

Bid Documents

MARYLHURST PARK PROJECT

CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

BIDS DUE: 2:00 PM, July 22, 2010; West Linn City Hall, 22500 Salamo Road, Mail Stop #1100, West Linn Oregon 97068.

BID OPENING: 2:00 PM, July 22, 2010; West Linn City Hall, 22500 Salamo Road, West Linn Oregon 97068.

CITY OF WEST LINN

22500 Salamo Road
West Linn, Oregon 97068
503 557-4700 FAX 503 656-4106

PROJECT DOCUMENTS FOR THE

MARYLHURST PARK PROJECT

CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

THE OFFICIALS OF THE CITY OF WEST LINN

Mayor	John Kovash
Council President	Scott Burgess
Councilor	Jody Carson
Councilor	Teri Cummings
Councilor	Jim Mattis
City Manager	Chris Jordan

CITY OF WEST LINN

MARYLHURST PARK

IN WEST LINN, CLACKAMAS COUNTY, OREGON

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ADVERTISEMENT FOR BID

MARLYHURST PARK

IN WEST LINN, CLACKAMAS COUNTY, OREGON

CITY OF WEST LINN, OREGON

Sealed bids for the Marylhurst Park Project in the City of West Linn, Clackamas County, Oregon, will be received by Ken Worcester, Parks and Recreation Director at City Hall, 22500 Salamo Road, West Linn, Oregon, 97068. Telephone (503) 557-4700, Fax (503) 656-4106 until 2:00 PM, July 22, 2010, after which time, the bids shall be publicly opened and read. Bids received after 2:00 PM will not be considered. First Tier Subcontractors Disclosure forms shall be submitted not later than 4:00 PM, July 22, 2010. Bids shall be clearly marked Marylhurst Park Project.

Work generally consists of site grading and retaining walls which must be completed by September 30, 2010, and utilities and concrete work which must be completed by November 30, 2010. Alternatives will be decided based on the available funds and the lowest bidders.

The project plans, specifications and proposed contract provisions may be reviewed at no cost through the City of West Linn's website at <http://westlinnoregon.gov/rfps> or obtained through the City of West Linn Engineering Division located at 22500 Salamo Road, West Linn, Oregon.

All bidders must be pre-qualified with the State of Oregon – Oregon Department of Transportation (ODOT). The apparent lowest bidder will be required to submit to the City the state-approved pre-qualification application and confirmation letter within five business days after the bid opening.

Each bidder must identify whether the bidder is a resident bidder, as defined in ORS 279A.120. The contract to be awarded pursuant to this solicitation is a public improvement contract, no offer will be received or considered unless the bidder is registered with the Construction Contractors Board or is licensed with the State Landscape Contractors Board, as applicable. The contract to be awarded pursuant to this solicitation is a contract for a public work subject to ORS 279C.800 through 279C.870 or the Davis-Bacon Act (40 U.S.C. 3141 to 3148), no offer will be received or considered unless the offer contains a statement that the bidder agrees to be bound by and will comply with the provisions of ORS 279C. 838, ORS 279C.840 or 40 U.S.C. 3141 to 3148. Each bidder shall certify that the bidder has not discriminated and will not discriminate against any minority, women or emerging small business enterprise in obtaining any required subcontract for this project.

Bids shall be accompanied by a Certified Check or bond in the amount of ten percent (10%) of the total amount of the bids to be forfeited to the Owner in the event of a breach of contract. A one hundred percent (100%) performance bond will be required to guarantee the faithful performance of the contract. A one hundred percent (100%) payment bond will be required to guarantee the faithful payment of lien holders and subcontractors etc.

All bids shall be submitted on the prescribed form and in said manner as indicated in the bids documents. Use of recycled material is encouraged.

The approximate budget range for this project is \$450,000 to \$550,000.

The West Linn City Council may reject any bid not in compliance with all prescribed Public Contracting procedures and requirements, and may reject for good cause all bids upon the Contracting Agency's finding that it is in the public interest to do so, or may waive immaterial informalities and irregularities.

Dated this July 7, 2010

Ken Worcester
Project Manager

Publication Date

Daily Journal of Commerce: 7, 8 and 9, 2010

MARYLHURST PARK

CITY OF WEST LINN, OREGON

PROJECT INFORMATION

PROJECT QUESTIONS

More detailed information concerning the project may be obtained by contacting:

Ken Worcester Parks and Recreation Director
City of West Linn, Parks and Recreation
22500 Salamo Road, West Linn OR 97068
Phone (503)503-557-4700 FAX (503) 656-4106
E-mail: kworcester@westlinnoregon.gov

GENERAL DESCRIPTION

The Work generally consists of the following items:

Work generally consists of, and utilities and. Alternatives will be decided based on the available funds and the lowest bidders.

1. site grading and retaining walls which must be completed by September 30, 2010, and
2. concrete work which must be completed by November 30, 2010, and

Performance of additional, alternate and incidental work as called for by the specifications and plans or to be determined on site shall be paid based on the unit prices quoted in the bid of the successful bidder.

It is understood that these improvements are intended to become the property of the City of West Linn upon completion and acceptance by the Parks and Recreation Director, and the City Engineer.

This is a Unit-Price and Lump Sum type contract.

Estimated quantities for each bid item shall be shown in the bid.

PRE-BID CONFERENCE A pre-bid conference will not be held.

TIME OF COMPLETION The time of completion of the work to be performed under this contract is as follows:

Work may begin not earlier than August 1, 2010, and must be completed in no case later than November 310, 2010.

Delays and extensions of the time may be allowed in accordance with section 108.06 of the City of West Linn Standard Construction Specifications.

LIQUIDATED DAMAGES The Contractor agrees that the "Time of Completion" is defined in the Bid and is September 30, 2010 for grading and retaining walls, and November 30, 2010 for utilities and concrete work, and agrees to complete the work by said date. The Contractor and City agree that the City will suffer damages each day the work remains uncompleted after the Time of Completion and that the amount of those damages will be difficult to ascertain. Contractor and City agree that a reasonable amount of damages for late completion is **\$500.00 (Five hundred dollars)** per day, for every calendar day thereafter during which the work remains uncompleted. Contractor agrees to pay these sums as damages and agrees that they are not imposed as a penalty.

BID SECURITY Bids must be accompanied by a certified check drawn on a bank in good standing, or a bid bond issued by a surety company authorized to issue such bonds in the State of Oregon, in an amount of not less than **ten percent (10%)** of the total amount of the bid submitted. This check or bid bond shall be given as a guarantee that if awarded the contract, the successful bidder will execute the attached contract and furnish a properly executed performance bond in the full amount of the contract price within the time specified.

PRE-QUALIFICATION OF BIDDERS The City requires that all bidders be pre-qualified with the State of Oregon – Oregon Department of Transportation (ODOT). Pre-qualification application forms may be obtained at the State of Oregon, Purchasing Division, Department of Administrative Services, 1225 Ferry St SE, Salem, OR 97310 or www.odot.state.or.us/techserv/progsrv/contract/application.htm. **Apparent lowest bidder shall submit to the City the state-approved pre-qualification application and confirmation letter within five business days after the bid opening.**

Successful bidder must also have either a City of West Linn Business License or a current Metro License and must comply with ORS 279C.505 (2) relating to employee drug-testing program (refer to Section 11 of contract). Bidder shall also identify whether he/she is a resident Bidder as defined in ORS 279A.120.

Bidders shall comply with the provisions of 279C.800 to 279C.870 or the federal prevailing rate of wage required under the Davis-Bacon Act (40 U.S.C. 3141 et seq.), as applicable. No bid will be received or considered by the City unless the bid contains a statement by the bidder that ORS 279C.838 or 279C.840 or 40 U.S.C. 3141, et seq. will be complied with. The PWR wage rates are available on the Bureau of Labor and Industries' (BOLI) website at http://www.oregon.gov/BOLI/WHDPWR/pwr_book.shtml for downloading.

Bidder shall also certify in its bid that it has not and will not discriminate against any minority, women, or emerging small business enterprise in obtaining any required subcontract for this project.

RECORD OF EXPERIENCE BY THE PRIME CONTRACTOR At the time of submission of bids, all bidders must provide and certify information that clearly demonstrates a 3-year period of expanding experience. Said experience must be with products, similar to that specified in this contract. Experience must include projects of a similar size and scope of work and be within the local geographic area (within 200 miles). Information shall be provided on form provided in the bid packet and include project name, description of work, cost, location, point of contact, and telephone number. The City of West Linn reserves the right to reject bids that do not contain and confirm the required experience information.

CONTRACT DOCUMENTS The Contract Documents pertaining to this work consists of the material bound and attached herewith. Contract amount will be determined based on the available funds, selected alternatives and the lowest responsive bid. These Contract Documents are intended to provide all details reasonably required for the execution of the proposed work. Any person contemplating the submission of a bid and being in doubt as to the meaning or intent of said Contract Documents should request of the Project Manager, in writing, an interpretation thereof. Any interpretation or change in said Contract Documents should be made in writing, and a copy of such interpretation or change will be published, as shall be all other addenda, on City's Web site. Addenda may be downloaded off the City's Web site. Bidders should frequently check the City's Web site until closing, i.e., at least once weekly until the week of Closing and at least once daily the week of the Closing. City will not be responsible for any other explanation or interpretation of said Documents.

CONSTRUCTION STANDARDS APPLICABLE the West Linn Public Works Design and Construction Standards and Standard Construction Specifications. If there is a conflict, the more restrictive requirement shall prevail.

WORK PERFORMED BY THE PRIME CONTRACTOR At the time of submission of bids, all bidders must identify and certify their company will accomplish a minimum of 50% of on-site construction involving both labor and materials. The City of West Linn reserves the right to reject bids that do not clearly and accurately identify the minimum of on-site work to be performed by the contractor.

SUPERVISION OF WORK BY THE PRIME CONTRACTOR Only an experienced, full-time employee of the prime contractor will supervise the work on behalf of the prime contractor. Said supervisor must have a demonstrated supervisory role of a minimum of 3 years and be employed by the prime contractor for a minimum of 12 months prior to the award of the contract.

CONTRACTING LICENSE REQUIREMENT The bidder must be registered with the Oregon Construction Contractors Board, or the State Landscape Contractors Board. Each bid must contain the license number of the bidder.

PREPARATION OF BID The bid for the work contemplated is to be submitted on the form prescribed in the bid herein. All blank spaces on the bid form must be filled in, in ink, in both words and numbers where applicable. No changes shall be made in the phrasing of the forms or in the items mentioned herein. Written amounts shall govern in cases of discrepancy between the amounts stated in writing and the amounts stated in numbers.

Any bid which contains omissions, erasures, alterations, additions of any kind, or items uncalled for, or which in any manner fail to conform to the conditions of the published Advertisement for Bids and associated addenda, may be rejected by the City of West Linn.

Bids made by corporations or partnerships shall contain names and addresses of the principal officers or partners.

SUBMISSION OF BIDS All bids must be submitted at the time and place and in the manner prescribed in the Advertisement for Bids. Bids must be made on the prescribed bid forms attached herewith, and submitted intact with the bid documents. Late bids will not be considered. Faxed or e-mailed bids will not be considered.

FIRST TIER SUBCONTRACTOR DISCLOSURE If a bid for the project is greater than \$100,000, within two working hours of the date and time the bids are due, the Bidder must submit a written disclosure of the names, addresses, Construction Contractor's Board Number, if applicable, and amount of subcontract for all first-tier subcontractors furnishing labor or labor and materials whose subcontracts are equal to or greater in value than 5% of the total project bid or \$15,000, whichever is greater, or \$350,000 and the describe the Work that each Subcontractor will perform.

WITHDRAWAL OF BID Any bid may be withdrawn prior to the scheduled date and time for the opening of bids either by telegraph, telephone, written request, or in person. No bid may be withdrawn after the time scheduled for opening of bids unless the time specified for awarding bids has elapsed.

The City reserves the right to retain the bid security of the three (3) lowest bidders until the successful bidder has furnished a one hundred percent (100%) performance bond. Upon failure of the successful bidder to deliver performance bond within the specified time, the next lowest bid may be accepted at the City's discretion, whereupon the above instructions and requirements will apply to the said second bidder. Bid security of all bidders, except the three (3) lowest, will be returned promptly after the evaluation of bids; bid security of the three lowest bidders will be returned within three (3) days after the contract has been executed or other disposition made thereof in accordance with the provisions stated herein.

CONDITIONS OF WORK Each bidder must inform himself of the conditions relating to the execution of the work, and it is assumed that he will inspect the site and make himself thoroughly familiar with all the Contract Documents. Failure to do so will not relieve the successful bidder of his obligation to enter into a

contract and complete the contemplated work in strict accordance with the Contract Documents. Each bidder must inform himself on all laws and statutes, both Federal and State, relative to the regular execution of the work, the employment of labor, right-of-way, and access to the work, fire protection regulations, and similar requirements. Pursuant to ORS 279C.525, the City hereby alerts the bidders to federal, state and local agencies that have enacted ordinances, rules or regulations dealing with the prevention of environmental pollution and the preservation of natural resources that affect the performance of the contract by directing bidders to refer to the Commentary on page 55 of Resolution No. 05-03, where a list of such federal, state and local agencies is set forth.

AWARD OR REJECTION The contract will be awarded to the lowest responsive, responsible bidder complying with the bid specifications. Should the City have sufficient funding and desire alternates, the contract will be awarded the alternates selected by the City in the City's discretion.

As required by ORS 279A.120, the City shall add a percent increase to each out-of-state bidders bid price equal to the percent of preference given to local bidder's in the bidder's home state. The City reserves the right to reject any or all bids or to waive any formality, informality, irregularity, or technicality in any bid. No bidder may withdraw his bid for a period of ninety (90) days after the date of opening thereof. The acceptance of a bid will be by notice in writing, mailed or delivered to the office designated in the Bid. The City may reject any bid not in compliance with all prescribed public bidding procedures and requirements, and may reject for good cause any or all bids upon a finding by the City that it is in the public interest to do so.

ADDENDA Any addenda issued during the time of bidding and forming a part of the Contract Documents to the bidder for the preparation of his bid, shall be covered in the bid, and shall be made a part of the contract. Addenda will be handled as follows: City will not mail notice of Addenda, but will publish notice of any Addenda on City's Web site. Addenda may be downloaded off the City's Web site. Bidders should frequently check the City's Web site until the date of closing, i.e., at least once weekly until the week of Closing and at least once daily the week of the Closing. Each addendum shall be required to be acknowledged in writing by the bidder.

EXECUTION OF CONTRACT The contract is executed upon signature of the contract document by both the City Manager and the Contractor's representative authorized to sign the contract.

PERFORMANCE, PAYMENT AND PUBLIC WORKS BOND The successful bidder shall file with the City performance and payment bonds in the full amount of the contract price of the contract within five (5) working days of notification of award of the contract by the City. The surety company furnishing this bond shall have a sound financial standing and a record of service satisfactory to the City and shall be authorized to do business in the State of Oregon. The Attorney-in-Fact (Resident Agent) who executes this performance and payment bond in behalf of the surety company must attach a copy of his power-of-attorney as evidence of his authority. A notary shall acknowledge the power as of the date of the execution of the surety bond which it covers. Prior to commencing work, Contractor shall also furnish proof of filing of a public works bond in the form and amount specified in ORS 279C.836, with the Construction Contractor's Board.

FAILURE TO FURNISH BOND OR SUBMIT PRE-QUALIFICATION LETTER Should the successful bidder fail or refuse to execute the contract and furnish the performance and payment bonds and pre-qualification letter, then the bid security deposited by said bidder shall be retained as liquidated damages by the City. It is agreed that this said sum is a fair estimate of the amount of damages the City will sustain in case the bidder fails to comply as provided herein and is not a penalty. Bid security deposited in the form of a certified check shall be subject to the same requirement as a bid bond.

RESPONSIBILITY OF PUBLIC AGENCY (CITY OF WEST LINN) Advertise and accept bids for the project, award, administrate the contract and inspect the project for compliance with contract plans and specifications, and provide payment upon completion.

CHANGES City may at any time, and without notice, issue a written Change Order requiring additional work within the general scope of this Contract, or any amendment thereto, or directing the omission of or variation in work. If such Change Order results in a material change in the amount or character of the work, an equitable adjustment in the Contract price and other provisions of this Contract as may be affected may be made. Any claim by Contractor for an adjustment under this section shall be asserted in writing within thirty (30) days from the date of receipt by Contractor of the notification of change or the claim shall be deemed waived by contractor. Whether made pursuant to this section or by mutual agreement, no change shall be binding upon City until a written Change Order is executed by the Authorized Representative of City, which expressly states that it constitutes a Change Order to this Contract. The issuance of information, advice, approvals, or instructions by City's Representative or other City personnel shall not constitute an authorized change pursuant to this section. Nothing contained in this section or any claim by the Contractor shall excuse the Contractor from proceeding with the prosecution of the work in accordance with the Contract.

CONTRACTOR'S RESPONSIBILITY The Contractor shall complete the work as represented in these plans and specifications, and as modified by change order or written direction of the City. It is understood that the plans, specifications, and other contract documents do not purport to control the method of performing the work, but only the requirements as to the nature of the completed work. The Contractor assumes the entire responsibility for the method of performing and installing the work. Suggestions as to the method included in the contract documents shall be deemed advisory only and the feasibility of such methods or the lack thereof shall not affect the Contractor's liability or status as an independent Contractor under this contract.

PAYMENTS The City will make monthly payments as specified in the General Conditions, and as may be agreed by Contractor and Engineer. Progress payments may be submitted monthly to the City project manager. Projects lasting less than thirty (30) days in duration will not receive progress payments. If the City is notified that payment has not been made for labor or materials invoiced to the City, the City may withhold monies from payment to the Contractor in a sum sufficient to pay for such labor or materials. With the final contract payment request, the contractor must include a statement certifying that all persons/subcontractors/suppliers supplying labor and material, which costs are included with the current payment request, have been paid in full. Progress payments, less a five percent retainage as authorized by ORS 279C.555, shall be made to the Contractor within twenty (20) days of the City's receipt of the statement of services.

FINAL PAYMENT: The Contractor shall notify the City in writing when the Contractor considers the project complete, and the City shall, within 3 working days after receiving the written notice, either accept the work or notify the Contractor of work yet to be performed on the contract.

Upon acceptance by the City, the entire balance due to the Contractor, including the retained percentage, shall be paid to the Contractor, by the City within 30 days after the date of said final acceptance.

The City shall pay to the Contractor interest at the rate of one and one-half percent per month on the final payment due the Contractor, to commence 30 days after the work under the Contract has been completed and accepted and to run until the date when final payment is tendered to the Contractor. If the City does not, within three (3) working days after receiving written notice of completion, notify the Contractor of work yet to be performed to fulfill contractual obligations, the interest provided by this subsection shall commence to run thirty (30) days after the end of the three (3) working day period.

As a further condition of final acceptance, the City may require the Contractor to submit evidence, satisfactory to the City's Representative, that all payrolls, material bills, and other indebtedness connected with the project have been paid, except that in case of any disputed indebtedness or liens, the Contractor may submit in lieu of evidence of payment, a surety bond satisfactory to the City guaranteeing payment of

all such disputed amounts when adjudicated in cases where such payment has not already been guaranteed by surety bond.

“AS BUILT” PLANS The Contractor shall maintain a set of “as built” plans noting the actual work performed, including dimensions, depths, thickness, materials, and other pertinent information marked in red ink on a clean set of project plans. The contractor shall include detailed drawings and changes as necessary to supplement the plan information. The contractor shall record in the as built plans the depth, location, type of pipe, and other information about other utilities or facilities encountered while constructing this project. The contractor shall note the products, and manufacturers (where possible) of installed materials.

WATER SUPPLY The Contractor shall be responsible for providing for all water necessary for this project. The City of West Linn is the purveyor of water in this area. A water supply hydrant is available to contractors next to 1970 8th Avenue in West Linn. Contact the City of West Linn, telephone 503-656-4261, to set up an account for this water source. Contractor shall comply with the instructions for use of City Water. Costs for handling the water shall be considered incidental to this contract.

PROJECT WORK AREA CLEANLINESS It is understood that the cleaning of the work areas is required at the end of each working day and after project completion is considered incidental and that no additional compensation will be paid individually for this work. Pavement areas will be swept clean and all construction debris will be disposed of in a way approved by the Project Engineer.

MARYLHURST PARK PROJECT

CITY OF WEST LINN, OREGON

SPECIAL SPECIFICATIONS

GENERAL INFORMATION

These special specifications and provisions are for the work as described herein in conjunction with the associated project plans and other related documents. The construction drawings are to be considered a part of these specifications bound herein. It is understood that these improvements are intended to become the property of the City of West Linn upon completion and acceptance by the Parks and Recreation Director and City Engineer.

Contact the following organizations before excavating in any area:

Name of Utility	Telephone No.	Utility Lines
Utility Notification Center Electric, Gas, Cable TV, Telephone, and others.	800 332-2344	Water, Sanitary Sewer, Storm water

The contractor shall be responsible for repairing all damage to identified utility lines located within the construction limits. The City of West Linn holds no liability for the locations of sanitary sewer lateral service lines.

Estimated quantities for each bid item shall be as shown in the bid, and as broken down in the bid item quantity spreadsheet included in these documents. Actual quantities may vary and contract will be adjusted based upon bid unit prices on amounts not to exceed 25% of total estimated quantities.

Construction of the facilities shown in the plans and specifications for this project shall be in conformance with established good construction practices, any permit conditions, the Oregon Standard Specifications for Construction, the City of West Linn Public Works Design and Construction Standards, the current versions of the Uniform Building Code, Uniform Plumbing Code, Oregon State Plumbing Specialty Code, Oregon State Health Division Rules and Standards, Oregon State Department of Environmental Quality Rules and Standards, and product manufacturers' recommended procedures. Where any of these rules or standards is in conflict with one another, the City Engineer shall determine which rules or standards shall govern.

Payment for each bid item shall be as set forth in the bidder's bid and shall include, but is not limited to, providing all materials, labor, and equipment necessary to perform the work listed herein. Work listed in each bid item shall be performed in accordance with the appropriate sections of the standard specifications, special specifications, standard details, and construction plans, except as modified herein.

The contractor is responsible for submitting information to the City's Project Manager for approval on all construction materials.

PRE-CONSTRUCTION CONFERENCE Pre-construction conference is required prior to start of this project. Traffic control plans and construction schedule shall be submitted to the City at least 5 working days prior to pre-construction conference for approval.

CONTRACTOR'S NOTIFICATION RESPONSIBILITY PRIOR TO BEGINNING WORK It is the contractor's responsibility to notify the City's Project Manager ten (7) working days prior to beginning work on any portion of this project. It is also understood that it is the City's responsibility to notify residents within

the project vicinity at least 5 (five) working days prior to beginning work. Traffic control plan if required, shall be submitted and approved four (2) weeks prior to beginning work with all the required signs to be installed at least two () weeks prior to beginning work.

Approval of the extent and duration of all temporary street closures by the City Engineer is required prior to any such closure.

LIMIT ON WORKING HOURS: Working hours shall be limited as follows unless specifically authorized by the City Engineer:

Monday through Friday - 7:00 am to 7:00 pm,
Saturday – 9:00 am to 5:00 pm,
Sunday - no work is permitted

MATERIAL SUBMITTALS: The Contractor is responsible for submitting information to the City Project Manager for approval on all construction materials. The City will allow using of the Recycled Asphalt Product (RAP) per Section 00745.03 of the 2008 Oregon Department of Transportation Standard Specifications with no more than 30% RAP will be allowed in the base courses (Class B) and no more than 20% RAP will be allowed in the wearing courses.

CORRECTION OBLIGATION PERIOD: The Contract will execute its work in strict accordance with the Contract Documents (which include the Oregon Department of Transportation Standard Specifications for Construction) in a sound and workmanlike manner. Contractor warrants and guarantees its work against all defects and deficiency in material and workmanship. The Contractor agrees to correct all defects appearing in the work or developing in the materials furnished for a period of **eighteen (18) months** after the date of final acceptance of the work by the City and further agrees to indemnify and save the City harmless from any cost encountered in correcting such defects. Further, if defects are corrected during the correction obligation period, a new eighteen (18) month period for that portion of the work will commence upon acceptance of the corrected work by the City.

TIME LIMIT OF UNSETTLED DISPUTES: No action, suit or other legal proceedings shall be maintained by Contractor arising out of the contract or breach thereof or anything done in connection therewith, unless commenced within **eighteen (18) months** of the final acceptance of the project. All claims or causes of action by or of Contractor in any way resulting from this contract shall be deemed barred unless action or suit thereon shall have been commenced within such time.

COMPLIANCE WITH OREGON REVISED STATUTES: The contractor must comply with all of the Oregon Revised Statutes for Public Works contracts, which are incorporated herein by this reference. Contractor shall comply with all applicable provisions of ORS 279C.505, ORS 279C.510, ORS 279C.515, ORS 279C.520, and ORS 279C.530. The contractor is specifically reminded that Performance and Payment bonds in a form acceptable to the City are required.

PAYMENT OF MINIMUM WAGE RATE: The contractor shall comply fully with all statutory requirements for payment of prevailing wage rates on public works projects. The hourly rate of wage to be paid workers on this project shall not be less than the specified minimum hourly rate of wage in accordance with ORS 279C.838 and 279C.840. shall not be less than the prevailing rate of wage for an hour's work in the same trade or occupation in the locality of the project. This requirement shall apply to all workers employed on the project by the prime contractor, subcontractors, or other persons doing or contracting to do the whole or any part of the work required for the project. The existing prevailing rates of wages as established by the Commissioner of the Bureau of Labor and Industries pursuant to ORS 279C.815 are hereby incorporated into these Specifications. The contractor shall obtain copies of applicable schedules of prevailing wage rates from the Bureau of Labor, 1400 Southwest Fifth Avenue, Room 514, Portland, Oregon 97201 or online at http://www.oregon.gov/BOLI/WHDPWR/pwr_book.shtml. When a contractor or subcontractor is a party to a statewide collective bargaining agreement in effect with any labor organization, the rate of wages

provided for in such agreement shall be considered to be the prevailing rate of wage to be paid to the workers on this project.

In conformance with State of Oregon regulations, the contractor or its surety and every subcontractor or its surety shall submit a statement in writing to the City in a form prescribed by the State Labor Commissioner certifying under oath the hourly rate of wage paid each classification of workers employed for work on the project, and further certifying that no worker has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in this contract. These statements are to be submitted to the City's Project Manager.

There is no representation on the part of the City that labor can be obtained at the hourly rates required by this contract. It is the responsibility of the contractor to be aware of local labor conditions and perspective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of a payment of wage rates in excess of the prevailing wage rates.

WORKERS' COMPENSATION INSURANCE AS REQUIRED BY ORS 656.017: The contractor, its subcontractors, and all employers working under this project subject to the Oregon Workers Compensation Law, shall comply with ORS 656.017, which requires them to provide workers' compensation coverage for all their subject workers. Evidence of contractor compliance with this requirement shall be submitted and approved by the City prior to payment.

PERMITS: The City will obtain the DEG 1200c permit, the Contractor shall obtain all other permits and licenses, including a City business license, and pay any fees (excluding System Development Charges) connected therewith having to do with his construction operations except those permits specifically stated to be obtained by the City. The contractor shall confine his operations to within the permanent or construction easement limits, and street right-of-way limits. Any damage to private property, either inside or outside of the aforementioned limits, shall be the responsibility of the Contractor. The city shall waive the cost of a public works permit.

OSHA: During performance of the contract, the contractor or vendor is required to comply with the conditions of the Federal Occupational Safety and Health Act (OSHA) and the standards and regulations issued thereunder. The contractor shall further agree to hold the City, its employees, agents, City Councilors, and assigns harmless and free from liability for failure to comply with said standards and regulations. It shall be the sole responsibility of the contractor or vendor to remain familiar with said standards and regulations and maintain their enforcement.

CONSTRUCTION SEQUENCING: Construction sequencing requirements for this contract is as follows: The contractor shall propose a plan of work that is acceptable to the City Project Manager, and update the plan as necessary to remain current and responsive throughout the project.

EXISTING UNDERGROUND UTILITIES: There are existing underground utilities in the project area. There may be conflicts between existing utilities and the planned improvements. The City Project Manager and the contractor shall cooperate as necessary to make adjustments to successfully construct the project. Minor adjustments will be considered incidental to the project, and will be included under unit price items. Significant added costs will be covered under extra work or other payment method as may be agreed upon between the contractor and City Project Manager.

TRAFFIC CONTROL: The contractor is solely responsible for providing for public traffic safety during the construction work. A traffic plan shall be developed by the contractor and submitted to the City Engineer for approval prior to commencement of any work. The contractor shall maintain safe conditions for pedestrian and vehicular traffic.

SECTION 206 – LANDSCAPING

These specifications amend the City of West Linn Public Works Standard Construction Specifications. Where discrepancies occur, these specifications shall override.

PART 1 – GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this Section.

Refer to Section 206 - Irrigation

DESCRIPTION OF WORK

Work includes all materials, equipment and labor necessary for: topsoil stripping, screening/grinding, stockpiling, placement, finish grading, protection, maintenance, guarantee and replacement; and related items necessary to complete the work indicated on the Drawings and/or specified.

SUBMITTALS

Soils Test: Have representative sample of topsoil tested for pH, N, P, K, and trace minerals, and request recommendations for amendments. Amend soils as recommended in the report.

PROTECTION OF EXISTING CONDITIONS

Protect work, adjacent property, public, and be responsible for any damage or injury arising from this contract due to actions or neglect.

SCHEDULING

Confine work to areas designated. Do not disturb existing vegetation outside of project limit lines. Repair or replace vegetation damaged as a result of Contractor's operation to satisfaction of Owner at Contractor's expense. See Section 02110 for specific requirements for protection of existing plantings.

Contractor shall be cognizant of all utility lines and underground obstructions. He shall familiarize himself with all utility, irrigation, mechanical, and electrical plans so that his digging/drilling operations do not damage lines. Repair or replacement by original installer shall be made at Contractor's expense for all existing buildings, equipment, underground utilities, irrigation equipment, paving, surfacing, stairs, and/or forms damaged as a result of Contractor's operations in a manner satisfactory to the Owner before final payment is made.

PROVISIONAL REVIEW (Punch List)

Upon completion of all soil placement, finish grading, and all other work (if any) required under the contract, the Contractor shall request a provisional inspection. No partial approvals will be given.

FINAL REVIEW/ACCEPTANCE

The Contractor shall request a final inspection upon satisfactory completion of all punch list items and any other work required under this contract. Final inspection and acceptance of the work shall establish the beginning of the guarantee period.

PART 2 – PRODUCTS

TOPSOIL

The Contractor shall screen, using mechanical screening methods, any topsoil material to remove all rocks, sticks, vegetative matter, clay lumps and other deleterious materials over 1" in diameter. Remove from site and legally dispose of screening spoils.

Obtain a fertility test for existing topsoil and any additional topsoil required as part of this contract, complete with amendment recommendations. The Contractor shall amend the soil after placement as specified in the report under recommendations.

Contractor's bid shall be based on assuming sufficient quantity of screened stockpiled topsoil will be available after processing to cover plant bed areas requiring additional soil for mounding as noted in drawings.

SUBSTITUTIONS

No substitutions shall be made without the prior written approval of the Landscape Architect. Requests for substitutions must be made at the time that documentation of ordered material is provided.

MULCH

Fine to medium grade ground fir or hemlock bark of uniform color, free from weed, seeds, sawdust, and splinters and shall not contain resin, tannin, wood fiber, salts, or other compounds detrimental to plant life. Size range of 1/2" to 1-1/4" with maximum of 30% passing a 1/2" screen. Submit sample for approval.

FERTILIZERS AND SOIL AMENDMENTS

General: Approved brands conforming to applicable State fertilizer laws. Uniform in composition, dry, free-flowing, delivered to the site in original unopened containers, each bearing the manufacturer's guaranteed analysis. All fertilizers must be EPA approved.

No fertilizer is to be used within 200 feet of or in a biofiltration swale or stormwater management facility. Topsoil may be considered for use as an amendment in barren areas within the 200 foot zone if approved by the Engineer.

Fertilizer shall not be used unless a need is established for the site as shown by a soil test. The test shall establish the need, formulation, and application rate.

SELECTIVE HERBICIDE

Treat all planting beds with a selective pre-emergent herbicide and remove all foreign weeds prior to acceptance.

PART 3 – EXECUTION

FINISH GRADING (GENERAL)

Finish grade all planting areas and fine grade as may be necessary or incidental to preparing planting and seeding areas. Establish finish grades in accordance with elevations shown in the Drawings, insuring that no pockets or any

other surface obstructions to positive drainage are present. Insure positive drainage away from low areas. Obtain approval of finish grades.

Subgrades, unless otherwise indicated, shall be 6" below finish grade in all planting areas. Prior to placing topsoil, thoroughly rototill/scarify all areas to a depth of 12" and remove rocks and sticks over 2" diameter. Take care not to damage existing tree and shrub roots that are not indicated for removal.

Place topsoil over all graded areas to a uniform depth of 6 inches.

TOPSOIL PLACEMENT AT PLANT BEDS

Following placement of the uniform layer of topsoil, place an additional quantity of amended stockpiled topsoil over plant bed areas necessary to achieve a minimum 3% slope for positive drainage, and rototill to a depth of 4" incorporating previously placed topsoil with the additional topsoil.

Apply 'Roundup' in all planting areas in accordance with manufacturer's recommendations and as necessary to remove weed growth. Apply pre-emergent herbicide at plant beds.

Rake, float, drag, roll, and perform all necessary operations to remove surface irregularities and to provide a firm, smooth surface with positive surface drainage. Remove all rocks, sticks and other debris 1" and larger in planting areas and seeded areas and dispose of on site as directed. Box drag and hand rake all seeded areas.

Finish grade after installation of topsoil and mulch shall be 1/2" below adjacent paved surfaces unless otherwise specified or detailed.

MULCHING

Spread 2" depth of bark mulch over all shrub beds. Maintain mulch 1/2" below surface of adjacent pavement or lawn area finish grade.

Clean-up:

A general clean-up shall be made immediately after and as part of all work done in the area. The clean-up shall include the entire area under this contract. Adjacent areas shall be cleaned to the extent that the work done under the contract may scatter litter. Such clean-up shall include sweeping and washing of paved areas to remove soil, and removing and legally disposing of all other litter and debris originating from any source whatsoever.

END OF SECTION 02900

SECTION 206 – IRRIGATION

These specifications amend the City of West Linn Public Works Standard Construction Specifications. Where discrepancies occur, these specifications shall override.

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work of this Section.

Refer to Section 206 Landscaping

SCOPE OF WORK

Furnishing and installing automatic irrigation system complete including complete point of connection to water line, trenching and backfill, and furnishing and installing all labor, equipment, and items noted on Drawings and specified herein, connection to building energy management system, connection to central control system, and balancing and testing of system. Provide a temporary water source for all turf areas, prior to seeding, but no later than September 15 if the permanent connection is not in place.

QUALITY ASSURANCE

Codes and Ordinances: All local, municipal, and State laws, rules, and regulations governing or relating to any portion of this work are hereby incorporated into and made a part of these Specifications. Anything contained in these Specifications shall not be construed to conflict with the above-mentioned rules, regulations or requirements, and where a conflict may occur, the rules regulations, or requirements of the governing code shall be adhered to. However, when these Specifications and/or Drawings call for or describe materials, workmanship or construction of a better quality, higher standard or larger size, these Specifications and/or the Drawings shall take precedence over the requirements of said rules, regulations, or codes.

SUBMITTALS

Products and Materials:

Immediately after award of Contract, provide sufficient descriptive literature/information as to all operating characteristics, including operating pressures, pressure losses, materials used in product, test certificates, special features, etc., for those products not specified by manufacturer or those submitted for approval as equal. Only the Owner's Representative can accept an item as "equal." Approval must be in writing.

Submit source and sample for pipe bedding and trench backfill material.

PERMITS AND FEES

Obtain all permits and pay required fees to any governmental agency having jurisdiction over the work. Arrange inspections if required by local agencies and ordinances during the course of construction.

APPROVAL

Whenever the terms "approve," "approval," or "approved" are used in the Specification, they mean approval of Owner's Representative in writing.

Record Irrigation Drawings: Contractor shall furnish accurate record drawings of the complete irrigation system in accordance with the General and Special Conditions. The Owner's Representative shall provide two sets of full-size

drawings showing all irrigation work required under this contract. The drawings sets are to be on site at all times during the construction so that Contractor can make a daily record of all work installed; the Contractor shall record all installed work on a daily basis in the drawings sets.

Actual location of hidden items including valves, stub cuts manual drains shut-off valves shall be shown on the prints by dimensions from easily identified permanent features such as buildings curbs fences walks or property lines. Drawings shall show approved manufacturer's name and catalog number. The drawings shall be to scale and all indications shall be neat. These prints will be observed by the Owner's Representative throughout the course of work. After testing and approval of mainlines and laterals for cover-up all information noted on the prints shall be transferred to one set with all indications recorded in a neat orderly way by Contractor. The record set shall be turned over to the Owner's Representative for review at or before the Provisional Acceptance (punch list) of the Project.

Operations and Maintenance (O & M) Manual: One manual, bound in a hardback cover, shall be submitted to the Owner's Representative for approval at the time of mainline testing. It shall include as a minimum the following information for all items used on the system:

- List of authorized distributors and service representatives for each piece of irrigation equipment, including names, addresses, and phone numbers.

- Guarantee/warranty certificates.

- Instruction manuals.

- Parts lists for each item with exploded views of each item showing part numbers.

- Complete trouble-shooting guide to common irrigation problems.

- DCVA Test Certification.

- Winterization and spring start-up procedures.

At the time of final inspection of the completed installation, the Contractor shall have completed revisions to the Owner's Representative's satisfaction of the "as-built" drawings and O & M Manual (indicating all changes) ready to turn over to the Owners for recording purposes; this shall be accomplished prior to final payment.

JOB CONDITIONS

Water Source: as directed by the City.

Mechanical/Electrical:

- A) Provide two, 3" diameter sleeves for control wiring from controller locations to planting area.

- B) Low voltage wiring connections to flow sensor and rain gauge from main controller.

Sleeving: Sleeve under all paved areas with PVC schedule 40 sleeves.

Other Trades: Coordinate all work with that of other trades.

Available Water Pressure: Verify available water pressure at point of connection prior to bidding work.

PROTECTION

Protect work, adjacent property, public, and be responsible for any damage or injury arising from this Contract.

1 Confine work to areas designated. Do not disturb natural vegetation outside of project limit lines. Protect all trees
2 and shrubs within project limits not designated to be removed. Repair or replace vegetation damaged as a result of
3 Contractor's operation to satisfaction of Owner at Contractor's expense.
4

5 Be cognizant of all utility lines and underground obstruction. Be familiar with all utility, irrigation, mechanical, and
6 electrical plans, so that digging/drilling operations do not damage lines. Replace or repair at Contractor's expense
7 any existing equipment, underground utilities, walks, stairs, and/or forms damaged as a result of Contractor's
8 operations in a manner satisfactory to the Owners before final payment is made.
9

10 GUARANTEE

11

12 Guarantee the satisfactory operation of equipment, materials and workmanship, including restoration of the area for a
13 period of one year from the date of final acceptance of the project. Repair or replace any defect in equipment or
14 workmanship occurring within that year at Contractor's expense.
15

16 PART 2 - PRODUCTS

17

18 GENERAL

19

20 Materials: All materials to be incorporated in this system shall be new and without flaws or defects and of quality
21 and performance as specified, and meeting the requirements of the system. All pipe damaged or rejected because of
22 defects shall be removed from the site at the time of rejections.
23

24 Substitutions: No substitutions of smaller pipe sizes will be permitted but substitutions of larger sizes of same type at
25 no extra cost with approval are acceptable.
26

27 Whenever any material is specified by name or number, such specifications shall be used for the purpose of
28 facilitating a description of the materials and establishing quality and shall be deemed and construed to be followed
29 by the words "or approved equal." No substitutions will be permitted which have not been submitted for prior written
30 approval of the Owner's Representative.
31

32 PIPE AND FITTINGS

33

34 Polyvinyl Chloride Pipe (PVC) and Fittings:
35

36 PVC compound Type 1, Grade 1, or Type 1, Grade 2, conforming to ASTM D 1784 specifications and approved and
37 certified by the National Sanitation Foundation, all fittings Schedule 40 unless otherwise noted. Each length of PVC
38 pipe is to be marked with an identifying extrusion "run" number and the manufacturer's name or trade name, the pipe
39 size and schedule or class.
40

41 PVC Solvent Weld Pipe:

42 PVC 1120 and 1220 material, and shall have 200 psi minimum pressure rating unless otherwise indicated, with SDR
43 21 walls which conform to ASTM D 2241. PVC pipe with walls heavier than SDR 21 shall be installed when noted.
44

45 Utilize schedule 40 PVC at all mainlines.
46

47 PVC Threaded Pipe PVC 1120 or PVC 1220 materials, Schedule 80 conforming to ASTM D 1785.
48

49 Plastic Pipe Fittings:

50 Conform to ASTM D 2466, Type 1, Grades 1 or 2. Pipe may be belled on one end with the dimensions of the
51 tapered bell conforming to ASTM D 2672. Molded fittings manufactured of the same materials as the pipe, suitable
52 for solvent weld, unless otherwise specified. Slip fitting socket taper shall be so sized that a dry, unsoftened pipe end
53 can be inserted no more than halfway into the socket. Plastic saddle and flange fittings not permitted.
54

Solvent Weld Compound:
Two-step application, with primer and solvent compounds.

PIPE BEDDING & BACKFILL

Bedding and backfill of irrigation trenches to subgrade elevation, shall be with clean sand. Submit source and sample for approval.

IRRIGATION HEADS

As shown on the Drawings.

VALVES

Master Valve:
Brass, normally open valve, minimum 200 psi pressure rating. Globe configuration, as specified on the Drawings.

Quick Coupler Valves:
Brass, two-piece with spring-loaded locking rubber cover. As specified on the Drawings.

Manual Drain Valves:
Brass, 3/4" size, commercial quality, non-rising stem type. As specified on the Drawings.

Zone Valves:
Nylon electric remote control valve with threaded connections (not glued) and PRS Feature as specified on the Drawings.

VALVE BOXES AND PROTECTIVE SLEEVES

General: Enclose all valves in valve boxes, at depth of pipe provide extensions to finish grade as required.

Valve Boxes: Automatic control valves quick couplers, manual drains and other components as indicated on the Drawings, jumbo sized green plastic valve box with locking cover.

Backflow Preventor:
Concrete box with locking driveable lid.

VALVE KEYS AND VALVE BOX COVER KEYS

Provide two complete sets of all keys required for opening or operation of valves, valve box covers, and protective sleeve cap covers.

RELAYS & OTHER EQUIPMENT

Provide and install any relays or other components including all wire runs as necessary to make pump operation possible from central control system. Coordinate with other trades.

MISCELLANEOUS ELECTRICAL EQUIPMENT

Control Wire: Insulated single-strand copper, minimum AWG No. 14, 600 V UL-approved as Type UF. Copper conductor must meet or exceed ASTM B-3. Red, white, orange, and black colors must be available. Sufficient quantities must be supplied to meet splice and extra-wire requirements listed under control wire installation. Control wire size must meet or exceed Rainbird and Toro irrigation control wire specifications including length of run/size ratio. Provide trace wire attached to control wire bundle at 5' OC.

Splice: Make watertight electrical wire splices with either 3-M, Scott's Lock Seal tack 3576-78 or Pen-Tite PVC socket and sealing plug or Rainbird PT-100 series.

Electrical Tape: Black plastic, 3/4" wide, minimum of 0.007" thick, and all-weather type.

Duct Tape: All-weather cloth tape.

Trace Wire: Bare #10 solid copper.

DRAIN ROCK

Unfractured rock; 100% passing 1-1/2" square sieve and 0% passing 3/4" square sieve.

PART 3 - EXECUTION

INSPECTION

Available Pressure Verification: Prior to the start of any work, verify the assumed static pressure at point of connection. Notify Owner's Representative in writing of pressure available for approval to proceed.

Owner's Representative

Installation of piping prior to establishment of correct subgrade elevations is strongly discouraged. Contractor must attain specified bury depths.

Owner's Representative

Plant Materials: Locate irrigation lines to avoid proposed plant material locations and any existing trees. Minor field adjustments may be made by the Owner's Representative to shrubs to avoid equipment. If conflict occurs with tree pit, relocate irrigation line at no additional cost.

PERFORMANCE

Owner's Representative Sprinkler head radii and pattern shall be selected and set to provide triple head-to-head coverage of irrigated areas and to minimize overspray onto adjacent areas including paved areas or areas beyond project limits.

Water service connections shall conform to the requirements set forth by the supplying agency, and all codes and ordinances.

Trenching:

Trenches shall be excavated for all pipe to provide a minimum depth of cover below finish grade as follows:

All mainlines: 18"

Laterals in field areas: 18"

Laterals in all other areas: 12"

All pipe below paved vehicular surfaces: 24"

Maximum bury depth for all pipe: 30"

Excavate no wider at any point than is necessary to lay the pipe or installation equipment. Excavate with vertical sides and provide bracing and shoring as required.

Excavate to depth required in any material encountered with no extra compensation. Materials unsuitable for bedding of pipe to be removed to depth 4" below pipe depth.

Exercise care when excavating trenches near existing trees. Where roots are 2" and greater in diameter, except in the direct path of the pipe, hand-excavate and tunnel. When large roots are exposed, wrap with heavy burlap for protection and to prevent excessive drying. Trenches dug by machines shall have the sides hand-trimmed, making a clean cut of the roots. All roots 1/2" and greater in diameter that are cut and trimmed shall be treated with an approved tree wound dressing. Trenches having exposed tree roots shall be backfilled within 24 hours unless adequately protected by moist burlap or canvas.

The top 6" of topsoil shall be kept separate from subsoil and shall be replaced as the top layer when backfill is made.

Piping:

Drain Valves:

Installed at Point of Connection, at the low point of each zone, and at isolated low points within zones, minimum. Each drain to have 1/2 cu. yd. drain rock sump. Install valves as per detail. Locate sumps outside of paved areas, use off-sets if necessary. System will be winterized by manual drains. Locate all manual drains on as built drawings.

Pipe Placement:

Plastic pipe shall be installed in a manner so as to provide for expansion and contraction as recommended by the manufacturer. Provide bare copper trace wire at mainlines only, attached to pipe at 10'-0" intervals, minimum.

PIPE BEDDING AND BACKFILL:

Bed and backfill pipe trenches with specified import material. Compact all trench backfill to 90%. Contractor shall be responsible for all repair of settled trenches.

Jointing:

General: All threaded joints (PVC or galvanized) shall be sealed with Teflon tape or Rectorseal "Heavy Duty" #100 virgin Teflon thread sealing paste only (no substitutes).

Care shall be taken to not over-tighten fittings. Do not over-tighten fittings.

Keep interior of pipes clean and free from dirt, debris, excess solvent, pipe cuttings or burrs, and ream to full diameter. When pipe laying is not in progress, close ends of pipe.

PVC Pipe: Use two-step solvent weld process only, applied as per manufacturer's recommendations.

No water shall be permitted in pipe until a period of at least 10 hours has elapsed for solvent weld-setting and curbing.

The joints shall be allowed to cure at least 24 hours before pressure is applied to the system.

Only factory-threaded schedule 80 PVC pipe may be connected to a threaded fitting without an adapter.

No male PVC adapters permitted. Use only female PVC adapters with galvanized steel pipe nipples (3" min. length). Street ells permitted only for triple swing joints, and only "Marlex" Schedule 40 high-density polyethylene (no substitutes).

Installation:

General: See details for general installation requirements. Provide sufficient clearance for materials requiring maintenance. Install all materials as per manufacturer's recommendations.

Sprinkler Head/Quick Coupler:

Risers for all sprinkler heads and quick-coupler valves shall be standard triple-swing joining type as detailed; made with Schedule 80 PVC threaded fittings.

Minimum riser size shall be the iron pipe size of the sprinkler head or quick coupler.

All sprinkler heads and quick coupling valves shall be set perpendicular and flush to finished grades. Heads in lawn areas must be slightly depressed to avoid mower damage. Place 12" square of sand base sod at each rotor head in turf areas. Position sod so head is centered. Excavate around head so soil level of sod is flush with finish grade.

Spray pattern shall not overthrow onto structures, glass, parking lots, walkways, or public right-of-ways.

Locate heads to avoid possible damage by vehicles and heavy equipment.

Heads must be within 6" of edge of paving or curbs.

After Fine grading/mulching adjust all head heights as necessary.

Valves: Enclose all valves (including automatic control valves and PRV's) in valve boxes. Valve box extension may be required. Install as per detail and locate precisely by dimensions to two fixed objects on as-built drawings.

Valve bonnet packings and bolts shall be checked and tightened before backfill.

Control Wiring Installation: Wiring between controllers and automatic control valves shall conform with national Electrical Code, latest edition, and shall have a common neutral, white; and separate control conductor for each valve. Label wires at both ends in a permanent fashion.

Splices will be permitted only at junction boxes, valve boxes, or at control equipment. A minimum of 2 feet or excess conductor shall be left at all splices, terminal, and control valves to facilitate inspection and future splicing. Encapsulate all splices with approved sealants. Run a bare copper trace wire along all mainlines and wide bundles to the furthest zones.

Control wires are to be taped together at 5' intervals with electrical tape, then this bundle is to be taped to the bottom of the main (supply) line at 10' intervals with at least one full wrap of duct tape. Tie a loose 20" loop in all wiring at changes of direction greater than 30 degrees. Untie all loops after all connections have been made. At Contractor's option, the control wire may be placed to the side of the main rather than below, provided that the wire is not installed above the top of the main nor more than 8" from the side of the main. Sleeve all control wires which do not run with main line in PVC CL 200, typical.

Run four unconnected continuous spare control wires (orange color) through each intermediate valve box (with loop) between controller and furthest automatic control valve. When backfilling around valve box, make sure that spare wires, splices and excess conductor are visible in box.

Clean-Up: Keep the premises free from rubbish and debris at all times, and arrange material so as not to interfere with other operations on the job site. Remove all unused material, rubbish, and debris from the site.

INSPECTIONS AND TESTING

General: To be valid, the pressure tests must be performed under the direction of the Owner's Representative. The Contractor must give 48 hours notice to the Owner's Representative when inspection is required. The location, inspection and testing provisions for these specifications will be strictly adhered to.

If, for any reason, any part of the sprinkler system is backfilled before location, testing, or inspection, it must be completely uncovered and exposed until approved for backfilling by Owner's Representative.

The Owner's Representative reserves the right to direct the removal and replacement of any items which, in his opinion, do not present an orderly, reasonably neat, or workmanlike appearance, provided such items can be properly installed in such orderly way by the usual methods in such work. Such removal and replacement shall be done, when directed in writing, at the Contractor's expense without additional cost to the Owner.

Preliminary Inspection/Pressure Testing: Prior to request for preliminary inspection or arrival of Owner's Representative, accomplish the following:

All pipe and valves (including drain valves and quick couplers) and all other equipment except sprinkler heads in place.

Cap all risers except first riser from valve on each lateral (one uncapped riser per lateral), typical.

Purge all air from main lines.

Test of Mains and Valves: With all valves in place and closed, test at 150 psi minimum for 30 minutes without introduction of additional service or pumping pressure. Testing shall be done with one pressure gauge installed on the line where directed by Owner's Representative. Lines which show loss of pressure exceeding 5 psi at the end of specified test periods shall be rejected. The Contractor shall correct installations rejects, and retesting will be performed as specified herein.

Test of Laterals: Purge all air from laterals and cap all risers. Open valves and bring system to line pressure. Lateral lines will be inspected visually. Lines which evidence visible leakage shall be rejected.

Rejected Systems: Rejected systems or portions of systems require repair and retesting in the manner specified.

Final Inspection/Operations and Coverage Check: Prior to request for final inspection or arrival of Owner's Representative accomplish the following:

Complete all work, including balancing, adjusting the system (pressure reducing valves, flow adjustment keys, nozzles, etc.) to provide optimum coverage without fogging. Backfill all except valve boxes.

Coverage Check: Operate each zone of the system for the Owner's Representative's inspection and approval.

SYSTEMS OPERATION ORIENTATION

At time of and as part of the final inspection, conduct a training and orientation session for the Owner covering the operation, adjustment and maintenance of the irrigation system. The "as-built" plans and operations manual shall be reviewed and all features explained. The Contractor shall notify the Owner's Representative in writing two weeks prior to the training and orientation session and shall coordinate with the Technician of the Central Irrigation Control System supplier. The date and time of the session shall be subject to approval of the Owner's Representative.

END OF SECTION 02830

SECTION 210 – STONE MASONRY

These specifications amend the City of West Linn Public Works Standard Construction Specifications.

PART 1 – GENERAL

SUMMARY

This Section includes materials and workmanship required for constructing a stone retaining wall with basalt blocks in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans.

SUBMITTALS:

Submit three sets of samples illustrating minimum and maximum stone sizes, color range and texture.

Submit qualification data for firms and persons specified in 'Quality Assurance' article to demonstrate their capabilities and experience. Include list of completed projects with project names, addresses, names of Architect and Owners, plus other information specified.

QUALITY ASSURANCE

Single-Source Responsibility for Stone: Obtain stone from an approved single source with resources to provide materials of consistent quality in appearance and physical properties without delaying the progress of the work. Proposals for alternative sources of stone shall be considered only if submitted in writing for approval by Owner's representative.

Single-Source Responsibility for Other Materials: Obtain each type of stone accessory, sealant, and other materials from one manufacturer for each product.

Installer Qualifications: Engage an experienced installer who specializes in stone installation (not brick and block), and has completed stone masonry similar in material, design, and extent to that indicated for Project that has resulted in construction with a ten year record of successful in-service performance.

Field-Constructed Mock-Up: Prepare mock-up for stonework, to verify selections made for color and finish under sample submittals and to establish standard of quality for aesthetic effects expected in completed work. Build mock-up to comply with the following requirements:

- Locate mock-up on site where indicated or, if not indicated, as directed by Landscape Architect.
- Construct stone mock-up, six feet long, including crushed base rock and drain rock backfill.
- No other masonry shall be laid before approval of mock-up.
- Mock-up, if approved, may remain as part of the Work.

Pre-installation Conference: Convene one week prior to commencing work of this section.

Care shall be taken to avoid staining, marking, or marring exposed face of stones. Owner's representative shall reject damaged or unsightly material.

SITE CONDITIONS

Materials and ambient air temperature shall be a minimum 40 degrees F prior to, during, and 48 hours after completion of work.

During temporary storage on site, at the end of working day, or during rainy weather, cover stone work exposed to weather with non-staining waterproof coverings, securely anchored.

PART 2 – PRODUCTS

STONE

Basalt Stones: Basalt rubble stone of minimum 6" dimension exposed face.

Face Sizes: 40 percent of stones between 150 and 250 sq. in., 25 percent of stones between 100 and 150 sq. in., 22 percent of stones between 72 and 100 sq. in., and the balance of at least 36 sq. in.

Nominal Thickness: Four inches.

Quarry stone in manner to ensure that stone matches approved samples.

Each stone shall be free from depressions and projections that might weaken it or prevent it from being properly bedded.

MORTAR

Mortar: ASTM C 270 using proportion specifications; with Type I Portland cement of gray color, with Type S hydrated lime.

Water: Clean and potable.

ACCESSORIES

Sealant: Match stone color, as approved.

Cleaning Solution: Type which will not harm stone, joint materials, or adjacent surfaces.

MORTAR MIX

General: Comply with referenced standards and with manufacturers' instructions relative to mix proportions, mixing equipment, mixer speeds, mixing containers, mixing time, and other procedures needed to produce mortars and grouts of uniform quality and with optimum performance characteristics.

Do not add admixtures including coloring pigments, air-entraining agents, accelerators, retarders, water repellent agents, antifreeze compounds, or calcium chloride unless otherwise specifically indicated.

Mixing: Combine and thoroughly mix cementitious materials, water, and aggregates in a mechanical batch mixer.

Do not use antifreeze compounds to lower the freezing point of mortar.

If water is lost by evaporation, re-temper only within two hours of mixing.

Use mortar within two hours after mixing at temperatures of 80 degrees F, or two-and-one-half hours at temperatures under 50 degrees F.

PART 3 – EXECUTION

EXAMINATION

Verify that support work and site conditions are ready to receive work of this section.

Verify that items built-in under other sections are properly located and sized.

PREPARATION

Establish lines, levels, and coursing. Protect from disturbance.

Clean stone prior to erection. Do not use wire brushes or implements which can mark or damage exposed surfaces.

INSTALLATION OF STONE

Set stones to comply with requirements indicated on Drawings. Set stones in random bond to produce the effect established in the mock-up.

Vary the stone size. Exercise care to prevent the bunching of small stones or stones of the same size. When stones of varying heights above the pitch line are being used, distribute the various heights of stones uniformly throughout the exposed faces of the work. Size stone units to fit opening dimensions and perimeter conditions.

Mortar:

Conceal mortar application to the extent possible such that no mortar can be seen in the joints between stones on the exposed face of wall and top of wall.

Stones to be set with mortar shall be cleaned thoroughly and moistened immediately before setting.

Handle stones in a manner to prevent jarring or displacing the stones already set. The rolling or turning of stones on the wall will not be permitted.

Beds and Joints:

Joints at faces of stones at walls shall be no more than 3/4" wide, and no more than 1" wide at intersections of 3 or more stones. Joints at faces of stones at bench shall be no more than 1/2" wide and no more than 3/4" wide at intersections of 3 or more stones. At no place shall corners of four stones be adjacent to each other.

Install mortar in accordance with ASTM C 780.

CLEANING

Clean soiled surfaces with water and scrub brush.

Use non-metallic tools in cleaning operations.

END OF SECTION 02850

DIVISION 4 – WATER SYSTEM

Comply with Division 4 of the City of West Linn Public Works Standard Construction Specifications modified as follows:

Section 402 – Add the following to this section:

Private PVC Water System Pipe and Fittings:

A. Polyvinyl Chloride Pipe and Fittings:

1. PVC pipe shall be ASTM D1785 Schedule 40. Fittings shall be Schedule 40 conforming to ASTM 1785 and ASTM 2466. Joints shall be solvent welded in accordance with ASTM 2564. All components for potable water distribution shall be NSF rated for potable water supply.
2. Accessories: Marking tape shall be 3-inch wide reinforced polyethylene, color coded with the message "caution buried waterline/sewerline" imprinted continuously along its length. Toning wire shall be 12 gauge galvanized.

Section 403 – Add the following to this section:

Private PVC Water System:

Pipe and accessories shall be handled in such a manner as to insure against damage. Particular care shall be taken not to injure pipe coating. Dropping of pipe or fittings shall be cause for rejection.

The interior of all piping and accessories shall be cleaned after assembly and before connection to equipment.

Whenever pipe requires field cutting to fit, work shall be done by a machine in a satisfactory manner so as to leave a smooth end at right angles to axis of pipe.

All piping to be buried below structures, foundations or slabs shall be installed with extreme care. When all joints have been made, the Contractor shall demonstrate to the Engineer's satisfaction that all of the piping is watertight and that all lines are clear before proceeding with any work above this piping. It shall be the Contractor's responsibility to see that these lines are kept clear until Final Acceptance of the Project, providing suitable tight wooden bulkheads or plugs for open end pipes. Any blockage of these systems due to earth, debris, cement slurry, or anything else shall be rectified at the Contractor's expense before the project is accepted.

Tracer wire and marking tape shall be laid continuously over new PVC pressure pipe. Tracer wire and marking tape shall be installed as shown on the drawings. Variations from alignment and grade for the marking tape shall not exceed 3-inches from the specified location either vertically or horizontally. Splice wire ends to maintain continuity. Connect tracer wire to valve bodies or other appurtenances to facilitate future location and connection of toning devices.

All pipe shall be installed in strict accordance with the manufacturer's recommendations and/or specifications, using the best commercial trade practice. Any special tools required for laying, jointing, cutting, etc., shall be supplied by the Contractor. Seal end of line with a tight fitting plug when the pipe is not being laid.

END OF DIVISION 4

DIVISION 6 - STORM DRAINAGE SYSTEM

Comply with Division 6 of the City of West Linn Public Works Standard Construction Specifications modified as follows:

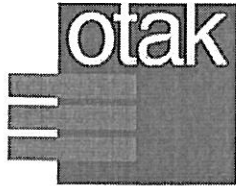
Section 602.02 – Add the following to this section:

Metal Trapped Catch Basins shall be manufactured by the Lynch Co. or approved equal. Install per manufacturer's recommended instructions.

Area Drains shall be Dura-Drain Precast Inlet Top Model P8 with American Drainage Plastic Catch Basin Base or approved equal. Install per manufacturer's recommended instructions.

Cleanouts shall be per City of West Linn Standard Detail WL-206 and shall be of the same material and size as the main line.

END OF DIVISION 6



DESIGN CALCULATIONS

Marylhurst Park Phase 1 – Rockery Walls

Prepared for
City of West Linn Parks and Recreation

Prepared by
Otak, Inc

July 2010

Ae-young Lee, PE
Bridges and Structures Group

Otak Project Number 15722



RENEWAL DATE: 12/31/2010

Rockery Wall Analysis - 5'-8" Maximum Height

General Information

File Contents

- Summary:** Rockery wall calculations.
- Scope:** Calculation of wall overturning, sliding and bearing stresses for given wall geometry. The following are checked against allowables:
- Bearing pressure at toe of wall
 - Sliding at base of wall
 - Overturning of entire wall system
- Notes on Use:**
- File equations currently in ENGLISH units.
 - All yellow highlighted cells are generally required input.
- Assumptions:**
- Soil properties unavailable, approximate
 - Mortar does not contribute structurally
 - No earth or live load surcharges
 - No seismic forces need to be considered

Attachments & References

- See Also:**
- Stability Analysis of a Rockery, By Alfred J. Hendron Jr. (Hendron)
 - American Rockery Contractors, Rock Wall Construction Guidelines (ARC)
 - 2007 AASHTO LRFD 4th ed (ALRFD)
 - 2006 International Building Code (IBC)

Files:

QA/QC Status

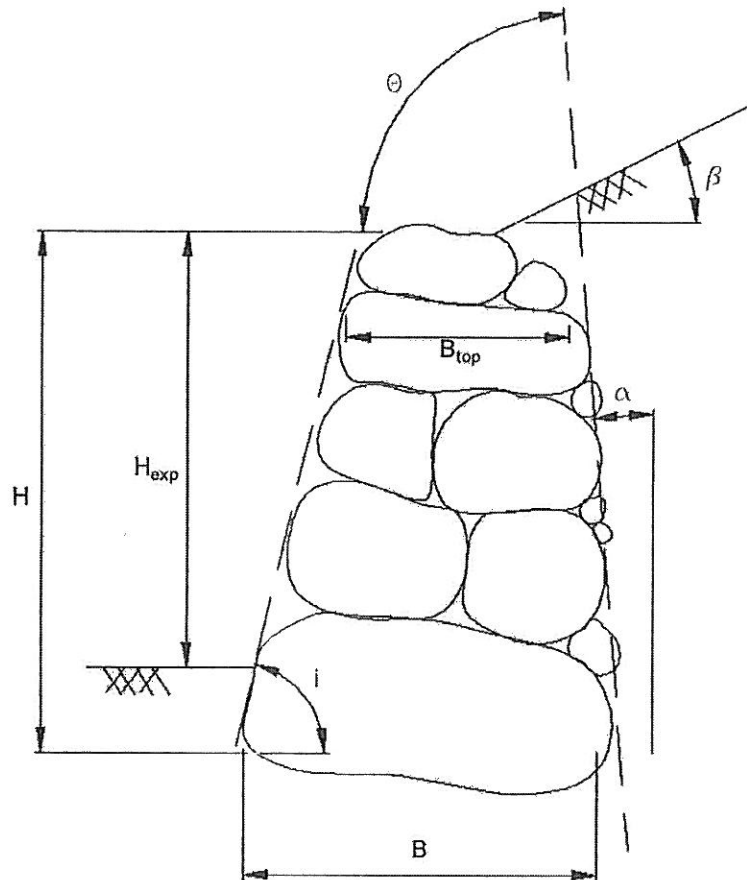
Checker: _____

Dates(s): _____

Comments: . _____

Actions Req'd: _____

Idealized Rockery Wall Section



Typical Section Dimensions and Properties

Material Properties

$$\gamma_r := 155 \text{pcf}$$

Assumed unit weight of rock.

Design Section Length and Height

$$\text{Sta}_d := 0$$

Sta. of design section.

$$\text{El}_{\text{TOW}} := 5 \text{ft}$$

Elevation of top of wall.

$$\text{El}_{\text{BOFmax}} := -8 \text{in}$$

Maximum elevation bottom of wall including embedment.

$$\text{El}_{\text{fg}} := 0 \text{ft}$$

Elevation of final ground in front of abutment wall.

$$H_w := \text{El}_{\text{TOW}} - \text{El}_{\text{BOFmax}}$$

$$H = 5.67 \text{ft}$$

Wall total height

$$H_{\text{exp}} := \text{El}_{\text{TOW}} - \text{El}_{\text{fg}}$$

$$H_{\text{exp}} = 5.00 \text{ft}$$

Exposed wall height

Wall Typical Section Geometry

$$\text{taper}_{\text{front}} := \frac{1}{4}$$

Front face batter; allowable 1H:6V to no flatter than 1H:4V (ARC)

$$B := 0.6 \cdot H$$

$$B = 3.40 \text{ft}$$

Base width of wall; arbitrary minimum requirement, adjust for bearing pressure

$$B_{\text{top}} := 1.5 \text{ft}$$

$$B_{\text{top}} = 1.50 \text{ft}$$

Width of top resisting rock course

☒ Soil and Surcharge Calculations

Soil Information

$$\gamma_{\text{soil}} := 110 \text{pcf}$$

Assumed soil unit weight.

$$\phi_{\text{soil}} := 33 \text{deg}$$

Assumed internal friction angle of retained soil

$$\delta_{\text{soil}} := 20 \text{deg}$$

$$\delta_{\text{soil}} = 20.00 \cdot \text{deg}$$

Friction angle delta for masonry on clay/silt/sand (ALRFD T3.11.5.3-1)

$$\beta := \text{atan}\left(\frac{0}{1}\right)$$

$$\beta = 0.00 \cdot \text{deg}$$

Backfill slope angle for (vert/horiz)

$$q_{\text{allow}} := 1.5 \frac{\text{kip}}{\text{ft}^2}$$

Assumed allowable bearing pressure (IBC)

$$h_{\text{EG}} := 0 \text{ft}$$

Surcharge depth

$$i := 90 \text{deg} - \text{atan}(\text{taper}_{\text{front}})$$

$$i = 75.96 \cdot \text{deg}$$

Angle of centroid

$$\theta := 90 \text{deg} - \text{atan}\left(\frac{B - B_{\text{top}} - H \cdot \text{atan}(90 \text{deg} - i)}{H}\right) \quad \theta = 84.57 \cdot \text{deg}$$

Angle of back face of wall to the horizontal.

$$K_a := \frac{\sin(\theta + \phi_{\text{soil}})^2}{\sin(\theta)^2 \cdot \sin(\theta - \delta_{\text{soil}}) \cdot \left(1 + \sqrt{\frac{\sin(\phi_{\text{soil}} + \delta_{\text{soil}}) \cdot \sin(\phi_{\text{soil}} - \beta)}{\sin(\theta - \delta_{\text{soil}}) \cdot \sin(\theta + \beta)}}\right)^2}$$

Active lateral earth pressure coefficient, ALRFD Eqn 3.11.5.3-1

$$K_a = 0.31$$

$$\gamma_a := \gamma_{\text{soil}} \cdot K_a$$

$$\gamma_a = 33.59 \cdot \text{pcf}$$

Equivalent fluid pressure for a wall with active pressures (yielding wall).

$$P_a := \frac{1}{2} \gamma_a \cdot H^2 \cdot 1 \text{ft}$$

$$P_a = 0.54 \cdot \text{kip}$$

Resultant lateral earth force

$$\gamma_p := 250 \text{pcf}$$

$$\gamma_p = 250.00 \cdot \text{pcf}$$

Assumed equivalent fluid pressure for a wall with passive pressures.

$$\gamma_{\text{eq}} := \gamma_a$$

$$\gamma_{\text{eq}} = 33.59 \cdot \text{pcf}$$

Specify which horizontal earth pressure coefficient to use.

☒ Soil and Surcharge Calculations

Wall Self Weight and Earth Pressures

Forces at Wall Base

$$R_r := \gamma_r \cdot \frac{H}{\sin(i)} \cdot \frac{B + B_{top}}{2} \cdot 1 \text{ ft}$$

$$R_r = 2.22 \cdot \text{kip}$$

Total weight of rockery per foot.

$$R_{r_par} := R_r \cdot \sin(i)$$

$$R_{r_par} = 2.15 \cdot \text{kip}$$

Weight of rockery acting along "CL" of wall.

$$R_{r_nor} := R_r \cdot \cos(i)$$

$$R_{r_nor} = 0.54 \cdot \text{kip}$$

Weight of rockery acting normal to "CL" of wall.

$$P_{EH_par} := P_a \cdot \sin(\delta_{soil})$$

$$P_{EH_par} = 0.18 \cdot \text{kip}$$

Earth pressure acting parallel to wall.

$$P_{EH_nor} := P_a \cdot \cos(\delta_{soil})$$

$$P_{EH_nor} = 0.51 \cdot \text{kip}$$

Earth pressure acting normal to wall.

Location of Forces

$$h_{r_nor} := \frac{H}{2}$$

$$h_{r_nor} = 2.83 \text{ ft}$$

Height of wall weight acting normal to wall.

$$h_{EH_nor} := \frac{H}{3}$$

$$h_{EH_nor} = 1.89 \text{ ft}$$

Height of earth pressure acting normal to wall.

Stability Checks - Static Loads

Overturning Moments

Base of Wall

$$M_{EH_o} := P_{EH_nor} \cdot h_{EH_nor} \cdot \left(\frac{1}{\sin(i)} \right) - P_{EH_par} \cdot \left(\frac{B}{2} \right)$$

$$M_{EH_o} = 0.67 \cdot \text{kip} \cdot \text{ft}$$

Sum moments at base due to lateral earth pressures.

$$M_o := M_{EH_o}$$

$$M_o = 0.67 \cdot \text{kip} \cdot \text{ft}$$

Total overturning moment.

Resisting Moments

Base of Wall

$$M_{r_r} := R_{r_nor} \cdot h_{r_nor} \cdot \left(\frac{1}{\sin(i)} \right)$$

$$M_{r_r} = 1.57 \cdot \text{kip} \cdot \text{ft}$$

Sum moments at wall base due to rock weight.

$$M_r := M_{r_r}$$

$$M_r = 1.57 \cdot \text{kip} \cdot \text{ft}$$

Total resisting moment.

Overturning Factor of Safety

Base of Wall

$$FS_{req_o} := 2.00$$

Required overturning factor of safety (F.S.)

$$FS_o := \frac{M_r}{M_o}$$

$$FS_o = 2.33$$

Calculated overturning F.S.

$$Check_{OT} := \text{if}(FS_o > FS_{req_o}, "OK", "NG")$$

$$Check_{OT} = "OK"$$

Sliding Factor of Safety

$$FS_{req_slide} := 1.5$$

Required sliding F.S.

$$\mu_{slide} := 0.3$$

Assumed sliding friction coefficient.

Base of Wall

$$F_{slide} := P_{EH_nor}$$

$$F_{slide} = 0.51 \cdot \text{kip}$$

Sliding force

$$F_{res} := \mu_{slide} (P_{EH_par} + R_{r_par}) + R_{r_nor}$$

$$F_{res} = 1.24 \cdot \text{kip}$$

Resisting force

$$FS_{slide} := \frac{F_{res}}{F_{slide}}$$

$$FS_{slide} = 2.44$$

Sliding F.S. at bottom of wall

$$Check_{slide} := \text{if}(FS_{slide} > FS_{req_slide}, "OK", "NG")$$

$$Check_{slide} = "OK"$$

Check Bearing Pressure

$$q := \frac{R_{r_par}}{B \cdot 1ft}$$

$$q = 632.92 \cdot \frac{\text{lbft}}{\text{ft}^2}$$

Bearing pressure at base of wall.

$$check_q := \text{if}(q_{allow} \geq q, "OK", "NG")$$

$$check_q = "OK"$$

Compare actual bearing pressure with allowable bearing pressure

Bid item Descriptions

SPECIAL NOTE All Attachments shall be filled out. Unit Prices on all Attachments shall match Unit Prices on the Base Bid Total. Mobilization/Demobilization, Traffic Control and Dust and Erosion Control items shall have Lump Sums and show percentage, calculated similar to the Base Bid. **Base Bid Total Plus** additional Projects Spread Sheet shall be filled out as directed.

BID BOND
Marylhurst Park Project

KNOW ALL MEN BY THESE PRESENTS, that

_____,
hereinafter called the Principal, and

_____,
a Corporation duly organized under the Laws of the State of Oregon, having its principle place of Business
at

_____,
in the State of _____, and authorized to do business in the State of Oregon as Surety, are
held and firmly bound unto the City of West Linn Engineering Department, hereinafter called the
Engineering Department, in the penal sum of

_____ Dollars

(\$_____), for the payment of which, well and truly to be made, we bind ourselves, our heirs,
executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS BOND IS SUCH THAT, WHEREAS, the Principal herein is herewith submitting
his Bid for the above noted project in the City of West Linn, Oregon, said Bid, by reference thereto, being
hereby made a part hereof.

NOW, THEREFORE, if the said Bid submitted by the said Principal be accepted, and the Contract be
awarded to said Principal, and if the said Principal shall execute the proposed Contract as required by the
bidding and the Contract Documents within the time set by said Documents, then this obligation shall be
void. If the Principal shall fail to execute the proposed Contract, the Surety hereby agrees to pay to the
Engineering Department the penal sum as liquidated damages.

Signed and sealed this _____ day of _____, 20_____

Principal

By: _____

Surety

By: _____

Attorney-in-Fact (A Certified Copy of the Agent's Power
of Attorney must be attached)

BID

**BID ITEM LIST
MARYLHURST PARK**

BASE BID						
Item No.	Spec Section	Item Description	Est'd Quantity.	Unit	Unit Price	Total Amount
1		Field Surveying	1	LS		
2	201	Mobilization	1	LS		
3	1200C Permit	Erosion Control	1	LS		
4	203	Clearing and Grubbing	7	AC		
5	204	Earthwork	23,900	CY		
6	203	Tree Removal and Preservation	1	LS		
7	210	Play Area Stone Retaining Wall	445	SF		
8	301	Sanitary Sewer Pipe, 4" PVC D3034 (Native Backfill)	295	LF		
9	301	Sanitary Sewer Pipe, 4" PVC D3034 (Rock Backfill)	90	LF		
10	301	Sanitary Sewer Pipe, 6" PVC D3034 (Rock Backfill)	20	LF		
11	301	Sanitary Sewer Pipe, 8" PVC D3034 (Rock Backfill)	132	LF		
12	302	Sanitary Sewer Cleanout	5	EA		
13	402	Water Pipe, 8" DIP in Street (Rock Backfill)	50	LF		
14	402	Water Pipe, 1" Sch 80 PVC (Dom)	327	LF		
15	402	Water Pipe, 2-1/2" Sch 80 PVC (Irr)	105	LF		
16	402	Water Relocate Blow Off Assembly	1	LS		
17	402	Water Service Connection, 2" DIP	1	LS		
18	402	Water Meter, 1-1/2", Complete	1	LS		
19	403	Water DCV Assembly, 1-1/2", Complete	1	LS		
20	403	Water Fire Hydrant Assembly	1	EA		
21	403	Utility Trench with 3" PVC Conduits (Native Backfill)	382	LF		
22	507	Offsite PCC Curb Replacement	25	LF		
23	505	Offsite AC Pavement Replacement (3" depth)	90	SY		
24	503	Parking Lot Agg Base, 3/4" - 0" (6" depth)	130	CY		
25	505	Parking Lot AC Pavement (2" depth)	780	SY		
26	507	Parking Lot PCC Curb	425	LF		
27	Drawing	Parking Lot Landscape Boulder	5	EA		
28	507	Site PCC Sidewalk	7,770	SF		
29	503	Site PCC Sidewalk Base, 3/4" - 0" (4" depth)	95	CY		
30	507	Play Area PCC Curb (16" depth)	215	LF		
31	507	Play Area PCC Vehicular Access	3,575	SF		
32	503	Play Area Vehicular Access Base, 3/4" - 0" (6" depth)	56	CY		
33	601	Play Area Stone Retaining Wall Subdrainage (6" depth)	138	LF		
34	601	Storm Drain Pipe, 8" PVC D3034 (Native Backfill)	1,142	LF		
35	601	Storm Drain Pipe, 12" DIP (Rock Backfill)	153	LF		
36	602	Storm Drain Manhole, 48"	6	EA		
37	602	Storm Drain Cleanout	5	EA		
38	602	Storm Drain Catch Basin (Lynch type)	2	EA		
39	602	Storm Drain Area Drain	3	EA		
40	602	Storm Drain Field Drain	2	EA		
41	602	Storm Drain Connect and Adjust to Existing	1	EA		
42	602	Outfall Riprap Structure	3	EA		
TOTAL BASE BID						

ADDITIVE ALTERNATE NO. 1

A1-1	206	Design-Build Site Irrigation	52,400	SF		
TOTAL ADD. ALT. NO. 1						

ADDITIVE ALTERNATE NO. 2

A2-1	Drawing	Play Area Stone Retaining Wall Guardrail	85	LF		
A2-2	Drawing	Parking Lot Removable Bollards	2	EA		
TOTAL ADD. ALT. NO. 2						

GRAND TOTAL WITH ADD. ALTS.						
------------------------------------	--	--	--	--	--	--

BID CHECKLIST
Marylhurst Park Project

NOTE: This checklist has been prepared as an aid to contractors in preparing and checking bids for completeness. However, it is not intended to incorporate all requirements of the bid documents. The contractor is responsible for familiarizing himself with the documents and completing all requirements for bidding.

BID

- ❑ Familiar with conditions of work and documents
- ❑ All bid items entered in WORDS AND NUMBERS
- ❑ All bids, including Base Bid, Additive Accumulation Bids and Attachments shall be filled out.
- ❑ Base Bid and Additive Accumulation Bids shall be signed by authorized representative with Title shown
- ❑ All blank spaces filled in
- ❑ Copies of addenda attached and SIGNED (if any)
- ❑ Registered with Construction Contractors Board, and license number noted
- ❑ Resident Bidder statement completed
- ❑ Written clarification MAY be attached
- ❑ Certified check or bid bond in the amount of 10% of Base Bid Total bid
- ❑ Contract Agreement enclosed.
- ❑ Bid SEALED and SIGNED.
- ❑ ODOT Pre-qualification is required.

PROJECT NOTES:

Workers Comp Insurance
Inspector overtime payments
Prevailing Wage Rate

QUESTIONS?

Contact: Ken Worcester 503-557-4700

BIDS DUE: 2:00 PM, July 22, 2010.
City Hall, 22500 Salamo Road, West Linn, OR 97068

PROJECT BIDS

RECYCLED MATERIALS

Following is a list of the bid items in which recycled materials is to be used by the Contractor along with the percentage of recycled materials contained within the finished product:

RESIDENT BIDDER STATUS

Is the Bidder a resident bidder, as defined in ORS 279A.120 _____.
If not, list the state of residence of the bidder: _____.

CONTRACTOR'S LICENSE NUMBER

List Contractor's License Number: _____

Tax I.D.: _____

BONDING INFORMATION

If the Bidder is awarded a construction Contract on this Bid, the Surety that will provide the Performance and Payment Bonds is:

_____ whose address is:

The name of the Bidder who is submitting this Bid is:

_____ doing business at:

which is the address where the contract and all communications concerned with this bid shall be sent.

THREE YEAR EXPERIENCE RECORD

Recent projects first

#1 (Project Name, Location, Contract Cost)

_____ Project description:

Project completion date: (contract) _____ (actual) _____

Contact name: _____

Telephone: _____

#2 (Project Name, Location, Contract Cost)

Project description: _____

Project completion date: (contract) _____ (actual) _____

Contact name: _____

Telephone: _____

#3 (Project Name, Location, Contract Cost)

Project description: _____

Project completion date: (contract) _____ (actual) _____

Contact name: _____

Telephone: _____

Attach additional sheets if needed.

ATTACHMENTS

INSURANCE REQUIREMENTS

Project Name: MARYLHURST PARK PROJECT

The contractor should have the following insurance per Section 107.06 of the West Linn Public Works Standard Construction Specifications reproduced below:

107.06 INSURANCE

A. General

1. The Contractor shall provide and maintain during the life of this Contract the insurance coverage designated hereafter. All costs for such insurance shall be born by the Contractor and shall be included in the contract price.

2. Prior to execution by the City and before commencing work under this Contract, Contractor shall furnish the City Engineer with certificates of insurance specified herein showing the name of the insurance carrier, coverage, type, amount (or limits), policy numbers, effective and expiration dates, description of operations covered, and containing substantially the following cancellation provision:

"The insurance covered by this certificate will not be canceled or materially reduced, except after 30 days written notice has been received by the City."

3. In case of the breach of any provision of this Article, the City, at its option, may take out and maintain, at the expense of the Contractor, such insurance as the City may deem proper. The City may deduct the cost of such insurance from any monies which may be due or become due the Contractor under this Contract.

B. Review and Approval of Insurance

The Contractor shall not commence work under this Contract nor allow any subcontractor to commence work on a subcontract until [it] the Contractor has obtained all the insurance required hereunder and such insurance has been approved by the Attorney. All policies or insurance and certificates of insurance shall be satisfactory to the City. Approval of the insurance shall not relieve or decrease the liability of the Contractor hereunder.

C. Workers' Compensation, the Federal Longshoremens' and Harborworkers' Act and the Federal Jones Act

1. The Contractor shall provide and shall require all subcontractors to provide workers' compensation coverage for all persons employed under this Contract including the Contractors' partners and any individual regardless of relation to the Contractor's partners and any individual regardless of relation to the Contractor or to the partners who provide work under this Contract. The Contractor shall be required to assure that subject workers will receive the compensation for compensable injuries provided in ORS Chapter 656 either by:

- a. a carrier-insured employer; or
- b. a self-insured employer as provided by ORS 656.407.

In addition to the statutory benefits outlined above, the Contractor and all subcontractors shall provide employers' liability insurance with limits of not less than:

\$100,000 each accident for bodily injury by accident
\$100,000 each employee for bodily injury for disease
\$500,000 policy limit for bodily injury by disease

2. Evidence of such coverage, including the guarantee or warranty period, shall be filed with the City and maintained for the duration of the Contract.

3. The Contractor shall defend, indemnify, and hold harmless, the City and the City's officers, agents, and employees against any liability that may be imposed upon them by reason of the Contractor's or subcontractor's failure to provide workers' compensation and employers liability coverage.

4. Where work under this Contract is subject to the Federal Longshoremen's and Harborworkers' Act or the Federal Jones Act, the Contractor shall provide coverage for such exposure.

D. General Liability and Automobile Liability

1. The Contractor shall provide a general liability policy that provides coverage for bodily injury including personal injury and property damage liability insurance and automobile liability insurance. Such insurance must protect the Contractor, the City, and their officers and employees from all things or damage which may arise out of this Contract or in connection therewith, including all operations of Subcontractors. Such insurance shall provide coverage for not less than the amounts for which public bodies are responsible as set forth in Oregon Revised Statutes Chapter 30, Tort Actions against Public Bodies, but in no event less than the following limits of liability:

\$1,000,000 each occurrence
\$1,000,000 general aggregate
\$1,000,000 product and completed operations aggregate
\$1,000,000 personal and advertising injury
\$1,000,000 combined single limit automobile liability for owned, non-owned, and hired automobiles.

The policy shall contain an endorsement that the aggregate applies separately to this Contract.

The insurance shall be written on a comprehensive form which includes broad form property damage on an occurrence basis. Unless excluded by Special Specification, the general liability policy shall include, without deductible, coverage for premises operations, explosion and collapse hazard, underground hazard, products, completed operations, contractual insurance, and independent contractors. Such insurance shall be maintained until the expiration of the guaranty period required by the Contract. Failure to maintain liability insurance as provided above shall, at City's option, be cause for immediate termination of the Contract.

2. The Contractor shall provide a letter from the insurance company which states that such insurance shall be without prejudice to coverage otherwise existing.

3. The City of West Linn, its officers, agents, and employees, shall be named additional insureds in the Contractor's General Liability Insurance policy by attaching ISO Endorsement number CG 20 09 11 85 ADDITIONAL INSURED - Owners, Lessees, or Contractors (Form A) or its equivalent.

The policy shall also provide for a Cross Liability Endorsement or Separation of Insureds Endorsement.

The policy shall be endorsed to provide an AMENDMENT - AGGREGATE LIMITS OF INSURANCE (per project) specifying that a separate aggregate limit of liability applies to this Contract.

If there are insufficient insurance proceeds and assets of the Contractor to fully indemnify the City of West Linn, its officers, employees, agents, and the City Engineer, then the City, its officers, employees, and agents would be indemnified first with any remaining insurance proceeds and assets to be used to indemnify the City Engineer.

4. If set forth in the Special Specifications, additional insureds may be the City's consultant, engineer, other governmental bodies with jurisdiction in the area involved in the project, and their officers and employees and such agents as may be specified.

E. Claims on Project

1. The Contractor, when notified of a claim by an affected party shall:
 - a. Refer claim to the Contractor's insurance carrier or claims administrator.
 - b. Contractor's insurer will copy City on acknowledgment of claim.
 - c. Contractor's insurer will copy City on notice to claimant of disposition of claim.

F. Builders Risk Insurance

During construction, Contractor shall obtain and maintain for the benefit of the parties to the Contract as their interest may appear, all-risk Builder's Risk insurance to the extent of 100 percent of the value of the project. Coverage shall also include: (1) formwork in place; (2) form lumber on site; (3) temporary structures; (4) equipment; and (5) supplies related to the work while at the site. Such insurance shall be endorsed to require thirty days' written notice to the City prior to cancellation or change of the policy. One copy of the policy and two certificates of such insurance shall be delivered to the City before commencing work and shall be subject to review and approval by the City. The City may temporarily waive delivery of the copy of the policy. In the event Contractor fails to maintain such insurance, the City may arrange therefore; and any premium incurred shall be to the account of Contractor.

PROJECT PLANS