FERNDELL ESTATES
WEST LINN, OREGON
PLANNING FILE: SUB-18-01/WRG-18-02

OWNER
William R. Varitz
17828 Robin View Court
West Linn, Oregon 97068

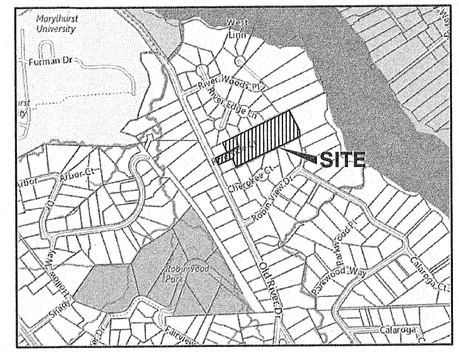
DEVELOPER
Greg Sams
Hymark Custom Homes
18811 Trillium Drive
West Linn, Oregon 97068

PLANNING
Rick Givens
18680 Sunblaze Drive
Oregon City, Oregon 97045

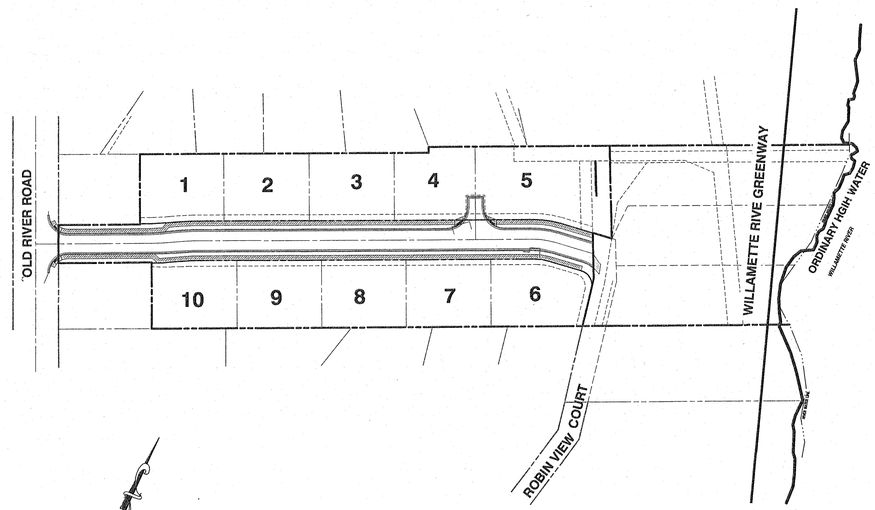
GEOTECHNICAL
Mia Mahedy-Sexton, PE GE
Rapid Soil Solutions
3540 SE 28th Avenue
Portland, OR 97202

ENGINEER
Bruce D. Goldson, PE
Theta, LLC
PO Box 1345
Lake Oswego, Oregon 97035
Phone 503-481-8822

SURVEYOR
James Brown, PLS
Centerline Concepts, Land Surveying, Inc.
19376 Molalla Ave Suite 120
Oregon City, Oregon 97045
Phone 503-650-0188



VICINITY MAP
SCALE: NTS



0 100 200
SCALE: 1" = 100'

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EXISTING CONIFEROUS TREE	EXISTING PROPERTY BOUNDARY
EXISTING DECIDUOUS TREE	EXISTING PROPERTY LINE
EXISTING UTILITY POLE	EXISTING RIGHT-OF-WAY
EXISTING UTILITY RISER	EXISTING CENTERLINE
EXISTING STORM MANHOLE	EXISTING FENCE
EXISTING CATCH BASIN	EXISTING EDGE OF PAVEMENT
EXISTING SANITARY MANHOLE	EXISTING SANITARY LINE
EXISTING WATER VALVE	EXISTING STORM LINE
EXISTING GAS VALVE	EXISTING WATER LINE
EXISTING FIRE HYDRANT	EXISTING RETAINING WALL
EXISTING WATER METER	EXISTING OVERHEAD POWER
EXISTING WELL	EXISTING GAS
NEW STORM MANHOLE	EXISTING TELEPHONE
NEW CATCH BASIN	EXISTING GRAVEL
NEW SANITARY MANHOLE	NEW PROPERTY LINE
NEW WATER VALVE	NEW EASEMENT
NEW WATER METER	NEW CURB
PROPOSED STREET LIGHT	NEW SANITARY LINE
CATCH BASIN PROTECTION	NEW STORM LINE
	NEW WATER LINE
	EXISTING CONCRETE
	NEW CONCRETE
	NEW AC PAVEMENT

UTILITY PROVIDERS

WATER/STORM/SEWER
City of West Linn
Contact: Erich Lais
Phone: 503-722-5514
Email: elais@westlinnoregon.gov

POWER
Portland General Electric
Contact: Dumitru Ilioi
Phone: 503-672-5477
Email: dumitru.Ilioi@pgn.com

GAS
Northwest Natural
Contact: Brian Kelly
Phone: 503-2200-2427
Email: brian.kelly@nwnatural.com

CABLE
Centurylink
Contact: Kenneth Sciulli
Phone: 503-242-0304
Email: kenneth.sciulli@centurylink.com

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

CITY OF WEST LINN ENGINEERING APPROVED
DATE 5/30/19 BY JB

REGISTERED PROFESSIONAL ENGINEER 7120 OREGON July 16, 1971 BRUCE D. GOLDSON

EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

COVER

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

Theta, llc
ENGINEERING - SURVEYING - PLANNING
PO Box 1345
Lake Oswego, Oregon 97035
503/481-8822
email: thetaeng@comcast.net

Hymark Custom Homes
18811 Trillium Drive
West Linn, Oregon 97068

Ferndell Estates
3300 & 3350 Riverside Court
West Linn, Oregon
Legal: 21E14AD00990

SHEET: 1.0

RECORD OF SURVEY
PROPERTY LINE ADJUSTMENT

LOCATED IN THE N.E. 1/4 SECTION 14 AND THE N.W. 1/4 SETION 13,
T.2S., R.1E., W.M., CITY OF WEST LINN, CLACKAMAS COUNTY, OREGON
JULY 17, 2014 SCALE 1"=50'
SURVEY PERFORMED FOR: BILL VARITZ

CLACKAMAS COUNTY SURVEYOR
RECEIVED: _____
ACCEPTED FOR FILING: _____
SURVEY NUMBER: _____

NARRATIVE:

THE PURPOSE OF THIS SURVEY IS TO ESTABLISH THE BOUNDARY LINES FOR THOSE TRACTS OF LAND DESCRIBED IN DOCUMENTS NO. 88-37558 AND 89-25912, CLACKAMAS COUNTY DEED RECORDS, FOR A PROPOSE PROPERTY LINE ADJUSTMENT.

FOR THE BASIS OF BEARINGS AND SOUTH LINE OF SAID DOCUMENT NO. 88-37558 TRACT, I HELD THE LINE BETWEEN THE FOUND MONUMENTS AT "A" AND "B" AND IT EASTERLY EXTENSION, HOLDING THE BEARING FROM SURVEY NO. 28678, CLACKAMAS COUNTY SURVEY RECORDS. THE FOUND MONUMENT AT "A" WAS SET IN SURVEY NO. 13391, CLACKAMAS COUNTY SURVEY RECORDS ON THIS LINE. THE FOUND MONUMENT AT "B" WAS SET IN THE PLAT OF "RIVERSIDE PARK", CLACKAMAS COUNTY PLAT RECORDS, FOR THIS LINE.

FOR THE NORTH LINE OF SAID DOCUMENT NO. 89-25912 TRACT AND THE WESTERLY PORTION OF THE NORTH LINE OF SAID DOCUMENT NO. 88-37558 TRACT AND, I HELD THE LINE BETWEEN THE FOUND MONUMENTS AT "C" AND "D". THE FOUND MONUMENT AT "C" WAS SET IN SURVEY NO. 13380, CLACKAMAS COUNTY SURVEY RECORDS FOR THIS LINE AND THE FOUND MONUMENT AT "D" WAS SET IN SAID SURVEY NO. 13391 FOR THIS LINE.

FOR THE WESTERLY LINE OF PARCEL 2 OF SAID DOCUMENT NO. 88-37558 TRACT, I HELD THE LINE BETWEEN THE FOUND MONUMENTS AT "D" AND "E". THE MONUMENT AT "E" WAS FOUND AND HELD FOR THIS LINE IN SAID SURVEY NO. 13391.

FOR THE EASTERLY PORTION OF THE NORTH LINE OF SAID DOCUMENT NO. 88-37558 TRACT, I HELD THE LINE BETWEEN THE FOUND MONUMENT AT "F" AND A POINT, DEED DISTANCE OF, N24°16'23"W, 7.50 FEET FROM THE FOUND MONUMENT AT "D", AND ITS EASTERLY EXTENSION. THE FOUND MONUMENT AT "F" WAS SET IN SAID SURVEY NO. 13391 FOR THIS LINE.

FOR THE MOST WESTERLY LINE OF SAID DOCUMENT NO. 88-37558 TRACT, I HELD 30.00 FEET EASTERLY OF AND PARALLEL WITH THE LINE BETWEEN THE FOUND MONUMENTS AT "A" AND "C".

FOR THE WEST LINE OF SAID DOCUMENT NO. 89-25912, I HELD THE LINE BETWEEN THE FOUND MONUMENTS AT "G" AND "H", BOTH MONUMENTS WERE SET IN SURVEY NO. 16419, CLACKAMAS COUNTY SURVEY RECORDS, FOR THIS LINE.

FOR THE SOUTH LINE OF THAT TRACT OF LAND DESCRIBED IN DOCUMENT NO. 2005-112515, CLACKAMAS COUNTY DEED RECORDS, I HELD THE LINE BETWEEN THE FOUND MONUMENTS AT "H" AND "I", BOTH MONUMENTS WERE SET IN SAID SURVEY NO. 16419 FOR THIS LINE.

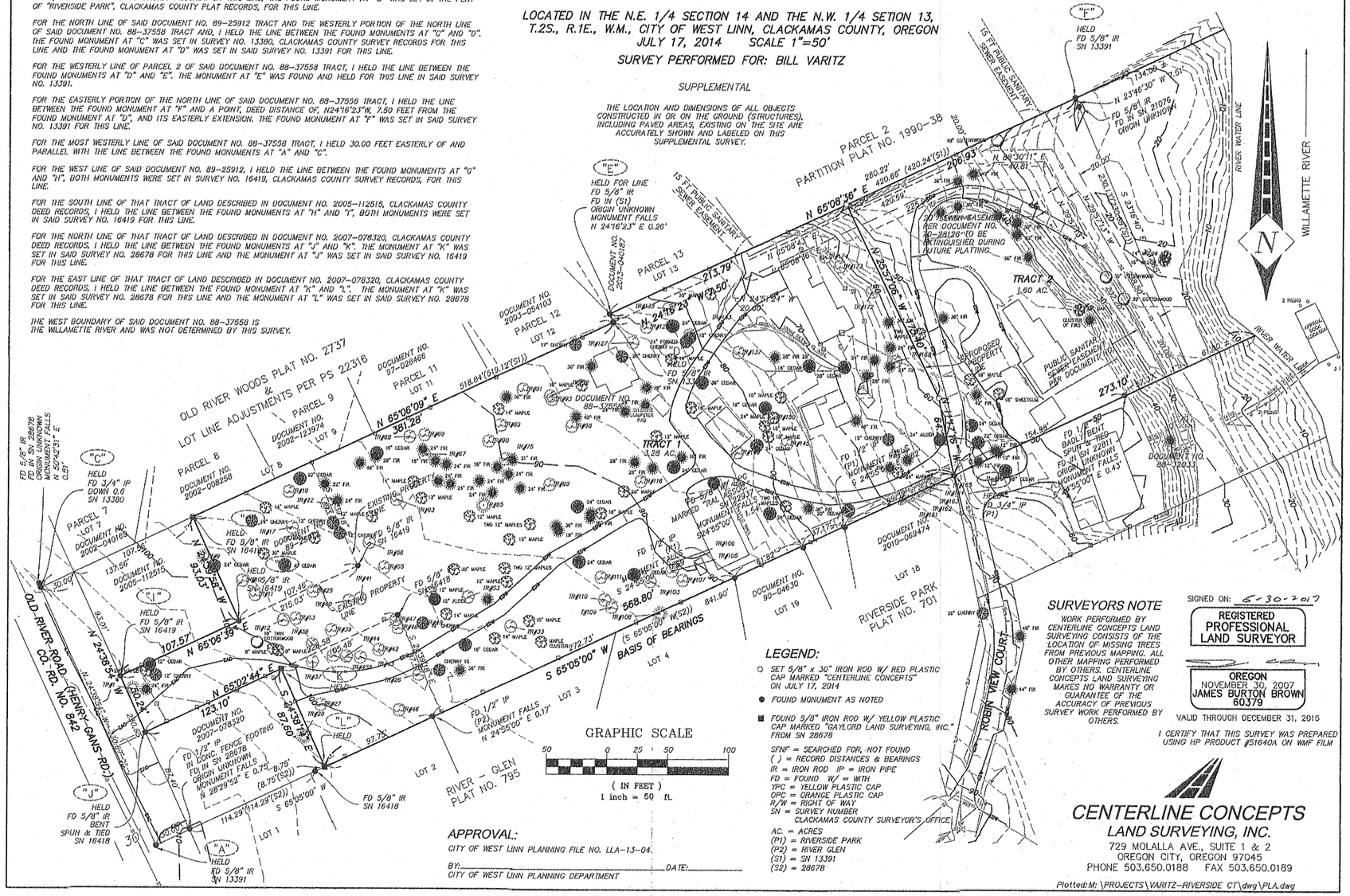
FOR THE NORTH LINE OF THAT TRACT OF LAND DESCRIBED IN DOCUMENT NO. 2007-078320, CLACKAMAS COUNTY DEED RECORDS, I HELD THE LINE BETWEEN THE FOUND MONUMENTS AT "J" AND "K". THE MONUMENT AT "K" WAS SET IN SAID SURVEY NO. 28678 FOR THIS LINE AND THE MONUMENT AT "J" WAS SET IN SAID SURVEY NO. 16419 FOR THIS LINE.

FOR THE EAST LINE OF THAT TRACT OF LAND DESCRIBED IN DOCUMENT NO. 2007-078320, CLACKAMAS COUNTY DEED RECORDS, I HELD THE LINE BETWEEN THE FOUND MONUMENT AT "K" AND "L". THE MONUMENT AT "K" WAS SET IN SAID SURVEY NO. 28678 FOR THIS LINE AND THE MONUMENT AT "L" WAS SET IN SAID SURVEY NO. 28678 FOR THIS LINE.

THE WEST BOUNDARY OF SAID DOCUMENT NO. 88-37558 IS THE WILLAMETTE RIVER AND WAS NOT DETERMINED BY THIS SURVEY.

SUPPLEMENTAL

THE LOCATION AND DIMENSIONS OF ALL OBJECTS CONSTRUCTED IN OR ON THE GROUND (STRUCTURES), INCLUDING PAVED AREAS, EXISTING ON THE SITE ARE ACCURATELY SHOWN AND LABELED ON THIS SUPPLEMENTAL SURVEY.



LEGEND:

- ○ SET 5/8" x 30" IRON ROD W/ RED PLASTIC CAP MARKED "CENTERLINE CONCEPTS" ON JULY 17, 2014
- ● FOUND MONUMENT AS NOTED
- ■ FOUND 5/8" IRON ROD W/ YELLOW PLASTIC CAP MARKED "GAYLORD LAND SURVEYING, INC." FROM SN 28678

SFNF = SEARCHED FOR, NOT FOUND
( ) = RECORD DISTANCES & BEARINGS
IR = IRON ROD IP = IRON PIPE
FD = FOUND W/ = WITH
YPC = YELLOW PLASTIC CAP
OPC = ORANGE PLASTIC CAP
R/W = RIGHT OF WAY
SN = SURVEY NUMBER
CLACKAMAS COUNTY SURVEYOR'S OFFICE

AC. = ACRES
(P1) = RIVERSIDE PARK
(P2) = RIVER GLEN
(S1) = SN 13391
(S2) = 28678

SURVEYORS NOTE

WORK PERFORMED BY CENTERLINE CONCEPTS LAND SURVEYING CONSISTS OF THE LOCATION OF MISSING TREES FROM PREVIOUS MAPPING. ALL OTHER MAPPING PERFORMED BY OTHERS. CENTERLINE CONCEPTS LAND SURVEYING MAKES NO WARRANTY OR GUARANTEE OF THE ACCURACY OF PREVIOUS SURVEY WORK PERFORMED BY OTHERS.

SIGNED ON: 5-30-2017

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
NOVEMBER 30, 2007
JAMES BURTON BROWN
60379

VALID THROUGH DECEMBER 31, 2015

I CERTIFY THAT THIS SURVEY WAS PREPARED USING HP PRODUCT #51640A ON WMF FILM

APPROVAL:

CITY OF WEST LINN PLANNING FILE NO. LLA-13-04.

BY:_____ DATE:_____
CITY OF WEST LINN PLANNING DEPARTMENT

CENTERLINE CONCEPTS
LAND SURVEYING, INC.
729 MOLALLA AVE., SUITE 1 & 2
OREGON CITY, OREGON 97045
PHONE 503.650.0188 FAX 503.650.0189

Plotted: M:\PROJECTS\VARITZ-RIVERSIDE CT\dwg\PLA.dwg

CITY OF West Linn ENGINEERING APPROVED
DATE 5/30/17 BY EC

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

2018-250

EXISTING CONDITIONS SURVEY

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'			
DATE:	June, 2017			
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

Theta, llc
ENGINEERING - SURVEYING - PLANNING
PO Box 1345
Lake Oswego, Oregon 97035
503/481-8822
email: thetaeng@comcast.net

Hymark Custom Homes
18811 Trillium Drive
West Linn, Oregon 97068

Ferndell Estates
3300 & 3350 Riverside Court
West Linn, Oregon
Legal: 21E14AD00990

SHEET: 2.0

GENERAL NOTES:

1. THESE PLANS REPRESENT PUBLIC IMPROVEMENTS ASSOCIATED WITH THE FERNDELL ESTATES SUBDIVISION CITY PLANNING FILE SUB-18-01/WRG-18-02.
2. ALL REFERENCES TO THE CITY OF WEST LINN STANDARDS REFER TO THE CURRENT STANDARDS AND SPECIFICATIONS.
3. THE DESIGN ENGINEER WILL BE RESPONSIBLE FOR INSPECTION OF THE PROPOSED IMPROVEMENTS WITH OVERSIGHT FROM THE CITY OF WEST LINN.
4. THE CONTRACTOR SHALL PROVIDE A WORK SCHEDULE TO THE ENGINEER AND CITY AND PROVIDE 24-HOUR NOTICE OF ANY TESTING REQUIRING WITNESSING BY THE CITY OF ENGINEER.
5. ANY CHANGES TO THE PLANS MUST RECEIVE APPROVAL BY THE ENGINEER AND CITY IN WRITING BEFORE PROCEEDING WITH THE WORK.
6. A PUBLIC IMPROVEMENT GUARANTEE AGREEMENT, PUBLIC WORKS PERMIT, A PRE-CONSTRUCTION MEETING, INSTALLATION OF THE EROSION CONTROL MEASURES, ARE ALL REQUIRED PRIOR TO BEGINNING CONSTRUCTION.
7. PRIOR TO SITE CLEARING A 6-FOOT TALL CHAIN-LINK FENCE SHALL BE PLACED AT THE TREE EASEMENT BOUNDARIES PRIOR TO SITE GRADING. THE CITY ARBORIST SHALL INSPECT AND APPROVE ALL THE TREE PROTECTION MEASURES PRIOR TO THE START OF THE SITE WORK. ALL TREE PROTECTION MEASURES SHALL REMAIN IN PLACE AND FUNCTIONAL FOR THE ENTIRE DURATION OF CONSTRUCTION.
8. A CITY AND ENGINEER REPRESENTATIVE MUST BE PRESENT FOR ALL TESTING, AND THE CITY SHALL BE FURNISHED A COPY OF ALL TEST RESULTS.
9. CONTRACTOR SHALL VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES AND POINTS OF CONNECTION PRIOR TO ORDERING MATERIALS. OTHER EXISTING UTILITIES MAY EXIST AND IF DISCREPANCIES ARE FOUND THE CONTRACT SHALL NOTIFY THE ENGINEER.
10. THE CONTACTOR SHALL ERECT AND MAINTAIN TRAFFIC CONTROL PER THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PART VI. CONSTRUCTION AND MAINTENANCE AND SUBMIT A TRAFFIC PLAN TO THE CITY PRIOR TO BEGINNING WORK.
10. OREGON LAW REQUIRES THAT THE RULES ADOPTED BY OREGON UTILITY NOTIFICATION CENTER BE FOLLOWED THOSE RULES SET FORTH IN OAR 952-001-0090. COPIES OF THE RULES ARE AVAILABLE BY CALLING THE CENTER OR ACCESSING VIA INTERNET AT WWW.CALLBEFOREYOUDIG.ORG <HTTP://WWW.CALLBEFOREYOUDIG.ORG>. PORTLAND METRO AREA 503-246-6699

STREET NOTES:

1. ALL STREET SECTIONS TO BE GRUBBED AND GRADED TO A MINIMUM OF 8-INCHES BELOW THE SUBGRADE.
2. THE 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 THE CITY OF WEST LINN PERSONNEL AND PROJECT GEOTECHNICAL PRIOR TO PLACEMENT OF FILL. THE PROJECT GEOTECHNICAL SHALL TEST FOR COMPACTION PER DIVISION 501.03.08 OF THE WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS.
3. AGGREGATE BASE ROCK SHALL CONFORM TO THE REQUIREMENTS OF DIVISION 205 OF THE WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. BASE COURSE IS 1 1/2" - 0" CRUSHED ROCK AND LEVELING COURSE IS 3/4"-0" CRUSHED ROCK. THE CITY OF WEST LINN REQUIRES A PROOF ROLL WITH A LOADED 10-CUBIC, OR LARGEST USED (IE SUPER SOLO) YARD DUMP TRUCK OF THE SUBGRADE PRIOR TO PLACEMENT OF THE BASE ROCK AND AT TOP OF ROCK JUST PRIOR TO PAVING.
4. ASPHALT CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS, DIVISION 205. THE BASE LIFT SHALL BE CLASS "B" AC AND THE TOP LIFT SHALL BE CLASS "C" AC MEETING THE WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS, DIVISION 505. THE TOP LIFT OF ASPHALT CONCRETE SHALL NOT BE PLACED PRIOR TO RECEIVING AUTHORIZATION FROM THE CITY OF WEST LINN.
5. CURB AND GUTTER SHALL HAVE A COMPRESSIVE STRENGTH OF 3300 PSI, AND MAXIMUM AGGREGATE. PER DIVISION 205 OF THE WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. A PROOF ROLL OF THE CURB LINES IS REQUIRED PRIOR TO CURB PLACEMENT. CONTRACTION JOINTS ARE TO BE INSTALLED AT 15-FOOT MAXIMUM. THE CONTRACTOR IS TO STAMP LOCATION OF SEWER AND WATER LINES CROSSING THE CURB LINE WITH AN "S" OR "W".
6. A STREET CONSTRUCTION ENCROACHMENT PERMIT OF SIMILAR PERMIT MAY BE REQUIRED FROM THE CITY OF WEST LINN.

STORM SEWER NOTES:

1. RIBBED PVC ASTM 794 OR DUCTILE IRON CONFORMING TO ASTM C 151, CLASS 52, WITH RUBBER JOINTS REQUIRED.
2. GUTTER INLETS SHALL BE POURED IN PLACE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI. FRAMES SHALL BE FABRICATED OF STRUCTURAL STEEL, ASTM A-7,A-36 A-3733.
3. MANHOLE BASES MAY BE POURED IN PLACE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3300PSI OR PRECAST. MANHOLE RISERS AND TOPS SHALL BE PRECAST WITH MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. TOPS SHALL BE ECCENTRIC COMES EXCEPT WHERE THERE IS INSUFFICIENT HEADROOM REQUIRES A FLAT TOP. THE INTERIOR DIMENSIONS NOTED ON THE PLANS ARE MINIMUMS, AND SOME OR ALL OF THE STORM MANHOLES ARE REQUIRED TO BE OVERSIZED. THE CONTRACTOR SHALL VERIFY WITH THE MANHOLE MANUFACTURER FOR THE ACTUAL SIZE OF MANHOLE NEEDED FOR TYPE AND SIZE OF PIPE TO BE USED. INVERTS SHALL BE CONSTRUCTED SO AS TO PROVIDE A SMOOTH FLOW AND PIPES SHALL BE CONNECTED TO THE MANHOLE BY MEANS OF A FLEXIBLE CONNECTION AND SHALL HAVE A SHEAR JOINT LOCATED 18-INCH OUTSIDE THE MANHOLE.
4. MANHOLES LOCATED IN EASEMENTS SHALL REQUIRED A TAMPER PROOF FRAME AND COVER AND SET 12-INCHES ABOVE FINISHED GRADE IN UNPAVED AREAS.
5. GRANULAR BACKFILL (3/4"-0") IS TO BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY PER ASHTO T-180 TEST METHOD AND NATIVE MATERIAL SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL.
6. STORM DRAIN SERVICE LATERALS SHALL BE 4-INCH CONFORMING TO ASTM D 3034 PVC AND BE INSTALLED TO A POINT BEYOND THE UTILITY EASEMENT AS SHOWN ON THE PLANS. THE LATERAL WILL BE PLUGGED WITH A RUBBER RING PLUG AND THE LOCATION MARKED WITH A 2X4 PAINTED WHITE.
7. A VIDEO INSPECTION IN ACCORDANCE WITH DIVISION 601.03.11 PER THE WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. ALL TESTS SHALL BE WITNESSED BY THE ENGINEER AND A REPRESENTATIVE OF THE CITY.
8. A PLUMBING PERMIT IS REQUIRED FOR ALL STORM DRAINS BEYOND THE FIRST CLEANOUT.

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 TOP SECTIONS. INVERTS SHALL BE CONSTRUCTED TO AS TO PROVIDE A SMOOTH FLOW WITH THE CHANNEL BEING ABLE TO PASS A 6"X36" CYLINDER INTO THE PIPES. PVC PIPE SHALL BE CONNECTED TO THE MANHOLE BY MEANS OF A FLEXIBLE CONNECTION AND SHALL BE A SHEAR JOINT LOCATED 18-INCHES OUTSIDE THE MANHOLE. CEMENT GROUT FOR CONNECTING PVC SEWER PIPE WILL NOT BE PERMITTED.
3. ALL MANHOLES LOCATED IN EASEMENT AREAS WILL HAVE TAMPER PROOF FRAMES AND COVERS WITH THE COVER SET 12-INCHES ABOVE THE FINISH GRADE IN UNPAVED AREAS.
4. GRANULAR BACKFILL (3/4"-0") IS TO BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY OF AASHTO T-180 TEST METHOD. NATIVE BACKFILL MATERIALS SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL. EXCAVATION, BEDDING AND BACKFILL TO BE IN ACCORDANCE WITH DIVISION 204 OF THE WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS. BACKFILL WITHIN NEW AND EXISTING STREETS SHALL BE CLASS B.
5. PVC SERVICE LATERALS SHALL BE 4-INCH CONFORMING TO THE SAME MATERIALS AS THE MAINLINE SEWERS. SERVICE LATERALS SHALL BE INSTALLED TO A POINT BEYOND THE UTILITY EASEMENT AS SHOWN ON THE PLAN. THE SERVICE LATERALS SHALL BE PLUGGED WITH THE LOCATION MARKED WITH 2X4 PAINTED GREEN.
6. SANITARY SEWER PIPE, INCLUDING SERVICE LATERALS SHALL BE TESTED FOR IN ACCORDANCE WITH WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS, DIVISION 301.03.09 AND MANHOLES TO BE VACUUM TESTED IN ACCORDANCE WITH DIVISION 302.03.07. TESTS SHALL BE WITNESSED BY THE ENGINEER AND THE CITY OF WEST LINN. CONTRACTOR IS RESPONSIBLE FOR COORDINATED THE TESTING AND PROVIDING PASSING TESTS PRIOR TO CONNECTION TO THE EXISTING SYSTEM.
7. A PLUMBING PERMIT FROM THE CITY IS REQUIRED FOR SANITARY SEWER LATERALS BEYOND THE FIRST CLEANOUT.
8. ALL MATERIALS, INSTALLATION, TESTING AND INSPECTIONS TO BE IN STRICT ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORK STANDARDS AND THE DEQ.

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 OTHERWISE NOTED ON THE PLANS. PIPE FITTINGS ARE TO BE THE SAME MATERIAL AND CLASS AS THE PIPE AND OF DOMESTIC ORIGIN.
2. WATER MAINS TO HAVE A MINIMUM COVER OF 36-INCHES
3. ALL TEES, BEND (HORIZONTAL AND VERTICAL), OR SIGNIFICANT CHANGES IN DIRECTION IN ALIGNMENT SHALL BE RESTRAINED WITH FIELD LOCK GASKETS AND MEGA LUG FITTINGS (SEE SPEC. 4.0014).
4. GATE VALVES SHALL BE RESILIENT SEAT, NON-RISING STEM WITH "O" RING PACKING, MEETING AWWA CLASS "C" SPECIFICATIONS. THE VALVES SHALL BE DESIGNED TO WITHSTAND A WORKING PRESSURE OF 150 PSI. GATE VALVES SHALL HAVE A TWO-INCH SQUARE OPERATING NUT AND SHALL OPEN COUNTERCLOCKWISE WHEN VIEWED FROM ABOVE. BUTTERFLY VALVES (10-INCHES AND ABOVE) SHALL BE RUBBER SEAT TYPE AND BUBBLE-TIGHT AT 150 PSI, CONFORMING TO AWWA C504. BUTTERFLY VALVES SHALL BE MUELLER OR APPROVED EQUAL WITH THE 2-INCH OPERATING NUT BEING 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 MATERIALS SHALL BE COMPACTED TO 95% OF IN-PLACE DRY DENSITY OF SURROUNDING SOIL. EXCAVATION, BEDDING AND BACKFILL SHALL BE IN ACCORDANCE WITH CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS, DIVISION 204. BACKFILL IN NEW AND EXISTING STREETS SHALL BE CLASS B.
6. SERVICES SHALL BE 1-INCH, TYPE K, COPPER. FOR DOUBLE SERVICES TWO 1-INCH COPPER LINES SHALL BE INSTALLED SIDE BY SIDE. CORPORATION STOPS SHALL BE MULLER H 15008 OR FORD F1000 4Q, ANGLE STOPS SHALL BE MUELLER H 14258, OR FORD 1" KV43-444W-Q, METER BOXES SHALL BROOKS #37 WITH 37-S LID AND COVER, OR EQUAL. METER BOXES ARE TO BE INSTALLED ¾" ABOVE FINISH GRADE AND 2½" FORM THE CURB IN PLANTER STRIPS OR FLUSH WITH SIDEWALK SURFACE IN A SIDEWALK. METER BOX LOCATION TO BE DETERMINED IN THE FIELD.
7. ALL WATERLINES SHALL BE PRESSURE TESTED AND BIOLOGICALLY TESTED BEFORE CONNECTION TO THE CITY WATER SYSTEM. CHLORINATION SHALL BE PER DIVISION 403.13 OF THE CITY OF WEST LINN CONSTRUCTION SPECIFICATIONS. PRESSURE TESTING SHALL BE IN ACCORDANCE WITH THE CITY OF WEST LINN STANDARD CONSTRUCTION SPECIFICATIONS, DIVISION 403.14. TEST PRESSURE WILL BE 180PSI OR 1.5 TIMES THE NORMAL WORKING PRESSURE, WHICHEVER IS HIGHER.
8. CONNECTION OF THE NEW PIPE SYSTEMS WILL NOT BE MADE UNTIL ALL TESTS ARE MADE AND THE CITY OF WEST LINN ACCEPTANCE.
9. A PLUMBING PERMIT IS REQUIRED FOR EXTENSIONS OF WATERLINES BEYOND THE METER.
10. ALL MATERIALS, INSTALLATION, TESTS, TO BE IN STRICT ACCORDANCE WITH THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS, DIVISION 204 AND THE OREGON STATE HEALTH DIVISION ADMINISTRATION RULES, CHAPTER 333.
11. ALL SURPLUS APPURTENANCES SHALL BE RETURNED TO THE CITY OF WEST LINN WATER DEPARTMENT.

CONDITIONS OF APPROVAL FILE NO.: SUB-18-01/WRG-18-02

1. SITE PLAN. WITH THE EXCEPTION OF MODIFICATIONS REQUIRED BY THESE CONDITIONS, THE FINAL PLAT SHALL CONFORM THE TO SUBMITTED TENTATIVE PLAN (SHEET 1/3) (SUBMITTED MAY 4, 2018).
2. ENGINEERING STANDARDS. ALL PUBLIC IMPROVEMENTS AND FACILITIES ASSOCIATED WITH PUBLIC IMPROVEMENTS, UTILITIES, GRADING, ONSITE STORM WATER DESIGN, STREET LIGHTING, STREET TREES, EASEMENTS, AND EASEMENT LOCATIONS ARE SUBJECT TO THE PUBLIC WORKS DIRECTOR'S REVIEW, MODIFICATION, AND APPROVAL PER THE CITY ADOPTED PUBLIC WORKS STANDARDS. THE APPLICANT SHALL PROVIDE AN UPDATED UTILITY AND PUBLIC IMPROVEMENTS PLAN FOR REVIEW AND APPROVAL BY THE PUBLIC WORKS DIRECTOR THAT ADDRESSES STAFF FINDINGS 30, 33 AND 42. ALL IMPROVEMENTS MUST BE DESIGNED, CONSTRUCTED, AND COMPLETED PRIOR TO FINAL PLAT APPROVAL. THE DIRECTOR OF PUBLIC WORKS MAY ALLOW A WAIVER OF IMPROVEMENTS AS ALLOWED BY CODE.
3. ROW DEDICATION. THE FINAL PLAN IS MODIFIED TO INCLUDE THE APPLICANT'S VOLUNTARY DEDICATION OF ROW (STAFF FINDING 20 AND 22) ON THE ADJACENT TAX LOT 1000 OF ASSESSOR'S MAP 21E 14AD AND TAX LOT 500, 21E13CB TO ACCOMMODATE A FUTURE STREET CONNECTION.
4. HCA BOUNDARY. THE HCA BOUNDARY IS REVISED TO REMOVE ALL HIGH AND MODERATE HVAS FROM THE SUBJECT PROPERTY (STAFF FINDING 6 AND 7). THE CITY WILL AMEND CITY AND METRO.

CITY OF West Linn ENGINEERING APPROVED
DATE 5/30/19 BY Ec

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

REGISTERED PROFESSIONAL ENGINEER 7120 OREGON JULY 16, 1971 BRUCE D. GOLDSON
EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

2018-250

GENERAL NOTES AND CONDITIONS OF APPROVAL

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	N/A	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

Theta, llc
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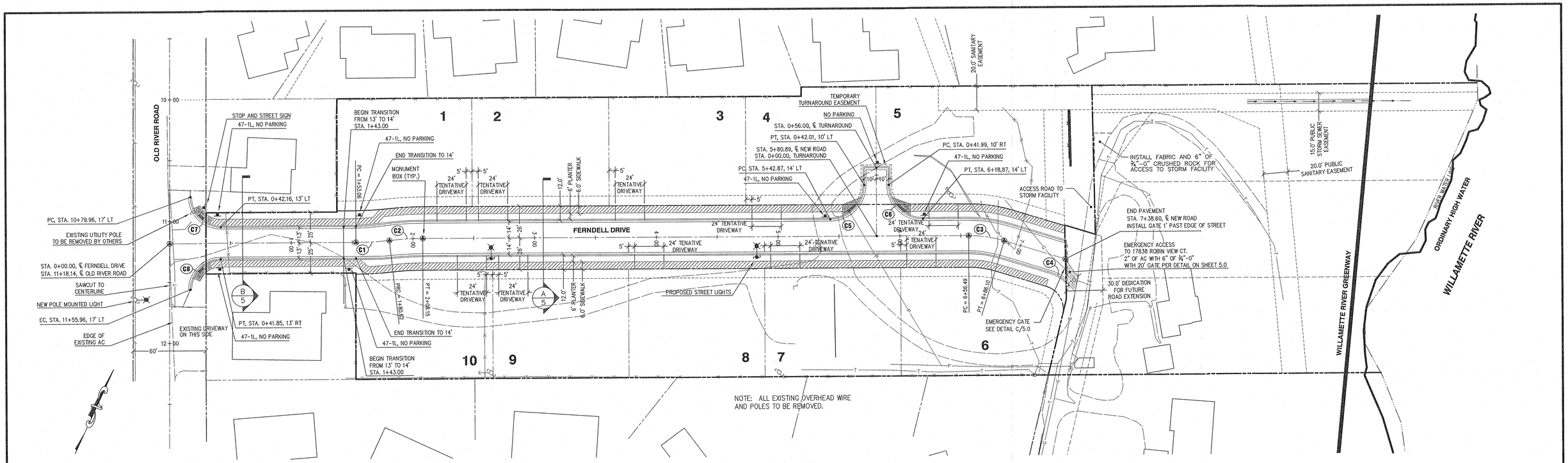
PO Box 1345
Lake Oswego, Oregon 97035
503/481-8822
email: thetaeng@comcast.net

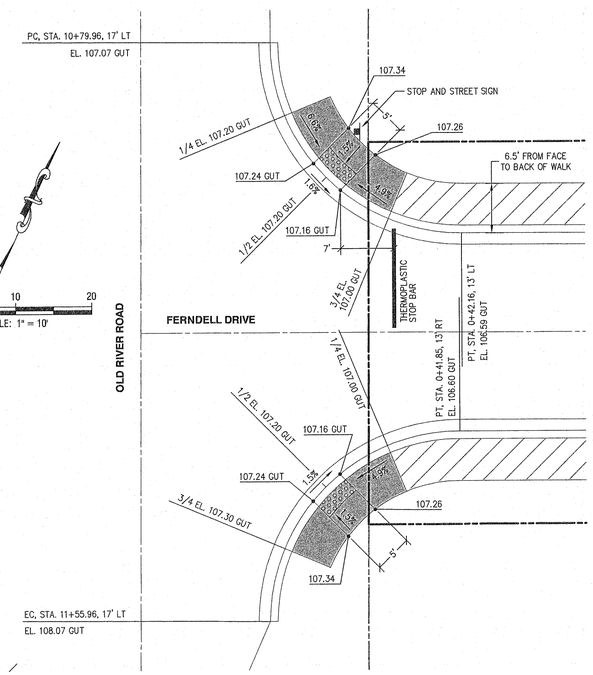
Hymark Custom Homes
18811 Trillium Drive
West Linn, Oregon 97068

Ferndell Estates
3300 & 3350 Riverside Court
West Linn, Oregon
Legal: 21E14AD00990

SHEET: 3.0

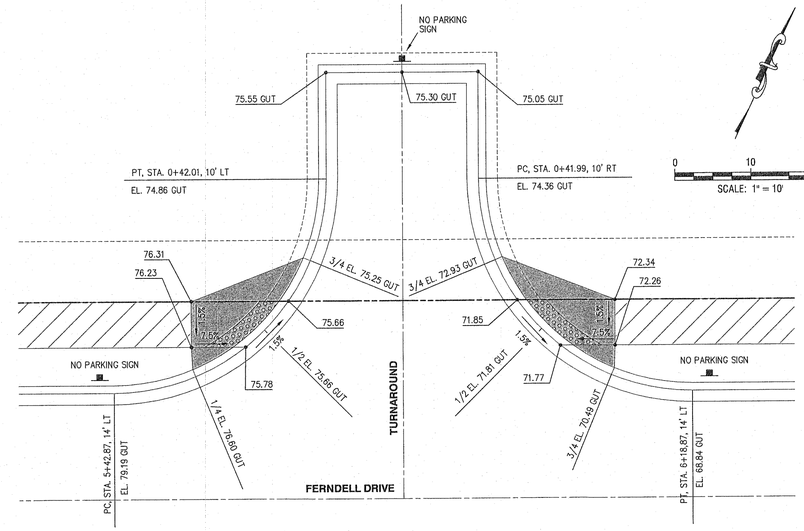


0 40 80
SCALE: 1" = 40'



0 10 20
SCALE: 1" = 10'

FERNDELL DRIVE &
OLD RIVER ROAD
INTERSECTION DETAIL
1 / 4.0
SCALE: 1" = 10'



0 10 20
SCALE: 1" = 10'

FERNDELL DRIVE &
TURNAROUND
INTERSECTION DETAIL
1 / 4.0
SCALE: 1" = 10'

STREET NAME

SIGNATE PER MANUAL OF UNIFORM TRAFFIC CONTROL DEVISES (MUTCD) CITY OF WEST LINN STANDARDS.

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	250.00	27.56	13.80	27.55	N61°59'23"E	6°19'02"
C2	250.00	27.53	13.78	27.51	S61°59'08"W	6°18'32"
C3	100.00	29.62	14.92	29.51	S73°37'30"W	16°58'12"
C4	32.00	15.11	7.70	14.97	N84°21'45"W	27°03'18"
C5	28.00	43.99	28.01	39.60	N20°07'50"E	90°01'09"
C6	28.00	43.97	27.99	39.59	S69°52'10"E	89°58'51"
C7	25.00	39.38	25.11	35.43	S69°43'52"E	90°14'28"
C8	25.00	39.16	24.90	35.28	S20°16'08"W	89°45'32"

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CITY OF West Linn ENGINEERING APPROVED
DATE 5/30/19 BY ec

REGISTERED PROFESSIONAL ENGINEER 7126 OREGON JULY 16, 1971 BRUCE D. GOLDSON
EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

STREET PLANS

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

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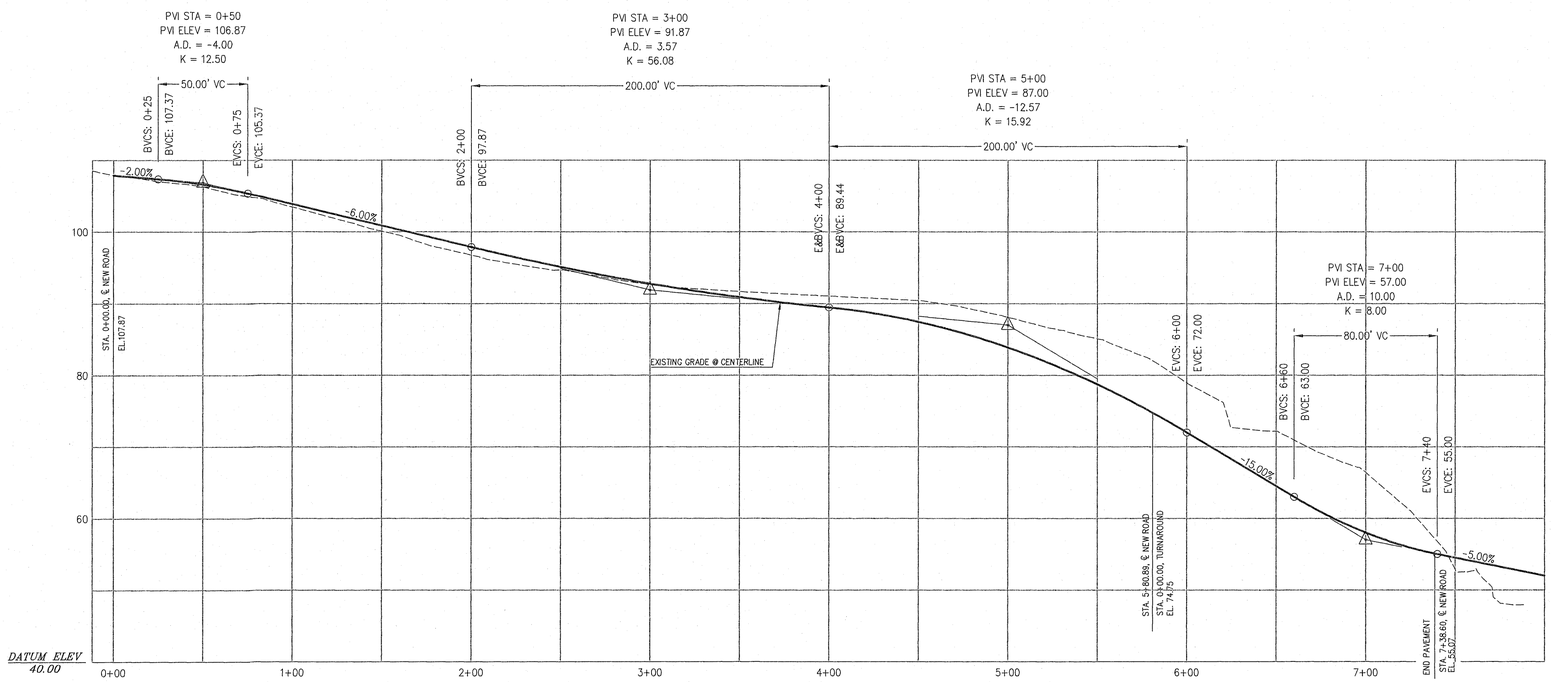
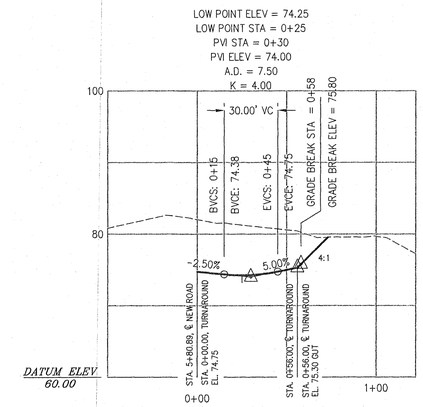
SHEET: 4.0



FERNDELL DRIVE CENTERLINE PROFILE

1 / 5.0

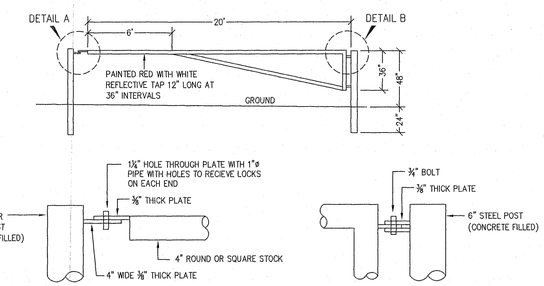
SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL



TURNAROUND CENTERLINE PROFILE

1 / 5.0

SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL



DETAIL A
1" = 1'

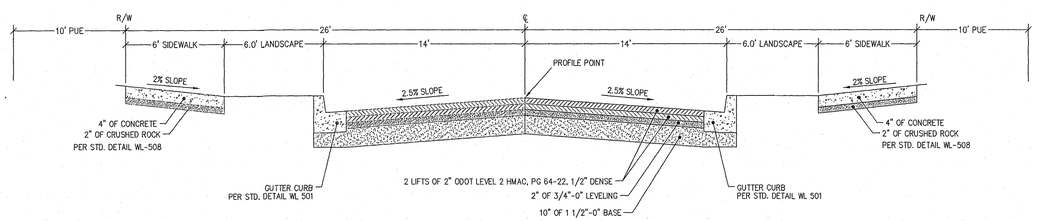
DETAIL B
1" = 1'

GATE SECURITY PER TVF&R (OFCD 103.5 & 503.6)

EMERGENCY GATE

C / 5.0

SCALE: NTS

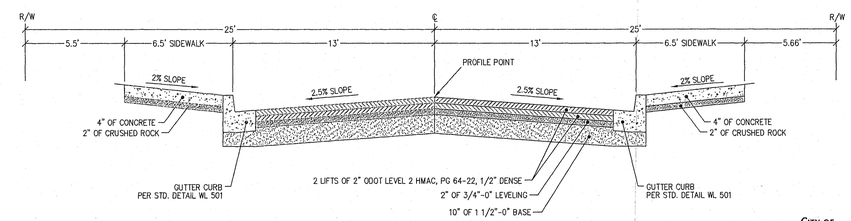


STA. 1+53.06 TO STA. 7+38.60

FERNDELL DRIVE TYPICAL LOCAL STREET

A / 5.0

SCALE: NTS



STA. 0+42.00 TO STA. 1+43.00

FERNDELL DRIVE TYPICAL LOCAL STREET

B / 5.0

SCALE: NTS

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City of West Linn ENGINEERING APPROVED
DATE 5/30/19 BY ec

REGISTERED PROFESSIONAL ENGINEER 7126 OREGON JULY 16, 1971 BRUCE D. GOLDSON

EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

STREET PROFILES

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
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FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

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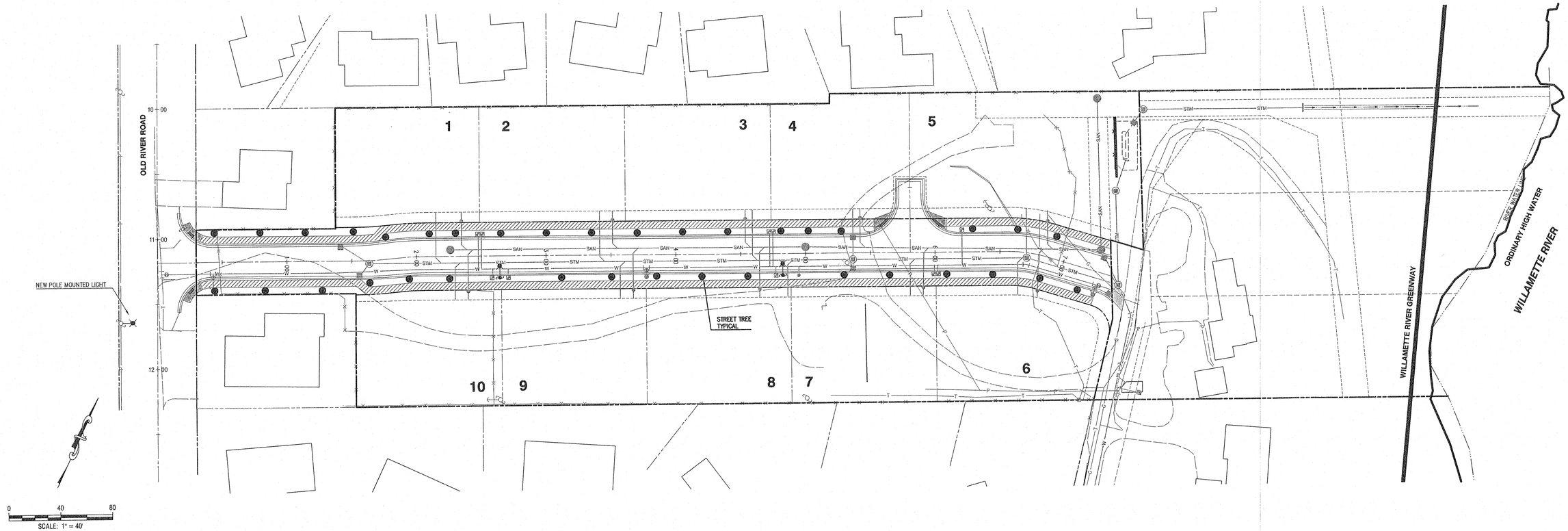
SHEET: 5.0



STREET TREES				
NUMBER	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION
36	TO BE DETERMINED		2" CAL.	B&B

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DATE 5/30/19 BY EC

REGISTERED PROFESSIONAL ENGINEER 7126 OREGON JULY 16, 1971 BRUCE D. GOLDSON
EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

STREET LIGHT AND STREET TREE PLAN

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

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West Linn, Oregon
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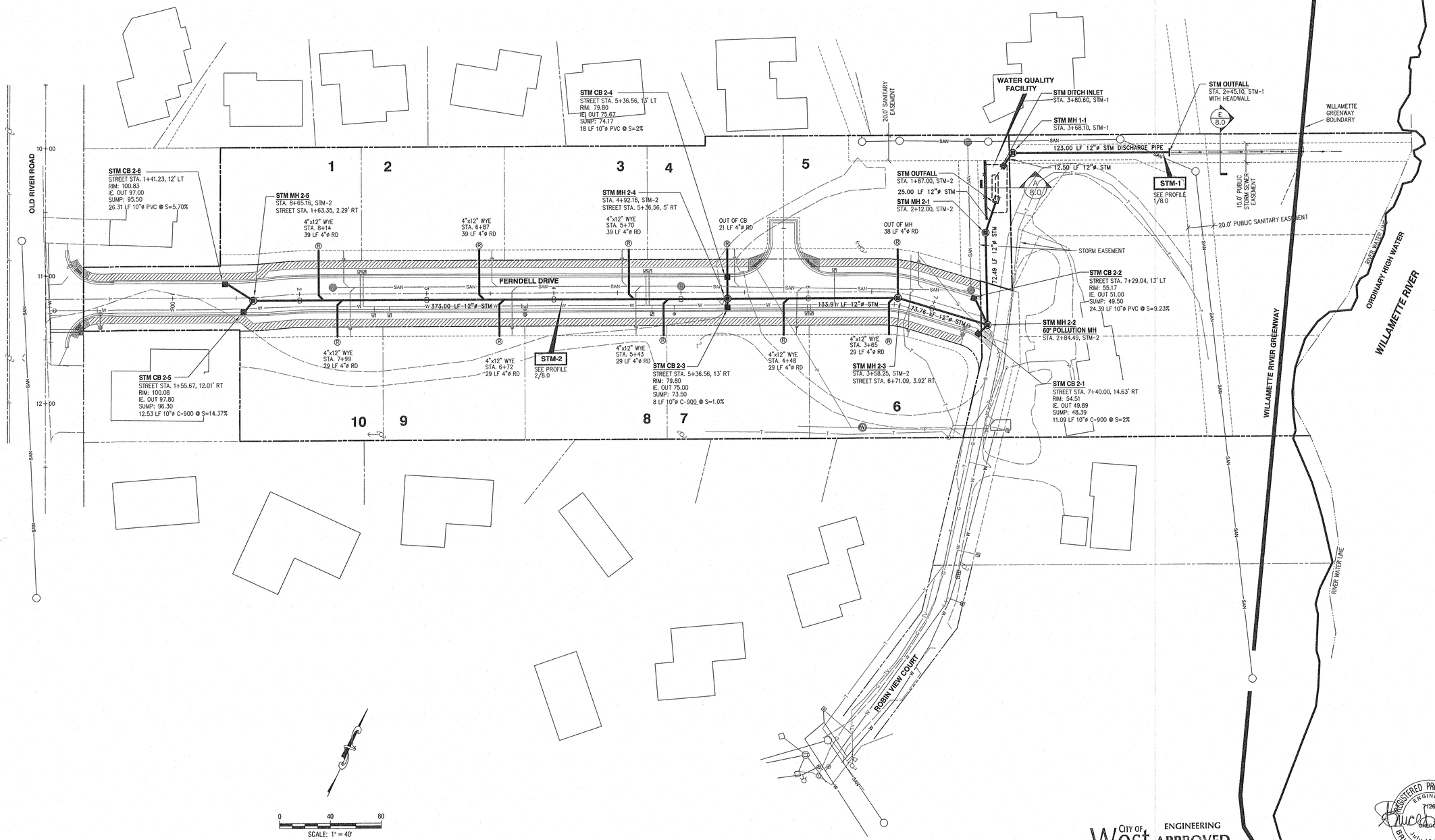
SHEET: 6.0



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

CITY OF West Linn ENGINEERING APPROVED
DATE 5/30/19 BY EC

REGISTERED PROFESSIONAL ENGINEER 7126 OREGON JULY 16, 1971 BRUCE D. GOLDSON
EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

STORM DRAINAGE PLAN

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

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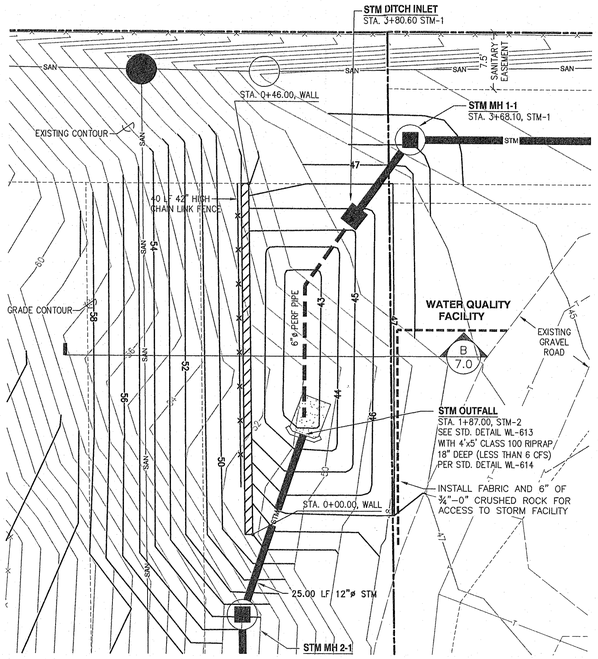
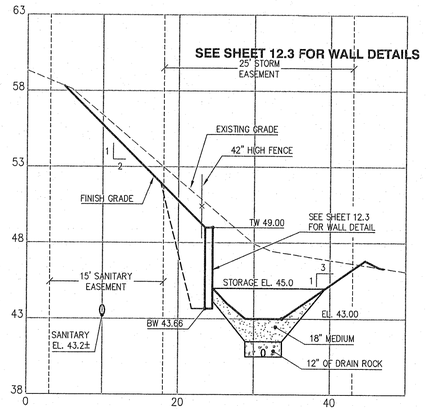
SHEET: 7.0



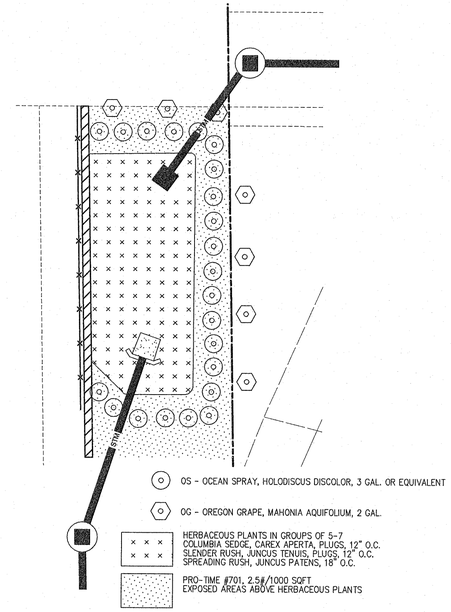
WATER QUALITY POND DETAIL (A / 8.0)

SCALE: 1" = 10'



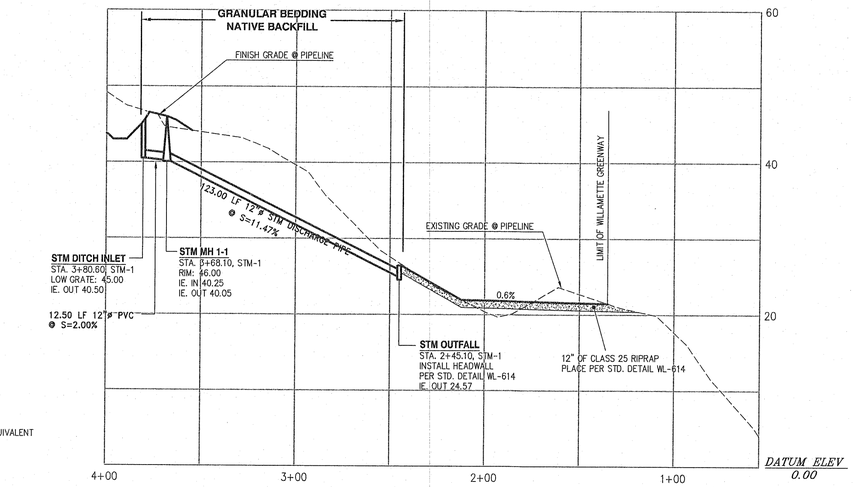
WATER QUALITY POND SECTION (B / 8.0)

SCALE: 1" = 10' HORIZONTAL
1" = 5' VERTICAL



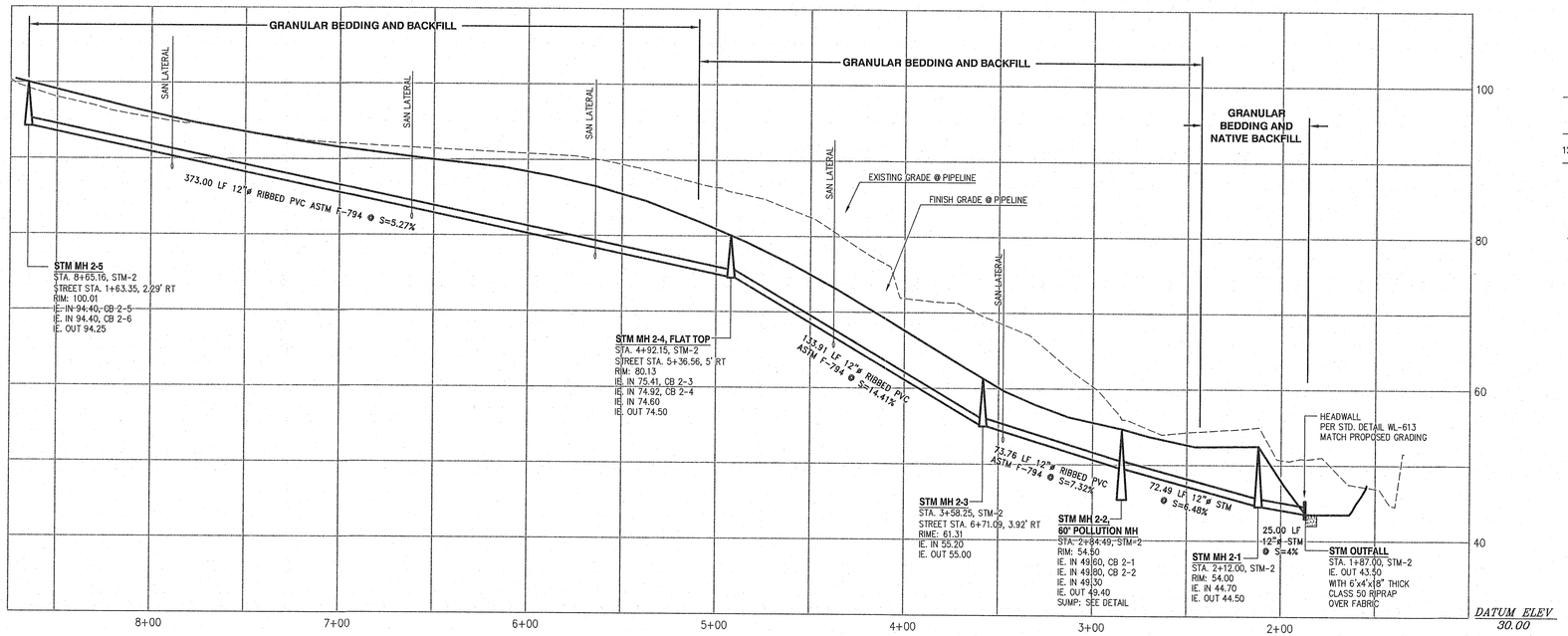
PLANTING PLAN (C / 8.0)

SCALE: NTS



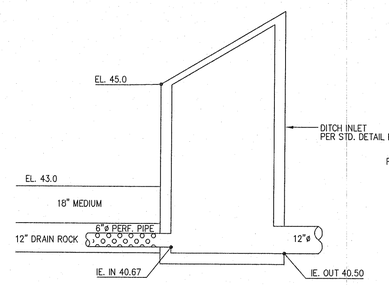
STM-1 STORM DRAINAGE PROFILE (1 / 8.0)

SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL



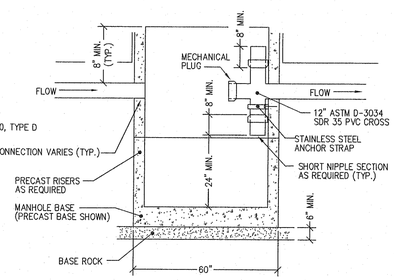
STM-2 STORM DRAINAGE PROFILE (2 / 8.0)

SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL



DITCH INLET (D / 8.0)

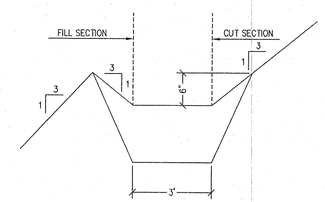
SCALE: NTS



POLLUTION MANHOLE (F / 8.0)

SCALE: NTS

REFERENCE ODOT RD 340



TYPICAL DITCH SECTION (E / 8.0)

SCALE: NTS

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CITY OF West Linn ENGINEERING APPROVED
DATE 5/30/19 BY EL

REGISTERED PROFESSIONAL ENGINEER 7126 OREGON July 16, 1971 BRUCE D. GOLOSON

EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

2018-250

STORM DRAINAGE PROFILES

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

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Ferndell Estates
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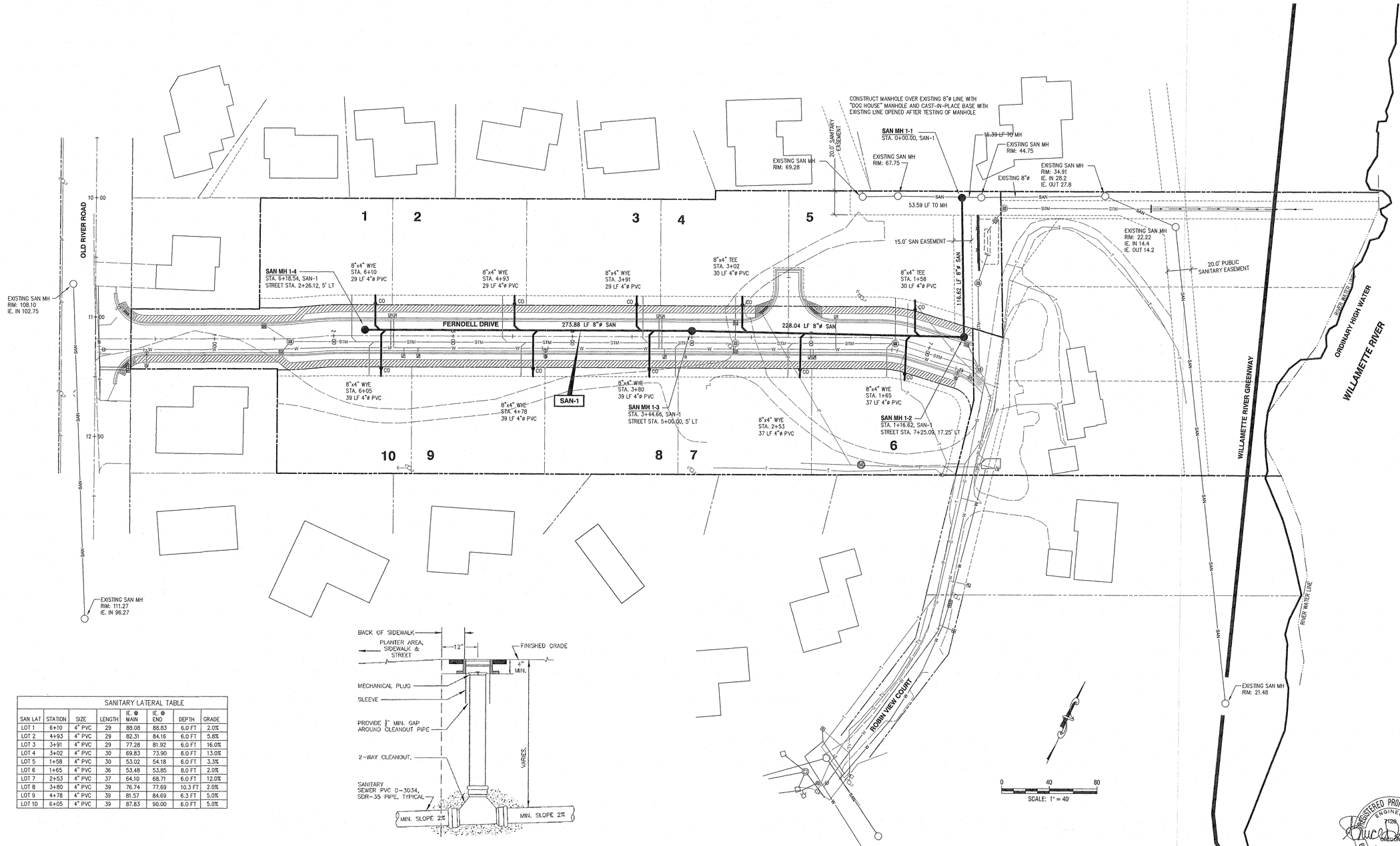
SHEET: 8.0



SANITARY CLEANOUT DETAIL (A / 9.0)

SCALE: NTS

SANITARY LATERAL TABLE							
SAN LAT	STATION	SIZE	LENGTH	IE. @ MAIN	IE. @ END	DEPTH	GRADE
LOT 1	6+10	4" PVC	29	88.08	88.63	6.0 FT	2.0%
LOT 2	4+93	4" PVC	29	82.31	84.16	6.0 FT	5.8%
LOT 3	3+91	4" PVC	29	77.28	81.92	6.0 FT	16.0%
LOT 4	3+02	4" PVC	30	69.83	73.90	6.0 FT	13.0%
LOT 5	1+58	4" PVC	30	53.02	54.18	6.0 FT	3.3%
LOT 6	1+65	4" PVC	36	53.48	53.85	8.0 FT	2.0%
LOT 7	2+53	4" PVC	37	64.10	68.71	6.0 FT	12.0%
LOT 8	3+80	4" PVC	39	76.74	77.69	10.3 FT	2.0%
LOT 9	4+78	4" PVC	39	81.57	84.69	6.3 FT	5.0%
LOT 10	6+05	4" PVC	39	87.83	90.00	6.0 FT	5.0%

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CITY OF West Linn ENGINEERING APPROVED
DATE 5/30/19 BY BL

REGISTERED PROFESSIONAL ENGINEER 21126 July 16, 1971 BRUCE D. GOLDSON
EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

SANITARY SEWER PLAN

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

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West Linn, Oregon
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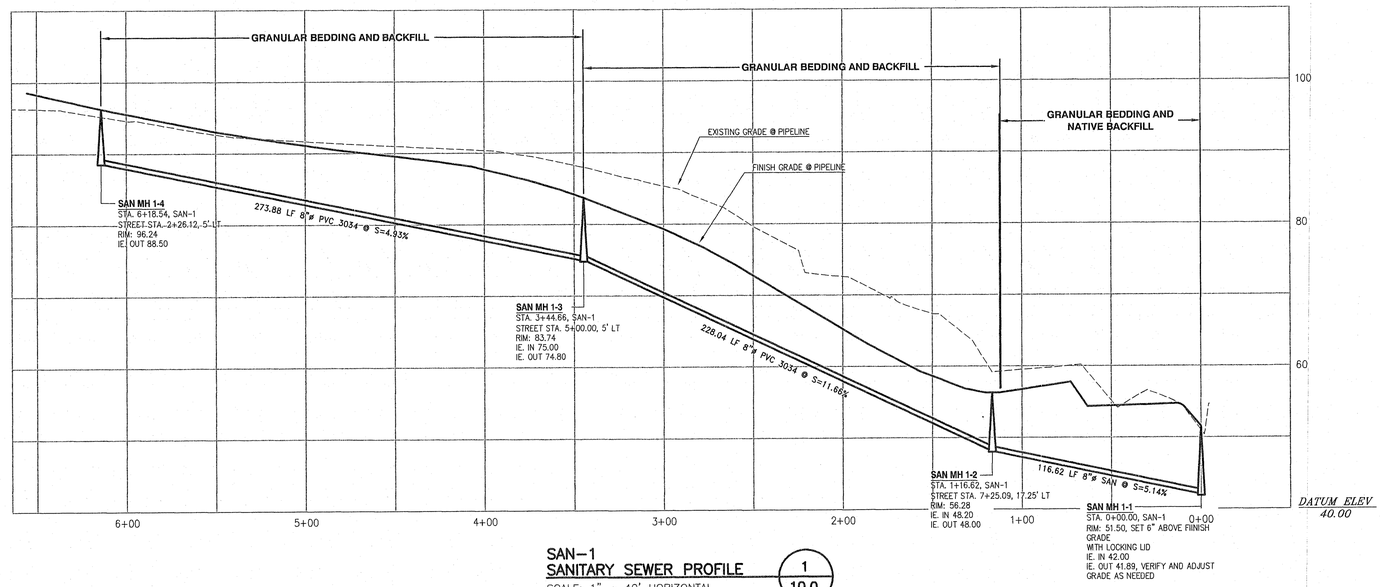
SHEET: 9.0



SAN–1
SANITARY SEWER PROFILE

1
10.0

SCALE: 1" = 40' HORIZONTAL
1" = 10' VERTICAL

CITY OF West Linn ENGINEERING APPROVED
DATE 5/30/19 BY EL

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REGISTERED PROFESSIONAL ENGINEER 7126 OREGON July 16, 1971 BRUCE D. GOLDSON

EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

SANITARY SEWER PROFILE

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
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FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

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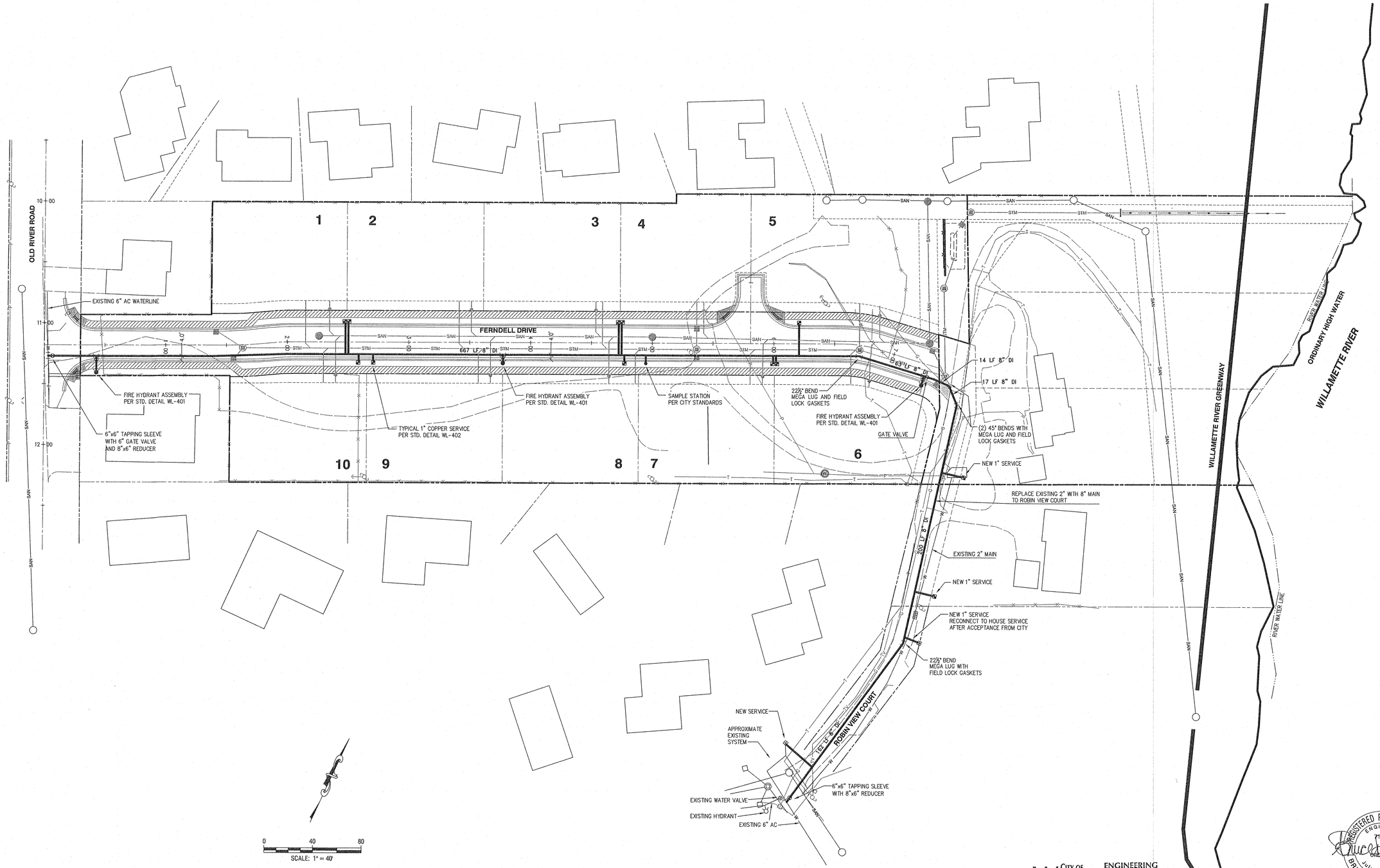
SHEET:
10.0



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CITY OF West Linn ENGINEERING APPROVED
DATE 5/30/19 BY EL

REGISTERED PROFESSIONAL ENGINEER 7120 OREGON July 16, 1971 BRUCE D. GOLDSON

EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

2018-250

WATER PLAN

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

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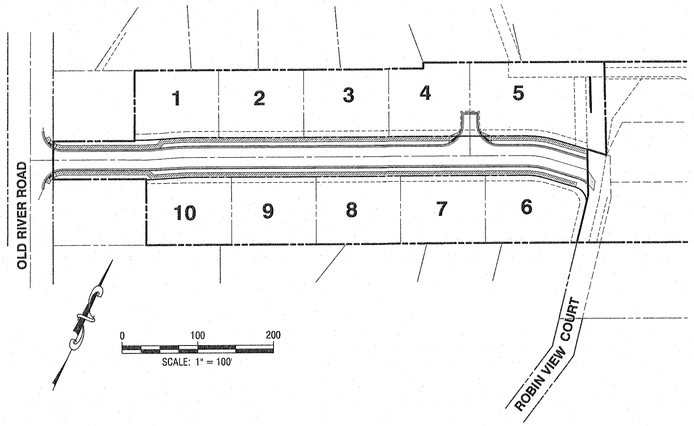
Legal: 21E14AD00990

SHEET: 11.0

EROSION AND SEDIMENT CONTROL PLANS



DEVELOPER

HYMARK CUSTOM HOMES
18811 TRILLIUM DRIVE
WEST LINN, OREGON 97068

ENGINEERING FIRM

THETA, LLC
CONTACT: BRUCE GOLDSON, P.E.
P.O. BOX 1345
LAKE OSWEGO, OR 97035
PHONE: 503-481-8822

NARRATIVE DESCRIPTIONS

EXISTING SITE CONDITIONS

2 PARCELS WITH FOUR BUILDINGS THAT ARE TO BE REMOVED.

DEVELOPED CONDITIONS

* RESIDENTIAL SUBDIVISION

NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE

* CLEARING (MAY, 2019)
* MASS GRADING (JUNE, 2019)
* UTILITY INSTALLATION (JUNE, 2019)
* STREET CONSTRUCTION (JULY, 2019)
* FINAL STABILIZATION (JULY/AUGUST, 2019)

TOTAL SITE AREA = 3.28 ACRES

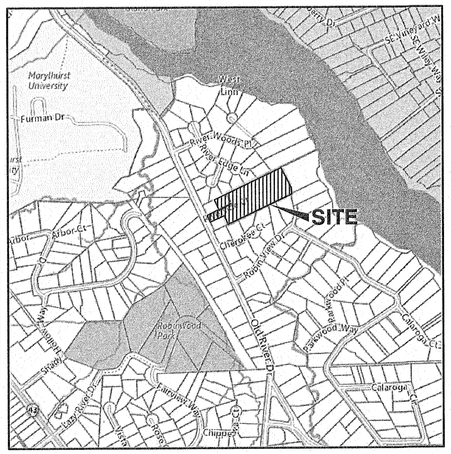
TOTAL DISTURBED AREA = 2.70 ACRES

SITE SOIL CLASSIFICATION:

WOODBURN SILT, CLASS C

RECEIVING WATER BODIES:

DIRECTLY TO THE WILLAMETTE RIVER



VICINITY MAP

SCALE: NTS

PROJECT LOCATION:

3300 & 3350 RIVERSIDE COURT
WEST LINN, OREGON
LATITUDE = 45.396863, LONGITUDE = 122.640283

PROPERTY DESCRIPTION:

T2S, R1E, 14AD, TL 900 & 990
LOCATED IN CLACKAMAS COUNTY, OREGON

ATTENTION EXCAVATORS:

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503-232-1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE CENTER. YOU MUST NOTIFY THE CENTER AT LEAST TWO BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503-246-6699.

PERMITTEE'S SITE INSPECTOR:

COMPANY/AGENCY: THETA, LLC
PHONE: 503-481-8822
BRUCE GOLDSON
EMAIL: thetaeng@comcast.net
CERTIFICATE NO. 80597, CESCL

DISCRIPTION OF EXPERIENCE:
CERTIFIED EROSION CONTROL AND SEDIMENT CONTROL LEAD, ID NO. 80597 (EXPIRES 10/01/2020)

LEGEND

- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- EXISTING WELL
- NEW CATCH BASIN
- CATCH BASIN PROTECTION
- EXISTING PROPERTY BOUNDARY
- EXISTING PROPERTY LINE
- EXISTING RIGHT-OF-WAY
- EXISTING CENTERLINE
- EXISTING FENCE
- EXISTING EDGE OF PAVEMENT
- EXISTING OVERHEAD POWER
- EXISTING GRAVEL
- NEW PROPERTY LINE
- NEW EASEMENT
- NEW CURB
- SILT FENCE
- WATTLE
- TREE PROTECTION
- EXISTING CONTOUR (100)
- PROPOSED CONTOUR (100)
- EXISTING CONCRETE
- NEW CONCRETE
- NEW AC PAVEMENT
- CONSTRUCTION ENTRY
- CONCRETE WASHOUT

INSPECTION FREQUENCY:

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

* HOLD A PRE-CON MEETING OF PROJECT CONSTRUCTION PERSONNELTHAT INCLUDES THE EC INSPECTOR.
* ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200 C PERMIT REQUIREMENTS.
* INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200 C PERMIT REQUIREMENTS.
* CHANGES TO THE APPROVED ESC PLAN MUST BE SUBMITTED TO DEQ IN THE FORM OF AN ACTION PLAN.

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

STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES:

INSPECTION FREQUENCY

SITE CONDITIONS	MINIMUM FREQUENCY
1. ACTIVE PERIOD	DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURING. AT LEAST ONCE EVERY 14 DAYS, REGARDLESS OF WHETHER OR NOT RUNOFF IS OCCURING.
2. PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY	ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE
3. INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONCESCUTIVE CALENDAR DAYS.	ONCE EVERY MONTH
4. PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER	IF PRACTICLE, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.
4. PERIODS DURING WHICH DICHARGE IS UNLIKELY DUE TO FROZEN CONDITIONS.	MONTHLY, RESUME MONITORING IMMEDIATELY UPON MELT, OR WHEN WEATHER CONDITIONS MAKE DISCHARGES LIKELY.

1. HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS. (Schedule A8.c.i.(3))
2. ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-C PERMIT REQUIREMENTS. (Schedule A.12.b and Schedule B.I)
3. INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-C PERMIT REQUIREMENTS. (Schedule B.I.c and B.2)
4. RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, THE ABOVE RECORDS MUST BE RETAINED BY THE PERMIT REGISTRANT BUT DO NOT NEED TO BE AT THE CONSTRUCTION SITE. (Schedule B.2.c)
5. ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT. (Schedule A8.a)
6. THE ESCP MUST BE ACCURATE AND REFLECT SITE CONDITIONS. (Schedule A12.c.i)
7. SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT WITHIN 10 DAYS. (Schedule A12.c.iv. and v)
8. PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION. (Schedule A7.a.iii)
9. IDENTIFY, MARK, AND PROTECT (BY CONSTRUCTION FENCING OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS. (Schedule A.8.c.i.(1) and (2))
10. PRESERVE EXISTING VEGETATION WHEN PRACTICAL AND RE-VEGETATE OPEN AREAS. RE-VEGETATE OPEN AREAS WHEN PRACTICABLE BEFORE AND AFTER GRADING OR CONSTRUCTION. IDENTIFY THE TYPE OF VEGETATIVE SEED MIX USED. (Schedule A7.a.v)
11. MAINTAIN AND DELINEATE ANY EXISTING NATURAL BUFFER WITHIN THE 50-FEET OF WATERS OF THE STATE. (Schedule A.7.b.i.and (2(a)(b))
12. INSTALL PERIMETER SEDIMENT CONTROL, INCLUDING STORM DRAIN INLET PROTECTION AS WELL AS ALL SEDIMENT BASINS, TRAPS, AND BARRIERS PRIOR TO LAND DISTURBANCE. (Schedule A8.c.i.(5))
13. CONTROL BOTH PEAK FLOW RATES AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTLETS AND DOWNSTREAM CHANNELS AND STREAM BANKS. (Schedule A7.c)
14. CONTROL SEDIMENT AS NEEDED ALONG THE SITE PERIMETER AND AT ALL OPERATIONAL INTERNAL STORM DRAIN INLETS AT ALL TIMES DURING CONSTRUCTION, BOTH INTERNALLY AND AT THE SITE BOUNDARY. (Schedule A.7.d.i)
15. ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK. (Schedule A.8.c.i.(6))
16. APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES. TEMPORARY OR PERMANENT STABILIZATIONS MEASURES ARE NOT REQUIRED FOR AREAS THAT ARE INTENDED TO BE LEFT UNVEGETATED, SUCH AS DIRT ACCESS ROADS OR UTILITY POLE PADS.(Schedule A8.c.ii.(3))
17. ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS. (Schedule A8.c.i.(7))
18. PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: CONSTRUCTION ENTRANCE, GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES. (ScheduleA7.d.ii and A.8.c.ii(4))
19. WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE. (Schedule A.7.d.ii.(5))
20. CONTROL PROHIBITED DISCHARGES FROM LEAVING THE CONSTRUCTION SITE, I.E., CONCRETE WASH-OUT, WASTEWATER FROM CLEANOUT OF STUCCO, PAINT AND CURING COMPOUNDS. (Schedule A.6)
21. USE BMPS TO PREVENT OR MINIMIZE STORM WATER EXPOSURE TO POLLUTANTS FROM SPILLS; VEHICLE AND EQUIPMENT FUELING, MAINTENANCE, AND STORAGE; OTHER CLEANING AND MAINTENANCE ACTIVITIES; AND WASTE HANDLING ACTIVITIES. THESE POLLUTANTS INCLUDE FUEL, HYDRAULIC FLUID, AND OTHER OILS FROM VEHICLES AND MACHINERY, AS WELL AS DEBRIS, FERTILIZER, PESTICIDES AND HERBICIDES, PAINTS, SOLVENTS, CURING COMPOUNDS AND ADHESIVES FROM CONSTRUCTION OPERATIONS. (Schedule A.7.e.i.(2))
22. IMPLEMENT THE FOLLOWING BMPS WHEN APPLICABLE: WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES, EMPLOYEE TRAINING ON SPILL PREVENTION AND PROPER DISPOSAL PROCEDURES, SPILL KITS IN ALL VEHICLES, REGULAR MAINTENANCE SCHEDULE FOR VEHICLES AND MACHINERY, MATERIAL DELIVERY AND STORAGE CONTROLS, TRAINING AND SIGNAGE, AND COVERED STORAGE AREAS FOR WASTE AND SUPPLIES. (Schedule A. 7.e.iii.)
23. USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL. (Schedule A7.a.iv)
24. THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS TO MINIMIZE NUTRIENT RELEASES TO SURFACE WATERS. EXERCISE CAUTION WHEN USING TIME-RELEASE FERTILIZERS WITHIN ANY WATERWAY RIPARIAN ZONE. (Schedule A.9.b.iii)
25. IF AN ACTIVE TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS. (Schedule A.9.d)
26. TEMPORARILY STABILIZE SOILS AT THE END OF THE SHIFT BEFORE HOLIDAYS AND WEEKENDS, IFNEEDED. THE REGISTRANT IS RESPONSIBLE FOR ENSURING THAT SOILS ARE STABLE DURING RAIN EVENTS AT ALL TIMES OF THE YEAR. (Schedule A7.b)
27. AS NEEDED BASED ON WEATHER CONDITIONS, AT THE END OF EACH WORKDAY SOIL STOCKPILES MUST BE STABILIZED OR COVERED, OR OTHER BMPS MUST BE IMPLEMENTED TO PREVENT DISCHARGES TO SURFACE WATERS OR CONVEYANCE SYSTEMS LEADING TO SURFACE WATERS. (Schedule A 7.e.ii.(2))
28. CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND BARE GROUND ACTIVITIES DURING WET WEATHER. (Schedule A.7.a.i)
29. SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL. (Schedule A.9.c.i)
30. OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT AND BEFORE BMP REMOVAL. (Schedule A.9.c.ii)
31. CATCH BASINS: CLEAN BEFORE RETENTION CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT. SEDIMENT BASINS AND SEDIMENT TRAPS: REMOVE TRAPPED SEDIMENTS BEFORE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT AND AT COMPLETION OF PROJECT. (Schedule A.9.c.iii & iv)
32. WITHIN 24 HOURS, SIGNIFICANT SEDIMENT THAT HAS LEFT THE CONSTRUCTION SITE, MUST BE REMEDIATED. INVESTIGATE THE CAUSE OF THE SEDIMENT RELEASE AND IMPLEMENT STEPS TO PREVENT A 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 TIMEFRAME. (Schedule A.9.b.i)
33. THE INTENTIONAL WASHING OF SEDIMENT INTO STORM SEWERS OR DRAINAGE WAYS MUST NOT OCCUR. VACUUMING OR DRY SWEEPING AND MATERIAL PICKUP MUST BE USED TO CLEANUP RELEASED SEDIMENTS. (Schedule A.9.b.ii)
34. THE ENTIRE SITE MUST BE TEMPORARILY STABILIZED USING VEGETATION OR A HEAVY MULCH LAYER, TEMPORARY SEEDING, OR OTHER METHOD SHOULD ALL CONSTRUCTION ACTIVITIES CEASE FOR 30 DAYS OR MORE. (Schedule A.7.f.i)
35. PROVIDE TEMPORARY STABILIZATION FOR THAT PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES CEASE FOR 14 DAYS OR MORE WITH A COVERING OF BLOWN STRAW AND A TACKIFIER, LOOSE STRAW, OR AN ADEQUATE COVERING OF COMPOST MULCH UNTIL WORK RESUMES ON THAT PORTION OF THE SITE. (Schedule A.7.fii)
36. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED, ALL TEMPORARY EROSION CONTROLS AND RETAINED SOILS MUST BE REMOVED AND DISPOSED OF PROPERLY, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. (Schedule A.8.c.iii(I) and D.3.c.ii and iii)

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 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 BE CLEARLY DELINEATED IN THE FIELD. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE IS PERMITTED BEYOND THE CLEARING LIMITS. THE OWNER/PERMITTEE 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 BMP's THAT MUST BE INSTALLED ARE A GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMP's MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT.
4. IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAT SEPTEMBER 1; THE TYPE AND PERCENTAGES OF SEED IN THE MIX MUST BE IDENTIFIED ON THE PLANS.
5. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP i.e. (FILTER BAG).
6. 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.
7. THE ESC MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED WITHIN 3 DAYS (OCT. 1 TO APR. 30) TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION CONTROL REGULATIONS. CHANGES TO THE APPROVED ESC PLAN MUST BE SUBMITTED IN THE FORM OF AN ACTION PLAN TO DEQ PER THE 1200 C PERMIT.
8. IN AREAS SUBJECT TO WIND EROSION, APPROPRIATE BMP's MUST BE USED WHICH MAY INCLUDE THE APPLICATION OF FINE WATER SPRAYING, PLASTIC SHEETING, MULCHING, OR OTHER APPROVED MEASURES.
9. ALL EXPOSED SOILS MUST BE COVERED DURING THE WET WEATHER PERIOD AND 21 DAYS OF MAY 1 TO SEPT. 30.

BMP MATRIX FOR CONSTRUCTION PHASES

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

		YEAR 2019							
BMPS	Month No.	4	5	6	7	8			
Pipe Slope Drains									
Energy Dissipaters									
Temporary Diversion Dikes									
Check Dams									
Temporary Seeding and Planting									
Permanent Seeding and Planting					X				
Mycorrhizae/ Biofertilizers									
Mulches (Straw 2 tons per acre)					X				
Construction Entrance		X	X	X	X				
Compost Blankets									
Compost Socks									
Compost Berm									
Soil Tackifiers									
Sodding Vegetative Buffer Strips									
Plastic Sheeting					X				
Sediment Fencing		X	X	X	X				
Erosion Control Blankets & Mats (Specify type)									
Earth Dikes (Stabilized)									
Drainage Swales									
Rock Outlet Protection									
Sediment Trap									
Straw Wattles (Loose compaction rice straw)		X	X	X					
Storm Drain Inlet Protection		X	X	X					
Temporary or Permanent Sedimentation Basins									
Unpaved roads graveled or other BMP on the road									
Dewatering (treatment location, schematic, & sampling plan required)									
Paving Operations Controls									
Concrete Truck Washout			X	X	X				

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

SHEET INDEX

EROSION AND SEDIMENT CONTROL PLANS

12.1 EROSION AND SEDIMENT CONTROL COVER SHEET
12.2 CLEARING AND DEMOLITION EROSION CONTROL PLAN
12.3 GRADING AND EROSION CONTROL PLAN
12.4 EROSION AND SEDIMENT CONTROL DETAILS

CITY OF West Linn ENGINEERING APPROVED
DATE 5/30/19 BY EL

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

REGISTERED PROFESSIONAL ENGINEER 7128 OREGON July 16, 1971 BRUCE D. GOLDSON
EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

EROSION AND SEDIMENT CONTROL COVER SHEET

2018-250

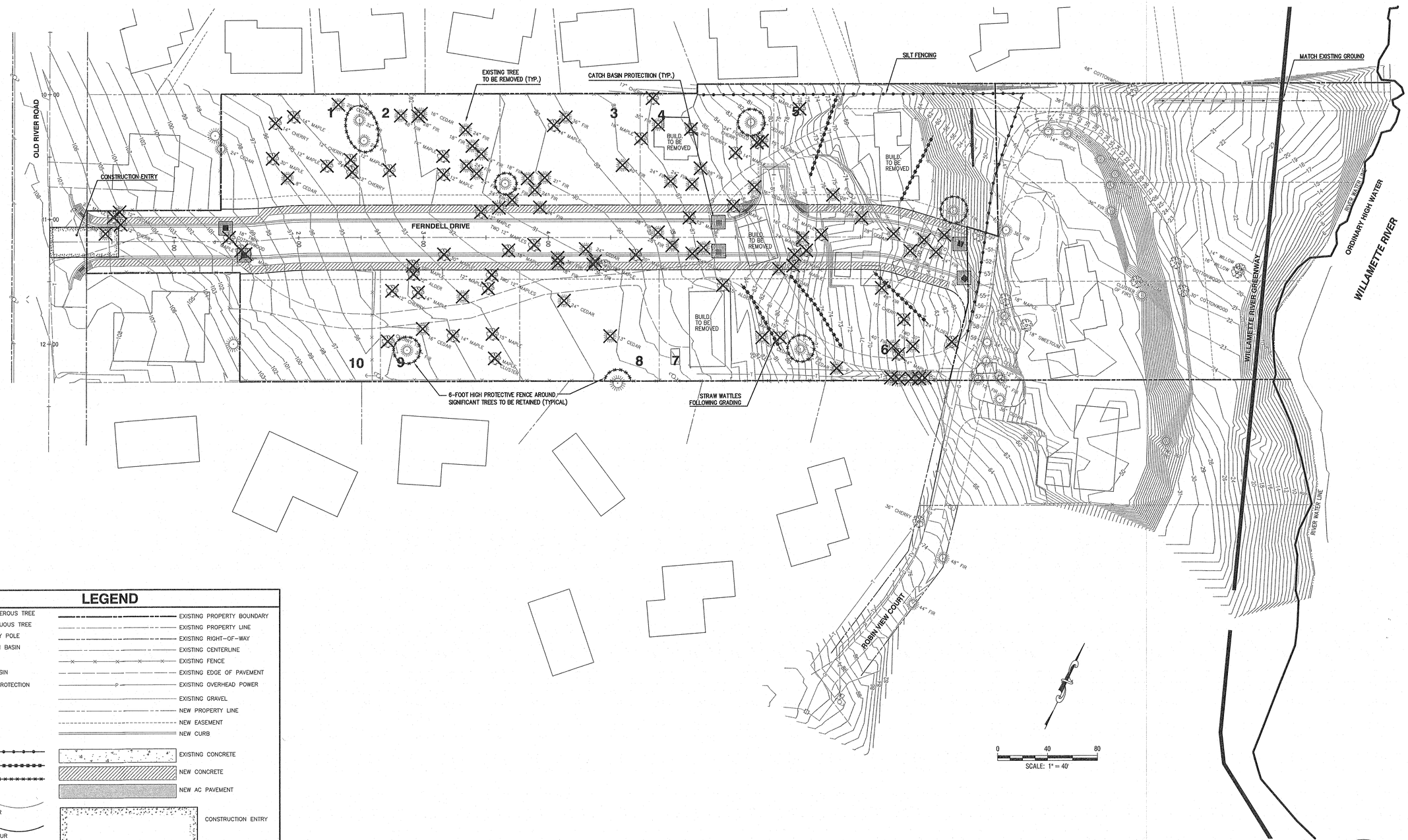
DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

Theta, llc
ENGINEERING - SURVEYING - PLANNING
PO Box 1345
Lake Oswego, Oregon 97035
503/481-8822
email: thetaeng@comcast.net

Hymark Custom Homes
18811 Trillium Drive
West Linn, Oregon 97068

Ferndell Estates
3300 & 3350 Riverside Court
West Linn, Oregon
Legal: 21E14AD00990

SHEET: 12.1



LEGEND

- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- EXISTING WELL
- NEW CATCH BASIN
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- WATTLE
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- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING CONCRETE
- NEW CONCRETE
- NEW AC PAVEMENT
- CONSTRUCTION ENTRY
- CONCRETE WASHOUT

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

CITY OF West Linn ENGINEERING APPROVED DATE 5/20/19 BY EL

REGISTERED PROFESSIONAL ENGINEER 7120 OREGON July 16, 1971 BRUCE D. GOLDSON

EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

CLEARING AND DEMOLITION EROSION CONTROL PLAN

2018-250

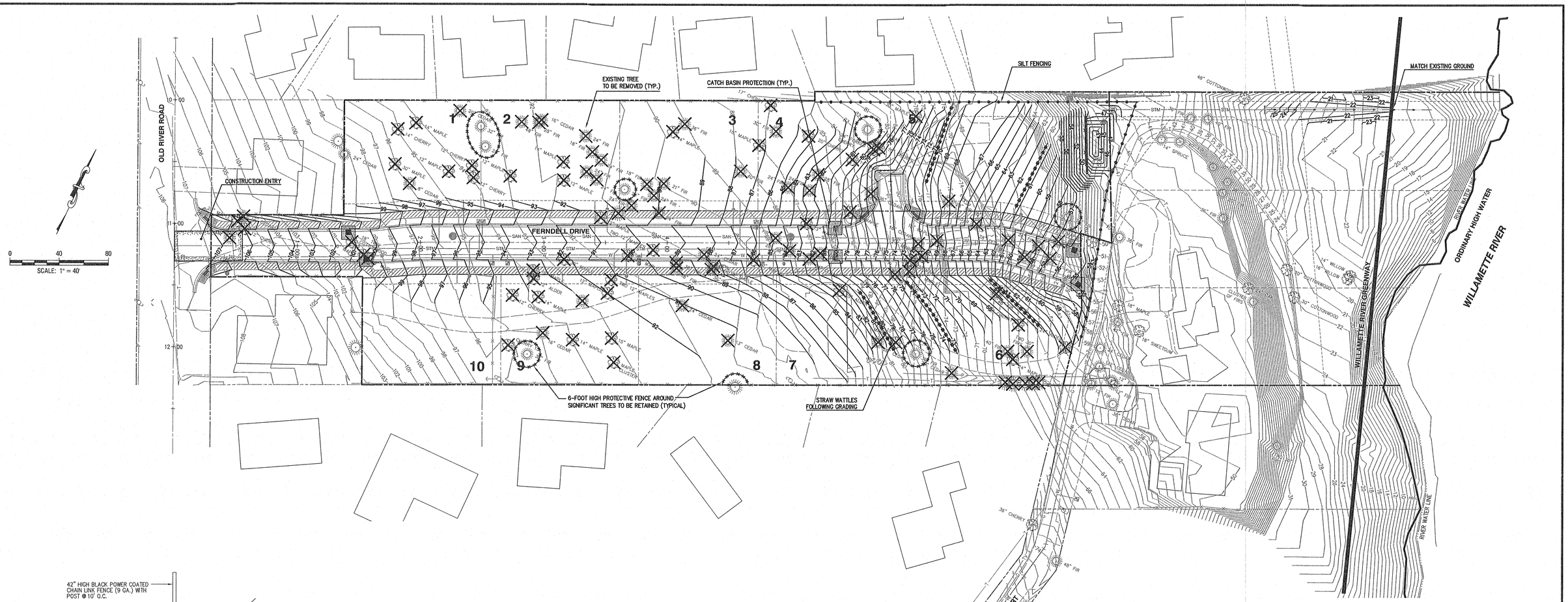
DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

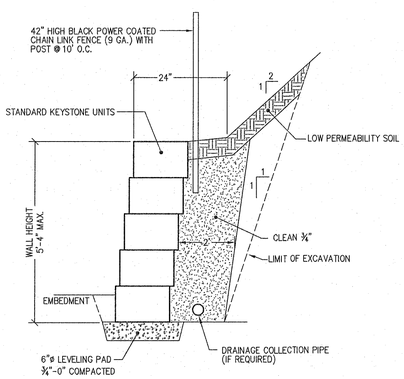
Theta, llc
ENGINEERING - SURVEYING - PLANNING
PO Box 1345
Lake Oswego, Oregon 97035
503/481-8822
email: thetaeng@comcast.net

Hymark Custom Homes
18811 Trillium Drive
West Linn, Oregon 97068

Ferndell Estates
3300 & 3350 Riverside Court
West Linn, Oregon
Legal: 21E14AD00990

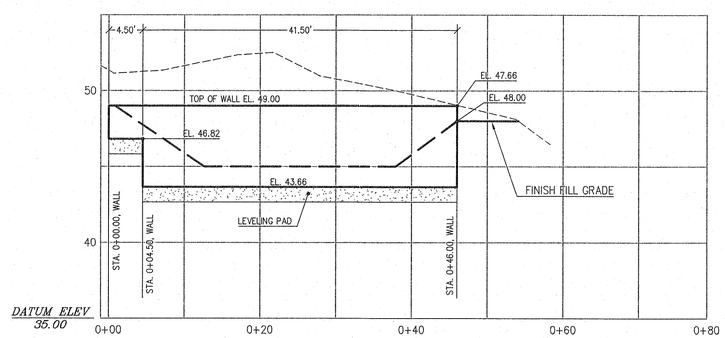
SHEET: 12.2





RETAINING WALL SCHEMATIC DESIGN — A / 12.3

SCALE: NTS



RETAINING WALL PROFILE — 1 / 12.3

SCALE: 1" = 10' HORIZONTAL
1" = 5' VERTICAL

LEGEND

- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- EXISTING UTILITY POLE
- EXISTING CATCH BASIN
- EXISTING WELL
- NEW CATCH BASIN
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- NEW CONCRETE
- NEW AC PAVEMENT
- CONSTRUCTION ENTRY
- CONCRETE WASHOUT

CITY OF West Linn ENGINEERING APPROVED
DATE 5/30/19 BY ec

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

REGISTERED PROFESSIONAL ENGINEER — OREGON — July 16, 1971 — BRUCE D. GOLDSON
EXPIRES: 06/30/2019
SIGNATURE DATE: 05/19/2019

2018-250

GRADING AND EROSION CONTROL PLAN

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	1" = 40'	05/06/2019	2	REVISED PER CITY REVIEW NO. 2
DATE:	June, 2017	03/28/2019	1	REVISED PER CITY REVIEW NO. 1
FILE:	Ferndell Estates Prelim3	DATE	NO.	REVISION

Theta, llc
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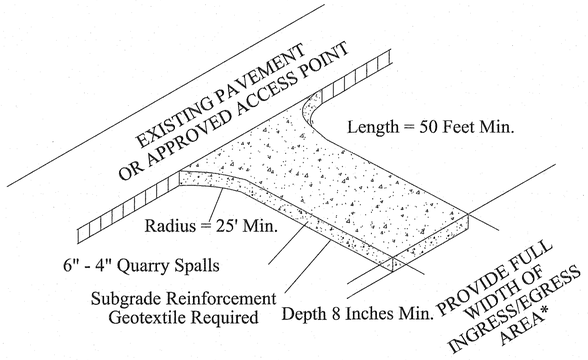
email: thetaeng@comcast.net

Hymark Custom Homes
18811 Trillium Drive
West Linn, Oregon 97068

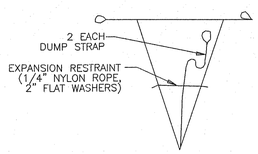
Ferndell Estates
3300 & 3350 Riverside Court
West Linn, Oregon
Legal: 21E14AD00990

SHEET: 12.3

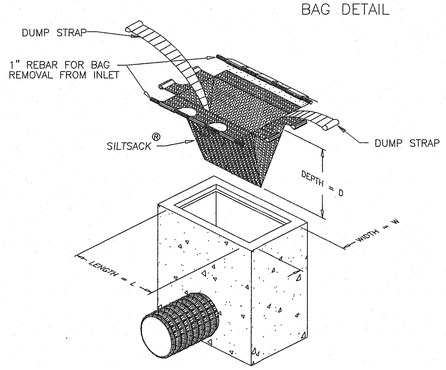


*20' MIN. FOR SINGLE FAMILY AND DUPLEX RESIDENTIAL

Construction Entrance

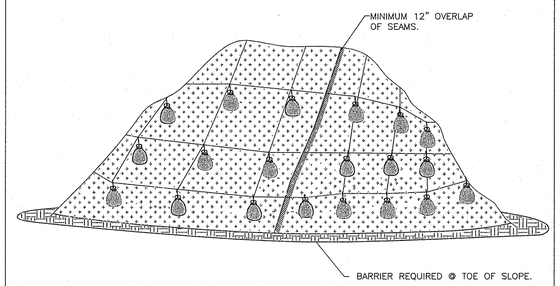


BAG DETAIL



Regular Flow Only
Do not use High Flow Insert Bags.

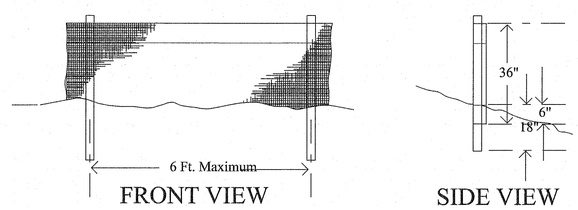
Catch Basin Insert Bag



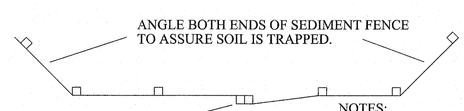
PLASTIC SHEETING

NOTES:
1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
2. BARRIER REQUIRED @ TOE OF STOCK PILE.
3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.

PLASTIC SHEETING	Detail Drawing 4-4



FRONT VIEW SIDE VIEW

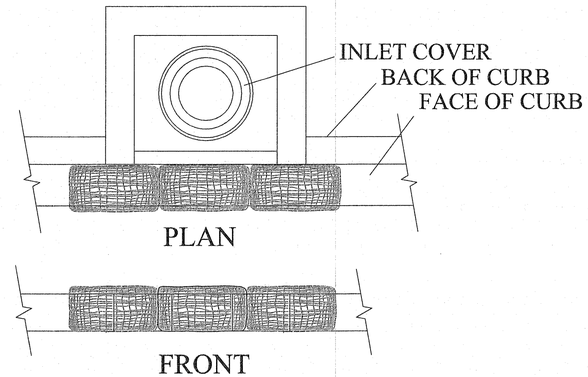


TOP VIEW

NOTES:
1. BURY BOTTOM OF FILTER FABRIC 6" MIN. VERTICALLY BELOW GRADE.
2. 2" x 2" FIR, PINE, OR STEEL FENCE POSTS.
3. STITCHED LOOPS TO BE INSTALLED UPHILL SIDE OF SLOPE.
4. COMPACT NATIVE FILL IN ALL AREAS OF FILTER FABRIC TRENCH.

Sediment Fence

NTS

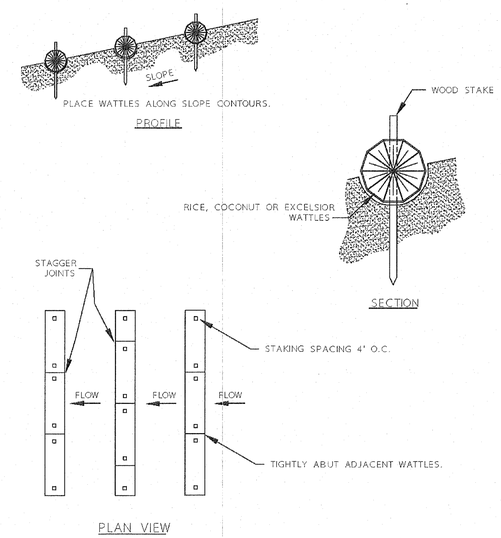


PLAN

FRONT

Ensure that no gaps exist between bags and 1/2 bag overlap of opening.

CURB INLET



NOTES:
1. STAKING SPECIFICATIONS:
   a. 1"X2" WOODEN STAKES
   b. ADDITIONAL STAKES MAY BE INSTALLED ON DOWNHILL SIDE OF WATTLES, ON STEEP SLOPE OR HIGHLY EROSIVE SOILS.
2. SPACING IN ACCORDANCE WITH DETAIL 940.

WATTLES

DETAIL DRAWING 4-27 REVISED 01-09

CITY OF West Linn ENGINEERING APPROVED DATE 5/30/19 BY ec

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

EROSION AND SEDIMENT CONTROL DETAILS

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	NTS			
DATE:	June, 2017			
FILE:	Ferndell Estates Details	DATE	NO.	REVISION

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SHEET: 12.4

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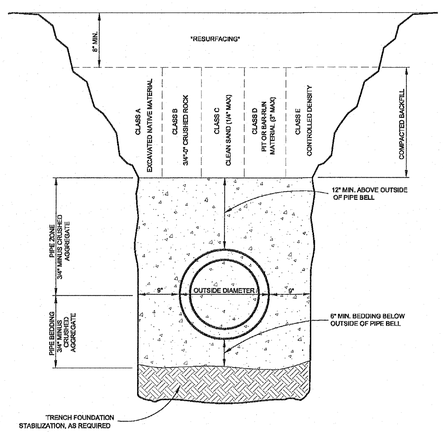

TRENCH BACKFILL BEDDING AND PIPE ZONE

City of West Linn | DATE: 2010 | DRAWING NO. WL-200 | FILE NO.

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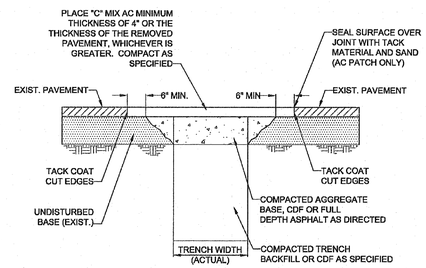

NOTE:

1. ALL EXISTING AC OR PCC PAVEMENT SHALL BE SAWCUT TO NEAT, STRAIGHT LINES PRIOR TO REPAVING.
2. CONCRETE PAVEMENT SHALL BE REPLACED WITH CONCRETE TO A MINIMUM THICKNESS OF REMOVED PAVEMENT, WHICHEVER IS GREATER.
3. IF EXISTING BASE MATERIAL IS CTB OR ATB, THEN REPLACEMENT BASE MATERIAL SHALL MATCH EXISTING.
4. ALL UTILITIES SHALL HAVE A MINIMUM COVER OF 36".
5. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY PER AASHTO T-180 OR AS SPECIFIED IN THE CONTRACT DOCUMENTS.
6. ALL TRENCH BACKFILL AND PATCHING SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY OF WEST LINN.
7. APPROVED CDF SHALL BE USED OR 3/4 - 0" GRAVEL BACKFILL SHALL BE PLACED AND COMPACTED IN 12" MAXIMUM LIFTS. IF 3/4-0" GRAVEL BACKFILL IS USED, COMPACTION TESTING BY A CERTIFIED TESTING COMPANY IS REQUIRED AT DEPTH INTERVALS AS SPECIFIED BY THE CITY ENGINEER.
8. T-CUT MAY BE ENLARGED AT THE DISCRETION OF THE CITY ENGINEER OR CITY INSPECTOR DUE TO SITE CONDITIONS OR PROJECT REQUIREMENTS.
9. ALL CUT EDGES SHALL BE SAND SEALED.
10. COMPACTED BACKFILL OR CDF MUST EXTEND 2 FEET OUTSIDE OF PAVEMENT SURFACE.

STREET T-CUT

City of West Linn | DATE: 2010 | DRAWING NO. WL-203 | FILE NO.

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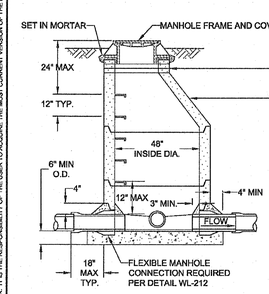


NOTE:
MANHOLE LID TO BE 1' ABOVE FINISH GRADE IN UNPAVED EASEMENTS.

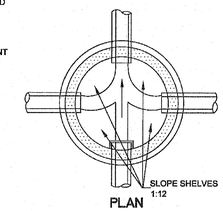
PRECAST SECTIONS AND POURED CONCRETE BASES SHALL CONFORM TO CITY STANDARD SPECIFICATIONS.

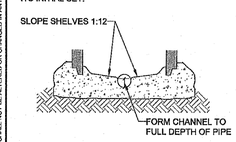
ALL JOINTS SHALL BE SEALED WITH WITH PREFORMED PLASTIC OR RUBBER RING TO FORM A WATER TIGHT SEAL.

LOCATE STEPS ON UPSTREAM SIDE OF MANHOLE.

NOTE:
POLYETHYLENE STEPS/IRON REINFORCEMENT 8" x 12" WIDE, 2" DROP, EMBEDDED 3", ON 12" CENTERS (TYPICAL)

MANHOLES SHALL HAVE A 12" MIN. 24" MAX. BOTTOM RISER, TO BE BEDDED IN THE CONCRETE AS THE BASE TAKES ITS INITIAL SET.





NOTE:
CHANNELS MUST BE ABLE TO PASS A 7"X30" CYLINDER INTO PIPES. SHELF SHALL NOT BE BELOW THE TOP OF THE PIPE.

STANDARD MANHOLE FOR LESS THAN 36" PIPE

City of West Linn | DATE: 2010 | DRAWING NO. WL-207 | FILE NO.

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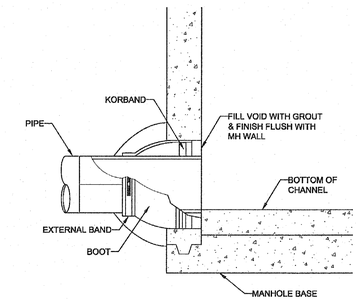
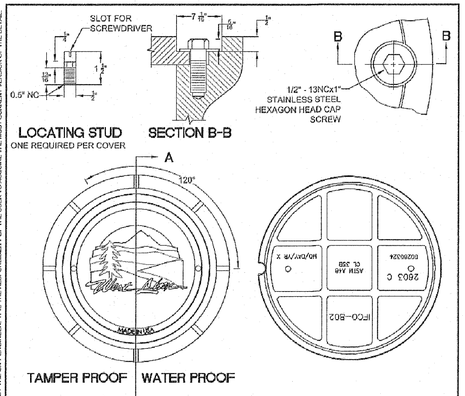


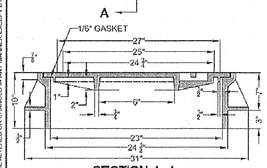
FLEXIBLE MANHOLE CONNECTION
(KOR-N-SEAL OR APPROVED EQUAL)

FLEXIBLE MANHOLE CONNECTION

City of West Linn | DATE: 2010 | DRAWING NO. WL-212 | 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.





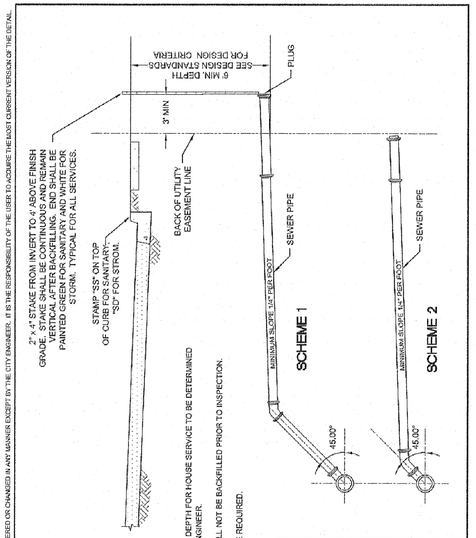
NOTE:

1. COVER AND FRAME TO BE MACHINED TO A TRUE BEARING ALL AROUND
2. MATERIAL SHALL BE OF GRAY CAST IRON A.S.T.M. A-48 CLASS 30
3. 2 HOLE LID FOR SANITARY SEWER
4. 16 HOLE LID FOR STORM SEWER

WATERPROOF AND TAMPERPROOF MANHOLE FRAME AND COVER

City of West Linn | DATE: 2010 | DRAWING NO. WL-214 | 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.



NOTE:

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

SERVICE BRANCH

City of West Linn | DATE: 2010 | DRAWING NO. WL-218 | FILE NO.

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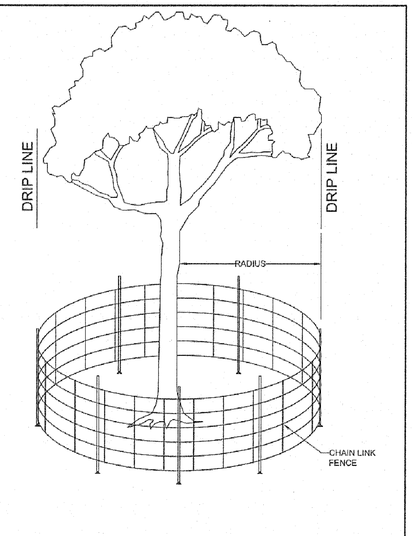

NOTE:

1. 6' CHAIN LINK ON 2" POST AT 10' SPACING, DRIVEN 2' INTO GROUND
2. RADIUS IS EITHER 1/2" PER CALIPER INCH OR 10' OUTSIDE OF DRIPLINE - SEE PLANS

TREE PROTECTION FENCE

City of West Linn | DATE: 2010 | DRAWING NO. WL-219 | FILE NO.

City of West Linn ENGINEERING APPROVED
DATE 5/30/19 BY EL

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STANDARD DETAILS

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	NTS			
DATE:	June, 2017			
FILE:	Ferndell Estates Details	DATE	NO.	REVISION

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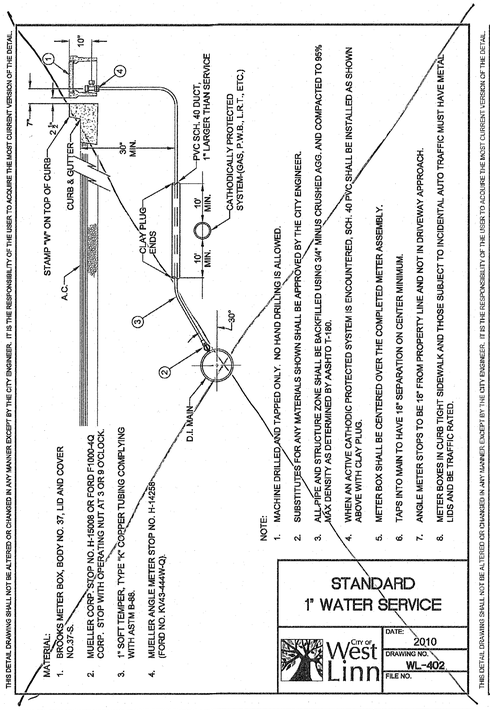


MATERIAL:
1. BROOKS METER BOX, BODY NO. 37, LID AND COVER NO.37-S.
2. MUELLER CORP. STOP NO. H-15008 OR FORD F1000-4Q CORP. STOP WITH OPERATING NUT AT 3 OR 9 O'CLOCK.
3. 1" SOFT TEMPER, TYPE "K" COPPER TUBING COMPLYING WITH ASTM B-88.
4. MUELLER ANGLE METER STOP NO. H-14258 (FORD NO. KV43-444W-Q).

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

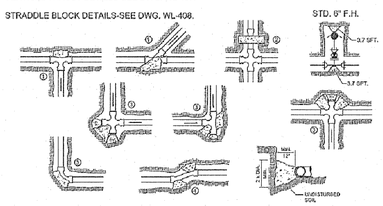
STANDARD 1" WATER SERVICE

City of West Linn | DATE: 2010 | DRAWING NO. WL-402 | 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.

FITTING SIZE (inches)	TEE, WYE, & HYDRANTS	STRADDLE BLOCK ②	90° BEND ③ PLUGGED CROSS TEE PLUGGED-RUNS	45° BEND ④	22 1/2° BEND ⑤	11 1/2° BEND ⑥
2	*	*	*	*	*	*
4	1.7	2.1	2.4	1.3	*	*
6	3.7	4.9	5.3	2.9	1.5	*
8	6.7	8.7	9.5	5.1	2.7	1.3
10	10.5	13.6	14.8	8	4.1	2
12	15.1	19.6	21.3	11.6	5.9	2.9
14						
16	26.8	34.8	37.9	20.5	10.4	5.2
18	33.9	44	47.9	25.9	13.2	6.7
LARGER	* *	* *	* *	* *	* *	* *
BEARING AREA OF THRUST BLOCKS (sq. ft.)						

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



* BLOCK TO UNDISTURBED TRENCH WALLS.

** THRUST BLOCKS FOR PIPES LARGER THAN 18" WILL BE INDIVIDUALLY DESIGNED BY THE ENGINEER.

HORIZONTAL THRUST BLOCKING

City of West Linn | DATE: 2010 | DRAWING NO. WL-406 | FILE NO.

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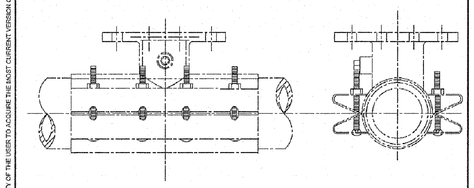

NOTE:
1. WATER MAIN SHALL BE CLEANED BEFORE ATTACHING SLEEVE.
2. SLEEVE AND VALVE SHALL BE PRESSURE TESTED BEFORE MAKING TAP.
3. PRESSURE TEST AND TAP SHALL BE MADE IN THE PRESENCE OF AN AUTHORIZED CITY REPRESENTATIVE.
4. PROPER TAPPING MACHINE SHALL BE USED TO MAKE TAP.
5. THRUST BLOCKING REQUIREMENTS SHALL BE DETERMINED BY THE ENGINEER OR PER DWG. WL-406.
6. TAP SHALL BE MADE NO CLOSER THAN 18 INCHES FROM THE NEAREST JOINT OR TAP.
7. SLEEVE AND VALVE SHALL BE WRAPPED WITH 8 MIL PLASTIC.
8. SLEEVES TO BE USED ARE JCM OR MUELLER STAINLESS STEEL TAPPING SLEEVES. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL.
9. SLEEVE SHALL BE AS LEVEL AS POSSIBLE.
10. ALL BOLTS SHALL HAVE NEVER SIEZE ON THREADS.

STANDARD WET TAP

City of West Linn | DATE: 2010 | DRAWING NO. WL-410 | FILE NO.

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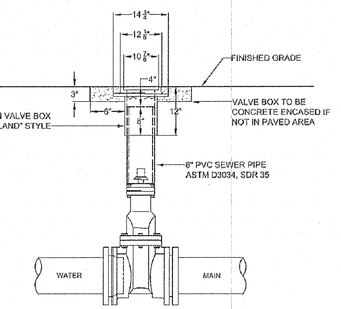

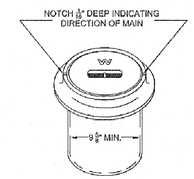

NOTE:
1. VALVE BOXES SHALL BE CENTERED DIRECTLY OVER THE VALVE NUT IN A VERTICAL POSITION.
2. VALVE BOX TOP SHALL BE ADJUSTED TO MEET FINISHED GRADE.
3. PVC SHALL BE ONE CONTINUOUS PIECE- NO BELLS OR COUPLERS.

STANDARD VALVE BOX DETAIL FOR 4" OR LARGER BLOW-OFF

City of West Linn | DATE: 2010 | DRAWING NO. WL-412 | FILE NO.

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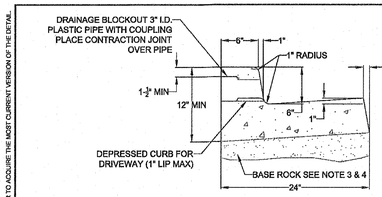
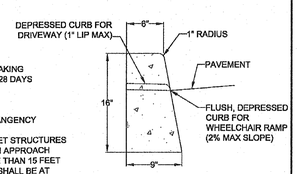


FLUSH, DEPRESSED CURB FOR WHEELCHAIR RAMP 2% MAX SLOPE

TYPICAL CURB AND GUTTER



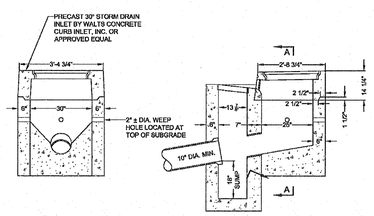
TYPICAL STRAIGHT CURB

NOTE:
1. CONCRETE SHALL HAVE A BREAKING STRENGTH OF 3300 PSI AFTER 28 DAYS
2. CONTRACTION JOINTS:
   A) TO BE PROVIDED:
      -AT EACH POINT OF TANGENCY
      -AT EACH COLD JOINT
      -AT EACH SIDE OF INLET STRUCTURES
      -AT BOTH SIDES OF AN APPROACH
   B) SPACING TO BE NOT MORE THAN 15 FEET
   C) THE DEPTH OF THE JOINT SHALL BE AT LEAST 1/3 OF THE THICKNESS OF CONCRETE
   D) EXPANSION JOINTS SHALL NOT BE USED
3. BASE ROCK - 1-1/2"-0", 95% COMPACTION PER AASHTO T-180 ROCK SHALL BE TO SUBGRADE OF THE STREET SECTION OR 4" IN DEPTH, WHICHEVER IS GREATER
4. FULL DEPTH PREPARED ROCK SECTION SHALL EXTEND 1' HORIZONTALLY BEYOND BOTH SIDES OF CURB AND GUTTER
5. DRAINAGE BLOCK - 3" DIA. PLASTIC PIPE
   A) DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE DONE BY:
      -CORE DRILLING
      -VERTICAL SAWCUT OF CURB 24" EACH SIDE OF DRAIN AND RE-POURED TO FULL DEPTH OF CURB
6. STAMP TOP OF CURB WITH "W" AT WATER SERVICE CROSSING AND "S" AT SANITARY LATERAL CROSSING

TYPICAL CURBS

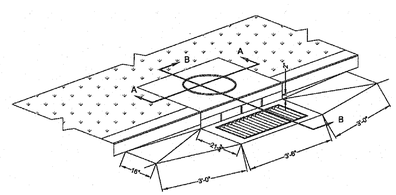
City of West Linn | DATE: 2010 | DRAWING NO. WL-501 | FILE NO.

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.



SECTION A-A

SECTION B-B

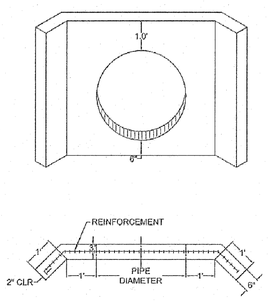


NOTE:
1. CAST IN PLACE CONCRETE TO BE 3300 PSI AND WEEP HOLE WITH GALVINIZED MESH. SCREEN ON MIN. 3 SIDES OF INLET.
2. MANHOLE RIMS AND COVERS AS MANUFACTURED BY HERN IRON WORKS, COEUR D' ALENE, IDAHO. COVER PATTERN NO. 2312, RIM PATTERN NO. 2311 OR APPROVED EQUAL.

COMBINATION CURB INLET

City of West Linn | DATE: 2010 | DRAWING NO. WL-601 | 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.



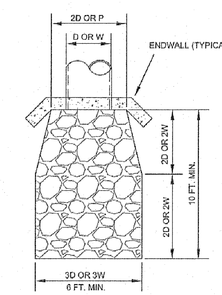
NOTE:
1. USE CONCRETE HAVING A 28 DAY DESIGN STRENGTH OF 3300 PSI.
2. OUTLET WING WALL SHALL BE USED FOR ALL OUTFALL PIPES FROM 10" TO 36".
3. THIS DETAIL REPRESENTS THE MINIMUM REQUIREMENT. THE NEED FOR ADDITIONAL STEEL, A FOOTING AND DRAINAGE BEHIND THE WALL SHALL BE INVESTIGATED BY THE DESIGN ENGINEER.
4. FOR PIPES LARGER THAN 33" OR MULTIPLE PIPE OUTLETS, USE DETAIL WL-612.
5. CONCRETE REINFORCEMENT SHALL CONSIST OF:
   A) ADDING A POLY-FIBER MESH TO THE CONCRETE MIX OR
   B) USE (2) #4 BARS ABOVE AND BELOW PIPE AND #4 BARS AT 6" O.C. VERTICALLY.

OUTLET HEADWALL (FOR OUTLET PIPES OF 10" TO 33")

City of West Linn | DATE: 2010 | DRAWING NO. WL-613 | FILE NO.

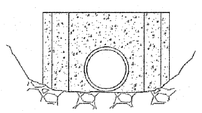
THIS DETAIL DRAWING SHALL NOT BE ALTERED OR CHANGED IN ANY MANNER EXCEPT BY THE CITY ENGINEER. IT IS THE RESPONSIBILITY OF THE USER TO ACQUIRE THE MOST CURRENT VERSION OF THE DETAIL.

D = PIPE DIAMETER
W = BOTTOM WIDTH OF CHANNEL
P = WETTED PERIMETER OF CHANNEL



DESIGN VELOCITY FT./SEC	ROCK CLASSIFICATION BY WEIGHT
8 - 10	200 LBS.
10 - 12	1/4 TON
12 - 14	1/2 TON
14 - 16	1 TON
16 - 18	2 TON

SELECTION OF RIP RAP (SEE NOTE 1)



NOTE:
1. DIMENSIONS FOR RIP RAP APPLY TO FLOWS
   < 2 CFS RIP RAP FOR FLOWS
   > 2 CFS MUST BE DESIGNED BY AN ENGINEER
   FLOWS > 20 FPS SHALL USE ENERGY DISSIPATOR
2. TYPE OF RIP RAP
   A. REGULAR QUARRY STONE CLASS 50-200
   B. COBBLESTONE
   C. CONCRETE (ONLY ALLOWED UPON APPROVAL OF THE CITY)
3. PLACEMENT
   A. MINIMUM DEPTH = 1 1/2 TIMES AVERAGE STONE SIZE.
   B. ROCKS SHALL BE PLACED TO PROVIDE A MINIMUM OF VOIDS.
   C. SURFACE ROCKS OR CONCRETE SHALL PROTRUDE AT LEAST 1/2 THEIR VERTICAL DIMENSION.
   D. RIP RAP IS TO BE PLACED OVER A NATURAL BEDDING, OR IT MAY BE GROUTED OR PLACED OVER A GRAVEL BEDDING AS REQUIRED BY THE CITY.

STORM SEWER OUTFALL

City of West Linn | DATE: 2010 | DRAWING NO. WL-614 | FILE NO.

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

City of West Linn ENGINEERING APPROVED
DATE 5/30/19 BY EL

STANDARD DETAILS

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	NTS			
DATE:	June, 2017			
FILE:	Ferndell Estates Details	DATE	NO.	REVISION

Theta, llc
ENGINEERING - SURVEYING - PLANNING
PO Box 1345
Lake Oswego, Oregon 97035
503/481-8822
email: thetaeng@comcast.net

Hymark Custom Homes
18811 Trillium Drive
West Linn, Oregon 97068

Ferndell Estates
3300 & 3350 Riverside Court
West Linn, Oregon
Legal: 21E14AD00990

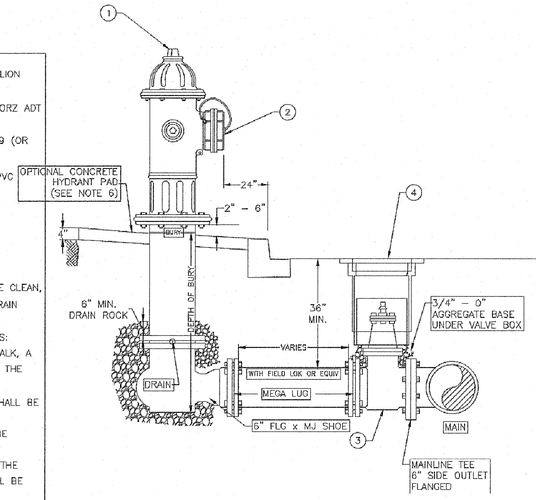
SHEET: D2

MATERIALS:

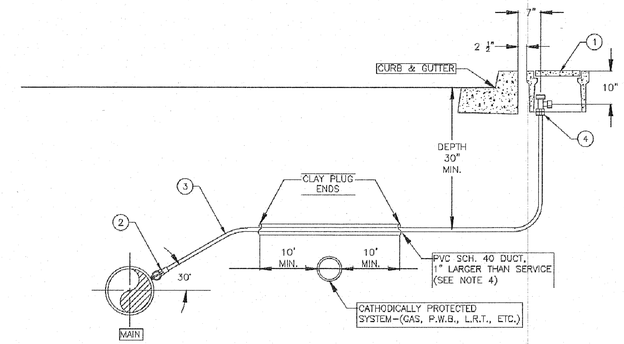
1. HYDRANT – MUELLER SUPER CENTURION MODEL A423 OR CLOW MEDALLION F2545 (OR APPROVED EQUAL). COLOR SHALL BE SAFETY YELLOW.
2. STORZ ADAPTER – REMOVE SAFETY CHAINS AND INSTALL 5X4.5 NFT STORZ ADT WITH CAP
3. VALVE – 6" MUELLER RESILIENT WEDGE GATE VALVE MODEL A-2361-19 (OR APPROVED EQUAL)
4. VALVE BOX – 18" TALL CAST IRON VALVE BOX WITH "W" COVER AND PVC EXTENSION, PER ODOT RD258.

NOTES:

1. ALL JOINTS SHALL BE RESTRAINED WITH MEGALUG MECHANICAL JOINT RESTRAINTS OR APPROVED EQUAL.
2. HYDRANT DRAIN OUTLETS SHALL REMAIN OPEN AND OPERATIONAL. PLACE CLEAN, 1 1/2" – 3/4" DRAIN ROCK AROUND SHOE TO AT LEAST 6" ABOVE DRAIN OUTLETS.
3. HYDRANTS SHALL BE PLACED ACCORDING TO THE FOLLOWING STANDARDS:
   - 3.1. WHERE A PLANTER STRIP EXISTS BETWEEN THE CURB AND SIDEWALK, A HYDRANT SHALL BE PLACED WITHIN THE PLANTER STRIP SO THAT THE FRONT PORT IS 24" BEHIND THE FACE OF THE CURB.
   - 3.2. WHERE THE SIDEWALK IS ADJACENT TO THE CURB, A HYDRANT SHALL BE PLACED BEHIND THE SIDEWALK.
   - 3.3. WHERE CURB AND SIDEWALK DO NOT EXIST, A HYDRANT SHALL BE PLACED ACCORDING TO THE DIRECTION OF CITY STAFF.
4. CONCRETE HYDRANT PADS ARE OPTIONAL AND SHALL BE INSTALLED AT THE DIRECTION OF CITY STAFF. ALL FITTINGS THAT CONTACT CONCRETE SHALL BE WRAPPED IN PLASTIC.
5. PROVIDE 2" TO 6" OF CLEARANCE BETWEEN THE TOP OF THE HYDRANT PAD OR GROUND SURFACE AND THE BOTTOM OF THE FLANGED BOLT PATTERN OF THE HYDRANT.
6. A 3-FOOT MINIMUM CLEAR ZONE SHALL BE MAINTAINED AROUND ALL HYDRANTS. NO TREES, POLES, OR FURNITURE ARE ALLOWED WITHIN THIS ZONE.



Standard Drawing No. WL-RD254
Effective Date:
Title: FIRE HYDRANT
City Engineer
Approved
City of West Linn
PUBLIC WORKS DEPARTMENT – STANDARD DRAWINGS
22500 Salamo Road, West Linn, OR 97068
Phone:503-722-5500
www.ci.west-linn.or.us
WL-RD254.dwg



MATERIALS: REFERENCE METER BOX DETAIL

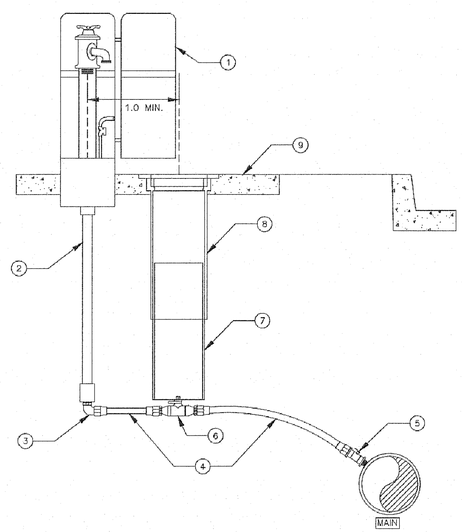
1. COMPOSITE STYLE METER BOX DRW486WBC OR EQUAL (MAKE NEW STANDARD)
2. MUELLER 1" B-25008 300PSI BALL TYPE CORP, OR APPROVED EQUAL
3. 1" SEAMLESS SOFT TEMPER, TYPE "K" COPPER TUBING COMPLYING WITH ASTM B-88
4. MUELLER 1" B-24258 300PSI BALL VALVE NO LEAD ANGLE STOP, OR APPROVED EQUAL

   SHOULD SAY MUELLER 1" B-24258 FULL PORT 300 PSI BALL VALVE NO LEAD ANGLE STOP OR APPROVED EQUAL

NOTE:

1. MACHINE DRILL OR TAP, HAND DRILLING IS NOT ALLOWED.
2. BACKFILL WITHIN PIPE AND STRUCTURE ZONE WITH 3/4" – 0" AGGREGATE BASE. COMPACT TO 95% MAX DENSITY AS DETERMINED BY AASHTO T-180.
3. WHEN AN ACTIVE CATHODIC PROTECTED SYSTEM IS ENCOUNTERED, SCH. 40 PVC SHALL BE INSTALLED AS SHOWN WITH CLAY PLUG.
4. METER BOX SHALL BE CENTERED OVER THE COMPLETED METER ASSEMBLY.
5. SERVICE TAPS INTO MAIN SHOULD HAVE 18" MIN. SEPARATION ON CENTER.
6. ANGLE METER STOPS SHALL BE 18" FROM ALL PROPERTY LINES AND NOT WITHIN A DRIVEWAY APPROACH.
7. METERS SHALL BE LOCATED BEHIND SIDEWALKS OR PLACED IN PLANTER STRIPS. BOXES THAT HAVE TO BE PLACED IN SIDEWALKS NEED TO BE APPROVED BY THE WATER DIVISION.

Standard Drawing No. WL-RD274
Effective Date:
Title: 1-INCH WATER SERVICE
City Engineer
Approved
City of West Linn
PUBLIC WORKS DEPARTMENT – STANDARD DRAWINGS
22500 Salamo Road, West Linn, OR 97068
Phone:503-722-5500
www.ci.west-linn.or.us
CAD_FILE_NAME



MATERIALS:

1. SAMPLING STATION – ECLIPSE NO. 88, BY THE KUPFERLE FOUNDRY CO. (OR EQUAL) WITH ¼" BALL VALVE IN PLACE OF ¼" P.E.T. COCK ON VENT, OR APPROVED EQUAL
2. BRASS STANDPIPE
3. ¾" COMPRESSION x MIPT 90° ELBOW – MUELLER H-15531, OR APPROVED EQUAL
4. ¾" K- SOFT COPPER, DOMESTIC
5. ¾" AWWA x COMPRESSION CORPORATION STOP MUELLER H-25008, OR APPROVED EQUAL
6. 3/4 FULL PORT BALL STRAIGHT SERVICE VALVE WITH COMPRESSION ENDS MUELLER B-25209, OR APPROVED EQUAL
7. 6" ASTM 3034 PVC PIPE
8. CAST IRON VALVE BOX, LID AND EXTENSION 910-C STYLE, OR APPROVED EQUAL. PER ODOT RD258.
9. 4" THICK CONCRETE SLAB SURROUNDING SAMPLING STATION

Standard Drawing No. WL-RD282
Effective Date:
Title: SAMPLING STATION
City Engineer
Approved
City of West Linn
PUBLIC WORKS DEPARTMENT – STANDARD DRAWINGS
22500 Salamo Road, West Linn, OR 97068
Phone:503-722-5500
www.ci.west-linn.or.us
WL-RD282.dwg

City of West Linn ENGINEERING APPROVED
DATE 5/30/19 BY: G.L.

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

STANDARD DETAILS

2018-250

DESIGNED:	BDG			
DRAWN:	BJS			
SCALE:	NTS			
DATE:	June, 2017			
FILE:	Ferndell Estates Details	DATE	NO.	REVISION

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West Linn, Oregon
Legal: 21E14AD00990

SHEET: D3