

CITY OF SHERWOOD

HIGHLAND AND ORCUTT SANITARY SEWER REHABILITATION

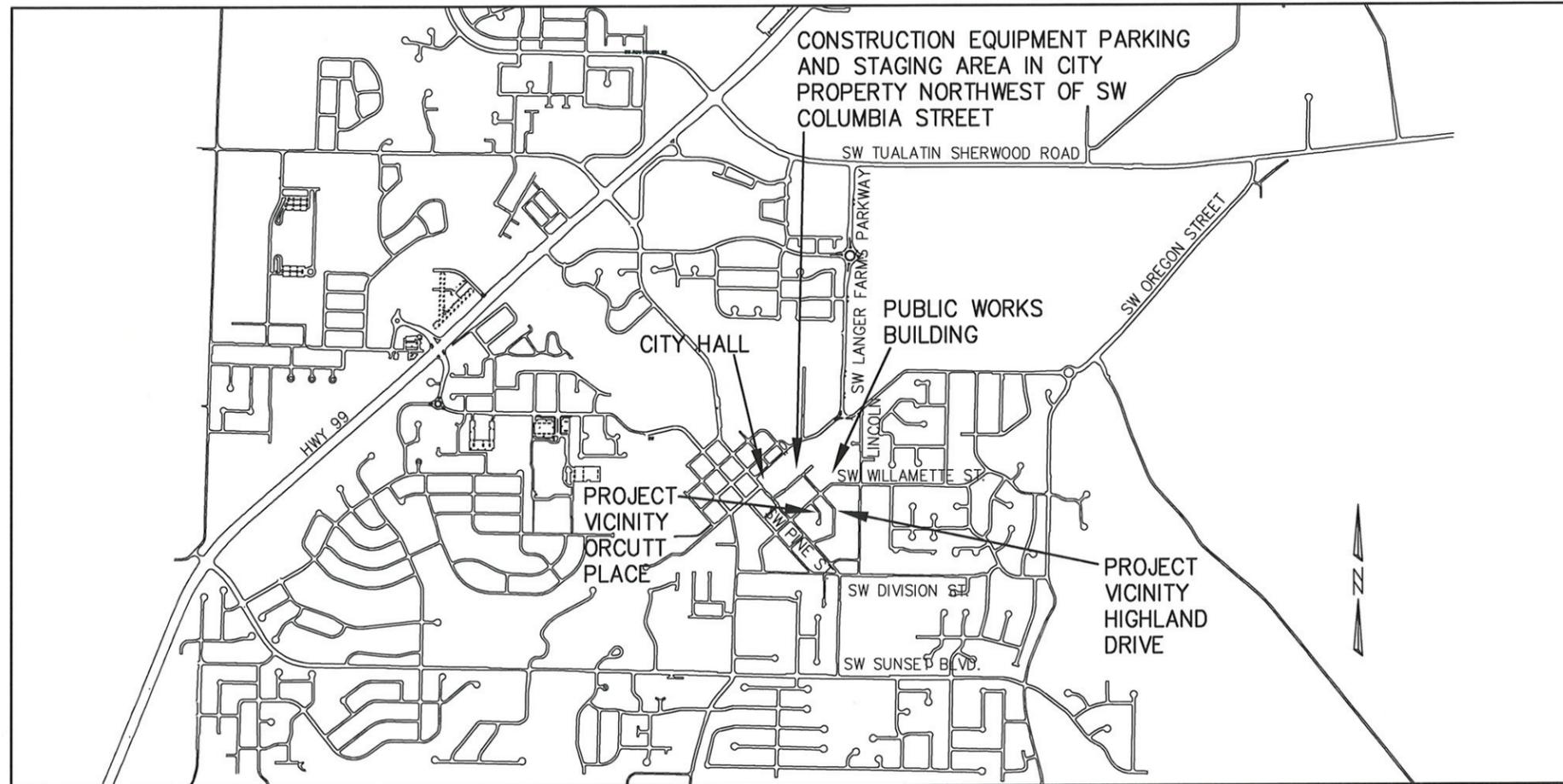
CONTRACT DRAWINGS

SHEET INDEX:

1. COVER SHEET
2. GENERAL NOTES
3. SANITARY SEWER PLAN (HIGHLAND NORTH)
4. SANITARY SEWER PLAN (HIGHLAND SOUTH)
5. SANITARY SEWER PLAN (ORCUTT)
6. CITY OF SHERWOOD DETAILS
7. CITY OF SHERWOOD DETAILS

DEVELOPER / OWNER:
 CITY OF SHERWOOD
 15527 SW WILLAMETTE ST
 SHERWOOD, OREGON 97140
 CONTACT: RICH SATTLER
 PH. 503-925-2319
 SATTLERR@SHERWOODOREGON.GOV

ENGINEER:
 CITY OF SHERWOOD
 22560 SW PINE ST
 SHERWOOD, OREGON 97140
 CONTACT: CRAIG CHRISTENSEN, PE
 PH. 503-925-2301
 CHRISTENSENC@SHERWOODOREGON.GOV



VICINITY MAP
 NOT TO SCALE

THIS DESIGN COMPLIES WITH ORS 92.044 (7) IN THAT NO UTILITY INFRASTRUCTURE IS DESIGNED TO BE WITHIN ONE (1) FOOT OF A SURVEY MONUMENT LOCATION SHOWN ON A SUBDIVISION OR PARTITION PLAT. NO DESIGN EXCEPTIONS NOR FINAL FIELD LOCATION CHANGES SHALL BE PERMITTED IF THAT CHANGE WOULD CAUSE ANY UTILITY INFRASTRUCTURE TO BE PLACED WITHIN THE PROHIBITED AREA.



INSPECTOR INFORMATION:

CITY OF SHERWOOD: ANDY STIRLING (503) 925-2307
 CONTACT INSPECTOR 48 HOURS PRIOR TO CONSTRUCTION.

SURVEY INFORMATION:

VERTICAL DATUM: NGVD29
 HORIZONTAL DATUM: NAD83 (OREGON STATE PLANE NORTH)

BENCH MARK INFORMATION:

DATUM IS FROM AN AERIAL DRAWING.

COVER SHEET
 HIGHLAND AND ORCUTT SANITARY SEWER REHABILITATION
 LOCATED IN SECTION 32BD, T2S, R1W, W.M. IN THE CITY OF SHERWOOD, WASHINGTON COUNTY, STATE OF OREGON

CITY OF SHERWOOD
 ENGINEERING DEPARTMENT
 22560 SW PINE STREET
 SHERWOOD, OREGON 97140
 PHONE: (503) 925-2309
 FAX: (503) 625-0629
 E-MAIL: engineering@sherwoodoregon.gov



DESIGNED BY:	CCC
DRAWN BY:	ASJ/CCC
CHECKED BY:	RS
FULL SIZE SCALE:	AS NOTED
DATE:	MARCH 10, 2015
HIGHLAND SANITARY COVERING	

REVISIONS	

JOB NO. **8073**
 SHEET NO. **1** OF **7**

GENERAL NOTES

- ALL CONSTRUCTION WORK, MATERIALS AND TESTING SHALL CONFORM TO APPLICABLE CITY OF SHERWOOD STANDARD CONSTRUCTION SPECIFICATIONS, CLEAN WATER SERVICES (CWS) DESIGN AND CONSTRUCTION STANDARDS, UNIFORM PLUMBING CODE (UPC) AND UNIFORM BUILDING CODE (UBC). CONTRACTOR AND SUBCONTRACTOR(S) SHALL HAVE A MINIMUM OF ONE SET OF APPROVED PLANS AND CITY OF SHERWOOD CONSTRUCTION SPECIFICATIONS ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN A CITY OF SHERWOOD OR METRO BUSINESS LICENSE BEFORE STARTING CONSTRUCTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION AND ARRANGE FOR THE RELOCATION OF ANY IN CONFLICT WITH THE PROPOSED CONSTRUCTION AT NO COST TO THE CITY. THE LOCATIONS, DEPTH AND DESCRIPTION OF EXISTING UTILITIES SHOWN WERE COMPILED FROM AVAILABLE RECORDS AND/OR FIELD SURVEYS. THE ENGINEER OR UTILITY COMPANIES DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF SUCH RECORDS. ADDITIONAL UTILITIES MAY EXIST WITHIN THE WORK AREA. COST OF ANY UTILITY RELOCATION IS INCIDENTAL.
- OREGON LAW REQUIRES THE CONTRACTOR 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. THE CONTRACTOR MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING (503) 232-1987 OR BY ACCESSING THE INTERNET AT WWW.STATE.OR.US/GOVERNMENT.HTM. THE CONTRACTOR MUST NOTIFY THE CENTER AT LEAST 2 BUSINESS DAYS, BUT NOT MORE THAN 10 BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL (503) 246-6699.
- THE CONTRACTOR SHALL MAKE PROVISIONS TO KEEP ALL EXISTING UTILITIES IN SERVICE AND PROTECT THEM DURING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY DAMAGED UTILITIES USING MATERIAL AND METHODS APPROVED BY THE UTILITY OWNER. NO SERVICE INTERRUPTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN AGREEMENT WITH THE UTILITY PROVIDER.
- THE CONTRACTOR SHALL PERFORM ANY ROOT PRUNING AS DETERMINED BY THE ENGINEER. THE CONTRACTOR SHALL PROTECT ALL EXISTING LANDSCAPING THAT IS TO REMAIN.
- CONTRACTOR SHALL NOTIFY THE CITY OF SHERWOOD 48 HOURS IN ADVANCE OF STARTING CONSTRUCTION AND 24 HOURS BEFORE RESUMING WORK AFTER SHUTDOWNS, EXCEPT FOR NORMAL RESUMPTION OF WORK FOLLOWING SATURDAYS, SUNDAYS, OR HOLIDAYS.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, BOULDERS, MISCELLANEOUS DEBRIS AND OTHER EXCESS MATERIAL OFFSITE. MATERIALS SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET ALL APPLICABLE REGULATIONS.
- CONSTRUCTION VEHICLES SHALL BE PARKED AT SHERWOOD PUBLIC WORKS BUILDING. HOURS OF CONSTRUCTION SHALL BE 7:30 AM TO 6:00 PM, MONDAY THROUGH FRIDAY. CONSTRUCTION IS PROHIBITED ON SATURDAY AND SUNDAY UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE CITY ENGINEER AND CITY MANAGER. CONSTRUCTION ACTIVITIES INCLUDE ALL FIELD MAINTENANCE OF EQUIPMENT, REFUELING, AND PICK UP AND DELIVERY OF EQUIPMENT AS WELL AS THE ACTUAL CONSTRUCTION ACTIVITY.
- AT THE END OF EACH WORK DAY, THE CONTRACTOR SHALL CLEAN UP THE PROJECT AREA AND LEAVE IT IN A NEAT AND SECURED MANNER. UPON COMPLETION, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL.
- THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS INCLUDING SUCH INCIDENTALS AS MAY BE NECESSARY TO MEET THE INTENT OF THE PROJECT CONTRACT DOCUMENTS, APPLICABLE AGENCY REQUIREMENTS AND OTHER WORK AS NECESSARY TO PROVIDE A COMPLETE PROJECT.
- CONTRACTOR SHALL PROVIDE EFFECTIVE EROSION PROTECTION TO INCLUDE, BUT NOT BE LIMITED TO, GRADING, DITCHING, STRAW WATTLES, TRIANGULAR SILT DAMS, SILT FENCING, AND SEDIMENT BARRIERS TO MINIMIZE EROSION AND IMPACT TO ADJACENT PROPERTY. SEE EROSION AND SEDIMENT CONTROL NOTES AND PLANS.
- THE CONTRACTOR SHALL MAINTAIN AND COORDINATE ACCESS TO ALL AFFECTED PROPERTIES. THE CONTRACTOR SHALL NOTIFY AFFECTED RESIDENTS A MINIMUM OF 48 HOURS PRIOR TO ANY DRIVEWAY CLOSURES AND ASSIST PROPERTY OWNER WITH ALTERNATIVE PARKING AND ACCESS. PEDESTRIAN ACCESS TO ENTRANCES SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR WILL PROVIDE RAMPS OR OTHER APPROVED METHODS FOR MAINTAINING ACCESS TO ENTRANCES. RAMPS SHALL BE ADA COMPLIANT, APPROVED BY THE ENGINEER, AND INCIDENTAL TO THE CONTRACT.
- IF GROUND WATER SPRINGS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE PROJECT ENGINEER. THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE THAT THE WATER IS NOT CONVEYED THROUGH UTILITY TRENCHES AND THE NATURAL FLOW PATH OF THE SPRING IS ALTERED AS LITTLE AS PRACTICABLE.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS BEFORE THE START OF WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY FIELD MEASUREMENTS AND OTHERWISE VERIFY ALL DIMENSIONS AND EXISTING CONSTRUCTION CONDITIONS INDICATED AND/OR SHOWN ON THE PLANS. SHOULD ANY ERROR OR INCONSISTENCY EXIST, THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK AFFECTED UNTIL REPORTED TO THE PROJECT ENGINEER FOR CLARIFICATION OR CORRECTION.
- ANY INSPECTION BY THE CITY, COUNTY, STATE, FEDERAL AGENCY OR PROJECT ENGINEER SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN COMPLIANCE WITH THE APPLICABLE CODES, REGULATIONS, CITY STANDARDS AND PROJECT CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL TO THE CITY OF SHERWOOD PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH THE SPECIFICATIONS. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL PROVIDE TO THE CITY PROJECT MANAGER AND PROJECT ENGINEER A 24 HOUR CONTACT PERSON AND NUMBER.
- NO TRENCHES OR PITS WILL BE ALLOWED TO REMAIN OPEN OVERNIGHT. ALL TRENCHES AND PITS SHALL BE COVERED WITH STEEL PLATES OR FILLED IN AT NIGHT.
- PROPERTY LINES SHOWN ON ALL PLAN SHEETS ARE FOR GENERAL DELINEATION ONLY AND ARE, BY NO MEANS, MEANT TO REPRESENT THE ACTUAL BOUNDARIES.
- CONTRACTOR TO MAINTAIN ONE COMPLETE SET OF DRAWINGS ON SITE FOR THE SOLE PURPOSE OF CONTRACTOR RECORDING AS-BUILT INSTALLATION OF IMPROVEMENTS. COMPLETE AS-BUILT INFORMATION SHALL BE SUBMITTED TO THE PROJECT ENGINEER UPON COMPLETION OF CONSTRUCTION.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL CONSTRUCTION SAFETY, HEALTH AND OTHER RULES AND REGULATIONS FROM OSHA, DEQ, STATE, AND LOCAL REGULATING AGENCIES FOR SAFETY AND INSTALLATION OF THE WORK INCLUDING BUT NOT LIMITED TO SHORING, BRACING, ERECTION/INSTALLATION, FALL PROTECTION, GUARDRAILS, ETC.
- 3/4"-0" CRUSHED ROCK PIPE ZONE AND GRANULAR BACKFILL MATERIAL IS REQUIRED FOR ALL UTILITY LINES AND CONDUITS UNLESS NOTED OTHERWISE. REFER TO PROFILES AND TYPICAL TRENCH DETAILS.
- EXISTING UNDERGROUND PRIVATE UTILITY LOCATIONS ARE SHOWN SCHEMATICALLY. ACTUAL LOCATIONS MAY VARY. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE OREGON UTILITY NOTIFICATION CENTER PRIOR TO EXCAVATING.
- FUEL, HAZARDOUS MATERIAL OR ANY EQUIPMENT CONTAINING FUEL OR HAZARDOUS MATERIAL SHALL BE LOCATED WITHIN THE STAGING AREA AT THE END OF EACH DAY. ANY CONTAMINATED SOILS OR AGGREGATES DUE TO CONSTRUCTION OPERATIONS SHALL BE REMOVED AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE. NEW MATERIALS SHALL BE IMPORTED AND INSTALLED TO REPLACE THE REMOVED MATERIALS AT THE CONTRACTOR'S EXPENSE.

SANITARY AND STORM DRAIN NOTES

- PIPE RULES:
 - WATERTIGHT GASKETS ARE REQUIRED ON ALL PIPE SIZES.
 - ALL OPEN TRENCH SEWER PIPING SHALL BE PVC, ASTM D 3034, SDR 35 OR PVC, C-905, SDR 18 OR PVC, C-900, SDR 18. COMPATIBLE FITTINGS MUST BE USED. ALL PIPE USED MUST BE OF WATERTIGHT JOINTS AND BE PRESSURE TESTED IF SO REQUIRED BY THE CITY. USE OF "CONCRETE" OR OTHER PLASTIC PIPE FOR OPEN TRENCH SEWER MAINS AND LATERALS IS NOT ALLOWED.
- MANHOLE WALLS SHALL BE PRECAST REINFORCED CONCRETE OF THE SIZE REQUIRED PER MANUFACTURER'S RECOMMENDATIONS FOR THE PIPE SIZES AND NUMBER OF OPENINGS.
- IF DRAINAGE FIELD TILE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE CITY'S INSPECTOR. THE INTENT WILL BE TO CONNECT ANY FUNCTIONING DRAIN TILE SYSTEM TO THE STORM DRAIN SYSTEM IN AN APPROPRIATE MANNER. SUCH CONNECTION MUST BE NOTED ON THE AS-BUILT DRAWINGS AND MUST BE APPROVED BY THE PROJECT ENGINEER AS WELL AS THE CITY'S INSPECTOR.
- ALL MANHOLES SHALL HAVE A CAST IRON MANHOLE FRAME AND COVER GROUTED TO JUST UNDER THE TOP OF THE FRAME.
- ALL MATERIALS, INSPECTIONS AND TESTS ARE TO BE IN ACCORDANCE WITH CITY OF SHERWOOD AND/OR CWS SPECIFICATIONS. ALL SECTIONS FAILING TO PASS THE REQUIRED TESTS AND INSPECTIONS SHALL BE LOCATED AND REPAIRED. AFTER REPAIR, THESE SECTIONS SHALL BE RETESTED AND INSPECTED UNTIL FOUND ACCEPTABLE.
- SEWER LINES SHALL BE LAID IN A STRAIGHT ALIGNMENT AND IN A UNIFORM GRADE BETWEEN THE MANHOLES AND CLEANOUTS.
- ALL STORM LINES SHALL BE MANDREL AND VIDEO TESTED. TESTING AND INSPECTION SHALL BE IN ACCORDANCE WITH CITY OF SHERWOOD AND CWS STANDARDS.
- ALL OTHER CONSTRUCTION PRACTICES (RELATING TO SANITARY AND STORM SEWER) WITHIN THE CITY'S PUBLIC RIGHT-OF-WAY, NOT COVERED IN THESE "GENERAL REQUIREMENTS" AND/OR "CONSTRUCTION DETAILS" SECTIONS, SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE MOST RECENT EDITION OF THE "CWS DESIGN & CONSTRUCTION STANDARDS."
- ALL NEW STORM SEWER PIPES AND MANHOLES SHALL BE TESTED, CLEANED AND VIDEOED PRIOR TO FINAL ACCEPTANCE.

NOTES:

- WHEN RAINFALL AND RUNOFF OCCURS DAILY INSPECTIONS OF THE EROSION AND SEDIMENT CONTROLS AND DISCHARGE OUTFALLS MUST BE PROVIDED BY SOME ONE KNOWLEDGEABLE AND EXPERIENCED IN THE PRINCIPLES, PRACTICES, INSTALLATION, AND MAINTENANCE OF EROSION AND SEDIMENT CONTROLS WHO WORKS FOR THE PERMITTEE.
- CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND FROM OCTOBER 1 THROUGH MAY 31 EACH YEAR.
- DURING WET WEATHER PERIOD, TEMPORARY STABILIZATION OF THE SITE MUST OCCUR AT THE END OF EACH WORK DAY.
- SEDIMENT CONTROLS MUST BE INSTALLED AND MAINTAINED ON ALL DOWN GRADIENT SIDES OF THE CONSTRUCTION SITE AT ALL TIMES DURING CONSTRUCTION. THEY MUST REMAIN IN PLACE UNTIL PERMANENT VEGETATION OR OTHER PERMANENT COVERING OF EXPOSED SOIL IS ESTABLISHED.
- ALL ACTIVE INLETS MUST HAVE SEDIMENT CONTROLS INSTALLED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. UNLESS OTHERWISE APPROVED, A SURFACE MOUNTED AND ATTACHABLE, U-SHAPED FILTER BAG IS REQUIRED FOR ALL CURB INLET CATCH BASINS.
- SIGNIFICANT AMOUNTS OF SEDIMENT WHICH LEAVES THE SITE MUST BE CLEANED UP WITHIN 24 HOURS AND PLACED BACK ON THE SITE AND STABILIZED OR PROPERLY DISPOSED. THE CAUSE OF THE SEDIMENT RELEASE MUST BE FOUND AND PREVENTED FROM CAUSING A RECURRENCE OF THE DISCHARGE WITHIN THE SAME 24 HOURS. ANY IN-STREAM CLEAN UP OF SEDIMENT SHALL BE PERFORMED ACCORDING TO THE OREGON DEPARTMENT OF STATE LANDS REQUIRED TIME FRAME.
- SEDIMENT MUST NOT BE INTENTIONALLY WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES.
- SEDIMENT MUST BE REMOVED FROM BEHIND ALL SEDIMENT CONTROL MEASURES WHEN IT HAS REACHED A HEIGHT OF 1/3RD THE BARRIER HEIGHT, AND PRIOR TO THE CONTROL MEASURES REMOVAL.
- CLEANING OF ALL STRUCTURES WITH SUMPS MUST OCCUR WHEN THE SEDIMENT RETENTION CAPACITY HAS BEEN REDUCED BY 50% AND AT COMPLETION OF PROJECT.
- ANY USE OF TOXIC OR OTHER HAZARDOUS MATERIALS MUST INCLUDE PROPER STORAGE, APPLICATION, AND DISPOSAL.
- THE PERMITTEE MUST PROPERLY MANAGE HAZARDOUS WASTES, USED OILS, CONTAMINATED SOILS, CONCRETE WASTE, SANITARY WASTE, LIQUID WASTE, OR OTHER TOXIC SUBSTANCES DISCOVERED OR GENERATED DURING CONSTRUCTION.
- THE APPLICATION RATE OF FERTILIZERS USED TO REESTABLISH VEGETATION MUST FOLLOW MANUFACTURER'S RECOMMENDATIONS. NUTRIENT RELEASES FROM FERTILIZERS TO SURFACE WATERS MUST BE MINIMIZED. TIME RELEASE FERTILIZERS SHOULD BE USED AND CARE SHOULD BE MADE IN APPLICATION OF FERTILIZERS WITHIN ANY WATER WAY RIPARIAN ZONE.
- OWNER OR DESIGNATED PERSON SHALL BE RESPONSIBLE FOR PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL MEASURES, IN ACCORDANCE WITH CURRENT CLEAN WATER SERVICES STANDARDS AND STATE, AND FEDERAL REGULATIONS.
- PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BOUNDARIES OF THE CLEARING LIMITS, VEGETATED BUFFERS, AND ANY SENSITIVE AREAS SHOWN ON THIS PLAN SHALL BE CLEARLY DELINEATED IN THE FIELD. UNLESS OTHERWISE APPROVED, 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 EQUIV.
- PRIOR TO ANY LAND DISTURBING ACTIVITIES, THE BMPs THAT MUST BE INSTALLED ARE GRAVEL CONSTRUCTION ENTRANCE, PERIMETER SEDIMENT CONTROL, AND INLET PROTECTION. THESE BMPs MUST BE MAINTAINED FOR THE DURATION OF THE PROJECT.
- IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1ST; THE TYPE AND PERCENTAGES OF SEED IN THE MIX ARE AS IDENTIFIED ON THE PLANS OR AS SPECIFIED BY THE DESIGN ENGINEER.
- WATER-TIGHT TRUCKS MUST BE USED TO TRANSPORT SATURATED BOLS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMPs; SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE.
- ALL PUMPING OF SEDIMENT LADEN WATER MUST BE DISCHARGED OVER AN UNDISTURBED, PREFERABLY VEGETATED AREA, AND THROUGH A SEDIMENT CONTROL BMP (I.E. FILTER BAG).
- THE ESC PLAN MUST BE KEPT ONSITE. ALL MEASURES SHOWN ON THE PLAN MUST BE INSTALLED PROPERLY TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER A SURFACE WATER SYSTEM, ROADWAY, OR OTHER PROPERTIES.
- THE ESC MEASURES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE MEASURES SHALL BE UPGRADED AS NEEDED TO MAINTAIN COMPLIANCE WITH ALL REGULATIONS.
- WRITTEN ESC LOGS ARE SUGGESTED TO BE MAINTAINED ONSITE AND AVAILABLE TO DISTRICT INSPECTORS UPON REQUEST.
- IN AREAS SUBJECT TO WIND EROSION, APPROPRIATE BMPs MUST BE USED WHICH MAY INCLUDE THE APPLICATION OF FINE WATER SPRAYING, PLASTIC SHEETING, MULCHING, OR OTHER APPROVED MEASURES.
- ALL EXPOSED SOILS MUST BE COVERED DURING WET WEATHER PERIOD.

EROSION AND SEDIMENT CONTROL NOTES

- THE ESC MEASURES SHOWN ON THIS PLAN ARE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, UPGRADE THESE MEASURES AS NEEDED TO COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL EROSION AND SEDIMENT CONTROL REGULATIONS.
- 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.
- EROSION AND SEDIMENT CONTROL MEASURES INCLUDING PERIMETER SEDIMENT CONTROL MUST BE IN PLACE BEFORE VEGETATION IS DISTURBED AND MUST REMAIN IN PLACE AND BE MAINTAINED, REPAIRED, AND PROMPTLY IMPLEMENTED FOLLOWING PROCEDURES ESTABLISHED FOR THE DURATION OF CONSTRUCTION, INCLUDING PROTECTION FOR ACTIVE STORM DRAIN INLETS AND CATCH BASINS AND APPROPRIATE NON-STORMWATER POLLUTION CONTROLS.
- ESTABLISH CONCRETE TRUCK AND OTHER CONCRETE EQUIPMENT WASHOUT AREAS BEFORE BEGINNING CONCRETE WORK.
- APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS.
- WHEN TRUCKING SATURATED SOILS FROM THE SITE, EITHER USE WATER-TIGHT TRUCKS OR DRAIN LOADS ON SITE.
- USE BMPs TO PREVENT OR MINIMIZE STORMWATER 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, LEFTOVER PAINTS, SOLVENTS, AND GLUES FROM CONSTRUCTION OPERATIONS.
- 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.
- USE WATER, SOIL-BINDING AGENT OR OTHER DUST CONTROL TECHNIQUE AS NEEDED TO AVOID WIND-BLOWN SOIL.
- 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.
- 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.
- CONSTRUCTION ACTIVITIES MUST AVOID OR MINIMIZE EXCAVATION AND CREATION OF BARE GROUND DURING WET WEATHER OCTOBER 01 - MAY 31.
- SEDIMENT FENCE: REMOVE TRAPPED SEDIMENT BEFORE IT REACHES ONE THIRD OF THE ABOVE GROUND FENCE HEIGHT AND BEFORE FENCE REMOVAL.
- OTHER SEDIMENT BARRIERS (SUCH AS BIOBAGS): REMOVE SEDIMENT BEFORE IT REACHES TWO INCHES DEPTH ABOVE GROUND HEIGHT. AND BEFORE BMP REMOVAL.
- 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.
- 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.
- 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.
- PROVIDE PERMANENT EROSION CONTROL MEASURES ON ALL EXPOSED AREAS. DO NOT REMOVE TEMPORARY SEDIMENT CONTROL PRACTICES UNTIL PERMANENT VEGETATION OR OTHER COVER OF EXPOSED AREAS IS ESTABLISHED. HOWEVER, DO REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AS EXPOSED AREAS BECOME STABILIZED, UNLESS DOING SO CONFLICTS WITH LOCAL REQUIREMENTS. PROPERLY DISPOSE OF CONSTRUCTION MATERIALS AND WASTE, INCLUDING SEDIMENT RETAINED BY TEMPORARY BMPs.
- SEEDING MUST TAKE PLACE NO LATER THAT SEPTEMBER 1.
- 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).
- ALL EXPOSED SOILS MUST BE COVERED DURING THE WET WEATHER PERIOD, OCTOBER 01 - MAY 31.

GENERAL NOTES

HIGHLAND AND ORCUTT SANITARY SEWER REHABILITATION

LOCATED IN SECTION 32BD, T2S, R1W, W.M. IN THE CITY OF SHERWOOD, WASHINGTON COUNTY, STATE OF OREGON

CITY OF SHERWOOD ENGINEERING DEPARTMENT 22880 SW PINE STREET SHERWOOD, OREGON 97140

PHONE: (503) 925-2309 FAX: (503) 625-0629 E-MAIL: engineering@sherwoodoregon.gov



DESIGNED BY:	CC
DRAWN BY:	AS/CC
CHECKED BY:	RS
FULL SIZE SCALE:	AS NOTED
DATE:	MARCH 10, 2015
HIGHLAND SANITARY COVERING	

JOB NO.	8073
SHEET NO.	2
	7

STANDARD DRAWING TITLE		DRAWING NUMBER
STANDARD EROSION CONTROL NOTES FOR SITES LESS THAN 1 ACRE		ESC-30
Any alteration of this drawing may not be associated in any way with the City of Sherwood Standard Drawings.	SCALE	DATE
	N.T.S.	JUL '09



CONSTRUCTION NOTES

AT LEAST ONE LANE OF SW WILLAMETTE STREET SHALL BE OPEN DURING CONSTRUCTION. ALL LANES OF SW WILLAMETTE STREET SHALL BE OPEN AT THE END OF EACH WORK DAY. NO LANE CLOSURES OF SW WILLAMETTE WILL BE ALLOWED BEFORE 8:30 AM. ADVANCED SIGNAGE AND FLAGGERS REQUIRED. SUBMIT TRAFFIC CONTROL PLAN FOR APPROVAL.

AT LEAST ONE LANE OF SW HIGHLAND DRIVE SHALL BE OPEN DURING CONSTRUCTION. ALL LANES OF SW HIGHLAND DRIVE SHALL BE OPEN AT THE END OF EACH WORK DAY. ADVANCED SIGNAGE AND FLAGGER REQUIRED. SUBMIT TRAFFIC CONTROL PLAN FOR APPROVAL.

ALL TRENCHES/PITS SHALL BE PROTECTED DURING CONSTRUCTION. TRENCHES/PITS SHALL BE EITHER FILLED, PLATED OR SURROUNDED BY SECURITY FENCING DURING CONSTRUCTION. TRENCHES/PITS THAT ARE FILLED WITHIN DRIVING SURFACES SHALL BE COLD PATCHED UNTIL PERMANENT SURFACING IS INSTALLED. (INCIDENTAL)

DRIVEWAY ACCESS SHALL BE MAINTAINED. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER 3 DAYS IN ADVANCE WHEN ANY WORK THAT OCCURS WILL CAUSE ACCESS CLOSURE OF ANY DRIVEWAY. ALL DRIVEWAYS SHALL BE OPEN AT THE END OF EACH WORKDAY.

CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER 3 DAYS IN ADVANCE OF WHEN SANITARY SERVICE IS TO BE SUSPENDED FOR PIPE BURSTING. CONTRACTOR SHALL RECONNECT ALL SEWER LATERALS PRIOR TO THE END OF THE WORK DAY.

ALL STREETS AND DRIVEWAYS SHALL BE KEPT CLEAN THROUGHOUT CONSTRUCTION (INCIDENTAL).

HOURS OF CONSTRUCTION ARE BETWEEN 7:30AM AND 6:00PM MONDAY THROUGH FRIDAY.

ANY CONSTRUCTION SURVEYING NECESSARY FOR THE COMPLETION OF THE PROJECT AND AS-BUILT SURVEYING SHALL BE PROVIDED BY THE CONTRACTOR'S SURVEYOR. THE INSTALLED MANHOLE RIM ELEVATIONS, LOCATION AND PIPE I.E.S SHALL HAVE POINT SHOTS BY AN OREGON LICENSED LAND SURVEYOR. CONTRACTOR SHALL PROVIDE AUTOCAD DRAWING WITH POINT SHOTS IN A VERSION READABLE TO THE CITY. INCIDENTAL TO BID ITEM "CONSTRUCTION SURVEY WORK".

CONTRACTOR SHALL MEASURE LOCATION OF ALL PIPING ENCOUNTERED DURING THE PROJECT AND ALL SANITARY LATERALS AND MARK ON AS-BUILTS TO BE SUPPLIED TO THE CITY.

CONTRACTOR MAY NOT BLOCK DRIVEWAYS BY STORING MATERIALS OR PERFORMING WELDING OPERATIONS ON PIPE. PIPE WELDING TO BE PERFORMED ON CITY PROPERTY NORTHWEST OF SW COLUMBIA STREET (SEE COVER SHEET) AND MOVED TO THE SITE FOR PIPE BURSTING UNLESS OTHERWISE APPROVED BY THE ENGINEER. STAGING AREA TO BE CLEANED AND RESTORED TO ORIGINAL CONDITION AFTER CONSTRUCTION.

ALL EXCAVATED MATERIALS SHALL BE REMOVED AND DISPOSED OF OFFSITE.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE WITH 4" MINIMUM OF LEVEL 2, 1/2" INCH ACP IN EXISTING PUBLIC STREET ASPHALT AREAS AND WITH 3" ASPHALT OF LEVEL 2, 1/2" INCH ACP IN DRIVEWAY AREAS. CRACK SEAL JOINTS BETWEEN NEW AC AND EXISTING AC AND BETWEEN NEW AC AND NEW CURB.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE WITH 6" MINIMUM OF CONCRETE (MIN. 4,000 PSI AT 28 DAYS) IN EXISTING AREAS OF CONCRETE DRIVING SURFACE.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE TO SURFACE IN EXISTING GRAVEL AREAS.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE TO 6" FROM FINISH GRADE TOPPED WITH 6" OF NEW TOP SOIL AND EITHER HYDRO-SEEDER OR BARK MULCHED TO MATCH EXISTING AREA SURFACE. "INCIDENTAL TO BID ITEM "YARD RESTORATION".

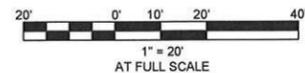
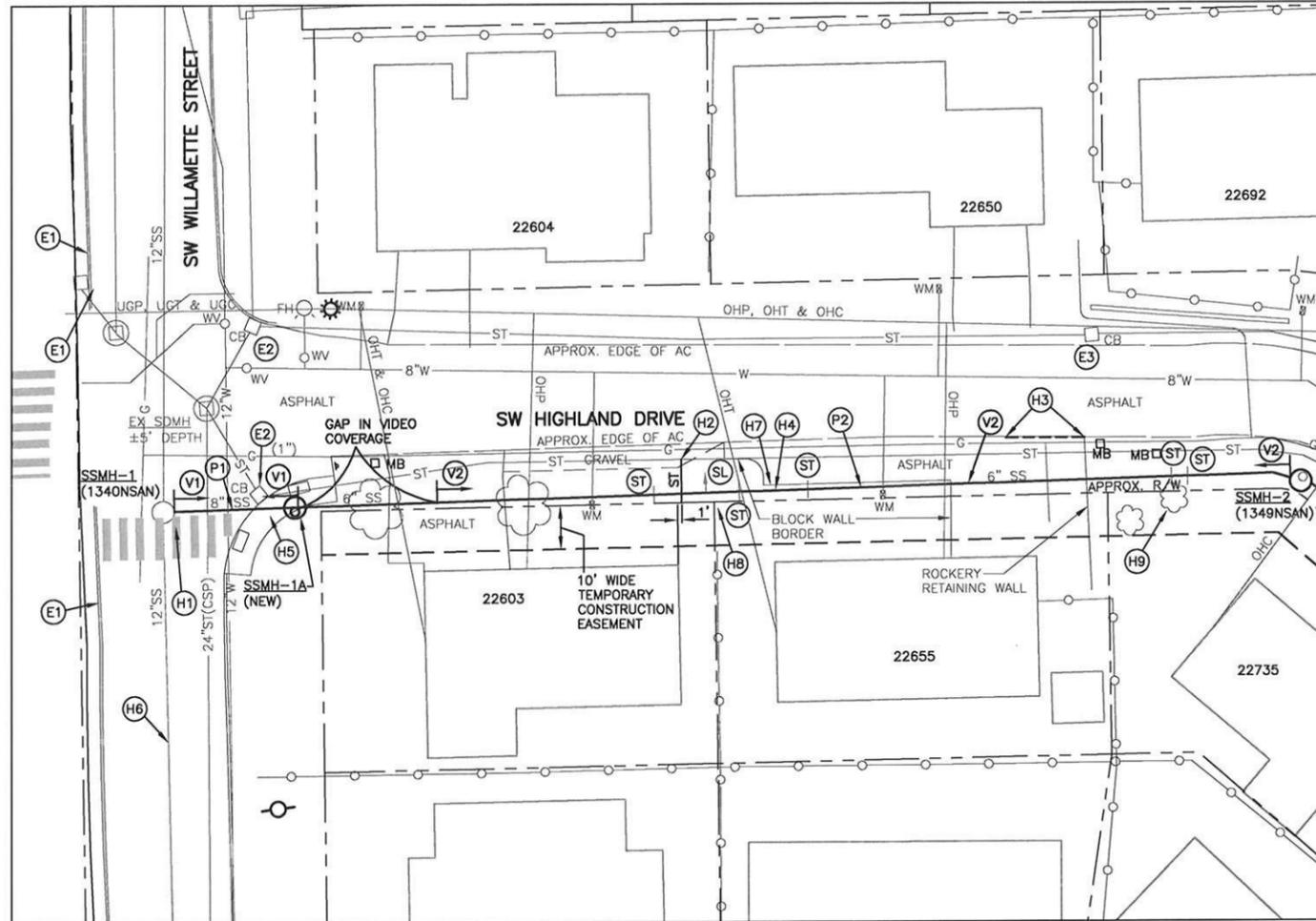
CONTRACTOR IS REQUIRED TO HAVE PORTABLE BATHROOM FACILITIES ON SITE. THE PORTABLE BATHROOM FACILITIES SHALL BE MOVED AS NEEDED TO THE SECTION OF THE SANITARY SYSTEM THAT IS OUT OF SERVICE (INCIDENTAL).

IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ANY PIPE BURSTED SEWER HAS NO GREATER THAN A 3/8" BELLY. IF NECESSARY THE CONTRACTOR MAY ELECT TO REPLACE AN EXISTING PIPE SECTION PRIOR TO PIPE BURSTING (INCIDENTAL TO THE BID ITEM "PIPE BURST PREPARATION") IF ANY PIPE BURST SECTIONS EXCEED THE 3/8" MAXIMUM BELLY, THEN THE CONTRACTOR SHALL FIX THE PIPE TO BRING THE PIPE SECTION TO WITHIN STANDARDS, RETEST AND REVIDEO THE FULL PIPE SECTION BETWEEN THE MANHOLES OF THE UNAPPROVED PIPE SECTION AT HIS/HER EXPENSE.

CONTRACTOR TO REMOVE ALL MAILBOXES NECESSARY TO PERFORM THE WORK. MAILBOXES SHALL BE TEMPORARILY SUPPORTED FOR MAIL SERVICE DURING CONSTRUCTION. UPON TESTING AND APPROVAL OF THE SYSTEM, THE MAILBOXES SHALL BE SOLIDLY REINSTALLED TO THEIR ORIGINAL POSITION (INCIDENTAL).

CONTRACTOR SHALL SUBMIT MATERIAL SPECIFICATIONS OF MATERIALS TO BE USED TO THE CITY PROJECT MANAGER FOR APPROVAL. MATERIALS INSTALLED THAT DO NOT MEET CITY SPECIFICATIONS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL TRANSPLANTED TREES/PLANTS SURVIVE FOR THE DURATION OF THE 2-YEAR MAINTENANCE BOND PERIOD. ANY TRANSPLANTED TREES/PLANTS THAT DIE DURING THE 2-YEAR MAINTENANCE BOND PERIOD SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE MEETING THE APPROVAL OF THE CITY AND HOME OWNER.



SANITARY VIDEO KEY NOTES

- (V1) VIDEO 1 - FROM 1340NSAN (DOWNSTREAM) TOWARD 1349NSAN (UPSTREAM)
- (V2) VIDEO 2 - FROM 1349NSAN (UPSTREAM) TOWARD 1340NSAN (DOWNSTREAM)

CAUTION: VIDEOS PROVIDED BY THE CITY ARE FOR REFERENCE ONLY. THE CITY IS NOT RESPONSIBLE FOR ANY INACCURACIES IN THE VIDEOS OR THE CONTRACTOR'S USE THEREOF. THE CONTRACTOR SHALL PERFORM HIS/HER OWN INVESTIGATION AS TO THE LOCATION OF ANY POTENTIAL AREA WHERE BELLING OF THE PIPE BURST MAY OCCUR, AREAS WHERE NEW MANHOLES ARE TO BE LOCATED AND TO MORE PRECISELY LOCATE THE EXISTING SANITARY SEWER LATERALS. INCLUDED IN THE BID ITEM "PIPE BURST PREPARATION".

EROSION CONTROL KEY NOTES

- (E1) INSTALL BIOBAGS IN FRONT OF CURB OPENING.
- (E2) INSTALL SILT SACKS (NO OVERFLOW) IN CATCH BASIN.
- (E3) INSTALL BIOBAGS AROUND INLET.
- (E4) INSTALL SILT SACKS (NO OVERFLOW) IN CATCH BASIN WITH BIOBAGS IN FRONT OF CURB OPENING.

SANITARY LATERAL KEY NOTES

- (ST) EXISTING SANITARY LATERAL ENTERS TOP OF EXISTING SANITARY MAIN SEE DETAIL RIGHT
- (SL) EXISTING SANITARY LATERAL ENTERS SANITARY MAIN FROM SIDE SEE DETAIL RIGHT
- (SC) EXISTING SANITARY LATERAL MAY BE CAPPED AND NOT IN USE. CONFIRM LATERAL NOT IN USE, IF SO DO NOT RECONNECT. (INCIDENTAL)

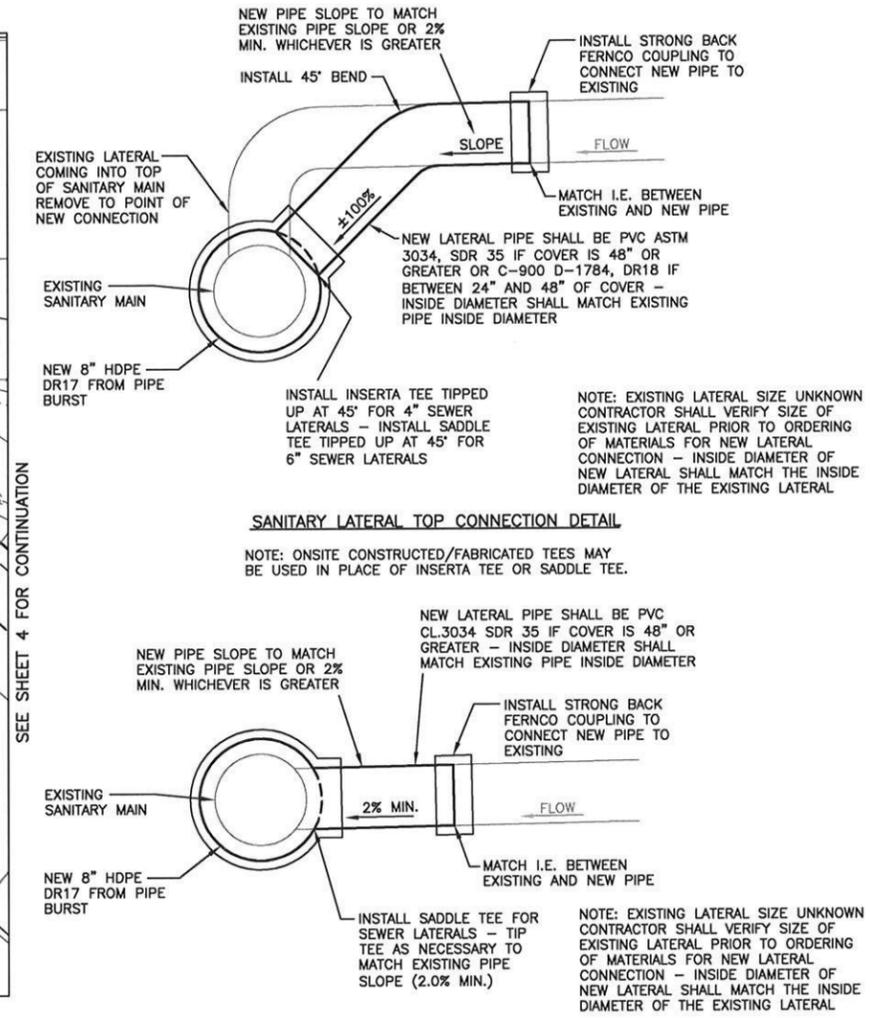
SANITARY PIPING KEY NOTES

- (P1) OPEN TRENCH REMOVE EXISTING CONCRETE PIPE AND INSTALL 8" PVC CL.3034, SDR 26 L=±26' S=1.0% MIN. OR MATCH EXISTING WHICHEVER IS STEEPER
- (P2) PIPE BURST INSTALL 8" HDPE DR 17 L=±231'

HIGHLAND GENERAL KEY NOTES

- (H1) INSTALL 12" WIDE WHITE THERMOPLASTIC CROSSWALK BARS TO REPLACE THE PORTIONS OF THE EXISTING BARS REMOVED DURING CONSTRUCTION (MATCH EXISTING).
 - (H2) POT HOLE EXISTING STORM SEWER AND VERIFY SIZE, MATERIAL TYPE AND LOCATION PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS. INSTALL 12"x6" PVC C-900 TEE CONNECT TO EXISTING 12" PVC PIPE WITH STRONG BACK FERNCO COUPLING. INSTALL 6" PVC C-900 TO PROPERTY LINE AND CAP END (L=±10' S=1.0%) INSTALL A PRESSURE TREATED 2"x4", PAINTED WHITE, APPROXIMATELY 2' ABOVE GRADE. MARK WITH LENGTH OF BOARD.
 - (H3) CLEAN SURFACE TACK COAT AND INSTALL 2" HIGH ASPHALT BERM FOR 18 FEET ALONG EDGE OF DRIVEWAY NEXT TO STREET DRIVING LANE.
 - (H4) APPROXIMATE LOCATION OF PIPE BELLY MAY NEED PIPE POINT REPAIR (SEE CONSTRUCTION NOTES LEFT).
 - (H5) REMOVE SIDEWALK, CURB AND SIDEWALK RAMP AS NECESSARY TO INSTALL NEW MANHOLE. RESTORE ONCE NEW SEWER IS TESTED AND APPROVED. CONCRETE TO HAVE MIN. COMPRESSIVE STRENGTH OF 3,500 PSI @28 DAYS.
 - (H6) CONTRACTOR TO CLEAN AND VIDEO EXISTING SEWER PIPE (±170') AFTER NEW SEWER WITHIN SW HIGHLAND DRIVE IS INSTALLED. IF VIDEO SHOWS THAT THE SANITARY SEWER IS NOT CLEAN, THE SEWER WILL BE RECLEANED AND REVIDEOED AT THE CONTRACTOR'S EXPENSE.
 - (H7) EXISTING RETAINING WALL BLOCKS TO BE MOVED TO SIDE OF GARAGE FOR CONSTRUCTION WORK IN THIS AREA. BLOCKS TO BE REPLACED AFTER NEW SYSTEM IS TESTED AND APPROVED. USE EXTREME CARE WHEN MOVING BLOCKS AS THEY HAVE SENTIMENTAL VALUE TO HOME OWNER.
 - (H8) REMOVE/TRIM EXISTING SHRUB AS NECESSARY REPLACE IN KIND.
 - (H9) EXCAVATE JAPANESE MAPLE TREE WITH ROOT BALL IF NECESSARY FOR THE CONSTRUCTION OF THE SANITARY SEWER. PROTECT, MAINTAIN AND REINSTALL IN ORIGINAL LOCATION.
- CAUTION: TREES/PLANTS CALLED OUT FOR REPLANTING ARE BASED UPON VISUAL OBSERVATIONS AND THE ANTICIPATED AREA OF EXCAVATIONS. ADDITIONAL TREES/PLANTS MAY NEED TO BE EXCAVATED AND RESTORED THAT ARE NOT CALLED OUT IN THE NOTES. ALL WORK INVOLVED WITH THE TRANSPLANTING OF EXISTING TREES/PLANTS NECESSARY FOR COMPLETION OF THE WORK IS COVERED UNDER THE BID ITEM "TRANSPLANTING EXISTING LANDSCAPING". SOME PLANTS MAY NOT BE DESIRED BY THE HOME OWNER TO BE REPLANTED. CONFIRM WITH HOME OWNER AND NOTIFY CITY PROJECT MANAGER. AT END OF CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A SIGNED WAIVER FROM EACH OF THE FOLLOWING PROPERTY OWNERS PLUS ANY OTHER PROPERTY OWNER WHOSE PROPERTY WAS DISTURBED BY THE CONTRACTOR.
- 22603 SW HIGHLAND DRIVE
22655 SW HIGHLAND DRIVE
22735 SW HIGHLAND DRIVE
22749 SW HIGHLAND DRIVE
22793 SW HIGHLAND DRIVE
22805 SW HIGHLAND DRIVE
22707 SW ORCUTT PLACE
22745 SW ORCUTT PLACE
- NOTE: THE CITY HAS PAID FOR A DEWATERING PERMIT TO ALLOW THE DEWATERING OF THE TRENCH INTO THE EXISTING SANITARY SEWER SYSTEM. PUMPING MAY NOT OCCUR DURING MAJOR STORM EVENTS. PUMP USED SHALL HAVE SCREENING AND SHALL PUMP AT A RATE LESS THAN 50GPM. THE CONTRACTOR SHALL COORDINATE WITH THE CITY PROJECT MANAGER 3 DAYS IN ADVANCE OF WHEN PUMPING WILL BE NECESSARY FOR CLEAN WATER SERVICES NOTIFICATION.

SEE SHEET 4 FOR CONTINUATION



SANITARY MANHOLE KEY NOTES

- SSMH-1 (1340NSAN)
CONTRACTOR TO CONNECT NEW 8" PVC PIPE TO EXISTING MANHOLE (±7' DEPTH) AND GROUT HOLE WATER TIGHT - RECHANNEL BASE AS NECESSARY
- SSMH-1A
CONTRACTOR TO POTHOLE LOCATION OF VERTICAL ELEVATION DIFFERENCE IN EXISTING PIPE (APPROXIMATELY 28.0' ON V1) TO MAKE MEASUREMENTS FOR THE ORDERING AND INSTALLATION OF A NEW CONCRETE MANHOLE TO BE INSTALLED TO REMOVE THE VERTICAL DEFLECTION IN THE SEWER - CONTACT ENGINEER ONCE HOLE IS OPEN - HOLE WILL REQUIRE SECURITY PROTECTION (STEEL PLATE, SECURITY FENCING OR FILL) WHILE WAITING FOR MANHOLE DELIVERY - CONCRETE SIDEWALK AND SIDEWALK RAMP TO BE RESTORED PER DETAILS
- SSMH-2 (1349NSAN)
EXISTING MANHOLE (±4.5' DEEP) TO BE REMOVED - CONTRACTOR TO VERIFY I.E. DEPTHS AND LOCATION PRIOR TO ORDERING NEW CONCRETE FLAT TOP MANHOLE WITH LOCKING FRAME AND COVER. INSTALL NEW MANHOLE AND CONNECT NEW 8" HDPE PIPE - INSURE POSITIVE DRAINAGE THROUGH MANHOLE

**SANITARY SEWER PLAN
HIGHLAND NORTH**

**HIGHLAND AND ORCUTT SANITARY
SEWER RESTORATION**

CITY OF SHERWOOD
ENGINEERING DEPARTMENT
1777 W. 17TH AVE.
SHERWOOD, OREGON 97140

PHONE: (503) 925-2309
FAX: (503) 625-0629
E-MAIL: engineering@sherwoodoregon.gov

LOCATED IN SECTION 32BD, T2S, R1W, W.M.
IN THE CITY OF SHERWOOD, WASHINGTON COUNTY,
STATE OF OREGON

REGISTERED PROFESSIONAL ENGINEER
No. 1777
CR 16 C
EXPIRES: 12-31-15

DESIGNED BY:	CC	AS/CCC	RS	AS NOTED	MARCH 10, 2015
DRAWN BY:					
CHECKED BY:					
FULL SIZE SCALE:					
DATE:					

HIGHLAND SANITARY PLAN REVISIONS

JOB NO.	
SHEET NO.	3
	7

CONSTRUCTION NOTES

AT LEAST ONE LANE OF SW WILLAMETTE STREET SHALL BE OPEN DURING CONSTRUCTION. ALL LANES OF SW WILLAMETTE STREET SHALL BE OPEN AT THE END OF EACH WORK DAY. NO LANE CLOSURES OF SW WILLAMETTE WILL BE ALLOWED BEFORE 8:30 AM. ADVANCED SIGNAGE AND FLAGGERS REQUIRED. SUBMIT TRAFFIC CONTROL PLAN FOR APPROVAL.

AT LEAST ONE LANE OF SW HIGHLAND DRIVE SHALL BE OPEN DURING CONSTRUCTION. ALL LANES OF SW HIGHLAND DRIVE SHALL BE OPEN AT THE END OF EACH WORK DAY. ADVANCED SIGNAGE AND FLAGGER REQUIRED. SUBMIT TRAFFIC CONTROL PLAN FOR APPROVAL.

ALL TRENCHES/PITS SHALL BE PROTECTED DURING CONSTRUCTION. TRENCHES/PITS SHALL BE EITHER FILLED, PLATED OR SURROUNDED BY SECURITY FENCING DURING CONSTRUCTION. TRENCHES/PITS THAT ARE FILLED WITHIN DRIVING SURFACES SHALL BE COLD PATCHED UNTIL PERMANENT SURFACING IS INSTALLED. (INCIDENTAL)

DRIVEWAY ACCESS SHALL BE MAINTAINED. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER 3 DAYS IN ADVANCE WHEN ANY WORK THAT OCCURS WILL CAUSE ACCESS CLOSURE OF ANY DRIVEWAY. ALL DRIVEWAYS SHALL BE OPEN AT THE END OF EACH WORKDAY.

CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER 3 DAYS IN ADVANCE OF WHEN SANITARY SERVICE IS TO BE SUSPENDED FOR PIPE BURSTING. CONTRACTOR SHALL RECONNECT ALL SEWER LATERALS PRIOR TO THE END OF THE WORK DAY.

ALL STREETS AND DRIVEWAYS SHALL BE KEPT CLEAN THROUGHOUT CONSTRUCTION (INCIDENTAL).

HOURS OF CONSTRUCTION ARE BETWEEN 7:30AM AND 6:00PM MONDAY THROUGH FRIDAY.

ANY CONSTRUCTION SURVEYING NECESSARY FOR THE COMPLETION OF THE PROJECT AND AS-BUILT SURVEYING SHALL BE PROVIDED BY THE CONTRACTOR'S SURVEYOR. THE INSTALLED MANHOLE RIM ELEVATIONS, LOCATION AND PIPE I.E.S SHALL HAVE POINT SHOTS BY AN OREGON LICENSED LAND SURVEYOR. CONTRACTOR SHALL PROVIDE AUTOCAD DRAWING WITH POINT SHOTS IN A VERSION READABLE TO THE CITY. INCIDENTAL TO BID ITEM "CONSTRUCTION SURVEY WORK".

CONTRACTOR SHALL MEASURE LOCATION OF ALL PIPING ENCOUNTERED DURING THE PROJECT AND ALL SANITARY LATERALS AND MARK ON AS-BUILTS TO BE SUPPLIED TO THE CITY.

CONTRACTOR MAY NOT BLOCK DRIVEWAYS BY STORING MATERIALS OR PERFORMING WELDING OPERATIONS ON PIPE. PIPE WELDING TO BE PERFORMED ON CITY PROPERTY NORTHWEST OF SW COLUMBIA STREET (SEE COVER SHEET) AND MOVED TO THE SITE FOR PIPE BURSTING UNLESS OTHERWISE APPROVED BY THE ENGINEER. STAGING AREA TO BE CLEANED AND RESTORED TO ORIGINAL CONDITION AFTER CONSTRUCTION.

ALL EXCAVATED MATERIALS SHALL BE REMOVED AND DISPOSED OF OFFSITE.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE WITH 4" MINIMUM OF LEVEL 2, 1/2 INCH ACP IN EXISTING PUBLIC STREET ASPHALT AREAS AND WITH 3" ASPHALT OF LEVEL 2, 1/2 INCH ACP IN DRIVEWAY AREAS. CRACK SEAL JOINTS BETWEEN NEW AC AND EXISTING AC AND BETWEEN NEW AC AND NEW CURB.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE WITH 6" MINIMUM OF CONCRETE (MIN. 4,000 PSI AT 28 DAYS) IN EXISTING AREAS OF CONCRETE DRIVING SURFACE.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE TO SURFACE IN EXISTING GRAVEL AREAS.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE TO 6" FROM FINISH GRADE TOPPED WITH 6" OF NEW TOP SOIL AND EITHER HYDRO-SEEDED OR BARK MULCHED TO MATCH EXISTING AREA SURFACE. (INCIDENTAL TO BID ITEM "YARD RESTORATION").

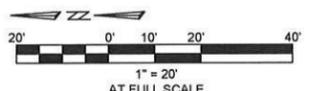
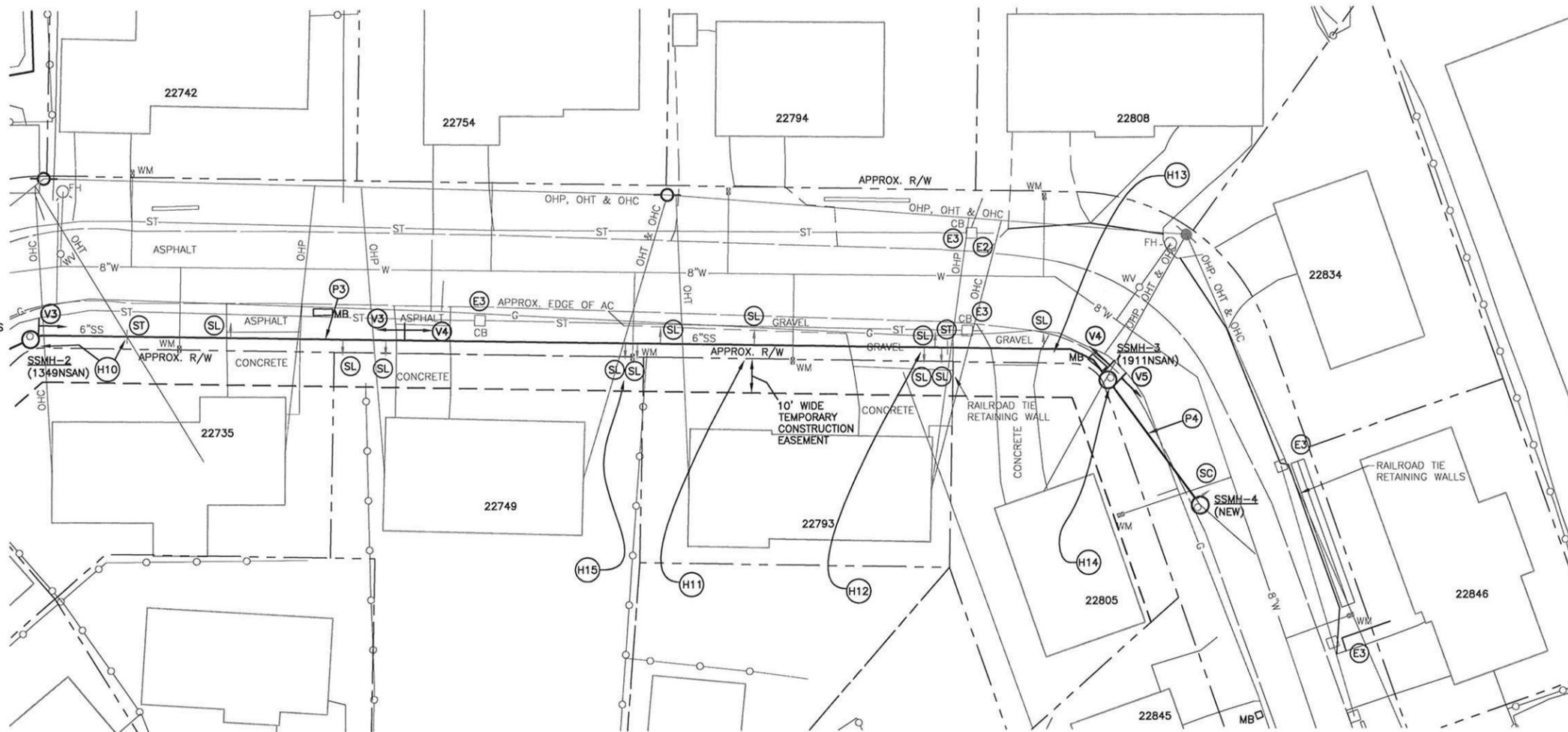
CONTRACTOR IS REQUIRED TO HAVE PORTABLE BATHROOM FACILITIES ON SITE. THE PORTABLE BATHROOM FACILITIES SHALL BE MOVED AS NEEDED TO THE SECTION OF THE SANITARY SYSTEM THAT IS OUT OF SERVICE (INCIDENTAL).

IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ANY PIPE BURSTED SEWER HAS NO GREATER THAN A 3/8" BELLY. IF NECESSARY THE CONTRACTOR MAY ELECT TO REPLACE AN EXISTING PIPE SECTION PRIOR TO PIPE BURSTING (INCIDENTAL TO THE BID ITEM "PIPE BURST PREPARATION") IF ANY PIPE BURST SECTIONS EXCEED THE 3/8" MAXIMUM BELLY, THEN THE CONTRACTOR SHALL FIX THE PIPE TO BRING THE PIPE SECTION TO WITHIN STANDARDS, RETEST AND REVIDEO THE FULL PIPE SECTION BETWEEN THE MANHOLES OF THE UNAPPROVED PIPE SECTION AT HIS/HER EXPENSE.

CONTRACTOR TO REMOVE ALL MAILBOXES NECESSARY TO PERFORM THE WORK. MAILBOXES SHALL BE TEMPORARILY SUPPORTED FOR MAIL SERVICE DURING CONSTRUCTION. UPON TESTING AND APPROVAL OF THE SYSTEM, THE MAILBOXES SHALL BE SOLIDLY REINSTALLED TO THEIR ORIGINAL POSITION (INCIDENTAL).

CONTRACTOR SHALL SUBMIT MATERIAL SPECIFICATIONS OF MATERIALS TO BE USED TO THE CITY PROJECT MANAGER FOR APPROVAL. MATERIALS INSTALLED THAT DO NOT MEET CITY SPECIFICATIONS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL TRANSPLANTED TREES/PLANTS SURVIVE FOR THE DURATION OF THE 2-YEAR MAINTENANCE BOND PERIOD. ANY TRANSPLANTED TREES/PLANTS THAT DIE DURING THE 2-YEAR MAINTENANCE BOND PERIOD SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE MEETING THE APPROVAL OF THE CITY AND HOME OWNER.



SANITARY VIDEO KEY NOTES

- V3 VIDEO 3 - FROM 1349NSAN (DOWNSTREAM) TOWARD 1911NSAN (UPSTREAM)
- V4 VIDEO 4 - FROM 1911NSAN (UPSTREAM) TOWARD 1349NSAN (DOWNSTREAM)
- V5 VIDEO 5 - UPSTREAM FROM 1911NSAN

CAUTION: VIDEOS PROVIDED BY THE CITY ARE FOR REFERENCE ONLY. THE CITY IS NOT RESPONSIBLE FOR ANY INACCURACIES IN THE VIDEOS OR THE CONTRACTOR'S USE THEREOF. THE CONTRACTOR SHALL PERFORM HIS/HER OWN INVESTIGATION AS TO THE LOCATION OF ANY POTENTIAL AREA WHERE BELLING OF THE PIPE BURST MAY OCCUR, AREAS WHERE NEW MANHOLES ARE TO BE LOCATED AND TO MORE PRECISELY LOCATE THE EXISTING SANITARY SEWER LATERALS. INCLUDED IN THE BID ITEM "PIPE BURST PREPARATION".

EROSION CONTROL KEY NOTES

- E1 INSTALL BIOBAGS IN FRONT OF CURB OPENING.
- E2 INSTALL SILT SACKS (NO OVERFLOW) IN CATCH BASIN.
- E3 INSTALL BIOBAG AROUND INLET.
- E4 INSTALL SILT SACKS (NO OVERFLOW) IN CATCH BASIN WITH BIOBAGS IN FRONT OF CURB OPENING.

SANITARY LATERAL KEY NOTES

- ST EXISTING SANITARY LATERAL ENTERS TOP OF EXISTING SANITARY MAIN SEE DETAIL RIGHT
- SL EXISTING SANITARY LATERAL ENTERS SANITARY MAIN FROM SIDE SEE DETAIL RIGHT

SANITARY PIPING KEY NOTES

- P3 PIPE BURST INSTALL 8" HDPE DR 17 L=±313'
- P4 OPEN TRENCH REMOVE EXISTING CONCRETE PIPE AND INSTALL 8" PVC C-900 L=±42' S=MATCH EXISTING (REPORT SLOPE TO ENGINEER PRIOR TO LAYING)

HIGHLAND GENERAL KEY NOTES

- H10 EXCAVATE ROSE PLANTS IF NECESSARY FOR THE CONSTRUCTION OF THE SANITARY SEWER. PROTECT, MAINTAIN AND REINSTALL IN ORIGINAL LOCATION.
- H11 EXCAVATE ROSE PLANTS AND FLOWER BULBS IF NECESSARY FOR THE CONSTRUCTION OF THE SANITARY SEWER. PROTECT, MAINTAIN AND REINSTALL IN ORIGINAL LOCATION.
- H12 REMOVE DECORATIVE LIGHTING AND RAILROAD TIE RETAINING WALL PROTECT, MAINTAIN AND REINSTALL IN ORIGINAL LOCATION. EXCAVATE SHRUBS AS NECESSARY AND REINSTALL IN ORIGINAL LOCATION. REMOVE CHERRY TREE AND STUMP IF NECESSARY FOR THE CONSTRUCTION OF THE SANITARY SEWER. IF NECESSARY, REPLACE CHERRY WITH GREEN LEAF JAPANESE MAPLE AT LOCATION APPROVED BY THE INSPECTOR.
- H13 TREE AND SHRUBS TO REMAIN.
- H14 TREES TO REMAIN. PLUM TREE MAY BE TRIMMED. REMOVE AND RESTORE RAISED FLOWER GARDEN BED/FLOWERS AND BRICK EDGING.
- H15 INSTALL PRESSURE TREATED 2" x 4" WITH DEPTH AT CONNECTION POINT (INCIDENTAL). MARK WITH LENGTH OF BOARD.

CAUTION: TREES/PLANTS CALLED OUT FOR REPLANTING ARE BASED UPON VISUAL OBSERVATIONS AND THE ANTICIPATED AREA OF EXCAVATIONS. ADDITIONAL TREES/PLANTS MAY NEED TO BE EXCAVATED AND RESTORED THAT ARE NOT CALLED OUT IN THE NOTES. ALL WORK INVOLVED WITH THE TRANSPLANTING OF EXISTING TREES/PLANTS NECESSARY FOR COMPLETION OF THE WORK IS COVERED UNDER THE BID ITEM "TRANSPLANTING EXISTING LANDSCAPING". SOME PLANTS MAY NOT BE DESIRED BY THE HOME OWNER TO BE REPLANTED, CONFIRM WITH HOME OWNER AND NOTIFY CITY PROJECT MANAGER. AT END OF CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A SIGNED WAIVER FROM EACH OF THE FOLLOWING PROPERTY OWNERS PLUS ANY OTHER PROPERTY OWNER WHOSE PROPERTY WAS DISTURBED BY THE CONTRACTOR.

- 22603 SW HIGHLAND DRIVE
- 22655 SW HIGHLAND DRIVE
- 22735 SW HIGHLAND DRIVE
- 22749 SW HIGHLAND DRIVE
- 22793 SW HIGHLAND DRIVE
- 22805 SW HIGHLAND DRIVE
- 22707 SW ORCUTT PLACE
- 22745 SW ORCUTT PLACE

SANITARY MANHOLE KEY NOTES

- SSMH-2 (1349NSAN) EXISTING MANHOLE (±4.0' DEEP) TO BE REMOVED - CONTRACTOR TO VERIFY I.E. DEPTHS AND LOCATION PRIOR TO ORDERING NEW CONCRETE FLAT TOP MANHOLE WITH LOCKING FRAME AND COVER, INSTALL NEW MANHOLE AND CONNECT NEW 8" HDPE PIPE - INSURE POSITIVE DRAINAGE THROUGH MANHOLE
- SSMH-3 (1911NSAN) EXISTING MANHOLE (±4.0' DEEP) TO BE REMOVED - CONTRACTOR TO VERIFY I.E. DEPTHS AND LOCATION PRIOR TO ORDERING NEW CONCRETE FLAT TOP MANHOLE WITH LOCKING FRAME AND COVER, INSTALL NEW MANHOLE AND CONNECT NEW 8" HDPE PIPE - INSURE POSITIVE DRAINAGE THROUGH MANHOLE
- SSMH-4 (NEW) POTHOLE SANITARY SEWER UPSTREAM FROM SEWER LATERAL AT LOCATION OF HORIZONTAL BEND (APPROXIMATELY 49' IN VIDEO V5) - CONTRACTOR TO VERIFY I.E. DEPTHS PRIOR TO ORDERING NEW CONCRETE FLAT TOP MANHOLE WITH FRAME AND COVER, INSTALL NEW MANHOLE AND CONNECT NEW 8" PVC UP AND EXISTING CONCRETE PIPE IN - ADJUST MANHOLE LOCATION AS NECESSARY TO EITHER MISS SEWER LATERAL OR CONNECT SEWER LATERAL TO MANHOLE - INSURE POSITIVE DRAINAGE THROUGH MANHOLE

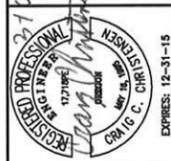
**SANITARY SEWER PLAN
HIGHLAND SOUTH**

**HIGHLAND AND ORCUTT SANITARY
SEWER RESTORATION**

LOCATED IN SECTION 32BD, T2S, R1W, W.M.
IN THE CITY OF SHERWOOD, WASHINGTON COUNTY,
STATE OF OREGON

**CITY OF SHERWOOD
ENGINEERING DEPARTMENT
SHERWOOD, OREGON 97140**

PHONE: (503) 925-2309
 FAX: (503) 625-0628
 E-MAIL: engineering@cityofsherwood.org



DESIGNED BY:	CCC	ANS/CCC	RS	AS NOTED	MARCH 10, 2015
DRAWN BY:					
CHECKED BY:					
FULL SIZE SCALE:					
DATE:					

HIGHLAND SANITARY PLAN	REVISIONS

CONSTRUCTION NOTES

AT LEAST ONE LANE OF SW WILLAMETTE STREET SHALL BE OPEN DURING CONSTRUCTION. ALL LANES OF SW WILLAMETTE STREET SHALL BE OPEN AT THE END OF EACH WORK DAY. NO LANE CLOSURES OF SW WILLAMETTE WILL BE ALLOWED BEFORE 8:30 AM. ADVANCED SIGNAGE AND FLAGGERS REQUIRED. SUBMIT TRAFFIC CONTROL PLAN FOR APPROVAL.

AT LEAST ONE LANE OF SW HIGHLAND DRIVE SHALL BE OPEN DURING CONSTRUCTION. ALL LANES OF SW HIGHLAND DRIVE SHALL BE OPEN AT THE END OF EACH WORK DAY. ADVANCED SIGNAGE AND FLAGGER REQUIRED. SUBMIT TRAFFIC CONTROL PLAN FOR APPROVAL.

ALL TRENCHES/PITS SHALL BE PROTECTED DURING CONSTRUCTION. TRENCHES/PITS SHALL BE EITHER FILLED, PLATED OR SURROUNDED BY SECURITY FENCING DURING CONSTRUCTION. TRENCHES/PITS THAT ARE FILLED WITHIN DRIVING SURFACES SHALL BE COLD PATCHED UNTIL PERMANENT SURFACING IS INSTALLED. (INCIDENTAL)

DRIVEWAY ACCESS SHALL BE MAINTAINED. CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER 3 DAYS IN ADVANCE WHEN ANY WORK THAT OCCURS WILL CAUSE ACCESS CLOSURE OF ANY DRIVEWAY. ALL DRIVEWAYS SHALL BE OPEN AT THE END OF EACH WORKDAY.

CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNER 3 DAYS IN ADVANCE OF WHEN SANITARY SERVICE IS TO BE SUSPENDED FOR PIPE BURSTING. CONTRACTOR SHALL RECONNECT ALL SEWER LATERALS PRIOR TO THE END OF THE WORK DAY.

ALL STREETS AND DRIVEWAYS SHALL BE KEPT CLEAN THROUGHOUT CONSTRUCTION (INCIDENTAL).

HOURS OF CONSTRUCTION ARE BETWEEN 7:30AM AND 6:00PM MONDAY THROUGH FRIDAY.

ANY CONSTRUCTION SURVEYING NECESSARY FOR THE COMPLETION OF THE PROJECT AND AS-BUILT SURVEYING SHALL BE PROVIDED BY THE CONTRACTOR'S SURVEYOR. THE INSTALLED MANHOLE RIM ELEVATIONS, LOCATION AND PIPE I.E.S SHALL HAVE POINT SHOTS BY AN OREGON LICENSED LAND SURVEYOR. CONTRACTOR SHALL PROVIDE AUTOCAD DRAWING WITH POINT SHOTS IN A VERSION READABLE TO THE CITY. INCIDENTAL TO BID ITEM "CONSTRUCTION SURVEY WORK".

CONTRACTOR SHALL MEASURE LOCATION OF ALL PIPING ENCOUNTERED DURING THE PROJECT AND ALL SANITARY LATERALS AND MARK ON AS-BUILTS TO BE SUPPLIED TO THE CITY.

CONTRACTOR MAY NOT BLOCK DRIVEWAYS BY STORING MATERIALS OR PERFORMING WELDING OPERATIONS ON PIPE. PIPE WELDING TO BE PERFORMED ON CITY PROPERTY NORTHWEST OF SW COLUMBIA STREET (SEE COVER SHEET) AND MOVED TO THE SITE FOR PIPE BURSTING UNLESS OTHERWISE APPROVED BY THE ENGINEER. STAGING AREA TO BE CLEANED AND RESTORED TO ORIGINAL CONDITION AFTER CONSTRUCTION.

ALL EXCAVATED MATERIALS SHALL BE REMOVED AND DISPOSED OF OFFSITE.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE WITH 4" MINIMUM OF LEVEL 2, 1/2 INCH ACP IN EXISTING PUBLIC STREET ASPHALT AREAS AND WITH 3" ASPHALT OF LEVEL 2, 1/2 INCH ACP IN DRIVEWAY AREAS. CRACK SEAL JOINTS BETWEEN NEW AC AND EXISTING AC AND BETWEEN NEW AC AND NEW CURB.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE WITH 6" MINIMUM OF CONCRETE (MIN. 4,000 PSI AT 28 DAYS) IN EXISTING AREAS OF CONCRETE DRIVING SURFACE.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE TO SURFACE IN EXISTING GRAVEL AREAS.

TRENCH AND PIT BACKFILL SHALL BE 3/4" - 0" CRUSHED AGGREGATE TO 6" FROM FINISH GRADE TOPPED WITH 6" OF NEW TOP SOIL AND EITHER HYDRO-SEEDING OR BARK MULCHED TO MATCH EXISTING AREA SURFACE. "INCIDENTAL TO BID ITEM "YARD RESTORATION".

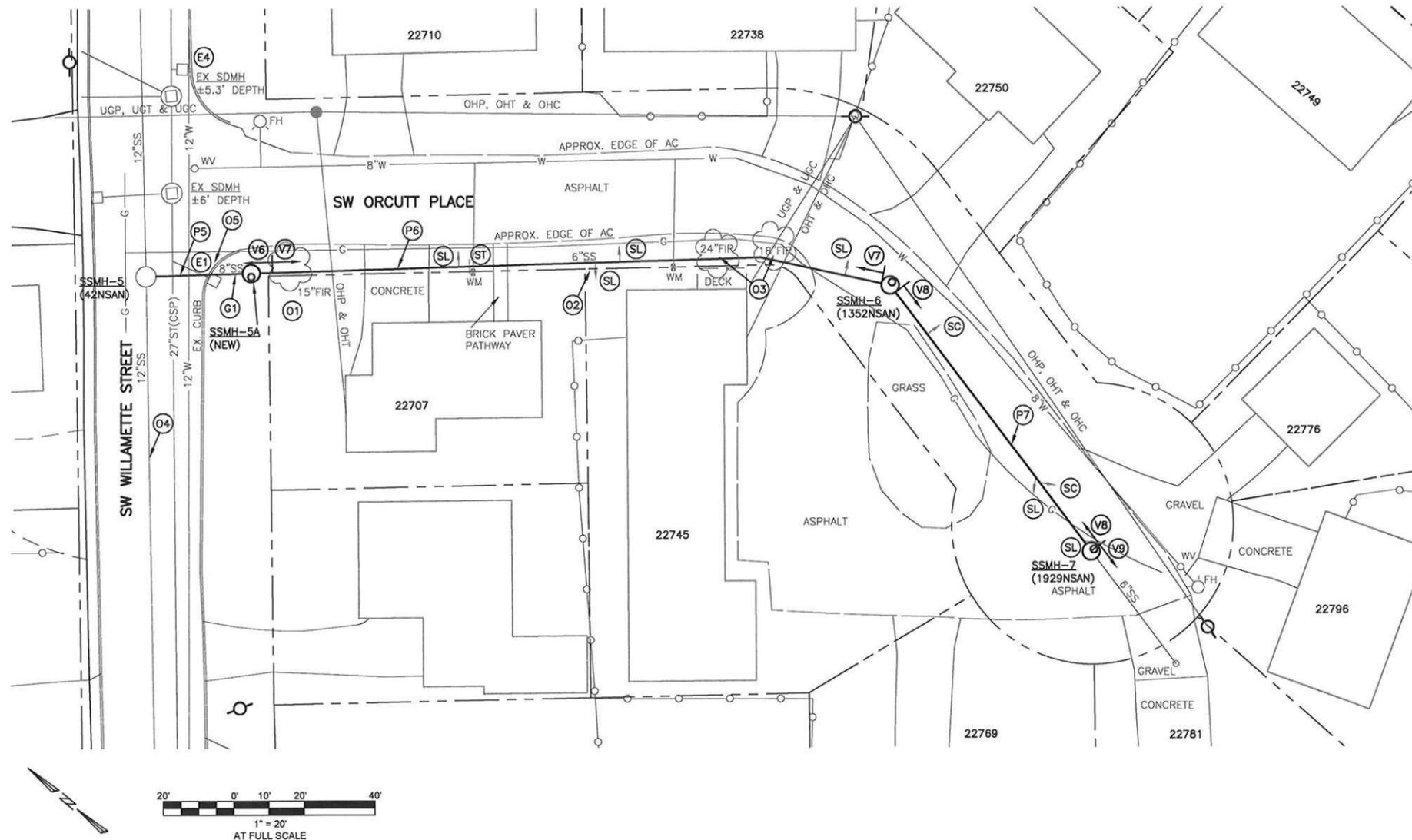
CONTRACTOR IS REQUIRED TO HAVE PORTABLE BATHROOM FACILITIES ON SITE. THE PORTABLE BATHROOM FACILITIES SHALL BE MOVED AS NEEDED TO THE SECTION OF THE SANITARY SYSTEM THAT IS OUT OF SERVICE (INCIDENTAL).

IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ANY PIPE BURSTED SEWER HAS NO GREATER THAN A 3/8" BELLY. IF NECESSARY THE CONTRACTOR MAY ELECT TO REPLACE AN EXISTING PIPE SECTION PRIOR TO PIPE BURSTING (INCIDENTAL TO THE BID ITEM "PIPE BURST PREPARATION") IF ANY PIPE BURST SECTIONS EXCEED THE 3/8" MAXIMUM BELLY, THEN THE CONTRACTOR SHALL FIX THE PIPE TO BRING THE PIPE SECTION TO WITHIN STANDARDS, RETEST AND REVIDEO THE FULL PIPE SECTION BETWEEN THE MANHOLES OF THE UNAPPROVED PIPE SECTION AT HIS/HER EXPENSE.

CONTRACTOR TO REMOVE ALL MAILBOXES NECESSARY TO PERFORM THE WORK. MAILBOXES SHALL BE TEMPORARILY SUPPORTED FOR MAIL SERVICE DURING CONSTRUCTION. UPON TESTING AND APPROVAL OF THE SYSTEM, THE MAILBOXES SHALL BE SOLIDLY REINSTALLED TO THEIR ORIGINAL POSITION (INCIDENTAL).

CONTRACTOR SHALL SUBMIT MATERIAL SPECIFICATIONS OF MATERIALS TO BE USED TO THE CITY PROJECT MANAGER FOR APPROVAL. MATERIALS INSTALLED THAT DO NOT MEET CITY SPECIFICATIONS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL TRANSPLANTED TREES/PLANTS SURVIVE FOR THE DURATION OF THE 2-YEAR MAINTENANCE BOND PERIOD. ANY TRANSPLANTED TREES/PLANTS THAT DIE DURING THE 2-YEAR MAINTENANCE BOND PERIOD SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE MEETING THE APPROVAL OF THE CITY AND HOME OWNER.



SANITARY VIDEO KEY NOTES

- (V6) VIDEO 6 - FROM 42NSAN (DOWNSTREAM) TOWARD 1352NSAN (UPSTREAM)
- (V7) VIDEO 7 - FROM 1352NSAN (UPSTREAM) TOWARD 42NSAN (DOWNSTREAM)
- (V8) VIDEO 8 - FROM 1352NSAN (DOWNSTREAM) TOWARD 1929NSAN (UPSTREAM)
- (V9) VIDEO 9 - UPSTREAM FROM 1929NSAN

CAUTION: VIDEOS PROVIDED BY THE CITY ARE FOR REFERENCE ONLY. THE CITY IS NOT RESPONSIBLE FOR ANY INACCURACIES IN THE VIDEOS OR THE CONTRACTOR'S USE THEREOF. THE CONTRACTOR SHALL PERFORM HIS/HER OWN INVESTIGATION AS TO THE LOCATION OF ANY POTENTIAL AREA WHERE THE BELLYING OF THE PIPE BURST MAY OCCUR. AREAS WHERE NEW MANHOLES ARE TO BE LOCATED AND TO MORE PRECISELY LOCATE THE EXISTING SANITARY SEWER LATERALS. INCLUDED IN THE BID ITEM "PIPE BURST PREPARATION".

EROSION CONTROL KEY NOTES

- (E1) INSTALL BIOBAGS IN FRONT OF CURB OPENING.
- (E2) INSTALL SILT SACKS (NO OVERFLOW) IN CATCH BASIN.
- (E3) INSTALL BIOBAG AROUND INLET.
- (E4) INSTALL SILT SACKS (NO OVERFLOW) IN CATCH BASIN WITH BIOBAGS IN FRONT OF CURB OPENING.

SANITARY LATERAL KEY NOTES

- (ST) EXISTING SANITARY LATERAL ENTERS TOP OF EXISTING SANITARY MAIN SEE DETAIL RIGHT
- (SL) EXISTING SANITARY LATERAL ENTERS SANITARY MAIN FROM SIDE SEE DETAIL RIGHT
- (SC) EXISTING SANITARY LATERAL MAY BE CAPPED AND NOT IN USE. CONFIRM LATERAL NOT IN USE, IF SO DO NOT RECONNECT. (INCIDENTAL)

SANITARY PIPING KEY NOTES

- (P5) OPEN TRENCH REMOVE EXISTING CONCRETE PIPE AND INSTALL 8" PVC CL.3034, SDR 26 L=±25' S=1.0% MIN. OR MATCH EXISTING WHICHEVER IS STEEPER
- (P6) PIPE BURST INSTALL 8" HDPE DR 17 L=±178'
- (P7) PIPE BURST INSTALL 8" HDPE DR 17 L=±91'

ORCUTT GENERAL KEY NOTES

- (O1) IF TREE REMOVAL IS REQUIRED FOR THE CONSTRUCTION OF THE SEWER, REMOVE BRANCHES AND STUMP AND LEAVE TRUNK FOR HOMEOWNER (MAX. 12-FOOT SECTIONS). TREE REPLACEMENT WILL BE REQUIRED. PLANT 2" CALIPER WHITE FLOWERED DOGWOOD AT LOCATION DIRECTED BY INSPECTOR. IF TREE IS TO REMAIN, DO NOT DAMAGE.
- (O2) REMOVE/TRIM EXISTING SHRUB AS NECESSARY REPLACE IN KIND. MOVE LARGE ROCKS AS NECESSARY AND RESTORE TO ORIGINAL LOCATION AFTER CONSTRUCTION. IF SATELLITE DISH IS IN CONFLICT WITH CONSTRUCTION WORK, CONTRACTOR SHALL COORDINATE WITH OWNER (FOR TEMPORARY LOCATION AND SERVICE OF DISH). REINSTALL AT ORIGINAL LOCATION AND INSURE SERVICE.
- (O3) EXISTING FIR TREES TO REMAIN, DO NOT DAMAGE.
- (O4) CONTRACTOR TO CLEAN AND VIDEO EXISTING SEWER PIPE (±340') AFTER NEW SEWER WITHIN SW ORCUTT PLACE IS INSTALLED. IF VIDEO SHOWS THAT THE SANITARY SEWER IS NOT CLEAN, THE SEWER WILL BE RECLEANED AND REVIDEOED AT THE CONTRACTOR'S EXPENSE.
- (O5) REMOVE EXISTING CURB AND REPLACE IN KIND.

CAUTION: TREES/PLANTS CALLED OUT FOR REPLANTING ARE BASED UPON VISUAL OBSERVATIONS AND THE ANTICIPATED AREA OF EXCAVATIONS. ADDITIONAL TREES/PLANTS MAY NEED TO BE EXCAVATED AND RESTORED THAT ARE NOT CALLED OUT IN THE NOTES. ALL WORK INVOLVED WITH THE TRANSPLANTING OF EXISTING TREES/PLANTS NECESSARY FOR COMPLETION OF THE WORK IS COVERED UNDER THE BID ITEM "TRANSPLANTING EXISTING LANDSCAPING". SOME PLANTS MAY NOT BE DESIRED BY THE HOME OWNER TO BE REPLANTED, CONFIRM WITH HOME OWNER AND NOTIFY CITY PROJECT MANAGER. AT END OF CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A SIGNED WAIVER FROM EACH OF THE FOLLOWING PROPERTY OWNERS PLUS ANY OTHER PROPERTY OWNER WHOSE PROPERTY WAS DISTURBED BY THE CONTRACTOR.

- 22603 SW HIGHLAND DRIVE
- 22655 SW HIGHLAND DRIVE
- 22735 SW HIGHLAND DRIVE
- 22749 SW HIGHLAND DRIVE
- 22793 SW HIGHLAND DRIVE
- 22805 SW HIGHLAND DRIVE
- 22707 SW ORCUTT PLACE
- 22745 SW ORCUTT PLACE

NOTE: THE CITY HAS PAID FOR A DEWATERING PERMIT TO ALLOW THE DEWATERING OF THE TRENCH INTO THE EXISTING SANITARY SEWER SYSTEM. PUMPING MAY NOT OCCUR DURING MAJOR STORM EVENTS. PUMP USED SHALL HAVE SCREENING AND SHALL PUMP AT A RATE LESS THAN 50GPM. THE CONTRACTOR SHALL COORDINATE WITH THE CITY PROJECT MANAGER 3 DAYS IN ADVANCE OF WHEN PUMPING WILL BE NECESSARY FOR CLEAN WATER SERVICES NOTIFICATION.

SANITARY SEWER PLAN ORCUTT

HIGHLAND AND ORCUTT SANITARY SEWER RESTORATION

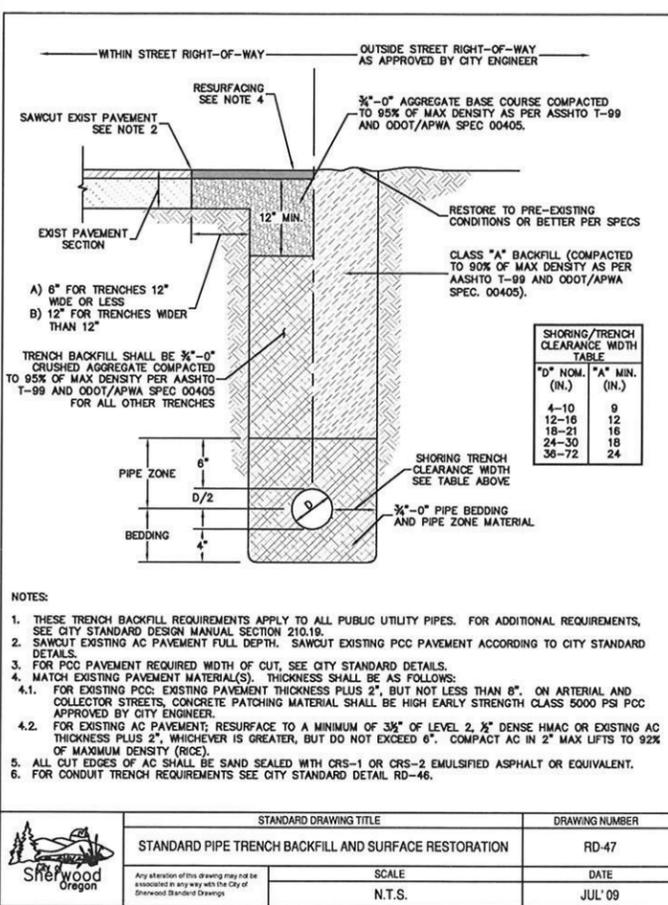
CITY OF SHERWOOD
ENGINEERING DEPARTMENT
SHERWOOD, OREGON 97140
PHONE: (503) 925-2309
FAX: (503) 625-0629
E-MAIL: engineering@sherwoodoregon.gov



DESIGNED BY:	AS/ACC
DRAWN BY:	RS
CHECKED BY:	AS NOTED
FULL SIZE SCALE:	MARCH 10, 2015
DATE:	HIGHLAND SANITARY PLAN REVISIONS

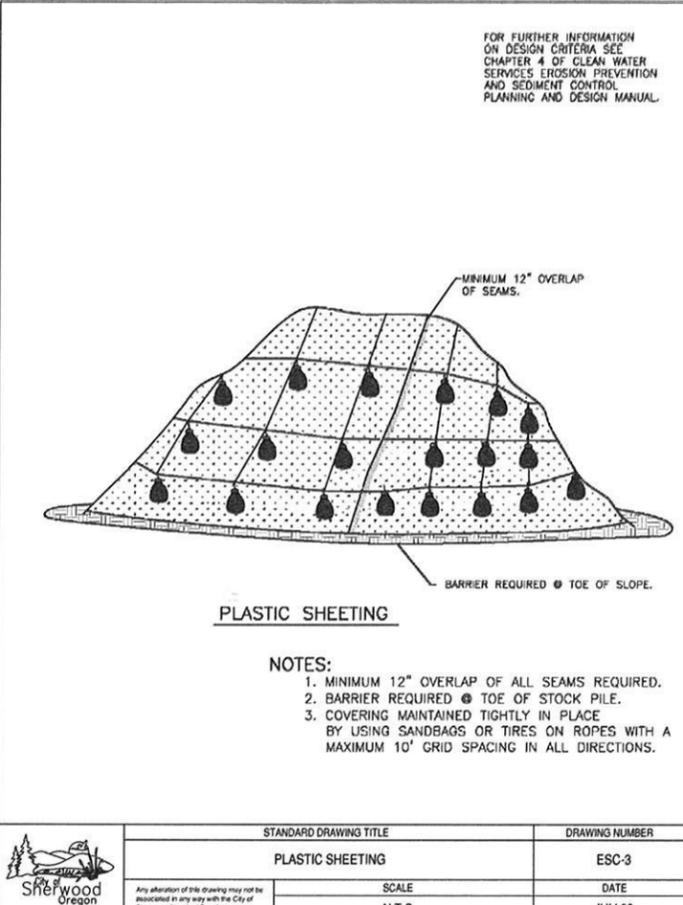
JOB NO.	
SHEET NO.	5
	7

LOCATED IN SECTION 32BD, T2S, R1W, W.M. IN THE CITY OF SHERWOOD, WASHINGTON COUNTY, STATE OF OREGON

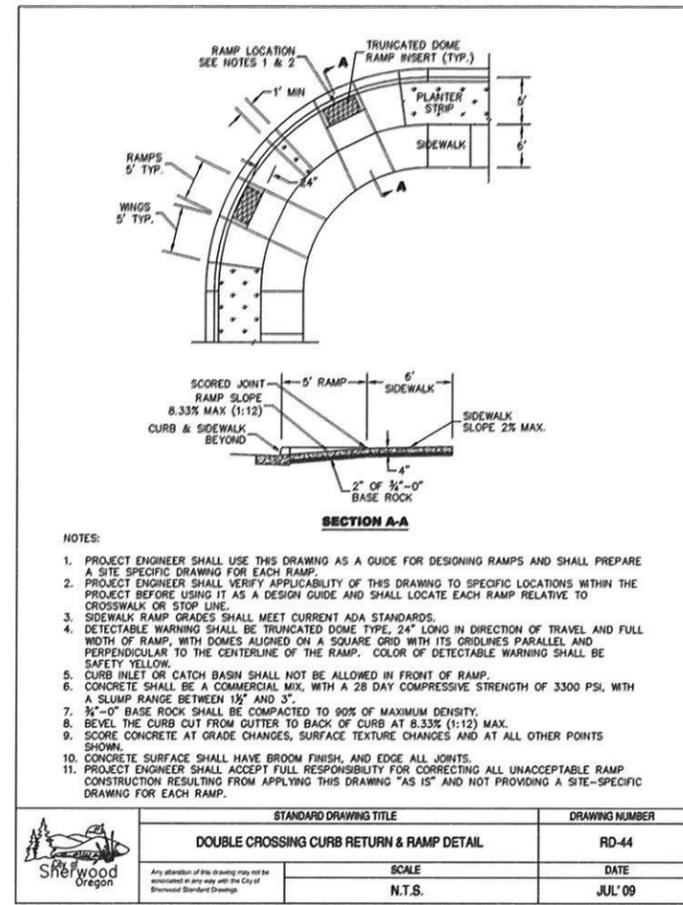


- NOTES:
- THESE TRENCH BACKFILL REQUIREMENTS APPLY TO ALL PUBLIC UTILITY PIPES. FOR ADDITIONAL REQUIREMENTS, SEE CITY STANDARD DESIGN MANUAL SECTION 210.19.
 - SAW-CUT EXISTING AC PAVEMENT FULL DEPTH. SAW-CUT EXISTING PCC PAVEMENT ACCORDING TO CITY STANDARD DETAILS.
 - FOR PCC PAVEMENT REQUIRED WIDTH OF CUT, SEE CITY STANDARD DETAILS.
 - MATCH EXISTING PAVEMENT MATERIAL(S). THICKNESS SHALL BE AS FOLLOWS:
 - FOR EXISTING PCC, EXISTING PAVEMENT THICKNESS PLUS 2", BUT NOT LESS THAN 8". ON ARTERIAL AND COLLECTOR STREETS, CONCRETE PATCHING MATERIAL SHALL BE HIGH EARLY STRENGTH CLASS 5000 PSI PCC APPROVED BY CITY ENGINEER.
 - FOR EXISTING AC PAVEMENT; RESURFACE TO A MINIMUM OF 3/8" OF LEVEL 2, 1/2" DENSE HMA/C OR EXISTING AC THICKNESS PLUS 2", WHICHEVER IS GREATER, BUT DO NOT EXCEED 6". COMPACT AC IN 2" MAX LIFTS TO 92% OF MAXIMUM DENSITY (RICE).
 - ALL CUT EDGES OF AC SHALL BE SAND SEALED WITH CRS-1 OR CRS-2 EMULSIFIED ASPHALT OR EQUIVALENT.
 - FOR CONDUIT TRENCH REQUIREMENTS SEE CITY STANDARD DETAIL RD-46.

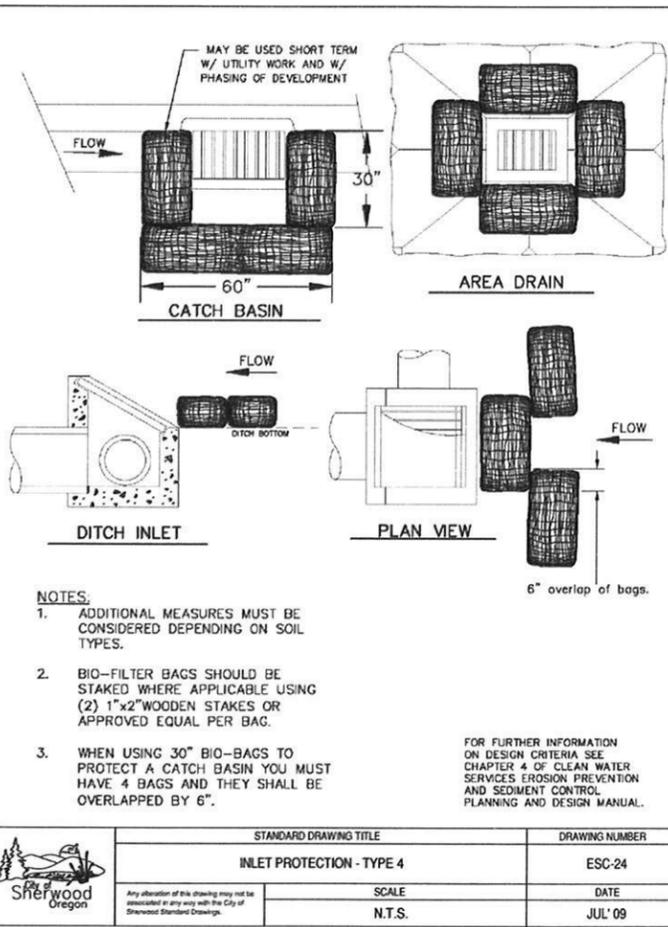
STANDARD DRAWING TITLE		DRAWING NUMBER
STANDARD PIPE TRENCH BACKFILL AND SURFACE RESTORATION		RD-47
SCALE	DATE	
N.T.S.	JUL'09	



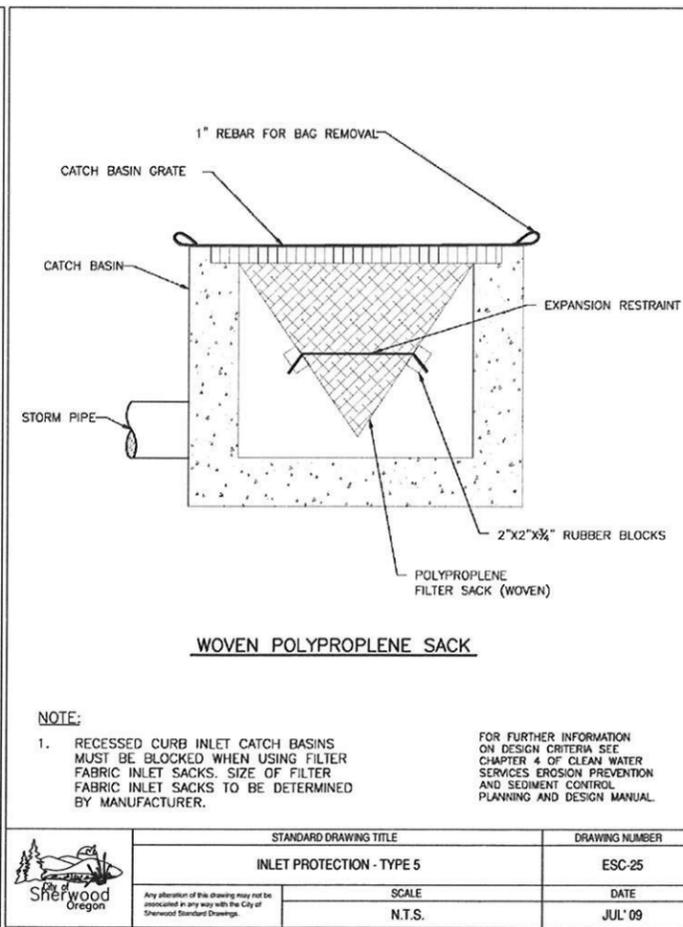
STANDARD DRAWING TITLE		DRAWING NUMBER
PLASTIC SHEETING		ESC-3
SCALE	DATE	
N.T.S.	JUL'09	



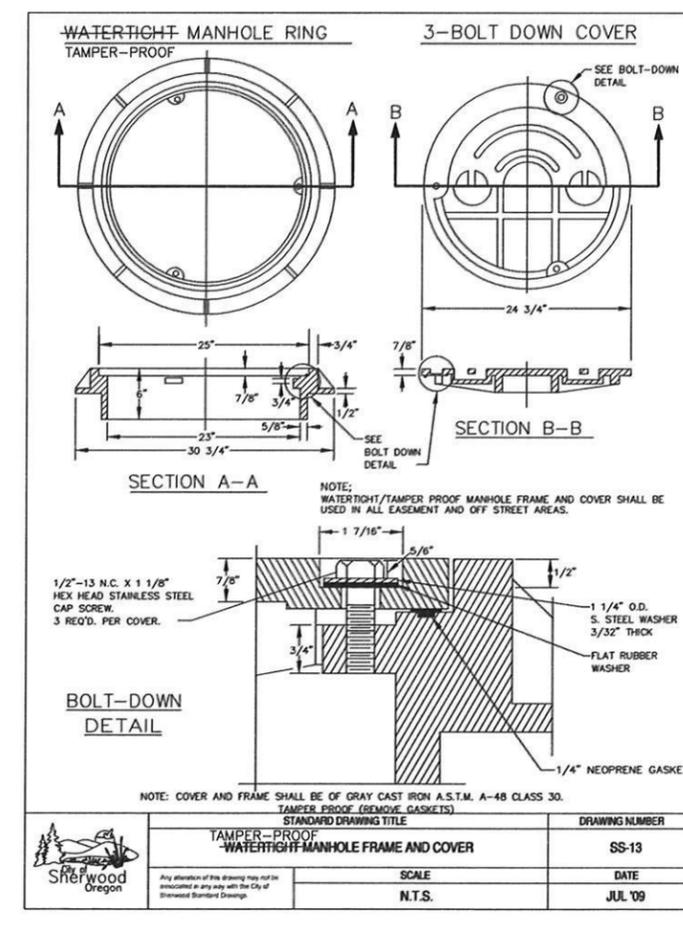
STANDARD DRAWING TITLE		DRAWING NUMBER
DOUBLE CROSSING CURB RETURN & RAMP DETAIL		RD-44
SCALE	DATE	
N.T.S.	JUL'09	



STANDARD DRAWING TITLE		DRAWING NUMBER
INLET PROTECTION - TYPE 4		ESC-24
SCALE	DATE	
N.T.S.	JUL'09	



STANDARD DRAWING TITLE		DRAWING NUMBER
INLET PROTECTION - TYPE 5		ESC-25
SCALE	DATE	
N.T.S.	JUL'09	



STANDARD DRAWING TITLE		DRAWING NUMBER
TAMPER-PROOF WATERTIGHT MANHOLE FRAME AND COVER		SS-13
SCALE	DATE	
N.T.S.	JUL'09	

STANDARD CITY DETAILS

HIGHLAND AND ORCUTT SANITARY SEWER RESTORATION

LOCATED IN SECTION 32BD, T2S, R1W, W.M. IN THE CITY OF SHERWOOD, WASHINGTON COUNTY, STATE OF OREGON

CITY OF SHERWOOD
ENGINEERING DEPARTMENT
SHERWOOD, OREGON 97140
PHONE: (503) 925-2309
FAX: (503) 625-0529
E-MAIL: engineering@ci.sherwood.or.us

REGISTERED PROFESSIONAL ENGINEER
17166
Lana M. Johnson
OR 16 C. CIVIL
EXPIRES: 12-31-15

DESIGNED BY:	DRAWN BY:	CHECKED BY:	FULL SIZE SCALE:	DATE:
CCC	AKS/CC	RS	AS NOTED	MARCH 10, 2015

HIGHLAND SANITARY_DETAILS.DWG

REVISIONS	

JOB NO. 8073

SHEET NO. 7

7