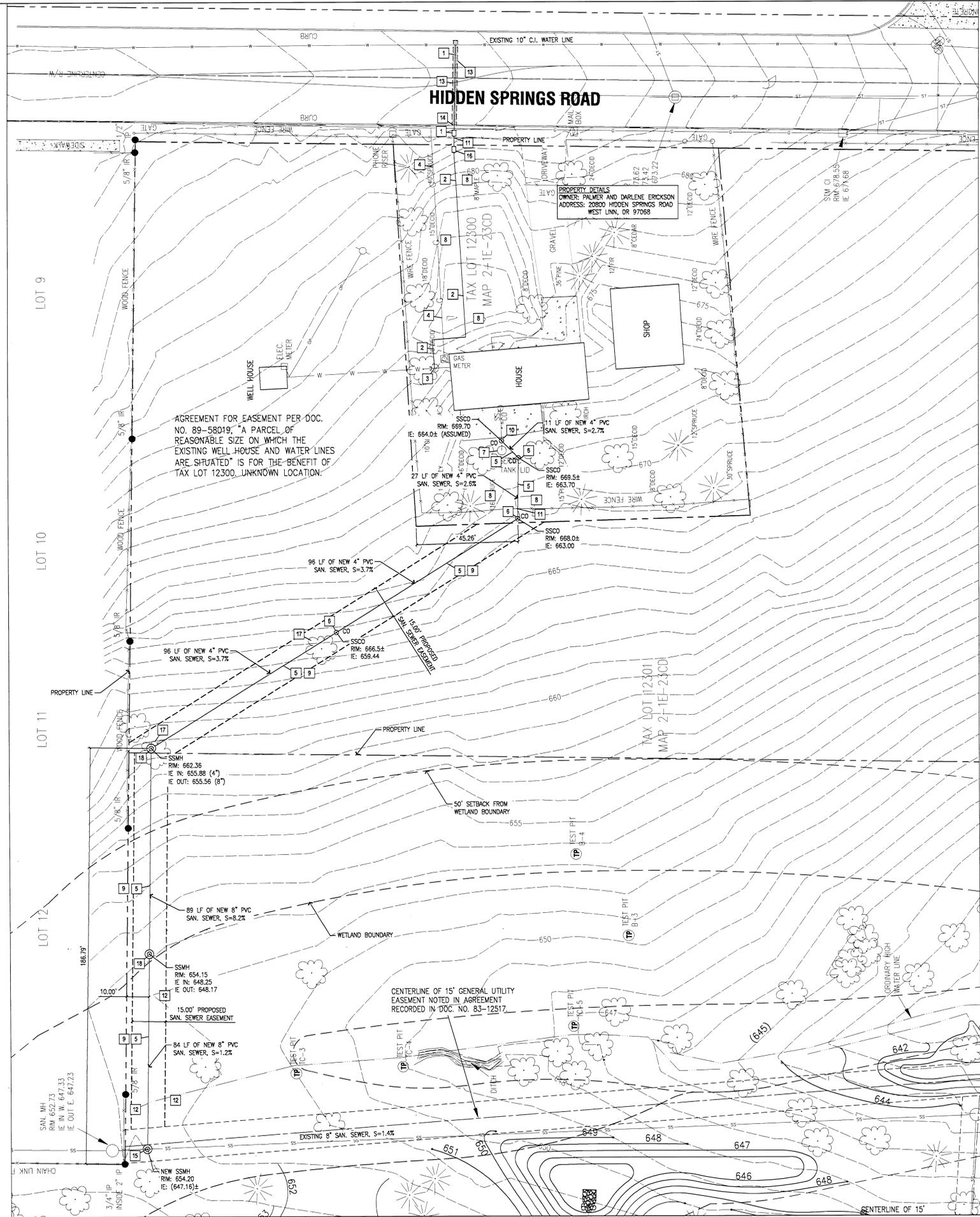
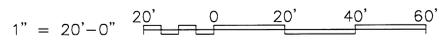


ERICKSON PROPERTY UTILITIES 2013



1 UTILITY PLAN SCALE: 1"=20'-0"



CONSTRUCTION NOTES

- 1. INSTALL 1" WATER SERVICE, METER AND BOX PER CITY OF WEST LINN STANDARD DRAWING WL-402. METER SIZE TO BE 5/8". INSTALL 1" COPPER WATER LINE FROM METER TO PROPERTY LINE... 2. INSTALL 1-1/2" PEX TUBING, MAINTAIN A MINIMUM OF 3" OF COVER. 3. CUT EXISTING WATER SUPPLY LINE AT PROPOSED POINT OF CONNECTION AND CAP THE "WELL" SIDE OF THE LINE... 4. ASSUMED LOCATION OF EXISTING GAS SERVICE LINE. CONTRACTOR TO VERIFY LOCATION PRIOR TO START OF CONSTRUCTION... 5. INSTALL PVC SANITARY SEWER PIPE, SIZE PER PLAN. 6. INSTALL STANDARD CLEANOUT. 7. SEPTIC TANK TO BE DECOMMISSIONED PER THE REQUIREMENTS SPECIFIED ON THIS DRAWING. ASSUMED SEPTIC TANK SIZE IS 1500 GALLONS. 8. RESTORE VEGETATION IN KIND IN AREAS DISTURBED BY CONSTRUCTION. 9. PRIOR TO START OF CONSTRUCTION, CONTRACTOR TO EVALUATE PROPOSED ROUTE FOR SANITARY LINE IN FIELD. NOTIFY ENGINEER IF THERE ARE ANY CONFLICTS WITH PROPOSED ROUTE AND EXISTING SITE FEATURES. 10. CONNECT TO EXISTING BUILDING SANITARY LINE AND INSTALL CLEANOUT. LOCATION AND DEPTH OF EXISTING SANITARY LINE IS ASSUMED. CONTRACTOR TO VERIFY LOCATION AND DEPTH PRIOR TO START OF CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY BETWEEN WHAT IS SHOWN ON THIS DRAWING AND WHAT IS OBSERVED IN FIELD. 11. REMOVE PORTION OF FENCE AS NECESSARY FOR INSTALLATION OF NEW UTILITY. REPAIR FENCE IN KIND AFTER INSTALLATION OF UTILITY. 12. THIS IS A JURISDICTIONAL WETLAND AREA. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS FOR CONSTRUCTING PROPOSED IMPROVEMENTS WITHIN WETLAND. CONTRACTOR TO MINIMIZE DISTURBANCE WITHIN EXISTING WETLAND AREA TO THE MAXIMUM EXTENT POSSIBLE. RESTORE AREAS DISTURBED BY CONSTRUCTION TO PRE-DISTURBED CONDITION. 13. SAWCUT EXISTING PAVEMENT AS NECESSARY FOR INSTALLATION OF NEW WATER SERVICE LINE. REPAIR PAVEMENT AFTER INSTALLATION OF WATER LINE. 14. SAWCUT EXISTING CURB AND GUTTER AS NECESSARY FOR INSTALLATION OF NEW WATER SERVICE LINE. REPAIR CURB AND GUTTER AFTER INSTALLATION OF WATER LINE. 15. INSTALL NEW MANHOLE AND CONNECT TO EXISTING SANITARY SEWER LINE. LOCATION AND DEPTH OF EXISTING SANITARY LINE IS ASSUMED. CONTRACTOR TO VERIFY LOCATION AND DEPTH PRIOR TO START OF CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY BETWEEN WHAT IS SHOWN ON THIS DRAWING AND WHAT IS OBSERVED IN FIELD. 16. INSTALL 1-1/2" REDUCED PRESSURE BACKFLOW PREVENTOR. 17. APPROXIMATE LOCATION OF EXISTING TREE. CONTRACTOR TO REMOVE EXISTING TREE AND ROOT SYSTEM AND DISPOSE OF OFF-SITE. 18. INSTALL NEW MANHOLE.

GENERAL SITE NOTES

- 1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE. CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND BECOMING FAMILIAR WITH THE SITE CONDITIONS PRIOR TO BIDDING. 2. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THAT NEW FEATURES TIE INTO EXISTING SITE DEVELOPMENT. REPORT DISCREPANCIES TO OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. 3. IN AREAS WHERE ASPHALT PAVING IS BEING REWORKED, PROVIDE NEW PAINT STRIPING FOR ALL REVISED PAVING WORK. 4. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH CITY INSPECTOR(S). CONTRACTOR SHALL NOTIFY CITY INSPECTOR(S) 48 HOURS PRIOR TO START OF CONSTRUCTION. 5. DURING CONSTRUCTION, THE CONTRACTOR AND/OR SUBCONTRACTORS SHALL HAVE A MINIMUM OF ONE (1) SET OF PERMIT APPROVED PLANS AND SPECIFICATIONS ON THE JOB SITE AT ALL TIMES. 6. UPON COMPLETION OF THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL. ALL DAMAGE CAUSED BY THE CONTRACTOR SHALL BE RESTORED TO AN "AS GOOD OR BETTER" CONDITION. 7. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO CITY OF WEST LINN STANDARDS AND SPECIFICATIONS. 8. SURVEY OF EXISTING CONDITIONS PREPARED BY COMPASS ENGINEERING, THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL SURVEY DATA. CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING RIGHT-OF-WAY LINES, SLOPE EASEMENTS, AND ALL HORIZONTAL AND VERTICAL CONTROL PRIOR TO CONSTRUCTION. 9. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING AND SHALL ARRANGE FOR STAKING WITH A LICENSED SURVEYOR. STAKING WILL BE REVIEWED BY OWNER FOR CONFORMANCE TO DESIGN PRIOR TO CONSTRUCTION. 10. ALL GRADES BETWEEN SPOT ELEVATIONS SHALL HAVE UNIFORM SLOPE UNLESS OTHERWISE INDICATED. 11. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL CONSTRUCTION. ADEQUATE SHORING BRACING, TIES, AND SUPPORTS SHALL BE USED TO PROVIDE PROPER TEMPORARY INTEGRITY DURING ALL PHASES OF CONSTRUCTION. 12. ALL EXISTING LANDSCAPED AND UNPAVED AREAS WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWORK OPERATIONS SHALL BE HAND RAKED SMOOTH AND RETURNED TO ORIGINAL EXISTING CONDITIONS. DISTURBED LANDSCAPED AREAS SHALL RECEIVE BARK DUST AND REPLACEMENT PLANTINGS. DISTURBED NATURAL AREAS SHALL BE HYDROSEED TO REPLACE NATIVE COVER. DISTURBED GRAVEL AREAS SHALL RECEIVE REPLACEMENT GRAVEL OR CRUSHED ROCK SURFACING. 13. ALL DITCHES, SWALES, GUTTERS, ETC. SHOULD BE CONSIDERED ACTIVE STORM CONVEYANCES UNLESS OTHERWISE INDICATED. CONTRACTOR IS RESPONSIBLE FOR ADDRESSING STORM WATER DRAINAGE AND DETERIORATION OF WORK AREAS DURING CONSTRUCTION. 14. DURING WET WEATHER PERIODS, CONTRACTOR IS RESPONSIBLE FOR SEQUENCING CONSTRUCTION IN A MANNER TO MINIMIZE IMPACT ON OPEN EARTHWORK AND CONSTRUCTION OPERATIONS. 15. ALL EXISTING MONUMENTS SHALL BE PROTECTED DURING CONSTRUCTION. IF ANY MONUMENTS ARE DISTURBED OR DESTROYED DURING CONSTRUCTION, CONTRACTOR SHALL RETAIN THE SERVICES OF A REGISTERED LAND SURVEYOR TO RESTORE THE MONUMENT TO ITS ORIGINAL CONDITION AND FILE THE NECESSARY SURVEYS AS REQUIRED BY STATE LAW. 16. COMPLETELY COVER ANY SOIL STOCKPILES WITH 6 MIL BLACK PLASTIC AND PROVIDE RESTRAINTS TO HOLD PLASTIC IN PLACE. MONITOR PLASTIC COVER AS PART OF CONTINUOUS EROSION CONTROL PLAN. PLACE SILT FENCE COMPLETELY AROUND STOCKPILE. 17. CONTRACTOR SHALL DEVELOP TEMPORARY TRAFFIC CONTROL PLAN AND PROVIDE IT TO THE CITY OF WEST LINN PRIOR TO THE START OF CONSTRUCTION. 18. CONTRACTOR TO PROVIDE ALL TEMPORARY SIGNAGE.

SEPTIC DECOMMISSIONING REQUIREMENTS

- A. DECOMMISSION INDICATED SEPTIC FACILITIES PER OREGON DEQ REQUIREMENTS (OAR 340-071-0185) AND CITY OF WEST LINN REQUIREMENTS. B. A DECOMMISSION PERMIT IS REQUIRED PRIOR TO ANY WORK BEING PERFORMED. CONTRACTOR TO PROVIDE ALL NECESSARY SERVICES AND FEES TO OBTAIN PERMIT. C. FACILITIES TO BE PUMPED BY A LICENSED SEWAGE DISPOSAL SERVICE TO REMOVE ALL SEPTAGE. D. FACILITIES TO BE FILLED WITH 3/4" MINUS GRAVEL. E. CONTRACTOR TO ARRANGE FOR FACILITIES TO BE INSPECTED BY CITY REPRESENTATIVE PRIOR TO BEING COVERED.

GENERAL UTILITY NOTES

- 1. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE PLOTTED FROM RECORD DRAWINGS AND INTERPOLATION OF PHYSICAL EVIDENCE ON THE SITE AND ARE SUBJECT TO FIELD VERIFICATION BY THE CONTRACTOR. 2. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD BEFORE BEGINNING CONSTRUCTION UNDER THIS SECTION OR ANY OTHER SECTION. 3. THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND OR ELBOW REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONENT PIECE, OR FITTING REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE AND WORKING SYSTEM. ALL ADDITIONAL WORK OR PARTS TO CONFORM TO CITY OF WEST LINN STANDARDS AND APPROVAL. 4. CONTRACTOR SHALL COORDINATE A UTILITY LOCATE 48 HOURS PRIOR TO BEGINNING ANY UTILITY CONSTRUCTION FOR LOCATION MARK-UP OF ALL EXISTING UTILITIES BOTH IN THE RIGHT-OF-WAY AND ON PRIVATE PROPERTY. CONTRACTOR SHALL COORDINATE THE UTILITY LOCAL WITH MUNICIPALITY HAVING JURISDICTION FOR ALL UTILITY WORK WITHIN A PUBLIC RIGHT-OF-WAY. INFORM ENGINEER IMMEDIATELY IF LOCATE INDICATES THAT EXISTING UTILITIES ARE DIFFERENT THAN SHOWN ON DRAWINGS. PRE-SURVEY LOCATING REQUESTS SHALL BE 14 DAYS IN ADVANCE. 5. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES, FEATURES, AND STRUCTURES LOCATED ON THE SITE. LOCATE, PROTECT, AND AVOID DISRUPTION OF ALL ABOVE AND BELOW GRADE UTILITIES DURING CONSTRUCTION. 6. ALL UTILITY CONSTRUCTION ON PRIVATE PROPERTY SHALL CONFORM TO THE LATEST EDITION OF THE OREGON PLUMBING SPECIALTY CODE. ALL UTILITY CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE STANDARD REQUIREMENTS OF THE MUNICIPALITY HAVING JURISDICTION. 7. ALL BURIED LINES TO HAVE 3 FEET MINIMUM COVER, UNLESS NOTED OTHERWISE. 8. THRUST RESTRAINTS REQUIRED ON ALL PRESSURE LINE BENDS AND FITTINGS. 9. ALL EXISTING UTILITIES AND THE-IN POINTS SHOULD BE CONSIDERED ACTIVE UTILITIES UNLESS OTHERWISE INDICATED. 10. CONFIRM ALL UTILITY VALVE VAULTS, VALVES, METERS, BACKFLOW PREVENTION ASSEMBLIES, AND OTHER PUBLIC UTILITY APPURTENANCES IN THE RIGHT-OF-WAY WITH THE MUNICIPALITY HAVING JURISDICTION.

GENERAL NOTE

ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS.

ATTENTION EXCAVATORS

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THESE RULES ARE SET FORTH IN OAR 852-001-0010 THROUGH OAR 852-001-0090. 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 ANY EXCAVATION. CALL 503-246-6899.

Table with columns: No., Revision, Drawn, Job Manager, Project Director, Date. Includes RECORD DRAWINGS and 12/2/13.

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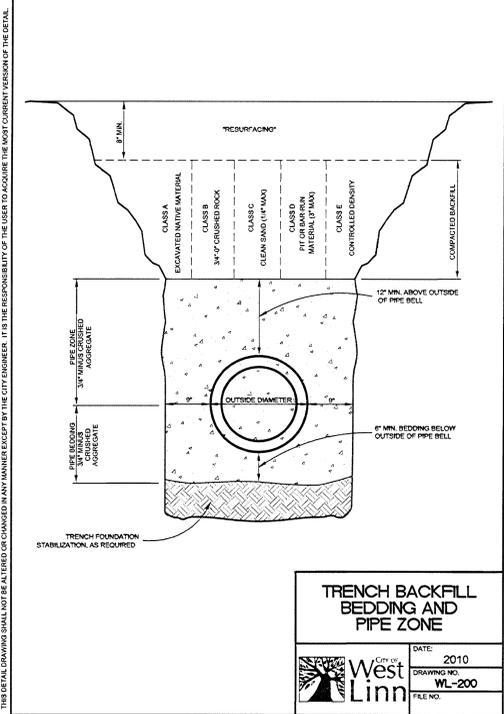
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Client WEST LINN-WILSONVILLE SCHOOL DISTRICT Project ERICKSON PROPERTY UTILITY IMPROVEMENTS Title UTILITY PLAN

Table with columns: Scale, AS SHOWN, Contract No. 8410015, Drawn, STS, Designer, STS, Drafting, STS, Design, STS, Approved, (Project Director), Date, 6/14/2013

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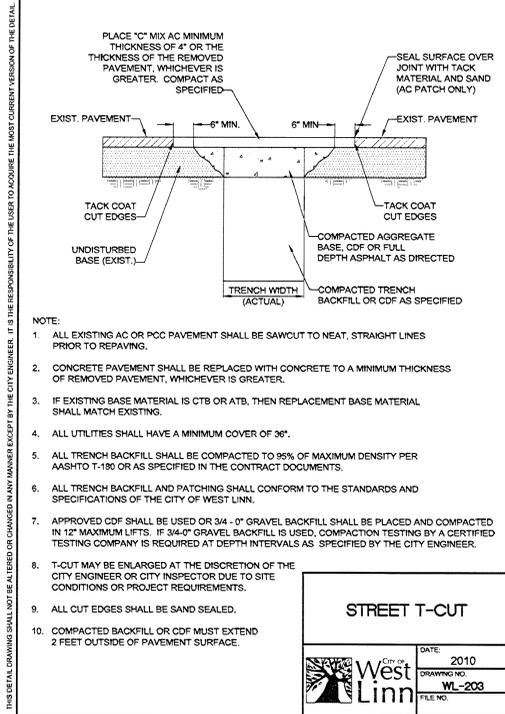
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TRENCH BACKFILL BEDDING AND PIPE ZONE

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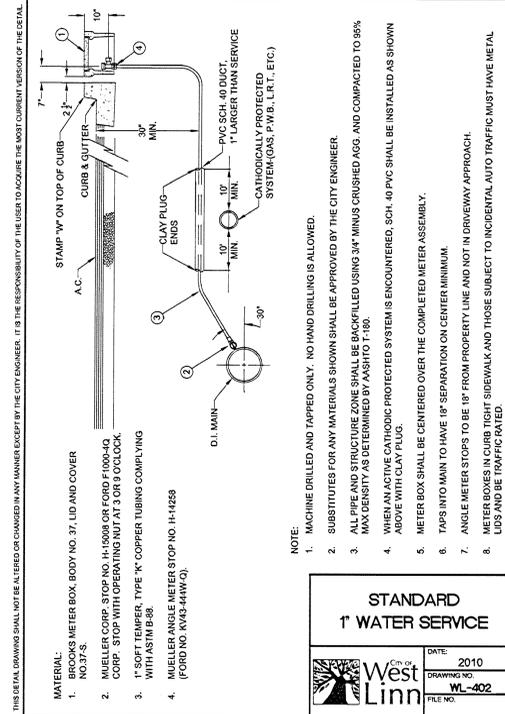
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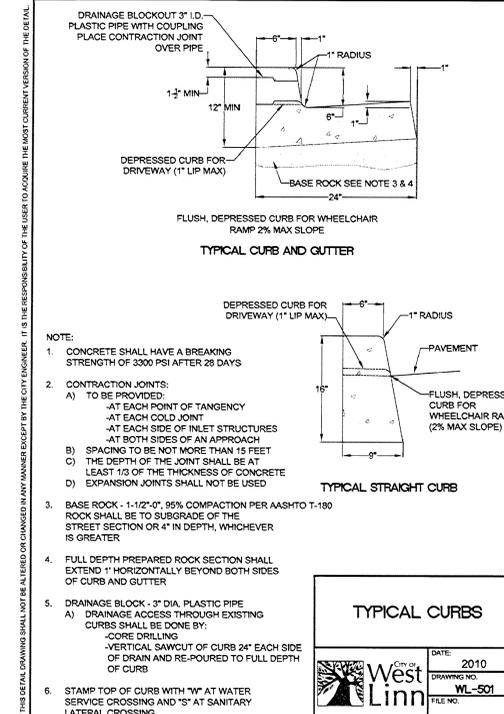
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STANDARD 1\"/>

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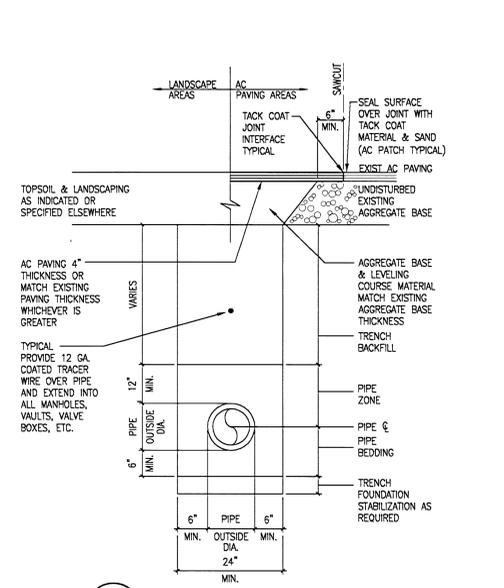
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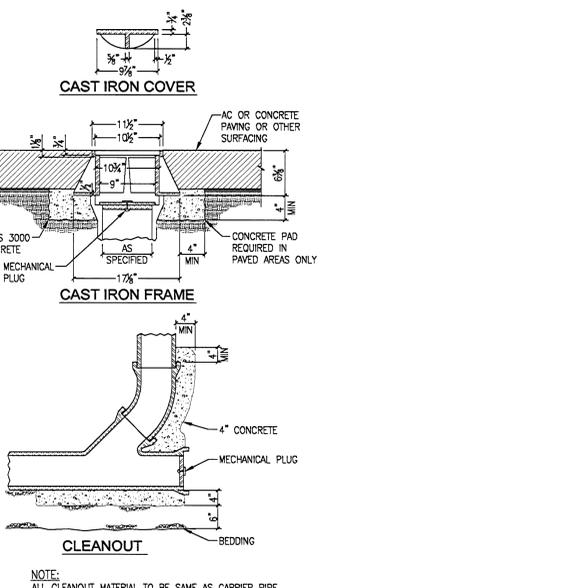
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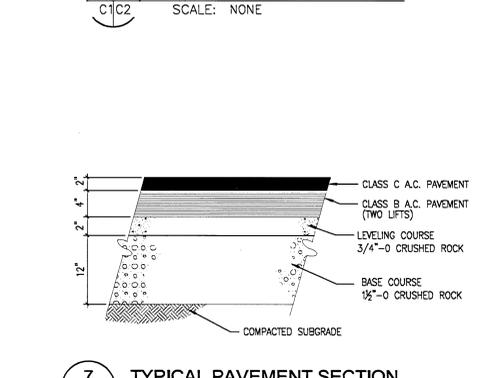
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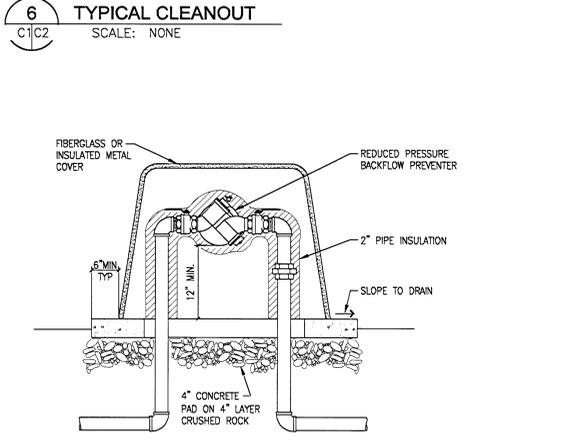
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6 TYPICAL CLEANOUT
SCALE: NONE



7 TYPICAL PAVEMENT SECTION
SCALE: NONE



1 1/2\"/>

GENERAL SPECIFICATIONS

- SECTION 0216 - EARTHWORK FOR UTILITIES
- TRENCH FOUNDATION MATERIAL
 - ON-SITE MATERIAL: NATIVE MATERIAL MAY BE USED AS TRENCH FOUNDATION IF IT IS FIRM, CLEAN, AND UNDISTURBED.
 - IMPORTED MATERIAL: SELECTED NATURAL FILL MATERIAL FROM OFF-SITE BORROW SHALL CONSIST OF THE FOLLOWING OR A BLEND THEREOF WELL GRADED FREE DRAINING OR CRUSHED ROCK UP TO 1 1/2" IN MAXIMUM SIZE WITH NOT MORE THAN 5% OF FINES PASSING THROUGH A #200 SIEVE.
 - PIPE BEDDING MATERIAL
 - IMPORTED MATERIAL: 3/4" MINUS WELL GRADED CRUSHED ROCK WITH LESS THAN 5% OF FINES PASSING THROUGH A #200 SIEVE.
 - FINE AGGREGATE CLEAN WASHED SAND, 100% PASSING A #4 SIEVE WITH LESS THAN 5% PASSING THROUGH A #200 SIEVE.
 - PIPE ZONE MATERIAL
 - IMPORTED MATERIAL: 3/4" MINUS WELL GRADED CRUSHED ROCK WITH LESS THAN 5% OF FINES PASSING THROUGH A #200 SIEVE.
 - IMPORTED MATERIAL: FINE AGGREGATE CLEAN WASHED SAND, 100% PASSING A #4 SIEVE WITH LESS THAN 5% PASSING THROUGH A #200 SIEVE.
 - TRENCH BACKFILL MATERIAL
 - ON-SITE MATERIAL (NOT UNDER STRUCTURES OR PAVING): CLEAN, ON SITE NATIVE MATERIAL, IS SUITABLE FOR USE AS TRENCH BACKFILL MATERIAL IN AREAS NOT UNDER STRUCTURES OR PAVING IF IT CAN BE PLACED IN ACCORDANCE WITH THESE SPECIFICATIONS. EXCAVATED ON-SITE NATIVE MATERIAL SHALL NOT BE USED AS TRENCH BACKFILL MATERIAL UNDER STRUCTURES OR PAVEMENTS. STOCK PILED ON-SITE EXCAVATED NATIVE MATERIAL USED AS GENERAL BACKFILL SHALL BE FREE OF ALL ORGANIC MATERIAL AND SHALL BE WITHIN 3% OF OPTIMUM MOISTURE CONTENT.
 - IMPORTED MATERIAL (UNDER STRUCTURES OR PAVING): SELECTED NATURAL FILL MATERIAL FROM OFF-SITE BORROW SHALL CONSIST OF THE FOLLOWING OR A BLEND THEREOF WELL GRADED FREE DRAINING OR CRUSHED ROCK UP TO 1 1/2" IN MAXIMUM SIZE WITH NOT MORE THAN 5% OF FINES PASSING THROUGH A #200 SIEVE.
 - DRAINAGE AGGREGATE MATERIAL
 - MEDIUM AGGREGATE 3/4" OR 5/8" TO 1 1/2" INCH, CLEAN WASHED MEDIUM SIZED DRAIN GRAVEL WITH LESS THAN 5% PASSING THROUGH A #200 SIEVE.
 - WHEN IN THE JUDGMENT OF THE OWNER, THE EXISTING MATERIAL IN THE BOTTOM OF THE TRENCH IS UNSUITABLE FOR SUPPORTING THE PIPE, EXCAVATE BELOW THE PIPE AS DIRECTED, PLACE BACKFILL IN TRENCH TO SUBGRADE OR PIPE BEDDING WITH TRENCH FOUNDATION MATERIAL OVER FULL WIDTH OF THE TRENCH AND COMPACT LAYERS NOT EXCEEDING 8 INCHES DEEP TO THE REQUIRED GRADE.
 - PLACE SPECIFIED BEDDING MATERIAL IN AT LEAST TWO LIFTS, PLACE FIRST LIFT TO PROVIDE THE MINIMUM 6 INCH DEPTH OF BEDDING MATERIAL SHOWN ON THE PLAN BEFORE THE PIPE IS INSTALLED. SPREAD BEDDING SMOOTHLY TO PROPER GRADE SO THE PIPE IS UNIFORMLY SUPPORTED ALONG THE BARREL AND EXCAVATE BELL HOLES AT EACH JOINT TO PERMIT PROPER ASSEMBLY AND INSPECTION OF THE ENTIRE JOINT. PROVIDE FIRM UNYIELDING SUPPORT ALONG THE ENTIRE PIPE LENGTH.
 - PLACE SUBSEQUENT LIFTS OF NOT MORE THAN 6 INCHES IN THICKNESS UP TO THE HORIZONTAL CENTERLINE OF THE PIPE. BRING LIFTS UP TOGETHER ON BOTH SIDES OF THE PIPE AND CAREFULLY WORK UNDER THE PIPE BY SLICING WITH A SHOVEL OR OTHER APPROVED PROCEDURE. PAY PARTICULAR ATTENTION TO THE AREA FROM THE FLOW LINE TO THE HORIZONTAL CENTERLINE OF THE PIPE OR TOP OF BEDDING TO INSURE THAT FIRM SUPPORT IS OBTAINED TO PREVENT ANY LATERAL MOVEMENT OF THE PIPE DURING THE FINAL BACKFILLING OF THE PIPE ZONE. PLACE PIPE BEDDING FULL WIDTH OF TRENCH.
 - PLACE SPECIFIED PIPE ZONE MATERIAL CAREFULLY AROUND THE PIPE IN 6 INCH LAYERS AND THOROUGHLY HAND TAMP WITH APPROVED STICKS SUPPLEMENTED BY WALKING IN AND SLASHING WITH A SHOVEL. PREVENT PIPE FROM MOVING EITHER HORIZONTALLY OR VERTICALLY DURING PLACEMENT AND COMPACTION OF THE PIPE ZONE MATERIAL. MECHANICAL COMPACTORS ARE PROHIBITED FOR PLACEMENT OF FILL IN THE PIPE ZONE.
 - BACKFILL TRENCH ABOVE THE PIPE ZONE TO WITHIN 8 INCHES OF THE FINAL SURFACE GRADE SHOWN ON THE PLANS IN LIFTS NOT TO EXCEED 8 INCHES OF LOOSE DEPTH. IN UNPAVED AREAS, COMPACT EACH LIFT TO MINIMUM 92% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 WITH MECHANICAL VIBRATORS OR IMPACT TAMPERS. COMPACT TRENCH AREAS AT PAVING AND INSIDE BUILDING AREAS TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D1557.
 - WHEN TEMPORARY STEEL PLATES ARE INSTALLED OVER A STREET CUT, THEY SHALL BE CAPABLE OF CARRYING AT LEAST AN MS-18 LOADING. PLACE STEEL PLATES WITH A MINIMUM OF 12 INCHES BEARING ON ALL SIDES OF A CUT. ANCHOR STEEL PLATES TO MINIMIZE SHIFTING. SHIM THE EDGES OF ALL STEEL PLATES WITH COLD MIX ASPHALT.

SECTION 02510 - EXTERIOR WATER DISTRIBUTION

- WATER SERVICE PIPING (LESS THAN 4" DIAMETER)
 - COPPER TUBING AND ASSOCIATED FITTINGS SHALL CONFORM TO ASTM B88, TYPE K. FITTINGS FOR SOLDER-TYPE JOINT SHALL CONFORM TO ANSI B16.18 OR ANSI B16.22. FITTINGS FOR COMPRESSION-TYPE JOINT SHALL CONFORM TO ANSI B16.26, FLARED TUBE TYPE.
 - PVC WATER SERVICE PIPING SHALL BE ASTM D 1785 SCHEDULE 40 OR ASTM D 2241, CLASS 150. FITTINGS SHALL BE ASTM D 2456. SOLVENT CEMENT FOR JOINTING SHALL BE PER ASTM D 2554.
 - CROSSLINKED POLYETHYLENE (PEX) TUBING WATER SERVICE SHALL BE IN ACCORDANCE TO ASTM F876 AND F877. FITTINGS SHALL BE IN ACCORDANCE WITH ASTM F1960.
- TAPPING SLEEVES SHALL BE DUCTILE IRON EPOXY COATED STEEL, OR STAINLESS STEEL FITTINGS. BRANCH OUTLET FROM TAPPING SLEEVE SHALL BE SCHEDULE 40 MINIMUM. SLEEVE SHALL CONFORM TO LOCAL MUNICIPALITY REQUIREMENTS.
- INSTALL PVC PIPING AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S ACCOMMODATIONS AND AWWA C 605.
- INSTALL VALVES, FITTINGS, HYDRANTS, AND THRUST BLOCKING IN ACCORDANCE WITH AWWA C 600.
- TEST WATER MAINS AND WATER SERVICE LINES IN ACCORDANCE WITH THE REQUIREMENTS OF AWWA C 600 FOR HYDROSTATIC TESTING. TEST DUCTILE-IRON PIPELINES WITH MECHANICAL JOINTS SHALL NOT EXCEED THE AMOUNTS GIVEN IN AWWA C 600. THE AMOUNT OF LEAKAGE ON DUCTILE-IRON PIPE WITH MECHANICAL JOINTS SHALL BE EXCEED THE AMOUNTS GIVEN IN AWWA C 600; NO LEAKAGE WILL BE ALLOWED AT JOINTS MADE BY ANY OTHER METHOD.
- AFTER THOROUGHLY FLUSHING THE SYSTEM WITH WATER TO REMOVE SEDIMENT, THE SYSTEM SHALL BE DISINFECTED THROUGHOUT TO AWWA C 651.
- SUBMITTALS: SUBMIT MANUFACTURER'S STANDARD CATALOG DATA FOR THE FOLLOWING
 - PIPE & FITTINGS

SECTION 02630 - SANITARY SEWER SYSTEM

- GRAVITY SANITARY SEWER PIPING
 - PVC PIPE SHALL CONFORM TO ASTM D3034, SDR 35, (4" TO 15") OR ASTM F679, PS 45, (18" TO 27").
- INSTALL PVC PIPE AND FITTINGS IN ACCORDANCE WITH THE GENERAL REQUIREMENTS FOR INSTALLATION OF PIPELINES AND WITH THE REQUIREMENTS OF UNI-B-5 FOR LAYING AND JOINING PIPE AND FITTINGS. MAKE JOINTS WITH THE GASKETS PREVIOUSLY SPECIFIED JOINTS WITH THIS PIPING ASSEMBLY THESE JOINTS IN ACCORDANCE WITH THE REQUIREMENTS OF UNI-B-5 FOR ASSEMBLY OF JOINTS. MAKE JOINTS TO OTHER PIPE MATERIALS IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PLASTIC PIPE MANUFACTURER.
- HYDROSTATIC TESTING (GRAVITY LINES)
 - PIPE AND JOINTS SHALL SUSTAIN LOSSES NOT EXCEEDING 0.04 GALLONS PER HOUR PER INCH DIAMETER PER 100 FEET WHEN FIELD TESTED BY EXFILTRATION METHODS, EXCEPT 0.3 GALLONS PER HOUR MAY BE USED IN ARID CLIMATE ZONES IF APPROVED BY THE ENGINEER.
 - THE HYDROSTATIC HEAD FOR TEST PURPOSES SHALL EXCEED THE MAXIMUM ESTIMATED GROUND WATER LEVEL IN THE SECTION BEING TESTED BY AT LEAST 72 INCHES AND IN NO CASE SHALL BE LESS THAN 72 INCHES ABOVE THE INSIDE TOP OF THE HIGHEST SECTION OF PIPE IN THE TEST SECTION, INCLUDING SERVICE CONNECTIONS. THE ENGINEER SHALL MAKE THE FINAL DECISIONS REGARDING TEST HEIGHT FOR THE WATER IN THE PIPE SECTION BEING TESTED. THE LENGTH OF PIPE TESTED BY EXFILTRATION SHALL BE LIMITED SO THAT THE PRESSURE ON THE INVERT OF THE LOWER END OF THE SECTION SHALL NOT EXCEED 28 FEET OF WATER COLUMN.
 - IN ADDITION TO HYDROSTATIC OR AIR TESTING, THE CONTRACTOR SHALL CONDUCT DEFLECTION TESTS OF SANITARY SEWERS CONSTRUCTED OF FLEXIBLE PIPE. THE TESTING SHALL BE CONDUCTED BY PULLING AN APPROVED MANDREL THROUGH THE COMPLETED PIPELINE. THE DIAMETER OF THE MANDREL SHALL BE 95% OF THE PIPE INITIAL INSIDE DIAMETER.
- SUBMITTALS: SUBMIT MANUFACTURER'S CATALOG DATA FOR PIPING & MANHOLES.

RECORD DRAWINGS	-	12/2/13
No.	Revision	Drawn Job Manager Project Director Date

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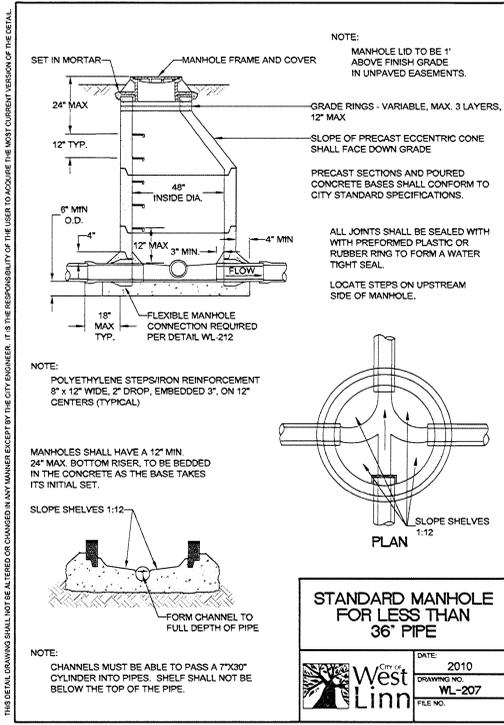
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Project **ERICKSON PROPERTY UTILITY IMPROVEMENTS**
Title **DETAILS & SPECIFICATIONS**

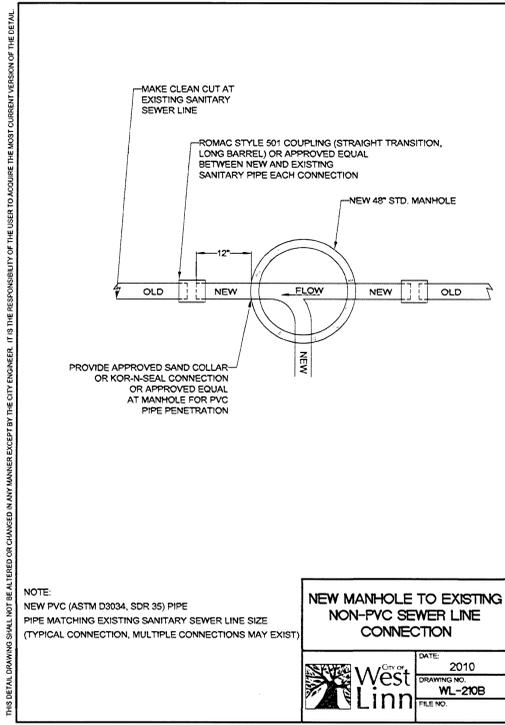
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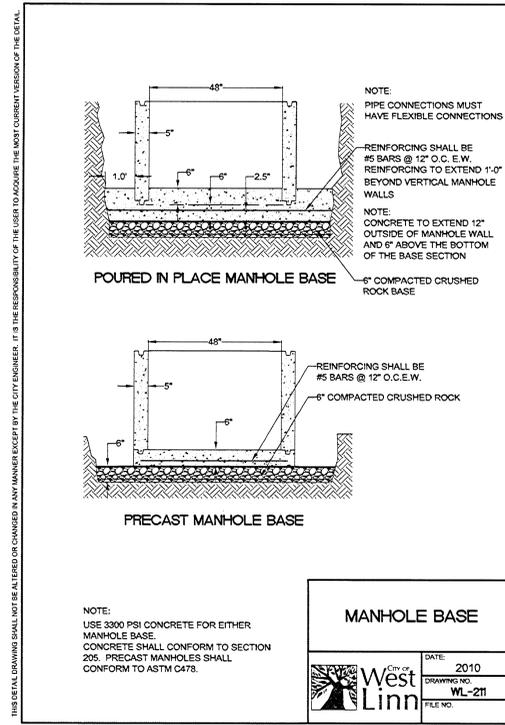
Drawing No. **C2** Original Size **Arch E1**
Sht 2 of 3 Rev.



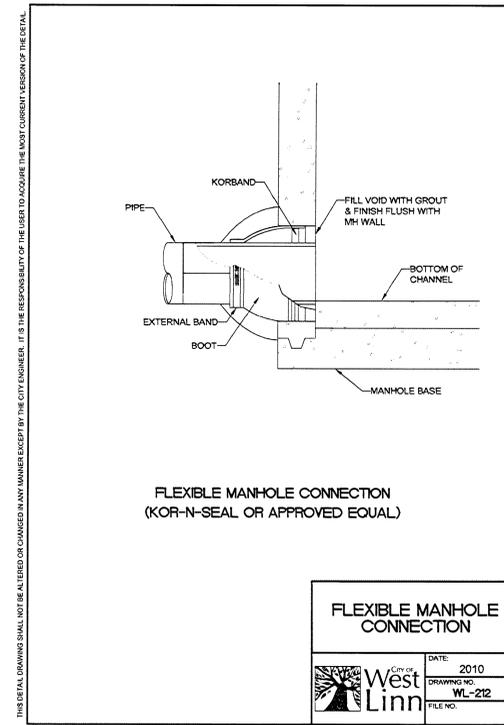
1 CITY OF WEST LINN STANDARD MANHOLE SCALE: NONE



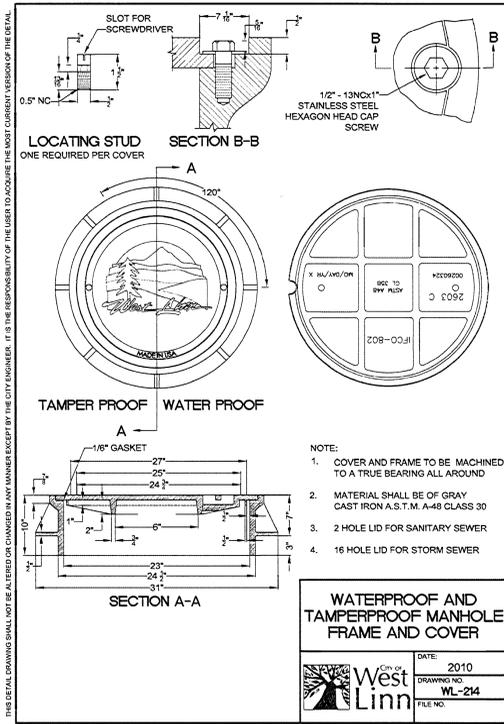
2 CITY OF WEST LINN MANHOLE CONNECTION TO EXISTING PIPE SCALE: NONE



3 CITY OF WEST LINN MANHOLE BASE SCALE: NONE



4 CITY OF WEST LINN FLEXIBLE MANHOLE CONNECTION SCALE: NONE



5 CITY OF WEST LINN MANHOLE FRAME & COVER SCALE: NONE

No.	Revision	Drawn	Job Manager	Project Director	Date
-	RECORD DRAWINGS	-	-	-	12/2/13

Drawing Revisions
Note: * indicates signatures on original issue of drawing or last revision of drawing

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GHD Inc.
15575 SW SEQUOIA PKWY SUITE 140 PORTLAND OR USA
T 1 503 226 3921 F 1 503 226 3926
W www.ghd.com

Client WEST LINN-WILSONVILLE SCHOOL DISTRICT
Project ERICKSON PROPERTY UTILITY IMPROVEMENTS
Title DETAILS

Scale	AS SHOWN	Contract No.	8410015
Drawn	STS	Designer	STS
Drafting Check		Design Check	

Approved (Project Director)
Date 6/14/2013
This Drawing must not be used for Construction unless Signed and Sealed as Approved

Drawing No.	Original Size
C3	Arch E1
Sheet 3 of 3	Rev.