

LAND USE PRE-APPLICATION CONFERENCE Thursday, November 15, 2012

City Hall 22500 Salamo Road

Willamette Conference Room

10:00 am Decommission existing septic facilities and attach city sewer. Install

new water service.

Applicant: West Linn/Wilsonville School District, Anthony Vandenberg

Subject Property Address: 20800 Hidden Springs Road

Neighborhood Assn: Hidden Springs

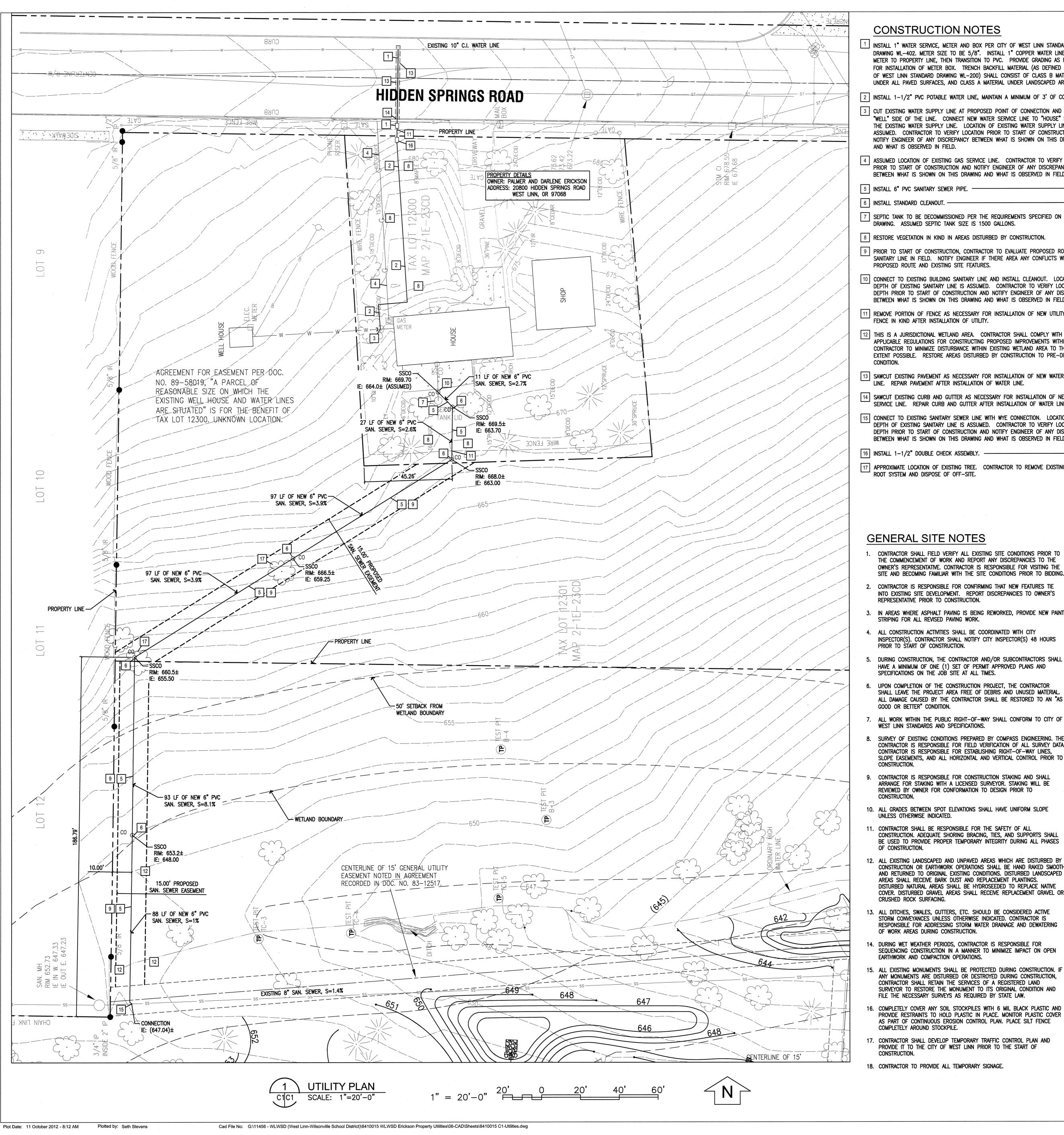
Planner: Tom Soppe Project #: PA-12-19





PRE-APPLICATION CONFERENCE

	THIS SECTION F	OR STAFF C	OMPLETION		
CONFERENCE DATE:	TIME:	Ann		PROJECT #:	2-19
STAFF CONTACT:				FEE:	
				350	
Pre-application conference be scheduled for a confere application fee, and accom of the conference date. To	ence, this form incorpanying materials	cluding prop s must be su	erty owner's ubmitted at l	s signature, the least 14 days in	pre-
Address of Subject Property (
Address of Subject Froperty (or map, tax loty.	70000	J. Moder	Spring's rec	<u>. </u>
Brief Description of Proposal:	decountsion	existing	Septict	Pacilities a	and_
attach city Sea	iera Insta	11 new	water se	surce.	
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Applicant's Name: Anth	on the deal	bera for	WLWV	SD	
Applicant's Name: Anthomatical	Sing Cardia	J . 3			
Discuss Name (Constitution)	> SW ISOFland	Road /	valation C	12 7 7069	-YOM - Market
Phone No: (503) 6.	73-7990 Er	maii Auuress.	Variote	not a WL	WU, KD,OR,
Please attach additional m to 11 x 17 inches in size de	-		osal includin	ng a site plan or	paper <u>up</u>
> North arrow			and from the	site, if applicabl	e
> Scale		➢ General I	ocation of exi	sting trees	
Property dimensions		> Location	of creeks and	or wetlands	
Streets abutting the property		> Location	of existing uti	lities (water, sew	er, etc.)
➢ Conceptual layout, design and/or		Easemen	ts (access, uti	lity, all others)	
building elevations					
Please list any questions or is	sues that you may l	have for city	staff regardin	g your proposal:	
By my signature below, I g	rant city staff <u>righ</u>	nt of entry o	nto the subj	ect property in	order to
prepare for the pre-application	ation do ference.				
Im L'S VIII	will			10.17,	12
Property owner's signature				Date	-
\					<u> </u>
Property owner's mailing add	dress (if different fro	om above)			



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, THEN TRANSITION TO PVC. PROVIDE GRADING AS NECESSARY FOR INSTALLATION OF METER BOX. TRENCH BACKFILL MATERIAL (AS DEFINED ON CITY OF WEST LINN STANDARD DRAWING WL-200) SHALL CONSIST OF CLASS B MATERIAL UNDER ALL PAVED SURFACES, AND CLASS A MATERIAL UNDER LANDSCAPED AREAS.
- 2 INSTALL 1-1/2" PVC POTABLE WATER LINE, 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. CONNECT NEW WATER SERVICE LINE TO "HOUSE" SIDE OF THE EXISTING WATER SUPPLY LINE. LOCATION OF EXISTING WATER SUPPLY LINE IS ASSUMED. CONTRACTOR TO VERIFY LOCATION PRIOR TO START OF CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY BETWEEN WHAT IS SHOWN ON THIS DRAWING
- 4 ASSUMED LOCATION OF EXISTING GAS SERVICE LINE. CONTRACTOR TO VERIFY LOCATION PRIOR TO START OF CONSTRUCTION AND NOTIFY ENGINEER OF ANY DISCREPANCY BETWEEN WHAT IS SHOWN ON THIS DRAWING AND WHAT IS OBSERVED IN FIELD.
- 5 INSTALL 6" PVC SANITARY SEWER PIPE.
- 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 AREA 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
- 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 CONNECT TO EXISTING SANITARY SEWER LINE WITH WYE CONNECTION. 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" DOUBLE CHECK ASSEMBLY.
- 17 APPROXIMATE LOCATION OF EXISTING TREE. CONTRACTOR TO REMOVE EXISTING TREE AND

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

- 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.
- ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH CITY INSPECTOR(S). CONTRACTOR SHALL NOTIFY CITY INSPECTOR(S) 48 HOURS PRIOR TO START OF CONSTRUCTION.
- 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.
- UPON COMPLETION OF THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL
- ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO CITY OF
- 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
- CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING AND SHALL ARRANGE FOR STAKING WITH A LICENSED SURVEYOR. STAKING WILL BE REVIEWED BY OWNER FOR CONFORMATION TO DESIGN PRIOR TO
- 10. ALL GRADES BETWEEN SPOT ELEVATIONS SHALL HAVE UNIFORM SLOPE
- 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
- 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 HYDROSEEDED 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 DEWATERING 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 COMPACTION OPERATIONS.
- 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.
- 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
- 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

- 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.
- 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.
- 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
- 8. THRUST RESTRAINTS REQUIRED ON ALL PRESSURE LINE BENDS AND FITTINGS.
- 9. ALL EXISTING UTILITIES AND TIE-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.

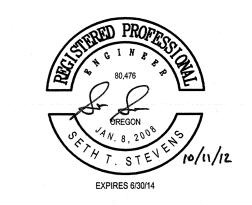
GENERAL NOTE -ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO THE CITY OF WEST LINN PUBLIC WORKS STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS.

ATTENTION EXCAVATORS

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. 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 ANY EXCAVATION. CALL 503-246-6699.

Drawn Manager Director

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



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

UTILITY PLAN

	Scale	AS SHOWN	Contract No. 8410015		
	Drawn	STS	Designer STS		
	Drafting Check		Design Check		
		515			

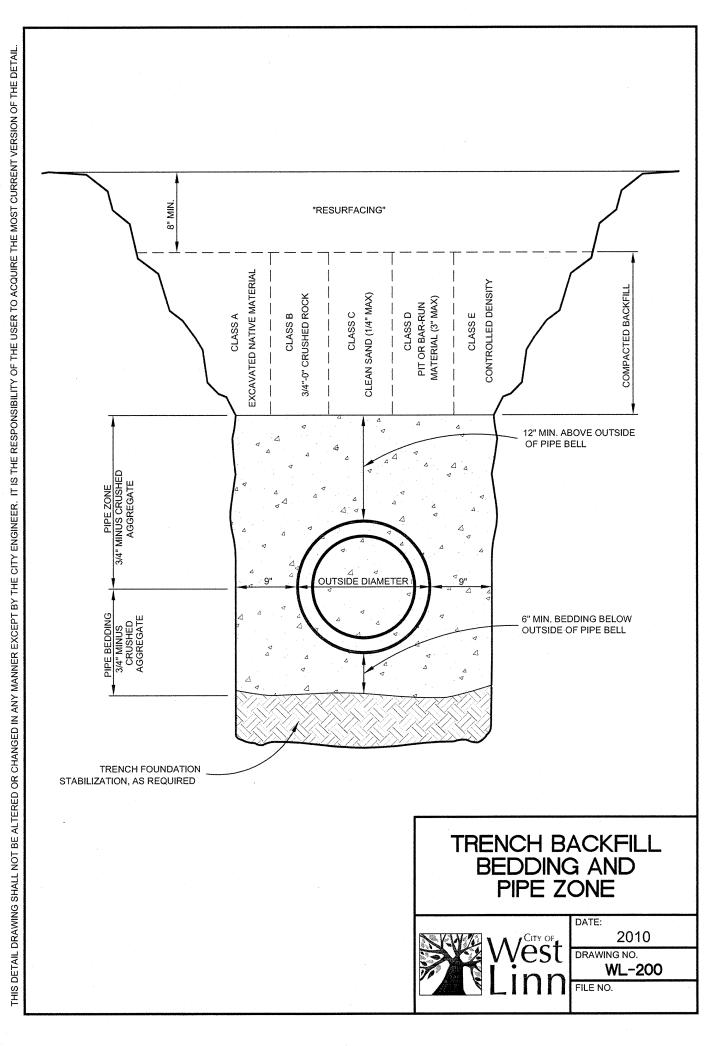
Approved (Project Director)

Drawing No.

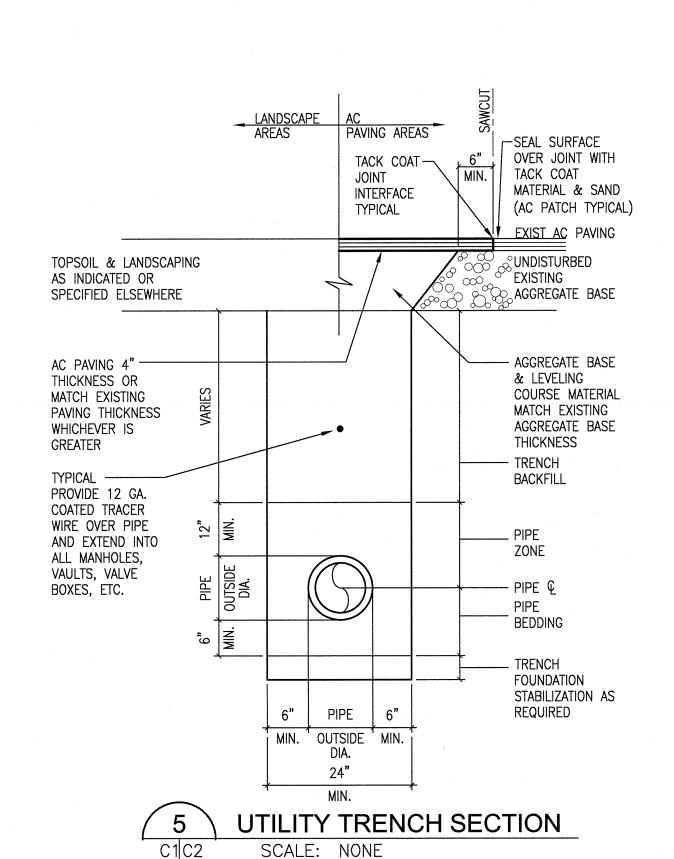
10/2/12 This Drawing must not be used for Construction unless Signed and Sealed as Approved

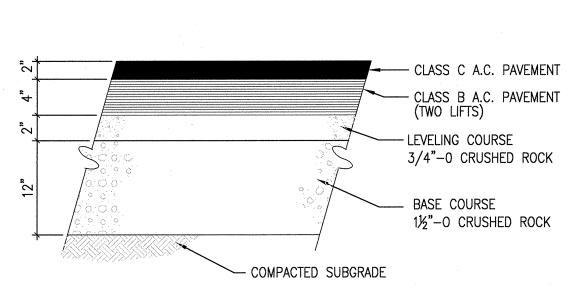
Arch E1

ISSUED FOR PERMIT



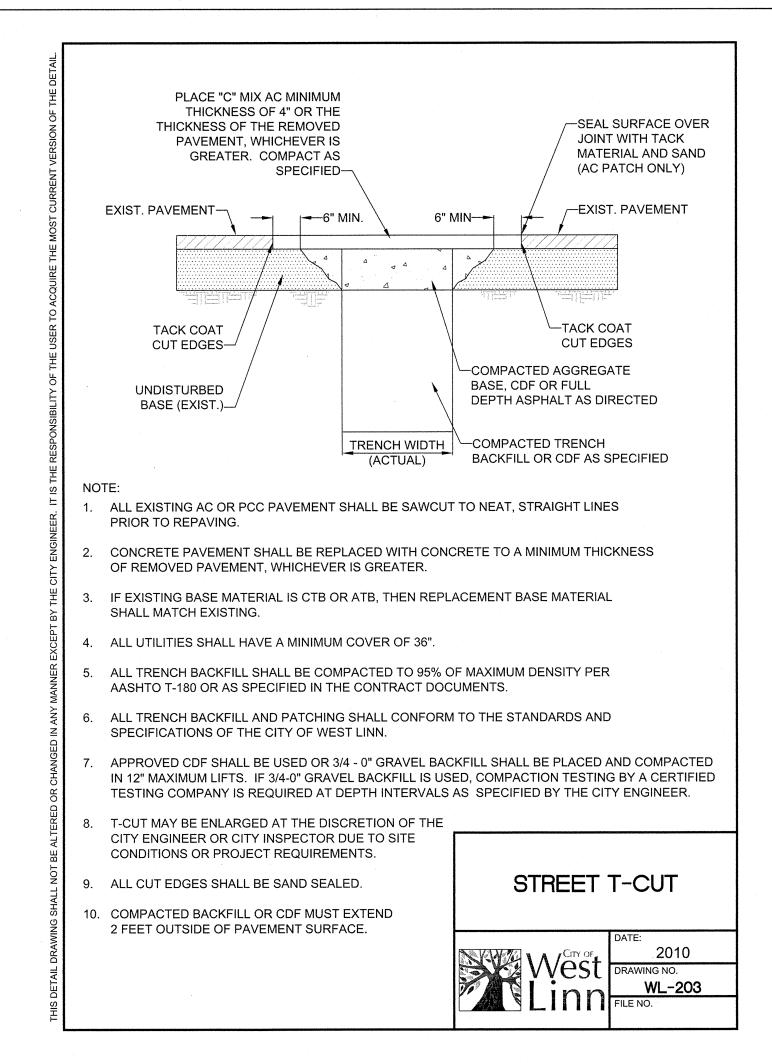




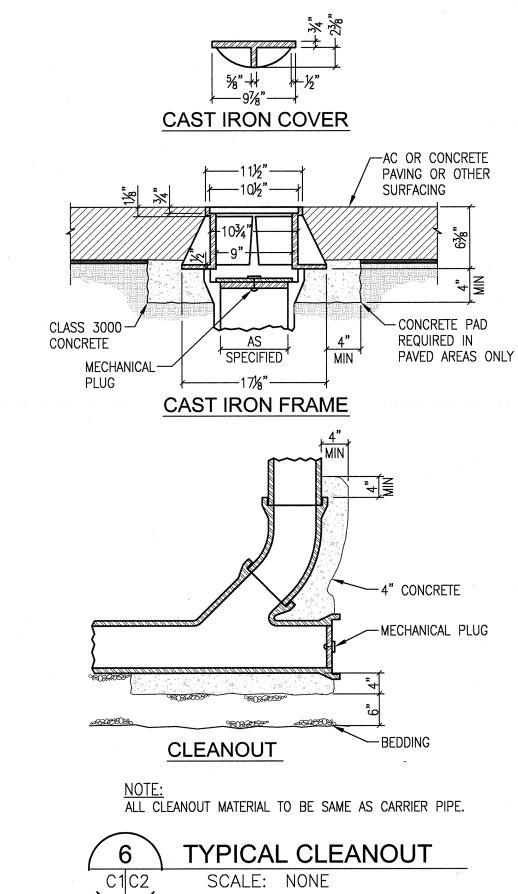


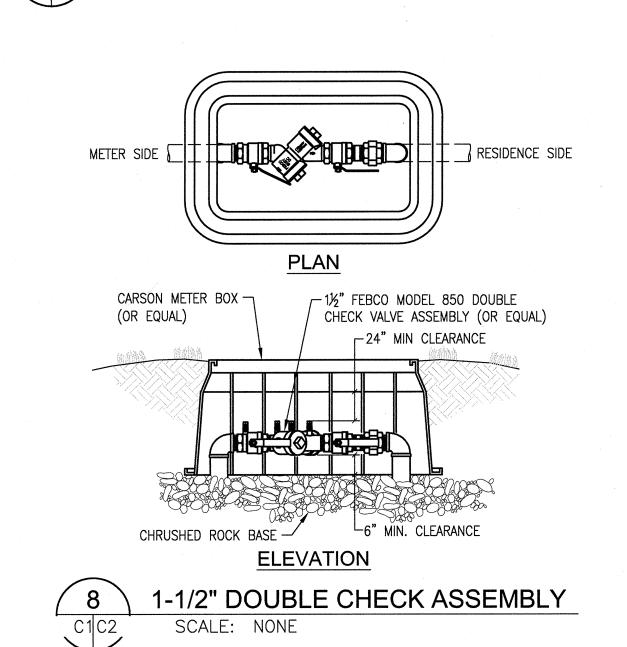


Plot Date: 11 October 2012 - 8:17 AM Plotted by: Seth Stevens

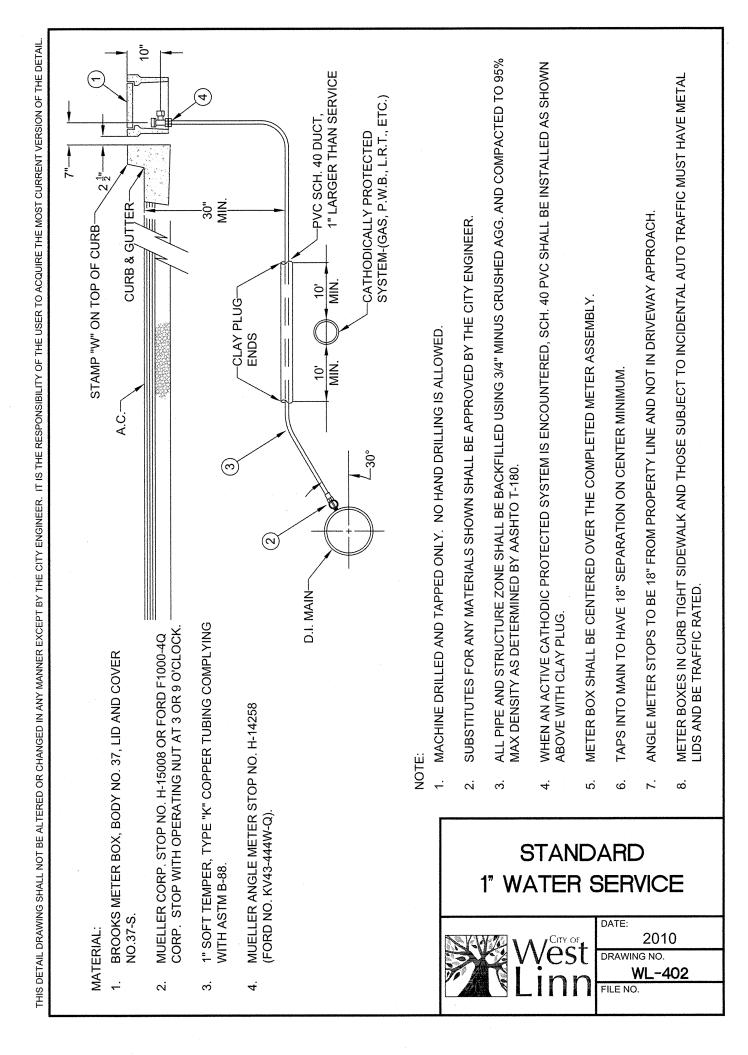








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GENERAL SPECIFICATIONS

SECTION 02316 - EARTHWORK FOR UTILITIES

TRENCH FOUNDATION MATERIAL

A. ON-SITE MATERIAL: NATIVE MATERIAL MAY BE USED AS TRENCH FOUNDATION IF IT IS FIRM, CLEAN, AND UNDISTURBED.

B. 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 1½" IN MAXIMUM SIZE WITH NOT MORE THAN 5% OF FINES PASSING THROUGH A #200 SIEVE.

2. PIPE BEDDING MATERIAL

A. IMPORTED MATERIAL: ¾" MINUS WELL GRADED CRUSHED ROCK WITH LESS THAN 5% OF FINES PASSING THROUGH A #200 SIEVE.

B. FINE AGGREGATE CLEAN WASHED SAND, 100% PASSING A #4 SIEVE WITH LESS THAN 5% PASSING THROUGH A #200 SIEVE.

PIPE ZONE MATERIAL

A. IMPORTED MATERIAL: 34" MINUS WELL GRADED CRUSHED ROCK WITH LESS THAN 5% OF FINES PASSING THROUGH A #200 SIEVE.

B. IMPORTED MATERIAL: FINE AGGREGATE CLEAN WASHED SAND, 100% PASSING A #4 SIEVE WITH LESS THAN 5% PASSING THROUGH A #200 SIEVE.

4. TRENCH BACKFILL MATERIAL

A. 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 ONSITE NATIVE MATERIAL SHALL NOT BE USED AS TRENCH BACKFILL MATERIAL UNDER STRUCTURES OR PAVEMENTS. STOCK PILED ONSIDE EXCAVATED NATIVE MATERIAL USED AS GENERAL BACKFILL SHALL BE FREE OF ALL ORGANIC MATERIAL AND SHALL BE WITHIN 3% OF OPTIMUM MOISTURE CONTENT.

B. 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 11/2" IN MAXIMUM SIZE WITH NOT MORE THAN 5% OF FINES PASSING THROUGH A #200 SIEVE.

5. DRAINAGE AGGREGATE MATERIAL

A. MEDIUM AGGREGATE 3/4 OR 5/8 TO 1/4 INCH, CLEAN WASHED MEDIUM SIZED DRAIN GRAVEL WITH LESS THAN 5% PASSING THROUGH A #200 SIEVE.

6. 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 6 INCHES DEEP TO THE REQUIRED GRADE.

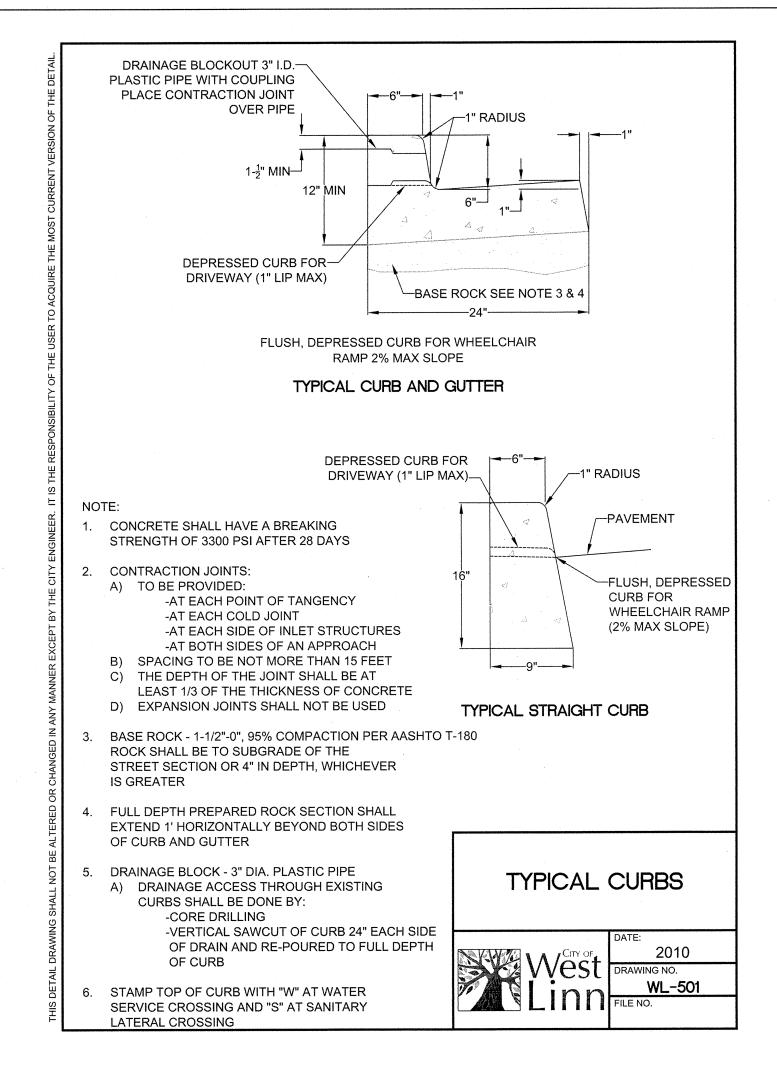
7. PLACE SPECIFIED BEDDING MATERIAL IN AT LEAST TWO LIFTS. PLACE FIRST LIFT TO PROVIDE THE MINIMUM 6 INCH DEPTH OF BEDDING MATERIAL SHOWN ON THE PLAN BEFORE THE PIPE IS INSTALLED. SPREAD BEDDING SMOOTHLY TO PROPER GRADE SO THE PIPE IS UNIFORMLY SUPPORTED ALONG THE BARREL AND EXCAVATE BELL HOLES AT EACH JOINT TO PERMIT PROPER ASSEMBLY AND INSPECTION OF THE ENTIRE JOINT. PROVIDE FIRM UNYIELDING SUPPORT ALONG THE ENTIRE PIPE LENGTH.

8. 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.

9. 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.

10. 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.

11. 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

1. WATER SERVICE PIPING (LESS THAN 4" DIAMETER)

A. 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

B. PVC WATER SERVICE PIPING SHALL BE ASTM D 1785 SCHEDULE 40 OR ASTM D 2241, CLASS 160. FITTINGS SHALL BE ASTM D 2466. SOLVENT CEMENT FOR JOINTING SHALL BE

2. TAPPING SLEEVES SHALL BE DUCTILE IRON EPOXY COATED STEEL, OR STAINLESS STEEL FITTINGS. BRANCH OUTLET FROM TAPPING SLEEVE SHALL BE SCHEDULE 10 MINIMUM. SLEEVE SHALL CONFORM TO LOCAL MUNICIPALITY REQUIREMENTS.

3. INSTALL PVC PIPING AND APPURTENANCES IN ACCORDANCE WITH MANUFACTURER'S

ACCOMMODATIONS AND AWWA C 605. 4. INSTALL VALVES, FITTINGS, HYDRANTS, AND THRUST BLOCKING IN ACCORDANCE WITH AWWA C

5. 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.

6. AFTER THOROUGHLY FLUSHING THE SYSTEM WITH WATER TO REMOVE SEDIMENT, THE SYSTEM SHALL BE DISINFECTED ACCORDING TO AWWA C 651.

7. SUBMITTALS: SUBMIT MANUFACTURES STANDARD CATALOG DATA FOR THE FOLLOWING

A. PIPE & FITTINGS

SECTION 02530 - SANITARY SEWER SYSTEM

1. GRAVITY SANITARY SEWER PIPING

A. PVC PIPE SHALL CONFORM TO ASTM D3034, SDR 35, (4" TO 15") OR ASTM F679, PS 46, (18" TO 27").

2. 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; ASSEMBLE THESE JOINTS IN ACCORDANCE WITH THE REQUIREMENTS OF UNI-B-5 FOR ASSEMBLE OF JOINTS. MAKE JOINTS TO OTHER PIPE MATERIALS IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PLASTIC PIPE MANUFACTURER.

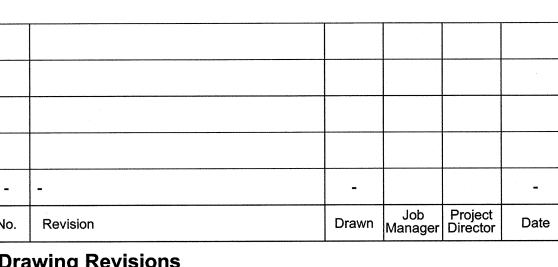
3. HYDROSTATIC TESTING (GRAVITY LINES)

A. 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

B. 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.

4. 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.

5. SUBMITTALS: SUBMIT MANUFACTURE'S CATALOG DATA FOR PIPING & MANHOLES.



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



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

DETAILS & SPECIFICATIONS

:					
Scale	AS SHOWN	Contract No. 8410015			
Drawn	STS	Designer STS			
Drafting Check		Design Check			
Approved (Project Director)					

Drawing No.

This Drawing must not be used for Construction unless Signed and Sealed as Approved Original Size

Arch E1