

# CONSTRUCTION DOCUMENTS

FOR

## HARPER'S TERRACE SUBDIVISION

PREPARED FOR  
LF 10, LLC

### SHEET INDEX

C000	COVER SHEET
C001	CONDITIONS OF APPROVAL
C002	GENERAL NOTES
C100	EXISTING CONDITIONS PLAN
C101	DEMOLITION PLAN
C102	TREE PROTECTION AND REMOVAL PLAN
C110	TENTATIVE SUBDIVISION PLAT
C120	GRADING AND EROSION CONTROL PLAN
C121	EROSION AND SEDIMENT CONTROL DETAILS
C200	GLORIA DRIVE PLAN AND PROFILE
C201	SUMMIT ST PLAN AND PROFILE
C202	PRIVATE DRIVE PLAN AND PROFILE
C210	CONSTRUCTION DETAILS I
C211	CONSTRUCTION DETAILS II
C300	STORM DRAINAGE PLAN
C301	STORM DRAINAGE PROFILE PLAN
C310	STORM DRAINAGE DETAILS I
C311	STORM DRAINAGE DETAILS II
C312	STORM DRAINAGE DETAILS III
C400	SANITARY SEWER AND WATER PLAN
C410	SANITARY AND WATER DETAILS
C500	STREET LIGHTING PLAN
C600	SUMMIT ST EXTENSION DEMOLITION AND EXISTING CONDITIONS
C601	SUMMIT ST EXTENSION PLAN AND PROFILE
C602	SUMMIT ST EXTENSION GRADING AND EROSION CONTROL PLAN
C610	SUMMIT ST EXTENSION CONSTRUCTION DETAILS
C611	SUMMIT ST EXTENSION ESCP DETAILS
L100	MITIGATION PLANTING PLAN

CONSTRUCTION PLANS	07/10/2014	BY	DATE
REVISION SUMMARY			

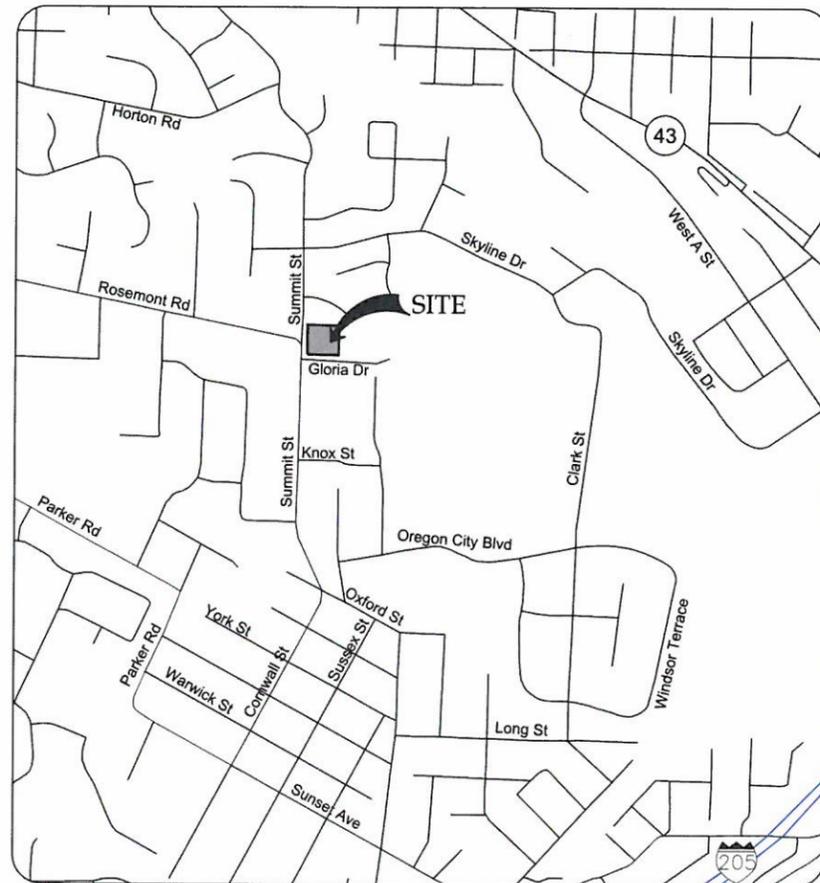
COVER SHEET  
**HARPER'S TERRACE  
SUBDIVISION**  
LF 10, LLC  
WEST LINN, OR

**J.T. SMITH**  
companies

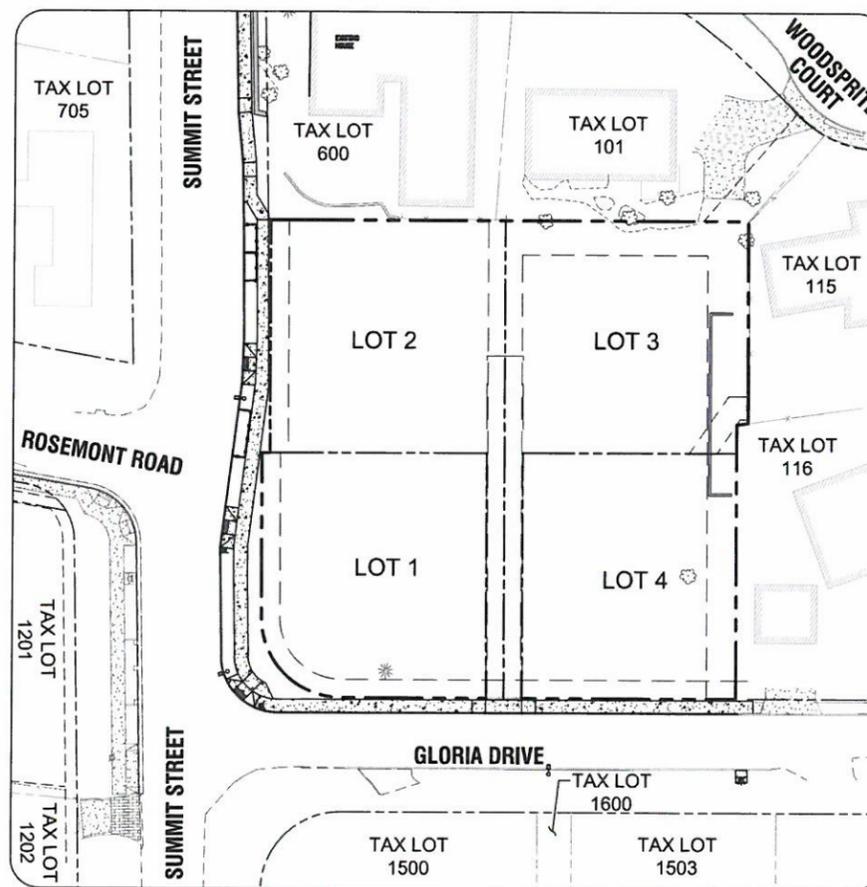
REGISTERED PROFESSIONAL  
ENGINEER  
12282PPE  
NOV 12 2008  
OREGON  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
07/28/2014

**3J CONSULTING, INC**  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
5075 SW GRIFFITH DRIVE, STE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9365

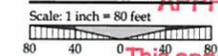
3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	2S1E250B 500
DESIGNED BY	CLF/BCH
CHECKED BY	JDH
SHEET TITLE	COVER SHEET
SHEET NUMBER	C000



VICINITY MAP  
NOT TO SCALE



SITE MAP



TAX LOT 500 LOCATED IN THE NW 1/4 & SE 1/4 OF SECTION 25, T.2S., R.1E., W.M. CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

**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: 7/29/14 BY: *Khori Q. Le*

### PROJECT TEAM

**OWNER/APPLICANT**  
LF 10, LLC  
C/O: J.T. SMITH COMPANIES  
5285 MEADOWS ROAD, SUITE #171  
LAKE OSWEGO, OR 97035  
CONTACT: JOHN WYLAND  
EMAIL: jwyland@jtsmithco.com

**PLANNING CONSULTANT**  
3J CONSULTING, INC  
5075 SW GRIFFITH DR, SUITE 150  
BEAVERTON, OR 97005  
CONTACT: ANDREW TULL  
PHONE: 503-946-9365  
EMAIL: andrew.tull@3j-consulting.com

**CIVIL ENGINEER**  
3J CONSULTING, INC.  
5075 SW GRIFFITH DR, SUITE 150  
BEAVERTON, OR 97005  
CONTACT: JOHN HOWARTH  
PHONE: (503) 946-9365  
EMAIL: john.howarth@3j-consulting.com

**GEOTECHNICAL CONSULTANT**  
GEOPACIFIC ENGINEERING, INC.  
14835 SW 72ND AVENUE  
PORTLAND, OR 97224  
CONTACT: SCOTT HARDMAN  
PHONE: (503) 625-4455  
EMAIL: shardman@geopacificeng.com

**LAND SURVEYOR**  
COMPASS SURVEYING  
4107 SE INTERNATIONAL WAY, SUITE 705  
MILWAUKIE, OR 97222  
CONTACT: DON DEVLAMINCK  
PHONE: 503-653-9093  
EMAIL: dond@compass-engineering.com

### SITE INFORMATION

**SITE ADDRESS**  
4997 SUMMIT STREET  
WEST LINN, OR 97068

**TAX LOT**  
2S1E25DB 500

**FLOOD HAZARD**  
MAP NUMBER: 41005C0257D ZONE X (UNSHADED)

**JURISDICTION**  
CITY OF WEST LINN

**ZONING**  
R-10

### UTILITIES & SERVICES

**WATER, STORM, SEWER**  
CITY OF WEST LINN  
CONTACT: KHOI LE  
PHONE: (503) 722-5517  
EMAIL: kle@westlinnoregon.gov

**GAS**  
NORTHWEST NATURAL - ENGINEERING  
CONTACT: BRIAN KELLEY  
PHONE: (503) 220-2427  
EMAIL: brian.kelley@nwnatural.com

**FIRE**  
TUALATIN VALLEY FIRE & RESCUE  
CONTACT: TY DARBY  
PHONE: (503) 259-1409  
EMAIL: ty.darby@tvfr.com

**POLICE, SCHOOLS, ROADS, PARKS**  
CITY OF WEST LINN

**POWER**  
PGE  
CONTACT: MIKE HIEB  
PHONE: (503) 570-4412  
EMAIL: mike.hieb@pgn.com

**CABLE**  
COMCAST  
CONTACT: KENNETH WILLIS  
PHONE: (503) 793-9981  
EMAIL: kenneth\_willis@cable.comcast.com

**CABLE**  
CENTURYLINK - REGIONAL ENGINEER  
CONTACT: KENNETH SCIULLI  
PHONE: (503) 242-0304  
EMAIL: kenneth.sciulli@centurylink.com

**CENTURYLINK - REGIONAL MANAGER**  
CONTACT: JEREMY MORRIS  
PHONE: (503) 293-4567  
EMAIL: jeremy.morris@centurylink.com

WEST LINN PLANNING COMMISSION  
FINAL DECISION NOTICE  
SUB-13-05

IN THE MATTER OF A 4-LOT SUBDIVISION AT 4997 SUMMIT STREET

At their meeting of February 19, 2014, the West Linn Planning Commission held a public hearing to consider the request by LF 10, LLC to approve a 4-lot subdivision. The proposed development required Subdivision approval. The approval criteria for Subdivision are found in Chapter 85 of the Community Development Code (CDC). The hearing was conducted pursuant to the provisions of CDC Chapter 99.

The hearing commenced with a staff report presented by Tom Soppe, Associate Planner. Andrew Tull of 3J Consulting, Inc. presented for the applicant. Alice Richmond provided testimony in support of the application. Janet Dalgaard provided testimony in opposition. Mr. Tull and Michael Robinson of Perkins Coie LLC provided the applicant's rebuttal. After deliberations, motions were made, seconded, and approved to amend Condition of Approval 4 and to eliminate Condition of Approval 5 respectively. A motion was made, seconded, and passed to approve the application with two new findings, with the amended conditions. The additional findings are as follows:

- Additional Finding 1:** Condition of Approval 4 should be amended to specifically require that both streets have street trees.
- Additional Finding 2:** As Condition of Approval 9 requires the development meet all Engineering standards including for street lighting, Condition of Approval 5 is not needed.

The approved conditions of approval are as follows, with conditions 6-9 re-numbered as 5-8:

- Site Plan.** With the exception of modifications required by these conditions, the project shall conform to the Subdivision Plat- Phase 1, Sheet C2.0, dated January 28, 2014, located on Page 47 of Exhibit PC-4. If proof of applicant ownership of the hiatus strip between this property and the property to the northeast is provided by the time of final platting, the final plat may then conform to the Subdivision Plat- Phase 2, Sheet C2.0A, dated January 28, 2014 located on Page 48 of Exhibit PC-4.
- Fire Flow Test.** The applicant shall perform a fire flow test to the satisfaction of TVFR.
- Shared Driveway Width.** The shared driveway pavement shall be 14 feet wide.

- Street Trees.** Street trees shall be provided on both Summit and Gloria. The applicant shall pay the appropriate amount towards street trees as determined by the City Parks and Recreation Department.
- Significant Trees.** The significant 36-inch fir tree proposed for removal at the south end of the proposed private street/shared driveway shall be mitigated for on an inch-per-inch basis on site. If that would result in excess trees on site at maturity, as determined by the City's Arborist, then the appropriate amount of mitigation may occur off-site in City-owned land. Required street trees shall not count towards mitigation.
- Sanitary Sewer Easement.** The final plat shall include a sanitary sewer easement on Lot 3 covering where Lot 4's sanitary sewer line traverses Lot 3.
- Stormwater.**
  - Prior to recording the final plat, the applicant shall record the proposed stormwater easement on the property at 2630 Woodsprite Court as shown on the Subdivision Plat Sheet C2.0 and Subdivision Plat Sheet C2.0A, Page 47-48 of Exhibit PC-4.
  - The applicant proposes a shared stormwater line located in the proposed shared driveway/private street and connecting downhill through the adjacent easements to the existing Woodsprite Court. This line shall be public.
- Engineering Standards.** All public improvements and facilities associated with public improvement including grading, onsite stormwater design, street lighting, easements, and easement locations are subject to the City Engineer's review, modification, and approval.

This decision will become effective 14 days from the date of mailing of this final decision as identified below. Those parties with standing (i.e., those individuals who submitted letters into the record, or provided oral or written testimony during the course of the hearings, or signed in on an attendance sheet or testimony form at either of the hearings, or who have contacted City Planning staff and made their identities known to staff) may appeal this decision to the West Linn City Council within 14 days of the mailing of this decision pursuant to the provisions of Chapter 99 of the Community Development Code. Such appeals would require a fee of \$400 and a completed appeal application form together with the specific grounds for appeal to the Planning Director prior to the appeal-filing deadline.

*Christine M. Steel*  
CHRISTINE STEEL, CHAIR  
WEST LINN PLANNING COMMISSION

2-27-14  
DATE

Mailed this 27<sup>th</sup> day of February, 2014.

Therefore, this decision becomes effective at 5 p.m., March 13, 2014.

Devlin/projects/folder/projects/2013/sub-13-05 4997 Summit S/508-13-05 Final Decision

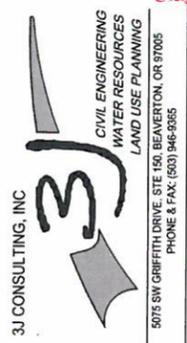
**APPROVED FOR CONSTRUCTION BY  
CITY OF WEST LINN**

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: 7/29/14 BY: Khori G. Le

CONSTRUCTION PLANS	07/10/2014
REVISION SUMMARY	BY DATE
#	

CONDITIONS OF APPROVAL  
**HARPER'S TERRACE  
SUBDIVISION**  
LF 10, LLC  
WEST LINN, OR



3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	2S1E250B 500
DESIGNED BY	CLF/BCH
CHECKED BY	JDH

SHEET TITLE  
C of A

SHEET NUMBER  
**C001**

SANITARY SEWER NOTES

- 1. PIPE SHALL BE PVC SEWER PIPE CONFORMING TO ASTM D-3034 SDR 35. MINIMUM STIFFNESS SHALL BE 46 PSI AND JOINT TYPE SHALL BE ELASTOMERIC GASKET CONFORMING TO ASTM D-3212.
2. MANHOLE BASE SHALL BE POURED IN PLACE CONCRETE BASE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI OR PRECAST. MANHOLE RISERS AND TOPS SHALL BE PRECAST SECTIONS WITH MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. TOPS SHALL BE ECCENTRIC CONES EXCEPT WHERE INSUFFICIENT HEADROOM REQUIRES FLAT TOPS. INVERTS SHALL BE CONSTRUCTED SO AS TO PROVIDE SMOOTH FLOW-THROUGH CHARACTERISTICS AND CHANNELS MUST BE ABLE TO PASS A 6"x36" CYLINDER INTO PIPES. PVC PIPE SHALL BE CONNECTED TO MANHOLE BY MEANS OF A FLEXIBLE CONNECTION AND SHALL HAVE A SHEAR JOINT LOCATED 18" OUTSIDE OF MANHOLE. CEMENT GROUT FOR CONNECTING PVC SEWER PIPE TO MANHOLE WILL NOT BE PERMITTED.
3. ALL MANHOLES LOCATED IN EASEMENT AREAS REQUIRE TAMPER PROOF LIDS AND THE LID SHALL BE SET 12" ABOVE THE PROPOSED GRADE WHEN PLACED IN UNPAVED AREAS.
4. CLEANOUT PIPE, FITTINGS, AND JOINTS SHALL BE THE SAME SPECIFICATIONS AS FOR PIPE. CASTINGS ARE AS SHOWN ON DETAIL AND SHALL CONFORM TO ASTM A48 (GRADE 30). CLEANOUT RISER SHALL MATCH DOWNSTREAM PIPE DIAMETER. FRAME SHALL SIT ON 24"x24" CONCRETE PAD.
5. GRANULAR BACKFILL (3/4"-0) IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD AND NATIVE MATERIAL SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL. EXCAVATION, BEDDING, AND BACKFILL SHALL BE IN ACCORDANCE WITH DIVISION 204 OF THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. BACKFILL UNDER NEW STREETS SHALL BE CLASS "B" AND BACKFILL IN EXISTING STREETS SHALL BE CLASS "E".
6. PVC SERVICE LATERALS SHALL BE 4" PIPE CONFORMING TO THE SAME SPECIFICATIONS AS THE SEWER MAINS. SERVICE LATERALS SHALL BE INSTALLED TO A POINT BEYOND THE LINE OF THE SEWER OR UTILITY EASEMENT AS SHOWN ON THE PLAN. THE SERVICE LATERAL SHALL BE PLUGGED WITH A 4" RUBBER RING PLUG, AND THE LOCATION OF THE LATERAL'S END MARKED WITH A 2"x4" STAKE PAINTED GREEN.
7. SANITARY SEWER PIPE AND APPURTENANCES SHALL BE TESTED FOR LEAKAGE IN ACCORDANCE WITH W.L.S.C.S. DIVISION 301.03.09 AND MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH W.L.S.C.S. DIVISION 302.03.07. ALL TESTS SHALL BE WITNESSED BY THE ENGINEER AND THE CITY OF WEST LINN. CONTRACTOR IS RESPONSIBLE FOR COORDINATING TESTING SO THAT ALL TEST SHALL BE PASSED AND NEW LINE SHALL BE ACCEPTED PRIOR TO CONNECTION TO EXISTING SYSTEM.
8. A PLUMBING PERMIT FROM THE CITY OF WEST LINN BUILDING DEPARTMENT IS REQUIRED FOR SANITARY SEWER LATERALS BEYOND THE FIRST CLEANOUT.
9. ALL MATERIALS, INSTALLATION, TEST, AND INSPECTIONS TO BE MADE IN STRICT ACCORDANCE WITH CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS.

WATER NOTES

- 1. WATER MAINS SHALL BE DUCTILE IRON PIPE CONFORMING TO AWWA C151 CLASS 52. PIPE IS TO HAVE CEMENT MORTAR LINING AND BITUMINOUS SEAL COAT CONFORMING TO AWWA C104. JOINTS ARE TO BE PUSH-ON RUBBER GASKETED JOINTS UNLESS NOTED OTHERWISE ON THE PLAN. PIPE FITTINGS ARE TO BE OF THE SAME MATERIAL AND CLASS AS PIPE OF DOMESTIC ORIGIN.
2. WATER MAINS HAVE A MINIMUM COVER OF 36".
3. THRUST BLOCKS ARE TO BE PROVIDED AT ALL CHANGES IN DIRECTION AND BRANCHES. THRUST BLOCKING CONCRETE STRENGTH IS TO BE 3300 PSI. SEE DETAILS FOR THRUST BLOCK SIZING. POUR THRUST BLOCKS AGAINST UNDISTURBED EARTH.
4. GATE VALVES SHALL BE RESILIENT SEAT, NON-RISING STEM WITH "O" RING PACKING, COMPLYING WITH AWWA CLASS "C" SPECIFICATIONS. THE VALVES SHALL BE DESIGNED TO WITHSTAND A WORKING PRESSURE OF 150 PSI. GATE VALVES SHALL BE FURNISHED WITH A TWO-INCH SQUARE OPERATING NUT AND SHALL OPEN COUNTERCLOCKWISE WHEN VIEWING FROM ABOVE. BUTTERFLY VALVES SHALL BE RUBBER SEAT TYPE AND BUBBLE-TIGHT AT 150 PSI, AND SHALL CONFORM TO AWWA C504. BUTTERFLY VALVES SHALL BE MUELLER OR APPROVED EQUAL. OPERATING NUT SHALL BE LOCATED ON THE SIDE OF THE MAIN SHOWN ON THE PLANS. VALVE BOXES SHALL BE "VANCOUVER" PATTERN.
5. GRANULAR BACKFILL (3/4"-0) IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD AND NATIVE MATERIAL SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL. EXCAVATION, BEDDING, AND BACKFILL SHALL BE IN ACCORDANCE WITH DIVISION 204 OF THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. BACKFILL UNDER NEW STREETS SHALL BE CLASS "E".
6. SERVICE LATERALS SHALL BE TYPE K COPPER LATERAL SIZES SHALL BE 1". FOR DOUBLE SERVICES TWO 1" WATER SERVICES SHALL BE LAID SIDE BY SIDE. CORPORATION STOPS SHALL BE MUELLER H 15008 OR FORD F1000 4Q. ANGLE METER STOP SHALL BE MUELLER H 14258 OR FORD 1" KV43-444W-Q. METER BOXES SHALL BE EQUAL TO BROOKS #37 WITH A 37-S LID AND COVER. METER BOXES ARE TO BE INSTALLED 3/4" ABOVE FINISH GRADE AND 2- 1/2" FROM THE CURB IN PLANTER STRIPS OR FLUSH WITH SIDEWALK SURFACE IN A SIDEWALK.
7. ALL WATERLINES WILL BE PRESSURE TESTED AND PURIFICATION TESTED BEFORE CONNECTION TO THE CITY WATER SYSTEM. PRESSURE TEST SHALL BE CONDUCTED AT 180 PSI OR 1.5 TIMES THE NORMAL WORKING PRESSURE, WHICHEVER IS HIGHER AND SHALL MEET THE REQUIREMENTS OF DIVISION 403.14 OF THE WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS.
8. CHLORINATION SHALL CONFORM WITH DIVISION 403.13 OF THE W.L.S.C.S.
9. DO NOT CONNECT NEW PIPE TO EXISTING PIPE PRIOR TO TESTING. THE CITY OF WEST LINN REQUIRES ACCEPTANCE OF NEW WATERLINE PRIOR TO CONNECTION TO EXISTING WATER SYSTEM.
10. A PLUMBING PERMIT IS REQUIRED FOR SERVICE LATERAL INSTALLATIONS BEYOND THE WATER METER.
11. ALL MATERIALS, INSTALLATION, TESTS, AND CHLORINATION TO BE IN STRICT ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, AND THE OREGON STATE HEALTH DIVISION ADMINISTRATION RULES, CHAPTER 333.

STORM SEWER NOTES

- 1. EIGHT INCH TO 24-INCH STORM DRAIN PIPE IS PREFERRED TO BE SEAMLESS GREEN RIBBED PVC PIPE CONFORMING TO ASTM F 794. WHERE LARGER PIPE IS REQUIRED OR LACK OF COVER PREVENTS USE OF RIBBED PVC PIPE, PIPE SHALL BE CLASS 3 NON-REINFORCED CONCRETE PIPE CONFORMING TO ASTM C14, REINFORCED CONCRETE PIPE CONFORMING TO ASTM C-76, CLASS IV, OR DUCTILE IRON PIPE CONFORMING TO AWWA C151 CLASS 52. RUBBER JOINTS ARE REQUIRED FOR ALL CONCRETE PIPE. SIX INCH AND SMALLER STORM DRAIN PIPE SHALL CONFORM TO ASTM D 3034 PVC PIPE.
2. GUTTER INLETS SHALL BE POURED IN-PLACE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI. FRAME SHALL BE FABRICATED OF STRUCTURAL STEEL, ASTM A-7, A-36, A-373.
3. MANHOLE BASE MAY BE POURED IN PLACE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI OF PRECAST. MANHOLE RISERS AND TOPS SHALL BE PRECAST SECTIONS WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. TOPS SHALL BE ECCENTRIC CONES EXCEPT WHERE INSUFFICIENT HEADROOM REQUIRES FLAT TOPS. INTERIOR DIMENSIONS NOTED ON THE PLANS ARE MINIMUMS. SOME OR ALL OF THE STORM DRAIN REQUIRED WILL BE OVERSIZED MANHOLES, CONTRACTOR SHALL CHECK WITH MANHOLE MANUFACTURER FOR ACTUAL SIZE OF MANHOLE NEEDED FOR TYPE AND SIZE OF PIPE TO BE USED. INVERTS SHALL BE CONSTRUCTED SO AS TO PROVIDE SMOOTH FLOW-THROUGH CHARACTERISTICS. PIPE SHALL BE CONNECTED TO MANHOLE BY MEANS OF A FLEXIBLE CONNECTION AND SHALL HAVE A SHEAR JOINT LOCATED 18" OUTSIDE OF THE MANHOLE.
4. ALL MANHOLES LOCATED IN EASEMENT AREAS REQUIRE TAMPER PROOF LIDS AND LID SHALL BE SET 12 INCHES ABOVE PROPOSED GRADE.
5. CLEANOUT PIPE, FITTINGS, AND JOINTS SHALL BE THE SAME SPECIFICATIONS AS FOR PIPE. CASTINGS ARE SHOWN ON DETAILS AND SHALL CONFORM TO ASTM A48 (GRADE 30). CLEANOUT RISER SHALL MATCH DOWNSTREAM PIPE DIAMETER.
6. GRANULAR BACKFILL (3/4"-0) IS TO BE COMPACTED TO 95% MAXIMUM DRY DENSITY PER AASHTO T-180 TEST METHOD AND NATIVE MATERIAL SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL.
7. STORM DRAIN SERVICE LATERALS SHALL BE 4" PIPE CONFORMING TO THE SAME SPECIFICATIONS AS THE STORM DRAIN MAIN LINES. SERVICES LATERALS SHALL BE INSTALLED TO A POINT BEYOND THE LINE OR UTILITY EASEMENT AS SHOWN ON THE PLAN. THE SERVICE LATERAL SHALL BE PLUGGED WITH 4" RUBBER RING PLUG, AND THE LOCATION OF THE LATERALS END MARKED WITH A 2"x4" STAKE PAINTED WHITE.
8. STORM DRAINS SHALL BE TESTED FOR DEFLECTION IN ACCORDANCE WITH DIVISION 601.03.11 AND VIDEO INSPECTED IN ACCORDANCE WITH DIVISION 601.03.12 OF THE WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. ALL TESTS SHALL BE WITNESSED BY THE ENGINEER AND A REPRESENTATIVE OF THE CITY.
9. A PLUMBING PERMIT FROM THE CITY OF WEST LINN BUILDING DEPARTMENT IS REQUIRED FOR STORM DRAINS BEYOND THE FIRST CLEANOUT.
10. ALL MATERIALS, INSTALLATION, TESTS, AND INSPECTIONS TO BE IN STRICT ACCORDANCE WITH THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS.
11. INFILTRATION RAIN GARDEN PLANTINGS TO CONFORM TO PLANTING SPECIFICATION AS SHOWN ON THE PLANS AND DETAILS CONTAINED HEREIN.

STREET NOTES

- 1. NEW STREET SECTIONS ARE TO BE CLEARED OF ALL SURFACE VEGETATION AND OTHER MISCELLANEOUS STRUCTURES OR MATERIALS. GRUB IMPROVEMENT AREAS TO REMOVE ALL BURIED VEGETATIVE MATTER AND DEBRIS TO A DEPTH 8" BELOW SUBGRADE. PROPERLY DISPOSE OF ALL WASTE MATERIAL.
2. STREET SUBGRADE SHALL CONFORM TO DIVISION 501 OF THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. AREAS TO RECEIVE FILL ARE TO BE INSPECTED BY CITY OF WEST LINN PERSONNEL PRIOR TO PLACEMENT OF THE FILL. THE CONTRACTOR SHALL HAVE FILL AREAS TESTED FOR COMPACTION BY A CERTIFIED TESTING LAB IN ACCORDANCE WITH W.L.S.C.S. DIVISION 501.03.08. SUCH TESTING WILL BE AT THE CONTRACTOR'S EXPENSE.
3. AGGREGATE BASE ROCK SHALL CONFORM TO THE REQUIREMENTS OF W.L.S.C.S. DIVISION 205. BASE COURSE SHALL BE 1-1/2" -0 CRUSHED ROCK AND LEVELING COURSE SHALL BE 3/4" -0. CITY OF WEST LINN REQUIRES A PROOF ROLL WITH A LOADED 10 YARD DUMP TRUCK OF THE SUBGRADE PRIOR TO PLACEMENT OF THE ROCK AND AGAIN AFTER PLACEMENT OF THE BASE ROCK AND PRIOR TO PAVING. ALL UNDERGROUND UTILITIES INCLUDING LATERALS, SERVICES, AND POWER OR GAS CONDUITS WILL BE IN PLACE BEFORE SUBGRADE PROOF ROLL WILL TAKE PLACE.
4. ASPHALT CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF W.L.S.C.S. DIVISION 205. 2" BASE LIFT SHALL BE CLASS "B" A.C. AND 2" FINAL LIFT SHALL BE CLASS "C" A.C. MEETING THE SPECIFICATIONS OF W.L.S.C.S. DIVISION 505. THE TOP LIFT OF ASPHALT CONCRETE SHALL NOT BE PLACED PRIOR TO RECEIVING PERMISSION FROM THE CITY OF WEST LINN ENGINEERING DEPARTMENT.
5. CONSTRUCT CURB AND GUTTER USING 3300 PSI CONCRETE MEETING THE SPECIFICATIONS OF W.L.S.C.S. DIVISION 205 (AFTER 28 DAYS) WITH MAXIMUM 1-1/2" AGGREGATE SIZE. CONTRACTION JOINTS AT 15' MAXIMUM ON CENTERS. THREE INCH WEEPHOLES ARE TO BE INSTALLED ON ALL LOTS UPHILL OR EVEN WITH THE STREET. GENERALLY, WEEPHOLES SHALL BE LOCATED AT THE CENTER AND LOWEST EDGE OF CURB FOR EACH LOT. CONTRACTOR SHALL STAMP LOCATION OF SEWER AND WATER CROSSINGS WITH AN (S) OR A (W), A PROOF ROLL OF THE CURBLINES IS REQUIRED PRIOR TO POURING CURBS.
6. ALL MATERIALS, INSTALLATION, TESTS, AND INSPECTIONS TO BE IN STRICT ACCORDANCE WITH CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS.
7. A STREET CONSTRUCTION ENCROACHMENT PERMIT OR SIMILAR PERMIT MAY BE REQUIRED FROM THE CITY OF WEST LINN. CONSTRUCTION PERMIT FEES OR OTHER SIMILAR FEES OR BONDING REQUIRED OF THE CONTRACTOR WILL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN.

GENERAL NOTES

- 1. ALL REFERENCES TO CITY DESIGN STANDARDS REFER TO THE CURRENT STANDARDS.
2. THE DESIGN ENGINEER WILL BE RESPONSIBLE FOR INSPECTION OF THE PROPOSED IMPROVEMENTS WITH OVERSIGHT FROM THE CITY'S PUBLIC WORKS AND ENGINEERING STAFF.
3. A WORK SCHEDULE WILL BE REQUIRED FROM THE CONTRACTOR SO THAT THE ENGINEER CAN HAVE AN INSPECTOR ONSITE AT THE APPROPRIATE TIMES. IF THE WORK SCHEDULE IS REVISED THE CONTRACTOR IS TO NOTIFY THE ENGINEER AT LEAST 24 HOURS NOTICE OF ANY TESTING REQUIRING THE PRESENCE OF THE ENGINEER AND/OR CITY STAFF.
4. THE CONTRACTOR IS TO RECEIVE THE APPROVAL OF THE ENGINEER AND THE CITY OF ANY PROPOSED CHANGES TO THE PLANS OR STANDARD REQUIREMENTS.
5. A BUILDING DEPARTMENT PLUMBING PERMIT IS REQUIRED FOR UTILITIES BEYOND THE FIRST CLEANOUT OR METER ON PRIVATE PROPERTY.
6. A PUBLIC IMPROVEMENT GUARANTEE AGREEMENT OR A PUBLIC WORKS PERMIT, A PRE-CONSTRUCTION MEETING WITH THE CITY OF WEST LINN, AND INSTALLATION OF EROSION CONTROL MEASURES ARE REQUIRED PRIOR TO BEGINNING CONSTRUCTION.
7. PRIOR TO SITE CLEARING, 8' TALL CHAIN-LINK FENCING SHALL BE PLACED AT TREE EASEMENT BOUNDARIES PRIOR TO SITE GRADING. THE CITY ARBORIST SHALL INSPECT & APPROVE ALL ONSITE TREE PROTECTION MEASURES PRIOR TO THE START OF THE SITE WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE CITY ARBORIST AND ARRANGE FOR THIS APPROVAL TO TAKE PLACE. NO PERMITS WILL BE ISSUED FROM ENGINEERING, PLANNING, OR BUILDING DEPARTMENTS WITHOUT TREE PROTECTION APPROVAL FROM THE CITY ARBORIST. ALL TREE PROTECTION MEASURES SHALL REMAIN IN PLACE AND FULLY FUNCTIONAL FOR THE ENTIRE TIME THAT SITE WORK AND CONSTRUCTION IS TAKING PLACE.
8. A CITY REPRESENTATIVE AND A REPRESENTATIVE OF THE ENGINEER MUST BE PRESENT AT ALL TESTING AND THE CITY SHALL BE FURNISHED A COPY OF ALL TEST RESULTS. IF ENGINEER OR CITY DO NOT WITNESS TESTING, CONTRACTOR WILL BE REQUIRED TO RE-TEST.
9. ALL FEES FOR STREET TREES SHALL BE PAID TO THE CITY OF WEST LINN PARKS AND RECREATION DEPARTMENT.
10. NO BUILDING PERMITS WILL BE GIVEN UNTIL THE IMPROVEMENTS HAVE BEEN ACCEPTED BY THE CITY AS SUBSTANTIALLY COMPLETE.
11. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES AND POINTS OF CONNECTION PRIOR TO ORDERING MANHOLES. IF DISCREPANCIES ARE FOUND, CONTRACTOR SHALL NOTIFY THE ENGINEER.

GENERAL GRADING AND EROSION CONTROL (PART 1)

- 1. APPROVAL OF THIS EROSION CONTROL (ESC) PLAN DOES NOT CONSTITUTE ON APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G. SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.)
2. THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED, AND VEGETATION OF LANDSCAPING IS ESTABLISHED.
3. THE ESC FACILITIES ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE DRAINAGE SYSTEM OR VIOLATE APPLICABLE WATER STANDARDS.
4. THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT LEAVE THE SITE.
5. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.
6. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH, OR WITHIN 24 HOURS FOLLOWING A STORM EVENT.
7. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A TRAPPED CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.
8. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.

GENERAL GRADING AND EROSION CONTROL (PART 2)

- 1. CLEAN WASTE MATERIAL EXCAVATED FROM ROAD CUT OR TRENCHING AREAS NOT USED IN STREET FILL AREAS MAY BE SPREAD EVENLY ACROSS LOT AREAS IN DEPTHS NOT TO EXCEED SIX INCHES, EXCEPT WHERE NOTED OTHERWISE ON THE PLANS.
2. DURING CONSTRUCTION, STRAW BALES, CUTOFF TRENCHES OR SOME OTHER METHOD OF RUNOFF CONTROL SHALL BE USED TO PREVENT EROSION AND/OR SILTATION FROM CROSSING OUTSIDE THE WORK AREA BOUNDARIES.
3. LARGE ORGANIC MATERIAL, MISCELLANEOUS PIPE OR CONSTRUCTION MATERIAL MUST BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
4. NO FILLING OR CUTTING SHALL BE DONE OUTSIDE OF APPROVED GRADING AREAS.
5. ALL EROSION CONTROL FACILITIES SHALL MEET THE REQUIREMENTS OF THE CLATSOP COUNTY DEPARTMENT OF UTILITIES, EROSION PREVENTION AND SEDIMENT CONTROL PLANS TECHNICAL GUIDANCE HANDBOOK (ECTGH), REVISED AUGUST, 1994; CHAPTER 31 OF THE COMMUNITY DEVELOPMENT CODE; AND THE OREGON ADMINISTRATIVE RULES.

EROSION CONTROL SUMMARY

- 1. THE INTENT OF THE REQUIREMENT IS TO PREVENT SILTATION FROM REACHING STORM DRAIN SYSTEMS AND DRAINAGEWAYS.
2. THE MINIMUM MEASURES NEED TO BE MADE ON ALL PROJECTS.
A. A GRAVEL PAD, AT LEAST 50 FEET LONG, IS REQUIRED WHERE VEHICLES WILL LEAVE THE CONSTRUCTION SITE.
B. A SEDIMENT BARRIER IS TO BE CONSTRUCTED OF STRAW BALES OR A SEDIMENT FENCE WHERE NOTED IN THE DETAILS OR WHERE SEDIMENT WILL CROSS OUTSIDE THE WORK AREA.

WHERE EXCAVATED MATERIAL IS PLACED ON HARD SURFACES (SUCH AS STREETS) MATERIAL MUST BE BROOMED OR SCRAPED CLEAN AS SOON AS POSSIBLE.
CITY OF WEST LINN
RE-SEED OR COVER DISTURBED AREAS AS SOON AS IS POSSIBLE AND PRACTICAL BUT NO LATER THAN THE COMPLETION OF CONSTRUCTION ON THE OTHER PHASES OF WORK. EROSION CONTROL MEASURES SUCH AS HAY BALES AND SILT FENCES MUST REMAIN IN PLACE UNTIL SEEDED AREAS SHOW GROWTH SUFFICIENT TO PREVENT EROSION.

APPROVED
This approval with the design with applications 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: 7/29/14 BY: Kensi Q. G.

SEDIMENT FENCE

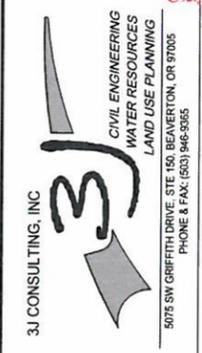
- 1. THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6-INCH OVERLAP, AND BOTH ENDS SECURELY FASTENED TO THE POST.
2. THE FILTER FABRIC FENCE SHALL BE INSTALLED TO FOLLOW THE CONTOURS, WHERE FEASIBLE. THEN FENCE POSTS SHALL BE SPACED A MAXIMUM OF SIX FEET APART AND DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 18 INCHES.
3. A TRENCH SHALL BE EXCAVATED, ROUGHLY 6 INCHES WIDE BY 6 INCHES DEEP, UPSLOPE AND ADJACENT TO THE WOOD POST TO ALLOW THE FILTER FABRIC TO BE BURIED. BURY THE BOTTOM OF THE FABRIC 6" VERTICALLY BELOW FINISHED GRADE. ALL AREAS OF FILTER FABRIC TRENCH SHALL BE COMPACTED.
4. THE FILTER FABRIC SHALL BE INSTALLED WITH STITCHED LOOPS OVER FENCE POSTS. THE FENCE POST SHALL BE CONSTRUCTED OF 2" X 2" FIR, PINE, OR STEEL. THE FENCE POST MUST BE A MINIMUM OF 48" LONG. THE FILTER FABRIC SHALL NOT BE STAPLED OR ATTACHED TO EXISTING TREES.
5. SEDIMENT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.
6. SEDIMENT FENCES SHALL BE INSPECTED BY APPLICANT/CONTRACTOR IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SEEDING/MULCHING

- 1. ALL AREAS DISTURBED DURING CONSTRUCTION TO BE GRADED TO DRAIN AND COMPACTED TO A MINIMUM OF 90% OF AASHTO T-99 IMMEDIATELY AFTER INSTALLATION OF UTILITIES OR GRADING.
2. RECOMMENDED SEED MIXTURE: 80% ELKA DWARF PERENNIAL RYEGRASS AND 20% CREEPING RED FESCUE, BY WEIGHT. APPLICATION RATE SHALL BE 100 POUNDS MINIMUM PER ACRE.
3. FERTILIZER SHALL BE 12-16-8 WITH 50% OF THE NITROGEN DERIVED FROM UREA FORMALDEHYDE, AND APPLIED AT A RATE OF 400 POUNDS PER ACRE.
4. SEED AND MULCH AT A RATE OF 2000 LBS/AC WITH HEAVY BONDING AGENT OR NETTING AND ANCHORS. MULCH SHALL BE A WOOD CELLULOSE FIBER OR OTHER MATERIAL SUITABLE FOR HYDROMULCHING.
5. TEMPORARY OR PERMANENT HYDROSEEDING ARE ACCEPTABLE SEEDING AND MULCHING MUST BE PROVIDED WHENEVER PERENNIAL COVER CANNOT BE ESTABLISHED ON SITES WHICH WILL BE EXPOSED FOR 60 DAYS OR MORE.

CONSTRUCTION PLANS
REVISION SUMMARY
DATE: 07/10/2014
BY:

GENERAL NOTES
HARPER'S TERRACE
SUBDIVISION
LF 10, LLC
WEST LINN, OR

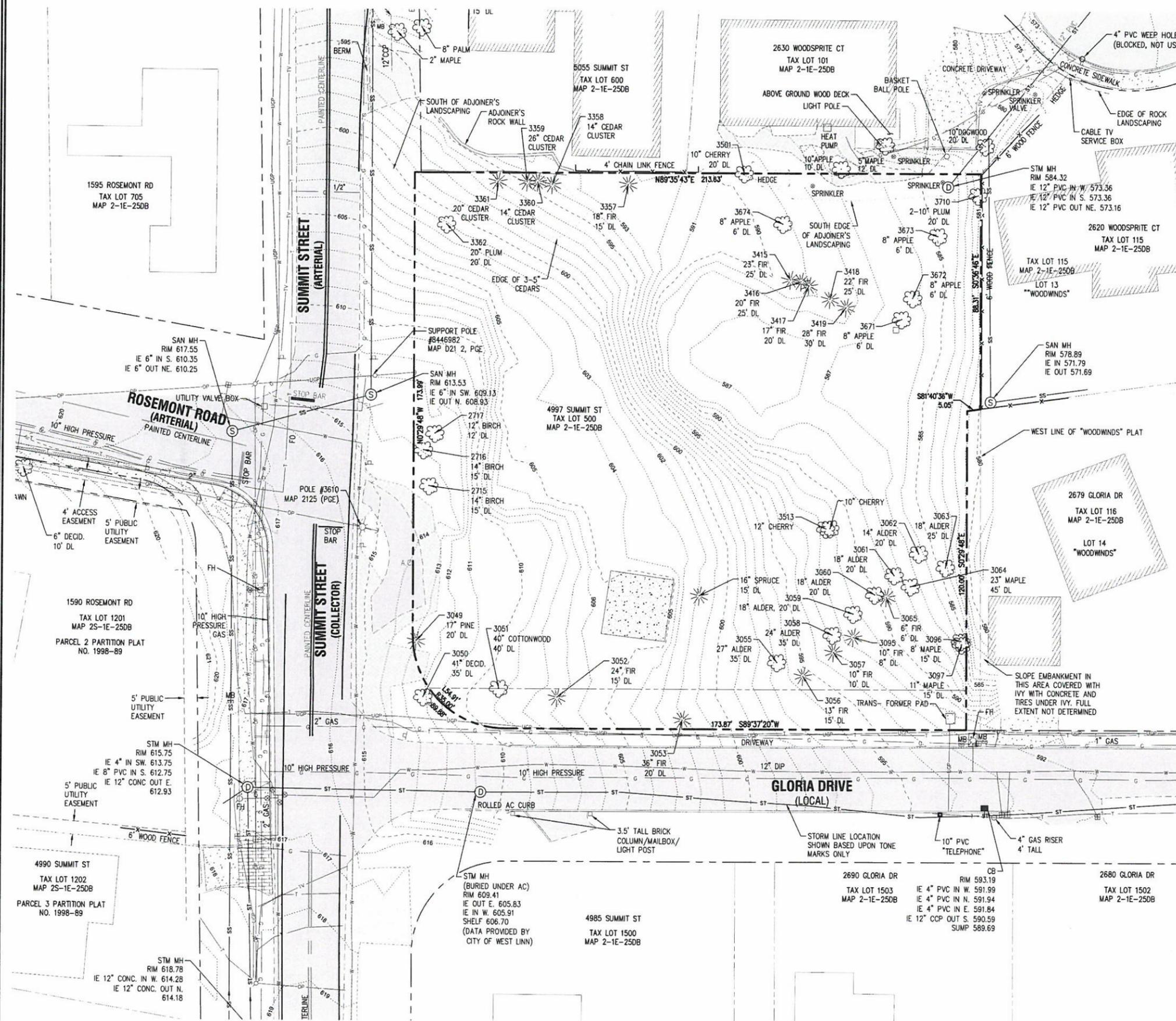


3J JOB ID # | 13123
LAND USE # | SUB-13-05
TAX LOT # | 2S1E2508 500
DESIGNED BY | CLF/BCH
CHECKED BY | JDH
SHEET TITLE
GENERAL NOTES
SHEET NUMBER
C002

TAX LOT 500 LOCATED IN THE NW 1/4 & SE 1/4 OF SECTION 25, T.2S., R.1E., W.M. CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON

EXISTING CONDITIONS PLAN

THIS PLAN IS INTENDED FOR USE AS AN EXISTING CONDITIONS PLAN SHOWING THE CONDITIONS OF THE SITE PRIOR TO CONSTRUCTION. INFORMATION SHOWN ON THIS PLAN WAS DEVELOPED FROM THE TOPOGRAPHIC SURVEY, AERIAL PHOTOS, AND SITE OBSERVATIONS BY THE ENGINEER. NOT ALL SURFACE FEATURES OR UTILITIES MAY BE SHOWN. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION TO DETERMINE WORK SPECIFIC DETAILS. TOPOGRAPHIC INFORMATION PROVIDED BY COMPASS ENGINEERING DATED APRIL, 2013.



LEGEND

--- (dashed)	BOUNDARY LINE	--- (dotted)	CURB
--- (dash-dot)	RIGHT-OF-WAY	--- (dotted)	ASPHALT
--- (solid)	CENTERLINE	--- (dotted)	SIDEWALK
--- (dotted)	LOT LINE	--- (dotted)	GRAVEL
--- (solid)	BUILDING	--- (dotted)	EXISTING TREES
--- (dotted)	1 FT CONTOUR	--- (dotted)	LIGHT POLE
--- (dotted)	5 FT CONTOUR	--- (dotted)	TRAFFIC SIGN
--- (dotted)	SANITARY SEWER	--- (dotted)	WATER VALVE
--- (dotted)	STORM SEWER	--- (dotted)	WATER METER
--- (dotted)	WATER LINE	--- (dotted)	SPRINKLER VALVE
--- (dotted)	GAS LINE	--- (dotted)	FIRE HYDRANT
--- (dotted)	UNDERGROUND POWER	--- (dotted)	
--- (dotted)	UNDERGROUND PHONE LINE	--- (dotted)	
--- (dotted)	OVERHEAD POWER	--- (dotted)	
--- (dotted)	SANITARY SEWER MANHOLE	--- (dotted)	
--- (dotted)	SANITARY SEWER MANHOLE	--- (dotted)	

NOTES

- UTILITY INFORMATION SHOWN ON THIS MAP IS BASED UPON OBSERVED FEATURES, RECORD DATA AND TONE MARKS PROVIDED BY PUBLIC UTILITY LOCATION SERVICES. NO WARRANTIES ARE MADE REGARDING THE ACCURACY OR COMPLETENESS OF THE UTILITY INFORMATION SHOWN. ADDITIONAL UTILITIES MAY EXIST. INTERESTED PARTIES ARE HEREBY ADVISED THAT UTILITY LOCATIONS SHOULD BE VERIFIED PRIOR TO DESIGN OR CONSTRUCTION OF ANY CRITICAL ITEMS.
- BASIS OF ELEVATIONS: NAVD '88.
- VERTICAL DATUM: NAVD '88 UTILIZING GPS POSITIONING TIED TO THE ORGN WITH REAL TIME CORRECTORS REFERENCED TO NAD '83 (2011).
- TOPOGRAPHIC FEATURES SHOWN ON THIS MAP WERE LOCATED USING STANDARD PRECISION TOPOGRAPHIC MAPPING PROCEDURES. THIRD PARTY USERS OF DATA FROM THIS MAP PROVIDED VIA AUTOCAD DRAWING FILES OR DATA EXCHANGE FILES SHOULD NOT RELY ON ANY AUTOCAD GENERATED INFORMATION WHICH IS BEYOND THE LIMITS OF PRECISION OF THIS MAP. THIRD PARTIES USING DATA FROM THIS MAP IN AN AUTOCAD FORMAT SHOULD VERIFY ANY ELEMENTS REQUIRING PRECISE LOCATIONS PRIOR TO COMMENCEMENT OF ANY CRITICAL DESIGN OR CONSTRUCTION. CONTACT COMPASS ENGINEERING FOR FURTHER INFORMATION. FURTHERMORE, COMPASS ENGINEERING WILL NOT BE RESPONSIBLE NOR HELD LIABLE FOR ANY DESIGN OR CONSTRUCTION RELATED PROBLEMS THAT ARISE OUT OF THIRD PARTY USAGE OF THIS MAP (IN AUTOCAD OR OTHER FORMAT) FOR ANY PURPOSE OTHER THAN SPECIFICALLY STATED HEREIN. THIS STATEMENT IS AN OFFICIAL PART OF THIS MAP.

**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: 7/29/14 BY: *Choi Q. Le*

CONSTRUCTION PLANS	DATE
REVISION SUMMARY	BY
	DATE

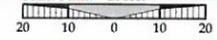
EXISTING CONDITIONS PLAN  
**HARPER'S TERRACE**  
 SUBDIVISION  
 LF 10, LLC  
 WEST LINN, OR

**J.T. SMITH** companies  
 REGISTERED PROFESSIONAL ENGINEER  
 12282PF  
 OREGON  
 NOV. 12, 2002  
 JOHN D. HOWARTH  
 EXPIRES: 06/30/15  
 Digital Signature  
 07/28/2014

**3J CONSULTING, INC**  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5015 SW GREENBUSH DRIVE, STE. 100, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-9585

3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	251E2508 500
DESIGNED BY	CLFBCH
CHECKED BY	JDH
SHEET TITLE	EXISTING COND.'S
SHEET NUMBER	C100

**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: 7/29/14 BY: *Khari Q. Le*



**LEGEND**

--- BOUNDARY LINE	--- RIGHT-OF-WAY	--- ASPHALT TO BE REMOVED
--- CENTERLINE	--- LOT LINE	--- SIDEWALK/CONCRETE
--- BUILDING	--- SANITARY SEWER	--- GRAVEL
--- STORM SEWER	--- STORM SEWER	--- EXISTING TREES
--- WATER LINE	--- GAS LINE	--- LIGHT POLE
--- UNDERGROUND POWER	--- UNDERGROUND PHONE LINE	--- TRAFFIC SIGN
--- CURB	--- SAWCUT LINE	--- WATER VALVE
--- EXISTING TREE TO BE REMOVED		--- WATER METER
		--- SPRINKLER VALVE
		--- FIRE HYDRANT

**DEMOLITION KEY**

1	DEMOLISH AND REMOVE EXISTING CONCRETE BUILDING PAD. DEBRIS AND REFUSE TO BE DISPOSED OFF-SITE AT AN APPROVED LOCATION.
2	REMOVE EXISTING TREE/LANDSCAPING NECESSARY TO INSTALL IMPROVEMENTS, SEE SHEET C102. ALL EXISTING TREE STUMPS TO BE REMOVED AND DISPOSED OF OFF-SITE.
3	REMOVE EXISTING GRAVEL SHOULDER/DRIVEWAY. DISPOSE OF RUBBLE AND REFUSE OFF-SITE.
4	SAWCUT EXISTING ASPHALT/CONCRETE PAVEMENT AS SHOWN (4' MIN. WIDTH) SAWCUT FULL DEPTH TO LIMIT DAMAGE OF ADJACENT STREET SURFACE DURING REMOVAL.
5	REMOVE EXISTING ASPHALT SURFACING AND BASE ROCK. DISPOSE OF RUBBLE AND REFUSE OFF SITE.
6	PROTECT EXISTING FENCING TO REMAIN.
7	REMOVE AND REPLACE EXISTING STREET SIGNS
8	PROTECT EXISTING TREE TO REMAIN (TYPICAL) , SEE SHEET C102.
9	PGE TO RELOCATE EXISTING SUPPORT POLE . CONTRACTOR TO COORDINATE WITH PORTLAND GENERAL ELECTRIC.
10	REMOVE EXISTING SUPPORT POLE, LIGHT AND FIXTURE. CONTRACTOR TO COORDINATE WITH PORTLAND GENERAL ELECTRIC.
11	REMOVE EXISTING CONCRETE CURB. DISPOSE OF RUBBLE AND REFUSE OFF-SITE.
12	RELOCATE EXISTING MAILBOX BEHIND SIDEWALK. CONTRACTOR TO COORDINATE WITH PROPERTY OWNER.
13	REMOVE / RELOCATE EXISTING TRANSFORMER AND PRIMARY CABLE. AFTER PGE APPROVAL, CONTRACTOR TO REMOVE VAULT AND ALL ASSOCIATED APPURTENANCES.
14	REMOVE EXISTING FIRE HYDRANT, SEE SHEET C400 FOR IMPROVEMENT PLANS. CONTRACTOR TO COORDINATE WITH CITY OF WEST LINN PUBLIC WORKS TO ABANDON LINE TO HYDRANT.
15	PROTECT EXISTING PAVEMENT/SIDEWALK TO REMAIN, SEE SHEETS C200 AND C201.

**GENERAL DEMOLITION NOTES**

- DEMOLITION NOTES ARE FOR CLARIFICATION ONLY AND ARE SHOWN FOR THE CONTRACTOR'S BENEFIT. THESE NOTES ARE NOT INTENDED TO BE COMPREHENSIVE. THE CONTRACTOR SHALL REMOVE OR RELOCATE ALL EXISTING ON-SITE IMPROVEMENTS NECESSARY TO ACCOMMODATE THE PROPOSED CONSTRUCTION.
- ALL EXISTING PROPERTY UTILITY SERVICES TO BE TERMINATED AND CAPPED AT THE RIGHT OF WAY PRIOR TO DEMOLISHING ANY EXISTING BUILDINGS.
- CONTRACTOR IS TO REMOVE ALL EXISTING SURFACE IMPROVEMENTS AND DEBRIS WITHIN THE LIMITS OF WORK UNLESS OTHERWISE NOTED. ALL DEBRIS FOUND ON SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE STATE CODES.
- CONTRACTOR TO PROTECT EXISTING FEATURES WHICH ARE TO REMAIN.
- CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURES, VALVE BOXES, VAULT LIDS AND UTILITY ACCESS STRUCTURES TO FINISH GRADE WITHIN AREAS AFFECTED BY PROPOSED CONSTRUCTION.
- CONSTRUCTION AND DEMOLITION ACTIVITIES SHALL BE PHASED IN SUCH A MANNER AS TO ENSURE THAT PUBLIC ACCESS ROADS ARE NOT BLOCKED AND REMAIN OPERATIONAL.
- SEE TREE PROTECTION AND REMOVAL PLAN (SHEET C1.2) FOR ALL TREE REMOVAL INFORMATION.

**DEMOLITION PLAN  
 HARPER'S TERRACE  
 SUBDIVISION**  
 LF 10, LLC  
 WEST LINN, OR

J.T. SMITH  
 COMPANIES

REGISTERED PROFESSIONAL  
 ENGINEER  
 72282PF  
 OREGON  
 NOV. 12, 2009  
 JOHN D. HOWARTH  
 EXPIRES 06/30/15  
 Digital Signature  
 07/28/2014

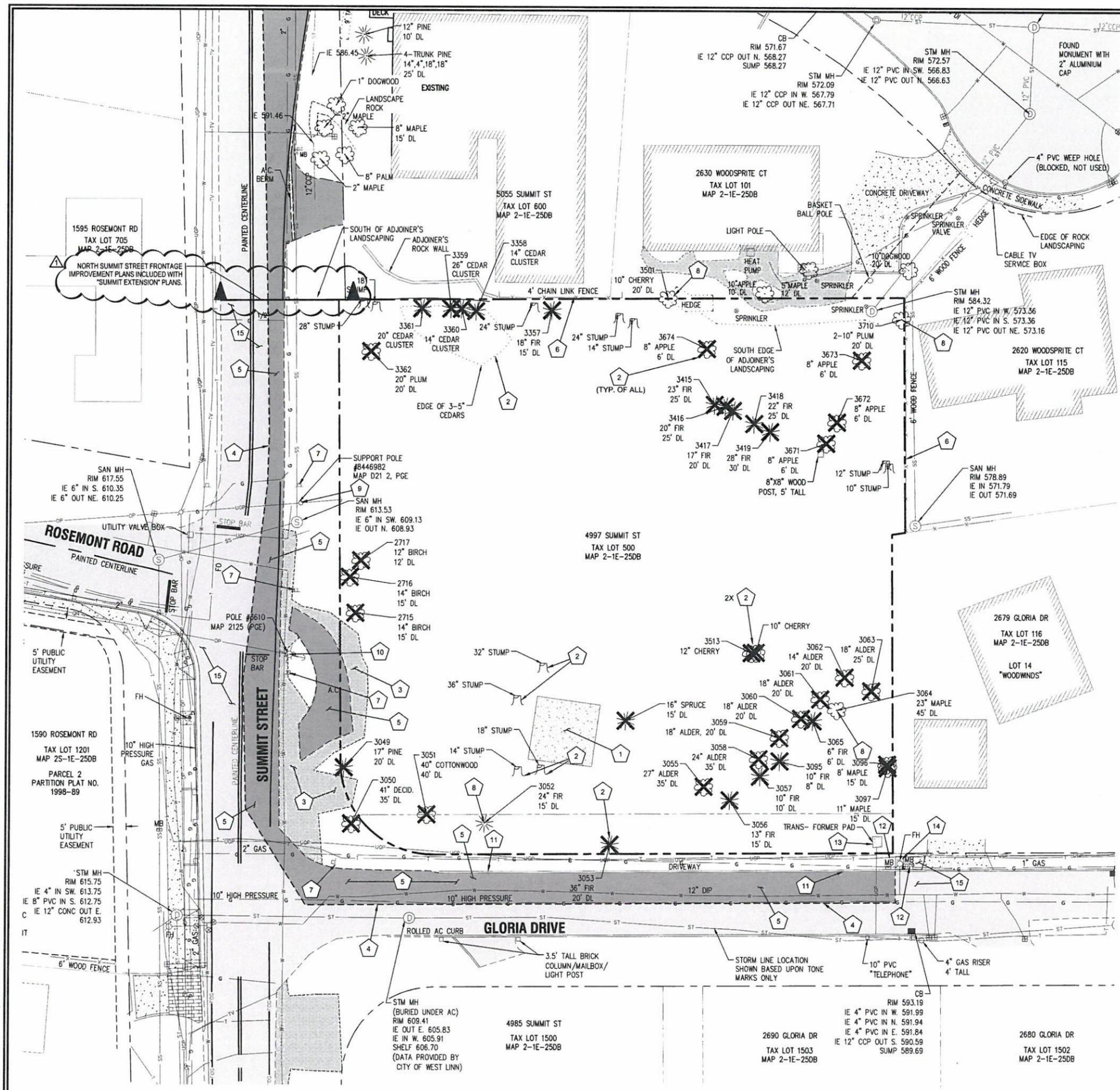
3J CONSULTING, INC.  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5075 SW GREFFITH DRIVE, STE 150, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-9855

3J JOB ID # | 13123  
 LAND USE # | SUB-13-05  
 TAX LOT # | 2S1E250B 500  
 DESIGNED BY | CLF/BCH  
 CHECKED BY | JDH  
 SHEET TITLE  
**DEMOLITION**  
 SHEET NUMBER

**C101**



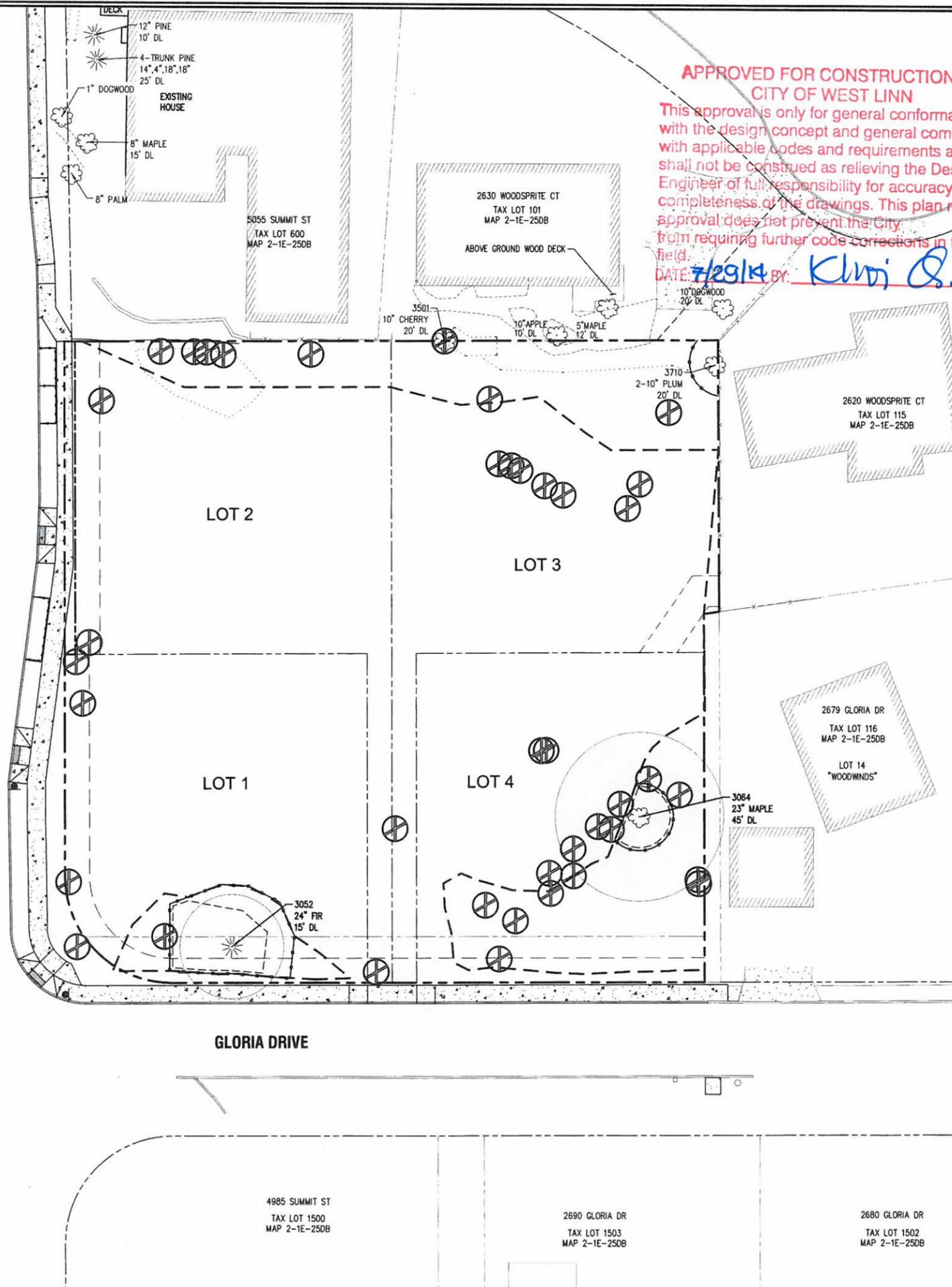
Know what's below.  
 Call before you dig.



SUMMIT STREET

ROSEMONT ROAD

SUMMIT STREET



**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: 7/29/14 BY: *Klari Q. G.*

**TREE INVENTORY**

SURVEY POINT NUMBER	TREE SPECIES	NOMINAL CALIPER SIZE (INCHES)	PROPOSED ACTION	SIGNIFICANT DESIGNATION	REMOVE DUE TO CONDITION
2715	EUROPEAN WHITE BIRCH	14	REMOVE	NO	INVASIVE SPECIES
2716	EUROPEAN WHITE BIRCH	14	REMOVE	NO	INVASIVE SPECIES
2717	EUROPEAN WHITE BIRCH	12	REMOVE	NO	INVASIVE SPECIES
3049	LODGE POLE PINE	17	REMOVE	NO	MECHANICAL DAMAGE
3050	PRINCESS TREE	41	REMOVE FROM ROW	NO	INVASIVE SPECIES
3051	BLACK COTTONWOOD	40	REMOVE	NO	BROKEN TOP, DECAY
3052	DOUGLAS FIR	24	SAVE	YES	NO MAJOR DEFECTS
3053	DOUGLAS FIR	36	REMOVE	YES	NO MAJOR DEFECTS
3054	SPRUCE	16	REMOVE	NO	POOR STEM STRUCTURE
3055	RED ALDER	27	REMOVE	NO	FORKED TOP BRANCH DECAY
3056	GRAND FIR	13	REMOVE	NO	FORKED TOP BRANCH DECAY
3057	GRAND FIR	10	REMOVE	NO	DEAD BRANCHES POOR CROWN
3058	RED ALDER	24	REMOVE	NO	BROKEN TOP, MULTI NEW TOPS
3059	RED ALDER	18	REMOVE	NO	12 DEG. LEAN
3060	RED ALDER	18	REMOVE	NO	BASAL, STEM DECAY
3061	RED ALDER	18	REMOVE	NO	BASAL, STEM DECAY
3062	RED ALDER	14	REMOVE	NO	MECH. DAMAGE, DECAY
3063	RED ALDER	18	REMOVE	NO	OVER-GROWN IVY
3064	BIGLEAF MAPLE	23	SAVE IF POSSIBLE	YES	8 DEG. LEAN, DECAY
3065	DOUGLAS FIR	6	REMOVE	NO	OVER-TOPPED, SUPPRESSED
3095	GRAND FIR	10	REMOVE	NO	SMALL CROWN, DECAY
3096	BIGLEAF MAPLE	8	REMOVE	NO	POOR CONDITION
3097	BIGLEAF MAPLE	11	REMOVE	NO	POOR CONDITION
3357	NOBLE FIR	18	REMOVE	NO	SUSPECT INFESTATION
3358	PORT-ORFORD-CEDAR	14	REMOVE	NO	VERY POOR STRUCT.
3359	PORT-ORFORD-CEDAR	14	REMOVE	NO	VERY POOR STRUCT.
3360	PORT-ORFORD-CEDAR	26	REMOVE	NO	VERY POOR STRUCT.
3361	PORT-ORFORD-CEDAR	20	REMOVE	NO	VERY POOR STRUCT. DECAY IN JUNCTURE, NOT MAINTAINED
3362	PLUM	20	REMOVE	NO	TOPPED IN PAST, POOR STRUCT.
3415	DOUGLAS FIR	23	REMOVE	NO	TOPPED IN PAST, POOR STRUCT.
3416	DOUGLAS FIR	20	REMOVE	NO	TOPPED IN PAST, POOR STRUCT.
3417	DOUGLAS FIR	28	REMOVE	NO	TOPPED IN PAST, POOR STRUCT.
3418	DOUGLAS FIR	17	REMOVE	NO	CODOM STEMS, HISTORY OF FAILURE
3419	DOUGLAS FIR	22	REMOVE	NO	BROKEN TOP, DECAY IN JUNCTURE
3501	SWEET CHERRY	10	REMOVE	NO	INVASIVE SPECIES
3513	SWEET CHERRY	10,12	REMOVE	NO	INVASIVE SPECIES
3671	APPLE	8	REMOVE	NO	DECAY
3672	APPLE	8	REMOVE	NO	DECAY
3673	APPLE	8	REMOVE	NO	DECAY
3674	APPLE	8	REMOVE	NO	DECAY
3710	PLUM	2*10	PROTECT ADJACENT TREE	NO	PROTECTION FENCING AT PROPERTY LINE

**GENERAL TREE INVENTORY STATISTICS**

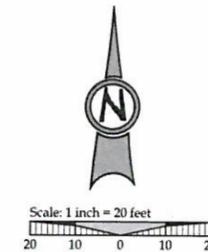
TOTAL TREE INVENTORY:	41 ea
TOTAL TREES RETAINED:	4 ea
TOTAL TREES REMOVED:	37 ea
TREES REMOVED DUE TO CONDITION:	34 ea
TOTAL TREE CALIPER INCHES:	738 inches
TOTAL CALIPER INCHES RETAINED:	103 inches
TOTAL CALIPER INCHES REMOVED:	635 inches

**SIGNIFICANT TREE STATISTICS**

SIGNIFICANT TREE INVENTORY:	3 ea
SIGNIFICANT TREES RETAINED:	2 ea
SIGNIFICANT TREES REMOVED:	1 ea
SIGNIFICANT TREE CALIPER INCHES:	83 inches
SIGNIFICANT CALIPER INCHES RETAINED:	47 inches
SIGNIFICANT CALIPER INCHES REMOVED:	36 inches
SIGNIFICANT TREE CANOPY COVERAGE:	3,061 Sq. Ft.
SIGNIFICANT TREE CANOPY RETAINED:	2,043 Sq. Ft.
SIGNIFICANT TREE CANOPY RETENTION:	67%
PRESERVATION EASEMENT AREA PROVIDED:	612 Sq. Ft.

**LEGEND**

- EXISTING SIGNIFICANT DECIDUOUS TREE
- EXISTING SIGNIFICANT CONIFEROUS TREE
- TREE POINT, TYPE, CALIPER AND DRIP LINE
- SIGNIFICANT TREE CANOPY
- TREE TO BE REMOVED
- TREE PROTECTION FENCING
- TREE PROTECTION AREA



TREE PROTECTION AND REMOVAL PLAN  
HARPER'S TERRACE  
SUBDIVISION  
LF 10, LLC  
WEST LINN, OR

REGISTERED PROFESSIONAL ENGINEER  
22282PE  
OREGON NOV 12 2005  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature 07/28/2014

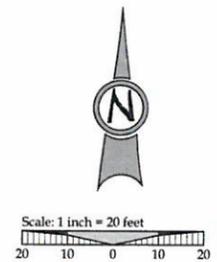
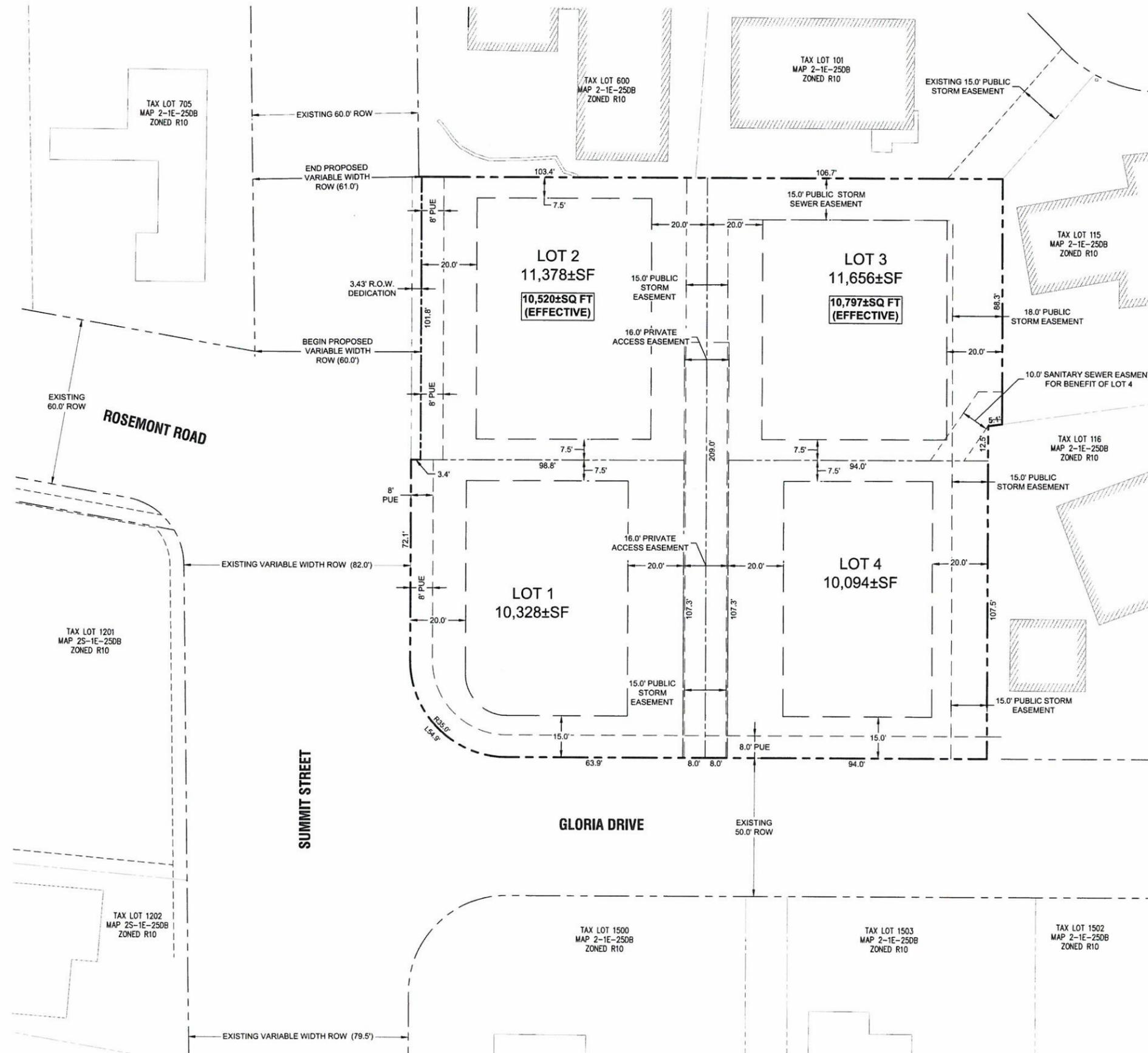
3J CONSULTING, INC  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
8075 SW GRIFFITH DRIVE, STE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 846-8965

3J JOB ID # | 13123  
LAND USE # | SUB-13-05  
TAX LOT # | 251E250B 500  
DESIGNED BY | CLF/BCH  
CHECKED BY | JDH

SHEET TITLE  
**TREE PLAN**  
SHEET NUMBER  
**C102**

CONSTRUCTION PLANS 07/10/2014  
REVISION SUMMARY BY DATE

TAX LOT 500 LOCATED IN THE NW 1/4 & SE 1/4 OF SECTION 25, T.2S., R.1E., W.M. CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON



**LEGEND**

---	BOUNDARY LINE
- - - -	EXISTING RIGHT-OF-WAY
---	EXISTING LOT LINE
---	EXISTING CURB
---	PROPOSED LOT LINE
---	PROPOSED SETBACK LINE

**SITE STATISTICS**

SITE ADDRESS	4997 SUMMIT STREET WEST LINN, OR 97068
TAXLOT	2S1E25DB 500
JURISDICTION	CITY OF WEST LINN
GROSS SITE AREA	1.02 ACRES
PROPERTY ZONING	R-10
FLOOD HAZARD MAP NUMBER	41005C0257D ZONE X (UNSHADED)

**SUBDIVISION STATISTICS**

RIGHT OF WAY DEDICATION	3,132 SF
MINIMUM ALLOWABLE EFFECTIVE LOT SIZE	10,000 SF
MINIMUM LOT DENSITY	3.2 UNITS
MAXIMUM LOT DENSITY	4.58 UNITS
PROPOSED LOT DENSITY	4.21 UNITS/ NET ACRE
MINIMUM LOT DENSITY (PER R-10 ZONING)	3.05 UNITS/ NET ACRE
MAXIMUM LOT DENSITY (PER R-10 ZONING)	4.35 UNITS/ NET ACRE

**SETBACKS:**

FRONT	20 FEET
SIDE	7.5 FEET
REAR	20 FEET
STREET SIDE	15 FEET
MAX. HEIGHT	35 FEET

**PROJECT TEAM**

**OWNER/APPLICANT**  
 LF 10, LLC  
 C/O: J.T. SMITH COMPANIES  
 5285 MEADOWS ROAD, SUITE #171  
 LAKE OSWEGO, OR 97035  
 CONTACT: JOHN WYLAND  
 EMAIL: jwyland@jtsmithco.com

**CIVIL ENGINEER**  
 3J CONSULTING, INC.  
 5075 SW GRIFFITH DRIVE, SUITE 150  
 BEAVERTON, OR 97005  
 CONTACT: JOHN HOWORTH  
 PHONE: (503) 946-9365  
 EMAIL: john.howorth@3j-consulting.com

**PLANNING CONSULTANT**  
 3J CONSULTING, INC.  
 5075 SW GRIFFITH DRIVE, SUITE 150  
 BEAVERTON, OR 97005  
 CONTACT: ANDREW TULL  
 PHONE: (503) 946-9365  
 EMAIL: andrew.tull@3j-consulting.com

**GEOTECHNICAL CONSULTANT**  
 GEOPACIFIC ENGINEERING, INC.  
 14835 SW 72ND AVENUE  
 PORTLAND, OR 97224  
 CONTACT: SCOTT HARDMAN  
 PHONE: (503) 625-4455  
 EMAIL: shardman@geopacificeng.com

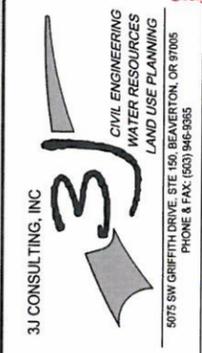
**LAND SURVEYOR**  
 3J CONSULTING, INC.  
 4107 SE INTERNATIONAL WAY, SUITE 705  
 MILWAUKEE, OR 97222  
 CONTACT: DON DEVLAMING, PLS  
 PHONE: (503) 453-9093  
 EMAIL: don@3j-consulting.com

**APPROVED FOR CONSTRUCTION BY CITY OF WEST LINN**  
 This plan review approval does not prevent the City from requiring further code corrections in the field.  
 DATE: 7/29/14 BY: *Khori Q. Le*

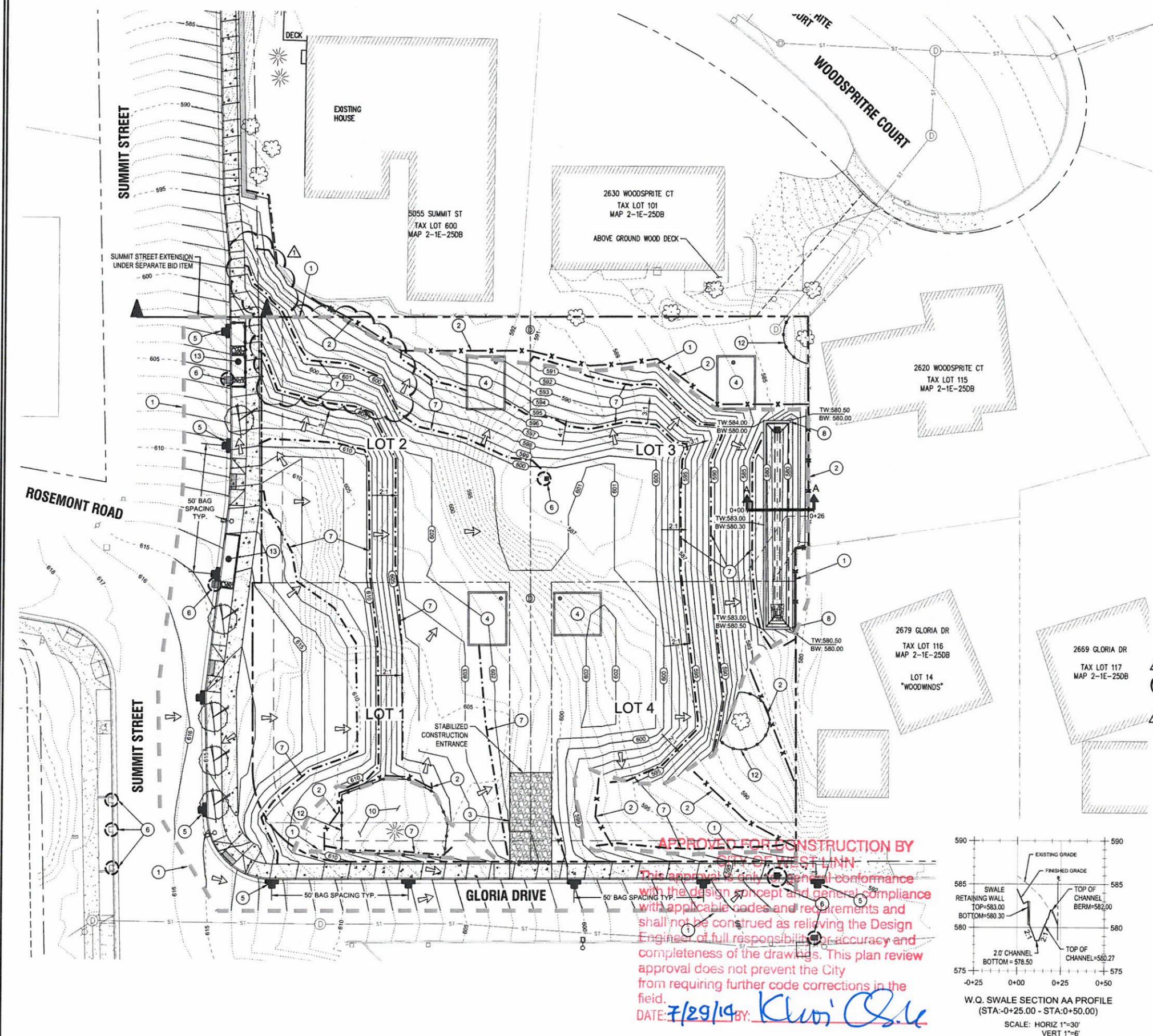
**CONSTRUCTION PLANS** 07/10/2014

REVISION SUMMARY	BY	DATE

TENTATIVE SUBDIVISION PLAT  
**HARPER'S TERRACE**  
 SUBDIVISION  
 LF 10, LLC  
 WEST LINN, OR



3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	2S1E25DB 500
DESIGNED BY	CLF/BCH
CHECKED BY	J.DH
SHEET TITLE	TENTATIVE PLAT
SHEET NUMBER	C110



### LEGEND

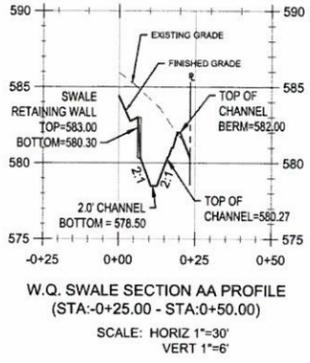
- BOUNDARY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE
- EXISTING EASEMENT LINE
- EXISTING LOT LINE
- EXISTING CURB AND GUTTER
- EXISTING SIDEWALK
- EXISTING TREES TO REMAIN
- EXISTING 1FT CONTOUR
- EXISTING 5FT INDEX CONTOUR
- PROPOSED LOT LINE
- PROPOSED CURB AND GUTTER
- PROPOSED CONCRETE
- PROPOSED RETAINING WALL
- PROPOSED STREET FRONTAGE TREE
- PROPOSED 1FT CONTOUR
- PROPOSED 5FT INDEX CONTOUR
- EROSION CONTROL: SILT FENCING (BLACK)
- EROSION CONTROL: FESCUE STRAW WATTLE
- EROSION CONTROL: BIO BAG CHECK DAM
- EROSION CONTROL: CONSTRUCTION ENTRANCE
- LIMITS OF GRADING/DISTURBANCE
- TREE PROTECTION FENCING
- SURFACE RUN-OFF FLOW ARROW
- EROSION CONTROL: INLET PROTECTION
- WALLED RAIN GARDEN FOR INDIVIDUAL LOT RUNOFF AND TREATMENT

### SITE GRADING INFORMATION

NEAT LINE CUT	482 CY
NEAT LINE FILL	4,885 CY
MAXIMUM CUT DEPTH	6.5 FT
MAXIMUM FILL DEPTH	14.6 FT
MAXIMUM PROPOSED SLOPE	2:1 (H:V)
TOTAL AREA OF DISTURBANCE	0.90 ACRES

- ### GRADING KEY NOTES
- 1 LIMITS OF PUBLIC STREET EXTENSION AND RIGHT OF WAY IMPROVEMENTS. COORDINATE WITH ADJACENT PROPERTY OWNER FOR ANY GRADE OR ALIGNMENT MODIFICATIONS REQUIRED.
  - 2 INSTALL SILT FENCE AT LIMITS OF GRADING PER DETAIL ON SHEET C121, OR AS NOTED OTHERWISE ON THIS SHEET.
  - 3 CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATION SHOWN PER DETAIL ON SHEET C121, OR AS OTHERWISE NOTED ON THIS SHEET.
  - 4 WALLED STORM WATER PLANTER, FOR INDIVIDUAL LOT RUNOFF CONTROL AND TREATMENT, TO BE BUILT AT THE TIME OF HOME CONSTRUCTION (UNDER SEPARATE PERMIT).
  - 5 INSTALL BIO BAG CHECK DAM FOR SEDIMENT CONTROL WITHIN RIGHT OF WAY AT 50' O.C. PER DETAIL ON SHEET C121.
  - 6 INSTALL INLET PROTECT PER DETAILS ON SHEET C121.
  - 7 INSTALL STRAW WATTLE PER DETAIL ON SHEET C121.
  - 8 CONSTRUCT WALLED STORM WATER QUALITY SWALE. SEE SHEET C300 FOR CONSTRUCTION DATA.
  - 9 RESERVED
  - 10 ALL GRADING AND DISTURBANCE ACTIVITIES ADJACENT TO SIGNIFICANT TREES SHALL BE COMPLETED UNDER SUPERVISION AND DIRECTION BY THE PROJECT ARBORIST AND THE CITY OF WEST LINN.
  - 11 CONSTRUCT CAST-IN-PLACE RETAINING WALL WITH 4' DECORATIVE FENCING (REGIS II MAJESTIC, DESIGN 6 SPAN), WITHIN SUBDIVISION EXTENTS.
  - 12 INSTALL TREE PROTECTION FENCING FOR CONSTRUCTION WHERE SHOWN PER DETAIL ON SHEET C210.
  - 13 INSTALL INFILTRATION PLANTER BOXES. SEE SHEET C300, C310, C311 & C312 FOR DETAILS.

- ### GRADING GENERAL NOTES:
1. ALL GRADING ACTIVITIES SHALL CONFORM TO THE UNIFORM BUILDING CODE AND THE OREGON SPECIALTY CODE AMENDMENTS, INCLUDING APPENDIX J.
  2. ALL PROPOSED WATTLES, CHECK DAMS AND SILT FENCING SHALL BE MOVED WHILE CONSTRUCTION PROGRESSES IN ORDER MAINTAIN PROPER EROSION CONTROL PREVENTION.
  3. ALL PROPOSED WATTLES, CHECK DAMS AND SILT FENCING SHALL BE INSTALLED AT GRADING EXTENTS, AND OR AT 50' INTERVALS, UNLESS NOTED OTHERWISE ON PLANS.



APPROVED FOR CONSTRUCTION BY  
CITY OF WEST LINN

This approval is only a 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: 7/29/14 BY: *Klari O'Leary*

### CONSTRUCTION PLANS

DATE	07/10/2014
BY	DATE
REVISION SUMMARY	BCH
CITY COMMENTS	07-10-14

## GRADING AND EROSION CONTROL PLAN HARPER'S TERRACE SUBDIVISION LF 10, LLC WEST LINN, OR

**J.T. SMITH**  
companies

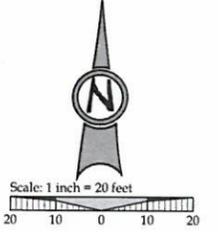
REGISTERED PROFESSIONAL  
ENGINEER  
NOV 12 2007  
OREGON  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
07/28/2014

**3J CONSULTING, INC**

CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING

5075 SW GRIFFITH DRIVE, STE 100, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9385

3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	251E2508 500
DESIGNED BY	CLF/BCH
CHECKED BY	JDH
SHEET TITLE	GRADING / ESCP
SHEET NUMBER	C120

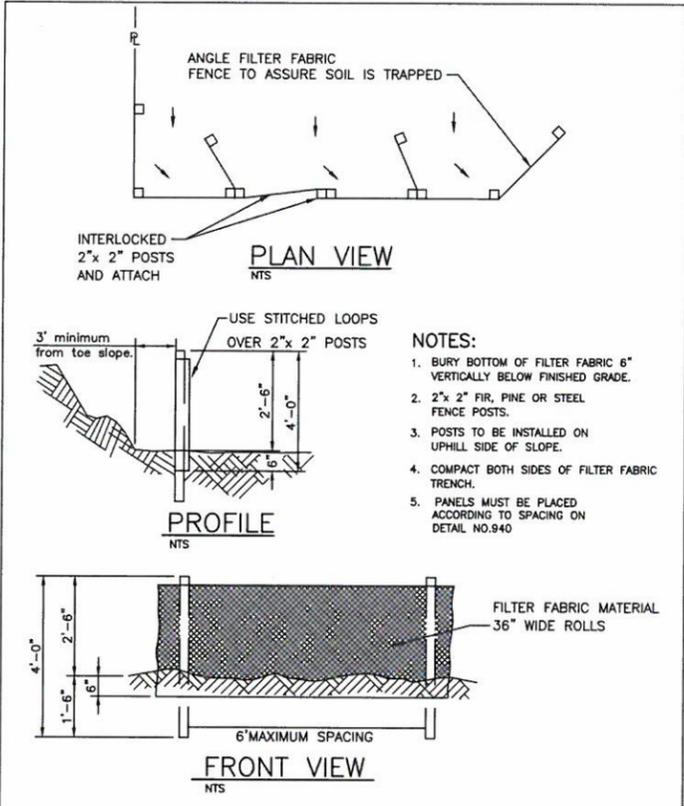


**EROSION AND SEDIMENT CONTROL PLAN NOTES**

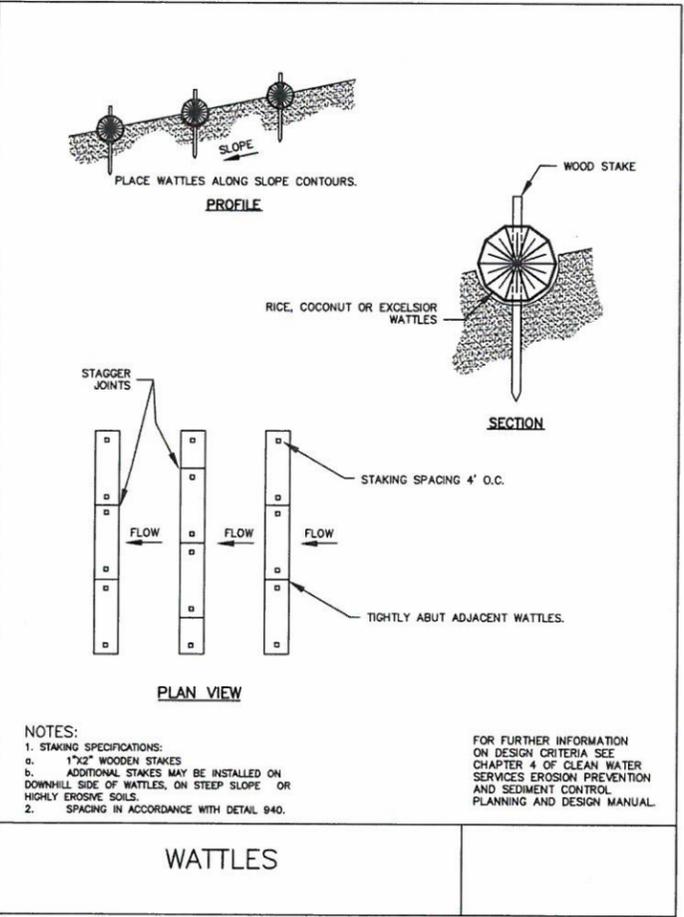
1. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES.
2. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND ON SLOPES FROM OCTOBER 1 THROUGH MAY 31 EACH YEAR.
3. DURING WET WEATHER PERIODS TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORKDAY IF RAINFALL IS FORECAST IN THE NEXT 24 HOURS.
4. ALL EROSION AND SEDIMENT CONTROLS NOT IN THE DIRECT PATH OF WORK MUST BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.
5. PRESERVE EXISTING VEGETATION AND RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION.
6. ALL TEMPORARY SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED.
7. SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION.
8. ALL ACTIVE CATCH BASINS SEDIMENT CONTROLS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
9. WATER-TIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON-SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMPs. SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE.
10. TEMPORARY STABILIZATION OR COVERING OF SOIL STOCKPILES MUST OCCUR AT THE END OF EACH WORKDAY OR OTHER BMPs MUST BE IMPLEMENTED TO PREVENT TURBID DISCHARGES TO SURFACE WATERS.
11. DEVELOP AND MAINTAIN ON-SITE A WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURE.
12. ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL.
13. THE PERMITEE MUST PROPERLY PREVENT AND MANAGE HAZARDOUS WASTES. USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION AND MEET ALL STATE AND FEDERAL REGULATIONS AND APPROVALS.
14. SIGNIFICANT AMOUNTS OF SEDIMENT, WHICH LEAVES THE SITE, MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIME FRAME.
15. SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATERBODIES. DRY SWEEPING MUST BE USED TO CLEAN UP RELEASED SEDIMENTS.
16. THE APPLICATION RATE OF FERTILIZERS USED TO RE-ESTABLISH VEGETATION MUST FOLLOW THE MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE FERTILIZERS SHOULD BE USED AND CARE SHOULD BE TAKEN IN THE APPLICATION OF FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE.
17. SEDIMENT MUST BE REMOVED FROM BEHIND A SEDIMENT FENCE WHEN IT HAS REACHED A HEIGHT OF 1/3 THE HEIGHT OF THE FENCE ABOVEGROUND AND BEFORE FENCE REMOVAL.
18. SEDIMENT MUST BE REMOVED FROM BEHIND BIO BAGS AND OTHER BARRIERS WHEN IT HAS REACHED A HEIGHT OF TWO (2) INCHES AND BEFORE BMP REMOVAL.
19. CLEANING OF TRAPPED CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT, AND AT THE COMPLETION OF A PROJECT.
20. REMOVAL OF TRAPPED SEDIMENT IN A SEDIMENT BASIN OR SEDIMENT TRAP OR CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT AND AT COMPLETION OF PROJECT.
21. DEQ MUST APPROVE OF ANY TREATMENT SYSTEM AND OPERATIONAL PLAN THAT MAY BE NECESSARY TO TREAT CONTAMINATED CONSTRUCTION DEWATERING OR SEDIMENT AND TURBIDITY IN STORMWATER RUNOFF.
22. SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR THIRTY DAYS OR MORE, THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD.
23. SHOULD CONSTRUCTION ACTIVITIES CEASE FOR FIFTEEN (15) DAYS OR MORE ON ANY SIGNIFICANT PORTION OF A CONSTRUCTION SITE TEMPORARY STABILIZATION IS REQUIRED FOR THAT PORTION OF THE SITE WITH STRAW, COMPOST, OR OTHER TACKIFIED COVERING THAT PREVENT SOIL OR WIND EROSION UNTIL WORK RESUMES ON THAT PORTION OF THE SITE.

**LOCAL AGENCY SPECIFIC EROSION CONTROL NOTES**

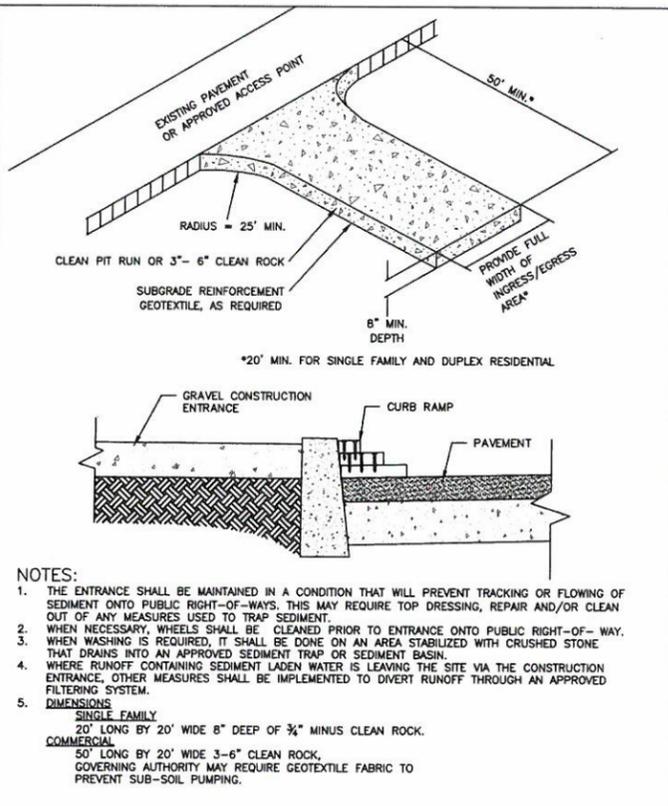
1. OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE LOCAL, STATE, AND FEDERAL REGULATIONS.
2. PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BOUNDARIES OF THE CLEARING LIMITS, VEGETATED BUFFERS, AND ANY SENSITIVE AREAS SHOWN ON THIS PLAN SHALL NOT BE CLEARLY DELINEATED LID IN THE FIELD. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE IS PERMITTED BEYOND THE CLEARING LIMITS. THE OWNER/PERMITEE MUST MAINTAIN THE DELINEATION FOR THE DURATION OF THE PROJECT. NOTE: VEGETATED CORRIDORS TO BE DELINEATED WITH ORANGE CONSTRUCTION FENCE OR APPROVED EQUAL.
3. PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BMPs THAT MUST BE INSTALLED ARE A GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMPs MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT.
4. IF VEGETATED SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1; THE TYPE AND PERCENTAGES OF SEED IN THE MIX MUST BE IDENTIFIED ON THE PLANS.
5. THE ESC PLAN MUST BE KEPT ON SITE. ALL MEASURES SHOWN ON THE PLAN MUST BE INSTALLED PROPERLY TO ENSURE THAT SEDIMENT OR SEDIMENT LADEN WATER DOES NOT ENTER A SURFACE WATER SYSTEM, ROADWAY, OR OTHER PROPERTIES.
6. THE ESC MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION CONTROL REGULATIONS.
7. ALL EXPOSED SOILS MUST BE COVERED DURING THE WET WEATHER PERIOD.



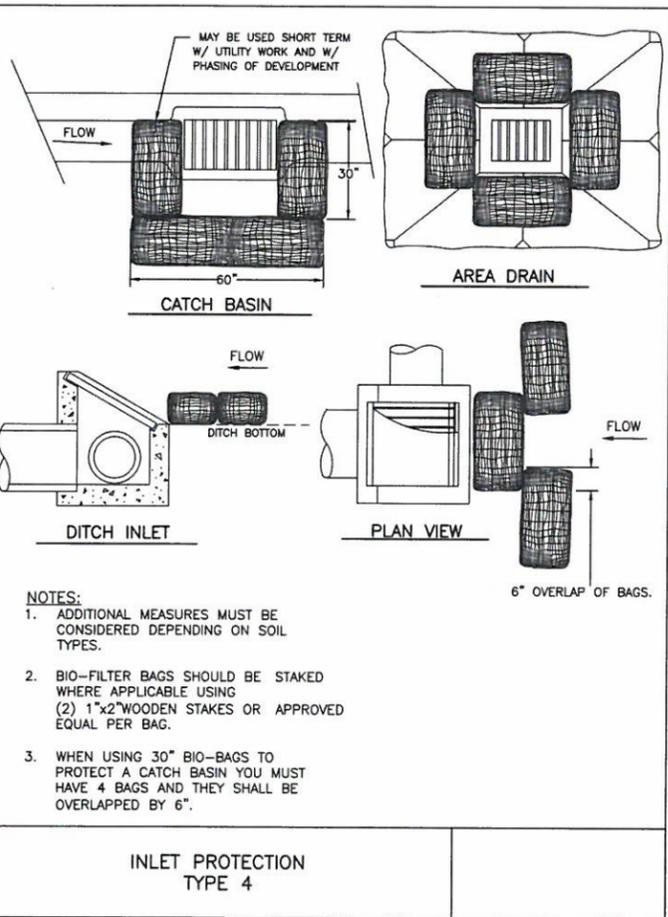
SEDIMENT FENCE



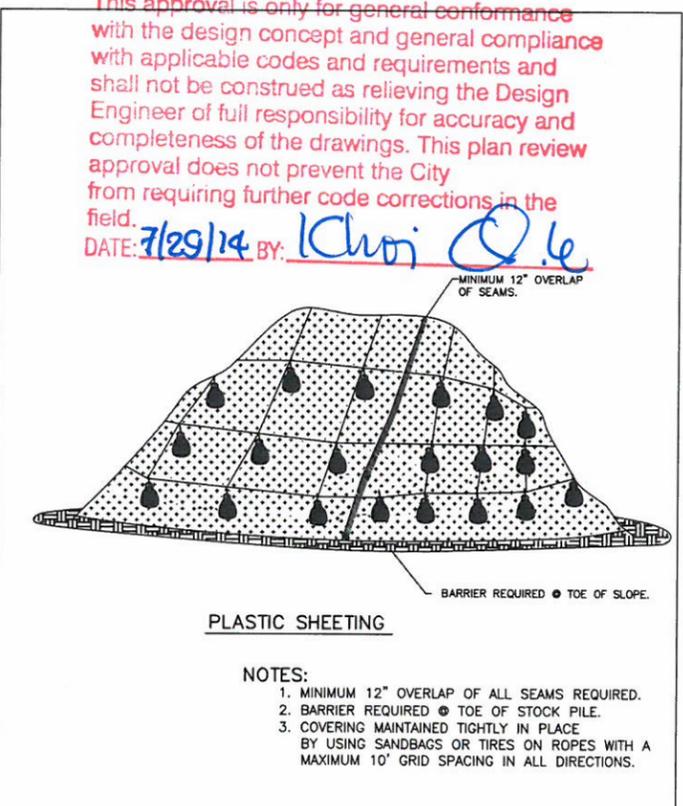
WATTLES



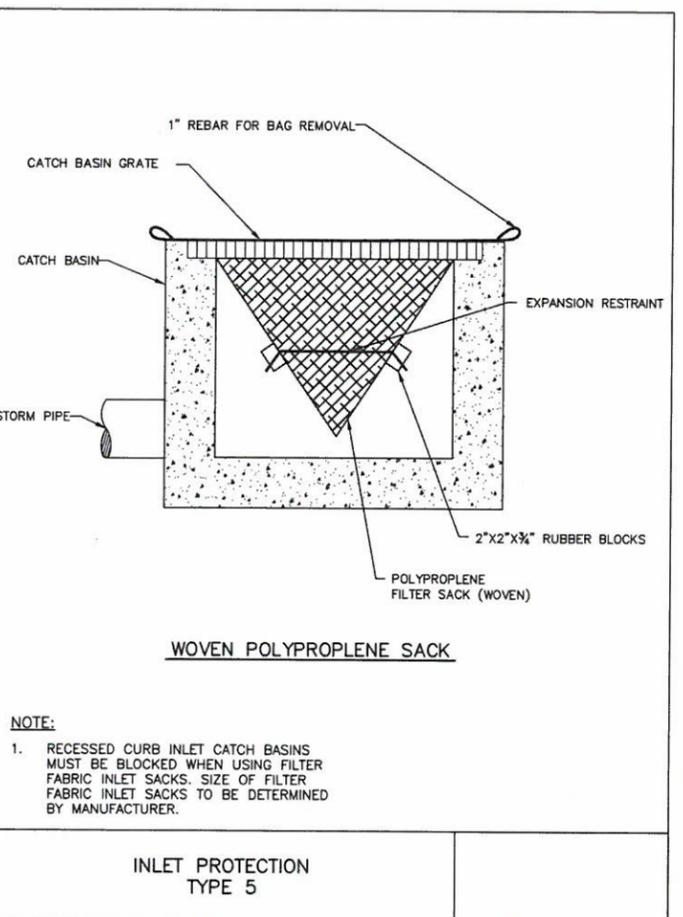
CONSTRUCTION ENTRANCE



INLET PROTECTION TYPE 4



PLASTIC SHEETING



INLET PROTECTION TYPE 5

CONSTRUCTION PLANS 07/10/2014  
REVISION SUMMARY BY DATE

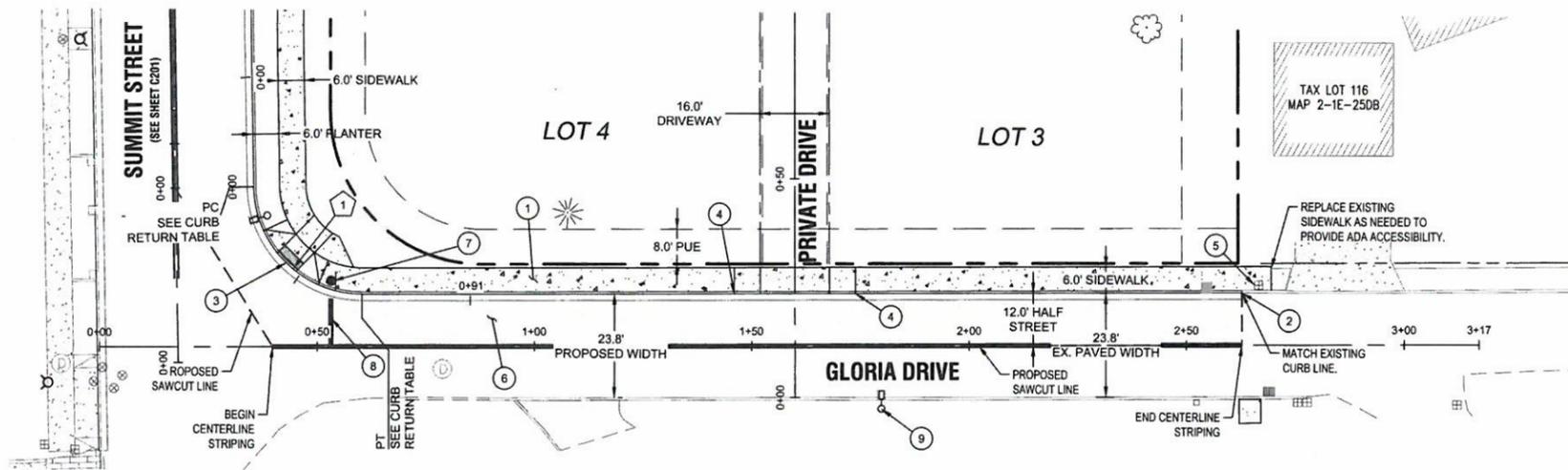
EROSION AND SEDIMENT CONTROL DETAILS  
**HARPER'S TERRACE SUBDIVISION**  
LF 10, LLC  
WEST LINN, OR

J.T. SMITH companies  
REGISTERED PROFESSIONAL ENGINEER  
122822PE  
OREGON NOV. 12 2003  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
07/28/2014

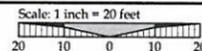
3J CONSULTING, INC  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
8805 SW CHANTON DR. SUITE 200  
WEST LINN, OR 97136  
PHONE & FAX: (503) 946-9585

3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	251E2608 500
DESIGNED BY	CLF/BCH
CHECKED BY	JDH

SHEET TITLE  
ESCP DETAILS  
SHEET NUMBER  
**C121**



Gloria Drive - Plan View



LEGEND

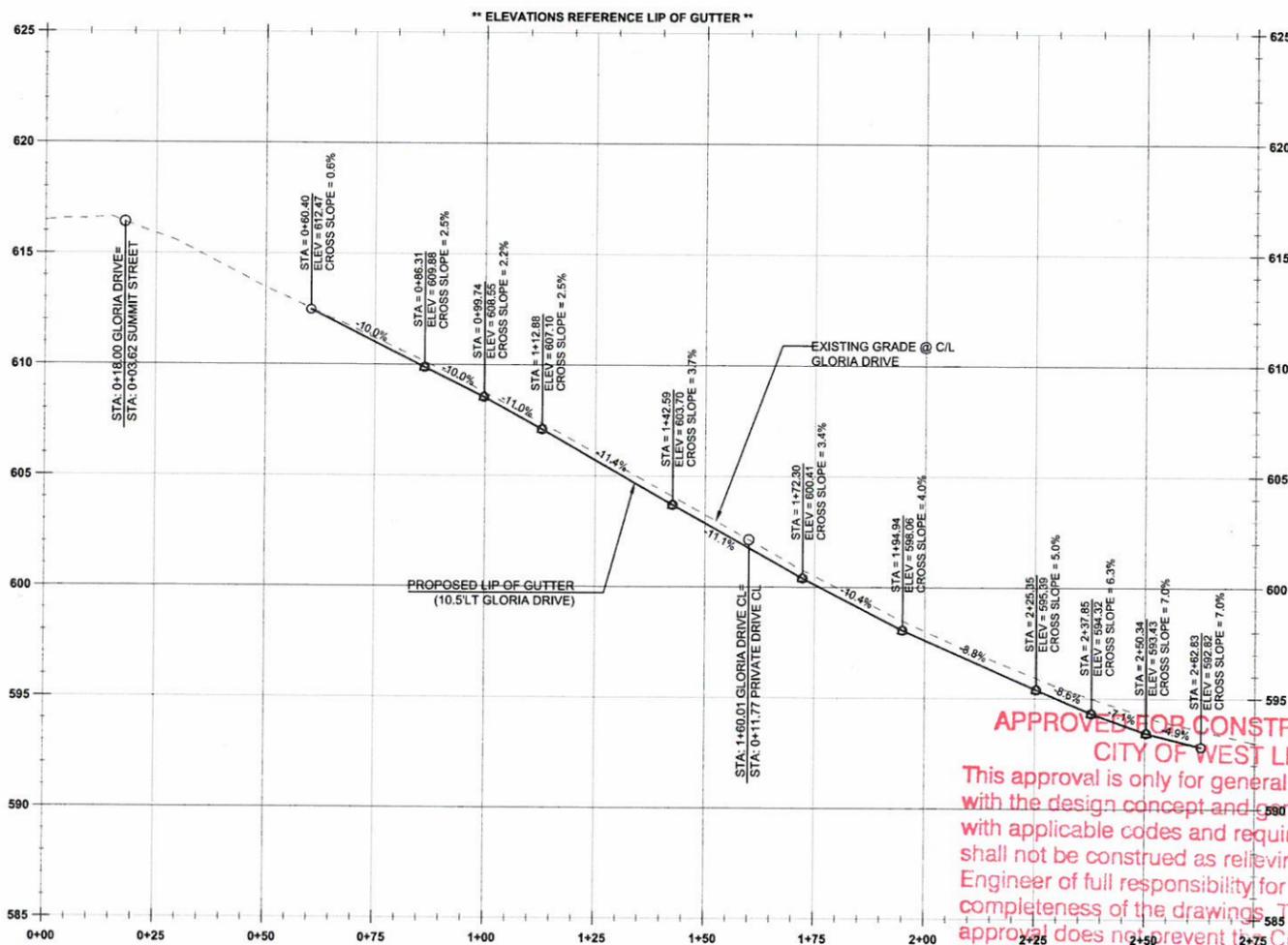
--- (dashed line)	BOUNDARY LINE	☀ ☁	EXISTING TREES TO REMAIN
--- (dashed line)	RIGHT-OF-WAY	--- (dashed line)	PROPOSED LOT LINE
--- (dashed line)	EXISTING EDGE OF ASPHALT	--- (dashed line)	PROPOSED CURB AND GUTTER
--- (dashed line)	EXISTING CURB	--- (dashed line)	PROPOSED CONCRETE
--- (dashed line)	EXISTING SIDEWALK	--- (dashed line)	EXISTING ASPHALT SAW CUT LIMITS
⊗	EXISTING LIGHT POLE	--- (dashed line)	APPROXIMATE EXTENTS OF ASPHALT PAVING
⊕	EXISTING TRAFFIC SIGN	--- (dashed line)	PROPOSED PAVEMENT STRIPING
⊙	EXISTING FIRE HYDRANT		

CONSTRUCTION KEY NOTES

- STA: 0+60.4, 12.5' LT TO STA: 2+69.6, 12.5' LT GLORIA DR: CONSTRUCT 6 FT WIDE CURB TIGHT SIDEWALK PER CITY OF WEST LINN STANDARD DETAIL WL-508 (CONCRETE SIDEWALK CROSS SECTION) ON SHEET C210.
- STA: 0+60.4, 12.0' LT TO STA: 2+62.9, 12.0' LT GLORIA DR: CONSTRUCT STANDARD CURB AND GUTTER PER CITY OF WEST LINN STANDARD DETAIL WL-501 (TYPICAL CURBS) ON SHEET C210.
- STA: 0+37.7, 26.5' LT TO STA: 0+50.3, 14.1' LT GLORIA DR: CONSTRUCT CURB RAMP PER CITY OF WEST LINN STANDARD DETAIL WL-506A (PARALLEL CURB RAMP) ON SHEET C211.
- STA: 1+46.0, 12.0' LT AND STA: 1+74.0, 12.0' LT GLORIA DR: CONSTRUCT SINGLE DRIVEWAY ACCESS TO GLORIA DRIVE (28 FT) PER CITY OF WEST LINN STANDARD DETAIL WL-503B (RESIDENTIAL DRIVEWAY WITH SIDEWALK ADJACENT TO CURB) ON SHEET C210.
- CONTRACTOR TO PROTECT EXISTING WATER METER FROM DAMAGE. RE-SET METER BOX FLUSH WITH FINISHED GRADE.
- RE-PAVE FROM SAWCUT LIMITS TO NEW LIP OF GUTTER WITHIN AREA SHOWN (APPROX. 2,750 SF). SEE LOCAL STREET PAVING REQUIREMENTS ON TYPICAL SECTION DETAIL THIS SHEET.
- STA: 0+53.33, 15.0' LT GLORIA DR: INSTALL STOP SIGN AND POST WITH V-LOC BREAKAWAY POST ANCHOR SYSTEM PER TYPICAL INSTALLATION DETAIL ON SHEET Z11.
- STA: 0+53.22, 0.5' LT GLORIA DR: INSTALL STOP BAR STRIPING PER TYPICAL INSTALLATION DETAIL THIS SHEET. INSTALL GLORIA DRIVE STREET CENTER LINE STRIPING PER DETAIL THIS SHEET.
- STA: 1+79.97, 14.41' RT AND STA: 1+54.6, 26.1' RT GLORIA DRIVE: INSTALL NEW LIGHT POLE BASE, JUNCTION BOX AND CONDUIT. BRONZE POLE, 6' MAST ARM, BETA LED FIXTURE APPROVED BY CITY OF WEST LINN. CONTRACTOR TO CONFIRM ALL LOCATIONS AND INSTALLATION REQUIREMENTS WITH PORTLAND GENERAL ELECTRIC.

GENERAL NOTES:

- REFER TO MITIGATION PLAN (C500) FOR ALL STREET TREE PLANTING LOCATIONS, DETAILS AND SPECIFICATIONS.



Gloria Drive Construction CL - Profile View  
(STA: 0+00 - STA: 2+75.00)  
1" = 20'H; 1" = 4'V

**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: 7/29/14 BY: *Kevin Q. G.*

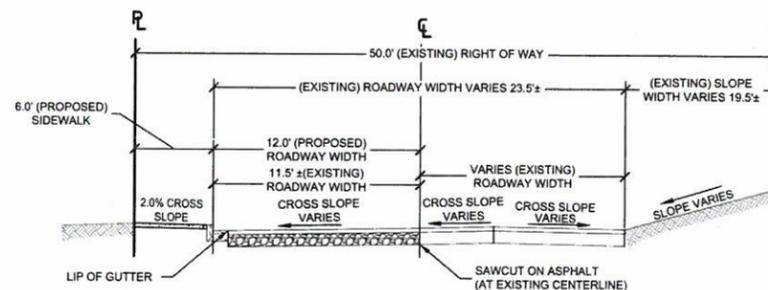
CURB RETURN TABLE

TAG NO.	PC STATION	DELTA	RADIUS	TANGENT	LENGTH	PT STATION	PC ELEV	1/4 Δ	1/2 Δ	3/4 Δ	PT ELEV
1	0+33.9, 36.58' LT	89°33'	26.5'	26.1'	41.2'	0+60.4, 10.5' LT	615.35	614.82	614.40	613.58	612.47

\* ALL CURB STATIONING, GEOMETRY AND OFFSETS REFERENCE LIP OF PROPOSED GUTTER  
 \* SEE C211 FOR CURB RETURN PROFILES AND 1/4 Δ ELEVATIONS

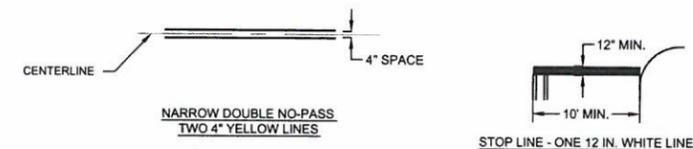
Gloria Drive - Driveway Location Table

LOT NO.	DRIVEWAY CL STATION	RAMP WIDTH
1 - 4	1+59.99	28FT



Typical Section - Gloria Drive Improvements

SCALE: N.T.S.



STRIPING NOTES

- STRIPING SHALL BE THERMOPLASTIC PAVEMENT MARKING MATERIAL.
- LOCATE STOP LINE 4' (MIN.) TO 10' (MAX.) IN ADVANCE OF THE NEAREST MARKED CROSSWALK LINE.
- ALL PAVEMENT MARKING MATERIALS SHALL BE INSTALLED AS PER OREGON STANDARD SPECIFICATIONS.

Gloria Drive Plan and Profile  
 Harper's Terrace  
 Subdivision  
 LF 10, LLC  
 WEST LINN, OR

CONSTRUCTION PLANS 07/10/2014  
 REVISION SUMMARY

J.T. SMITH  
 companies



Digital Signature  
 07/28/2014

3J CONSULTING, INC  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5075 SW GREENTH DRIVE, STE 100, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-5855

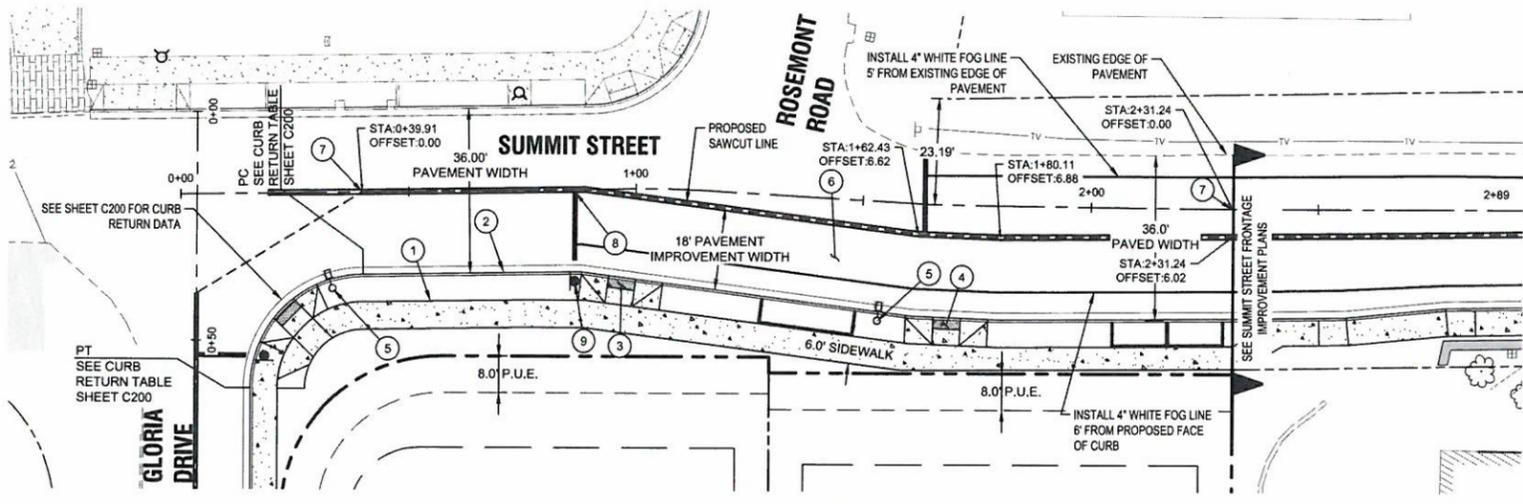
3J JOB ID # | 13123  
 LAND USE # | SUB-13-05  
 TAX LOT # | 2S1E250B 500  
 DESIGNED BY | CLF/BCH  
 CHECKED BY | JDH

SHEET TITLE  
 GLORIA DR. P & P

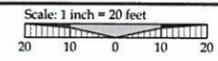
SHEET NUMBER

C200





SUMMIT STREET - PLAN VIEW



LEGEND

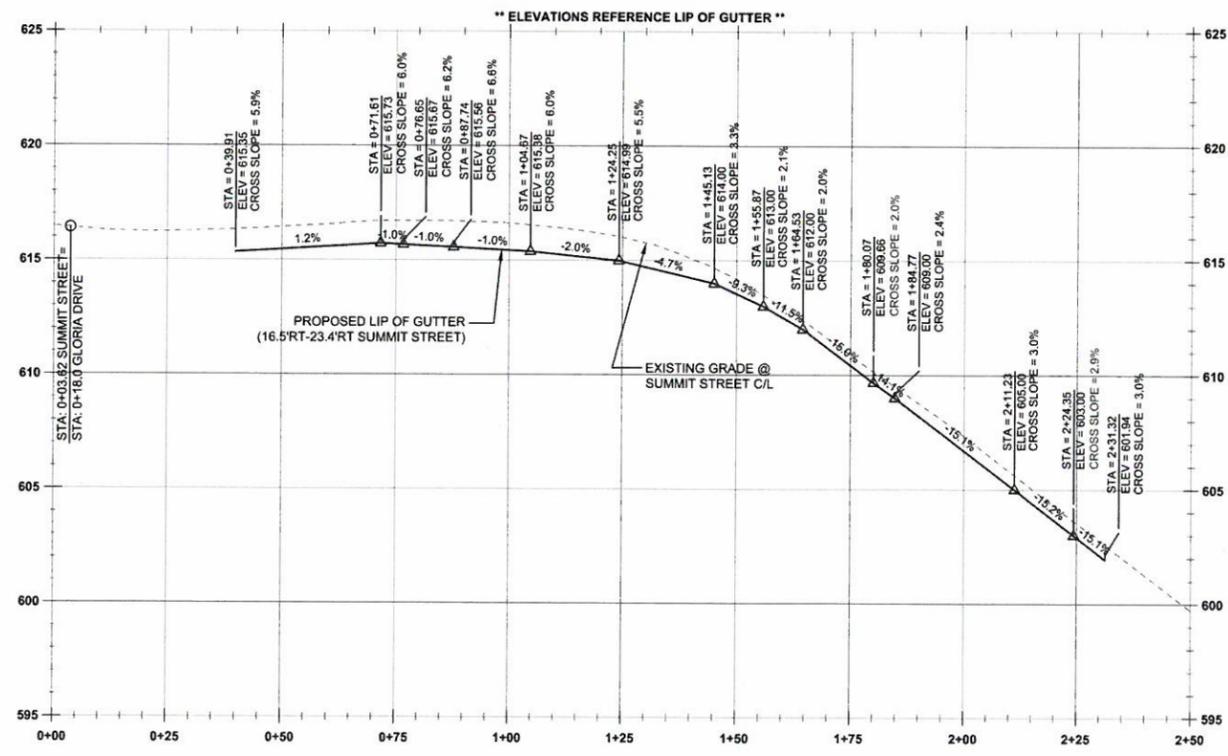
	BOUNDARY LINE		EXISTING TREES TO REMAIN
	RIGHT-OF-WAY		PROPOSED LOT LINE
	EXISTING EDGE OF ASPHALT		PROPOSED CURB AND GUTTER
	EXISTING CURB		PROPOSED CONCRETE
	EXISTING SIDEWALK		EXISTING ASPHALT SAW CUT LIMITS
	EXISTING LIGHT POLE		APPROXIMATE EXTENTS OF ASPHALT PAVING
	EXISTING TRAFFIC SIGN		PROPOSED PAVEMENT STRIPING
	EXISTING FIRE HYDRANT		

CONSTRUCTION KEY NOTES

- STA: 0+39.91, 24.0' RT TO STA: 2+31.33, 30.0' RT SUMMIT STREET: CONSTRUCT 6 FT WIDE DETACHED SIDEWALK PER CITY OF WEST LINN STANDARD DETAIL WL-508 (CONCRETE SIDEWALK CROSS SECTION) ON SHEET C210.
- STA: 0+39.91, 16.5' RT TO STA: 2+31.32, 22.5' RT SUMMIT STREET: CONSTRUCT STANDARD CURB AND GUTTER PER CITY OF WEST LINN STANDARD DETAIL WL-501 (TYPICAL CURBS) ON SHEET C200.
- STA: 0+87.84, 18.0' RT TO STA: 1+06.26, 20.53' RT SUMMIT STREET: CONSTRUCT CURB RAMP PER CITY OF WEST LINN STANDARD DETAIL WL-506A (PARALLEL CURB RAMP) ON SHEET C211.
- STA: 1+60.75, 24.55' RT TO STA: 1+77.63, 24.81' RT SUMMIT STREET: CONSTRUCT CURB RAMP PER CITY OF WEST LINN STANDARD DETAIL WL-506A (PARALLEL CURB RAMP) ON SHEET C211.
- STA: 0+33.25, 21.0' RT AND STA: 1+54.6, 26.1' RT SUMMIT STREET: INSTALL NEW LIGHT POLE BASE, JUNCTION BOX AND CONDUIT, BRONZE POLE, 6' MAST ARM, BETA LED FIXTURE APPROVED BY CITY OF WEST LINN. CONTRACTOR TO CONFIRM ALL LOCATIONS AND INSTALLATION REQUIREMENTS WITH PORTLAND GENERAL ELECTRIC.
- RE-PAVE FROM SAWCUT LIMITS TO NEW LIP OF GUTTER WITHIN AREA SHOWN (APPROX. 3,165 SF). SEE COLLECTOR / ARTERIAL STREET PAVING REQUIREMENTS ON TYPICAL SECTION DETAIL THIS SHEET.
- STA: 0+39.91, TO STA: 2+31.24, SUMMIT STREET: INSTALL PAVEMENT MARKINGS FOR NEW STREET CENTERLINE & FOG LINE PER TYPICAL SECTION DIMENSIONS SHOWN THIS SHEET. PAVEMENT MARKING MATERIALS SHALL BE INSTALLED AS PER OREGON STANDARD SPECIFICATIONS & AS NOTED THIS SHEET.
- STA: 0+86.58, 0.5' RT SUMMIT STREET: INSTALL STOP BAR STRIPING PER TYPICAL INSTALLATION DETAIL THIS SHEET.
- STA: 0+86.58, 20.02' RT SUMMIT STREET: INSTALL STOP SIGN AND POST WITH V-CURB BREAKAWAY POST ANCHOR SYSTEM PER TYPICAL INSTALLATION DETAIL ON SHEET 211.

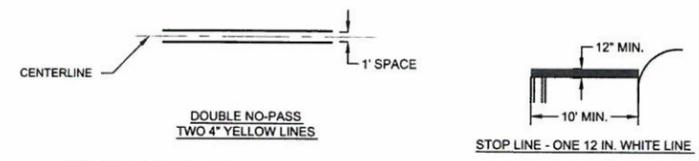
GENERAL NOTES:

- REFER TO MITIGATION PLAN (C500) FOR ALL STREET TREE PLANTING LOCATIONS, DETAILS AND SPECIFICATIONS.



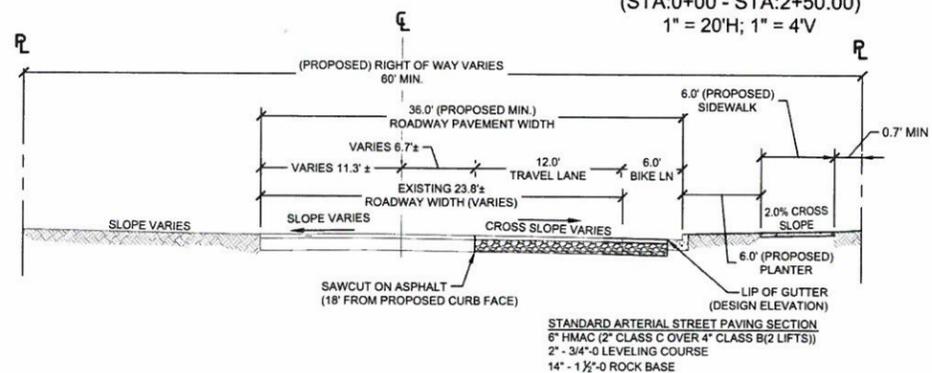
SUMMIT STREET CONSTRUCTION CL - PROFILE VIEW

(STA:0+00 - STA:2+50.00)  
1" = 20'H; 1" = 4'V

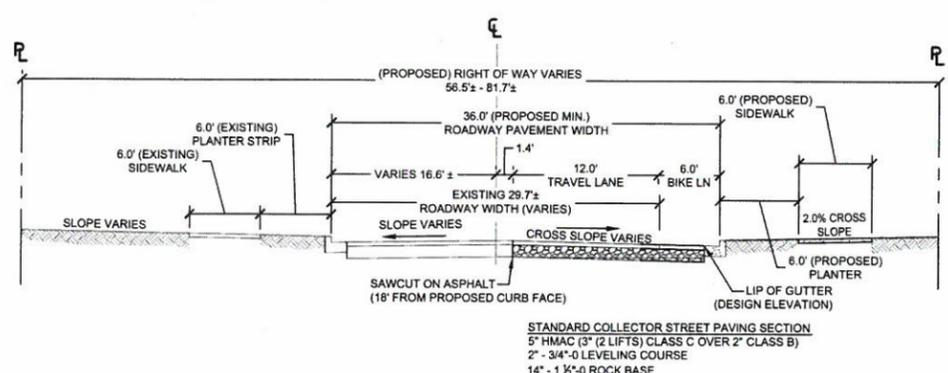


STRIPING NOTES

- STRIPING SHALL BE THERMOPLASTIC PROFILED PAVEMENT MARKING MATERIAL.
- LOCATE STOP LINE 4' (MIN.) TO 10' (MAX.) IN ADVANCE OF THE NEAREST MARKED CROSSWALK LINE.
- ALL PAVEMENT MARKING MATERIALS SHALL BE INSTALLED AS PER OREGON STANDARD SPECIFICATIONS.



TYPICAL SECTION - SUMMIT STREET (NORTH OF ROSEMONT ROAD)  
SCALE: N.T.S. (ARTERIAL CLASSIFICATION)



TYPICAL SECTION - SUMMIT STREET (SOUTH OF ROSEMONT ROAD)  
SCALE: N.T.S. (COLLECTOR CLASSIFICATION)

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.

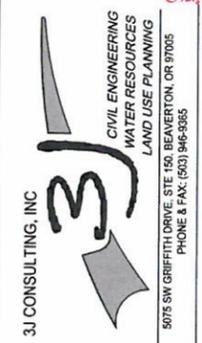
DATE: 7/29/14 BY: *Klaus D. U.*



Know what's below.  
Call before you dig.

CONSTRUCTION PLANS	07/10/2014	BY	DATE
REVISION SUMMARY			

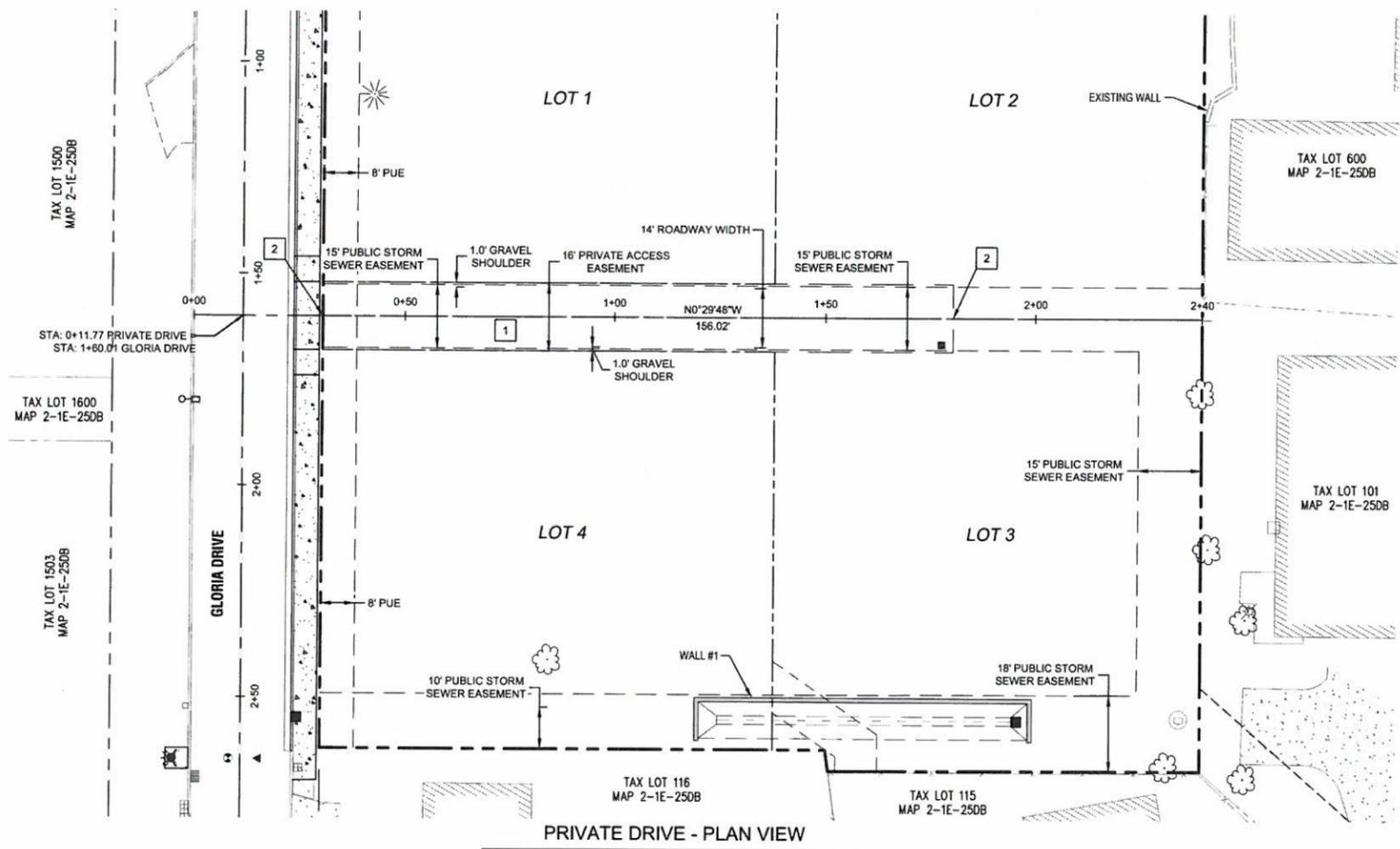
SUMMIT ST PLAN AND PROFILE  
HARPER'S TERRACE  
SUBDIVISION  
LF 10, LLC  
WEST LINN, OR



3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	251E250B 500
DESIGNED BY	CLF/BCH
CHECKED BY	JDH

SHEET TITLE  
SUMMIT ST P & P

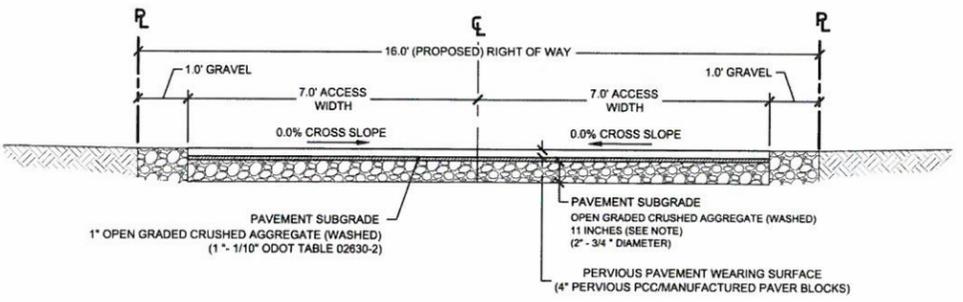
SHEET NUMBER  
C201



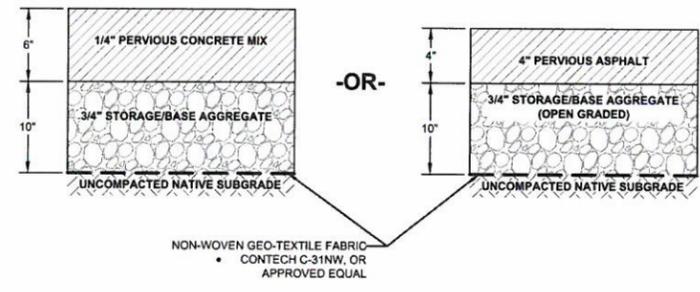
**LEGEND**

	BOUNDARY LINE		EXISTING TREES TO REMAIN
	RIGHT-OF-WAY		PROPOSED LOT LINE
	EXISTING CENTERLINE		PROPOSED CURB AND GUTTER
	EXISTING EASEMENT LINE		PROPOSED CONCRETE
	EXISTING LOT LINE		PROPOSED RETAINING WALL
	EXISTING CURB		PROPOSED PERVIOUS PAVEMENT
	EXISTING SIDEWALK		
	EXISTING LIGHT POLE		
	EXISTING TRAFFIC SIGN		
	EXISTING FIRE HYDRANT		

- GENERAL SITE CONSTRUCTION NOTES**
- CONSTRUCT PERVIOUS CONCRETE SHARED ACCESS DRIVE PER "PERVIOUS CONCRETE PAVING SECTION" DETAIL AND "TYPICAL SECTION" THIS SHEET. MODIFICATIONS SHALL BE APPROVED BY THE ENGINEER.
  - PRIVATE DRIVEWAY STA: 0+30.57 TO STA: 1+80.00  
CONSTRUCT DRIVEWAY IMPROVEMENTS PER TYPICAL SECTION AND PROFILE INFORMATION SHOWN THIS SHEET.



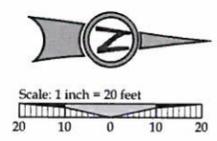
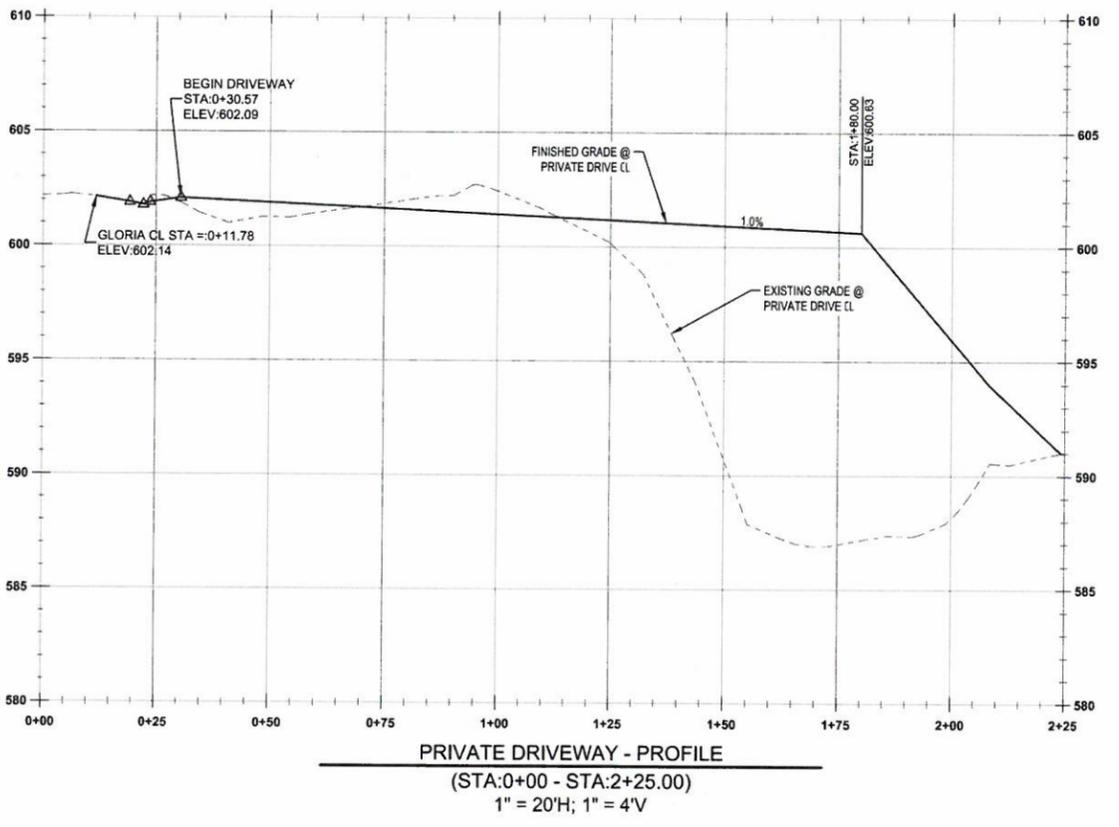
TYPICAL SECTION - COMMON DRIVEWAY IMPROVEMENTS  
SCALE: N.T.S.



**PERVIOUS CONCRETE/ASPHALT NOTES**

- CONTRACTOR TO CONTACT ENGINEER FOR SPECIFICATIONS FOR PERVIOUS CONCRETE OR PERVIOUS ASPHALT PRIOR TO CONSTRUCTION.
- MATERIAL AND GENERAL PAVEMENT NOTES:  
1. STORAGE/BASE AGGREGATE SHOULD MEET OR EXCEED THE 2008 EDITION OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION 02630.11 (OPEN GRADED AGGREGATE) FOR SUBBASE, BASE, AND SHOULDERS. THE GRADATION AND MATERIAL REQUIREMENTS SHOULD ALSO BE AS SPECIFIED IN O.S.S.C. 02630.11 (OPEN GRADED AGGREGATE). PRIOR TO COMMENCING CONCRETE WORK, CONTRACTOR SHALL SCHEDULE A PRE-PAVING CONFERENCE WITH THE ENGINEER, AND OWNER'S REPRESENTATIVE(S).
- PERVIOUS CONCRETE SHOULD BE CONSTRUCTED IN ACCORDANCE WITH ACI-308R-13 (SPECIFICATION FOR PERVIOUS CONCRETE PAVEMENT), CONTAIN BETWEEN 15% AND 18% AIR VOIDS, AND OBTAIN A STRENGTH OF 2,000PSI OR GREATER. REFER TO PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION ON PERVIOUS CONCRETE MIXES, PERFORMANCE CRITERIA AND PLACEMENT REQUIREMENTS.
- SUB-GRADE GEOTEXTILE SHOULD MEET OR EXCEED THE REQUIREMENTS AND SPECIFICATIONS OF O.S.S.C. 03350 (GEOSYNTHETIC INSTALLATION) AND 02320 (GEOSYNTHETICS) FOR TYPE I DRAINAGE FABRICS.

**APPROVED FOR CITY**  
This approval is only in accordance with the design concept and general compliance with applicable code requirements. It 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: 7/29/14 BY: Khoi Q. B.



**CONSTRUCTION PLANS**

DATE	07/10/2014
BY	
REVISION SUMMARY	

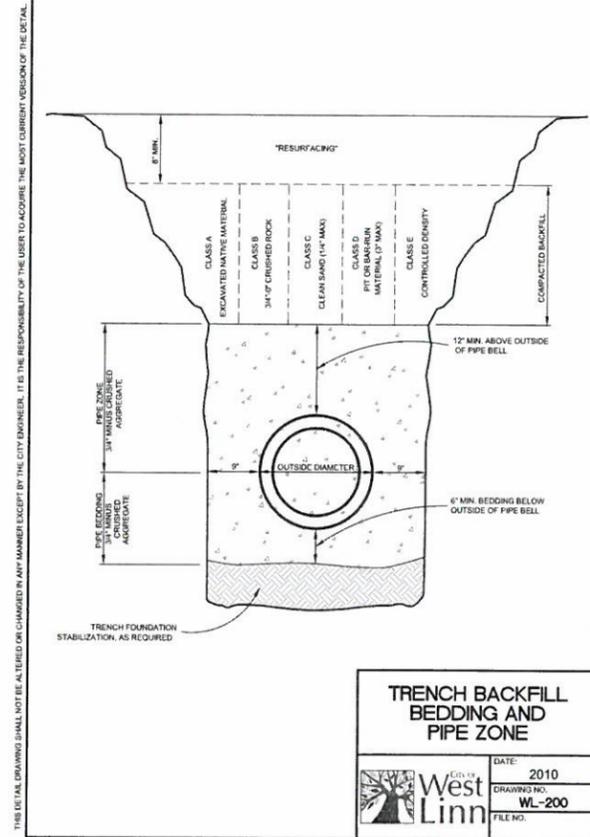
PRIVATE DRIVE PLAN AND PROFILE  
**HARPER'S TERRACE**  
SUBDIVISION  
LF 10, LLC  
WEST LINN, OR

**J.T. SMITH** COMPARTMENTS  
REGISTERED PROFESSIONAL ENGINEER  
72282PE  
OREGON NOV 13, 2008  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature 07/28/2014

**3J CONSULTING, INC.**  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
5075 SW GREFFITH DRIVE, STE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9985

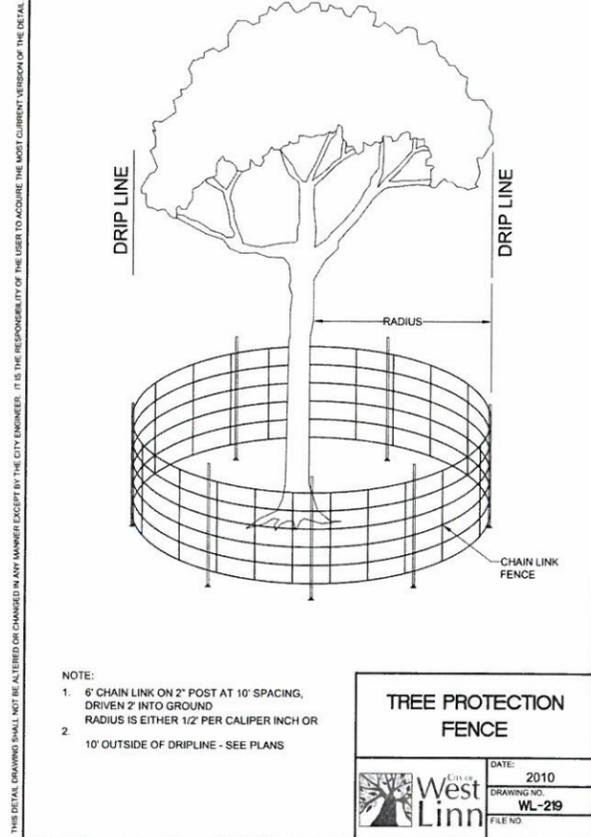
3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	2S1E250B 500
DESIGNED BY	CLF/BCH
CHECKED BY	JDH
SHEET TITLE	DRIVEWAY P & P
SHEET NUMBER	C202





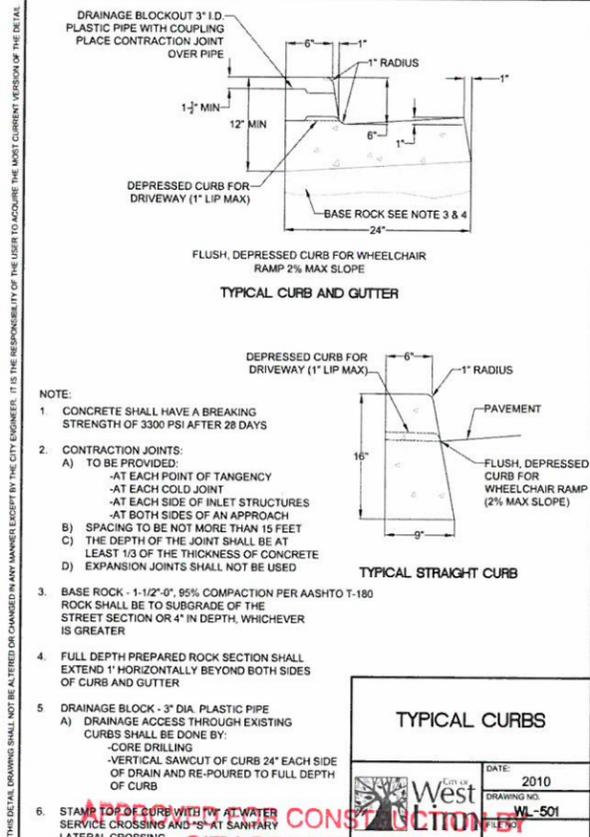
**TRENCH BACKFILL BEDDING AND PIPE ZONE**

DATE: 2010  
DRAWING NO: WL-200  
FILE NO:



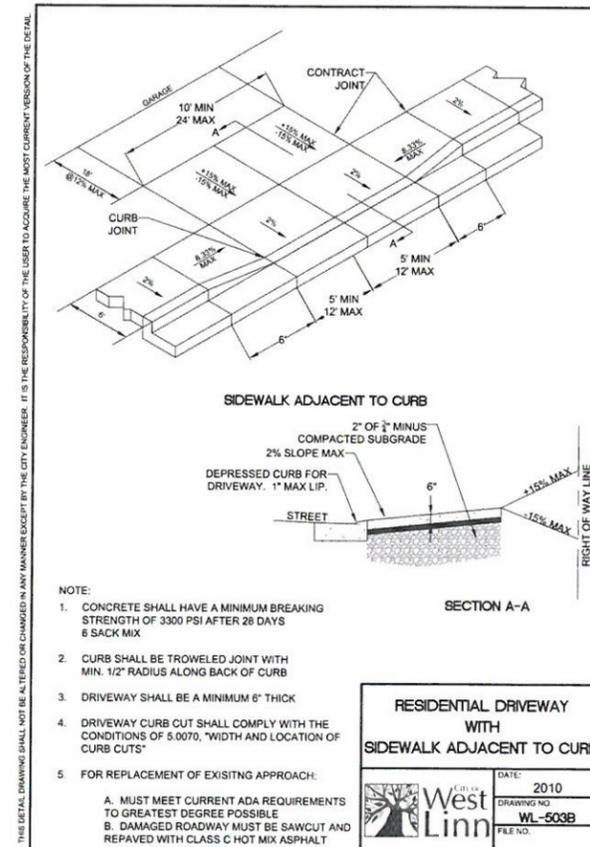
**TREE PROTECTION FENCE**

DATE: 2010  
DRAWING NO: WL-219  
FILE NO:



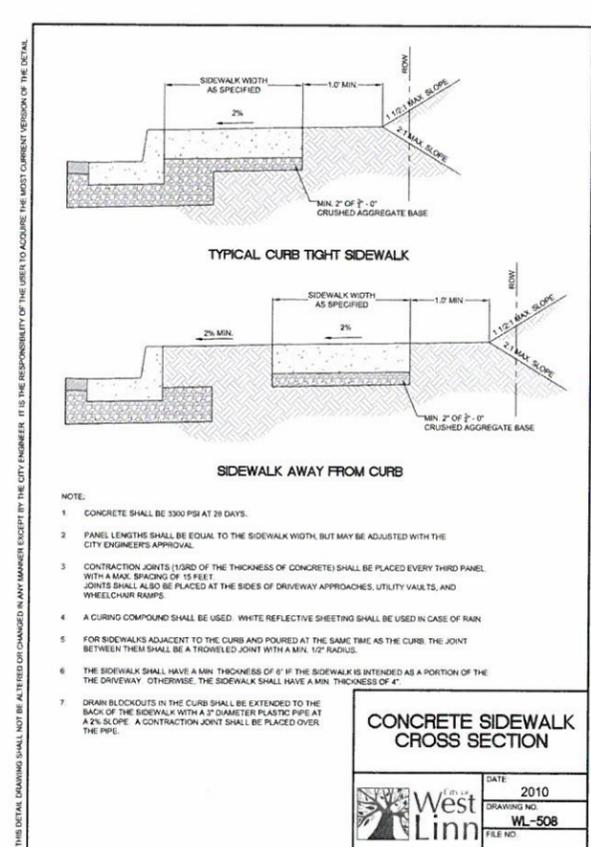
**TYPICAL CURBS**

DATE: 2010  
DRAWING NO: WL-501  
FILE NO:



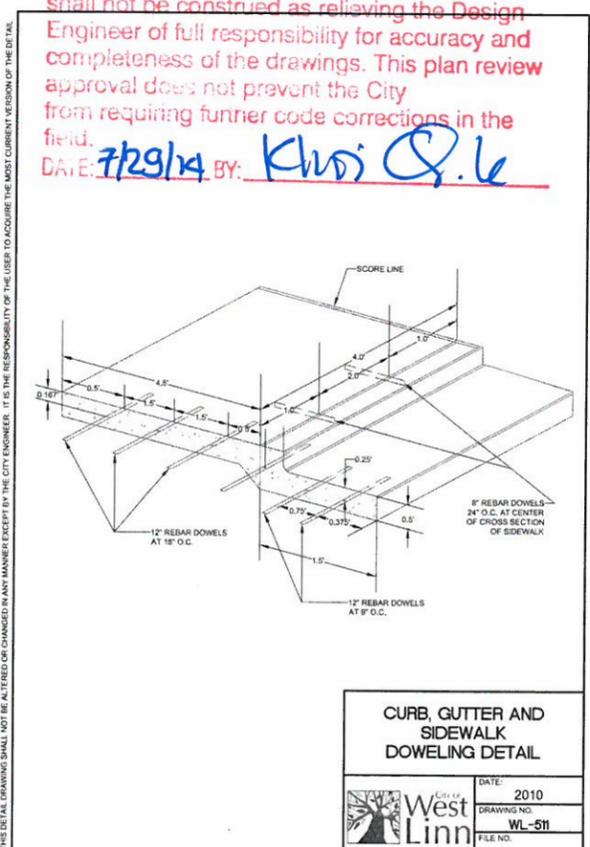
**RESIDENTIAL DRIVEWAY WITH SIDEWALK ADJACENT TO CURB**

DATE: 2010  
DRAWING NO: WL-503B  
FILE NO:



**CONCRETE SIDEWALK CROSS SECTION**

DATE: 2010  
DRAWING NO: WL-508  
FILE NO:



**CURB, GUTTER AND SIDEWALK DOWELING DETAIL**

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.

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.

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.

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.

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.

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.

CONSTRUCTION PLANS	07/10/2014
REVISION SUMMARY	BY DATE

**CONSTRUCTION DETAILS I**  
**HARPER'S TERRACE**  
**SUBDIVISION**  
LF 10, LLC  
WEST LINN, OR

**J.T. SMITH**  
companies  
REGISTERED PROFESSIONAL ENGINEER  
22282PE  
OREGON  
12.2007  
JOHN D. HOWARTH  
EXPIRES 06/30/15  
Digital Signature  
07/28/2014

**3J CONSULTING, INC**  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
5075 SW GRIFFITH DRIVE, STE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-5085

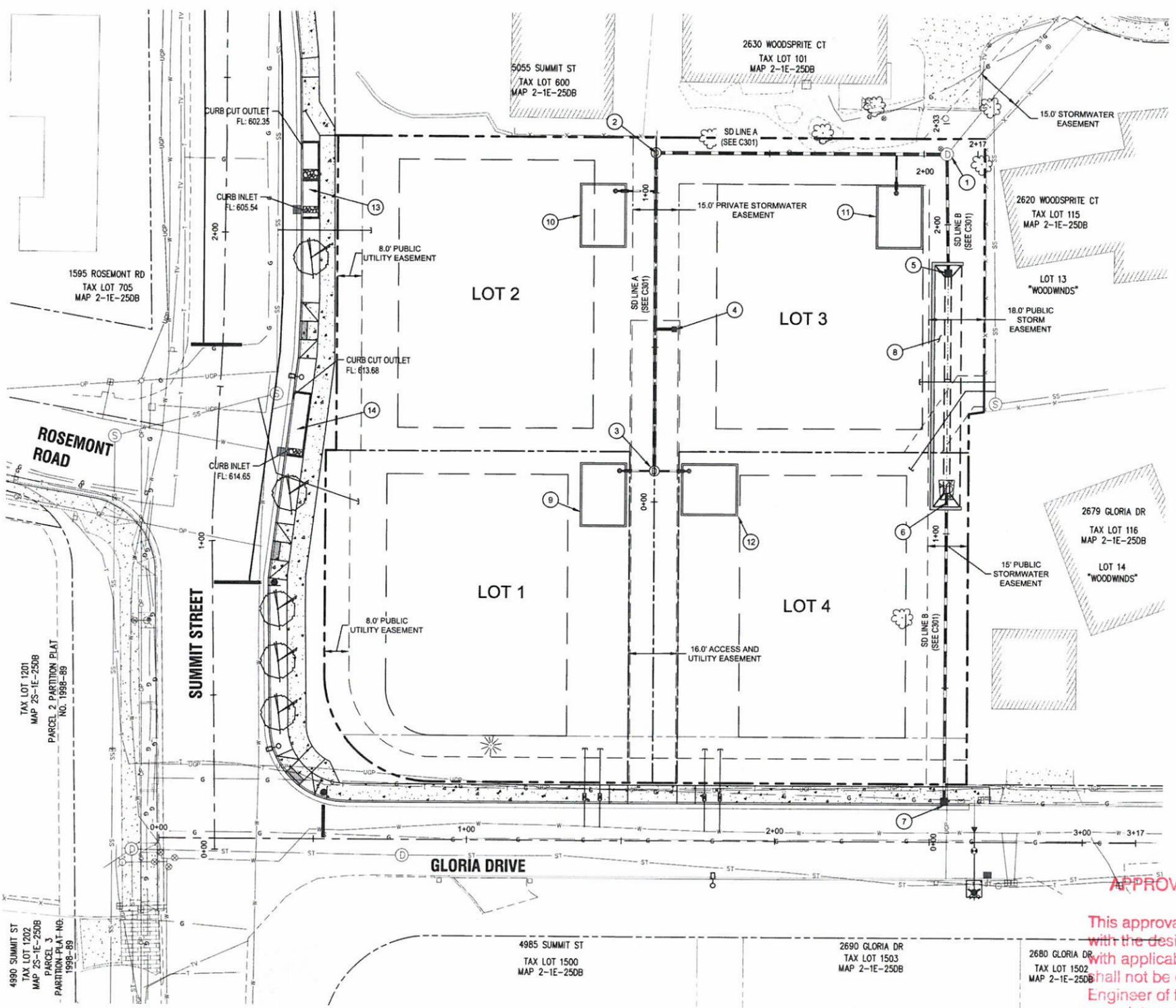
3J JOB ID # | 13123  
LAND USE # | SUB-13-05  
TAX LOT # | 251E2508 500  
DESIGNED BY | CLF/BCH  
CHECKED BY | JDH

SHEET TITLE  
**DETAILS I**  
SHEET NUMBER

**C210**

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: 7/29/14 BY: *Kristi Q. L.*





**GENERAL UTILITY NOTES**

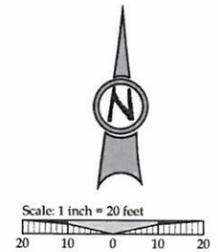
1. ALL EXISTING STORM DRAIN PIPING AND STRUCTURES DESIGNATED FOR MODIFICATION WITHIN THESE PLANS SHALL BE POTHOLED AND FIELD VERIFIED FOR LENGTH, ALIGNMENT, DEPTH AND GRADE PRIOR TO COMMENCEMENT OF CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. ALL PRIVATE HORIZONTAL DRAIN PIPING SHOWN SHALL CONFORM TO THE INTERNATIONAL PLUMBING CODE (IPC) AND ALL OREGON SPECIALTY CODE AMENDMENTS FOR: FITTINGS, CONNECTIONS, ALIGNMENT, GRADE & MATERIAL.
3. SEE SHEETS C301 FOR PROFILE DATA.

**STORM LATERAL TABLE**

STORM LATERAL	LATERAL SIZE	LENGTH	INVERT AT MAIN	INVERT AT END	DEPTH AT END	MAIN LINE STATION
LOT 1	6"	11.3 LF	596.27	596.50	6.0 FT	SD MH 5
LOT 2	6"	13.2 LF	587.78	588.04	6.0 FT	STA: 1+00.55, STORM LINE A
LOT 3	6"	12.7 LF	575.85	576.10	6.0 FT	STA: 1+91.11, STORM LINE A
LOT 4	6"	11.3 LF	596.27	596.50	6.0 FT	SD MH 5

**STORM DRAIN STRUCTURE TABLE**

1. EX. SD MH 3  
PROFILE DATA: SEE SHEET C301  
CONSTRUCTION DATA: SEE SHEET 310
2. SD MH 4  
PROFILE DATA: SEE SHEET C301  
CONSTRUCTION DATA: SEE SHEET 310
3. SD MH 5  
PROFILE DATA: SEE SHEET C301  
CONSTRUCTION DATA: SEE SHEET 310
4. SD CB A1  
STA: 0+55.88, 6.22 RT STORM LINE A  
FL: 600.54  
IE OUT (8" W): 597.55  
INSTALL 8.53 LF 8" PVC @ S=8814  
SUMP: 596.05
5. SD DI B2  
CONSTRUCT DITCH INLET AT LOCATION SHOWN PER STD.  
DWG. WL-603 SHOWN ON SHEET C311  
AND ELEVATION DATA SHOWN ON C301.
6. CONSTRUCT STORM LINE 'B'  
OUTFALL TO WATER QUALITY  
SWALE AS SHOWN ON SHEET C301.  
CLASS 100 RIP RAP PAD (APPROX. 3 CY)  
APPROXIMATELY 6Lx5Wx2D.
7. SD CI B1  
PROFILE DATA: SEE SHEET C301  
CONSTRUCTION DATA: SEE SHEET 311
8. CONSTRUCT WATER QUALITY  
SWALE AS SHOWN. ELEVATION DATA  
SHOWN ON SHEET C301.
9. LOT 1 - WATER QUALITY PLANTER  
TO BE CONSTRUCTED UNDER SEPARATE  
PERMIT AT THE TIME OF HOME CONSTRUCTION.
10. LOT 2 - WATER QUALITY PLANTER  
TO BE CONSTRUCTED UNDER SEPARATE  
PERMIT AT THE TIME OF HOME CONSTRUCTION.
11. LOT 3 - WATER QUALITY PLANTER  
TO BE CONSTRUCTED UNDER SEPARATE  
PERMIT AT THE TIME OF HOME CONSTRUCTION.
12. LOT 4 - WATER QUALITY PLANTER  
TO BE CONSTRUCTED UNDER SEPARATE  
PERMIT AT THE TIME OF HOME CONSTRUCTION.
13. CONSTRUCT 24' NOMINAL LENGTH STORM WATER PLANTER  
'B'. SEE SHEETS C310, C311 & C312 FOR DETAILS
14. CONSTRUCT 20' NOMINAL LENGTH STORM WATER PLANTER  
'A'. SEE SHEETS C310, C311 & C312 FOR DETAILS



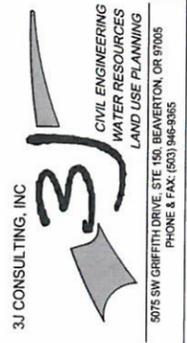
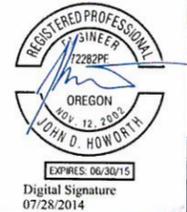
**LEGEND**

- BOUNDARY LINE
- - - EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE
- - - EXISTING LOT LINE
- EXISTING CURB
- EXISTING ASPHALT
- EXISTING SIDEWALK
- EXISTING GRAVEL DRIVE
- EXISTING LIGHT POLE
- EXISTING TRAFFIC SIGN
- EXISTING SANITARY SEWER LINE
- EXISTING WATER LINE
- EXISTING STORM LINE
- EXISTING GAS LINE
- EXISTING UNDERGROUND POWER
- EXISTING SANITARY MANHOLE
- EXISTING STORM MANHOLE
- EXISTING CATCHBASIN
- PROPOSED RIGHT-OF-WAY
- PROPOSED LOT LINE
- PROPOSED CENTERLINE
- PROPOSED CURB
- PROPOSED SIDEWALK
- PROPOSED SETBACK LINE
- STORM SEWER CURB INLET
- STORM SEWER DITCH INLET
- STORM DRAIN LINE AND MANHOLE
- DETENTION POND LIMITS
- STORM SEWER LATERAL AS NOTED
- SANITARY SEWER LATERAL
- SANITARY SEWER LINE AND MANHOLE
- DOMESTIC WATER SERVICE & METER
- PROPOSED STREET LIGHT
- PROPOSED RETAINING WALL

**APPROVED FOR CONSTRUCTION BY**  
**CITY OF WASHINGTON**  
 Know what's below.  
 Call before you dig.  
 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: 7/29/14 BY: *Kristi Q. de*

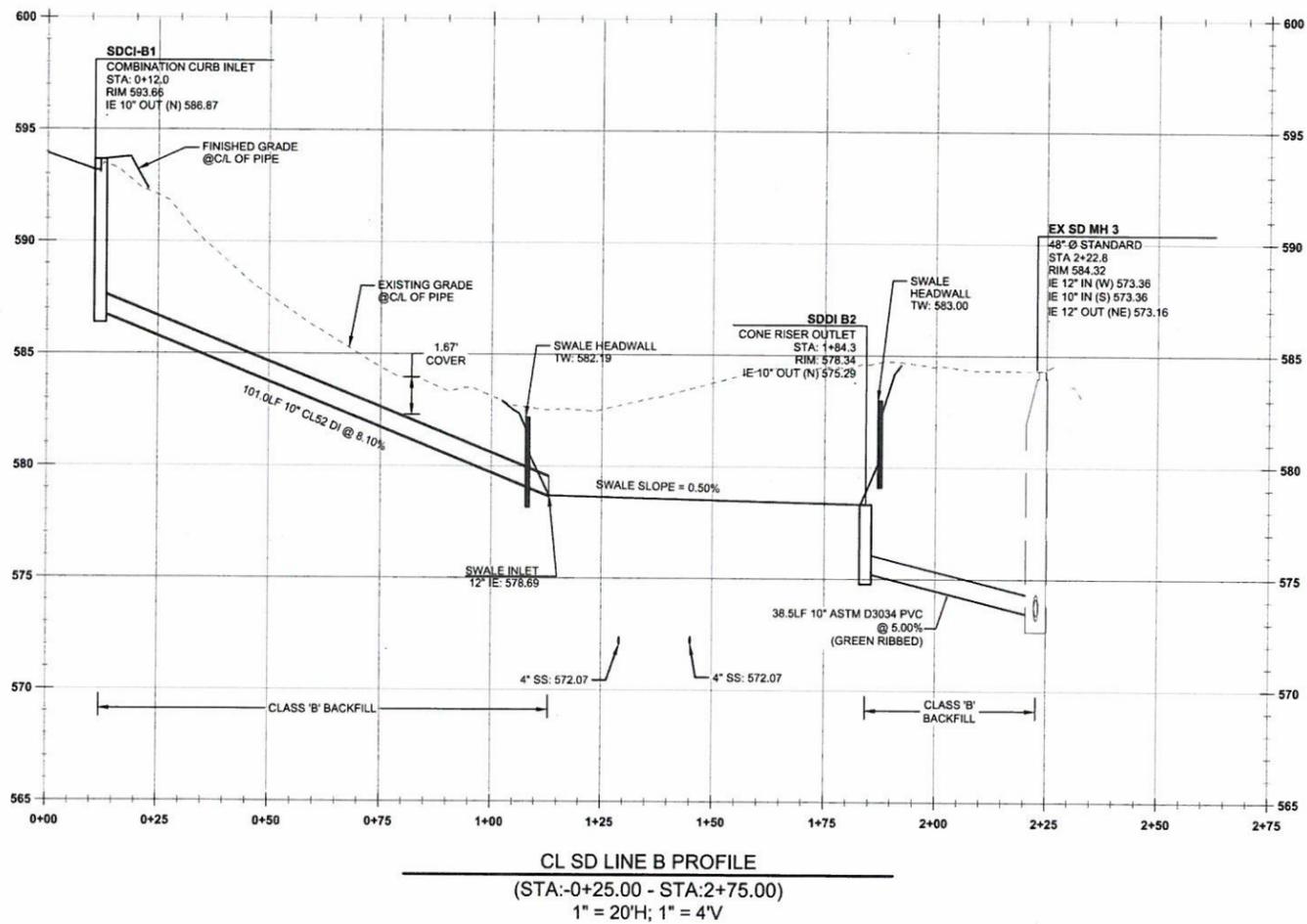
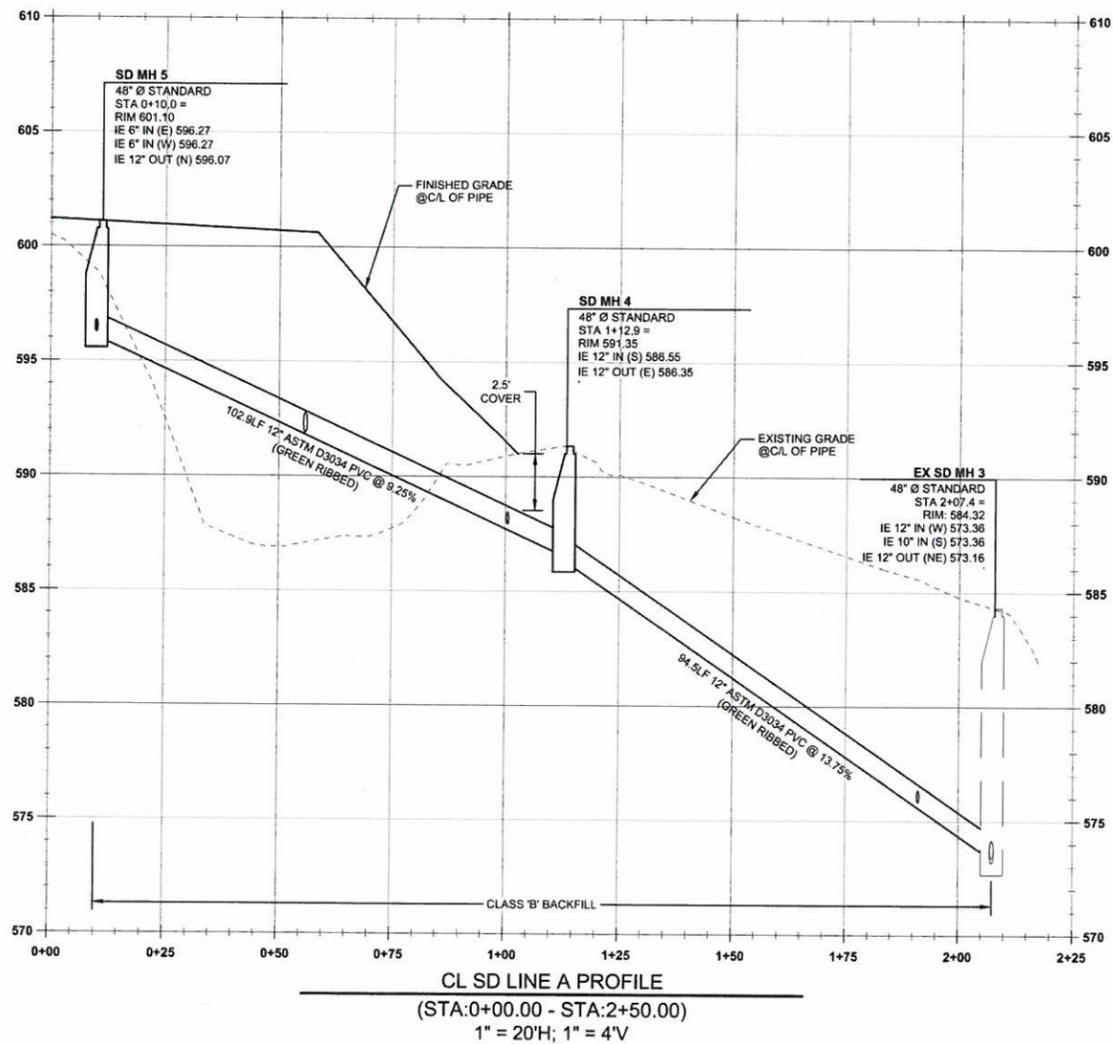
CONSTRUCTION PLANS	07/10/2014	BY	DATE
REVISION SUMMARY			

**STORM DRAINAGE PLAN**  
**HARPER'S TERRACE**  
**SUBDIVISION**  
 LF 10, LLC  
 WEST LINN, OR



3J JOB ID # | 13123  
 LAND USE # | SUB-13-05  
 TAX LOT # | 251E2508 500  
 DESIGNED BY | CLF/BCH  
 CHECKED BY | JDH

SHEET TITLE  
**STORM PLAN**  
 SHEET NUMBER  
**C300**



**APPROVED FOR CONSTRUCTION BY  
CITY OF WEST LINN**

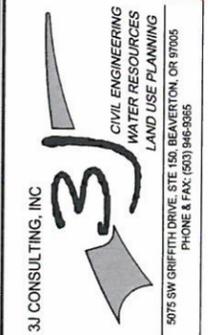
This approval is only for general conformance with the design concept and general compliance with applicable codes and requirements and shall not be construed as relieving the Design Engineer of full responsibility for accuracy and completeness of the drawings. This plan review approval does not prevent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

DATE: 7/29/14 BY: Khori Q. Le



Know what's below.  
Call before you dig.

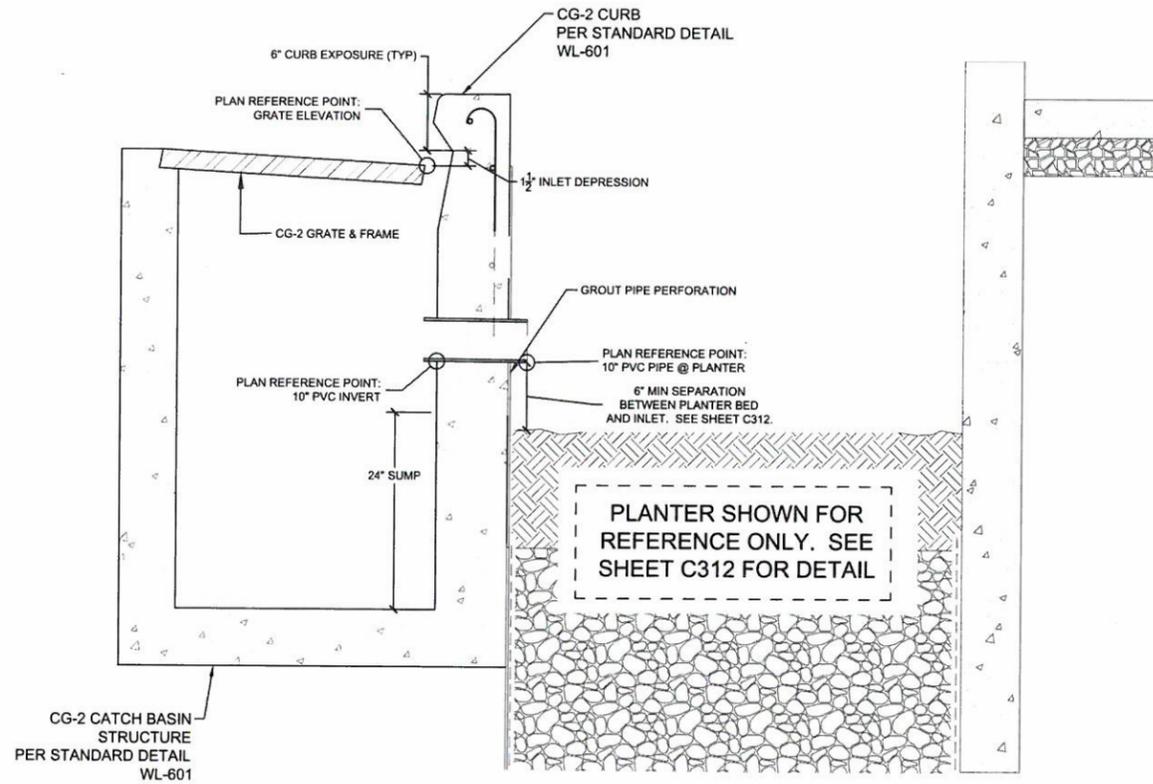
STORM DRAINAGE PROFILE PLAN  
**HARPER'S TERRACE  
SUBDIVISION**  
LF 10, LLC  
WEST LINN, OR



3J JOB ID # | 13123  
LAND USE # | SUB-13-05  
TAX LOT # | 281E25DB 500  
DESIGNED BY | CLF/BCH  
CHECKED BY | JQH  
SHEET TITLE  
SD LINES 'A' & 'B'  
SHEET NUMBER

**C301**

CONSTRUCTION PLANS	07/10/2014
REVISION SUMMARY	BY DATE
A	

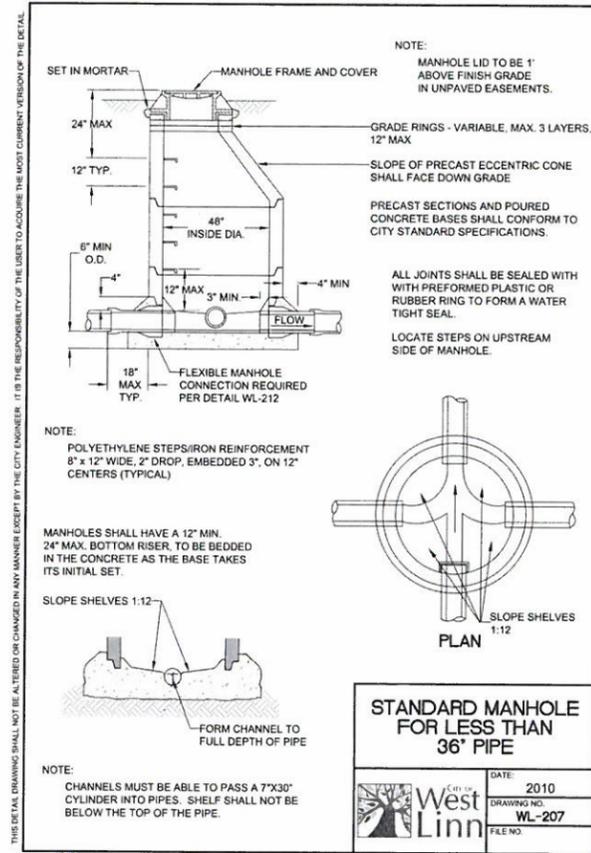


### CG-2 PLANTER INLET

N.T.S.

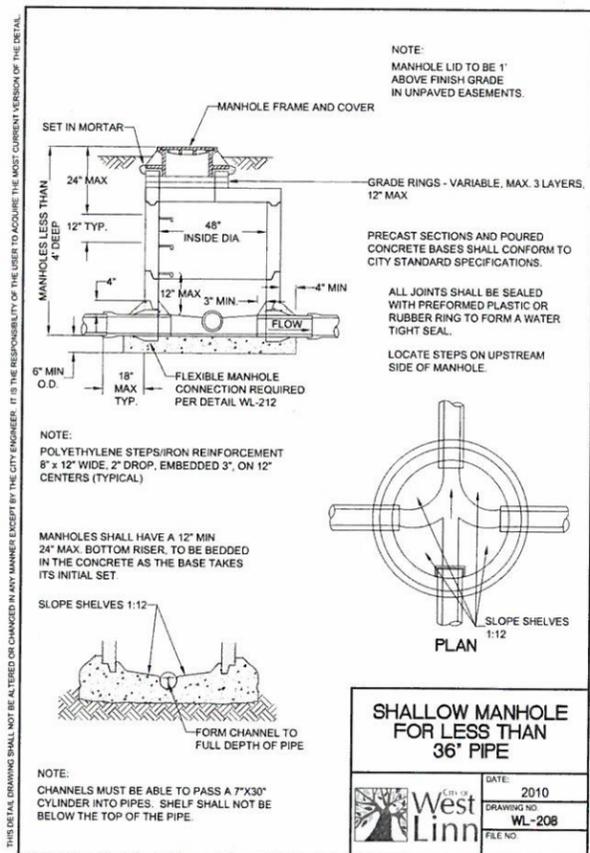
CG-2 CATCH BASIN  
STRUCTURE  
PER STANDARD DETAIL  
WL-601

PLANTER SHOWN FOR  
REFERENCE ONLY. SEE  
SHEET C312 FOR DETAIL



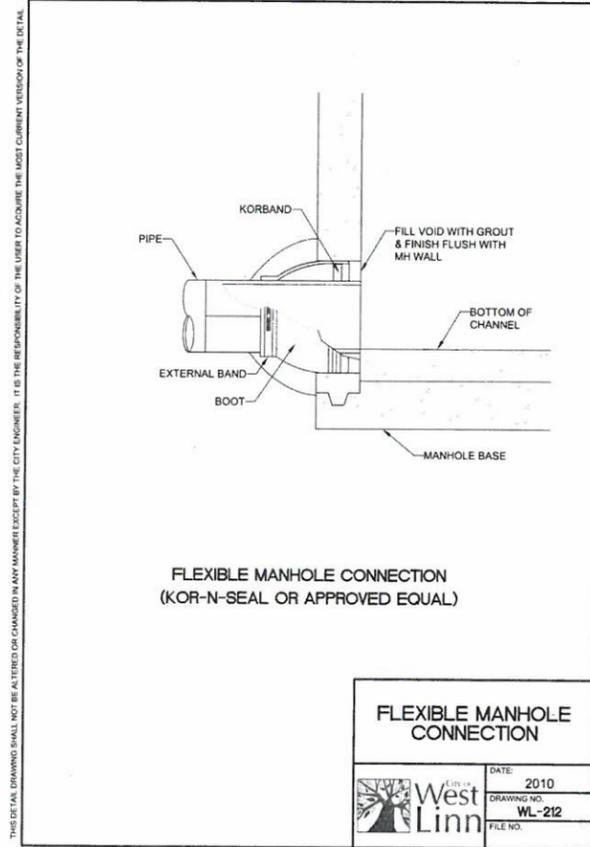
### STANDARD MANHOLE FOR LESS THAN 36" PIPE

DATE: 2010  
DRAWING NO: WL-207  
FILE NO:



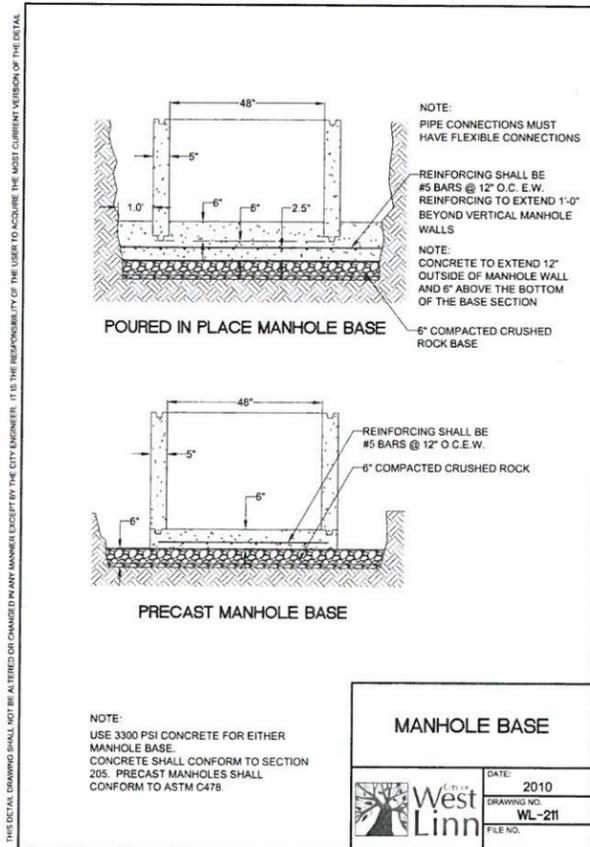
### SHALLOW MANHOLE FOR LESS THAN 36" PIPE

DATE: 2010  
DRAWING NO: WL-208  
FILE NO:



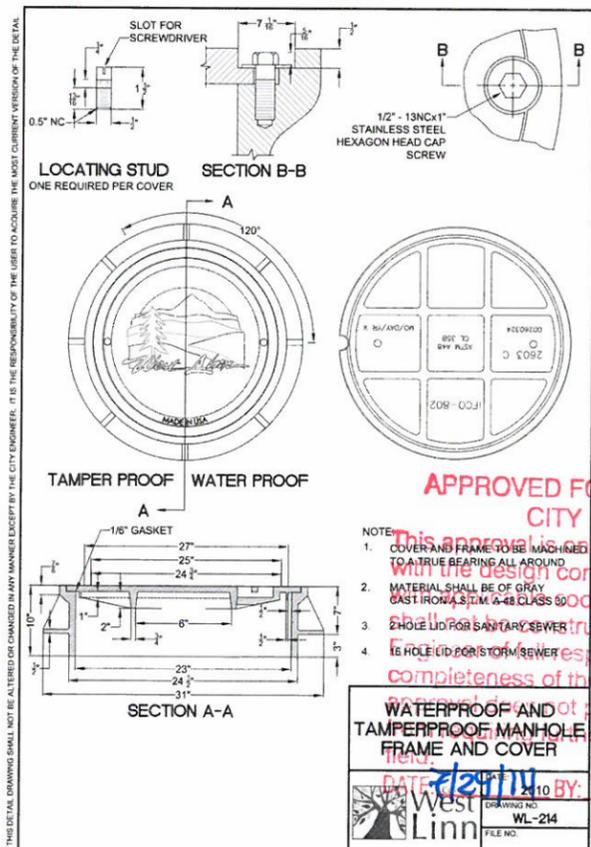
### FLEXIBLE MANHOLE CONNECTION (KOR-N-SEAL OR APPROVED EQUAL)

DATE: 2010  
DRAWING NO: WL-212  
FILE NO:



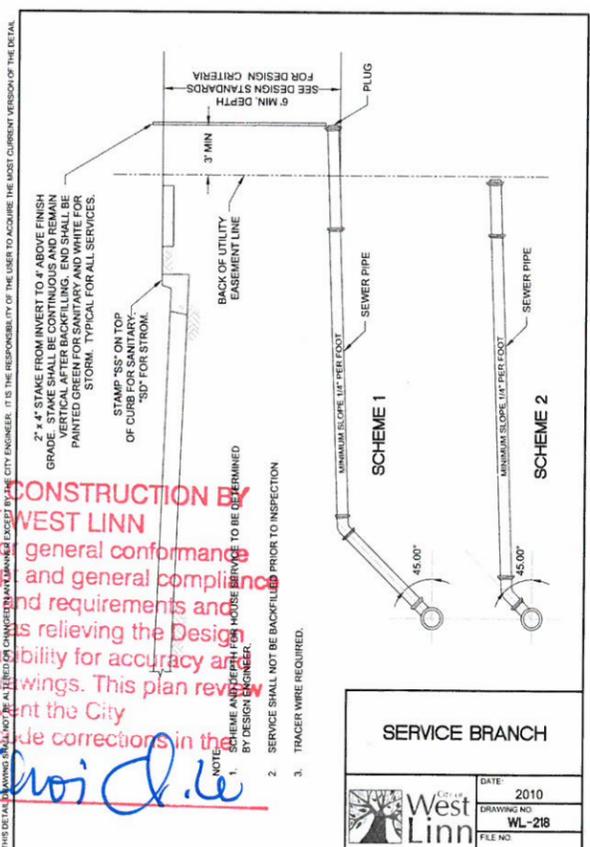
### MANHOLE BASE

DATE: 2010  
DRAWING NO: WL-211  
FILE NO:



### WATERPROOF AND TAMPERPROOF MANHOLE FRAME AND COVER

DATE: 2010  
DRAWING NO: WL-214  
FILE NO:



### SERVICE BRANCH

DATE: 2010  
DRAWING NO: WL-218  
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.

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.

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.

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.

CONSTRUCTION PLANS	07/10/2014
REVISION SUMMARY	BY DATE

STORMWATER DRAINAGE DETAILS  
**HARPER'S TERRACE**  
SUBDIVISION  
LF 10, LLC  
WEST LINN, OR

**J.T. SMITH**  
companies

REGISTERED PROFESSIONAL  
ENGINEER  
12282PF  
OREGON  
NOV. 12, 2002  
JOHN D. HOWARTH

COPIES: 06/30/15  
Digital Signature  
07/28/2014

**3J CONSULTING, INC**

CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING

5075 SW GREENTH DRIVE, STE. 450, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-8885

3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	251E2508 500
DESIGNED BY	CLF/BCH
CHECKED BY	JDH
SHEET TITLE	STM DETAILS I
SHEET NUMBER	C310

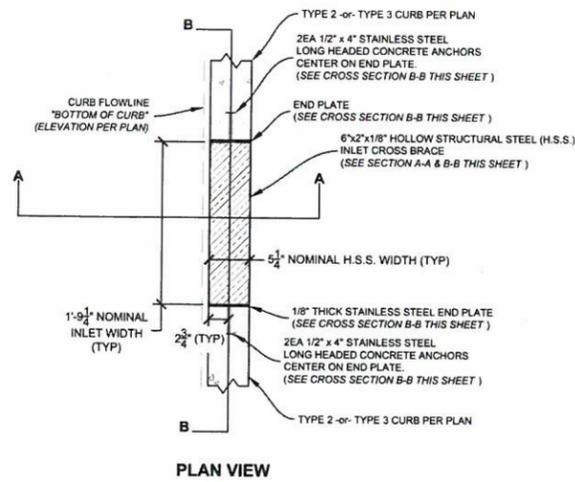
**APPROVED FOR CONSTRUCTION BY  
CITY OF WEST LINN**

This approval is only for general conformance with the design concept and general compliance with codes and requirements and does not constitute a relieving of the Design Engineer's responsibility for accuracy and completeness of the drawings. This plan review is not intended to prevent the City Engineer from making corrections in the field.

DATE: 07/10/2014 BY: *Kristi D. Le*

NOTE:  
1. COVERS AND FRAME SHALL BE MADE TO A TRUE BEARING ALL AROUND.  
2. MATERIAL SHALL BE OF GRAY CAST IRON, ASTM A-48 CLASS 30.  
3. 2" HOLE FOR SANITARY SEWER.  
4. 2" HOLE FOR STORM SEWER.

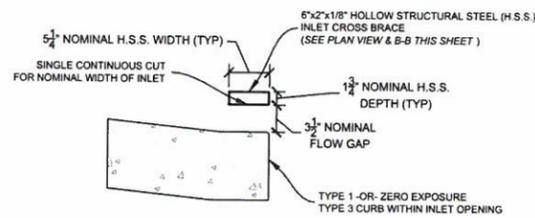
NOTE:  
1. SCHEME AND DEPTH FOR INSURE SERVICE TO BE DETERMINED BY DESIGN ENGINEER.  
2. SERVICE SHALL NOT BE BACKFILLED PRIOR TO INSPECTION.  
3. TRACER WIRE REQUIRED.



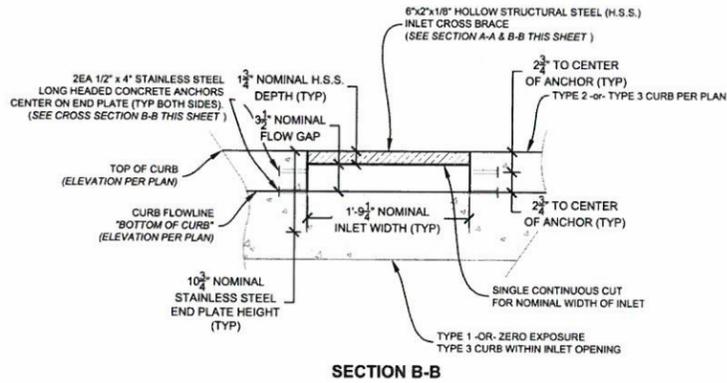
PLAN VIEW

**GENERAL NOTES:**

1. SPLASH PADS ARE REQUIRED AT ALL INLETS. SEE SITE PLAN FOR LOCATION, DIMENSION AND TYPE OF MATERIAL USED FOR DISSIPATION.
2. HEADED CONCRETE ANCHORS SHALL MEET THE REQUIREMENTS OF ASTM A-108
3. H.S.S. 6"x2"x1/8" CHANNEL SHALL MEET THE REQUIREMENTS OF ASTM A-500 GRADE B
4. END PLATES SHALL MEET THE REQUIREMENTS OF ASTM A-36
5. ENTIRE ASSEMBLY SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A-123.
6. SINGLE BEVEL GROOVE WELD.
7. ALIGN CURB JOINTS TO ADJACENT SIDEWALK OR DRIVEWAY CONCRETE SURFACE JOINTS.
8. WET SET INLET ASSEMBLY WITH INITIAL CURB POUR
9. ADJACENT ASPHALT GRADE TO BE EQUAL TO OR GREATER THAN INLET ELEVATION



SECTION A-A

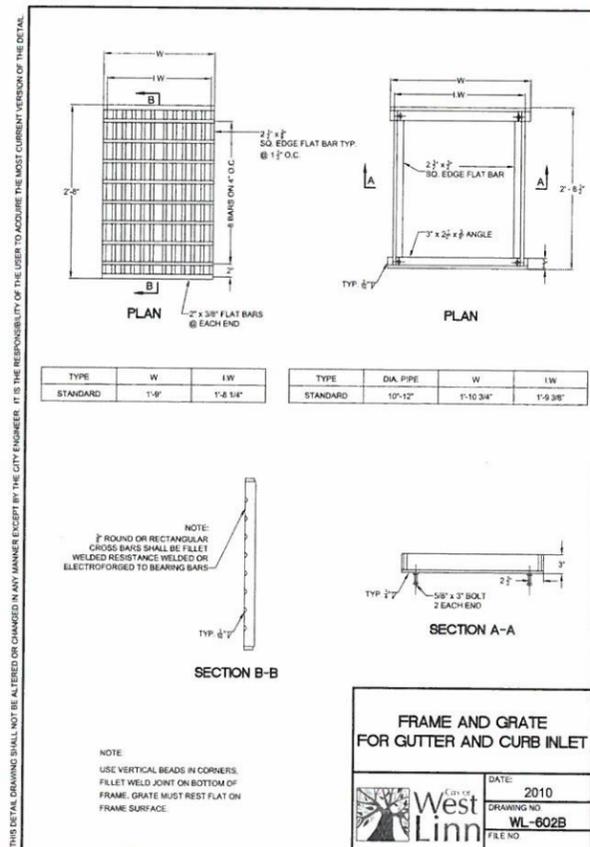
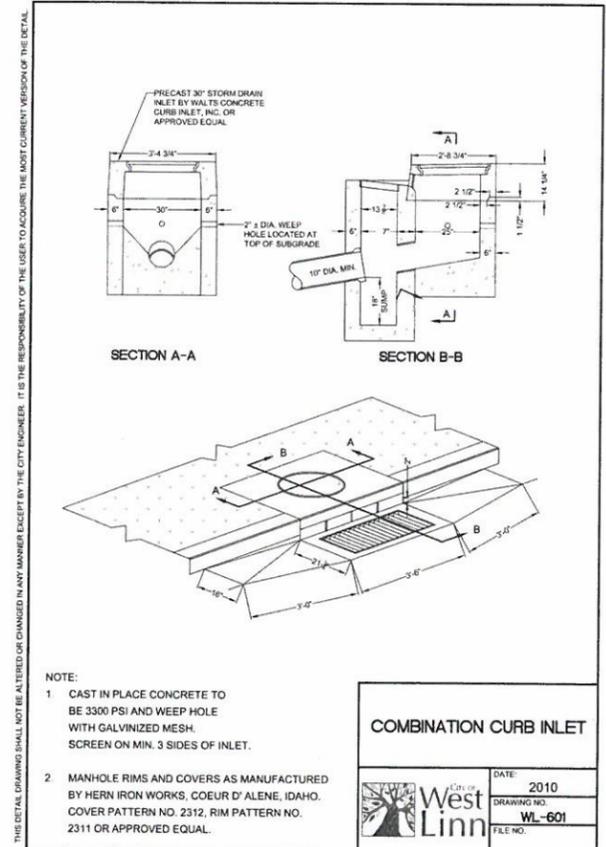


SECTION B-B

**METAL CURB INLET DETAIL**

N.T.S.

1  
C311



**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: 7/29/14 BY: *Klaus Q. Le*

THE NATIVE SOIL IN THE TOP 18 INCHES OF ALL STORM WATER PLANTERS SHALL BE AMENDED WITH A MIX OF ONE PART IMPORTED ORGANIC COMPOST AND ONE PART GRAVELLY SAND, SUCH THAT THERE ARE EQUAL PARTS COMPOST, SAND AND NATIVE SOIL. THIS MIX WILL REQUIRE THE STORMWATER PLANTER AREA TO BE OVER EXCAVATED BY APPROXIMATELY 12 INCHES PRIOR TO ADDING SAND AND COMPOST. THE SPECIFICATIONS INCLUDED HEREIN SHALL BE USED FOR THIS PURPOSE AND INCLUDED ON THE PERMIT PLANS. THE MIX SHALL BE THOROUGHLY TILLED TOGETHER ON-SITE, AND SHALL BE CAPABLE OF INFILTRATING WATER WITHOUT PROLONGED PONDING ON THE SURFACE. IF SUCH PONDING OCCURS, ORGANIC COMPOST AND SAND MUST BE ADDED AND RE-TILLED UNTIL INFILTRATION PERFORMANCE IS ENHANCED. A 2-INCH LAYER OF SHREDED BARK MULCH (NOT BARK DUST OR BARK CHIPS) SHALL BE USED OVER THE AMENDED SOIL AND BETWEEN THE PLANTINGS TO COMPLETELY COVER THE SOIL AND PREVENT EROSION OR WEED INTRUSION.

**ORGANIC COMPOST**  
 ORGANIC COMPOST SHALL HAVE THE FOLLOWING PROPERTIES:  
 100% SHALL PASS A 1/2" INCH SCREEN  
 8% BETWEEN 1/2" AND 7/8"  
 CARBON NITROGEN RATIO BETWEEN 20:1 AND 35:1 (35:1 C:N RATIO RECOMMENDED FOR NATIVE PLANTS)  
 ORGANIC MATTER CONTENT BETWEEN 40 AND 50 PERCENT

ORGANIC COMPOST MAY CONSIST OF THE FOLLOWING:  
**MUSHROOM COMPOST** - THE USED BEDDING MATERIAL FROM COMMERCIAL MUSHROOM PRODUCTION  
**COMPOSTED YARD DEBRIS** - COMMERCIALLY MANUFACTURED MATERIAL, MADE FROM DEAD PLANT MATERIAL SUCH AS GRASS CLIPPINGS, WEEDS, GREEN AND DEAD LEAVES, GARDEN AND VEGETABLE MATERIAL, AND GROUND BRANCHES OF TREES AND SHRUBS. FURNISH A PRODUCT THAT IS COMPOSTED UNDER CONTROLLED AEROBIC DECOMPOSITION, WITH THE INTERNAL TEMPERATURE REACHING 57°C (135°F) FOR 15 DAYS, WITHOUT EXCEEDING 68°C (159°F). ENSURE THAT IT CONTAINS A MAXIMUM OF 10% BACTERIA AND 10% FUNGUS.  
**PEAT MOSS** - HORTICULTURAL GRADE, NATURAL PEAT MOSS IN AIR-DRY CONDITION, FREE FROM WOODY SUBSTRANCES, IN BALES OR BAGS LABELED FOR CONTENT AND VOLUME. ONLY PEAT MOSS USED IN COMBINATION WITH ONE OF THE ABOVE COMPOSTS IS ACCEPTABLE.

**GRAVELLY SAND**  
 GRAVELLY SAND SHALL BE FREE OF ORGANIC MATERIAL, CONTAMINANTS, AND HAZARDOUS MATERIALS, AND SHALL CONFORM TO THE FOLLOWING GRADATION:

U.S. SIEVE SIZE	PERCENT PASSING
2-INCH	100
1/2-INCH	70-100
NO. 40	50-80
NO. 200	15-40
	0-3

MEANS: MIX COMPOST, SAND AND NATIVE SOIL TO A HOMOGENEOUS CONSISTENCY. DO NOT MIX COMPOST, SAND, AND NATIVE SOIL IN THE RAIN OR WET CONDITIONS.

**STORAGE**  
 STORE STOCK PILES OF ORGANIC SOIL MIX IN A MANNER THAT PREVENTS IT FROM BECOMING WET FROM RAIN, STORM WATER RUNOFF, OR OTHER SOURCES OF WATER, OR CONTAMINATED BY FINE SOIL OR OTHER UNDESIRABLE MATERIALS. ALL STOCKPILES OF MIXED SOIL MATERIAL SHALL BE PROTECTED AND COVERED.

**PLACEMENT**  
 PLACE AMENDED SOIL MIX IN RAIN GARDENS AND STORMWATER PLANTERS IN LIFTS NOT EXCEEDING 6 INCHES IN LOOSE THICKNESS. AFTER ALL LIFTS HAVE BEEN PLACED, GRADE SOIL TO FINISH GRADAS AS SPECIFIED ON THE PLANS. DO NOT OVER COMPACT SOIL MIX WITH MECHANICAL EQUIPMENT AFTER PLACEMENT.

**MULCH**  
 SHREDED BARK MULCH (NOT BARK DUST OR BARK CHIPS) SHALL BE USED IN A 2-INCH LAYER MINIMUM OVER THE AMENDED SOIL MIX AND BETWEEN THE PLANTINGS TO COMPLETELY COVER THE SOIL AND PREVENT EROSION OR WEED INTRUSION.

**INFILTRATION TESTING**  
 WET THE SURFACE OF THE RAIN GARDEN OR STORMWATER PLANTER WITH A SPRINKLER OR HOSE UNTIL SATURATED. SMALL RAIN GARDENS AND PLANTERS (100 SQUARE IN SURFACE) AREA CAN BE TESTED FULL-SCALE, WHILE LARGE RAIN GARDENS AND PLANTERS CAN UTILIZE ISOLATED FALLING HEAD TEST (MINIMUM 2 PER 100 SQUARE FEET OF AREA). FILL THE TESTING AREA TO A DEPTH OF 4 INCHES AND TRACK THE TIME IT TAKES TO COMPLETELY DRAIN. REPEAT TEST 3 TIMES. IF THE WATER IN ANY OF THE TEST FAILS TO DRAIN DOWN IN LESS THAN AN HOUR, ADD COMPOST AND GRAVELLY SAND TO THE MIX AND RE-TILL. REPEAT THIS PROCEDURE UNTIL FAVORABLE TEST RESULTS ARE ACHIEVED.

**SOIL AMENDMENT AND MULCH SPECIFICATION**

DATE: 2010  
 DRAWING NO: WL-618B  
 FILE NO:

PLANTING ZONE B PLANTING ZONE A PLANTING ZONE B

Rain Garden planting plan per specification

Riser piping and debris shield set to allow minimum ponding depth of 6", maximum ponding depth of 12"

2" Clean River Rock No Minus

3:1 MAX SIDE SLOPE 2.0 MIN. BOTTOM 3:1 MAX SIDE SLOPE

5.0' MIN. WIDTH

Overflow and underdrain piping directs excess run-off to an approved disposal point

Infiltration of water into native soils

Rain Garden soil amendment depth shall be 18" min.

Incoming run-off from roof downspout or paving

**RAIN GARDEN SURFACE AREA = TOTAL IMPERVIOUS AREA x 0.06**

**RAIN GARDEN PLANTS**

ZONE	BOTANICAL NAME	COMMON NAME
A	CAREX BRITICA	COULUVER SEDGE
A	CAREX DENSA	DENSE SEDGE
A	CAREX PANSA	SANDOWNE SEDGE
A	CAREX TESTACEA	NEW ZEALAND ORANGE SEDGE
A	CAREX TUMULICOLA	FOOTHILL SEDGE
A	DESCHAMPSIA CAESPITOSA	TUFTED HAIR GRASS
A	ELEOCHARIS PALUSTRIS	CREeping SPIKE RUSH
A	JUNCUS BALTICUS	BALTIC RUSH
A	JUNCUS EFFUSUS 'CARIENSIS'	COMMON RUSH
A	JUNCUS EFFUSUS 'GOLD'	COMMON RUSH
A	JUNCUS EFFUSUS 'CARIENSIS GRAY'	COMMON RUSH
A	JUNCUS FRATENSIS	SPREADING RUSH
B	ARCTOSTAPHYLOS UVA-URSI	KIDNEKINCK
B	BLECHNUM SPICANT	DEER FERN
B	CORNUS SERICEA 'VAR. MELBY'	DWARF REDTWDG DOGWOOD
B	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILY TURF
B	GALTHERIA SHALLON	SALAL
B	MAHONIA NERVOSA	LOW OREGON GRAPE
B	MAHONIA REPENS	CREeping OREGON GRAPE

**INFILTRATION RAIN GARDEN TYPE 2**

DATE: 2010  
 DRAWING NO: WL-618A  
 FILE NO:

SECTION B-B SECTION A-A

DITCH INLET

PLAN

NOTE:  
 1. CONCRETE STRENGTH SHALL BE 3300 PSI.  
 2. CATCH BASIN, FRAME, AND GRATES SHALL MEET H20 LOADING.  
 3. INSIDE FRAM. DIMENSIONS 2'-3 3/8" x 2'-8 1/2"

**STANDARD DITCH INLET**

DATE: 2010  
 DRAWING NO: WL-603  
 FILE NO:

INLET TYPE	V	Y	Y1	NO OF BARS	TYPE
D	2'-4 3/4"	2'-3 3/8"	2'-3"	9	1

CONSTRUCTION PLANS 07/10/2014  
 REVISION SUMMARY  
 BY: DATE:

**STORM DRAINAGE DETAILS II  
 HARPER'S TERRACE  
 SUBDIVISION**  
 LF 10, LLC  
 WEST LINN, OR

J.T. SMITH companies  
 REGISTERED PROFESSIONAL ENGINEER  
 122829P  
 OREGON  
 NOV 12 2002  
 JOHN D. HOWORTH  
 EXPIRES: 06/30/15  
 Digital Signature  
 07/28/2014

3J CONSULTING, INC  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5075 SW GRIFFITH DRIVE, STE. 400, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-9585

3J JOB ID # | 13123  
 LAND USE # | SUB-13-05  
 TAX LOT # | 2S1E250B 500  
 DESIGNED BY | CLF/BCH  
 CHECKED BY | JDH

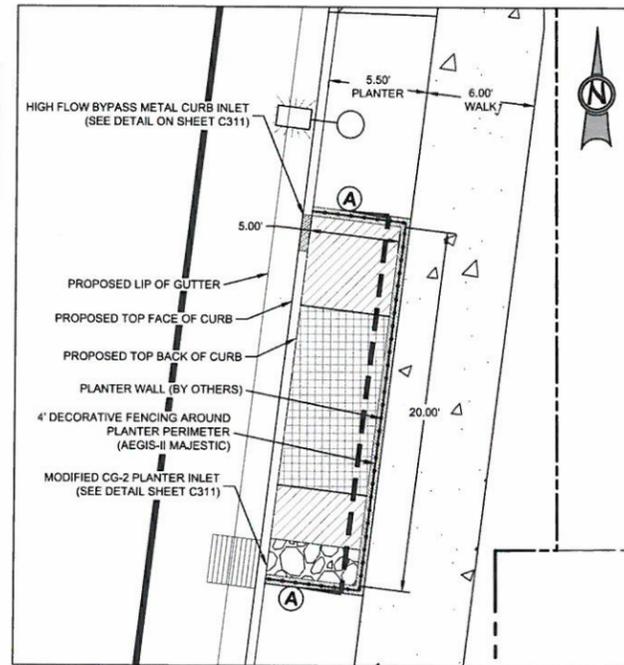
SHEET TITLE  
**STM DETAILS I**  
 SHEET NUMBER  
**C311**

**PLANTER 'A': PLANTING SCHEDULE**

SYMBOL	PLANT SPECIES COMMON NAME (BOTANICAL)	SIZE	SPACING	QUANTITY
	ORANGE SEDGE (CAREX TESTACEA)	1 Gal	1' O.C.	57
	SPREADING RUSH (JUNCUS PATENS)	1 Gal	1' O.C.	58

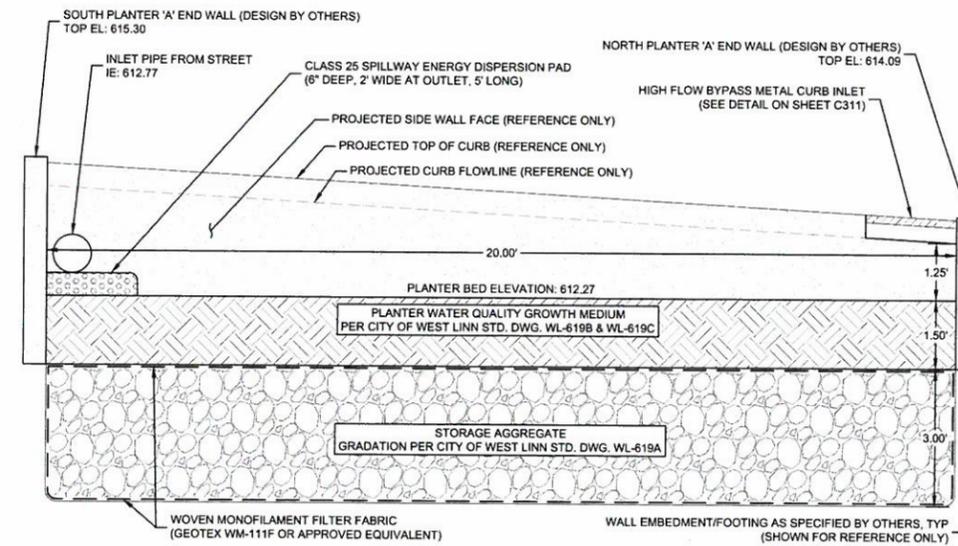
**NOTES:**

1. LANDSCAPE CONTRACTOR TO DECIDE UPON FINAL PLANTING LOCATIONS.
2. ALL IN-PLACE PLANTINGS SHALL CONFORM TO THE QUANTITY, SIZE, SPECIES AND SPACING REQUIREMENTS LISTED ON THIS SHEET
3. PLANTING PALETTE TO CONFORM WITH THE APPROVED LANDSCAPE PLANTING TEMPLATE #1 SHOWN ON SW-315
4. PLANTING QUANTITIES PER EXHIBIT 2-13 AND 2-14 OF THE CITY OF PORTLAND STORM WATER MANAGEMENT MANUAL



**PLANTER 'A': LAYOUT PLAN**

SCALE: 1" = 5'



**PLANTER 'A': SECTION A-A**

SCALE: N.T.S.

**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.

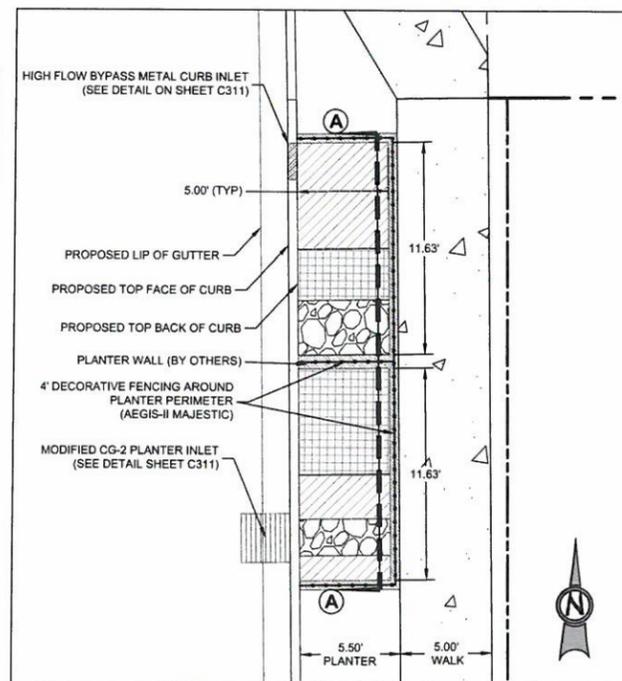
DATE: 7/29/14 BY: *Kelvin O. Howarth*

**PLANTER 'B': PLANTING SCHEDULE**

SYMBOL	PLANT SPECIES COMMON NAME (BOTANICAL)	SIZE	SPACING	QUANTITY
	ORANGE SEDGE (CAREX TESTACEA)	1 Gal	1.5' O.C.	69
	SPREADING RUSH (JUNCUS PATENS)	1 Gal	1.5' O.C.	69

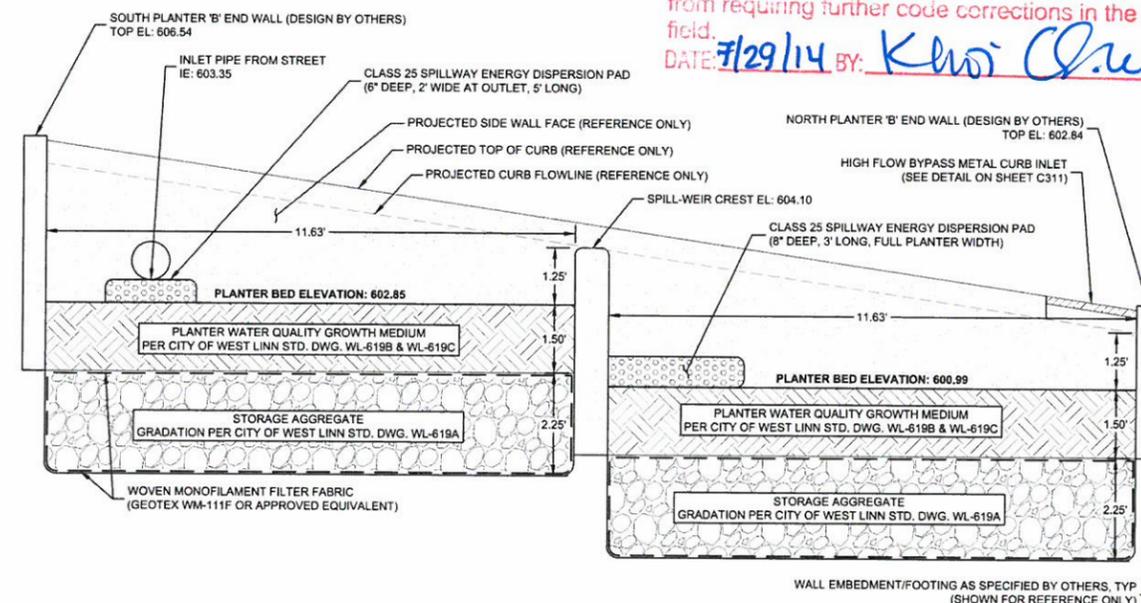
**NOTES:**

1. LANDSCAPE CONTRACTOR TO DECIDE UPON FINAL PLANTING LOCATIONS.
2. ALL IN-PLACE PLANTINGS SHALL CONFORM TO THE QUANTITY, SIZE, SPECIES AND SPACING REQUIREMENTS LISTED ON THIS SHEET
3. PLANTING QUANTITIES PER EXHIBIT 2-13 AND 2-14 OF THE CITY OF PORTLAND STORM WATER MANAGEMENT MANUAL



**PLANTER 'B': LAYOUT PLAN**

SCALE: 1" = 5'



**PLANTER 'B': SECTION A-A**

SCALE: N.T.S.

CONSTRUCTION PLANS 07/10/2014  
REVISION SUMMARY BY DATE

STORM DRAINAGE DETAILS III  
HARPER'S TERRACE  
SUBDIVISION  
LF-10, LLC  
WEST LINN, OR

J.T. SMITH  
companies

REGISTERED PROFESSIONAL  
ENGINEER  
12282PE  
OREGON  
NOV. 12, 2002  
JOHN O. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
07/28/2014

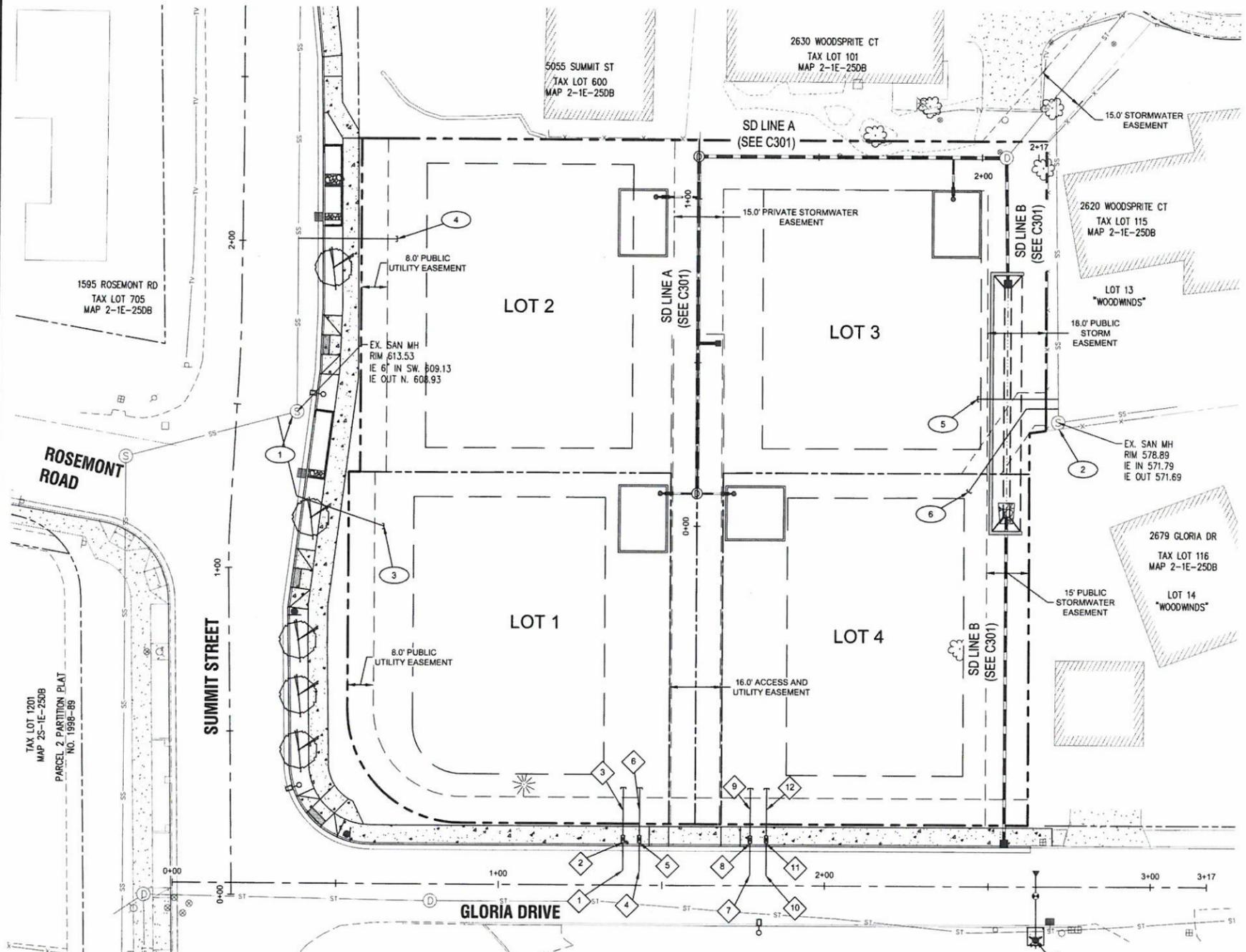
3J CONSULTING, INC  
CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING  
5075 SW GRIFFITH DRIVE, STE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9385

3J JOB ID # | 13123  
LAND USE # | SUB-13-05  
TAX LOT # | 251E260B 500  
DESIGNED BY | CLF/BCH  
CHECKED BY | JDH

SHEET TITLE  
STM DETAILS III

SHEET NUMBER

C312



**LEGEND**

---	BOUNDARY LINE	⊙	EXISTING STORM MANHOLE
- - -	RIGHT-OF-WAY	■	EXISTING CATCHBASIN
---	EXISTING CENTERLINE	---	PROPOSED RIGHT-OF-WAY
---	EXISTING EASEMENT LINE	---	PROPOSED LOT LINE
---	EXISTING LOT LINE	---	PROPOSED CENTERLINE
---	EXISTING CURB AND GUTTER	---	PROPOSED CURB AND GUTTER
SS	EXISTING SANITARY SEWER LINE	---	PROPOSED SIDEWALK
---	EXISTING WATER LINE	---	STORM DRAIN LINE AND MANHOLE
ST	EXISTING STORM LINE	⊙	STORM SEWER CURB INLET
---	EXISTING SIDEWALK	⊙	PROPOSED STREET LIGHT
⊙	EXISTING LIGHT POLE	⊙	PROPOSED RETAINING WALL
⊙	EXISTING TRAFFIC SIGN	⊙	PROPOSED SANITARY
⊙	EXISTING FIRE HYDRANT	⊙	PROPOSED WATER LINE
⊙	EXISTING WATER METER		
⊙	EXISTING SANITARY MANHOLE		

**SANITARY SEWER CONSTRUCTION NOTES**

- 1 STA: 1+48.81, 18.4' RT SUMMIT STREET CL  
CORE EXISTING SANITARY SEWER MANHOLE AND INSTALL PROPOSED 4" SANITARY LATERALS FOR LOTS 1 & 2. FOR ELEVATION DATA SEE SANITARY LATERAL TABLE THIS SHEET.
- 2 STA: 2+70.55, 142.0' LT GLORIA DRIVE CL  
CORE EXISTING SANITARY SEWER MANHOLE AND INSTALL PROPOSED 4" SANITARY LATERALS FOR LOTS 3 & 4. FOR ELEVATION DATA SEE SANITARY LATERAL TABLE THIS SHEET.
- 3 SANITARY SEWER STUB (LOT 1)  
STA: 1+27.58, 46.7' RT, SUMMIT STREET CL  
SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA.  
CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 ON SHEET C410.
- 4 SANITARY SEWER STUB (LOT 2)  
STA: 1+50.52, 48.82' RT, SUMMIT STREET CL  
SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA.  
CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 ON SHEET C410.
- 5 SANITARY SEWER STUB (LOT 3)  
STA: 2+43.7, 147.3' LT, GLORIA DRIVE CL  
SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA.  
CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 ON SHEET C410.
- 6 SANITARY SEWER STUB (LOT 4)  
STA: 2+43.84, 120.2' LT, GLORIA DRIVE CL  
SEE LATERAL TABLE THIS SHEET FOR ELEVATION DATA.  
CAP AND MARK END PER CITY OF WEST LINN STANDARD DETAIL WL-218 ON SHEET C410.

**SANITARY LATERAL TABLE**

SAN LATERAL	LATERAL SIZE	LENGTH	INVERT AT MAIN	INVERT AT END	DEPTH AT END	MAIN LINE STATION
LOT 1 SANITARY	4"	53.3 LF	609.43	611.18	4.0 FT	1+46.91, 12.6' RT, SUMMIT STREET CL
LOT 2 SANITARY	4"	30.5 LF	601.17	602.20	4.0 FT	2+00.95, 16.9' RT, SUMMIT STREET CL
LOT 3 SANITARY	4"	24.8 LF	571.76	572.26	11.9 FT	2+70.49, 149.2' LT, GLORIA DRIVE CL
LOT 4 SANITARY	4"	40.7 LF	571.81	572.62	12.1 FT	2+70.51, 146.2' LT, GLORIA DRIVE CL

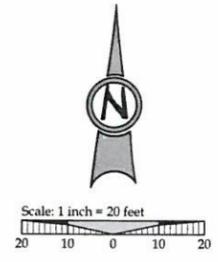
**WATER LINE CONSTRUCTION NOTES**

- 1 (STA: 1+37.97, 4.5' LT GLORIA DRIVE)  
INSTALL 1" WATER SERVICE TO EXISTING 12" DIP WATER LINE, INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- 2 (STA: 1+37.98, 13.0' LT GLORIA DRIVE)  
INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- 3 (STA: 1+37.98, 22.9' LT GLORIA DRIVE)  
CAP 1" STUB-OUT 3' BEYOND PUE AND MARK w/ 2x4.
- 4 (STA: 1+42.97, 4.41' LT GLORIA DRIVE)  
INSTALL 1" WATER SERVICE TO EXISTING 12" DIP WATER LINE, INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- 5 (STA: 1+42.98, 13.0' LT GLORIA DRIVE)  
INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- 6 (STA: 1+42.98, 22.8' LT GLORIA DRIVE)  
CAP 1" STUB-OUT 3' BEYOND PUE AND MARK w/ 2x4.
- 7 (STA: 1+76.97, 3.1' LT GLORIA DRIVE)  
INSTALL 1" WATER SERVICE TO EXISTING 12" DIP WATER LINE, INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- 8 (STA: 1+76.98, 13.0' LT GLORIA DRIVE)  
INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- 9 (STA: 1+76.98, 23.2' LT GLORIA DRIVE)  
CAP 1" STUB-OUT 3' BEYOND PUE AND MARK w/ 2x4.
- 10 (STA: 1+81.97, 3.1' LT GLORIA DRIVE)  
INSTALL 1" WATER SERVICE TO EXISTING 12" DIP WATER LINE, INCLUDING 1" CORP. STOP, 1" COPPER PIPE, METER BOX, AND ALL FITTINGS PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- 11 (STA: 1+81.98, 13.0' LT GLORIA DRIVE)  
INSTALL 1" METER BOX IN PLANTER STRIP PER CITY OF WEST LINN STANDARD DETAIL WL-402 (STANDARD 1 INCH WATER SERVICE) ON SHEET C410.
- 12 (STA: 1+81.98, 23.2' LT GLORIA DRIVE)  
CAP 1" STUB-OUT 3' BEYOND PUE AND MARK w/ 2x4.
- 13 PRIOR TO INSTALLATION OF FIRE HYDRANT, CONTRACTOR TO VERIFY ELEVATION WITH CITY OF WEST LINN PUBLIC WORKS DEPARTMENT. SEE CITY OF WEST LINN STANDARD DETAIL WL-401 (STANDARD FIRE HYDRANT ASSEMBLY) ON SHEET C511.

**GENERAL NOTES**

1. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE DEVELOPER.
2. ALL WATER PIPE TO BE DUCTILE IRON PIPE UNLESS OTHERWISE NOTED.
3. WATER SYSTEM TO BE INSTALLED AND TESTED PER CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS.
4. ALL SEWER PIPE TO BE PVC AND SHALL CONFORM TO ASTM D-3034 UNLESS OTHERWISE NOTED.
5. EXTEND PRIVATE UTILITIES WITH A JOINT TRENCH WITHIN 8' PUE SHOWN. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER TO OBTAIN DESIGN INFORMATION.
6. ALL UTILITY LATERAL LOCATIONS MUST BE STAMPED ON NEW CURB.

**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: 7/29/14 BY: *K. Choi*



CONSTRUCTION PLANS 07/10/2014  
 REVISION SUMMARY BY DATE

SANITARY SEWER AND WATER PLAN  
**HARPER'S TERRACE**  
**SUBDIVISION**  
 LF 10, LLC  
 WEST LINN, OR

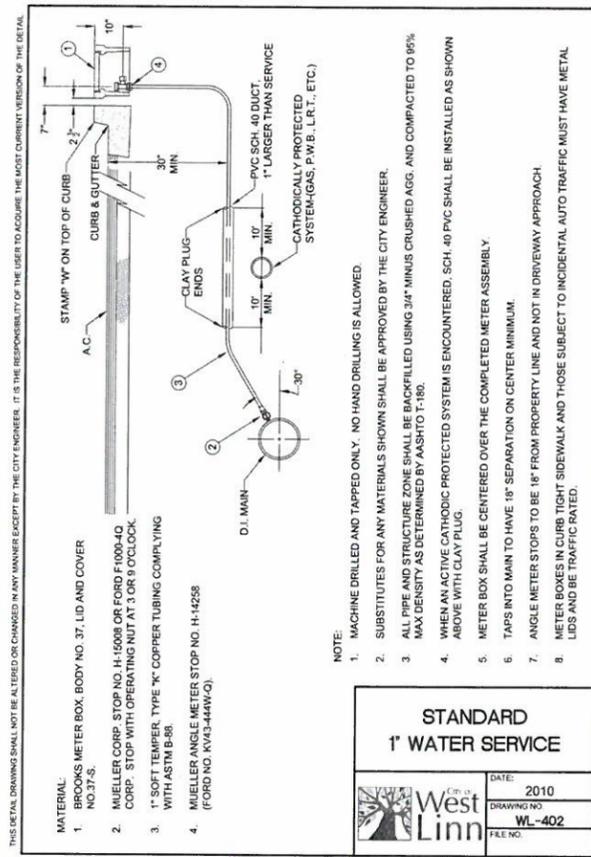
J.T. SMITH companies



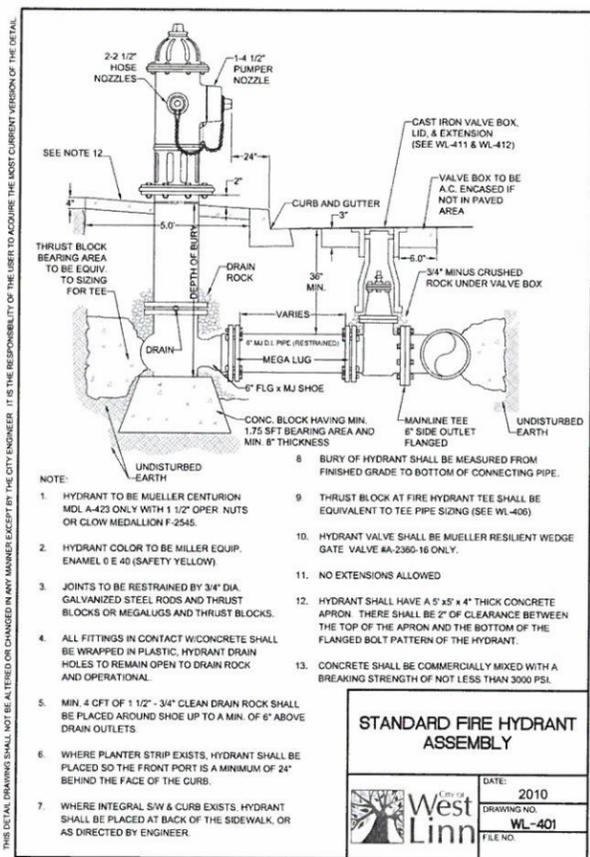
3J CONSULTING, INC  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5075 SW GRIFFITH DRIVE, STE 150, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-9585

3J JOB ID # | 13123  
 LAND USE # | SUB-1345  
 TAX LOT # | 251E250B 500  
 DESIGNED BY | CLF/BCH  
 CHECKED BY | JDH

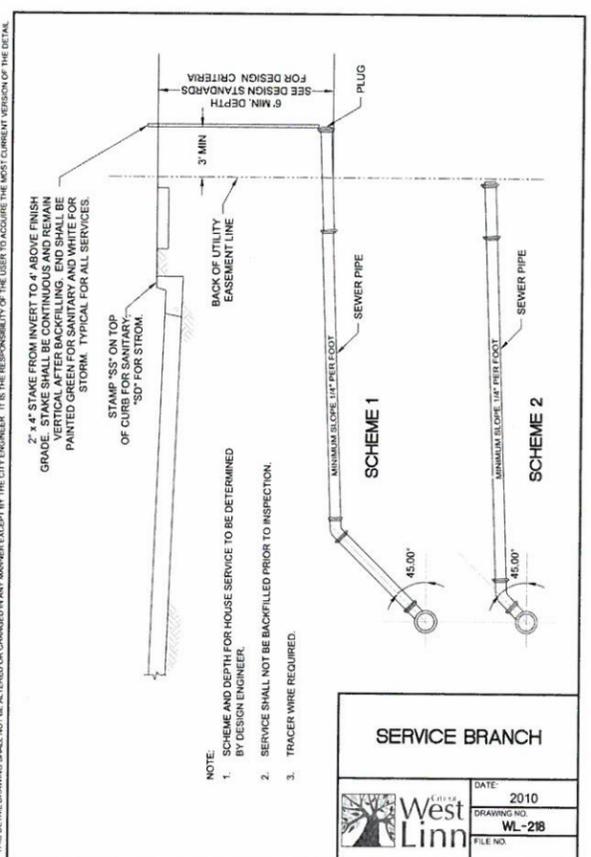
SHEET TITLE  
**SEWER & WATER**  
 SHEET NUMBER  
**C400**



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



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



DATE: 2010  
 DRAWING NO: WL-218  
 FILE NO:

**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: 7/29/14 BY: *[Signature]*

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.

To ensure proper operation and accessibility of all backflow prevention device assemblies, the following requirements shall apply to installation of these devices, unless specifically approved by the Water Division Engineer.

- No part of the backflow prevention device shall be submerged in water or installed in a location subject to flooding. If installed in a vault or chamber, adequate drainage shall be provided by either drainage to daylight or by sump pump with high water alarm system. Test cocks shall be plugged. The plugs shall not be of dissimilar metals.
- The device assembly must be protected from freezing and other severe weather conditions.
- Only devices approved for vertical installation may be installed vertically.
- The device assembly shall be readily accessible with adequate room for maintenance and testing. Devices 2 inches and smaller shall have at least a 12-inch clearance below and on both sides of the device assembly; and if located in a vault, the top of the device assembly shall be between 12 and 24 inches below grade.
- All device assemblies larger than 2 inches shall have a 12-inch clearance on the backside, a 24-inch clearance on the test-cock side, and 12 inches below the device assemblies. Adequate clearance (3 inches minimum) must be maintained above O.S. & Y. gate-valve stem. Headroom of 6' 0" is required in vaults. Access to the device and to any vault or chamber shall remain clear at all times. An OSHA approved chamber ladder that extends 3 ft. above surface of vault shall be installed.
- No indicating valves are allowed on Double Check Device assemblies.
- Only approved Double Check Detector Check Valve Assemblies are to be used for system containment on fire line services in the City of West Linn. The meter on bypass assembly shall read in cubic feet.
- If a Fire Line Flow, or Tamper Switch is installed, it must be connected to a monitored Fire Detection System approved by the Fire Marshal. No installation will modify the backflow device assembly or interfere with its operation or maintenance.
- All backflow devices shall be installed at the service connection to the premises per Oregon Administrative Rules 333-061-070, Cross Connection Control Requirements, unless specifically approved by the Water Division Engineer. (service connection - a location where the public water facilities end at or near the property line)
- All pipe between main and device shall be restrained. Use Mega-Lug retainer glands on m fittings and Field-Lok gaskets on bell joints. Uni-Flange adapters may be used in vaults.

**BACKFLOW PREVENTION DEVICES**

DATE: 2010  
 DRAWING NO: WL-414C  
 FILE NO:

**SANITARY AND WATER DETAILS**  
**HARPER'S TERRACE SUBDIVISION**  
 LF 10, LLC  
 WEST LINN, OR

CONSTRUCTION PLANS 07/10/2014  
 REVISION SUMMARY

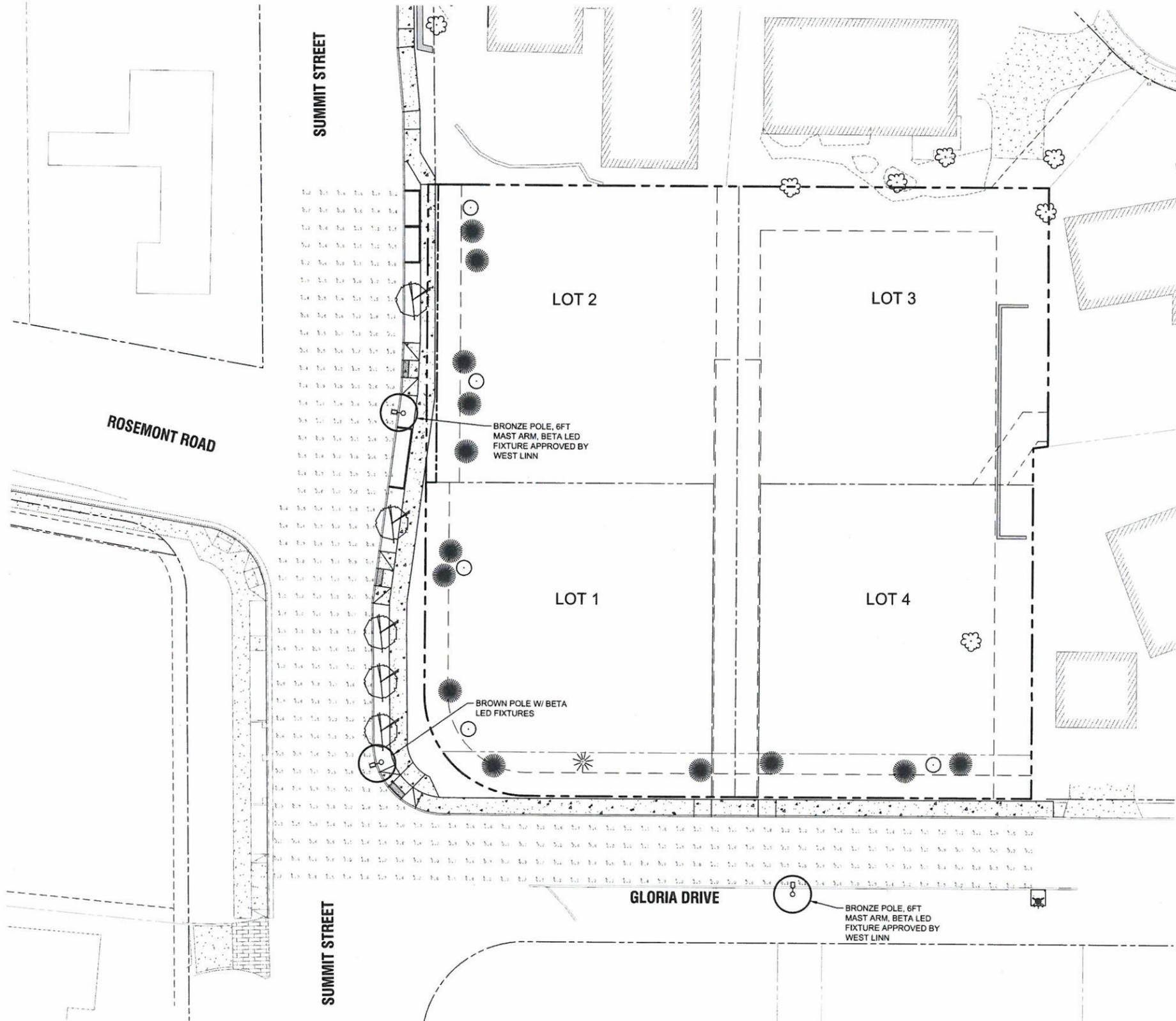
J.T. SMITH COMPANIES  
 REGISTERED PROFESSIONAL ENGINEER  
 OREGON  
 JOHN D. HOWARTH  
 EXPIRES: 06/30/15  
 Digital Signature 07/28/2014

3J CONSULTING, INC.  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5075 SW GRIFFITH DRIVE, STE 150, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-9585

3J JOB ID # | 13123  
 LAND USE # | SUB-13-05  
 TAX LOT # | 251E250B 500  
 DESIGNED BY | CLF/BCH  
 CHECKED BY | JDH

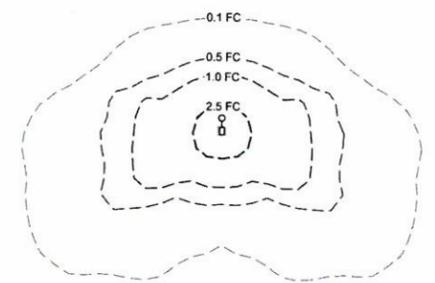
SHEET TITLE  
 SAN. & WAT. DET.

SHEET NUMBER  
**C410**



**LEGEND**

- SUBDIVISION BOUNDARY LINE
- EXISTING RIGHT OF WAY
- EXISTING PROPERTY LINE
- PROPOSED LOT LINE
- ILLUMINATION ANALYSIS POINT (FC)
- FOOT CANDLE UNIT



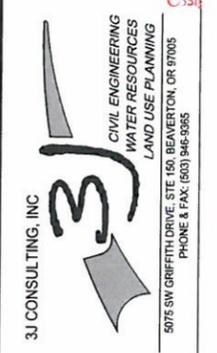
**STREET LIGHTING STATISTICS**

ROAD CLASSIFICATION (SUMMIT ST)	COLLECTOR
ROAD CLASSIFICATION (GLORIA DR)	LOCAL
EXISTING LIGHT(S) INCLUDED	0
MAX. ILLUMINATION	4.5FC
MIN. ILLUMINATION	0.1FC
AVERAGE ILLUMINATION	1.25FC
UNIFORMITY (AVG/MIN)	12.5

**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: 7/29/14 BY: Choi Q. U

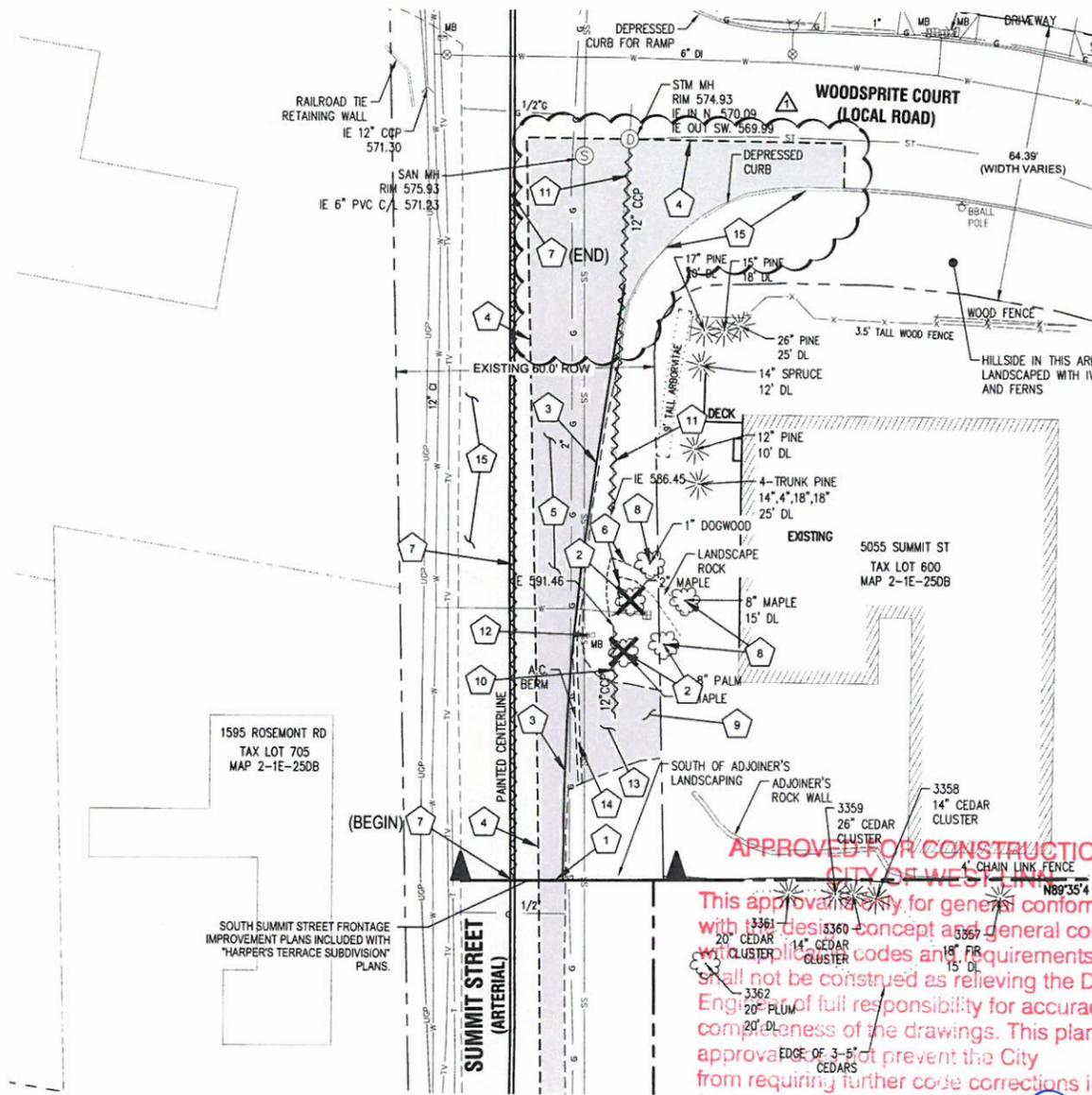
CONSTRUCTION PLANS	07/10/2014
REVISION SUMMARY	BY DATE

**STREET LIGHTING PLAN  
HARPER'S TERRACE  
SUBDIVISION**  
 LF 10, LLC  
 WEST LINN, OR



3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	251E2508 500
DESIGNED BY	CLF/BCH
CHECKED BY	JDH

SHEET TITLE  
**LIGHTING PLAN**  
 SHEET NUMBER  
**C500**



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: 7/29/14 BY: Khari S. Le

**EXISTING CONDITIONS NOTES**

- UTILITY INFORMATION SHOWN ON THIS MAP IS BASED UPON OBSERVED FEATURES, RECORD DATA AND TONE MARKS PROVIDED BY PUBLIC UTILITY LOCATION SERVICES. NO WARRANTIES ARE MADE REGARDING THE ACCURACY OR COMPLETENESS OF THE UTILITY INFORMATION SHOWN. ADDITIONAL UTILITIES MAY EXIST. INTERESTED PARTIES ARE HEREBY ADVISED THAT UTILITY LOCATIONS SHOULD BE VERIFIED PRIOR TO DESIGN OR CONSTRUCTION OF ANY CRITICAL ITEMS.
- BASIS OF ELEVATIONS: NAVD '88.
- VERTICAL DATUM: NAVD '88 UTILIZING GPS POSITIONING TIED TO THE ORGN WITH REAL TIME CORRECTORS REFERENCED TO NAD '83 (2011).
- TOPOGRAPHIC FEATURES SHOWN ON THIS MAP WERE LOCATED USING STANDARD PRECISION TOPOGRAPHIC MAPPING PROCEDURES. THIRD PARTY USERS OF DATA FROM THIS MAP PROVIDED VIA AUTOCAD DRAWING FILES OR DATA EXCHANGE FILES SHOULD NOT RELY ON ANY AUTOCAD GENERATED INFORMATION WHICH IS BEYOND THE LIMITS OF PRECISION OF THIS MAP. THIRD PARTIES USING DATA FROM THIS MAP IN AN AUTOCAD FORMAT SHOULD VERIFY ANY ELEMENTS REQUIRING PRECISE LOCATIONS PRIOR TO COMMENCEMENT OF ANY CRITICAL DESIGN OR CONSTRUCTION. CONTACT COMPASS ENGINEERING FOR FURTHER INFORMATION. FURTHERMORE, COMPASS ENGINEERING WILL NOT BE RESPONSIBLE NOR HELD LIABLE FOR ANY DESIGN OR CONSTRUCTION RELATED PROBLEMS THAT ARISE OUT OF THIRD PARTY USAGE OF THIS MAP (IN AUTOCAD OR OTHER FORMAT) FOR ANY PURPOSE OTHER THAN SPECIFICALLY STATED HEREIN. THIS STATEMENT IS AN OFFICIAL PART OF THIS MAP.

**GENERAL DEMOLITION NOTES**

- DEMOLITION NOTES ARE FOR CLARIFICATION ONLY AND ARE SHOWN FOR THE CONTRACTOR'S BENEFIT. THESE NOTES ARE NOT INTENDED TO BE COMPREHENSIVE. THE CONTRACTOR SHALL REMOVE OR RELOCATE ALL EXISTING ON-SITE IMPROVEMENTS NECESSARY TO ACCOMMODATE THE PROPOSED CONSTRUCTION.
- ALL EXISTING PROPERTY UTILITY SERVICES TO BE TERMINATED AND CAPPED AT THE RIGHT OF WAY PRIOR TO DEMOLISHING ANY EXISTING BUILDINGS.
- CONTRACTOR IS TO REMOVE ALL EXISTING SURFACE IMPROVEMENTS AND DEBRIS WITHIN THE LIMITS OF WORK UNLESS OTHERWISE NOTED. ALL DEBRIS FOUND ON SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE STATE CODES.
- CONTRACTOR TO PROTECT EXISTING FEATURES WHICH ARE TO REMAIN.
- CONTRACTOR SHALL ADJUST ALL EXISTING MANHOLE RIMS, DRAINAGE STRUCTURES, VALVE BOXES, VAULT LIDS AND UTILITY ACCESS STRUCTURES TO FINISH GRADE WITHIN AREAS AFFECTED BY PROPOSED CONSTRUCTION.
- CONSTRUCTION AND DEMOLITION ACTIVITIES SHALL BE PHASED IN SUCH A MANNER AS TO ENSURE THAT PUBLIC ACCESS ROADS ARE NOT BLOCKED AND REMAIN OPERATIONAL.

**LEGEND**

--- BOUNDARY LINE	ASPHALT TO BE REMOVED
--- RIGHT-OF-WAY	SIDEWALK/CONCRETE
--- CENTERLINE	GRAVEL
--- LOT LINE	EXISTING AC TO REMAIN
--- BUILDING	EXISTING TREES
SS SANITARY SEWER	LIGHT POLE
ST STORM SEWER	TRAFFIC SIGN
W WATER LINE	WATER VALVE
G GAS LINE	WATER METER
UCP UNDERGROUND POWER	SPRINKLER VALVE
TEL UNDERGROUND PHONE LINE	FIRE HYDRANT
OP OVERHEAD POWER	
--- CURB	
--- SAWCUT LINE	
X EXISTING TREE TO BE REMOVED	

**DEMOLITION KEY**

- BEGIN DEMOLITION NORTH OF TAX LOT 500. CONTINUE SAWCUT LINE NORTH FROM ONSITE SAWCUT LINE EXTENTS. SEE ONSITE IMPROVEMENT PLANS FOR MATCHLINE.
- CONTRACTOR TO RELOCATE EXISTING MAPLE TREES EAST AS NECESSARY TO INSTALL FRONTAGE IMPROVEMENTS. COORDINATE WITH PROPERTY OWNER.
- REMOVE EXISTING STREET FOG-LINE STRIPING WITHIN AREAS WHERE AC IS TO BE REMOVED.
- SAWCUT EXISTING ASPHALT/CONCRETE PAVEMENT AS SHOWN (4' MIN. WIDTH). SAWCUT FULL DEPTH TO LIMIT DAMAGE OF ADJACENT STREET SURFACE DURING REMOVAL.
- REMOVE EXISTING ASPHALT SURFACING AND BASE ROCK. DISPOSE OF RUBBLE AND REFUSE OFF SITE.
- REMOVE PORTION OF EXISTING LANDSCAPED ROCK GROUND COVER WITHIN FRONTAGE IMPROVEMENT AREA.
- REMOVE EXISTING STREET CENTER LINE STRIPING AS SHOWN.
- PROTECT EXISTING TREES TO REMAIN. SEE SHEET C601 FOR FRONTAGE IMPROVEMENTS EXTENTS.
- PROTECT EXISTING AC DRIVEWAY EAST OF PROPOSED SIDEWALK. SEE SHEET C601 FOR FRONTAGE IMPROVEMENT EXTENTS.
- REMOVE EXISTING 12" CCP STORM DRAINAGE PIPE.
- CONTRACTOR TO ABANDON 80 LF OF EXISTING 12" CCP STORM DRAINAGE PIPE TO EXISTING STORM MANHOLE WHERE PRACTICAL. REMOVE WHERE NECESSARY AND IF COVER WILL BE LESS THAN 30".
- RELOCATE EXISTING MAILBOX BEHIND NEW SIDEWALK. CONTRACTOR TO COORDINATE WITH PROPERTY OWNER.
- REMOVE EXISTING RESIDENTIAL AC DRIVEWAY WITHIN EXTENTS OF PROPOSED FRONTAGE IMPROVEMENTS. SEE SHEET C601.
- REMOVE EXISTING ASPHALT BERM. DISPOSE OF RUBBLE AND REFUSE OFF SITE.
- REMOVE EXISTING CONCRETE CURB.

CONSTRUCTION PLANS 07/10/2014  
 REVISION SUMMARY  
 CITY COMMENTS  
 BY DATE  
 BCH 07-23-14

SUMMIT EXTENSION DEMO & EX COND.  
 HARPER'S TERRACE  
 SUBDIVISION  
 LF 10, LLC  
 WEST LINN, OR

JOHN D. HOWORTH  
 EXPIRES: 06/30/15  
 Digital Signature  
 07/28/2014

3J CONSULTING, INC.  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5075 SW GRIFFITH DRIVE, STE. 450, BEAVERTON, OR 97005  
 PHONE & FAX: (503) 946-5885

3J JOB ID # | 13123  
 LAND USE # | SUB-13-05  
 TAX LOT # | 251E2508 500  
 DESIGNED BY | CLF/BCH  
 CHECKED BY | JDH

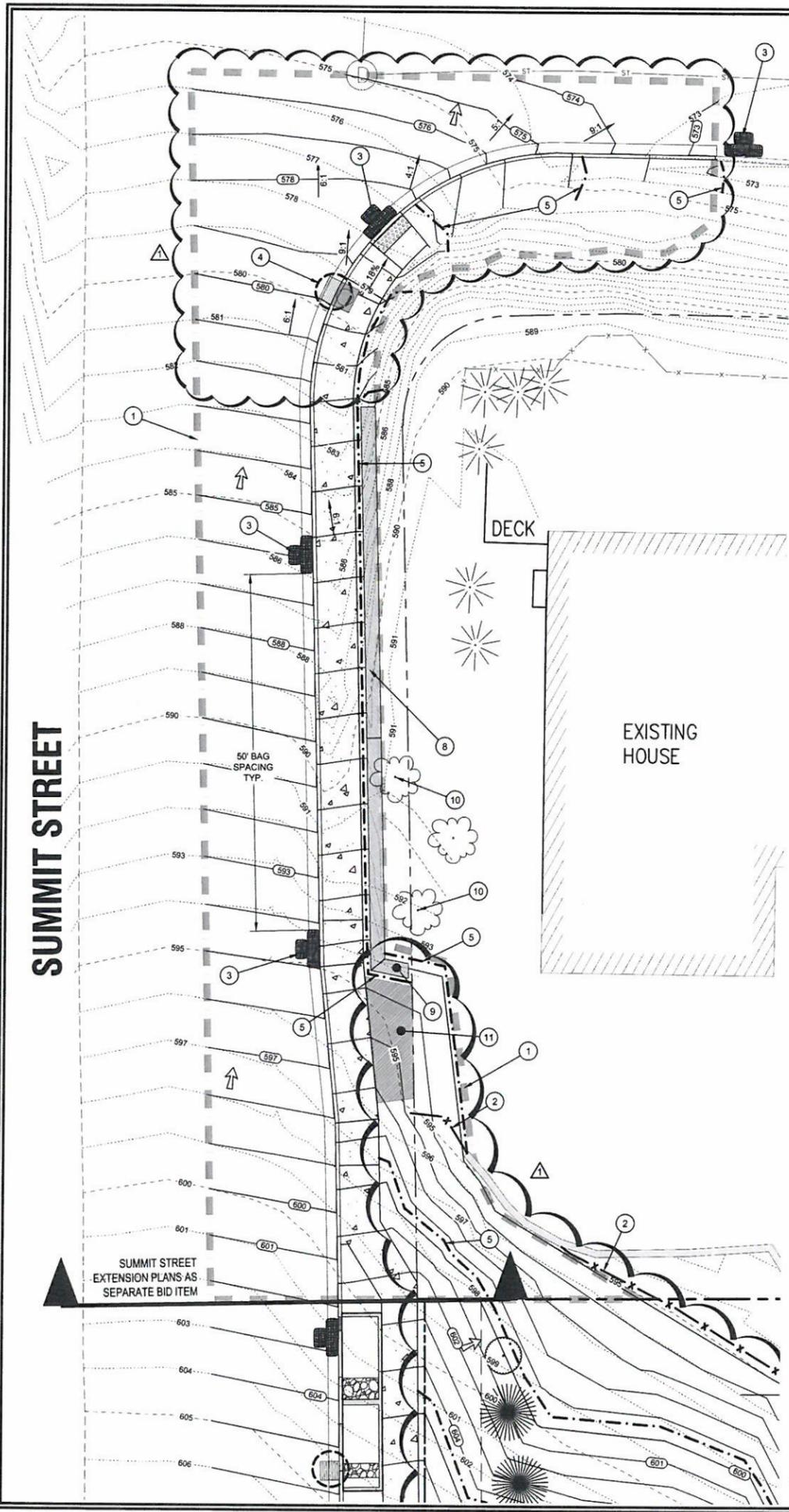
SHEET TITLE  
 SUMMIT EXT DEMO  
 SHEET NUMBER

C600



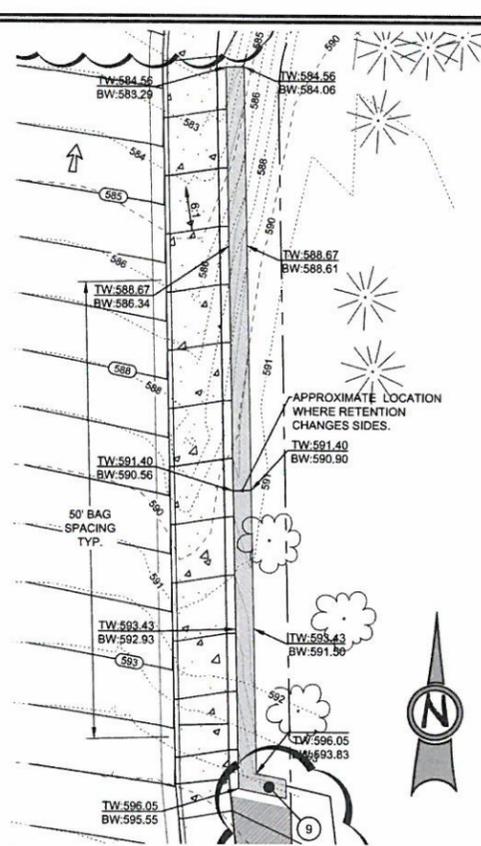


**SUMMIT STREET**

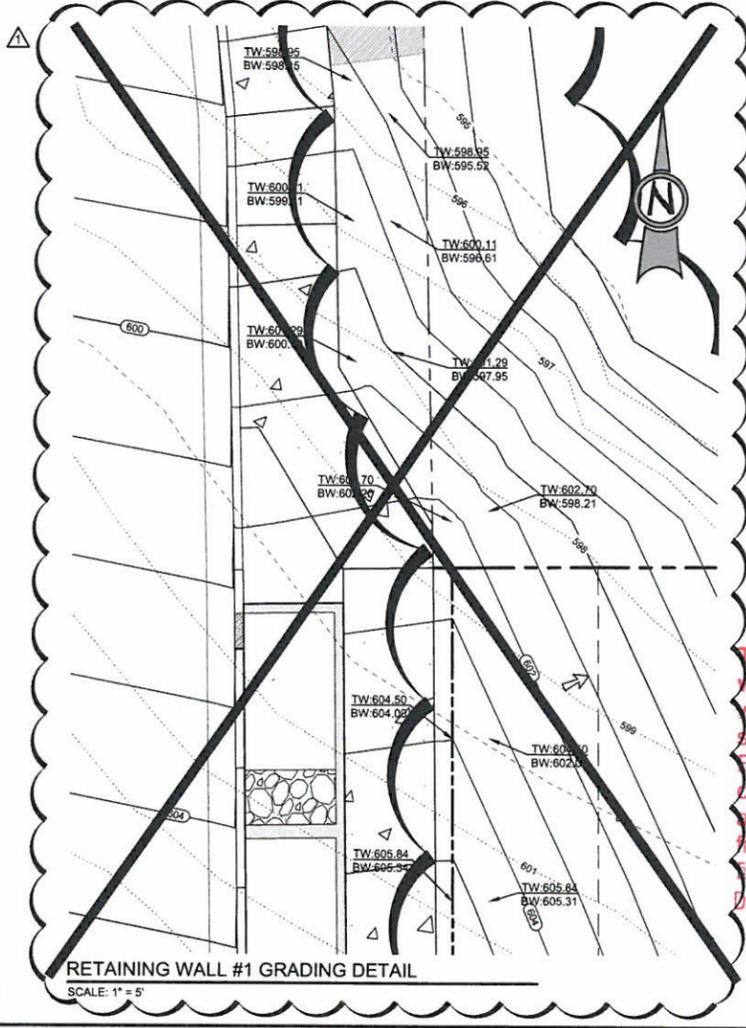


SUMMIT STREET EXTENSION PLANS AS SEPARATE BID ITEM

Scale: 1 inch = 10 feet



RETAINING WALL #2 GRADING DETAIL  
SCALE: 1" = 10'



RETAINING WALL #1 GRADING DETAIL  
SCALE: 1" = 5'

**LEGEND**

- BOUNDARY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CURB AND GUTTER
- EXISTING TREES TO REMAIN
- EXISTING 1FT CONTOUR
- EXISTING 5FT INDEX CONTOUR
- PROPOSED LOT LINE
- PROPOSED CURB AND GUTTER
- PROPOSED CONCRETE
- PROPOSED RETAINING WALL
- PROPOSED 1FT CONTOUR
- PROPOSED 5FT INDEX CONTOUR
- EROSION CONTROL: SILT FENCING (BLACK)
- EROSION CONTROL: FESCUE STRAW WATTLE
- EROSION CONTROL: BIO BAG CHECK DAM
- LIMITS OF GRADING/DISTURBANCE
- TREE PROTECTION FENCING
- SURFACE RUN-OFF FLOW ARROW
- EROSION CONTROL: INLET PROTECTION

**SITE GRADING INFORMATION**

NEAT LINE CUT	7 CY
NEAT LINE FILL	81 CY
MAXIMUM CUT DEPTH	1.75 FT
MAXIMUM FILL DEPTH	4.0 FT
MAXIMUM PROPOSED SLOPE	1:1 (H:V)
TOTAL AREA OF DISTURBANCE	0.10 ACRES

- GRADING KEY NOTES**
- LIMITS OF PUBLIC STREET EXTENSION AND RIGHT OF WAY IMPROVEMENTS. COORDINATE WITH ADJACENT PROPERTY OWNER FOR ANY GRADE OR ALIGNMENT MODIFICATIONS REQUIRED.
  - INSTALL SILT FENCE AT LIMITS OF GRADING PER DETAIL ON SHEET C611, OR AS NOTED OTHERWISE ON THIS SHEET.
  - INSTALL BIO BAG CHECK DAM FOR SEDIMENT CONTROL WITHIN RIGHT OF WAY AT 50' O.C. PER DETAIL ON SHEET C611.
  - INSTALL INLET PROTECTION PER DETAILS ON SHEET C611.
  - INSTALL STRAW WATTLE PER DETAIL ON SHEET C611.
  - CONSTRUCT 50 LF, 8-INCH THICK, CAST-IN-PLACE CONCRETE RETAINING WALL WITH 4" DECORATIVE FENCING (ALGOS II MAJESTIC, DESIGN 0' SPAN). SEE "RETAINING WALL #1 GRADING DETAIL" THIS SHEET.
  - END CONCRETE RETAINING WALL. TRANSITION END WING TO DAYLIGHT WITH EXISTING GRADES OUTSIDE EXISTING DRIVEWAY.
  - CONSTRUCT 82 LF MODULAR BLOCK (MANOR STONE) WALL (4" MAX. HEIGHT). SEE "RETAINING WALL #2 GRADING DETAIL" THIS SHEET.
  - END CONCRETE RETAINING WALL. TRANSITION END WING TO DAYLIGHT WITH EXISTING GRADES OUTSIDE EXISTING DRIVEWAY.
  - CONTRACTOR TO PROTECT EXISTING TREES ADJACENT TO PROPOSED RETAINING WALL.
  - CONTRACTOR TO TRANSITION PAVEMENT RESTORATION AREA TO MATCH EXISTING GRADE WITHIN PRIVATE DRIVEWAY. CONTRACTOR TO COORDINATE WITH PROPERTY OWNER.

**GRADING GENERAL NOTES:**

- ALL GRADING ACTIVITIES SHALL CONFORM TO THE UNIFORM BUILDING CODE AND THE OREGON SPECIALTY CODE AMENDMENTS, INCLUDING APPENDIX J.
- ALL PROPOSED WATTLES, CHECK DAMS AND SILT FENCING SHALL BE MOVED WHILE CONSTRUCTION PROGRESSES IN ORDER TO MAINTAIN PROPER EROSION CONTROL PREVENTION.
- ALL PROPOSED WATTLES, CHECK DAMS AND SILT FENCING SHALL BE INSTALLED AT GRADING EXTENTS AND OR AT 50' INTERVALS UNLESS NOTED OTHERWISE ON PLANS.
- CONTRACTOR TO RECONNECT EXISTING DOWNSPOUTS ON ADJACENT PROPERTY IF ENCOUNTERED DURING CONSTRUCTION.

**APPROVED FOR CONSTRUCTION BY**

This approval is only for general conformance with the design. The Engineer 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: 7/29/14 BY: *Choi Ok*

**CONSTRUCTION PLANS** 07/10/2014

REVISION SUMMARY BY DATE

CITY COMMENTS BCH 07-23-14

**SUMMIT ST. GRADING AND EROSION PLAN**  
**HARPER'S TERRACE**  
**SUBDIVISION**  
LF 10, LLC  
WEST LINN, OR

**J.T. SMITH** companies

REGISTERED PROFESSIONAL ENGINEER  
12282PE  
OREGON  
10/12/2007  
JOHN D. HOWARTH  
EXPIRES: 06/30/15  
Digital Signature  
07/28/2014

**3J CONSULTING, INC**

CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING

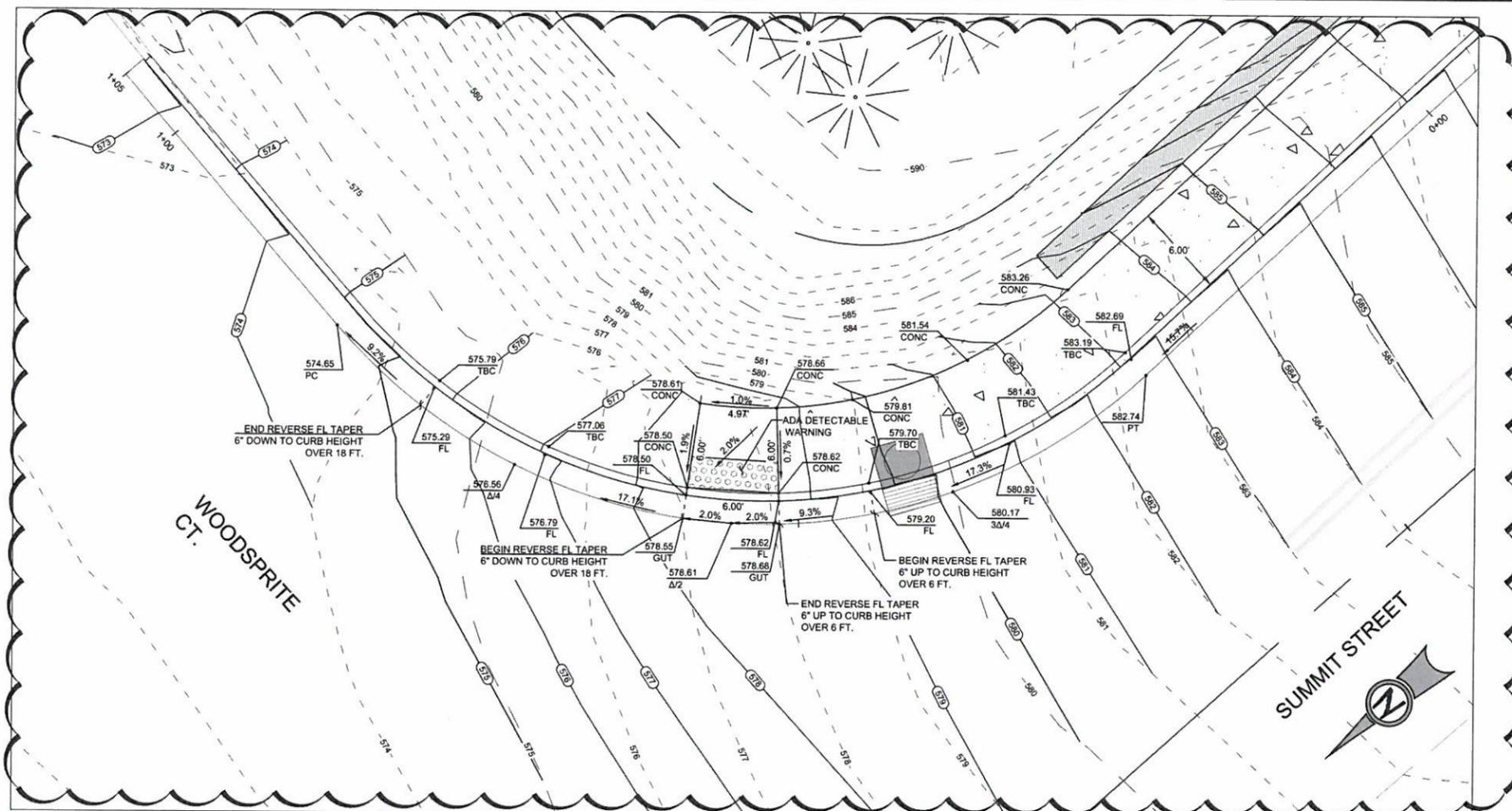
5075 SW GRIFFITH DRIVE, STE 150, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9385

3J JOB ID # | 13123  
LAND USE # | SUB-13-05  
TAX LOT # | 251E2508 500  
DESIGNED BY | CLF/BCH  
CHECKED BY | JDH

SHEET TITLE  
**SUMMIT GRADING**

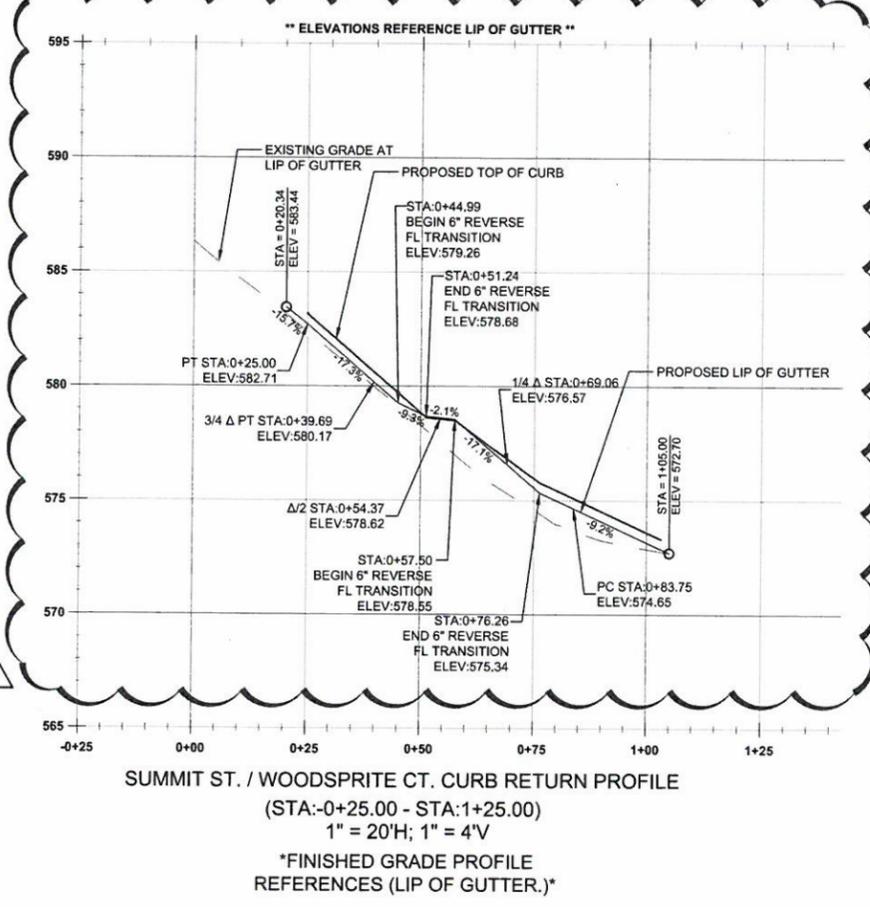
SHEET NUMBER  
**C602**





WOODSPRITE CT. AND SUMMIT ST ADA RAMP DETAIL

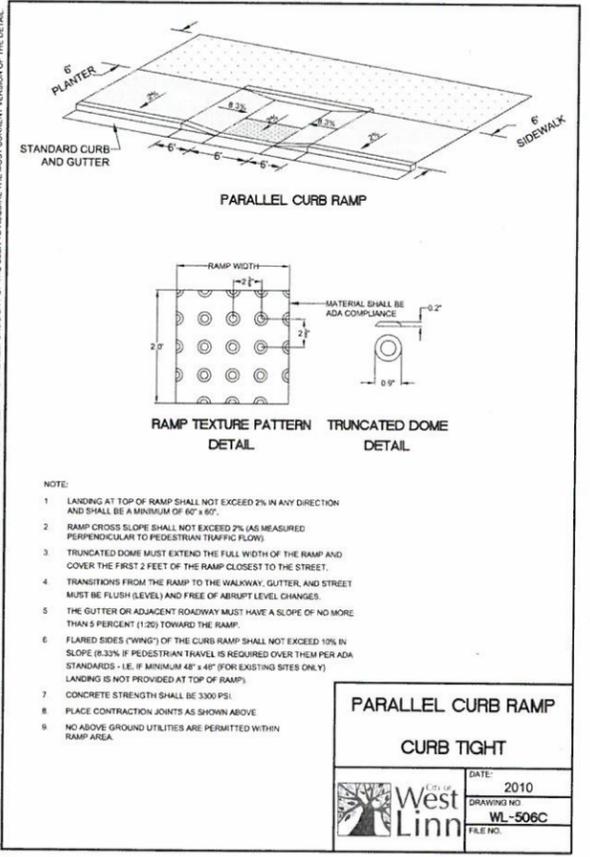
SCALE: 1" = 5'



SUMMIT ST. / WOODSPRITE CT. CURB RETURN PROFILE

(STA: -0+25.00 - STA: 1+25.00)  
1" = 20'H; 1" = 4'V  
\*FINISHED GRADE PROFILE  
REFERENCES (LIP OF GUTTER.)\*

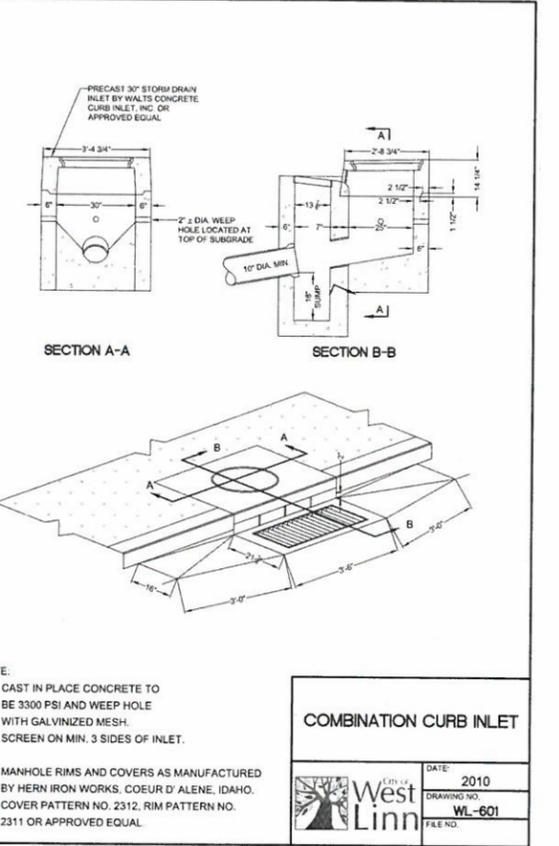
**APPROVED FOR CONSTRUCTION BY  
CITY OF WEST LINN**  
This approval is only for general conformance with the design concept and general compliance with applicable codes and requirements and shall not be construed as relieving the Design Engineer of full responsibility for accuracy and completeness of the drawings. This plan review approval does not prevent the City from requiring further code corrections in the field.  
DATE: 7/29/14 BY: *Chris Q-L*



- NOTE:
1. LANDING AT TOP OF RAMP SHALL NOT EXCEED 2% IN ANY DIRECTION AND SHALL BE A MINIMUM OF 6' x 6'.
  2. RAMP CROSS SLOPE SHALL NOT EXCEED 2% (AS MEASURED PERPENDICULAR TO PEDESTRIAN TRAFFIC FLOW).
  3. TRUNCATED DOME MUST EXTEND THE FULL WIDTH OF THE RAMP AND COVER THE FIRST 2 FEET OF THE RAMP CLOSEST TO THE STREET.
  4. TRANSITIONS FROM THE RAMP TO THE WALKWAY, GUTTER, AND STREET MUST BE FLUSH (LEVEL) AND FREE OF ABRUPT LEVEL CHANGES.
  5. THE GUTTER OR ADJACENT ROADWAY MUST HAVE A SLOPE OF NO MORE THAN 5 PERCENT (1:20) TOWARD THE RAMP.
  6. FLARED SIDES ("WING") OF THE CURB RAMP SHALL NOT EXCEED 10% IN SLOPE (0.33% IF PEDESTRIAN TRAVEL IS REQUIRED OVER THEM PER ADA STANDARDS - I.E. IF MINIMUM 48" x 48" (FOR EXISTING SITES ONLY) LANDING IS NOT PROVIDED AT TOP OF RAMP).
  7. CONCRETE STRENGTH SHALL BE 3000 PSI.
  8. PLACE CONTRACTION JOINTS AS SHOWN ABOVE.
  9. NO ABOVE GROUND UTILITIES ARE PERMITTED WITHIN RAMP AREA.

**PARALLEL CURB RAMP  
CURB TIGHT**

DATE:	2010
DRAWING NO:	WL-506C
FILE NO:	



- NOTE:
1. CAST IN PLACE CONCRETE TO BE 3000 PSI AND WEEP HOLE WITH GALVANIZED MESH. SCREEN ON MIN. 3 SIDES OF INLET.
  2. MANHOLE RIMS AND COVERS AS MANUFACTURED BY HERN IRON WORKS, COEUR D'ALENE, IDAHO. COVER PATTERN NO. 2312, RIM PATTERN NO. 2311 OR APPROVED EQUAL.

**COMBINATION CURB INLET**

DATE:	2010
DRAWING NO:	WL-601
FILE NO:	

CONSTRUCTION PLANS	07/10/2014
REVISION SUMMARY	BY DATE
CITY COMMENTS	BCH 07-23-14

SUMMIT EXT. CONSTRUCTION DETAILS  
**HARPER'S TERRACE  
SUBDIVISION**  
LF 10, LLC  
WEST LINN, OR

**J.T. SMITH  
COMPANIES**

REGISTERED PROFESSIONAL  
ENGINEER  
OREGON  
NOV. 13, 2007  
JOHN D. HOWARTH  
EXPIRES 06/30/16  
Digital Signature  
07/28/2014

**3J CONSULTING, INC.**

CIVIL ENGINEERING  
WATER RESOURCES  
LAND USE PLANNING

6075 SW GRIFFITH DRIVE, STE 100, BEAVERTON, OR 97005  
PHONE & FAX: (503) 946-9585

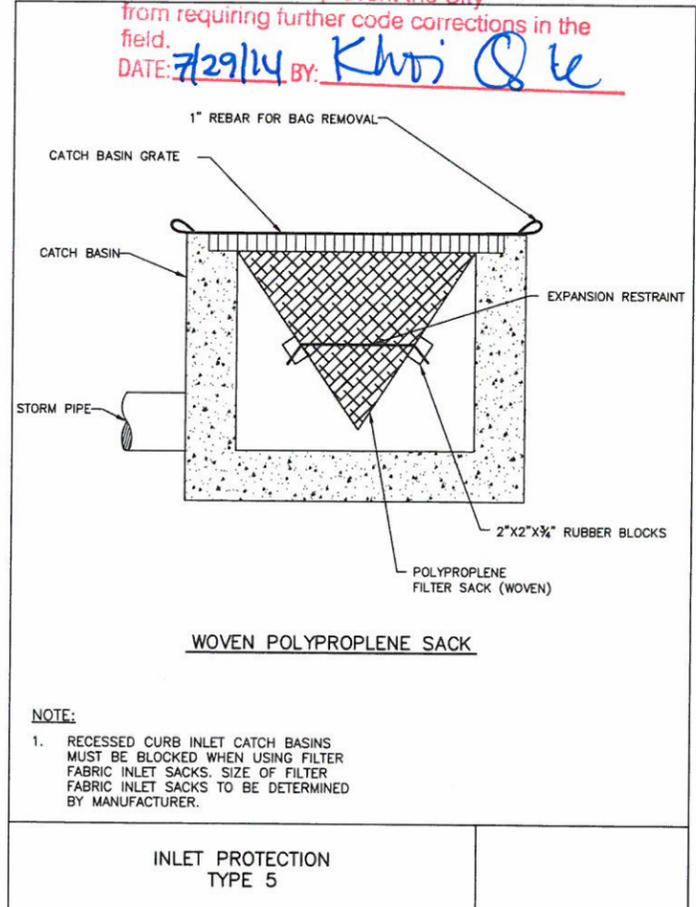
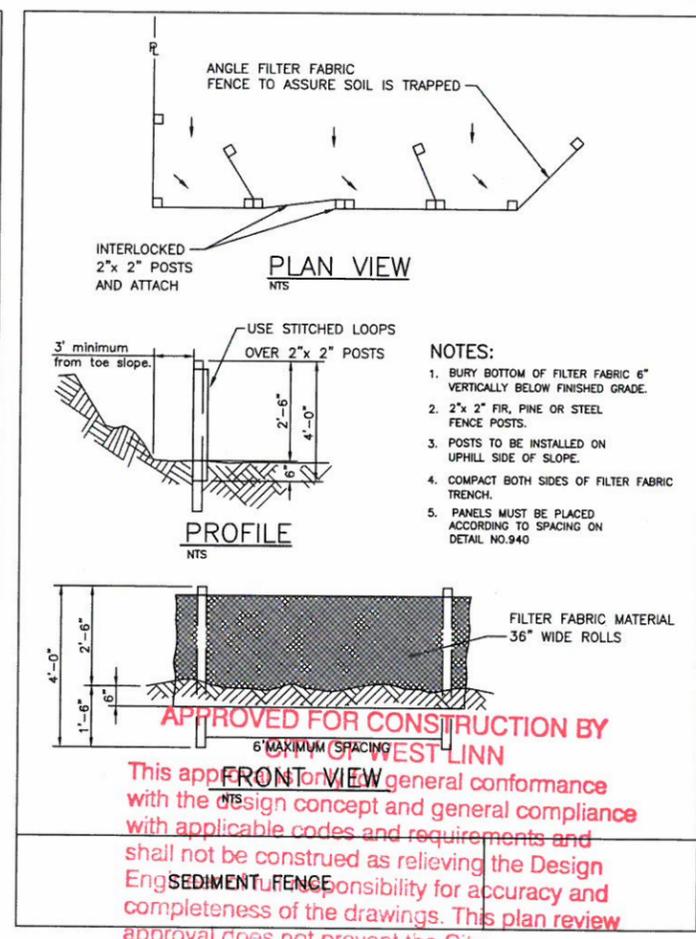
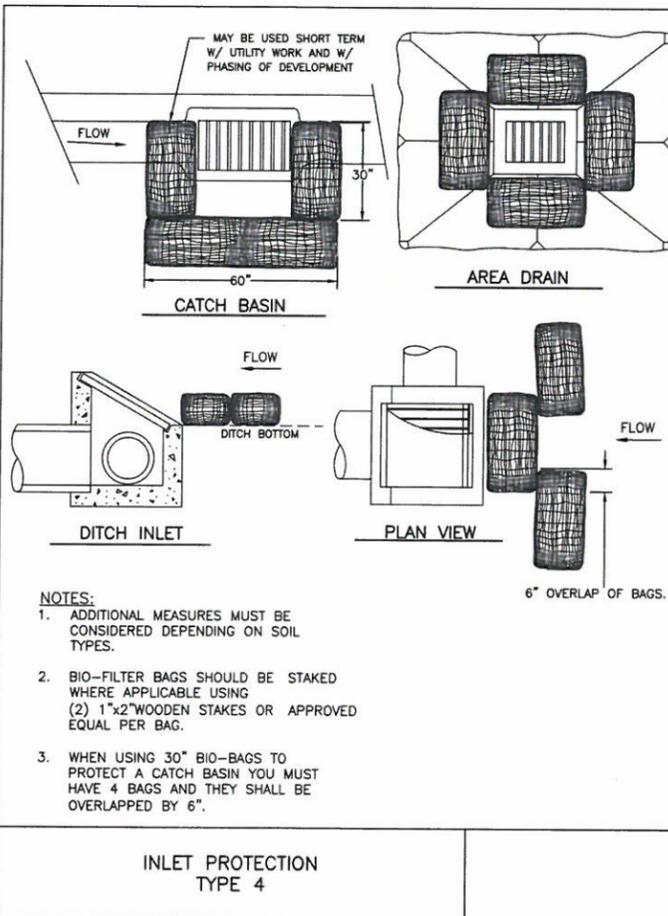
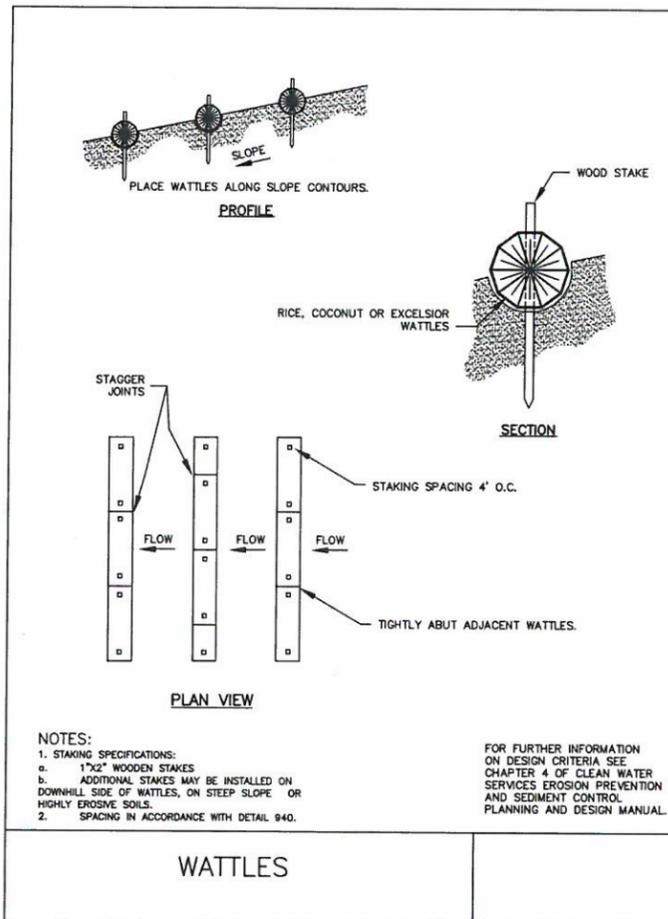
3J JOB ID #	13123
LAND USE #	SUB-13-05
TAX LOT #	251E2508 500
DESIGNED BY	CLF/BCH
CHECKED BY	JDH
SHEET TITLE	CONST. DETAILS
SHEET NUMBER	C610

**EROSION AND SEDIMENT CONTROL PLAN NOTES**

- APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES.
- CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND ON SLOPES FROM OCTOBER 1 THROUGH MAY 31 EACH YEAR.
- DURING WET WEATHER PERIODS TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORKDAY IF RAINFALL IS FORECAST IN THE NEXT 24 HOURS.
- ALL EROSION AND SEDIMENT CONTROLS NOT IN THE DIRECT PATH OF WORK MUST BE INSTALLED PRIOR TO ANY LAND DISTURBANCE.
- PRESERVE EXISTING VEGETATION AND RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION.
- ALL TEMPORARY SEDIMENT CONTROLS MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED.
- SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION.
- ALL ACTIVE CATCH BASINS SEDIMENT CONTROLS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- WATER-TIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON-SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMPs. SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE.
- TEMPORARY STABILIZATION OR COVERING OF SOIL STOCKPILES MUST OCCUR AT THE END OF EACH WORKDAY OR OTHER BMPs MUST BE IMPLEMENTED TO PREVENT TURBID DISCHARGES TO SURFACE WATERS.
- DEVELOP AND MAINTAIN ON-SITE A WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURE.
- ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL.
- THE PERMITEE MUST PROPERLY PREVENT AND MANAGE HAZARDOUS WASTES, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION AND MEET ALL STATE AND FEDERAL REGULATIONS AND APPROVALS.
- SIGNIFICANT AMOUNTS OF SEDIMENT, WHICH LEAVES THE SITE, MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DIVISION OF STATE LANDS REQUIRED TIME FRAME.
- SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATERBODIES. DRY SWEEPING MUST BE USED TO CLEAN UP RELEASED SEDIMENTS.
- THE APPLICATION RATE OF FERTILIZERS USED TO RE-ESTABLISH VEGETATION MUST FOLLOW THE MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE FERTILIZERS SHOULD BE USED AND CARE SHOULD BE TAKEN IN THE APPLICATION OF FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE.
- SEDIMENT MUST BE REMOVED FROM BEHIND A SEDIMENT FENCE WHEN IT HAS REACHED A HEIGHT OF 1/3 THE HEIGHT OF THE FENCE ABOVEGROUND AND BEFORE FENCE REMOVAL.
- SEDIMENT MUST BE REMOVED FROM BEHIND BIO BAGS AND OTHER BARRIERS WHEN IT HAS REACHED A HEIGHT OF TWO (2) INCHES AND BEFORE BMP REMOVAL.
- CLEANING OF TRAPPED CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT, AND AT THE COMPLETION OF A PROJECT.
- REMOVAL OF TRAPPED SEDIMENT IN A SEDIMENT BASIN OR SEDIMENT TRAP OR CATCH BASINS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY (50) PERCENT AND AT COMPLETION OF PROJECT.
- DEQ MUST APPROVE OF ANY TREATMENT SYSTEM AND OPERATIONAL PLAN THAT MAY BE NECESSARY TO TREAT CONTAMINATED CONSTRUCTION DEWATERING OR SEDIMENT AND TURBIDITY IN STORMWATER RUNOFF.
- SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR THIRTY DAYS OR MORE, THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD.
- SHOULD CONSTRUCTION ACTIVITIES CEASE FOR FIFTEEN (15) DAYS OR MORE ON ANY SIGNIFICANT PORTION OF A CONSTRUCTION SITE TEMPORARY STABILIZATION IS REQUIRED FOR THAT PORTION OF THE SITE WITH STRAW, COMPOST, OR OTHER TACKIFIED COVERING THAT PREVENT SOIL OR WIND EROSION UNTIL WORK RESUMES ON THAT PORTION OF THE SITE.

**LOCAL AGENCY SPECIFIC EROSION CONTROL NOTES**

- OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE LOCAL, STATE, AND FEDERAL REGULATIONS.
- PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BOUNDARIES OF THE CLEARING LIMITS, VEGETATED BUFFERS, AND ANY SENSITIVE AREAS SHOWN ON THIS PLAN SHALL BE CLEARLY DELINEATED IN THE FIELD. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE IS PERMITTED BEYOND THE CLEARING LIMITS. THE OWNER/PERMITEE MUST MAINTAIN THE DELINEATION FOR THE DURATION OF THE PROJECT. NOTE: VEGETATED CORRIDORS TO BE DELINEATED WITH ORANGE CONSTRUCTION FENCE OR APPROVED EQUAL.
- PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BMPs THAT MUST BE INSTALLED ARE A GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMPs MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT.
- IF VEGETATED SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1; THE TYPE AND PERCENTAGES OF SEED IN THE MIX MUST BE IDENTIFIED ON THE PLANS.
- THE ESC PLAN MUST BE KEPT ON SITE. ALL MEASURES SHOWN ON THE PLAN MUST BE INSTALLED PROPERLY TO ENSURE THAT SEDIMENT OR SEDIMENT LADEN WATER DOES NOT ENTER A SURFACE WATER SYSTEM, ROADWAY, OR OTHER PROPERTIES.
- THE ESC MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION CONTROL REGULATIONS.
- ALL EXPOSED SOILS MUST BE COVERED DURING THE WET WEATHER PERIOD.



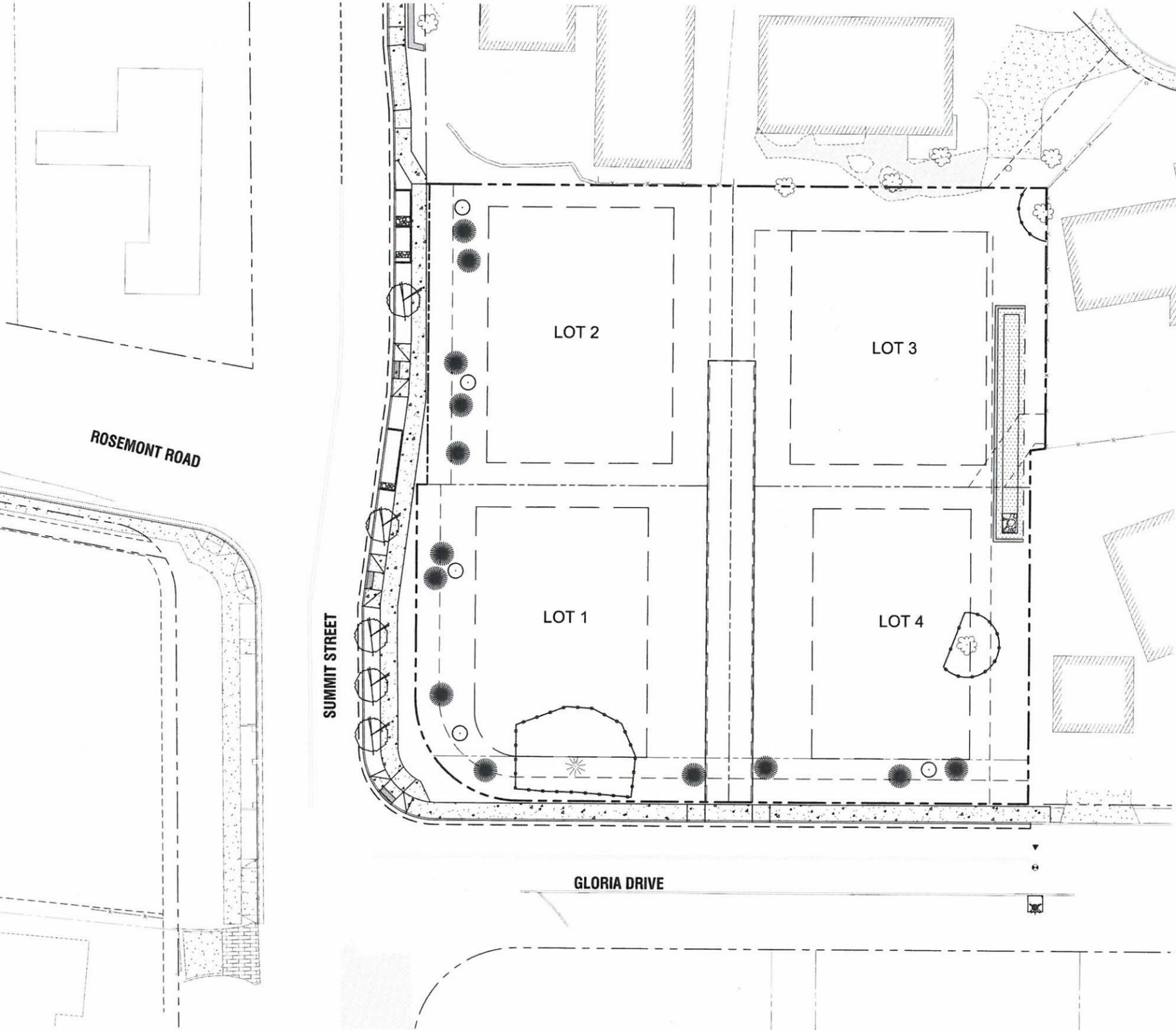
CONSTRUCTION PLANS	07/10/2014
REVISION SUMMARY	BY: DATE:

SUMMIT ST EXTENSION ESCP DETAILS  
**HARPER'S TERRACE**  
 SUBDIVISION  
 LF 10, LLC  
 WEST LINN, OR

J.T. SMITH  
 COMPANIES  
 REGISTERED PROFESSIONAL ENGINEER  
 2282PF  
 OREGON  
 NOV 12 2002  
 JOHN D. HOWARTH  
 EXPIRES 06/30/15  
 Digital Signature  
 07/28/2014

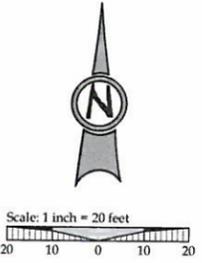
3J CONSULTING, INC.  
 CIVIL ENGINEERING  
 WATER RESOURCES  
 LAND USE PLANNING  
 5805 SW GRIFFITH DRIVE SUITE 400 BIRKENHEAD, OREGON 97006  
 PHONE & FAX: (503) 946-3985

3J JOB ID # | 13123  
 LAND USE # | SUB-13-05  
 TAX LOT # | 2S1E250B 500  
 DESIGNED BY | CLF/BCH  
 CHECKED BY | JDH  
 SHEET TITLE  
 ESCP DETAILS  
 SHEET NUMBER  
**C611**



**LEGEND**

- SUBDIVISION BOUNDARY LINE
- EXISTING RIGHT OF WAY
- EXISTING PROPERTY LINE
- PROPOSED RIGHT OF WAY
- PROPOSED LOT LINE
- PROPOSED EASEMENT
- PROPOSED SETBACK LINE
- TREE PROTECTION FENCING
- PROPOSED PERVIOUS PAVING
- PROPOSED CONCRETE



**PLANT MATERIALS SCHEDULE**

COMMON NAME	BOTANICAL NAME	SIZE	SPACING	QUANTITY
SCARLET OAK	QUERCUS COCCINIA	2" CAL.	22' MIN	5
VINE MAPLE	ACER CIRCINATUM	6' / 2" CAL.	10' MIN	5
WESTERN RED CEDAR	THUJA PLICATA	2" CAL.	12' MIN	13

TOTAL PROPOSED TREE COUNT: 23  
 TOTAL MITIGATION REQUIREMENT: 36" (CALIPER MEASUREMENT)  
 \*\*\*STREET TREES NOT INCLUDED IN MITIGATION COUNT\*\*\*

**GENERAL LANDSCAPING NOTES**

- LANDSCAPE PLANTING SHALL CONFIRM TO THE STANDARDS ESTABLISHED UNDER THE WEST LINN STANDARDS FOR LANDSCAPE PLANTING
- ALL PLANT BEDS SHALL HAVE A 3" DEPTH OF BARK MULCH
- ALL PLANT MATERIAL DELIVERED TO THIS SITE SHALL MEET THE AMERICAN NURSERYMAN'S ASSOCIATION STANDARDS
- CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ALL PLANT MATERIAL SUBSTITUTIONS FROM THE CIVIL ENGINEER PRIOR TO INSTALLATION. PLANT SUBSTITUTIONS WITHOUT PRIOR WRITTEN APPROVAL THAT DO NOT COMPLY WITH THE DRAWINGS AND SPECIFICATIONS MAY BE REJECTED BY THE LANDSCAPE ARCHITECT AT NO COST TO THE OWNER. THESE ITEMS MAY BE REQUIRED TO BE REPLACED WITH PLANT MATERIALS THAT ARE IN COMPLIANCE WITH THESE DRAWINGS.

**WATER QUALITY SWALE PLANTING NOTES**

INSTALL WATER QUALITY PLANTINGS PER CITY OF PORTLAND STANDARD VEGETATED SWALE DETAIL SW-120 AND SW-303.

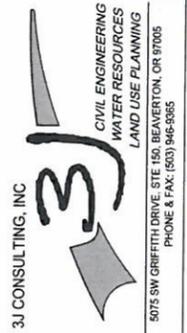
**APPROVED FOR CONSTRUCTION BY CITY OF WEST LINN**

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: 7/29/14 BY: *Chris P. G.*

CONSTRUCTION PLANS 07/10/2014  
 REVISION SUMMARY BY DATE

**MITIGATION PLANTING PLAN  
 HARPER'S TERRACE  
 SUBDIVISION**  
 LF 10, LLC  
 WEST LINN, OR



3J JOB ID # | 13123  
 LAND USE # | SUB-13-05  
 TAX LOT # | 2S1E250B 500  
 DESIGNED BY | CLF/BCH  
 CHECKED BY | JGH

SHEET TITLE  
**MITIGATION PLAN**

SHEET NUMBER  
**L100**