

June 20, 2019

Morgan Will, Development Manager Stafford Land Co. 8840 SW Holly Lane Wilsonville, OR 97070-9800

RE: Approval of Grading Permit GRAD 2019-05 "Smith Creek Development: Phase 1A" (Parcel 2, Partition Plat 2018-075; Tax Lot 052W13 00106); Accela record no. 971-19-000062-PLNG.

Dear Mr. Will:

Following original submittal of the grading permit application on March 15, 2019, staff approves the permit with the following conditions:

Planning Conditions of Approval:

- Conformance with Approved Plans: All site work shall be in substantial conformance with the grading plans received June 20, 2019, which cover the Phase 1A subarea of the subject property. (The remaining area would be Phase 2A and subject to separate grading approval.)
- 2. DEQ: All development activity shall be in accordance with the approved 1200-C permit 33148 dated May 31, 2019. The applicant shall provide to the City any modifications to the Department of Environmental Quality (DEQ) permit.
- 3. The applicant, not the City, is responsible for obtaining permits from the US Army Corps of Engineers (USACE), Oregon Department of State Lands (DSL), Oregon Department of Transportation (ODOT), and other agencies which might require approval or permit.
- 4. All work within public rights-of-way or easements within City jurisdiction shall require plan approval and permit issuance from the Public Works Department.

Public Works Conditions of Approval:

The applicant shall:

- 5. Comply with submitted Grading Plan (Sheets 2 [Grading Notes], 11, & 12 of 56; EC6 & EC7); including measures to keep the right of way clean and to protect existing catch basins around the work area. All catch basins around the work area shall be clean of debris and soils at all times.
- 6. Continuously maintain adequate protection of all the work from damage and shall protect the public and private property of others from injury or loss arising in connection with the work.
- 7. Comply with City of Woodburn Planning Department requirements through Woodburn Development Ordinance (WDO) <u>5.01.04 Grading Permit</u>.
- 8. Prior to starting work, contact Public Works for inspection of the erosion control in the public right-of-way. Contact Dago Garcia, P.E., City Engineer at (503) 982-5248 or dago.garcia@ci.woodburn.or.us.

Background

The property owner through Stafford Land Company and Ordinance No. 2565 (2018) annexed territory including the subject property and obtained approval of a planned unit development (PUD), preliminary subdivision, and ancillary applications for the Smith Creek Development via the Final Order of November 14, 2018. The project is split into nine phases; the grading plans are limited to Phase 1A.

Context

This grading permit in no way abrogates or supersedes any conditions of approval in the Smith Creek Development Final Order of November 14, 2018. With this in mind, staff met with the developer, Stafford Land Co., on March 18 and the civil engineer from Emerio Design on May 6 to discuss Phase 1A work.

Summary of Review:

This site is subject to the development standards of the Woodburn Development Ordinance. The applicant is requesting to grade the site in preparation for the installation of public improvements including utilities, streets, and stormwater management facilities relating to Phase 1A of the Smith Creek Development.

Pursuant to WDO 4.01.02, The Director shall render all Type I land use decisions. The Director's decision is the final decision of the City on a Type I application and cannot be appealed by any party through the City land use appeals process. If you have any questions regarding this matter, contact Chris Kerr, Community Development Director chris.kerr@ci.woodburn.or.us or (503) 980-2445.

Final decision approved by designee:

Colin Cortes

Colin Cortes, AICP, CNU-A, Senior Planner

June 20, 2019

Enclosures (4):

- 1. Marked Tax Map
- 2. DEQ 1200-C Permit 33148 (abridged)
- 3. Application Form
- 4. Approved Plans (Sheets 2, 11, & 12 of 56; EC6 & EC7)
- 5. Storm Drainage Report (abridged)
- 6. Smith Creek Development Exhibits C-4 & Y-1

cc: Chris Kerr, AICP Community Development Director
Dan Handel, AICP, Associate Planner
Dago Garcia, P.E., City Engineer

file(s): GRAD 2019-05 Accela record no. 971-19-000062-PLNG



Permit Number: 1200-C

Expiration Date: December 14, 2020

Page 1 of 30



GENERAL PERMIT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM STORMWATER DISCHARGE PERMIT

Oregon Department of Environmental Quality 811 SW Sixth Avenue, Portland OR 97204

Telephone: (503) 229-5279 or 1-800-452-4011 (toll free in Oregon)

Issued pursuant to ORS 468B.050 and Section 402 of the Federal Clean Water Act

REGISTERED TO: File No: 126319 Date: May 31, 2019 Permit No: 33148 Marion County Stafford Development Company, LLC EPA: ORR10F719 LLID: 1228535451394

8840 SW Holly Ln

Wilsonville, OR 97070-9800

River Mile: 0.670000000000000004

Location: Smith Creek Development - Phase 1a, West Of 105 Ben Brown Lane, Woodburn

SOURCES COVERED BY THIS PERMIT:

The legally authorized representative (see Definitions) for construction activities (as defined below) that may discharge to surface waters or conveyance systems leading to surface waters of the state must register for coverage under this permit with DEQ before any land disturbance occurs, unless the construction activities are automatically covered as described in the 1200-CN permit.

- Construction activities including clearing, grading, excavation, materials or equipment staging and stockpiling that will disturb one or more acres and may discharge to surface waters or conveyance systems leading to surface waters of the state.
- Construction activities including clearing, grading, excavation, materials or equipment staging and stockpiling that will disturb less than one acre that are part of a common plan of development or sale if the larger common plan of development or sale will ultimately disturb one acre or more and may discharge to surface waters or conveyance systems leading to surface waters of the state.
- This permit also authorizes discharges from any other construction activity (including construction activity that disturbs less than one acre and is not part of a common plan of development or sale) designated by DEQ, where DEQ makes that designation based on the potential for contribution to an excursion of a water quality standard or for significant contribution of pollutants to waters of the state.

This permit does not authorize the following:

- In-water or riparian work, which is regulated by other programs and agencies including the Federal Clean Water Act Section 404 permit program, the Oregon Department of State Lands, the Oregon Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, the U.S. Army Corp of Engineers, the National Marine Fisheries Service, and the Department of Environmental Quality Section 401 certification program.
- Post-construction stormwater discharges that originate from the site after completion of construction activities and final stabilization.
- Discharges to underground injection control (UIC) systems.

Effective: December 15, 2015

mer, Operations Administrator Expiration Date: December 14, 2020

Permit Number: 1200-C

Expiration Date: December 14, 2020

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PERMITTED ACTIVITIES

Until this permit expires, is modified or revoked, the permit registrant is authorized to construct, install, modify, or operate erosion and sediment control measures and stormwater treatment and control facilities, and to discharge stormwater and certain specified non-stormwater discharges to surface waters of the state or conveyance systems leading to surface waters of the state only in conformance with all the requirements, limitations, and conditions set forth in the permit including attached schedules as follows:

Unless specifically authorized by this permit, by regulation issued by EPA, by another NPDES permit, or by Oregon Administrative Rule, any other direct or indirect discharge to waters of the state is prohibited, including discharges to an underground injection control system.

Permit Number: 1200-C

Expiration Date: December 14, 2020 Page 3 of 30

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General Information (Información General)

CITY OF WOODBURN

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0	5

Department of Economic & Development Services 270 Montgomery Street • Woodburn, Oregon 97071 Phone: 503-982-5246 • Website: www.woodburn-or.us

GRADING PERMIT

(PERMISO PARA ALTERAR LA SUPERFICIE DE TERRENO)

Project location (Ubicación del Proyecto): Parcel 2,	Partition Plat 2018-075 TL 10 6 , Map 052W13
Property owner (Propietario): Hazel M. Smith Properties, Lt	
Mailing Address (Dirección Postal):	Mailing Address (Dirección Postal):
33844 SE White Oak Rd, Corvallis, OR 97333	8840 SW Holly Lane, Wilsonville, OR 97070
Telephone (Teléfono):	Telephone (<i>Teléfono</i>): (971) 206-8615
E-mail (Dirección Cibernética):	E-mail (Dirección Cibernética):
Required attachments (Accesorios requeridos)	morgan@staffordlandcompany.com
Four copies of the Grading Plan, preferably 11"x17" requested but not required. (Cuatro copias del Plan de 11"x17". Una copia electrónica, preferiblemente en foi	Alterar la Superficie de Terreno, preferiblemente de
Certification (Certificación)	
know the contents to be true. (Por la presente decisolicitud anterior y se que lo contenido es verídico. Owner frome A framas (Firma del Propietario)	Applicant (Firma del Solicitante)
Print Name YVONNE THOMAS (Escriba en letra de molde)	Print Name _Morgan Will (Escriba en letra de molde)
Date (Fecha) 3/20/20/9	Date (Fecha) 3 (14/19
ee (Cuota)	
Free (Gratis)	
Prior to acting on an application, the Dir	ector may request additional information.

9-9-2013

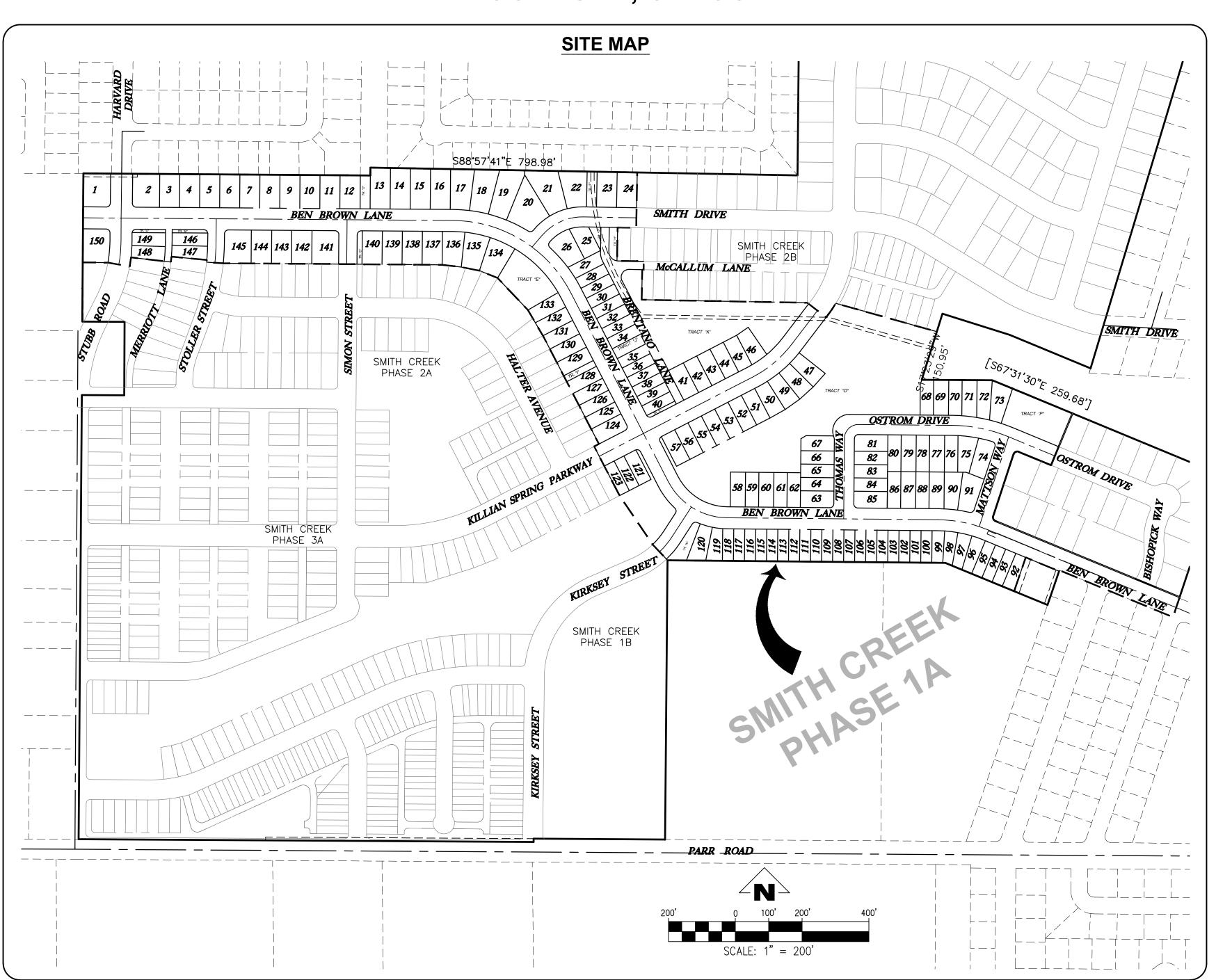
(Antes de actuar sobre una solicitud, el Director podrá solicitar información adicional.)

RECEIVED

Page 1 of 2

SMITH CREEK PHASE 1A

151-LOT SUBDIVISION TAX MAP 52W13 -TL 100, TAX MAP 52W13BD -TL 100 & 200 **TAX MAP 51W18BC - TL 4000** WOODBURN, OREGON



PROJECT CONTACTS

<u>OWNER:</u>

STAFFORD LAND COMPANY 485 SOUTH STATE STREET LAKE OSWEGO, OREGON 97034 CONTACT: MORGAN WILL (503) 305-7647

SURVEYOR:

BARKER SURVEYING 3657 KASHMIR WAY SE SALEM, OREGON 97317 CONTACT: GREGORY L. WILSON (503) 588-8800 (P) (503) 363-2469 (F)

GEOTECHNICAL ENGINEER:

GEOPACIFIC 14835 SW 72nd AVENUE PORTLAND, OR 97224 CONTACT: JAMES D. IMBRIE (503) 598-8445 (P)

(503) 941-9281 (F)

CIVIL ENGINEER:

EMERIO DESIGN, LLC 6445 SW FALLBROOK PL. STE. 100 BEAVERTON, OR 97008 CONTACT: ROY W. HANKINS, P.E. (503) 746-8812 (P) (503) 639-9592 (F)

SITE DATA

32.90 AC ZONING: RSN

PARCEL 2 OF LOT: PARTITION PLAT 2018-075

PAPER SCALE NOTE

THESE PLANS ARE FULL SIZED ON 22"X34" PAPER, IF 11"X17" SCALE

COVER SHEET AND INDEX OF DRAWINGS

CONSTRUCTION NOTES & LEGEND

TYPICAL STREET SECTIONS

EXISTING CONDITIONS AND DEMOLITION PLAN - WES

EXISTING CONDITIONS AND DEMOLITION PLAN - EAST

PRELIMINARY PLAT - WEST

PRELIMINARY PLAT - EAST

GRADING PLAN -WEST GRADING PLAN —EAST

TRACT 'K' WATER QUALITY FACILITY PLAN & PROFILE

TRACT 'K' WATER QUALITY FACILITY DETAILS

BRENTANO LN & STORM SD-02 PLAN & PROFILE

KILLIAN SPRING PARKWAY & STORM SD-03, SD-04 PLAN & PROFIL

OWN LN & STORM SD-05 STA 16+50 TO 23+50 PLAN & PROFILE

BROWN LN & STORM SD-05 STA 8+50 TO 16+50 PLAN & PROFILE ST, SMITH DR & STORM SD, SD-06 PLAN & PROFILE

'P' WATER QUALITY FACILITY DETAILS

OSTROM DR & STORM SD-10 STA 12+00 TO 19+50 PLAN & PROFILE

BEN BROWN LN & STORM SD-12 STA 31+50 TO 39+50 PLAN & PROFILE

THOMAS WAY & SD-10. SD-12 STA 9+50 TO 13+50 PLAN & PROFILE

KIRKSEY ST, MERRIOTT LN & STORM SD-13, SD PLAN & PROFILE

PATH SEGMENT - C STA 9+50 TO 15+80 PLAN & PROFILE

CURB RETURN DETAILS

34 CURB RETURN DETAILS

35 CURB RETURN DETAILS

CURB RETURN DETAILS

37 CURB RETURN DETAILS

CURB RETURN DETAILS 39 SAN. SS-A, SS-B STA 0+00 TO 4+00 & WATER LINE PLAN & PROFILE

40 SANITARY SS-B STA 4+00 TO 12+50 & WATER LINE PLAN & PROFILE

SANITARY SS-B STA 12+50 TO 19+13 & WATER LINE PLAN & PROFILE

42 SANITARY SS-C, SS- H, SS-D & SIMON WATER LINE PLAN & PROFILE

43 SANITARY SS-E, SS- F & WATER LINE PLAN & PROFILE

44 SANITARY SS-MM & WATER LINE PLAN & PROFILE

SANITARY SS-00 & WATER LINE PLAN & PROFILE

46 SANITARY SS-NN & WATER LINE PLAN & PROFILE

SANITARY SS-PP STA 0+00 TO 2+44 & WATER LINE PLAN & PROFILE SANITARY SS-QQ STA 0+00 TO 6+00 & WATER LINE PLAN & PROFILE

49 SANITARY SS-QQ STA 6+00 TO 10+09 & WATER LINE PLAN & PROFILE

STREET SIGNAGE & STRIPING PLAN

51 STREET SIGNAGE DETAILS

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

56 CONSTRUCTION DETAILS

EC1 1200-C COVER SHEET

EC2 DEMOLITION & EROSION & SEDIMENT CONTROL PLAN

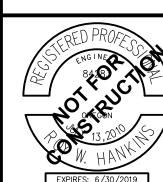
EC3 DEMOLITION & EROSION & SEDIMENT CONTROL PLAN

EC4 STREET GRADING, EROSION & SEDIMENT CONTROL PLAN

EC5 STREET GRADING, EROSION & SEDIMENT CONTROL PLAN

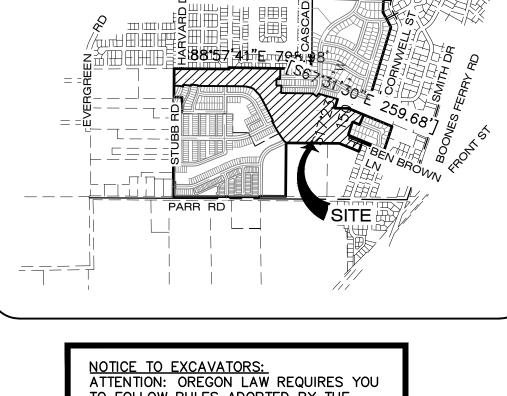
EC6 EROSION & SEDIMENT CONTROL DETAILS EC7 EROSION & SEDIMENT CONTROL DETAILS INDE AND AWING HE DR S 0





SHEET

56



VICINITY MAP

(NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503)-232-1987).

POTENTIAL UNDERGROUND FACILITY OWNERS Dig Safely.

Call the Oregon One-Call Center DIAL 811 or 1-800-332-2344

EMERGENCY TELEPHONE NUMBERS

NW NATURAL GAS

FRONTIER

PROPOSED PUBLIC ROW

AFTER HOURS

503-226-4211 Ext.4313

503-226-4211 503-464-7777

1-800-491-0118 503-982-5247

CITY OF WOODBURN ENGINEERING 503-982-5218 WOODBURN WATER DEPARTMENT WOODBURN NON-EMERGENCY 503-982-2345

THIS DESIGN COMPLIES WITH ORS 92.044 (7) IN THAT NO UTILITY INFRASTRUCTURE IS DESIGNED TO BE WITHIN ONE (1) FOOT OF A SURVEY MONUMENT LOCATION SHOWN ON A SUBDIVISION OR PARTITION PLAT. NO DESIGN EXCEPTIONS NOT FINAL FIELD LOCATION CHANGES SHALL BE PERMITTED IF THAT CHANGE WOULD CAUSE ANY UTILITY INFRASTRUCTURE TO BE PLACED WITHIN THE PROHIBITED

VERTICAL DATUM

THE VERTICAL DATUM FOR THIS SURVEY IS BASED UPON POST-PROCESSED GPS STATIC OBSERVATION OF INDEPENDENT CONTROL, PROCESSED THROUGH OPUS, DATUM IS NAVD 88, CONVERTED TO NGVD 29 THROUGH THE VERTCON PROCESS TOOL.

IMPERVIOUS AREA SUMMARY

EXISTING PRIVATE PROPERTY = 0 SF(0.00 AC)(0.00 AC)EXISTING PUBLIC ROW = 0 SF

TOTAL EXISTING (0.00 AC) = 0 SF

PROPOSED PRIVATE PROPERTY = 947,187 SF (21.74 AC)

TOTAL PROPOSED = 1,286,924 SF (29.54 AC)

= 339,737 SF (7.80 AC)

PRIVATE AGENCIES HAVING JURISDICTION.

- 3. ALL MATERIALS AND WORKMANSHIP FOR FACILITIES IN STREET RIGHT-OF-WAY OR EASEMENTS SHALL CONFORM TO THE APPLICABLE REGULATIONS, SPECIFICATIONS, CODES AND REQUIREMENTS OF THE CITY OF WOODBURN, MARION COUNTY, AMERICAN PUBLIC WORK ASSOCIATION OREGON CHAPTER (A.P.W.A.) STANDARD PLANS AND SPECIFICATIONS, THE OREGON SPECIFICATIONS STATE PLUMBING CODE, THE UNIFORM BUILDING CODE, THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY, AND THE OREGON HEALTH DIVISION (OHD)
- UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DIRECTOR, CONSTRUCTION OF ALL PUBLIC FACILITIES SHALL BE DONE BETWEEN 7:00 A.M. AND 6:00 P.M., MONDAY THROUGH
- 5. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DRAWINGS INCLUDING SUCH INCIDENTALS AS MAY BE NECESSARY TO MEET APPLICABLE AGENCY REQUIREMENTS AND PROVIDE A COMPLETED PROJECT.
- CONTRACTOR TO NOTIFY CITY, COUNTY, ODOT AND ALL UTILITY COMPANIES A MINIMUM OF 48 HOURS (2 BUSINESS DAYS) PRIOR TO START OF CONSTRUCTION BY CALLING "ONE CALL" AT 246-6699 AND ALL OTHER APPLICABLE AGENCIES, AND SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF ORS 757.541 TO 757.571.
- ANY INSPECTION BY THE CITY, COUNTY OR OTHER AGENCIES SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND AGENCY REQUIREMENTS.
- CONTRACTOR SHALL ERECT AND MAINTAIN BARRICADES, WARNING SIGNS, TRAFFIC CONES PER CITY, COUNTY AND ODOT REQUIREMENTS IN ACCORDANCE WITH THE MUTCD (INCLUDING OREGON AMENDMENTS). ACCESS TO DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES. ALL TRAFFIC CONTROL MEASURES SHALL BE APPROVED AND IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITY.
- RECORD DRAWINGS. THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF APPROVED DRAWINGS ON THE CONSTRUCTION SITE AT ALL TIMES WHEREON HE WILL RECORD ANY APPROVED DEVIATIONS IN CONSTRUCTION FROM THE APPROVED DRAWINGS, AS WELL AS THE STATION LOCATIONS AND DEPTHS OF ALL EXISTING UTILITIES ENCOUNTERED. THESE FIELD RECORD DRAWINGS SHALL BE KEPT UP TO DATE AT ALL TIMES AND SHALL BE AVAILABLE FOR INSPECTION BY THE CITY UPON REQUEST.
- 10. UPON COMPLETION OF CONSTRUCTION OF PUBLIC FACILITIES, CONTRACTOR SHALL SUBMIT A CLEAN SET OF FIELD RECORD DRAWINGS CONTAINING ALL AS-BUILT INFORMATION TO THE DESIGN ENGINEER FOR USE IN THE PREPARATION OF AS-BUILT DRAWINGS FOR SUBMITTAL
- 11. THE CONTRACTOR SHALL SUBMIT A SUITABLE MAINTENANCE BOND PRIOR TO FINAL PAYMENT WHERE REQUIRED BY PUBLIC AND/OR PRIVATE AGENCIES HAVING JURISDICTION.
- 12. CONTRACTOR SHALL CONFORM TO DEQ STORMWATER PERMIT NO. 1200C FOR CONSTRUCTION ACTIVITIES WHERE 1 ACRES OR MORE ARE DISTURBED.
- 13. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION OR VARIANCE FROM THESE PLANS. ANY VARIATIONS FROM THESE PLANS SHALL BE PROPOSED ON CONSTRUCTION FIELD PRINTS AND TRANSMITTED TO THE ENGINEER AND THE CITY FOR APPROVAL.

EXISTING UTILITIES & FACILITIES

- 14. THE EXISTENCE AND APPROXIMATE LOCATION OF KNOWN UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE DRAWINGS WERE DETERMINED BY A SEARCH OF AVAILABLE PUBLIC RECORDS AND/OR FIELD SURVEYS. THE LOCATIONS AND DEPTHS OF THESE UTILITIES ARE FROM THESE RECORDS AND ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR. NO RESPONSIBILITY IS ASSUMED BY EITHER THE OWNER, THE ENGINEER, NOR THE UTILITY COMPANIES FOR ACCURACY OF COMPLETENESS OF SUCH RECORDS.
- 15. ATTENTION: OREGON LOW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987).
- 16. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THIS SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THESE DRAWINGS, SHALL BE REPAIRED OR REPLACE AT THE CONTRACTOR'S EXPENSE. EXISTING SURFACE FEATURES AND FENCING SHALL BE REPLACE IN KIND.
- 17. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES LOCATED PRIOR TO STARTING ANY
- 18. CONTRACTOR SHALL POTHOLE TO VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION SHALL PROVIDE LAND DEVELOPMENT CONSULTANTS 72-HOURS NOTICE OF ANY POTENTIAL CONFLICTS.
- 19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE RELOCATION OF BURIED AND OVERHEAD UTILITIES.
- 20. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AND ELEVATIONS TO HIS OR HER SATISFACTION.
- 21. DEMOLITION WORK SHALL INCLUDE REMOVAL OF ALL STUMPS AND VEGETATION DEBRIS. CONFORMANCE WITH ALL REGULATIONS AND PERMITTING REQUIREMENTS FOR SUCH WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 22. ALL OPEN CUTTING OF EXISTING STREETS SHALL BE PATCHED WITH A.C., COLD (TEMPORARY) OR HOT MIX, AT THE CLOSE OF EACH WORK DAY. TRENCHES SHALL NOT BE LEFT OPEN OVERNIGHT
- 23. CONTRACTOR SHALL LOCATE AND MARK ALL EXISTING PROPERTY AND STREET MONUMENTS PRIOR TO CONSTRUCTION. ANY MONUMENTS DISTURBED DURING THE CONSTRUCTION OF THIS 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.
- 24. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES WHERE NEW FACILITIES CROSS. CONTRACTOR SHALL BE RESPONSIBLE FOR EXPOSING POTENTIAL UTILITY CONFLICTS FAR ENOUGH AHEAD OF CONSTRUCTION TO MAKE NECESSARY GRADE MODIFICATIONS WITHOUT DELAYING THE WORK. IF GRADE MODIFICATION IS NECESSARY. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER, AND THE DESIGN ENGINEER SHALL OBTAIN APPROVAL FROM THE CITY ENGINEER PRIOR TO CONSTRUCTION. ALL UTILITY CROSSINGS SHALL BE POTHOLED AS NECESSARY PRIOR TO EXCAVATING OR BORING TO ALLOW THE CONTRACTOR TO PREVENT GRADE OR ALIGNMENT CONFLICTS.
- 25. ALL EXISTING FACILITIES SHALL BE MAINTAINED IN-PLACE BY THE CONTRACTOR UNLESS OTHERWISE SHOWN OR DIRECTED. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO SUPPORT, MAINTAIN, OR OTHERWISE PROTECT EXISTING UTILITIES AND OTHER FACILITIES AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR TO LEAVE EXISTING FACILITIES IN ON

- EQUAL OR BETTER-THAN-ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY
- 26. UTILITIES, OR INTERFERING PORTIONS OF UTILITIES, THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK. THE CONTRACTOR SHALL PLUG THE REMAINING EXPOSED ENDS OF ABANDONED UTILITIES.
- 27. CONTRACTOR SHALL REMOVE ALL EXISTING SIGNS, MAILBOXES, FENCES, LANDSCAPING, ETC., AS REQUIRED TO AVOID DAMAGE DURING CONSTRUCTION AND REPLACE THEM TO EXISTING OR BETTER CONDITION.
- 28. ANY SEPTIC TANKS ENCOUNTERED DURING CONSTRUCTION SHALL BE PUMPED OUT. CONTRACTOR SHALL BREAK BOTTOM OF TANK AND BACKFILL WITH PEA GROVEL UNLESS OTHERWISE REQUIRED BY THE GOVERNING PUBLIC AGENCY. SEPTIC TANK REMOVAL TO BE IN ACCORDANCE WITH COUNTY SANITARIAN REQUIREMENTS.
- 29. ANY WELLS ENCOUNTERED SHALL BE ABANDONED PER STATE OF OREGON WATER RESOURCES DEPARTMENT REQUIREMENTS.
- 30. ANY FUEL TANKS ENCOUNTERED SHALL BE REMOVED AND DISPOSED OF PER STATE OF OREGON DEQ REQUIREMENTS. BACKFILL WITH COMPACTED GRANULAR MATERIAL.

GRADING, PAVING & DRAINAGE NOTES

- 31. CONTRACTOR TO REVIEW THE MOST CURRENT SOILS REPORT PREPARED BY GEO PACIFIC AND 58. SIDEWALKS AND DRIVEWAYS SHALL BE CONSTRUCTED TO THE FULL THICKNESS SHOWN. CONFORM TO ALL RECOMMENDATIONS LISTED IN THE REPORT.
- 32. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MANAGING CONSTRUCTION ACTIVITIES TO INSURE THAT PUBLIC STREETS AND RIGHT-OF-WAYS ARE KEPT CLEAN OF MUD. DUST OR DEBRIS. DUST ABATEMENT SHALL BE MAINTAINED BY ADEQUATE WATERING OF THE SITE BY
- 33. UNLESS OTHERWISE NOTED, ALL GRADING, ROCKING AND PAVING TO CONFORM TO THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION 2018.
- 34. CLEAR AND GRUB WITHIN WORK LIMITS ALL SURFACE VEGETATION, TREES, STUMPS, BRUSH, ROOTS, ETC. DO NOT DAMAGE OR REMOVE TREES EXCEPT AS APPROVED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS. PROTECT ALL ROOTS TWO INCHES IN DIAMETER OR LARGER OF TREES TO BE SAVED.
- 35. STRIP WORK LIMITS PER THE GEOTECHNICAL RECOMMENDATIONS, REMOVING ALL ORGANIC MATERIAL WHICH CANNOT BE COMPACTED INTO A STABLE MASS. ALL TREES, BRUSH AND DEBRIS ASSOCIATED WITH CLEARING, STRIPPING OR GRADING SHALL BE REMOVED AND DISPOSED OF OFF-SITE.
- 36. IMMEDIATELY FOLLOWING FINE GRADING OPERATIONS, COMPACT SUBGRADE TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR). SUBGRADE MUST BE INSPECTED AND APPROVED BY THE CITY PRIOR TO PLACING EMBANKMENTS OR BASE ROCK.
- 37. ALL FILLS WITHIN PUBLIC RIGHT-OF-WAYS AND EASEMENTS SHALL BE ENGINEERED; ADDITIONALLY, ANY FILLS OUTSIDE OF PUBLIC RIGHT-OF-WAYS WHICH ARE OVER 2 FEET IN DEPTH SHALL BE ENGINEERED. ENGINEERED FILLS SHALL BE CONSTRUCTED IN 6" LIFTS. EACH LIFT SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD (MODIFIED PROCTOR).
- 38. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, STRAIGHT GRADES SHALL BE RUN BETWEEN ALL FINISH GRADE ELEVATIONS AND/OR FINISH CONTOUR LINES SHOWN. FINISH PAVEMENT GRADES AT TRANSITION TO EXISTING PAVEMENT SHALL MATCH EXISTING PAVEMENT GRADES OR BE FEATHERED PAST JOINTS WITH EXISTING PAVEMENT AS REQUIRED TO PROVIDE A SMOOTH, FREE DRAINING SURFACE.
- 39. ALL PROPOSED ELEVATIONS SHOWN SHALL BE CONSIDERED TO BE FINISH SURFACE ELEVATIONS, INCLUDING TOPSOIL STRIPPINGS, UNLESS OTHERWISE NOTED.
- 40. CRUSHED ROCK SHALL CONFORM TO THE REQUIREMENTS OF SECTION 00641 (AGGREGATE SUBBASE, BASE, AND SHOULDERS) OF THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION 2018. COMPACT TO 95% OF THE MAXIMUM DRY DENSITY. WRITTEN COMPACTION TEST RESULTS MUST BE RECEIVED BY THE CITY PRIOR TO SCHEDULING
- 41 A.C. PAVEMENT SHALL CONFORM TO THE REQUIREMENTS OF SECTION 00744 (ASPHALT CONCRETE PAVEMENT) OF THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION 2018. A.C. PAVEMENT SHALL BE COMPACTED TO A MINIMUM OF 92% OF MAXIMUM DENSITY AS DETERMINED BY THE RICE STANDARD METHOD.
- 42. ALL EXISTING OR CONSTRUCTED MANHOLES. CLEAN OUTS, MONUMENTS. GAS VALVES. WATER VALVES AND SIMILAR STRUCTURES SHALL BE ADJUSTED TO MATCH FINISH GRADE OF THE PAVEMENT, SIDEWALK, LANDSCAPED AREA OR MEDIAN STRIP WHEREIN THEY LIE.
- 43. UNLESS OTHERWISE SHOWN ON THE DRAWINGS, NO CUT OR FILL SLOPES SHALL BE CONSTRUCTED STEEPER THAN 2H: 1V.
- 44. ALL PLANTER AREAS SHALL BE BACKFILLED WITH APPROVED TOP SOIL MINIMUM 8" THICK. STRIPPING MATERIALS SHALL NOT BE USED FOR PLANTER BACKFILL.
- 45. CONTRACTOR SHALL HYDROSEED ALL EXPOSED SLOPES AND DISTURBED AREAS WHICH ARE NOT SCHEDULED TO BE LANDSCAPED. 46. GRADING SHOWN ON THE DRAWINGS IS CRITICAL TO FUNCTIONING OF DETENTION SYSTEM
- AND SHALL BE STRICTLY FOLLOWED. 47. THE REMOVAL OF UNSUITABLE MATERIAL SHALL BE DONE IN CONSULTATION WITH THE SOILS ENGINEER. UNSUITABLE MATERIAL SHALL BE DISPOSED OF AS DETERMINED BY THE SOILS

ENGINEER. IF SUCH MATERIAL IS REMOVED FROM THE SITE IT SHALL BE DONE AT THE

CONTRACTOR'S SOLE EXPENSE.

STREET SECTION.

- 48. CONTRACTOR TO HAVE SUFFICIENT NUMBER OF COMPACTION TESTS PERFORMED ON EACH LIFT TO MEET THE CITY OF WOODBURN REQUIREMENTS AT THE OWNER'S EXPENSE. TESTS SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY AND WRITTEN RESULTS SHALL BE PROVIDED TO THE APPROPRIATE AGENCY. SHOULD COMPACTION REQUIREMENTS NOT BE MET, CONTRACTOR SHALL RE-COMPACT THE FILL AND PAY ALL ADDITIONAL TESTING COSTS. TESTS SHALL BE TOKEN AT INTERVALS NOT GREATER THAN EVERY 100' IN THE PUBLIC
- 49. THE PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ALL CATCH BASINS, CLEANOUTS, VAULTS, ETC. THAT ARE AFFECTED BY CONSTRUCTION AND/OR FILL TO FINISH GRADE. STORM DRAIN INLET STRUCTURES SHALL BE ADJUSTED SO WATER FLOWS INTO THE STRUCTURE WITHOUT PONDING WATER.
- 50. DURING COMPACTION OF AGGREGATE BASE, MATERIALS SHALL BE MAINTAINED WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. THE CONTRACTOR SHALL BEGIN COMPACTION OF EACH LAYER IMMEDIATELY AFTER THE MATERIAL IS SPREAD, AND CONTINUE UNTIL A DENSITY OF NOT LESS THAN 95% OF AASHTO T-180 HAS BEEN ACHIEVED.
- 51. THE SURFACE OF THE AGGREGATE BASE SHALL BE WITHIN -0.04 FOOT TO +0.02 FOOT OF PLAN ELEVATION AT ANY ONE POINT. THE FINAL SURFACE SHALL NOT DEVIATE AT ANY POINT MORE THAN 0.04 FOOT FROM THE BOTTOM OF A 12-FOOT STRAIGHTEDGE LAID IN ANY DIRECTION ON THE SURFACE OF THE ROADWAY.
- 52. ASPHALTIC CONCRETE PAVEMENTS WHICH DO NOT MEET SUBSTANTIAL COMPLIANCE REQUIREMENTS FOR COMPACTION. AND ARE DEEMED BY THE ENGINEER TO BE NOT SUITABLE

FOR USE, WILL BE REJECTED. ANY REJECTED MATERIAL SHALL BE REMOVED. NO PAYMENT WILL BE MADE FOR THE REJECTED MATERIAL, OR FOR REMOVAL OF THE REJECTED MATERIAL.

53. ANY PAVEMENT WITH A RICE STANDARD DENSITY LESS THAN 92% SHALL BE DEEMED UNSUITABLE. AND WILL BE REJECTED. ANY REJECTED MATERIAL SHALL BE REMOVED AND REPLACED AT THE EXPENSE OF THE CONTRACTOR.

CURBS & SIDEWALKS

- 54. UNLESS OTHERWISE SHOWN OR INDICATED ON THE DRAWINGS, 6-INCHES NOMINAL CURB EXPOSURE USED FOR DESIGN OF ALL PARKING LOT AND STREET GRADES.
- 55. CONTRACTOR SHALL PROVIDE 0 MINIMUM 2 WEEP HOLES PER LOT TO PROVIDE FOR LOT DRAINAGE. WEEP HOLES SHALL ALSO BE PROVIDED AS REQUIRED FOR ADDITIONAL DRAIN PIPES SHOWN ON THE DRAWINGS. CONTRACTOR SHALL INSTALL DRAIN PIPES FROM EACH WEEP HOLE TO THE BOCK OF SIDEWALK LOCATION PRIOR TO ACCEPTANCE OF THE CURBING BY THE CITY. WEEP HOLES INSTALLED IN EXISTING CURBS SHALL BE CORE DRILLED.
- 56. CURBS SHALL BE STAMPED WITH ON 'S' OR A 'W' AT THE POINT WHERE EACH SANITARY SEWER LATERAL OR WATER SERVICE LATERAL CROSSES THE CURB, RESPECTIVELY. LETTERS SHALL BE A MINIMUM OF 2-INCHES HIGH.
- 57. CONTRACTOR SHALL CONSTRUCT HANDICAP ACCESS ROMPS AT ALL INTERSECTIONS IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS
- 59. WHERE TRENCH EXCAVATION REQUIRES REMOVAL OF PCC CURBS AND/OR SIDEWALKS, THE CURBS AND/OR SIDEWALKS SHALL BE SAW CUT AND REMOVED AT A TOLLED JOINT UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE CITY. THE SOW CUT LINES SHOWN THE DRAWINGS ARE SCHEMATIC AND NOT INTENDED TO SHOW THE EXACT ALIGNMENT OF SUCH

PIPED UTILITIES

- 60. CONTRACTOR SHALL COORDINATE AND PAY ALL COSTS ASSOCIATED WITH CONNECTING TO EXISTING WATER, SANITARY SEWER AND STORM SEWER FACILITIES.
- 61. UNLESS OTHERWISE NOTED. MATERIALS AND WORKMANSHIP FOR WATER, SANITARY SEWER AND STORM DRAIN SHALL CONFORM TO OREGON APWA STANDARD SPECIFICATIONS, AND CITY OF WOODBURN REQUIREMENTS.
- 62. BEDDING AND BACKFILL. ALL PIPES SHALL BE BEDDED WITH MINIMUM 6-INCHES OF 3/4" MINUS CRUSHED ROCK BEDDING AND BACKFILLED WITH COMPACTED 3/4" MINUS CRUSHED ROCK IN THE PIPE ZONE (CRUSHED ROCK SHALL EXTEND A MINIMUM OF 12-INCHES OVER THE TOP OF THE PIPE IN ALL CASES). CRUSHED ROCK TRENCH BACKFILL SHALL BE USED UNDER ALL IMPROVED AREAS, INCLUDING SIDEWALKS.
- 63. CONTRACTOR SHALL ARRANGE FOR AND PAY ALL COSTS TO ABANDON EXISTING SEWER AND WATER SERVICES NOT SCHEDULED TO REMAIN IN SERVICE.
- 64. ALL PIPED UTILITIES ABANDONED IN PLACE SHALL HAVE ALL OPENINGS CLOSED WITH CONCRETE PLUGS WITH A MINIMUM LENGTH EQUAL TO 2 TIMES THE DIAMETER OF THE
- 65. THE END OF ALL UTILITY STUBS SHALL BE MARKED WITH A 2 X 4 PAINTED WHITE AND WIRED TO PIPE STUB. THE TYPE OF UTILITY SHALL BE CLEARLY LABELED ON THE 2 X 4, I.E. "SANITARY SEWER", "STORM DRAIN".
- 66. CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT AND FACILITIES REQUIRED FOR TESTING ALL UTILITY PIPING IN ACCORDANCE WITH CITY CONSTRUCTION SPECIFICATIONS.
- 67. TRACER WIRE. ALL NONMETALLIC WATER, SANITARY AND STORM SEWER PIPING SHALL HAVE AN ELECTRICALLY CONDUCTIVE INSULATED 12 GAUGE COPPER TRACER WIRE THE FULL LENGTH OF THE INSTALLED PIPE, USING BLUE WIRE FOR WATER AND GREEN FOR STORM AND SANITARY PIPING. TRACER WIRE SHALL BE EXTENDED UP INTO ALL VALVE BOXES, AND MANHOLES AND CATCH BASINS. TRACER WIRE PENETRATIONS INTO MANHOLES SHALL BE WITHIN 18 INCHES OF THE RIM ELEVATION AND ADJACENT MANHOLE STEPS. THE TRACER WIRE SHALL BE TIED TO THE TOP MANHOLE STEP OR OTHERWISE SUPPORTED TO ALLOW RETRIEVAL FROM THE OUTSIDE OF THE MANHOLE.
- 68. DETECTIBLE OR NON-DETECTABLE ACID AND ALKALI RESISTANT SAFETY WARNING TAPE SHALL BE PROVIDED ALONG THE FULL LENGTH OF ALL SANITARY SEWER AND STORM DRAIN LATERALS AND ALONG ALL WATER, SANITARY SEWER AND STORM DRAIN MAINLINE SEGMENTS NOT LOCATED UNDER SIDEWALKS OR PAVED PORTIONS OF PUBLIC STREETS. UNDERGROUND WARNING TAPE SHALL BE CONTINUOUS THE ENTIRE LENGTH OF SERVICE LATERALS INSTALLED FROM THE MAINLINE TO THE BACK OF THE PUE 6 TO 12" ABOVE THE PIPE.
- 69. NO TRENCHES IN ROADS OR DRIVEWAYS SHALL BE LEFT IN ON OPEN CONDITION OVERNIGHT. ALL SUCH TRENCHES SHALL BE CLOSED BEFORE THE END WORK DAY AND NORMAL TRAFFIC FLOWS RESTORED.

WATER LINES

- 70. CITY FORCES TO OPERATE ALL VALVES, INCLUDING FIRE HYDRANTS, ON EXISTING PUBLIC MAINS.
- 71. ALL WATER MAINS SHALL BE CLASS 52 DUCTILE IRON PIPE. ALL FITTINGS 4 INCHES THROUGH 24 INCHES IN DIAMETER SHALL BE DUCTILE IRON FITTINGS IN CONFORMANCE WITH AWWA C-153 OR AWWA C-110. THE MINIMUM WORKING PRESSURE FOR ALL MJ COST IRON OR DUCTILE IRON FITTINGS 4 INCHES THROUGH 24 INCHES IN DIAMETER SHALL BE 350 PSI FOR MJ FITTINGS AND 250 PSI FOR FLANGED FITTINGS.
- 72. UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER, ALL VALVES SHALL BE FLANGE CONNECTED TO ADJACENT TEES OR CROSSES.
- 73. WATER SERVICE PIPE ON THE PUBLIC SIDE OF THE METER SHALL BE TYPE K SOFT COPPER TUBING CONFORMING TO ASTM B-88. 74. UNLESS OTHERWISE NOTED, WATER SERVICE PIPE ON THE PRIVATE SIDE OF THE METER
- SHALL BE SCHEDULE 40 PVC. COMPLY WITH MARION COUNTY PLUMBING PERMIT. 75. DOMESTIC AND FIRE BACKFLOW PREVENTION DEVICES AND VAULTS SHALL CONFORM TO

REQUIREMENTS OF PUBLIC AND/OR PRIVATE AGENCIES HAVING JURISDICTION.

- 76. CONTRACTOR SHALL INSTALL TEMPORARY PLUG AND BLOWOFF AS REQUIRED AT THE END OF WATERLINE OR OTHER LOCATIONS FOR FLUSHING, TESTING, AND CHLORINATION AS NEEDED.
- 77. THE WORK SHALL BE PERFORMED IN A MANNER DESIGNATED TO MAINTAIN WATER SERVICE TO BUILDINGS SUPPLIED FROM THE EXISTING WATERLINES. IN NO CASE SHALL SERVICE TO ANY MAIN LINE OR BUILDING BE INTERRUPTED FOR MORE THAN FOUR (4) HOURS IN ANYONE DAY. CONTRACTOR SHALL NOTIFY THE CITY AND ALL AFFECTED RESIDENTS AND BUSINESSES A MINIMUM OF 24 BUSINESS HOURS (ONE (1) BUSINESS DAY) PRIOR TO ANY INTERRUPTION OF SERVICE.
- 78. SANITARY SEWER LATERAL CROSSINGS. WHERE SANITARY SEWER LINES CROSS ABOVE OR WITH 18-INCHES VERTICAL SEPARATION BELOW A WATERLINE, SEWER MAINS AND/OR LATERAL SHALL BE REPLACED WITH C-900 PVC (DRI8) PIPE AT THE CROSSING. CENTER ONE FULL LENGTH (20') OF PVC PIPE CONFORMING TO AWWA C-900 (DR 18) AT THE CROSSING. CONNECT TO THE EXISTING SEWER LINES WITH APPROVED RUBBER COUPLINGS.

- 79. ALL WATER LINE PIPE SHALL HAVE A MINIMUM OF 36 INCHES OF COVER TO FINISH GRADE. BACKFILL MUST BE COMPACTED TO A DENSITY OF 92% IN IMPROVED OR STRUCTURAL FILL AREAS. MINIMUM COMPACTION IN UNPAVED NON-STRUCTURAL FILL AREAS IS 90%. COMPACTION IS TO BE PER AASHTO T -180.
- 80. ALL TEES, BENDS AND ENDS OF WATER LINES SHALL BE RESTRAINED WITH MECHANICAL JOINTS (MEGALUG SERIES 1100), OR APPROVED EQUAL. USE FIELD LOCK GASKETS IN ALL PUSH-ON PIPE JOINTS.
- B1. ALL WATER LINES SHALL BE THOROUGHLY FLUSHED AND CHLORINATED. POTABLE WATER TEST SHALL BE APPROVED BY THE OREGON STATE HEALTH DEPORTMENT AND CITY OF WOODBURN PRIOR TO ANY METERED SERVICE HOOKUP. CONTRACTOR SHALL INSTALL TEMPORARY PLUG AND BLOWOFF AS REQUIRED AT THE END OF WATERLINE FOR FLUSHING TESTING AND CHLORINATION. WATER LINES SHALL BE PRESSURE TESTED PER AWWA C-600 AS LISTED BY AWWA. WATER LINE DISINFECTION SHALL CONFORM TO AWWA C-601 AND CITY OF WOODBURN REQUIREMENTS.
- 82. PROVIDE TRACE WIRE FOR ALL MAINS.
- 83. ALL WATER MAINS SHALL BE RESTRAINED MECHANICAL JOINTS, FIELD-LOCK GASKETS AND THRUST BLOCKS AS SPECIFIED. ALL FITTINGS SHALL BE RESTRAINED.
- 84. MINIMUM 18LF RESTRAINED PIPE. ALL MECHANICAL JOINTS SHALL BE RESTRAINED WITH MEGALUG SERIES 1100, OR APPROVED EQUAL. USE FIELD LOCK GASKETS IN ALL PUSH-ON PIPE JOINTS A MINIMUM OF 18LF FROM FITTING.
- 85. 8" D.I. 45" MJ BENDS SHALL BE INSTALLED WITH RETAINER GLANDS AND THRUST BLOCKS, AS SPECIFIED, ALL FITTINGS SHALL BE RESTRAINED.
- 86. 8" D.I. 45° FLG BENDS SHALL BE INSTALLED WITH RETAINER GLANDS AND THRUST BLOCKS. AS SPECIFIED. ALL FITTINGS SHALL BE RESTRAINED.
- 87. 8" D.I. MJ TEE FITTINGS SHALL BE RESTRAINED WHEN INSTALLED.
- 88. 4" STANDARD BLOWOFF ASSEMBLY (TEMPORARY FOR TESTING). SEE DETAIL 5000-5. BLOWOFF ASSEMBLY SHALL BE REMOVED PRIOR TO FINAL CONNECTION TO EXISTING VALVE.
- 89. CONNECT NEW WATER MAIN TO EXISTING VALVE AFTER ALL TESTING IN NEW WATER MAIN IS COMPLETED AND APPROVED BY THE CITY. PRIOR TO FINAL CONNECTION CONTRACTOR SHALL VERIFY THAT EXISTING VALVE IS NOT LEAKING

STORM DRAINS

- 90. STORM DRAIN PIPE MATERIALS TO CONFORM TO THE CONSTRUCTION DRAWINGS AND CITY REQUIREMENTS. CONTRACTOR SHALL USE UNIFORM PIPE MATERIAL ON EACH PIPE RUN BETWEEN STRUCTURES UNLESS OTHERWISE DIRECTED OR APPROVED. JOINTED HDPE PIPE SHALL NOT BE USED FOR SLOPES EXCEEDING TEN PERCENT (10%).
- 91. CATCH BASINS AND JUNCTION BOXES SHALL BE SET SQUARE WITH BUILDINGS OR WITH THE EDGE OF THE PARKING LOT OR STREET WHEREIN THEY LIE. STORM DRAIN INLET STRUCTURES AND PAVING SHALL BE ADJUSTED SO WATER FLOWS INTO THE STRUCTURE WITHOUT PONDING WATER.
- 92. UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER, ALL STORM DRAIN CONNECTIONS SHALL BE BY MANUFACTURED TEES.
- 93. UNLESS OTHERWISE SHOWN OR DIRECTED, INSTALL STORM DRAIN PIPE IN ACCORDANCE WITH MANUFACTURES INSTALLATION GUIDELINES.
- 94. MANDREL TESTING. CONTRACTOR SHALL CONDUCT DEFLECTION TEST OF FLEXIBLE STORM DRAIN PIPES (I.E. HDPE, PVC, ETC.) BY PULLING AN APPROVED MANDREL THROUGH THE COMPLETED PIPE LINE FOLLOWING TRENCH COMPACTION. THE DIAMETER OF THE MANDREL SHALL BE 95% OF THE INITIAL PIPE DIAMETER. TEST SHALL BE CONDUCTED NOT MORE THAN 30 DAYS AFTER THE TRENCH BACKFILLING AND COMPACTION HAS BEEN COMPLETED
- 95. CLEANING. PRIOR TO MANDREL TESTING OR FINAL ACCEPTANCE, FLUSH AND CLEAN ALL DRAINS, AND REMOVE ALL FOREIGN MATERIAL FROM THE MAINLINES, MANHOLES AND CATCH BASINS.
- 96. STORM DRAIN PIPE SHALL BE AS SHOWN ON THE PLANS.
- 97. CONCRETE AND PVC PIPE SHALL BE LAID WITH RUBBER RING JOINTS. ALL STORM PIPE JOINTS SHALL BE WATERTIGHT REGARDLESS OF SPECIFIED OR SELECTED MATERIAL.
- 98. MINIMUM COVER ON STORM LINES IS 36" FROM THE TOP OF THE PIPE TO FINISH GRADE. BACKFILL MUST BE COMPACTED TO A DENSITY OF 92% IN IMPROVED OR STRUCTURAL FILL AREAS. MINIMUM COMPACTION IN UNPAVED, NON-STRUCTURAL FILL AREAS IS 90%. COMPACTION IS TO BE PER AASHTO T-180. LINES WITH LESS THAN 36" COVER SHALL BE REINFORCED CONCRETE. WHEN INSTALLED IN TRAFFIC AREAS PROVIDE A CONCRETE CAP.
- 99. THE LOCATION AND/OR STATIONING AND THE DEPTH FROM THE INVERT FROM THE TOP OF CURB TO THE INVERT ELEVATION OF ALL STORM DRAIN LATERALS SHALL BE RECORDED BY THE CONTRACTOR AND PROVIDED TO THE ENGINEER.

SANITARY SEWERS

- 100. INSTALL 2X4 MARKER BEHIND SERVICE PLUG AS INDICATED IN DETAIL 603. MARK DEPTH OF INVERT ON POST.
- 101. UNLESS OTHERWISE SHOWN, SANITARY SEWER PIPE SHALL BE PVC IN CONFORMANCE WITH ASTM D-3034, SDR 35. ALL OTHER APPURTENANCES AND INSTALLATION TO CONFORM TO THE CITY SPECIFICATIONS AND STANDARD DRAWINGS.
- 102. ALL PRECAST MANHOLES SHALL BE PROVIDE WITH INTEGRAL RUBBER BOOTS. WHERE MANHOLES WITH INTERNAL RUBBER BOOTS ARE NOT USED, A FLEXIBLE JOINT SHALL BE PROVIDED ON ALL MAINLINES WITHIN 1.5 FEET OF THE OUTSIDE FACE OF THE MANHOLE. LOCKDOWN LIDS REQUIRED ON ALL MANHOLES OUTSIDE OF PUBLIC RIGHT-OF-WAY.
- 103. OPENINGS FOR CONNECTIONS TO EXISTING MANHOLES SHALL BE MODE BY SAWCUTTING OR CORE-DRILLING EXISTING MANHOLE STRUCTURES. USE OF PNEUMATIC JACKHAMMERS SHALL BE PROHIBITED. CONNECTIONS TO BE WATERTIGHT AND SHALL PROVIDE A SMOOTH FLOW INTO AND THROUGH THE MANHOLE. SMALL CHIPPING HAMMERS OR SIMILAR LIGHT TOOLS WHICH WILL NOT DAMAGE OR CRACK THE MANHOLE BASE MAY BE USED TO SHAPE CHANNELS OR ENLARGE EXISTING OPENINGS IF AUTHORIZED BY CITY ENGINEER.
- 104. LEAKAGE TESTING. SANITARY SEWER PIPE AND APPURTENANCES SHALL BE TESTED FOR LEAKAGE. LEAKAGE TESTS SHALL INCLUDE AN AIR TEST OF ALL SEWER MAINS AND LATERALS AND VACUUM TESTING OF THE MANHOLES IN ACCORDANCE WITH CITY OF WOODBURN PROCEDURES.
- 105. CLEANING. PRIOR TO MANDREL TESTING AND/OR TV INSPECTION, FLUSH AND CLEAN ALL SEWERS OF ALL FOREIGN MATERIAL FROM THE MAINLINES AND MANHOLES.
- 106. CONTRACTOR SHALL CONDUCT DEFLECTION TEST OF FLEXIBLE SANITARY SEWER PIPES BY PULLING AN APPROVED MANDREL THROUGH THE COMPLETED PIPE LINE FOLLOWING TRENCH COMPACTION. THE DIAMETER OF THE MANDREL SHALL BE 95% OF THE INITIAL PIPE DIAMETER. TEST SHALL BE CONDUCTED NOT MORE THAN 30 DAYS AFTER THE TRENCH BACKFILLING AND COMPACTION HAS BEEN COMPLETED.
- 107. UPON COMPLETION OF ALL SEWER CONSTRUCTION, TESTING AND REPAIR, THE CONTRACTOR SHALL CONDUCT A COLOR TV ACCEPTANCE INSPECTION OF ALL MAINLINES IN ACCORDANCE

WITH APWA 303.3.11. THE TV INSPECTION SHALL BE CONDUCTED BY ON APPROVED TECHNICAL SERVICE WHICH IS EQUIPPED TO MAKE AUDIOVISUAL RECORDINGS OF THE TV INSPECTIONS ON CD. UNLESS OTHERWISE REQUIRED BY AGENCY WITH JURISDICTION, A STANDARD 1" DIAMETER BALL SHALL BE SUSPENDED IN FRONT OF THE CAMERA DURING THE INSPECTION. SUFFICIENT WATER TO REVEAL LOW AREAS OR REVERSE GRADES SHALL BE DISCHARGED INTO THE PIPE IMMEDIATELY PRIOR TO INITIATION OF THE TV INSPECTION. THE CD AND WRITTEN REPORT SHALL BE DELIVERED TO THE CITY. TV REPORT SHALL BE DONE BY AN APPROVED CITY OF WOODBURN PROGRAM. CONTACT CITY OF WOODBURN FOR APPROVED PROGRAM PRIOR TO TV INSPECTION.

- 108. THE LOCATION AND/OR STATIONING AND THE VERTICAL DISTANCE FROM THE TOP OF CURB 8TO THE INVERT ELEVATION OF ALL SEWER SERVICE LATERALS SHALL BE RECORDED BY THE CONTRACTOR AND PROVIDED TO THE ENGINEER.
- 109. MINIMUM COVER ON PUBLIC SANITARY SEWER LILEA IS 36" FROM THE TOP OF THE PIPE TO FINISHED GRADE. BACKFILL MUST BE COMPACTED TO A DENSITY NO LESS THAN 92% IN IMPROVED OR STRUCTURAL FILL AREAS. MINIMUM COMPACTION IN UNPAVED, NON STRUCTURAL FILL AREAS IS 90%. COMPACTIONS TO BE PER AASHTO T-180. MAXIMUM COMPACTION TEST SPACING OVER PUBLIC SANITARY LINES IS 150'.
- 110. ALL SANITARY SERVICE LATERAL CONNECTIONS AT THE MAIN ARE TO BE TEES UNLESS OTHERWISE NOTED.
- 111. MAINTAIN MINIMUM 10 FOOT HORIZONTAL CLEAR DISTANCE BETWEEN WATER AND SANITARY SEWER LINES EXCEPT AT CROSSINGS. VERTICAL SEPARATION SHALL BE A MINIMUM OF 18 INCHES CLEAR DISTANCE WHERE WATER LINES CROSS OVER SANITARY SEWER LINES. PVC C-900 PIPE SHALL BE USED (FOR SEWER) 10 FEET ON EITHER SIDE OF THE CROSSING WHEN THE CLEAR DISTANCE BETWEEN THE WATER LINE AND SANITARY SEWER LINE IS LESS THAN 18 INCHES.
- 112. ALL SEWER SERVICE LATERALS SHALL EXTEND A MINIMUM OF 5 FEET BEYOND P.U.E. INTO EACH LOT. THE MINIMUM GRADE FOR LATERALS SHALL BE 2.0% EXCEPT WHERE NOTED. SANITARY SEWER SERVICE LATERALS SHALL BE 4" DIAMETER UNLESS OTHERWISE NOTED ON

- 113. STREET LIGHTS SHALL BE INSTALLED AFTER ALL OTHER EARTHWORK AND PUBLIC UTILITY INSTALLATIONS ARE COMPLETED AND AFTER ROUGH GRADING OF THE PROPERTY IS ACCOMPLISHED TO PREVENT DAMAGE TO THE POLES.
- 114. STREET LIGHTS POLES SHALL BE SET TO A DEPTH AS SPECIFIED BY THE MANUFACTURER AND PGE, BUT NOT LESS THAN 5 FEET.
- 115. STREET LIGHT POLES SHALL BE INSTALLED WITHIN ONE DEGREE (1°) OF PLUMB.

- 116. UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR APPROVED BY JURISDICTION HAVING AUTHORITY, ALL NEW PRIVATE UTILITIES (POWER, CABLE TV, TELEPHONE & GAS) SHALL BE INSTALLED UNDERGROUND. INSTALLATION OF PRIVATE UTILITIES IN A COMMON TRENCH WITH WATER, SANITARY SEWER OR STORM SEWER IS PROHIBITED
- 117. CONTRACTOR SHALL COORDINATE WITH POWER, TELEPHONE, TV COMPANY FOR LOCATION OF VAULTS, PEDESTALS, ETC. ALL ABOVE-GRADE FACILITIES SHALL BE PLACED IN A LOCATION THE PROPOSED SIDEWALK LOCATION.
- 118. POWER, TELEPHONE AND TV TRENCHING AND CONDUITS SHALL BE INSTALLED PER UTILITY COMPANY REQUIREMENTS WITH PULL WIRE. CONTRACTOR SHALL VERIFY WITH UTILITY COMPANY FOR SIZE AND TYPE OF CONDUIT PRIOR TO CONSTRUCTION. ALL CHANGES IN DIRECTION OF UTILITY CONDUIT RUNS SHALL HAVE LONG RADIUS STEEL BENDS.
- 119. CONTRACTOR SHALL NOTIFY AND COORDINATE WITH PRIVATE UTILITIES FOR RELOCATION OF POWER POLES, VAULTS, ETC.

ROOF DRAINS

120. ALL RUNOFF FROM ROOF SURFACES SHALL BE CONVEYED UNDERGROUND THROUGH THE CURB FACE TO THE STREET AT THE INDIVIDUAL LOT FRONTAGE, OR TO THE PUBLIC STORM

LEGEND:

Some Symbols shown may not be used on map **⟨¬¬⟩** DECIDUOUS TREE EVERGREEN TREE O UTILITY POLE ① STORM SEWER MANHOLE ₩ LIGHT POLE E CATCH BASIN → GUY WIRE SANITARY SEWER CLEANOUT S SANITARY SEWER MANHOLE ₩ WATER VALVE

₩ WATER METER C FIRE HYDRANT GAS VALVE

G GAS METER BOLLARD — SIGN

□ MAILBOX

C COMMUNICATIONS PEDESTAL COMMUNICATIONS MANHOLE

STORM OUTFALL FOUND MONUMENT

DOWN SPOUT TO

STORM SYSTEM

W WELL HEAD

ELECTRIC BOX **ELECTRIC METER** ELECTRICAL POWER PEDESTAL **ELECTRIC RISER** HEAT PUMP —— XOH—— OVERHEAD LINE ——————— GAS LINE

ELECTRICAL LINE ____xcom___ COMMUNICATIONS LINE _____xss ____ SANITARY SEWER LINE _____XSD ____ STORM DRAIN LINE

_____XW_____ WATER LINE ■ COMMUNICATIONS BOX ___ FENCE LINE (G) GAS RISER

> DOWN SPOUT TO SPLASH GUARD/GROUND

GAS STUB **WATER BLOWOFF**

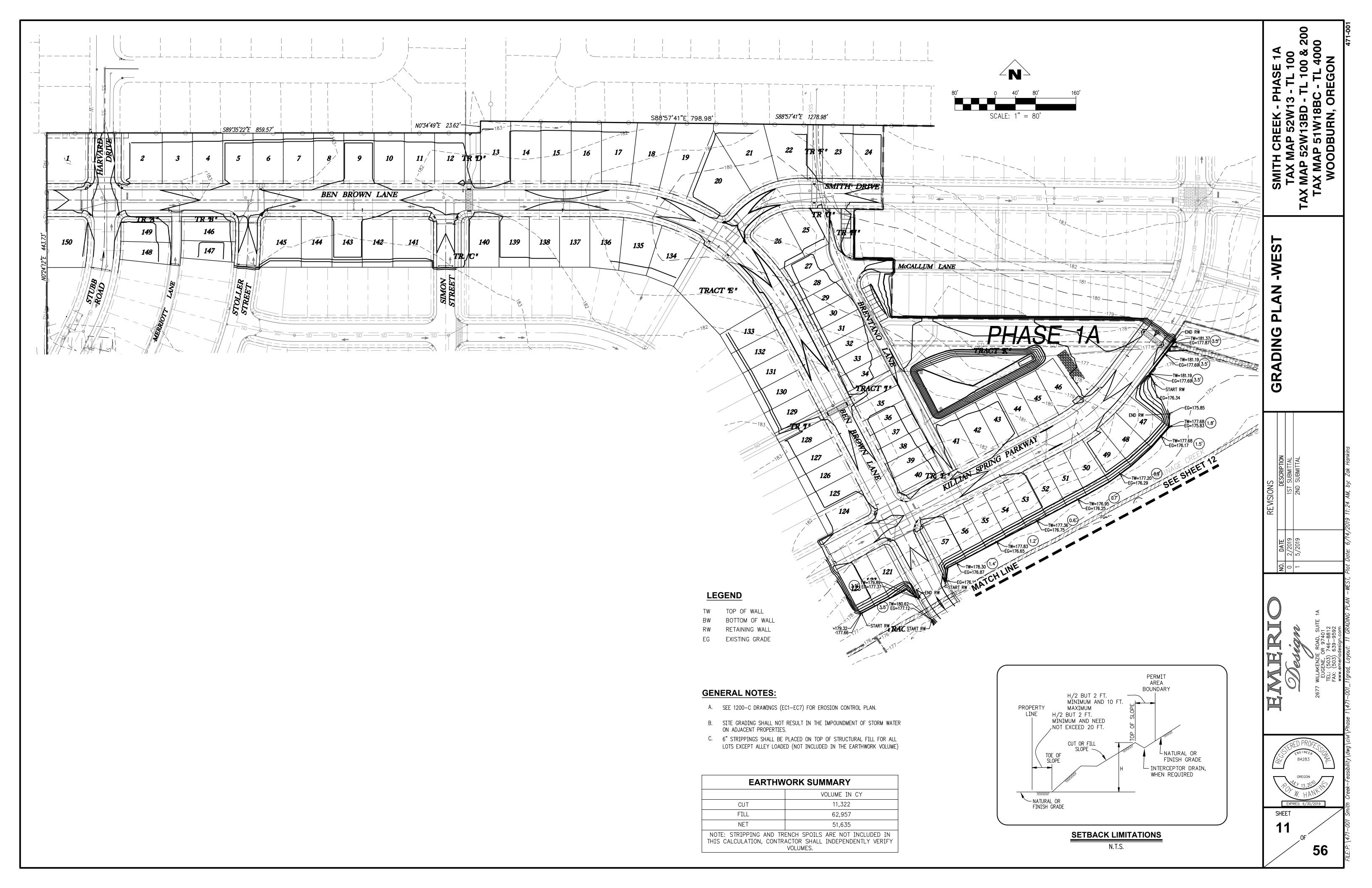
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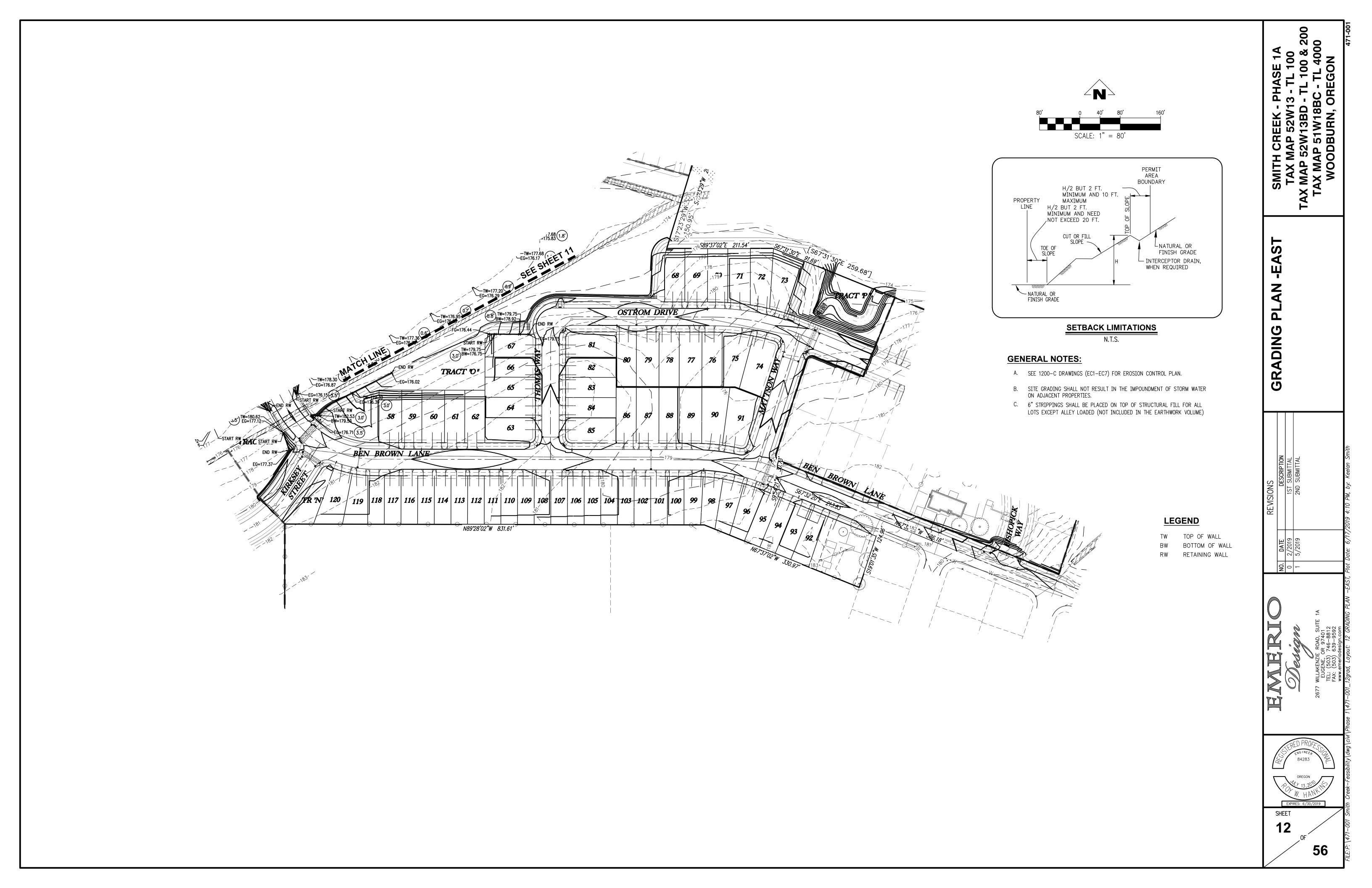
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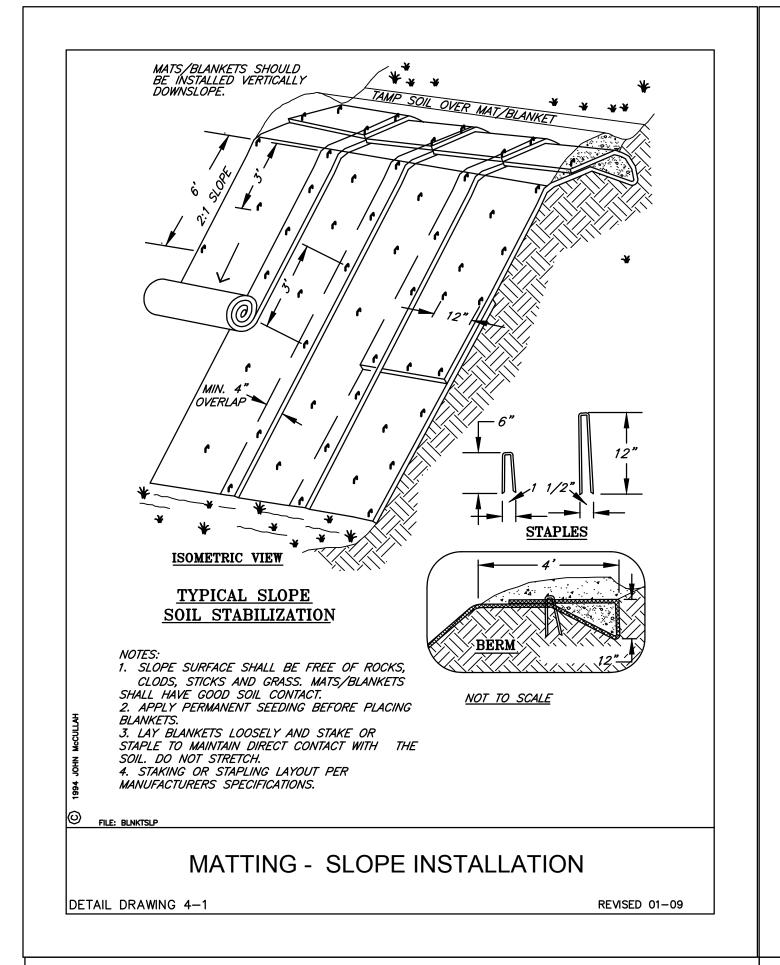
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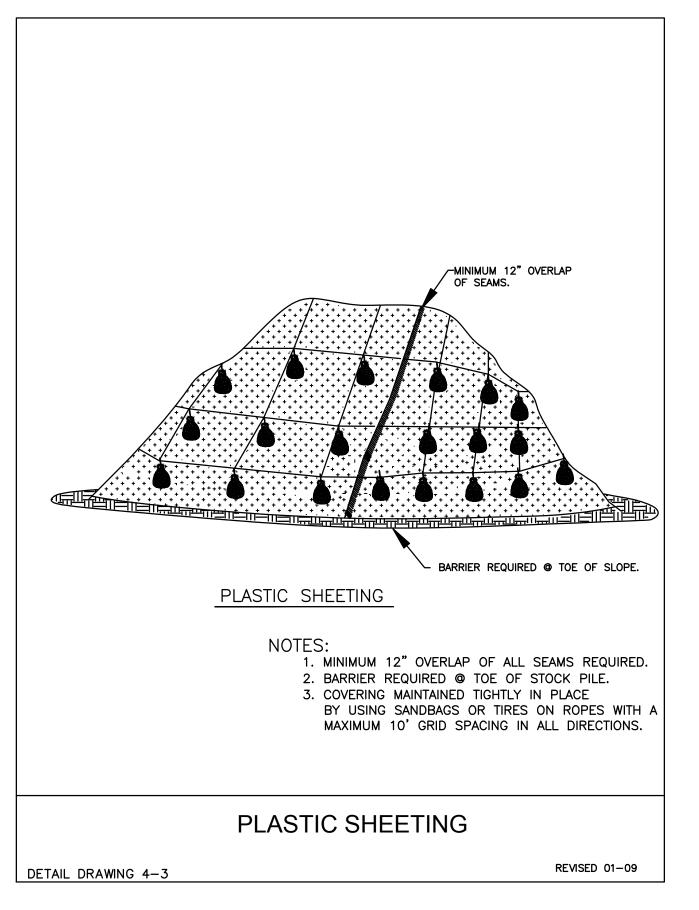
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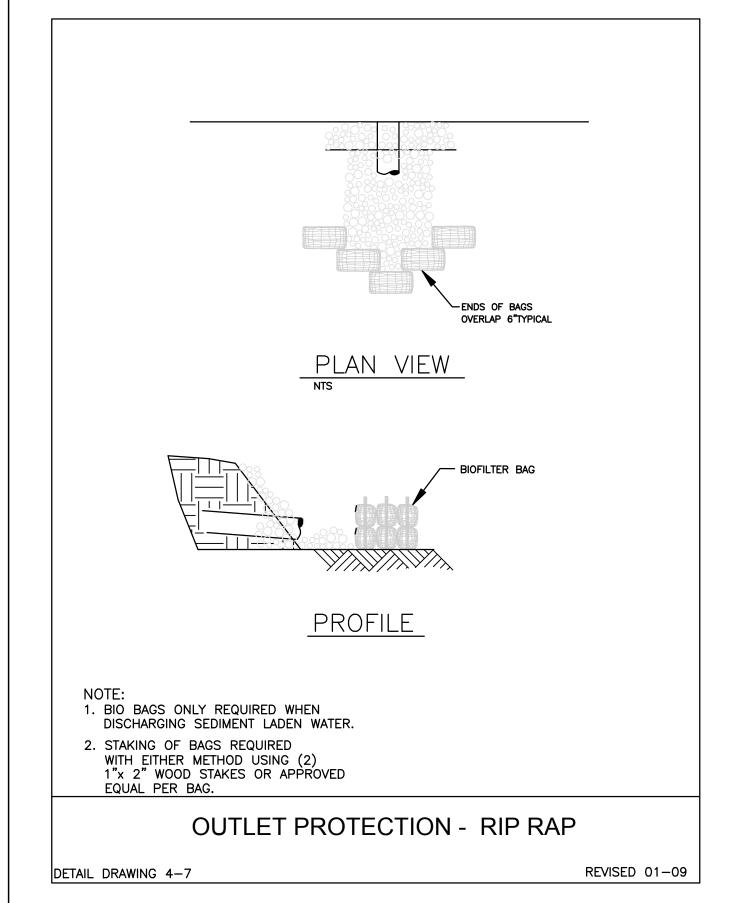
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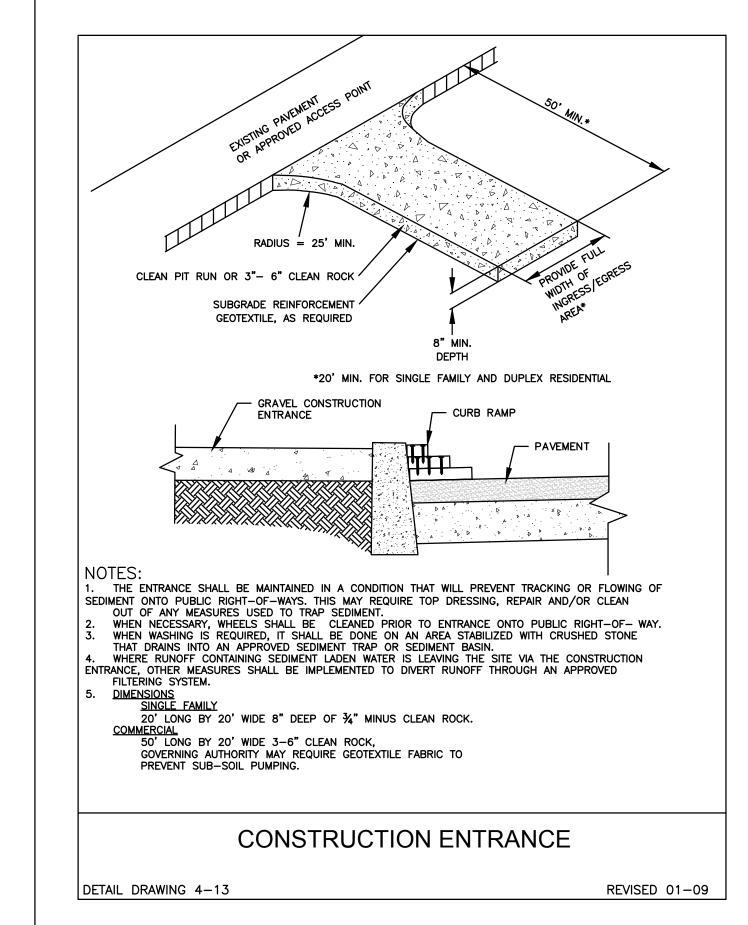


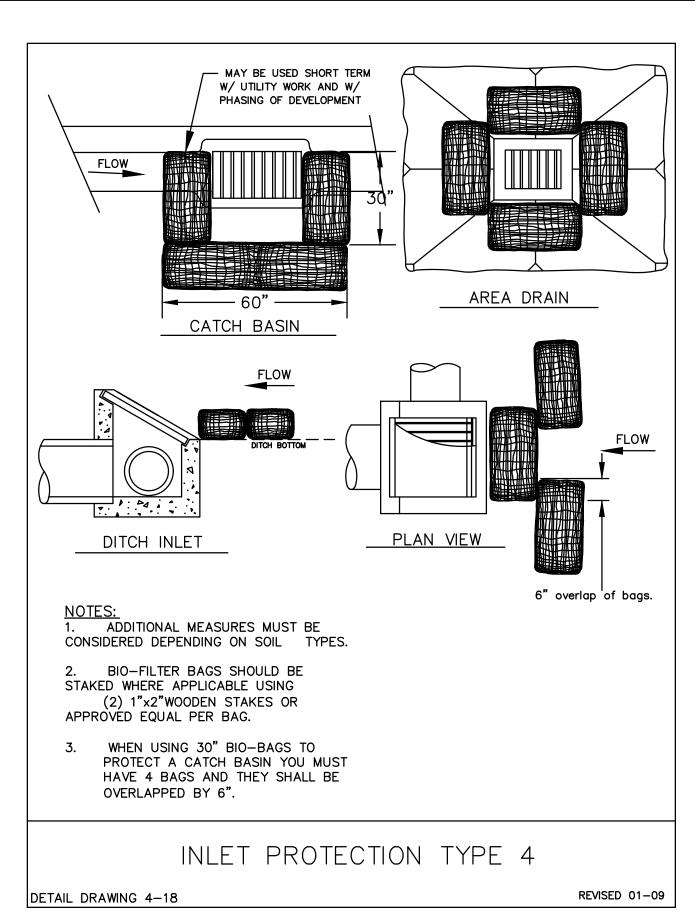


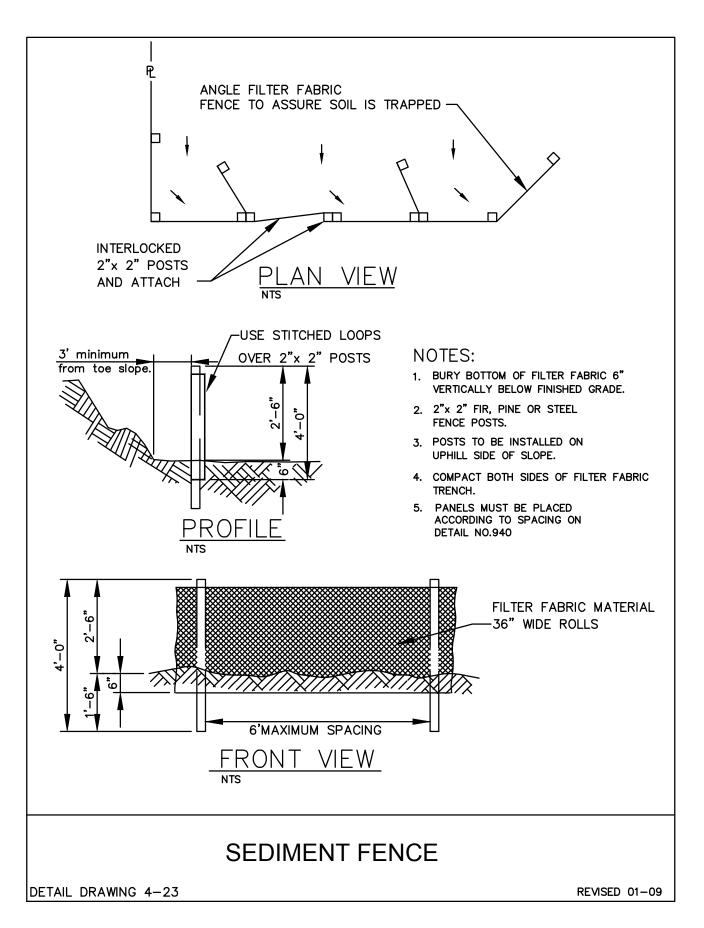




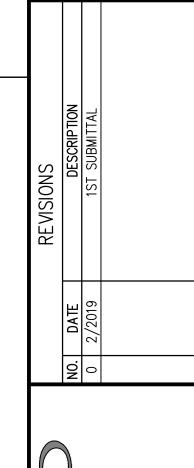




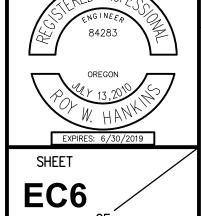




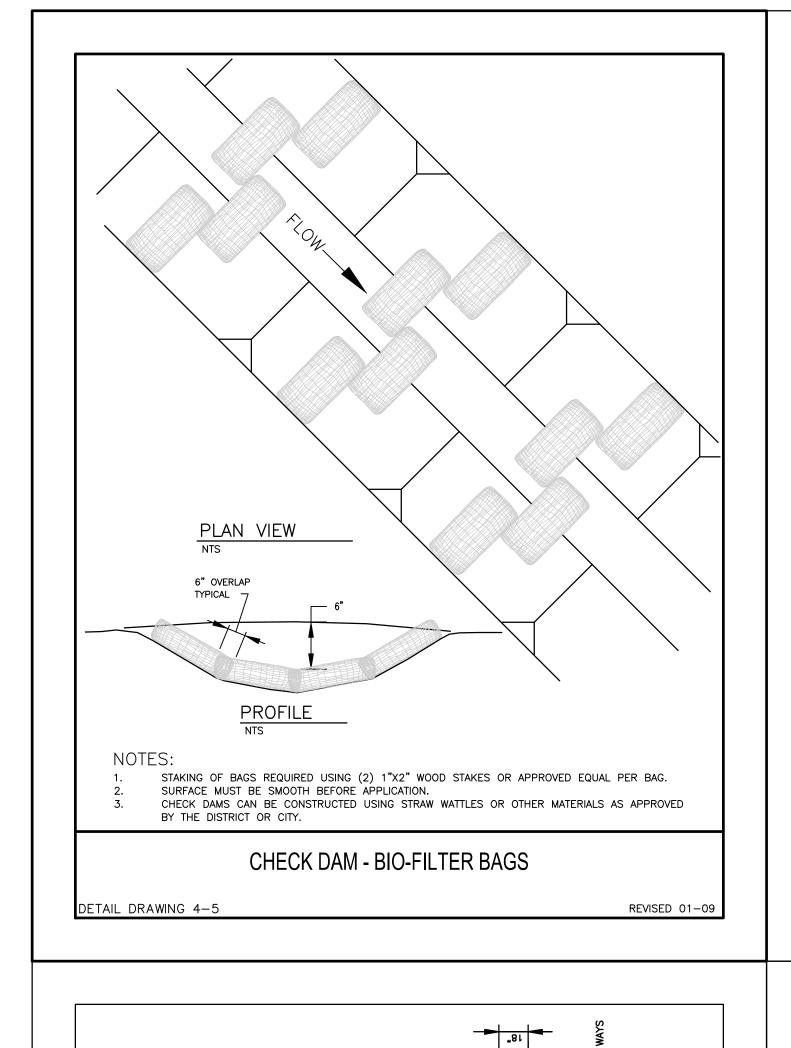
EROSION & SEDIMENT CONTROL DETAILS

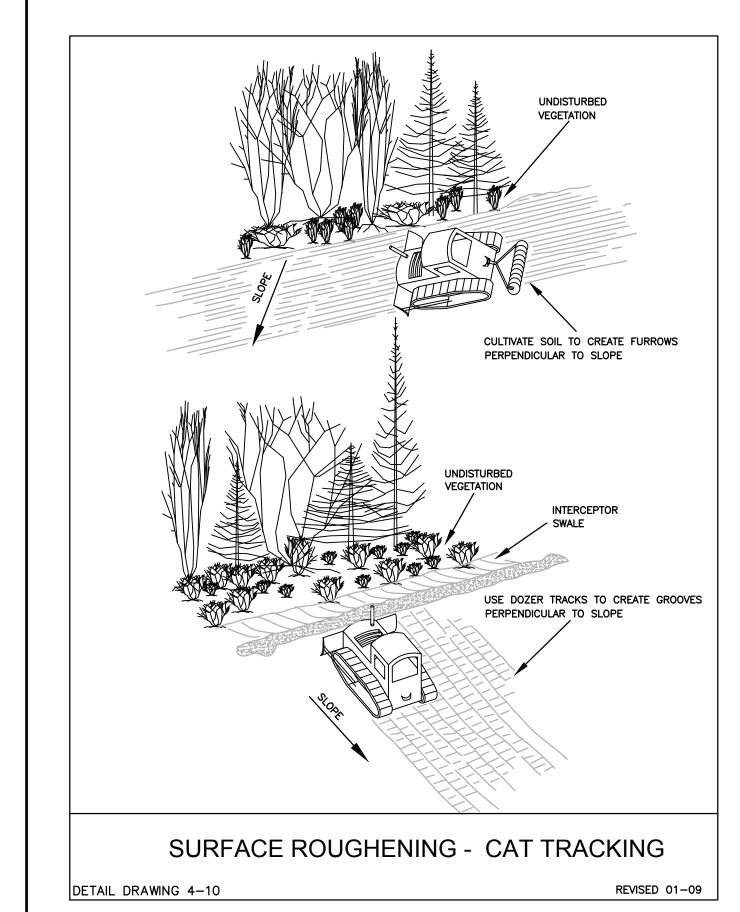


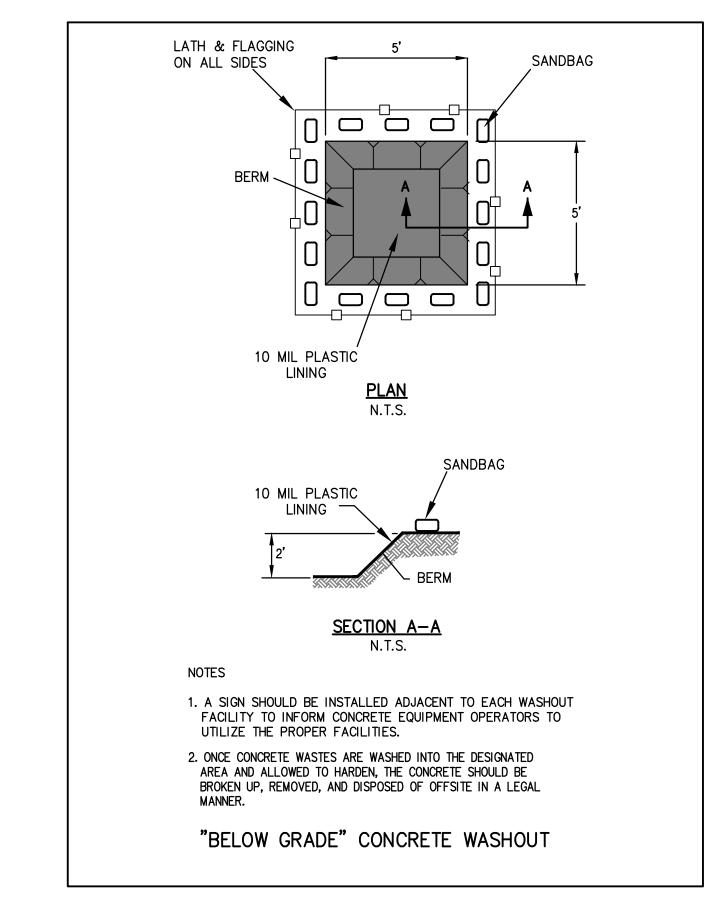


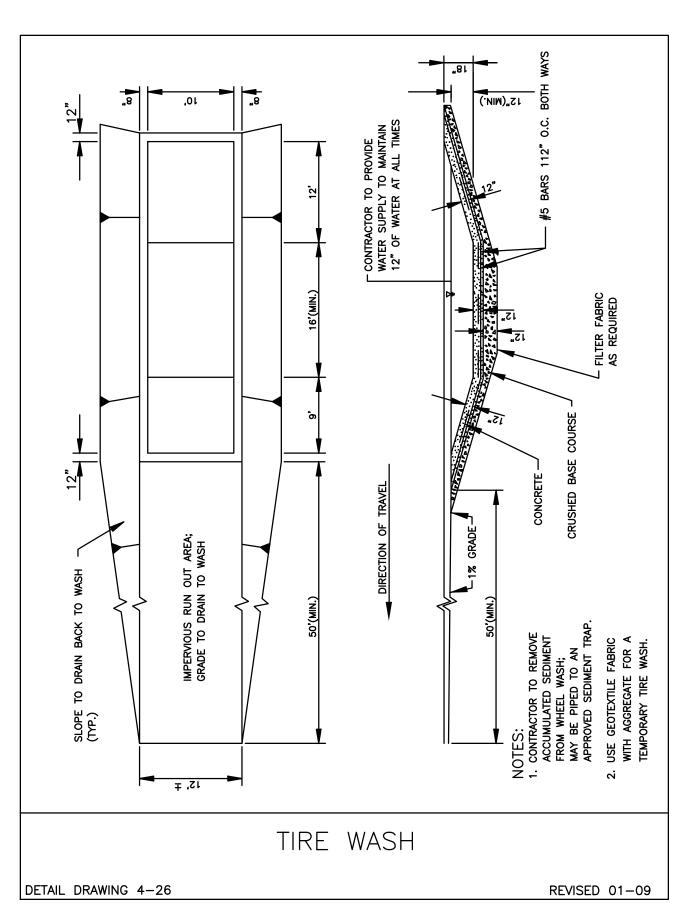


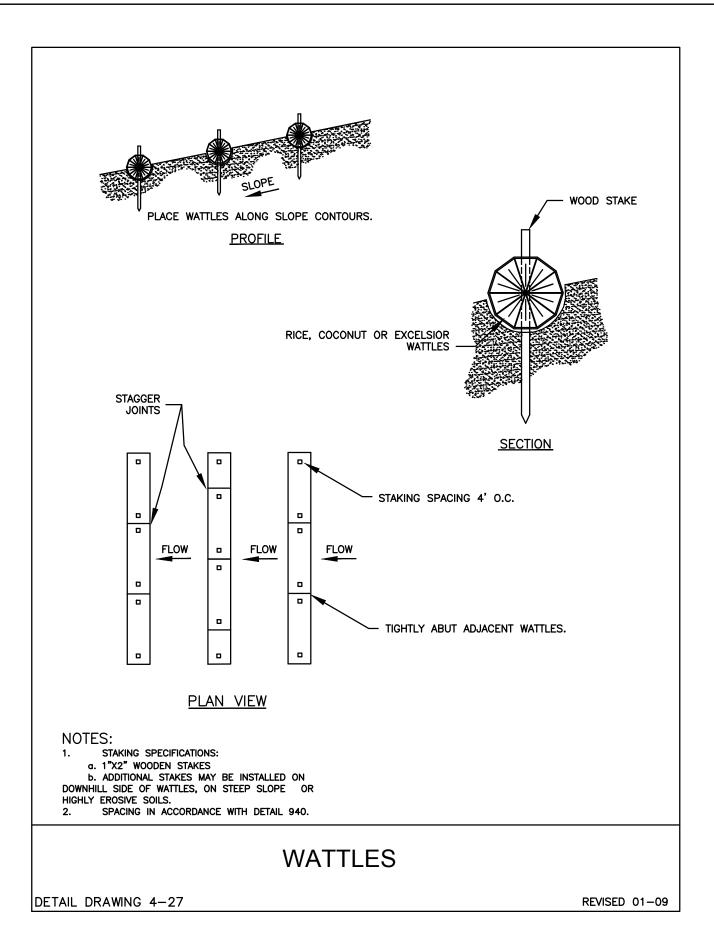
EC7











SEDIMENT DETAILS EROSION & CONTROL SHEET

EC7

SMITH CREEK -TAX MAP 52W



CIVIL ENGINEERS & PLANNERS

Storm Drainage Report for Smith Creek – Phase 1A City of Woodburn, Oregon (TL 100, Tax Map 052W13)

Emerio Project Number:

471-001

City of Woodburn Permit Numbers:

TBD

Date:

03/13/2019



Prepared For: Mr. Morgan Will Stafford Development Company, LLC 485 South State Street Lake Oswego, Oregon 97034 (503) 305-7647 morgan@staffordlandcompany.com Prepared By:
Roy Hankins, PE
Emerio Design, LLC
2677 Willakenzie Road, Suite 1A
Eugene, OR 97401
(541) 521-9797
roy@emeriodesign.com

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