water main. Once the City Engineer has approved all required infrastructure has been installed and all system valves are accessible, he will schedule the City crews to load the water main. The City will slowly fill the system and bleed as much air as possible out of the new line, loading the main line, services, hydrants, and all other infrastructure related to the water main. Once the system has been filled, the water main must disinfect (bake) for a minimum of 24 hours. After which time the City will return to the site to flush the water main per the requirements of Section 7-03.3(24)A.

**7-09.4, Measurement**

Section 7-09.4 is supplemented with the following:

(****** West Richland GSP)

All trench excavation shall be unclassified and a separate measurement will not be made for any excavation, cement concrete and asphalt pavement sawing, removal and disposal, dewatering, furnishing and installing bedding, and backfill for pipelines unless specified. All cost for excavation, cement concrete and asphalt pavement sawing, removal and disposal, dewatering, furnishing and installing bedding, and backfill for pipelines and fittings including detectable marking tape and tracer wire shall be incidental to the pipe installation except as set forth in these specifications and plans.

Fittings of the type and size listed on the bid proposal schedule will be measured per each furnished and installed.

No measurement will be made for any required adaptors and shall be considered incidental to an associated bid item.

“Connect to Existing Water Main” will be measured per each connection listed in the bid proposal.
“Shoring - Trench Safety Systems” will be measured by the linear foot.

“Imported Trench Backfill” will be measured per cubic yard.

“__In. Temporary Blowoff Assembly”, shall be measured per each.

A separate measurement will not be made for digging and verifying for installation of water mains, valves, fittings, services and appurtenances.

A separate measurement will not be made for water line flushing and testing. All associated cost for water line flushing and testing shall be included in the various related items in the bid proposal.

7-09.5 Payment
Section 7-09.5 is supplemented with the following:

(****** West Richland GSP)

“____ Pipe for Water Main _____ In. Diam.”, per lineal foot.

The unit contract price per lineal foot for “____ Pipe for Water Main _____ In. Diam.” shall be full pay for all work to complete the installation of the water main including but not limited to trench excavation, bedding, laying and jointing pipe, backfilling, testing, flushing, disinfecting the pipeline, and cleanup.

“____ In. X ____In. X ____In. Cross”, per each,

“____ In. X ____In. X ____In. Tee”, per each,

“____ In. ____Degree Bend”, per each,

The unit contract price per each specified fittings shall be full pay to furnish all labor, materials and equipment for installation of the specified fitting including but not limited to excavation, bedding, laying and jointing pipe and fittings, backfilling, testing, flushing, disinfecting the pipeline, specified thrust restraint and clean up.

“Connect to Existing Water Main”, per each.

The unit contract price per each for “Connect to Existing Water Main” shall be full pay to provide all labor, materials and equipment for the connections to include excavation and backfill, and any connection fittings not listed in the bid proposal.


The unit contract price per linear foot for “Shoring - Trench Safety Systems,” for all trenches 4 foot or greater in depth measured through structures, shall be full compensation for furnishing all labor, equipment, materials and all other incidentals to meet the requirements of the Washington Industrial Safety and Health Act, Chapter 49.17 RCW and Chapter 296-155 WAC, including all other applicable local, Contracting Agency and Federal laws and regulations.

“Imported Trench Backfill”, per cubic yard.

The unit contract price per cubic yard for Imported Trench Backfill” shall be full pay for all materials, equipment and labor to remove and dispose of native material, bed, backfill and compact the bedding and backfill zone of trench with crushed surfacing top course as detailed in the Plans.

“__In. Temporary Blowoff Assembly” per each.

The unit contract price per each for “__In. Temporary Blowoff Assembly” shall be full pay for all labor, materials, and equipment required to complete the work as detailed in the plans and specifications including but not limited to trenching and backfill, valves, fittings, pipe, thrust blocks, adjusting of valve boxes to finished grade, and drain rock.
SECTION 7-12, VALVES FOR WATER MAINS

7-12.1, Description
Section 7-12.1 is supplemented with the following:
(****** West Richland GSP)

Work shall include adjusting of existing valve boxes to finished grade.

7-12.2, Materials
Section 7-12.2 is supplemented with the following:
(****** West Richland GSP)

Materials shall meet the requirements of the City of West Richland Standard Details.

All ductile iron for the valve boxes, lids, and covers shall be domestic products made in and stamped USA.

All wetted materials, including rubbers, plastics, adhesives, lubricants, etc. must meet NSF Standard 61 Lead Leach Limit of allowable lead at 5ppb maximum.

All externally exposed fasteners on valves shall be type 304 stainless steel.

Unless otherwise specified in the plans or specifications all valves 12-inch and smaller shall be gate valves and all valves larger than 12-inches shall be butterfly valves.

Tapping Sleeves
Flanges shall be ductile with gridded gaskets surrounding the entire pipe. Bolts and nuts shall be 18-8 Type 304 Stainless Steel.

7-12.3, Construction Requirements
Section 7-12.3 is supplemented with the following:
(****** West Richland GSP)

All valves shown on the plans adjacent to tees, crosses, or similar fittings shall be flanged to such fittings. The flanges on valves and tee (or crosses) shall be plain faced. Flanges shall be faced and drilled to 150 pound American Standard dimensions.

Only City personnel are authorized to operate any existing or new water valves.

Valve boxes shall be installed per City of West Richland Standard Detail 4-3. Misaligned valve boxes shall be excavated, plumbed and backfilled at the Contractor's expense. The Contractor shall run tracer wire outside of lower box and inside top box. The Contractor shall use extreme caution to not nick, pinch or damage the tracer wire during installation and/or adjustment of valve box. Valve box shall be adjusted to finished grade per City of West Richland Standard Detail 3-4.

Live tap tapping sleeves shall be in accordance with the requirements of City of West Richland Standard Detail 4-5. The Contractor shall be required to install resilient seated gate valves and tapping sleeves when making live taps on mains. The Contractor shall perform all live taps. The City will allow the Contractor to make taps on under the City Inspector's supervision. The City Inspector must be notified a minimum of 2 working days prior to the tap date. Tapping saddles shall be pressure tested prior to performing the tap. Tapping sleeve shall be a minimum of 3-feet from pipe bell and a minimum of 1-foot from spigot end insertion point. Tapping sleeve shall be air tested with 15 PSI or 150 PSI hydrostatic for 5 minutes prior to tapping. The Contractor must
produce the coupon to the City Inspector. Size on size taps shall require extended tapping sleeves and be pre-approved by the City Engineer. No live taps will be allowed on existing AC waterlines.

All existing valves, air release valves, and valve boxes removed as part of construction are to be salvaged to the City unless otherwise directed.

Valve nut extensions shall be required on any valve measuring more than 3 feet from top of valve box to top of valve nut.

**Adjust Water Valve Box**
Existing water valve boxes shall be referenced by the Contractor prior to being lowered for construction activities. Water valve boxes shall not be adjusted to finished grade until paving has been completed, at which time, reference points shall be used to established valve locations for final adjustment. Adjustments must be fully complete within ten (10) working days after paving and must be fully complete within three (3) working days from the beginning of the adjustment. All adjustment locations must be marked with reflective cones. Adjustments shall meet the requirements of City of West Richland Standard Detail 3-4 and 4-3.

Add the following Section:
(****** West Richland GSP)

7-12.3(2)A, Air Vacuum Release Valves
Air vacuum release valves shall be placed at high points in the water main, as shown in the plans or as required by the City Engineer. Air vacuum release valves shall be installed per City of West Richland Standard Detail 4-7.

7-12.4, Measurement
Section 7-12.4 is supplemented with the following:
(****** West Richland GSP)

“Air Vacuum Release Valve” shall be measured per each.
“__In. X __In. Live Tap” shall be measured per each.
“Adjust Water Valve Box” shall be measured per each.

Adjustment of valve boxes on new valves will not be measured and shall be considered incidental to an associated bid item.

No measurement will be made for required valve nut extensions and shall be considered incidental to an associated bid item.

7-12.5, Payment
Section 7-12.5 is supplemented with the following:
(****** West Richland GSP)

“Air Vacuum Release Valve”, per each.
The unit contract price per each for “Air Vacuum Release Valve” shall be full pay for all labor, material, and equipment including but not limited to trenching and backfill, valves, pipe, fittings, valve chamber, adjustment of valve chamber rings and cover to finished grade, pea gravel, concrete, guard post, frames, covers, and all other incidental work required to complete the work.

“__In. X __In. Live Tap”, per each.
The unit contract price per each for “__In. X __In. Live Tap” shall be full pay for all labor, material, and equipment for the installation of the live tap including but not limited to the tapping sleeve. The auxiliary gate valve shall be paid for under an associated bid item.

“Adjust Water Valve Box”, per each.
The unit contract price per each for “Adjust Water Valve Box” shall be full pay for all labor, material and equipment to adjust existing water valve boxes to finished grade.

SECTION 7-14, HYDRANTS
7-14.2, Materials
Section 7-14.2 is supplemented with the following:
(****** West Richland GSP)

All ductile iron shall be domestic products made in and stamped USA. Fire hydrants shall meet the requirements stated in City of West Richland Materials List and Standard Details. Fire hydrants shall be painted OSHA Safety Yellow above ground line. Hydrant paint shall be Quickset Enamel No. 3472 Hydrant Yellow as manufactured by Farwest Paint Manufacturing Company, 4522 South 133nd, Tukwila, WA 98168 or approved equal.

All wetted materials, including rubbers, plastics, adhesives, lubricants, etc. must meet NSF Standard 61 Lead Leach Limit of allowable lead at 5ppb maximum.

The main valve opening shall be 5-1/4-inch and two 2-1/2-inch hose nozzles with 4 NST per inch and on 4-1/2-inch Steamer Port with 4 NST per inch. Hydrant operating nuts and hydrant caps shall be 1-1/2-Inch. The hydrant waste orifice at the base of the hydrant shall be bronze and connected to the hydrant by means of a bronze on bronze fitting to prevent rust and normal soil corrosion from plugging or interfering with its operation. Hydrants shall be of standard manufacture and of a pattern approved by the City. The name or mark of the manufacture, size of the valve opening, and year made shall be plainly cast in raised letters and so placed on the hydrant barrel as to be visible after the hydrant has been installed.

The hydrant shall be fitted with a permanent hydrant adapter, designed with metal sealing surfaces for permanent mounting. The adaptor shall be 5-inch Storz x 4-1/2-inch NH, equipped with cap and connector cable. The permanent hydrant adapter shall be Harrington, Inc., HPHA 5-45 NH or approved equal.

7-14.3, Construction Requirements
Section 7-14.3 is supplemented with the follows:
(****** West Richland GSP)

All fittings and joints shall be restrained from lateral tee to assembly. Shackle rods will not be allowed.

Set all hydrants plumb and nozzles parallel with, or at right angles to, the curb, with the pumper nozzle facing the curb. Set hydrants so the middle of the traffic flange is 2-inches to 6-inches above finished ground or sidewalk level to clear the bolts and nuts. Hydrants shall be ordered with the bury depth required to meet the above specification. No extensions will be allowed.

When fire hydrants are not protected by a curb, hydrants shall be protected by guard posts per City of West Richland Standard Detail 4-4B.

New hydrants or existing hydrants not active shall be hooded until the hydrant is operational.
All existing valves and hydrants removed as part of construction and to be salvaged shall remain the ownership of the City unless directed otherwise. No existing hydrants or valve shall be re-used unless specifically stated in the plans or specifications.

Area around hydrant and 1 foot outside of hydrant guard posts shall be covered with 2-inches of 5/8-inch minus crushed surfacing top course.

**Hydrant Guard Posts**

Hydrant Guard Posts shall be installed on specified fire hydrants shown in the plans per City of West Richland Detail 4-4B.

**7-14.4, Measurement**

Section 7-14.4 is supplemented with the following:

(****** West Richland GSP)

No measurement will be made for crushed surfacing top course around hydrant and shall be considered incidental to an associated bid item.

“Hydrant Guard Post” shall be measured per each.

“Hydrant Assembly” shall be measured per each to also include all required fitting and joint restraints.

**7-14.5, Payment**

Section 7-14.5 is supplemented with the following:

“Hydrant Assembly”, per each.

The unit contract price per each for “Hydrant Assembly” shall be full pay for all work to furnish and install the hydrant assemblies as stated in Section 7-14.3 to also include fitting and joint restraints.

**SECTION 7-15, SERVICE CONNECTIONS**

**7-15.1, Description**

Section 7-15.1 is supplemented with the following:

(****** West Richland GSP)

The work shall also include connection of new water services to existing private service line. The work may include conflicts and modifications to cross connection devices and irrigation manifold. Work shall include adjustments and modifications to both systems when required.

**7-15.2, Materials**

Section 7-15.2 is supplemented with the following:

(****** West Richland GSP)

Materials shall meet the requirements of the Standard Details.

Service lines for 1-inch meters may be copper or polyethylene pressure pipe P.R. 200 PSI-SDR9, meeting the requirements of ASTM D 2737 and AWWA C901 with copper tube sized OD. Service lines for 1-1/2-Inch and 2-inch water services shall both be 2-Inch polyethylene.

Materials used for modifications to irrigation or cross connection facilities shall be of equal or better quality unless specified otherwise.
Section 7-15.3 is supplemented with the following:

(****** West Richland GSP)

On new mains not loaded with water the main may be tapped using a hole saw. After the tap is complete, the Contractor must ensure the coupon has not fallen into the pipe and all debris shall be cleaned from the hole due to the tap.

When tapping a main loaded with water or existing main, a live tapping machine must be used. When tapping C-900 (PVC) the boring tool must be a shell cutter designed specifically for tapping plastic. The coupon must be retained in the cutter eliminating the possibility of it being left inside the watermain. All other main types (AC, steel, ductile iron, etc.) may be tapped using a drill bit made for the type of pipe being tapped.

The Contractor shall remove existing meter box, setter and meters, and salvage to the City shops. The Contractor shall install a temporary “Jumper” line from the City service line to the residential line with a temporary ball valve or shut off device. The “Jumper” line shall have enough play in the line to allow for installation of new meter setter and meter box to be installed in exact location of previous meter box. Work shall be scheduled so no single “Jumper” line is in use for more than 10 working days unless approved otherwise by the City. Once the new setters have been installed and the new waterline has passed all required tests, the temporary ball valve or shut off device in the “Jumper” line shall be closed and abandoned in place and the residential service line shall be changed over to the new meter setter.

The Contractor is responsible to retain and protect existing irrigation and cross connection facilities at each residence if present. Any adjustment or relocation of either facility due to the new service shall be the responsibility of the Contractor.

The Contractor shall install all water services and mainline. All services must be health sampled and pressure tested prior to connecting to any businesses and homes. The Contractor shall provide extra width trench at mainline as required to install the saddle. The saddle shall be installed a minimum of two (2) feet from all hubs, bells and joints.

The Contractor is responsible to reconnect new services to existing services. Where existing water services are galvanized, the Contractor shall thread the service and install a dielectric union between copper and galvanized connection. Where the existing service to the business and/or home is found to be deteriorated, the owner shall be notified in writing by the Contractor of the condition of the existing service and the limits of responsibilities as noted herein. The water service pipe shall be left exposed until the owner is shown the condition of the pipe. The Contractor shall then carefully bed and backfill the connection. The Contractor shall be fully responsible for all leaks in the existing owner service within 5-feet of the work connection for a period of one year and within 20-feet for a period of five days. Other leaks shall be the responsibilities of the property owner. Meter boxes shall be adjusted to grade and to slope of existing ground.

Copper and polyethylene service pipe shall be laid without kinking or buckling on short radius bends. Tubing should be laid as a continuous piece from service saddle or corporation stop to the A.M.S. Splices shall not be allowed unless approved by the engineer. Tubing showing signs of damage, out of round, or laid with kinked or buckling shall be rejected.

The Contractor shall supply and install all parts required to connect new service to existing service line. Existing service lines may vary. The Contractor is to deliver new setter to the City shop a minimum of two weeks prior to installation for City crews to jig meter setters. The Contractor shall then pick them up from the shop and handle with care to keep adjusted shape of setter. The
Contractor shall give the City one working day notice of each service connection. The City will install new meter or remove existing meter and install in new Contractor installed setter.

The Contractor shall submit a written plan on how they intend to swap the existing water services to the new services while limiting the time each business and/or home is without water. This plan must be submitted to the City 5 working days prior to work being performed.

The construction plans typically do not show the existing improvements behind the curb and sidewalk (if walk is present). The Contractor shall make himself aware of the general condition and any special conditions that may exist. All fences, lawn, irrigation systems, rock/gravel/asphalt areas and all miscellaneous landscaping shall be restored in accordance with industrial standards and shall be of equal or better quality then the existing improvements. The Contractor shall take necessary measures to limit the impact to the existing improvements as much as possible, including tunneling or missiling under major tree roots, curbs, walks, fences, and similar obstructions.

The Contractor is responsible to water any lawn if the sprinkler line is out of service due to the Contractor’s work. Any damage done to the lawn due to broken sprinkler lines will be repaired and/or replaced at the Contractors expense.

Any water meter box which is located in a driveway or potential path of a vehicle or heavy equipment must have a ductile iron lid.

New 1-inch, 1-1/2-inch and 2-inch water meter boxes shall be installed per City of West Richland Standard Detail 4-9 and 4-11. Meter boxes shall not be placed on corners with other utilities unless adequate spacing is achieved and approved by the City Engineer. Meter boxes shall be set square with the roadway and level with the adjacent sidewalk and/or lawn. A total of four (4) self-tapping screws shall be installed 3-inches each side from the center of the box on each long side of the box. Screws shall be long enough to attach the top meter box to the lower box. Care shall be taken when compacting around the meter box to limit deflection of the box. Excess deflection will require the removal and re-compaction. It is recommended a support 2x4 board be installed inside the box to aid in temporary support during compaction. Support board shall be removed after compaction efforts are complete.

Service lines using polyethylene piping required installation of tracer wire. The tracer wire shall be installed with the service line and terminated in the water meter box. Tracer wire shall meet the requirements of Section 7-09.2.

When a new water service is being installed for future use, service pipe shall be extended from the back of the new meter setter a total of 18-feet. End of service pipe shall be capped and marked with a pressure treated 2x4 painted blue. Extreme caution shall be taken to ensure service stubs are installed with a minimum of 36-inches of cover meeting plumbing code requirements.

Water service lines crossing existing curb shall have a “W” ground in the face of the curb. New curb installed over water service lines shall have a “W” stamped in the curb while the concrete is still wet.

**7-15.4, Measurement**

Section 7-15.4 is supplemented with the following:

(***** West Richland GSP)

“Service Connection ___In. Diam.”, shall be measured per each.
No measurement will be made for ductile iron lids when required and shall be considered incidental to an associated bid item.

7-15.5, Payment
Section 7-15.5 is supplemented with the following:
(*West Richland GSP*)

“Service Connection __In. Diam.,” per each.
The unit contract price per each for “Service Connection __In. Diam.” Shall be full pay for removal and salvage to the City the existing meter box and lid, temporary supply line, supplying and installing a complete water service and any other work required for modifications to existing irrigation and cross connection facilities.

SECTION 7-17, SANITARY SEWERS

7-17.2, Materials
Section 7-17.2 is supplemented with the following:
(*West Richland GSP*)

Materials shall meet the requirements of the City of West Richland Materials List and Standard Details.

Unless otherwise specified in the specifications or on the plans, all sewer pipe 15-inch diameter or smaller and with less than 15-feet of cover shall be polyvinyl chloride (PVC) SDR 35, ASTM D3034. Sewer mains 15-inch diameter or smaller with more than 15-feet of cover shall be PVC SDR 26 (PS115), ASTM D3034. All sewer mains 18-inch diameter to 48-inch diameter shall be PS115, ASTM F679.

Pipe size 15-In. and smaller, less than 15-foot cover
Pipe size 15-In and smaller, more than 15-foot cover
Pipe size 18-In. Diam. to 48-In. Diam.

PVC SDR 35, ASTM D3034
PVC SDR 26(PS115), ASTM D3034
PVC SDR 26(PS115 ASTM F679

7-17.3, Construction Requirements

7-17.3(1), Protection of Existing Sewerage Facilities
Section 7-17.3(1) is supplemented with the following:
(*West Richland GSP*)

When installing sewer extension, the Contractor shall install a pressurized sewer ball in the outlet pipe of the nearest existing sewer manhole to keep any construction debris from entering the existing sewer system. Sewer ball shall be fastened to the top ladder rung of the manhole by a rope. If this is not feasible due to active sewer services, a sewer ball shall be placed in the outlet pipe of the first new manhole in the new extension. Ball shall remain in place until the project has been accepted by the City.

7-17.3(2)A, General
The first paragraph in Section 7-09.3(23) is deleted in its entirety and replaced with the following:
(*West Richland GSP*)

Sewers and appurtenances shall be cleaned and any installation where there is a pipe joint shall be tested by low pressure air method, except where the ground water table is such that the City Engineer may require an infiltration test. Pressure testing of the sewer main will not be conducted until after backfill is complete, sewer services installed and water main installed (if applicable). The Contractor may
choose to perform a pressure test for quality control prior to this time. Cleaning shall consist of hydro pressure jetting of lines (jet truck). Material and debris shall be caught and removed from each structure.

**7-17.3(2)H, Television Inspection**

Section 7-17.3(2)H is supplemented with the following:

(****** West Richland GSP)

The Contractor shall inspect all sewer lines by the use of a camera. Camera inspections shall not be conducted until the lines have been cleaned per 7-17.3(2)A. A ball or equivalent device shall be attached to the camera to show any “belly” in the line which may exceed ¾-inch in depth. Inspection shall be record on a DVD and viewable through a Windows Media Player. The video must show distance from beginning of run to end of run designated the location of the run, and must be submitted to the City Engineer for approval. Any “belly” in excess of ¾-inch, rolled gaskets, and damaged pipe observed in the video shall be rejected and shall be fixed by the Contractor. If the video shows debris in the lines, the Contractor shall flush and re-video the line. At the end of the project, City personnel will perform a final video inspection with the City camera equipment for documentation purposes and final approval. If any pipes are found dirty, the Contractor shall be required to re-clean the identified lines. The Contractor will be required to provide video proof the line is clean.

Add the following sections:

(****** West Richland GSP)

**7-17.3(2)I, Sewer Marker Post**

When indicated in the plans the Contractor shall mark the termination points of sewer mains and clean outs. The Contractor shall bury a length of 4” x 4” pressure treated post from the bottom of the trench to 3-feet above finish grade. Post shall be placed on a masonry brick at the bottom of the trench. The post shall be painted green with permanent paint with markings at 1-foot intervals painted with permanent white paint.

**7-17.3(2)J, Bypass Pumping**

Should the Contractor utilize a bypass pumping system to divert sanitary sewer flows the following shall be required:

**Submittals**

As part of the bypass pumping system, the Contractor shall submit a bypass pumping plan for review by the Engineer prior to implementation. The Contractor shall observe the following when preparing their control plan:

- Duration of the bypass shall be limited to a maximum of 12 hours,
- Submergence of bypass manhole shall be limited to a maximum depth of 4 feet above the existing invert.

The Sewage Bypass Control Plan shall include the following:

- Description and details of the system,
- Product data on all equipment to be used,
- Schedule of bypass pumping with respect to overall project schedule,
- Method of plugging downstream pipe (invert out) at bypass manhole,
- Method for controlling wastewater levels in bypass manhole during low flows and peak flows – use of any control logic,
- Contingency Plan in case of primary system, equipment and/or power failure, unexpected flow conditions and emergency notification protocols,
- Spill Response Plan,
- Operating and maintenance plan of equipment and fueling, and
- Traffic Control Plan at time of Sewage Bypass.

**Construction Requirements**

Address noise abatement of portable power generation equipment to reduce noise to a level of not more than 63 dBA at 30 feet.

**Preparation/Demonstration**

Contractor shall provide independent power sources for all sewage bypass equipment that requires a power source. Employ all temporary lighting and safety control systems. Contractor shall operate the sewage bypass system for a 2-hour trial period before bringing the bypass system online. If the bypass system fails or deficiencies are noted, the Contractor shall correct the problem(s) and restart the trial period at no additional cost to the City. Trial period shall continue until the City Engineer deems successful.

Provide all necessary temporary electrical service to machinery and provisions for backup power generation. Provide personnel to operate and maintain system function throughout the project period.

Install discharge piping in a manner to provide safe and reliable service, without disrupting public access; report spillage immediately to the City of West Richland. Isolate area from the public and employ remediation procedures.

**Sewage Bypass Control Systems**

Pumping equipment, bypass piping, and mechanisms shall be appropriately sized and operated to continuously divert sewage flows without surcharging the bypass outfall location.

The primary bypass system shall consist of two redundant pumps each capable of independently conveying peak flow and one smaller pump to convey average low flows. The Contractor shall verify anticipated flows and provide pumps sufficient to convey said flows. When the Contractor is required to perform night work, portable lighting equipment shall meet the requirements of the City specifications and SWSS Section 1-10.3(1)A. The bypass system shall have an independent power supply. The Contractor is responsible for providing continuous monitoring and operation, troubleshooting maintenance activities of the bypass system while in use.

**Termination**

Remove equipment and appurtenances upon termination of sewage bypass control activities and restore disturbed area to original condition.

**7-17.4, Measurement**

Section 7-17.4 shall be supplemented with the following:

(****** West Richland GSP)

All trench excavation shall be unclassified and a separate measurement will not be made for excavation, dewatering, furnishing and installing bedding and backfill for pipelines. All cost for excavation, dewatering, furnishing and installing bedding and backfill for pipelines and fittings including detectable marking tape shall be considered incidental to the pipe installation.
No measurement will be made for Bypass Pumping and if chosen to be used by the Contractor shall be included in an associated bid item.

“Shoring - Trench Safety Systems” per linear foot.

Cement concrete plugs shall meet the requirements of 7-08.3(4). No separate measurement shall be made for cement concrete plugs and shall be considered incidental to an associated bid item.

No measurement will be made for sewer caps and marker posts and shall be considered incidental to an associated bid item.

No measurement will be made for cleaning and video inspections of sewer mains and shall be considered incidental to an associated bid item.

**7-17.5 Payment**

Section 7-17.5 shall be supplemented with the following:

(****** West Richland GSP)

“Shoring - Trench Safety Systems” per linear foot.

The unit contract price per linear foot for “Shoring - Trench Safety Systems,” for all trenches 4 foot or greater in depth measured through structures, shall be full compensation for furnishing all labor, equipment, materials and all other incidentals to meet the requirements of the Washington Industrial Safety and Health Act, Chapter 49.17 RCW and Chapter 296-155 WAC, including all other applicable local, Contracting Agency and Federal laws and regulations.

Revise the second paragraph to read as follows:

The unit contract price per linear foot for sewer pipe of the kind and size specified shall be full pay for furnishing, hauling and assembling in place the completed installation including all wyes, tees, special fittings, joint materials, cleaning and debris removal, testing, bedding material, backfill material and adjustment of inverts to manholes for the completion of the installation to the required lines of grades.

**SECTION 7-18, SIDE SEWER**

**7-18.1, Description**

Section 7-18.1 is supplemented with the following:

(****** West Richland GSP)

The work shall consist of construction side sewers in accordance with the plans, specifications and the City of West Richland Standard Details.

**7-18.2, Materials**

Section 7-18.2 is supplemented with the following:

(****** West Richland GSP)

Materials shall meet the requirements of the Standard Details.

**7-18.3, Construction Requirements**

Section 7-18.3(1) is supplemented with the following:

(****** West Richland GSP)

**7-18.3(1), General**
On new sewer lines wye’s shall be PVC gasketed fittings and shall be installed at 2:00 o'clock or 10:00 o'clock positions. Other bends and fittings on 4-inch services shall be gasket or glue joint fitted. No bends greater than 45 degrees shall be used within the City right-of-way all fitting shall be SDR35 rated for use with SDR35 sewer pipe. All service pipe joints and 6-inch and larger fitting shall be gasket joined.

Sewer services installed on existing PVC sewer lines shall be a gasketed sewer saddle wye, hole saw shall be used for tapping the existing pipe and coupon shall be retained and provided to the City Inspector.

The City has shown on the plans the approximate locations of side sewer services. Every effort has been made to show potential conflicts with sewer services; the exact depth and location of sewer services are not known. The City has verified the location of the sewer services at the connection point with the mainline by use of sewer camera equipment. Direction from connection point and exact location of crossing curbline is unknown and shall be verified by the Contractor. The Contractor shall make every effort to prevent damage to sewer services. The services in the City of West Richland are owned and maintained by the property owner and they will not be located by the City through a standard call for utility locates.

Prior to excavating in the vicinity of businesses and homes connected to existing sewer systems on all projects under contract to the City, the Contractor shall locate the sewer service. Location shall be made by inserting a locatable cable or signal transmitting cable into the sewer service either at a clean out or point of entry in the home. The Contractor is fully responsible for contacting the owner and making arrangements as necessary to complete the service locate. After the service is located, the Contractor shall reference the location as required to all relocation of the service during all phased excavation work. On all private contracts the Contractor may locate each side sewer service at his option; however, damaged services shall be repaired by the Contractor in all cases, at no additional cost to the City.

When sewer services are inadvertently broken or damaged, the Contractor shall repair the side sewer by installing a Schedule 40 ABS sewer pipe. The repaired section of pipe shall be placed a minimum of one foot into the trench walls to provide a solid foundation for the crossing of the new trench. The pipe ends shall be connected using repair clamps. Repair clamps shall be a flexible coupling with stainless steel clamps and shall be Fernco flexible couplings or equal. The area under the side service connection shall be bedded with compacted crushed surfacing top course rock. The City may require CDF encasement of broken sewer service lines at locations of waterline crossings. Final decision will be made by the City Engineer. When directed by the engineer or where rocky soils, unstable soils or other conditions exist, where it may be difficult to detect a damaged side service, water shall be run from the home toilet or other source, to ensure all side services are undamaged, prior to beginning backfill operations. If the City feels little effort is being made to locate the existing sewer services, the City may require the Contractor to stop work until new locate methods are implemented. Any lost time due to stoppage of work will not be reimbursable.

If the City feels excess materials have entered the system which may cause problems, the City will camera the sewer line. Cost of the camera and any required cleaning will be at the expense of the Contractor. Any dig and verify for sewer services will be considered incidental to an associated bid item.

7-18.3(5), End Pipe Marker
Section 7-18.3(5) is supplemented with the following:
(****** West Richland GSP)

End pipe marker shall be per City of West Richland Standard Detail 3-6B.

7-18.4 and 7-18.5, Measurement and Payment
Section 7-18.4 and 7-18.5 is supplemented with the following:
(****** West Richland GSP)

If the Contractor damages side sewer services during construction, no additional compensation will be made for damages resulting from the service damage or for the cost of labor, equipment and materials as required to complete the sewer service repair as specified.

SECTION 7-19, SEWER CLEANOUTS
7-19.1, Description
Section 7-19.1 is supplemented with the following:
(****** West Richland GSP)

The work shall consist of constructing sewer cleanout in accordance with these Specifications, Plans and the City of West Richland Standard Details.

All ductile iron for rings, covers, and lids shall be domestic products made in and stamped USA.

Final adjustment of sewer cleanout shall be by City of West Richland Detail 3-4.

7-19.2, Materials
Section 7-19.2 is supplemented with the following:
(****** West Richland GSP)

Materials shall meet the requirements of the City of West Richland Materials List and Standard Details.

7-19.4, Measurement
Section 7-19.5 is supplemented with the following:
(****** West Richland GSP)

“__In. Sewer Cleanout”, shall be measured per each.

7-19.5, Payment
Section 7-19.5 is supplemented with the following:
(****** West Richland GSP)

“__In. Sewer Cleanouts”, per each.
The unit contract price per each for “__In. Sewer Cleanout” shall be full pay for furnishing all labor, materials, and equipment required to install cleanout including adjusting to finished grade.

SECTION 8-01, EROSION CONTROL AND WATER POLLUTION CONTROL
8-01.3, Construction Requirements
8-01.3(1), General
Section 8-01.3(1) is supplemented with the following:
(****** West Richland GSP)
All areas disturbed by the work and not scheduled for pavement surfacing, landscape rock, shoulder ballast, or other constructed improvements shall be hydroseeded. Preparation shall be in accordance with Section 8-01.3(2)A and have seed, fertilizer and mulch placed on it in accordance with Section 8-01.3(2)B, and 8-01.3(2)D.

**Temporary Erosion and Sediment Control Plan**
The Contractor shall submit, follow and maintain Temporary Erosion and Sediment Control Plan (TESC).

**8-01.3(2)B, Seeding and Fertilizing**
Section 8-02.3(15)B is supplemented with the following:

(* West Richland GSP)

Sufficient quantities of fertilizer shall be applied to supply the following amounts of nutrients:

- Total Nitrogen as N – 20 pounds per acre.
- Available Phosphate as P2O5 – 60 pounds per acre.
- Soluble Potash as K2O – 60 pounds per acre.

Ninety percent of nitrogen applied per acre shall be derived from isobutydene diurea (IBDU), cyclo-di-urea (CDU) or a time release, polyurethane coated source with a minimum of 6 months. The remainder may be derived from any source.

**Non-Irrigated Seeding**
Grass seed shall be a commercially prepared mix that will grow without irrigation at the project location. The application rate shall be 60 pounds per acre. The seed mix blend shall be as follows:

<table>
<thead>
<tr>
<th>Kind and Variety of Grass</th>
<th>Minimum % by Weight</th>
<th>Minimum % Pure Seed</th>
<th>Seeding in Mixture</th>
<th>Germination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Bunch Wheatgrass</td>
<td>35</td>
<td>32.0</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Thickspike Wheatgrass</td>
<td>30</td>
<td>27.0</td>
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<td></td>
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<tr>
<td>Big Bluegrass</td>
<td>25</td>
<td>23.0</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Sandberg Bluegrass</td>
<td>10</td>
<td>9.0</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Weed Seed</td>
<td>2.0 (max)</td>
<td></td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Inert &amp; Other Crop Seed</td>
<td>7.0 (max)</td>
<td></td>
<td>85</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Contractor shall be responsible for protecting all planting areas against vehicle traffic by use of approved warning signs and barricades. Planting areas that have been damaged through any cause prior to final inspection and areas failing to receive a uniform application at the specified rate shall be reseeded, re-fertilized at the Contractor’s expense.

**8-01.3(2)D, Mulching**
Section 8-02.3(15)D is supplemented with the following:

(* West Richland GSP)
Wood Cellulose Fiber Mulch
Wood cellulose fiber mulch shall be furnished, hauled, and evenly applied at a rate of 2,000 pounds per acre within forty-eight (48) hours after the areas where the seed and fertilizer have been applied with the seed and fertilizer materials in one operation by approved hydraulic equipment. The equipment shall have a built-in agitation system with an operating capacity sufficient to agitate, suspend, and homogeneously mix a slurry of fiber, fertilizer, seed and water. Distribution and discharge lines shall be large enough to prevent stoppage and shall be equipped with a set of hydraulic discharge spray nozzles which will provide a uniform distribution of the slurry.

The wood fiber mulch shall be on the current WSDOT Qualified Products List.

8-01.3(9)D, Inlet Protection
Section 8-01.3(9)D is supplemented with the following:
(****** West Richland GSP)

Inlet protection shall be installed at each inlet grate on new and adjacent existing catch basins. Inlet protection shall be manufactured for the removal of dirt, sand, and other sediment from stormwater using a minimum 8 oz per square yard 180 ex non-woven polypropylene geotextile fabric or approved equal. The trap shall have a square shaped top designed to insert under the catch basin grate without folding. The trap shall be regularly maintained and following the completion of the construction on the project the Contractor shall remove the traps from all catch basins and clean the catch basin sump and any pipe that has become contaminated with sediment and debris. On sub-divisions, the Contractor shall reinstall traps after cleaning. City personnel will remove the traps at a later date once construction in the area is complete.

8-01.4, Measurement
Section 8-01.4 is supplemented with the following:
(****** West Richland GSP)

“Temporary Erosion and Sediment Control Plan”, per lump sum.

8-01.5, Payment
Section 8-01.5 is supplemented with the following:
(****** West Richland GSP)

“Temporary Erosion and Sediment Control Plan”, per lump sum
The lump sum Contract price for “Temporary Erosion and Sediment Control Plan” shall be full pay to install and maintain the stormwater management concepts shown in the Plans. These include storm drain inlet protection, stabilized construction entrances, and any additional erosion control measures necessary to comply with the construction stormwater general permit.

SECTION 8-02, ROADSIDE RESTORATION
8-02.1, Description
Section 8-02.1 is supplemented with the following:
(****** West Richland GSP)

Work shall include restoration of all disturbed landscaping due to construction activities and proposed landscaping as shown in the plans, removal and replacement of existing landscaping,
trees, irrigation, irrigation modifications, furnishing and install trees, root barriers, weed fabric
landscape curbing, sod and slope protection rock where shown in the plans and where directed by
the City Engineer. Work shall also include restoration of roadway shoulders.

8-02.2, Materials
Section 8-02.2 is supplemented with the following:
(****** West Richland GSP)

Slope Protection Rock 9-03.9(5)
Shoulder Restoration 9-03.9(3), Crushed Surfacing Top Course

Root Barrier
Root barrier shall be 18-inch polyurethane “Deep Root” root barrier or approved equal.

Topsoil Type A
Excavated or imported soils which is loose, friable and contains ordinary amounts of humus. It
shall contain no lumps of soil or rock larger than ¼-inch or stack or roots. It shall be sufficiently
fertile to sustain normal health plant growth and shall have a pH value no higher than 7.5 nor lower
than 6.5. The top soil shall be approved by the City Engineer.

8-02.3, Construction Requirements
Section 8-02.3 is supplemented with the following:
(****** West Richland GSP)

Slope Protection Rock
The Contractor shall level and prepare ground where slope protection will be placed. Preparation
may include the removal and disposal of existing materials to level or to account for the extra
material for the slope rock. Once grade has been prepared and approved by the City Engineer,
the slope protection rock shall be placed in a uniform layer to the depth indicated in the plans. If
no depth is indicated in the plans then the slope protection rock shall be place in a uniform layer
to a depth of a minimum of 2-inches or as specified in the plans. The Contractors method of
application shall be subject to the approval of the City Engineer.

Shoulder Restoration
The Contractor shall restore the shape of the roadside ditch and the lining materials if disturbed or
contaminated due to construction activities. Ditch bottom shall be restored to the pre-existing grade
and condition unless otherwise stated in the plans. Slope from edge of roadway to ditch bottom
shall be covered with crushed surfacing top course at a minimum depth of 2-inches, spread to a
uniform and smooth grade, and compacted by equipment wheel or steel drum roller.

8-02.3(8), Planting
Section 8-02.3(8) is supplemented with the following:
(****** West Richland GSP)

Tree Installation
The Contractor shall take the locations of all trees prior to placement for approval by the City Engineer. Once the locations have been approved, the Contractor shall install trees in tree wells with root barrier and topsoil as shown in the tree planting detail in the plans. Tree stabilization shall also be installed at each tree location as shown in the plans.

Add the following new section:
(****** West Richland GSP)
8-02.3(17), Landscape Restoration
Landscape restoration shall consist of restoring all disturbed site improvements due to construction activities. Restoration shall include but is not limited to furnishing and installing sodded lawn, irrigation, landscape rock, filter fabric and gravel, concrete curbing and any other required items to restore impacted areas due to construction activities behind the proposed sidewalk to an equal or better condition than existing.

All disturbed lawn areas shall be cut with a sod cutter or other method approved by the Engineer, and replaced. During trenching the top 4" of topsoil shall be segregated and replaced prior to sod installation. All damaged sod shall be replaced with grass sod from an off-site source and placed on four inches of topsoil. During irrigation season all sod shall be watered daily by the Contractor for a three-week period, at which time any dead or browned sod shall be removed and replaced. The replaced areas will again require a three-week watering period. The Contractor shall provide a water source and all equipment required to maintain the sod. Use of the property owner’s water and/or hoses shall be approved in writing by the property owner prior to its use. At any yard where the underground sprinkling system is disturbed (either piping or heads), the Contractor shall verify with the resident that the system has been restored to satisfactory operating condition.

Areas where additional landscape area has been added and/or removed the Contractor shall be required to modify existing sprinkler system to ensure ample coverage and does not spray the new sidewalk or roadway. This may require installing new sprinklers, moving existing sprinklers or changing the sprinkler style depending on site conditions. All changes to an existing sprinkler system shall be documented and drawings of the modifications shall be supplied to the City Engineer.

All site restoration shall be completed within 14 calendar days after the adjacent construction has taken place. All construction debris shall be removed and properly disposed of.

If existing topsoil is not segregated for reuse, then topsoil from an off-site source shall be provided. Topsoil shall be a sandy loam silt material free of sticks, rocks, wood, vegetable material and other deleterious material, and shall contrail 30% silt or clay. Minimum thickness placed shall be four inches. The seed specifications for grass sod and/or hydro-seed shall be submitted to the Engineer for approval prior to placement.

In areas where landscaping rock and/or gravel exist, the Contractor shall remove and replace rock and landscaping materials to match existing types or better.

The City has made every effort to represent impacts to existing condition however some discrepancies may exist. The Contractor is responsible to use site verification to establish the extent of the impacts to the existing site. The Contractor shall make every effort to limit construction impacts to areas behind the sidewalk. All restoration materials and installations shall be completed per current industry standards.

8-02.4, Measurement
Section 8-02.4 is supplemented with the following:
(****** West Richland GSP)

“Landscape Restoration”, shall be measured per lump sum.
“Slope Protection Rock”, shall be measured per square yard.
“Shoulder Restoration”, shall be measured per square yard.
8-02.5, Payment
Section 8-02.5 is supplemented with the following:
(****** West Richland GSP)

“Landscape Restoration”, per lump sum.
The unit contract price per lump sum for “Landscape Restoration” shall be full pay for all labor, materials, and equipment to restore all disturbed landscaping other than those specifically listed in the bid proposal.

“Slope Protection Rock”, per square yard.
The unit contract price per square yard for “Slope Protection Rock” shall be full pay for all labor, materials, and equipment to complete the work as specified in the plans and specifications.

“Shoulder Restoration”, per square yard.
The unit contract price per square yard for “Shoulder Restoration” shall be full pay for all labor, materials, and equipment to restore the roadside ditch including crushed surfacing top course.

SECTION 8-03, IRRIGATION SYSTEMS
8-03.1, Description
Section 8-03.1 is supplemented with the following:
(****** West Richland GSP)

When specified, work shall include installation of City, Columbia Irrigation District, and Kennewick Irrigation District owned dry-irrigation systems in new sub-divisions. Work and materials shall be per the irrigation owner's requirements and standards. For City owned irrigation systems the work and materials shall be per Columbia Irrigation District Standard Specification and Details unless stated otherwise in the plans or these specifications. Irrigation valve can adjustments shall be per City of West Richland Standard Detail 3-4 and valve can lids shall be identified with “IRR” on the lid.

All irrigation systems connected to the City’s domestic water system must be installed per the City’s Cross Connection requirements, inspected and approved by the City’s Cross Connection Specialist.

8-03.2, Materials
Section 8-03.2 is supplemented with the following:
(****** West Richland GSP)

Tree Emitters/Bubblers
Watering system used for each tree shall be a root zone watering system. The system shall be designed to allow near the surface and deep root watering, allow water, air and nutrients to bypass dense soils and directly reach the root system, easy serviceability of bubblers and check valves, flow rates of 0.25 to 0.5 gpm and approximate depth of watering being 18-inches. The system shall be protected from fines and sands by use of a fabric sleeve. Each tree shall have a minimum of two emitters.

Valves
All valves shall be Hunter ICV valves or an approved equal and shall be installed with a union on both ends for removal, maintenance, or replacement. The entire valve and union shall be enclosed in an irrigation valve box sized for easy removal of valve if needed without digging up the valve box.
Timers
Irrigation timers shall be Irritrol Rain Dial Series, or approved equal and shall be installed in a secure/lockable enclosure resistant to water and adverse weather conditions. The timer shall be sized to have a minimum of two open/unused stations for future use.

8-03.3, Construction Requirements
Section 8-03 is supplemented with the following:
(****** West Richland GSP)

When PVC irrigation mains 4-inches and larger cross City right-of-way, pipe materials shall transition to C900 meeting the requirements of Section 9-30.1(5)A.

City owned dry irrigation mains installed in private sub-divisions shall be constructed per the approved plans and Columbia Irrigation District Standards. Mainline valves shall be installed at every roadway crossing at road right-of-way line or back of easement line, whichever is furthers from the roadway centerline or as shown on the approved plans.

8-03.3(14), Irrigation Electrical Service
Section 8-03.3(14) is supplemented with the following:
(****** West Richland GSP)

Irrigation timers shall have the ability to run off electrical service and battery.

8-03.5, Payment
Section 8-03.5 is supplemented with the following:
(****** West Richland GSP)

Delete the 6th, 7th and 8th paragraph and replace with the following:

“Irrigation System” per lump sum.
Payment will be made in proportion to work completed for the “Irrigation System”. At the time the system is complete, tested, inspected, approved and fully operational payment will be increased to 90 percent. Upon the completion, submittal and approval of the as-built plans payment for “Irrigation System” shall be increased to 100 percent.

SECTION 8-04, CURBS, GUTTERS, AND SPILLWAYS
8-04.1, Description
Section 8-04.1 is supplemented with the following:
(****** West Richland GSP)

Work shall include catch basin gutter widening per the City of West Richland Detail 2-10B.

8-04.2, Materials
Section 8-04.2 is supplemented with the following:
(****** West Richland GSP)

Catch basins gutter widening, curb, gutters, and spillways shall be Commercial Concrete.

Commercial Concrete (564lb/cy of cement) 6-02.3(2)B
Concrete Cure

8-04.3(1), Cement Concrete Curbs, Gutters and Spillways
Section 8-04.3(1) is supplemented with the following:
At each location where an underground utility crosses a concrete curb the curb shall be stamped in both the face of curb and top of gutter with the following:

- Water Mains and Water Services \( W \)
- Sewer Mains and Sewer Services \( S \)
- Storm Mains \( D \)
- Conduits \( C \)
- Electrical \( E \)
- Gas \( G \)

Letters shall be 1-1/2-inch min. and carefully stamped with an embossed tool.

**8-04.4, Measurement**
Section 8-04.4 is supplemented with the following:

Measurement shall be made for catch basin gutter widening under the Bid item “Cement Conc. Traffic Curb and Gutter”.

**SECTION 8-06, CEMENT CONCRETE DRIVEWAY ENTRANCES**

**8-06.2, Materials**
Section 8-06.2 is supplemented with the following:

Crushed Surfacing Top Course \( 9-03.9(3) \)
Commercial Concrete (564 lb/cy of cement) \( 6-02.3(2)B \)
Concrete Cure

**8-06.3, Construction Requirements**
Section 8-06.3 is supplemented with the following:

All cement concrete driveways shall be commercial concrete containing 564 lb/cy of cement.

All new driveways shall be type as referenced in the plans. At locations where there are existing driveways the Contractor shall grade the driveway to create a smooth transition to the new entrance. The Contractor may not enter on private property without written approval from the property owner.

All driveway entrances shall be placed on 4-inches of compacted crushed surfacing top course compacted to 95-percent maximum density per AASHTO T180. The City Inspector must approved compaction by field observation or compaction test verification prior to the installation of the driveway.

**8-06.4, Measurement**
Section 8-06.4 is supplemented with the following:

No measurement shall be made for crushed surfacing top course placed under the driveway entrance and shall be considered incidental to an associated bid item.
Transitions behind the new driveway approach to existing driveway shall be considered incidental to an associated bid item unless specified otherwise in the plans or specifications.

SECTION 8-13, MONUMENT CASES
8-13.3, Construction Requirements
Section 8-13.3 is deleted and replaced with the following:
(****** West Richland GSP)

Removing and Resetting Monument
Any roadway monument that is anticipated to be disturbed by construction activities shall be survey referenced prior to construction by a professional land surveyor, licensed in the State of Washington. Prior to removal the Contractor shall prepare and submit all documentation required for the temporary removal of survey monuments. The Contractor shall submit to the Engineer proof of filing all pre-removal documentation before removal of the monuments.

When adjusting or removing and resetting a monument case and cover, care shall be taken not to damage the case and cover, all work shall be done in a manner that will not disturb the monument. If the monument is disturbed, it shall be reset at no additional expense to the Contracting Agency.

The Contractor’s Land Surveyor shall reestablish disturbed monuments in full conformity with Washington State Law including preparation and submittal of all documentation. At conclusion of the roadway construction, the Professional Land Surveyor will mark with “straddles” or other standard marking methods the locations for reestablishing the survey monuments.

When required, the Contractor shall prepare and file a Record of Survey map in accordance with RCW 58.09 and provide a recorded copy to the Contracting Agency. The Contracting Agency will provide all existing base maps, existing horizontal and vertical control, and other material available with Washington State Plane Coordinate information to the Contractor. The Contracting Agency will also provide maps, plan sheets, and/or aerial photographs clearly identifying the limits of the areas to be surveyed. The Contractor shall establish Washington State Plane Coordinates on all points required in the Record of Survey and other points designated in the Contract documents.

8-13.4, Measurement
Section 8-13.4 is supplemented with the following:
(****** West Richland GSP)

Measurement for removing and resetting monuments will be by the unit per each monument removed and reset.

8-13.5, Payment
Section 8-13.5 is supplemented with the following:
(****** West Richland GSP)

“Removing and Resetting Monument”, per each. The unit Contract price per each for “Removing and Resetting Monument” shall be full pay to complete the work as specified including excavating and furnishing, replacing damaged monuments, placing and curing concrete.

SECTION 8-14, CEMENT CONCRETE SIDEWALKS
8-14.2, Materials
Section 8-14.2 is supplemented with the following:
(****** West Richland GSP)
8-14.3, Construction Requirements
Section 8-14.3 is supplemented with the following:
(****** West Richland GSP)

All cement concrete sidewalks shall be Commercial Concrete with 564 lb/cy of cement.

All sidewalks and pedestrian ramps shall be placed on 2-inches of compacted crushed surfacing top course compacted to 95 percent maximum density per AASHTO T180. The City Inspector must approve the compaction by field observation or compaction test verification prior to the installation of the sidewalk or pedestrian ramp.

8-14.3(2), Forms
Section 8-14.3(2) is supplemented with the following:
(****** West Richland GSP)

All curb ramp forms shall be inspected by the City Inspector prior to pouring any concrete. All grades, slopes, and cross slope dimensions must meet ADA Standards. Final approval will not be made until concrete has been poured and cured. Any ramp not meeting the requirements will be rejected and the Contractor will be required to remove and replace it at the Contractor’s expense.

8-14.3(4), Curing
Section 8-14.3(4) is supplemented with the following:
(****** West Richland GSP)

It shall be the Contractor’s responsibility to protect the new concrete during curing from pedestrian traffic and vandalism. Any damage to the concrete will be removed and replaced at the Contractor’s expense.

8-14.4, Measurement
Section 8-14.4 is supplemented with the following:
(****** West Richland GSP)

No measurement shall be made for crushed surfacing top course placed under sidewalks and pedestrian ramps and shall be considered incidental to an associated bid item.

SECTION 8-18, MAILBOX SUPPORT

8-18.1, Description
Section 8-18.1 is supplemented with the following:
(****** West Richland GSP)

Work shall include ordering, purchasing and installing mailbox and mounting post as indicated on the Contract Plans.

8-18.3, Construction Requirements
Section 8-18.3 is supplemented with the following:
(****** West Richland GSP)
On private developments, the Contractor shall coordinate with Joe Spry (509-967-0400) at the Richland US Postal Office to determine the type, brand and size of mailbox unit need for the development. The Contractor shall receive final approval from the post office after installation has been completed. The Developer is to install 10-linear feet of sidewalk in front of the mailbox cluster unit when installed behind curb and gutter. Cluster units cannot be installed directly on property corners. They should be shifted to one side of the other so property pin can be installed outside the concrete pad of the mailbox.

SECTION 8-20, ILLUMINATION, TRAFFIC SIGNAL SYSTEMS, AND ELECTRICAL
8-20.1, Description
8-20(1), Regulations and Code
Section 8-20(1) is supplemented with the following:
(****** West Richland GSP)

The Contractor shall ensure all State required electrical inspections are coordinated and made prior to covering or energizing the system. The Contractor is to coordinate with Benton Rural Electrical Association (BREA) for energizing of any electrical system.

8-20.2, Materials
Replace the first paragraph of Section 8-20.2 with the following:
(****** West Richland GSP)

Materials shall meet Section 9-29 of the SWSS. Unless otherwise indicated in the Plans or specified in the Special Provisions, all materials shall be new.

8-20.3, Construction Requirements
Section 8-20.3 is supplemented with the following:
(****** West Richland GSP)

Removals
Poles designated for removal or relocation shall not be removed prior to approval by the Engineer. Removals associated with the electrical system shall not be stockpiled within the jobsite without the Engineer’s approval.

All removals associated with the electrical system, which are not designated to remain the property of the Contracting Agency, shall become the property of the Contractor and shall be removed from the project.

The Contractor shall:

Remove all wires for discontinued circuits from the conduit system.
Remove elbow sections of abandoned conduit entering junction boxes.

Abandoned conduit encountered during excavation shall be removed to the nearest outlets or as directed by the Engineer.

Remove foundations entirely, unless the Plans state otherwise.

Voids created by removal of foundations and junction boxes shall be backfilled. Backfilling and compaction shall be performed in accordance with Section 2-09.3(1)E.

8-20.3(1), General
Section 8-20.3(1) is supplemented with the following:
The Contractor shall be required to secure, at his own expense, from the State of Washington Department of Labor and Industries Electrical Division, all state inspection permits required to construct the work as specified. Final acceptance of the system will not be granted until all permits have received the appropriate approvals.

8-20.3(5)B, Conduit Type
Section 8-20.3(5)B is supplemented with the following:

All street light conduits shall be SCH40 PVC. All street light conduits shall be installed per City of West Richlands Standard Details.

8-20.3(5)B2, Non-Metallic Conduit
Section 8-20.3(5)B2 is supplemented with the following:

Those conduits shown on the plans to receive future conductors shall be blown clean with compressed air and end caps shall be used to seal the conduit ends. The Contractor shall install at each end of the conduit a 4”x4”x4’ pressure treated marker post painted white.

Conduits shall enter all junction boxes through the bottom utilizing standard radius bends. The ends of the conduit inside the junction box shall terminate near the side wall of the box so as to leave the major area of the box open and clear.

8-20.3(5)C, Conduit Size
Section 8-20.3(5)C is supplemented with the following:

Minimum conduit size for street lights shall be 1-1/2-Inches.

8-20.3(6), Junction Boxes, Cable Vaults, and Pull Boxes
Section 8-20.3(6) is supplemented with the following:

At a minimum, a junction box shall be installed on both sides of each electrical conduit crossing of City right-of-way or to the nearest property corner, at each street light and at maximum 300 foot intervals.

8-20.3(8), Wiring
Section 8-20.3(8) is supplemented with the following:

The minimum size for the lighting conductor shall be No. 6 Aluminum. The conductor shall be cross-link poly USE insulation. The minimum ground wire shall be No. 8 THHN, green coded, insulated copper wire. A larger ground wire shall be used where load conditions require.

Wiring within pole bases, junction boxes, etc., shall be neatly arranged. The ground wire shall be colored coded green the entire length.
Splicing of lighting conductors will only be permitted in junction boxes, in transformers boxes for transformer leads and in control equipment boxes. Splices are not allowed in the street light pole or at the pole hand holes.

Conductors in junction boxes shall be spliced by direct burial unitap connectors which are rubber insulated, dual rated connectors for networks up to 600V.

Where heat shrink splice insulation is used, the insulation of the individual conductors will be wiped clean and dry. The splice material shall be well lapped over the conductor insulation. Care shall be taken to ensure the conductor insulation is not damaged by the application of too much heat to the splice. If the conductor insulation shows indications of heat deformation, the entire splice shall be replaced. Heat shrink splices shall conform to SWSS Section 9-29.12(1).

Drip loops shall be provided on all conductors where they enter poles or transformer leads.

An inline fused, watertight, electrical disconnect kit shall be installed inside the junction box, at every light standard base for every conductor above ground potential. The fused watertight electrical quick disconnect kit shall be properly sized to accommodate the various conductors and fuses as required. All connections shall be made with compression fittings. The kit shall be designated so that upon disconnection of the fuse holder the fuse shall remain in the load side of the kit.

A fused safety disconnect switch shall be required and located adjacent to the BREA’s source of power, on single and multiple fixture locations. The number of disconnects shall be kept to a minimum with typically ten to thirteen lights on a single leg of the circuit. Where fewer than ten lights are scheduled for installation, all lights shall be energized from a single disconnect, unless extenuating circumstances are encountered and the Engineer’s approval is received. The safety disconnect switch shall be drilled for a lock to be of suction type that it can be locked on. The switch shall not be capable of being disconnected with locked on. The Contractor shall leave the box unlocked at all times and the City crew will secure the box when it is energized.

8-20.3(13)A, Light Standards
Section 8-20.3(13)A is supplemented with the following:
(***** West Richland GSP)

Street light standards shall be per City of West Richland Standard Details.

SECTION 8-22, PAVEMENT MARKING
8-22.2, Materials
Section 8-22.2 is supplemented with the following:
(***** West Richland GSP)

Use of Type C and Type D plastic pavement markings shall not be allowed.

8-22.3(1), Preliminary Spotting
First sentence of Section 8-22.3(1) is deleted and replaced with the following:
(***** West Richland GSP)

The Contractor shall be responsible for all preliminary spotting necessary to place pavement marking as shown in the plans.

8-22.3(6), Removal or Pavement Marking
Section 8-22.3(6) shall be supplemented with the following:
All striping removal shall be completed by hydoblasting unless otherwise approved by the City Engineer.

(April 4, 2011)

**BOLLARDS**

**Description**

This work shall consist of furnishing and installing steel bollards in accordance with the Plans, Standard Plans, and these Specifications, at the locations shown in the Plans or as staked by the Engineer.

**Materials**

**Posts and Hardware**

Type 1 and Type 2 bollard posts shall be ASTM A 53, NPS 3 (3” Nom.) schedule 80 steel pipe. Post sleeves shall be ASTM A 53, NPS 4 (4”Nom.) schedule 40 steel pipe.

Type 3 bollard posts shall be steel structural tubing per ASTM A 500 Gr B.

Steel plate shall be per ASTM A 36.

All steel parts shall be hot-dip galvanized after fabrication in accordance with AASHTO M 111.

**Reflective Tape**

Reflective tape shall be one of the following or an approved equal:

- Scotchlite High Intensity Grade Series 2870
- Reflexite AP-1000
- Scotchlite Diamond Grade LDP Series 3970
- T-6500 High Intensity (Type IV)

**Concrete**

Footings shall be constructed using concrete Class 3000.

**Construction Requirements**

Bollards shall be constructed in accordance with the Standard Plans.

Bollards shall not vary more than 1/2 inch in 30 inches from a vertical plane.

Bollard posts and the exposed parts of the base assembly shall be painted in accordance with Section 6-07.3(11) for galvanized surfaces. The top coat shall match City approved paint for Bollards.

**Measurement**

Measurement for bollards will be by the unit for each type of bollard furnished and installed.

**Payment**

Payment will be made in accordance with Section 1-04.1, for the following bid items:

"Bollard Type ____, per each."
SECTION 9-03, AGGREGATES

9-03.9, Aggregates for Ballast and Crushed Surfacing
Add the following new Section
(****** West Richland GSP)

9-03.9(5), Slope Protection Rock
Slope protection rock shall visually match existing slope protection material and have similar gradation by weight as follows:

<table>
<thead>
<tr>
<th>Passing the 1-1/4” square sieve</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passing the 3/4” sieve</td>
<td>80-100%</td>
</tr>
<tr>
<td>Passing the 5/8” sieve</td>
<td>45-60%</td>
</tr>
<tr>
<td>Passing the 1/2” sieve</td>
<td>0-25%</td>
</tr>
<tr>
<td>Passing the No. 4 sieve</td>
<td>2.5% max</td>
</tr>
<tr>
<td>Passing the No. 200 sieve</td>
<td>1.5% max</td>
</tr>
</tbody>
</table>

The fracture requirement shall be at least 90% or the rock shall have 1 fractured face and will apply to materials retained on each sieve no. 4 and above if that sieve retains more than 5% of the total. A 5 gallon sample shall be provided to the City for visual inspection and approval. The City reserves the right to test gradation if desired as an additional acceptance measure. The City may also accept the sample based strictly on visual inspection. The City also reserves the right to test actual material delivered to the site for final material acceptance.

9-03.12, Gravel Backfill

9-03.12(5), Gravel Backfill for Drywells
Delete Section 9-03.12(5) in its entirety and replace with the following:
(****** West Richland GSP)

Angular Basalt Gravel Backfill for drywells shall conform to the following grading:

<table>
<thead>
<tr>
<th>SIEVE SIZE</th>
<th>PERCENT PASSING</th>
</tr>
</thead>
<tbody>
<tr>
<td>3”</td>
<td>100</td>
</tr>
<tr>
<td>2 ½”</td>
<td>90-100</td>
</tr>
<tr>
<td>2”</td>
<td>60-80</td>
</tr>
<tr>
<td>1 ½”</td>
<td>20-40</td>
</tr>
<tr>
<td>1”</td>
<td>10-15</td>
</tr>
<tr>
<td>¾”</td>
<td>0-5</td>
</tr>
<tr>
<td>½”</td>
<td>0</td>
</tr>
</tbody>
</table>

Sieve testing shall be performed for approval. The City may choose to approve by sample submittal or field verification.

Round River Rock Gravel Backfill for drywells shall conform to the following grading:

No sieve breakdown is required. Rock shall have a varied size distribution between 1-1/4” to 4”. Sample shall be submitted to the City for visual approval.

SECTION 9-12, MASONRY UNITS
Add the following new Section:
(****** West Richland GSP)
9-12.3, Ladder Rungs
Ladder Rungs (steps) shall be 316 stainless steel or co-polymer polypropylene steel reinforced steps conforming to the requirements of ASTM C478 and shall be rated for a minimum of 300-foot pound concentrated load. The steel core shall be a minimum one-half inch steel bar fully enclosed in co-polymer polypropylene. Steps shall have integral restraints to prevent side slipping of feet. Ladder rungs shall be installed only in sanitary sewer manholes.

SECTION 9-30, WATER DISTRIBUTION MATERIALS
9-30.2, Fittings
Section 9-30.2 is supplemented with the following:
(****** West Richland GSP)

All wetted materials, including rubbers, plastics, adhesives, lubricants, etc. must meet NSF Standard 61 Lead Leach Limit of allowable lead at 5ppb maximum.

9-30.3, Valves
9-30.3(1), Gate Valves (3-inch to 16-inch)
Section 9-30.3(1) is supplemented with the following:
(****** West Richland GSP)

The ductile iron gate valve wedge or gate member shall be fully encapsulated in synthetic rubber. All seating surfaces within the valve body shall be inclined to the vertical, the valve stem shall be sealed by a minimum of two (2) O-rings and all stem seals shall be replaceable with the valve wide open and subjected to full rated pressure.
APPENDIX – HMA TESTING & ACCEPTANCE AGREEMENT
1. Private Development

A. Pre-Pave Meeting
A pre-pave meeting shall be held with the City and the paving Contractor. During the meeting the City will discuss the paving activities as they relate to the specific project and address any questions, concerns, and restrictions. The City Engineer will pre-determine the sub-lots for compaction testing and the number of tests to be performed for each sub-lot and provide this to the Contractor at this meeting. The City Engineer reserves the right to add or reduce the size or number of sub-lots and amount of tests per sub-lot at any time during the project.

B. Asphalt Classification
The City uses both HMA Class 3/8" and HMA Class 1/2" PG 64-28 for all City streets unless otherwise stated. Contractor shall provide the class of HMA specified in the plans. The Contractor must submit a Job Mix Formula to the City one week prior to paving. The JMF will strictly be used for mix approval and documentation.

C. Mix Property Testing
The CTL (commercial testing laboratory) will collect one sample of the HMA at the batch plant each day of paving. Additional samples may be collected as directed by the Engineer. Samples will be collected in accordance with WSDOT FOP for WAQTC/AASHTO T 168. Each sample will be tested for compliance with requirements for asphalt binder content by WSDOT FOP for AASHTO T 308 and gradation by WAQTC FOP for AASHTO T 27/T 11. The reference maximum density will be determined on each sample according to WSDOT FOP for AASHTO T 209. At the discretion of the engineer, samples may be tested for Va (% air voids) according to WSDOT SOP 731.

D. Quality Control Testing
The CTL will visit the site near the beginning of the paving shift as directed by the engineer to assist the paving contractor’s quality control staff by performing comparative nuclear density tests. The nuclear density gauge used by the CTL for this purpose will be the same device used for acceptance density testing following completion of the days paving. The CTL will conduct individual measurements of in place density in accordance with WSDOT FOP for WAQTC TM 8 at a maximum of five locations selected by the contractor. The contractor may also conduct measurements using their device at these locations for comparative and quality control purposes.
E. Acceptance Testing for Density

The CTL will visit the site daily following completion of finish rolling as directed by the engineer to conduct acceptance density testing. Typical tests will be conducted at the frequency of one measurement for each 80 tons per sub-lot with a minimum of 3 tests. Density measurements shall be conducted in accordance with WSDOT FOP for WAQTC TM 8. Prior to paving, the City Engineer will determine the testing lots and the amount of tests per lot. Test locations will be selected by the stratified random sampling procedure contained in WSDOT Test Method T 716. No test will be performed any closer than 2 feet from a paving joint, edge of curb, located in a curb return area of a roadway and not closer than 20 feet from the start or end of a paving pull. In accordance with TM8, 4 minute test times will be conducted for compaction testing. Direct transmission testing will not be conducted, backscatter density testing will be performed. Compaction percentage will be determined for each test using the reference maximum density determined on the sample collected during that days paving shift. When testing the HMA compaction and a single result fails to meet the 91 percent of the referenced maximum density, a second test shall be conducted at the exact same location as the failing test without any disruption or movement of the testing device. The higher of the two tests will be used for evaluation. All test results and location of the testing gauge shall be marked on the pavement.

F. Evaluation Criteria

Mix Properties

Mix properties will be considered acceptable if test results indicate compliance with the Aggregate Gradation Control Points criteria detailed in the most recent edition of WSDOT M41-10, 9-03.8(6). Job Mix Tolerances and Adjustments stated in 9-03.8(7) will not be used on the submitted JMF. Mix that has one or more constituents fall outside of the aggregate gradation control points listed in 9-03.8(6), a second test shall be run from remainders of the initial sample. If the second test confirms the results of the first test, all HMA installed that day shall be rejected. In the event that all constituents in the second test results fall within tolerance limits, a third test will be performed from the initial sample. If the constituents of the third test are within the tolerance limits, the mix shall be considered accepted. If one or more constituents in the third test all outside the tolerance limits, all HMA installed on that day shall be rejected. Rejected HMA shall be removed and replaced by the Contractor. The City may, at the discretion of the City Engineer, accept a negotiated price reduction for acceptance of the mix in lieu of removal and replacing the rejected mix. The reduction shall be reimbursed to the City via cashiers check from the developer.

Compaction/Density

Acceptance of HMA densities shall follow nonstatistical evaluation for each individual sub-lot. A Composite Payment Factor (CPF) will be determined using the WSDOT SAM (Statistical Analysis of Material) software for each sub-lot based on 91% of the referenced maximum density. A CPF of 1 or higher will result in acceptance of the lot. A CPF of less than 0.85 will result in the rejection of the sub-lot. Any lot with a CPF between 0.85 and 0.99 will result in a price reduction. The unit price of HMA of $90 per ton will be used for calculations in determination of the price reduction amount. The calculated reduction shall be reimbursed to the City via cashiers check from the Developer. Once all testing has passed and/or reduction reimbursement has been received by the City, the asphalt can be accepted.

Section 5-04.3(10)C4 second paragraph will be followed if the Contractor wishes to have cores taken on sub-lot/s not meeting 91 percent of the reference maximum density with a CPF below 1.00. All costs for cores must be reimbursed to the City by
the Developer if the CPF for the sub-lot/s based on the results of the HMA cores is less than 1.00 at a rate of $200 per core.

G. **Process of Rejecting Defective Asphalt**

Work that is defective or does not conform to the aforementioned mix and/or compaction requirements may be rejected by the City Engineer. The Engineer may, with or without sampling, reject any section of roadway that appears defective. The City's policy is not to patch a new roadway and will look for the best location to establish the rejection limits which may include the removal of asphalt that has passing compaction. Any rejected section of roadway shall be removed and replaced at the expense of the Contractor.

The Contractor and developers signatures below shall confirm that both understand and accept the procedures for HMA acceptance that apply to this project. Signing of this document is required prior to acceptance of top course for paving surface.

___________________________________________  
Developer                                      Date