



**Oregon State  
University**

**Construction Contracts  
Administration, Procurement  
Contracts & Materials  
Management (PCMM)**  
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2/14/2018

Oregon State University  
Construction Contract Administration  
**Path of Travel Improvements 2018**

**ADDENDUM NO. 1**

THIS ADDENDUM IS BEING ISSUED for clarification and/or revisions of the drawings and specifications as noted. This document is hereby made a part of the Contract Documents to the extent as though it was originally included herein.

**The following changes shall be made to the TECHNICAL SPECIFICATIONS:**

- Item 1                BID FORM – REPLACE in its entirety with the attached \*\*\*\*REVISED 02/13/2018.
  
- Item 2                Section 01 22 00 “Unit Prices” – REPLACE in its entirety with the attached section 01 22 00, dated 02/13/2018.
  
- Item 3                Section 31 05 00 “Earthwork” – REPLACE in its entirety with the attached section 31 05 00, dated 02/13/2018.

**The following changes shall be made to the DRAWINGS:**

- Item 4                Sheet C1.1 “East Campus ADA Barriers”, REPLACE in its entirety with sheet C1.1, Rev 4 dated 02/13/2018.
  
- Item 5                Sheet C1.2 “NW Campus ADA Barriers”, REPLACE in its entirety with sheet C1.2, Rev 4 dated 02/13/2018.
  
- Item 6                Sheet C1.3 “SW Campus ADA Barriers”, REPLACE in its entirety with sheet C1.3, Rev 4 dated 02/13/2018.

**END OF ADDENDUM NO. 1**

**OREGON STATE UNIVERSITY**

**BID FORM**

PROJECT: PATH OF TRAVEL IMPROVEMENTS 2018

BID CLOSING: THURSDAY MARCH 1, 2018 2:00PM

FROM: \_\_\_\_\_  
*Name of Contractor*

TO: Oregon State University (“Owner”)  
Construction Contracts Administration  
644 SW 13<sup>th</sup> Street  
Corvallis, Oregon 97333

1. The Undersigned (*check one of the following and insert information requested*):

\_\_\_ a. An individual doing business under an assumed name registered under the laws of the State of \_\_\_\_\_; or

\_\_\_ b. A partnership registered under the laws of the State of \_\_\_\_\_; or

\_\_\_ c. A corporation organized under the laws of the State of \_\_\_\_\_; or

\_\_\_ d. A limited liability corporation/company organized under the laws of the State of \_\_\_\_\_;

2. The Undersigned proposes to add to or deduct from the Base Bid indicated above the items or work relating to the following Unit Price(s) as designated in the Specifications, for which any adjustments in the Contract amount will be made in accordance with Section D of the OSU General conditions.

Item No.	Exhibit or Spec.	Schedule of Items	MM*	Quantity	Unit	Unit Price	Total Price
<b>OSU Path of Travel Improvements</b>							
1	Section 03 30 53; SHTS C1.1-C1.3	Remove ext’g sidewalk & improvements; replace with 4-inch concrete sidewalk per Construction Item #1	DQ	6,354	SF		
2	Section 03 30 53; SHTS C1.1-C1.3	Remove ext’g sidewalk & improvements; replace with 6-inch concrete sidewalk per Construction Item #2	DQ	3,675	SF		
3	Section 03 30 53; SHTS C1.1-C1.3	Remove ext’g sidewalk across driveway; replace per Construction Item #3	DQ	753	SF		
4	Section 03 30 53; SHTS C1.1-	Remove ext’g asphalt & improvements behind driveway; replace per	DQ	1,057	SF		

	C1.3	Construction Item #4					
5	Section 03 30 53; SHTS C1.1- C1.3	Remove ext'g sidewalk across driveway; replace per Construction Item #5	DQ	842	SF		
6	Section 03 30 53; SHTS C1.1- C1.3	Remove ext'g asphalt over tunnel top; replace over tunnel per Construction Item #6	DQ	117	SF		
7	Section 03 30 53; SHTS C1.2.3	Remove ext'g sidewalk across driveway and panel behind sidewalk; replace per Construction Item #7	DQ	263	SF		
8	Section 03 30 53; SHTS C1.1- C1.3	Remove ext'g curb or improvement; replace with 16-inch curb per Construction Item #8	DQ	57	LF		
9	Section 03 30 53; SHTS C1.1- C1.3	Remove ext'g curb & sidewalk; replace with monolithic curb & sidewalk per Construction Item #9	DQ	0	SF		<b>Not Used</b>
10	Section 03 30 53; SHTS C1.1- C1.3	Remove ext'g curb & improvements; replace with curb ramp per Construction Item #10	DQ	0	Each		<b>Not Used</b>
11	Section 03 30 53; SHTS C1.2	Remove rat slab over tunnel; replace per Construction Item #11	DQ	175	SF		
12	Section 03 30 53; SHTS C1.1- C1.3	Remove ext'g pavers & improvements; per Construction Item #12	DQ	12	SF		
13	Section 03 30 53; SHTS C1.1- C1.3	Remove ext'g pavers & improvements; replace per Construction Item #13	DQ	0	SF		<b>Not Used</b>
14	Section 03 30 53; SHTS C1.1- C1.3	Remove ext'g pavers & improvements; replace per Construction Item #14	DQ	0	SF		<b>Not Used</b>
15	Section 03 30 53; SHTS C1.1- C1.3	Remove ext'g pavers & improvements; replace per Construction Item #15	DQ	92	SF		
16	Section 03 30 53; SHTS C1.1- C1.3	Remove ext'g pavers & improvements; replace per Construction Item #16	DQ	3	Each		
17	Section 03 30 53; SHTS C1.1-	Remove ext'g pavers & improvements; replace per Construction Item #17	DQ	101	SF		

	C1.3						
18/19	Section 32 12 16; SHTS C1.1- C1.3	Remove ext'g asphalt and rock; replace with 2-2.5-inch lifts asphalt and 15 inches baserock per Construction Items 18 & 19	DQ	1,627	SF		
20	Section 03 30 53; SHT C1.2	Remove ext'g 10' x 32.5' sidewalk; replace with 6-inch thick concrete over 4 inches baserock per Construction Item #20	DQ	0	SF		<b>Not Used</b>
21	Section 03 30 53	Adjust Meter Box to New Finish Grade	DQ	6	Each		
22	Section 03 30 53; SHTS C1.2	Install Concrete Wheel Stops per Construction Item #22	DQ	39	Each		
23	Section 32 12 16; SHT C1.2	Remove ext'g asphalt and rock 2 feet from face of curb; replace with 2-2-inch lifts asphalt and 12 inches baserock per Construction Item #23	DQ	0	SF		<b>Not Used</b>
24	Section 03 30 53; SHT C1.1	Remove ext'g driveway transition; replace per Construction Item #24	DQ	55	SF		
25	Section 03 30 53; SHT C1.3	Remove ext'g ramp; replace per Construction Item #25	DQ	45	SF		
26	Section 31 05 00	Remove damaged or ext'g irrigation lateral; replace with new rerouted 5-foot section of irrigation lateral per Section 31 05 00	DQ	60	Each (per 5' section of new pipe)		
27	Section 31 05 00	Remove damaged or lost Rainbird 1800 sprinkler head; replace with new Rainbird 1800 per Section 31 05 00	DQ	60	Each		
28	Section 31 05 00	Remove damaged or lost Hunter I-20 rotor head; replace with new Hunter I-20 per Section 31 05 00	DQ	15	Each		
29	Section 02 22 00	Mobilization; Traffic, Pedestrian, Fencing Control, Clean-up	AQ	1	LS		

MM\*: DQ - Design Quantity; AQ - Actual Quantity; LS - Lump Sum

Units: LS - Lump Sum; SF-Square Foot; LF - Lineal Feet; CY-Cubic Yard

For a TOTAL BID of the sum of Total Price

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

and the Undersigned agrees to be bound by the following documents:

- Notice of Opportunity
  - Supplemental Instructions to Bidders
  - Performance Bond and Payment Bond
  - Supplemental OSU General Conditions
  - Prevailing Wage Rates
  - Plans and Specifications
  - Instructions to Bidders
  - Sample Contract
  - OSU General Conditions
  - Payroll and Certified Statement Form
  - Drawings and Details
- ADDENDA numbered \_\_\_\_ through \_\_\_\_, inclusive (*fill in blanks*)

3. The work shall be completed within the time stipulated and specified in Division 1, Section 01 11 00, of the Specifications.

4. The Undersigned certifies that: (1) This Bid has been arrived at independently and is being submitted without collusion with and without any agreement, understanding, or planned common course of action with any other vendor of materials, supplies, equipment or services described in the invitation to bid designed to limit independent bidding or competition; and (2) The contents of the Bid have not been communicated by the Undersigned or its employees or agents to any person not an employee or agent of the Undersigned or its surety on any Bond furnished with the Bid and will not be communicated to such person prior to the official opening of the Bid.

5. The undersigned **HAS, HAS NOT** (*circle applicable status*) paid unemployment or income taxes in Oregon within the past 12 months and **HAS, HAS NOT** (*circle applicable status*) a business address in Oregon..

6. The Undersigned agrees, if awarded a contract, to comply with the provisions of ORS 279C.800 through 279C.870 pertaining to the payment of the prevailing rates of wage.

7. Contractor's CCB registration number is \_\_\_\_\_. As a condition to submitting a bid, a Contractor must be registered with the Oregon Construction Contractors Board in accordance with ORS 701.035 to 701.055, and disclose the registration number. Failure to register and disclose the number will render the bid unresponsive and it will be rejected, unless contrary to federal law.

8. The successful Bidder hereby certifies that all subcontractors who will perform construction work as described in ORS 701.005(2) were registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 at the time the subcontractor(s) made a bid to work under the Contract.

9. The successful Bidder hereby certifies that, in compliance with the Worker's Compensation Law of the State of Oregon, its Worker's Compensation Insurance provider is \_\_\_\_\_, Policy No. \_\_\_\_\_, and that Contractor shall submit Certificates of Insurance as required.

10. Contractor's Project Manager for this project is: \_\_\_\_\_,  
Office Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_.

11. The Undersigned certifies that it has not discriminated against minority, women, or emerging small businesses in obtaining any subcontracts for this project.

12. The Undersigned agrees, if awarded the Contract, to execute and deliver to Owner, within twenty (20) calendar days after receiving the Contract Documents, an Agreement Form and a satisfactory Performance Bond and Payment Bond, each in an amount equal to one hundred (100) percent of the

Contract sum, using forms provided by the Owner. The surety requested to issue the Performance Bond and Payment Bond will be: \_\_\_\_\_.

(name of surety company - not insurance agency) The Undersigned hereby authorizes said surety company to disclose any information to the Owner concerning the Undersigned's ability to supply a Performance Bond and Payment Bond each in the amount of the Contract.

By signature below, Contractor agrees to be bound by this Bid.

NAME OF FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_

FEDERAL TAX ID \_\_\_\_\_

TELEPHONE NO \_\_\_\_\_

FAX NO \_\_\_\_\_

SIGNATURE 1) \_\_\_\_\_

Sole Individual - Signature

\_\_\_\_\_  
Sole Individual - Printed Name

or 2) \_\_\_\_\_

Partner

or 3) \_\_\_\_\_

Authorized Officer of Corporation - Signature

\_\_\_\_\_  
Authorized Officer of Corporation Printed Name

(SEAL)

\_\_\_\_\_  
Attested: Secretary of Corporation

*Payment information will be reported to the IRS under the name and taxpayer ID # provided above. Information not matching IRS records could subject Contractor to 31 percent backup withholding.*

**\*\*\*\*\* END OF BID \*\*\*\*\***

UNIT PRICES  
Section 01 22 00

**PART 1 GENERAL**

1.01 DESCRIPTION

- A. Provide unit prices for the Work described herein.

1.02 QUALITY ASSURANCE

- A. For each unit price item which is performed, coordinate the work of the various trades involved, and modify surrounding work as required to complete the project, as intended.
- B. In the figure for each unit price, include incidental costs which, as attributable to adjustments in the work of other trades, may be required to achieve the contemplated final conditions.
- C. If there is a question regarding the extent, scope, nature, or intent of the unit price work, contact the Owner for clarification. Failure on the part of the Contractor to clarify any unclear items shall not relieve the Contractor of the responsibility for performing the Work in accordance with the intent and requirements of the Project Manual or Drawings.
- D. The description of unit price items listed hereinafter is qualitative. The quantities listed are estimated quantities and are included for the purpose of award of the Contract. Actual quantities of labor and materials required to execute the unit price items of Work will be determined by project conditions and with concurrence of the Owner's Authorized Representative.

**PART 2 PRODUCTS**

2.01 GENERAL

- A. The notes on the Plan Sheets apply to the Work under each unit price item.

**PART 3 EXECUTION**

3.01 LIST OF UNIT PRICE ITEMS OF WORK

- A. Remove existing sidewalk/Replace with 4-inch concrete sidewalk per Construction Item #1
  - 1. Unit price per Square Foot (SF) to remove existing sidewalk and improvements, and replace per Construction Item #1. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.
- B. Remove existing sidewalk/Replace with 6-inch concrete sidewalk per Construction Item #2
  - 1. Unit price per Square Foot (SF) to remove existing sidewalk and improvements, and

replace per Construction Item #2. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

C. Remove existing sidewalk across driveway/Replace per Construction Item #3

1. Unit price per Square Foot (SF) to remove existing sidewalk across driveway, and replace per Construction Item #3. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

D. Remove existing asphalt & improvements behind driveway/Replace per Construction Item #4

1. Unit price per Square Foot (SF) to remove existing asphalt behind driveway, and replace per Construction Item #4. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

E. Remove existing sidewalk across driveway/Replace per Construction Item #5

1. Unit price per Square Foot (SF) to remove existing sidewalk across driveway, and replace per Construction Item #5. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

F. Remove existing asphalt over tunnel top/Replace per Construction Item #6

1. Unit price per Square Foot (SF) to remove existing asphalt over tunnel top, and replace per Construction Item #6. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

G. Remove existing sidewalk across driveway and panel behind sidewalk/Replace per Construction Item #7

1. Unit price per Square Foot (SF) to remove existing sidewalk across driveway and panel behind sidewalk, and replace per Construction Item #7. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.



H. Remove existing curb or improvement/Replace with curb per Construction Item #8

1. Unit price per Linear Foot (LF) to remove existing curb and/or improvement, and replace per Construction Item #8. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

I. Remove existing curb & sidewalk/Replace per Construction Item #9 (NOT USED)

J. Remove existing curb and improvements/Replace per Construction Item #10 (NOT USED)

K. Remove existing rat slab over tunnel/Replace per Construction Item #11

1. Unit price per Square Foot (SF) to remove existing rat slab over tunnel, and replace per Construction Item #11. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

L. Remove existing pavers and improvements/Replace per Construction Item #12

1. Unit price per Square Foot (SF) to remove existing pavers and improvements, and replace per Construction Item #12. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

M. Remove existing pavers and improvements/Replace per Construction Item #13 (NOT USED)

N. Remove existing pavers and improvements/Replace per Construction Item #14 (NOT USED)

O. Remove existing pavers and improvements/Replace per Construction Item #15

1. Unit price per Square Foot (SF) to remove existing pavers and improvements, and replace per Construction Item #15. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

P. Remove existing pavers and improvements/Replace per Construction Item #16

1. Unit price per Square Foot (SF) to remove existing pavers and improvements, and

replace per Construction Item #16. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

Q. Remove existing pavers and improvements/Replace per Construction Item #17

1. Unit price per Square Foot (SF) to remove existing pavers and improvements, and replace per Construction Item #17. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

R. Remove existing asphalt and rock/Replace per Construction Items #18 & 19

1. Unit price per Square Foot (SF) to remove existing asphalt and rock, and replace with per Construction Items #18 & 19. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

S. Remove existing 10' X 32.5' sidewalk/Replace per Construction Item #20 (NOT USED)

T. Salvage existing meter box/Adjust to new finish grade per Construction Item #21

1. Unit price per each to salvage existing meter box, and adjust to new finish grade per Construction Item #21. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

U. Install new concrete Wheel Stops per Construction Item #22

1. Unit price per each to install new concrete wheel stops per Construction Item #22. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

V. Remove existing asphalt and rock 2-feet from curb/Replace per Construction Item #23 (NOT USED)

W. Remove existing driveway transition/Replace per Construction Item #24

1. Unit price per Square Foot (SF) to remove existing driveway transition and rock,

and replace per Construction Item #24. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

X. Remove existing ramp and rock/Replace per Construction Item #25

1. Unit price per Square Foot (SF) to remove existing concrete ramp and rock, and replace per Construction Item #25. The unit contract price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

Y. Irrigation lateral line replacement

1. Unit price per each five foot or less increment to remove existing irrigation lateral lines and appurtenances, and reroute per Earthwork specification 31 05 00. The project improvements may make rerouting of some irrigation lines necessary. The unit price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price shall meet the requirements of the Contract Documents.

Z. Rainbird 1800 spray head replacement

1. Unit price per each to install new Rainbird 1800 spray heads and appurtenances, per Earthwork specification 31 05 00. The unit price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price shall meet the requirements of the Contract Documents.

AA. Hunter I-20 rotor head replacement

1. Unit price per each to install new Hunter I-20 spray heads and appurtenances, per Earthwork specification 31 05 00. The unit price for this bid item shall be considered full payment for all related work, including work zone control, labor, materials, and equipment. The construction for this unit price shall meet the requirements of the Contract Documents.

AB. Mobilization; Traffic, Pedestrian, & Fencing Control; Clean-up

1. Unit price per Lump Sum (LS) for all mobilization. The unit contract price for this bid item shall be considered full payment for all project related work, including work zone control, tree protection, erosion control (if required), labor, materials, and equipment. The construction for this unit price item shall meet the requirements of the Contract Documents.

## SECTION 31 05 00 EARTHWORK

### PART 1 – GENERAL

#### 1.01 CONTRACT CONDITIONS

- A. Work of this Section is bound by the General Conditions and Supplemental General Conditions and Division 1, bound herewith, in addition to this Specification and accompanying Drawings.

#### 1.02 DESCRIPTION

- A. SCOPE: This section specifies earthwork which consists of sawcutting and removal of pavement, excavation, backfilling, compacting, grading, disposal of excess material, and irrigation repairs and/or modifications.
- B. DEFINITIONS: Refer to the City of Corvallis Standard Construction Specifications, Technical Requirements, Section II.1.B DEFINITIONS.
- C. PROTECTION: Site preparation shall not damage structures, landscaping or vegetation adjacent to the site. The Contractor shall repair, or replace any damaged property.

#### 1.03 RELATED WORK SPECIFIED ELSEWHERE

- A. Summary of Work, Section, 01 11 00
- B. Unit Prices, Section 01 22 00
- C. Tree and Plant Protection, Section 01 56 39
- D. Mobilization; Traffic, Pedestrian, and Fencing Control; Cleanup, Section 02 22 00
- E. Cast-In-Place Concrete, Curbs, and Gutters, Section 03 30 53
- F. Asphalt Concrete Paving, Section 32 12 16

#### 1.04 SUBMITTALS

- A. The Contractor shall submit to the Owner's Authorized Representative for approval, a gradation analysis for baserock and drain rock, certifying compliance with these specifications.
- B. The following licensed landscape contractors are pre-approved: Rexius (Eugene); B Johnson Turf & Irrigation (Corvallis); Shonnards Landscape (Corvallis); Graton's Custom Landscape (Junction City). The use of any other Landscape Contractors must be approved by the Owner's Authorized Representative prior to the bid utilizing the Substitution Request procedure described in Section 01 25 00. Substitution requests are due by February 19, 2018.

#### 1.05 QUALITY ASSURANCE

- A. REFERENCES:

1. All work shall be conducted in accordance with the City of Corvallis Standard Construction Specifications, Technical Requirements, hereinafter referred to as “the Standards”.
  2. United States Department of Agriculture (USDA): Soil textural classification chart.
- B. COMPACTION TESTS:
1. Testing shall be in accordance with Section II.1.E of the Standards except that compaction testing shall be at the expense of the Owner, and the testing shall comply with ASTM D1557, unless otherwise specified. If the tests indicate that recompaction is necessary, recompaction testing required to meet the specified compaction shall be at the expense of the Contractor.
  2. The Contractor is responsible for implementing and coordinating all compaction testing with the Owner Authorized Representative and the Special Testing Agency. The Contractor shall not backfill over any areas (including trenches, pipe bedding, subgrade, etc.) unless compaction testing results comply with specifications, or the Owner Authorized Representative has provided approval to proceed.

## **PART 2 – MATERIALS**

### **2.01 CRUSHED AGGREGATE**

- A. Backfill for areas to be paved, from subgrade to finish grade, shall be  $\frac{3}{4}$ ”-0” crushed aggregate baserock meeting the requirements of Section II.3.C of the Standards.
- B. Backfill for trench bedding and pipe zones in landscaped areas shall also be  $\frac{3}{4}$ ”-0” crushed aggregate as described above. Backfill in landscaped areas above the pipe zone to within 2 feet of finished grade shall be native material if the Owner’s Authorized Representative determines it meets the requirements of Section III.1.C.05.1 of the Standards, however, the Contractor shall be prepared to provide  $\frac{3}{4}$ ”-0” crushed aggregate at no additional cost. The top 2 feet of backfill in landscaped areas shall be approved imported topsoil.
- C. Backfill for trench bedding, pipe zones, and subsequent backfill under paved areas shall be  $\frac{3}{4}$ ”-0” or  $1\frac{1}{2}$ ”-0” crushed aggregate as described above.
- D. Backfill for overexcavated areas shall be approved quarry rock, 3”-0”, per Section II.2.C.02 of the Standards.

### **2.02 GEOTEXTILE FABRIC**

- A. Subgrade Geotextile material (see Table 02320-4 of the ODOT Special Provisions and installation shall conform to ODOT’s “Oregon Standard Specifications for Construction”, Section 02320 and 00350, respectively.
- B. Drainage Geotextile material and installation shall conform to ODOT’s “Oregon Standard Specifications for Construction”, Section 02320 and 00350, respectively. The drainage geotextile material shall be Type 2.
- C. Pavement Overlay Geotextile material and installation shall conform to ODOT’s “Oregon Standard Specifications for Construction”, Section 02320 and 00350, respectively.

### **2.03 IMPORTED TOPSOIL**

- A. All imported topsoil material shall conform to USDA textural classification of "LOAM", and shall be free of rock, clay, subsoil, clods, lumps plants, roots, sticks, weeds, seeds, and other deleterious material.
- B. The Contractor shall gain approval for the supplier of the proposed imported topsoil, from the Owner's Authorized Representative prior to site delivery.

#### 2.04 NATIVE BACKFILL

- A. Native on-site fine grained soils, free of roots larger than 1-inch in diameter, rocks, debris, clods, clay, and vegetation. Material shall be conditioned to near optimum moisture content prior to placement.

#### 2.05 LAWN SEED

- A. All lawn seed shall be Champion Perennial Rye Grass, unless otherwise approved by Owner.
- B. Certified Oregon Blue Tag Free of Weed Seed with Dealer's Statement of Analysis Guarantee.
- C. Current of latest season's crop labeled in conformance with State and US Department of Agriculture laws and regulations.
  - 1. Purity: 98% by weight.
  - 2. Germination: 90%.

#### 2.06 IRRIGATION LINES

- A. Irrigation repairs and modifications shall be made utilizing Schedule 40 PVC pipe and fittings matching existing pipe sizes.
- B. If galvanized pipe is encountered, thread pipe and provide a threaded galvanized to PVC adapter. If pipe is not threadable, find nearest joint and replace with PVC.

#### 2.07 SPRINKLER HEADS

- A. Replace sprinkler heads with the same manufacturer and model as the original.
  - 1. Rainbird 1800 spray head and associated appurtenances (i.e., fittings, funny pipe, appropriate nozzle, etc.).
  - 2. Hunter I-20 rotor head and associated appurtenances (i.e., fittings, funny pipe, appropriate nozzle, etc.).

### **PART 3 – EXECUTION**

#### 3.01 PREPARATION

- A. Protect structures, utilities, pavements, plants, planting areas, and other facilities from damage caused by settlement, lateral movement, undermining, erosion, and other hazards caused by earthwork operations.
- B. Protect subgrades against freezing temperatures. Provide insulation to protect as necessary.
- C. Provide measures to prevent erosion or displacement of soils either by water or air to adjacent properties.

- D. Provide adequate measures to protect workmen and job site passers-by. Contractor shall provide 6-foot chain-link fence as called out on Contract Documents, and when safety conditions warrant, as determined by the Owner Authorized Representative.
- E. Protect irrigation in the vicinity of the Work. In the event modifications need to occur, Contractor's pre-approved Landscape Sub-Contractor shall coordinate, and gain approval of means and methods prior to performing the Work.

### 3.02 CONTROL OF WATER

- A. The Contractor shall keep excavations reasonably free from water during construction in accordance with Section III.1.D.05 of the Standards, in addition to the following requirements.
- B. The static water level shall be drawn down a minimum of 1 foot below the bottom of excavations to maintain the undisturbed state of natural soils and allow the placement of any fill to the specified density. Disposal of water shall not damage property or create a public nuisance. The Contractor shall have on hand pumping equipment and machinery in good working condition for emergencies and shall have workmen available for its operation. Dewatering systems shall operate continuously until backfill has been completed to 1 foot above the normal static groundwater level.
- C. Groundwater shall be controlled to prevent softening of the bottom of excavations, or formation of "quick" conditions. Dewatering systems shall not remove natural soils. The Contractor shall control surface runoff to prevent entry or collection of water in excavations.
- D. Release of groundwater to its static level shall be controlled to prevent disturbance of the natural foundation soils or compacted fill and to prevent flotation or movement of structures or pipelines.
- E. Provide and maintain ample means and devices with which to promptly remove and dispose of all water entering the excavation. Keep all excavations free of water during the entire progress of the work.
- F. Provide for surface drainage during the period of construction in a manner to avoid creating a nuisance to adjacent areas.
- G. Site subgrade soils are sensitive to wet weather conditions and construction disturbance. Exposed subgrade shall be protected. Any disturbance resulting from inadequate care and protection shall be corrected at the Contractor's expense.

### 3.03 SHORING

- A. Shoring shall be in accordance with Section III.1.D.04 of the Standards. Shoring will be required when necessary to prevent caving and to protect adjacent structures, property, workers, and the public. All shoring of trenches shall conform to the safety requirements of the Federal, State, and local laws, ordinances, and codes concerning such. The most stringent of these shall apply. It shall be the sole responsibility of the Contractor to see that these safety requirements are met.

### 3.04 DUST CONTROL

- A. Sprinkle and wet down work areas, equipment, roadways and earthwork with water sufficient to prevent raising objectionable dust and causing any nuisance or hazard on the site or to adjacent properties.

### 3.05 HAULING

- A. When hauling is done over highways or city streets, the loads shall be trimmed and the vehicle shelf areas shall be cleaned after each loading.

### 3.06 GENERAL EXCAVATION

- A. The Contractor shall conduct excavation per Section II.1.D of the Standards.
- B. Comply with local codes, ordinances and requirements of authorities having jurisdiction including maintaining stable excavations.
- C. Excavate for walks, pavements, curbs, and site structures to indicated cross sections, elevations and grades.
- D. Unauthorized excavations to be at the Contractor's expense, including remedial work directed by the Owners Authorized Representative.
- E. Give notice to other trades and crafts requiring use of the excavations to install their work and cooperate with their installations.
- F. Perform all excavation of every description, regardless of the character, nature, or condition of material encountered, as specified, shown, or required to accomplish the construction.
- G. Excavate for curbs, walks, or other structural improvements to the required minimum grades or deeper elevations shown on the Drawings or established by the Owners Authorized Representative.
- H. Clean the excavation to neat lines.

### 3.07 FILL

- A. Remove vegetation, topsoil, debris, saturated or unsuitable soil materials, obstruction, and deleterious materials prior to placing fills.
- B. Prior to placing fill on any subgrade, the subgrades are to be prepared, compacted, tested, and approved by the Owner Authorized Representative.

### 3.08 MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each fill or fill layer before compaction to within 2 percent of optimum moisture content.
- B. Do not fill on surfaces that are muddy, frozen, or contain frost or ice.
- C. Remove, replace, scarify, or air dry acceptable soil material that is too wet to compact for compaction to specified density.

### 3.09 OVEREXCAVATION AND SUBGRADE STABILIZATION

- A. Where the undisturbed condition of natural soils is inadequate for support of the planned construction, the Contractor shall immediately contact the Owner Authorized Representative for direction and approval of a plan to overexcavate to adequate supporting soils.



### 3.10 GEOTEXTILE

- A. After subgrade preparation and specified compaction has been achieved. Place fabric such that it extends a minimum of 24-inches beyond the outside edges of excavation and baserock. Fabric is to be folded back over top of baserock after specified compaction has been achieved.
- B. After excavation and specified subgrade compaction of drainage crossings has been achieved, install drainage geotextile fabric as specified on the Drawings.
- C. After asphalt grinding, install asphalt overlay geotextile as specified in 2.02.C

### 3.11 COMPACTION

- A. All crushed aggregate, including fills under pavements, curbs, sidewalks, parking areas, and site structures shall be compacted to a minimum 95% relative compaction as determined by ASTM D1557.
- B. All fills requiring compaction shall not exceed 8-inches uncompacted thickness, and shall be within 2% of optimum moisture content.
- C. The Contractor is responsible for implementing and coordinating all compaction testing with the Owner Authorized Representative and the Special Testing Agency. The frequency of compaction testing for each type of work (i.e., roadbed, pipe trenches, site structure, etc.) shall be based on City of Corvallis, Public Improvement by Private Contractor (PIPC) requirements.
- D. Topsoil shall be minimally compacted, such that consolidation and settling will not occur during the warranty period, while seeding and plant growth can be readily established. The Contractor shall receive approval of a topsoil compaction from the Owner Authorized Representative, prior to implementation.
- E. Fills placed near existing trees shall be only lightly compacted, as directed by the Owner Authorized Representative.
- F. Native backfill must be approved for use by the Owner Authorized Representative. If approval is provided, compaction shall meet a minimum 90% relative dry density as determined by ASTM D1557.
- G. The subgrade shall be compacted to 95% relative density, as determined by AASHTO T99 (ASTM D698), or "firm and unyielding", as approved by Owner Authorized Representative. If the Owner's Authorized Representative determines subgrade materials are not suitable for testing, then compaction will be determined by proof rolling, per the Standards, Section II.1.E.01.

### 3.12 EARTHWORK FOR PIPELINES AND CONDUITS

- A. GENERAL: Earthwork for pipelines and conduits is specified in the Standard Details, and in the following paragraphs.
- B. PIPELINE EXCAVATION: The bottom of the trench shall be carried to the specified lines and grades with proper allowance for pipe thickness and for bedding as specified in Section III.1.D.03 of the Standards and in City of Corvallis' Standard Details 110 and 201.
- C. PIPELINE AND CONDUIT BACKFILL:
  - 1. BEDDING:

- a. The Contractor shall not proceed with backfill placement in excavated areas until the subgrade has been inspected and approved by the Owner Authorized Representative. All pipe 12 inches in diameter or less shall have a 4 inch minimum thickness of bedding material below the barrel of the pipe as specified in Section III.1.D.06.1 of the Standards. Bedding material shall be placed in the bottom of the trench, leveled and compacted. Bell holes shall be excavated at each pipe joint to permit proper inspection and uniform bearing of pipe on bedding material.
  - b. After the pipe has been laid to alignment and grade, unless otherwise specified, additional bedding material shall be placed in layers the full width of the trench and compacted up to the specified level. Bedding shall be placed simultaneously on both sides of the pipe, keeping the level of backfill the same on each side. The material shall be carefully placed and compacted around the pipe to ensure that the pipe barrel is completely supported and that no voids or uncompacted areas are left beneath the pipe. Contractor shall use extra care in placing material beneath the pipe to prevent lateral movement during backfilling.
  - c. The backfill material may differ, depending type of pipe or conduit. See Drawings and Specifications for proper backfill material.
2. INITIAL BACKFILL: After pipe has been properly bedded, Contractor shall place and compact initial backfill around the pipe and to the upper limits of the pipe zone as specified in Section III.1.D.06.2.
  3. SUBSEQUENT BACKFILL: Backfill placement and compaction above the pipe zone shall be in accordance with Section III.1.D.07 and III.1.D.08 of the Standards and as specified above with the following exceptions. Backfill shall be placed and compacted in lifts of no more than two (2) feet of depth when compacted by a hoe-pack or one (1) foot of depth when compacted by other means. Prior to the beginning of backfill work, the Contractor shall coordinate with the Owner Authorized Representative to establish an acceptable method and compactive effort to meet these specifications. The Contractor shall not begin backfill work until approval is received from the Owner.

### 3.13 WET WEATHER WORK

- A. If fill is placed under wet conditions, where control of soil and/or fill's moisture content is not possible, all fill shall be granular.
- B. Protect soil against moisture with plastic sheets.
- C. Slope ground surface in construction area and seal with smooth drum roller to promote rapid water runoff and to prevent water ponding.
- D. Perform work in small areas, and carry through completion to minimize exposure to wet weather.
- E. Where traffic is anticipated over exposed subgrade, protect subgrade with compacted layer of gravel or crushed rock, and if necessary, limit traffic as required to prevent soil disturbance.

### 3.14 GRADING

- A. GENERAL:

1. Uniformly grade areas to a smooth surface, free of irregular surface changes, and to lines and elevations indicated.
2. Provide smooth transitions between proposed and existing adjacent grades or elevation.
3. Finish subgrades to indicated elevations within the following tolerances:
  - a. Lawn or unpaved areas: 0.10-feet.
  - b. Paving areas: 0.05-feet.
4. Round surfaces where abrupt slopes occur, unless otherwise directed by the Owner Authorized Representative.
5. Allow for topsoil and soil preparation.

### 3.15 SURPLUS MATERIAL

- A. Unless otherwise specified, surplus excavated material, waste material, trash, and debris shall be disposed of off the Owner's site in accordance with applicable laws, ordinances, and environmental requirements.
- B. If the quantity of surplus material is specified, the quantity specified is approximate. The Contractor shall ensure that there is sufficient material available for the completion of the embankments before disposing of any material inside or outside the site. Shortage of material, caused by premature disposal of any material by the Contractor, shall be replaced by the Contractor.

### 3.16 QUALITY CONTROL

- A. Protect all newly graded areas from traffic, freezing, and erosion.
- B. Repair and re-establish grades to specified tolerances where completed or partially completed surfaces have become eroded, rutted, or settled due to subsequent construction operations or weather conditions.
- C. Clean, repair, or replace when directed, any existing improvements, trees or other items damaged by the Work in this section at no additional cost to the Owner.

### 3.17 LANDSCAPE REPAIR

- A. Place approved topsoil adjacent to new structure (i.e., driveway, sidewalk, curb, ramp, etc.) at a maximum 6:1 slope. Compact per specifications, or as directed by Owner's Authorized Representative.
- B. Place approved lawn seed per manufacturer's specifications.
- C. Backfill for Work areas where irrigation lines are not present shall be approved imported topsoil, but does not require a Landscape Contractor. Compact ("walk-in") topsoil to minimize future settling.

### 3.18 IRRIGATION REPAIR/MODIFICATIONS

- A. Protect irrigation lines and appurtenances during construction. If irrigation lateral lines, associated fittings, and/or spray heads are identified by the utility locate, and do not require relocation to perform the Work, then the cost of repair shall be performed by the Landscape Contractor at the expense of the Contractor.
- B. Notify Owner immediately if damage to irrigation occurs and/or irrigation lateral line modifications are required during the Work. Contractor to coordinate repair and/or modifications to the irrigation with Contractor's Landscape Sub-contractor and OSU's

- Landscape Department for direction and approval. Contractor shall temporarily protect pipe ends to keep irrigation lines clean (i.e., mechanical cap, plug, tape, etc.) until Landscape Contractor can perform the repair and/or modifications.
- C. Backfill for irrigation lines (new and existing) shall be approved imported topsoil and shall be performed by an approved licensed Landscape Contractor after inspection approval and measurement verification by the Owner's Authorized Representative. Compact ("walk-in") topsoil to minimize future settling.
  - D. If irrigation lateral lines and/or fittings are damaged or require relocation modifications during construction, the approved Landscape Contractor shall perform the Work as recommended by the manufacturer and Standard Landscaping Practices. Prior to backfill, the Work requires inspection, approval, and payment measurement verification by the Owner's Authorized Representative. This work will be paid by Unit Price lengths in increments of five (5) feet or less.
  - E. If sprinkler heads are damaged or lost during excavation, the approved Landscape sub-Contractor shall replace the original using the same sprinkler head and all appropriate appurtenances, including all fittings, nozzles, and funny pipe. All Work shall be performed as recommended by the manufacturer and Standard Landscaping Practices. Prior to backfill, the Work requires inspection, approval, and payment verification by the Owner's Authorized Representative.

#### **PART 4 – MEASUREMENT AND PAYMENT**

##### **4.01 UNIT PRICE: IRRIGATION LINE REPLACEMENT**

- A. The purpose of this unit price item is to remove existing lateral irrigation lines that need to be modified, relocated, or that have been damaged, and replace with new irrigation lines and associated appurtenances.
- B. The payment for this bid item shall be made at the contract unit price, and shall be paid based in increments of 5 feet or less, on an each increment basis. The unit price includes all labor, materials, and equipment associated with the construction of the irrigation, including associated appurtenances (i.e., fittings, etc.), excavation, haul off, backfill, and landscape repair (soil replacement, grass seeding as needed). The construction for this unit price item shall meet requirements of this Section, and the Contract Documents.

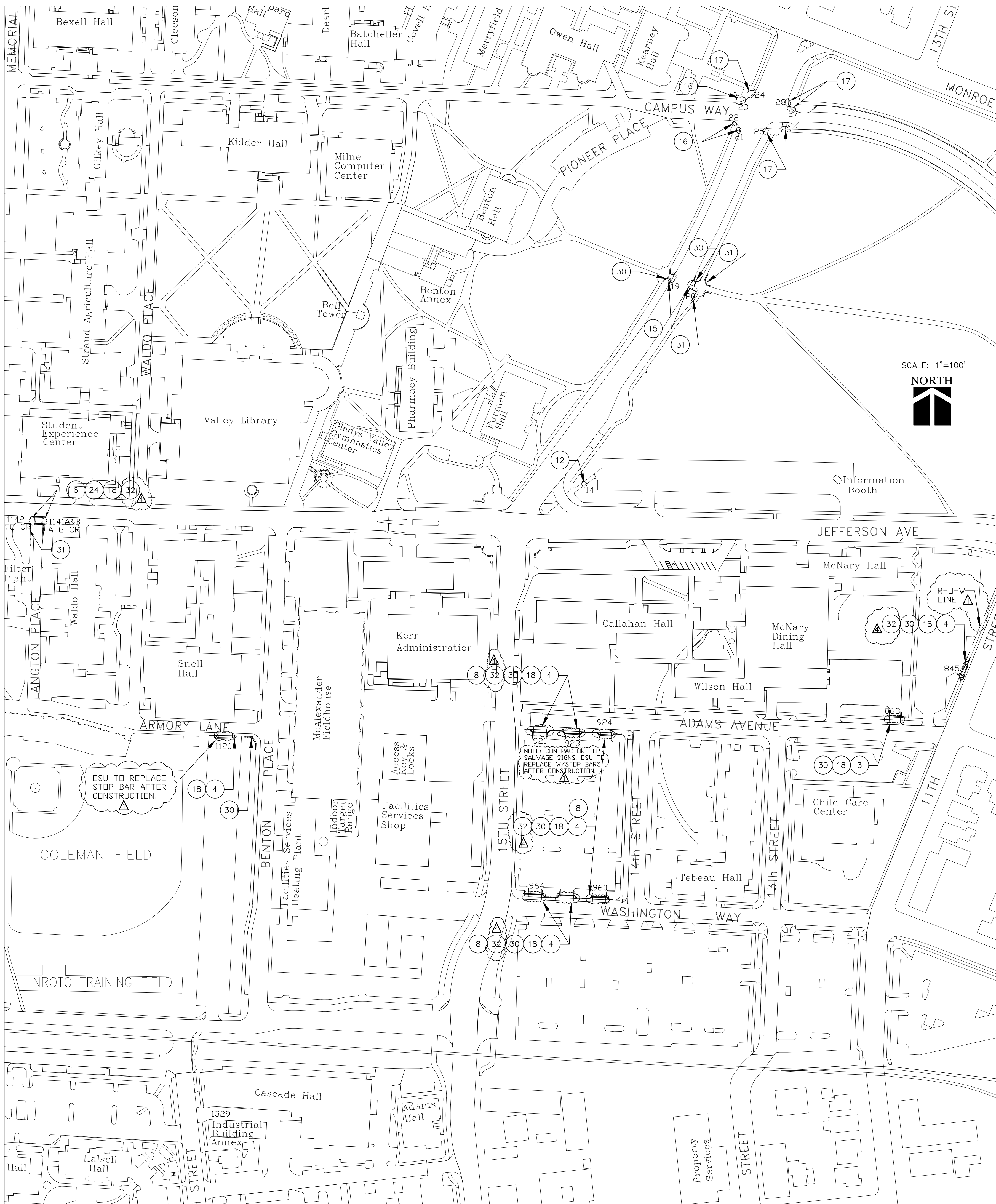
##### **4.02 UNIT PRICE: RAINBIRD 1800 SPRAY HEAD REPLACEMENT**

- A. The purpose of this unit price item is to replace the original damaged or lost Rainbird 1800 sprinkler heads with new Rainbird 1800 sprinkler heads and associated appurtenances.
- B. The payment for this bid item shall be made at the contract unit price, and shall be paid on a per each basis. The unit price includes all labor, materials, and equipment associated with the construction of the sprinkler head, including associated appurtenances (i.e., fittings, funny pipe, appropriate nozzles, etc.), excavation, haul off, backfill, and landscape repair (soil replacement, grass seeding as needed). The construction for this unit price item shall meet requirements of this Section, and the Contract Documents.

4.03 UNIT PRICE: HUNTER I-20 ROTOR HEAD REPLACEMENT

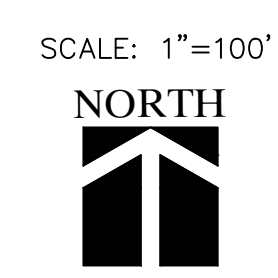
- A. The purpose of this unit price item is to replace the original damaged or lost Hunter I-20 rotor heads with new Hunter I-20 rotor heads and associated appurtenances.
- B. The payment for this bid item shall be made at the contract unit price, and shall be paid on a per each basis. The unit price includes all labor, materials, and equipment associated with the construction of the sprinkler head, including associated appurtenances (i.e., fittings, funny pipe, appropriate nozzles, etc.), excavation, haul off, backfill, and landscape repair (soil replacement, grass seeding as needed). The construction for this unit price item shall meet requirements of this Section, and the Contract Documents.

END OF SECTION 31 05 00



**CONSTRUCTION ITEMS**

- 1 REMOVE EXISTING SIDEWALK/IMPROVEMENT. REPLACE WITH NEW 4-INCHES P.C.C. OVER 4-INCHES OF COMPACTED 3/4" MINUS CRUSHED AGGREGATE. SEE DETAIL 10, SHEET CD1.1.
- 2 REMOVE EXISTING SIDEWALK. REPLACE WITH NEW 6-INCHES P.C.C. OVER 4-INCHES OF COMPACTED 3/4" MINUS CRUSHED AGGREGATE. SEE DETAIL 10, SHEET CD1.1.
- 3 REMOVE EXISTING SIDEWALK ACROSS DRIVEWAY. REPLACE WITH 8" P.C.C. W/#4 REBAR 16" O.C. & E.W. AT MAX. 1.5% CROSS SLOPE; OVER 4-INCHES OF COMPACTED 3/4" MINUS CRUSHED AGGREGATE. SAWCUT FOR ASPHALT TRANSITION BEHIND SIDEWALK DIMENSION SHOWN ON PLANS. CONSTRUCT TRANSITION WITH 2-2.5" LIFTS OF HMAc OVER 15-INCHES OF BASEROCK.
- 4 CONSTRUCT NEW SIDEWALK BEHIND EXT'G DRIVEWAY PER DETAIL 11, SHT CD1.1.
- 5 REMOVE EXISTING SIDEWALK ACROSS DRIVEWAY, TRANSITIONS PANELS, AND IMPROVEMENTS AND REPLACE PER DETAIL 12, SHT CD1.1.
- 6 REMOVE EXISTING ASPHALT OVER TOP OF TUNNEL AND OTHER IMPROVEMENTS, AND RECONSTRUCT PER DETAIL 13, SHT CD1.1.
- 7 REMOVE EXISTING S/W ACROSS DWY AND TRANSITION CONCRETE PANEL, FROM B.O.W. TO FIRST JOINT (APPROX 6.5'). REPLACE W/8" PCC W/#4 REBAR 16" O.C. & E.W.; OVER 4-INCHES COMPACTED BASEROCK. SIDEWALK/DWY PANEL TO BE 1.5% MAXIMUM CROSS SLOPE.
- 8 REMOVE EXISTING CURB AND CONSTRUCT NEW 16-INCH STRAIGHT CURB CITY STD. DETAIL 103, SHEET CD1.1.
- 9 NOT USED.
- 10 NOT USED.
- 11 REMOVE EXISTING RAT-SLAB SIDEWALK ACROSS DRIVEWAY OVER TUNNEL AND RECONSTRUCT PER DETAIL 13, SHT CD1.1, EXCEPT DRIVEWAY TRANSITION (FROM STREET TO SIDEWALK) TO REMAIN, AND NO DETECTABLE WARNINGS.
- 12 RECONSTRUCT CURB RAMP PER DETAIL 16, SHT CD1.2.
- 13 NOT USED.
- 14 NOT USED.
- 15 RECONSTRUCT CURB RAMP PER DETAIL 19, SHT CD1.2.
- 16 RECONSTRUCT CURB RAMP PER DETAIL 18, SHT CD1.2.
- 17 RECONSTRUCT CURB RAMP PER DETAIL 17, SHT CD1.2.
- 18 SAWCUT 2' BEHIND B.O.W. FOR ASPHALT TRANSITION. REPLACE PER DETAILS OR NOTE 3.
- 19 SAWCUT 4' BEHIND B.O.W. FOR ASPHALT TRANSITION. REPLACE PER DETAILS OR NOTE 3.
- 20 NOT USED.
- 21 ADJUST METER BOX TO NEW F.G.
- 22 INSTALL PRECAST 9"x6" WIDE REINFORCED CONCRETE WHEEL STOPS. INSTALL WITH "DURAL" EPOXY BONDING AGENT, OR OWNER APPROVED EQUAL FROM ODOT'S QPL. INSTALL WHEEL STOP EDGE CLOSEST TO SIDEWALK TWO FEET FROM JOINT TO ALLOW MINIMUM 2.5-FOOT BUMPER OVERHANG.
- 23 NOT USED.
- 24 REMOVE EXT'G IMPROVEMENT, REPLACE W/8" PCC W/#4 REBAR 16" O.C. & E.W.; OVER 4-INCHES COMPACTED BASEROCK. SEE NOTE 3, DETAIL 13, SHT CD1.1.
- 25 REMOVE APPROX. 95 S.F. OF EXISTING SIDEWALK RAMP AND BASEROCK. REPLACE WITH 4-INCHES OF CONCRETE OVER 4-INCHES BASEROCK WITH 2' X 5' YELLOW "ACCESS TILE" DETECTABLE WARNING, OR APPROVED EQUAL (FIELD VERIFY SIZE).
- 30 INSTALL 4-FOOT ORANGE SNOW FENCING AROUND TREES AND SHRUBS.
- 31 INSTALL 6-FOOT WIRE MESH FENCING AROUND TREES AND SHRUBS.
- 32 CONTRACTOR SHALL COORDINATE WITH OSU LANDSCAPE DEPT. TO PLACE 4-INCH PVC IRRIGATION SLEEVE AT BOTTOM OF EXCAVATION IN ASPHALT TRANSITION.



**ESTIMATED ITEM QUANTITIES**

1. 174 S.F.
2. 306 S.F.
3. 101 S.F.
4. 782 S.F.
5. 0 S.F.
6. 117 S.F.
7. 0
8. 24 L.F.
9. 0
10. 0
11. 0
12. 12 S.F.
13. 0
14. 0
15. 92 S.F.
16. 3 EACH
17. 101 S.F.
18. 511 S.F.
19. 0
20. 0
21. 0
22. 0
23. 0
24. 55 S.F.
25. 0

**CURB RAMP TABLE**

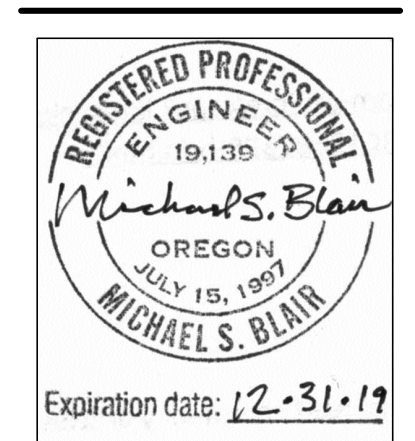
LOCATION NO. IN DWG	OSU BARRIER #	ESTIMATED DETECTABLE WARNING PANEL REPLACEMENT	ESTIMATED CONCRETE REPLACEMENT	NOTES
14	?	2'X6'	12 SF	SEE DETAIL 15, SHT CD1.2
19	139A&B	2'X10'	46 SF	SEE DETAIL 19, SHT CD1.2
20	140A&B	2'X10'	46 SF	SEE DETAIL 19, SHT CD1.2
21	148A&B	2'X5.8'	38 SF	SEE DETAIL 18, SHT CD1.2
22	147A&B	2'X6'	16 SF	SEE DETAIL 18, SHT CD1.2
23	141A&B	2'X5.5'	32 SF	SEE DETAIL 18, SHT CD1.2
24	142	2'X6.7'	31 SF	SEE DETAIL 17, SHT CD1.2
25	145	2'X6'	19 SF	SEE DETAIL 17, SHT CD1.2
26	146	2'X6'	20 SF	SEE DETAIL 17, SHT CD1.2
27	144	2'X6'	16 SF	SEE DETAIL 17, SHT CD1.2
28	143	2'X6'	15 SF	SEE DETAIL 17, SHT CD1.2



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**Infrastructure Solutions Engineering, LLC**  
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 P.O. Box 9  
 Corvallis, OR 97339  
 Cell: 541.510.3322  
 Email: mke.blair@isaregion.com

**PATH OF TRAVEL IMPROVEMENTS**  
 OREGON STATE UNIVERSITY  
 OSU PROJ. NO.: 1919-14

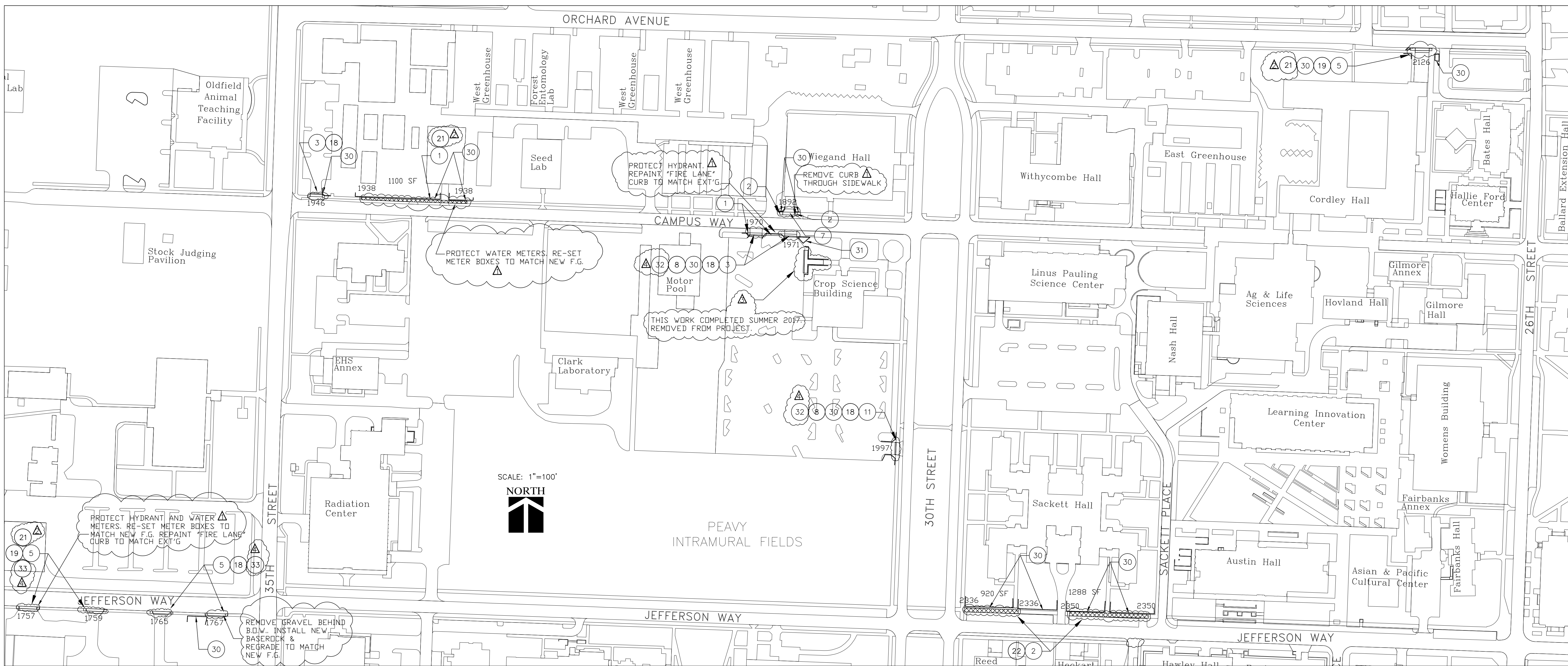


Expiration date: 12-31-19

Drawn By: MSB  
 Checked: NN  
 Project #: 1919-14  
 Date: April 19, 2017

Rev. #	Date
#	dd/mm/yy
▲	18/05/17
▲	25/05/17
▲	09/01/18
▲	13/02/18

SHEET TITLE  
**EAST CAMPUS ADA BARRIERS**  
 SHEET #  
**C1.1**



SCALE: 1"=50'

**NW CAMPUS ADA BARRIERS**

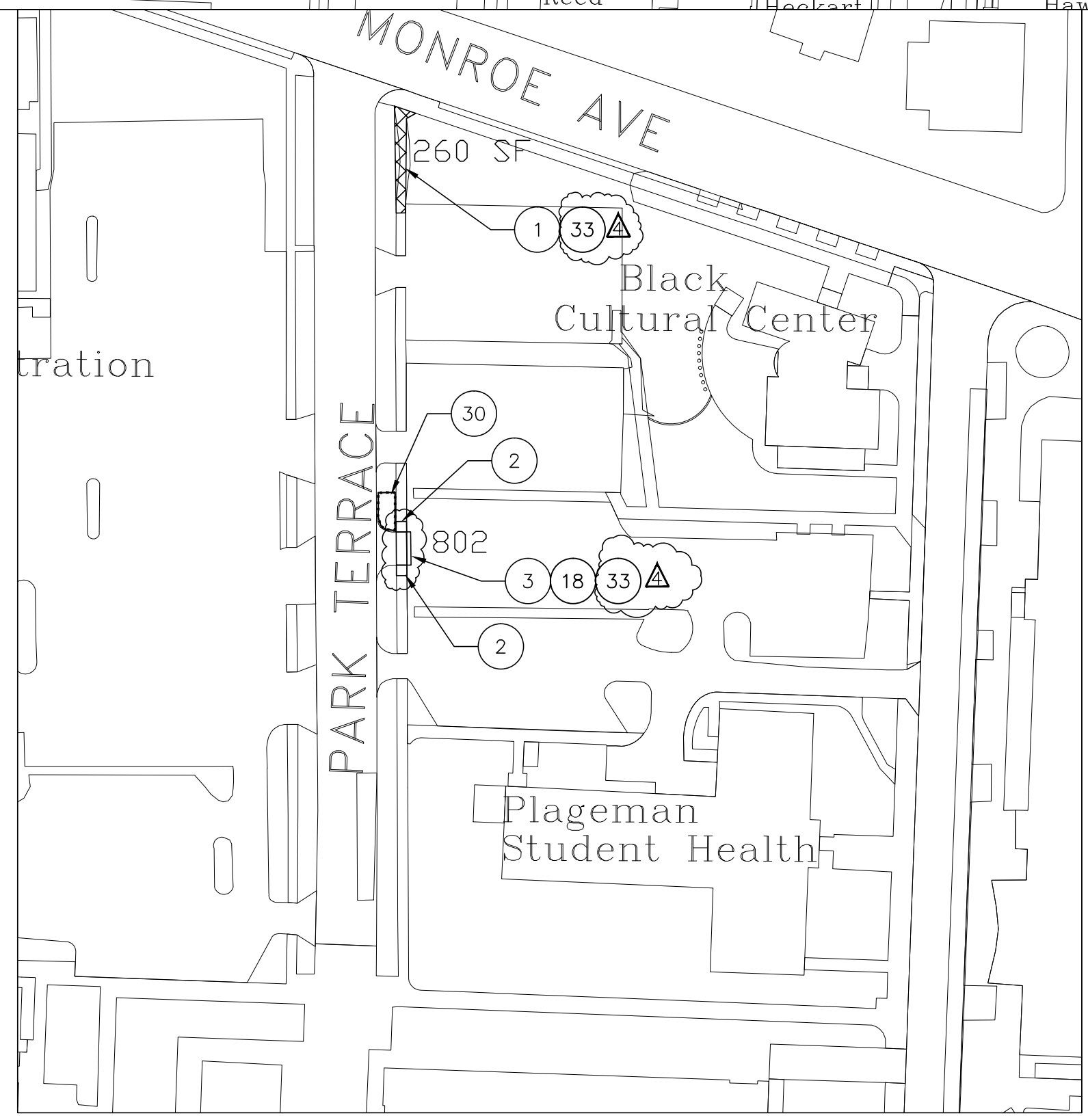
**ESTIMATED ITEMS QUANTITIES**

**CONSTRUCTION ITEMS**

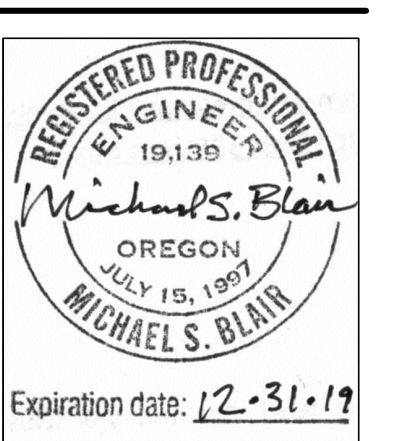
- 1 REMOVE EXISTING SIDEWALK/IMPROVEMENT. REPLACE WITH NEW 4-INCHES P.C.C. OVER 4-INCHES OF COMPACTED 3/4" MINUS CRUSHED AGGREGATE. SEE DETAIL 10, SHEET CD1.1.
- 2 REMOVE EXISTING SIDEWALK. REPLACE WITH NEW 6-INCHES P.C.C. OVER 4-INCHES OF COMPACTED 3/4" MINUS CRUSHED AGGREGATE. SEE DETAIL 10, SHEET CD1.1.
- 3 REMOVE EXISTING SIDEWALK ACROSS DRIVEWAY. REPLACE WITH 8" P.C.C. W/#4 REBAR 16" O.C. & E.W. AT MAX. 1.5% CROSS SLOPE; OVER 4-INCHES OF COMPACTED 3/4" MINUS CRUSHED AGGREGATE. SAWCUT FOR ASPHALT TRANSITION BEHIND SIDEWALK DIMENSION SHOWN ON PLANS. CONSTRUCT TRANSITION WITH 2-2.5" LIFTS OF HMAc OVER 15-INCHES OF BASEROCK.
- 4 CONSTRUCT NEW SIDEWALK BEHIND EXT'G DRIVEWAY PER DETAIL 11, SHT CD1.1.
- 5 REMOVE EXISTING SIDEWALK ACROSS DRIVEWAY, TRANSITION PANELS, AND IMPROVEMENTS AND REPLACE PER DETAIL 12, SHT CD1.1.
- 6 REMOVE EXISTING ASPHALT OVER TOP OF TUNNEL AND OTHER IMPROVEMENTS, AND RECONSTRUCT PER DETAIL 13, SHT CD1.1.
- 7 REMOVE EXISTING S/W ACROSS DWY AND TRANSITION CONCRETE PANEL, FROM B.O.W. TO FIRST JOINT (APPROX 6.5'). REPLACE W/8" PCC W/#4 REBAR 16" O.C. & E.W.; OVER 4-INCHES COMPACTED BASEROCK. SIDEWALK/DWY PANEL TO BE 1.5% MAXIMUM CROSS SLOPE.
- 8 REMOVE EXISTING CURB AND CONSTRUCT NEW 16-INCH STRAIGHT CURB CITY STD. DETAIL 103, SHEET CD1.1.
- 9 NOT USED
- 10 NOT USED
- 11 REMOVE EXISTING RAT-SLAB SIDEWALK ACROSS DRIVEWAY OVER TUNNEL AND RECONSTRUCT PER DETAIL 13, SHT CD1.1, EXCEPT DRIVEWAY TRANSITION (FROM STREET TO SIDEWALK) TO REMAIN, AND NO DETECTABLE WARNINGS.
- 12 RECONSTRUCT CURB RAMP PER DETAIL 16, SHT CD1.2.

- 13 NOT USED.
- 14 NOT USED
- 15 RECONSTRUCT CURB RAMP PER DETAIL 19, SHT CD1.2.
- 16 RECONSTRUCT CURB RAMP PER DETAIL 18, SHT CD1.2.
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- 23 NOT USED
- 24 REMOVE EXT'G IMPROVEMENT, REPLACE W/8" PCC W/#4 REBAR 16" O.C. & E.W.; OVER 4-INCHES COMPACTED BASEROCK. SEE NOTE 3, DETAIL 13, SHT CD1.1
- 25 REMOVE APPROX. 45 S.F. OF EXISTING SIDEWALK RAMP AND BASEROCK. REPLACE WITH 4-INCHES OF CONCRETE OVER 4-INCHES BASEROCK WITH 2' X 5' YELLOW "ACCESS TILE" DETECTABLE WARNING, OR APPROVED EQUAL (FIELD VERIFY SIZE).
- 30 INSTALL 4-FOOT ORANGE SNOW FENCING AROUND TREES AND SHRUBS.
- 31 INSTALL 6-FOOT WIRE MESH FENCING AROUND TREES AND SHRUBS.
- 32 CONTRACTOR SHALL COORDINATE WITH OSU LANDSCAPE DEPT. TO PLACE 4-INCH PVC IRRIGATION SLEEVE AT BOTTOM OF EXCAVATION IN ASPHALT TRANSITION.
- 33 NO IRRIGATION IN THIS LOCATION.

1.	1,565 S.F.
2.	3,369 S.F.
3.	195 S.F.
4.	245 S.F.
5.	842 S.F.
6.	0
7.	263 S.F.
8.	17 L.F.
9.	0
10.	0
11.	175 S.F.
12.	0
13.	0
14.	0
15.	0
16.	0
17.	0
18.	442 S.F.
19.	359 S.F.
20.	0
21.	6 EACH
22.	39 EACH
23.	0
24.	0
25.	0



**PARK TERRACE DWY**



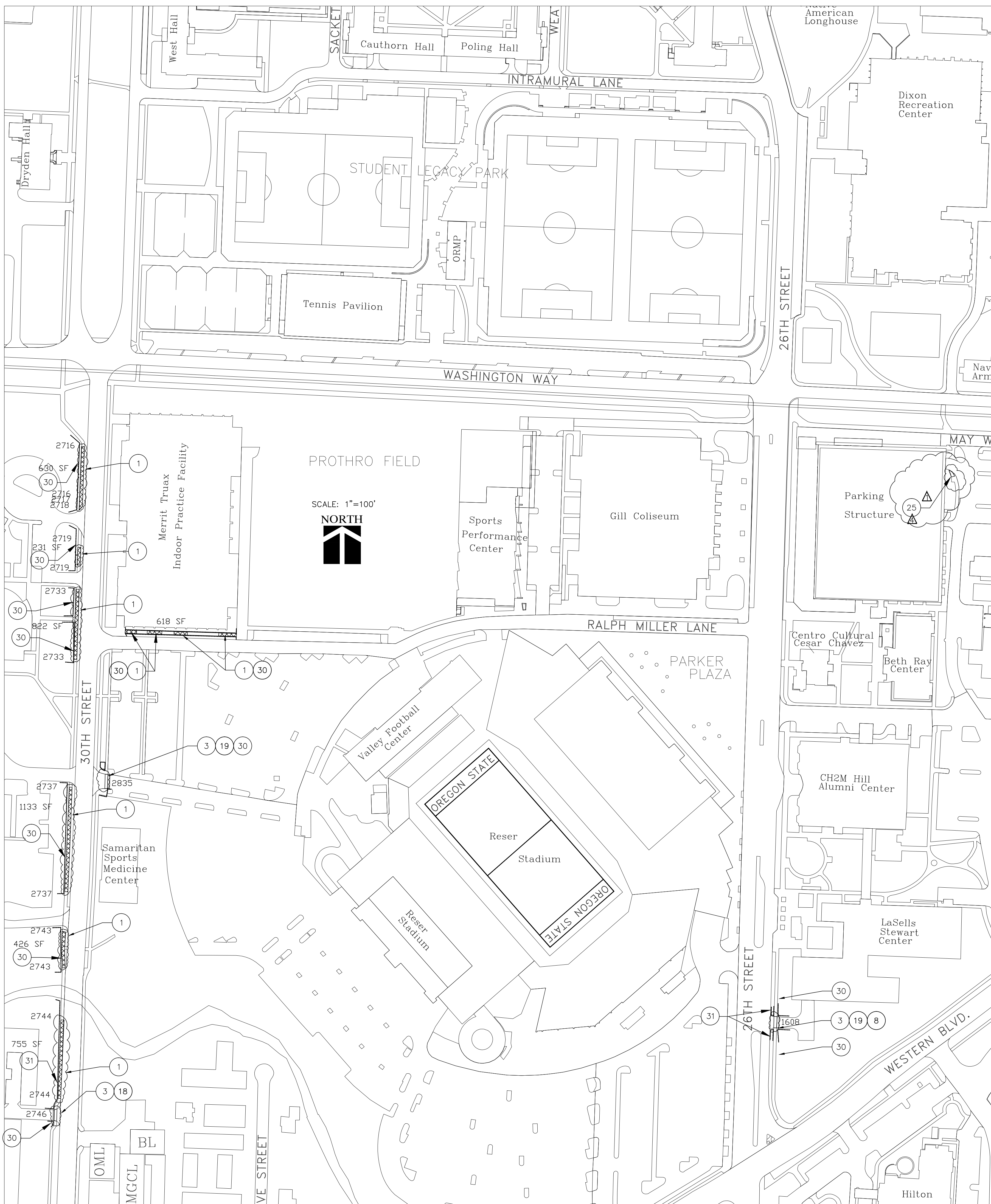
Drawn By: MSB

Checked: NN

Project #: 1919-14

Date: April 19, 2017

Rev. #:	Date:
#	dd/mm/yy
	18/05/17
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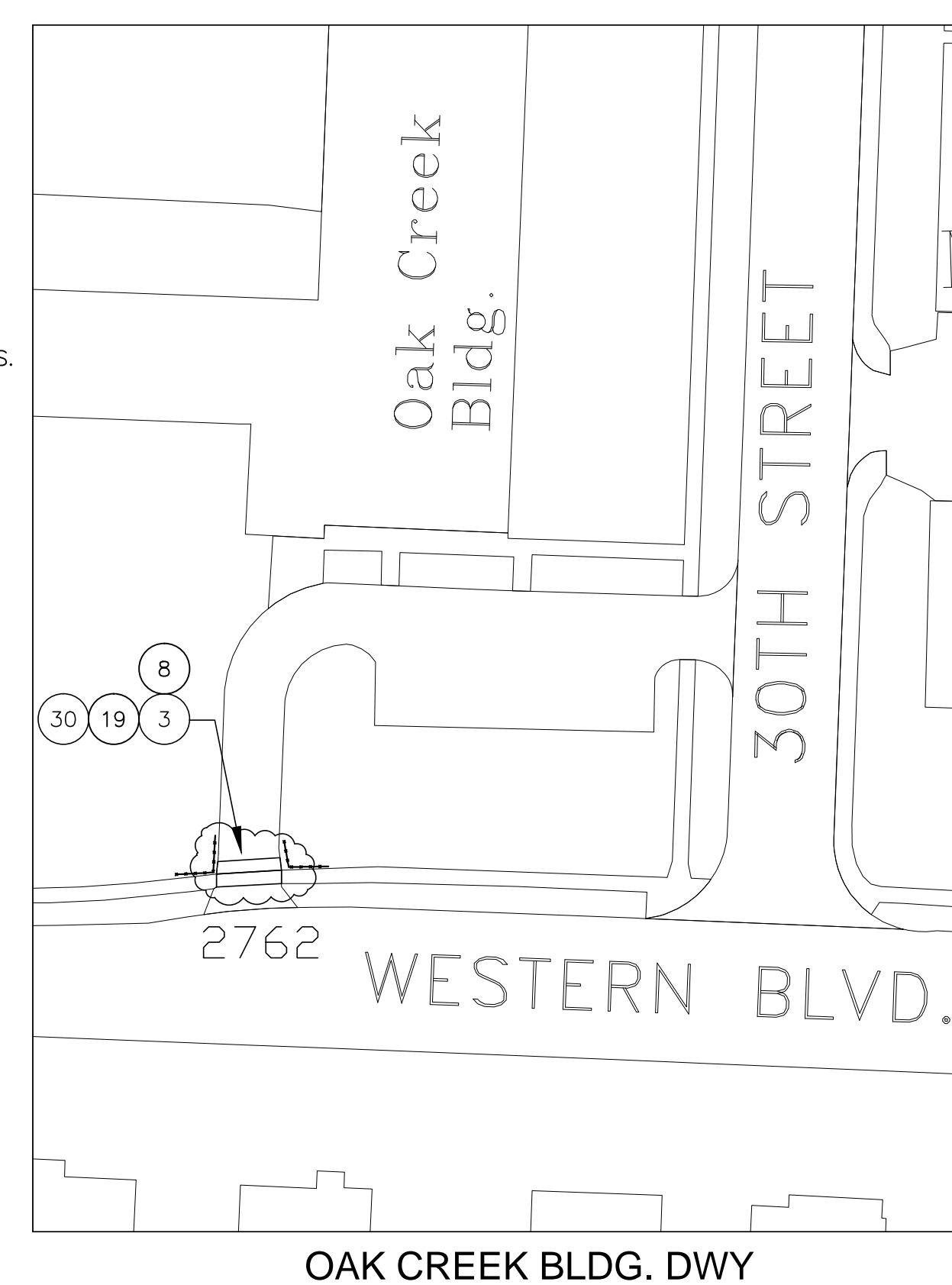


**CONSTRUCTION ITEMS**

**ESTIMATED ITEM QUANTITIES**

- 1 REMOVE EXISTING SIDEWALK/IMPROVEMENT. REPLACE WITH NEW 4-INCHES P.C.C. OVER 4-INCHES OF COMPACTED 3/4" MINUS CRUSHED AGGREGATE. SEE DETAIL 10, SHEET CD1.1.
- 2 REMOVE EXISTING SIDEWALK. REPLACE WITH NEW 6-INCHES P.C.C. OVER 4-INCHES OF COMPACTED 3/4" MINUS CRUSHED AGGREGATE. SEE DETAIL 10, SHEET CD1.1.
- 3 REMOVE EXISTING SIDEWALK ACROSS DRIVEWAY. REPLACE WITH 8" P.C.C. W/#4 REBAR 16" O.C. & E.W. AT MAX. 1.5% CROSS SLOPE; OVER 4-INCHES OF COMPACTED 3/4" MINUS CRUSHED AGGREGATE. SAWCUT FOR ASPHALT TRANSITION BEHIND SIDEWALK DIMENSION SHOWN ON PLANS. CONSTRUCT TRANSITION WITH 2-2.5" LIFTS OF HMAC OVER 15-INCHES OF BASEROCK.
- 4 CONSTRUCT NEW SIDEWALK BEHIND EXT'G DRIVEWAY PER DETAIL 11, SHT CD1.1.
- 5 REMOVE EXISTING SIDEWALK ACROSS DRIVEWAY, TRANSITIONS PANELS, AND IMPROVEMENTS AND REPLACE PER DETAIL 12, SHT CD1.1.
- 6 REMOVE EXISTING ASPHALT OVER TOP OF TUNNEL AND OTHER IMPROVEMENTS, AND RECONSTRUCT PER DETAIL 13, SHT CD1.1.
- 7 REMOVE EXISTING S/W ACROSS DWY AND TRANSITION CONCRETE PANEL, FROM B.O.W. TO FIRST JOINT (APPROX 6.5'). REPLACE W/8" PCC W/#4 REBAR 16" O.C. & E.W.; OVER 4-INCHES COMPACTED BASEROCK. SIDEWALK/DWY PANEL TO BE 1.5% MAXIMUM CROSS SLOPE.
- 8 REMOVE EXISTING CURB AND CONSTRUCT NEW 16-INCH STRAIGHT CURB CITY STD. DETAIL 103, SHEET CD1.1.
- 9 NOT USED
- 10 NOT USED
- 11 REMOVE EXISTING RAT-SLAB SIDEWALK ACROSS DRIVEWAY OVER TUNNEL AND RECONSTRUCT PER DETAIL 13, SHT CD1.1, EXCEPT DRIVEWAY TRANSITION (FROM STREET TO SIDEWALK) TO REMAIN, AND NO DETECTABLE WARNINGS.
- 12 RECONSTRUCT CURB RAMP PER DETAIL 16, SHT CD1.2.
- 13 NOT USED.
- 14 NOT USED.
- 15 RECONSTRUCT CURB RAMP PER DETAIL 19, SHT CD1.2.
- 16 RECONSTRUCT CURB RAMP PER DETAIL 18, SHT CD1.2.
- 17 RECONSTRUCT CURB RAMP PER DETAIL 17, SHT CD1.2.
- 18 SAWCUT 2' BEHIND B.O.W. FOR ASPHALT TRANSITION.
- 19 SAWCUT 4' BEHIND B.O.W. FOR ASPHALT TRANSITION.
- 20 NOT USED
- 21 ADJUST METER BOX TO NEW F.G.
- 22 INSTALL PRECAST 9"x6" WIDE REINFORCED CONCRETE WHEEL STOPS. INSTALL WITH "DURAL" EPOXY BONDING AGENT, OR OWNER APPROVED EQUAL FROM ODOT'S QPL. INSTALL WHEEL STOP EDGE CLOSEST TO SIDEWALK TWO FEET FROM JOINT TO ALLOW MINIMUM 2.5-FOOT BUMPER OVERHANG.
- 23 NOT USED
- 24 REMOVE EXT'G IMPROVEMENT, REPLACE W/8" PCC W/#4 REBAR 16" O.C. & E.W.; OVER 4-INCHES COMPACTED BASEROCK. SEE NOTE 3, DETAIL 13, SHT CD1.1.
- 25 REMOVE APPROX. 45 S.F. OF EXISTING SIDEWALK RAMP AND BASEROCK. REPLACE WITH 4-INCHES OF CONCRETE OVER 4-INCHES BASEROCK WITH 2' X 5' YELLOW "ACCESS TILE" DETECTABLE WARNING, OR APPROVED EQUAL (FIELD VERIFY SIZE).
- 30 INSTALL 4-FOOT ORANGE SNOW FENCING AROUND TREES AND SHRUBS.
- 31 INSTALL 6-FOOT WIRE MESH FENCING AROUND TREES AND SHRUBS.
- 32 CONTRACTOR SHALL COORDINATE WITH OSU LANDSCAPE DEPT. TO PLACE 4-INCH PVC IRRIGATION SLEEVE AT BOTTOM OF EXCAVATION IN ASPHALT TRANSITION.

1.	4,615 S.F.
2.	0
3.	457 S.F.
4.	0
5.	0
6.	0
7.	0
8.	16 L.F.
9.	0
10.	0
11.	0
12.	0
13.	0
14.	0
15.	0
16.	0
17.	0
18.	40 S.F.
19.	275 S.F.
20.	0
21.	0
22.	0
23.	0
24.	0
25.	45 S.F.



**OSU**  
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UNIVERSITY

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**PATH OF TRAVEL  
IMPROVEMENTS**

**OREGON STATE UNIVERSITY**  
OSU PROJ. NO.: 1919-14

REGISTERED PROFESSIONAL  
ENGINEER  
19139  
Michael S. Blair  
OREGON  
JULY 15, 1997  
MICHAEL S. BLAIR

Expiration date: 12-31-19

Drawn By: MSB  
Checked: NN  
Project #: 1919-14  
Date: April 19, 2017

Rev. #:	Date:
#	dd/mm/yy
▲	18/05/17
▲	25/05/17
▲	09/01/18
▲	13/02/18

SHEET TITLE  
**SW CAMPUS  
ADA  
BARRIERS**

SHEET #  
**C1.3**