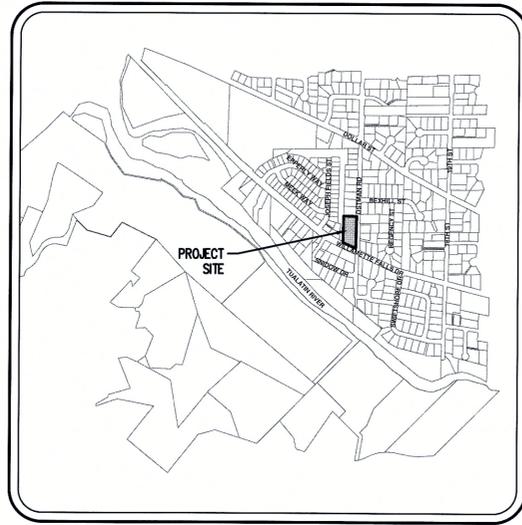


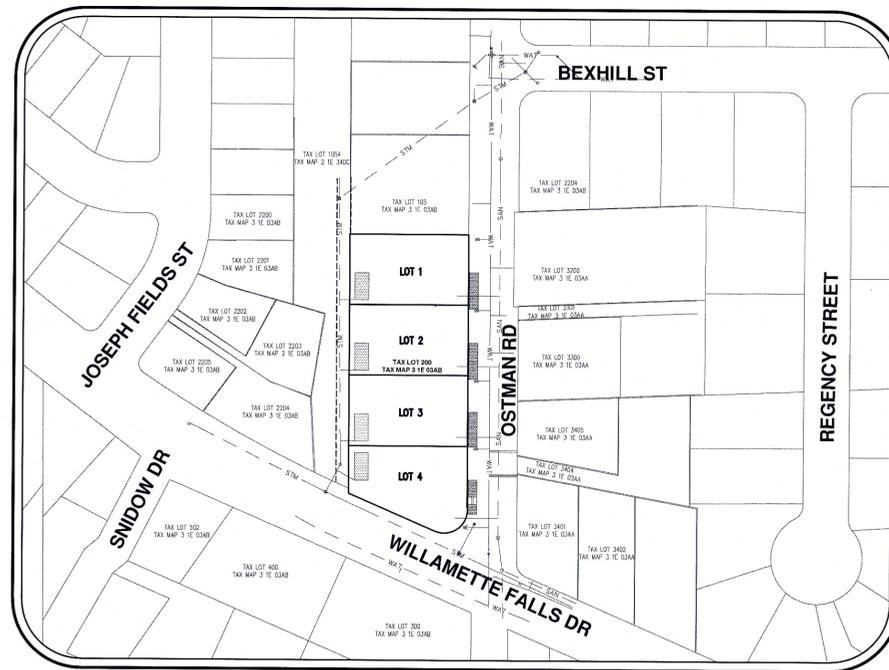
# RENAISSANCE AT WILLAMETTE

## CONSTRUCTION PLANS

This Plan has been Reviewed & Complies w/  
 Building: DND By: JS Date: 9-17-14  
 Planning: JS By: JS Date: 9-17-14  
 Engineering: KGL By: JS Date: 9-17-14  
 Parks: MP By: JS Date: 9-17-14



VICINITY MAP  
 SCALE: 1" = 1000'



SITE MAP  
 SCALE: 1" = 100'

### OWNER/APPLICANT:

RENAISSANCE HOMES  
 16771 BOONES FERRY ROAD  
 LAKE OSWEGO, OR 97035

### PLANNING/CIVIL ENGINEERING/SURVEYING LANDSCAPE ARCHITECTURE FIRM (APPLICANT'S REPRESENTATIVE):

AKS ENGINEERING & FORESTRY, LLC  
 CONTACT: DAVID NICHOLS  
 12965 SW HERMAN DR, SUITE 100  
 TUALATIN, OR 97062  
 PH: 503-563-6151  
 FAX: 503-563-6152

### SITE LOCATION:

1770 OSTMAN ROAD  
 WEST LINN, OR 97068

### SITE DESCRIPTION:

TAX LOT 200, CLACKAMAS COUNTY ASSESSOR'S MAP 3 1E 03AB, LOCATED IN THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 3, TOWNSHIP 3 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

### PROJECT PURPOSE:

FOUR LOT RESIDENTIAL SUBDIVISION FOR FUTURE SINGLE-FAMILY DETACHED HOMES IN THE R-10 ZONE, AS APPROVED IN THE CITY OF WEST LINN FINAL DECISION NOTICE DATED 4-10-2014 FOR SUB-14-01/VAR-14-01/VAR-14-02/VAR-14-03/VAR-14-04/VAR-14-05.

### BENCHMARK:

VERTICAL DATUM: ELEVATIONS ARE BASED ON NGS BENCHMARK 89 B (PID: RD0258) ON THE WEST SIDE OF HIGHWAY 99E, 2.4 MILES SOUTH OF THE PROJECT SITE WITH A NAVD 88 ELEVATION OF 93.78 FEET.

### TOTAL SITE AREA:

44,463 SF± (1.02 ACRES±)

### UTILITY CONTACTS:

**POWER**  
 PORTLAND GENERAL ELECTRIC  
 121 SW SALMON ST  
 PORTLAND, OREGON. 97024  
 PH: (503) 736-5450

### CABLE / INTERNET

COMCAST  
 9605 SW NIMBUS  
 BEAVERTON, OREGON. 97008  
 PH: (503) 912-8307

### TELEPHONE

CENTURY LINK  
 1001 MOLALLA AVE  
 OREGON CITY, OREGON. 97045  
 PH: (888) 496-1650

### GAS

NW NATURAL  
 220 NW 2ND AVE  
 PORTLAND, OREGON. 97209  
 PH: (503) 226-4211

### FIRE

TUALATIN VALLEY FIRE AND RESCUE  
 11945 SW 70TH AVENUE  
 TIGARD, OREGON. 97223  
 PH: (503) 649-8577

### GARBAGE

WEST LINN REFUSE AND RECYCLING  
 1600 SE 4TH AVE  
 CANBY, OREGON. 97013  
 PH: (503) 557-3900

### WATER / SANITARY / STORM SEWER

CITY OF WEST LINN PUBLIC WORKS  
 22500 SALAMO RD  
 WEST LINN, OREGON. 97034  
 PH: (503) 656-4261

APPROVED FOR CONSTRUCTION BY  
 THE CITY OF WEST LINN  
 FOR GENERAL CONFORMANCE  
 WITH APPLICABLE CODES AND REQUIREMENTS AND  
 COMPLIANCE WITH THE CITY OF WEST LINN  
 ENGINEER OF FULL RESPONSIBILITY FOR ACCURACY AND  
 COMPLETENESS OF THE DRAWINGS. THIS PLAN REVIEW  
 APPROVAL DOES NOT PREVENT THE CITY  
 FROM REQUIRING FURTHER CODE CORRECTIONS IN THE  
 FIELD.  
 DATE: 9/17/14 BY: Khori Q. Le

### LEGEND

EXISTING		PROPOSED	
DECIDUOUS TREE		STORM SEWER CLEAN OUT	
CONIFEROUS TREE		STORM SEWER CATCH BASIN	
FIRE HYDRANT		STORM SEWER MANHOLE	
WATER BLOWOFF		GAS METER	
WATER METER		GAS VALVE	
WATER VALVE		GUY WIRE ANCHOR	
WATER REDUCER		POWER POLE	
DOUBLE CHECK VALVE		POWER VAULT	
AIR RELEASE VALVE		POWER JUNCTION BOX	
SANITARY SEWER CLEAN OUT		POWER PEDESTAL	
SANITARY SEWER MANHOLE		COMMUNICATIONS VAULT	
SIGN		COMMUNICATIONS JUNCTION BOX	
STREET LIGHT		COMMUNICATIONS RISER	
		MAILBOX	

	EXISTING	PROPOSED
RIGHT-OF-WAY LINE		
BOUNDARY LINE		
PROPERTY LINE		
CENTERLINE		
DITCH		
CURB		
EDGE OF PAVEMENT		
EASEMENT		
FENCE LINE		
GRAVEL EDGE		
POWER LINE		
OVERHEAD WIRE		
COMMUNICATIONS LINE		
FIBER OPTIC LINE		
GAS LINE		
STORM SEWER LINE		
SANITARY SEWER LINE		
WATER LINE		

### ATTENTION EXCAVATORS:

OREGON LAW 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 THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS BUT NOT MORE THAN TEN BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.



### SHEET INDEX

- C000 - COVER SHEET WITH VICINITY AND SITE MAPS
- C001 - CONSTRUCTION NOTES
- C002 - EXISTING CONDITIONS PLAN AND TREE TABLE
- C030 - DEMOLITION AND TREE REMOVAL AND PRESERVATION PLAN
- C050 - EROSION AND SEDIMENT CONTROL COVER SHEET
- C051 - PHASE I EROSION AND SEDIMENT CONTROL PLAN
- C052 - PHASE II GRADING AND EROSION CONTROL
- C053 - EROSION CONTROL DETAILS
- C100 - STREET PLAN AND CROSS SECTIONS
- C101 - STREET PLAN AND PROFILE - WILLAMETTE FALLS DRIVE
- C102 - STREET PLAN AND PROFILE - OSTMAN ROAD
- C103 - STREET DETAILS
- C104 - STREET DETAILS
- C110 - STRIPING AND SIGNAGE PLAN
- C200 - PUBLIC STORM SEWER PLAN AND PROFILE - OSTMAN ROAD
- C201 - PUBLIC STORM SEWER DETAILS
- C202 - PRIVATE STORM SEWER PLAN
- C300 - PUBLIC SANITARY SEWER PLAN AND PROFILE - OSTMAN ROAD
- C301 - SANITARY SEWER DETAILS
- C400 - WATER PLAN
- C401 - WATER DETAILS
- L100 - LANDSCAPING PLAN

RENAISSANCE  
 AT WILLAMETTE

WEST LINN  
 OREGON

COVER SHEET WITH  
 VICINITY AND SITE  
 MAPS

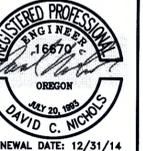
DESIGNED BY: DCN

DRAWN BY: JDR

CHECKED BY: DCN/MBH

SCALE: AS NOTED

DATE: 09/16/14



REVISIONS

JOB NUMBER  
 3745

SHEET

C000

AKS ENGINEERING AND FORESTRY, LLC  
 12965 SW HERMAN RD  
 SUITE 100  
 TUALATIN, OR 97062  
 PHONE: 503.563.6151  
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AKS  
 PLANNING · SURVEYING  
 LANDSCAPE ARCHITECTURE

CLACKAMAS COUNTY ASSESSOR'S TAXMAP 351C03AB

RENAISSANCE AT WILLAMETTE  
 WEST LINN, OREGON

RENAISSANCE AT WILLAMETTE  
 WEST LINN, OREGON

AKS ENGINEERING AND FORESTRY, LLC

**GENERAL NOTES**

1. ALL WORK AND MATERIAL SHALL CONFORM TO THESE PLANS AND THE APPLICABLE PROVISIONS OF THE CITY OF WEST LINN'S PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, INCLUDING DIVISION 1 THROUGH DIVISION 6. THE CONTRACTOR SHALL CONFORM TO THESE SPECIFICATIONS AT ALL TIMES AND AS DIRECTED BY THE CITY AND PROJECT ENGINEER. THE CONTRACTOR SHALL CONFORM TO THE MOST RECENT EDITION OF THE UNIFORM PLUMBING CODE AND THE MOST RECENT EDITION OF THE INTERNATIONAL BUILDING CODE FOR ALL PRIVATE IMPROVEMENTS.
2. THE LOCATIONS, DEPTHS AND DESCRIPTIONS OF EXISTING UTILITIES SHOWN ARE COMPILED FROM AVAILABLE RECORDS AND/OR FIELD SURVEYS. THE ENGINEER OR UTILITY COMPANIES DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF SUCH RECORDS. ADDITIONAL UTILITIES MAY EXIST WITHIN THE WORK AREA.
3. THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE SHOWN FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR MUST VERIFY ALL EXISTING UTILITIES FOR BOTH VERTICAL ELEVATION AND HORIZONTAL LOCATION PRIOR TO START OF WORK (POTHOLE BEFORE DIGGING IF NECESSARY). SHOULD CONFLICTS ARISE AND REDESIGN OR RELOCATION OF FACILITIES IS NECESSARY, IT SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. CHANGES MUST BE APPROVED BY THE PROJECT ENGINEER IN ADVANCE OF WORK. CONTRACTOR SHALL COORDINATE THE WORK WITH APPLICABLE AGENCIES.
5. TRENCHES OUTSIDE OF THE FUTURE PAVED OR CONCRETE AREAS MAY BE BACKFILLED WITH NATIVE MATERIAL IN ACCORDANCE WITH COMPACTION SPECIFICATIONS FOR APWA CLASS A BACKFILL. CONTRACTOR SHALL CHECK WITH PROJECT ENGINEER AND VERIFY.
6. SUBSEQUENT SETTLEMENT OR CRACKING OF FINISHED SURFACES WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE, AND REPAIRED IN A MANNER ACCEPTABLE TO AND AT NO COST TO THE CITY OR DEVELOPER.
7. THE CONTRACTOR SHALL CONTROL TRAFFIC THROUGH THE PROJECT SITE IN CONFORMANCE WITH THE LATEST EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "OREGON SUPPLEMENTS", AND CITY REQUIREMENTS. THE CONTRACTOR SHALL AT ALL TIMES MAINTAIN LOCAL ACCESS FOR OWNERS NEAR THE PROJECT SITE. THE CONTRACTOR SHALL PROVIDE A PROJECT-SPECIFIC TRAFFIC CONTROL PLAN, APPROVED BY THE CITY, AND AVAILABLE ON THE PROJECT SITE.
8. THE CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) SET OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING THE CONSTRUCTION PHASES.
9. CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL EARTHWORK, TRENCH BACKFILL, ROAD CONSTRUCTION COMPACTION TESTS, AND GEOTECHNICAL REVIEWS WITH THE PROJECT'S GEOTECHNICAL ENGINEER AND THE CITY.
10. CONTRACTOR SHALL MAINTAIN BENCHMARKS, PROPERTY CORNERS, AND MONUMENTS. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, AND IF REQUIRED BY ORS 209, THE CONTRACTOR SHALL PAY FOR THEIR REPLACEMENT BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS AND OTHER SUCH MONUMENTS.
11. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING ITEMS:
  - A. LIST OF SUBCONTRACTORS
  - B. PROJECT SCHEDULE
  - C. TRAFFIC CONTROL PLAN
  - D. EMERGENCY CONTACT NAME AND PHONE NUMBER
12. PRIOR TO FINAL ACCEPTANCE AND PAYMENT, THE CONTRACTOR SHALL CLEAN THE WORK SITE AND ADJACENT AREAS OF ANY DEBRIS, DISCARDED ASPHALTIC CONCRETE MATERIAL, OR OTHER ITEMS DEPOSITED BY THE CONTRACTOR'S PERSONNEL DURING THE PERFORMANCE OF THIS CONTRACT.
13. PUBLIC ROADWAYS SHALL NOT BE CLOSED TO TRAFFIC, AT ANY TIME, WITHOUT HAVING FIRST OBTAINED A STREET CLOSURE PERMIT FROM THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR PROVISION OF TIMELY NOTIFICATION OF TRAFFIC FLOW DISRUPTIONS TO AREA-WIDE EMERGENCY SERVICES, TRI-MET BUS SERVICE, AND THE SCHOOL DISTRICT.
14. TRAFFIC CONTROL DEVICES, FLAG PERSONS, ETC., SHALL BE IN PLACE PRIOR TO INITIATION OF CONSTRUCTION WORK AND SHALL BE EFFECTIVELY MAINTAINED. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO ANY WORK WITHIN EXISTING RIGHT-OF-WAY.
15. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER OR THE CITY FORTY-EIGHT (48) HOURS PRIOR TO ANY STAGED INSPECTION.
16. A COPY OF THE PERMIT WITH ALL ATTACHMENTS, A COPY OF THE APPROVED CONSTRUCTION PLANS, AND ALL AMENDMENTS SHALL BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. ALL WORK SHALL CONFORM TO THE PERMIT TERMS, CONDITIONS/PROVISIONS, CITY-APPROVED CONSTRUCTION PLANS, APPROVED PLAN AMENDMENTS, AND THESE GENERAL CONDITIONS. CHANGES TO ANY OF THE AFORESAID MUST BE APPROVED BY THE PROJECT ENGINEER AND CITY, IN ADVANCE OF WORK PERFORMANCE.
18. MAINTENANCE OF THE WORK AREA AND APPROACH ROADS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE WORK AREA AND APPROACH ROADS SHALL BE MAINTAINED IN A CLEAN AND SANITARY CONDITION, FREE FROM OBSTRUCTIONS, HAZARDS, DEBRIS, AND TRASH AT ALL TIMES. A COPY OF THE CONTRACTOR CERTIFICATE OF INSURANCE SHALL BE AVAILABLE AT THE WORK AREA.
19. THE SPREADING OF MUD OR DEBRIS OR STORAGE OF MATERIAL OR EQUIPMENT OF ANY KIND UPON ANY PUBLIC ROADWAY IS STRICTLY PROHIBITED AND VIOLATION SHALL BE CAUSE FOR IMMEDIATE SUSPENSION OF THE PERMIT. THE PROJECT ENGINEER AND/OR CITY MAY AT ANY TIME ORDER IMMEDIATE CLEAN UP AND STOPPAGE OF WORK TO ACCOMPLISH CLEAN-UP
20. EFFECTIVE EROSION CONTROL IS REQUIRED. EROSION CONTROL DEVICES MUST BE INSTALLED AND MAINTAINED THROUGHOUT CONSTRUCTION. EROSION CONTROL MEASURES SHALL BE APPROVED BY THE CITY.
21. PROPERTY DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED. GRASS, SHRUBS, FLOWERS, BARK DUST, EXISTING SIGNS, PAVEMENT MARKINGS, MAILBOXES, ETC. DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE RE-ESTABLISHED, REINSTALLED OR REPLACED, WITH LIKE KIND AND MATERIAL.
22. EFFECTIVE DRAINAGE CONTROL IS REQUIRED. DRAINAGE SHALL BE CONTROLLED WITHIN THE SITE AND SHALL BE ROUTED SO THAT ADJACENT PRIVATE PROPERTY, PUBLIC PROPERTY, AND THE RECEIVING SYSTEM ARE NOT ADVERSELY IMPACTED. THE PROJECT ENGINEER AND/OR CITY MAY AT ANY TIME ORDER CORRECTIVE ACTION AND STOPPAGE OF WORK TO ACCOMPLISH EFFECTIVE DRAINAGE CONTROL.

23. A TEMPORARY HARD-SURFACE PATCH (COLD MIX AC OR HOT MIX BASE PAVING) SHALL BE PLACED ON TRENCHES WITHIN EXISTING ROADWAYS AT THE END OF EACH DAY'S WORK. NO TRENCH, ON-SITE OR OFF-SITE, SHALL BE LEFT AT ANY TIME IN AN UNSAFE CONDITION. THE CONTRACTOR IS RESPONSIBLE AND LIABLE FOR HAZARDS OR DAMAGE RESULTING FROM THE PROSECUTION OF THE WORK.
24. WORK PROVIDED FOR UNDER THE PERMIT SHALL INCLUDE REPAIR OF EXISTING FACILITIES (ROADS, DITCHES, ETC.) AS MAY BE NECESSARY, IN THE PROJECT ENGINEER'S OPINION, TO OVERCOME DETERIORATION OR DAMAGE WHICH OCCURRED IN CONJUNCTION WITH THE WORK AUTHORIZED BY THE PERMIT. CORRECTIVE WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
25. THE PROJECT ENGINEER MAY, AT THEIR DISCRETION, REQUIRE THE PROVISION OF TESTS AND/OR REPORTS FROM THE CONTRACTOR TO VALIDATE CLAIMS OF MATERIAL OR CONSTRUCTION ADEQUACY/COMPLIANCE. SUCH TESTS/REPORTS SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE.
26. THE CONTRACTOR IS TO COORDINATE CONSTRUCTION OF DRY UTILITIES WITH THE UTILITY COMPANIES (POWER, TELEPHONE, GAS, AND CABLE TELEVISION).
27. POWER, TELEPHONE, GAS, AND CABLE TELEVISION TRENCHING AND CONDUITS ARE TO BE INSTALLED PER UTILITY COMPANY REQUIREMENTS WITH PULL WIRE. VERIFY WITH UTILITY COMPANY FOR SIZE AND TYPE OF CONDUIT PRIOR TO CONSTRUCTION.
28. THE PROJECT ENGINEER RESERVES THE RIGHT TO ADJUST GRADES OR ALIGNMENT TO ACCOMMODATE OTHER UTILITIES AS REQUIRED; SUCH ADJUSTMENTS OR REVISIONS SHALL BE REVIEWED BY THE CITY AND APPROVED PRIOR TO COMMENCEMENT OF WORK.
29. PROPERTY AND RIGHT-OF-WAY LINES SHOWN ARE APPROXIMATE. THESE PLANS ARE NOT MEANT TO SERVE BOUNDARY SURVEY PURPOSES.
30. ALL LENGTHS ARE HORIZONTAL DISTANCES AND SHALL BE CONSIDERED APPROXIMATE. PIPE LENGTHS ARE FROM CENTER OF STRUCTURE (MANHOLE) TO CENTER OF STRUCTURE (MANHOLE).
31. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
32. THE CONTRACTOR SHALL MAKE PROVISIONS TO KEEP ALL EXISTING UTILITIES IN SERVICE AND PROTECT THEM DURING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY DAMAGED UTILITIES USING MATERIALS AND METHODS APPROVED BY THE UTILITY OWNER. NO SERVICE INTERRUPTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN AGREEMENT WITH THE UTILITY PROVIDER.
33. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL, AND OTHER MATERIAL IN THE ROADWAY AND WHERE INDICATED ON THE PLANS. MATERIAL SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET ALL APPLICABLE REGULATIONS.
34. UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT "REDLINE DRAWINGS" TO THE PROJECT ENGINEER. "REDLINE DRAWINGS" DOCUMENT ALL DEVIATIONS AND REVISIONS TO THE APPROVED PLANS; THEY ALSO RECORD A DESCRIPTION OF CONSTRUCTION MATERIALS ACTUALLY USED (PIPE MATERIAL, ETC.).
35. THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS INCLUDING SUCH INCIDENTALS, AS MAY BE NECESSARY TO MEET THE INTENT OF THE PROJECT CONTRACT DOCUMENTS, APPLICABLE AGENCY REQUIREMENTS, AND OTHER WORK AS NECESSARY TO PROVIDE A COMPLETE PROJECT.
36. THERE SHALL BE NO ALTERATION OR VARIANCE FROM THE APPROVED PLANS WITHOUT APPROVAL OF THE PROJECT ENGINEER.
37. THE CONTRACTOR SHALL MAINTAIN AND COORDINATE ACCESS TO ALL AFFECTED PROPERTIES.
38. IF GROUND WATER SPRINGS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE THAT THE WATER IS NOT CONVEYED THROUGH UTILITY TRENCHES, AND THE NATURAL FLOW PATH OF THE SPRING IS ALTERED AS LITTLE AS PRACTICABLE. THE PROJECT ENGINEER SHALL SUBMIT INFORMATION SUMMARIZING THE SITUATION TO THE CITY.
39. ANY INSPECTION BY THE CITY, COUNTY, STATE, FEDERAL AGENCY, OR PROJECT ENGINEER SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN COMPLIANCE WITH THE APPLICABLE PLANS CODES, REGULATIONS, STANDARDS, AND PROJECT CONTRACT DOCUMENTS.
40. SAWCUT STRAIGHT MATCH LINES WHERE EXISTING PAVEMENT MEETS NEW PAVEMENT. SAND AND SEAL JOINT (TYPICAL).
41. DUST SHALL BE CONTROLLED WITHIN THE DEVELOPMENT DURING CONSTRUCTION AND SHALL NOT BE PERMITTED TO DRIFT ONTO ADJACENT PROPERTIES.
42. CONTRACTOR SHALL WORK TO PRESERVE ALL TEMPORARY SURVEY CONTROL POINTS, TEMPORARY BENCHMARKS, TEMPORARY GRADE STAKES, AND OTHER REFERENCE POINTS FOR AS LONG AS THEY ARE NEEDED FOR CONSTRUCTION ACTIVITIES.
43. CONTRACTOR SHALL FOLLOW OSHA REQUIREMENTS.
44. ALL TRENCHES SHALL BE PROPERLY SHORED AND BRACED TO PREVENT CAVING.
45. NO TRENCHES WILL BE ALLOWED TO REMAIN OPEN OVERNIGHT. ALL TRENCHES SHALL BE COVERED WITH STEEL PLATES OR FILLED IN AT NIGHT.
46. UNIDENTIFIED UTILITIES SHALL NOT BE DISRUPTED OR CUT UNTIL UTILITY COMPANY HAS APPROVED THE CUT OR DISRUPTION.
47. ALL 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 AN EQUAL OR BETTER-THAN-ORIGINAL CONDITION.

48. NOTIFY THE UTILITY COMPANY IMMEDIATELY OF ALL UTILITIES EXPOSED. 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.
49. WHERE TRENCH EXCAVATION REQUIRES REMOVAL OF PCC CURBS AND/OR SIDEWALKS, THE CURBS AND/OR SIDEWALKS SHALL BE SAWCUT AND REMOVED AT A TOOLED JOINT UNLESS OTHERWISE AUTHORIZED BY THE OWNER'S REPRESENTATIVE. THE SAWCUT LINES SHOWN ON THE DRAWINGS ARE SCHEMATIC AND NOT INTENDED TO SHOW THE EXACT ALIGNMENT OF SUCH CUTS.
50. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DOCUMENTS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DOCUMENTS AND IN FULL COMPLIANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS AND CODES.
51. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE APPROVED DRAWINGS AND DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS AND DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. ALL REPAIRS SHALL USE NEW MATERIAL. REPAIRS SHALL RESTORE THE DAMAGED ITEM TO THE PRE-EXISTING CONDITION OR BETTER. SUCH REPAIRS SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE EXPENSE.
52. CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH SHALL INCLUDE BUT NOT BE LIMITED TO THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.
53. DEBRIS AND TRASH SHALL NOT BE BURIED OR STOCKPILED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL CITY, STATE, AND FEDERAL LAWS AND REGULATIONS. THE CONTRACTOR SHALL MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES, TO BE PROVIDED TO THE PROJECT ENGINEER UPON REQUEST.
54. CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND APPROVALS FOR OFF SITE DISPOSAL FACILITIES AND SUPPLY A COPY OF APPROVALS TO THE PROJECT ENGINEER UPON REQUEST.
55. CONTRACTOR SHALL MONITOR THE HAULING OF DEBRIS TO INSURE THAT ALL SPILLAGE FROM TRUCKS IS PROMPTLY AND COMPLETELY REMOVED AND CLEANED UP.
56. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS BEFORE THE START OF WORK. THE CONTRACTOR SHALL TAKE NECESSARY FIELD MEASUREMENTS AND OTHERWISE VERIFY ALL DIMENSIONS AND EXISTING CONSTRUCTION CONDITIONS INDICATED AND/OR SHOWN ON THE PLANS. SHOULD ANY ERROR OR INCONSISTENCY EXIST, THE CONTRACTOR SHALL NOT PROCEED WITH THE EFFECTED WORK UNTIL REPORTED TO THE PROJECT ENGINEER FOR CLARIFICATION OR CORRECTION.
57. CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF MAILBOXES WITH LOCAL POSTMASTER.
58. CONTRACTOR MUST DISCONNECT AND ABANDON ALL UTILITIES TO STRUCTURES THAT ARE BEING DEMOLISHED PER THE REQUIREMENTS OF THE PUBLIC UTILITY BEING ABANDONED.
59. CONTRACTOR TO LOCATE UNDERGROUND FUEL TANK AND ABANDON PER DEQ UNDERGROUND STORAGE TANK REQUIREMENTS, INCLUDING REMOVAL OF THE TANK AND REPLACEMENT WITH STRUCTURAL FILL.

**NOTIFICATION**

GENERAL - THE CONTRACTOR SHALL, AS A MINIMUM, COORDINATE THE PROPOSED CONSTRUCTION ACTIVITIES WITH THE OWNER AND THE LOCAL PUBLIC AGENCIES, UTILITIES AND COMPANIES DURING CONSTRUCTION TO AVOID DAMAGE AND TO PREVENT THE INTERRUPTION OF SERVICES AND UTILITIES TO RESIDENTS AND BUSINESSES.

ONE CALL LOCATE - OREGON UTILITIES NOTIFICATION CENTER (503) 246-6699

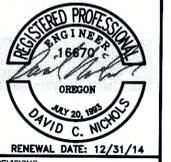
**APPROVED FOR CONSTRUCTION BY**  
 CITY OF WEST LINN  
 This approval is only for general conformance with the design concept and general compliance with applicable codes and requirements and shall not be construed as relieving the Design Engineer of full responsibility for accuracy and completeness of the drawings. This plan review approval does not prevent the City from requiring further code corrections in the field.  
 DATE: 9/11/14 BY: *Klari D. C.*

**AKS**  
 AKS ENGINEERING AND FORESTRY, LLC  
 12965 SW HERMAN RD  
 SUITE 100  
 TUALATIN, OR 97062  
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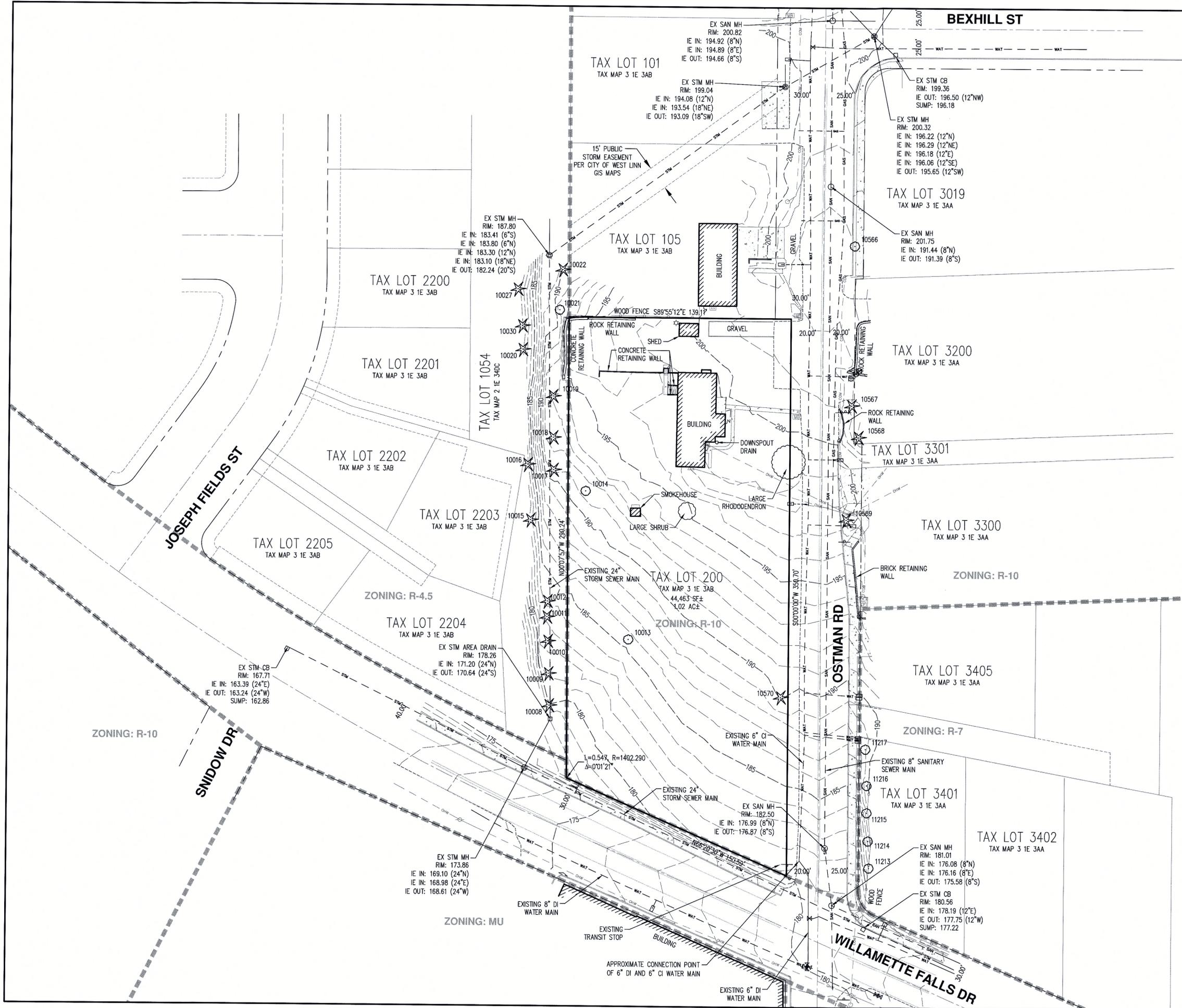
**RENAISSANCE AT WILLAMETTE**  
**WEST LINN OREGON**  
 CLACKAMAS COUNTY ASSESSOR'S TAXMAP 35103AB  
 ENGINEERING · PLANNING · SURVEYING  
 FORESTRY · LANDSCAPE ARCHITECTURE

**CONSTRUCTION NOTES**

DESIGNED BY: DCM  
 DRAWN BY: JDR  
 CHECKED BY: DCM/MBH  
 SCALE: AS NOTED  
 DATE: 09/16/14



JOB NUMBER  
**3745**  
 SHEET  
**C001**

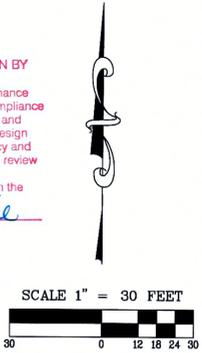


- NOTES:**
- UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBER 13235032. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
  - FIELD WORK WAS CONDUCTED OCTOBER 30 - NOVEMBER 6, 2013.
  - VERTICAL DATUM: ELEVATIONS ARE BASED ON NGS BENCHMARK 89 B (PID: R00258) ON THE WEST SIDE OF HWY 99E, 2.4 MILES SOUTH OF THE PROJECT SITE WITH A NAVD 88 ELEVATION OF 93.78 FEET.
  - THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY.
  - SURVEY IS ONLY VALID WITH SURVEYOR'S STAMP AND SIGNATURE.
  - BUILDING FOOTPRINTS ARE MEASURED TO SIDING UNLESS NOTED OTHERWISE. CONTACT SURVEYOR WITH QUESTIONS REGARDING BUILDING TIES.
  - CONTOUR INTERVAL IS 1 FOOT.
  - ONLY TREES HAVING A DIAMETER OF 6" AND GREATER, MEASURED AT BREAST HEIGHT, WERE SURVEYED.

**TREE TABLE**

TREE NO.	SPECIES	DBH(IN.)
10008	PINE	18
10009	PINE	6,15
10010	PINE	20
10011	DOUGLAS FIR	20
10012	DOUGLAS FIR	25
10013	CHERRY	8,7,7
10014	APPLE	26(ROTTEN)
10015	PINE	11,11
10016	PINE	12
10017	PINE	23
10018	PINE	15
10019	PINE	19
10020	PINE	9
10021	COTTONWOOD	65(STUMP)
10022	DOUGLAS FIR	31
10027	PINE	9
10030	PINE	6
10566	CHERRY	11,11,12
10567	DOUGLAS FIR	49
10568	DOUGLAS FIR	56
10569	DOUGLAS FIR	27
10570	DOUGLAS FIR	38(DEAD)
11213	MAPLE	26
11214	MAPLE	11
11215	MAPLE	14
11216	MAPLE	13
11217	BIRCH	18

APPROVED FOR CONSTRUCTION BY  
CITY OF WEST LINN  
This approval is only for general conformance with the design concept and general compliance with applicable codes and requirements and shall not be construed as relieving the Design Engineer of full responsibility for accuracy and completeness of the drawings. This plan review approval does not prevent the City from requiring further code corrections in the field.  
DATE: 9/17/14 BY: Khoi Q. Le



**AKS**  
ENGINEERING AND FORESTRY, LLC  
2305 SW HERMAN RD  
TUALUMINA, OR 97062  
PHONE: 503.663.6151  
FAX: 503.663.6152  
www.aks-eng.com

**RENAISSANCE  
AT WILLAMETTE**

**WEST LINN**  
CLACKAMAS COUNTY ASSESSOR'S TAXMAP 31E03AB

**EXISTING  
CONDITIONS PLAN  
AND TREE TABLE**

**OREGON**  
REGISTERED PROFESSIONAL LAND SURVEYOR  
JULY 15, 2003  
MONTGOMERY B. HURLEY  
58542LS  
RENEWALS: 6/30/15

JOB NUMBER  
**3745**  
SHEET  
**C002**

AKS DRAWING FILE: 3745 C002 EX.COND.DWG | LAYOUT: C002

**DEMOLITION AND TREE REMOVAL AND PRESERVATION PLAN**

**DEMOLITION NOTES:**

- PRIOR TO STARTING DEMOLITION OPERATIONS, THE CONTRACTOR SHALL APPLY FOR AND OBTAIN ALL NECESSARY PERMITS REQUIRED BY FEDERAL, STATE, CITY, AND LOCAL LAWS, CODES, AND REGULATIONS. CITY DEMOLITION PERMIT SHALL BE REQUIRED.
- THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES AND/OR IMPROVEMENTS TO REMAIN ON OR OFF SITE. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING STRUCTURES AND/OR IMPROVEMENTS TO REMAIN AND SHALL RESTORE ANY DAMAGE TO THE PRE-DEMOLITION CONDITION OR BETTER USING NEW MATERIALS. ANY REPAIRS REQUIRED SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE COST AND EXPENSE.
- CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR ALL OFF SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO OWNER'S REPRESENTATIVE PRIOR TO INITIATING WORK.
- CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES IN CONFORMANCE WITH THE EROSION CONTROL PLAN, NOTES, AND DETAILS PRIOR TO STARTING DEMOLITION OPERATIONS.
- THE LOCATION OF ALL UTILITIES SHALL BE MARKED IN THE FIELD PRIOR TO DEMOLITION. CONTRACTOR SHALL PROTECT AND MAINTAIN IN A SAFE AND OPERABLE CONDITION ALL UTILITIES INDICATED TO REMAIN, AND PREVENT INTERRUPTION OF EXISTING UTILITY SERVICES EXCEPT WHEN AUTHORIZED IN WRITING BY THE AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL PROVIDE TEMPORARY SERVICES, ACCEPTABLE TO GOVERNING AUTHORITIES AND OWNER'S REPRESENTATIVE, FOR BUILDING(S) TO REMAIN AS REQUIRED DURING INTERRUPTIONS TO EXISTING UTILITY SERVICES.
- DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE PROJECT LIMITS WITHOUT WRITTEN PERMISSION FROM THE OWNER'S REPRESENTATIVE AND/OR GOVERNMENTAL AGENCIES HAVING JURISDICTION IF APPLICABLE.
- THE CONTRACTOR SHALL KEEP ALL STREETS AND PUBLIC RIGHT-OF-WAYS CLEAN OF MUD, DIRT, AND DEMOLITION DEBRIS. THE CONTRACTOR SHALL MONITOR THE HAULING OF DEBRIS TO INSURE THAT ANY SPILLAGE FROM TRUCKS IS PROMPTLY AND COMPLETELY REMOVED AND CLEANED UP. IF REQUIRED AND/OR NECESSARY, THE CONTRACTOR SHALL COVER ALL HAUL VEHICLES.
- CONTRACTOR SHALL CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. IF APPLICABLE STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY STREET OPENING OR DEMOLITION ACTIVITIES IN THE RIGHT-OF-WAY.
- CONTRACTOR SHALL CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITIONS EXISTING PRIOR TO THE START OF THE WORK.

**TREE TABLE**

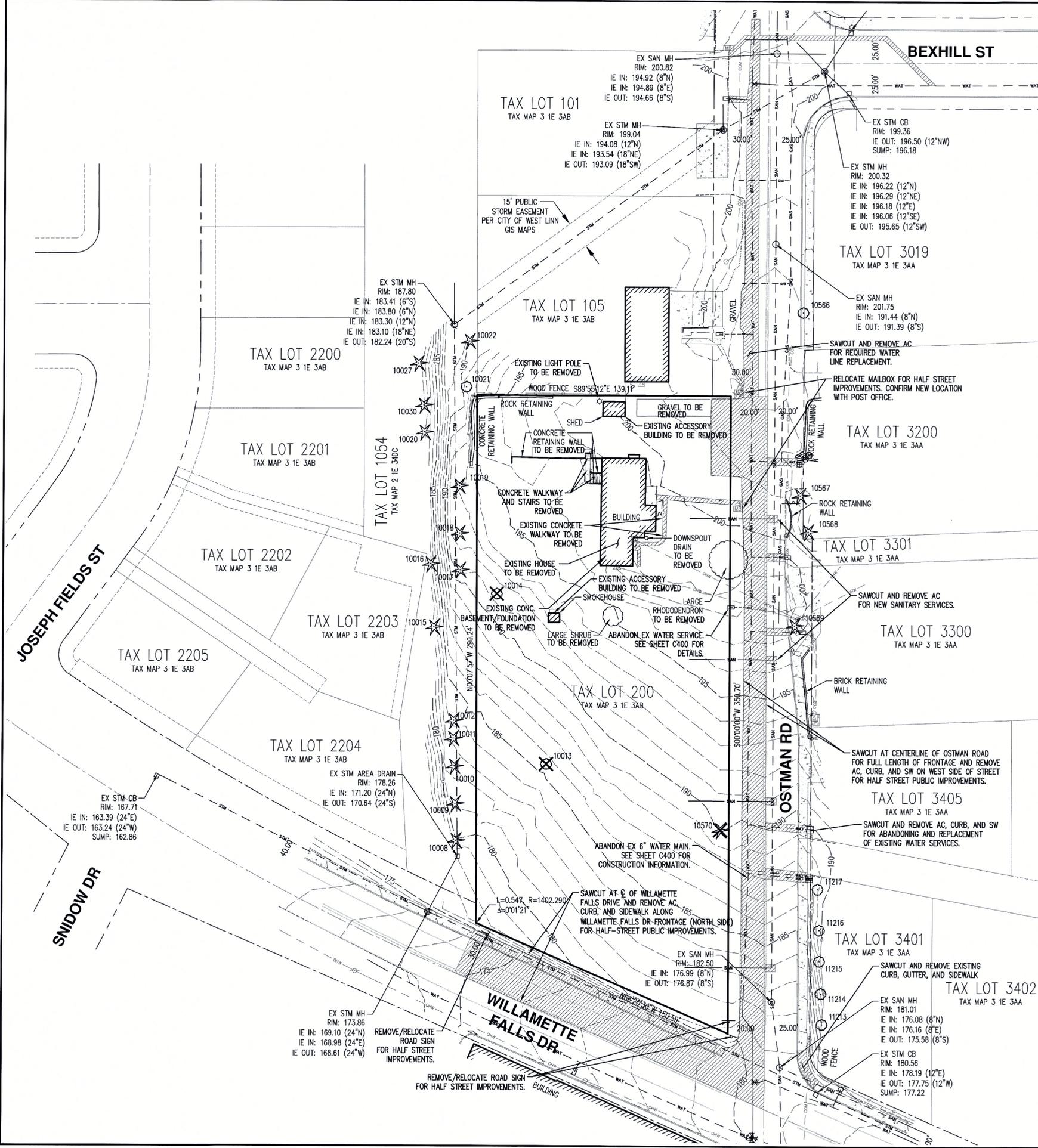
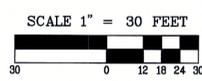
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\* TREE TO BE REMOVED

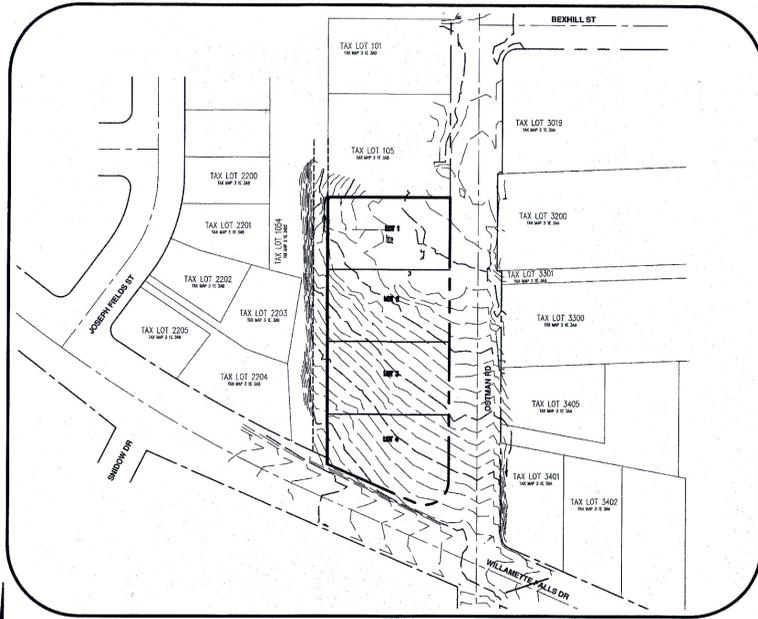
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 DATE: 9/17/14 BY: *Khoi Cole*

**LEGEND**

- EXISTING GROUND CONTOUR (1 FT) --- 101 ---
- EXISTING GROUND CONTOUR (5 FT) --- 100 ---
- EXISTING TREE TO BE REMOVED \* X
- EXISTING TREE TO REMAIN \* O
- A.C. / CONCRETE TO BE REMOVED [Hatched Box]



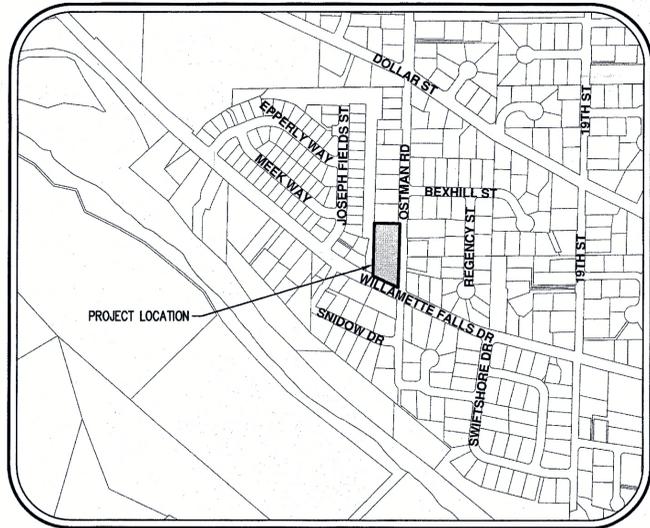
# ODEQ EROSION AND SEDIMENT CONTROL PLAN (ESCP)



## APPROVED PLAN SITE MAP

City of West Linn  
Building Department  
DATE: 8-27-14  
BY: David W. Nichols

THIS PLAN REVIEW APPROVAL DOES NOT PREVENT THE FIELD INSPECTOR FROM REQUIRING FURTHER CODE CORRECTIONS.



## VICINITY MAP

SCALE: 1"=500'

### ATTENTION EXCAVATORS:

OREGON LAW 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 THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS BUT NOT MORE THAN TEN BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.



### PLANNING / ENGINEERING / SURVEYING FIRM

AKS ENGINEERING & FORESTRY, LLC.  
CONTACT: DAVID NICHOLS  
12965 SW HERMAN ROAD, SUITE 100  
TUALATIN, OR 97062  
PH: 503-563-6151  
FAX: 503-563-6152

### APPLICANT/OWNER

RENAISSANCE HOMES  
16771 BOONES FERRY ROAD  
LAKE OSWEGO, OR 97035

### SHEET INDEX

- C050 - EROSION CONTROL COVER SHEET
- C051 - PHASE 1 EROSION AND SEDIMENT CONTROL PLAN
- C052 - PHASE 2 GRADING AND EROSION CONTROL PLAN
- C053 - EROSION CONTROL NOTES AND DETAILS

### NARRATIVE DESCRIPTIONS

**EXISTING SITE CONDITIONS**  
ONE SINGLE FAMILY HOUSE WITH DETACHED SHED OUTBUILDING.

**DEVELOPED CONDITIONS**  
\* RESIDENTIAL SUBDIVISION BUILDING LOTS.

### NATURE OF CONSTRUCTION ACTIVITY AND TIMETABLE FOR MAJOR ACTIVITIES

- \* CLEARING (SEPT, 2014 - JAN, 2015)
- \* MASS GRADING [EXCAVATION AND FILL] (SEPT, 2014 - NOV, 2014)
- \* INSTALLATION OF UTILITIES (SEPT, 2014 - JAN, 2015)
- \* STREET CONSTRUCTION (SEPT, 2014 - JAN, 2015)
- \* FINAL STABILIZATION (JAN, 2015)

TOTAL SITE AREA = 1.02 ACRES±

TOTAL DISTURBED AREA = 60,566 SF± = 1.39 ACRES±

### SITE SOIL CLASSIFICATION:

53C LATOURELL LOAM, 8% TO 15 % SLOPES  
88A WILLAMETTE SILT LOAM, WET, 0% - 3% SLOPES

### RECEIVING WATER BODIES:

PUBLIC STORM DRAINAGE SYSTEM.

### INSPECTION FREQUENCY:

- \* ONCE EVERY TWO WEEKS ON INACTIVE SITES.
- \* DAILY WHEN STORMWATER RUNOFF IS OCCURRING.

### PROJECT LOCATION:

1770 OSTRMAN ROAD, WEST LINN, OR 97068  
LAT: N45.344722' LONG: W122.667222'

### PROPERTY DESCRIPTION:

TAX LOT 200, CLACKAMAS COUNTY ASSESSOR'S MAP 3 1E 03AB, LOCATED IN THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 3, TOWNSHIP 3 SOUTH, RANGE 1 EAST, WILLAMETTE MERIDIAN, CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

### PERMITTEE'S SITE INSPECTOR:

NATHAN GARITY  
COMPANY/AGENCY: AKS ENGINEERING & FORESTRY, LLC  
PHONE: 503-563-6151 (OFFICE) 971-275-3920 (MOBILE)  
FAX: 503-563-6151  
E-MAIL: NATHAN@AKS-ENG.COM  
DESCRIPTION OF EXPERIENCE: 5 YEARS EXPERIENCE INSTALLING AND 2 YEAR INSPECTING EROSION AND SEDIMENT CONTROLS.

THE PERMITTEE IS REQUIRED TO MEET ALL THE CONDITIONS OF THE 1200CN PERMIT. THIS ESCP AND GENERAL CONDITIONS HAVE BEEN DEVELOPED TO FACILITATE COMPLIANCE WITH THE 1200CN PERMIT REQUIREMENTS. IN CASES OF DISCREPANCIES OR OMISSIONS, THE 1200CN PERMIT REQUIREMENTS SUPERCEDE REQUIREMENTS OF THIS PLAN.

## STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES:

### ODEQ STANDARD EROSION AND SEDIMENT CONTROL PLAN 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 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.A)
3. 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.A)
4. 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))
5. SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. (SCHEDULE A.12.C.II)
6. 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))
7. 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 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)(E)(2))
8. PRESERVE EXISTING VEGETATION AND RE-VEGETATED OPEN AREAS WHEN PRACTICABLE BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
9. 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.D.I AND A.8.C)
10. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (SCHEDULE A.8.C.I.(6))
11. 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.(7))
12. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (SCHEDULE A.8.C.I.(7))
13. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPs SUCH AS: GRAVELED (OR PAVED) EXISTING AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPs MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (SCHEDULE A.7.D.II.(0 AND A.8.C.I.(4))
14. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (SCHEDULE A.7.D.II.(3))
15. USE BMPs TO PREVENT OR MINIMIZE STORMWATER EXPOSED TO POLLUTANTS FROM SPILLS, VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION OPERATIONS. (SCHEDULE A.7.E.I.(2))
16. WATER OR USE A SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (SCHEDULE A.7.B.II)
17. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH 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)
18. IF A STORMWATER TREATMENT SYSTEM (FOR EXAMPLE, ELECTO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, 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)
19. 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)
20. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND DURING WET WEATHER. (SCHEDULE A.7.A.I)
21. 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)
22. 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)
23. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENT BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (SCHEDULE A.9.C.III & IV)
24. 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 REOCURRENCE 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 TIMEFRAME. (SCHEDULE A.9.B.I)
25. 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)
26. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHODS SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (SCHEDULE A.7.F.I)
27. 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 AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (SCHEDULE A.7.F.II)
28. THE DESIGNATED EROSION AND SEDIMENT CONTROL INSPECTOR MUST PERFORM DAILY INSPECTIONS OF THE BMPs AND DISCHARGE OUTFALLS WHEN RAINFALL AND RUNOFF OCCUR. RECORD THE INSPECTIONS AND OBSERVATIONS IN A LOG THAT IS ON SITE. (SCHEDULE B.1.B(1))
29. ALL ESCP CONTROLS AND PRACTICES MUST BE INSPECTED VISUALLY ONCE TO ENSURE THAT BMPs ARE IN WORKING ORDER PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY AND MUST BE INSPECTED VISUALLY ONCE EVERY TWO (2) WEEKS DURING INACTIVE PERIODS GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS. (SCHEDULE B.1.B(2) & (3))
30. IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION DURING PERIOD IN WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER. (SCHEDULE B.1.B(4))
31. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. IDENTIFY THE TYPE OF VEGETATION SEED MIX USED. (SCHEDULE A.7.B.II)
32. PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED AREAS. 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 BMPs. (SCHEDULE A.8.C.II)

This Plan has been Reviewed & Complies w/  
By: [Signature] Date: 8-27-14  
Building: [Signature] Date: 8-27-14  
Planning: [Signature] Date: 8-27-14  
Engineering: KGL Date: 8/28/14  
Parks: [Signature] Date: 8-27-14

CITY OF WEST LINN  
EROSION CONTROL APPROVED  
DATE 8/28/14 BY KGL

## BMP MATRIX FOR CONSTRUCTION PHASES

REFER TO DEQ GUIDANCE MANUAL FOR A COMPREHENSIVE LIST OF AVAILABLE BMP'S.

BMPs	YEAR:																	
	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11
PIPE SLOPE DRAINS																		
ENERGY DISSIPATORS																		
TEMPORARY DIVERSION DIKES																		
CHECK DAMS																		
TEMPORARY SEEDING AND PLANTING																		
PERMANENT SEEDING AND PLANTING										X	X	X						
MYCORRHIZAE/BIOFERTILIZERS																		
MULCHES (SPECIFY TYPE)																		
COMPOST BLANKETS																		
COMPOST SOCKS																		
COMPOST BERM																		
SOIL TACKIFIERS																		
SODDING VEGETATIVE BUFFER STRIPS																		
SEDIMENT FENCING	**				X	X	X	X	X	X								
EROSION CONTROL BLANKETS AND MATS-AMERICAN GREEN S150																		
EARTH DIKES (STABILIZED)																		
DRAINAGE SWALES								X	X	X	X	X						
ROCK OUTLET PROTECTION																		
SEDIMENT TRAP																		
STORM DRAIN INLET PROTECTION	**				X	X	X	X	X	X								
TEMPORARY OR PERMANENT SEDIMENTATION-BASINS																		
UNPAVED ROADS GRAVELED OR OTHER BMP ON ROAD																		
DEWATERING (TREATMENT LOCATION, SCHEMATIC, AND SAMPLING PLAN REQUIRED)																		
PAVING OPERATION CONTROLS											X	X						
CONCRETE TRUCK WASHOUT								X	X	X	X							
GRAVEL CONSTRUCTION ENTRANCE	**				X	X	X	X										
PLASTIC SHEETING										X	X	X						
RAIN GARDEN								X	X	X	X	X						

\*\* SIGNIFIES BMP THAT WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY.

### INSPECTION FREQUENCY

SITE CONDITION	MINIMUM FREQUENCY
1. ACTIVE PERIOD	DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURRING.  AT LEAST ONCE EVERY TWO (2) WEEKS REGARDLESS OF WHETHER STORMWATER RUNOFF IS OCCURRING.
2. PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY.	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE.
3. INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.	ONCE EVERY TWO (2) WEEKS.
4. PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.	IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.

- \* HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS.
- \* ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-CN PERMIT REQUIREMENTS.
- \* INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-CN PERMIT REQUIREMENTS.
- \* REVISIONS TO APPROVED ESC PLAN OR INSPECTOR MUST BE SUBMITTED TO DEQ OR AGENT IN ACCORDANCE WITH CURRENT 1200-CN PERMIT.

## RATIONALE STATEMENT

A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON DEQ'S GUIDANCE MANUAL 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 CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS, AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AN ACTION PLAN WILL BE SUBMITTED.

INITIAL *DN*



AKS ENGINEERING AND FORESTRY, LLC  
12965 SW HERMAN RD  
SUITE 100  
TUALATIN, OR 97062  
PHONE: 503.563.6151  
FAX: 503.563.6152  
www.aks-eng.com

RENAISSANCE AT WILLAMETTE  
WEST LINN  
CLACKAMAS COUNTY ASSESSOR'S TMAP 31E03AB  
TAX LOT 0200

EROSION AND SEDIMENT CONTROL COVER SHEET

DESIGNED BY: DCN  
DRAWN BY: JDR  
CHECKED BY: DCN/MBH  
SCALE: AS NOTED  
DATE: 08/14/14  
RENEWAL DATE: 12/31/14

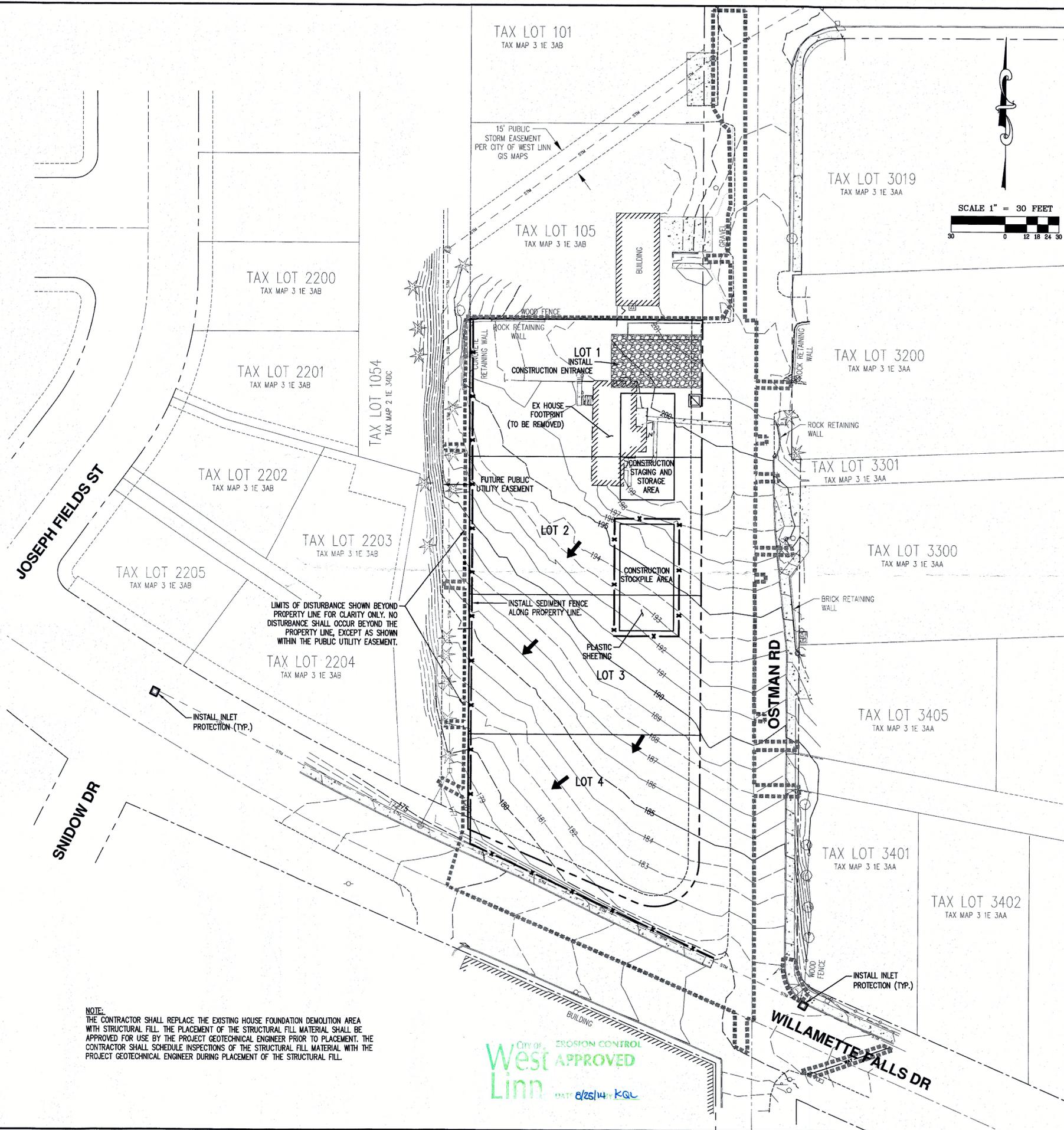
JOB NUMBER: 3745  
SHEET: C050

**GRADING AND EROSION CONTROL LEGEND**

- EXISTING GROUND CONTOUR (1 FT)
- EXISTING GROUND CONTOUR (5 FT)
- FINISHED GRADE CONTOUR (1 FT)
- FINISHED GRADE CONTOUR (5 FT)
- LIMITS OF DISTURBANCE (1.39 ACRES ±)
- SEDIMENT FENCE (TO BE INSTALLED PRIOR TO GRADING)
- SEDIMENT FENCE (TO BE INSTALLED AFTER GRADING)
- INLET PROTECTION
- CONCRETE WASHOUT AREA
- DRAINAGE FLOW DIRECTION
- GRAVEL CONSTRUCTION ENTRANCE
- SLOPE MATTING

**LEGEND**

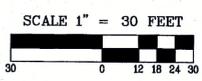
- |                          |                 |                             |                 |
|--------------------------|-----------------|-----------------------------|-----------------|
| <b>EXISTING</b>          | <b>PROPOSED</b> | <b>EXISTING</b>             | <b>PROPOSED</b> |
| DECIDUOUS TREE           |                 | STORM SEWER CLEAN OUT       |                 |
| CONIFEROUS TREE          |                 | STORM SEWER CATCH BASIN     |                 |
| FIRE HYDRANT             |                 | STORM SEWER AREA DRAIN      |                 |
| WATER BLOWOFF            |                 | STORM SEWER MANHOLE         |                 |
| WATER METER              |                 | GAS METER                   |                 |
| WATER VALVE              |                 | GAS VALVE                   |                 |
| DOUBLE CHECK VALVE       |                 | GUY WIRE ANCHOR             |                 |
| AIR RELEASE VALVE        |                 | POWER POLE                  |                 |
| SANITARY SEWER CLEAN OUT |                 | POWER VAULT                 |                 |
| SANITARY SEWER MANHOLE   |                 | POWER JUNCTION BOX          |                 |
| SIGN                     |                 | POWER PEDESTAL              |                 |
| STREET LIGHT             |                 | COMMUNICATIONS VAULT        |                 |
| MAILBOX                  |                 | COMMUNICATIONS JUNCTION BOX |                 |
|                          |                 | COMMUNICATIONS RISER        |                 |
- 
- |                     |                 |                 |
|---------------------|-----------------|-----------------|
|                     | <b>EXISTING</b> | <b>PROPOSED</b> |
| RIGHT-OF-WAY LINE   |                 |                 |
| BOUNDARY LINE       |                 |                 |
| PROPERTY LINE       |                 |                 |
| CENTERLINE          |                 |                 |
| DITCH               |                 |                 |
| CURB                |                 |                 |
| EDGE OF PAVEMENT    |                 |                 |
| EASEMENT            |                 |                 |
| FENCE LINE          |                 |                 |
| GRAVEL EDGE         |                 |                 |
| POWER LINE          |                 |                 |
| OVERHEAD WIRE       |                 |                 |
| COMMUNICATIONS LINE |                 |                 |
| FIBER OPTIC LINE    |                 |                 |
| GAS LINE            |                 |                 |
| STORM SEWER LINE    |                 |                 |
| SANITARY SEWER LINE |                 |                 |
| WATER LINE          |                 |                 |



LIMITS OF DISTURBANCE SHOWN BEYOND PROPERTY LINE FOR CLARITY ONLY. NO DISTURBANCE SHALL OCCUR BEYOND THE PROPERTY LINE, EXCEPT AS SHOWN WITHIN THE PUBLIC UTILITY EASEMENT.

**NOTE:**  
THE CONTRACTOR SHALL REPLACE THE EXISTING HOUSE FOUNDATION DEMOLITION AREA WITH STRUCTURAL FILL. THE PLACEMENT OF THE STRUCTURAL FILL MATERIAL SHALL BE APPROVED FOR USE BY THE PROJECT GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. THE CONTRACTOR SHALL SCHEDULE INSPECTIONS OF THE STRUCTURAL FILL MATERIAL WITH THE PROJECT GEOTECHNICAL ENGINEER DURING PLACEMENT OF THE STRUCTURAL FILL.

City of West Linn  
EROSION CONTROL APPROVED  
DATE: 8/25/14 BY: KAL



AKS DRAWING FILE: 3745 C051 GRADING AND ESC REVIT.DWG | LAYOUT: C051

AKS ENGINEERING AND FORESTRY, LLC  
12965 SW HERMAN RD  
SUITE 100  
TUALATIN, OR 97062  
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ENGINEERING · SURVEYING  
FORESTRY · LANDSCAPE ARCHITECTURE

RENAISSANCE  
AT WILLAMETTE

WEST LINN  
OREGON

PHASE I EROSION AND  
SEDIMENT CONTROL PLAN

CLACKAMAS COUNTY ASSESSOR'S TAXMAP 351E03AB  
TAX LOT 0200

DESIGNED BY: DCN

DRAWN BY: JDR

CHECKED BY: DCN/MBH

SCALE: AS NOTED

DATE: 08/14/14

RENEWAL DATE: 12/31/14

REVISIONS

JOB NUMBER  
3745

SHEET  
C051

**GRADING AND EROSION CONTROL LEGEND**

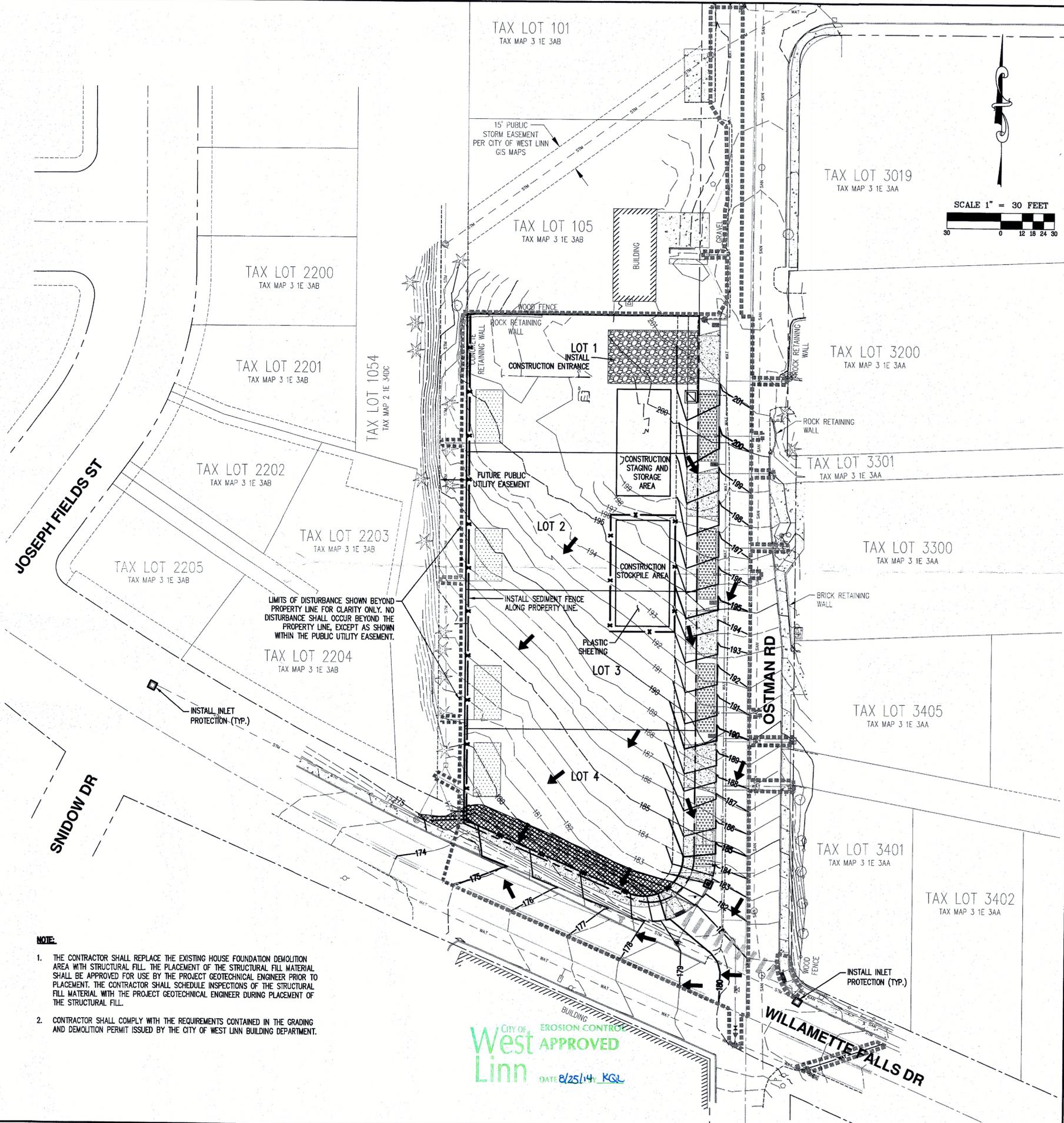
EXISTING GROUND CONTOUR (1 FT)	
EXISTING GROUND CONTOUR (5 FT)	
FINISHED GRADE CONTOUR (1 FT)	
FINISHED GRADE CONTOUR (5 FT)	
LIMITS OF DISTURBANCE (1.39 ACRES ±)	
SEDIMENT FENCE (TO BE INSTALLED PRIOR TO GRADING)	
SEDIMENT FENCE (TO BE INSTALLED AFTER GRADING)	
INLET PROTECTION	
CONCRETE WASHOUT AREA	
DRAINAGE FLOW DIRECTION	
GRAVEL CONSTRUCTION ENTRANCE	
SLOPE MATTING	

**LEGEND**

DECIDUOUS TREE		EXISTING	PROPOSED	STORM SEWER CLEAN OUT		EXISTING	PROPOSED
CONIFEROUS TREE		EXISTING	PROPOSED	STORM SEWER CATCH BASIN		EXISTING	PROPOSED
FIRE HYDRANT		EXISTING	PROPOSED	STORM SEWER AREA DRAIN		EXISTING	PROPOSED
WATER BLOWOFF		EXISTING	PROPOSED	STORM SEWER MANHOLE		EXISTING	PROPOSED
WATER METER		EXISTING	PROPOSED	GAS METER		EXISTING	PROPOSED
WATER VALVE		EXISTING	PROPOSED	GAS VALVE		EXISTING	PROPOSED
DOUBLE CHECK VALVE		EXISTING	PROPOSED	GUY WIRE ANCHOR		EXISTING	PROPOSED
AIR RELEASE VALVE		EXISTING	PROPOSED	POWER POLE		EXISTING	PROPOSED
SANITARY SEWER CLEAN OUT		EXISTING	PROPOSED	POWER VAULT		EXISTING	PROPOSED
SANITARY SEWER MANHOLE		EXISTING	PROPOSED	POWER JUNCTION BOX		EXISTING	PROPOSED
SIGN		EXISTING	PROPOSED	POWER PEDESTAL		EXISTING	PROPOSED
STREET LIGHT		EXISTING	PROPOSED	COMMUNICATIONS VAULT		EXISTING	PROPOSED
MAILBOX		EXISTING	PROPOSED	COMMUNICATIONS JUNCTION BOX		EXISTING	PROPOSED
		EXISTING	PROPOSED	COMMUNICATIONS RISER		EXISTING	PROPOSED

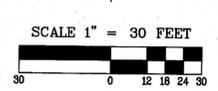
RIGHT-OF-WAY LINE		EXISTING	PROPOSED
BOUNDARY LINE		EXISTING	PROPOSED
PROPERTY LINE		EXISTING	PROPOSED
CENTERLINE		EXISTING	PROPOSED
DITCH		EXISTING	PROPOSED
CURB		EXISTING	PROPOSED
EDGE OF PAVEMENT		EXISTING	PROPOSED
EASEMENT		EXISTING	PROPOSED
FENCE LINE		EXISTING	PROPOSED
GRAVEL EDGE		EXISTING	PROPOSED
POWER LINE		EXISTING	PROPOSED
OVERHEAD WIRE		EXISTING	PROPOSED
COMMUNICATIONS LINE		EXISTING	PROPOSED
FIBER OPTIC LINE		EXISTING	PROPOSED
GAS LINE		EXISTING	PROPOSED
STORM SEWER LINE		EXISTING	PROPOSED
SANITARY SEWER LINE		EXISTING	PROPOSED
WATER LINE		EXISTING	PROPOSED



LIMITS OF DISTURBANCE SHOWN BEYOND PROPERTY LINE FOR CLARITY ONLY. NO DISTURBANCE SHALL OCCUR BEYOND THE PROPERTY LINE, EXCEPT AS SHOWN WITHIN THE PUBLIC UTILITY EASEMENT.

- NOTE:**
1. THE CONTRACTOR SHALL REPLACE THE EXISTING HOUSE FOUNDATION DEMOLITION AREA WITH STRUCTURAL FILL. THE PLACEMENT OF THE STRUCTURAL FILL MATERIAL SHALL BE APPROVED FOR USE BY THE PROJECT GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT. THE CONTRACTOR SHALL SCHEDULE INSPECTIONS OF THE STRUCTURAL FILL MATERIAL WITH THE PROJECT GEOTECHNICAL ENGINEER DURING PLACEMENT OF THE STRUCTURAL FILL.
  2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS CONTAINED IN THE GRADING AND DEMOLITION PERMIT ISSUED BY THE CITY OF WEST LINN BUILDING DEPARTMENT.

City of West Linn  
EROSION CONTROL APPROVED  
DATE: 8/25/14 KQL



**AKS**  
AKS ENGINEERING AND FORESTRY, LLC  
12985 SW HERMAN RD  
SULZMAN, OR 97062  
PHONE: 503.966.6151  
FAX: 503.966.6152  
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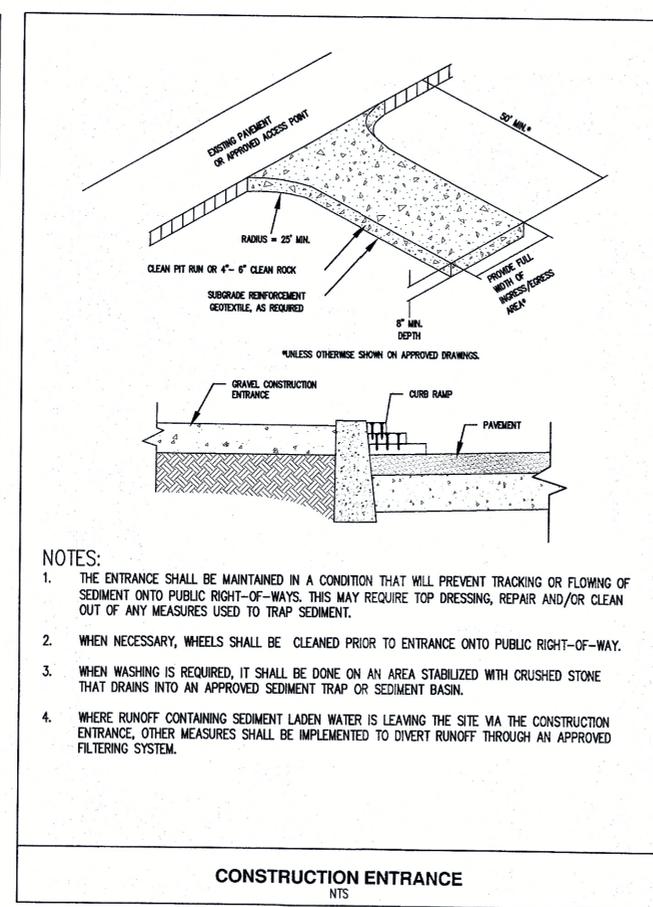
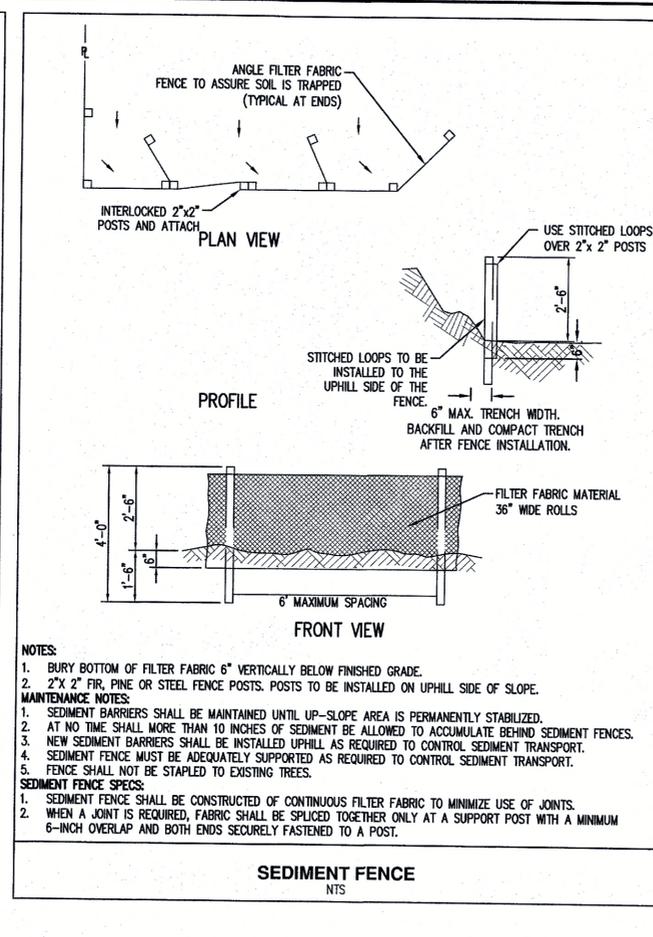
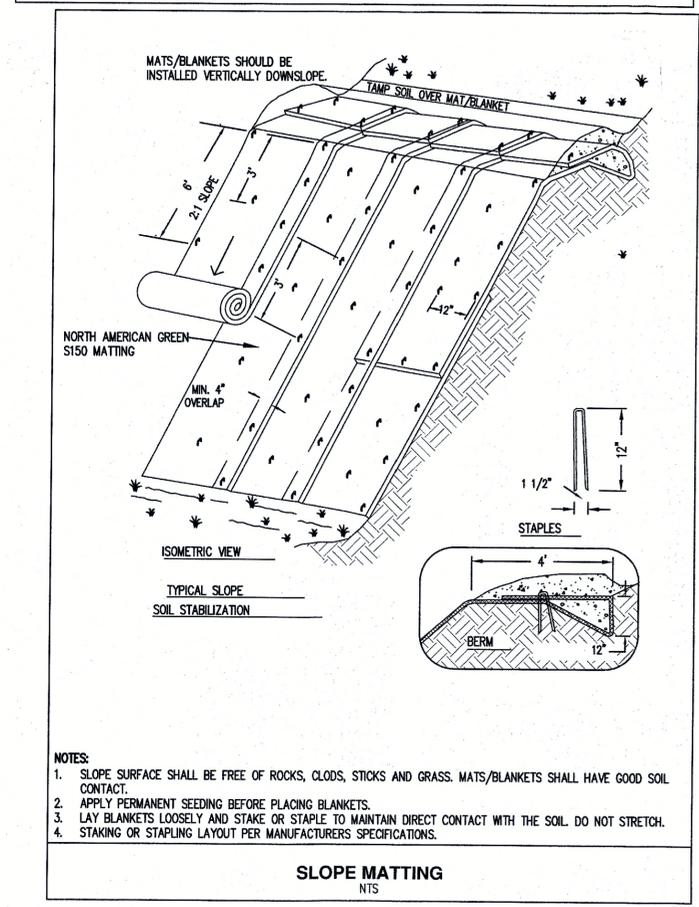
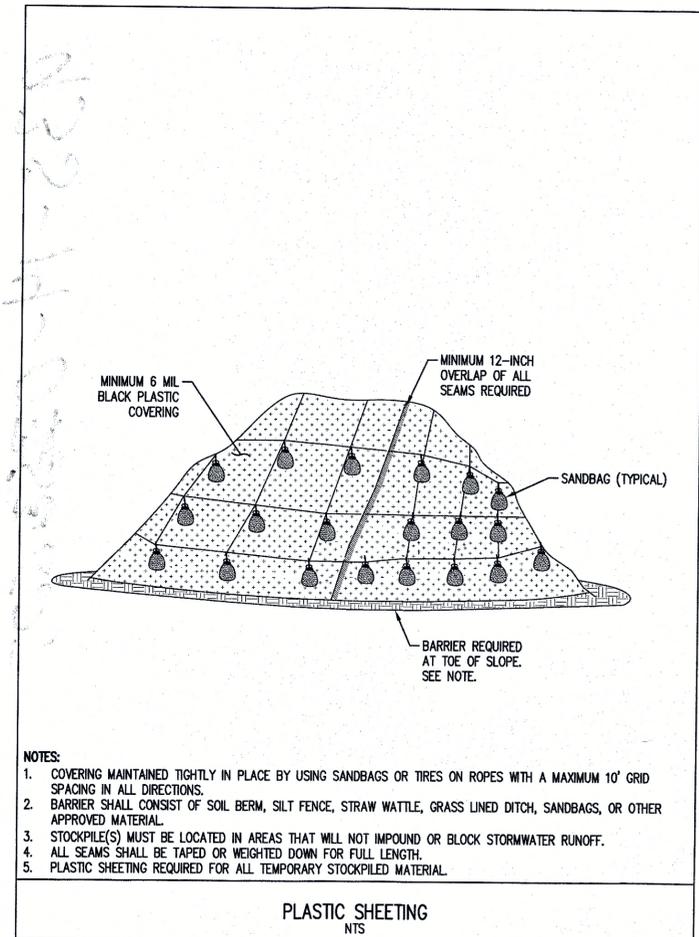
**RENAISSANCE AT WILLAMETTE**  
WEST LINN OREGON  
CLATSOP COUNTY ASSESSOR'S TAX MAP 31E33A06  
TAX LOT 0200

**PHASE II GRADING AND EROSION PLAN**

DESIGNED BY: DCN  
DRAWN BY: JDR  
CHECKED BY: DCN/MBH  
SCALE: AS NOTED  
DATE: 08/14/14

REGISTERED PROFESSIONAL ENGINEER  
DAVID C. NICHOLS  
RENEWAL DATE: 12/31/14

JOB NUMBER 3745  
SHEET C052



**PRE-CONSTRUCTION, CLEARING, AND DEMOLITION NOTES:**

- ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE OR OTHER APPROVED MATERIALS.
- SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES.

**EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION:**

- ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- ALL "SEDIMENT BARRIERS (TO BE INSTALLED AFTER GRADING)" SHALL BE INSTALLED IMMEDIATELY FOLLOWING ESTABLISHMENT OF FINISHED GRADE AS SHOWN ON THESE PLANS.
- INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.
- LONG TERM SLOPE STABILIZATION MEASURES SHALL BE IN PLACE OVER AREAS WITH A SLOPE MORE THAN 5:1.

**OTHER MISCELLANEOUS BMP NOTES:**

- TO PREVENT ILLICIT CONNECTION AND ILLEGAL DISCHARGE:**
- INSPECT SITE BEFORE BEGINNING THE JOB FOR EVIDENCE OF ILLICIT CONNECTIONS OR ILLEGAL DUMPING OR DISCHARGES.
  - INSPECT SITE REGULARLY DURING PROJECT EXECUTION FOR EVIDENCE OF ILLICIT CONNECTIONS OR ILLEGAL DUMPING OR DISCHARGES.
  - OBSERVE SITE PERIMETER FOR EVIDENCE OR POTENTIAL OF ILLICITLY DISCHARGED OR ILLEGALLY DUMPED MATERIAL WHICH MAY ENTER THE JOB SITE.
  - IDENTIFICATION OF ILLICIT CONNECTIONS AND ILLEGAL DUMPING OR DISCHARGES:
    - SOLIDS: LOOK FOR DEBRIS, OR RUBBISH PILES. SOLID WASTE DUMPING OFTEN OCCURS ON ROADWAYS WITH LIGHT TRAFFIC LOADS OR IN AREAS NOT EASILY VISIBLE FROM THE TRAVELED WAY.
    - LIQUIDS:
      - VISIBLE SIGNS OF STAINING OR UNUSUAL COLORS TO THE PAVEMENT OR SURROUNDING ADJACENT SOILS.
      - DISCOLORATION OR OILY SUBSTANCES IN THE WATER OR STAINS AND RESIDUES DETAINED WITH DITCHES, CHANNELS OR DRAINAGE BOXES.
      - PUNGENT ODORS COMING FROM THE DRAINAGE SYSTEMS.
      - ABNORMAL WATER FLOW DURING THE DRY WEATHER SEASON.
      - URBAN AREAS - EVIDENCE OF ILLICIT CONNECTIONS OR ILLEGAL DISCHARGES IS TYPICALLY DETECTED AT THE STORM DRAIN OUTFALL LOCATIONS OR AT THE MANHOLES. SIGNS OF AN ILLICIT CONNECTION OR ILLEGAL DISCHARGE CAN INCLUDE:
        - ABNORMAL WATER FLOW DURING THE DRY WEATHER SEASON.
        - UNUSUAL FLOWS IN SUB-DRAIN SYSTEMS USED FOR DEWATERING.
        - PUNGENT ODORS COMING FROM THE DRAINAGE SYSTEMS.
        - DISCOLORATION OR OILY SUBSTANCES IN THE WATER OR STAINS AND RESIDUES DETAINED WITHIN DITCHES.
        - EXCESSIVE SEDIMENT DEPOSITS, PARTICULARLY ADJACENT TO OR NEAR ACTIVE OFF-SITE CONSTRUCTION.

- WHEN CLEANING VEHICLES OR EQUIPMENT WITH WATER:
  - USE AS LITTLE WATER AS POSSIBLE. CONSIDER USING A HIGH PRESSURE SPRAYER AND USE THE POSITIVE SHUTOFF VALVE.
  - DO NOT USE SOLVENTS OR DETERGENTS TO CLEAN VEHICLES OR EQUIPMENT ON SITE.
  - DO NOT USE STEAM CLEANING ON SITE.

- INSPECT AND CLEAN WORK AREAS REGULARLY TO LIMIT WIND BLOWN DEBRIS AND POLLUTANTS TRANSPORTED BY STORMWATER.
- TO REUSE AND RECYCLE CONSTRUCTION WASTES:**
- USE TRENCH SPOILS AND CUT AREA SOIL FOR FILL. UNSUITABLE AND EXCESS MATERIAL SHALL BE HAULED OFF SITE TO AN APPROVED LOCATION. IMPORTED FILL MATERIAL SHALL BE APPROVED BY THE PROJECT'S GEOTECHNICAL ENGINEER.

**GRADING, STREET, AND UTILITY EROSION AND SEDIMENT CONSTRUCTION NOTES:**

- LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SLOPE MATTING.
- TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
- STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
- EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
- AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
- SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
- AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.
- SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORMWATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.
- AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORMWATER SYSTEM.
- USE BMPs SUCH AS INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
- COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.



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FAX: 503.563.6152  
www.aks-eng.com

**RENAISSANCE AT WILLAMETTE**  
WEST LINN  
TAX LOT 0220  
CLACKAMAS COUNTY ASSESSOR'S TAMAP SITE/DAG

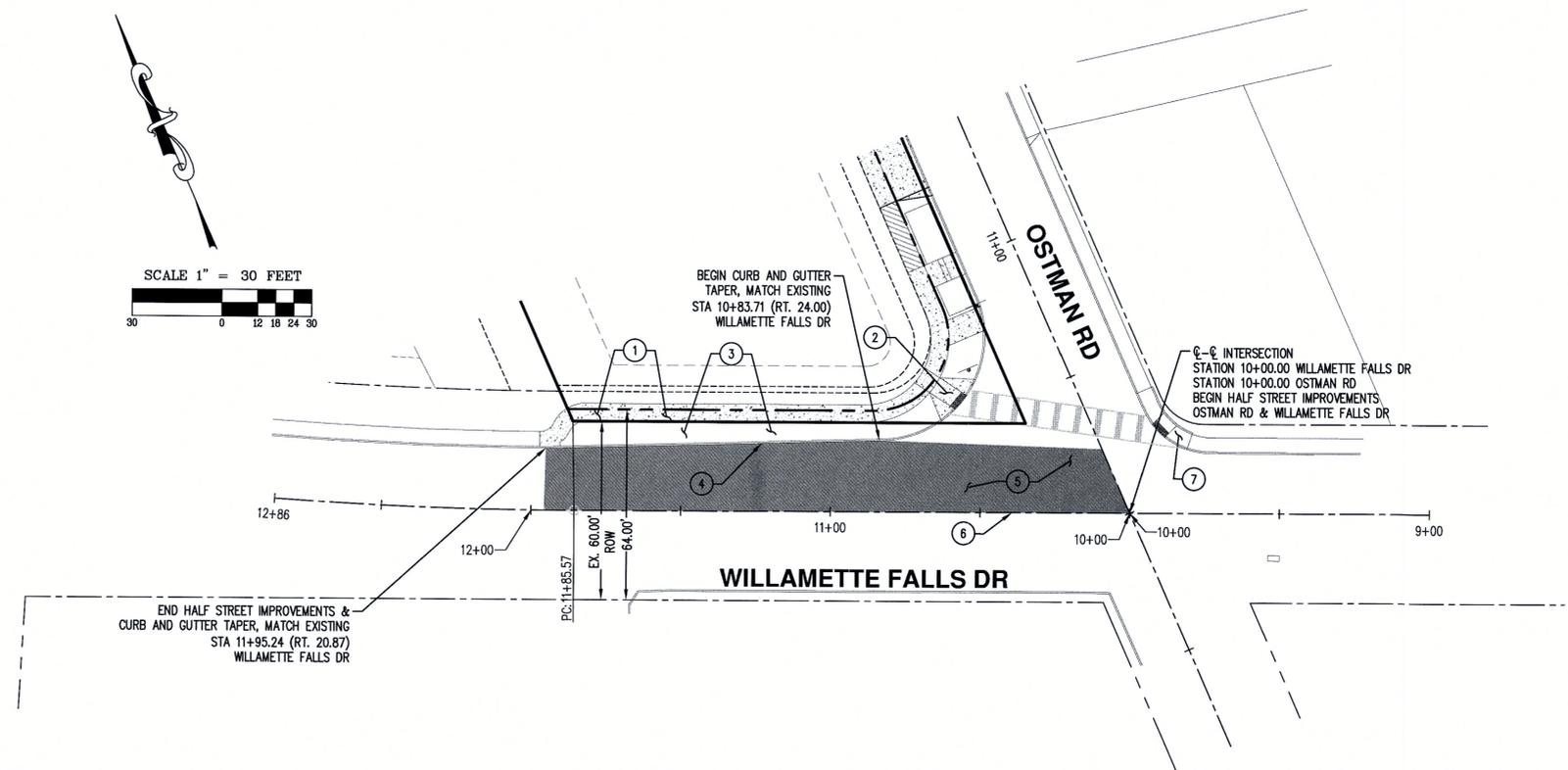
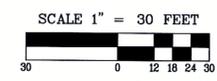
**EROSION CONTROL DETAILS**

DESIGNED BY: DCN  
DRAWN BY: JUR  
CHECKED BY: DCN/MBH  
SCALE: AS NOTED  
DATE: 08/14/14

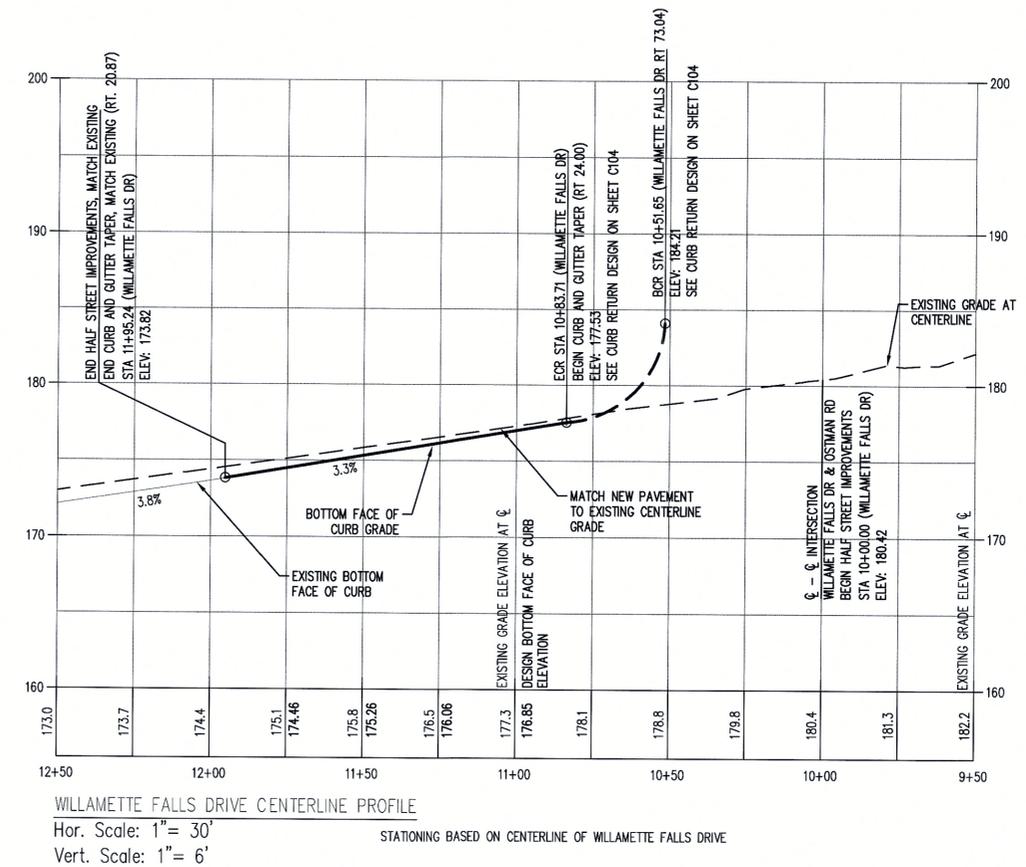
REGISTERED PROFESSIONAL ENGINEER  
DAVID C. NICHOLS  
RENEWAL DATE: 12/31/14  
REVISIONS:

JOB NUMBER  
3745  
SHEET  
C053





- PUBLIC STREET KEYED NOTES**
- 1 INSTALL 6' WIDE CONCRETE SIDEWALK, SEE DETAIL ON SHEET C103, SEE SHEET C104 FOR DETAILED GRADING.
  - 2 INSTALL SIDEWALK RAMP, SEE DETAIL ON SHEET C103. SEE SHEET C104 FOR DETAILED GRADING.
  - 3 INSTALL LANDSCAPING AND STREET TREES, SEE SHEET L100 (TO BE APPROVED BY CITY ARBORIST).
  - 4 INSTALL STANDARD CURB AND GUTTER, SEE DETAIL ON SHEET C103.
  - 5 INSTALL AC PAVEMENT AND AGGREGATE BASE, SEE DETAIL ON SHEET C103.
  - 6 SAWCUT EX AC AT CENTERLINE. SAND AND SEAL SAWCUT JOINT PER CITY CONSTRUCTION STANDARDS.
  - 7 INSTALL SIDEWALK RAMP, SEE DETAIL ON SHEET C104.



**WILLAMETTE FALLS DRIVE  
 CENTERLINE ALIGNMENT**

CENTERLINE STATION	TANGENT / CURVE	BEARING / RADIUS	LENGTH	DELTA
PT STA: 10+00.00				
	TANGENT	N66°20'30"W	185.57'	
PC STA: 11+85.57				
	CURVE RT	1432.29'	9.66'	00°23'00"
PT STA: 11+95.24				

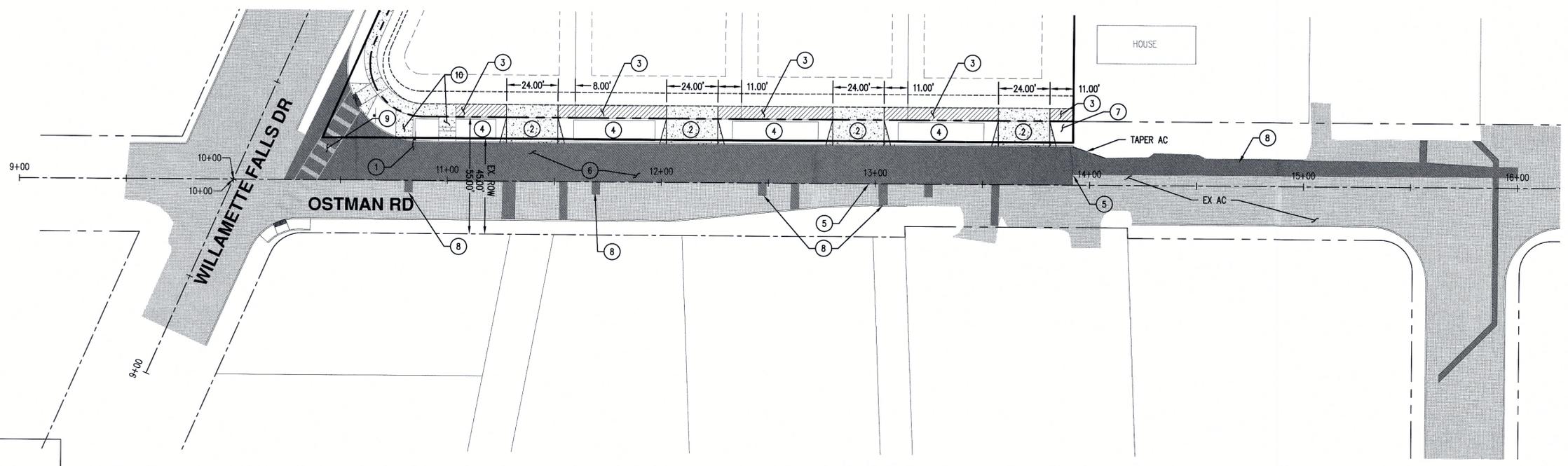
APPROVED FOR CONSTRUCTION BY  
 CITY OF WEST LINN

This approval is only for general conformance with the design concept and general compliance with applicable codes and requirements and shall not be construed as relieving the Design Engineer of full responsibility for accuracy and completeness of the drawings. This plan review approval does not prevent the City from requiring further code corrections in the field.

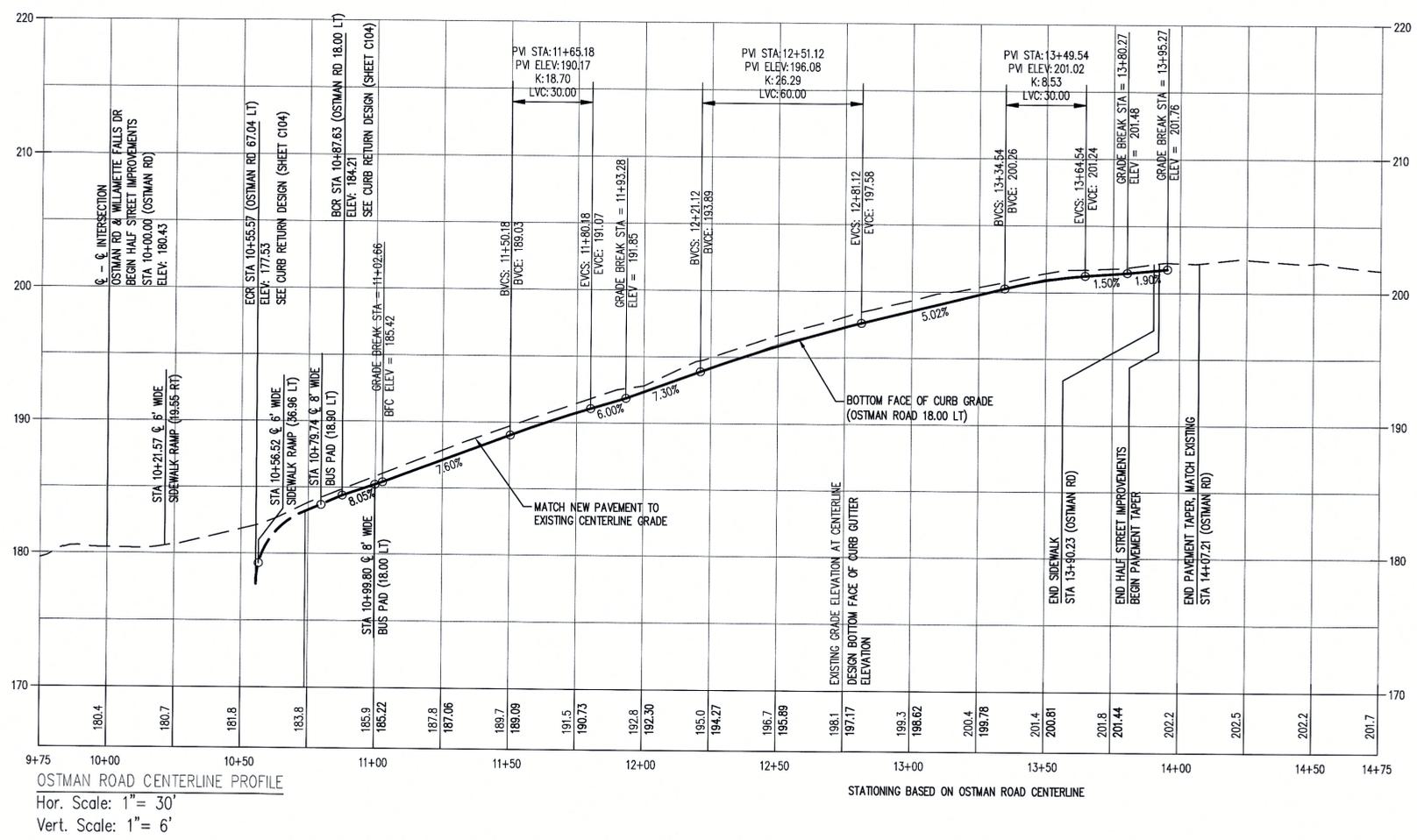
DATE: 9/17/14 by *Choi & e*



APPROVED FOR CONSTRUCTION BY  
 CITY OF WEST LINN  
 This approval is only for general conformance with the design concept and general compliance with applicable codes and requirements and shall not be construed as relieving the Design Engineer of full responsibility for accuracy and completeness of the drawings. This plan review approval does not prevent the City from requiring further code corrections in the field.  
 DATE: 9/17/14 BY: Kwoj & Co.



OSTMAN ROAD CENTERLINE ALIGNMENT				
CENTERLINE STATION	TANGENT	BEARING	LENGTH	DELTA
PT STA: 10+00.00				
	TANGENT	S00°00'00"W	392.21'	
PT STA: 13+92.21				

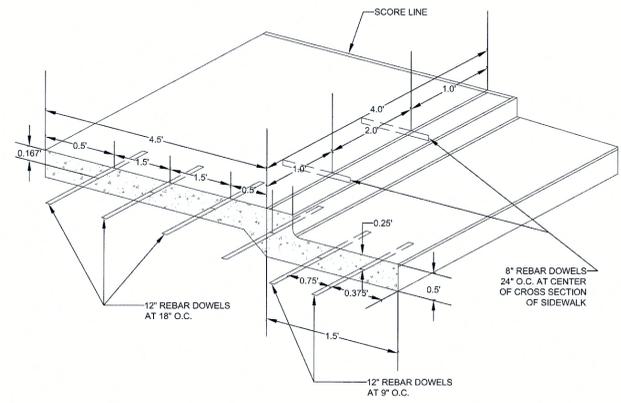


**PUBLIC STREET KEYED NOTES**

- 1 INSTALL STANDARD CURB AND GUTTER, SEE DETAIL ON SHEET C103.
- 2 INSTALL CONCRETE DRIVEWAY APRON, SEE DETAIL ON SHEET C103.
- 3 FUTURE SIDEWALK BY OTHERS, NOT PART OF THIS PERMIT.
- 4 SEE SHEETS C200 AND C202 FOR PUBLIC STORMWATER FACILITY.
- 5 SAWCUT EXISTING AC AT CENTERLINE. SAND AND SEAL SAWCUT JOINT PER CITY CONSTRUCTION STANDARDS.
- 6 INSTALL AC PAVING AND AGGREGATE BASE, SEE DETAIL ON SHEET C103.
- 7 INSTALL LANDSCAPING AND STREET TREES, SEE DETAIL ON SHEET L100.
- 8 TRENCH RESTORATION AND PAVING, SEE DETAILS ON SHEET C103.
- 9 NEW ADA CROSSWALK (PROJECT SIDE OF STREET ONLY), SEE DETAILED GRADING ON SHEET C104. SEE SHEET C110 FOR DETAILS OF PAVEMENT MARKING.
- 10 INSTALL 8' WIDE CONCRETE SIDEWALK, SEE DETAIL ON SHEET C103. SEE SHEET C104 FOR GRADES.

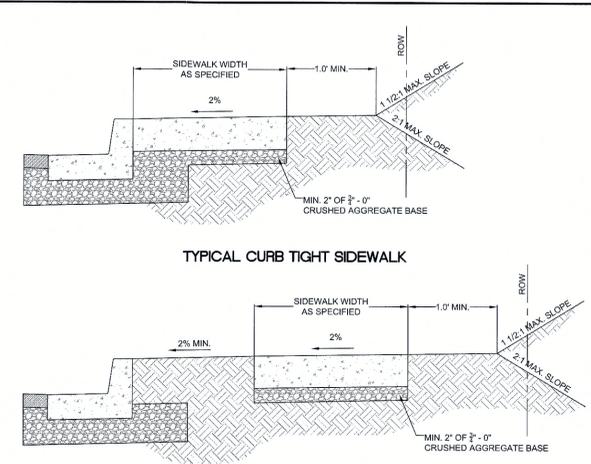
AKS DRAWING FILE: 3745 C100 SITE PLAN.DWG | LAYOUT: C103

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



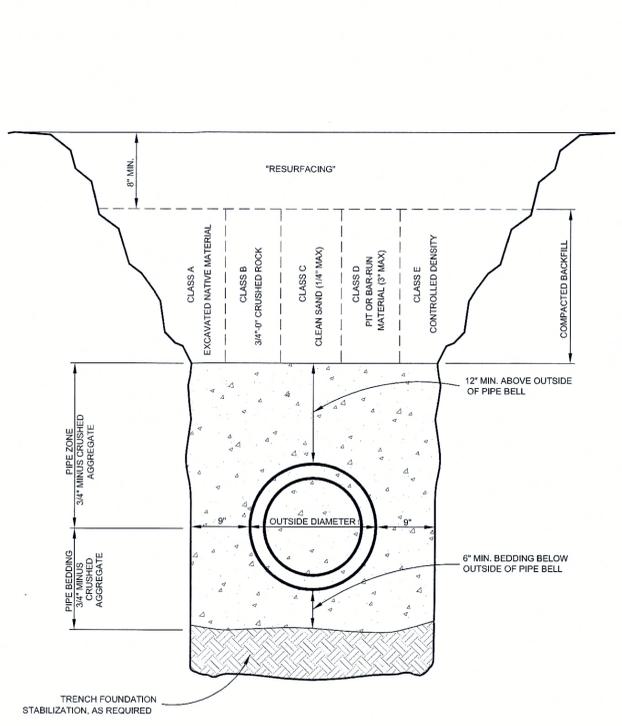
CURB, GUTTER AND SIDEWALK DOWELING DETAIL. City of West Linn logo, DATE: 2010, DRAWING NO. WL-511, FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



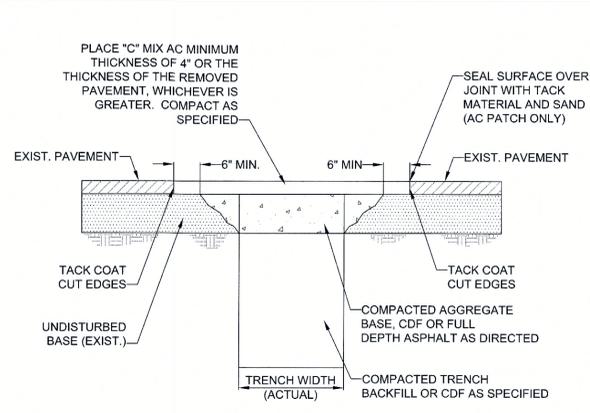
CONCRETE SIDEWALK CROSS SECTION. City of West Linn logo, DATE: 2010, DRAWING NO. WL-508, FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



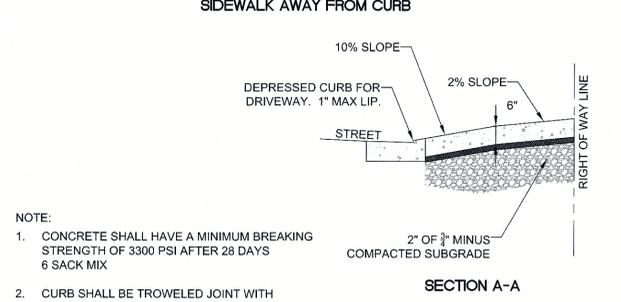
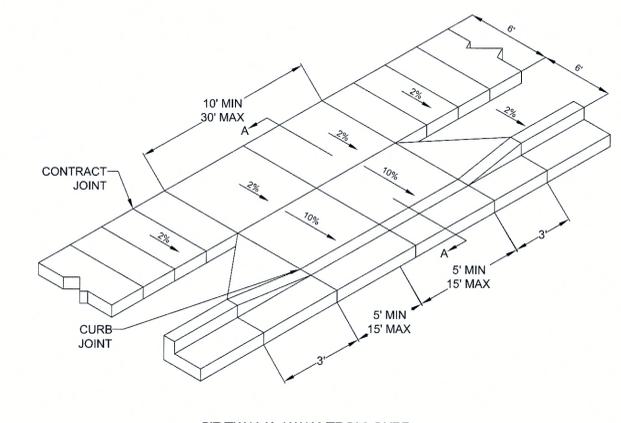
TRENCH BACKFILL BEDDING AND PIPE ZONE. City of West Linn logo, DATE: 2010, DRAWING NO. WL-200, FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



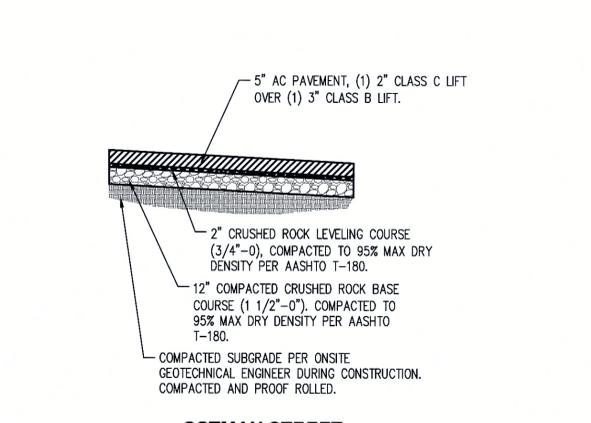
STREET T-CUT. City of West Linn logo, DATE: 2010, DRAWING NO. WL-203, FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



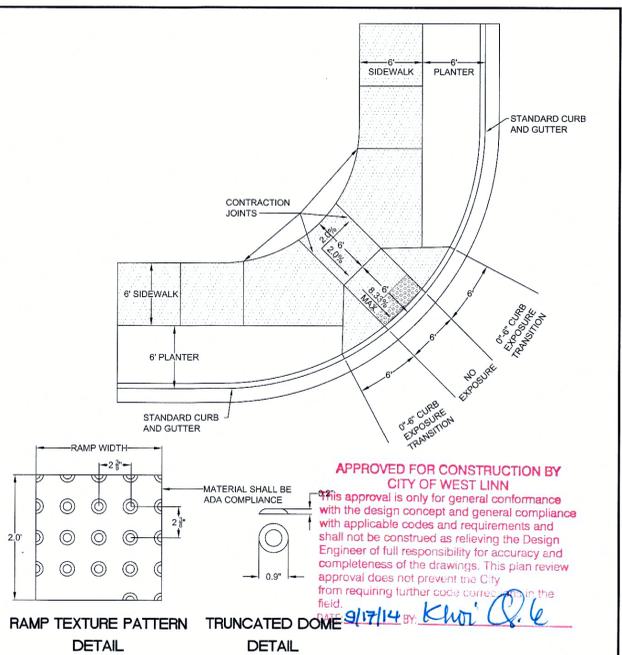
RESIDENTIAL DRIVEWAY WITH SIDEWALK AWAY FROM CURB. City of West Linn logo, DATE: 2010, DRAWING NO. WL-503A, FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



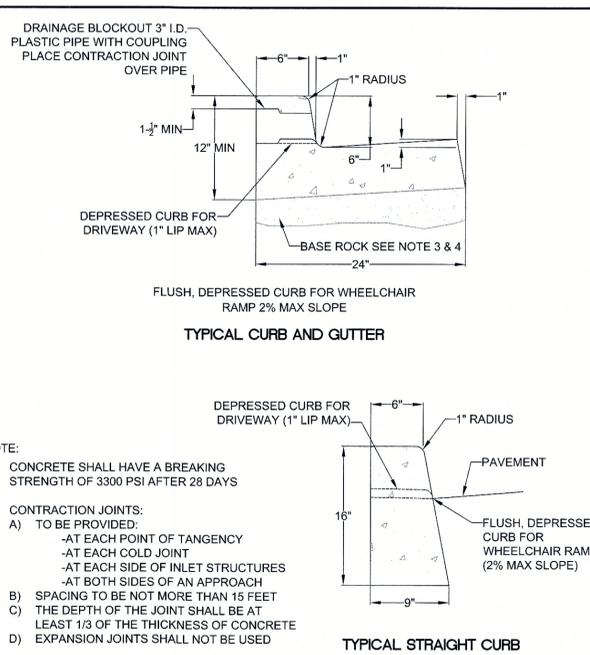
WILLAMETTE FALLS DRIVE TYPICAL NEW ASPHALT SECTION. City of West Linn logo, DATE: 2010, DRAWING NO. WL-507A, FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



SINGLE CURB RAMP (ALLOWED WITH CITY ENGINEER APPROVAL ONLY). City of West Linn logo, DATE: 2010, DRAWING NO. WL-507A, FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.



TYPICAL CURBS. City of West Linn logo, DATE: 2010, DRAWING NO. WL-501, FILE NO.

AKS ENGINEERING AND FORESTRY, LLC. 12865 SW HERMAN RD SUITE 100 TUALATIN, OR 97062 PHONE: 503.563.6151 FAX: 503.563.6152 www.aks-eng.com

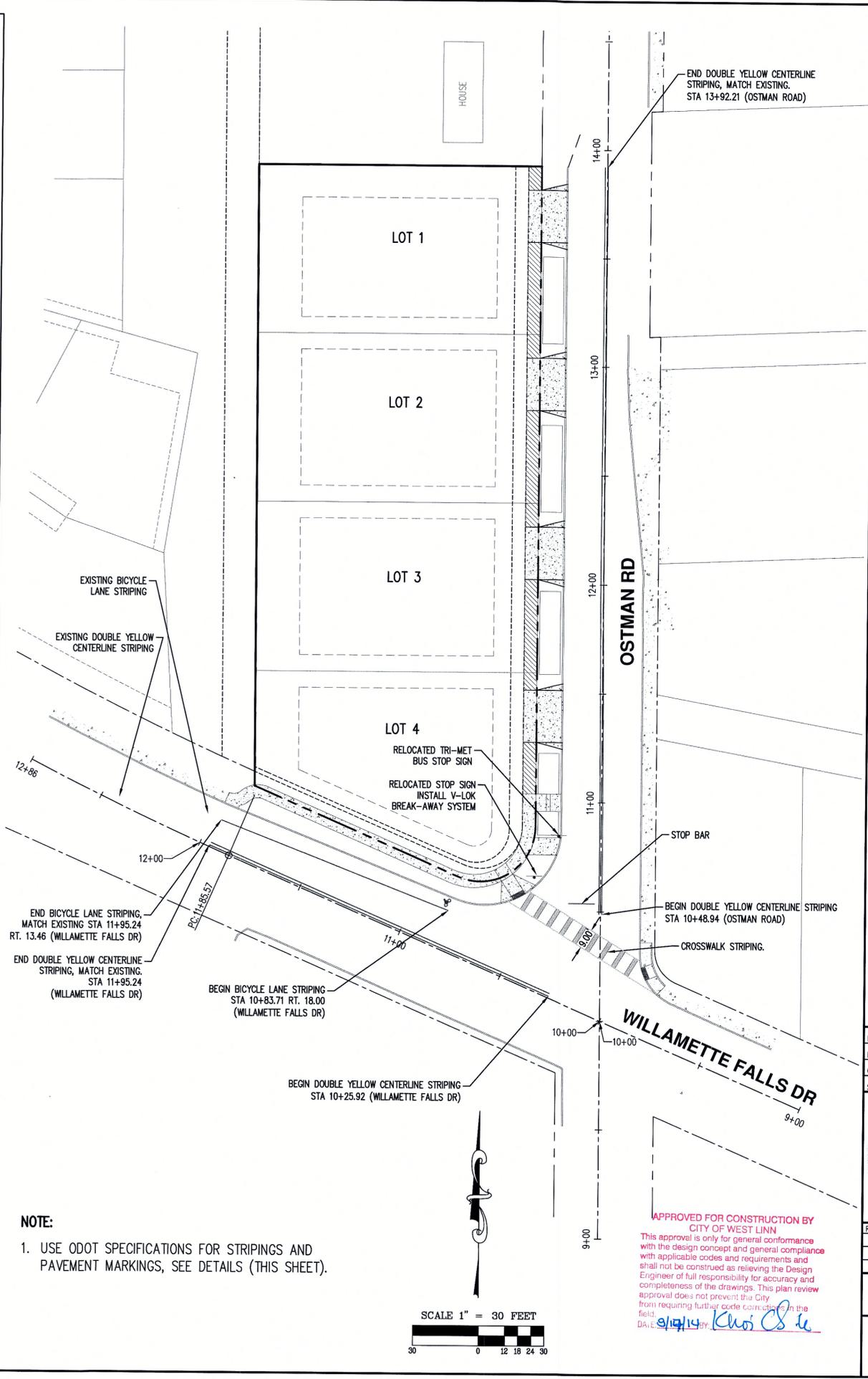
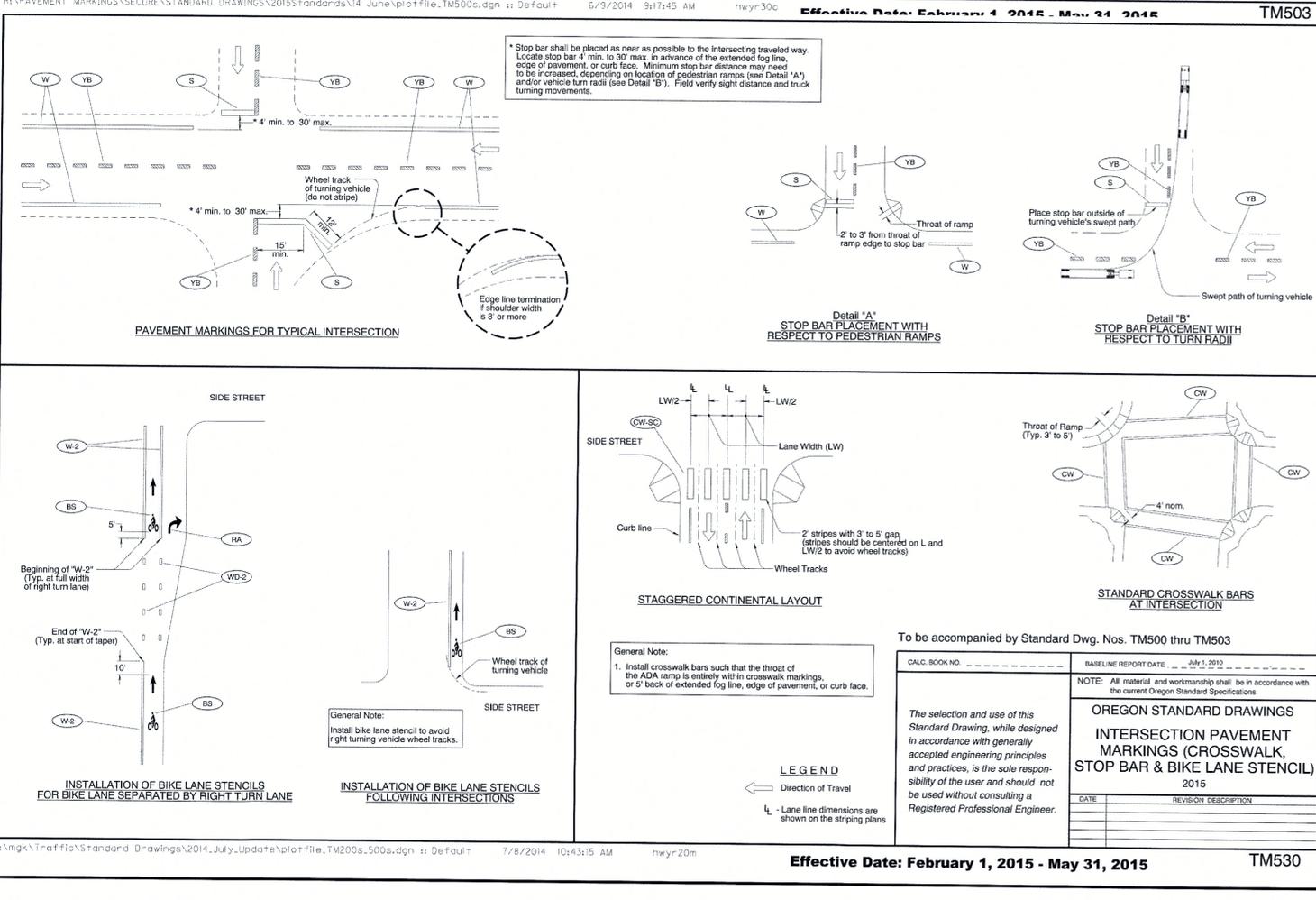
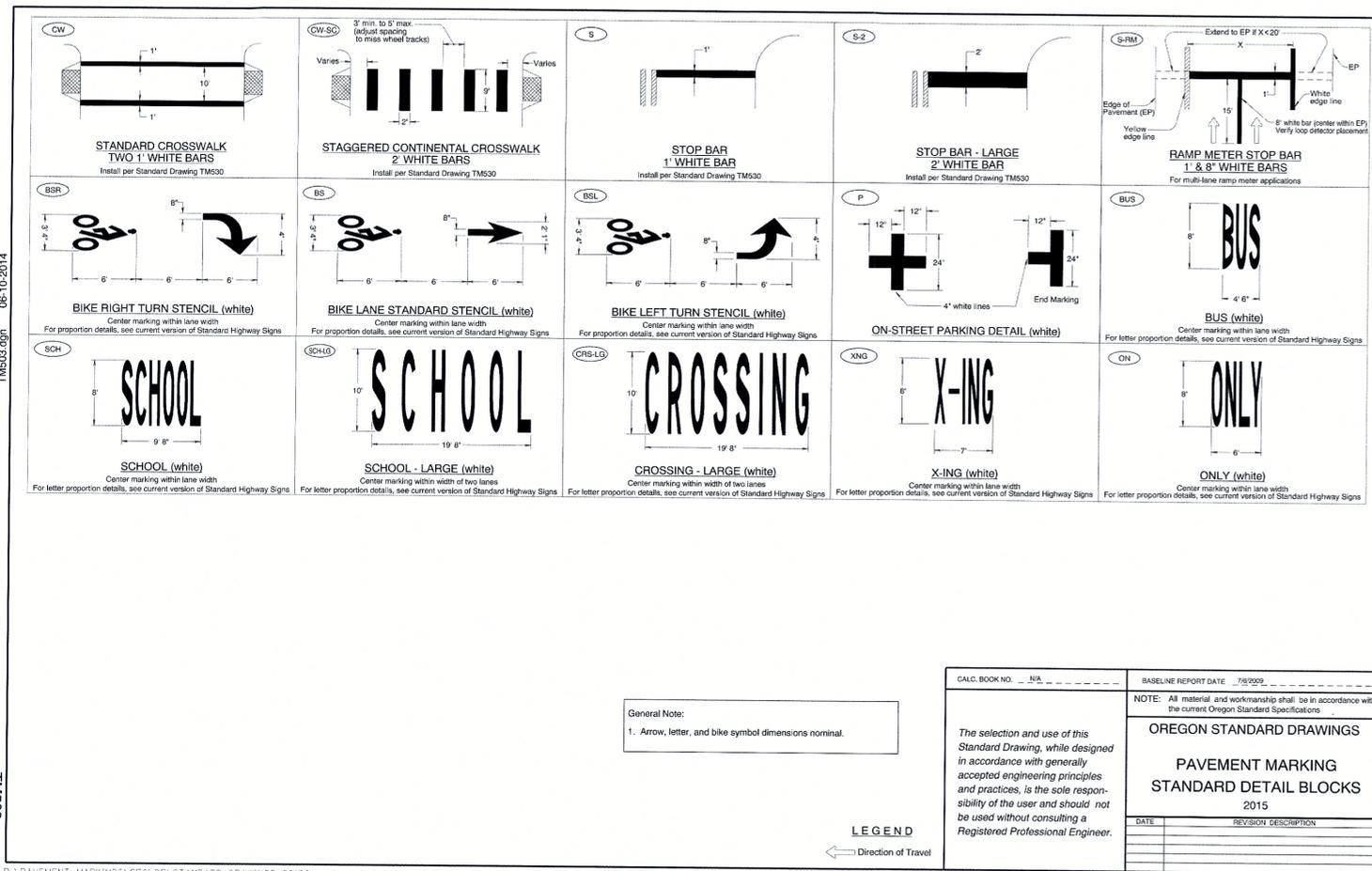
RENAISSANCE AT WILLAMETTE WEST LINN OREGON. CLACKAMAS COUNTY ASSESSOR'S TAXMAP 351E03A9. WEST LINN OREGON TAX LOT 0200

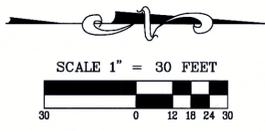
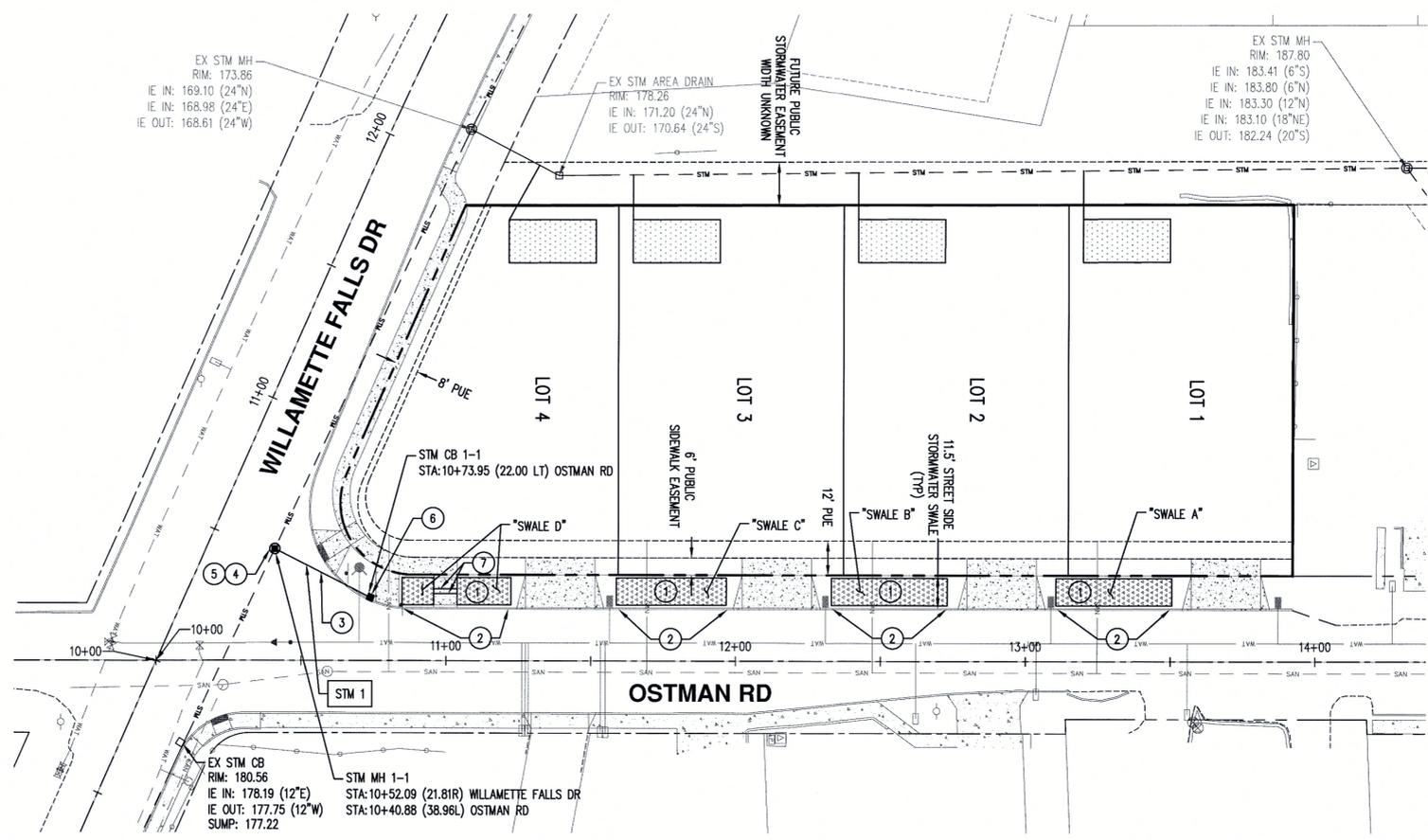
DESIGNED BY: DCN. DRAWN BY: JDR. CHECKED BY: DCN/MBH. SCALE: AS NOTED. DATE: 09/16/14. RENEWAL DATE: 12/31/14.

REVISIONS table with columns for description and date.

JOB NUMBER 3745. SHEET C103.







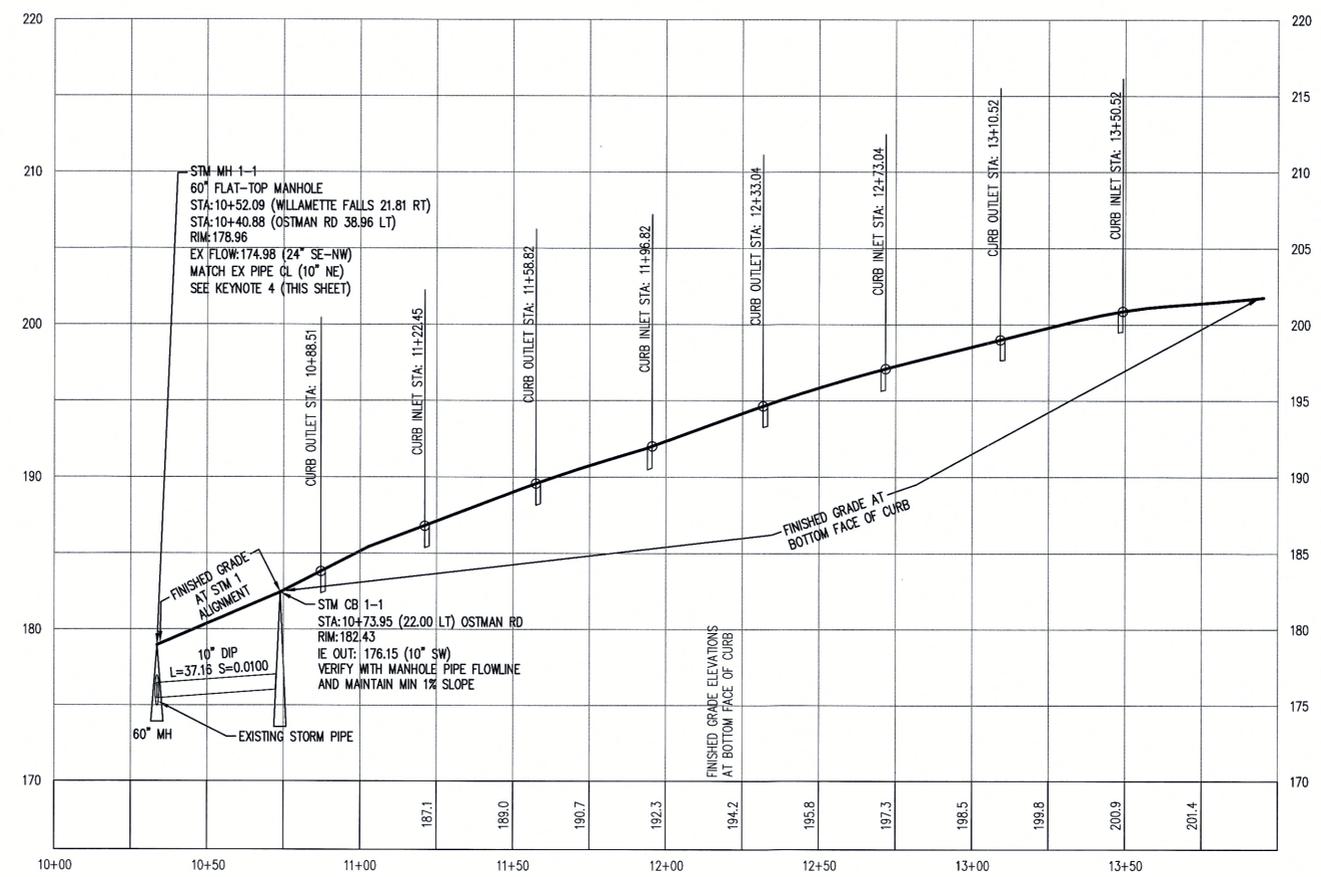
**LEGEND**

- PRIVATE STORMWATER "RAINGARDEN" FACILITY FOR LOTS, BY OTHERS. NOT PART OF THIS PERMIT.
- PUBLIC STREETSIDE STORMWATER FACILITY, SEE DETAIL ON SHEET C202.

**PUBLIC STORMWATER DRAINAGE  
KEYED NOTES**

- 1 INSTALL PUBLIC STREETSIDE STORMWATER FACILITY PER DETAILS ON SHEET C201.
- 2 INSTALL INLET AND OUTLET IN CURB PER DETAIL ON SHEET C201. REVERSE SLOPE ON OUTLET WING WALL ONLY, 0.10' TO PREVENT GUTTER DRAINAGE FROM ENTERING SWALE AT SWALE OUTLET LOCATION. **ALL INLETS TO BE 30" WIDE AT THROAT.**
- 3 INSTALL 37 LF 10" DIP AT S = 0.0100.
- 4 CONTRACTOR SHALL POTHOLE TO VERIFY EXISTING PIPE SIZE AND FLOWLINE AT THIS LOCATION PRIOR TO ORDERING AND INSTALLING STORM MANHOLE 1-1.
- 5 INSTALL 60" STORMWATER MANHOLE, SEE DETAIL ON SHEET C201.
- 6 INSTALL "2 1/2 A" GUTTER INLET, SEE DETAIL ON SHEET C201.
- 7 INSTALL (2) 8" ASTM D3034 SDR 35 CULVERT PIPES AT BOTTOM OF "SWALE D". MATCH FLOWLINES TO SWALE FLOWLINE.

**NOTE:**  
ALL PUBLIC STORM SEWER CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, DIVISION 6, STORM DRAIN TECHNICAL REQUIREMENTS.



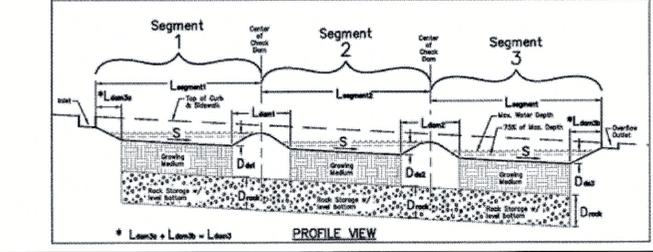
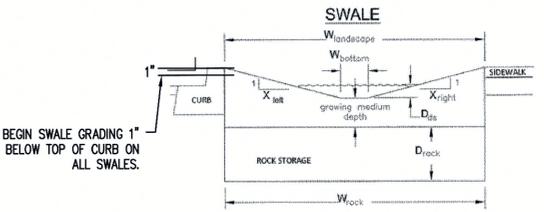
**STM 1**  
HOR: 1" = 30'  
VERT: 1" = 6'

STATIONING BASED ON OSTMAN ROAD CENTERLINE

**APPROVED FOR CONSTRUCTION BY  
CITY OF WEST LINN**  
This approval is only for general conformance with the design concept and general compliance with applicable codes and requirements and shall not be construed as relieving the Design Engineer of full responsibility for accuracy and completeness of the drawings. This plan review approval does not prevent the City from requiring further code corrections in the field.  
DATE: 9/17/14 BY: *KWJ CS-le*

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.

PUBLIC STREET SWALE	LENGTH OF FACILITY SEGMENT (L <sub>segment</sub> ) (ft)	CHECK DAM LENGTH (L <sub>dam</sub> ) (ft)	BOTTOM WIDTH (W <sub>bottom</sub> ) (ft)	SIDE SLOPE RIGHT (X <sub>right</sub> )	SIDE SLOPE LEFT (X <sub>left</sub> )	DOWNSTREAM DEPTH (D <sub>down</sub> ) (ft)	LANDSCAPE WIDTH (W <sub>landscape</sub> ) (ft)	ROCK STORAGE WIDTH (W <sub>rock</sub> ) (ft)	ROCK STORAGE DEPTH (D <sub>rock</sub> ) (ft)
A	8	2	5.0	3	3	8	11.5	9	18
B	8	2	5.0	3	3	8	11.5	9	18
C	8	2	5.0	3	3	8	11.5	9	18
D	8	2	5.0	3	3	8	11.5	9	18



**PUBLIC STREET SWALES**  
NTS

- Provide protection from all vehicle traffic, equipment staging, and foot traffic in proposed infiltration areas prior to, during, and after construction.
- Dimensions:
  - Width of swale: 5' - 12'.
  - Depth of swale (from top of growing medium to overflow elevation); Simplified: 9", Presumptive: 6"-12".
  - Longitudinal slope of swale: 6.0% or less.
  - Flat bottom width: 2'.
  - Side slopes of swale: 3:1 maximum.
- Setbacks (from centerline of facility):
  - Infiltration swales must be 10' from foundations and 5' from property lines.
  - Flow-through swales must be lined with connection to approved discharge point according to SWMM Section 1.3.
- Overflow:
  - Overflow required for Simplified Approach.
  - Inlet elevation must allow for 2" of freeboard, minimum.
  - Protect from debris and sediment with strainer or grate.
- Piping: shall be ABS Sch. 40, cast iron, or PVS Sch. 40. 3" pipe required for up to 1,500 sq ft of impervious area, otherwise 4" min. Piping must have 1% grade and follow the Uniform Plumbing Code.
- Drain rock:
  - Size for infiltration swale: 1 1/2" - 3/4" washed.
  - Size for flow-through swale: 3/4" washed.
  - Depth for Simplified: 12".
  - Depth for Presumptive: 0-48", see calcs.
- Separation between drain rock and growing medium: Use filter fabric (see SWMM Exhibit 2-4 Geotextile table) or a gravel lens (3/4" - 1/2" inch washed, crushed rock 2 to 3 inches deep).
- Growing medium:
  - 18" minimum.
  - See Appendix F.3 for specification or use sand/loam/compost 3-way mix.
- Vegetation: Follow landscape plans otherwise refer to plant list in SWMM Appendix F. Minimum container size is 1 gallon. # of plantings per 100sf of facility area:
  - Zone A (wet): 115 herbaceous plants OR 100 herbaceous plants and 4 small shrubs.
  - Zone B (moderate to dry): 1 tree AND 3 large shrubs / small trees AND 4 small shrubs AND 140 groundcover plants.
 The delineation between Zone A and B shall be either at the outlet elevation or the check dam elevation, whichever is lowest.
- Waterproof liner: Shall be 30 mil PVC or equivalent for flow-through facilities.
- Install washed pea gravel or river rock to transition from inlets and splash pad to growing medium.
- Check dams: Shall be placed according to facility design. Refer to SW-340 for profile and spacing.
- Inspections: Call BDS IVR Inspection Line, (503) 823-7000, for appropriate inspections.

- DRAWING NOT TO SCALE -

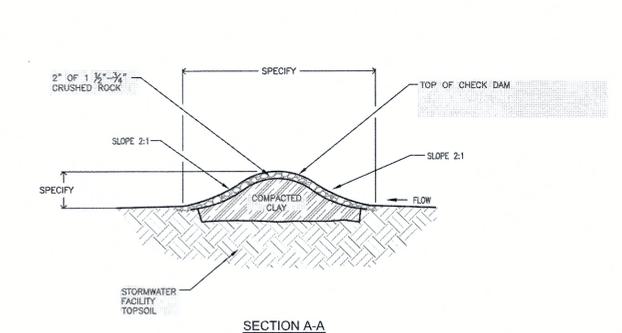
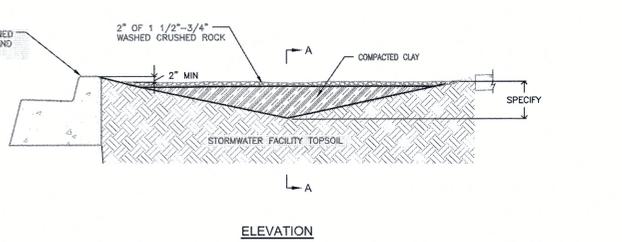
**STORMWATER MANAGEMENT MANUAL TYPICAL DETAILS**

- Simplified / Presumptive Design Approach -

Swale	NUMBER <b>SW-120</b>
-------	-------------------------



Bureau of Environmental Services



- DESIGNER INFORMATION**
- Rock check dam for use in swales and curb extensions with side slopes.
  - Specify check dam elevation and width.
  - Provide stationing and/or dimensioning for check dams.
- CONSTRUCTION NOTES**
- Hand tamp topsoil directly under check dam.
  - Key clay core into stormwater facility topsoil.

- DRAWING NOT TO SCALE -

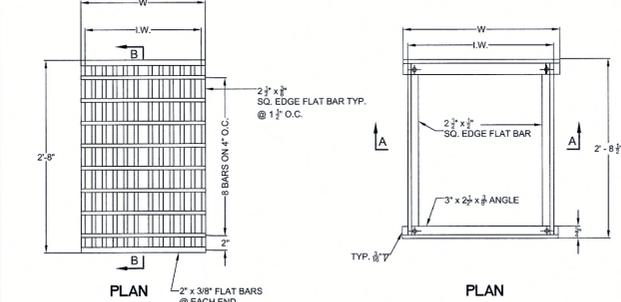
**STORMWATER MANAGEMENT MANUAL TYPICAL DETAILS**

- 2011 GREEN STREETS -  
Rock Check Dam for Swales  
Check Dams

NUMBER <b>SW-340</b>
-------------------------

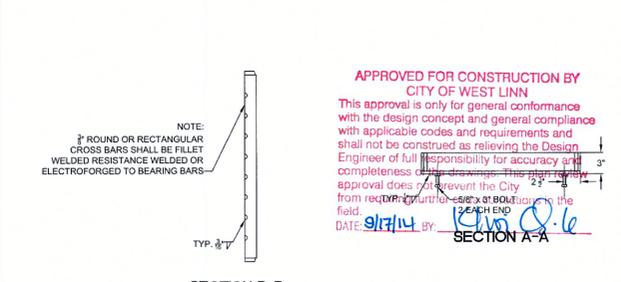


Bureau of Environmental Services



TYPE	W	I/W
STANDARD	1'-9"	1'-8 1/4"

TYPE	DIA. PIPE	W	I/W
STANDARD	10"-12"	1'-10 3/4"	1'-9 3/8"



**FRAME AND GRATE FOR GUTTER AND CURB INLET**

DATE: 2010 DRAWING NO. <b>WL-602B</b> FILE NO.
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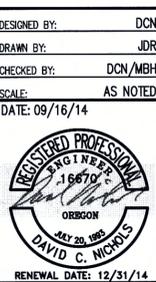


City of West Linn



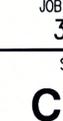
TYPE	W	I/W
STANDARD	1'-9"	1'-8 1/4"

TYPE	DIA. PIPE	W	I/W
STANDARD	10"-12"	1'-10 3/4"	1'-9 3/8"



**FRAME AND GRATE FOR GUTTER AND CURB INLET**

DATE: 2010 DRAWING NO. <b>WL-602B</b> FILE NO.
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City of West Linn

**AKS**  
ENGINEERING AND FORESTRY, LLC  
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SUITE 100  
TUALATIN, OR 97062  
PHONE: 503.563.6151  
FAX: 503.563.6152  
www.aks-eng.com

**RENAISSANCE AT WILLAMETTE**

**WEST LINN**  
CLATSOP COUNTY ASSESSOR'S TAXMAP 35IED3AB  
OREGON  
ENGINEERING · PLANNING · SURVEYING  
FORESTRY · LANDSCAPE ARCHITECTURE

TAX LOT 0200

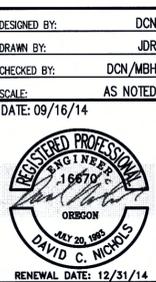
DESIGNED BY: DCN  
DRAWN BY: JDR  
CHECKED BY: DCN/MBH  
SCALE: AS NOTED  
DATE: 09/16/14

RENEWAL DATE: 12/31/14

JOB NUMBER  
**3745**

SHEET  
**C201**

**PUBLIC STORM SEWER DETAILS**

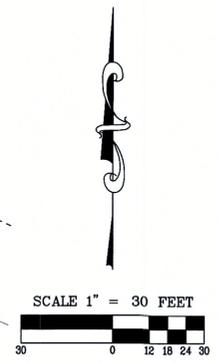
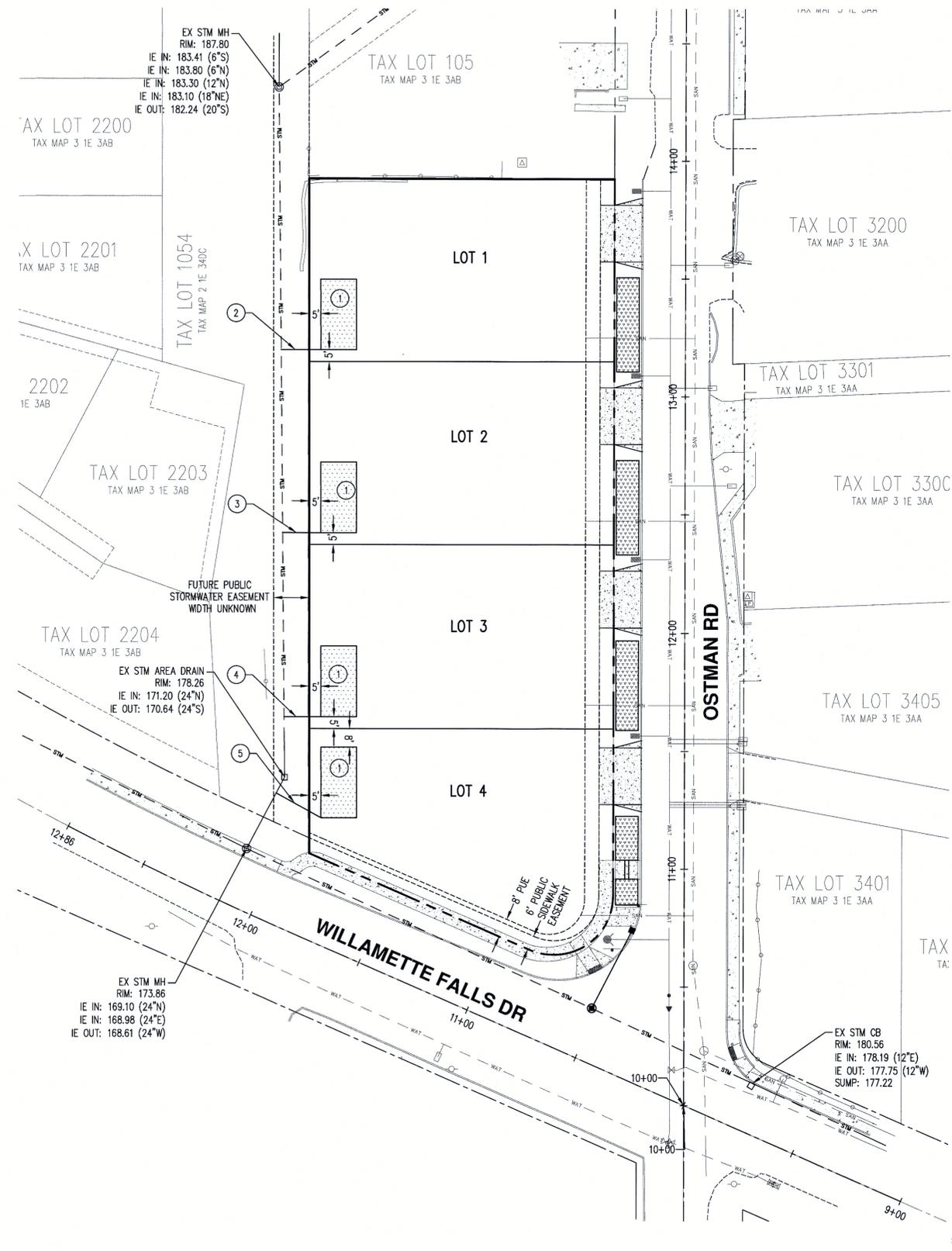


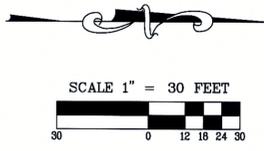
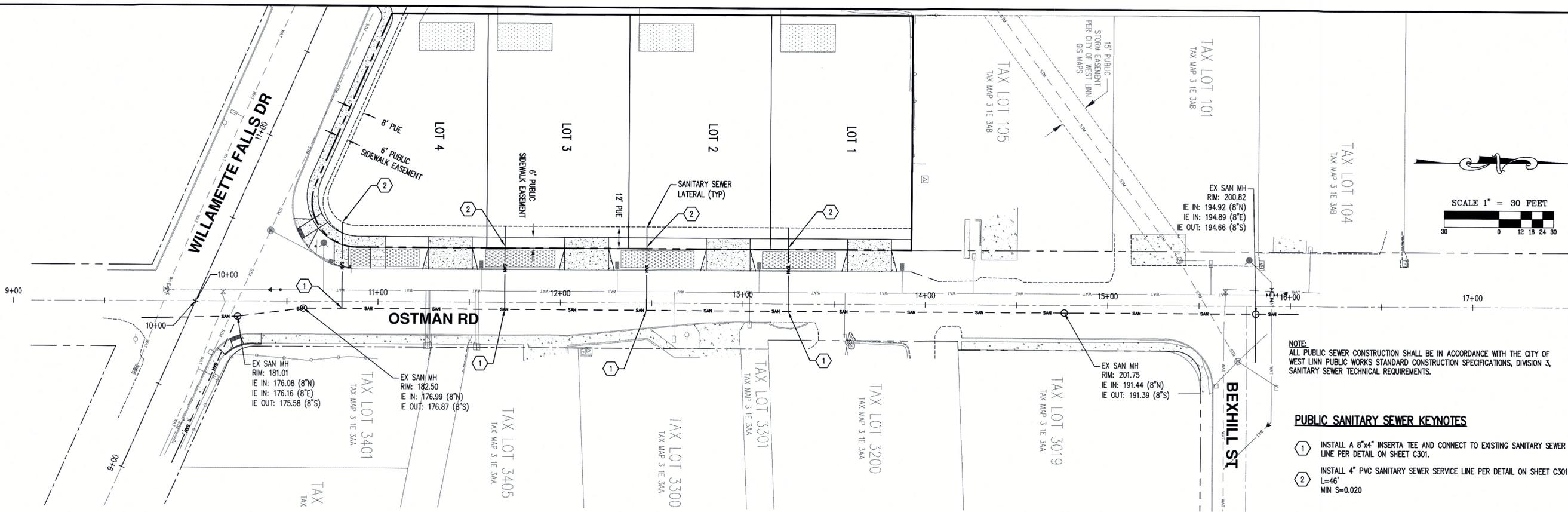
APPROVED FOR CONSTRUCTION BY  
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**PRIVATE STORMWATER  
 DRAINAGE KEYED NOTES**

- ① PRIVATE STORMWATER RAINGARDEN FACILITY BY OTHERS, NOT PART OF THIS PERMIT.
- ② INSTALL PRIVATE STORMWATER OVERFLOW PIPE, 8" PCV ASTM D 3034 SDR 35. L=16.85 IE OUT = 188.90. PLACE TRACER WIRE OVER CENTERLINE OF PIPE. MATCH EXISTING PIPE CENTERLINE. CONTRACTOR SHALL POTHOLE TO VERIFY EXISTING PIPE SIZE AND FLOWLINE AT THIS LOCATION.
- ③ INSTALL PRIVATE STORMWATER OVERFLOW PIPE, 8" PCV ASTM D 3034 SDR 35. L=16.02 IE OUT = 182.69. PLACE TRACER WIRE OVER CENTERLINE OF PIPE. MATCH EXISTING PIPE CENTERLINE. CONTRACTOR SHALL POTHOLE TO VERIFY EXISTING PIPE SIZE AND FLOWLINE AT THIS LOCATION.
- ④ INSTALL PRIVATE STORMWATER OVERFLOW PIPE, 8" PCV ASTM D 3034 SDR 35. L=15.60 IE OUT = 176.47. PLACE TRACER WIRE OVER CENTERLINE OF PIPE. MATCH EXISTING PIPE CENTERLINE. CONTRACTOR SHALL POTHOLE TO VERIFY EXISTING PIPE SIZE AND FLOWLINE AT THIS LOCATION.
- ⑤ INSTALL PRIVATE STORMWATER OVERFLOW PIPE, 8" PCV ASTM D 3034 SDR 35. L=21.66 IE OUT = 172.46. PLACE TRACER WIRE OVER CENTERLINE OF PIPE. MATCH EXISTING PIPE CENTERLINE. CONTRACTOR SHALL POTHOLE TO VERIFY EXISTING PIPE SIZE AND FLOWLINE AT THIS LOCATION.

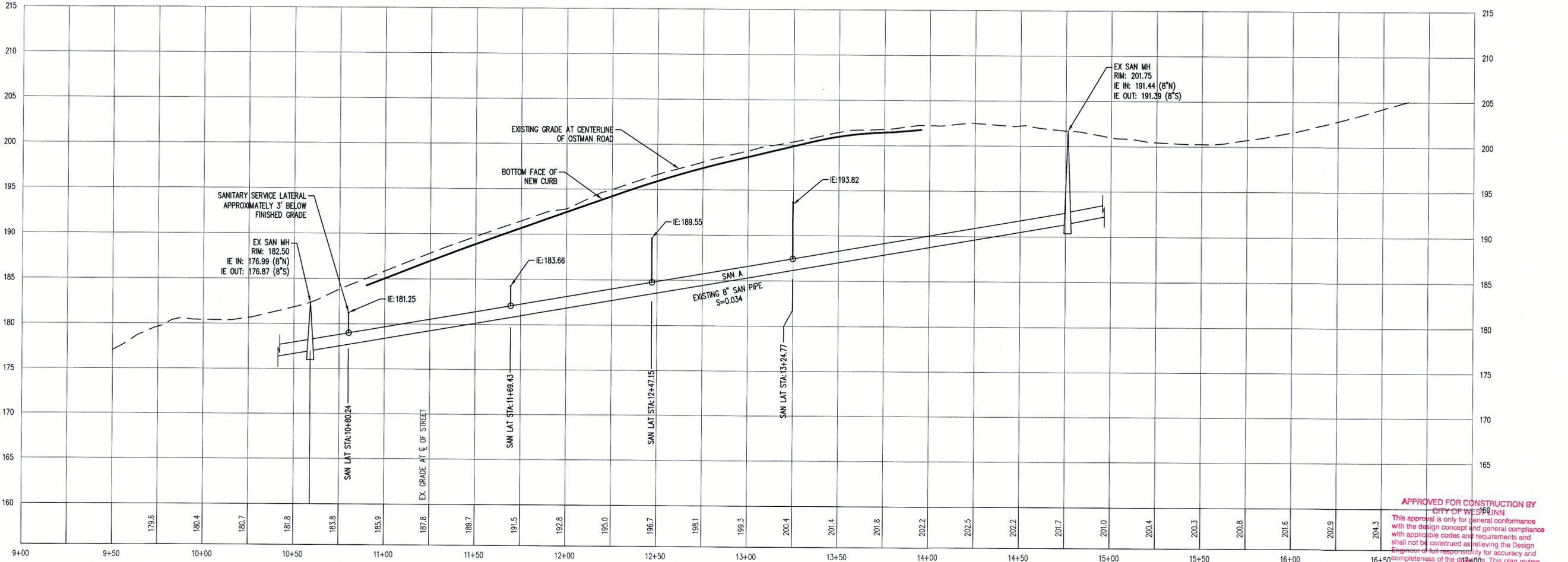
NOTE:  
 1. A WATERTIGHT PLUG SHALL BE INSTALLED ON THE END OF SERVICE LATERALS AND A 2" x 4" WOOD MARKER SHALL BE PLACED AT LATERAL END FROM PIPE INVERT TO AT LEAST 36" ABOVE THE FINISHED GROUND. THE 2" x 4" TOP SHALL BE PAINTED WHITE AND MARKED WITH THE DEPTH OF THE LATERAL MEASURED FROM GROUND TO INVERT OF PIPE.





NOTE:  
 ALL PUBLIC SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, DIVISION 3, SANITARY SEWER TECHNICAL REQUIREMENTS.

- PUBLIC SANITARY SEWER KEYNOTES**
- 1 INSTALL A 8"x4" INSERTA TEE AND CONNECT TO EXISTING SANITARY SEWER LINE PER DETAIL ON SHEET C301.
  - 2 INSTALL 4" PVC SANITARY SEWER SERVICE LINE PER DETAIL ON SHEET C301.  
 L=46'  
 MIN S=0.020



**SAN A \***  
 HOR: 1" = 30'  
 VERT: 1" = 6'

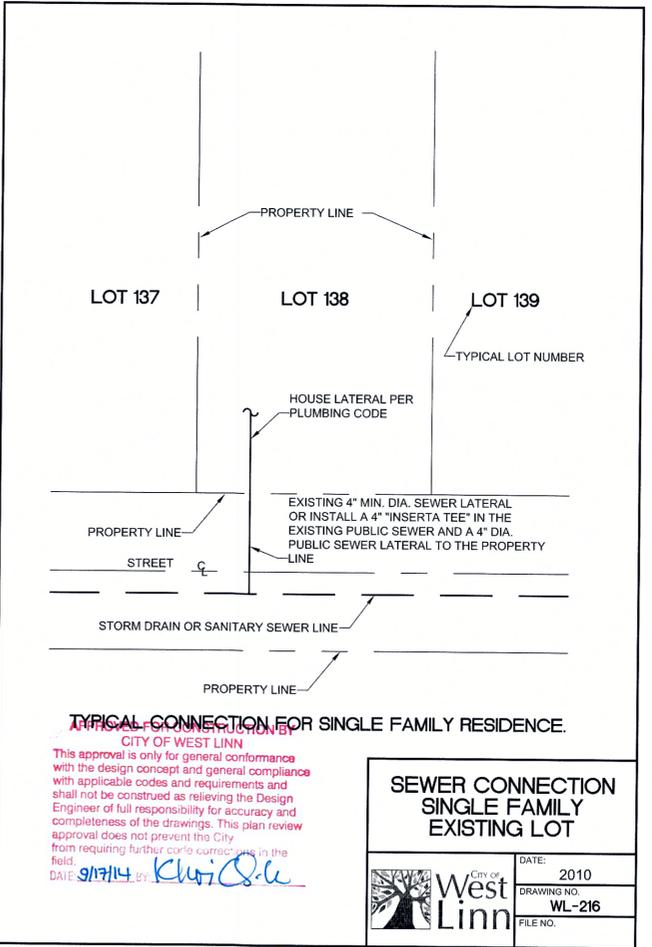
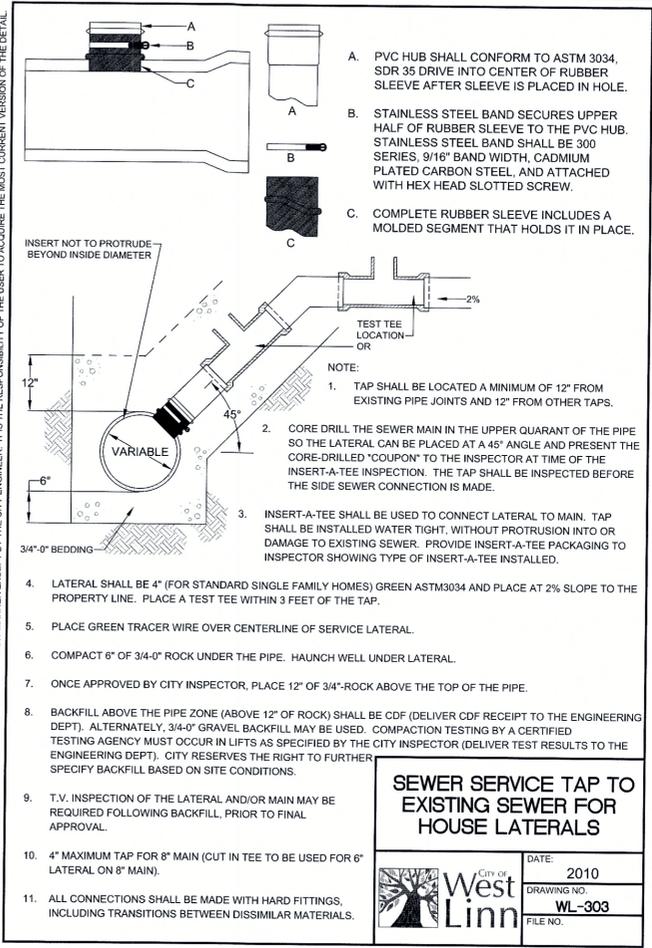
\* STATIONING BASED ON OSTMAN ROAD CENTERLINE

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 DATE: 9/17/14 BY: *[Signature]*

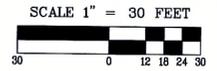
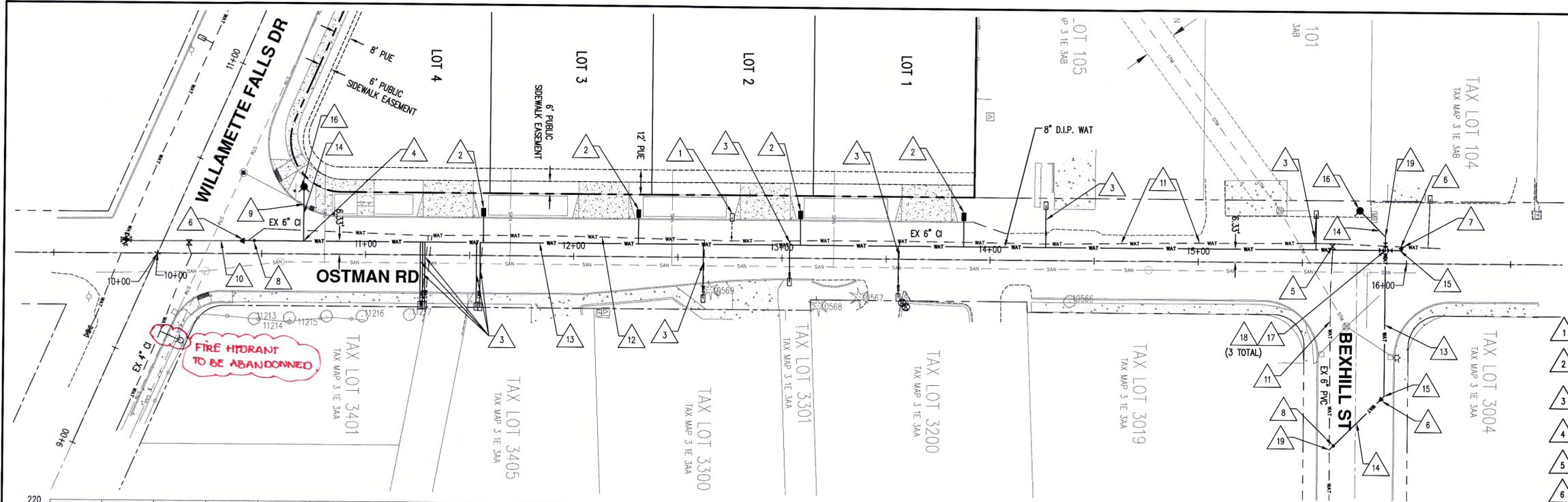
DESIGNED BY: DCN  
 DRAWN BY: JDR  
 CHECKED BY: DCN/MBH  
 SCALE: AS NOTED  
 DATE: 09/16/14

REGISTERED PROFESSIONAL ENGINEER  
 18670  
 OREGON  
 JUL 20 1983  
 DAVID C. WICKOFS  
 RENEWAL DATE: 12/31/14

REVISIONS  
 JOB NUMBER  
**3745**  
 SHEET  
**C301**

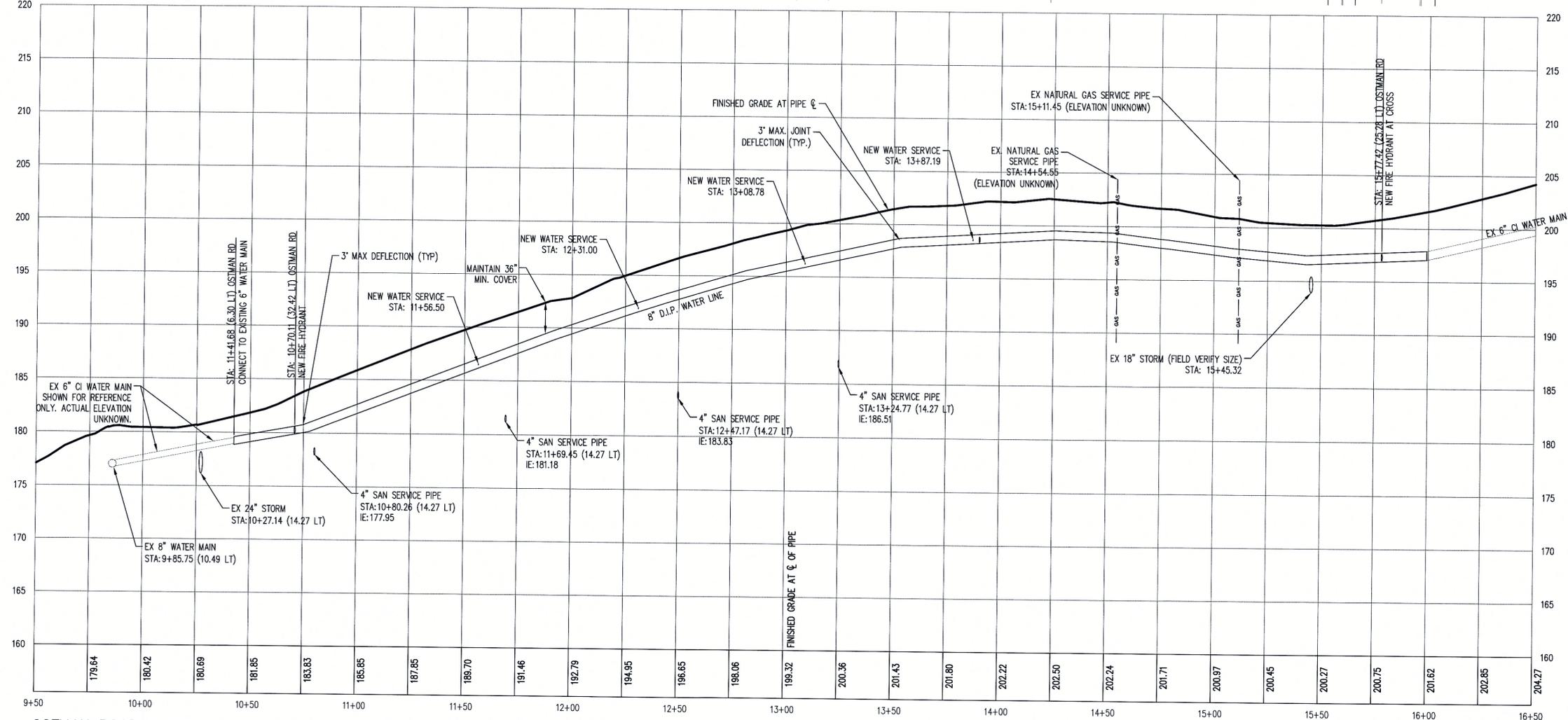


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**WATER KEYED NOTES**

- 1 ABANDON EXISTING WATER SERVICE. WATER METER TO BE RETURNED TO THE CITY.
- 2 INSTALL 1" SINGLE WATER SERVICE (TYP). SEE DETAIL ON SHEET C401 FOR CONSTRUCTION INFORMATION.
- 3 ABANDON EXISTING WATER SERVICE LINES. CONNECT TO NEW D.I.P. WATER MAIN, SEE DETAILS ON SHEET C401. INSTALL NEW 1" SINGLE WATER SERVICE LINES, SEE DETAIL ON SHEET C401 FOR CONSTRUCTION INFORMATION.
- 4 INSTALL 8"x8"x6" TEE FLG.xFLG.xFLG. WITH THRUST BLOCKING PER DETAIL ON SHEET C401.
- 5 REMOVE EXISTING 6" VALVE BOX AND REPLACE WITH CDF.
- 6 INSTALL 8"x6" M.J.xM.J. REDUCER. THRUST BLOCKING PER DETAIL ON SHEET C401.
- 7 INSTALL 6"x6" M.J. 45° BEND. THRUST BLOCKING, SEE DETAIL ON SHEET C401. VERIFY PIPE JOINT CONNECTION REQUIREMENT WITH THE CITY.
- 8 INSTALL TEMPORARY BLOWOFF, SEE DETAIL ON SHEET C401.
- 9 INSTALL 6"x6" M.J. 45° BENDS UNDER EXISTING STORM PIPE (4 EACH). THRUST BLOCKING PER DETAIL ON SHEET C401.
- 10 EX 6" WATER LINE (TO REMAIN).
- 11 ABANDON PIPE IN PLACE. FILL WATER LINE ENDS WITH CONCRETE.
- 12 EXISTING 6" MAIN LINE TO BE ABANDONED IN-PLACE AFTER ALL SERVICE CONNECTIONS HAVE BEEN MADE TO THE NEW WATER MAIN AND TESTING AND DISINFECTION ARE COMPLETED AND APPROVED. PLUG ENDS OF PIPE WITH CONCRETE.
- 13 INSTALL 8" D.I.P. CL. 52.
- 14 INSTALL 6" D.I.P. CL. 52.
- 15 INSTALL 8"x8" M.J. 45° BEND. THRUST BLOCKING SEE DETAIL ON SHEET C401.
- 16 INSTALL FIRE HYDRANT PER DETAIL ON SHEET C401.
- 17 INSTALL 8"x8"x8" CROSS FLG.xFLG.xFLG. WITH THRUST BLOCKING PER DETAIL ON SHEET C401.
- 18 INSTALL 8" GATE VALVE M.J. x FLG.
- 19 INSTALL 6"x6" M.J. 45° BEND. VERIFY PIPE JOINT CONNECTION REQUIREMENT WITH THE CITY. SEE DETAIL ON SHEET C401 FOR THRUST BLOCKING.



**OSTRMAN ROAD WATER LINE PROFILE**

HOR: 1" = 30'  
 VERT: 1" = 6'

STATIONING IS BASED ON CENTERLINE OF OSTRMAN ROAD.

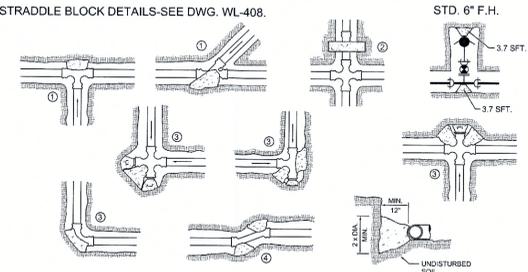
- NOTES**
1. ALL PUBLIC WATER LINE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATION DIVISION 4, WATER TECHNICAL REQUIREMENTS.
  2. ALL WATER PIPE PRODUCTS BEING REMOVED SHALL BE RETURNED TO THE CITY AS DIRECTED BY THE CITY PROJECT ENGINEER / INSPECTOR.
  3. PROVIDE RESTRAIN JOINTS WITH FIELD-LOK GASKET. RESTRAIN LENGTH CALCULATIONS PER PUBLIC WORKS STANDARDS, SECTION 4.0014 USE EBBA AS NEEDED.

**APPROVED FOR CONSTRUCTION BY**  
 CITY OF WEST LINN  
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 DATE: 9/17/14 by *[Signature]*

FITTING SIZE (Inches)	TEE, WYE & HYDRANTS ①	STRADDLE BLOCK ②	90° BEND PLUGGED CROSS TEE PLUGGED RUNS ③	45° BEND ④	22 1/2° BEND ⑤	11 1/2° BEND ⑥
2	*	*	*	*	*	*
4	1.7	2.1	2.4	1.3	*	*
6	3.7	4.9	5.3	2.9	1.5	*
8	6.7	8.7	9.5	5.1	2.7	1.3
10	10.5	13.8	14.8	8	4.1	2
12	15.1	19.6	21.3	11.6	5.9	2.9
14						
16	26.8	34.8	37.9	20.5	10.4	5.2
18	33.9	44	47.9	25.9	12.8	6.7
LARGER	*	*	*	*	*	*

BEARING AREA OF THRUST BLOCKS (sq. ft.)

- ALL VALUES ARE BASED ON THE FOLLOWING ASSUMPTIONS:  
AVG. PRESSURE = 100 PSI X 2 (safety factor), 1500 PSF SOIL BEARING CAPACITY; NORMAL DISTRIBUTION DESIGN VELOCITY NOT TO EXCEED 5 F/S.
- ALL FITTINGS SHALL BE WRAPPED IN 8 MM PLASTIC PRIOR TO PLACEMENT OF CONCRETE.
- BEARING SURFACE OF THRUST BLOCKING SHALL BE AGAINST UNDISTURBED SOIL.
- ALL CONCRETE MIX SHALL HAVE A MIN. 28 DAY STRENGTH OF 3000 PSI.
- ALL PIPE ZONES SHALL BE GRAVEL FILLED AND COMPACTED.
- THRUST BLOCKS FOR PLUGGED CROSS AND PLUGGED TEE SHALL HAVE #4 REBAR LIFTING LOOPS INSTALLED AS SHOWN.
- VERTICAL THRUST DETAILS-SEE DWG. WL-407.
- STRADDLE BLOCK DETAILS-SEE DWG. WL-408.



- \* BLOCK TO UNDISTURBED TRENCH WALLS.
- \*\* THRUST BLOCKS FOR PIPES LARGER THAN 18" WILL BE INDIVIDUALLY DESIGNED BY THE ENGINEER.

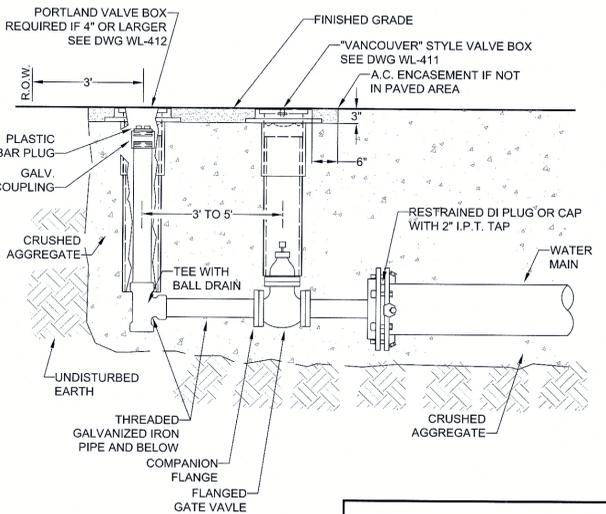
**HORIZONTAL THRUST BLOCKING**

DATE: 2010  
DRAWING NO. WL-406  
FILE NO.

**BLOW-OFF SIZES REQUIRED**

MAIN SIZE	BLOW-OFF SIZE
4" TO 6"	2"
8" TO 12"	4"
14" TO 18"	6"
20" & UP	PER ENGR.

- NOTE:**
- BACKFILL WITH SELECT CRUSHED AGGREGATE A MINIMUM OF 6" ON ALL SIDES. COMPACTED TO 95% OF MAX DENSITY AS DETERMINED BY AASHTO T180.
  - ON TEMPORARY BLOW-OFFS ONLY, AN MJ CAP TAPPED 4" OR 6" MAY BE SUBSTITUTED FOR REDUCER.
  - TEMPORARY BLOW-OFF IS ONE REMOVED AT THE END OF PROJECT CONSTRUCTION. A PERMANENT BLOW-OFF REMAINS ON THE PROJECT AFTER ACCEPTANCE.
  - PLACE BLOW-OFF STANDPIPE 3 FT. INSIDE R.O.W. LINE AT END OF STREET (2 FT FROM BARRICADE).



**PERMANENT OR TEMPORARY 4' AND 6' BLOW-OFF**

DATE: 2010  
DRAWING NO. WL-404B  
FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.

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**STANDARD VALVE BOX DETAIL**

DATE: 2010  
DRAWING NO. WL-411  
FILE NO.

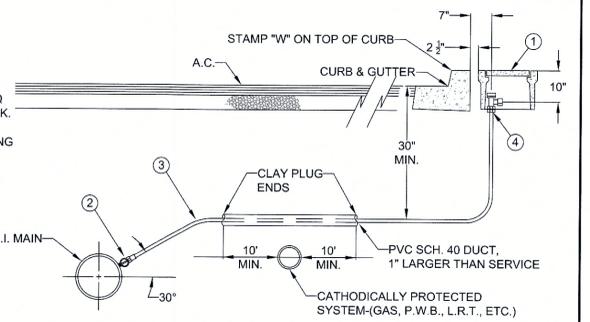
**STANDARD FIRE HYDRANT ASSEMBLY**

DATE: 2010  
DRAWING NO. WL-401  
FILE NO.

THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.

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- MATERIAL:**
- BROOKS METER BOX, BODY NO. 37, LID AND COVER NO.37-S.
  - MUELLER CORP. STOP NO. H-15008 OR FORD F1000-4Q CORP. STOP WITH OPERATING NUT AT 3 OR 9 O'CLOCK.
  - 1" SOFT TEMPER, TYPE "K" COPPER TUBING COMPLYING WITH ASTM B-88.
  - MUELLER ANGLE METER STOP NO. H-14258 (FORD NO. KV43-444W-Q).



- NOTE:**
- MACHINE DRILLED AND TAPPED ONLY. NO HAND DRILLING IS ALLOWED.
  - SUBSTITUTES FOR ANY MATERIALS SHOWN SHALL BE APPROVED BY THE CITY ENGINEER.
  - ALL PIPE AND STRUCTURE ZONE SHALL BE BACKFILLED USING 3/4" MINUS CRUSHED AGG. AND COMPACTED TO 95% MAX DENSITY AS DETERMINED BY AASHTO T-180.
  - WHEN AN ACTIVE CATHODIC PROTECTED SYSTEM IS ENCOUNTERED, SCH. 40 PVC SHALL BE INSTALLED AS SHOWN ABOVE WITH CLAY PLUG.
  - METER BOX SHALL BE CENTERED OVER THE COMPLETED METER ASSEMBLY.
  - TAPS INTO MAIN TO HAVE 18" SEPARATION ON CENTER MINIMUM.
  - ANGLE METER STOPS TO BE 18" FROM PROPERTY LINE AND NOT IN DRIVEWAY APPROACH.
  - METER BOXES IN CURB TIGHT SIDEWALK AND THOSE SUBJECT TO INCIDENTAL AUTO TRAFFIC MUST HAVE METAL LIDS AND BE TRAFFIC RATED.

DATE: 2010  
DRAWING NO. WL-402  
FILE NO.

APPROVED FOR INSTALLATION  
CITY OF WEST LINN  
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Date: 9/17/14 By: [Signature]

TAX LOT 2200  
TAX MAP 3 1E 3AB

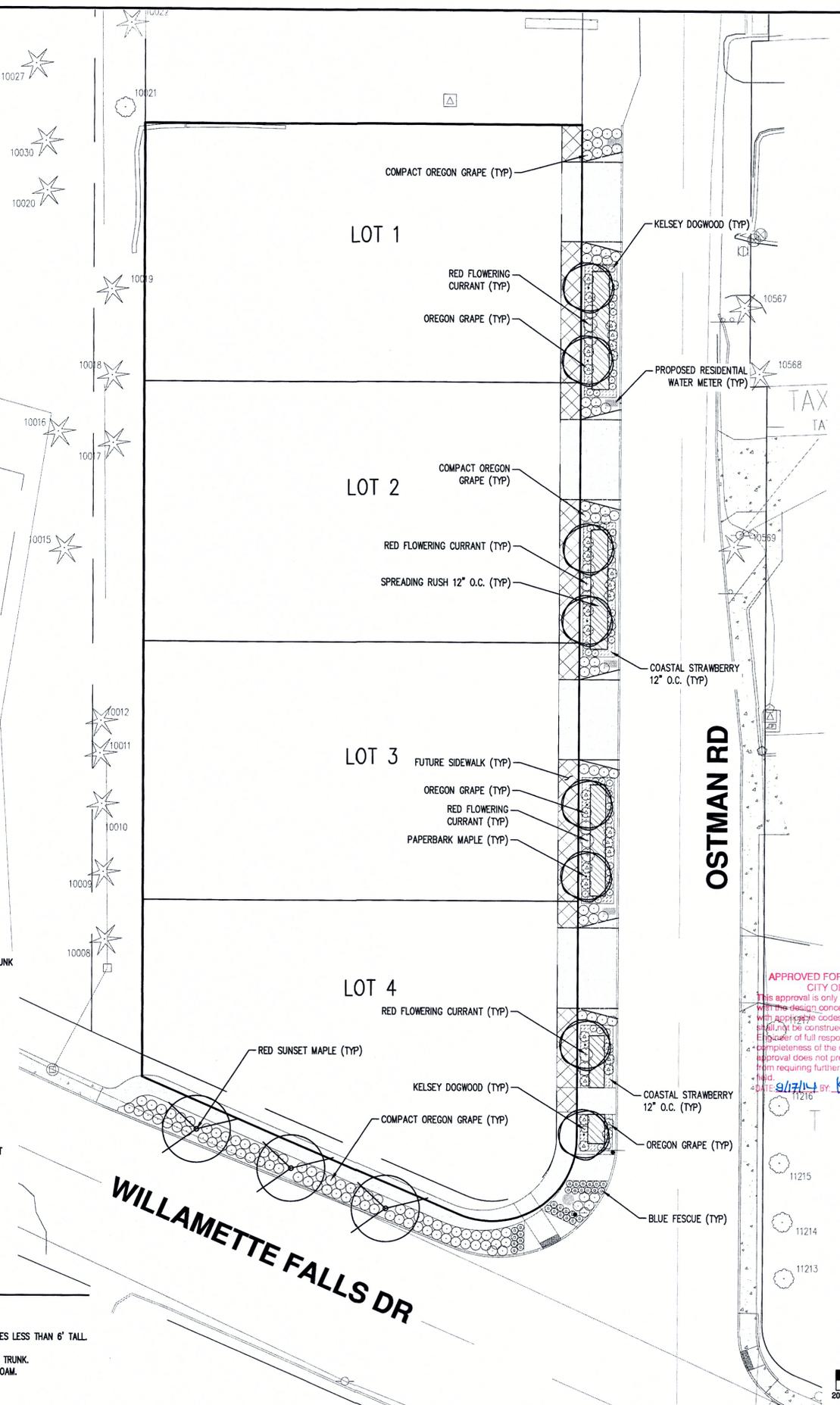
AX LOT 2201  
TAX MAP 3 1E 3AB

T 2202  
3 1E 3AB

TAX LOT 2203  
TAX MAP 3 1E 3AB

TAX LOT 2204  
TAX MAP 3 1E 3AB

TAX LOT 1054  
TAX MAP 2 1E 3ADC



**PLANT SCHEDULE**

TREES	QTY	BOTANICAL NAME / COMMON NAME	SIZE/CONTAINER	SPACING
	3	ACER RUBRUM 'FRANKSRED' / RED SUNSET MAPLE	2" CAL. B&B	AS SHOWN
STORMWATER TREES	QTY	BOTANICAL NAME / COMMON NAME	SIZE/CONTAINER	SPACING
	8	ACER GRISEUM / PAPERBARK MAPLE	1.5" CAL. B&B	AS SHOWN
SHRUBS	QTY	BOTANICAL NAME / COMMON NAME	SIZE/CONTAINER	SPACING
	128	MAHONIA AQUIFOLIUM 'COMPACTA' / COMPACT OREGON GRAPE	1 GAL. CONT.	36" o.c.
GRASSES	QTY	BOTANICAL NAME / COMMON NAME	SIZE/CONTAINER	SPACING
	30	FESTUCA GLAUCA / BLUE FESCUE	1 GAL. CONT.	24" o.c.
STORMWATER SHRUBS	QTY	BOTANICAL NAME / COMMON NAME	SIZE/CONTAINER	SPACING
	50	CORNUS SERICEA 'KELSEY' / KELSEY DOGWOOD	1 GAL. CONT.	24" o.c.
	32	MAHONIA AQUIFOLIUM / OREGON GRAPE	1 GAL. CONT.	36" o.c.
	11	RIBES SANGUINEUM / RED FLOWERING CURRANT	3 GAL. CONT.	48" o.c.
STORMWATER HERBACEOUS PLANTS	QTY	BOTANICAL NAME / COMMON NAME	SIZE/CONTAINER	SPACING
	647	JUNCUS PATENS / SPREADING RUSH	1 GAL. CONT.	12" o.c.
STORMWATER GROUNDCOVER	QTY	BOTANICAL NAME / COMMON NAME	SIZE/CONTAINER	SPACING
	601	FRAGARIA CHILOENSIS / COASTAL STRAWBERRY	1 GAL. CONT.	12" o.c.

**GENERAL NOTES:**

- CONTRACTOR IS RESPONSIBLE FOR VERIFYING PLANT QUANTITIES. IF DISCREPANCIES OCCUR, DESIGN INTENT PREVAILS OVER QUANTITIES LISTED.
- ALL PLANTS AND PLANTINGS SHALL CONFORM TO CITY OF WEST LINN DESIGN STANDARDS AND TO AMERICAN NURSERY STANDARDS AS 1280.1.
- REVISIONS OR SUBSTITUTIONS TO PLANTINGS, INCLUDING CHANGES TO LOCATION, QUANTITIES, SPECIES, SIZES, SPACING, ETC. DUE TO UNFORESEEN SITE CONDITIONS, PLANT AVAILABILITY, ETC. MAY BE MADE BY THE LANDSCAPE ARCHITECT WHERE ALLOWED BY CITY OF WEST LINN DESIGN STANDARDS, PRIOR TO FINAL INSTALLATION.
- TREES TO BE PLANTED SHALL MEET THE REQUIREMENTS OF THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS FOR NURSERY STOCK (ANSI Z60.1) FOR GRADE NO. 1 OR BETTER. DOUBLE STAKE ALL TREES. PROVIDE ROOT BARRIERS WHERE ADJACENT TO HARD SURFACING, CURBS, SIDEWALKS, ETC. ROOT BARRIER SHALL BE A MINIMUM OF 18" DEEP BY 10' LONG. CENTER ROOT BARRIER ON TREE TRUNK.
- CENTER TREES IN PLANTER STRIP WHERE NOT IN STORMWATER SWALES. KEEP SHRUBS AND GROUNDCOVERS A MINIMUM OF 24" O.C. FROM PAVING AND 3' O.C. FROM TREES. ADJUST PLANTINGS AS NECESSARY ON SITE TO AVOID CONFLICT WITH UTILITIES, HYDRANTS, LIGHT POLES, METERS, ETC.
- MULCH: APPLY 3" DEEP WELL-AGED MEDIUM GRIND OR SHREDDED DARK HEMLOCK OR FIR BARK MULCH UNDER AND AROUND ALL PLANTINGS. CARE SHALL BE TAKEN TO AVOID COVERING FOLIAGE OR ROOT CROWN OF PLANTS WITH BARK MULCH.  
\* SEE STORMWATER NOTES FOR BARK MULCH IN SWALES.
- GROWING MEDIUM: GROWING MEDIUM IN ALL NEW PLANTING BEDS SHALL BE A MINIMUM OF 12" DEEP. EXISTING, NON-COMPACTED, NATIVE SOIL MAY COUNT TOWARDS THIS REQUIREMENT. REUSE SURFACE SOIL STOCKPILED ON THE SITE AND/OR IMPORT NEW TOPSOIL TO MAKE UP REQUIRED AMOUNTS FOR INSTALLATION. TOPSOIL SHALL BE FREE OF ROOTS, PLANTS, SOD, STONES, CLAY LUMPS, DEBRIS, ALKALI SALTS, AND OTHER EXTRANEIOUS MATERIALS HARMFUL TO PLANT GROWTH AND HAVE A MINIMUM OF 15%-30% ORGANIC MATERIAL CONTENT. SOIL PLACEMENT AND PLANTINGS SHALL OCCUR IN CONDITIONS THAT DO NOT RESULT IN OVER-COMPACTATION OR EROSION, SATURATED SOIL OR OTHER CONDITIONS SUCH AS FREEZING OR ABOVE AVERAGE TEMPERATURES, RAINY CONDITIONS, ETC. SOIL SHALL BE IN FRIABLE (WORKABLE) CONDITION WHEN PLACED. FINISHED GRADE OF NEW PLANTING SHALL SEAMLESSLY MEET FINISH GRADE SET IN GRADING PLANS.  
\* SEE STORMWATER NOTES FOR SOIL PREPARATION IN SWALES.
- ALL PLANTING AREAS SHALL BE AUTOMATICALLY IRRIGATED USING THE LATEST IN WATER SAVING TECHNOLOGY (I.E. DRIP IRRIGATION, FOR PLANTING BEDS, EVAPOTRANSPIRATION (ET) CONTROL CLOCK, ETC.). LANDSCAPE CONTRACTOR TO 'DESIGN-BUILD' IRRIGATION SYSTEM AND SUBMIT PLANS TO CITY OF WEST LINN AND THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO BEGINNING INSTALLATION. COORDINATE POINT OF CONNECTION (POC), SLEEVING, AND CONTROL CLOCK LOCATION WITH GENERAL CONTRACTOR PRIOR TO PAVING AND OTHER HARD SURFACE CONSTRUCTION COMMENCEMENT.  
\* SEE STORMWATER NOTES FOR IRRIGATION IN SWALES.

**STORMWATER NOTES:**

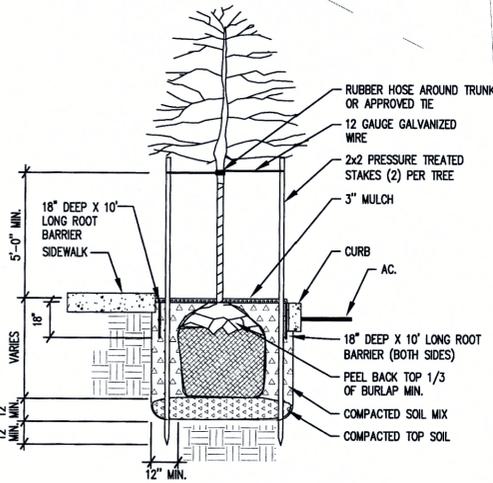
- ALL PLANTS AND PLANTINGS SHALL CONFORM TO THE CITY OF WEST LINN DESIGN STANDARDS AND THE BUREAU OF ENVIRONMENTAL SERVICES (BES) MANUAL. PLANT IN ACCORDANCE WITH STANDARDS ADOPTED BY THE OREGON LANDSCAPE CONTRACTORS BOARD (OLCB).
- PLANTING SHALL OCCUR IN THE SPRING (MARCH) OR EARLY FALL (SEPTEMBER THROUGH OCTOBER) UNLESS SUPPLEMENTAL MEASURES ARE TAKEN TO ENSURE PLANT SURVIVAL.
- HATCHED AREAS ARE MEANT TO PORTRAY GENERAL PLANT AREAS. PLANT AREA FOR FULL COVERAGE AT SPACING NOTED IN PLANT LEGEND. ADJUST PLANTINGS AS NECESSARY TO AVOID VAULTS, INLETS, ETC.
- GROWING MEDIUM: 18" DEEP; IMPORTED SOIL, SANDY LOAM MIXED WITH PLANT DERIVED COMPOST OR SAND/SOIL/COMPOST BLEND IN ACCORDANCE WITH BUREAU OF ENVIRONMENTAL SERVICES (BES) STANDARDS. GROWING MEDIUM SHALL BE APPROXIMATELY ONE-THIRD COMPOST BY VOLUME, FREE-DRAINING, AND SUPPORT PLANT GROWTH. COMPOST SHALL BE ENTIRELY PLANT DERIVED.
- SOIL PLACEMENT AND PLANTING SHALL OCCUR IN CONDITIONS THAT DO NOT RESULT IN OVER-COMPACTATION OR EROSION, SATURATED SOIL OR OTHER CONDITIONS SUCH AS FREEZING OR ABOVE AVERAGE TEMPERATURES, RAINY CONDITIONS, ETC.
- INVASIVE PLANT MATERIAL, INCLUDING HIMALAYAN BLACKBERRY, THISTLE SPECIES, ETC. SHALL BE REMOVED ENTIRELY FROM THE STORMWATER SWALES BEFORE PLANTING IF PRESENT. REMOVE INVASIVE VEGETATION IN ACCORDANCE WITH BES STANDARDS.
- MULCH: APPLY 3" DEEP FINE TO MEDIUM HEMLOCK MULCH OR WELL-AGED ORGANIC YARD DEBRIS COMPOST UNDER AND AROUND ALL PLANTINGS IN ZONE 'B' (DRY ZONE) ONLY. CARE SHALL BE TAKEN TO AVOID PLACING MULCH IN ZONE 'A' (WET ZONE), IN A STORMWATER FLOW PATH, OR IN AREAS WHERE IT MAY CLOG INLETS OR OUTLETS OR ESCAPE THE SWALES.
- MANURE MULCHING AND HIGH-FERTILIZER HYDROSEEDING SHALL BE PROHIBITED IN THE SWALES DURING AND AFTER CONSTRUCTION.
- IRRIGATION: CONTRACTOR SHALL PROVIDE A TEMPORARY 'DESIGN-BUILD' IRRIGATION SYSTEM FOR THE STORMWATER SWALES. TEMPORARY IRRIGATION SYSTEM SHALL MEET ALL CITY OF WEST LINN STANDARDS AND INCLUDE ALL NECESSARY COMPONENTS, CONTROL VALVES, DOUBLE CHECKVALVES, ETC. NECESSARY FOR FULL COVERAGE. IRRIGATION SYSTEM SHALL BE REMOVED AT THE END OF TWO-YEARS OR PLANT ESTABLISHMENT, WHICHEVER IS LONGER. COORDINATE WITH GENERAL CONTRACTOR AND/OR OWNER.
- MAINTENANCE WARRANTY PERIOD: MAINTENANCE WARRANTY PERIOD SHALL BE PROVIDED BY THE LANDSCAPE CONTRACTOR FOR A PERIOD OF 2-YEARS AFTER DATE OF COMPLETION. REGULAR MAINTENANCE TASKS SHALL BE PERFORMED IN ACCORDANCE WITH INDUSTRY STANDARDS. THESE TASKS MAY INCLUDE, BUT ARE NOT LIMITED TO, REMOVAL OF UNDESIRABLE WEEDS OR INVASIVE VEGETATION, PRUNING, MULCHING, PLANT REPLACEMENT, AND IRRIGATION SYSTEM REPAIR.

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DATE: 8/17/14 BY: KWT/Sle

OSTMAN RD

WILLAMETTE FALLS DR

SCALE 1" = 20 FEET



**1 TYPICAL STREET TREE PLANTING DETAIL**

- NTS
1. DRIVE STAKES OUTSIDE OF ROOTBALL PARALLEL TO STREET AND SIDEWALK. SINGLE STAKE TREES LESS THAN 6" TALL.
2. SET TREE 2" ABOVE FINISH GRADE TO ALLOW FOR SETTLING OF SOIL.
3. PROVIDE A 10' LONG ROOT BARRIER NEXT TO SIDEWALK AND CURB. CENTER BARRIER ON TREE TRUNK.
4. SOIL MIX FOR TREE PLANTING TO BE 1/3 ORGANIC MATERIALS, 1/3 TOPSOIL, AND 1/3 SANDY LOAM.

**AKS**  
AKS ENGINEERING AND FORESTRY, LLC  
12965 SW HERMAN RD  
SUITE 100  
DULAIN, OR 97062  
PHONE: 503.963.0151  
FAX: 503.963.0152  
www.aks-eng.com

**RENAISSANCE AT WILLAMETTE**  
LANDSCAPE PLAN  
WEST LINN  
TAX LOT 0200

**OREGON**  
ENGINEERING · SURVEYING  
FORESTRY · LANDSCAPE ARCHITECTURE

CLACKAMAS COUNTY ASSESSOR'S TAXMAP 351E03AB

DESIGNED BY: KAH/TEB  
DRAWN BY: SKW/TEB  
CHECKED BY: DGN/KAH  
SCALE: AS NOTED  
DATE: 09/16/14

REGISTERED  
797  
LANDSCAPE ARCHITECT  
KIRSTI A. HAUSWALD  
OREGON  
06/06/13

REVISIONS

JOB NUMBER  
3745

SHEET  
L100