



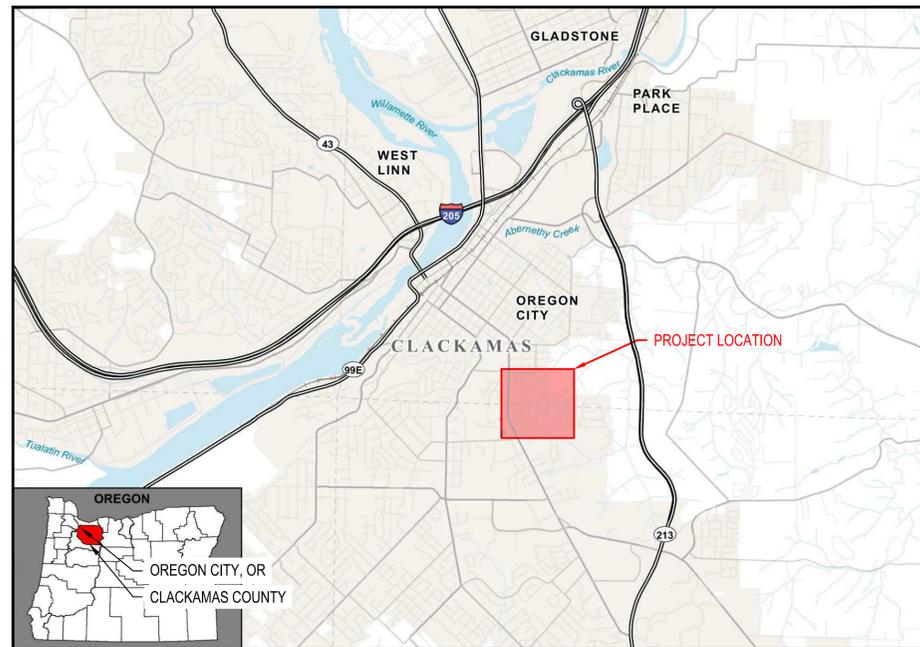
# CITY OF OREGON CITY

## PETER SKENE WAY EMERGENCY SANITARY SEWER REPLACEMENT

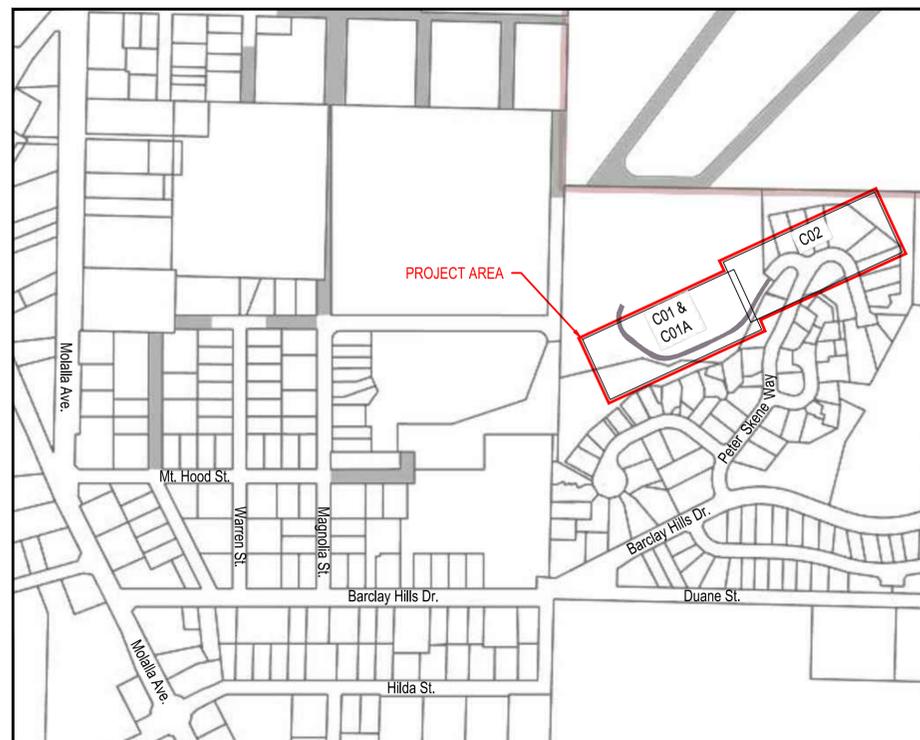
SUMMER 2017  
VOLUME II OF II



**PROJECT VICINITY MAP**



**PROJECT LOCATION MAP**



**LEGENDS**

**EXISTING LEGEND**

	CONIFEROUS TREE		RIGHT OF WAY LINE
	DECIDUOUS TREE		RIGHT OF WAY CENTERLINE
	FIRE HYDRANT		PROPERTY LINE
	WATER METER		EASEMENT
	WATER VALVE		EDGE OF PAVEMENT
	SANITARY SEWER MANHOLE		GRAVEL EDGELINE
	STORM SEWER MANHOLE		ROADWAY CURB
	STORM SEWER CATCH BASIN		FENCE
	POWER JUNCTION BOX		UNDERGROUND COMMUNICATION
	COMMUNICATIONS JUNCTION BOX		NATURAL GAS
	COMMUNICATIONS PEDESTAL		UNDERGROUND POWER
	SIGN		SANITARY SEWER
	LIGHT POLE		BYPASS PUMP DISCHARGE
	MAILBOX		STORM DRAIN LINE
	DRIVEWAY		WATER LINE
	TEST PIT		WATER SERVICE LINE
			GRAVEL
			ASPHALT
			CONCRETE

**PROPOSED LEGEND**

	MANHOLE		TO BE ABANDONED/REMOVED
	8" SS SANITARY SEWER PIPE		SILT FENCE
	6" DR STORM DRAIN PIPE		INLET PROTECTION
	STORM DRAIN CLEANOUT		CONSTRUCTION ENTRANCE
	PAVEMENT RESTORATION		

**SURVEY NOTES**

- UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBER 17088139. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
- FIELD WORK WAS CONDUCTED APRIL 24-27, 2017 BY AKS ENGINEERING AND FORESTRY.
- VERTICAL DATUM: ELEVATIONS ARE BASED ON AN NGS BENCHMARK NO. W723, A 3 1/2" BRASS DISK, LOCATED AT THE JUNCTION OF STATE HIGHWAY 99E AND TUMWATER DRIVE, 86.3' SOUTHWEST OF THE CENTERLINE OF THE DRIVE AND 16.4' SOUTHEAST OF THE CENTERLINE OF THE NORTHEAST BOUND LANES OF THE HIGHWAY. ELEVATION = 126.77 FEET (NGVD 27).
- THIS MAP DOES NOT CONSTITUTE A PROPERTY BOUNDARY SURVEY.
- BUILDING FOOTPRINTS ARE MEASURED TO SIDING UNLESS NOTED OTHERWISE.
- CONTOUR INTERVAL IS 1 FOOT.
- TREES WITH DIAMETER OF 6" AND GREATER ARE SHOWN. TREE DIAMETERS WERE DETERMINED BY VISUAL INSPECTION. TREE INFORMATION IS SUBJECT TO CHANGE UPON ARBORIST INSPECTION.

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**CONTACT PERSONNEL**

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LARRY GRIGGS	PORTLAND GENERAL ELECTRIC	(503) 963-6860

**CALL 48 HOURS BEFORE YOU DIG  
ONE CALL 1-800-332-2344**

ATTENTION: 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 THE RULES BY CALLING THE CENTER AT 503-232-1978.

LOCATE TICKET NUMBER: 16012114



PROJECT NUMBER: CI 17-004  
PROJECT MANAGER: JONATHAN ARCHIBALD  
DATE: Jun 21, 2017  
SCALE: KMP  
SHOWN: JRB

RH2 ENGINEERING INC.  
6500 SW MACADAM AVE.  
SUITE 125  
PORTLAND, OREGON 97239

PETER SKENE WAY EMERGENCY SEWER REPLACEMENT  
OREGON CITY, OREGON  
CITY FILE NO. CI 17-004

COVER

REV. NO.	DATE	DESCRIPTION
		90% DESIGN REVIEW

REVISIONS

DRAWING NUMBER: **COV**  
SHEET 01 OF 07



**GENERAL NOTES**

- 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.
- THE WORK ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ODOT'S STANDARD SPECIFICATIONS, THE CITY'S STANDARD SPECIFICATIONS, ORS CHAPTER 333, AND ANWA AND APWA STANDARDS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS BEFORE 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 APPLICABLE CODES, REGULATIONS, CITY STANDARDS AND PROJECT CONTRACT DOCUMENTS.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY REQUIRED PERMITS IN ADDITION TO PERMITS PROVIDED BY OWNER. THE CONTRACTOR SHALL OBTAIN THE APPROPRIATE UTILITY PERMIT(S) FROM THE CITY, STATE, OR COUNTY WITH JURISDICTION FOR THE STREETS OR ROADS WITHIN THE PROJECT WORK AREA PRIOR TO CONSTRUCTION OF SYSTEM IMPROVEMENTS. A CITY BUSINESS PERMIT IS REQUIRED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES REQUIRED TO PERFORM THE WORK. CONTRACTORS SHALL ABIDE BY ALL OSHA AND OTHER APPLICABLE SAFETY REGULATIONS.
- CONTRACTOR SHALL MAINTAIN AND COORDINATE ACCESS TO ALL AFFECTED PROPERTIES.
- THE CONTRACTOR SHALL GIVE THE CITY A MINIMUM OF 72 HOURS NOTICE IN ADVANCE OF START OF WORK AND CONNECTION TO EXISTING SYSTEM AND PRIOR TO SHUTTING DOWN ANY EXISTING WATER MAIN OR SERVICE.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL, AND OTHER MATERIAL IN ROADWAY AND WHERE INDICATED ON THE PLANS. MATERIAL SHALL BE DISPOSED OF IN SUCH A MANNER AS TO MEET ALL APPLICABLE REGULATIONS. CONTRACTOR SHALL ENSURE RECIPIENTS OF FILL MATERIAL REMOVED OFFSITE ARE PERMITTED TO RECEIVE SAID MATERIALS REGARDLESS OF THE RECEIVING JURISDICTION. CITY REQUIRES GRADING PERMIT PER OREGON CITY MUNICIPAL CODE 15.48 FOR A SINGLE SITE TO RECEIVE OVER 10 CUBIC YARDS OF MATERIAL UNLESS THE GRADING WORK IS ALREADY COVERED IN ANOTHER JURISDICTIONS' GRADING/FILL REQUIREMENTS WHEN APPROPRIATE.
- CONTRACTOR SHALL CALL 1-800-332-2344 FOR UTILITY LOCATES BEFORE CONSTRUCTION. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED BY THE APPROPRIATE UTILITY LOCATING PROFESSIONALS, PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND THE UTILITY COMPANY WHEN A CONFLICT OCCURS.
- 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 BE RESPONSIBLE FOR SETTING AND MAINTAINING ALL ALIGNMENT STAKES, SLOPE STAKES, AND GRADES NECESSARY FOR THE CONSTRUCTION OF THE WATER MAINS, SANITARY SEWER LINES, SIDE SEWERS, TRENCHING, UTILITIES, STORM DRAINAGE, ROADBED, SURFACING, PAVING, SIGNING, ILLUMINATION, SIGNALS, AND STRIPING IF SUCH CONSTRUCTION IS INCLUDED IN THIS PROJECT. EXCEPT FOR THE SURVEY CONTROL DATA FURNISHED BY THE OWNER, CALCULATIONS, SURVEYING, AND MEASURING REQUIRED FOR SETTING AND MAINTAINING THE NECESSARY LINES AND GRADES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL PRESERVE ALL EXISTING SURVEY MONUMENTS IN AND AROUND THE WORK AREA INCLUDING MARKERS FOR FRONT PROPERTY CORNERS. IF ANY SURVEY MONUMENT OR MARKERS WILL BE DISTURBED BY CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HIRE A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF OREGON TO CONDUCT A PRE-CONSTRUCTION SURVEY AND TO REPLACE THE AFFECTED MONUMENTS AND MARKERS IN ACCORDANCE WITH STATE LAWS.
- THE CONTRACTOR SHALL CLEAN UP ALL AREAS AFFECTED BY CONSTRUCTION ACTIVITY TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE END OF EACH WORKING DAY OR MORE FREQUENTLY IF REQUIRED. THIS INCLUDES REMOVAL OF ALL DUST, MUD, ROCKS, ASPHALT DEBRIS, AND REFUSE FROM STREETS, SIDEWALKS, DRIVEWAYS, AND ANY OTHER AREAS AFFECTED BY THE CONSTRUCTION ACTIVITIES. THE OWNER'S REPRESENTATIVE CAN SHUTDOWN THE PROJECT IF CLEAN UP IS NOT PERFORMED TO THEIR SATISFACTION. WORK WILL RESUME ONCE THE PROJECT SITE IS CLEAN AND ORDERLY AS DETERMINED BY THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL ADHERE TO ALL APPLICABLE EROSION CONTROL REQUIREMENTS.
- CONSTRUCTION VEHICLES SHALL PARK ON THE CONSTRUCTION SITE, OR AT A LOCATION INDICATED ON THE APPROVED PLAN. HOURS OF CONSTRUCTION SHALL BE 7:00 AM TO 6:00 PM, MONDAY THROUGH FRIDAY UNLESS SPECIFICALLY NOTED ELSEWHERE. WORK ON SATURDAY OR SUNDAY & HOLIDAYS MUST BE APPROVED BY PROJECT ENGINEER. CONSTRUCTION ACTIVITIES INCLUDE ALL FIELD MAINTENANCE OF EQUIPMENT, REFUELING, PICKUP AND DELIVERY OF EQUIPMENT AS WELL AS ACTUAL CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT OR REPLACE ANY EXISTING ABOVE GRADE STRUCTURES (INCLUDING THOSE NOT SHOWN ON PLANS) SUCH AS MAILBOXES, SIGNS, FENCES, OR RETAINING WALLS.
- CONTRACTOR SHALL RESTORE ALL ROADS, DRIVEWAYS, AND OTHER TRENCHED OR DISTURBED AREAS TO THEIR EXISTING CONDITION OR BETTER AND PER CITY STANDARDS AND THESE PLANS AND SPECIFICATIONS.
- OPEN TRENCHES SHALL BE LIMITED TO A MAXIMUM OF 100 FEET WITHIN STREET RIGHT-OF-WAYS UNLESS LIMITED TO A LESSER AMOUNT BY PERMIT. ALL TRENCHES SHALL BE BACKFILLED AND TEMPORARILY PAVED WITH HOT AC MIX EVERYDAY OR COVERED WITH A TRAFFIC RATED STEEL SHEET AND RAMPED WITH TEMPORARY AC. STEEL SHEET SHALL BE PINNED PER ODOT REQUIREMENTS. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND WARNING SIGNS IN ACCORDANCE WITH THE MUTCD, CITY, AND ODOT REQUIREMENTS. TEMPORARY PAVEMENT SHALL BE MAINTAINED UNTIL WORK IS COMPLETED.
- CONTRACTOR SHALL RESTORE TRAFFIC LOOPS DAMAGED OR REMOVED DURING CONSTRUCTION AND SHALL RESTRIPE PARKING AND TRAFFIC LINES AND MARKINGS DAMAGED OR REMOVED DURING CONSTRUCTION FOLLOWING PAVEMENT RESTORATION. PAINT SHALL BE TRAFFIC RATED, 2 COAT MINIMUM APPLIED AND MATCH EXISTING COLOR. PAYMENT SHALL BE INCIDENTAL TO SURFACE RESTORATION BID ITEMS.
- ANY ALTERATION OR VARIANCE FROM THESE PLANS, EXCEPT MINOR FIELD ADJUSTMENTS NEEDED TO MEET EXISTING FIELD CONDITIONS, SHALL FIRST BE SUBMITTED TO THE OWNER IN WRITING FOR APPROVAL PRIOR TO IMPLEMENTATION. ANY ALTERATION OR VARIANCE FROM THESE PLANS SHALL BE DOCUMENTED ON CONSTRUCTION FIELD PRINTS AND TRANSMITTED TO THE PROJECT ENGINEER.
- CONTRACTOR MUST KEEP (1) COPY OF APPROVED PLANS ON-SITE WHENEVER CONSTRUCTION IS IN PROGRESS. UPON COMPLETION OF CONSTRUCTION AND PRIOR TO CLOSOUT, THE CONTRACTOR SHALL SUBMIT "REDLINE DRAWINGS" TO THE CITY FOR PREPARATION OF RECORD DRAWINGS. THE "REDLINE DRAWINGS" ARE TO DOCUMENT ALL DEVIATIONS AND REVISIONS TO THE APPROVED PLANS.

**EXISTING UTILITIES**

- UTILITY LOCATIONS SHOWN HEREON ARE BASED UPON ASBUILT FIELD LOCATION OF EXISTING STRUCTURES, FIELD LOCATION OF UTILITIES BASED ON LOCATOR PAINT MARKINGS AND LOCATIONS BASED ON UTILITY LOCATION MAPS FROM THE UTILITY PURVEYORS. OTHER UTILITIES OR DEVIATIONS FROM THESE PLANS MAY EXIST. NO SUB-SURFACE EXPLORATION WAS MADE TO VERIFY UTILITY ROUTINGS AND THE ROUTING OF ALL BURIED UTILITIES SHOULD BE CONFIRMED WITH THE UTILITY PURVEYOR AND EXPOSED IN AREAS CRITICAL TO CONSTRUCTION FOR VERIFICATION. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, ELEVATION AND SIZE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION OF ANY BURIED PROPOSED UTILITIES. CALL 1-800-332-2344 48 HOURS BEFORE CONSTRUCTION FOR UTILITY LOCATIONS. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND THE UTILITY COMPANY WHEN A CONFLICT OCCURS OR WHEN A CONFLICT IS ANTICIPATED.
- OVERHEAD UTILITIES: NOT ALL OVERHEAD UTILITIES MAY BE SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE TO INDEPENDENTLY VERIFY ALL OVERHEAD UTILITIES. THE CONTRACTOR SHALL ACCOUNT FOR ACCOMMODATING ALL OVERHEAD UTILITIES IN THEIR BID AND NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR FACILITATING OVERHEAD UTILITIES.
- EXISTING WATER AND POWER FACILITIES MAY NOT BE SHUT DOWN FOR ANY PERIOD WITHOUT PRIOR APPROVAL FROM OWNER. A MINIMUM OF ONE WEEK NOTICE TO THE OWNER IS REQUIRED FOR ANY SHUT DOWN. THE CONTRACTOR SHALL NOT OPERATE EXISTING WATER, SEWER, OR POWER SYSTEM EQUIPMENT (VALVES, SWITCHES, ETC.). NO SHUTDOWNS SHALL BE ALLOWED ON MONDAYS, FRIDAYS OR THE DAYS BEFORE OR AFTER A HOLIDAY.

- THE CONTRACTOR SHALL NOTIFY FRANCHISE OFFICIAL, A MINIMUM OF 48 HOURS IN ADVANCE OF ANY PLANNED DISRUPTION TO UTILITIES INCLUDING, BUT NOT LIMITED TO WATER, SEWER, NATURAL GAS, IRRIGATION, TELEPHONE, POWER, CABLE AND FIBER OPTICS.
- ALL UTILITY CONSTRUCTION SHALL COMPLY WITH THE OREGON DEPARTMENT OF TRANSPORTATION AND UTILITY FRANCHISE STANDARDS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING UTILITIES AND STRUCTURES AND SHALL PROVIDE SHORING AND SUPPORT AS NECESSARY.

**SANITARY SEWER MAIN CONSTRUCTION NOTES**

- ALL TRENCH EXCAVATION SHALL BE IN CONFORMANCE WITH APWA DIVISION III, SECTION 301.1.01, AND SHALL BE CLASSIFIED AS EITHER ROCK OR COMMON EXCAVATION. ALL EXCESS MATERIAL FROM TRENCH EXCAVATION SHALL BE DISPOSED OF ON AN APPROVED SITE.
- PIPE BEDDING AND PIPE ZONE MATERIAL SHALL CONFORM WITH GRANULAR BEDDING AND BACKFILL REQUIREMENTS APWA DIVISION III, SECTION 301.2.02 AND SHALL BE 3/4"-0" CRUSHED ROCK, CLASS "B". SAND MAY BE APPROVED AS A SUBSTITUTE FOR 3/4"-0" IN TRENCHES THAT HAVE NO GROUNDWATER IN THE PIPE ZONE. TRENCH BACKFILL SHALL BE CLASS "E" CLSM IN TRENCHES THAT ARE CROSSING VEHICLE TRAVEL LANES. COMPACTION SHALL MEET CITY REQUIREMENTS PER STANDARD DRAWINGS NO. 313.
- TRENCH BACKFILL MAY BE CLASS A, PER APWA DIVISION III, SECTION 301.2.04, ON ALL SEWER LINES OUTSIDE PUBLIC STREETS OR OUTSIDE OF PAVED AREAS. TRENCH BACKFILL SHALL BE CLASS B PER APWA DIVISION III, SECTION 301.2.04B IN ALL PUBLIC STREETS OR PAVED AREAS IN THE PROJECT. THE CLASS B BACKFILL SHALL EXTEND A MINIMUM OF TWO FEET (2') BEYOND THE EDGE OF STREET OR SURFACED AREAS.
- TRENCH BACKFILL COMPACTION SHALL BE AS PER APWA DIVISION III, SECTION 301.3.07. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE THE REQUIRED COMPACTION. 95% COMPACTION, AASHTO T99, IS REQUIRED IN PUBLIC STREETS AND PAVED AREAS, 85% COMPACTION REQUIRED IN NON-BUILDABLE AREAS.
- BACKFILL SHALL BE PLACED AND COMPACTED IN A MAX. OF 24-INCH LIFTS. COMPACTION TESTING REQUIRED AT A FREQUENCY OF 2 TESTS FOR EVERY 100 FEET OF TRENCH. THE TESTS SHALL OCCUR AT 4-FEET BELOW FINISH GRADE, AND AT THE TOP OF THE BACKFILL SECTION.
- TRENCH SURFACE RESTORATION IN PAVED AREAS SHALL CONFORM TO THE T-CUT STANDARD IN CITY DRAWING NO. 532.
- SUBSEQUENT SETTLEMENT OF THE FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A RESULT OF IMPROPER COMPACTION AND SHALL B PROMPTLY REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- ALL SEWER LINES SHALL BE VIDEO INSPECTED BY THE CONTRACTOR PER APWA DIVISION III SECTION 303.3.11 AND A MANDREL PASSED THROUGH ALL PVC LINES TO CHECK DEFLECTION PER APWA DIVISION, SECTION 303.3.10
- ALL SEWER LINES SHALL BE AIR TESTED PER DIVISION III, SECTION 303.3.9C OF THE STANDARD SPECIFICATIONS. AS REQUIRED BY APWA, MANHOLES SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH APWA DIVISION III, SECTION 306.3.03. ALL MANHOLES MAY BE VACUUM TESTED AS A SUBSTITUTION FOR HYDROSTATIC TESTING IF APPROVED BY THE CITY ENGINEER.
- PAVEMENT RESURFACING, WHERE REQUIRED, SHALL CONFORM TO APWA DIVISION II, STREETS AND RELATED WORK, OF THE STANDARD SPECIFICATIONS. COMPACTION SHALL MEET CITY REQUIREMENTS PER STANDARD DRAWING NO. 502.
- PROJECT ENGINEER RESERVES THE RIGHT TO ADJUST GRADES OR ALIGNMENT TO ACCOMMODATE OTHER UTILITIES AS REQUIRED; SUCH ADJUSTMENTS SHALL BE REVIEWED BY THE CITY OF OREGON CITY ENGINEERING STAFF, AND APPROVED PRIOR TO COMMENCING WORK.
- ALL PVC SEWER PIPE SHALL CONFORM TO ASTM D3034, SDR35 SPECIFICATIONS AND SHALL BE CLEARLY MARKED AS SUCH.
- ALL MANHOLES LOCATED IN UNIMPROVED EASEMENTS AND RIGHT OF WAYS SHALL BE PROVIDED WITH TAMPER PROOF LIDS AND SHALL BE FLUSH WITH EXISTING GRADE AND MARKED WITH A MARKER POST, UNLESS OTHERWISE NOTED.
- SANITARY SEWER LINES CROSSING LESS THAN 12 INCHES BELOW A STORM DRAIN (12 INCHES OR GREATER IN DIAMETER) SHALL BE CONSTRUCTED WITH DUCTILE IRON PIPE.
- CONTRACTOR SHALL SUBMIT A BYPASS PUMPING PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION PER SECTION 00490 OF THE STANDARD SPECIFICATIONS.
- ALL HDPE SEWER PIPE SHALL CONFORM TO ASTM F 714, AND HAVE A MAXIMUM DIMENSION RATIO (DR) OF 17. ALL DUCTILE IRON PIPE SHALL BE CLASS 50, CEMENT-MORTAR LINED, RESTRAINED JOINT PIPE AND CONFORM TO ANSI/AWWA C151/A21.51. PIPE JOINTS SHALL BE DESIGNED TO PROVIDE UP TO 2.9 INCHES OF EXPANSION CAPABILITY WHEN FULLY SEATED AND CAPABLE OF 4 DEGREE DEFLECTION.
- THE FOLLOWING FINISHING AND TESTING PRACTICES MUST BE PERFORMED ON ALL PIPE SEGMENTS:
  - REMOVAL OF BUTT WELD BEADS ON INTERIOR OF ALL JOINTS (HDPE ONLY)
  - MANDREL DEFLECTION TESTING PER SECTION 00455 OF THE SPECIFICATIONS
  - AIR TESTING PER SECTION 00445 OF THE SPECIFICATIONS.
  - VACUUM TESTING PER SECTION 00470 OF THE SPECIFICATIONS.
  - VIDEO TESTING PER SECTION 00445 OF THE SPECIFICATIONS.

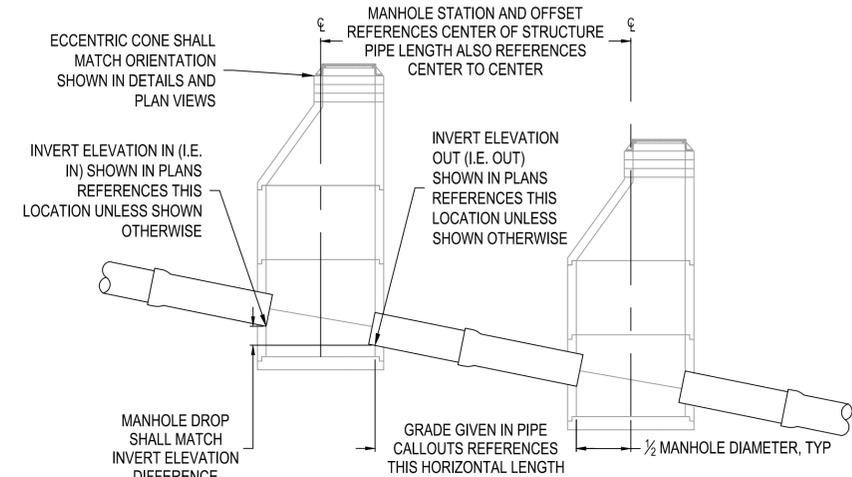
**TRAFFIC CONTROL NOTES**

- CONTRACTOR SHALL ERECT AND MAINTAIN TRAFFIC CONTROL PER THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", PART VI, CONSTRUCTION AND MAINTENANCE, AS ADOPTED AND MODIFIED BY ODOT. SHOULD WORK BE IN AN EXISTING PUBLIC RIGHT OF WAY THAT IS OPEN TO TRAFFIC, THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE APPROPRIATE CITY, COUNTY, AND STATE PERSONNEL FOR APPROVAL. APPROVALS SHALL BE OBTAINED PRIOR TO START OF WORK.
- CONTRACTOR SHALL USE EVERY REASONABLE PRECAUTION TO SAFEGUARD THE PERSONS AND PROPERTY OF THE TRAVELING PUBLIC. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FURNISH, PLACE, AND MAINTAIN THE BARRICADES, BARRIERS, LIGHTS, SIGNAGE, AND FLAGGERS NECESSARY TO PROTECT THE TRAVELING PUBLIC AND THEIR PROPERTY. ALL TRAFFIC CONTROL DEVICES SHALL MEET MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES STANDARDS. ALL BARRICADES AND OBSTRUCTIONS SHALL BE PROTECTED AT NIGHT BY SIGNAL LIGHTS, WHICH SHALL BE SUITABLY DISTRIBUTED AND OPERATED FROM SUNSET TO SUNRISE.
- THE CONTRACTOR SHALL PROVIDE FOR EMERGENCY VEHICLE ACCESS TO ALL PROPERTIES ADJACENT TO THE PROJECT. THE OWNER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY ACTIONS BY THE CONTRACTOR THAT MAY AFFECT THE FUNCTIONS OR DRIVEWAY ACCESS OF THE OWNER.

**TESC GENERAL NOTES**

- CONTRACTOR SHALL ADHERE TO ALL APPLICABLE EROSION CONTROL REQUIREMENTS AND SHALL PROVIDE EROSION AND SEDIMENTATION CONTROL MEASURES AND FACILITIES AS REQUIRED TO PREVENT EROSION.
- IN THE EVENT OF ANY EROSION CONTROL MEASURE FAILURE, IMMEDIATE ACTION SHALL BE TAKEN TO REPAIR, REPLACE, OR CONSTRUCT ADDITIONAL MEASURES AS REQUIRED TO ENSURE ADEQUATE EROSION CONTROL PROTECTION.
- ANY DISCHARGE OF SEDIMENT-LADEN RUN-OFF OR OTHER POLLUTANTS TO WATERS OF THE STATE IS SUBJECT TO ENFORCEMENT ACTION, THE COST FOR WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

- DURING CONSTRUCTION, ALL RELEASES OF OILS, HYDRAULIC FLUIDS, FUELS, OTHER PETROLEUM PRODUCTS, PAINTS, SOLVENTS, AND OTHER DELETERIOUS MATERIALS MUST BE CONTAINED AND REMOVED IN A MANNER THAT WILL PREVENT THEIR DISCHARGE TO WATERS AND SOILS. THE CLEANUP OF SPILLS SHALL TAKE PRECEDENCE OVER OTHER WORK ON THE PROJECT. BARRELS, PETROPHILIC PADS, TARPS, AND OTHER EQUIPMENT NECESSARY FOR CAPTURING, CONTROLLING, AND DISPOSING OF HAZARDOUS FLUIDS SHALL BE AVAILABLE ON-SITE AT ALL TIMES.
- OWNER REPRESENTATIVES MAY DIRECT MAINTENANCE AND REPAIR OF TESC MEASURES AND/OR FACILITIES AS THE HIGHEST PRIORITY WORK AT ANY TIME THE TESC MEASURES AND/OR FACILITIES DO NOT MEET THE PERMIT, CITY AND PLAN REQUIREMENTS. TESC MEASURES AND FACILITIES ARE NOT SHOWN ON THE PLANS, BUT SHALL BE PROVIDED BASED ON WEATHER CONDITIONS AND CONSTRUCTION PRACTICES AT THE DISCRETION OF THE OWNER.
- FILTER FABRIC INLET BARRIERS ARE TO BE CONSTRUCTED AROUND ALL STORM SYSTEM INLETS WHICH ARE DOWNSTREAM FROM THE CONSTRUCTION SITE AND SUBJECT TO RECEIVING SEDIMENT OR SEDIMENT LADEN WATER AS A RESULT OF THE CONSTRUCTION OPERATIONS.
- DUST CONTROL MUST BE PROVIDED BY THE CONTRACTOR. THE CONTRACTOR SHALL USE A VACUUM STREET SWEEPER TO REMOVE DUST AND DEBRIS FROM PAVEMENT AREAS AS DIRECTED BY THE ENGINEER OR OWNER'S REPRESENTATIVE. FLUSHING OF STREETS SHALL NOT BE PERMITTED WITHOUT PRIOR CITY AND COUNTY APPROVAL. POWER BROOMS SHALL NOT BE USED, NOT PERMITTED ON SITE.
- SEE DWG NO. G02 FOR AGENCY SPECIFIC EROSION CONTROL NOTES AND DETAILS. AGENCY SPECIFIC NOTES SHALL SUPERCEDE GENERAL NOTES IN CASE OF CONFLICT.



**GRAVITY SEWER STATIONING AND GRADE DETAIL**

NTS



PROJECT MANAGER: JONATHAN ARCHIBALD  
 FILE NUMBER: CI 17-004  
**OREGON CITY**

PROJECT NO: 917-063  
 DESIGNER: KMP  
 SCALE: SHOWN  
 DATE: Jun 21, 2017  
 DRAWN BY: JRB  
 RHP2 ENGINEERING INC.  
 6500 SW MACADAM AVE.  
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 PORTLAND, OREGON 97239

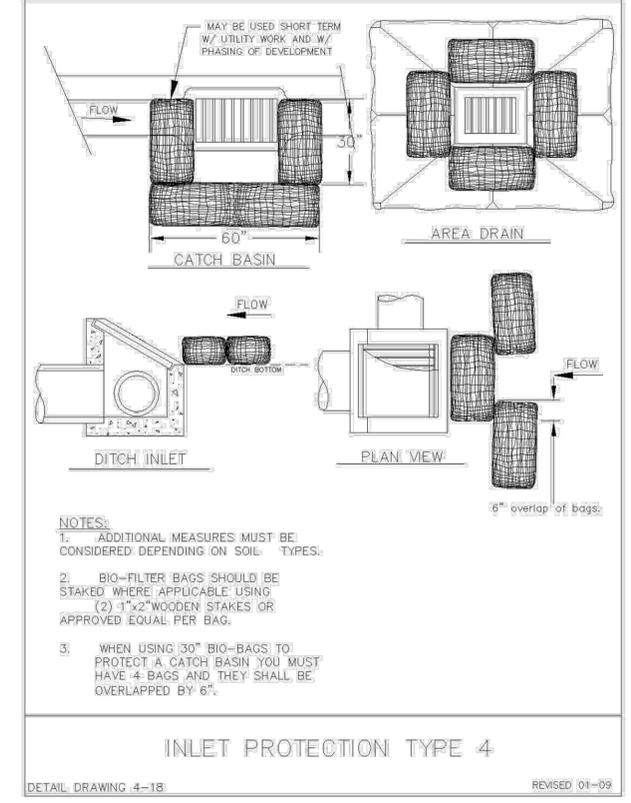
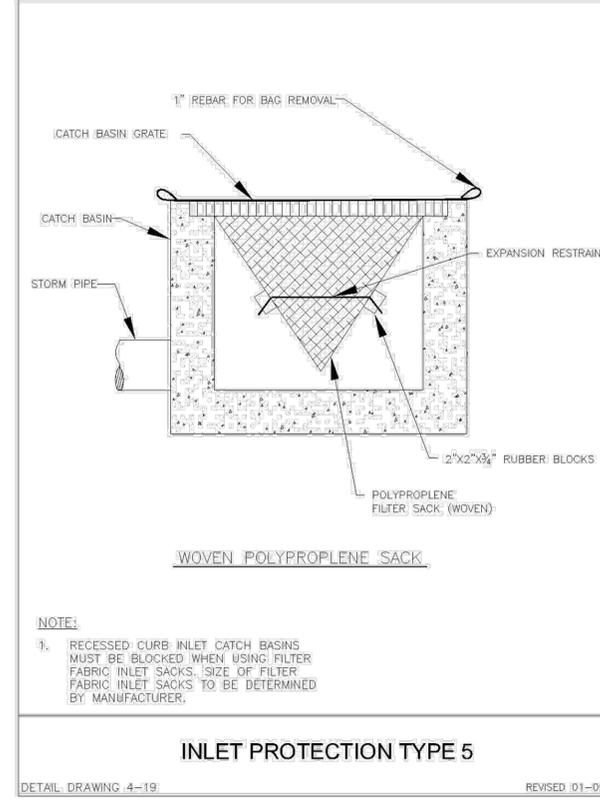
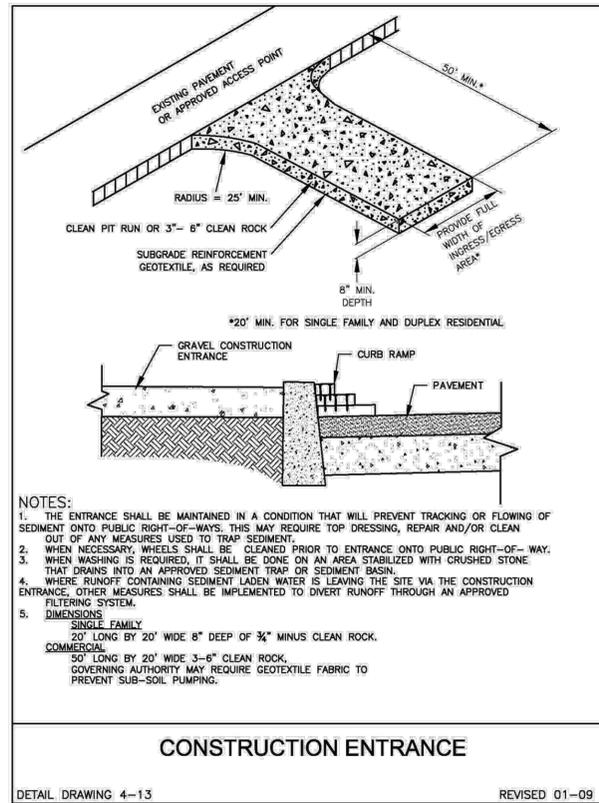
**GENERAL NOTES**  
 PETER SKENE WAY EMERGENCY SEWER REPLACEMENT  
 OREGON CITY, OREGON  
 CITY FILE NO. CI 17-004

NO.	DATE	DESCRIPTION
90% DESIGN REVIEW		

DRAWING NUMBER:  
**G01**  
 SHEET 02 OF 07

**AGENCY SPECIFIC EROSION CONTROL NOTES (OREGON CITY/CLACKAMAS COUNTY)**

- 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 EQUAL.
- 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 SOILS FROM THE CONSTRUCTION SITE. AN APPROVED EQUIVALENT IS TO DRAIN THE SOIL ON SITE AT A DESIGNATED LOCATION USING APPROPRIATE BMPs; SOIL MUST BE DRAINED SUFFICIENTLY FOR MINIMAL SPILLAGE.
- 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.



**TREE TABLE**

TREE NUMBER	SPECIES	DBH (IN.)	TREE NUMBER	SPECIES	DBH (IN.)	TREE NUMBER	SPECIES	DBH (IN.)	TREE NUMBER	SPECIES	DBH (IN.)
10156	DECIDUOUS	20	10574	DECIDUOUS	9	10612	DECIDUOUS	11	10655	DECIDUOUS	9
10157	DECIDUOUS	8	10575	DECIDUOUS	12	10613	DECIDUOUS	6	10656	DECIDUOUS	6
10158	DECIDUOUS	10	10576	DECIDUOUS	7	10614*	DECIDUOUS	14	10657	DECIDUOUS	13
10159	DECIDUOUS	10,14,20,25	10578	DECIDUOUS	13	10615*	DECIDUOUS	11	10658	DECIDUOUS	8
10249	DECIDUOUS	13,19	10581	DECIDUOUS	9	10624*	DECIDUOUS	8	10659	DECIDUOUS	7
10439	CONIFEROUS	18	10582	DECIDUOUS	12	10625*	DECIDUOUS	11	10660	DECIDUOUS	10
10510	DECIDUOUS	28	10583	DECIDUOUS	8	10626*	DECIDUOUS	7	10661*	DECIDUOUS	36
10514	DECIDUOUS	11	10584	DECIDUOUS	7	10627*	DECIDUOUS	7	10662	DECIDUOUS	13
10515	DECIDUOUS	15,15,15	10586	DECIDUOUS	8	10628	DECIDUOUS	7	10663	DECIDUOUS	23
10516	DECIDUOUS	8,14	10587	DECIDUOUS	8	10629	DECIDUOUS	6	10664	DECIDUOUS	10
10517	DECIDUOUS	8	10588	DECIDUOUS	7	10630	DECIDUOUS	9	10665	DECIDUOUS	23
10518*	DECIDUOUS	26	10589	DECIDUOUS	6	10631	DECIDUOUS	8	10666	DECIDUOUS	20
10519*	DECIDUOUS	15,15,8	10591	DECIDUOUS	9	10632	DECIDUOUS	11	10667	DECIDUOUS	7
10520*	DECIDUOUS	16	10592	DECIDUOUS	7	10633	DECIDUOUS	13	10668	DECIDUOUS	9,14
10523	DECIDUOUS	12	10593	DECIDUOUS	12	10634*	DECIDUOUS	9	10669	DECIDUOUS	9
10524	DECIDUOUS	24,28	10594	DECIDUOUS	8	10635	DECIDUOUS	14	10684*	DECIDUOUS	12
10527	DECIDUOUS	10,16,24	10595	DECIDUOUS	10	10636	DECIDUOUS	12,14	10685*	DECIDUOUS	8
10528	CONIFEROUS	30	10596	DECIDUOUS	9,11	10641	DECIDUOUS	8	10686*	DECIDUOUS	7
10529	DECIDUOUS	49	10597	DECIDUOUS	12	10642	DECIDUOUS	9	10687*	DECIDUOUS	8
10530	DECIDUOUS	28	10598*	DECIDUOUS	10	10643	DECIDUOUS	7	10721	CONIFEROUS	30
10531	DECIDUOUS	28	10601*	DECIDUOUS	6	10644	DECIDUOUS	10	10726	DECIDUOUS	14
10542	DECIDUOUS	7	10602*	DECIDUOUS	8	10645	DECIDUOUS	8	10727	DECIDUOUS	13
10543	DECIDUOUS	18	10603*	DECIDUOUS	7,8	10646	DECIDUOUS	7,28	10728	DECIDUOUS	19
10544	DECIDUOUS	9	10604*	DECIDUOUS	8	10647*	DECIDUOUS	15	10732	DECIDUOUS	13
10545	DECIDUOUS	6	10605*	DECIDUOUS	6	10648	DECIDUOUS	10	10733	DECIDUOUS	13
10546	DECIDUOUS	6	10606*	DECIDUOUS	10	10649	DECIDUOUS	6	10734	DECIDUOUS	27
10569	DECIDUOUS	9	10607*	DECIDUOUS	6,7	10650	DECIDUOUS	12	10735	DECIDUOUS	13
10570	DECIDUOUS	7	10608	CONIFEROUS	8	10651	DECIDUOUS	9	10744	DECIDUOUS	19
10571	DECIDUOUS	9	10609	DECIDUOUS	13	10652	DECIDUOUS	9	10784	DECIDUOUS	9
10572	DECIDUOUS	7	10610	DECIDUOUS	9	10653	DECIDUOUS	7			
10573	DECIDUOUS	9	10611	DECIDUOUS	6	10654	DECIDUOUS	10,10			

NOTE: \* DENOTES TREES LOCATED WITHIN CLEARING LIMITS



**OREGON CITY**  
PROJECT MANAGER: JONATHAN ARCHIBALD  
FILE NUMBER: CI 17-004

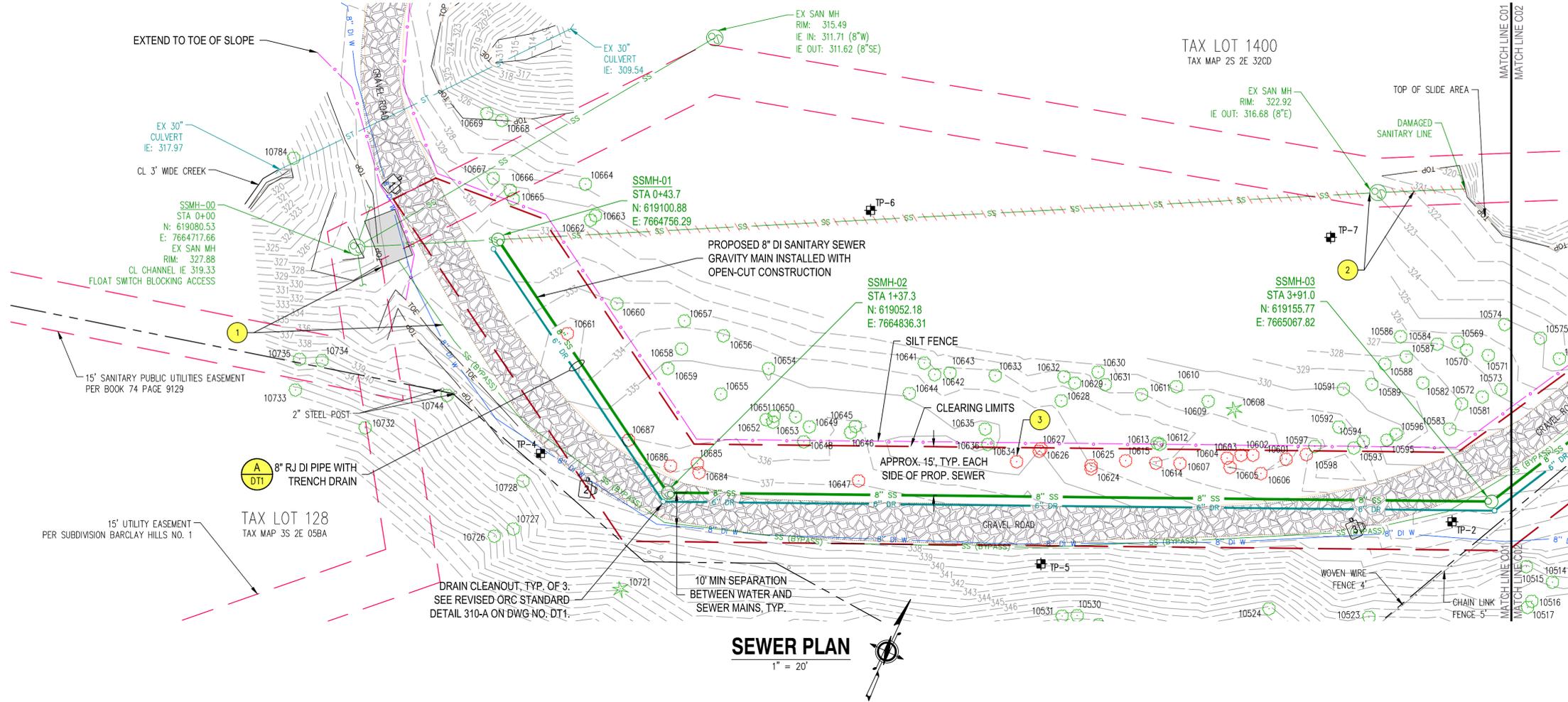
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DESIGNED BY: KMP  
SCALE: SHOWN  
DATE: Jun 21, 2017  
DRAWN BY: JRB

**ESC NOTES AND DETAILS**  
PETER SKENE WAY EMERGENCY SEWER REPLACEMENT  
OREGON CITY, OREGON  
CITY FILE NO. CI 17-004

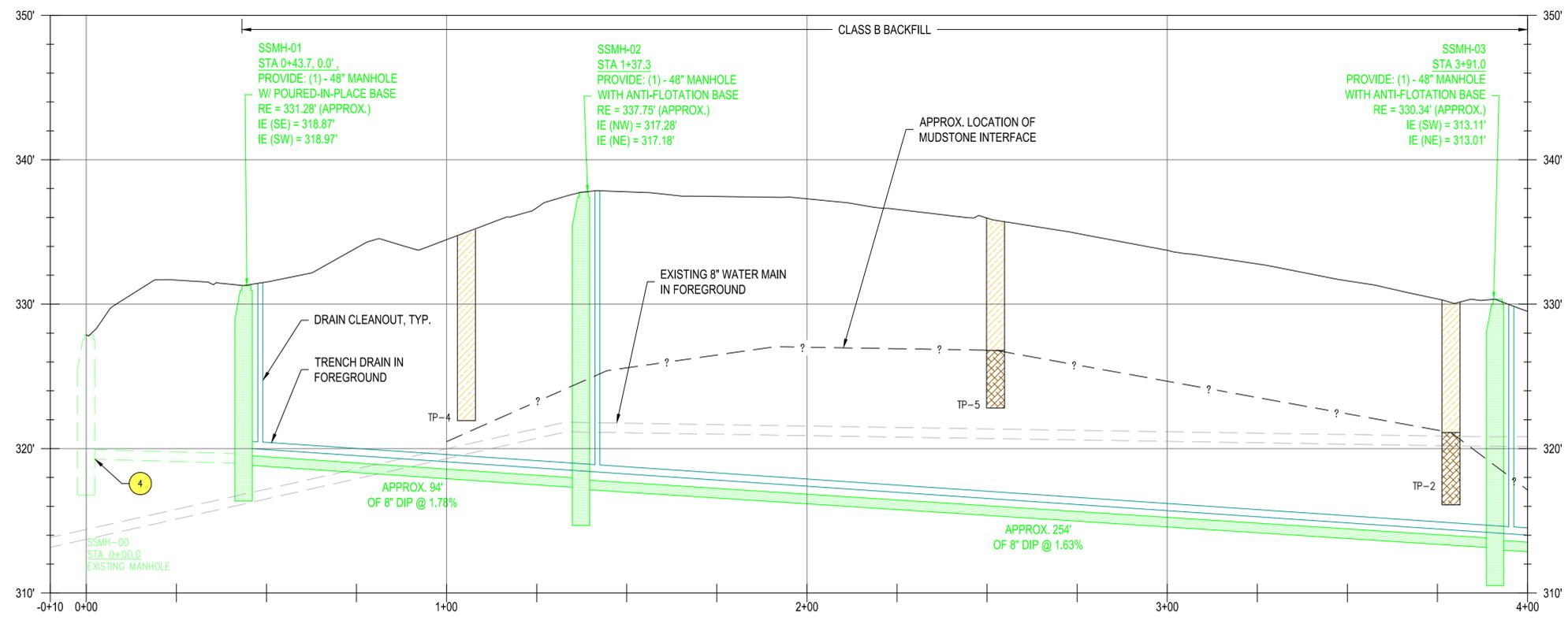
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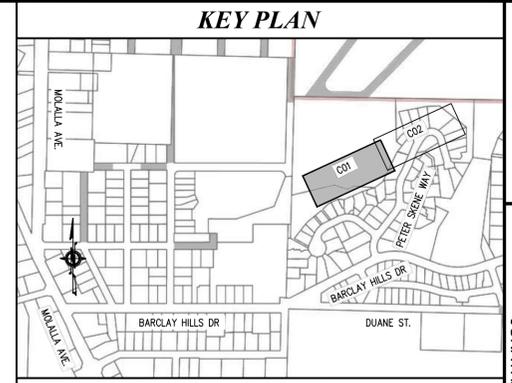
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**C00**  
SHEET 03 OF 07



**SEWER PLAN**  
1" = 20'



**SEWER PROFILE**  
H: 1" = 20', V: 1" = 5'



**CONSTRUCTION NOTES**

- 1 EXISTING TEMPORARY PUMP AND ABOVE GRADE DISCHARGE PIPING. MAINTAIN ACCESS TO EQUIPMENT AT ALL TIMES. RELOCATE TEMPORARY DISCHARGE PIPING WHERE REQUIRED TO CONSTRUCT PROPOSED IMPROVEMENTS. SEE SECTION 00490 OF THE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
- 2 FILL AND ABANDON EXISTING 8" CONC. SEWER AND MANHOLE PER THESE PLANS AND SECTION 00490 OF THE SPECIAL PROVISIONS. AT SLIDE AREA, PLUG PIPE WITH INFLATABLE PLUG AND FILL PIPE TO WITHIN 5' OF THE TOP OF SLOPE; ASSUME THAT INFLATABLE PLUG WILL BE ABANDONED IN PLACE. COORDINATE WITH CITY TO ABANDON MANHOLE IN A MANNER THAT DOES NOT REQUIRE THE USE OF HEAVY EQUIPMENT NEAR THE TOP OF THE SLIDE ZONE.
- 3 REMOVE TREES WITHIN CLEARING LIMITS AS NECESSARY FOR CONSTRUCTION AND TO PROMOTE THE LONG-TERM HEALTH OF THE REMAINING TREES. WHERE POSSIBLE, MINIMIZE TREE AND ROOTBALL REMOVAL. CUT TREES TO APPROX. 12" ABOVE GRADE, LEAVING ROOTBALL INTACT. CUT TREES MAY BE LEFT ONSITE OR REMOVED AND DISPOSED. TREES LEFT ONSITE SHALL BE PLACED IN A MANNER THAT DOES NOT INTERFERE WITH THE LONG TERM ACCESS OR USE OF THE SITE. CONTRACTOR SHALL COORDINATE WITH CITY REGARDING DISPOSAL OF CUT TREES.
- 4 FOLLOWING TESTING, COORDINATE WITH CITY TO RESTORE GRAVITY SEWER OPERATION BY REMOVING TEMPORARY BYPASS PUMPING SYSTEM AND PLUG FROM DOWNSTREAM PIPE.

**PHOTOS**



REGISTERED PROFESSIONAL ENGINEER  
88113  
**PRELIMINARY**  
OREGON  
KYLE PETTIBONE  
EXPIRES: 12/31/2018

PROJECT MANAGER: JONATHAN ARCHIBALD  
FILE NUMBER: CI 17-004  
**OREGON CITY**

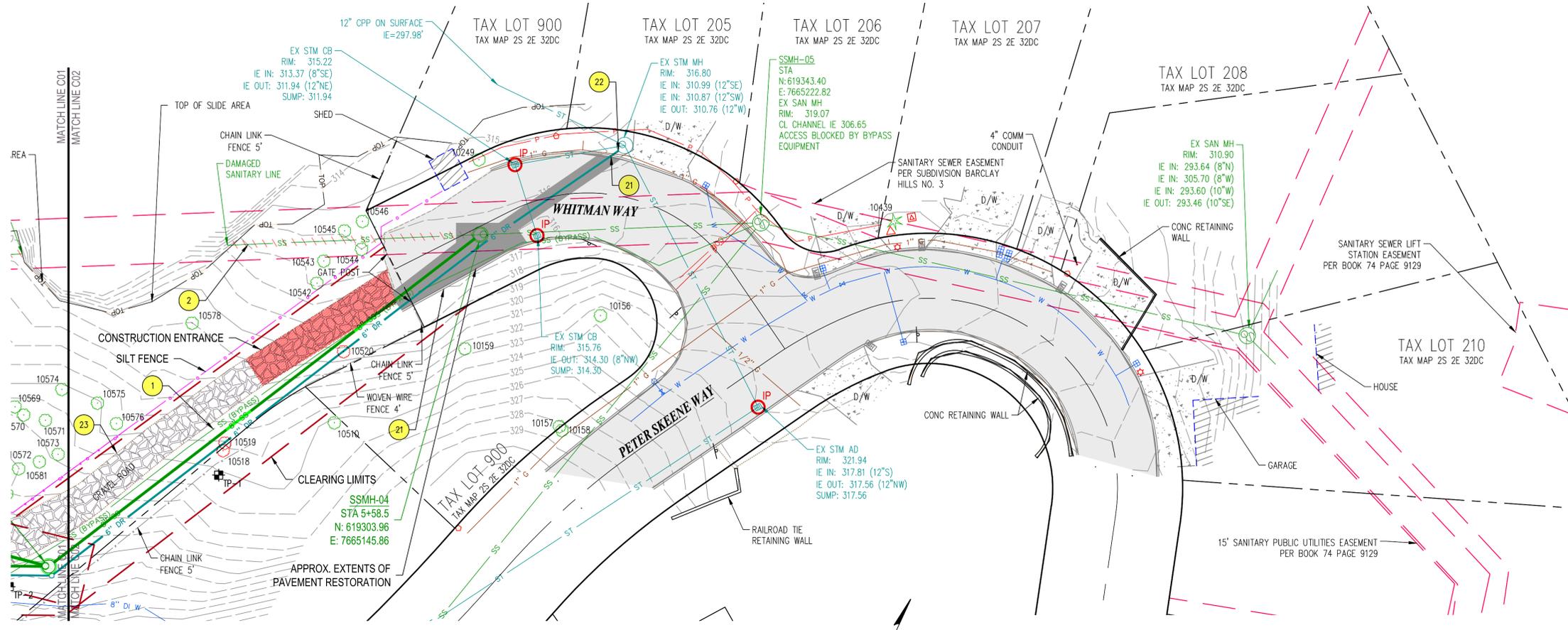
PROJECT NO: 917-063  
DESIGNER: KMP  
SCALE: SHOWN  
DATE: Jun 21, 2017  
DRAWN BY: JRB

SECTION 1 - OPEN CUT (BASE BID)  
SEWER PLAN & PROFILE  
PETER SKENE WAY EMERGENCY SEWER REPLACEMENT  
OREGON CITY, OREGON  
CITY FILE NO. CI 17-004

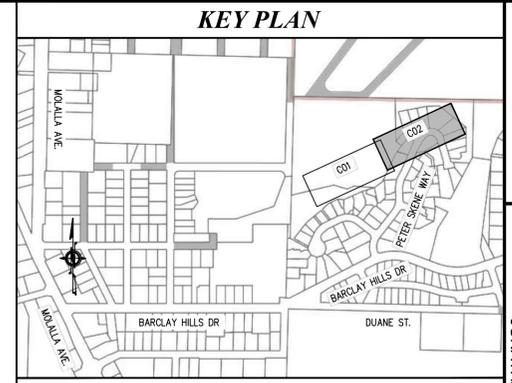
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SHEET 04 OF 07



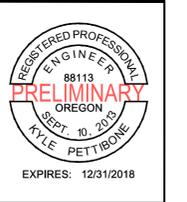


**SEWER PLAN**  
1" = 20'



**CONSTRUCTION NOTES**

- SEE DWG NO. C01 FOR ADDITIONAL NOTES AND DETAILS.
- 21 PROTECT EXISTING CURB, GUTTER, AND DRIVEWAY APRON.
- 22 CONNECTION TO EXISTING MANHOLE, INSTALL TRENCH DRAIN AT IE 311.0'
- 23 RESTORE 10' WIDE GRAVEL ACCESS ROAD W/ 0"-3/4" CRUSHED ROCK, 6" MIN COMPACTED DEPTH.



**OREGON CITY**  
PROJECT MANAGER: JONATHAN ARCHIBALD  
FILE NUMBER: CI 17-004

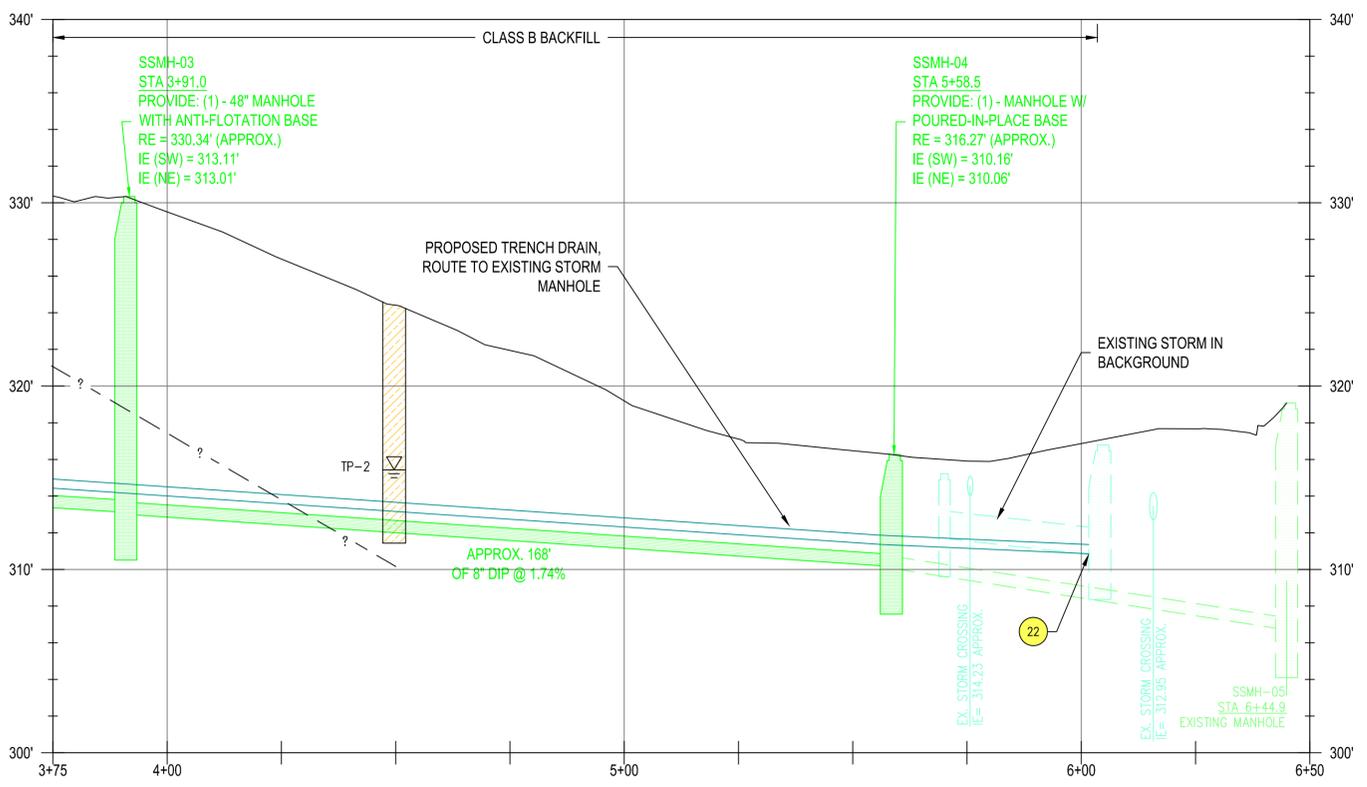
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DESIGNER: KMP  
SCALE: SHOWN  
DATE: Jun 21, 2017  
DRAWN BY: JRB

**SEWER PLAN & PROFILE**  
**SECTION 2 - OPEN CUT (BASE BID)**  
PETER SKEENE WAY EMERGENCY SEWER REPLACEMENT  
OREGON CITY, OREGON  
CITY FILE NO. CI 17-004

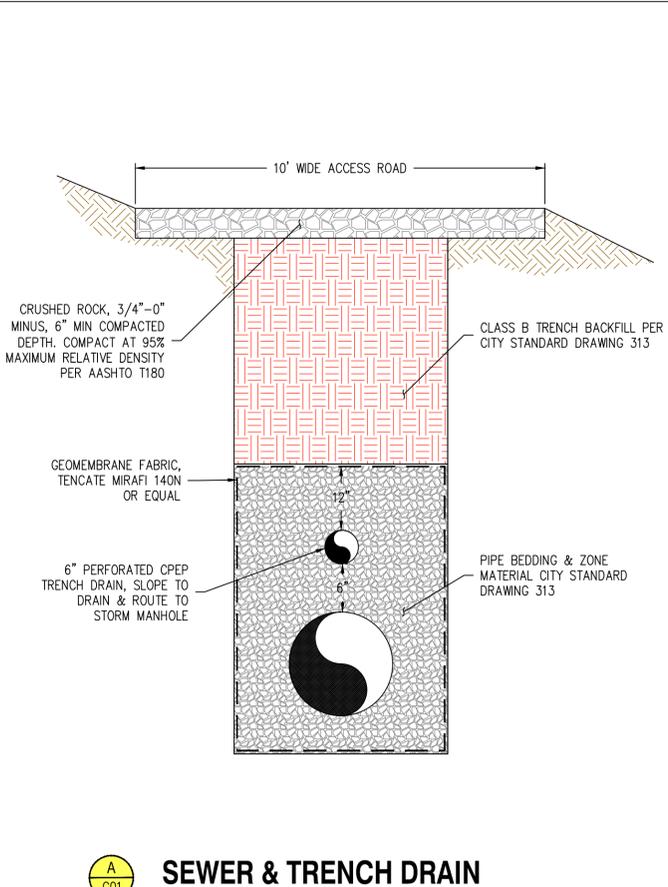
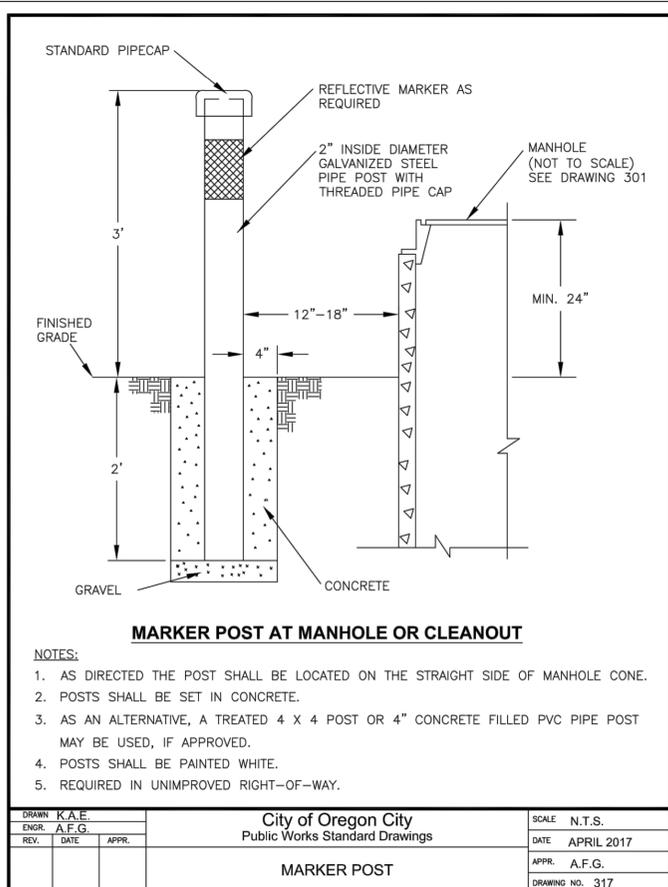
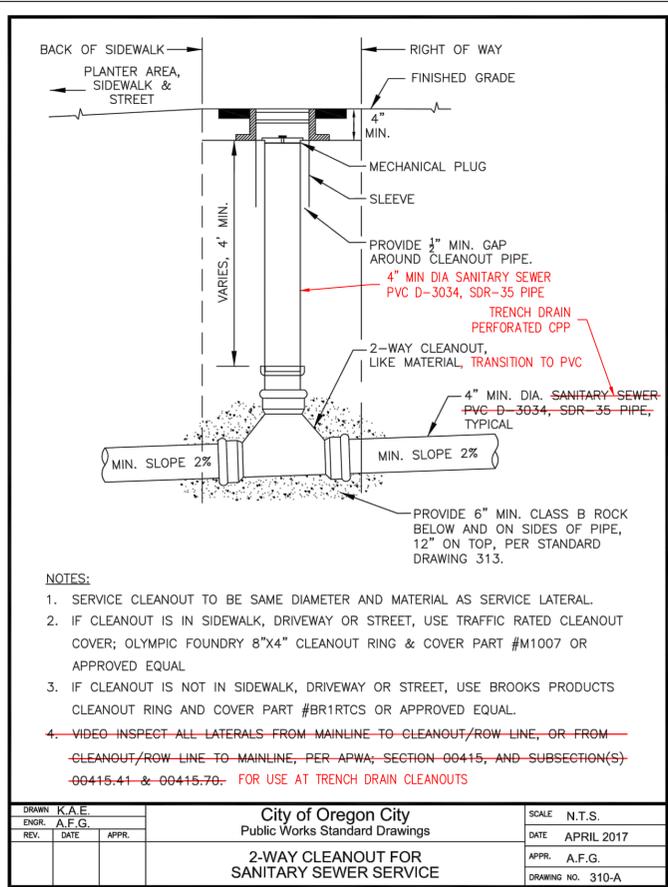
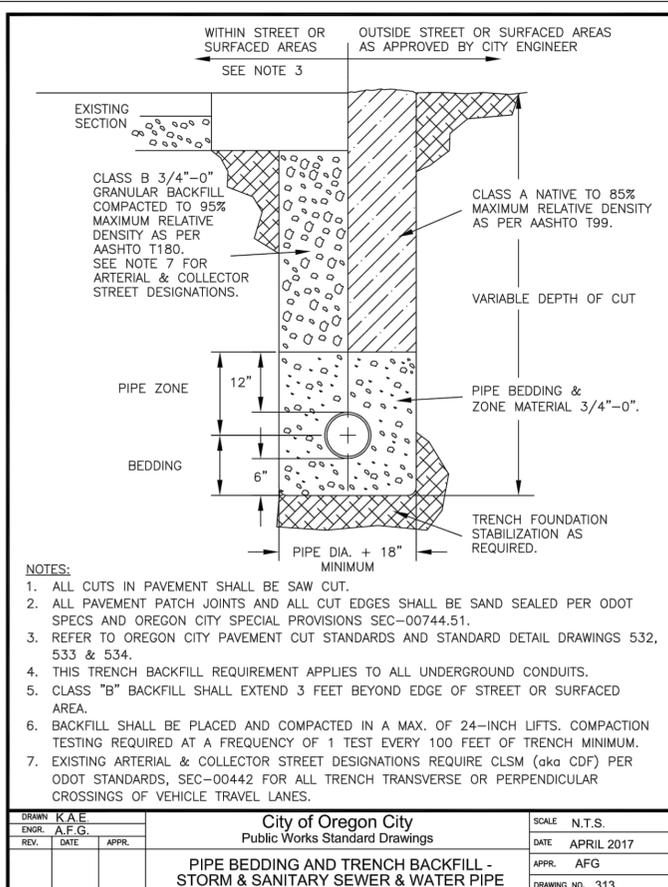
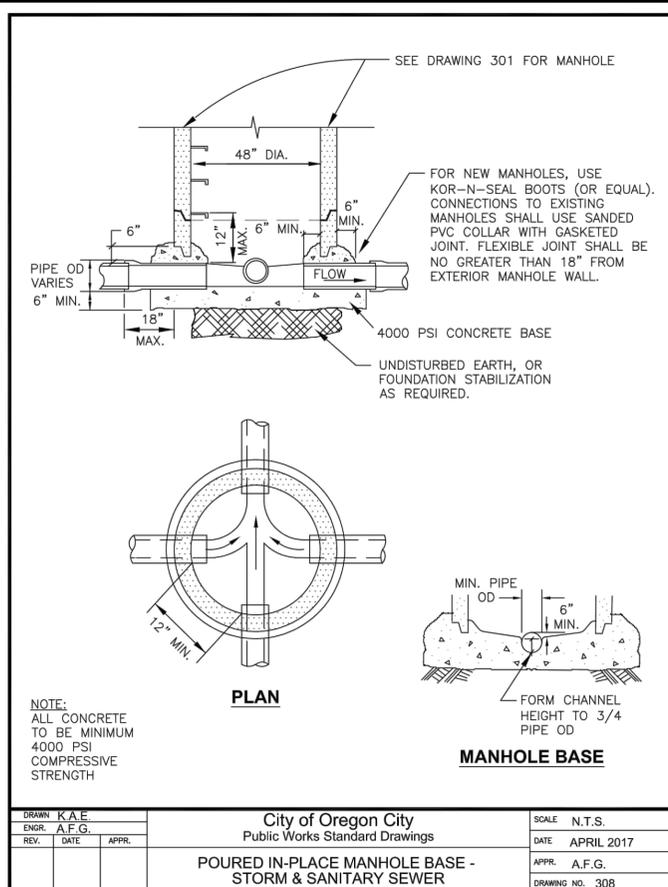
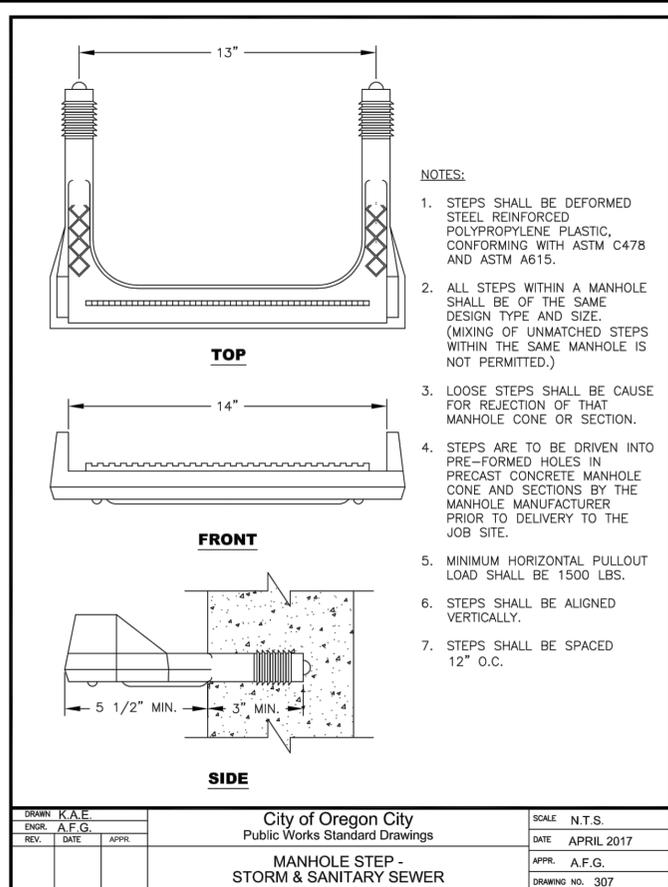
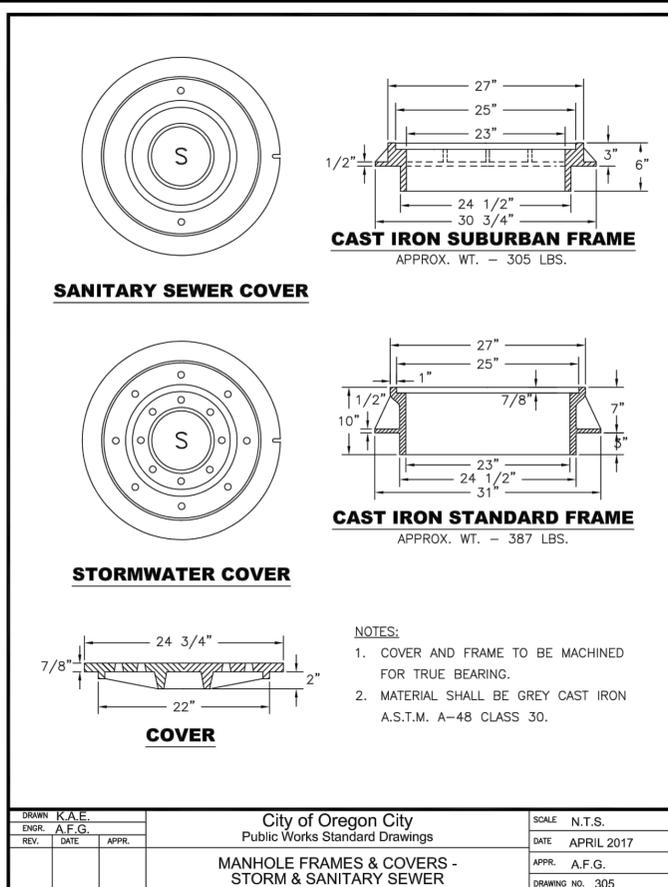
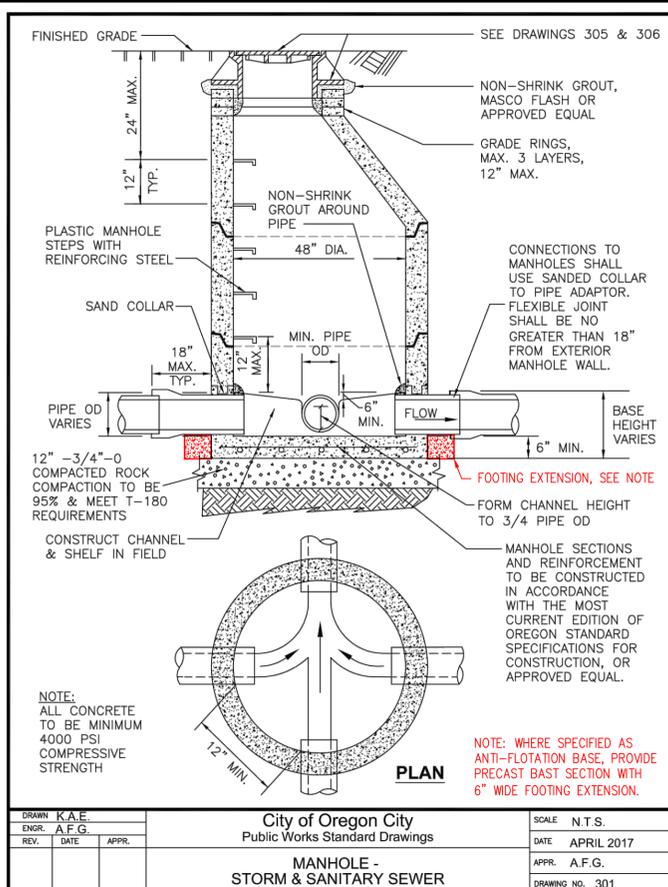
REVISIONS

**90% DESIGN REVIEW**

DRAWING NUMBER:  
**C02**  
SHEET 06 OF 07



**SEWER PROFILE**  
H: 1" = 20', V: 1" = 5'



REGISTERED PROFESSIONAL ENGINEER  
88113  
PRELIMINARY  
OREGON  
KYLE PETTIBONE  
EXPIRES: 12/31/2018

PROJECT NUMBER: CI 17-004  
PROJECT MANAGER: JONATHAN ARCHIBALD

CLIENT: PORTLAND, OREGON 97239

ENGINEER: RH2 ENGINEERING INC.  
6500 SW MACADAM AVE.  
SUITE 125

DATE: Jun 21, 2017

SCALE: SHOWN

DESIGNER: KMP

REVISOR: JRB

PETER SKENE WAY EMERGENCY SEWER REPLACEMENT  
OREGON CITY, OREGON  
CITY FILE NO. CI 17-004

**SEWER DETAILS**

DRAWING NUMBER: DT1  
SHEET 07 OF 07