

Project: Earthwork and Demolition Package - Howard Elementary School Site
Title: Addendum No. 1
Contract No: CIP 410 213 09
Owner: Eugene School District 4j
 Architect's Project No: 1336
Date: June 27, 2014
From: Curt Wilson, PIVOT Architecture
To: Interested Bidders



This Addendum is available at the Owner's website <http://www.4j.lane.edu/bids/> and modifies the Project Manual, Specifications, and Drawings in accordance with the Invitation to Bid and the Instructions to Bidders as follows:

1-1-0 General Information

- 1-1-1 The attached agenda and sign-up sheet for the non-mandatory pre-bid meeting are provided for information.
- 1-1-2 In answer to a question raised by bidders at the pre-bid meeting, the Owner has completed testing of the existing roofing and determined that the roofing does not contain asbestos.

1-2-0 Changes to the Project Manual

- 1-2-1 Section 00 0110 – Table of Contents: Make revisions as indicated in the attached revised specification dated 6/27/14.
- 1-2-2 Section 01 1100 – Summary of Work: Add the attached Form 01 1100 C – Full Time Superintendent Disclosure Statement.
- 1-2-3 Section 31 2000 – Earth Moving: Make revisions as indicated in the attached revised specification dated 6/27/14.
- 1-2-4 Section 31 2500 – Erosion Control: Make revisions as indicated in the attached revised specification dated 6/27/14.
- 1-2-5 Section 32 1200 – Flexible Paving: Make revisions as indicated in the attached revised specification dated 6/27/14.

1-3-0 Changes to the Drawings

- 1-3-1 Add the attached drawing AXXX – Temporary Construction Sign.

- 1-3-2 C001: Revised finished grade contours around east and west courtyards and south entrance. Refer to attached full sized sheet C001.
- 1-3-3 C001: Add internal haul route. Refer to attached full sized sheet C001.
- 1-3-4 C001: Add note and hatching requiring additional rock for a haul road across existing gravel parking lot. Refer to attached full sized sheet C001.
- 1-3-5 C001: Delete Construction Entrance and Truck Wheel Wash details. Refer to attached full sized sheet C001.
- 1-3-6 C002: Add Detail 3, City of Eugene Construction Entrance. Refer to attached full sized sheet C002.
- 1-3-7 C003: Add approximate location of existing abandoned sanitary sewer drain field and add note requiring the removal of the drain field if encountered in building excavation. Refer to attached full sized sheet C003.
- 1-3-8 C003: Revised Building Grid locations. Refer to attached full sized sheet C003.

- 1-3-9 1/D001 – DEMOLITION SITE PLAN: Owner has completed the removal of the wooden garden boxes on the east side of the building. Keynote D18 has been deleted.
- 1-3-10 D101 – DEMOLITION FLOOR PLAN AND SECTION: General Notes B. and C. have been revised as indicated in the attached revised drawing sheet.
- 1-3-11 D101 – DEMOLITION FLOOR PLAN AND SECTION: The following Keynotes have been revised as indicated in the attached revised drawing sheet:
 - Keynote D6
 - Keynote D9
 - Keynote D11
 - Keynote D14
 - Keynote D26
 - Keynote D27
 - Keynote D28
 - Keynote D30
 - Keynote D32
 - Keynote D33
- 1-3-12 1/D101 – DEMOLITION FLOOR PLAN AND SECTION: (E) Water Fountain (Keynote D29) is not to be demolished and is to remain. Keynote D29 has been deleted.
- 1-3-13 1/D101 – DEMOLITION FLOOR PLAN AND SECTION: Location of capped (E) 1" HW below slab (Keynote D30) has been adjusted to the north.
- 1-3-14 1/D101 – DEMOLITION FLOOR PLAN AND SECTION: Keynote D31 has been deleted.
- 1-3-15 1/D101 – DEMOLITION FLOOR PLAN AND SECTION: DDC Control Panel to remain (Keynote D34) was located incorrectly along the south wall of Service Room 7. Actual location of panel is along the south wall of Storage 6.
- 1-3-16 S011 – OVERALL BUILDING PAD PLAN: Revised plan note 2 to reflect current BIM model; updated plan and dimensions and grids to coordinate with current architectural model.

1-4-0 Substitution Approvals

- 1-4-1 None

End of Addendum No. 1

Project: Earthwork and Demolition - Howard Elementary School
Date: June 17, 2014
From: Eric Gunderson
Subject: Non-Mandatory Prebid Meeting Agenda
2:00 PM, Howard Cafeteria

1. Introductions
2. Documents
 - a. <http://www.4j.lane.edu/bids/>
3. Overview (Summary of Work)
 - a. Future School
 - b. Earth Work and Demolition
 - c. Asbestos Removal
 - d. Kelley Track
4. Schedule
 - a. Bid Schedule
 - Prebid Meeting at Howard Cafeteria: Tuesday June 17, 2014, 2:00 pm
 - Bid Opening at Facilities Office: July 8, 2014, 2:00 pm
 - Cut off for Substitution Requests: 10 days before bid opening, June 28, 2014, 5:00 pm (note that the 28th is a Saturday).
 - Cut off for Addenda: 4 days before bid opening, July 3, 2014, 2:00 pm (4 days is actually July 4)
 - b. Work Schedule
 - i. Expected Notice to Proceed: July 15, 2014 (Following River Road Summer Festival)
 - ii. Work to be substantially complete October 31, 2014
 - c. Permits: City of Eugene Building Permit and Erosion Control in progress.
5. Bidding,
 - a. Base Bid and Allowance
 - b. Prevailing wage rates
6. Division 1
 - a. Temp Facilities, Work limits and fence
 - b. Submittals, digital
 - c. Closeout – Record Survey
7. Scope of Earthwork and Demolition
 - a. Demo & Salvage
 - b. Building Repairs, Carpentry, Roofing, Sheet Metal, Paint
 - c. Some M & E work on building
 - d. Earthwork
 - e. Erosion Control
8. Cost Estimate: \$450,000 including allowances.

NON-MANDATORY PRE-PROPOSAL MEETING SIGN-IN FORM

Project: Earthwork and Demolition, Howard Site

Meeting Date & Time: 6/17/2014, 2:00 PM

Location: Howard Elementary School, Cafeteria - 700 Howard Lane, Eugene, OR 97404

FIRM NAME	REPRESENTATIVES NAME	MAILING ADDRESS	PHONE	FAX	E-MAIL
Advanced Mechanical	Eric Bergmann	PO Box 397 Brownsville OR 97527	541-466-3939	541-466-3949	eric@advancedmechanicalinc.com
Advanced Mechanical	Gene Schilman	" "	" "	" "	
EUGENE SAND GRAVEL	MARK ALBERTS	PO BOX 1067 EUGENE, OR 97401	541-687-5034	541-687-5055	malberts@oilcoستمaterials.com
Willamette Valley Excavating	Brand Reynolds	Po Box 12861 Salem, OR 97309	503-932-7012	503-339-1997	brand@wv-excavating.com
Dorman Const.	Mark Olson	303 S 5th St suite 135 Springfield	541-984-0012	541-501-9013	marko@dorman-const.com
CHAMBERS CONSTRUCTION	PRIAN ANDERSON	3028 JUDKINS RD #1 EUGENE, OR	541.687.9445	541.687.9451	BANDERSON@CHAMBERSCONSTRUCTION.COM
Payne Const	Greg	535 River Loop 1	541-6889038	5416896861	GPayne1420@MSN.Com

**SECTION 00 0110
TABLE OF CONTENTS**

PROCUREMENT AND CONTRACTING REQUIREMENTS

DIVISION 00 -- PROCUREMENT AND CONTRACTING REQUIREMENTS

- 00 0101 - Project Title Page
- 00 0110 - Table of Contents
- 00 0115 - List of Drawing Sheets
- 00 1113 - Invitation To Bid
- 00 2113 - Instructions to Bidders, AIA Document A701
- 00 2213 - Supplementary Instructions to Bidders
- 00 3100 - Available Project Information
- 00 4113 - Bid Form
- 00 4522 - First Tier Subcontractor Disclosure Form
- 00 5213 - Form of Agreement
- 00 7213 - General Conditions, AIA Document A201
- 00 7300 - Supplementary Conditions
- 00 7343 - Prevailing Wage Rates for Public Contracts in Oregon

SPECIFICATIONS

DIVISION 01 -- GENERAL REQUIREMENTS

- 01 1100 - Summary of Work
- 01 2100 - Allowances
- 01 2500 - Contract Modification Procedures
- 01 2501 - Change Request/Proceed Order (CR/PO) Form
- 01 2900 - Payment Procedures
- 01 3100 - Project Management and Coordination
- 01 3200 - Construction Progress Documentation
- 01 3300 - Submittal Procedures
- 01 4000 - Quality Requirements
- 01 5000 - Temporary Facilities and Controls
- 01 6000 - Product Requirements
- 01 6023 - Substitution Request Form
- 01 7300 - Execution Requirements
- 01 7329 - Cutting and Patching
- 01 7700 - Closeout Procedures
- 01 7839 - Project Record Documents

DIVISION 02 -- EXISTING CONDITIONS

- 02 4100 - Demolition

DIVISION 03 -- CONCRETE

DIVISION 04 -- MASONRY

DIVISION 05 -- METALS

DIVISION 06 -- WOOD, PLASTICS, AND COMPOSITES

06 1000 - Rough Carpentry

06 2000 - Finish Carpentry

DIVISION 07 -- THERMAL AND MOISTURE PROTECTION

07 2100 - Thermal Insulation

07 2500 - Weather Barriers

07 4623 - Wood Siding

07 5100 - Built-Up Bituminous Roofing

07 6200 - Sheet Metal Flashing and Trim

07 9005 - Joint Sealers

DIVISION 08 -- OPENINGS

08 1416 - Flush Wood Doors

08 7100 - Door Hardware

DIVISION 09 -- FINISHES

09 2116 - Gypsum Board Assemblies

09 9000 - Painting and Coating

DIVISION 10 -- SPECIALTIES

DIVISION 11 -- EQUIPMENT

DIVISION 12 -- FURNISHINGS

DIVISION 13 -- SPECIAL CONSTRUCTION

DIVISION 14 -- CONVEYING EQUIPMENT

DIVISION 21 -- FIRE SUPPRESSION

DIVISION 22 -- PLUMBING

DIVISION 23 -- HEATING, VENTILATING, AND AIR-CONDITIONING (HVAC)

DIVISION 26 -- ELECTRICAL

DIVISION 27 -- COMMUNICATIONS

DIVISION 28 -- ELECTRONIC SAFETY AND SECURITY

DIVISION 31 -- EARTHWORK

31 2000 - Earth Moving

31 2500 - Erosion Control

DIVISION 32 -- EXTERIOR IMPROVEMENTS

32 1200 - Flexible Paving

DIVISION 33 -- UTILITIES

~~2.01 APPENDIX DOCUMENTS~~

~~A. APPENDIX SECTION A -- REFERENCED AIA DOCUMENTS~~

~~1. A201 GENERAL CONDITIONS (Bound in Section 007200)~~

~~2. A310 BID BOND~~

~~3. A312 PERFORMANCE & PAYMENT BOND~~

~~4. G701 CHANGE ORDER~~

~~5. G702 APPLICATION FOR PAYMENT~~

~~6. G703 CONTINUATION SHEET~~

~~7. G704 CERTIFICATE OF SUBSTANTIAL COMPLETION~~

~~8. G706 CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS~~

~~9. G706A CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS~~

~~10. G707 CONSENT OF SURETY TO FINAL PAYMENT~~

- ~~11. G707A CONSENT OF SURETY TO RELEASE OF RETAINAGE~~
- ~~12. G710 ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS~~
- ~~13. G714 CONSTRUCTION CHANGE DIRECTIVE~~

END OF TABLE OF CONTENTS

SECTION 31 2000
EARTH MOVING

PART 1 GENERAL

1.01 CONTRACT CONDITIONS

- A. Work of this section is bound by the Contract Conditions and Division 1, bound herewith, in addition to this specification and accompanying drawings.

1.02 SECTION INCLUDES

- A. Excavation and fills, including compaction, of on-site private building pad and pavement.

1.03 RELATED SECTIONS

- A. Section ~~02 3200~~ 00 3100 - ~~Geotechnical Investigations~~ Available Project Information
- B. Section 01 7839 - Project Record Documents
- C. Section ~~34 2333~~ 02 4100 - ~~Trenching and Backfill~~ Demolition

1.04 REFERENCED SPECIFICATIONS

- A. ODOT Standard Specifications (latest revision).

1.05 REFERENCED DOCUMENTS

- A. Geotechnical Report: Geotechnical Investigation and Seismic Hazard Study, Howard Elementary School, Eugene, Oregon, dated December 31, 2013 and Supplemental Geotechnical Analysis, dated June 9, 2014.
- ~~B. All earthwork operations shall comply with the recommendations and requirements of the Geotechnical Report.~~

1.06 DEFINITIONS

- A. Rock: Material that cannot be removed by one-yard shovel, by backhoe with 9,500 lb. digging force, by pick and shovel, or by 200 HP Crawler fitted with normal excavating equipment. Ripper attachment as might be hooked into seam is not considered "normal" excavating equipment.
- B. Unstable Soil: Soft, loose, wet, or disturbed ground that is incapable of supporting material, equipment, personnel, or structure.
- C. Wet Weather Conditions: Wet Weather Conditions apply to materials placed during dry weather but which are subsequently subjected to rainfall and equipment or construction traffic. The Contractor shall be responsible for the performance of the selected type of material.

1.07 SUBMITTALS

- A. Comply with Section 01 3300, unless otherwise noted.
- B. Product Data: Manufacturer's specifications and technical data including performance, construction, and manufacturing information.
 - 1. Submit for: Subgrade geotextile.
- C. Samples: Submit 2 material sample(s) (2 quart minimum) of the following product for approval prior to delivery to site.
 - 1. Select Fill.
 - 2. Granular Site Fill (if Bar-Run is used).
- D. Field Quality Control: Submittals as specified in Part 3 of this section.
 - 1. Field Tests.
 - 2. Special Inspections for Code Compliance.
- E. Closeout Requirements: Comply with Section 01 7700 and Section 01 7800.
 - 1. Provide record documents.

1.08 QUALITY REQUIREMENTS

- A. Manufacturer's Qualifications: Not less than 5 years experience in the actual production of specified products.
- B. Installers Qualifications: Firm with not less than 5 years experience in installation of systems similar in complexity to those required for this project.
- C. Product/Material Qualifications:
 - 1. Design Data: Compaction testing shall be in accordance with Section ~~04-4500~~ 01 4000, QUALITY CONTROL REQUIREMENTS.
 - 2. Test Reports: Provide imported material gradation test reports. Provide material compaction test reports.
- D. Regulatory Requirements:
 - 1. An erosion control permit is required. The Owner shall apply, pay for, and secure the permit. The contractor shall comply with the construction erosion control permit.
 - 2. Comply with 2008 Oregon Standard Specifications for Construction published by ODOT and the Oregon chapter of APWA and City of Eugene Amendment No. 1 for work within right-of-ways.
- E. Observation and Inspection: Owner will retain a Geotechnical Engineer to monitor earthwork operations.

1.09 DELIVERY, STORAGE, AND HANDLING

- A. Delivery, Storage and Protection: Comply with manufacturer's recommendations.
 - 1. Protect from damage by the elements and construction procedures.

1.10 ADVANCE NOTICES

- A. Notify Engineer at least 48 hours before starting work of this section.

1.11 COORDINATION

- A. Coordinate with other trades affecting or affected by work of this section.

PART 2 PRODUCTS

2.01 STABILIZATION FILL

- A. Imported, clean, angular quarry rock, 3-inch or 6-inch minus material, open-gradation.

2.02 SELECT FILL

- A. Shall consist of 1½"-0 or ¾"-0, clean, well-graded, durable, crushed rock that is free of plastic clay, organic matter and construction debris and with no more than 5 percent by weight passing the No. 200 sieve.

2.03 GRANULAR SITE FILL

- A. Shall consist of 3"-0, clean, well-graded, crushed (quarry) rock.
- B. Bar-run gravel approved by the Geotechnical Engineer may be used if placed during dry weather.

2.04 SUBGRADE SEPARATION GEOTEXTILE

- A. The Separation Geotextile shall have Mean Average Roll Value (MARV) strength properties meeting the requirements of an AASHTO M 288-06 Class 2 woven geotextile. The geotextile shall have MARV hydraulic properties meeting the requirements of AASHTO M 288-2006 (geotextile for separation) with a permittivity greater than 0.05 per sec.⁻¹ and an AOS less than 0.6 mm. This geotextile is not suitable for construction during wet weather.

PART 3 EXECUTION

3.01 EXISTING CONDITIONS

- A. Prior to starting of the work of this section verify that existing grades and field conditions agree with drawings. Notify Engineer of deviations.

- B. Do not start work of this section until all unsatisfactory conditions have been corrected. Commencing work implies acceptance of existing conditions.
- C. If field measurements differ slightly from drawing dimensions, modify work as required for accurate fit. If measurements differ substantially, notify Engineer prior to starting work of this section.

3.02 PRECONSTRUCTION CONFERENCE

- A. Hold a preconstruction conference with the Geotechnical Engineer, Owner's Representative and the earthwork subcontractor prior to beginning earthwork operations.
- B. Comply with the recommendations of the Geotechnical Engineer.

3.03 PROTECTION

- A. Monuments: Carefully maintain bench marks, monuments, and other reference points. If disturbed or destroyed, replace as directed.
- B. Existing Utilities: Existing utilities shall be field located. Protect active utility lines encountered. Repair or replace utility lines damaged by work of this Section.
- C. Pavement Cleaning: Maintain pavements and walkways clean at all times.
- D. Dust Control: Protect persons and property against damage and discomfort caused by dust; water as necessary and when directed.
- E. Other Work and Adjacent Property: Protect against damage caused by work of this section.

3.04 GENERAL REQUIREMENTS

- A. Contractor shall perform all excavation necessary or required for proper construction of the work and placement or installation of materials.
- B. Cutting Pavements: Cut vertical, straight-line joints using power saw designed for cutting pavements.
- C. Line and Grade: Excavate to lines and grades shown on the drawings or as established by the Engineer.
- D. Shoring: Shore excavations when necessary to prevent caving during excavation in unstable material, or to protect adjacent structures, property, workers, and the public or as required by local, state, or federal agencies. Shoring shall be removed, as the backfilling is done, in a manner that does not damage work or permit voids in the backfill. It shall be the sole responsibility of the Contractor to see that safety requirements are met.
- E. Temporary stockpiling of Excavated Materials: Excavated materials may be placed in approved areas. Do not obstruct roadways, bikeways, or pedestrian walkways. Conform to all federal, state and local codes governing the safe loading of excavated materials adjacent to excavations.
- F. Excess Excavation: Where excavation, through the Contractor's error, is carried to levels lower than those shown on drawings, backfill with specified bedding material to proper levels at Contractor's expense.
- G. Drainage: Except as otherwise permitted, excavation shall be done in a manner as to provide for adequate drainage. In excavation where gravity drainage is not practical, the Contractor shall provide pumps and accessories with which to remove and dispose of all water, including but not limited to, surface water from rainfall entering the excavations, as required to accomplish the work and as required by governing jurisdictions.
- H. Backfilling shall not commence until after excavations have been inspected. Backfill shall be placed in such a manner as not to disturb, damage, or subject such facilities to unbalanced loads or forces. Make fills as soon as feasible after Engineer's review and acceptance.
- I. If rock or unstable soil are encountered, notify Engineer. Removal of rock or unstable soil will be paid for as an addition to the contract.

3.05 GEOTEXTILE PLACEMENT

- A. Acquisition and Storage: Provide complete rolls of geotextile as furnished by the manufacturer, and protect against damage and deterioration. Store all geotextile rolls in a dry place and off the ground at all times according to ASTM D4873 (latest revision). Cover all rolls and partial rolls with a dark protective covering when received. The geotextile will be rejected for use if the Engineer determines it has defects, deterioration, or has been damaged.
- B. Surface Preparation: Prepare the surface receiving the geotextile to a smooth condition free of obstructions, depressions, and debris unless otherwise directed. Do not drag the geotextile on the ground or mishandle it in any way.
- C. Loosely place the geotextile without wrinkles so placement of the overlying material will not tear the geotextile. Lap or sew the geotextile at the ends and sides of adjoining sheets as specified.
- D. On Slopes: Place the geotextile with the machine direction oriented up-down the slope. Lap the upper sheets over the top of the lower sheets. When the geotextile is placed on a slope steeper than 6:1, securely anchor the laps to the ground surface with pins or stakes as necessary to prevent slippage and tearing of the geotextile. Start placement of fill material on the geotextile at the toe of the slope and proceed upwards.
- E. Overlap: Minimum overlap shall be 24 inches.
- F. If the Engineer determines the specified overlap is not sufficient, increase the overlap to provide adequate coverage or sew the geotextile together in the field. If field-sewn, the provisions of ODOT 00350.20 and 00350.41(a-3) apply.
- G. Protection of Geotextile: Protect the geotextile at all times from ultraviolet (UV) rays, contamination by surface runoff, and construction activities.
- H. Traffic or construction equipment will not be permitted directly on the geotextile except as authorized by the Engineer. When placed for construction, cover the geotextile with specified cover material as soon as possible.
- I. Place cover material on the geotextile in a manner that the geotextile is not torn, punctured, or shifted. Use a minimum 6-inch-thick cover layer or twice the maximum aggregate size, whichever is thicker. End-dumping cover material directly on the geotextile will not be permitted.
- J. Limit construction vehicles in size and weight so rutting in the initial layer above the geotextile is not more than three inches deep or one half the layer thickness, whichever is less. Turning of vehicles on the first layer will not be permitted.
- K. Repair of Geotextile: Repair or replace all torn, punctured, or contaminated geotextiles during construction at no cost to the Owner. Repair by placing a patch of the specified geotextile over the affected area. Where geotextile seams are required to be sewn, repair any damaged sheet by sewing unless otherwise indicated on the plans or special provisions or as directed.

3.06 CLEARING AND GRUBBING

- A. Clear and grub site in all areas to receive improvements. Clearing shall be the removal of all brush, grass, shrubs, trees, weeds, rubbish, structures, pavements, and debris flush with or slightly below original ground surface. Remove willow and blackberry, if any, to not less than 12 inches below original ground surface. Grubbing shall be the removal of all stumps and roots larger than 1-1/2 inches in diameter, rocks larger than 6 inches, and existing structures to 4 inches below existing grade.
- B. Dispose of all cleared and grubbed materials off site.

3.07 EXCAVATION AND FILLS AT PEDESTRIAN PAVEMENT AREAS (DRY WEATHER)

- A. Strip the existing ground approximately 4 inches or as required to remove roots, sod or other existing demolition debris. Stripping depth to be confirmed by the Geotechnical Engineer. Remove strippings from site.
- B. Excavate any additional existing material to the grades required on the drawings. Remove any additional excavated material from site.

- C. Use Select Fill to raise the grade to the bottom of the pavement section elevation. Place fill in 12-inch maximum loose lifts and compact to a minimum density of 95 percent relative compaction, per a maximum dry density of ASTM D698 (latest revision) at an optimum moisture content of ± 2 percent. Fill that cannot be tested shall be compacted to the approval of the Engineer and Geotechnical Engineer.
- D. Place Crushed Rock Pavement Base. Place base material in 12-inch maximum loose lifts and compact to a minimum density of 95 percent relative compaction, per a maximum dry density of ASTM D698 (latest revision) at an optimum moisture content of ± 2 percent.

3.08 EXCAVATION AND FILLS AT BUILDING AREAS (DRY WEATHER)

- A. Strip the existing ground approximately 4 inches or as required to remove roots, sod or other existing demolition debris. Stripping depth to be confirmed by the Geotechnical Engineer. Remove strippings from site.
- B. Excavate the existing native material in the one test ~~pits~~ pit indicated on the drawings under the direction of the Engineer and Geotechnical Engineer. Remove material from site. Fill the test ~~pits~~ pit with Granular Site Fill or Select Fill. Place fill in 12-inch maximum loose lifts and compact to a minimum density of 95 percent relative compaction, per a maximum dry density of ASTM D698 (latest revision) at an optimum moisture content of ± 2 percent. Fill that cannot be tested shall be compacted to the approval of the Engineer and Geotechnical Engineer.
- C. Excavate any additional existing material to the grades required on the drawings. Remove any additional excavated material from site.
- D. Over excavate any unsuitable fill or other deleterious material as directed by the Engineer and Geotechnical Engineer. Overexcavation will be paid for as an addition to the contract. Overexcavated material shall be removed from site. Use Select Fill or Granular Site Fill to fill the voids left after overexcavation. Place fill in 12-inch maximum loose lifts and compact to a minimum density of 95 percent relative compaction, per a maximum dry density of ASTM D698 (latest revision) at an optimum moisture content of ± 2 percent. Fill that cannot be tested shall be compacted to the approval of the Engineer and Geotechnical Engineer.
- E. Building Pad Preparation:
 - 1. Proof-roll the completed subgrade with a vehicle approved by the Geotechnical Engineer. Scarify and moisture condition (dry) the subgrade to a depth of 12-inches and compact the subgrade to a depth of 12-inches where soft soils are present.
 - a. The Contractor may over-excavate the soft soil and replace with Select Fill or Granular Site Fill in lieu of scarifying and moisture conditioning the subgrade at the contractor's cost. The final excavation for areas requiring the removal of soft soil shall be done with a hoe equipped with a smooth bucket. The depth of over-excavation and backfill shall be directed by Geotechnical Engineer.
 - 2. Place subgrade geotextile over entire subgrade.
 - 3. Use Granular Site Fill or Select Fill to raise the grade to 12" below ~~top of building pad~~ the finished floor elevation. Place fill in 12-inch maximum loose lifts and compact to a minimum density of 95 percent relative compaction, per a maximum dry density of ASTM D698 (latest revision) at an optimum moisture content of ± 2 percent. Fill that cannot be tested shall be compacted to the approval of the Engineer and Geotechnical Engineer.
 - 4. Place Select Fill to provide a 12-inch thick building pad. Top of pad shall be 12 inches below finished floor elevation. Place fill in 12-inch maximum loose lifts and compact to a minimum density of 95 percent relative compaction, per a maximum dry density of ASTM D1557 (latest revision) at an optimum moisture content of ± 3 percent. It shall be the contractor's responsibility to maintain and repair the building slab base after initial testing and approval.
- F. Foundation Preparation:
 - 1. Scarify and moisture condition the subgrade to a depth of 12-inches and compact the subgrade to a depth of 12-inches where soft soils are present.
 - a. The Contractor may over-excavate the soft soil and replace with Select Fill or Granular Site Fill in lieu of scarifying and moisture conditioning the subgrade at the

contractor's cost. The final excavation for areas requiring the removal of soft soil shall be done with a hoe equipped with a smooth bucket. The depth of over-excavation and backfill shall be directed by Geotechnical Engineer.

2. Building foundations shall be supported on a minimum 12 inches of Select Fill. The Select Fill shall extend horizontally on all sides of the footing a minimum distance ~~equal to one-half the depth of the fill. Place~~ as shown on the drawings, do not place Separation Geotextile in the footing locations ~~at the direction of~~ unless directed by the Geotechnical Engineer.
3. Place fill in 12-inch maximum loose lifts and compact to a minimum density of 95 percent relative compaction, per a maximum dry density of ASTM D698 (latest revision) at an optimum moisture content of ± 2 percent.
4. It shall be the Contractor's responsibility to maintain and repair the building foundation fills after initial testing and approval.

3.09 GRADING

- A. Perform all earthwork to the lines and grades shown on the drawings. Shape and finish slopes to conform to the lines, grades, and cross sections as shown or approved by the Engineer. Provide positive drainage away from buildings and sidewalks.

3.10 MAINTENANCE OF EARTHWORK

- A. Contractor shall maintain all earthwork surfaces until all work has been completed and accepted. Such maintenance shall include, but not be limited to, addition of appropriate backfill material to keep backfilled surface smooth, free from ruts and potholes, and suitable for traffic flow.

3.11 DISPOSAL OF WASTE MATERIAL AND EXCESS EXCAVATION

- A. Remove from site excess material that is unsuitable for backfilling or stockpiling at the Contractor's expense.

3.12 SETTLEMENT

- A. Any settlement in earthwork which occurs during the warranty period and is attributable to construction procedures, such as improper removal of shoring or insufficient compaction, shall be corrected by the Contractor at his own expense. Any piping or facilities damaged by such settlement shall be restored to their original condition at the Contractor's expense.

3.13 FIELD QUALITY CONTROL

- A. Refer to Section ~~01 4500~~ 01 4000 for responsibilities for arranging, supervising, and payment of field quality control requirements.
- B. Refer to Section 01 7839, PROJECT RECORD DOCUMENTS, for record survey.
- C. Field Tests:
 1. Subgrade compaction testing.
 2. Material compaction testing.
 3. Imported material gradation testing.
- D. Field Inspections: Notify Engineer prior to work of this section.
- E. Special Inspections for Code Compliance: Obtain building inspector approvals.

3.14 CLEANING

- A. Upon completion of the work of this section promptly remove from the working area all scraps, debris, and surplus material.

3.15 PROTECTION

- A. Protect all work installed under this section.
- B. Replace at no additional cost to Owner, any damaged work of this Section.

END OF SECTION

SECTION 31 2500
EROSION AND SEDIMENT CONTROL

PART 1 GENERAL

1.01 CONTRACT CONDITIONS

- A. Work of this section is bound by the Contract Conditions and Division 1, bound herewith, in addition to this specification and accompanying drawings.

1.02 SECTION INCLUDES

- A. Prevention of erosion due to construction activities.
- B. Prevention of sedimentation of storm and sanitary sewers due to construction activities.
- C. Restoration of areas eroded due to insufficient preventative measures.
- D. Compensation of owner fines levied by authorities having jurisdiction due to non-compliance by contractor.

1.03 RELATED SECTIONS

- A. Section ~~02-3200~~ 00 3100 - ~~Geotechnical Investigations~~ Available Project Information
- B. Section 31 2000 - Earth Moving

1.04 REFERENCED SPECIFICATIONS

- A. ODOT Standard Specifications (current edition).

1.05 SUBMITTALS

- A. Comply with Section 01 3300, unless otherwise noted.
- B. Product Data: Manufacturer's specifications and technical data including performance, construction, and manufacturing information.
 - 1. Submit for: Inlet protection products.
- C. Closeout Requirements: Comply with Section 01 7700 and Section 01 7800.

1.06 QUALITY REQUIREMENTS

- A. All measures indicated in this specification may not be required. Contractor responsible for implementing erosion and sediment controls adequate to comply with permit requirements.
- B. Manufacturer's Qualifications: Not less than 5 years experience in the actual production of specified products.
- C. Installers Qualifications: Firm with not less than 5 years experience in installation of systems similar in complexity to those required for this project.
- D. Regulatory Requirements:
 - 1. Do not begin clearing, grading, or other work involving disturbance of ground surface cover until applicable permits have been obtained.
 - 2. An erosion control permit is required from the City of Eugene. The Owner shall apply, pay for, and secure the permit. The contractor shall comply with the construction erosion control permit.
 - 3. Owner will withhold payment to Contractor equivalent to all fines resulting from non-compliance with applicable regulations.
 - 4. Action Plan: Contractor shall prepare and submit an Action Plan when Erosion and Sediment Control Measures are modified after permit registration is approved. The Action Plan shall identify revisions made to the approved Erosion and Sediment Control Plan, and shall identify corrective actions taken to cease the discharge of sediment into surface waters or stormwater systems. The Action Plan shall be prepared in accordance with the *1200-C Construction Stormwater Permit Registration Guidance* document published by Oregon DEQ in June 2006. An Action Plan shall be required under the following circumstances:

- a. Emergency Situations: Emergency change in erosion control measures due to emergency situations, where immediate corrective action is required to cease the discharge of significant amounts of sediment from entering surface waters or nearby properties. In emergency situations, contractor shall take immediate action to correct the stormwater discharge. Contractor shall submit action plan to City of Eugene within 10 calendar days of the discharge identifying the corrective actions taken to cease the discharge.
 - b. Non-Emergency Changes Made Once Project is Underway: Submit Action Plan for changes in the project design affecting stormwater discharges, local conditions, project schedule, weather conditions, or other appropriate reasons. Action Plan shall be required for changes to the Erosion and Sediment Control Measures identified in the Drawings, their location, maintenance required, and any other revisions necessary to prevent and control erosion and sediment runoff. Contractor shall submit action plan to City of Eugene at least 10 calendar days before implementing the revisions.
5. Comply with 2008 Oregon Standard Specifications for Construction published by ODOT and the Oregon chapter of APWA and City of Eugene Amendment No. 1 for work within rights-of-way.
- E. Stormwater Runoff: Control increased stormwater runoff due to disturbance of surface cover due to construction activities for this project.
1. Prevent runoff into storm sewer systems, including open drainage channels, in excess of actual capacity or amount allowed by authorities having jurisdiction, whichever is less.
 2. Anticipate runoff volume due to the most extreme short term and 24-hour rainfall events that might occur in 25 years.
- F. Erosion On Site: Minimize wind, water, and vehicular erosion of soil on project site due to construction activities for this project.
1. Control movement of sediment and soil from temporary stockpiles of soil.
 2. Prevent development of ruts due to equipment and vehicular traffic.
 3. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Owner.
- G. Erosion Off Site: Prevent erosion of soil and deposition of sediment on other properties caused by water leaving the project site due to construction activities for this project.
1. Prevent windblown soil from leaving the project site.
 2. Prevent tracking of mud onto public roads outside site.
 3. Prevent mud and sediment from flowing onto sidewalks and pavements.
 4. If erosion occurs due to non-compliance with these requirements, restore eroded areas at no cost to Owner.
- H. Sedimentation of Waterways On Site: Prevent sedimentation of waterways on the project site, including rivers, streams, lakes, ponds, open drainage ways and storm sewers.
1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Owner; remove deposited sediments and relocate on site; comply with requirements of authorities having jurisdiction.
- I. Sedimentation of Waterways Off Site: Prevent sedimentation of waterways off the project site, including rivers, streams, lakes, ponds, open drainage ways, storm sewers, and sanitary sewers.
1. If sedimentation occurs, install or correct preventive measures immediately at no cost to Owner; remove deposited sediments and relocate on site; comply with requirements of authorities having jurisdiction.
- J. Open Water: Prevent standing water that could become stagnant.
- K. Monitoring and Inspection:
1. Contractor shall be responsible for monitoring the construction erosion control measures and shall make adjustments to measures, in accordance with the drawings and permit, to accommodate changes in earthwork operations and weather conditions.

2. Contractor shall be responsible for appointing an Erosion Control Inspector. Inspector shall be a person knowledgeable in the principles and practice of erosion and sediment controls, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, is knowledgeable in the correct installation of the erosion and sediment controls, and is able to assess the effectiveness of any sediment and erosion control measures selected to control the quality of stormwater discharges from the construction activity. Erosion Control Inspector shall submit periodic inspection reports as noted on the Drawings.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Delivery, Storage and Protection: Comply with manufacturer's recommendations.
 1. Protect from damage by the elements and construction procedures.

1.08 ADVANCE NOTICES

- A. Notify Engineer at least 48 hours before starting work of this section.

1.09 COORDINATION

- A. Coordinate with other trades affecting or affected by work of this section.

PART 2 PRODUCTS

2.01 BARK/MULCH BIO BERM

- A. The compost filter berm material consists of compost or a blend of compost and mulch materials according to the specifications as follows.
- B. The filter berm material shall meet particle sizing specifications that when used in a filter berm system are tested in conformance with the outlined methods and scope of ASTM D6459 (latest revision), standard test method for determination of Erosion Controlled Blanket (ECB) Performance in Protecting Hill Slopes from Rainfall Erosion.
- C. The compost portion of the filter berm shall be derived from well-decomposed organic matter source produced by controlled aerobic (biological) decomposition that has been sanitized through the generation of heat and stabilized to the point that it is appropriate for this particular application. Compost material shall be processed through proper thermophilic composting, meeting the U.S. Environmental Protection Agency's definition for a 'process to further reduce pathogens' (PFRP). The compost portion shall meet the chemical, physical and biological properties outlined below.
 1. The pH shall be between 5.0 and 8.5 for berms to receive vegetation.
 2. Nitrogen Content: 0.5 - 2.0%.
 3. Soluble Salts: Maximum 5 mmhos/cm.
 4. Compost shall be weed and pesticide free, with manmade materials comprising less than 1%.

2.02 SEDIMENT FENCE

- A. Sediment Fence Fabric: Polypropylene geotextile resistant to common soil chemicals, mildew, and insects; non-biodegradable; in longest lengths possible; fabric including seams with the following minimum average roll lengths.
- B. Apparent Opening Size: 30 U.S. Std. Sieve, maximum, when tested in accordance with ASTM D4751 (latest revision).
- C. Permittivity: 0.05 sec^{-1} , minimum, when tested in accordance with ASTM D4491 (latest revision).
- D. Ultraviolet Resistance: Retaining at least 70 percent of tensile strength, when tested in accordance with ASTM D4355 (latest revision) after 500 hours exposure.
- E. Grab Tensile Strength-Supported: 100 lb-f, minimum, in cross-machine direction; 120 lb-f, minimum, in machine direction; when tested in accordance with ASTM D4632 (latest revision).
- F. Grab Tensile Strength-Unsupported: 90 lb-f, minimum, in cross-machine direction; 100 lb-f, minimum, in machine direction; when tested in accordance with ASTM D4632 (latest revision).

- G. Color: Manufacturer's standard, with embedment and fastener lines preprinted.
- H. Manufacturers:
 - 1. BP Amoco, Amoco Fabrics and Fibers; www.geotextile.com.
 - 2. TC Mirafi; www.tcmirafi.com.
 - 3. Synthetic Industries; www.fixsoil.com.

2.03 BIO-FILTER BAGS

- A. Provide minimum size 18" x 6" x 30" plastic mesh bags with 1/2 inch openings filled with approximately 45 pounds of clean, 100% recycled wood-product waste.

2.04 CATCH BASIN INSERT BAG / CURB INLET SEDIMENT DAM

- A. Provide prefabricated filter inserts manufactured specifically for collecting sediment in drainage inlets. Include handles and/or fasteners sufficient to keep the insert from falling into the inlet during maintenance and removal of the insert from the inlet. Insert bags shall be included on the Oregon Qualified Products List (QPL) for Type 3 Inlet Protection, or approved. Curb Inlet Sediment Dams shall be included on the Oregon QPL for Type 6 Inlet Protection, or approved.

2.05 STRAW MULCH COVER

- A. Straw mulch for non-hydroseeding applications from bentgrass, bluegrass, fescue or ryegrass, singly or in combination. If grass seed straw is not available within a reasonable distance of the project, straw from barley, oat or wheat may be allowed upon approval of the Agency. Provide straw that is not moldy, caked, decayed, or of otherwise low quality. Submit certification from the supplier that the straw is free of noxious weed seeds or plant parts. Acceptable documentation will show either (1) that the straw source is from an "Oregon Certified Seed" field, or (2) the seed lab test results of the seed harvested from the straw meet minimum Oregon Certified Seed quality for weed seed content. Use a straw binder or tackifier.

2.06 SUBGRADE GEOTEXTILE

- A. Subgrade geotextile shall meet the requirements of Section 02 3200, Geotechnical Investigations, and Section 31 2000, Earth Moving.

PART 3 EXECUTION

3.01 EXISTING CONDITIONS

- A. Examine site and identify existing features that contribute to erosion resistance; maintain such existing features to greatest extent possible.
- B. Do not start work of this section until all unsatisfactory conditions have been corrected. Commencing work implies acceptance of existing conditions.
- C. If field measurements differ slightly from drawing dimensions, modify work as required for accurate fit. If measurements differ substantially, notify Engineer prior to starting work of this section.

3.02 INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES

- A. Install as shown on drawings, or as directed by Engineer, Erosion and Sediment Control Inspector, or Local Authority Having Jurisdiction. All measures included in this specification or details shown on Drawings may not be necessary. Contractor to utilize measures, as needed, to meet the requirements of erosion control permit(s) and the intent of this specification.

3.03 PROTECTION

- A. Monuments: Carefully maintain bench marks, monuments, and other reference points. If disturbed or destroyed, replace as directed.
- B. Existing Utilities: Existing utilities shall be field located. Protect active utility lines encountered. Repair or replace utility lines damaged by work of this Section.
- C. Pavement Cleaning: Maintain pavements and walkways clean at all times.
- D. Dust Control: Protect persons and property against damage and discomfort caused by dust; water as necessary and when directed.

- E. Other Work and Adjacent Property: Protect against damage caused by work of this section.

3.04 FIELD QUALITY CONTROL

- A. Refer to Section ~~01 4500~~ 01 4000 for responsibilities for arranging, supervising, and payment of field quality control requirements.
- B. Special Inspections for Code Compliance:
 - 1. Obtain building approvals from Local Authority Having Jurisdiction.
 - 2. Provide periodic inspection reports as noted on the Drawings.

3.05 MAINTENANCE

- A. Maintain temporary measures until permanent measures have been established.
- B. Repair deficiencies immediately.

3.06 CLEANING

- A. Remove temporary measures after permanent measures have been installed, unless permitted to remain by Engineer.
- B. Clean out temporary sediment control structures that are to remain as permanent measures.
- C. Where removal of temporary measures would leave exposed soil, shape surface to an acceptable grade and finish to match adjacent ground surfaces.

3.07 PROTECTION

- A. Protect all work installed under this section.
- B. Replace at no additional cost to Owner, any damaged work of this Section.

END OF SECTION

**SECTION 32 1200
FLEXIBLE PAVING**

PART 1 GENERAL

1.01 CONTRACT CONDITIONS

- A. Work of this Section is bound by the Contract Conditions and Division 1, bound herewith, in addition to this specification and accompanying drawings.

1.02 SECTION INCLUDES

- A. Asphaltic concrete pavements and crushed rock pavement base for on-site private improvements.

1.03 WORK INCLUDED BUT SPECIFIED IN OTHER SECTIONS

- A. Section 31 2000 - Earth Moving

1.04 REFERENCED SPECIFICATIONS

- A. 2008 Oregon Standard Specifications for Construction, HMAC Pavement Reference, Section 00744.

1.05 SUBMITTALS

- A. Comply with Section 01 3300, unless otherwise indicated.
- B. Product Data: Manufacturer's specifications and technical data including performance, construction, and fabrication information.
 - 1. Submit for job mix formulas (JMF).
- C. Field Quality Control submittals as specified in Part 3 of this Section:
 - 1. Field Tests.
- D. Closeout Requirements: Comply with Section 01 7700 and Section 01 7800.
 - 1. Special warranties
 - 2. Provide record documents.

1.06 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Not less than 5 years experience in the actual production of specified products.
- B. Installer's Qualifications: Firm with not less than 5 years experience in installation of systems similar in complexity to those required for this project.
- C. Pre-installation Conference: Contractor, installer, Engineer, and representatives of other affected trades shall meet at site to review paving operations, acceptance of substrata surfaces, and coordination with other trades.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Delivery, Storage and Protection: Comply with manufacturer's recommendations.
 - 1. Protect materials and maintain product temperature during delivery.

1.08 SPECIAL WARRANTIES

- A. Contractor shall warrant installed pavement for a period of 2 years from date of Substantial Completion. When notified in writing from Owner, they shall promptly and without inconvenience and cost to Owner correct said deficiencies to comply with requirements.

1.09 COORDINATION

- A. Coordinate with other trades affecting or affected by work of this section.

1.10 ADVANCE NOTICES

- A. Notify Engineer at least 48 hours before starting work of this section at each site.

PART 2 PRODUCTS

2.01 CRUSHED ROCK PAVEMENT BASE

- A. Under Dense Graded HMAC Mixture: Imported Clean 3/4"-0 or 1-1/2"-0 dense graded crushed rock or crushed gravel, free of foreign material and meeting the requirements of ODOT Standard Specifications (current edition) 02630, Base Aggregate.

2.02 HOT MIXED ASPHALT CONCRETE (HMAC)

- A. Asphalt Mixture: The asphalt concrete mixture shall be a well-graded, uniform coated, durable mix of the mix type(s) as shown on the plans or approved by the Engineer.

BROADBAND LIMITS

DENSE GRADED MIXTURE

Sieve Size	Percentage of Total	Percentage of Total
	Aggregate (by weight)	Aggregate (by weight)
Passing	1/2" Dense	3/4" Dense
1"	--	99-100
3/4"	99-100	92-100
1/2"	90-100	75-91
1/4"	52-80	50-70
No. 10	21-46	21-41
No. 40	8-25	6-24
No. 200	3-8	2-7
Asphalt Cement	4-8	4-8

Asphalt Cement (Binder): Per Oregon Standard Specifications for Construction, (current edition). Use PG (Performance Grade) 64-22 for base and wearing courses.

- B. Aggregate for Base Course Mix: Per Oregon Standard Specifications for Construction (current edition).
- C. Aggregate for Wearing Course (Top Lift of HMAC) Mix: Per Oregon Standard Specifications for Construction (current edition).
- D. Fine Aggregate: Per Oregon Standard Specifications for Construction (current edition).
- E. Mineral Filler: Finely ground particles of limestone, hydrated lime, or other mineral dust, free of foreign matter.
- F. Asphalt Tack Coat: Type CSS-1, CSS-1h, CMS-2, CMS-2S, CMS-2h, CRS-2, HFRS-2 or HFMS-2 emulsified asphalt (EA) conforming to Standard Specifications for Highway Construction (current edition).
- G. Reclaimed Asphalt Pavement (RAP) Material: Shall not exceed 30% in the new pavement. Rap material not permitted in Level 4 HMAC pavement, in accordance with Standard Specifications for Highway Construction (current edition). Asphalt mixtures including RAP to meet all normal specification and Oregon Standard Specifications for Construction (current edition) requirements.

~~**2.03 JOB MIX FORMULA (JMF)**~~

- ~~A. Mix Formula: The Contractor shall submit a JMF for each mixture to be used on the project and meeting the Level 2 criteria of Oregon Standard Specifications for Construction, Current Edition.~~
- ~~B. The Contractor shall supply the job mix design to the Engineer ten (10) work days prior to production. The job mix formula shall be no more than five (5) years old.~~
- ~~C. Approval: No paving shall occur until the Contractor receives written approval of the Contractor's job mix formula.~~

~~**2.04 HMAC ACCEPTANCE**~~

- ~~A. The mixture will be accepted by visual inspection of the Engineer. If the mixture is considered suspect, the Contractor shall obtain samples under the observation of the Engineer and tested as per Oregon Standard Specifications for Construction, Current Edition (section 00744.16).~~

~~Testing shall be performed by an independent testing agency paid for by the Contractor. Contractor to be reimbursed by Owner if testing shows HMAC is within the specified limits and tolerances.~~

~~2.05 HMAC PRODUCTION QUALITY CONTROL/ASSURANCE~~

- ~~A. As specified for Level 2 HMAC in the Oregon Standard Specifications for Construction, Current Edition. Submit the appropriate documentation/reports to Engineer for review.~~

~~2.06 MODIFICATION OF MIXES~~

- ~~A. Modification: The Engineer reserves the right to modify specified mixes for use under various traffic conditions on various segments of the work and for feathering, spot patching, and other special purposes. The Contractor shall provide mixes proportioned as directed by the Engineer for such purposes.~~

PART 3 EXECUTION

3.01 EXISTING CONDITIONS

- A. Prior to starting of the work of the section verify that existing grades and field conditions agree with drawings. Notify Engineer of deviations.
- B. Do not start work of this section until all unsatisfactory conditions have been corrected. Commencing work implies acceptance of existing conditions.
- C. If field measurements differ slightly from drawing dimensions, modify work as required for accurate fit. If measurements differ substantially, notify Engineer prior to starting work of this section.

3.02 WEATHER LIMITATIONS

- A. Surface Temperature: Asphalt concrete shall be placed on a dry prepared surface when the surface temperature is not less than specified below.
Nominal Specified
Compacted Thickness
of Individual Courses
2" to 2-1/2" 50°F
2-1/2" and over 40°F
- B. Weather: Asphalt concrete shall not be placed during rain or other adverse weather conditions. However, if approved by the Engineer, the mix in transit at the time the adverse conditions occur may be laid if the mix has been covered during transit and is at the specified temperature, if the foundation is free from pools or flow of water, and if all other requirements of these specifications are met. Asphalt concrete mixtures shall not be placed when the foundation is frozen or when, in the opinion of the Engineer, existing or expected weather conditions will prevent the proper handling, finishing, or compaction of the mixtures. Dense mixes shall only be placed from 3/15 – 9/30.
- C. Ambient Temperature Caution: The Contractor is cautioned that placing asphalt concrete on cool days when the temperature is less than 60°F may require an adjustment in Contractor's normal placing and compaction procedures so that specified minimum compaction requirements will be met. The temperatures shown in the table in this section are not recommended temperatures for paving, but paving may be allowed at these temperatures on the condition that specified pavement compaction is achieved.

3.03 ASPHALT CONCRETE PLACEMENT METHOD-PAVING MACHINE

- A. Pavers: If used, Pavers shall be self-contained, power-propelled units with an activated screed or strike-off assembly, heated if necessary, and capable of spreading and finishing layers of asphalt concrete material to the widths thicknesses, lines, grades, and cross sections required.
- B. Asphalt concrete can be hand placed.

3.04 COMPACTORS

- A. Rollers: Rollers shall be steel wheel, pneumatic tire, vibratory or a combination of these types. They shall be in good condition and capable of reversing without backlash.

3.05 PREPARATION OF FOUNDATION

- A. Bases: All bases and foundations on which the pavement is to be constructed shall meet the applicable specifications and be approved prior to the start of paving. Existing bases and foundations shall be reconditioned as specified or directed.
- B. Edges: Broken or ragged edges of existing paved surfaces underlying or abutting the new pavement shall be trimmed back to firm material. Surfaces against which asphalt concrete is to be placed shall be treated with an asphalt tack coat.
- C. Tack Coat: Prior to placing each lift of asphalt concrete, tack coat asphalt shall be applied to completely cover all cold longitudinal joint and all prepared existing asphalt and portland cement concrete surfaces. Immediately before applying the tack coat, the surface to be tacked shall be clean and dry. The application rate shall be between 0.05 and 0.20 gallons per square yard of surface area to achieve uniform, thorough coverage and as approved by the Engineer. Emulsified asphalt temperature to be between 140 and 185°F and application to be in accordance with manufacturer's recommendations.

3.06 CRUSHED ROCK PAVEMENT BASE PLACEMENT

- A. Placement and compaction shall conform to the requirements of Section 31 2000, Earth Moving.

3.07 PLACING ASPHALT PAVEMENT - SINGLE COURSE

- A. Place asphalt within 24 hours of applying tack coat. Do not place HMAC pavement on the tack coat until the asphalt separates from the water (breaks), but before it loses its tackiness.
- B. Place up to 3 inch compacted thickness in one lift.
- C. Install drainage covers and frames in correct position and elevation.
- D. Compact pavement by rolling. Do not displace or extrude pavement from position. Use hand-operated compacting equipment in areas inaccessible to rolling equipment.
- E. Develop rolling with consecutive passes to achieve even and smooth finish, without roller marks.

3.08 CONTROL OF LINE AND GRADE

- A. Line and Grade: The Contractor shall furnish, place, and maintain supports, wires, devices, and materials as necessary to provide continuous line and grade reference control to the automatic paver control system on either or both sides of the paving machine.

3.09 HAULING, DEPOSITING AND PLACING

- A. Hauling: Cover HMAC if rain or cold air temperatures are encountered any time between loading and placement. Engineer may reject material compromised (below specified temperature, slumping or separating, solidifying or crusting). Rejected loads will be disposed of off-site at the Contractor's expense.
- B. Depositing: Material shall be deposited from vehicles to prevent segregation.
- C. Placing: Do not place material during rain or other adverse weather conditions, unless allowed by Engineer. Material placed in adverse conditions is to meet all normal contract specification requirements. Material in transit at the time adverse conditions occur may be placed if it has been covered during transport, it is placed in areas free of standing or flowing water, temperature and all other requirements are met.

3.10 TEMPERATURE CONTROL

- A. Temperature of Mixture:
 - 1. The temperature of the mixture at the time it is placed in final position shall be within 10 degrees of 280°F. The Engineer may adjust the lay-down temperature in 10-degree

increments to attain maximum workability and compaction. In no case shall the lay-down temperature of mixture be less than 240°F.

3.11 COMPACTION

- A. Rolling: Immediately after the asphalt concrete mixture has been spread, struck off and surface irregularities and other defects remedied, it shall be thoroughly and uniformly rolled until the mixture is compacted. Complete breakdown and intermediate compaction before the mix temperature drops below 180°F.
- B. General:
1. The type, number, and weight of rollers shall be sufficient to compact the mixture while it is still within the specified temperature range. Rollers shall not be operated in vibratory mode when the temperature of the mixture has dropped below 180 degrees.
 2. Steel roller wheels shall be moistened with water or other approved material to the least extent necessary to prevent pickup of mixture and not cause spotting or defacement of the surface of the mixture.
 3. Rollers shall be operated at speeds recommended by the roller manufacturer and slow enough to avoid displacement of the mixture. The maximum speeds shall be 3 miles per hour for steel-wheeled rollers and pneumatic-tired rollers, unless faster speeds are approved.
 4. Care shall be exercised not to displace the line and grade of edges. Displacement of any course occurring as a result of the reversing of the direction of a roller, or from other causes, shall be corrected at once by the use of approved rakes and addition of fresh mixture when required.
 5. Any mixture that becomes loose and broken, contaminated, segregated, or is in any way defective, shall be removed and replaced with new mixture at no expense to the Owner.
 6. Finish rolling shall continue until all roller marks are eliminated.
 7. Along curbs and walls, on walks, irregular areas, and other areas not practicably accessible to specified rollers, the mixture shall be compacted with approved self-propelled rollers, mechanical tampers, hot hand tampers, or heavy hand rollers. On depressed areas, a trench roller may be used or cleated compression strips may be used under the roller to transmit compression to the depressed area.
- C. ~~Density Requirements:~~
- ~~1. The Contractor is responsible for process control and shall conduct sampling, testing, measurement and inspection. The contractor shall provide daily nuclear density testing (ODOT Test Method 310C-87) to develop rolling patterns necessary to achieve the minimum compaction requirement of 91 percent as determined by Rice Density Test AASHTO T-209 as modified by ODOT TM 306. This is in addition to Owner's testing as necessary to ensure the finished pavement meets specifications. A copy of all compaction test reports shall be provided to the Engineer. Contractor to immediately take corrective measures when it is determined that specified compaction density is not achieved. If specified compaction density cannot be achieved the Contractor shall remove and replace the defective asphalt areas at the Contractor's expense. The Owner has the option of accepting these areas with a reduced payment to the Contractor.~~
 - ~~2. Asphalt compaction below 88 percent as determined by Rice Density Test AASHTO T-209 as modified by ODOT TM 306 is not acceptable.~~
 - ~~3. The Architect will determine the suitability of the final product through final acceptance testing. Results of these tests will be used to determine payment deductions, if any to be assessed against the Contract. The final density of each paving project location will be determined by averaging the results of a minimum of five (5) density tests taken with a nuclear gauge (ODOT TM 310C-87) at randomly selected locations within each paving project.~~
 - ~~4. Paving in areas 6 feet wide or less and irregular areas not accessible by large rollers are not subject to the minimum compaction per (2) above.~~
 - ~~5. The Owner shall take acceptance tests to verify that the work meets specifications.~~

3.12 PAVEMENT SMOOTHNESS

- A. Utility Structures: The joint between the pavement and the top surface of utility structures, such as manhole covers and valve boxes located in the traveled way, shall meet the pavement surface tolerances.
- B. Tolerance: The surface of the finished pavement shall be within 0.02 foot of the specified line, grade, and cross section.
- C. Texture: The completed surface of all courses of the mixture shall closely parallel that specified for the top surface of the finished pavement and shall be smooth, uniform on texture and conform to the specified crown and grade.
- D. Job control testing shall be performed with a 10 foot straightedge furnished and operated by the Contractor. The Engineer may observe this testing, or the Engineer may require additional testing to be performed under the Engineer's supervision. Operations to eliminate the unacceptable pavement shall be corrected by the Contractor using a method or methods listed below and approved by the Engineer.
- E. Roughness: When tests show the pavement is not within the above tolerances, the Contractor shall take immediate action to correct equipment or procedures in the paving operations to eliminate the unacceptable pavement roughness.
- F. Method of Correction: Any surface irregularities exceeding the above tolerances shall be corrected by the Contractor using a method or methods listed below and approved by the Engineer.

3.13 FIELD QUALITY CONTROL

- A. Refer to Section ~~01 4500~~ 01 4000 for responsibilities for arranging, supervising, and payment of field quality control requirements.
- ~~B. Field Tests:~~
 - ~~1. Base rock compaction testing.~~
 - ~~2. Asphaltic concrete pavement compaction testing.~~
 - ~~3. Asphaltic concrete pavement gradation testing.~~
- C. Field Inspections: Notify Engineer prior to paving operations.

3.14 CORRECTIVE ACTION

- A. Corrective Measures: The Engineer shall require one or more of the following corrective measure be performed on the deficient areas:
 - 1. Remove and replace the surface course.
 - 2. Place an overlay of a thickness approved by the Engineer.
 - 3. Grind the pavement surface utilizing diamond blades up to a maximum depth of 0.3 inch and apply an emulsion fog coat as directed by the Engineer.
- B. Additional Corrective Work: After completion of the corrective work, if the Engineer finds it is still not satisfactory, the Contractor shall perform additional corrective work on areas still not meeting the above tolerances.
- C. Expense: All corrective work, including furnishing of materials, shall be performed at the Contractor's expense and no adjustment in contract time will be made for corrective action work.
- D. Localized Surface Irregularities: Where surface irregularities are localized or where the Engineer determines corrective work would not be in the Owner's best interests, the Engineer may deduct from payment due the Contractor amounts equivalent to the Engineer's estimate of work costs had the corrective work been done.

3.15 STRUCTURE ADJUSTMENT

- A. Prior to placement of wearing course, locate and adjust to finished pavement grade all catch basins and other structures and appurtenances within the pavement area.

3.16 CLEANING

- A. Trim and remove excess asphalt concrete accumulations from abutting structures such as curbs, manholes, catch basins, and other structure.
- B. Including work of other sections, clean, repair and touch-up, or replace when directed, products which have been soiled, discolored, or damaged by work of this section. Remove excess spilled material and debris from project site upon work completion or sooner, if directed.
- C. Upon completion of the work of this section promptly remove from the working area all scraps, debris, and surplus material.

3.17 PROTECTION

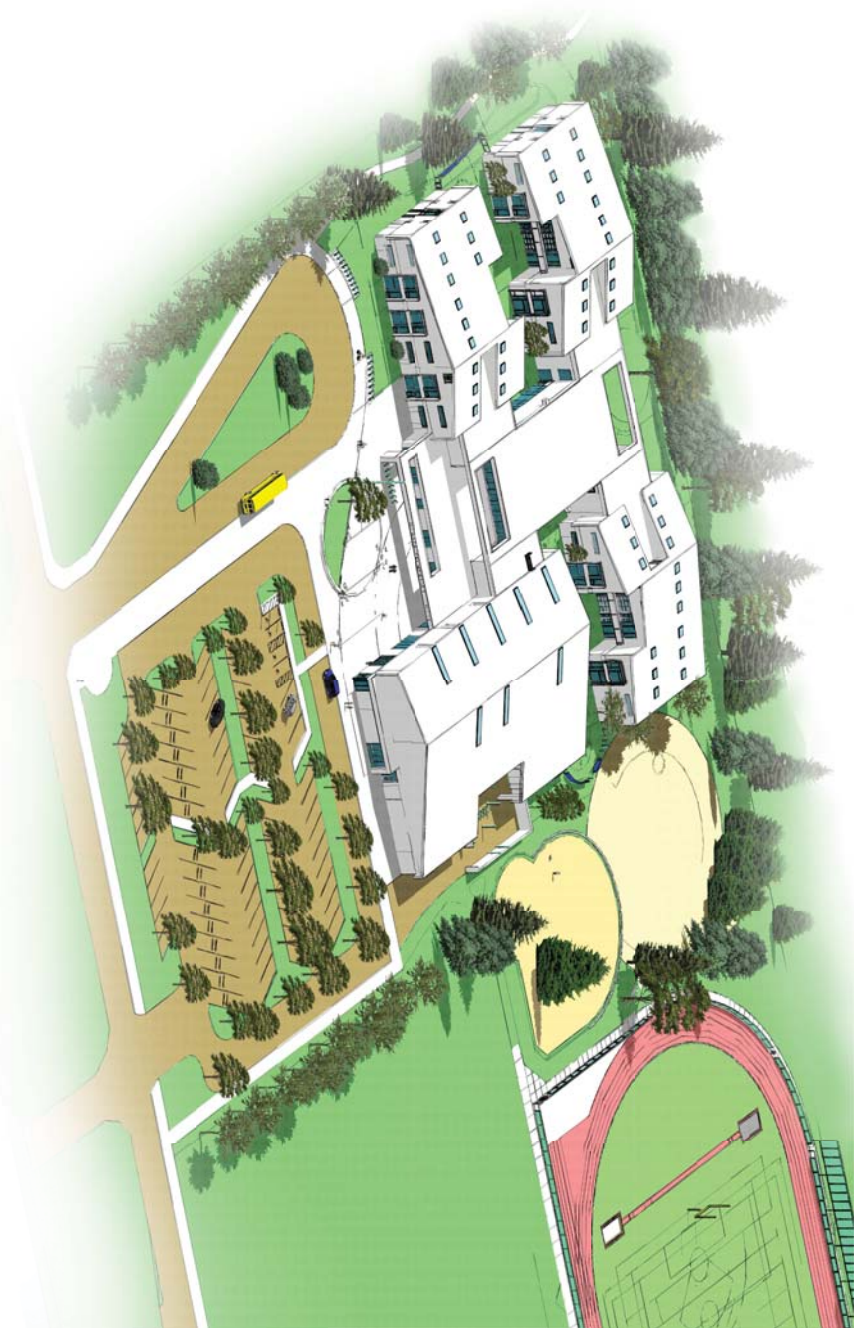
- A. In addition to other required provisions for traffic, the following shall apply to pavement construction: No traffic or equipment shall come in contact with the compacted mixture until it has cooled and set sufficiently to prevent marking; edges shall be protected from being broken down; and edge drop-off(s) one inch or more in height shall be marked with approved reflectorized and/or flashing warning devices visible by day and night to the traveling public, and placed at spacings as specified by the Engineer.
- B. Protect all work installed under this section.
- C. Replace at no additional cost to Owner, any damaged work of this section.

END OF SECTION

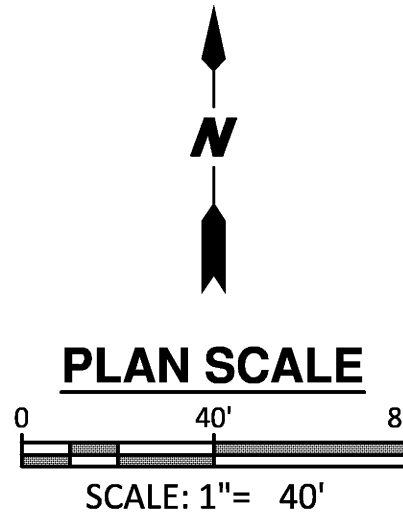
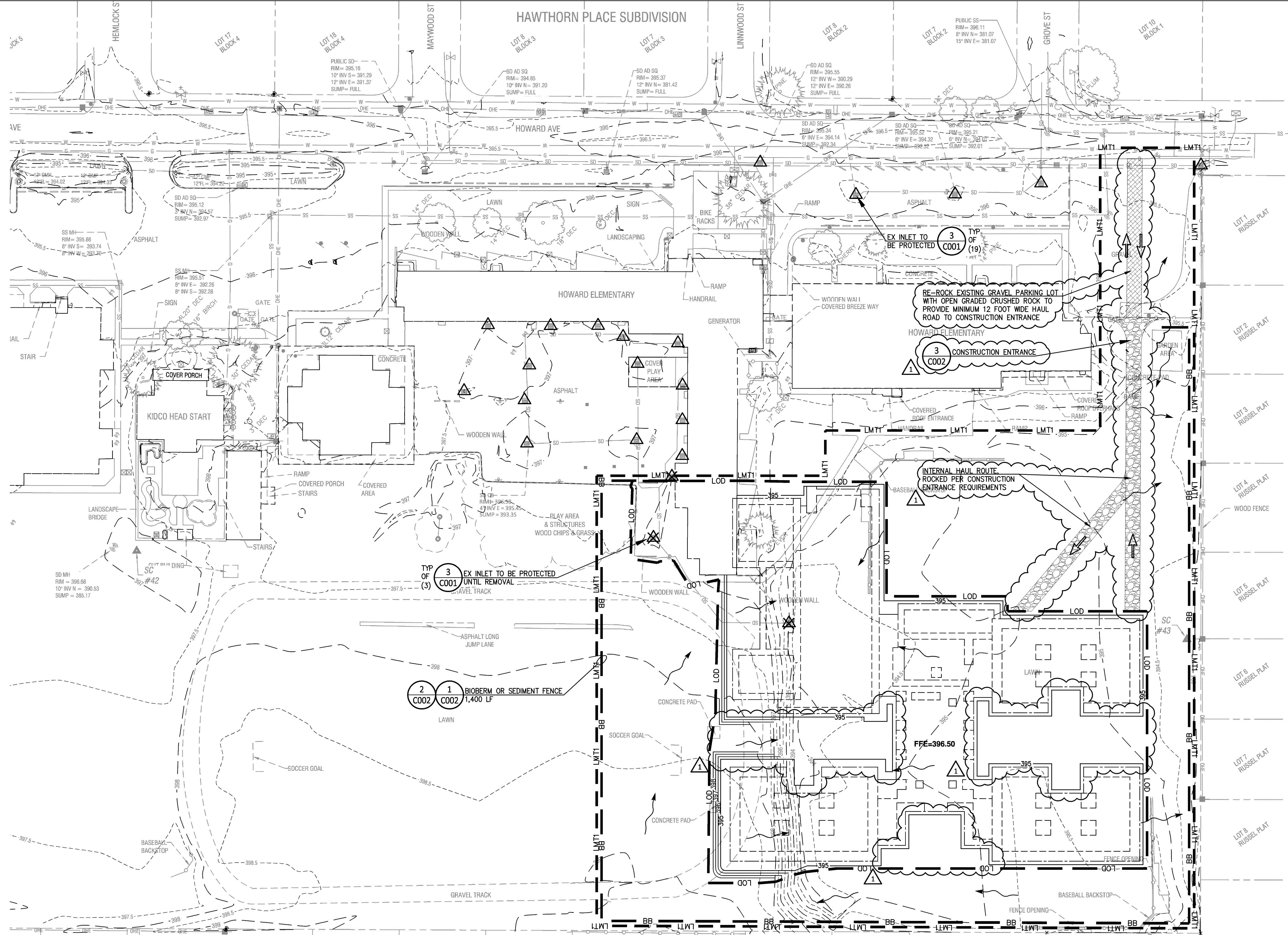
New Howard Elementary School

Planned for Fall 2015

***THANK YOU
VOTERS!***

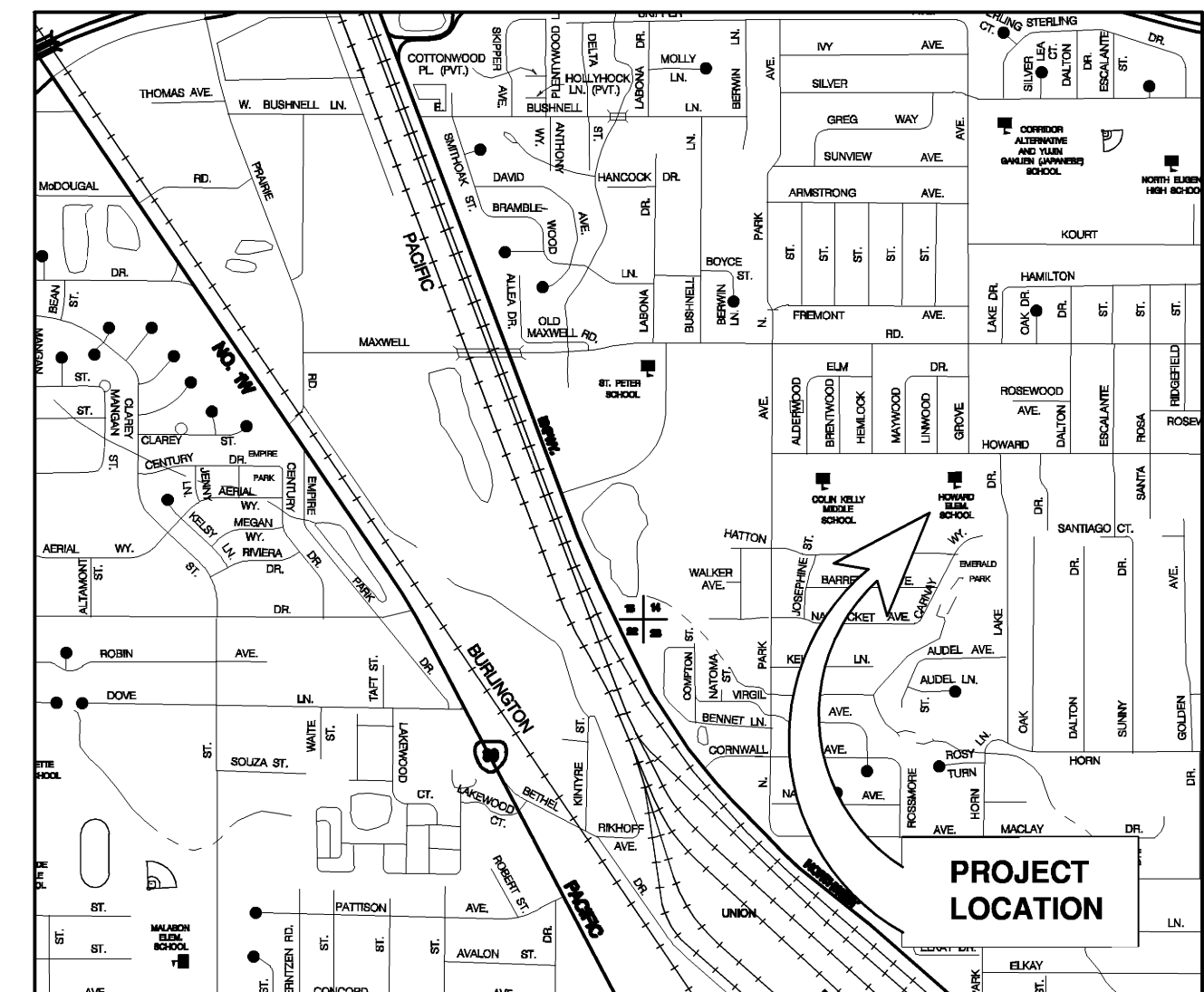


For more information please visit the project website: www.4jnewschoolshoward-riverroad.org



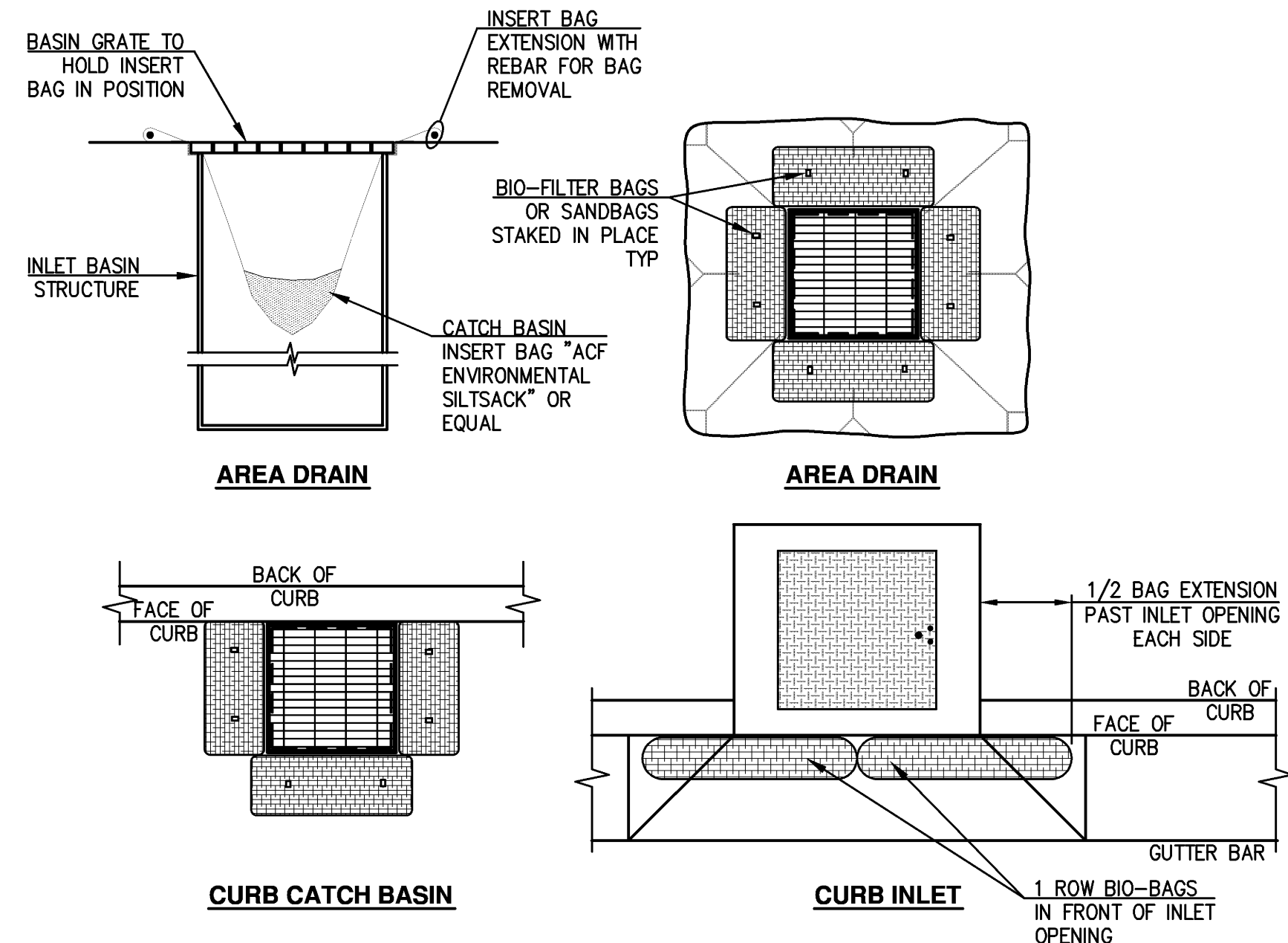
SHEET NOTES
1. REFER TO SHEET C003 FOR LEGENDS AND GENERAL NOTES.

EROSION SEDIMENTATION CONTROL LEGEND	
	EXISTING CONTOUR ELEVATION - MAJOR
	EXISTING CONTOUR ELEVATION - MINOR
	NEW CONTOUR ELEVATION - MAJOR
	NEW CONTOUR ELEVATION - MINOR
	APPROXIMATE LIMITS OF PACKAGE 1 CONSTRUCTION
	APPROXIMATE LIMITS OF MAJOR SOIL DISTURBANCE
	CONTINUOUS BIO BERM/SEDIMENT FENCING
	EXISTING DRAINAGE FLOW PATTERN
	EXISTING INLET TO BE PROTECTED
	EXISTING INLET TO BE REMOVED
	CONSTRUCTION TRAFFIC ACCESS ROUTING
	EROSION SEDIMENTATION CONTROL



VICINITY MAP
NO SCALE

PROPERTY/SITE DESCRIPTION
TAX LOT 100 (LANE COUNTY TAX MAP 17-04-14-34) LOCATED IN THE SW 1/4 OF SECTION 14, TOWNSHIP 17 SOUTH, RANGE 4 WEST, WILLAMETTE MERIDIAN LANE COUNTY, OREGON
TOTAL SITE AREA = 23.1 ACRES
TOTAL DISTURBED AREA = 4.7 ACRES



NOTES
1. PRIOR TO 1st PAVEMENT LIFT, REMOVE BIO-BAG/SANDBAG BARRIERS AND INSTALL BASIN INSERT BAG OR CURB INLET SEDIMENT DAM AT ALL INLET STRUCTURES.

DRAINAGE INLET STRUCTURE PROTECTION

1 NOT USED

2 NOT USED

3

DEVELOPER/OWNER

EUGENE SCHOOL DISTRICT 4J
CONTACT: BEN BRANTLEY
200 N. MONROE STREET
EUGENE, OR 97402
PHONE: 541-790-7700
FAX: 541-790-7711

ENGINEERING/SURVEYING FIRM

BALZHISER & HUBBARD ENGINEERS, INC.
BALZHISER & HUBBARD ENGINEERS, INC.
CONTACT: MONICA ANDERSON
100 W 13TH AVE
EUGENE, OR 97401
PHONE: 541-686-3478
FAX: 541-345-5303

NARRATIVE DESCRIPTIONS

EXISTING SITE CONDITIONS

SITE CONSISTS OF 2.31 ACRES OF DEVELOPED LAND WITH SLOPES RANGING FROM 0 TO 3 PERCENT. THE EXISTING VEGETATION IS MADE UP OF TREES, SHRUBS, AND VARIOUS GRASSES.

DEVELOPED CONDITIONS

NEW ELEMENTARY SCHOOL WITH ASSOCIATED PARKING, PLAY AREAS AND SITE UTILITIES.

SITE SOIL CLASSIFICATION

(PER SOIL SURVEY OF LAKE COUNTY AREA, OREGON)
75 MALABON-URBAN LAND COMPLEX, DEEP AND WELL DRAINED.

RECEIVING WATER BODIES

A1 CHANNEL VIA LAKE COUNTY OWNED PIPED STORM DRAINAGE.

GENERAL EROSION SEDIMENTATION CONTROL (ESC) NOTES

STOCKPILES

- 1. STOCK PILES OF NATIVE SOILS AND/OR FILL MATERIALS SHALL NOT BE EXPOSED TO THE WEATHER WITHOUT PROVISIONS OF SECONDARY CONTAINMENT AND TREATMENT MEASURES AS OUTLINED BELOW.
2. SECONDARY CONTAINMENT SHALL CONSIST OF INSTALLED BIO BERM AND/OR CONTAINMENT DITCH AT TOE OF SLOPE AROUND STOCKPILE PERIMETER. BERM AND/OR DITCH SHALL BE OF SUFFICIENT SIZE TO CONTAIN STOCKPILED MATERIALS IN PLACE.
3. STOCK PILES ON SITE DURING WET WEATHER SEASON (OCTOBER 15 THROUGH APRIL 30) SHALL BE COVERED WITH 6 MIL (MIN. THICKNESS) POLYETHYLENE PLASTIC SHEETING. SHEETING SHALL BE INSTALLED AND MAINTAINED TIGHTLY IN PLACE USING APPROVED ANCHORING SYSTEM ON A 10' (MAX) GRID SPACING IN ALL DIRECTIONS. ALL SEAMS BETWEEN ADJACENT SHEETS SHALL BE LAPPED 12" (MIN) AND TAPPED OR WEGHED DOWN FULL LENGTH OF SEAM. FOR SEAMS PARALLEL TO THE SLOPE, CONTAINMENT SHEET SHALL OVERLAP THE DOWNHILL SHEET. NO RUNOFF SHALL BE ALLOWED TO RUN UNDER THE PLASTIC COVERING.
4. DEMOLITION AND/OR CONSTRUCTION DEBRIS, WASTE AND GARBAGE PILES OR CONSTRUCTION MATERIALS CONTAINING TOXIC CONTAMINANTS SHALL NOT BE PLACED WITHIN 25 FEET OF ANY NATURAL DRAINAGE FEATURE, STORM DRAIN INLET STRUCTURE OR DESIGNATED PROTECTED AREA.
5. LOCATION OF CONSTRUCTION MATERIAL STORAGE AREAS AND DEBRIS, WASTE AND GARBAGE PILE AREAS SHALL BE PROVIDED BY THE CONTRACTOR TO THE CITY AT THE TIME OF THE INITIAL ESC CONTROL INSPECTION.

STABILIZED CONSTRUCTION ENTRANCE

- 1. STABILIZED CONSTRUCTION ENTRANCE(S) SHALL BE ESTABLISHED AS SOON AS POSSIBLE AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHT-OF-WAY. EXISTING PAVED ACCESS MAY BE USED AS CONSTRUCTION ENTRANCE AS NOTED ON SHEET CD01.
2. ADDITIONAL ROCK SHALL BE ADDED PERIODICALLY, IF NECESSARY, TO MAINTAIN PROPER FUNCTION OF THE PAD.
3. INSTALL VEHICLE BARRIERS AT ANY SITE ENTRANCE NOT USED AS STABILIZED CONSTRUCTION ENTRANCE TO RESTRICT SITE ACCESS.
4. IF ESTABLISHED ENTRANCES DO NOT ADEQUATELY REMOVE DIRT AND MUD FROM VEHICLE WHEELS SUCH THAT MUD AND DIRT TRACKING IS EVIDENT OFF SITE, ADDITIONAL MEASURES MUST BE TAKEN. SUCH MEASURES MAY INCLUDE WHEEL WASHING BEFORE VEHICLES LEAVE THE SITE OR OTHER CONSTRUCTION TECHNIQUES/WORK OPERATION MODIFICATIONS.
5. WHEEL WASHING SHOULD BE DONE ON THE GRAVEL PAD AND WASH WATER SHOULD DRAIN THROUGH A SILT-TRAPPING STRUCTURE PRIOR TO LEAVING THE CONSTRUCTION SITE. REFER TO DETAIL Z.0000, TRUCK WHEEL WASH.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN UP ANY SEDIMENT/MUD TRACKED INTO ADJACENT RIGHT-OF-WAY.

GENERAL NOTES

- 1. INSTALL BASIN INSERT BAGS OR CURB INLET SEDIMENT DAMS AT ALL INLET STRUCTURES.
2. THE FOLLOWING WERE REVIEWED AND DO NOT PERTAIN TO THIS PROJECT:
A. THERE ARE NO NATURAL RESOURCE SITES.
B. THERE ARE NO BORROW SITES.
C. THERE ARE NO CONSERVATION ZONES.
3. ALL ESC MEASURES WILL BE COMPLETED IN A TWO PHASES. THE SECOND PHASE WILL BE EXECUTED UNDER A SEPARATE CONTRACT.
4. SITE WORK WILL BE COMPLETED IN A TWO PHASES. THE SECOND PHASE WILL BE EXECUTED UNDER A SEPARATE CONTRACT.
5. EXPECTED TIME PERIOD OF LAND DISTURBING ACTIVITIES FOR PHASE ONE IS 3 MONTHS.

SCHEDULE FOR CONSTRUCTION AND IMPLEMENTATION OF ESC CONTROLS

- 1. HOLD THE PRE-CONSTRUCTION MEETING.
2. FLAG OR FENCE CLEARING LIMITS (AS STATED ON THE APPROVED PLANS).
3. INSTALL ESC MEASURES PRIOR TO CONSTRUCTION.
4. CALL TO SCHEDULE AN ON-SITE INSPECTION OF ALL EROSION MEASURES AFTER INSTALLATION AND PRIOR TO COMMENCING SOIL DISTURBANCE OPERATIONS.
5. MAINTAIN ESC MEASURES IN ACCORDANCE WITH CITY OF EUGENE STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
6. PERFORM DAILY INSPECTIONS OF THE ESC FACILITIES AND MAINTAIN WRITTEN RECORDS OF INSPECTIONS.
7. UPDATE EROSION AND ESC MEASURES TO HANDLE MAJOR CHANGE IN SITE CONDITIONS.
8. COVER ALL AREAS THAT WILL BE UNWORKED FOR MORE THAN SEVEN DAYS DURING THE DRY SEASON OR TWO DAYS DURING THE WET SEASON WITH STRAW, WOOD FIBER MULCH, COMPOST, PLASTIC SHEETING, OR EQUIVALENT.
9. STABILIZE ALL AREAS WITHIN SEVEN DAYS OF REACHING FINAL GRADE.
10. SEED OR SOD ANY AREAS TO REMAIN UNWORKED FOR MORE THAN 30 DAYS.
11. SWEEP STREETS ADJACENT TO CONSTRUCTION ENTRANCES A MINIMUM OF ONCE PER WEEK. USE OF WATER TRUCKS TO WASH DOWN STREETS IS NOT ALLOWED AFTER BEGINNING OF PAVEMENT PLACEMENT.
12. UPON COMPLETION OF THE PROJECT, STABILIZE ALL DISTURBED AREAS AND LEAVE BMP'S IN PLACE FOR PHASE TWO.

Table with columns: REV#, REVISION, DATE, INIT. Row 1: ADDENDUM 1: ADD CITY OF EUGENE CONSTRUCTION ACCESS DETAIL, 6/27/2014, JAH.

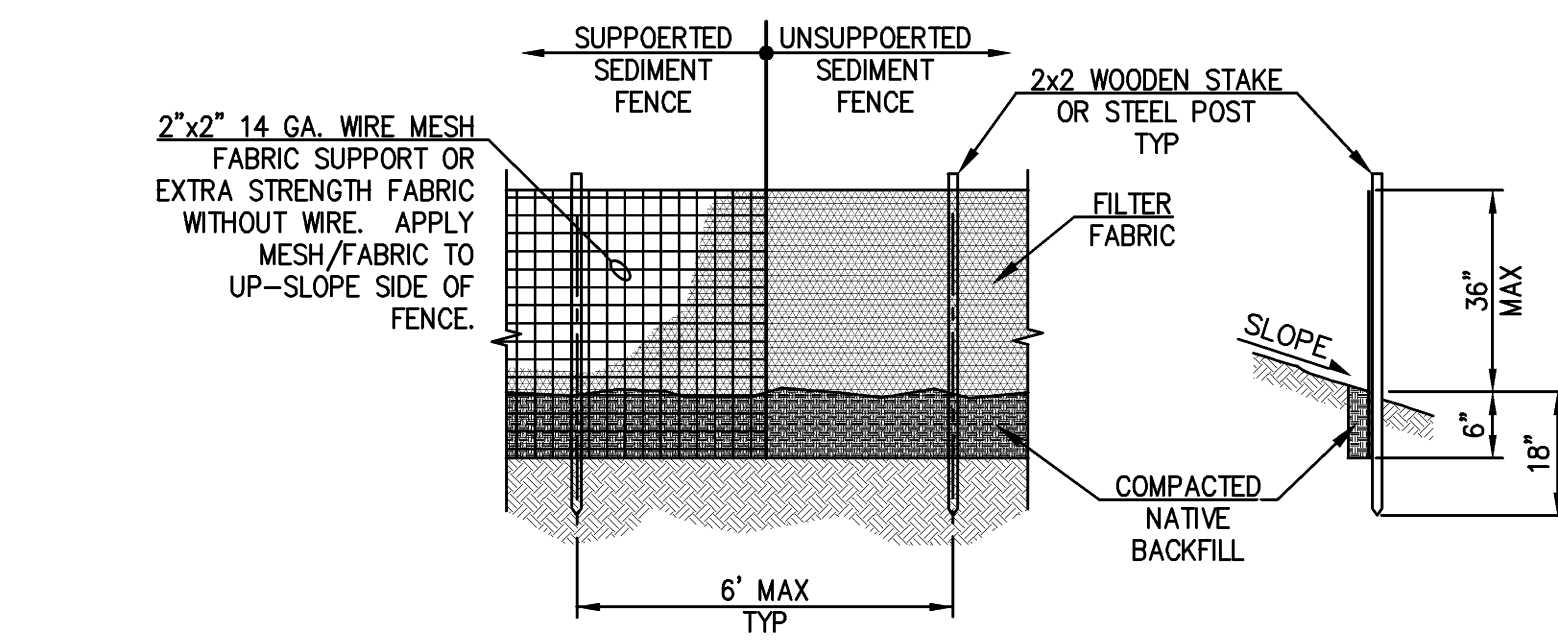
- NOTES
1. BERM SIZE:
SLOPES LESS THAN 5% - 24"-36" WIDE BY 12"-18" HIGH
SLOPES GREATER THAN 5% - 36"-48" WIDE BY 18"-24" HIGH
2. COMPOST MULCH SHALL BE MEDIUM-GRADE, MIXED YARD DEBRIS.
3. BARK MULCH SHALL BE STANDARD COMMERCIAL PRODUCT, MEDIUM-COURSE GROUND BARK. BARK SHALL BE GROUND FIR BARK, FREE FROM WEEDS AND SEED.

1 CONTINUOUS BARK/MULCH BIO BERM

No Scale

DEQ STANDARD EROSION AND SEDIMENT CONTROL PLAN (ESCP) NOTES

- 1. HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (Schedule A.8.c.i.(3))
2. ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS.
3. INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS.
4. RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, RETAIN THE ESCP AT THE CONSTRUCTION SITE OR AT ANOTHER LOCATION. (Schedule B.2.c.)
5. ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (Schedule A.8.d)
6. THE ESCP MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, UPGRADE THESE MEASURES AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS (Schedule A.8.c.i.(1)(c))
7. SUBMISSIONS OF ALL ESC REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESC REVISION IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT. (Schedule A.12.c.ii)
8. PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (Schedule A.8.c.i.(1)(d))
9. IDENTIFY, MARK, AND PROTECT (BY FENCING OFF OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (Schedule A.8.c.i.(1) & (2))
10. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (Schedule A.7.b.iii(1) and A.7.b.iii(3))
11. EROSION AND SEDIMENT CONTROL MEASURES INCLUDING PERIMETER SEDIMENT CONTROL MUST BE IN PLACE BEFORE VEGETATION IS DISTURBED AND MUST REMAIN IN PLACE AND BE MAINTAINED, REPAIRED, AND PROMPTLY IMPLEMENTED FOLLOWING PROCEDURES ESTABLISHED FOR THE DURATION OF CONSTRUCTION, INCLUDING PROTECTION FOR ACTIVE STORM DRAIN INLETS AND CATCH BASINS AND APPROPRIATE NON-STORMWATER POLLUTION CONTROLS. (Schedule A.7.f.1 and A.8.d)
12. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (Schedule A.8.c.i.(6))
13. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS. (Schedule A.8.c.i.(2))
14. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (Schedule A.8.c.i.(7))
15. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMP'S SUCH AS: GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ON-SITE, OR USE AN EXIT TIRE WASH. THESE BMP'S MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (Schedule A.7.d.i.(1) and A.8.c.i.(4))
16. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (Schedule A.7.d.ii(3))
17. USE BMP'S TO PREVENT OR MINIMIZE STORMWATER EXPOSURE TO POLLUTANT FROM SPILLS, VEHICLE AND EQUIPMENT FUELING, MAINTENANCE AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION OPERATIONS. (Schedule A.7.e.(2))
18. IMPLEMENT THE FOLLOWING BMP'S WHEN APPLICABLE, WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (Schedule A.7.e.iii)
19. USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (Schedule A.7.b.i)
20. THE APPLICATION RATE OF FERTILIZERS USED TO RE-ESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (Schedule A.9.b.ii)
21. IF A STORMWATER TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN INCLUDING SYSTEM SCHEDULE, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (Schedule A.9.d)
22. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IF NEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (Schedule A.7.b)
23. AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMP'S MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEASING TO SURFACE WATERS. (Schedule A.7.e.i.(2))
24. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND DURING WET WEATHER. (Schedule A.7.a.i)
25. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (Schedule A.9.c.i)
26. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT, AND BEFORE BMP REMOVAL. (Schedule A.9.c.ii)
27. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (Schedule A.9.c.iii and iv)
28. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A REOCCURENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIME FRAME. (Schedule A.9.b.i)
29. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (Schedule A.9.b.ii)
30. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (Schedule A.7.f.i)
31. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (Schedule A.7.f.ii)
32. PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED AREAS. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. HOWEVER, DO REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AS EXPOSED AREAS BECOME STABILIZED, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. PROPERLY DISPOSE OF CONSTRUCTION MATERIALS AND WASTE, INCLUDING SEDIMENT RETAINED BY TEMPORARY BMP'S. (Schedule A.7.b.iii(2) and A.8.c.iii)



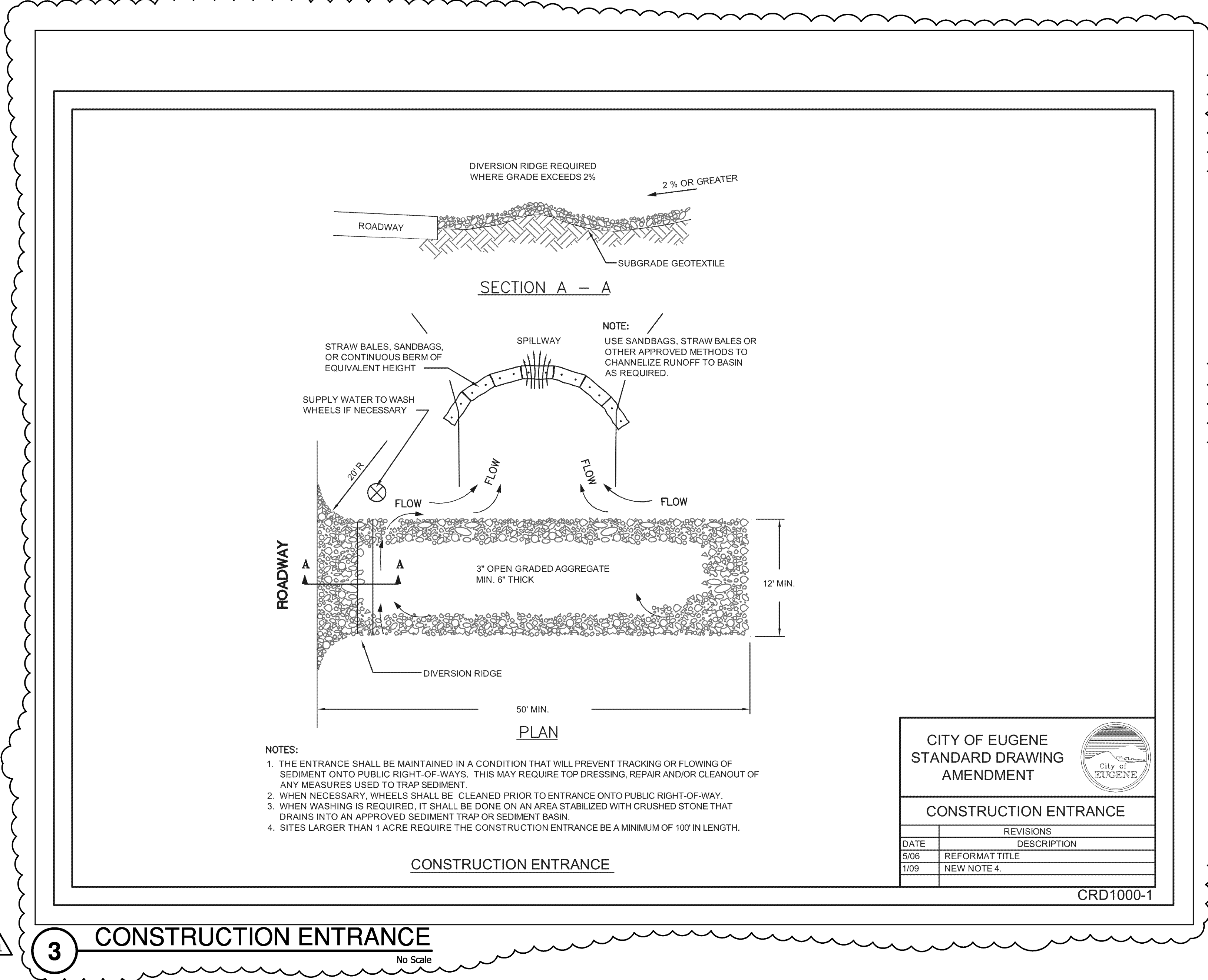
- NOTES
1. MAX GROUND SLOPE (PERPENDICULAR TO FENCE):
SUPPORTED FENCE - 1H:1V
UNSUPPORTED FENCE - 4H:1V
2. SYNTHETIC FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0F TO 120F.
3. FILTER FABRIC SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POSTS WITH A MINIMUM OF 6 INCH OVERLAP AND BOTH ENDS SECURED TO POST.
4. CONTINUOUS BIO BERM MAY BE INSTALLED AT UPHILL BASE OF FILTER FABRIC IN LIEU OF BURYING BOTTOM OF FABRIC.
5. USE STAPLES OR WIRE RINGS TO ATTACH FILTER FABRIC TO FILTER SUPPORT FABRIC.

2 SEDIMENT FENCE

No Scale

CITY OF EUGENE CONSTRUCTION SITE MANAGEMENT PLAN (CSMP) NOTES

- 1. PRIOR TO ANY GROUND DISTURBANCE ON THE SITE ONE INSPECTION WITH EROSION PREVENTION STAFF IS REQUIRED.
2. THE CONSTRUCTION SITE MANAGEMENT PLAN DOES NOT AUTHORIZE CONSTRUCTION ACTIVITIES. GRADING, BUILDING, PEPI, AND OTHER PERMITS MAY BE REQUIRED. ALL OTHER NECESSARY APPROVALS SHALL BE OBTAINED.
3. ISSUANCE OF AN EROSION PREVENTION PERMIT APPROVES PROTECTION MEASURES, NOT CONSTRUCTION OR OTHER DISTURBING ACTIVITIES. IT DOES NOT RELIEVE THE PERMIT HOLDER AND/OR THE CONTRACTOR FROM GRADING PERMITTING REQUIREMENTS.
4. CONSTRUCTION SHALL CONFORM TO THE CURRENT EDITION OF THE CITY AMENDED OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION AND CITY STANDARD DRAWINGS ("REQUIRED FOR PUBLIC IMPROVEMENT PROJECTS ONLY").
5. EROSION AND SEDIMENT CONTROL MEASURES, AND OTHER NATURAL RESOURCE PROTECTION FENCING AND BARRIERS, SHOWN ON THE CSMP ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING CONSTRUCTION, MEASURES SHALL BE UPGRADED, AS NEEDED OR AS DIRECTED BY THE CITY INSPECTOR.
6. IMPLEMENTATION OF THE CSMP, INCLUDING CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF EROSION AND SEDIMENT CONTROL MEASURES AND PROTECTION FENCING, IS THE RESPONSIBILITY OF THE PERMIT HOLDER AND/OR THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND VEGETATION/LANDSCAPING IS ESTABLISHED AND APPROVED.
7. BOUNDARIES OF THE CLEARING AND GRADING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED IN THE FIELD PRIOR TO CONSTRUCTION. DURING CONSTRUCTION, NO DISTURBANCE BEYOND THE FLAGGED CLEARING AND GRADING LIMITS SHALL BE PERMITTED. THE FLAGGING SHALL BE MAINTAINED BY THE PERMIT HOLDER AND/OR THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION. IN ADDITION, WETLAND AND RIPARIAN AREAS SHALL BE IDENTIFIED AND PROTECTED WITH APPROPRIATE FENCING AS NOTED ON CSMP PRIOR TO CONSTRUCTION AND SHALL NOT BE DISTURBED UNLESS THE PROPER PERMITS ARE OBTAINED.
8. EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THIS CSMP MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DOES NOT ENTER THE STORMWATER SYSTEM, ROADWAYS, ADJACENT PROPERTY OR VIOLATE APPLICABLE WATER QUALITY STANDARDS. WHEN DESIGNING AND IMPLEMENTING MEASURES, THE PERMIT HOLDER AND/OR THE CONTRACTOR SHALL CONSIDER THE SEASONAL VARIATION OF RAINFALL, TEMPERATURE, AND OTHER CLIMATIC FACTORS RELATIVE TO THE TIMING OF LAND DISTURBANCE ACTIVITIES.
9. EROSION AND SEDIMENT CONTROL MEASURES ON ACTIVE SITES SHALL BE INSPECTED AND MAINTAINED DAILY AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES OF RAIN PER 24 HOUR PERIOD. ANY REQUIRED REPAIRS OR ADJUSTMENTS SHALL BE MADE IMMEDIATELY. THE EROSION AND SEDIMENT CONTROL MEASURES ON INACTIVE SITES SHALL BE INSPECTED A MINIMUM OF ONCE EVERY MONTH AND/OR WITHIN 48 HOURS FOLLOWING STORM EVENTS. ADDITIONALLY, SITES COVERED UNDER DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) PERMITS (1200-C, 1200-CN) MUST COMPLY WITH THOSE PERMIT MONITORING AND RECORD-KEEPING REQUIREMENTS.
10. DURING THE WET WEATHER SEASON (OCTOBER 15 TO APRIL 30), ALL EXPOSED SOIL AND STOCKPILE AREAS SHALL BE COVERED, OR OTHERWISE PROTECTED BY A FACILITY (OR COMBINATION OF FACILITIES) THAT RESULT IN NO STORMWATER RUNOFF LEAVING THE SITE DURING A 5-YEAR STORM EVENT. FOR DEVELOPMENT SITES OVER 40 ACRES, THE DESIGN STORM SHALL BE A 10-YEAR STORM EVENT CONSISTENT WITH AN APPROVED CSMP.
11. ALL ADJACENT PROPERTIES, WATER FEATURES, AND RELATED NATURAL RESOURCES ARE TO BE KEPT FREE OF DEPOSITS OR DISCHARGES OF SOIL, SEDIMENT OR CONSTRUCTION-RELATED MATERIAL FROM THE CONSTRUCTION SITE.
12. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROTECTED FROM DAMAGE AT ALL TIMES. EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL VEGETATION HAS BEEN ESTABLISHED AND THE SITE IS PERMANENTLY STABILIZED. ANY MEASURES THAT ARE DAMAGED OR DESTROYED SHALL BE REPAIRED OR REPLACED IMMEDIATELY.
13. STABILIZE ALL DISTURBED AREAS WITHIN 50 FEET OF WATERWAYS, WETLANDS OR OTHER SENSITIVE AREAS WITHIN 7 DAYS OF EXPOSURE.
14. STREETS ADJACENT TO CONSTRUCTION ENTRANCES AND ALONG HAUL ROUTES SHALL BE SWEEP AS NEEDED OR WHEN DIRECTED BY THE CITY INSPECTOR TO ENSURE PUBLIC RIGHTS-OF-WAY ARE KEPT CLEAN AND FREE OF DEBRIS.
15. WHEN TRUCKING SATURATED SOILS TO OR FROM THE SITE, EITHER WATER-TIGHT TRUCKS SHALL BE USED OR LOADS SHALL BE DRAINED PRIOR TO TRANSPORT UNTIL DRIPPING HAS BEEN REDUCED TO NO MORE THAN ONE GALLON PER HOUR. SEDIMENT LADEN WATER WILL NOT BE ALLOWED TO ENTER THE STORMWATER SYSTEM.
16. EXTRACTED GROUND WATER FROM EXCAVATED TRENCHES SHALL BE DISPOSED OF IN A SUITABLE MANNER WITHOUT DISCHARGING SEDIMENT TO ADJACENT PROPERTIES, THE CITY'S STORMWATER SYSTEM, WATER FEATURES, OR RELATED NATURAL RESOURCES. DEWATERING SYSTEMS SHALL BE DESIGNED AND OPERATED SO AS TO PREVENT REMOVAL OF THE NATURAL SOILS AND SO THAT THE GROUNDWATER LEVEL OUTSIDE THE EXCAVATION IS NOT REDUCED TO THE EXTENT THAT WOULD DAMAGE OR ENDANGER ADJACENT STRUCTURES OR PROPERTY. APPROVAL OF THE DEWATERING SYSTEM DOES NOT GUARANTEE THAT IT WILL MEET THE OUTCOMES OR BE ACCEPTABLE FOR USE IN ALL SITUATIONS. MODIFICATIONS TO THE SYSTEM WILL BE REQUIRED IF THE OUTCOMES CANNOT BE MET. AT NO TIME WILL SEDIMENT LADEN WATER BE ALLOWED TO LEAVE THE CONSTRUCTION SITE.
17. A SUPPLY OF MATERIALS NECESSARY TO MEET THE OUTCOMES AND IMPLEMENT THE CSMP OR OTHER EROSION PRACTICES UNDER ALL WEATHER CONDITIONS SHALL BE MAINTAINED AT ALL TIMES ON THE CONSTRUCTION SITE.
18. NO HAZARDOUS SUBSTANCES, SUCH AS PAINTS, THINNERS, FUELS AND OTHER CHEMICALS SHALL BE RELEASED ONTO THE SITE, ADJACENT PROPERTIES, OR INTO WATER FEATURES, THE CITY'S STORMWATER SYSTEM, OR RELATED NATURAL RESOURCES.
19. NO DISCHARGE INTO THE CITY'S STORMWATER SYSTEM OR RELATED NATURAL RESOURCES OF CONSTRUCTION RELATED CONTAMINANTS RESULTING FROM ACTIVITIES SUCH AS, BUT NOT LIMITED TO, CONCRETE SAWING, CLEANING OR WASHING OF EQUIPMENT, TOOLS, OR VEHICLES, SHALL OCCUR.
20. ALL WORK PERFORMED BY UTILITY COMPANIES FOR THIS PROJECT, INCLUDING PLACEMENT OF APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES, FINISHED GRADING, SEEDING, MULCHING AND CLEAN UP IS GOVERNED BY THE CONDITIONS AND REQUIREMENTS OF THIS CSMP. COMPLIANCE WITH THESE REQUIREMENTS IS THE RESPONSIBILITY OF THE PERMIT HOLDER.



- NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. SITES LARGER THAN 1 ACRE REQUIRE THE CONSTRUCTION ENTRANCE BE A MINIMUM OF 100' IN LENGTH.

3 CONSTRUCTION ENTRANCE

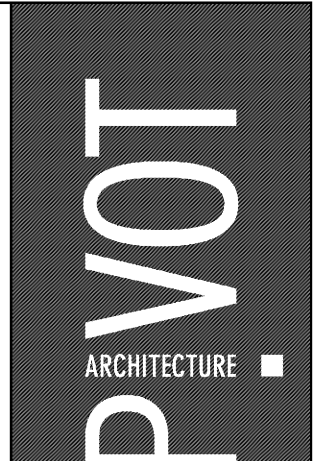
No Scale

BMP MATRIX WITH ESCP IMPLEMENTATION SCHEDULE

Table with columns: BMP'S, PHASE, YEAR, MONTH, and grid for implementation dates from 2014 to 2016. Rows include Runoff Controls, Clearing & Grubbing Practices, Vegetative Erosion Controls, and Erosion Control Practices.

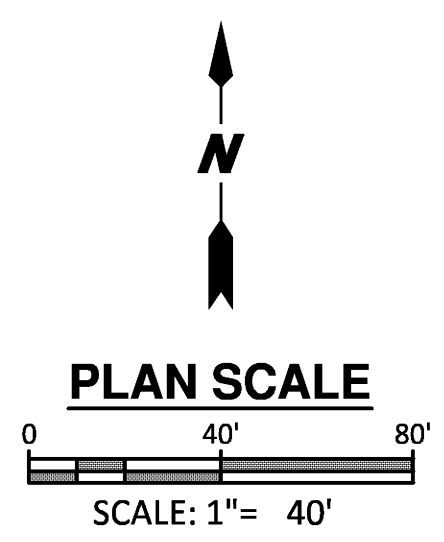
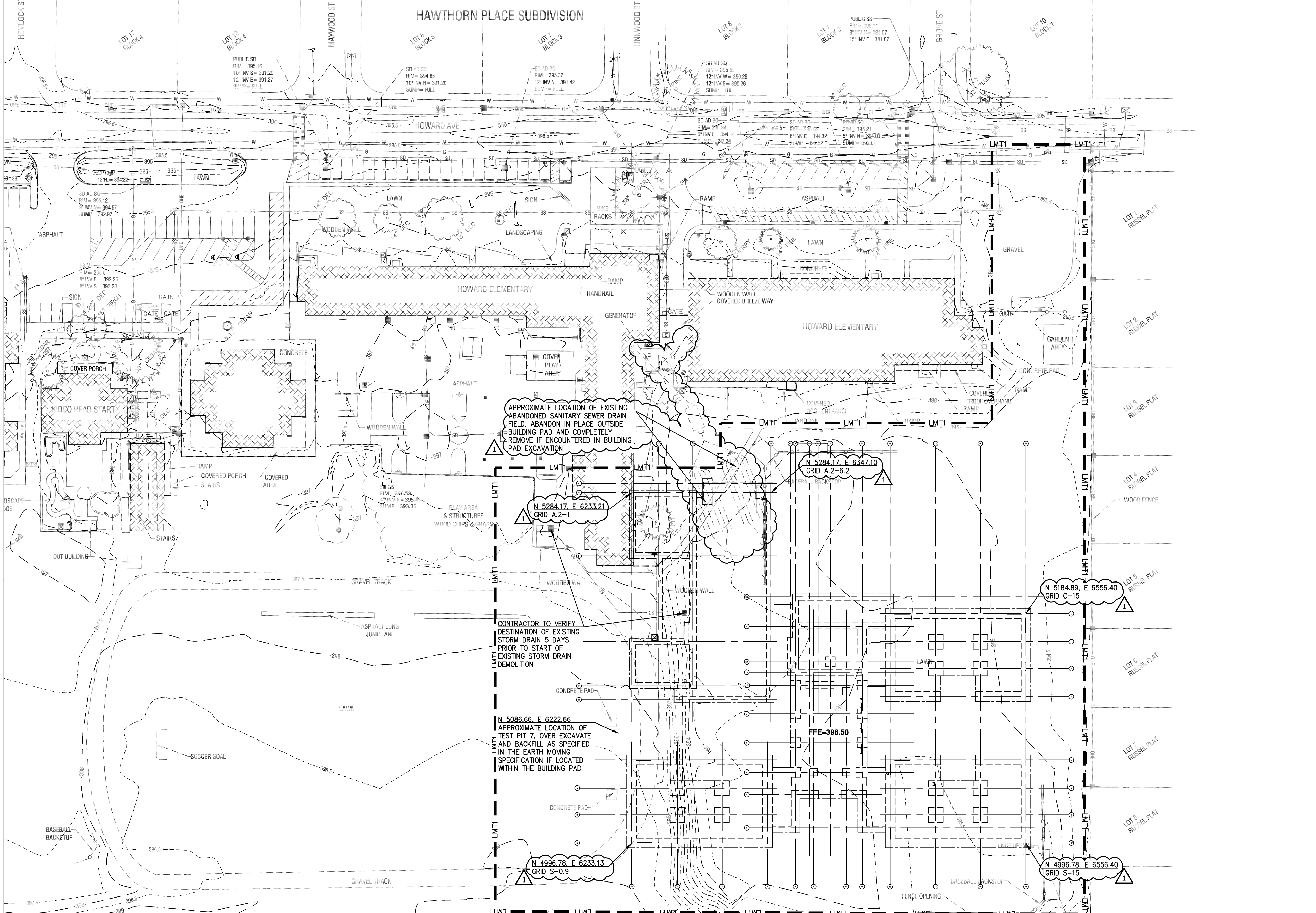
** = MEASURES TO BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICE (BMP) OPTIONS BASED ON DEQ'S 1200-C PERMIT APPLICATION AND ESCP GUIDANCE DOCUMENT HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMP'S WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS, TOPOGRAPHIC PREVENTION CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS. AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESCP, AN ACTION PLAN WILL BE SUBMITTED.

CITY OF EUGENE STANDARD DRAWING AMENDMENT. Construction Entrance. Includes revision table with columns for Date, Reformat Title, and Description.



BALZHISER & HUBBARD ENGINEERS INC. 100 WEST 15TH AVENUE, EUGENE, OR 97401, P: 541-686-3478, F: 541-345-5303. Website: www.bh-engineers.com

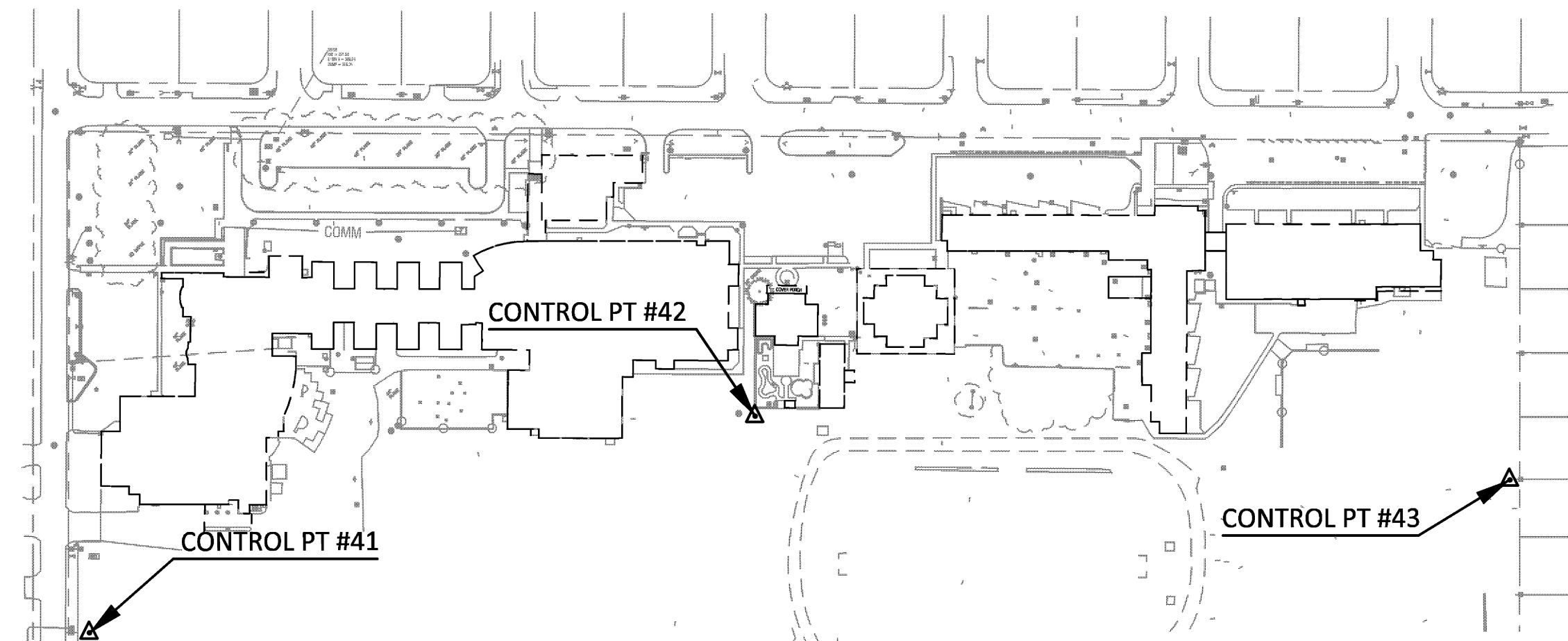
VERTICAL text on the right margin: EARTHWORK AND DEMOLITION PACKAGE, EUGENE SCHOOL DISTRICT, 700 HOWARD AVE., EUGENE, OREGON 97404, HOWARD ELEMENTARY SCHOOL SITE, EROSION AND SEDIMENT CONTROL NOTES AND DETAILS, PROJECT # 1330, NETWORK, DATE 5/27/2014, TIME 12:51:13 PM, DRAWN BY JAH, CHECKED BY MSA, C002



- SHEET NOTES:**
- REFER TO EARTHWORK SPECIFICATIONS FOR ADDITIONAL EXCAVATION DESCRIPTIONS OF AREAS SHOWN HEREON.
 - REFER TO STRUCTURAL DRAWINGS FOR EXCAVATION AND FILL REQUIREMENTS.
 - TRANSITION BETWEEN EXISTING AND FINISHED SURFACE ELEVATIONS SHOWN ON PLAN SHALL BE SMOOTH AND UNIFORM.
 - REFER TO ARCHITECTURAL DRAWINGS FOR EXCAVATION SECTION DETAILS.

- GENERAL NOTES:**
- EXISTING TOPOGRAPHIC INFORMATION:** FROM SURVEY PREPARED BY BALZHISER & HUBBARD ENGINEERS TITLED "TOPOGRAPHIC SURVEY FOR 4J SCHOOL DISTRICT LYING IN SW 1/4 OF SEC. 14, TOWNSHIP 17S, RANGE 4W, W.M., CITY OF EUGENE, LANE COUNTY, OREGON". DATED SEPTEMBER 2013.
 - BASIS OF BEARING:** BASED ON THE OREGON COORDINATE REFERENCE SYSTEM, EUGENE ZONE. ALL DISTANCES ARE GROUND DISTANCES AND ARE EXPRESSED IN INTERNATIONAL FEET. SEE SURVEY METADATA FOR MORE INFORMATION.
 - COORDINATE SYSTEM TRANSLATION:** THE SURVEY FILE HAS BEEN TRANSLATED FROM BHE'S SURVEY CONTROL POINT No. 41 TO A LOCAL DATUM PLAN COORDINATE OF 5000, 5000.
 - BASIS OF ELEVATION:** BASED ON CITY OF EUGENE BENCHMARK R0899 WITH A PUBLISHED ELEVATION OF 395.68' (NAVD 88 DATUM).
 - THE CONTRACTOR SHALL LOCATE AND MARK ALL EXISTING PROPERTY AND STREET MONUMENTS PRIOR TO CONSTRUCTION. ANY MONUMENTS DISTURBED DURING CONSTRUCTION OF THE PROJECT SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE. THE MONUMENTS SHALL BE REPLACED WITHIN A MAXIMUM OF 90 DAYS, AND THE COUNTY SURVEYOR SHALL BE NOTIFIED IN WRITING AS REQUIRED BY ORS 209.150.
 - LOCATIONS OF EXISTING UTILITIES ARE ASSUMED FROM INFORMATION AVAILABLE AND ARE NOT GUARANTEED TO BE COMPLETE AND ACCURATE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF EXISTING UTILITIES.
 - CONTRACTOR SHALL NOTIFY EACH UNDERGROUND UTILITY PRIOR TO EXCAVATING, BORING, OR POT-HOLING. ATTENTION: OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN O.A.R. 952-001-0010 - 952-001-0090. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 1-800-332-2344)
 - CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS AND COMPLY WITH REQUIREMENTS AND SPECIFICATIONS OF ANY RESPECTIVE UTILITY COMPANY FOR UTILITIES TO BE CUT, MOVED, RELOCATED, OR RE-CONNECTED TO AN EXISTING FACILITY.
 - CONTRACTOR SHALL INCLUDE DEMOLITION OF EXISTING PRIVATE STORM DRAIN, SANITARY SEWER, AND WATER UTILITIES. REMOVE EXISTING STRUCTURES WHERE ENCOUNTERED. CUT AND CAP EXPOSED ENDS OF EXISTING PIPES ENCOUNTERED. (ABANDON EXISTING PIPE IN PLACE IN ALL AREAS EXCEPT UNDER NEW BUILDING. REMOVE EXISTING PIPES BENEATH NEW BUILDING.)

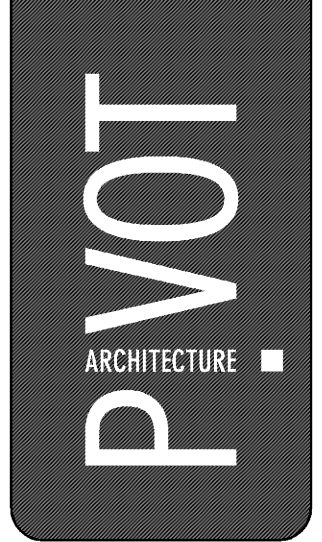
SURVEY LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	WATER VALVE	COMM	COMMUNICATIONS
	WATER METER	CMP	CORRUGATED METAL PIPE
	IRRIGATION VALVE	ELEC	ELECTRIC
	WATER VAULT	SS	SANITARY SEWER
	BACK FLOW PREVENTER	AD SQ	SQUARE AREA DRAIN
	FIRE HYDRANT	SD	STORMWATER
	FIRE DEPARTMENT CONNECTION		GAS METER
	AREA DRAIN (SQUARE)		GAS VALVE
	STORM DRAIN MANHOLE		SEWER MANHOLE
	UTILITY POLE		CLEANOUT
	GUY ANCHOR		METAL POST
	LIGHT POLE		SET PERMANENT SITE CONTROL (SC)
	LIGHT POLE WITH ARM		REFER TO DETAIL AND BENCHMARK TABLE
	ELECTRIC METER		FOUND CITY BENCHMARK (BM)
	ELECTRIC RISER		PROPERTY LINE
	ELECTRIC TRANSFORMER		DENOTES BUILDING OVERHEAD
	ELECTRIC VAULT		EASEMENT LINE
	TELEPHONE RISER		1.0' CONTOUR INTERVAL
	TELEPHONE VAULT		0.5' CONTOUR INTERVAL
	HEAT PUMP		HATCH DENOTES BUILDING
	JUNCTION BOX		HATCH DENOTES BUILDING OVERHANG
	ARBORVITAE		HATCH DENOTES ASPHALT PAVEMENT
	METAL BASKETBALL HOOP POLE		HATCH DENOTES CONCRETE
	SIGN		HATCH DENOTES GRAVEL
	BOLLARD		PAVEMENT PAINT STRIPE
	WOOD POST		CHAIN LINK FENCE
	FLAG POLE		UNDERGROUND WATER LINE
	POLE		UNDERGROUND STORM DRAIN LINE
	MAIL BOX		UNDERGROUND SANITARY SEWER LINE
	ADA PARKING		UNDERGROUND GAS LINE
	CONIFEROUS TREE		UNDERGROUND COMM LINE
	BROADLEAF TREE		OVERHEAD COMBINED UTILITY LINE



SITE CONTROL (SC)				
Point #	Northing	Easting	Elevation	Description
41	5000.00	5000.00	396.77	SET BRASS CAP
42	5243.02	5749.10	396.19	SET BRASS CAP
43	5172.14	6598.59	395.63	SET BRASS CAP

1 CONTROL POINT TABLE AND MAP
SCALE: 1" = 150'

REV	REVISION	DATE	INIT
1	ADDENDUM 1: UPDATE BLDG CORNERS, ADD INFO ON EX SS DRAIN FIELD.	6/27/2014	JAH
2			
3			



EARTHWORK AND DEMOLITION PACKAGE
EUGENE SCHOOL DISTRICT
700 HOWARD AVE, EUGENE, OREGON 97404
HOWARD ELEMENTARY SCHOOL SITE

SITE EARTHWORK DIAGRAM

PROJECT #	REVISIONS
C003	
DATE	DATE
12/14/14	12/14/14
DESIGNED	DRAWN
JAH	JAH
CHECKED	CHECKED
MBA	MBA

GENERAL NOTES

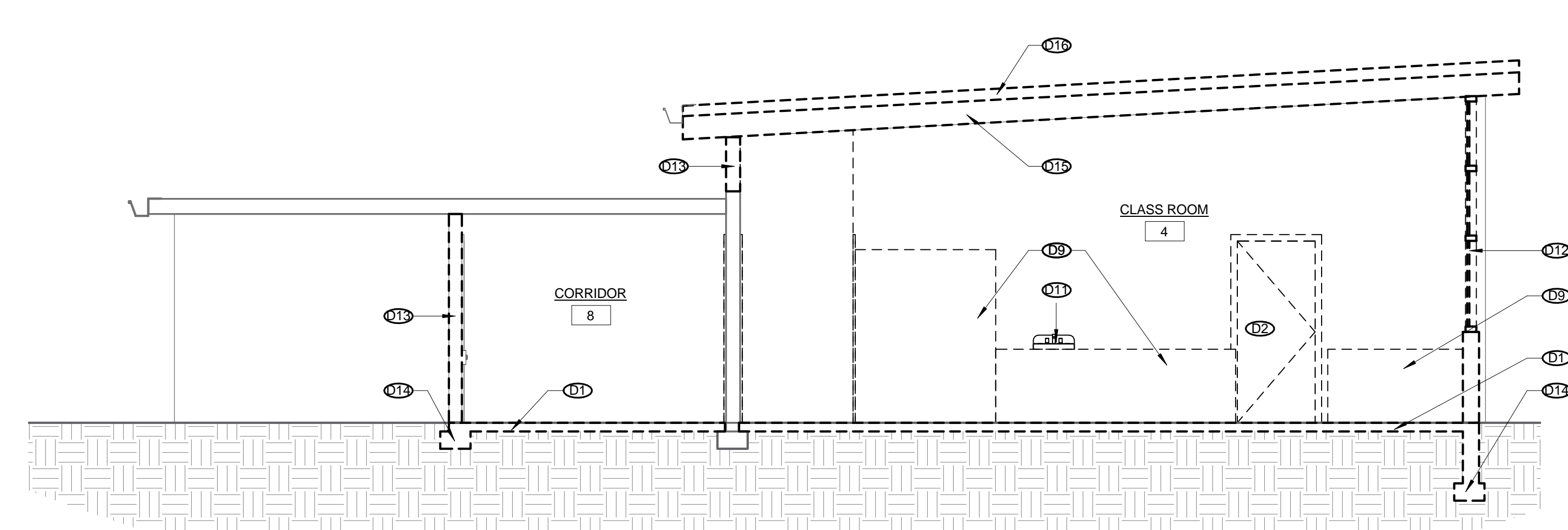
- A. SALVAGE (E) WOOD ROOF JOISTS. STRIP OFF ALL FASTENERS. STORE ONSITE. COORDINATE LOCATION WITH OWNER.
- B. OWNER HAS COMPLETED ASBESTOS ABATEMENT IN THE AREAS BEING DEMOLISHED. PART OF THIS SCOPE WAS THE REMOVAL OF INTERIOR WALL FINISHES IN CLASS ROOMS 4 AND 5 (INCLUDING RESTROOMS AND CLOSETS) ALONG WITH INTERIOR FLOOR FINISH REMOVAL IN CORRIDOR 8 AND CLASS ROOM 5. DURING ABATEMENT, IT WAS DETERMINED THAT THE ROOF DOES NOT CONTAIN ASBESTOS.
- C. SHUTDOWN OF CW, HW, AND HEATING WATER PRIOR TO DEMOLITION WILL BE BY OWNER.

KEYNOTE LEGEND

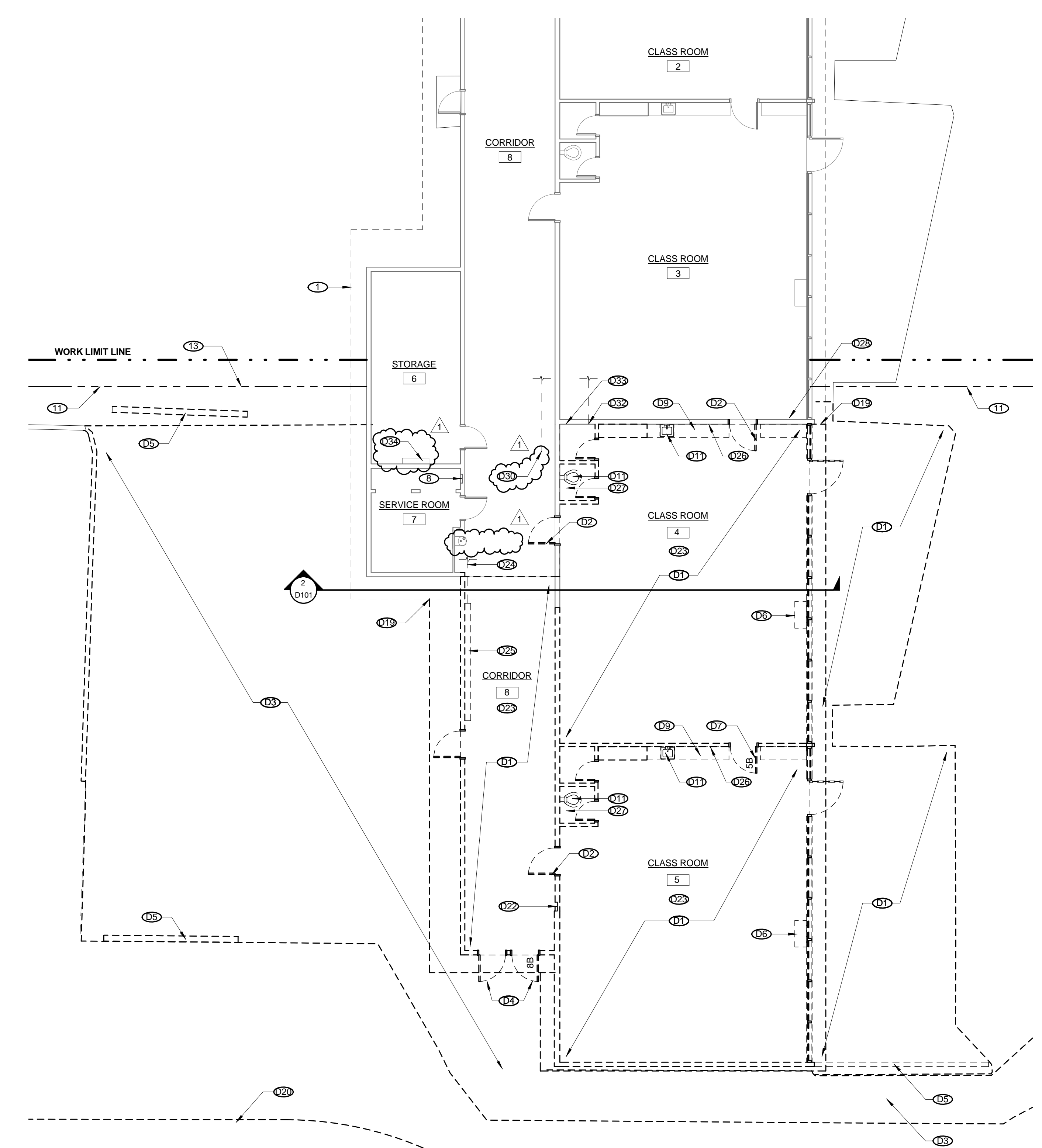
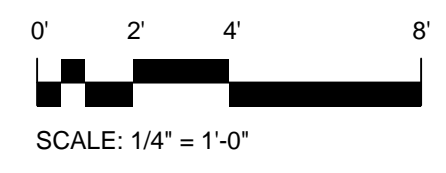
- 1 EXISTING ROOF LINE ABOVE
- 8 (E) PANELBOARD TO REMAIN
- 11 TEMPORARY FENCE. CONNECT TO FENCING AT TRACK WHERE OCCURS
- 13 12" WIDE TEMPORARY GATE LOCATION
- D1 DEMO (E) CONCRETE SLAB
- D2 DEMO (E) DOOR AND FRAME
- D3 DEMO (E) ASPHALT PAVING
- D4 DEMO (E) DOORS. SALVAGE PANIC HARDWARE FOR REUSE. COORDINATE STORAGE LOCATION WITH OWNER
- D5 DEMO (E) CONCRETE SITE WALL
- D6 OWNER TO REMOVE (E) UNIT VENTILATOR AND CUT AND CAP (E) HW AT COMMON WALL BETWEEN CLASSROOMS 3 & 4. CONTRACTOR TO DEMO (E) BRANCH PIPING
- D7 REMOVE (E) DOOR AND FRAME. SALVAGE FOR REUSE INCLUDING DOOR HARDWARE. COORDINATE STORAGE LOCATION WITH OWNER.
- D8 (E) CASEWORK REMOVED BY OTHERS
- D9 OWNER TO REMOVE (E) PLUMBING FIXTURES, BRANCH WASTE AND WATER PIPING BELOW FLOOR
- D10 DEMO (E) WINDOW ASSEMBLY
- D13 DEMO PORTION OF (E) WALL
- D14 DEMO (E) CONCRETE FOUNDATION. FILL FOUNDATION EXCAVATION WITH COMPACTED SELECT FILL TO TOP OF SURROUNDING GRADE & COMPACT TO 95% RMD
- D15 REMOVE (E) WOOD ROOF JOISTS AND SALVAGE FOR REUSE. SEE GENERAL NOTE A.
- D16 DEMO (E) ROOF ASSEMBLY
- D19 EXTENT OF ROOF DEMOLITION
- D20 EXISTING GRAVEL TRACK TO BE REMOVED W/ EXCAVATION FOR NEW BUILDING PAD
- D21 (E) PANELBOARD AND ADJACENT PULLBOX TO BE REMOVED. REMOVE FEEDER BACK TO SOURCE
- D22 DISCONNECT AND REMOVE ALL LIGHTING, LIGHTING CONTROLS, ELECTRICAL DEVICES AND LOW VOLTAGE DEVICES WITHIN THE DEMO AREA. REMOVE ALL CONDUCTORS AND CONDUITS BACK TO SOURCE
- D24 CUT (E) HEATING WATER SUPPLY AND RETURN BACK TO NEAREST ACTIVE BRANCH AND CAP WITHIN ENCLOSURE. REPAIR ENCLOSURE. COORDINATE WITH OWNER SHUTDOWN AND DRAINING OF SYSTEM AS REQUIRED TO ACCOMPLISH WORK
- D25 DEMO (E) CONNECTOR AND CONTROLS
- D26 DEMO (E) THERMOSTAT
- D27 DEMO (E) EXHAUST FAN & DUCTWORK
- D28 OWNER TO REMOVE (E) HEATING WATER SUPPLY AND RETURN SERVING DEMO UNIT VENTILATORS. OWNER TO CAP IN UTILITY TUNNEL UNDER REMAINING BUILDING
- D30 OWNER TO CUT AND CAP (E) 1" HW BELOW SLAB AT REMAINING BLDG FOUNDATION
- D32 OWNER TO CUT AND CAP (E) 1-1/4" CW BELOW SLAB AT REMAINING BLDG FOUNDATION
- D33 OWNER TO CUT AND CAP (E) 4" WASTE BELOW SLAB AT REMAINING BLDG FOUNDATION
- D34 DDC CONTROL PANEL TO REMAIN

WALL FILL PATTERNS:

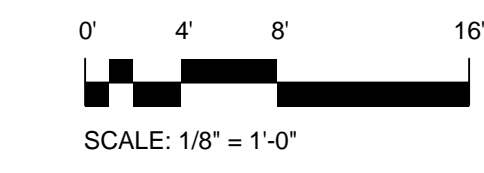
- - - - - EXISTING WALL ASSEMBLY
- [- - - -] WALL ASSEMBLY TO BE DEMOLISHED



2 PARTIAL BUILDING SECTION
1/4" = 1'-0"



1 PARTIAL DEMOLITION FLOOR PLAN
1/8" = 1'-0"



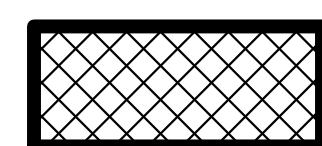
GENERAL NOTES

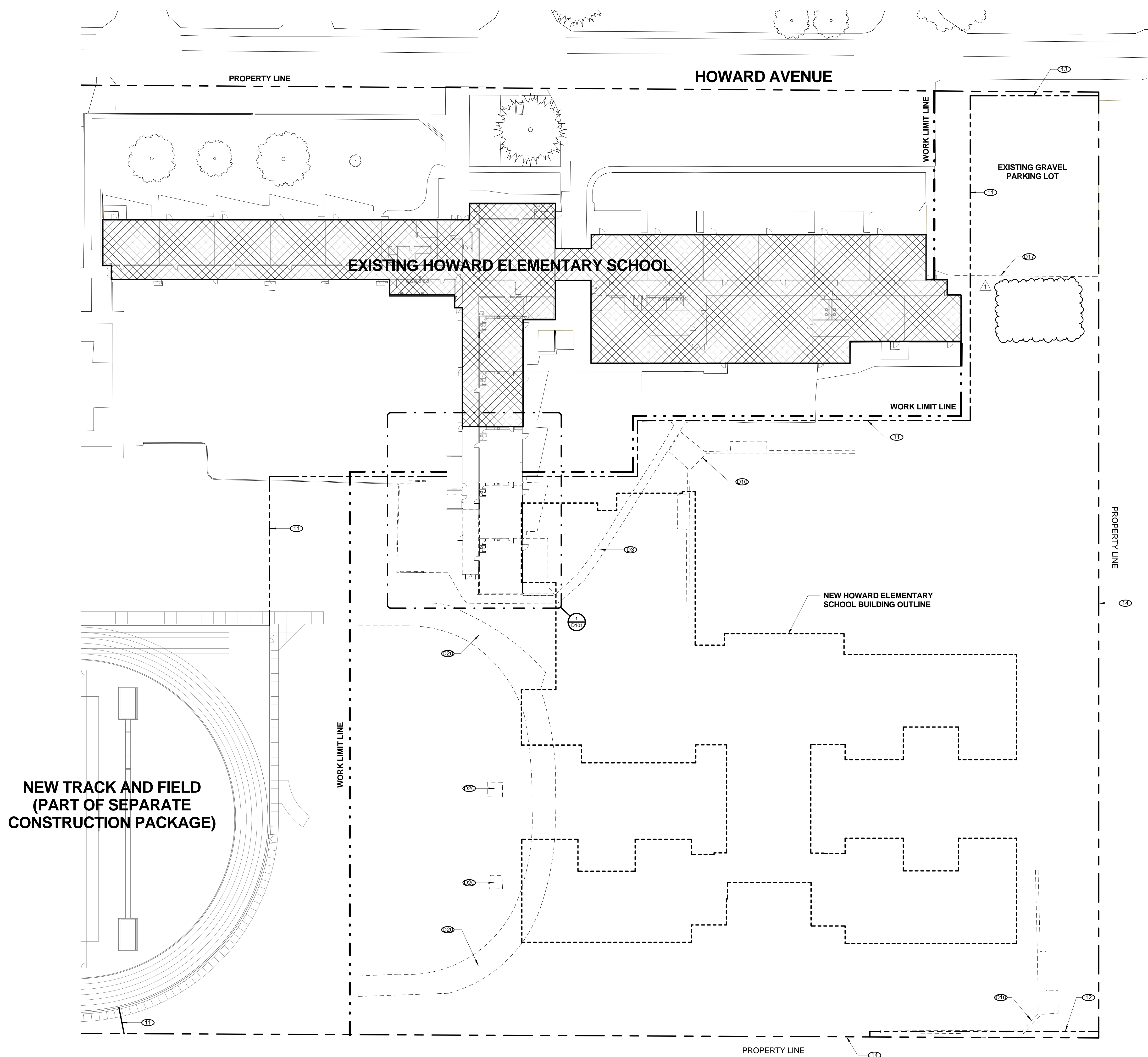
- A. EXTENTS OF (E) IRRIGATION SYSTEM ARE UNKNOWN. PRIOR TO ANY CONSTRUCTION, MEET WITH OWNER TO OBSERVE AND VERIFY (E) IRRIGATION. LOCATE AND VERIFY SIZE OF (E) IRRIGATION MAIN LINE, VALVE AND IRRIGATION HEADS. NOTIFY OWNER IN WRITING IF ANY SYSTEMS ARE NOT OPERATING PROPERLY.
- B. (E) LANDSCAPES AND TREES WITH (E) IRRIGATION PRIOR TO CONSTRUCTION ARE NOT TO BE WITHOUT WATER FOR LONGER THAN 10 DAYS. COORDINATE ANTICIPATED DISRUPTION OF (E) IRRIGATION WITH OWNER TO ALLOW FOR ADDITIONAL WATERING IN ADVANCE OF IRRIGATION SHUTDOWN.
- C. CUT AND CAP (E) IRRIGATION MAIN LINES AND LATERAL LINES TO REMAIN. MAKE REPAIRS NECESSARY TO (E) IRRIGATION SYSTEM TO REMAIN TO PROVIDE A FULLY OPERATIONAL IRRIGATION SYSTEM TO LANDSCAPE AREAS TO REMAIN DURING TIME OF CONSTRUCTION.

KEYNOTE LEGEND

- 11 TEMPORARY FENCE. CONNECT TO FENCING AT TRACK WHERE OCCURS
- 12 BLOCK OFF ENTRANCES TO EMERALD PARK WITH TEMPORARY FENCING
- 13 12' WIDE TEMPORARY GATE LOCATION
- 14 (E) FENCING ALONG PROPERTY LINE
- D3 DEMO (E) ASPHALT PAVING
- D10 DEMO (E) BASEBALL BACKSTOP ASSEMBLY
- D17 DEMO (E) CHAINLINK FENCE
- D20 EXISTING GRAVEL TRACK TO BE REMOVED W/ EXCAVATION FOR NEW BUILDING PAD

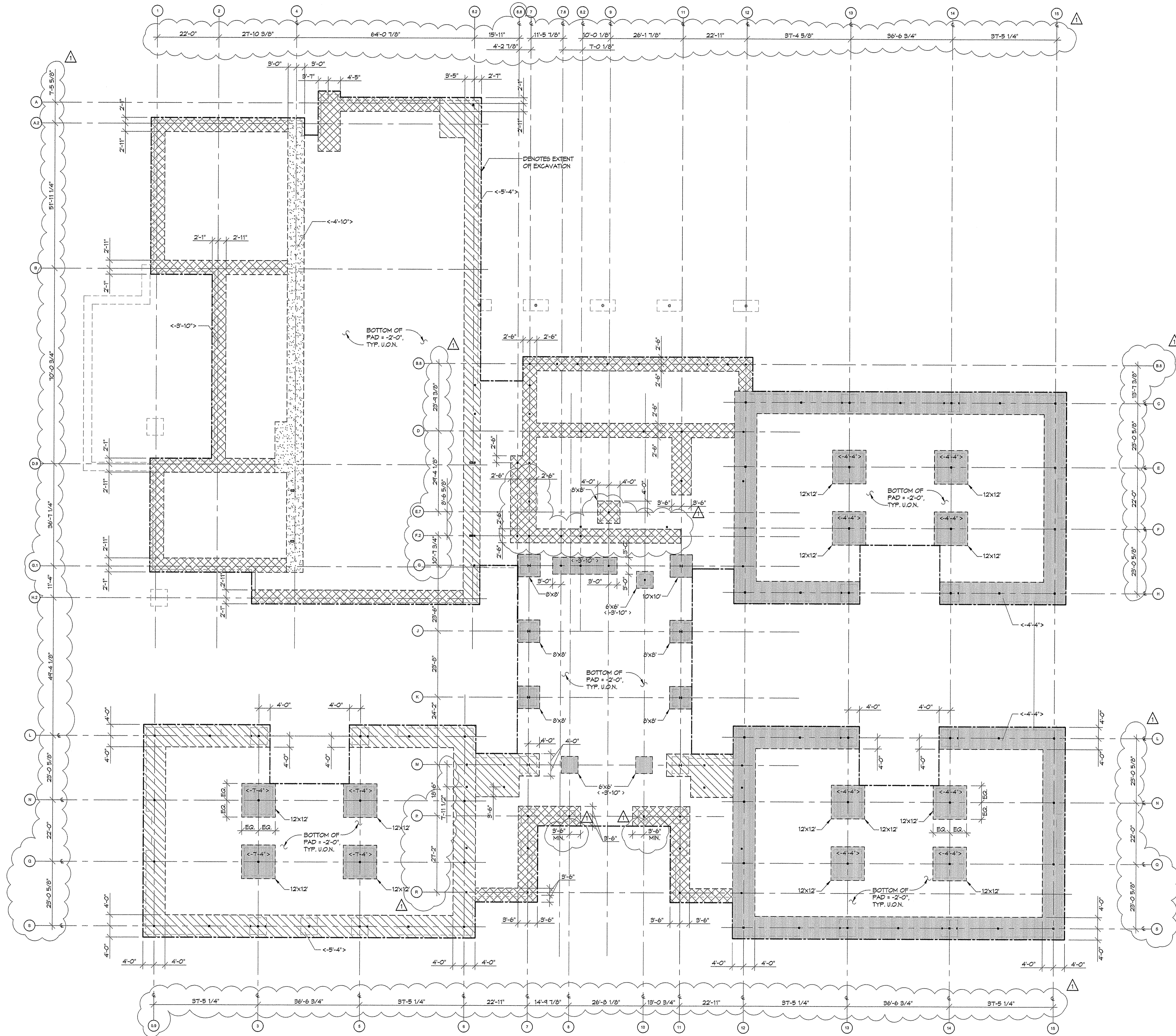
SITE PLAN DEMOLITION LEGEND

 AREA OF EXISTING SCHOOL NOT ALTERED BY DEMOLITION WORK AS DESCRIBED WITHIN THIS PACKAGE



1 PARTIAL SITE DEMOLITION PLAN
1" = 30'-0"

PROJECT #	1336	PERSON	
ISSUE DATE	06/11/2014	AD	ADD 1 - 06/27/2014
DESIGN		CHK	
DRAWN			



- NOTES:**
- THIS DRAWING IS INTENDED TO BE USED IN CONJUNCTION WITH DRAWINGS AND SPECIFICATIONS PROVIDED BY OTHERS.
 - BUILDING GRID DIMENSIONS PROVIDED ON THIS SHEET WERE OBTAINED BY IMPORTING THE ELECTRONIC REVIT MODEL PROVIDED BY THE ARCHITECTS (PIVOT ARCHITECTURE AND DOWA-BI) DATED JUNE 11, 2014.
 - WIDTHS AND DEPTHS OF EXCAVATION WERE DETERMINED WITH INFORMATION PROVIDED BY THE GEOTECHNICAL CONSULTANT, FOUNDATION ENGINEERS (FE). SEE THE ORIGINAL REPORT, DATED DECEMBER 31, 2013 AND ADDENDUM TO THE REPORT, DATED JUNE 06, 2014 (FE PROJECT 2131076).
 - BUILDING FINISHED FLOOR RELATIVE ELEVATION (FFE) = 0'-0" = DATUM ELEV. +995.5'; TOP OF COMPACTED STRUCTURAL FILL (BUILDING PAD) TO BE AT -1'-0" BELOW FFE (DATUM ELEV. = 995.5').
 - BOTTOM OF SUBGRADE/COMPACTED STRUCTURAL FILL TO BE AT -2'-0" BELOW FFE UNLESS OTHERWISE INDICATED.

--- DENOTES EXTENT OF BUILDING PAD EXCAVATION

[Cross-hatch pattern] DENOTES BOTTOM OF COMPACTED STRUCTURAL FILL w/ REL. ELEV. = -3'-10"

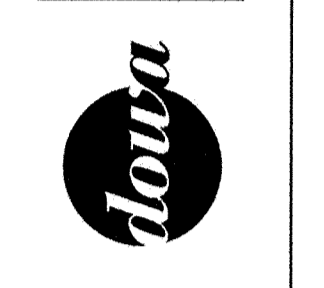
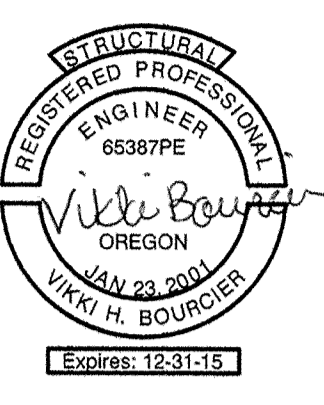
[Diagonal hatch pattern] DENOTES BOTTOM OF COMPACTED STRUCTURAL FILL w/ REL. ELEV. = -4'-4"

[Dotted pattern] DENOTES BOTTOM OF COMPACTED STRUCTURAL FILL w/ REL. ELEV. = -4'-10"

[Horizontal hatch pattern] DENOTES BOTTOM OF COMPACTED STRUCTURAL FILL w/ REL. ELEV. = -5'-4"

[Square symbol] DENOTES SQUARE EXCAVATION ELEVATION & DIMENSIONS AS NOTED. BTM OF FILL REL. ELEV. = -5'-4" UNLESS OTHERWISE NOTED THIS: "x"x"x"

OVERALL BUILDING PAD PLAN
1/16" = 1'-0"



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EARTHWORK AND DEMOLITION PACKAGE
EUGENE SCHOOL DISTRICT
44 W BROADWAY ST. EUGENE, OREGON
4J HOWARD ELEMENTARY SCHOOL

OVERALL BUILDING
PAD PLAN

PROJECT #	REVIEWS
ISSUE DATE	ADDENDUM #1 - JUNE 27, 2014
DRAWN	AM
CHECKED	WB