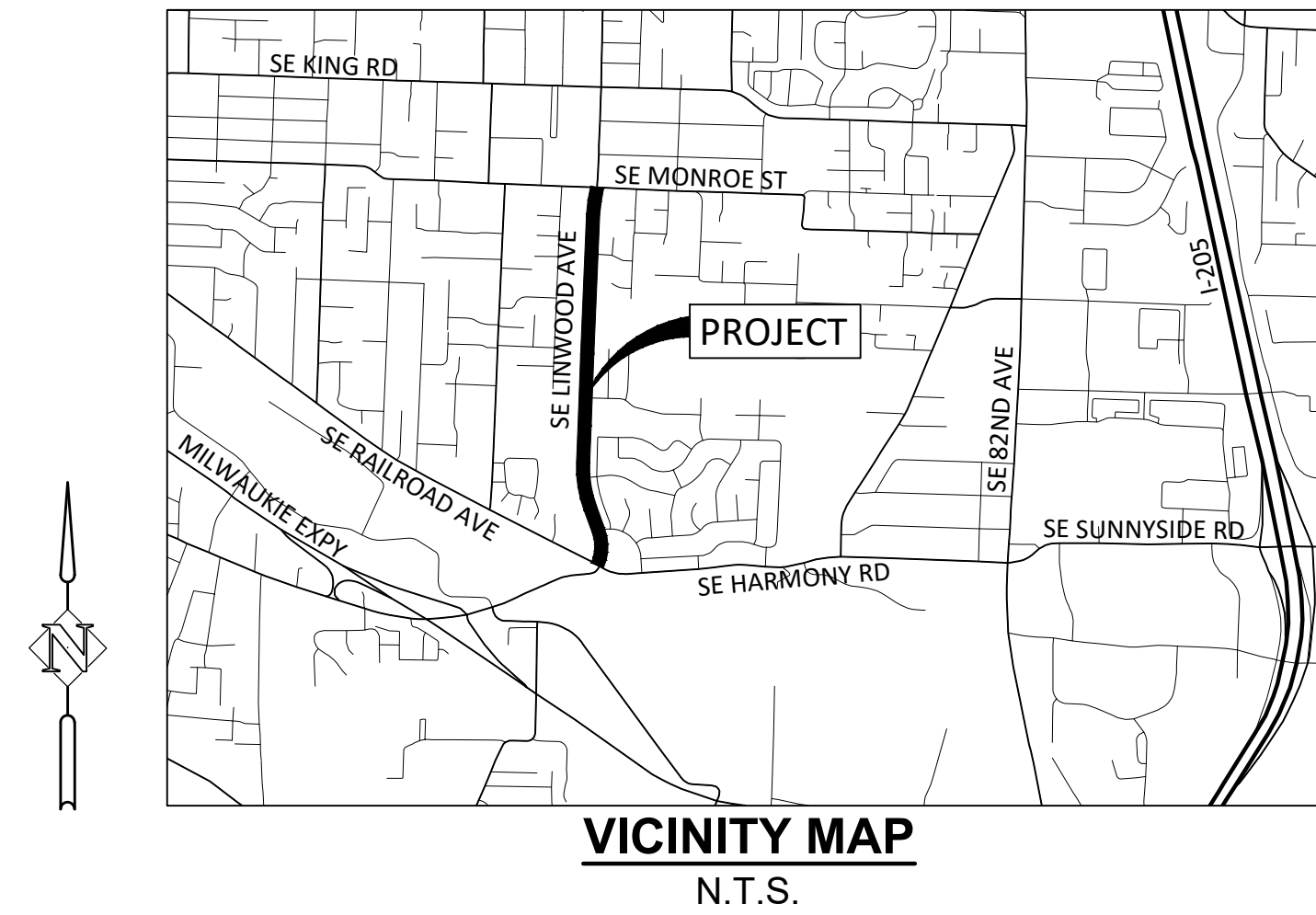


SE LINWOOD AVENUE IMPROVEMENT PROJECT

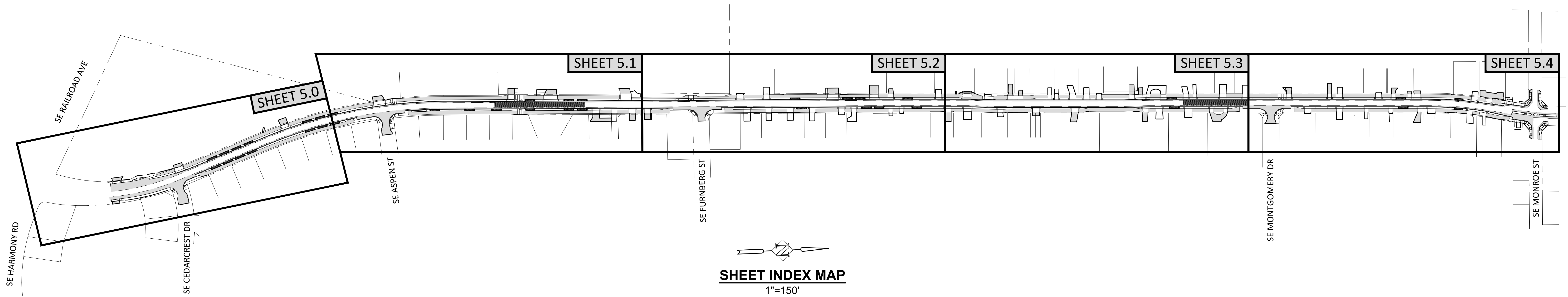
MILWAUKIE, OREGON

PROJECT NUMBER CIP-2019-045
 CITY OF MILWAUKIE



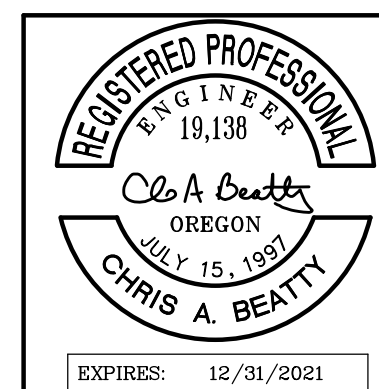
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ISSUED FOR CONSTRUCTION
 CONFORMED SET

12/4/2020		CONFORMED SET	DESIGNED:	CAB
			DRAWN:	HHPR
			CHECKED:	CAB
			DATE:	12/4/2020
DATE	NO.	DESCRIPTION	REVISIONS	



HHPR Harper Houf Peterson Righellis Inc.
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COVER SHEET
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	1.0
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK28-DWG\Sheets\MWK28-1.0 COVER SHEET.dwg

GENERAL NOTES:

- CONTRACTOR SHALL ADHERE TO THE CITY OF MILWAUKIE PUBLIC WORKS STANDARDS, CITY OF MILWAUKIE SUPPLEMENTAL STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND THE 2018 EDITION OF THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, EXCEPT AS MODIFIED BY SPECIAL PROVISIONS PREPARED FOR THIS PROJECT. ACCEPTANCE BY THE CITY OF MATERIALS, CONSTRUCTION PROCEDURES, AND TESTING REQUIREMENTS ARE MANDATORY FOR HIS PROJECT.
- CONTRACTOR SHALL SCHEDULE CONSTRUCTION IN A MANNER THAT ALLOWS THE CITY TIME TO WITNESS THE REQUIRED TESTING. CONTRACTOR SHALL NOTIFY THE CITY 48 HOURS PRIOR TO TESTING. CONTRACTOR MUST PROVIDE IN WRITING, PRIOR TO CONSTRUCTION, THE PROPER MATERIAL CERTIFICATIONS. THE CONTRACTOR SHALL PAY AN INDEPENDENT TESTING LABORATORY FOR DENSY AND COMPACTION TESTING. REQUIRED AIR TESTING, MANDREL TESTING, TELEVISION INSPECTION, AND VACUUM TESTING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE ALL MATERIALS EXCAVATED FROM WORK IN THE RIGHT-OF-WAY AND DISPOSE AT A PROPER LANDFILL. THE CONTRACTOR IS RESPONSIBLE FOR SECURING NECESSARY PERMITS FOR DISPOSAL.
- ANY CONSTRUCTION OBSERVATION BY THE CITY, STATE, FEDERAL AGENCY, OR THE ENGINEER OF RECORD, SHALL NOT, IN ANY WAY, RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES, REGULATIONS, CITY STANDARDS, AND PROJECT CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL TAKE NO ADVANTAGE OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES IN THE PLANS. WHEN ERRORS, OMISSIONS OR DISCREPANCIES ARE FOUND, THE ENGINEER SHALL BE NOTIFIED. WORK PERFORMED BY THE CONTRACTOR AS A RESULT OF AN ERROR, OMISSION OR DISCREPANCY IN THE PLANS SHALL BE AT THE CONTRACTOR'S RISK AND EXPENSE WHEN SUCH ERROR, OMISSION, OR DISCREPANCY HAS NOT BEEN BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER.
- THE CONTRACTOR SHALL HAVE AT ALL TIMES ON-SITE, THE APPROVED CONSTRUCTION PLANS & SPECIAL SPECIFICATIONS, CITY OF MILWAUKIE STANDARD SPECIFICATIONS & STANDARD PLANS, 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND ALL OTHER APPLICABLE SPECIFICATIONS BOOKS AND MANUALS.
- THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY OF MILWAUKIE ENGINEERING DEPARTMENT AFTER THE CITY APPROVES THE CONTRACT AND PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL PROVIDE TWO (2) WEEKS NOTICE TO SCHEDULE A PRE-CONSTRUCTION MEETING. THOSE WHO MAY ATTEND ARE: CITY, ENGINEER, PORTLAND GENERAL ELECTRIC (PGE), FRONTIER COMMUNICATIONS, COMCAST, NW NATURAL GAS, CENTURY LINK, AND THE CONTRACTOR.
- PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING ITEMS: LIST OF SUBCONTRACTORS; PROJECT SCHEDULE; TRAFFIC CONTROL PLAN; EMERGENCY CONTACT NAME AND PHONE NUMBER; SUBMITTALS AS REQUIRED.
- PRIOR TO ORDERING ANY MATERIALS, THE CONTRACTOR SHALL PROVIDE TO THE CITY ALL THE MANUFACTURER'S SPECIFICATION SHEETS FOR MATERIALS TO BE USED.
- THE CONTRACTOR SHALL ENSURE THEY HAVE ALL REQUIRED PERMITS AND LICENSES BEFORE STARTING CONSTRUCTION.
- 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.
- THERE SHALL BE NO ALTERATION OR VARIANCE FROM THE APPROVED PLANS WITHOUT APPROVAL OF THE CITY.
- ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY. THE CITY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY MATERIALS OR WORKMANSHIP THAT DOES NOT CONFORM TO THE CITY STANDARDS.
- CONTRACTOR SHALL SCHEDULE 24-HOURS IN ADVANCE OF INSPECTION THROUGH OREGON E-PERMITTING BY CALLING THE INSPECTION LINE AT 1-(888) 299-2821 OR VISITING THE WEBSITE AT <https://aca-oregon.accela.com/oregon/>. SCHEDULE INSPECTIONS FOR THE FOLLOWING WORK:
 - PUBLIC UTILITY EXCAVATION
 - STORM FACILITY STRUCTURES - INSTALLATION AND FORMS
 - STORM FACILITY BACKFILL
 - STORM FACILITY PLANTINGS
 - PUBLIC UTILITY INSTALLATION
 - PUBLIC UTILITY CONNECTIONS
 - STREET SUB-GRADE
 - STREET BASE AGGREGATE
 - STREET PAVEMENT INSTALLATION
 - CURB & SIDEWALK FORMS
 - FINAL INSPECTION
 - PUBLIC UTILITY TESTING
- THE CONTRACTOR SHALL PROVIDE TEST RESULTS FOR, BUT NOT LIMITED TO:
 - BASE COMPACTION
 - ASPHALT COMPACTION
 - MANHOLE TESTING
 - SEWER/STORM TESTING
 - STORM/SEWER MANDREL
- FOR UNANTICIPATED CONTAMINATION ENCOUNTERED DURING CONSTRUCTION IN THE CITY RIGHT-OF-WAY: THE PERMITTEE/APPLICANT OR ITS AGENT SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE MANAGEMENT, AND DISPOSAL OF CONTAMINATED MEDIA ENCOUNTERED. THE PERMITTEE IS ALSO RESPONSIBLE FOR ALL RESULTANT DELAYS.
- CONTRACTOR SHALL TAKE REASONABLE EFFORT IN THE PRESERVATION OF EXISTING IMPROVEMENTS, LANDSCAPING AND VEGETATION THROUGHOUT CONSTRUCTION. ANY LANDSCAPING/TREES DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED IN CONFORMANCE WITH CITY OF MILWAUKIE STANDARDS.
- CONTRACTOR SHALL NOT USE THE PUBLIC RIGHT OF WAY FOR STORAGE OF EQUIPMENT, MATERIALS, CONSTRUCTION TRAILERS, AND CONSTRUCTION VEHICLES UNLESS OTHERWISE APPROVED. CONSTRUCTION VEHICLES SHALL PARK AT THE LOCATIONS(S) DETERMINED AT THE PRE-CONSTRUCTION MEETING.
- IT IS THE OBLIGATION OF THE CONTRACTOR TO OBTAIN WRITTEN APPROVAL FROM PRIVATE PROPERTY OWNERS FOR USE OF PRIVATE PROPERTY FOR CONSTRUCTION STAGING AND TO RESTORE PRIVATE PROPERTY TO A CONDITION SATISFACTORY TO PROPERTY OWNER AT PROJECT COMPLETION. THE CONTRACTOR SHALL PROVIDE A COPY OF ALL AGREEMENTS SIGNED WITH PRIVATE PROPERTY OWNERS.
- UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT "CLEAN AS-BUILT DRAWINGS" TO THE ENGINEER. "CLEAN AS-BUILT DRAWINGS" DOCUMENT ALL DEVIATIONS AND REVISIONS TO THE APPROVED PLANS; THEY SHALL ALSO RECORD A DESCRIPTION OF CONSTRUCTION MATERIALS ACTUALLY USED (PIPE MATERIAL, ETC.)

- PRIOR TO FINAL ACCEPTANCE AND PAYMENT, THE CONTRACTOR SHALL CLEAN THE WORK SITE AND ADJACENT AREAS OF ANY DEBRIS, DISCARDED ASPHALTIC CONCRETE MATERIAL, OR OTHER ITEMS DEPOSITED DURING THE PROJECT.
- CONSTRUCTION ACTIVITIES ARE ALLOWED BETWEEN 7:00 AM AND 7:00 PM, MONDAY THROUGH FRIDAY. ACTIVITIES MAY OCCUR ON SATURDAYS AND HOLIDAYS IF APPROVED BY THE CITY ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN AND COORDINATE ACCESS TO ALL AFFECTED PROPERTIES.
- THE CONTRACTOR SHALL ERECT AND MAINTAIN TRAFFIC CONTROL PER THE 2011 OREGON TEMPORARY TRAFFIC CONTROL HANDBOOK. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY FOR APPROVAL PRIOR TO THE START OF WORK.
- WORK PROVIDED FOR UNDER THE PERMIT SHALL INCLUDE REPAIR OF EXISTING FACILITIES (ROADS, DITCHES, ETC.) AS MAY BE NECESSARY, IN THE PROJECT ENGINEER'S OPINION, TO OVERCOME DETERIORATION OR DAMAGE WHICH OCCURRED IN CONJUNCTION WITH THE WORK AUTHORIZED BY THE PERMIT. CORRECTIVE WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- PROPERTY DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED TO EXISTING OR BETTER CONDITION. GRASS, SHRUBS, PAVEMENT, ETC. DISTURBED BY CONSTRUCTION ACTIVITY SHALL BE RE-ESTABLISHED, REINSTALLED, OR REPLACED, WITH LIKE KIND AND MATERIAL TO EXISTING OR BETTER CONDITION.

SURVEY & LOCATES:

- 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. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 1-877-668-4001.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ANY AND ALL EXISTING UTILITIES AND OBTAINING UTILITY LOCATION PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT OREGON UTILITY NOTIFICATION CENTER 1-800-332-2344 AT LEAST TWO (2) BUSINESS DAYS AND NOT MORE THAN TEN (10) BUSINESS DAYS PRIOR TO AN EXCAVATION.
- CONTRACTOR SHALL MAINTAIN ALL EXISTING BENCHMARKS, PROPERTY CORNERS, AND MONUMENTS. IF ANY SUCH POINTS ARE DISTURBED OR DESTROYED DURING CONSTRUCTION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, AND IF REQUIRED BY ORS 209, THE PROPERTY CORNERS AND OTHER SUCH MONUMENTS SHALL BE RESET BY A REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING FACILITIES AND STUBS TO BE UTILIZED AND NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES WITH THE APPROVED PLAN.
- PROPERTY AND RIGHT-OF-WAY LINES SHOWN ARE APPROXIMATE. THESE PLANS ARE NOT MEANT TO SERVE PROPERTY BOUNDARY SURVEY PURPOSES.
- THE CONTRACTOR IS RESPONSIBLE FOR POTHOLING TO VERIFY EXISTING UTILITY LOCATIONS AND ENSURE NO CONFLICTS PRIOR TO CONSTRUCTION.
- CONTRACTOR MUST VERIFY ALL EXISTING UTILITIES FOR BOTH VERTICAL ELEVATION AND HORIZONTAL LOCATION PRIOR TO START OF WORK. SHOULD CONFLICTS ARISE AND REDESIGN OR RELOCATION OF FACILITIES IS NECESSARY, THEN CHANGES MUST APPROVED BY THE PROJECT ENGINEER IN ADVANCE OF WORK. CONTRACTOR SHALL COORDINATE THE WORK WITH APPLICABLE AGENCIES.
- CONTRACTOR SHALL WORK TO PRESERVE ALL TEMPORARY SURVEY CONTROL POINTS, TEMPORARY BENCHMARKS, TEMPORARY GRADE STAKES, AND OTHER REFERENCE POINTS FOR AS LONG AS THEY ARE NEEDED FOR CONSTRUCTION ACTIVITIES. RE-STAKING DUE TO CONTRACTORS NEGLIGENCE WILL BE AT THE EXPENSE OF THE CONTRACTOR.
- ALL STREET CENTERLINE MONUMENTS SHALL BE SET IN MONUMENT CASES THAT CONFORM TO CITY OF MILWAUKIE SPECIFICATIONS.

ENVIRONMENTAL & EROSION CONTROL:

- CONTRACTOR SHALL INSTALL, UTILIZE, AND MAINTAIN EROSION PREVENTION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION PREVENTION & SEDIMENT CONTROL PLAN.
- EROSION CONTROL TO BE IN PLACE AND APPROVED BY THE CITY PRIOR TO ANY CONSTRUCTION ACTIVITIES. EFFECTIVE EROSION PROTECTION TO INCLUDE, BUT NOT LIMITED TO HAY BALES, SEDIMENT BARRIERS, AND INLET PROTECTION TO MINIMIZE EROSION IMPACT TO ADJACENT PROPERTIES AND THE STORM DRAIN SYSTEM.
- EFFECTIVE DRAINAGE CONTROL IS REQUIRED.
- IF GROUND WATER SPRINGS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE PROJECT ENGINEER, THE PROJECT ENGINEER SHALL DIRECT THE CONTRACTOR TO 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.

SAFETY:

- CONTRACTOR SHALL FOLLOW ALL OSHA REQUIREMENTS.
- ALL TRENCHES SHALL BE PROPERLY SHORED AND BRACED TO PREVENT CAVING.
- NO TRENCH SHALL BE LEFT AT ANY TIME IN AN UNSAFE CONDITION. THE CONTRACTOR IS RESPONSIBLE AND LIABLE FOR HAZARDS OR DAMAGE RESULTING FROM THE PROSECUTION OF THE WORK.
- NO TRENCHES WILL BE ALLOWED TO REMAIN OPEN OVERNIGHT. ALL TRENCHES SHALL BE COVERED WITH STEEL PLATES OR BACK FILLED AT THE END OF EACH SHIFT.

SITE PREPERATION NOTES:

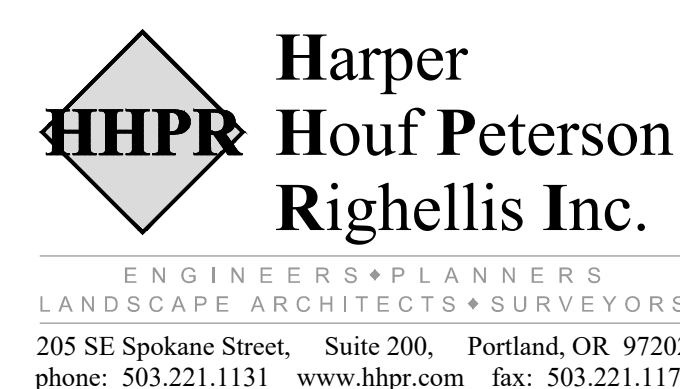
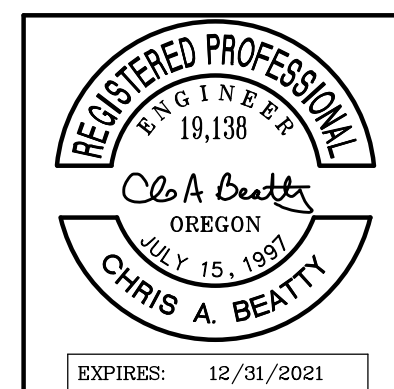
- PRIOR TO PLACEMENT OF ENGINEERED FILL, OR IDENTIFIED SOFT/LOOSE SOILS ENCOUNTERED DURING SUBGRADE PREPARATION TO BE:
 - COMPACTED TO A FIRM UNYIELDING CONDITION.
 - OVER-EXCAVATED AND REPLACED WITH ENGINEERED FILL, OR
 - STABILIZED WITH ROCK.

UTILITY NOTES:

- THE LOCATIONS, DEPTHS, AND DESCRIPTIONS OF EXISTING UTILITIES SHOWN ARE 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.
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE SHOWN FOR INFORMATION ONLY. UTILITY LOCATIONS SHALL BE VERIFIED BY OREGON UTILITIES NOTIFICATION CENTER IMMEDIATELY PRIOR TO ANY EXCAVATION. NOTIFY PROJECT ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING UTILITY LOCATE MARKINGS FOR THE DURATION OF THE PROJECT AND SHALL BE RESPONSIBLE FOR LOCATING NEW UTILITIES PRIOR TO CITY ACCEPTANCE.
- FOR ANY EXISTING UNDERGROUND UTILITY CONFLICTING WITH PROPOSED WORK DESCRIBED HEREIN, CONTRACTOR SHALL NOTIFY PROJECT ENGINEER OF THE CONFLICT.
- EVERY NEW OR EXISTING SERVICE LINE THAT HAS ANY WORK DONE TO IT OR THE ADJACENT MAIN IS REQUIRED TO BE TELEVISION INSPECTED FROM THE CENTER OF MAIN OR MANHOLE TO THE HOME, BUILDING, OR OTHER STRUCTURE.
- EXISTING MAINLINE PIPE, STRUCTURES, AND OTHER MATERIALS REMOVED DURING CONSTRUCTION SHALL BE DISPOSED OF IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND STANDARD SPECIFICATIONS.
- ALL PIPE LENGTHS SHOWN ARE HORIZONTAL DISTANCES AND SHALL BE CONSIDERED APPROXIMATE. FINAL LENGTHS ARE DETERMINED BY FIELD CONDITIONS.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SANITARY SEWER SERVICE TO PRIVATE PROPERTIES AND UPSTREAM AREAS THROUGHOUT CONSTRUCTION.
- PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO KEEP ALL EXISTING UTILITIES IN SERVICE AND PROTECT THEM DURING CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY DAMAGED UTILITIES USING MATERIALS AND METHODS APPROVED BY THE UTILITY OWNER. NO SERVICE INTERRUPTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN AGREEMENT WITH THE UTILITY PROVIDER.
- FRANCHISE UTILITIES SHOWN ON THESE PLANS ARE FOR INFORMATION AND COORDINATION PURPOSES ONLY AND ARE NOT AUTHORIZED FOR INSTALLATION UNDER THE PUBLIC STREET IMPROVEMENT PERMIT. UTILITY COMPANIES ARE REQUIRED TO SECURE SEPARATE UTILITY PERMITS FROM THE CITY FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- UTILITIES OR INTERFERING PORTIONS OF UTILITIES THAT ARE ABANDONED IN PLACE SHALL BE REMOVED BY THE CONTRACTOR TO THE EXTENT NECESSARY TO ACCOMPLISH THE WORK. ABANDONED UTILITIES SHALL BE VERIFIED BY CITY STAFF PRIOR TO REMOVAL. THE CONTRACTOR SHALL PLUG THE REMAINING EXPOSED ENDS OF ABANDONED UTILITIES WITH CONCRETE A MINIMUM OF TWO (2) FEET INTO THE PIPE.
- ALL UTILITY CROSSINGS SHALL BE POTHOLED PRIOR TO EXCAVATION TO ALLOW FOR GRADE ADJUSTMENTS DUE TO ALIGNMENT CONFLICTS. THE USE OF BENDS TO AVOID ALIGNMENT CONFLICTS WILL NOT BE ALLOWED UNLESS OTHERWISE INDICATED.
- EXISTING UTILITY SERVICES SHALL BE MAINTAINED AT ALL TIMES, WHEN SERVICE DISRUPTIONS ARE REQUIRED, CONTRACTOR SHALL NOTIFY AFFECTED BUSINESS OF THE DATE AND DURATION OF THE DISRUPTION A MINIMUM OF 48 HOURS IN ADVANCE OF THE DISRUPTION UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR WILL PROVIDE FOR CONTINUOUS FUNCTION OF STORMWATER SYSTEM DURING CONSTRUCTION.
- ALL UTILITY POINTS OF CONNECTION TO THE EXISTING SYSTEM SHALL BE POTHOLED PRIOR TO THE START OF NEW UTILITY INSTALLATION TO VERIFY ALIGNMENT, DEPTH, PIPE SIZE, AND PIPE MATERIAL. THE CONTRACTOR SHALL ARRANGE A PRE-CONNECTION MEETING WITH THE CITY PRIOR TO THE START OF CONNECTION WORK.

P:\M\K\City of Milwaukie\MWK-28 Linwood Avenue\MWK28-DIVCS\Sheets\MWK28-1 COVER SHEET.dwg

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020
R E V I S I O N S	



GENERAL NOTES & LEGEND
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	1.1
JOB NO.	MWK-28

STREET NOTES:

- PAVING NOTES AND DETAILS WITHIN THESE PLANS ARE INTENDED FOR DRY WEATHER CONSTRUCTION.
- THE SPREADING OF MUD OR DEBRIS OR STORAGE OF MATERIAL OR EQUIPMENT OF ANY KIND UPON ANY ROADWAY WITHOUT CITY PERMISSION IS STRICTLY PROHIBITED.
- POCKETS OF ORGANIC DEBRIS OR LOOSE FILL ENCOUNTERED DURING RIPPING OR RILL SHALL BE REMOVED AND REPLACED WITH ENGINEERED FILL.
- THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES, MANHOLES AND WATER METER BOXES TO FINISHED STREET, DRIVEWAY, OR SIDEWALK GRADE.
- THE CONTRACTOR SHALL SAWCUT STRAIGHT MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING PAVEMENT AND NEW PAVEMENT. SAWCUT LINES SHOWN REPRESENT APPROXIMATE LOCATIONS. FINAL LOCATION SHALL BE APPROVED BY CITY. SEAL JOINTS WITH RUBBERIZED SEALANT IMMEDIATELY FOLLOWING PAVING.
- ALL EXISTING ASPHALT AT MATCH POINTS SHALL BE SAW CUT TO CLEAN LINES AND GRADES. FINAL LOCATION SHALL BE APPROVED BY CITY.
- FINISH GRADES AT THE TRANSITION TO EXISTING PAVEMENT SHALL MATCH EXISTING GRADES, OR BE FEATHERED PAST JOINTS TO PROVIDE A SMOOTH, FREE DRAINING SURFACE.
- THE CONTRACTOR SHALL VACUUM SAW CUT SLURRY AS SAW CUTTING IS BEING PERFORMED.
- STREET CONSTRUCTION REQUIRES MOISTURE-DENSITY TESTING OF THE SUBGRADE MATERIAL AND BASE ROCK. ASPHALT PAVEMENT SHALL BE TESTED FOR ACCEPTABLE COMPACTION. SPECIFIC DATA SHALL BE PROVIDED BY CONTRACTOR PRIOR TO CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: 1) PROCTORS FOR IN PLACE MATERIALS AND 2) DATA ON TRENCH AND BASE ROCK. ASPHALT CONCRETE MUST BE A CURRENT MIX DESIGN APPROVED BY THE CITY ENGINEER. REFER TO 00330.43, 00641.12, 00641.15, 00641.44, 00745.13, AND 00745.79 OF THE OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- THE PROJECT ENGINEER AND CITY RESERVE THE RIGHT TO ADJUST GRADES OR ALIGNMENT TO ACCOMMODATE OTHER UTILITIES AS REQUIRED.
- ALL CONCRETE SHALL HAVE A 28-DAY ULTIMATE COMPRESSIVE STRENGTH OF 3,300 PSI.
- CONTRACTOR TO PROOF-ROLL FINAL SUB-GRADE WITH 10 CUBIC YARD TRUCK LOADED WITH ROCK PRIOR TO PLACING AGGREGATE BASE WITHIN THE PUBLIC RIGHT-OF-WAY. CITY INSPECTOR MUST BE PRESENT FOR PROOF-ROLL.
- AGGREGATE BASE SHALL BE COMPACTED TO OSSC STANDARDS. CONTRACTOR TO HAVE AGGREGATE BASE COMPACTION TESTING CONDUCTED BY A QUALIFIED TESTING FACILITY PRIOR TO PLACEMENT OF ASPHALT CONCRETE WITHIN THE PUBLIC RIGHT-OF-WAY. TEST REPORTS TO BE PROVIDED TO CITY OF MILWAUKIE.
- DENSITY TESTING FOR COMPLIANCE WITH PROJECT PLANS/SPECIFICATIONS TO BE PERFORMED BY THE PROJECT GEOTECHNICAL ENGINEER DURING PLACEMENT OF PAVEMENT SECTION MATERIALS.
- AGGREGATE BASE SHALL BE COMPACTED TO 95% MAX. DENSITY AS DETERMINED BY AASHTO T-180. CONTRACTOR TO HAVE AGGREGATE BASE COMPACTION TESTING CONDUCTED BY A QUALIFIED TESTING FACILITY PRIOR TO PLACEMENT OF ASPHALT CONCRETE WITHIN THE PUBLIC RIGHT-OF-WAY. TEST REPORTS TO BE PROVIDED TO CITY OF MILWAUKIE.
- EACH LIFT OF ASPHALT CONCRETE SHALL BE COMPACTED TO 92% RICE DENSITY IN CONFORMANCE WITH AASHTO T-209. CONTRACTOR TO HAVE ASPHALT CONCRETE COMPACTION TESTING CONDUCTED BY A QUALIFIED TESTING FACILITY WITHIN THE PUBLIC RIGHT-OF-WAY. TEST REPORTS TO BE PROVIDED TO CITY OF MILWAUKIE.
- ALL EXCAVATIONS WITHIN A PAVED STREET OPEN TO TRAFFIC SHALL BE TEMPORARILY RESURFACED AT THE END OF EACH WORK DAY AND PRIOR TO ALLOWING VEHICULAR TRAFFIC ONTO EXCAVATED AREAS. CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING, MAINTAINING, AND REMOVING TEMPORARY SURFACING MATERIALS. NO MEASUREMENT WILL BE MADE FOR TEMPORARY SURFACING MATERIALS AND IS CONSIDERED INCIDENTAL TO THE WORK.

ROADWAY SIGNING AND STRIPING NOTES:

- ALL SIGNING, STRIPING AND PERMANENT BARRICADES TO BE INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS FOR THE WORK IN THE RIGHT-OF-WAY AT THE PRE-CONSTRUCTION MEETING.
- CONTRACTOR SHALL NOT REMOVE ANY STREET SIGNAGE WITHOUT PRIOR CITY APPROVAL.
- CONTRACTOR SHALL REPLACE DAMAGED OR REMOVED PAVEMENT MARKINGS UPON COMPLETION OF PROJECT. CONTRACTOR SHALL USE MATERIAL APPROPRIATE FOR INTENDED USE WITH SPECIFICATIONS AS CALLED OUT ON THE APPROVED PLANS.
- CLACKAMAS COUNTY STRIPES ALL CITY OF MILWAUKIE ROADWAYS.

CITY OF MILWAUKIE PERMANENT SIGNAGE AND MARKING NOTES:

- CONTRACTOR SHALL NOT REMOVE ANY STREET SIGNAGE NOT INDICATED IN THE PLANS WITHOUT PRIOR CITY APPROVAL.
- CONTRACTOR SHALL REPLACE DAMAGED SIGNS OR SIGN POLES.
- CONTRACTOR SHALL UPDATE ALL SIGNAGE PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) WHEN SIGNS ARE REMOVED OR DAMAGED.
- CONTRACTOR SHALL REPLACE DAMAGED OR REMOVED PAVEMENT MARKINGS UPON COMPLETION OF FINAL PAVING. CONTRACTOR SHALL USE MATERIAL APPROPRIATE FOR INTENDED USE WITH SPECIFICATIONS AS CALLED OUT ON THE APPROVED PLAN.
- CONTRACTOR SHALL RETURN ALL SIGNS/POLES/HARDWARE NOT BEING REINSTALLED TO THE CITY OF MILWAUKIE.
- CONTRACTOR SHALL INSTALL ALL SIGNS AND MARKINGS PER OSSC AND CITY OF MILWAUKIE SPECS.

CITY OF MILWAUKIE TRAFFIC CONTROL NOTES:

- ALL SIGNING, STRIPING AND PERMANENT BARRICADES TO BE INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS FOR THE WORK IN THE RIGHT-OF-WAY AT THE PRE-CONSTRUCTION MEETING.
- ALL TRAFFIC CONTROL MEASURES SHALL CONFORM WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LATEST EDITION OF THE OREGON TEMPORARY TRAFFIC CONTROL HANDBOOK (OTTCH) FOR OPERATIONS OF THREE DAYS OR LESS.
- THESE TRAFFIC CONTROL PLANS ARE SCHEMATIC IN NATURE AND ARE CONSIDERED THE MINIMUM NECESSARY TO ADEQUATELY MANAGE TRAFFIC DURING CONSTRUCTION.
- EACH TRAFFIC CONTROL DETAIL IS TO BE IMPLEMENTED WITH THE ASSOCIATED TYPE OF WORK. FOR EXAMPLE, THE "WATER MAIN & SERVICE INSTALLATION" DETAIL CAN BE FLIPPED TO USE ON THE OPPOSITE SIDE OF THE ROADWAY AND THE "LANE CLOSURE AT INTERSECTION WITH FLAGGING" DETAIL CAN BE FLIPPED TO USE ON ANY OF THE FOUR INTERSECTION CORNERS.
- CONTRACTOR SHALL INSTALL AND MAINTAIN ALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THIS PLAN THROUGHOUT THE DURATION OF CONSTRUCTION.
- ALL TRAVEL LANES, STREETS, DRIVEWAYS, AND POINTS OF ACCESS SHALL BE OPENED TO VEHICULAR TRAFFIC AT THE END OF EACH WORK DAY. ALL AREAS OF EXCAVATION WITHIN THE TRAVELED WAY SHALL BE TEMPORARILY COVERED WITH STEEL PLATES OR BACKFILLED AND TEMPORARILY SURFACED WITH ASPHALT CONCRETE PATCHING UNTIL FINAL PAVING.
- CONTRACTOR SHALL PROVIDE VEHICULAR ACCESS TO SIDE STREETS AND DRIVEWAYS TO THE EXTENT PRACTICABLE. WHEN VEHICULAR ACCESS CANNOT BE PROVIDED, THE CONTRACTOR WILL NOTIFY THE AFFECTED BUSINESS / PROPERTY OWNER OF THE DATE AND DURATION OF THE INTERRUPTION, A MINIMUM OF 3 DAYS IN ADVANCE OF THE CLOSURE.
- SIGN LOCATIONS ARE APPROXIMATE. FINAL SIGN LOCATION SHALL BE DETERMINED BY PROJECT ENGINEER IN THE FIELD.
- TRAFFIC CONTROL SIGNS SHALL BE SIZED IN ACCORDANCE WITH CONVENTIONAL ROADWAY STANDARDS OF THE MUTCD.
- TRAFFIC CONTROL SIGNS SHALL BE SPACED IN ACCORDANCE WITH THE MUTCD AND OTTCH FOR 30 MPH VEHICULAR SPEEDS.
- LANE SHIFTING AND MERGER TAPERS SHALL HAVE A LENGTH NECESSARY TO ACCOMMODATE 30 MPH VEHICULAR SPEEDS.
- CONE LOCATIONS ARE SCHEMATIC AND DENOTE LANE LOCATIONS, LANE TAPERS, AND WORK AREAS AND DO NOT INDICATE THE NUMBER OF CONES TO BE PLACED. CONTRACTOR WILL PLACE CONES IN A NUMBER SUFFICIENT TO ADEQUATELY DELINEATE AND DIRECT TRAFFIC AROUND WORK AREAS.
- THE MINIMUM VEHICLE TRAVEL LANE WIDTH SHALL BE A 12-FOOT CLEAR DISTANCE PERPENDICULAR TO THE DIRECTION OF TRAVEL.
- CONTRACTOR TO PROVIDE TRAFFIC CONTROL PLAN FOR ASPHALT CONCRETE PAVING AT THE PRE-PAVING MEETING.
- WORK AT SIGNALIZED INTERSECTIONS REQUIRES FLAGGERS TO BE STATIONED AT EACH LEG OF THE INTERSECTION AND THE TRAFFIC SIGNAL TURNED OFF. CONTACT CLACKAMAS COUNTY AT 503 650-3735 TO SCHEDULE SIGNAL SHUT DOWNS.

CITY OF MILWAUKIE STORMWATER FACILITY NOTES:

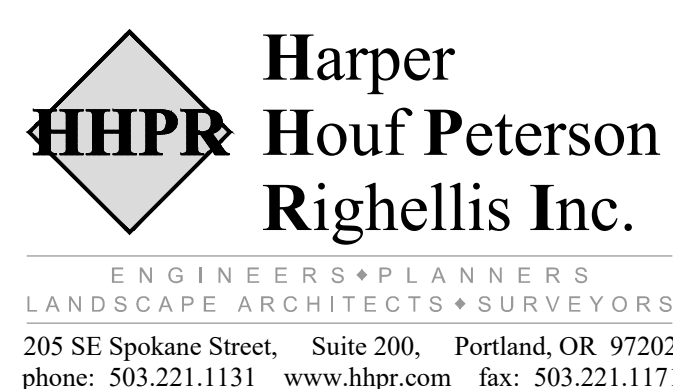
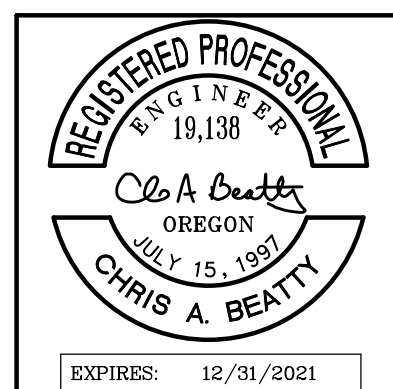
- INSTALL TOPSOIL IN A MANNER THAT ENSURES ADEQUATE INFILTRATION. PLACE IN TWO EQUAL LIFTS. LIFTS SHOULD NOT BE COMPACTED, BUT RATHER PLACED IN A MANNER TO REDUCE EXCESSIVE EROSION OR SETTLEMENT. LIFTS MAY BE LIGHTLY WATERED TO ENCOURAGE NATURAL COMPACTION OR, IF NECESSARY ROLLED WITH A WATER-FILLED LANDSCAPE ROLLER. SLIGHTLY OVERFILL THE FACILITY ABOVE PROPOSED FINISH GRADE TO ACCOMMODATE NATURAL SETTLEMENT.
- FOLLOWING SWALE CONSTRUCTION, PLANTING SHALL OCCUR BETWEEN SEPTEMBER 1 AND NOVEMBER 1, OR BETWEEN FEBRUARY 1 AND APRIL 15. IF CONSTRUCTION IS COMPLETED DURING THESE TIME PERIODS, PLANTING SHALL OCCUR IMMEDIATELY. IF CONSTRUCTION IS COMPLETED OUTSIDE OF THESE TIME PERIODS, TOPSOIL SHALL BE COVERED ENTIRELY WITH NORTH AMERICAN GREEN C125BN EROSION CONTROL FABRIC, SECURED WITH 12" WOODEN ECOSTAKES (18" ON-CENTER), PLANTS SHALL BE INSTALL THROUGH HOLES CUT IN THE EROSION CONTROL FABRIC, AND FABRIC SHALL BE RESTAKED SECURELY FOR STABILIZATION AND SOIL COVERAGE FOLLOWING PLANTING.
- CONTRACTOR TO PLACE EROSION CONTROL FABRIC OVER STORMWATER FACILITY TO PREVENT EROSION DURING WET WEATHER CONDITIONS. FABRIC SHALL BE 100% BIODEGRADABLE COIR FABRIC (NORTH AMERICAN C125BN OR APPROVED EQUAL).
- FACILITY AND SURROUNDING SITE WILL BE STABILIZED TO PREVENT MEASURABLE SEDIMENT FROM ERODING ON THE SITE AND INTO ADJACENT AREAS.

CITY OF MILWAUKIE WATER NOTES:

- ALL WORK AND MATERIALS SHALL COMPLY WITH CITY OF MILWAUKIE STANDARDS, OREGON HEALTH AUTHORITY ADMINISTRATIVE RULES, CHAPTER 333, AND AWWA STANDARDS.
- CONTRACTOR SHALL POTHOLE ALL UTILITY CROSSINGS PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION, SIZE, DEPTH AND TYPE OF ALL UTILITIES AND INTERFERENCES SITUATED ALONG ROUTE OF PROPOSED CONSTRUCTION PRIOR TO COMMENCEMENT OF EXCAVATION, FABRICATION AND INSTALLATION. CONTRACTOR SHALL, AT THEIR EXPENSE AND COST, CONSTRUCT ALL IMPROVEMENTS IN SUCH A MANNER AS WILL PROTECT ALL EXISTING UNDERGROUND UTILITIES AND, IN THE EVENT OF ANY CONFLICTS, SHALL NOTIFY THE PROJECT ENGINEER.
- CONTRACTOR SHALL ATTEND A PRE-CONNECTION MEETING WITH CITY PRIOR TO START OF CONNECTION WORK. THE CONTRACTOR WILL MEET WITH THE CITY ON PROJECT SITE TO VERIFY PROPER MATERIALS PRIOR TO ANY WATER INSTALLATION. THE CONTRACTOR MUST PROVIDE A CHLORINATION AND DECHLORINATION PLAN TO THE CITY FOR APPROVAL THAT COMPLIES WITH AWWA REGULATIONS.
- CONTRACTOR MAY NEED TO TRENCH SUBSTANTIALLY AHEAD IN ORDER TO DETERMINE IF THERE ARE ANY UTILITY CONFLICTS AND AVOID REMOVING PIPING WITH FIELD-LOK. CONTRACTOR TO PLAN AND BUDGET ACCORDINGLY. THIS WORK SHALL BE CONSIDERED INCIDENTAL.
- WATER METERS TO BE FURNISHED AND INSTALLED BY CITY UNLESS OTHERWISE INDICATED. CONTRACTOR TO FURNISH AND INSTALL ALL FITTINGS, METER BOX, AND LID PER CITY OF MILWAUKIE STANDARDS.
- GATE VALVES 4" THROUGH 8" SHALL BE RESILIENT WEDGE, NON-RISING STEM WITH "O" RING PACKING, COMPLYING WITH THE AWWA CLASS C SPECIFICATIONS.
- BUTTERFLY VALVES SHALL BE NON-RISING STEM WITH "O" RING PACKING AND COMPLY WITH THE AWWA CLASS C SPECIFICATIONS.
- RETAINER GLANDS ARE REQUIRED FOR ALL MECHANICAL JOINT CONNECTIONS. MEGALUG RETAINER GLANDS SHALL BE USED FOR DUCTILE IRON PIPE CONNECTIONS. GRIPPING RETAINER GLANDS SHALL BE USED FOR CAST IRON PIPE CONNECTIONS.
- THRUST BLOCKS SHALL NOT BE USED ON TEES, BENDS OR BLOW-OFFS, UNLESS OTHERWISE NOTED, PROVIDED THAT ALL RESTRAINT FITTINGS ARE INSTALLED WITH MANUFACTURER SPECIFIED TORQUE. CONTRACTOR IS RESPONSIBLE FOR HAVING A FUNCTIONAL TORQUE WRENCH ON-SITE. CONTRACTOR SHALL PLACE 8-MIL PLASTIC SHEETING BETWEEN THRUST BLOCKS AND PIPE FITTINGS. IF A THRUST BLOCK IS USED, SEE OSD RD 250 FOR ADDITIONAL REQUIREMENTS.
- PIPE BEDDING AND PIPE ZONE SHALL BE CLASS B AND COMPACTED PER OSSC STANDARDS IN ALL PUBLIC RIGHTS-OF-WAY OR PAVED AREAS IN THE PROJECT. TRENCH BACKFILL TO BE CLASS A IN LANDSCAPE AREAS AND CLASS B IN ALL OTHER AREAS WITHIN THE PUBLIC ROW.
- ALL BOLTED TOGETHER JOINTS AND VALVES SHALL HAVE CORROSION RESISTANT 8MIL WRAP.
- CITY WATER CREWS HAVE THE RIGHT TO REMOVE OR KEEP ANY OR ALL OLD WATER INFRASTRUCTURE THAT IS EXPOSED BY CONTRACTOR.
- THE MAXIMUM ALLOWABLE JOINT DEFLECTION SHALL NOT EXCEED 3".
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPER SEPARATION BETWEEN SANITARY LINES AND WATERLINES AS REQUIRED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY AND STATE DEPARTMENT OF HEALTH.
- CONTRACTOR SHALL REQUEST WATER SYSTEM SHUT DOWN FROM THE CITY OF MILWAUKIE PROJECT MANAGER AT LEAST TEN (10) BUSINESS DAYS IN ADVANCE OF ANY PLANNED SERVICE DISRUPTION. UPON APPROVAL, CONTRACTOR WILL PROVIDE NOTIFICATION (CITY WILL PROVIDE DOUR HANGERS TO BE DISTRIBUTED) OF SERVICE DISRUPTION TO THE AFFECTED WATER CUSTOMERS FIVE (5) CALENDAR DAYS IN ADVANCE OF SERVICE DISRUPTIONS.
- WATER LINE FLUSHING SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF MILWAUKIE STANDARDS. CONTRACTOR SHALL PROVIDE ALL HOOK-UPS, PIPING, HOSES, AND ALL OTHER EQUIPMENT FOR FLUSHING. CONTRACTOR TO COORDINATE FLUSHING WITH CITY OF MILWAUKIE PROJECT MANAGER. CITY INSPECTOR TO BE ON SITE TO MEASURE VELOCITY PRODUCED.
- HYDROSTATIC TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF MILWAUKIE STANDARDS. THE TEST SHALL CONFORM WITH AWWA C600, SECTION 4 WITH THE FOLLOWING MODIFICATIONS. THE TEST PRESSURE SHALL BE 180 PSI OR 1.5 TIMES THE NORMAL WORKING PRESSURE, WHICHEVER IS HIGHER, MEASURED AT THE POINT OF HIGHEST ELEVATION. THE DURATION SHALL BE 60 MINUTES WITH NO LOSS IN PRESSURE. TESTING SHALL BE MONITORED BY THE CITY OF MILWAUKIE INSPECTOR. DISINFECTION OF THE LINE SHALL BE PERFORMED AFTER THE HYDROSTATIC TESTING. CONTRACTOR SHALL USE A PRESSURE GAUGE THAT READS IN ONE POUND INCREMENTS.
- DISINFECTION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF MILWAUKIE STANDARDS AND CONFORM TO AWWA C651. PIPELINES SHALL BE FLUSHED AND DISINFECTED BEFORE PLACING INTO SERVICE. DISCHARGING OF THE CHLORINATED WATER USED FOR DISINFECTION INTO SURFACE WATERS IS PROHIBITED. APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS CONCERNING DISCHARGE SHALL BE FOLLOWED. OREGON STATE HEALTH DIVISION BACTERIOLOGICAL TESTS SHALL BE TAKEN BY THE CITY OF MILWAUKIE.
- ALL NEW WATERLINES SHALL PASS HYDROSTATIC TESTING AND DISINFECTION PRIOR TO CONNECTION TO THE EXISTING SYSTEM UNLESS OTHERWISE INDICATED OR APPROVED. CONTRACTOR TO INSTALL TEMPORARY BLOW-OFFS AT THE ENDS OF THE WATER MAINS TO PERFORM TESTING AND DISINFECTION.
- DUE TO THE AGE OF THE EXISTING WATERLINES AND VALVES, LEAKAGE OF EXISTING FACILITIES MAY OCCUR DURING CONSTRUCTION OF TIE-INS. CONTRACTOR SHALL HAVE ON-SITE PUMPS ADEQUATE TO KEEP TRENCHES DE-WATERED AND WILL FOLLOW ALL CITY STORMWATER REQUIREMENTS FOR DEWATERING.
- OPERATION OF ALL EXISTING VALVES TO ISOLATE WATERLINES FOR THE REQUIRED WORK SHALL BE CONDUCTED BY CITY OF MILWAUKIE EMPLOYEES ONLY.
- "STICK BY STICK" CONSTRUCTION MAY BE REQUIRED IN AREAS WHERE PROPOSED WATERLINE IS CLOSE TO EXISTING WATER MAIN. IF TRENCH OF THE EXISTING WATERLINE IS FALLING INTO THE NEW CONSTRUCTION TRENCH, OR IF THE EXISTING WATERLINE IS EXPOSED, "STICK BY STICK" CONSTRUCTION WILL BE REQUIRED.
- ALL TEES, ELBOWS, CHANGES IN PIPE DIRECTION AND PIPE CONNECTIONS THEMSELVES, SHALL HAVE PUSH-ON RUBBER GASKETED JOINTS AND BE INSTALLED USING FIELD-LOK OR APPROVED EQUAL LOCKING GASKET. PUSH-ON AND MECHANICAL PIPE JOINTS SHALL CONFORM TO ANSI/AWWA SPECIFICATION C111/A21.11 AND FLANGED JOINTS SHALL CONFORM TO ANSI/AWWA C115/A21.15. THRUST BLOCKS SHALL NOT BE USED UNLESS CALLED OUT OR INDICATED.
- HOT TAPS SHALL HAVE A POURED-IN-PLACE CONCRETE THRUST BLOCK. CONTRACTOR SHALL PLACE 8-MIL PLASTIC SHEETING BETWEEN THRUST BLOCKS AND PIPE FITTINGS. CITY MUST APPROVE SUB-CONTRACTOR DOING DIRECT TAPPING ON LIVE CITY WATER MAINS.

P:\MWK\City of Milwaukie\MWK-28 Linwood Avenue\MWK28-DWG\Sheets\MWK28-1 COVER SHEET.dwg

DESIGNED:	CAB	
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DATE:	9/1/2020	
R E V I S I O N S		
DATE	NO.	DESCRIPTION



<p>GENERAL NOTES & LEGEND</p> <p>SE LINWOOD AVENUE</p> <p>MILWAUKIE, OREGON</p>	<p>SHEET NO.</p> <p style="font-size: 2em;">1.2</p> <p>JOB NO.</p> <p>MWK-28</p>
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CITY OF MILWAUKIE WATER NOTES CONTINUED:

- 25. IF CONNECTING TO CITY FIRE HYDRANT FOR TEMPORARY WATER, CONTRACTOR TO RENT BACKFLOW PREVENTER AND HYDRANT METER THROUGH THE CITY. CITY PUBLIC WORKS WILL INSTRUCT CONTRACTOR ON USE. CONTRACTOR TO PROVIDE DEPOSIT AND PAPERWORK TO CITY BUILDING DEPARTMENT. CONTRACTOR IS RESPONSIBLE FOR SECURING METER AND BACKFLOW EACH NIGHT TO PREVENT DAMAGE OR THEFT.
- 26. WHERE NEW WATER METER, SERVICES AND HYDRANTS ARE BEING INSTALLED, SIDEWALK PANELS SHALL BE CUT IN FULL AND REPLACED. DISPOSAL IS RESPONSIBILITY OF CONTRACTOR. SIDEWALK SCORING SHALL MATCH EXISTING SCORING. CONTRACTOR SHALL PLACE AND MAINTAIN TEMPORARY BACKFILL OR TEMPORARY TRAFFIC STEEL PLATE ON OPEN SIDEWALK AREA FOR DURATION OF PROJECT, UNTIL SIDEWALK IS READY TO BE POURED.
- 27. THE CONTRACTOR WILL NOTIFY THE CITY WHEN ANY EXCAVATION WORK CAN COMPROMISE ANY RESTRAINT OR THRUSTING OF WATER MAINS.
- 28. THE CONTRACTOR MUST MAINTAIN PIPE PLUGS IN NEW WATER MAIN DURING MAINLINE CONSTRUCTION.
- 29. PROVIDE AND INSTALL A RESTRAINED CAP/PLUG ON ALL ABANDONED OLD MAINS AND ACCURATELY DOCUMENT ON AS-BUILTS.
- 30. TRACER WIRE TO BE INSTALLED ON ALL PUBLIC OWNED PLASTIC WATER PIPES PER OSD RD 300 AND RD 336.
- 31. ANY LEADED FITTINGS OR SERVICE LINES EXPOSED DURING WORK THAT WERE NOT PREVIOUSLY IDENTIFIED FOR REPLACEMENT NEED TO BE COMMUNICATED TO THE PROJECT MANAGER IMMEDIATELY.
- 32. WHEN ADJUSTING GRADE AT EXISTING FIRE HYDRANT, IF BARREL EXPOSURE BETWEEN FLANGE AND FINISHED GRADE WILL EXCEED 6", A SHORTER BARREL SHALL BE INSTALLED. IF FLANGE WILL BE BELOW FINISHED GRADE, A RISER SHALL BE INSTALLED.

TOPOGRAPHIC LEGEND

EXISTING	
— STM —	STORM SEWER LINE
— SAN —	SANITARY SEWER LINE
— W —	WATER LINE
— G —	GAS LINE
— OW —	OVERHEAD WIRE
— X — X —	FENCE LINE, TYPE AS NOTED
— T —	TELEPHONE LINE
— E —	ELECTRIC LINE
—>—>—>—	UTILITY LINE IS BELIEVED TO CONTINUE, CONNECTION NOT LOCATED OR UNKNOWN
SS	SANITARY SEWER MANHOLE
SD	STORM SEWER MANHOLE
CB	CATCH BASIN
DI	DITCH INLET
CI	CURB INLET
AD	AREA DRAIN
WH	WATER MANHOLE
WV	WATER VALVE
FH	FIRE HYDRANT
WM	WATER METER
IB	IRRIGATION BOX
GWS	GAS WARNING SIGN
GV	GAS VALVE
GM	GAS METER
PM	POWER METER
PR	POWER RISER
PC	POWER CABINET
EB	ELECTRIC BOX
CTR	CABLE TELEVISION RISER
TB	TELEPHONE BOX
TM	TELEPHONE MANHOLE
TR	TELEPHONE RISER
GS	EXISTING GRAVEL SURFACE
UR	UNKNOWN RISER/CABINET
GW	GUY WIRE
GL	GROUND LIGHT
LP	LIGHT POLE
SL	STREET LIGHT
UP	UTILITY POLE
UP-U	UTILITY POLE W/ UNDERGROUND UTILITIES
UP-S	UTILITY POLE W/ STREET LIGHT
UP-US	UTILITY POLE W/ UNDERGROUND UTILITIES AND STREET LIGHT
SPS	SINGLE POST SIGN
GP	GATE POST
B	BOLLARD
MB	MAIL-BOX
SR	SHRUB / BUSH (SIZE AS NOTED)
CT	CONIFEROUS TREE (APPROXIMATE DIAMETER BREST HIGH AS NOTED)
DT	DECIDUOUS TREE (APPROXIMATE DIAMETER BREST HIGH AS NOTED)
ST	STUMP - APPROXIMATE DIAMETER ON TOP, OR DBH, IF OVER 4" TALL.
TSB	TRAFFIC SIGNAL BOX
TSCP	TRAFFIC SIGNAL CABINET POLE WITH PEDESTRIAN PUSH BUTTON
R	ROCK (SIZE AS NOTED)
PROPOSED	
"L" - LINWOOD AVE	"M1" - MONTGOMERY ST
"C" - CEDARCREST DR	"M2" - MONROE ST
"A" - ASPEN ST	"S" - SAWCUT
"F" - FURNBERG ST	"TE" - THICKENED EDGE
— — — — —	CONSTRUCTION CENTERLINE
— — — — —	ROW / PROPERTY LINE
— — — — —	STORM PIPE
— — — — —	REMOVE EXISTING STORM PIPE
— — — — —	SIDEWALK THICKENED EDGE
— — — — —	WALL
— — — — —	DAYLIGHT CATCH LINE
SD	MANHOLE
CB	G-2 CATCH BASIN
CI	CURB INLET CATCH BASIN
AD	AREA DRAIN
WM	WATER METER
B	BOLLARD
X	REMOVE STORM STRUCTURE
PC	PROPOSED CONCRETE
SP	PROPOSED STORM PLANTER
GR	PROPOSED GRAVEL
PA	PROPOSED PERVIOUS ASPHALT PATHWAY
AC	PROPOSED AC
TW	PROPOSED TACTICAL WARNING

P:\MWK\City of Milwaukie\MWK-28 Linwood Avenue\MWK28-DWG\Sheets\MWK28-1 COVER SHEET.dwg

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DATE:	9/1/2020	
DATE	NO.	DESCRIPTION
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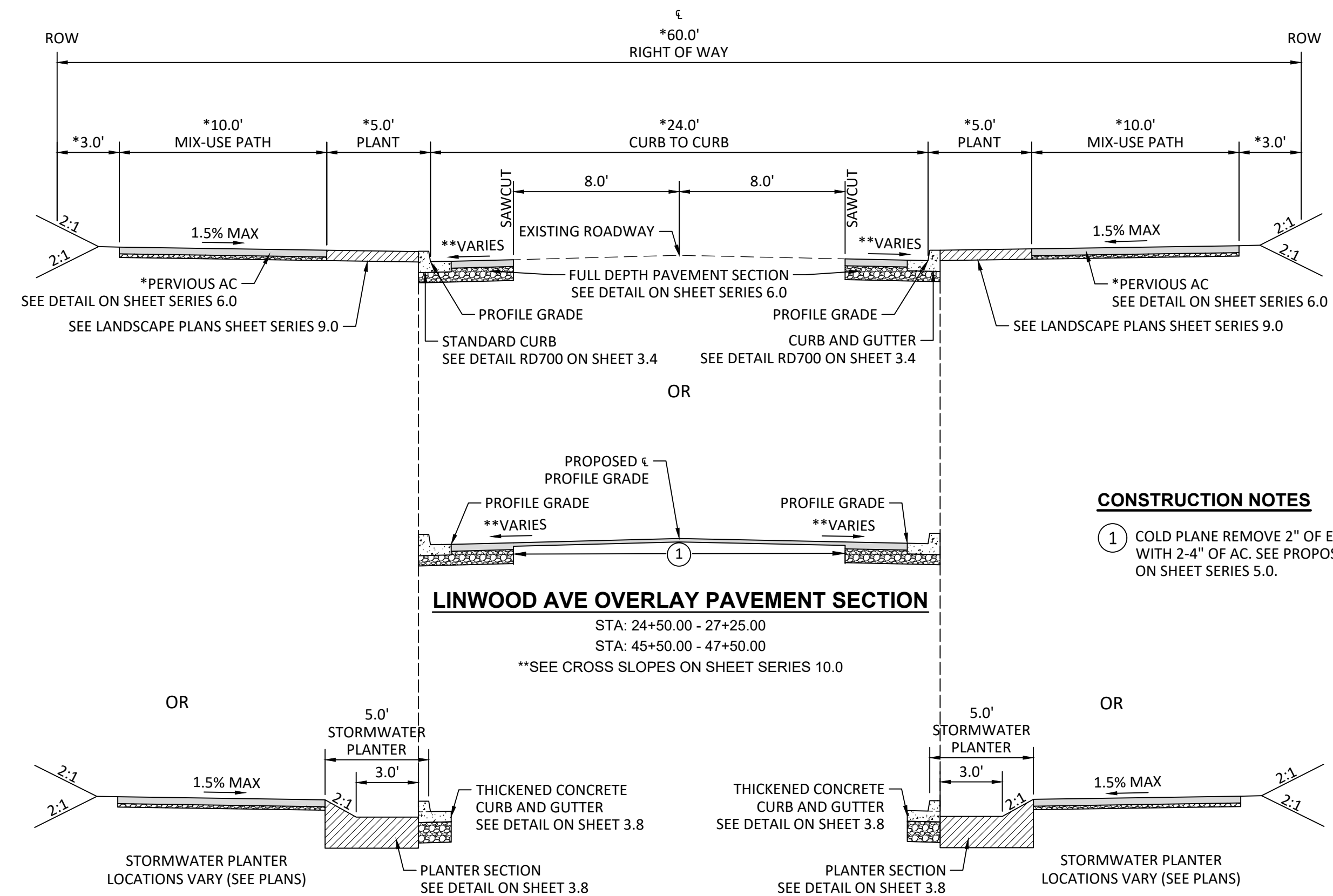
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 LANDSCAPE ARCHITECTS • SURVEYORS
 205 SE Spokane Street, Suite 200, Portland, OR 97202
 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

GENERAL NOTES & LEGEND
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	1.3
JOB NO.	MWK-28

TYPICAL SECTIONS SHOWN
(SEE SHEET SERIES 6.0 FOR LOCATIONS OF VARIATION)

NOTE: DAYLIGHT TO BE 2:1 MAX SLOPE UNLESS OTHERWISE SPECIFIED ON PLAN. SEE ROADWAY PLAN AND PROFILE ON SHEET SERIES 5.0 AND CROSS SECTIONS ON SHEET SERIES 10.0 FOR MORE INFORMATION.



CONSTRUCTION NOTES

- 1 COLD PLANE REMOVE 2" OF EXISTING AC. REPLACE WITH 2-4" OF AC. SEE PROPOSED ϵ PROFILE GRADE ON SHEET SERIES 5.0.

LINWOOD AVE OVERLAY PAVEMENT SECTION

STA: 24+50.00 - 27+25.00
STA: 45+50.00 - 47+50.00

**SEE CROSS SLOPES ON SHEET SERIES 10.0

LINWOOD AVE TYPICAL SECTION

STA: TYPICAL FOR ALL LOCATIONS NOT SPECIFIED ON SHEET 2.1

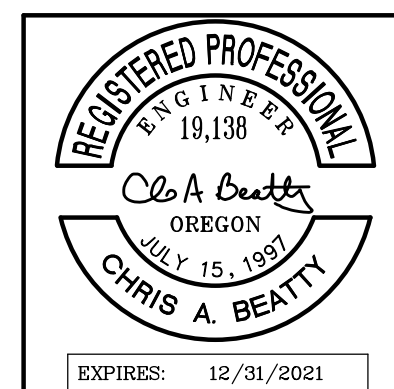
*SEE LOCATIONS OF VARIATION ON SHEET SERIES 6.0

**SEE CROSS SLOPES ON SHEET SERIES 10.0

SCALE: 1"=5'

P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK28-DWG(Sheets)\MWK28-2.0 TYPICAL SECTIONS.dwg

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DATE:	9/1/2020	
REVISIONS		
DATE	NO.	DESCRIPTION



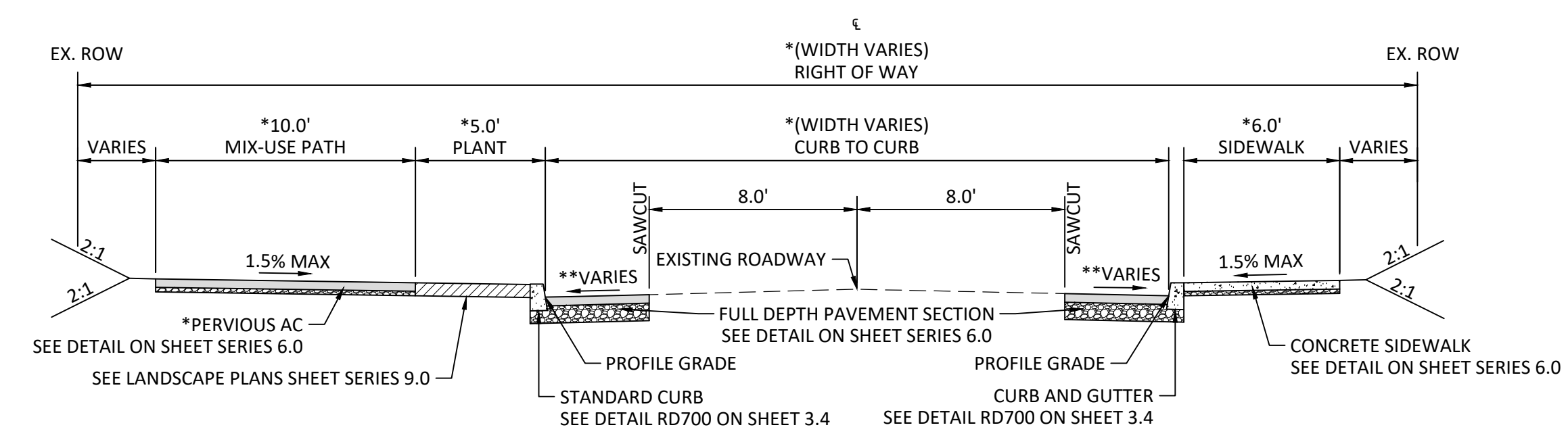
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TYPICAL SECTIONS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	2.0
JOB NO.	MWK-28

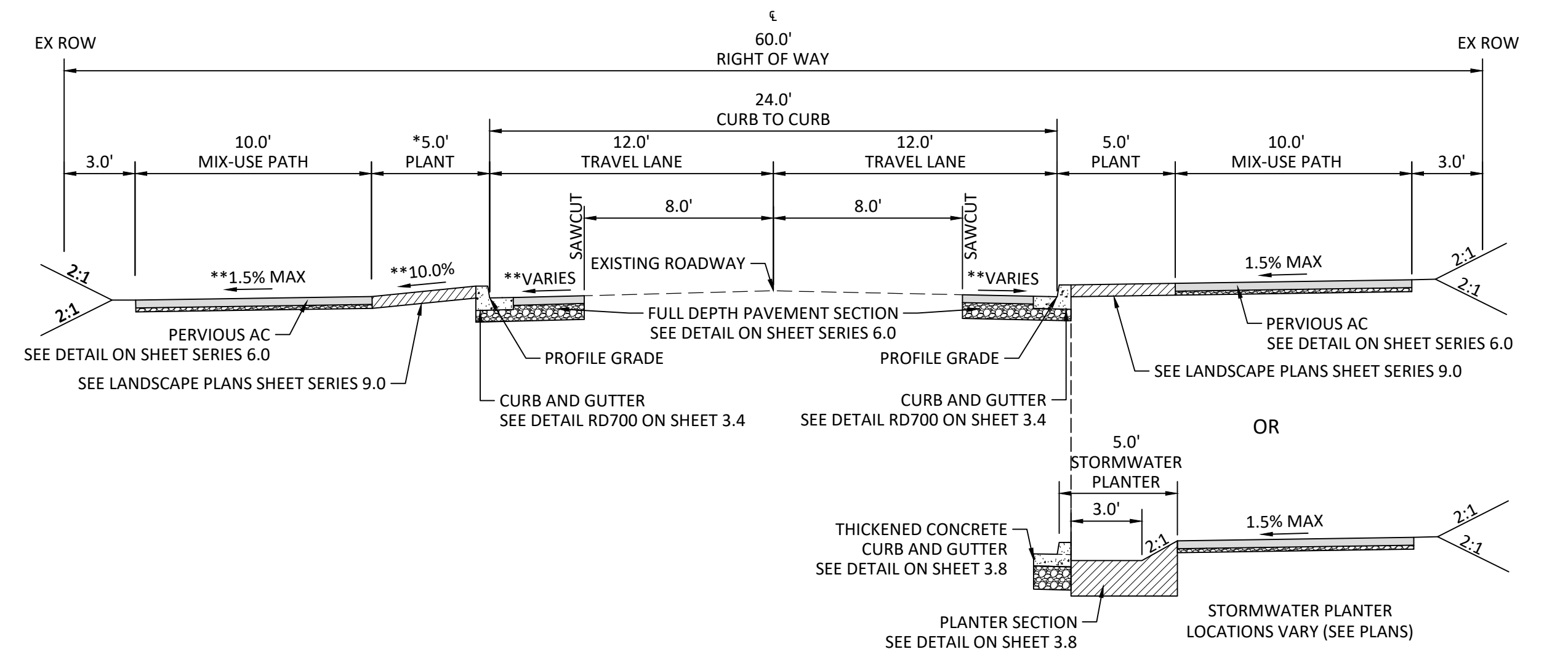
TYPICAL SECTIONS SHOWN
(SEE SHEET SERIES 6.0 FOR LOCATIONS OF VARIATION)

NOTE: DAYLIGHT TO BE 2:1 MAX SLOPE UNLESS OTHERWISE SPECIFIED ON PLAN. SEE ROADWAY PLAN AND PROFILE ON SHEET SERIES 5.0 AND CROSS SECTIONS ON SHEET SERIES 10.0 FOR MORE INFORMATION.



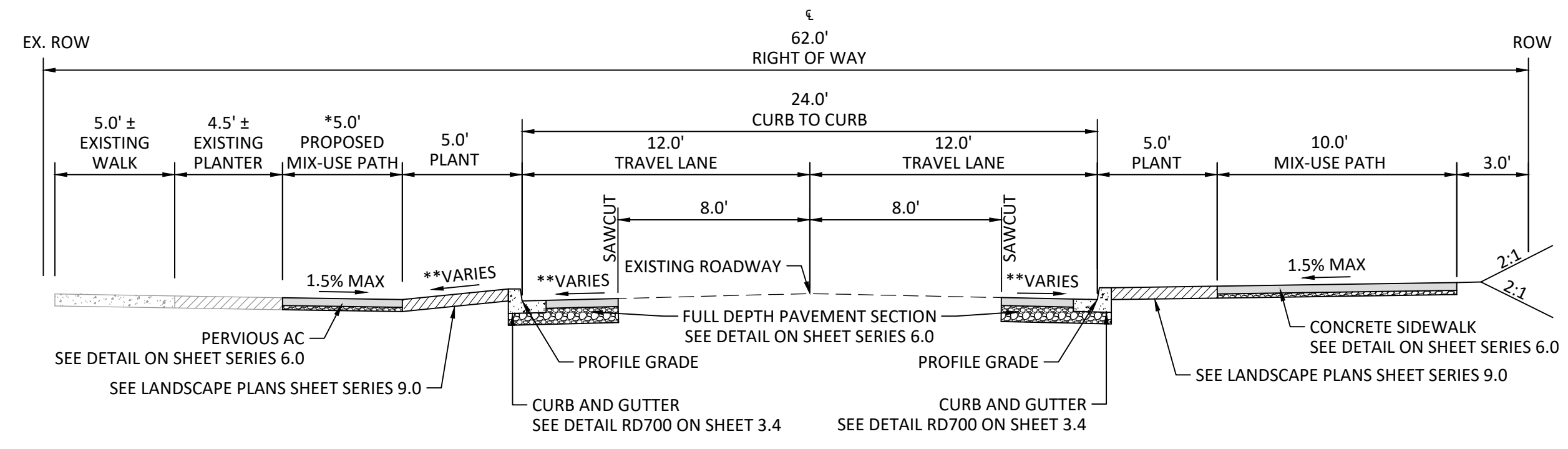
LINWOOD AVE TYPICAL SECTION

STA: 12+30.92 - 14+40.78
*SEE LOCATIONS OF VARIATION ON SHEET SERIES 6.0
**SEE CROSS SLOPES ON SHEET SERIES 10.0
SCALE: 1"=5'



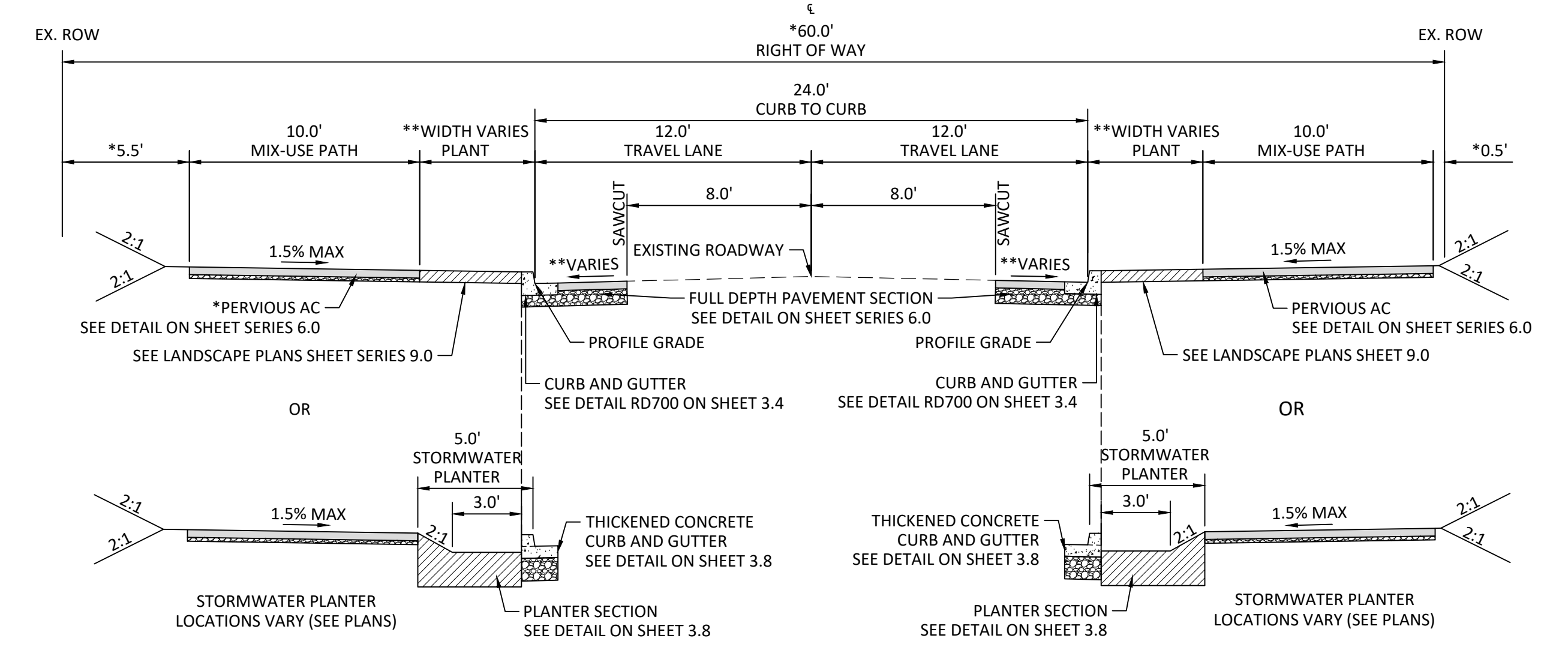
LINWOOD AVE TYPICAL SECTION

STA: 21+51.51 - 24+50.00
*SEE LOCATIONS OF VARIATION ON SHEET SERIES 6.0
**SEE CROSS SLOPES ON SHEET SERIES 10.0
SCALE: 1"=5'



LINWOOD AVE TYPICAL SECTION

STA: 28+67.39 - 31+64.72
*SEE LOCATIONS OF VARIATION ON SHEET SERIES 6.0
**SEE CROSS SLOPES ON SHEET SERIES 10.0
SCALE: 1"=5'

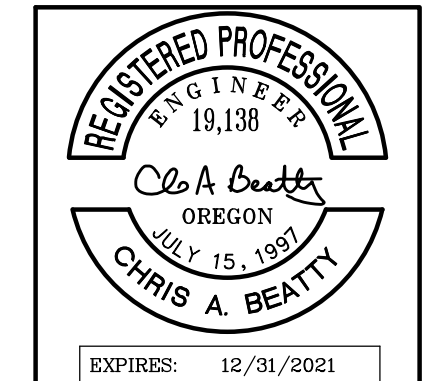


LINWOOD AVE TYPICAL SECTION

STA: 39+03.71 - 44+50.02
*SEE LOCATIONS OF VARIATION ON SHEET SERIES 6.0
**SEE CROSS SLOPES ON SHEET SERIES 10.0
SCALE: 1"=5'

P:\MWK (City of Milwaukie)\MWK28-DWG(Sheets)\MWK28-2.0 TYPICAL SECTIONS.dwg

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DATE	NO.	DESCRIPTION



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TYPICAL SECTIONS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	2.1
JOB NO.	MWK-28

P:\MWK\City of Milwaukie\MWK28 (Linwood Avenue)\MWK28-DWG(Sheets)\MWK28-3.0 DETAILS.dwg

"A" (in)	"B" (in)	"C" (in)	"D" (in)
4	10	4	8
6	10	4	8
8	10	6	10
10	10	6	10
12	12	6	10
15	12	6	10
18	16	6	12
21	16	6	12
24	18	6	12
30	18	6	12
36	24	6	14
42	24	6	14
48	24	6	14
54	24	6	14
60	24	6	14
66	24	6	14
72	24	6	14

For pipes over 72" diameter, see general note 3.

GENERAL NOTES FOR ALL DETAILS:

- Surfacing of paved areas shall comply with street cut Std. Dwg. RD302.
- For pipe installation in embankment areas where the trench method will not be used and the pipe is $\geq 36"$ diameter, increase dimension "B" to nominal pipe diameter.
- Pipes over 72" diameter are structures, and are not applicable to this drawing.
- See Std. Dwg. RD336 for tracer wire details (When required).

Effective Date: June 1, 2020 – November 30, 2020 RD300

MANHOLE WITH PRECAST FLAT SLAB TOP

MANHOLE WITH PRECAST CONICAL TOP

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

- All precast products shall conform to requirements of ASTM C478.
- Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
- See Std. Dwg. RD345 for pipe to manhole connections.
- See Std. Dwg. RD344 for manhole base section.
- Adjust 24" maximum.
- All connecting pipes shall have a tracer wire, or approved alternate.
- See Std. Dwg. RD336 for manhole steps.
- See Std. Dwg. RD336 for details not shown.
- See Std. Dwg. RD356 for manhole covers and frames, manhole adjustment rings, etc.
- Max. pipe diameter varies with pipe material.
- See Std. Dwg. RD342 for shallow manholes.
- Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.

Effective Date: June 1, 2020 – November 30, 2020 RD335

DETAIL "A" TRACER WIRE (See general note 6)

DETAIL "B" MANHOLE STEPS (See general note 7)

DETAIL "C" PRECAST CONICAL TOP OR PRECAST FLAT SLAB TOP AND MANHOLE STEPS ORIENTATION (See general note 7)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

- All precast products shall conform to requirements of ASTM C478.
- Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
- See Std. Dwg. RD345 for pipe to manhole connections.
- See Std. Dwg. RD344 for manhole base section.
- Adjust 24" maximum.
- All connecting pipes shall have a tracer wire, or approved alternate. Place tracer wire directly over pipe centerline and on top of the pipe zone material.
- Steps shall conform to requirements of ASTM C478. When H=42" or less omit steps. See Detail "C" for alignment of steps, and manhole cover and frame.
- See Std. Dwg. RD335 for details not shown.
- See Std. Dwg. RD336 for manhole covers and frames, manhole adjustment rings, etc.
- Max. pipe diameter varies with pipe material.
- See Std. Dwg. RD342 for shallow manholes.
- See project plans for details not shown.

Effective Date: June 1, 2020 – November 30, 2020 RD336

CONNECTION OF RIGID PIPE TO STRUCTURE

CONNECTION OF FLEXIBLE PIPE TO STRUCTURE

GENERAL NOTES FOR ALL DETAILS:

- See Std. Dwg. RD364, RD365, and RD366 for inlet details not shown.
- See appropriate standard drawings or special project details for other similar structures.
- Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
- Max. pipe diameter varies with pipe material.
- All connecting pipes shall have a tracer wire, or approved alternate.
- See Std. Dwg. RD336 for tracer wire details.
- When rigid pipe is used, the connecting pipe shall have a flexible, gasketed and unrestrained joint within 18" of manhole wall. Joint type varies with manufacturer.
- When flexible pipe is used, install resilient connectors conforming to requirements of ASTM C923.
- Pipe zone varies, see Std. Dwg. RD300.

Effective Date: June 1, 2020 – November 30, 2020 RD339

DATE	NO.	DESCRIPTION

DESIGNED: CAB
 DRAWN: HHPR
 CHECKED: CAB
 DATE: 9/1/2020

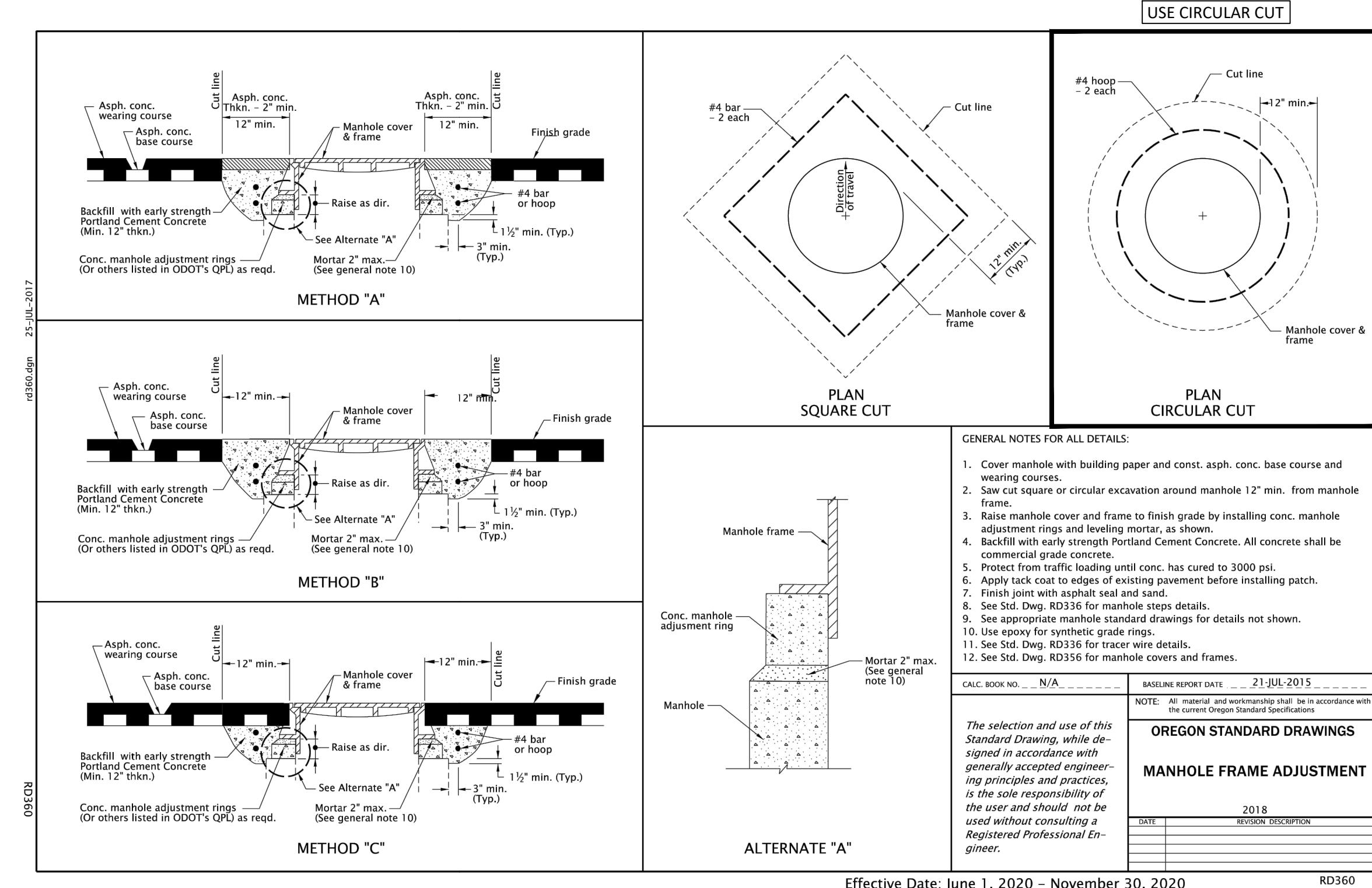
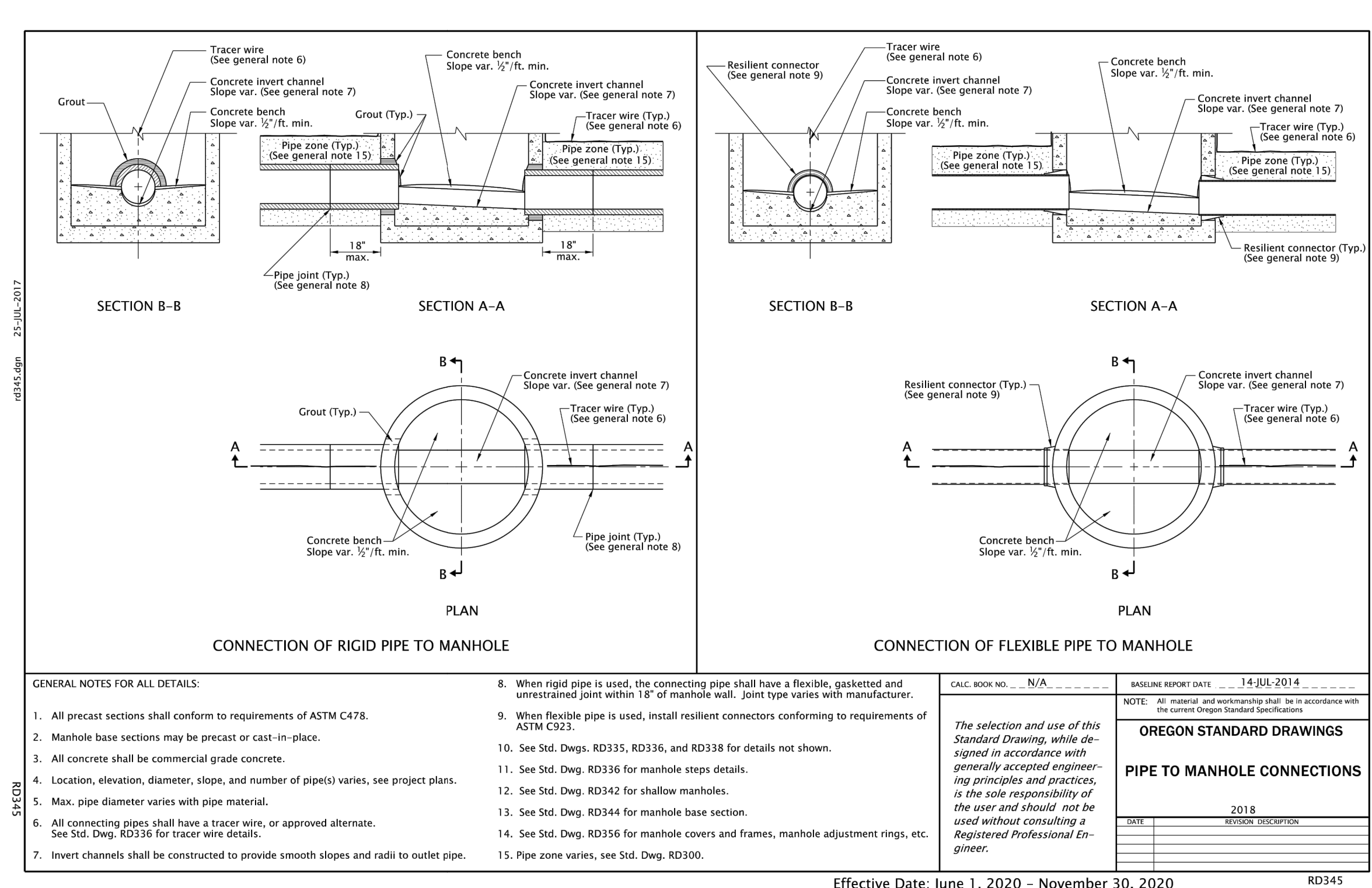
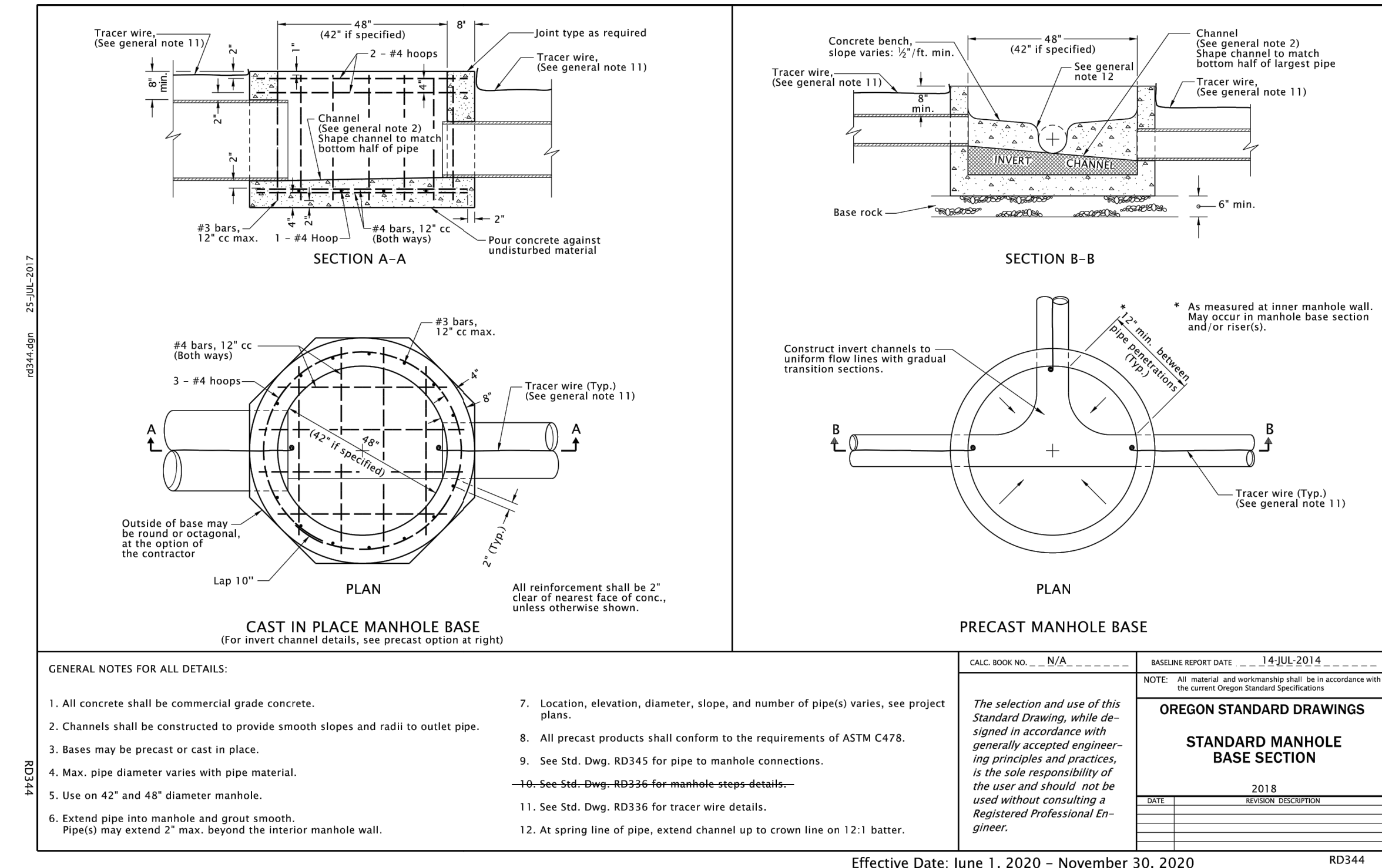
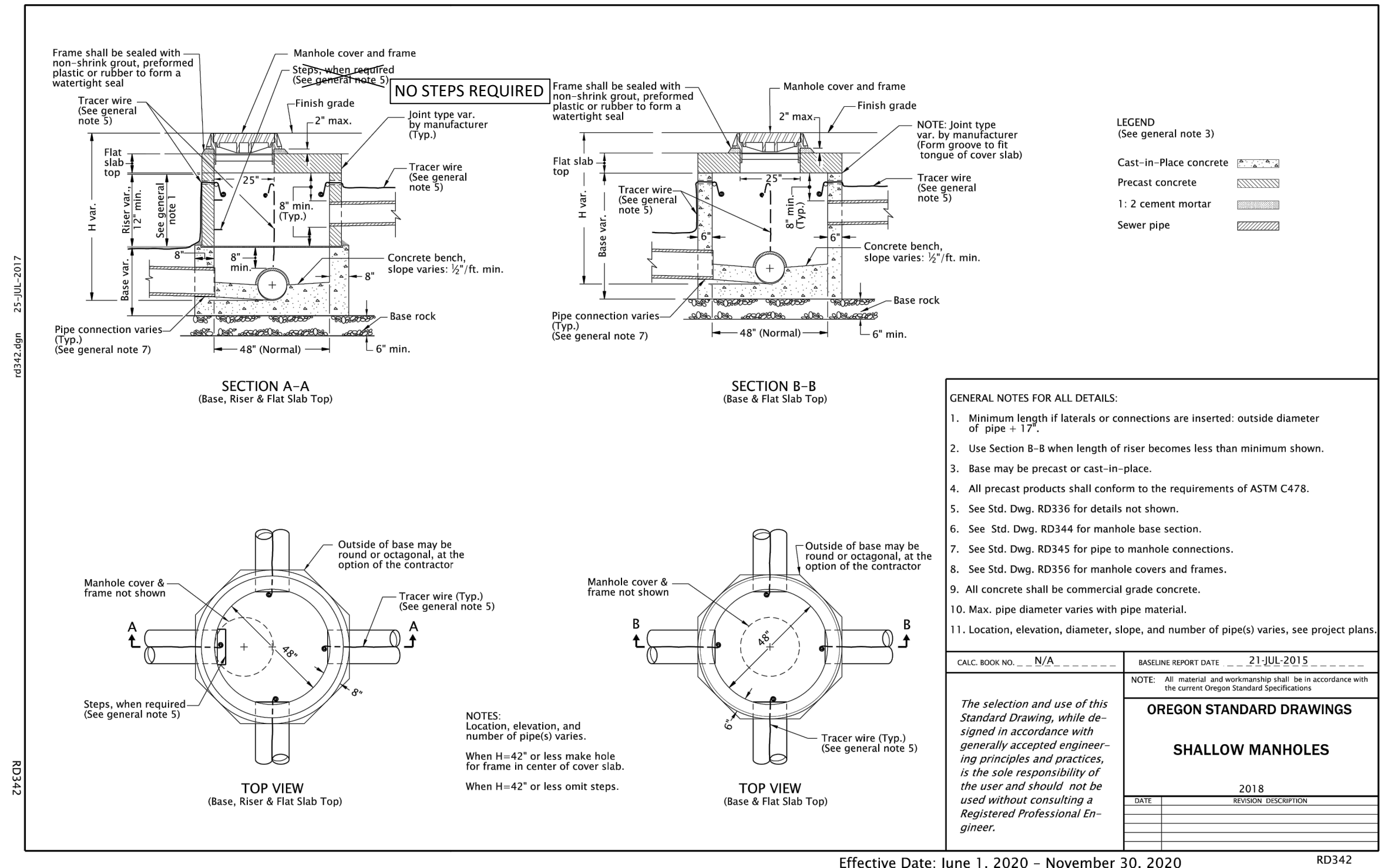


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DETAILS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO. **3.0**

JOB NO. MWK-28



DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020



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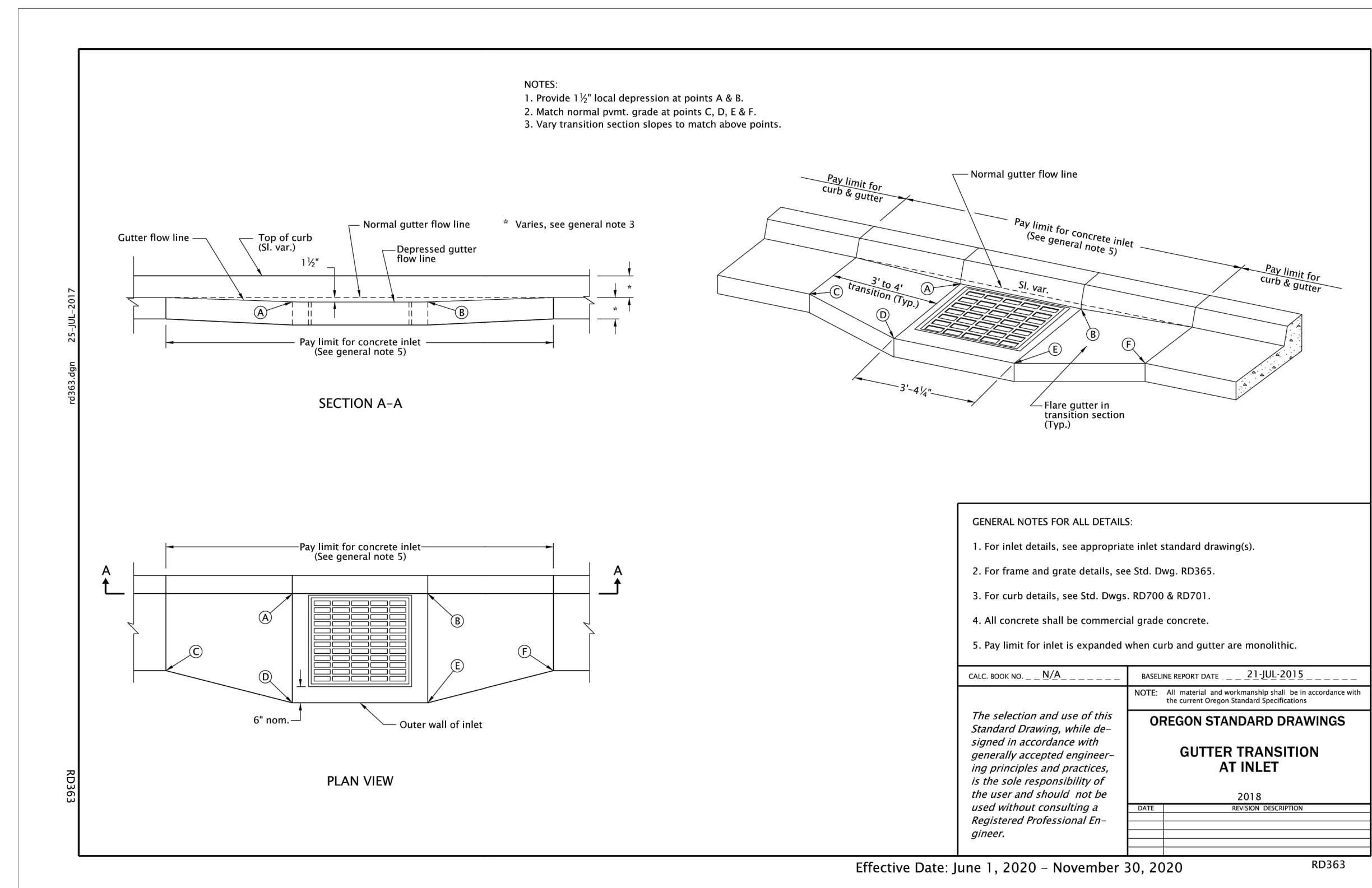
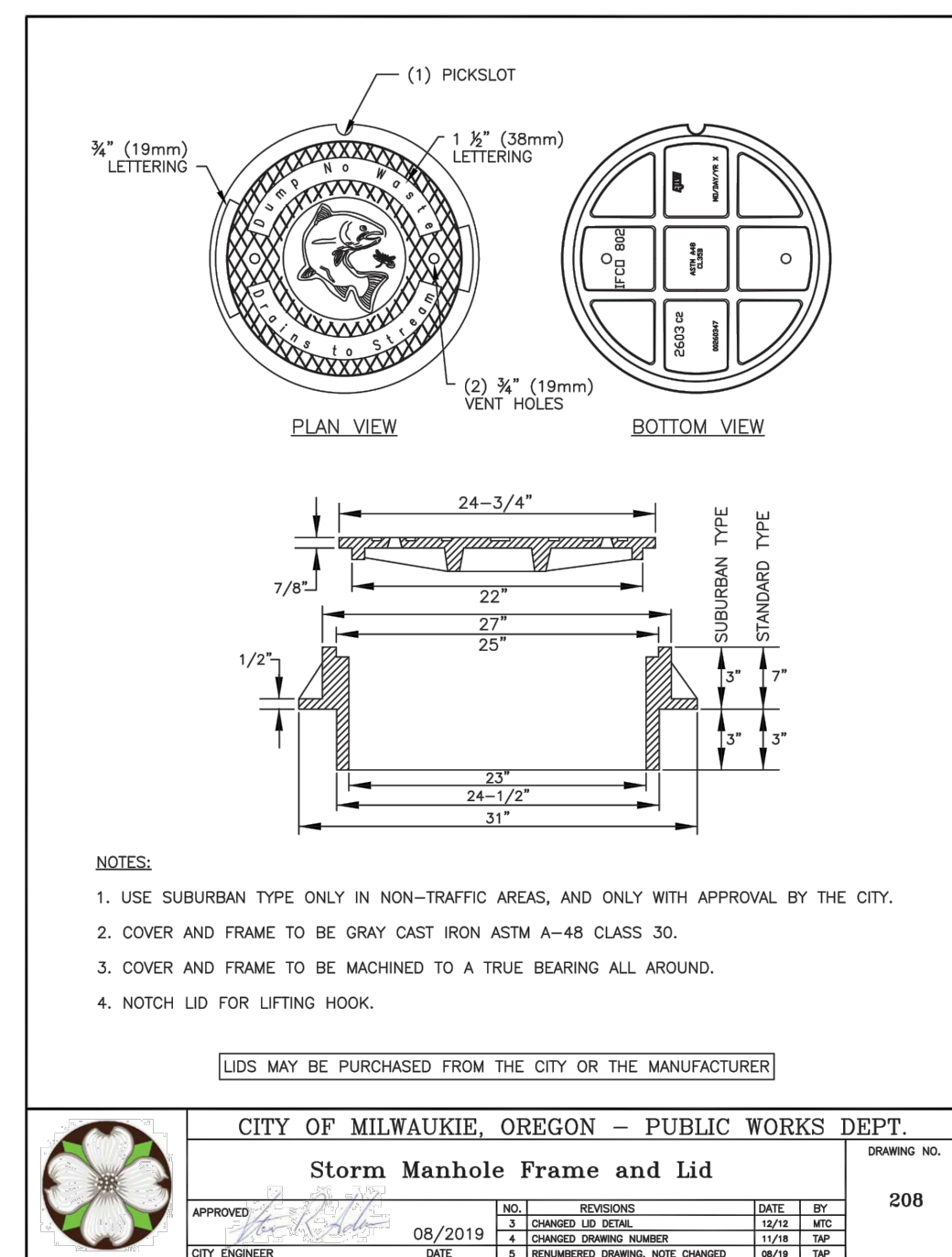
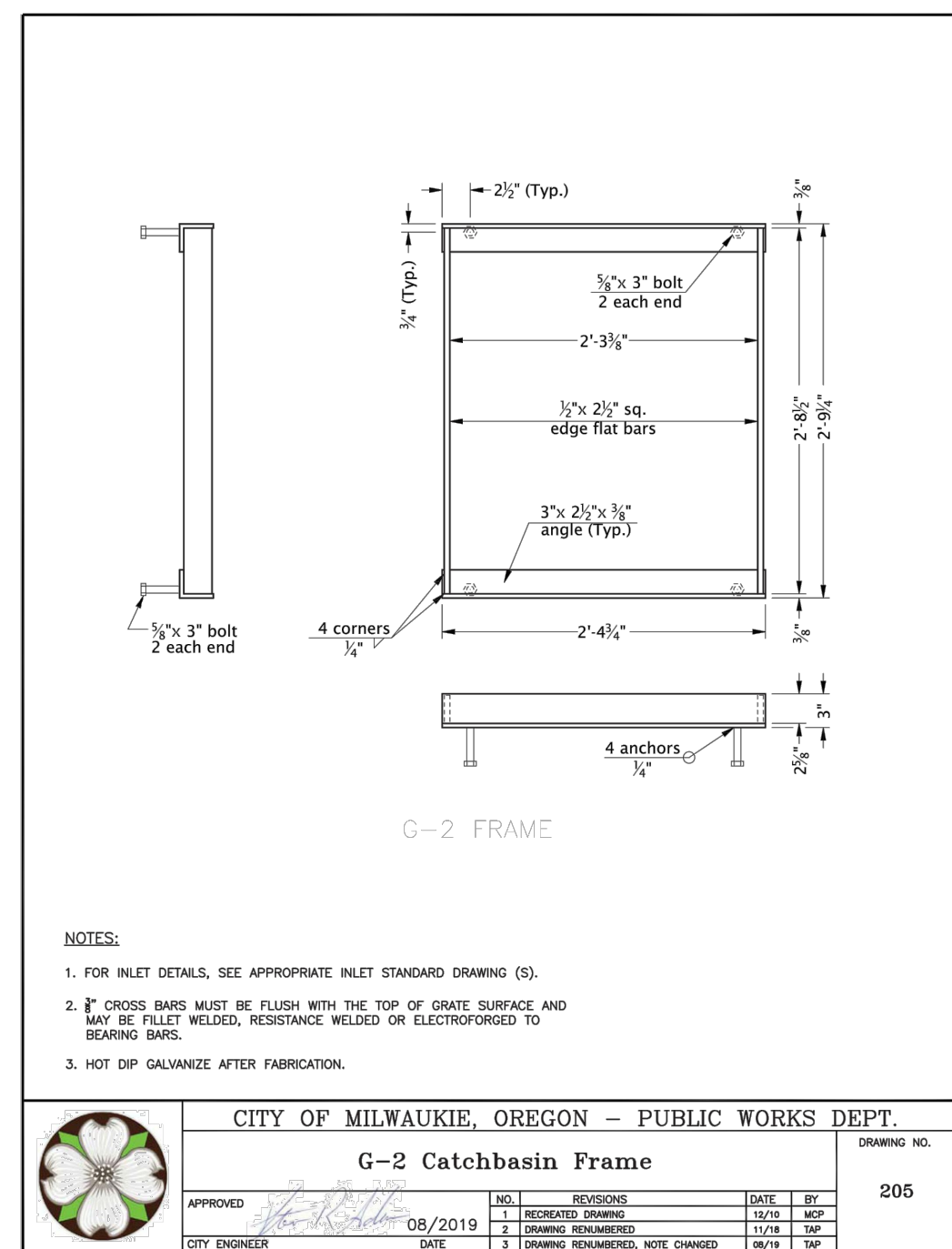
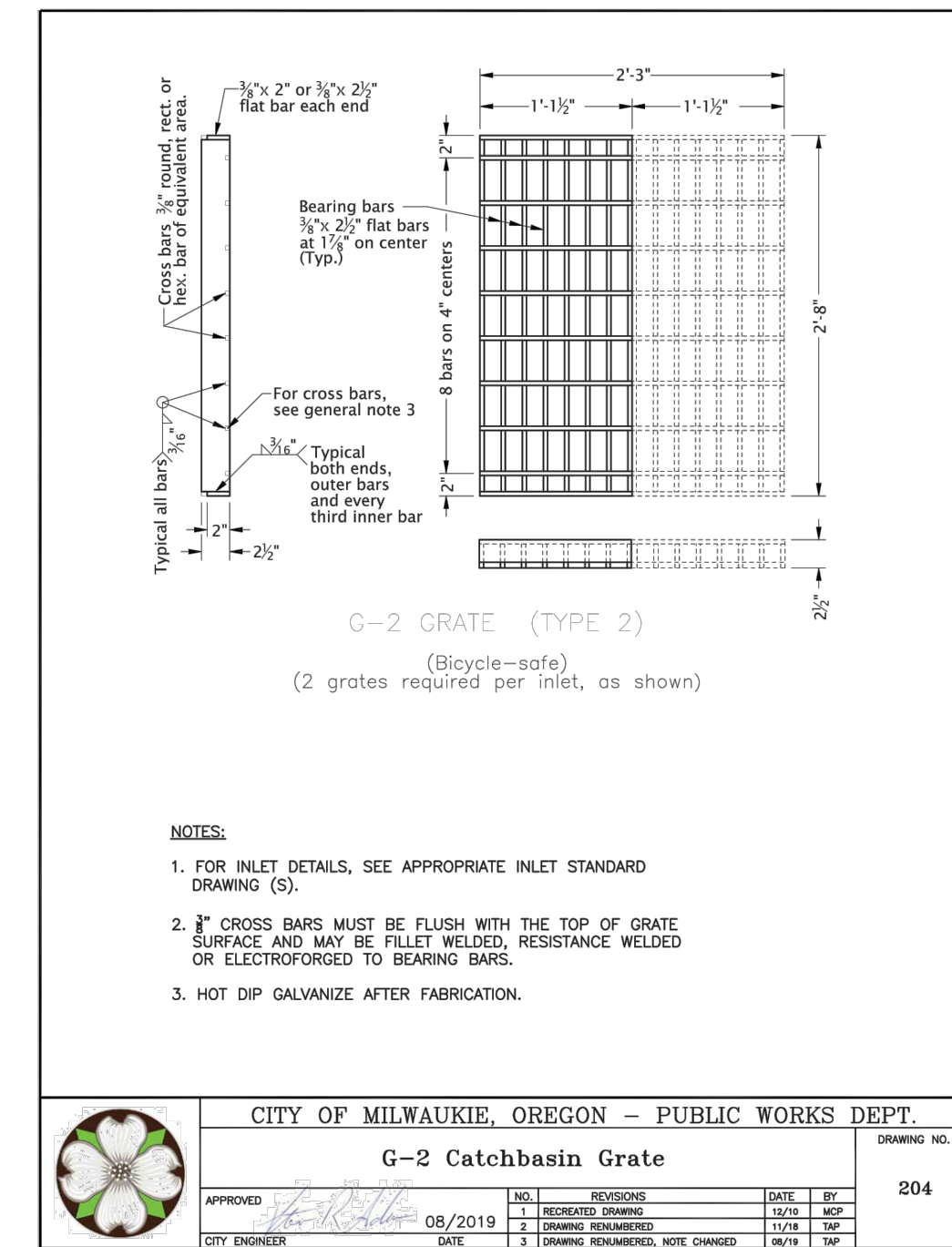
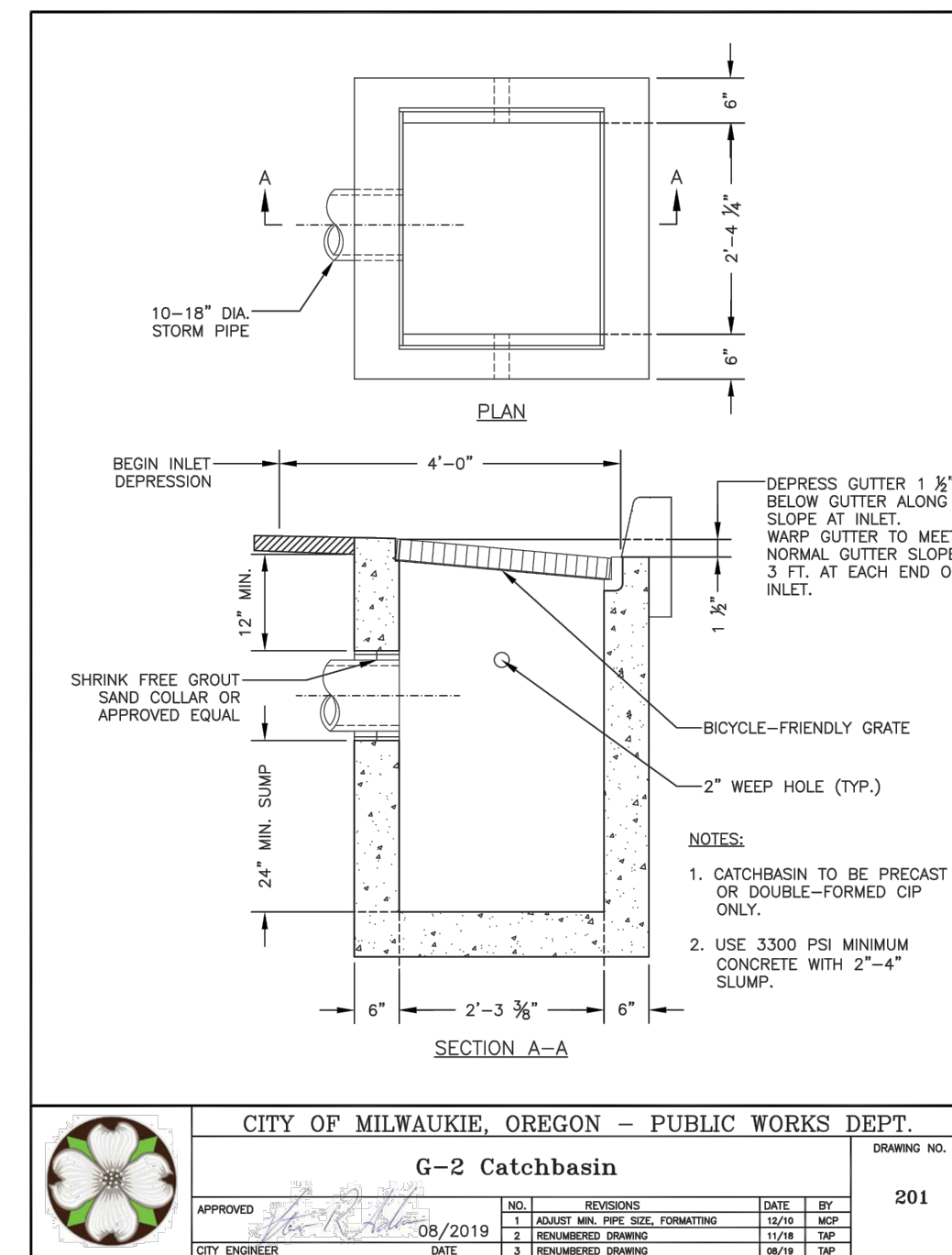
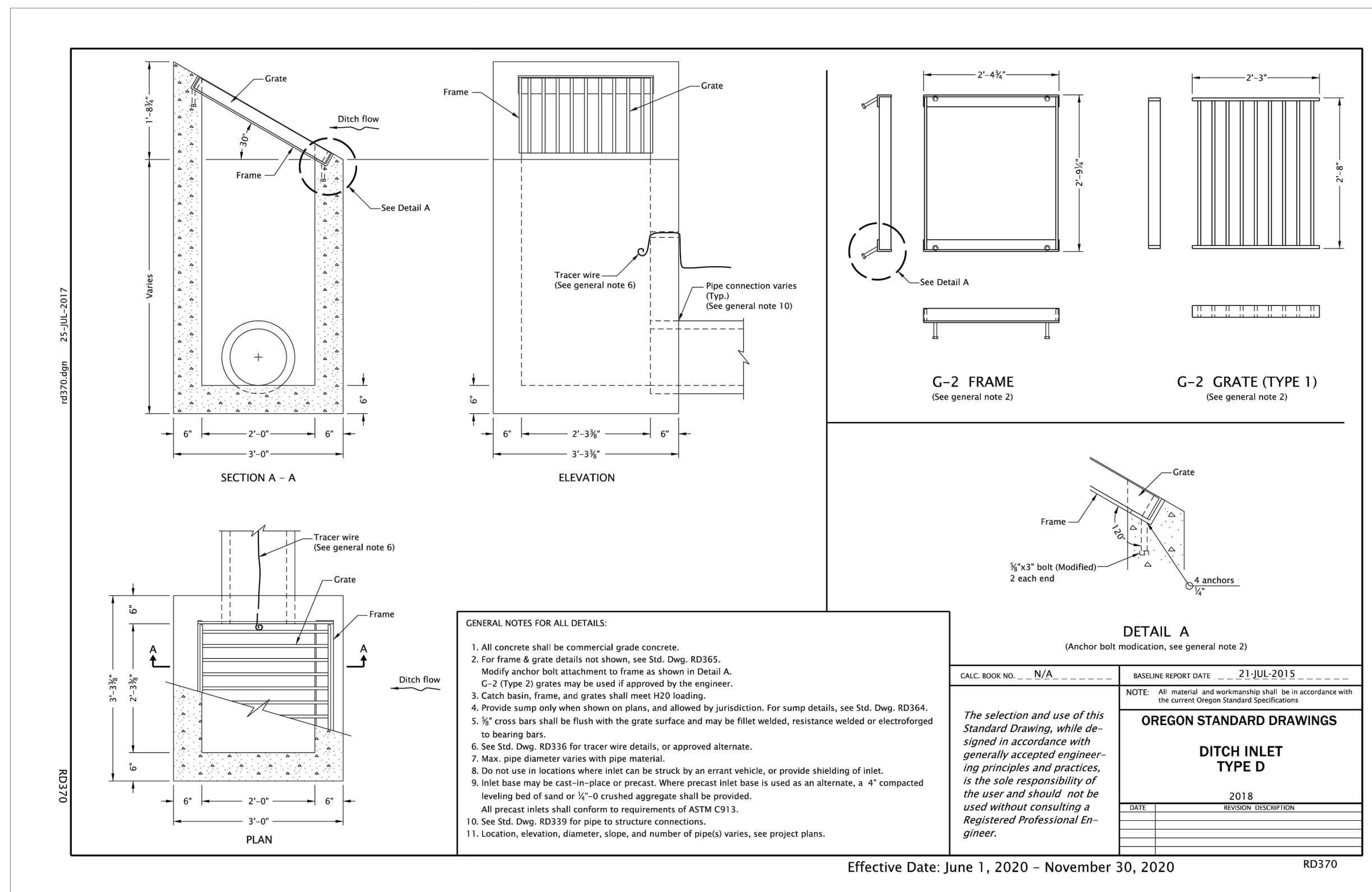
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DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

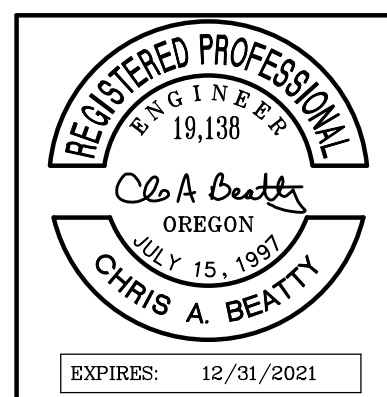
SHEET NO.	3.1
JOB NO.	MWK-28

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DATE	NO.	DESCRIPTION

DESIGNED: CAB
DRAWN: HHPR
CHECKED: CAB
DATE: 9/1/2020

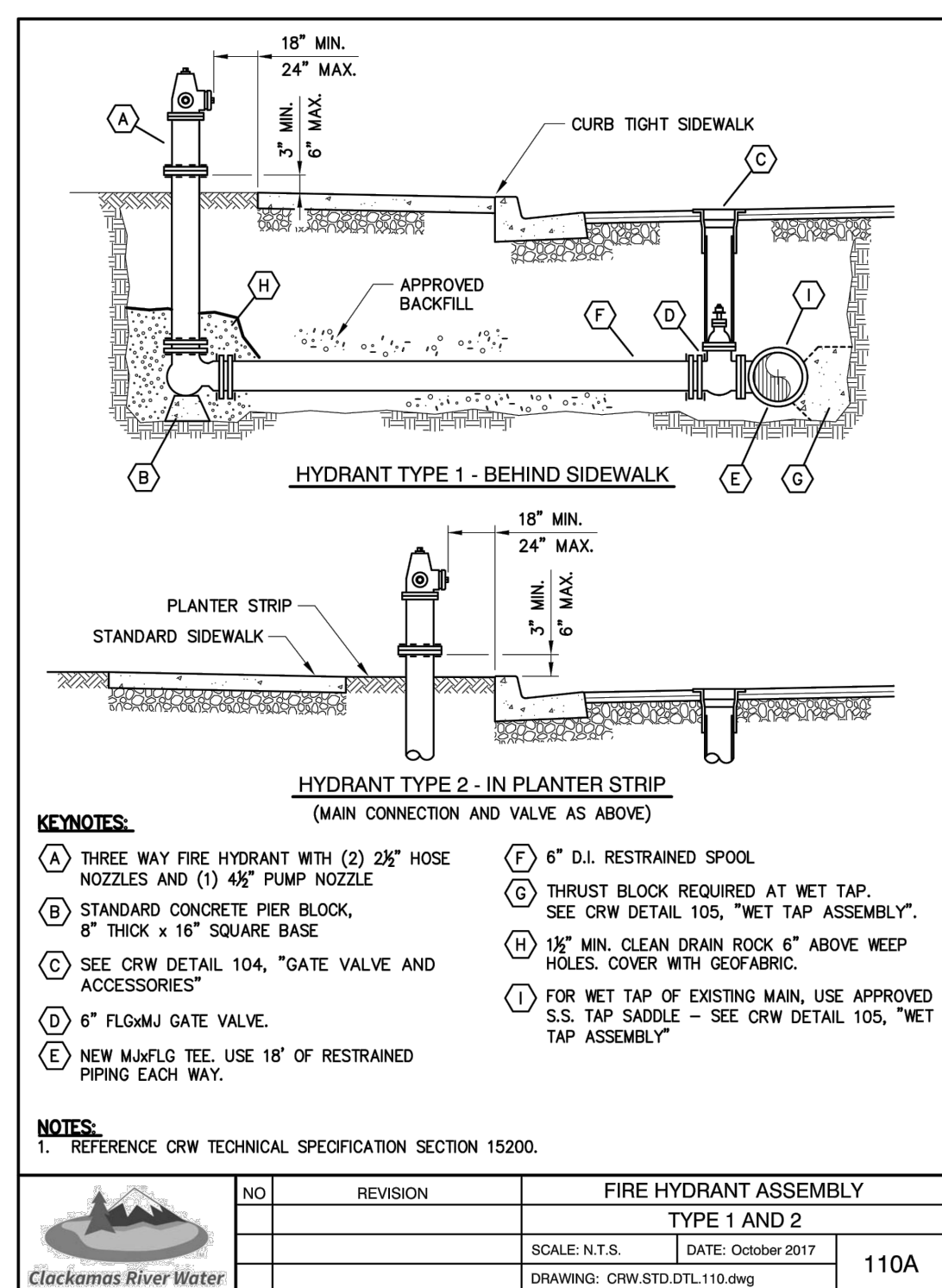
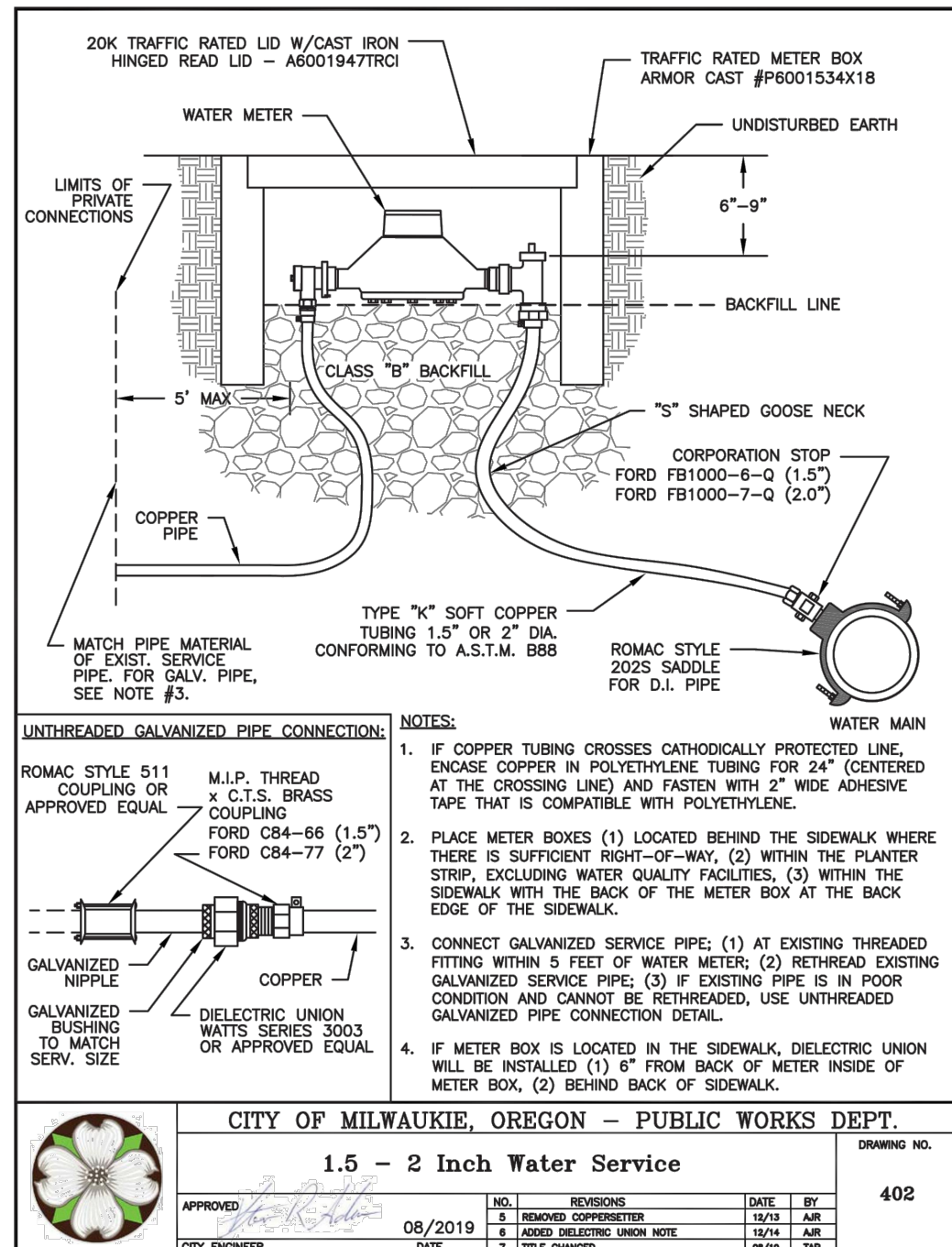
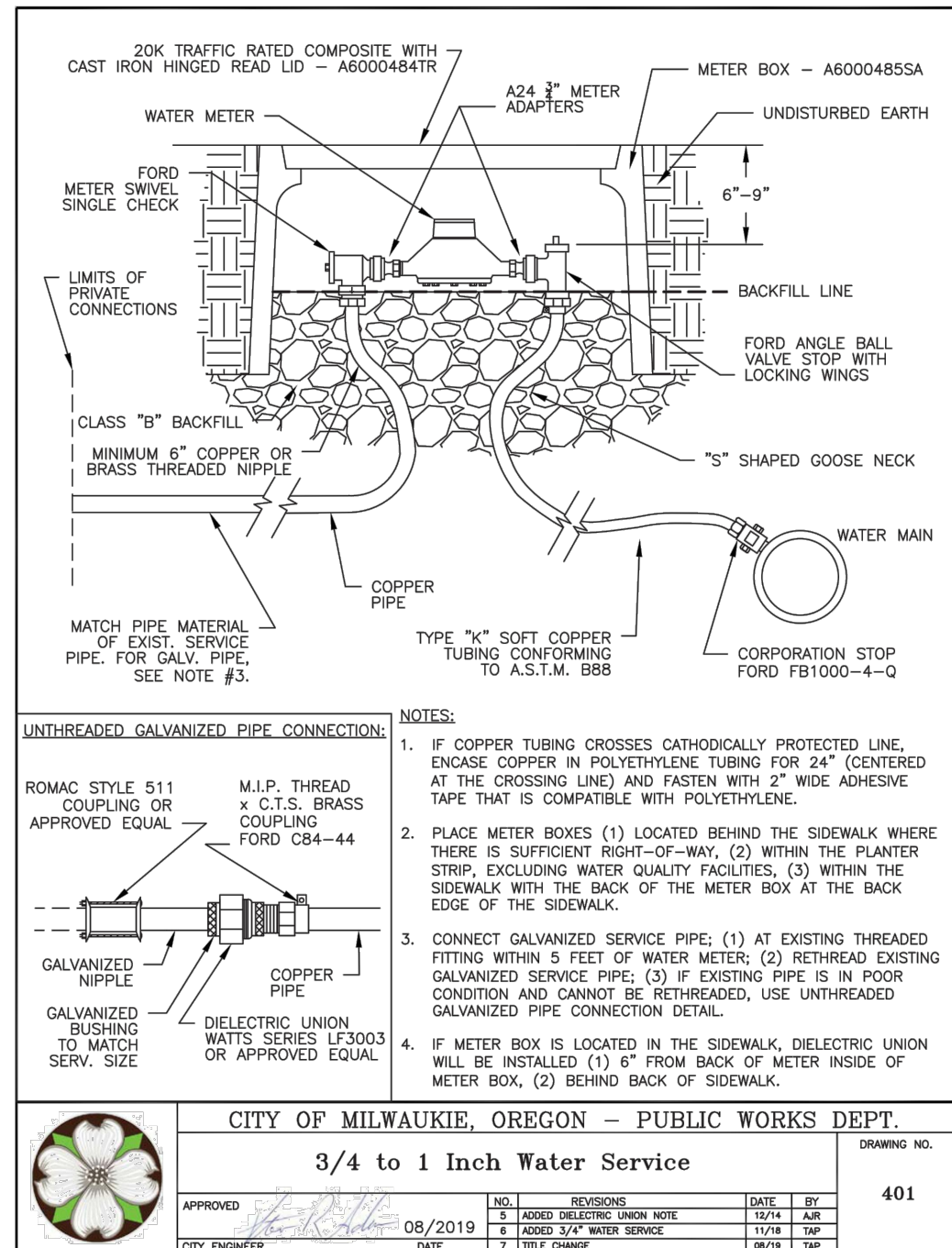


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DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO. 3.2

JOB NO. MWK-28



THRUST BLOCKING

TABLE A
CONCRETE THRUST BLOCKING (HORIZONTAL)

PIPE DIA.	Thrust (T) at Fittings in Pounds				
	A	B	C	D	E
4"	250	3555	4320	2315	1215
6"	250	6860	9735	5215	2720
8"	250	12185	17310	9265	4835
10"	250	19045	27045	14480	7560
12"	250	27405	38940	20840	10880
14"	250	37320	53010	28370	14815
16"	250	48740	69245	37050	19360

TABLE B
Soil Bearing Capacity (B) in PSI

Soil Type	Soil Bearing Capacity (B) in PSI
Muck, peat, etc.	0
Soft Clay	1000
Sand	2000
Sand and gravel	3000
Sand and gravel cemented with clay	4000
Hard shale	10,000

TABLE C
CONCRETE BLOCKING FOR CONVEX VERTICAL BENDS

PIPE DIA.	DIMENSION TABLE				
	Table Pressure (PSI)	Bend Angle (deg)	Concrete Volume (cu ft)	Stirrup Dia. (in)	Stirrup Length (in)
4"	250	11.25	0.21	1.8	
		22.5	0.43	2.3	1/4
6"	250	11.25	0.48	2.4	
		22.5	0.95	3.0	1/4
8"	250	11.25	0.86	2.9	
		22.5	1.65	3.5	1/4
10"	250	11.25	1.39	3.3	
		22.5	2.62	4.1	1/4
12"	250	11.25	1.94	3.7	
		22.5	3.91	4.7	1/4
14"	250	11.25	2.62	4.1	
		22.5	5.26	5.2	1/4
16"	250	11.25	3.44	4.5	
		22.5	6.89	5.7	1/4

THRUST BLOCK BEARING AREA EQUATION

NOTE: WHEN THRUST BLOCK BEARING AREA IS NOT SPECIFIED ON THE PLANS OR DETERMINED BY THE ENGINEER, USE THE FOLLOWING PROCEDURE TO DETERMINE REQUIRED BEARING AREA.

- Determine thrust (T) for type of fitting or joint and size of pipe from Table A.
- Determine Design (Test) Pressure from Standard Specifications or Special Provisions.
- Determine Table Pressure from Table A.
- Determine Soil Bearing Capacity (B) of soil from Table B.
- Determine required bearing area (A) in sq. ft. as follows:

$$\text{Thrust Block Area} = A = \frac{(T)(\text{Design (Test) Pressure})}{\text{Table Pressure}}$$

Example: Design (Test) Pressure = 150 PSI From Table A, T = 37320 From Table B, B = 2000

$$A = \frac{(37320)(150)}{2000} = 2799 \text{ sq. ft.}$$

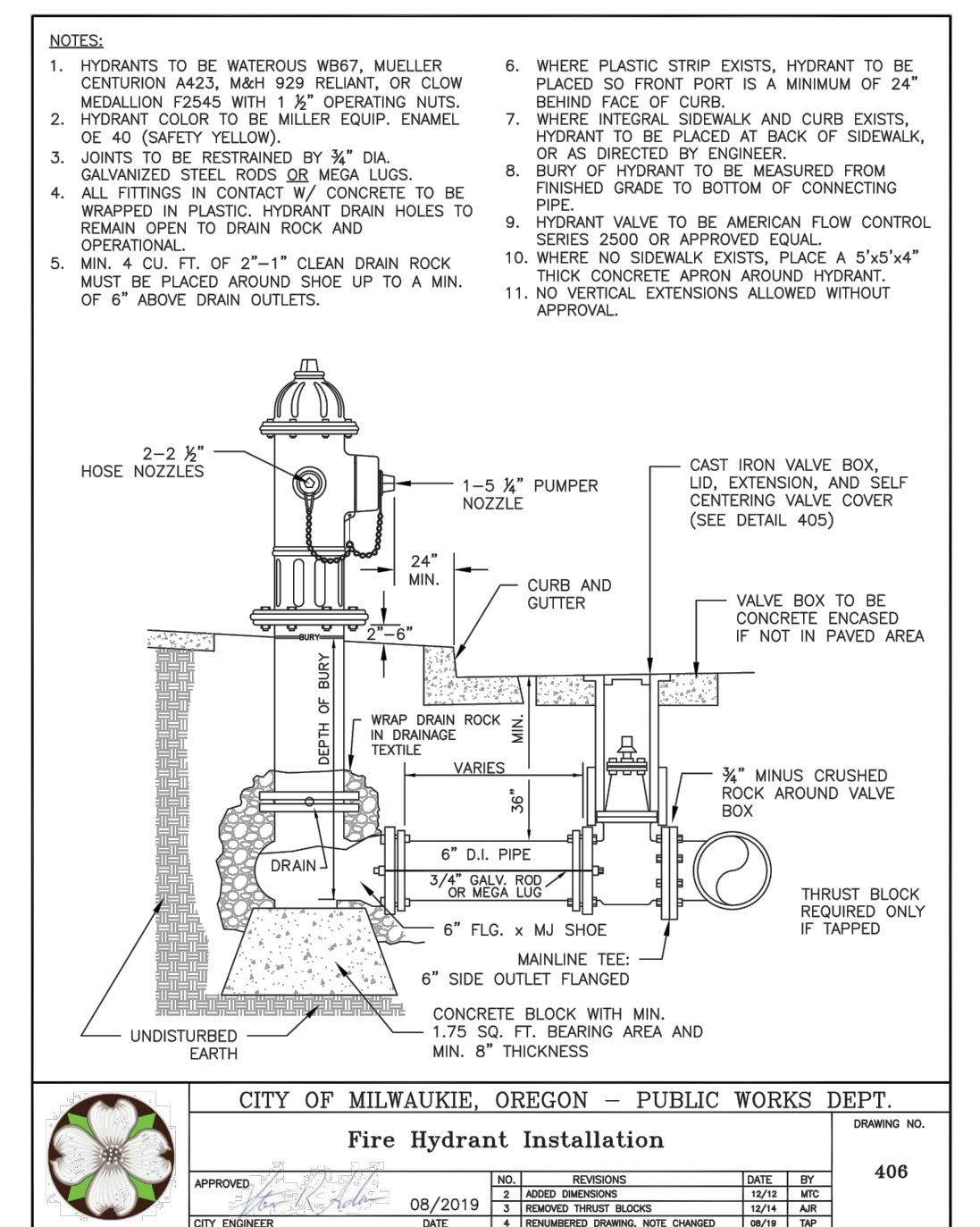
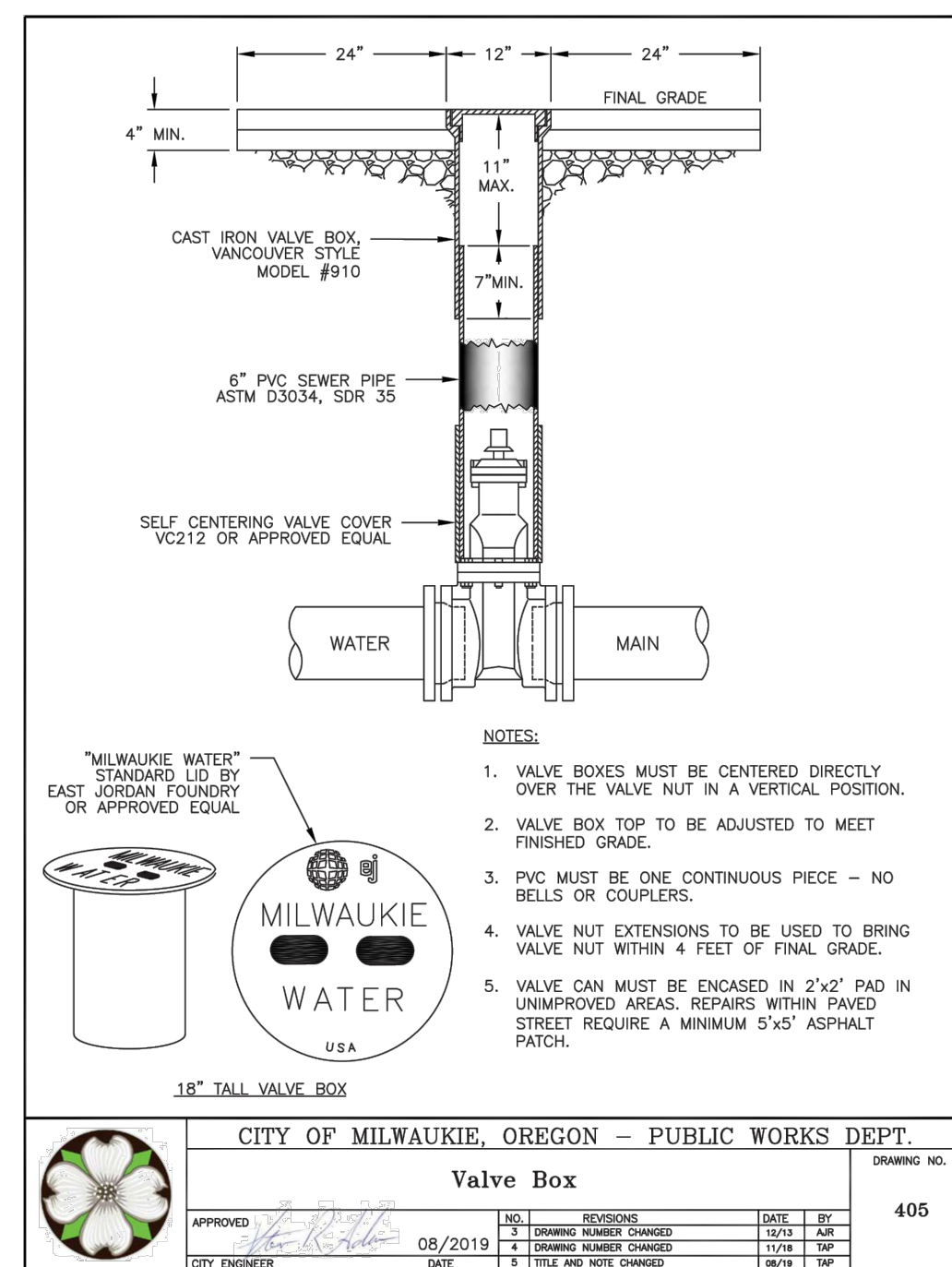
GENERAL NOTES FOR ALL DETAILS:

- Contractor to provide blocking adequate to withstand full test pressure.
- All concrete blocking against undisturbed earth.
- All concrete shall be commercial grade concrete.
- Wrap pipe and/or fittings with 2 layers of polyethylene film where in contact with concrete.
- Keep concrete clear of all joints and accessories.
- Stirrups shall be deformed galvanized cold rolled steel AASHTO M31 (ASTM A615), Grade 60. Coat with coal tar epoxy after installation.
- See project plans for details not shown.

CONVEX VERTICAL BEND (See Table C)

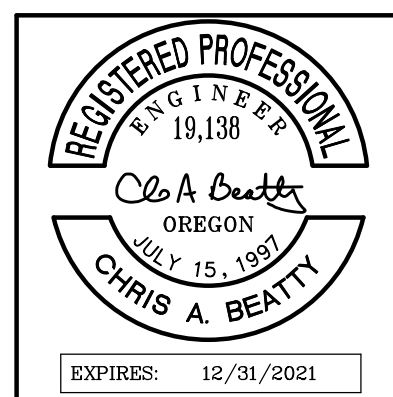
TEE
CROSS
STRADDLE
BEND
CROSS
TEE
WYE

CITY OF MILWAUKIE, OREGON - PUBLIC WORKS DEPT.
Fire Hydrant Installation



DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020



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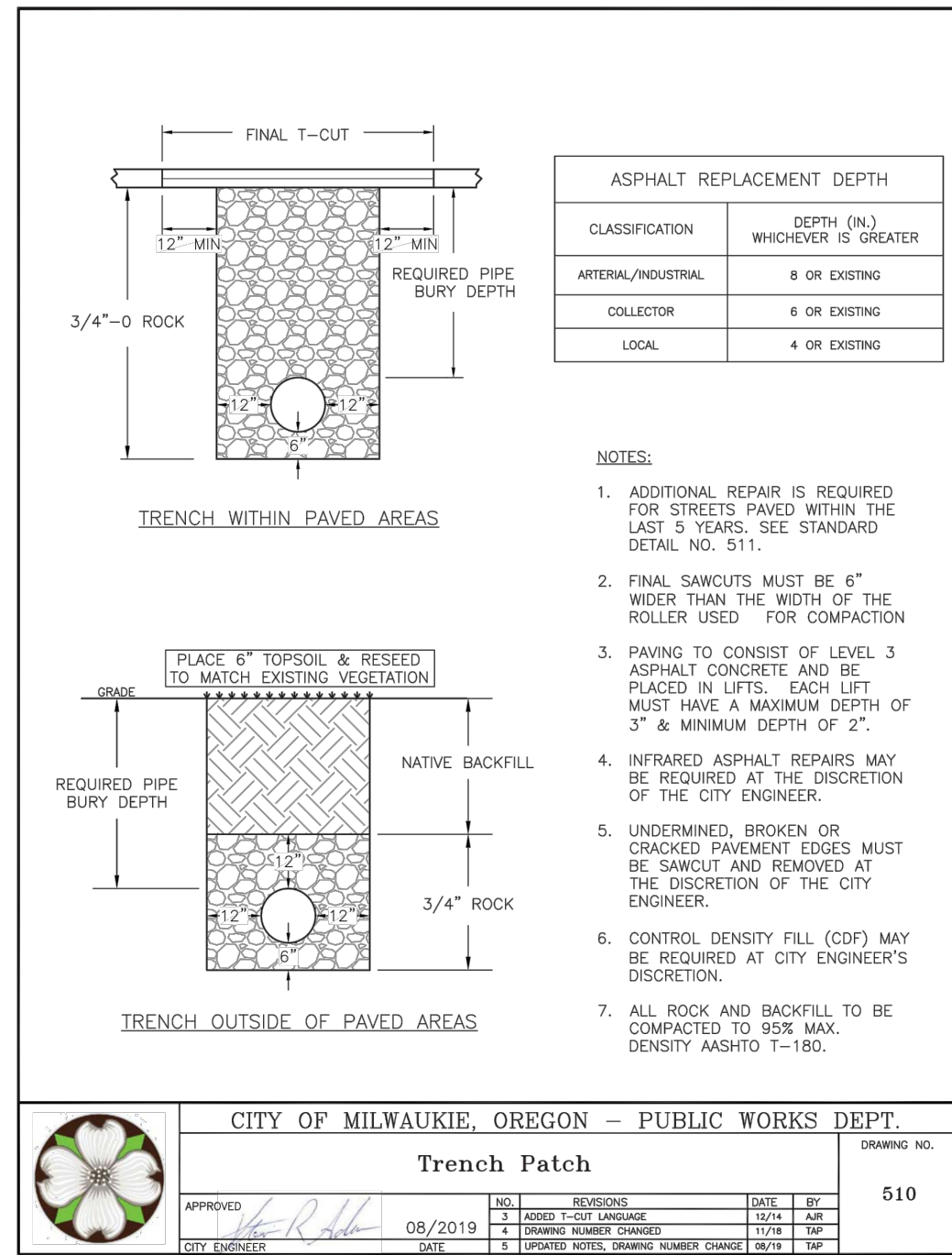
DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.

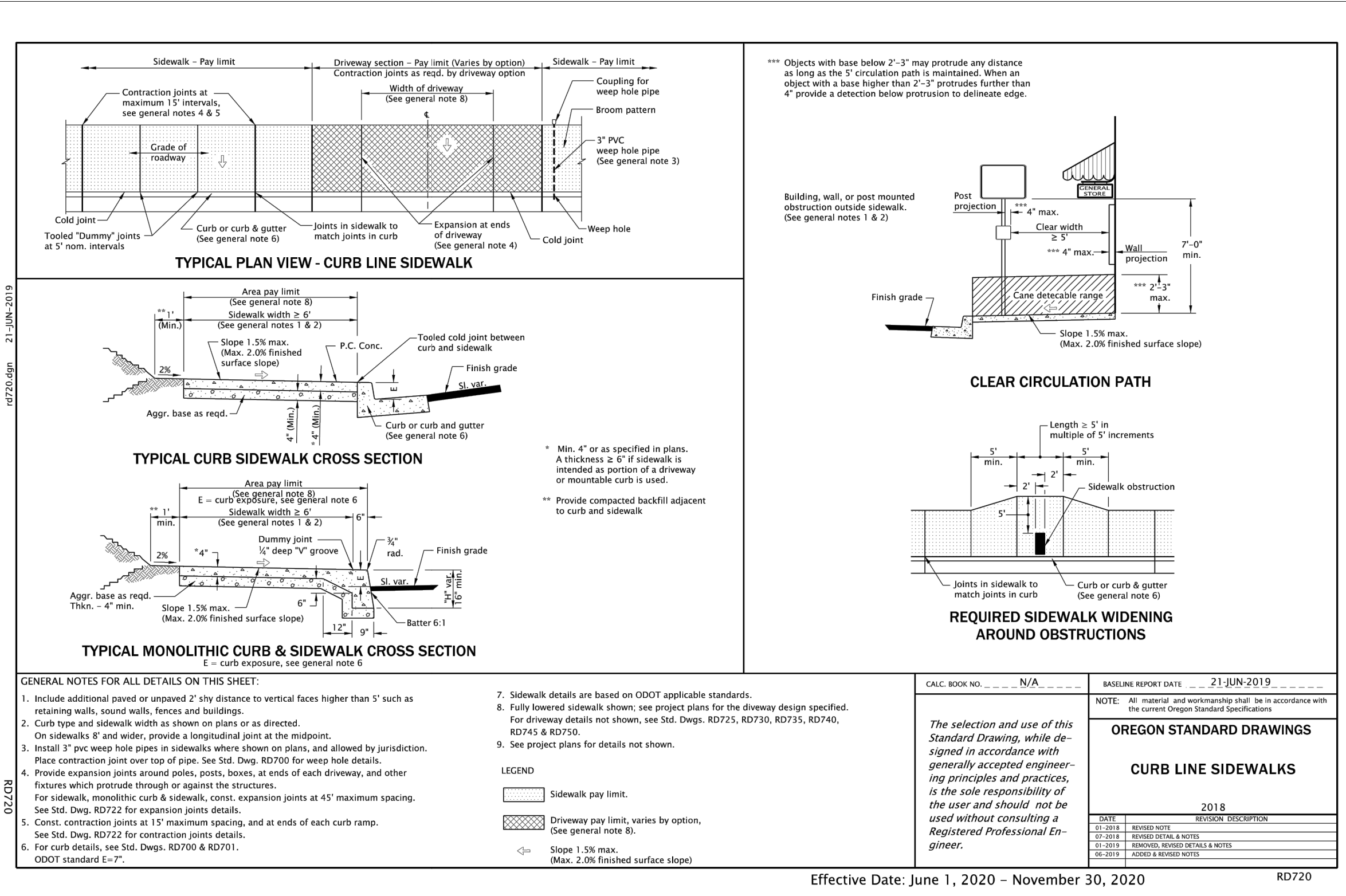
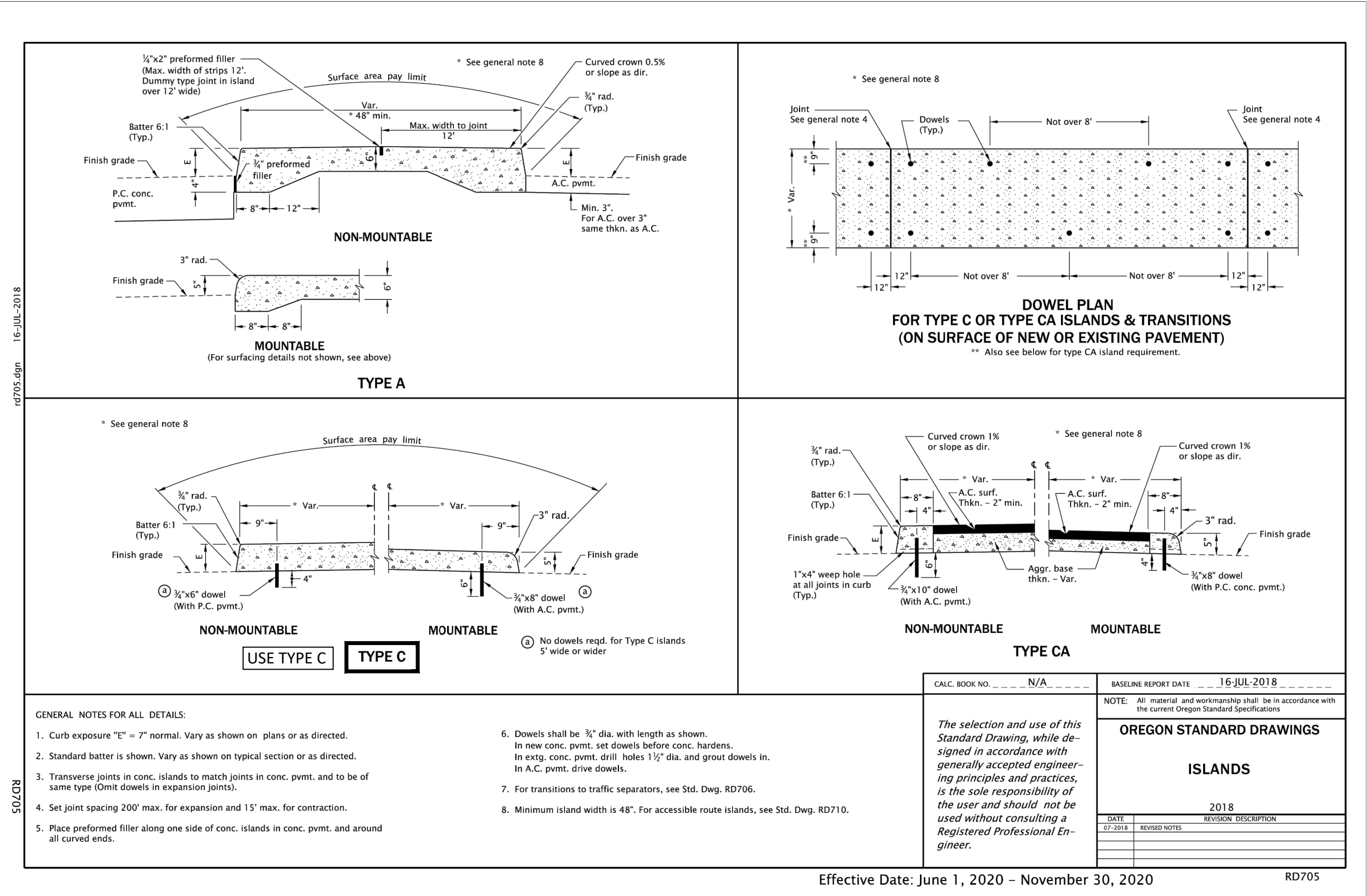
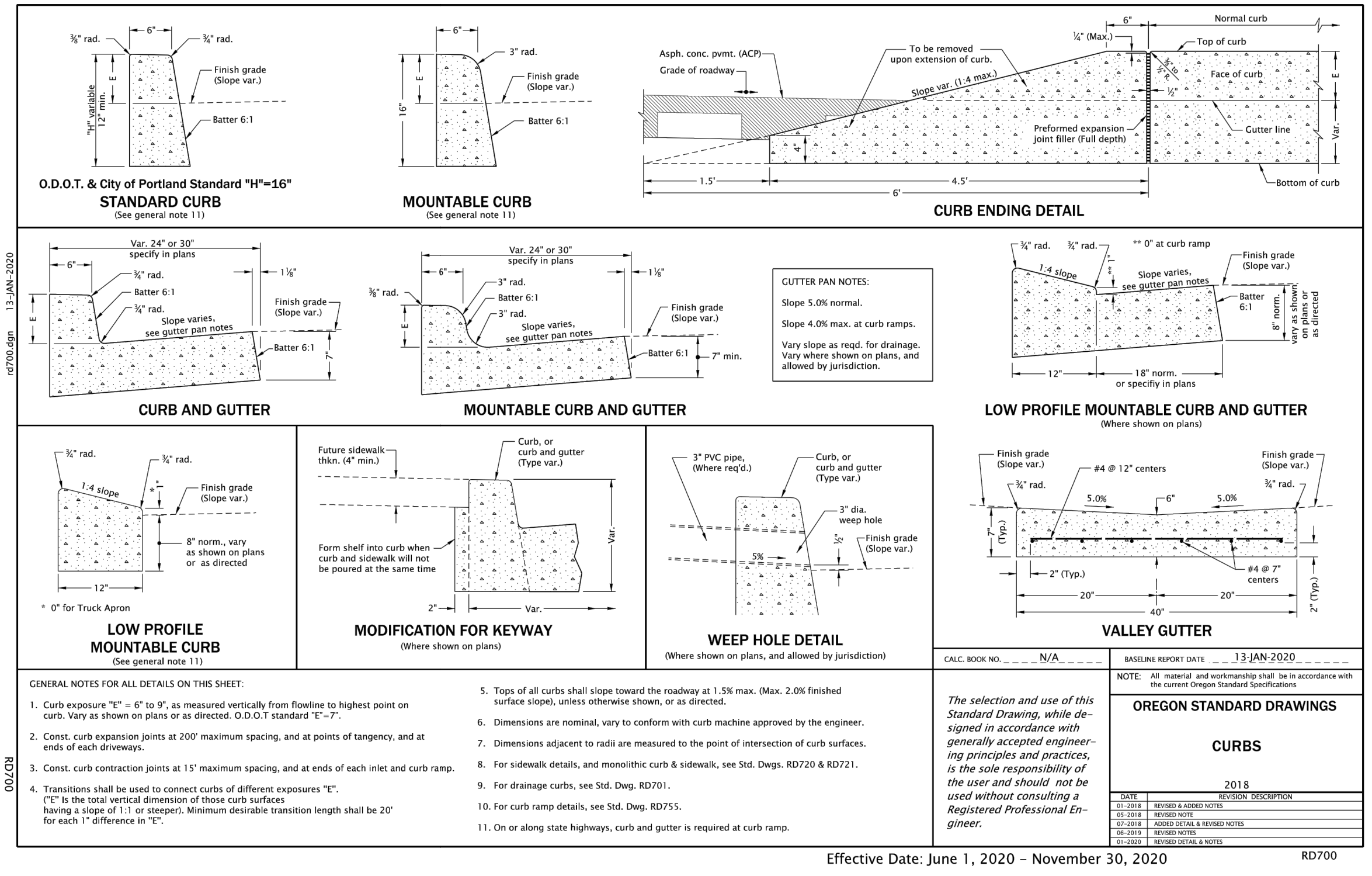
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JOB NO.

MWK-28

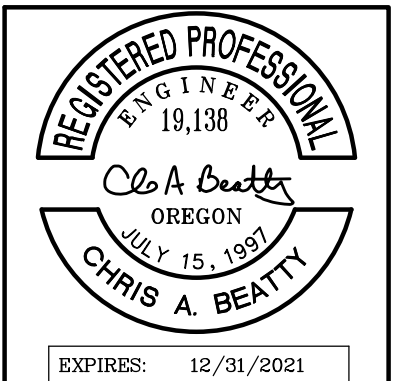


CITY OF MILWAUKIE, OREGON - PUBLIC WORKS DEPT.				
Trench Patch				
NO.	REVISIONS	DATE	BY	DESCRIPTION
01	ADDED 1'-0" LARGER	10/14/19	AKB	
02	ADDED 1'-0" LARGER	10/14/19	AKB	
03	ADDED 1'-0" LARGER	10/14/19	AKB	
04	ADDED 1'-0" LARGER	10/14/19	AKB	
05	ADDED 1'-0" LARGER	10/14/19	AKB	
06	ADDED 1'-0" LARGER	10/14/19	AKB	
07	ADDED 1'-0" LARGER	10/14/19	AKB	
08	ADDED 1'-0" LARGER	10/14/19	AKB	
09	ADDED 1'-0" LARGER	10/14/19	AKB	
10	ADDED 1'-0" LARGER	10/14/19	AKB	



DATE	NO.	DESCRIPTION

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020

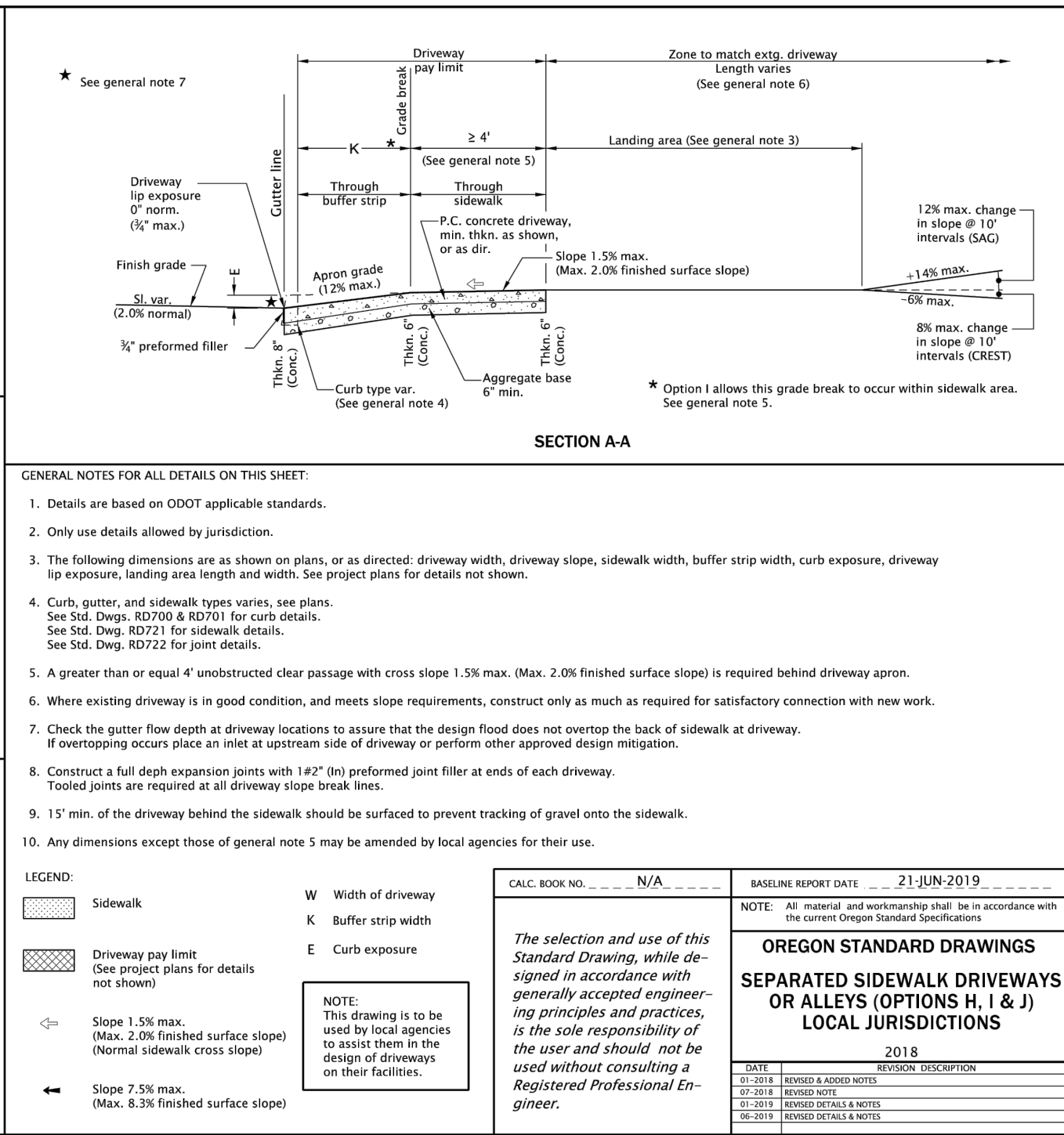
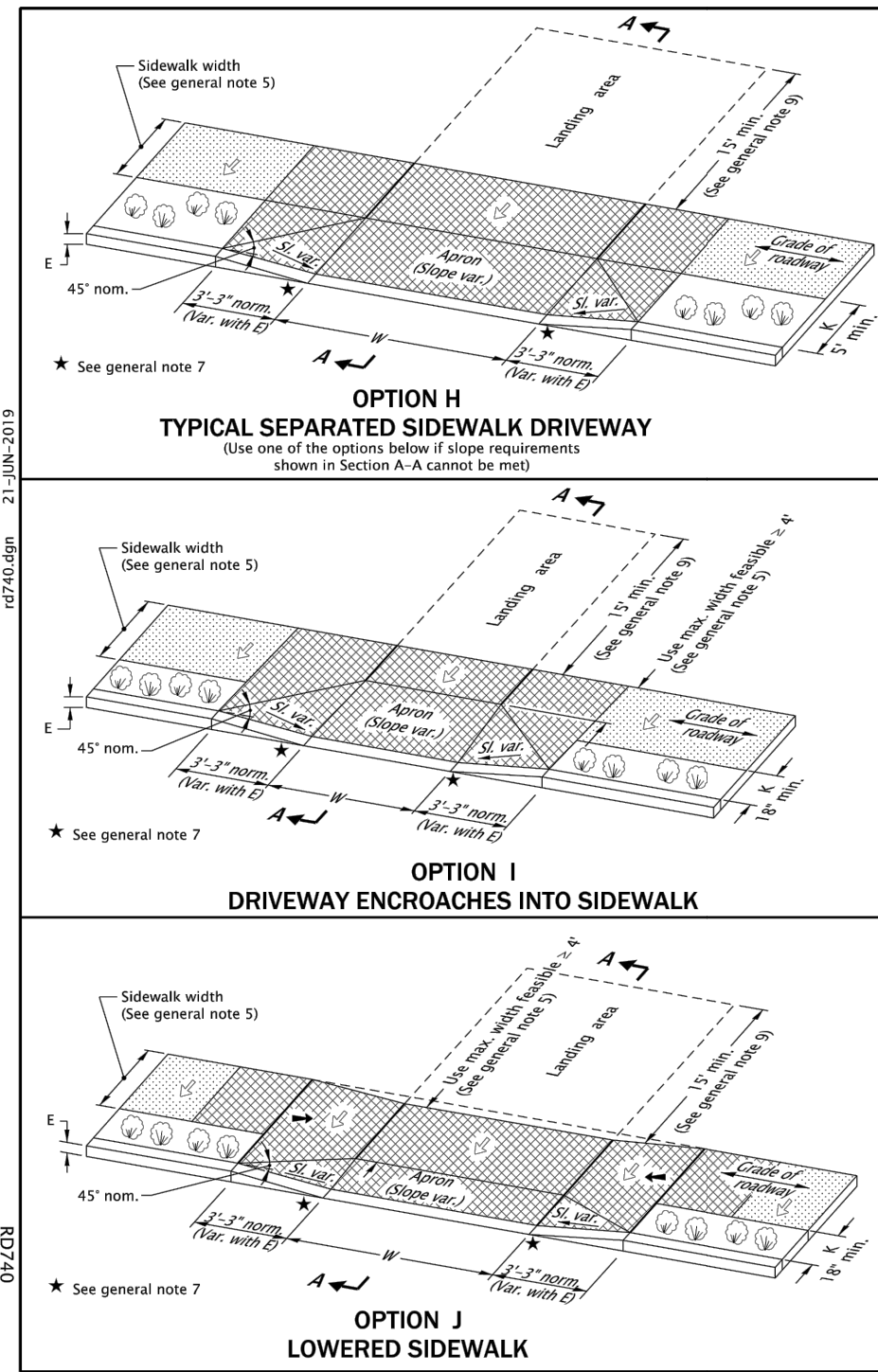


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DETAILS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	3.4
JOB NO.	MWK-28

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GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

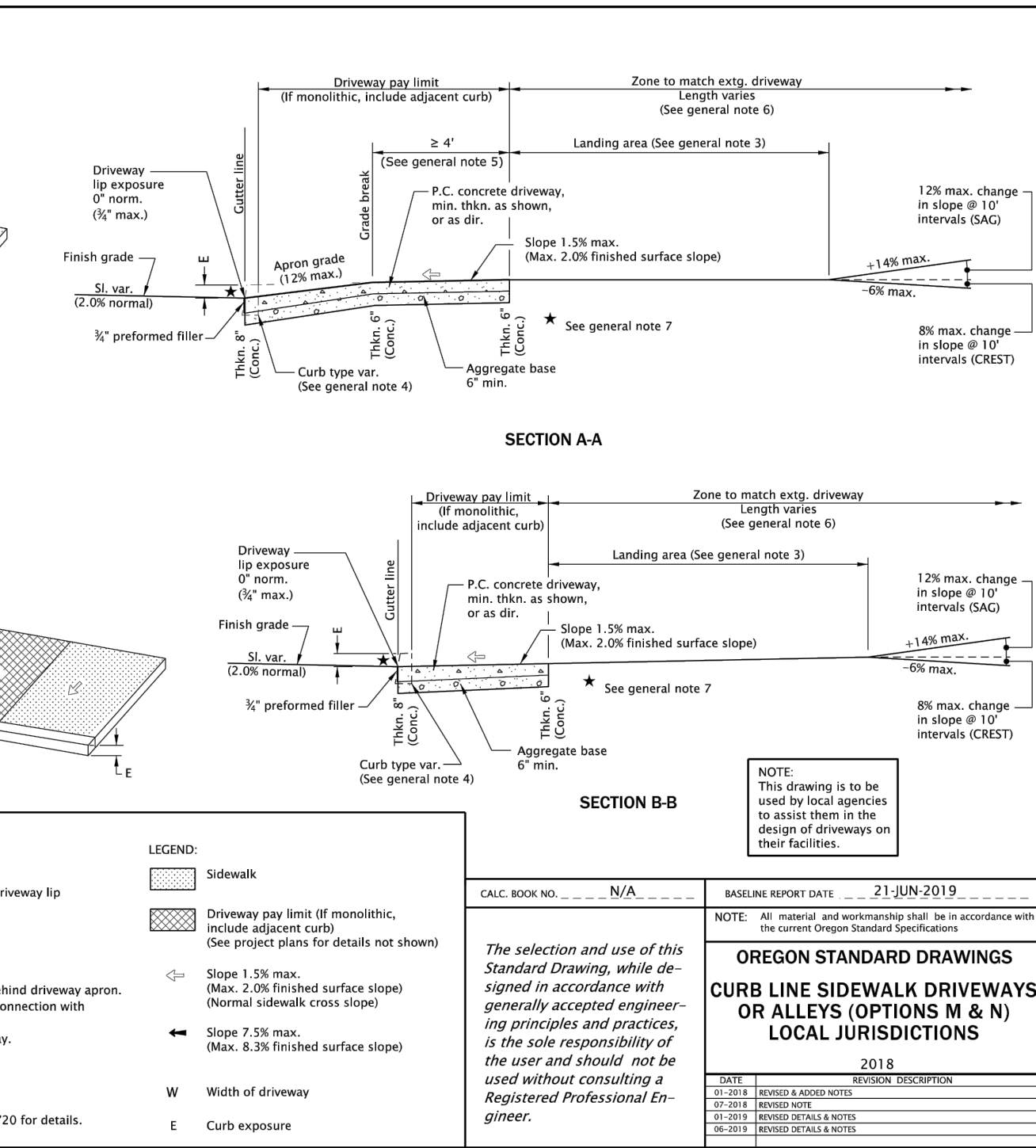
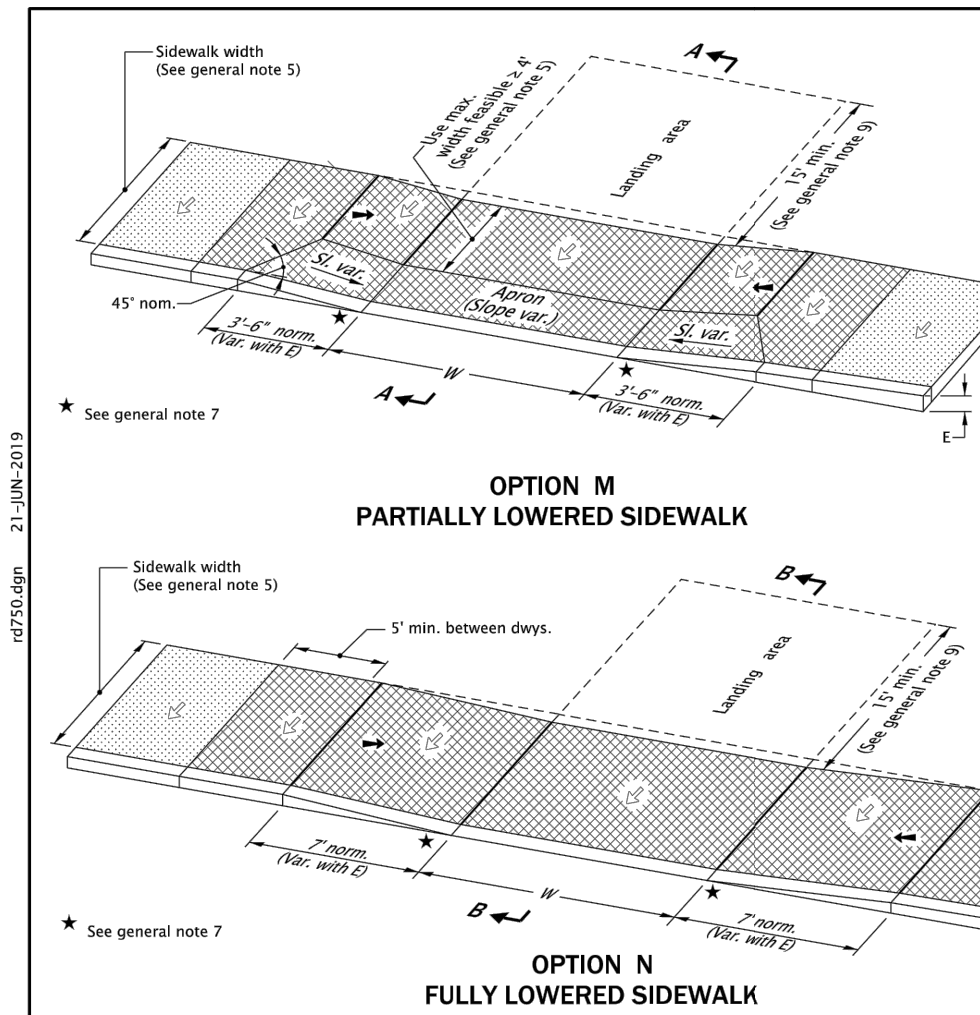
- Details are based on ODOT applicable standards.
- Only use details allowed by jurisdiction.
- The following dimensions are as shown on plans, or as directed: driveway width, driveway slope, sidewalk width, buffer strip width, curb exposure, driveway lip exposure, landing area length and width. See project plans for details not shown.
- Curb, gutter, and sidewalk types varies, see plans. See Std. Dwg. RD700 & RD701 for curb details. See Std. Dwg. RD721 for sidewalk details. See Std. Dwg. RD722 for joint details.
- A greater than or equal 4' unobstructed clear passage with cross slope 1.5% max. (Max. 2.0% finished surface slope) is required behind driveway apron.
- Where existing driveways in good condition, and meets slope requirements, construct only as much as required for satisfactory connection with new work.
- Check the gutter flow depth at driveway locations to assure that the design flood does not overtop the back of sidewalk at driveway. If overtopping occurs place an inlet at upstream side of driveway or perform other approved design mitigation.
- Construct a full depth expansion joints with 1/2" (in) preformed joint filler at ends of each driveway. Tooled joints are required at all driveway slope break lines.
- 15' min. of the driveway behind the sidewalk should be surfaced to prevent tracking of gravel onto the sidewalk.
- Any dimensions except those of general note 5 may be amended by local agencies for their use.

LEGEND:

- Sidewalk
- Driveway pay limit (See general note 5)
- Buffer strip width (See project plans for details not shown)
- Slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Slope 7.5% max. (Max. 8.3% finished surface slope)

OREGON STANDARD DRAWINGS
SEPARATED SIDEWALK DRIVEWAYS OR ALLEYS (OPTIONS H, I & J)
LOCAL JURISDICTIONS

Effective Date: June 1, 2020 – November 30, 2020 RD740



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

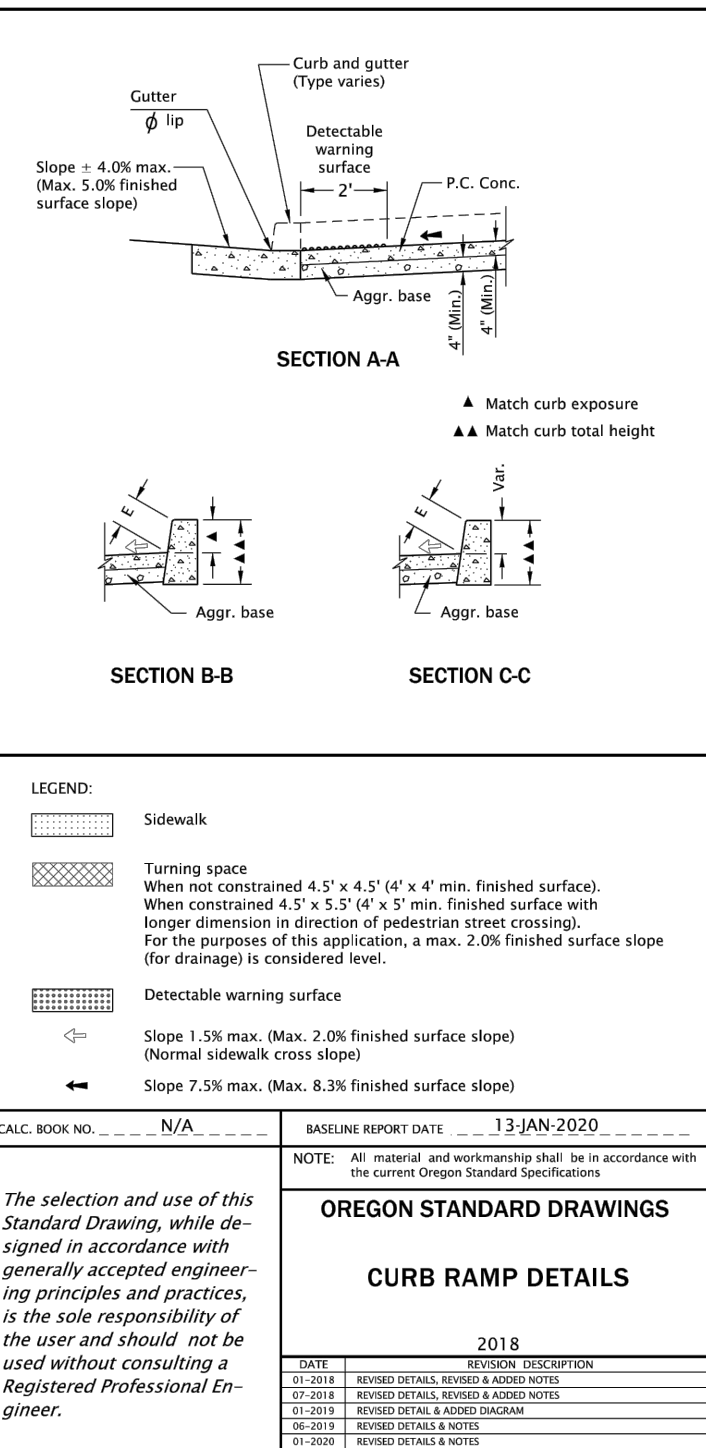
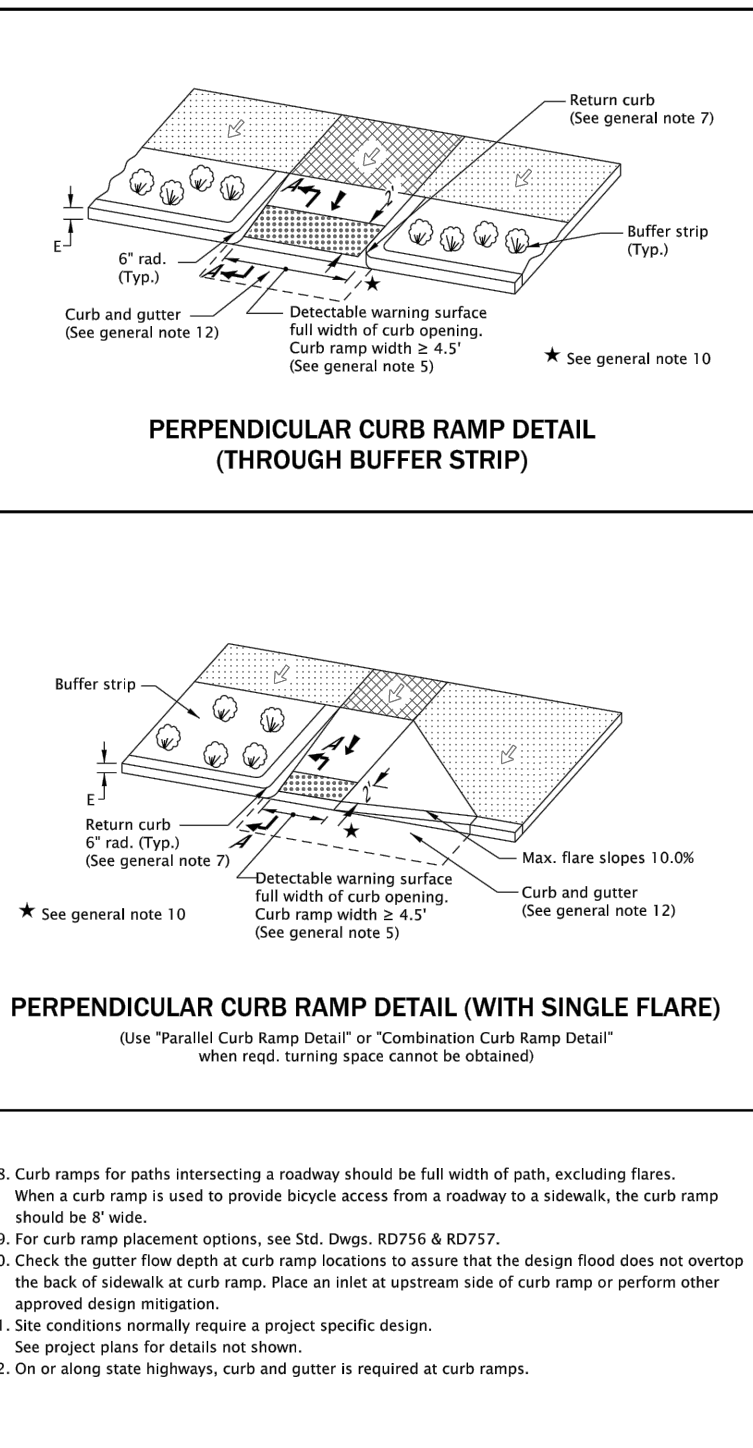
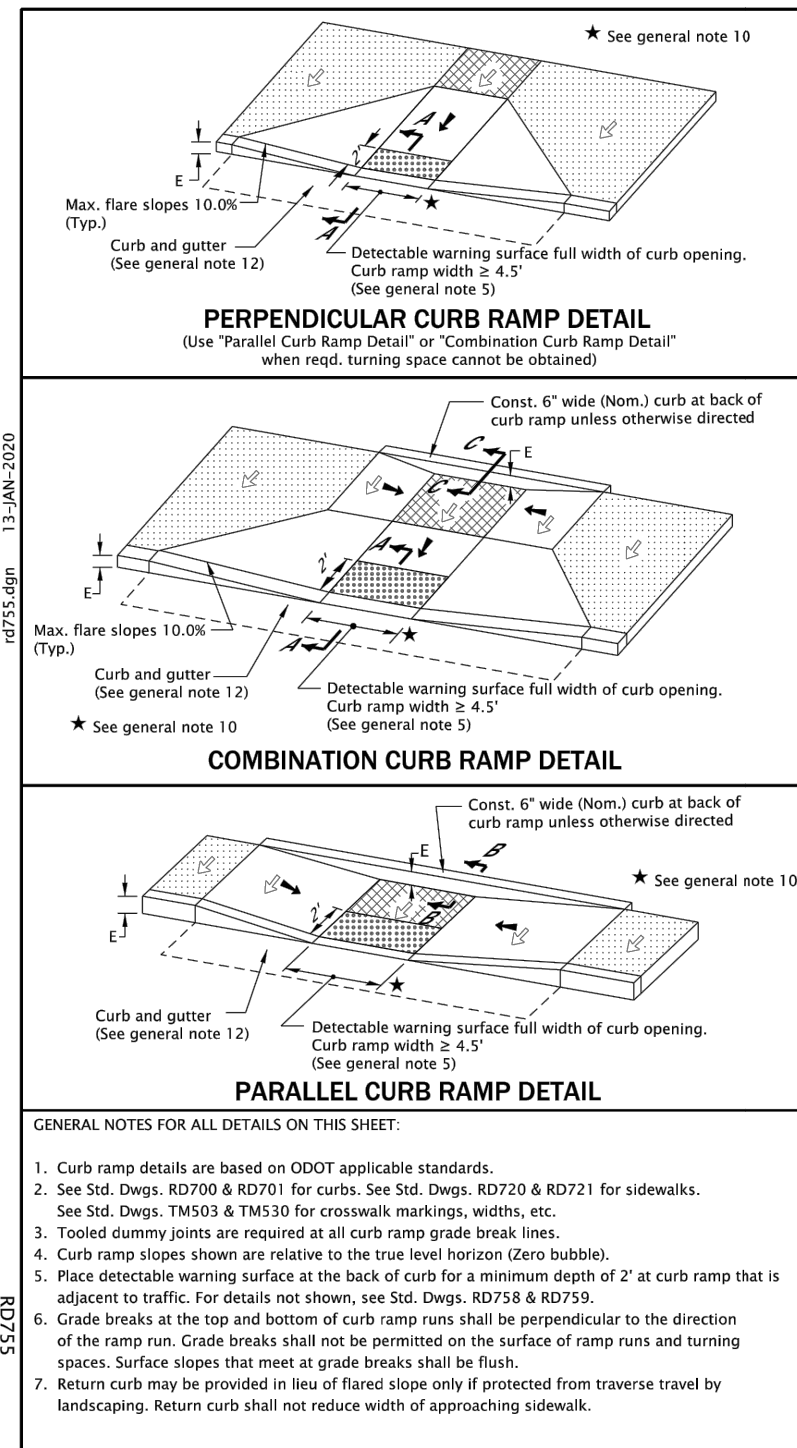
- Details are based on ODOT applicable standards.
- Only use details allowed by jurisdiction.
- The following dimensions are as shown on plans, or as directed: driveway width, driveway slope, sidewalk width, curb exposure, driveway lip exposure, landing area length and width. See project plans for details not shown.
- Curb, gutter, and sidewalk types varies, see plans. See Std. Dwg. RD700 & RD701 for curb details. See Std. Dwg. RD721 for sidewalk details. See Std. Dwg. RD722 for joint details.
- A greater than or equal 4' unobstructed clear passage with cross slope 1.5% max. (Max. 2.0% finished surface slope) is required behind driveway apron.
- Where existing driveways in good condition, and meets slope requirements, construct only as much as required for satisfactory connection with new work.
- Check the gutter flow depth at driveway locations to assure that the design flood does not overtop the back of sidewalk at driveway. If overtopping occurs place an inlet at upstream side of driveway or perform other approved design mitigation.
- Construct a full depth expansion joints with 1/2" (in) preformed joint filler at ends of each driveway. Tooled joints are required at all driveway slope break lines.
- 15' min. of the driveway behind the sidewalk should be surfaced to prevent tracking of gravel onto the sidewalk.
- Monolithic curb & sidewalk shall retain thickened edge through lowered profile, to accommodate driveway use. See Std. Dwg. RD720 for details.
- Any dimensions except those of general note 5 may be amended by local agencies for their use.

LEGEND:

- Sidewalk
- Driveway pay limit (If monolithic, include adjacent curb)
- Slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Slope 7.5% max. (Max. 8.3% finished surface slope)
- Width of driveway
- Curb exposure

OREGON STANDARD DRAWINGS
CURB LINE SIDEWALK DRIVEWAYS OR ALLEYS (OPTIONS M & N)
LOCAL JURISDICTIONS

Effective Date: June 1, 2020 – November 30, 2020 RD750



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

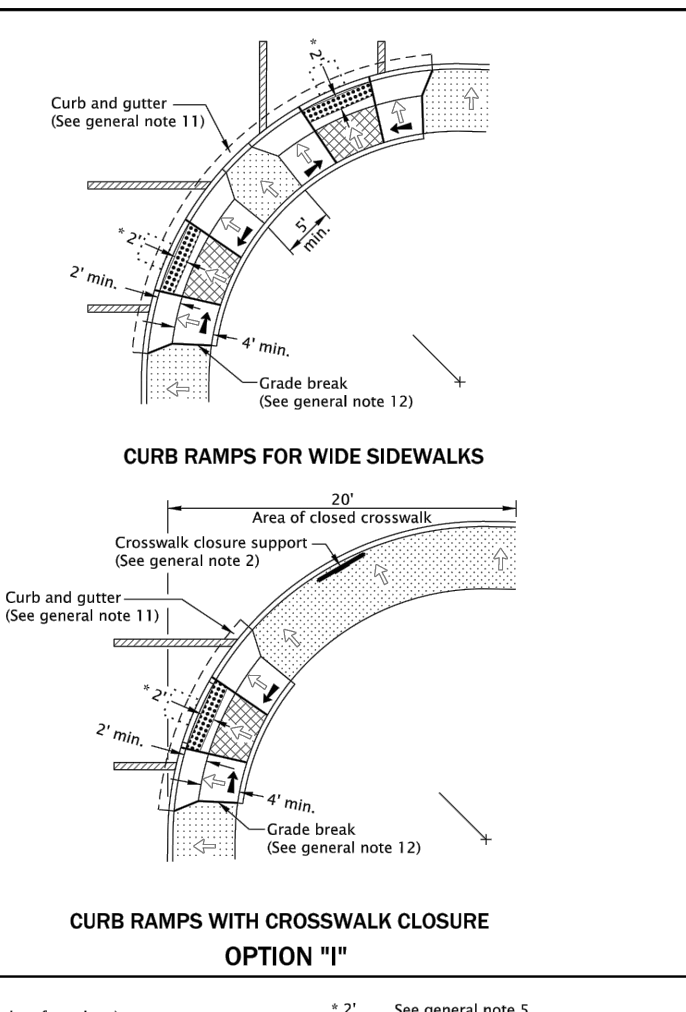
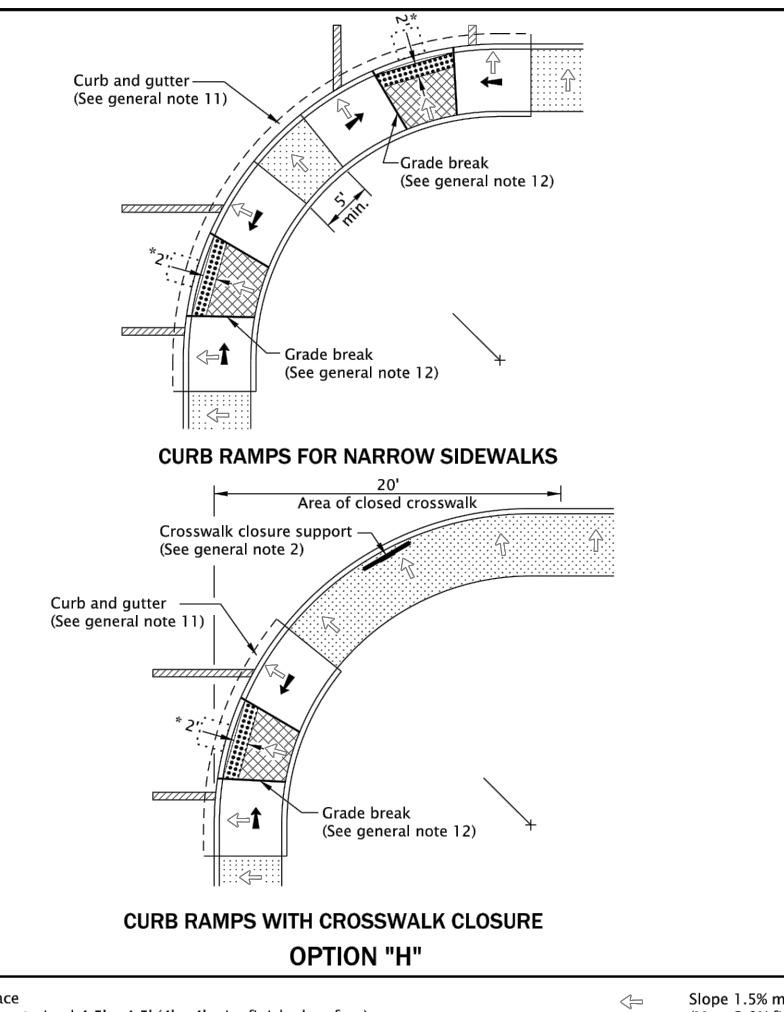
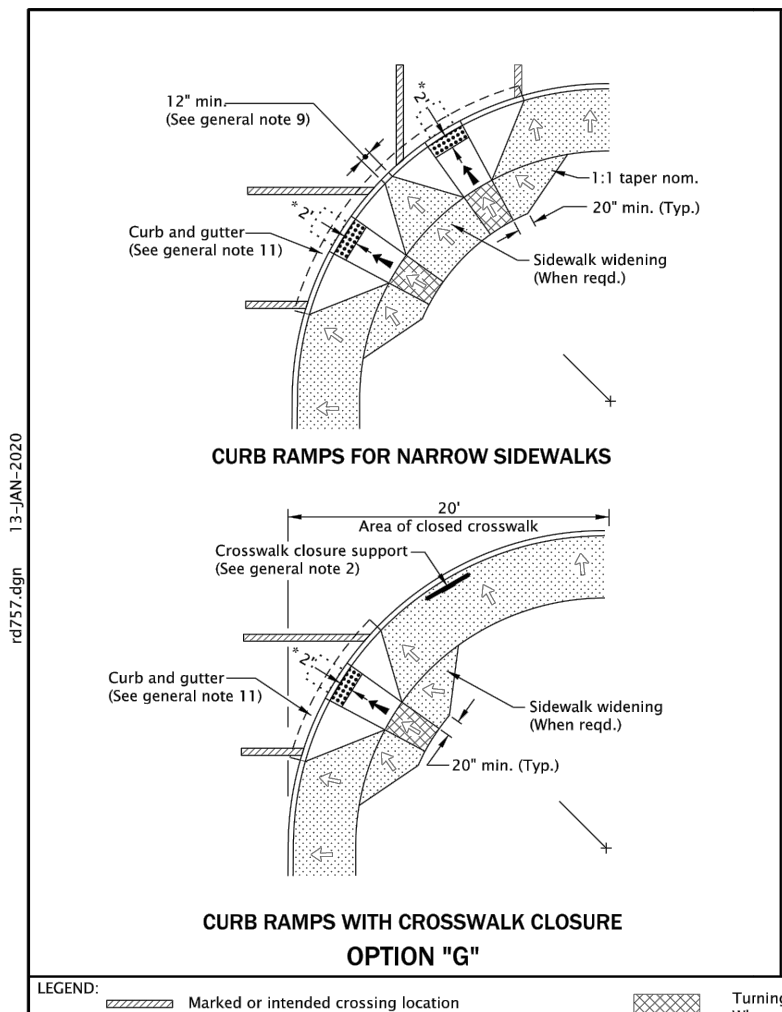
- Curb ramp details are based on ODOT applicable standards. See Std. Dwg. RD700 & RD701 for curbs. See Std. Dwg. RD720 & RD721 for sidewalks. See Std. Dwg. TMS33 & TMS30 for crosswalk markings, widths, etc.
- Tooled dummy joints are required at all curb ramp grade break lines.
- Curb ramp slopes shown are relative to the true level horizon (zero bubble).
- Place detectable warning surface at the back of curb for a minimum depth of 2' at curb ramp that is adjacent to traffic. For details not shown, see Std. Dwg. RD756 & RD759.
- Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
- Return curb may be provided in lieu of flared slope only if protected from traverse travel by landscaping. Return curb shall not reduce width of approaching sidewalk.
- Curb ramps for paths intersecting a roadway should be full width of path, excluding flares. When a curb ramp is used to provide bicycle access from a roadway to a sidewalk, the curb ramp should be 8' wide.
- For curb ramp placement options, see Std. Dwg. RD756 & RD759.
- Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk at curb ramp. Place an inlet at upstream side of curb ramp or perform other approved design mitigation.
- Site conditions normally require a project specific design. See project plans for details not shown.
- On or along state highways, curb and gutter is required at curb ramps.

LEGEND:

- Sidewalk
- Turning space (When not constrained 4.5' x 4.5' (4' x 4' min. finished surface with longer dimension in direction of pedestrian street crossing). For the purposes of this application, a max. 2.0% finished surface slope (for drainage) is considered level.
- Detectable warning surface
- Slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Slope 7.5% max. (Max. 8.3% finished surface slope)

OREGON STANDARD DRAWINGS
CURB RAMP DETAILS

Effective Date: June 1, 2020 – November 30, 2020 RD755



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

- Curb ramp details are based on ODOT applicable standards. See project plans for details not shown. See Std. Dwg. RD700 & RD701 for curbs. See Std. Dwg. TMS33 & TMS30 for crosswalk markings, widths, etc. See Std. Dwg. RD755 for curb ramp details. See Traffic Standard Drawings for signal pole and pedestrian pedestrian details.
- Tooled dummy joints are required at all curb ramp slope break lines.
- Curb ramp slopes shown are relative to the true level horizon (zero bubble).
- Place detectable warning surface in the lower 2' of curb ramp that is adjacent to traffic. For details not shown, see Std. Dwg. RD758 & RD759.
- Check the gutter flow depth to assure that the design flood does not overtop the back of sidewalk. If overtopping occurs place an inlet at upstream side or perform other approved design mitigation.
- Return curb may be provided in lieu of flared slope only if protected from traverse travel by landscaping. Return curb shall not reduce width of approaching sidewalk.
- Curb ramps for paths intersecting a roadway should be full width of path, excluding flares. When a curb ramp is used to provide bicycle access from a roadway to a sidewalk, the curb ramp should be 8' wide.
- When 2 curb ramps are immediately adjacent as in Option G, the curb exposure (E) between the adjacent side flares may range between 3' and full design exposure.
- Only use options allowed by jurisdiction.
- On or along state highways, curb and gutter is required at curb ramps.
- Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.

LEGEND:

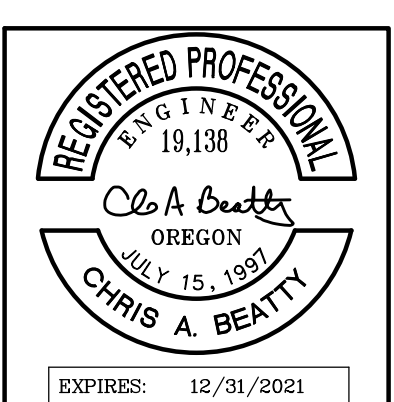
- Marked or intended crossing location
- Sidewalk
- Detectable warning surface
- Turning space (When not constrained 4.5' x 4.5' (4' x 4' min. finished surface with longer dimension in direction of pedestrian street crossing). For the purposes of this application, a max. 2.0% finished surface slope (for drainage) is considered level.
- Slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Slope 7.5% max. (Max. 8.3% finished surface slope)
- 4' x 4' clear space
- See general note 5

OREGON STANDARD DRAWINGS
CURB RAMP LAYOUT OPTIONS
LARGE RADII

Effective Date: June 1, 2020 – November 30, 2020 RD757

DATE	NO.	DESCRIPTION

DESIGNED: CAB
 DRAWN: HHP
 CHECKED: CAB
 DATE: 9/1/2020



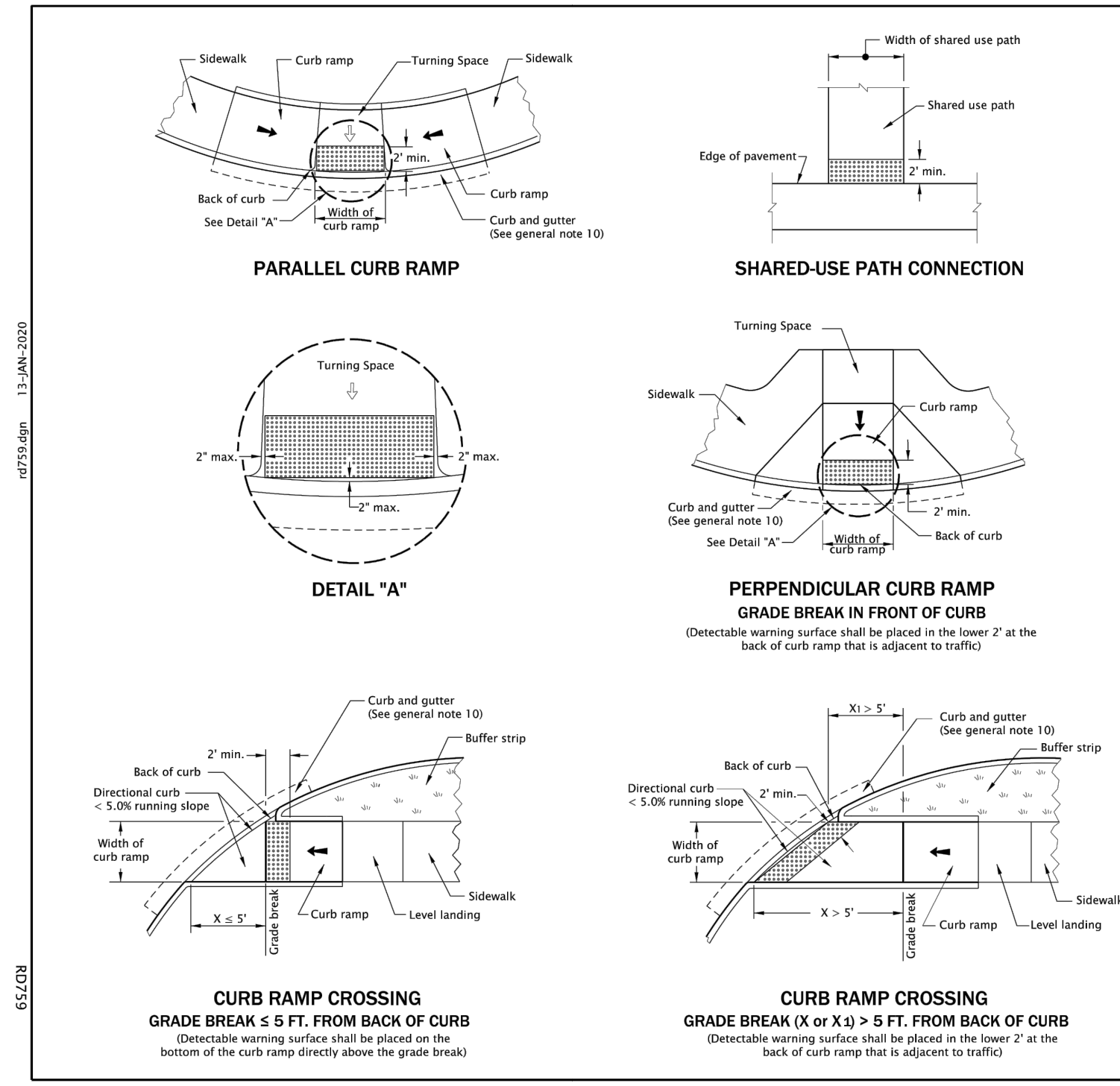
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DETAILS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

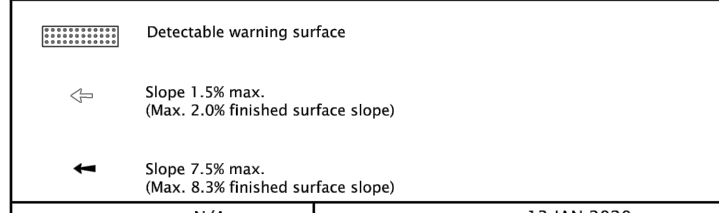
SHEET NO. **3.5**
 JOB NO. MWK-28

13-JAN-2020

65.00



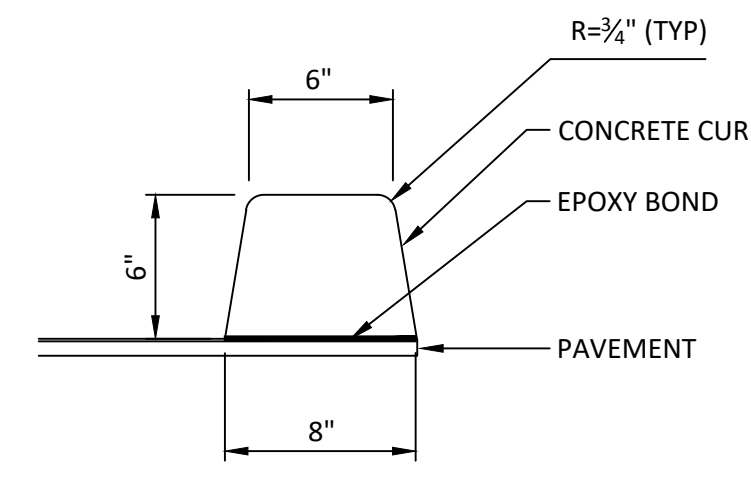
- GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:
1. Detectable warning surface details & locations are based on ODOT applicable Standards.
 2. See project plans for details not shown.
See Std. Dwg. RD700 & RD701 for curbs.
See Std. Dwg. RD720 for sidewalks.
See Std. Dwg. TM493 & TM439 for crosswalk markings, widths, etc.
See Std. Dwg. RD705 & RD710 for islands.
 3. The Detectable Warning Surface shall extend the full width of the curb ramp, or other roadway entrance as applicable. A gap of up to 2 inches on each side of the detectable warning surface is permitted (Measured at the leading edge of the detectable warning surface panel).
 4. Detectable warning surface shall be placed at the back of curb for a minimum depth of 2 ft. at curb ramps that adjacent to traffic. Detectable warning surface may be radial or rectangular, but must comply with the truncated dome size and spacing standards. Detectable warning surface may be cut to meet necessary shape as shown in plans. Color to be safety yellow if no color specified in construction note. For detectable warning surface on or along state highway, alternative colors must be approved.
 5. Detectable warning surface shall be used in the following locations:
a) Curb ramps (See Std. Dwg. RD755, RD756, & RD757).
b) Crossing Islands (Accessible Route Islands), (See Std. Dwg. RD710).
c) Rail crossings (See Std. Dwg. RD758).
 6. Where public transportation stations (rail, bus, etc.) use platform boarding, detectable warning surface shall be placed along the full edge length of the station, when not protected by platform screens or guards (See Std. Dwg. RD758).
 7. Detectable warning surface shall not be used on the following locations:
a) End of sidewalk transitions that are not at a crosswalk, (See Std. Dwg. RD754).
b) Driveways, unless constructed with curb return, (See Std. Dwg. RD725, RD730, RD731, RD740, RD741, & RD750).
c) Parking lots.
 8. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
 9. Where no curb is present, the detectable warning surface shall be placed at the edge of the roadway.
 10. On or along state highways, curb and gutter is required at curb ramps.
 11. Detectable warning surface placement for perpendicular ramps vary as shown.



CALC. BOOK NO.	N/A	BASELINE REPORT DATE	13-JAN-2020
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.			
OREGON STANDARD DRAWINGS			
DETECTABLE WARNING SURFACE DETAILS & PLACEMENT LOCATIONS			
2018			
DATE	REVISION DESCRIPTION		
07-2018	REVISION DRAWING TITLE, REVISED DETAILS & NOTES		
08-2018	REVISION DETAIL NOTES		
09-2018	REVISION DETAIL NOTES		
10-2018	REVISION DETAIL NOTES		
11-2018	REVISION DETAIL & REVISION NOTES		

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

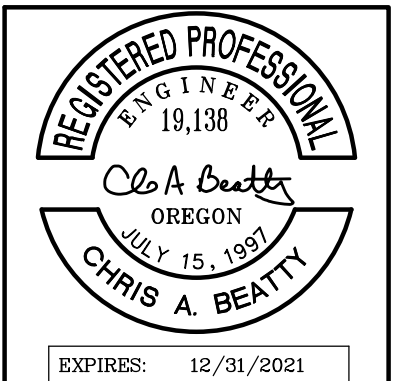
Effective Date: June 1, 2020 – November 30, 2020 RD759



- NOTES:**
1. CURB SHALL BE MACHINE EXTRUDED.
 2. CONCRETE TO BE 3,000 PSI AFTER 28 DAYS.
 3. EXPANSION JOINT EVERY 20 FEET.
 4. CURB SHALL BE BONDED TO AC PAVEMENT.

EXTRUDED CURB DETAIL
NTS

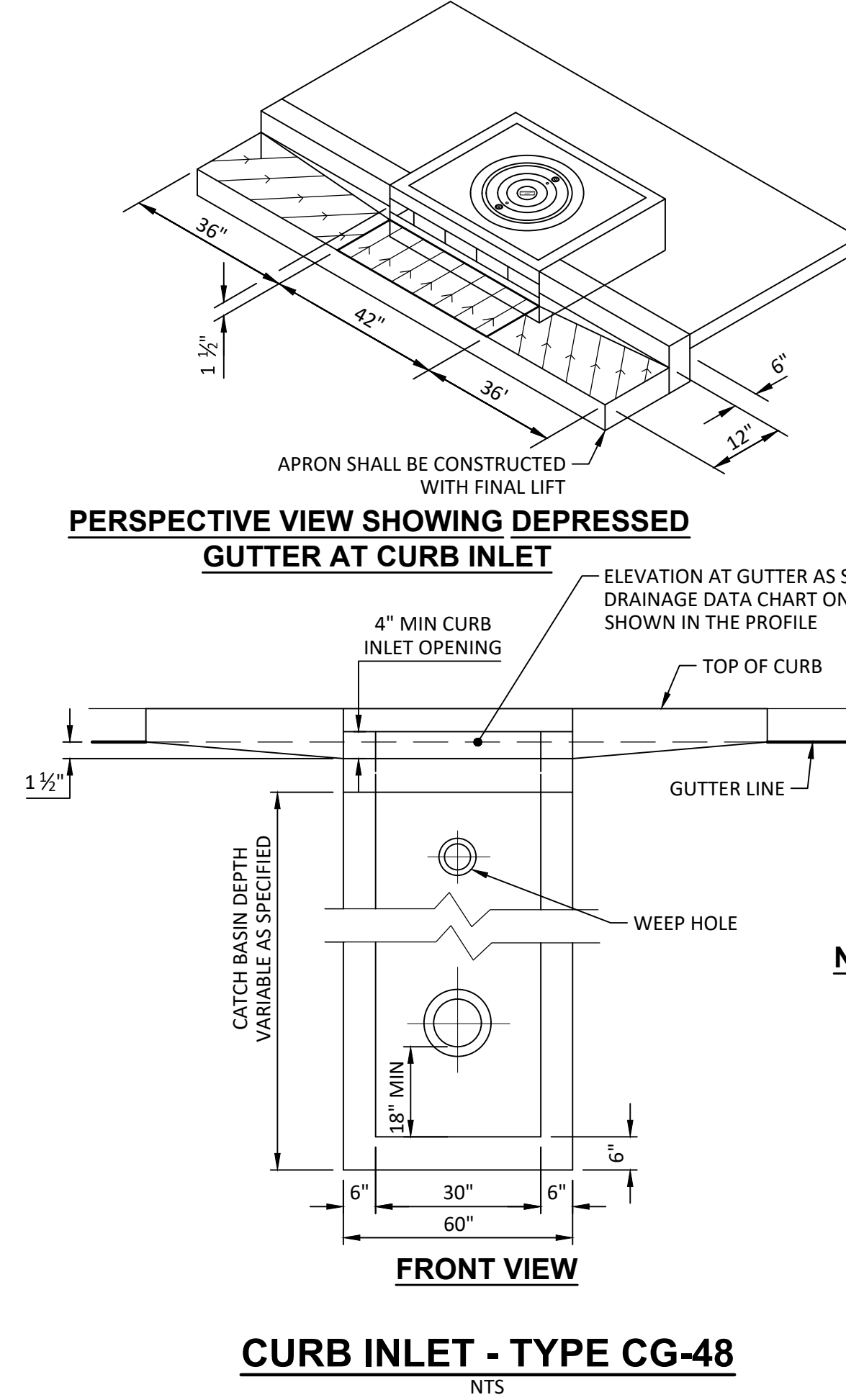
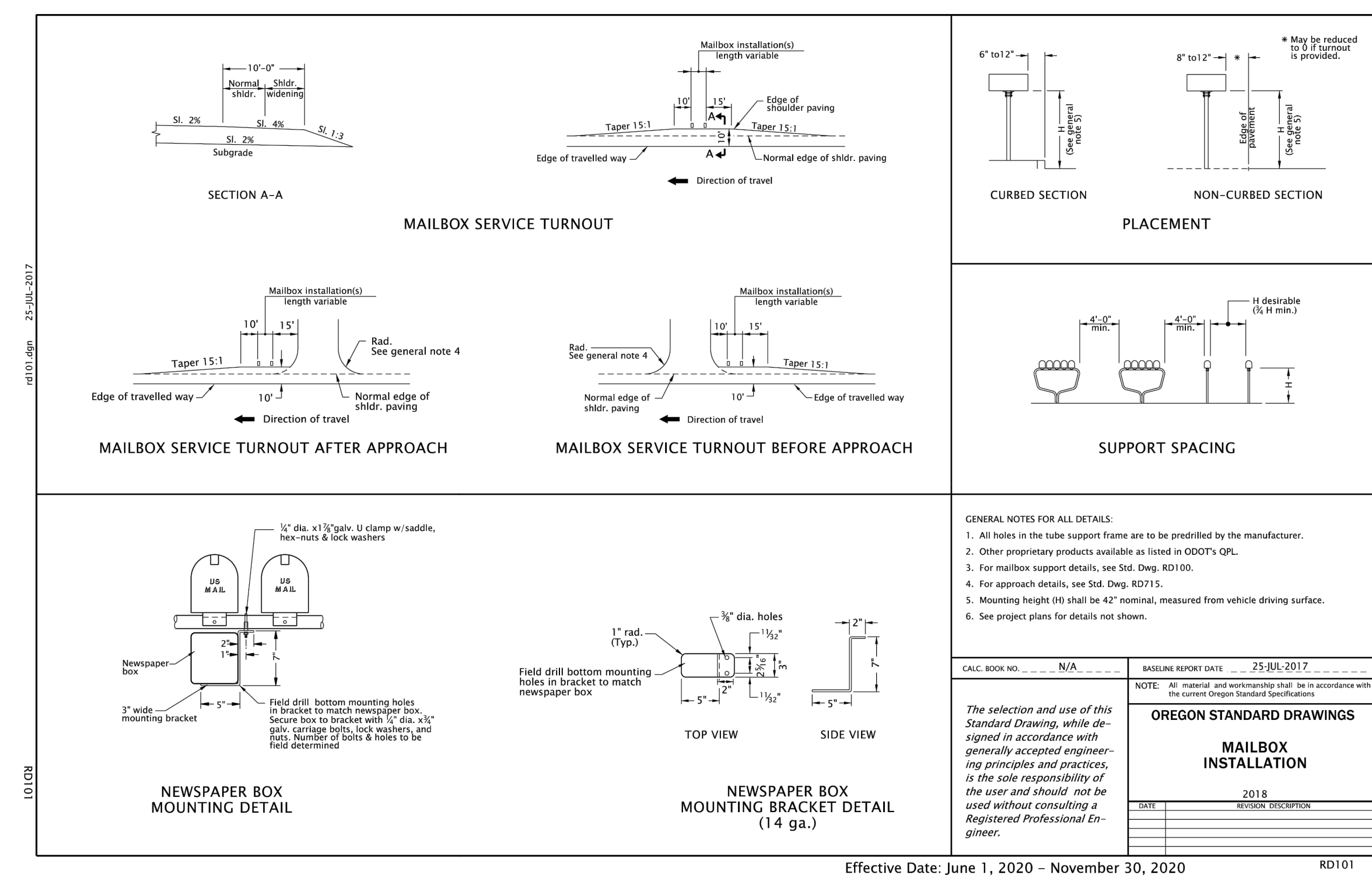
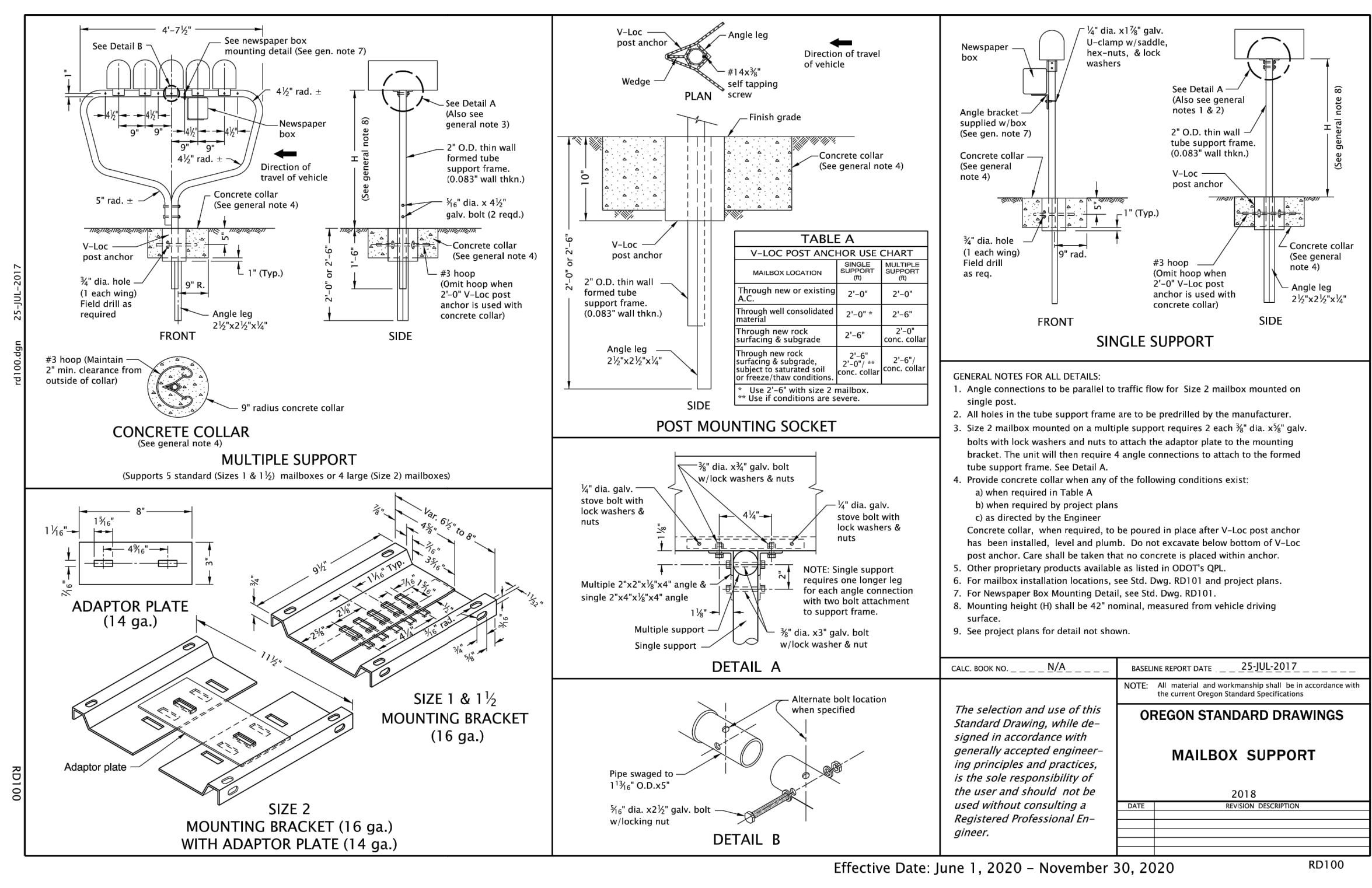
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DATE:	12/4/2020	
REVISIONS		
DATE	NO.	DESCRIPTION



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DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	3.6
JOB NO.	MWK-28



- NOTES:**
- ALL FABRICATED METAL PARTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.
 - CONCRETE SHALL ATTAIN A MIN. COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS.
 - PRECAST CURB INLET FRAME AND LIDE IS PATTERNED AFTER CITY OF MILWAUKIE DRAWING NO. 208.

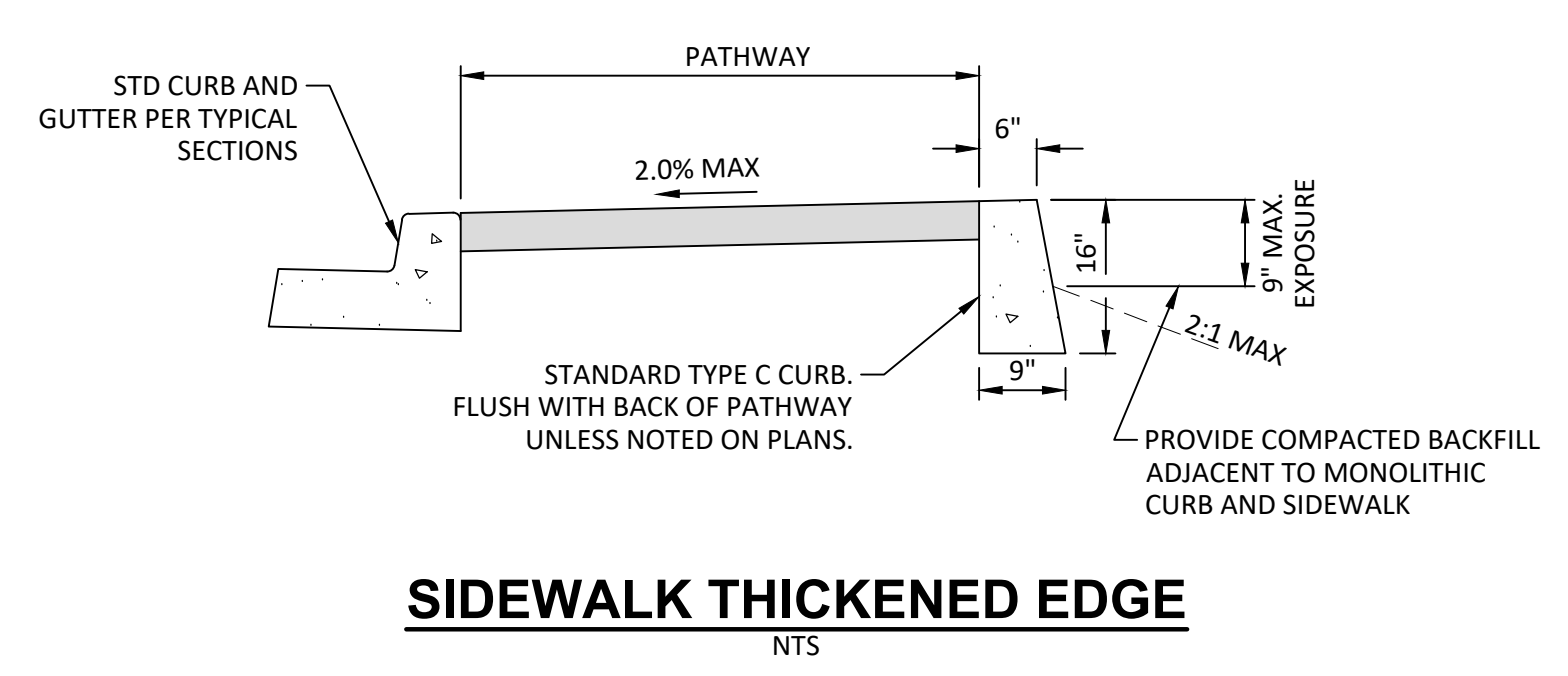
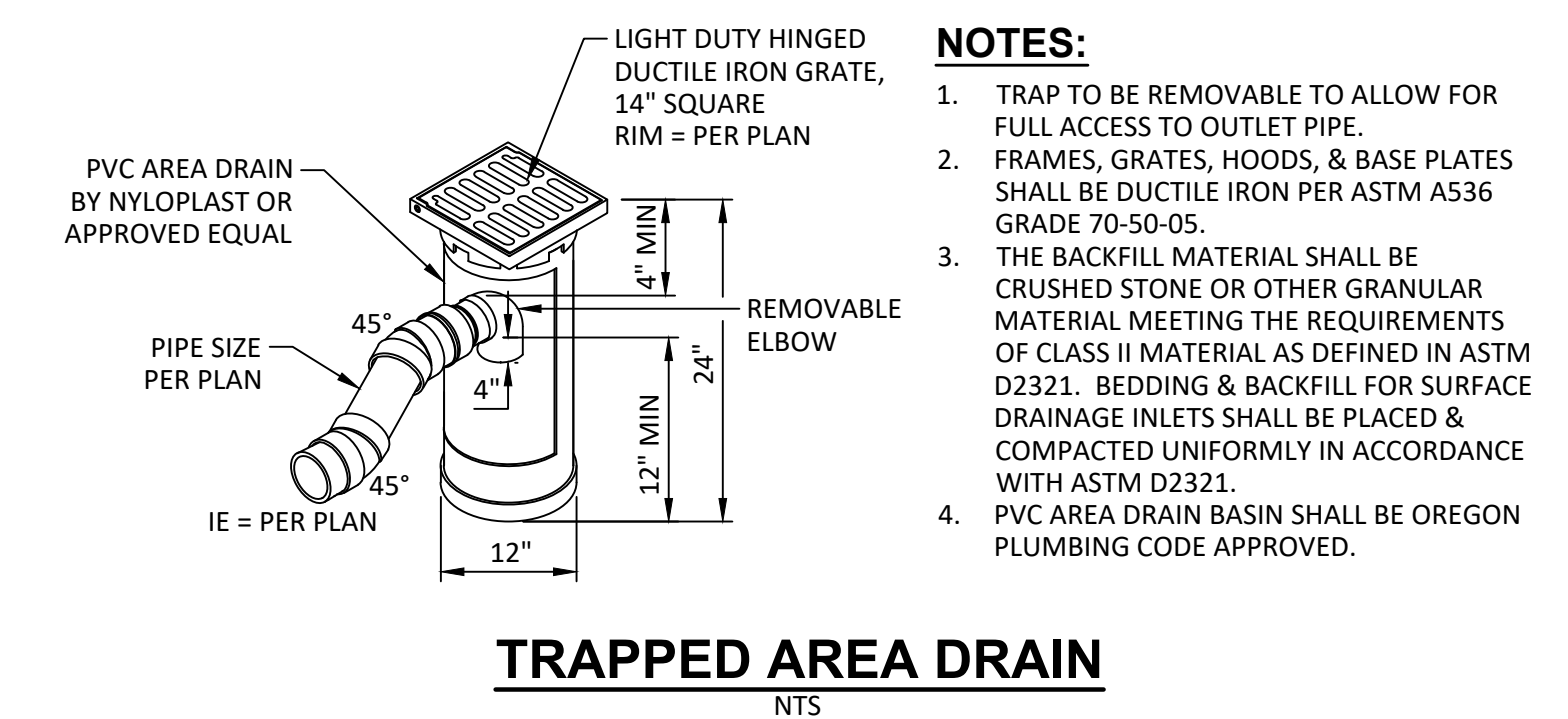
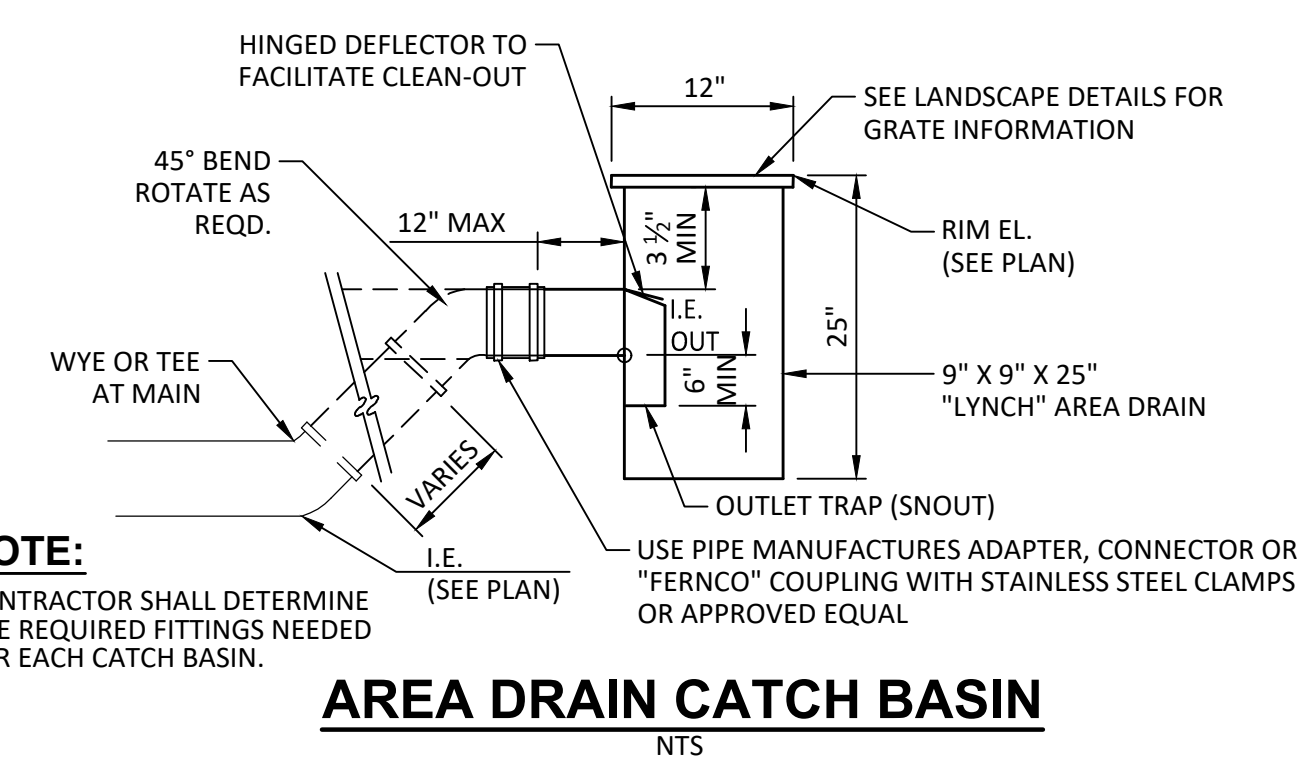
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DATE: 9/1/2020

REVISIONS



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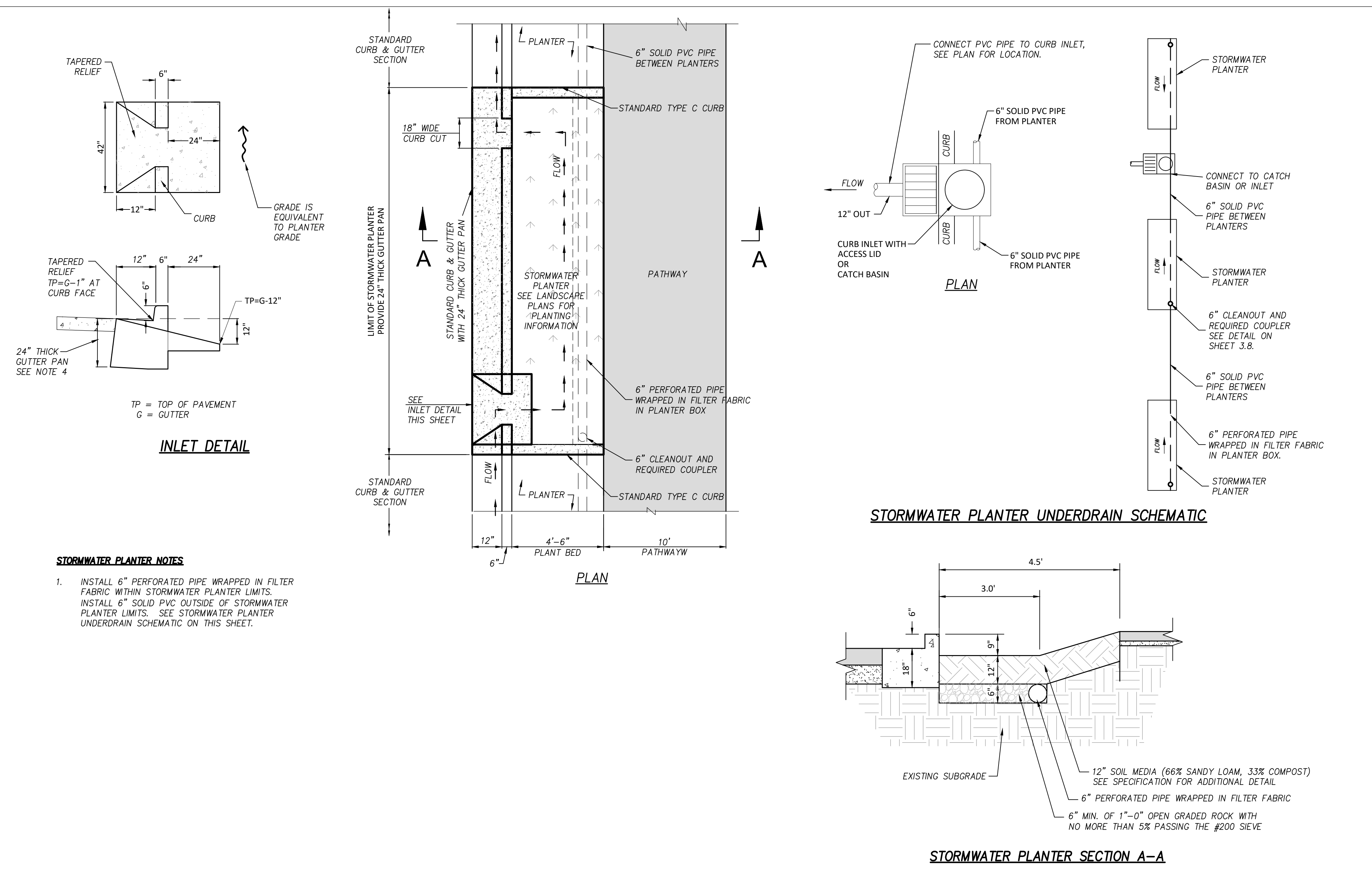


DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

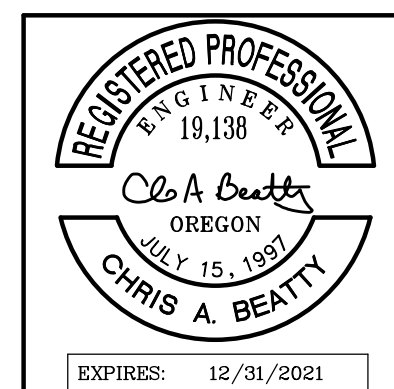
SHEET NO.
3.7
JOB NO. MWK-28

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P:\MWK (City of Milwaukie)\MWK28 (Linwood Avenue)\MWK28-DWG(Sheets)\MWK28-3.0 DETAILS.dwg



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R E V I S I O N S		
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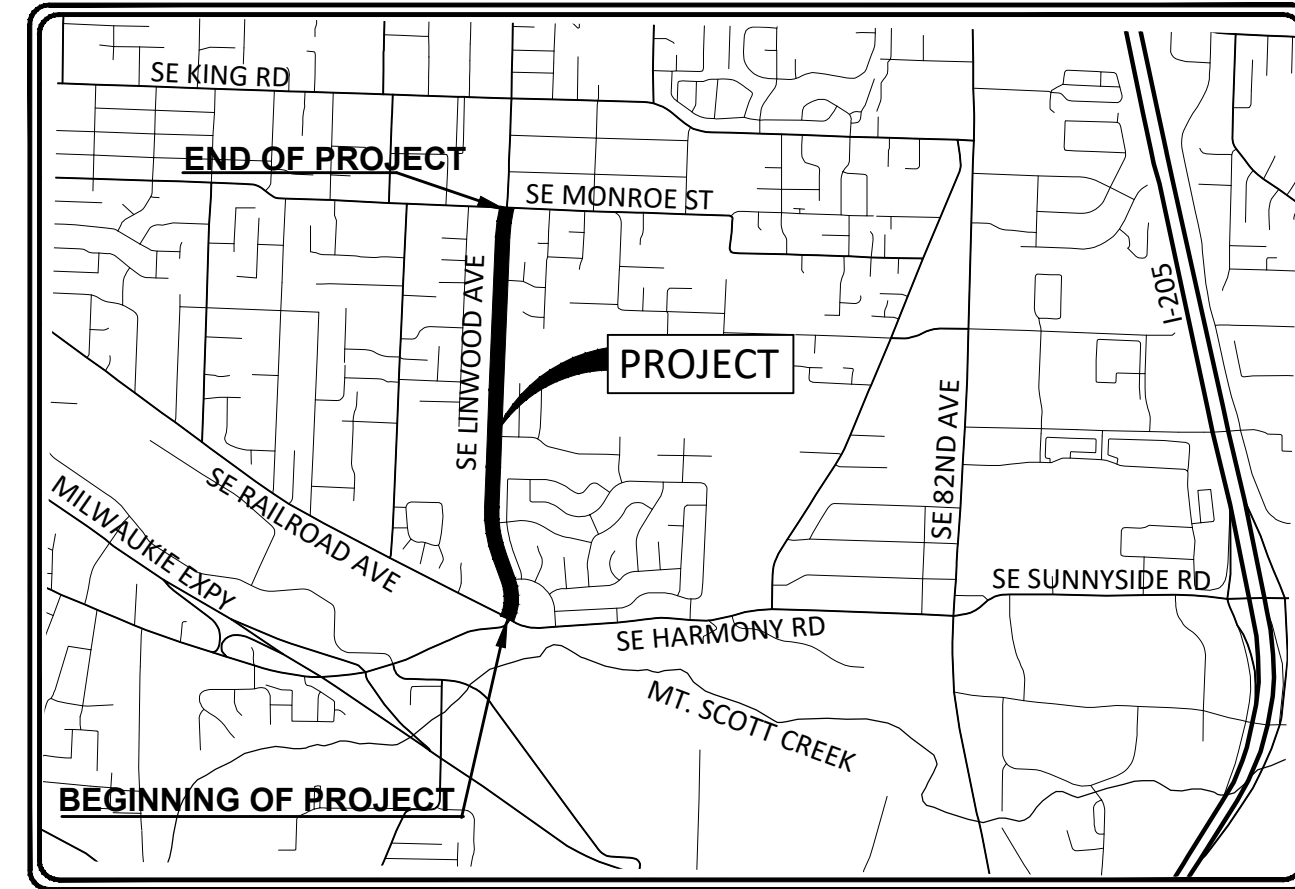
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DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	3.8
JOB NO.	MWK-28

SE LINWOOD AVENUE IMPROVEMENT PROJECT ESCP

MILWAUKIE, OREGON



VICINITY MAP
N.T.S.

SHEET INDEX

4.0	ECSP COVER SHEET
4.1	ECSP STANDARD NOTES
4.2	ECSP STANDARD NOTES
4.3	ECSP CLEARING AND DEMOLITION PLAN
4.4	ECSP CLEARING AND DEMOLITION PLAN
4.5	ECSP CLEARING AND DEMOLITION PLAN
4.6	ECSP PLAN
4.7	ECSP PLAN
4.8	ECSP PLAN
4.9	ECSP DETAILS
4.10	ECSP DETAILS

ATTENTION EXCAVATORS:

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

DEVELOPER / AGENCY

DEVELOPER/COMPANY: CITY OF MILWAUKIE
CONTACT: WENDY MARSHALL, PE
6101 SE JOHNSON CREEK BLVD
MILWAUKIE, OR 97206
PHONE: 503-786-7694
FAX: 503-774-8236

PLANNING / ENGINEERING / SURVEYING FIRM

HARPER HOUF PETERSON RIGHELLIS INC.
CONTACT: CHRIS BEATTY, PE
205 SE SPOKANE AVE, SUITE 200
PORTLAND, OR 97202
PHONE: 503-221-1131
FAX: 503-221-1171

NARRATIVE DESCRIPTIONS

EXISTING SITE CONDITIONS

- SE LINWOOD AVE IS AN EXISTING TWO LANE ROADWAY WITH NO BIKE LANES RUNNING NORTH AND SOUTH WITH ADJACENT RESIDENTIAL PROPERTIES THROUGHOUT THE CORRIDOR. PORTIONS OF THE CORRIDOR FRONTAGE ARE DEVELOPED WITH CURB AND SIDEWALK, BUT MOST OF THE CORRIDOR CONSISTS OF UNDERDEVELOPED FRONTAGE.

DEVELOPED CONDITIONS

- SE LINWOOD AVE WILL BE IMPROVED FROM APPROX. 200' NORTH OF THE INTERSECTION AT SE HARMONY RD AND SE RAILROAD AVE TO NE MONROE ST. IMPROVEMENTS WILL INCLUDE 12' TRAVEL LANES WITH CURB AND GUTTER ON BOTH SIDES, PEDESTRIAN AND BIKE FACILITIES INCORPORATED INTO A 10' MIXED-USE PATH ON BOTH SIDES, AND IMPROVED STORMWATER MANAGEMENT FACILITIES. THE NEW ROADWAY WILL PROVIDE A SAFE ROUTE FOR PEDESTRIANS AND CYCLISTS TO LINWOOD ELEMENTARY SCHOOL / SOJOURNER SCHOOL, AND IMPROVE THE MULTI-MODAL CAPACITY OF THIS NORTH / SOUTH ARTERIAL. WHILE THESE PROPOSED IMPROVEMENTS ARE ONLY FOR THE CITY OF MILWAUKIE PORTION OF SE LINWOOD AVE, CLACKAMAS COUNTY IS CONCURRENTLY IMPROVING ITS PORTION OF SE LINWOOD AVENUE WITH A SIMILAR TYPICAL SECTION TO CREATE A COHESIVE CORRIDOR THAT IS SAFE FOR ALL MODES OF TRANSPORTATION.

NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE

- CLEARING (JULY 2020)
 - MASS GRADING (JULY 2020)
 - UTILITY INSTALLATION (JULY 2020 - NOVEMBER 2020)
 - STREET CONSTRUCTION (JULY 2020 - NOVEMBER 2020)
 - FINAL STABILIZATION (NOVEMBER 2020 - DECEMBER 2020)
- *FINAL LIFT AC MAY BE SPRING 2021

TOTAL SITE AREA = 275,000 SF = 6.31 ACRES
TOTAL DISTURBED AREA = 211,180 SF = 4.85 ACRES

SITE SOIL CLASSIFICATION:

- THE SITE IS MAPPED BY USDA WITH THE FOLLOWING SOIL UNITS:
- 53A-LATOURELL LOAM, 0 TO 3 PERCENT SLOPES, RUNOFF IS SLOW, HAZARD OF EROSION IS SLIGHT
 - 53B-LATOURELL LOAM, 3 TO 8 PERCENT SLOPES, RUNOFF IS SLOW, HAZARD OF EROSION IS SLIGHT
 - 71A-QUATAMA LOAM, 0 TO 3 PERCENT SLOPES, RUNOFF IS SLOW, HAZARD OF EROSION IS SLIGHT
 - 84-WAPATO SILTY CLAY LOAM, RATING C/D

RECEIVING WATER BODIES:

NEAREST WATER BODY: MT. SCOTT CREEK

INSPECTION FREQUENCY:

SITE CONDITION	
1.	ACTIVE PERIOD
2.	PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY.
3.	INACTIVE PERIODS GREATER THAN FOURTEEN (14) CONSECUTIVE CALENDAR DAYS.
4.	PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.
5.	PERIODS DURING WHICH DISCHARGE IS UNLIKELY DUE TO FROZEN CONDITIONS.

- HOLD A PRE-CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL THAT INCLUDES THE INSPECTOR TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS.
- ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH DEQ 1200-CN PERMIT REQUIREMENTS.
- INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH DEQ'S 1200-CN PERMIT REQUIREMENTS.
- RETAIN A COPY OF THE ESCP AND ALL REVISIONS ON SITE AND MAKE IT AVAILABLE ON REQUEST TO DEQ, AGENT, OR THE LOCAL MUNICIPALITY. DURING INACTIVE PERIODS OF GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS, RETAIN THE ESCP AT THE CONSTRUCTION SITE OR AT ANOTHER LOCATION.

PROJECT LOCATION:

SE LINWOOD AVE
SOUTH PROJECT LIMITS: SE HARMONY RD AND SE RAILROAD AVE
NORTH PROJECT LIMITS: SE MONROE ST
LATITUDE = 45.4355555 - 45° 26' 08"
LONGITUDE = 122.5991667 - 122° 35' 57"

PERMITTEE'S SITE INSPECTOR:

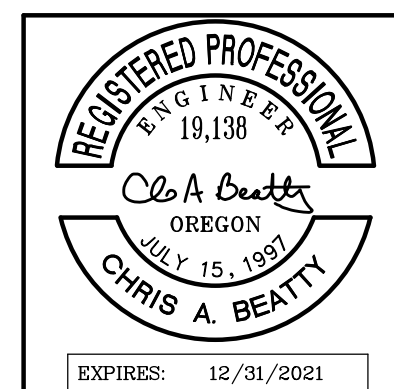
NAME: KURTIS PIPKIN
COMPANY/AGENCY: HARPER HOUF PETERSON RIGHELLIS INC.
PHONE: 503-221-1131
FAX: 503-221-1171
E-MAIL: KURTISP@HHPR.COM
DESCRIPTION OF EXPERIENCE: CIVIL ENGINEERING DESIGNER AND FIELD INSPECTOR

CESCL #70278. (BEGINNING JANUARY 1, 2017 EROSION CONTROL INSPECTORS MUST HAVE CERTIFICATION THROUGH A PROGRAM APPROVED BY DEQ. THE FOLLOWING PROGRAMS CAN BE USED TO MEET THIS REQUIREMENT: CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL, CERTIFIED PROFESSIONAL IN STORM WATER QUALITY, WASHINGTON STATE CERTIFIED EROSION AND SEDIMENT CONTROL LEAD, ROGUE VALLEY SEWER SERVICES EROSION AND SEDIMENT CONTROL CERTIFICATION.)

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

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DATE	NO.	DESCRIPTION
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ESCP COVER SHEET
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	4.0
JOB NO.	MWK-28

BMP MATRIX FOR CONSTRUCTION PHASES

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

	CLEARING	MASS GRADING	UTILITY INSTALLATION	STREET CONSTRUCTION	FINAL STABILIZATION	WET WEATHER (OCT. 1 - MAY 31ST)
EROSION PREVENTION						
PRESERVE NATURAL VEGETATION	**X		X	X	X	X
GROUND COVER					X	X
HYDRAULIC APPLICATIONS						
PLASTIC SHEETING						X
MATTING					X	X
DUST CONTROL	X	X	X	X	X	X
TEMPORARY/ PERMANENT SEEDING		X	X	X	X	X
BUFFER ZONE	**X	X	X	X	X	X
OTHER:						
SEDIMENT CONTROL						
SEDIMENT FENCE (PERIMETER)	**X	X	X	X	X	X
SEDIMENT FENCE (INTERIOR)			X	X	X	X
STRAW WATTLES	X	X	X		X	X
FILTER BERM					X	X
INLET PROTECTION	**X	X	X	X	X	X
DEWATERING	X	X	X	X	X	X
SEDIMENT TRAP					X	X
NATURAL BUFFER ENCROACHMENT	*X	*X	*X	*X	*X	*X
OTHER:						
RUN OFF CONTROL						
CONSTRUCTION ENTRANCE		X	X	X	X	X
PIPE SLOPE DRAIN						
OUTLET PROTECTION						
SURFACE ROUGHENING					X	X
CHECK DAMS						
OTHER:						
POLLUTION PREVENTION						
PROPER SIGNAGE	X	X	X	X	X	X
HAZ WASTE MGMT	X	X	X	X	X	X
SPILL KIT ON-SITE	X	X	X	X	X	X
CONCRETE WASHOUT AREA	X	X	X	X	X	X
OTHER:						

* SIGNIFIES ADDITIONAL BMP'S REQUIRED FOR WORK WITHIN 50' OF WATER OF THE STATE.
 ** SIGNIFIES BMP THAT WILL BE INSTALLED PRIOR TO ANY GROUND DISTURBING ACTIVITY.

RATIONALE STATEMENT

A COMPREHENSIVE LIST OF AVAILABLE BEST MANAGEMENT PRACTICES (BMP) OPTIONS BASED ON DEQ'S GUIDANCE MANUAL HAS BEEN REVIEWED TO COMPLETE THIS EROSION AND SEDIMENT CONTROL PLAN. SOME OF THE ABOVE LISTED BMP'S WERE NOT CHOSEN BECAUSE THEY WERE DETERMINED TO NOT EFFECTIVELY MANAGE EROSION PREVENTION AND SEDIMENT CONTROL FOR THIS PROJECT BASED ON SPECIFIC SITE CONDITIONS, INCLUDING SOIL CONDITIONS TOPOGRAPHIC CONSTRAINTS, ACCESSIBILITY TO THE SITE, AND OTHER RELATED CONDITIONS, AS THE PROJECT PROGRESSES AND THERE IS A NEED TO REVISE THE ESC PLAN, AN ACTION PLAN WILL BE SUBMITTED.

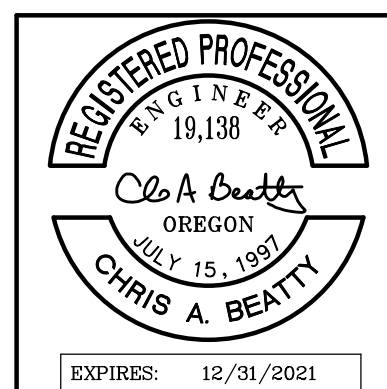
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INITIAL

GRADING, STREET AND UTILITY EROSION AND SEDIMENT CONSTRUCTION NOTES:

- SEED USED FOR TEMPORARY OR PERMANENT SEEDING SHALL BE COMPOSED OF ONE OF THE FOLLOWING MIXTURES, UNLESS OTHERWISE AUTHORIZED:
 - VEGETATED CORRIDOR AREAS REQUIRE NATIVE SEED MIXES. SEE RESTORATION PLAN FOR APPROPRIATE SEED MIX.
 - DWARF GRASS MIX (MIN. 100 LB./AC.)
 - DWARF PERENNIAL RYEGRASS (80% BY WEIGHT)
 - CREeping RED FESCUE (20% BY WEIGHT)
 - STANDARD HEIGHT GRASS MIX (MIN. 100LB./AC.)
 - ANNUAL RYEGRASS (40% BY WEIGHT)
 - TURF-TYPE FESCUE (60% BY WEIGHT)
- SLOPE TO RECEIVE TEMPORARY OR PERMANENT SEEDING SHALL HAVE THE SURFACE ROUGHENED BY MEANS OF TRACK-WALKING OR THE USE OF OTHER APPROVED IMPLEMENTS. SURFACE ROUGHENING IMPROVES SEED BEDDING AND REDUCES RUN-OFF VELOCITY.
- LONG TERM SLOPE STABILIZATION MEASURES SHALL INCLUDE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER VIA SEEDING WITH APPROVED MIX AND APPLICATION RATE.
- TEMPORARY SLOPE STABILIZATION MEASURES SHALL INCLUDE: COVERING EXPOSED SOIL WITH PLASTIC SHEETING, STRAW MULCHING, WOOD CHIPS, OR OTHER APPROVED MEASURES.
- STOCKPILED SOIL OR STRIPPINGS SHALL BE PLACED IN A STABLE LOCATION AND CONFIGURATION. DURING "WET WEATHER" PERIODS, STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING OR STRAW MULCH. SEDIMENT FENCE IS REQUIRED AROUND THE PERIMETER OF THE STOCKPILE.
- EXPOSED CUT OR FILL AREAS SHALL BE STABILIZED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR WATTLES, OR OTHER APPROPRIATE MEASURES. SLOPES EXCEEDING 25% MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
- AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF A FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCHING, OR OTHER APPROVED MEASURES.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, TIRE WASHES, STREET SWEEPING, AND VACUUMING MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- ACTIVE INLETS TO STORM WATER SYSTEMS SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET PROTECTION MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED AS NEEDED.
- SATURATED MATERIALS THAT ARE HAULED OFF-SITE MUST BE TRANSPORTED IN WATER-TIGHT TRUCKS TO ELIMINATE SPILLAGE OF SEDIMENT AND SEDIMENT-LADEN WATER.
- AN AREA SHALL BE PROVIDED FOR THE WASHING OUT OF CONCRETE TRUCKS IN A LOCATION THAT DOES NOT PROVIDE RUN-OFF THAT CAN ENTER THE STORM WATER SYSTEM. IF THE CONCRETE WASH-OUT AREA CAN NOT BE CONSTRUCTED GREATER THAN 50' FROM ANY DISCHARGE POINT, SECONDARY MEASURES SUCH AS BERMS OR TEMPORARY SETTLING PITS MAY BE REQUIRED. THE WASH-OUT SHALL BE LOCATED WITHIN SIX FEET OF TRUCK ACCESS AND BE CLEANED WHEN IT REACHES 50% OF THE CAPACITY.
- SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE TRANSFERRED TO THE STORM WATER SYSTEM. SWEEPINGS SHALL BE PICKED UP AND DISPOSED IN THE TRASH.
- AVOID PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUN-OFF INTO THE STORM WATER SYSTEM.
- USE BMPS SUCH AS CHECK-DAMS, BERMS, AND INLET PROTECTION TO PREVENT RUN-OFF FROM REACHING DISCHARGE POINTS.
- COVER CATCH BASINS, MANHOLES, AND OTHER DISCHARGE POINTS WHEN APPLYING SEAL COAT, TACK COAT, ETC. TO PREVENT INTRODUCING THESE MATERIALS TO THE STORM WATER SYSTEM.

DATE	NO.	DESCRIPTION
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STANDARD EROSION AND SEDIMENT CONTROL PLAN DRAWING NOTES:

- ALL PERMIT REGISTRANTS MUST IMPLEMENT THE ESCP. FAILURE TO IMPLEMENT ANY OF THE CONTROL MEASURES OR PRACTICES DESCRIBED IN THE ESCP IS A VIOLATION OF THE PERMIT.
- THE ESCP 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.
- SUBMISSION OF ALL ESCP REVISIONS IS NOT REQUIRED. SUBMITTAL OF THE ESCP REVISIONS IS ONLY UNDER SPECIFIC CONDITIONS. SUBMIT ALL NECESSARY REVISION TO DEQ OR AGENT.
- PHASE CLEARING AND GRADING TO THE MAXIMUM EXTENT PRACTICAL TO PREVENT EXPOSED INACTIVE AREAS FROM BECOMING A SOURCE OF EROSION.
- IDENTIFY, MARK, AND PROTECT (BY FENCING OFF OR OTHER MEANS) CRITICAL RIPARIAN AREAS AND VEGETATION INCLUDING IMPORTANT TREES AND ASSOCIATED ROOTING ZONES, AND VEGETATION AREAS TO BE PRESERVED. IDENTIFY VEGETATIVE BUFFER ZONES BETWEEN THE SITE AND SENSITIVE AREAS (E.G., WETLANDS), AND OTHER AREAS TO BE PRESERVED, ESPECIALLY IN PERIMETER AREAS.
- 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. DIRECT ALL WASH WATER INTO A PIT OR LEAK-PROOF CONTAINER. HANDLE WASH WATER AS WASTE, CONCRETE DISCHARGE TO WATERS OF THE STATE IS PROHIBITED.
- APPLY TEMPORARY AND/OR PERMANENT SOIL STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS AS GRADING PROGRESSES AND FOR ALL ROADWAYS INCLUDING GRAVEL ROADWAYS.
- ESTABLISH MATERIAL AND WASTE STORAGE AREAS, AND OTHER NON-STORMWATER CONTROLS.
- PREVENT TRACKING OF SEDIMENT ONTO PUBLIC OR PRIVATE ROADS USING BMPS SUCH AS: GRAVELED (OR PAVED) EXITS AND PARKING AREAS, GRAVEL ALL UNPAVED ROADS LOCATED ONSITE, OR USE AN EXIT TIRE WASH. THESE BMPS MUST BE IN PLACE PRIOR TO LAND-DISTURBING ACTIVITIES.
- 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.
- IF A STORMWATER TREATMENT SYSTEM (FOR EXAMPLE, ELECTRO-COAGULATION, FLOCCULATION, FILTRATION, ETC.) FOR SEDIMENT OR OTHER POLLUTANT REMOVAL IS EMPLOYED, SUBMIT AN OPERATION AND MAINTENANCE PLAN (INCLUDING SYSTEM SCHEMATIC, LOCATION OF SYSTEM, LOCATION OF INLET, LOCATION OF DISCHARGE, DISCHARGE DISPERSION DEVICE DESIGN, AND A SAMPLING PLAN AND FREQUENCY) BEFORE OPERATING THE TREATMENT SYSTEM. OBTAIN PLAN APPROVAL BEFORE OPERATING THE TREATMENT SYSTEM. OPERATE AND MAINTAIN THE TREATMENT SYSTEM ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- 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.
- IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1; THE TYPE AND PERCENTAGES OF SEED IN THE MIX MUST BE IDENTIFIED ON THE PLANS.
- ALL EXPOSED SOILS MUST BE COVERED DURING THE WET WEATHER PERIOD, OCTOBER 01 - MAY 31.
- IF WATER OF THE STATE IS WITHIN THE PROJECT SITE OR WITHIN 50 FEET OF THE PROJECT BOUNDARY, MAINTAIN THE EXISTING NATURAL BUFFER WITHIN THE 50-FOOT ZONE FOR THE DURATION OF THE PERMIT COVERAGE, OR MAINTAIN LESS THAN THE ENTIRE EXISTING NATURAL BUFFER AND PROVIDE ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS.
- STAGING AREA REQUIREMENTS: CONSTRUCTION STAGING WILL LIKELY OCCUR WITHIN THE SE LINWOOD AVE RIGHT-OF-WAY OR WITHIN THE RIGHT-OF-WAY ON SIDE STREETS THROUGHOUT THE PROJECT CORRIDOR. ALL STOCKPILES MUST BE COVERED WITH PLASTIC SHEETING AT ALL TIMES WHEN NOT BEING UTILIZED. IN ADDITION, THE PERIMETER OF ALL STOCKPILES MUST BE SURROUNDED WITH STRAW WADDLES OR COMPOST FILLER SOCKS.
- CONCRETE WASHOUT BASINS TO BE PROVIDED IN CLOSE PROXIMITY AT ALL LOCATIONS WHERE CONCRETE IS BEING PLACED.

PRE-CONSTRUCTION, CLEARING, AND DEMOLITION NOTES:

- ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- SEDIMENT BARRIERS APPROVED FOR USE INCLUDE SEDIMENT FENCE, BERMS CONSTRUCTED OUT OF MULCH, CHIPPINGS, OR OTHER SUITABLE MATERIAL, STRAW WATTLES, OR OTHER APPROVED MATERIALS.
- SENSITIVE RESOURCES INCLUDING, BUT NOT LIMITED TO, TREES, WETLANDS, AND RIPARIAN PROTECTION AREAS SHALL BE CLEARLY DELINEATED WITH ORANGE CONSTRUCTION FENCING OR CHAIN LINK FENCING IN A MANNER THAT IS CLEARLY VISIBLE TO ANYONE IN THE AREA. NO ACTIVITIES ARE PERMITTED TO OCCUR BEYOND THE CONSTRUCTION BARRIER.
- CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES INCLUDING, BUT NOT LIMITED TO, STREET SWEEPING, AND VACUUMING, MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- RUN-ON AND RUN-OFF CONTROLS SHALL BE IN PLACE AND FUNCTIONING PRIOR TO BEGINNING SUBSTANTIAL CONSTRUCTION ACTIVITIES. RUN-ON AND RUN-OFF CONTROL MEASURES INCLUDE: SLOPE DRAINS (WITH OUTLET PROTECTION), CHECK DAMS, SURFACE ROUGHENING, AND BANK STABILIZATION.

EROSION AND SEDIMENT CONTROL BMP IMPLEMENTATION:

- ALL BASE ESC MEASURES (INLET PROTECTION, PERIMETER SEDIMENT CONTROL, GRAVEL CONSTRUCTION ENTRANCES, ETC.) MUST BE IN PLACE, FUNCTIONAL, AND APPROVED IN AN INITIAL INSPECTION, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.
- ALL "SEDIMENT BARRIERS (TO BE INSTALLED AFTER GRADING)" SHALL BE INSTALLED IMMEDIATELY FOLLOWING ESTABLISHMENT OF FINISHED GRADE AS SHOWN ON THESE PLANS.
- LONG TERM SLOPE STABILIZATION MEASURES "INCLUDING MATTING" SHALL BE IN PLACE OVER ALL EXPOSED SOILS BY OCTOBER 1.
- THE STORM WATER FACILITY SHALL BE CONSTRUCTED AND LANDSCAPED PRIOR TO THE STORM WATER SYSTEM FUNCTIONING AND SITE PAVING.
- INLET PROTECTION SHALL BE IN-PLACE IMMEDIATELY FOLLOWING PAVING ACTIVITIES.

LOCAL AGENCY-SPECIFIC EROSION CONTROL NOTES:

- IF VEGETATIVE SEED MIXES ARE SPECIFIED, SEEDING MUST TAKE PLACE NO LATER THAN SEPTEMBER 1; THE TYPE AND PERCENTAGES OF SEED IN THE MIX MUST BE IDENTIFIED ON THE PLANS.
- 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.

P:\M\K (City of Milwaukie)\M\K-28 (Linwood Avenue)\M\K-28-DWG\Sheets\M\K-28-4-D EROSION CONTROL COVER.dwg

ESCP STANDARD NOTES
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	4.1
JOB NO.	MWK-28

CITY OF MILWAUKIE EROSION CONTROL NOTES:

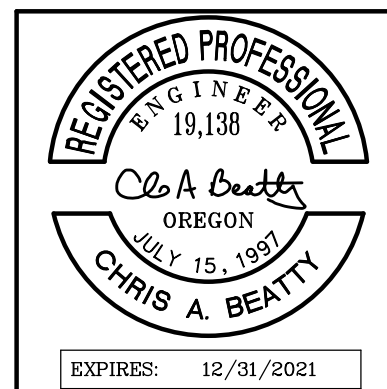
1. ALL EROSION PREVENTION MEASURES SHALL BE IN PLACE, FUNCTIONAL, AND APPROVED IN ACCORDANCE WITH THE APPROVED EROSION PREVENTION AND SEDIMENT CONTROL PLAN PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES. ALL SOIL DISTURBING AND CONSTRUCTION ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH MMC CHAPTER 16.28 EROSION CONTROL AND ANY APPLICABLE LOCAL, STATE OR FEDERAL REQUIREMENTS.
2. ALTERNATIVE SEDIMENT CONTROLS MUST PROVIDE A DISCHARGE THAT IS CLEAN AND FREE OF SEDIMENT, SURFACTANTS, AND OTHER POLLUTANTS PRIOR TO ENTERING THE STORM SYSTEM. APPROVAL OF ALTERNATIVE SEDIMENT CONTROLS BY THE CITY OF MILWAUKIE WASTEWATER DIVISION MANAGER IS REQUIRED PRIOR TO INSTALLATION.
3. WRITTEN SPILL PREVENTION AND RESPONSE PROCEDURES SHALL BE DEVELOPED, MAINTAINED, AND IMPLEMENTED ON THE CONSTRUCTION SITE.
4. DUMPING OR DISPOSAL OF SPOIL MATERIALS INTO ANY STREAM CORRIDOR, WETLANDS, SURFACE WATERS OR ON ANY PUBLIC OR PRIVATE PROPERTY NOT SPECIFIED FOR SAID PURPOSE IS PROHIBITED.
5. SEDIMENT AND POLLUTANTS SHALL NOT BE WASHED INTO STORM SEWERS, DRAINAGE WAYS, OR WATER BODIES. DRY SWEEPING SHALL BE IMPLEMENTED TO CLEAN UP CONSTRUCTION AREAS TO PREVENT RELEASE OF SEDIMENTS INTO THE STORM SYSTEM.
6. DISPOSAL OF SEDIMENT LADEN WATER INTO THE WASTEWATER SYSTEM IS PROHIBITED, UNLESS PRIOR WRITTEN APPROVAL IS RECEIVED FROM THE CITY OF MILWAUKIE WASTEWATER DIVISION MANAGER. SEDIMENT LADEN WATER SHALL BE PUMPED THROUGH AN APPROVED SEDIMENT CONTROL BMP PRIOR TO DISPOSAL INTO THE WASTEWATER SYSTEM.
7. SAWCUTTING SLURRY AND DEBRIS SHALL BE VACUUMED AND REMOVED FROM ALL IMPERVIOUS SURFACES. VACUUMED SAWCUTTING SLURRY SHALL BE PROPERLY DISPOSED OF AND NOT DISCHARGED INTO THE STORM SYSTEM.
8. WATER TIGHT TRUCKS SHALL BE USED TO TRANSPORT SATURATED SOILS FROM THE CONSTRUCTION SITE.
9. TEMPORARY STABILIZATION AND COVERING OF SOIL STOCKPILES SHALL OCCUR AT THE END OF EACH WORK DAY.
10. ALL TOXIC OR HAZARDOUS MATERIALS SHALL BE PROPERLY STORED, APPLIED, AND DISPOSED.
11. AN AREA SHALL BE DESIGNATED FOR WASHING OUT CONCRETE TRUCKS SUCH THAT RUNOFF FROM WASHING ACTIVITIES ARE CONTAINED AND DO NOT LEAVE THE SITE OR ENTER THE STORM SYSTEM.
12. SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE SHALL NOT BE WASHED TO THE STREET OR STORM SYSTEM. SWEEPINGS SHALL BE COLLECTED AND PROPERLY DISPOSED OF IN THE TRASH.
13. PAVING IN WET WEATHER WHEN PAVING CHEMICALS CAN RUNOFF INTO THE STORM SYSTEMS IS PROHIBITED.
14. TRACKING OF DIRT AND DEBRIS ONTO IMPERVIOUS SURFACES, SUCH AS STREETS AND PARKING LOTS, IS PROHIBITED. IMPERVIOUS SURFACES SHALL BE KEPT FREE OF DIRT AND DEBRIS AT ALL TIMES IF IT CAN BE SPREAD BY TRAFFIC OR CAN ENTER THE STORM SYSTEM.
15. GRAVEL OR DIRT CURB RAMPS ARE PROHIBITED. ONLY WOOD STEP STYLE CURB RAMPS ARE ALLOWED.
16. UPON COMPLETION OF SITE RESTORATION AND APPROVAL FROM THE CITY OF MILWAUKIE ENGINEERING DIRECTOR, ALL TEMPORARY EROSION CONTROL MEASURES MAY BE REMOVED.
17. DRAINAGE FROM SPRINGS OR GROUNDWATER MUST BE ADDRESSED DURING CONSTRUCTION BY THE CONTRACTOR. DISCHARGE FROM GROUNDWATER ENCOUNTERED ON THE SITE MUST BE CLEAN OF SEDIMENT OR POLLUTANTS.
18. AREAS SUBJECT TO WIND EROSION SHALL USE APPROPRIATE DUST CONTROL MEASURES INCLUDING THE APPLICATION OF FINE SPRAY OF WATER, PLASTIC SHEETING, STRAW MULCH, OR OTHER APPROVED MEASURES.
19. DATES OF IMPLEMENTATION OF WET WEATHER MEASURES ARE OCTOBER 1ST TO APRIL 30TH.
20. MATERIALS SHALL NOT BE STOCKPILED ON PUBLIC STREETS OR IN THE RIGHT OF WAY FOR LONGER THAN IMMEDIATE USE.

WET WEATHER EROSION CONTROL NOTES:

ON SEPTEMBER 1ST OF EACH YEAR, IF THERE ARE EXPOSED SOILS, DISTURBED AREAS, OR GROUND-COVER VEGETATION NOT FULLY ESTABLISHED SUFFICIENT TO PREVENT EROSION, A SPECIFIC EROSION CONTROL PLAN SHALL BE PREPARED BASED ON THE EXISTING AND EXPECTED SITE CONDITIONS USING THE WET WEATHER EROSION PREVENTION MEASURES (SEE EROSION PREVENTION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL CHAPTER 4 FOR REQUIREMENTS). FOR SURFACE WATER FACILITIES, FIBER MATTING SHALL BE INSTALLED IN ALL AREAS EXPOSED TO WATER FLOW OR INUNDATION; FREE-FLOATING MULCH SHALL NOT BE USED IN AREAS SUBJECT TO INUNDATION. FIBER MATTING SHALL EITHER BE SEEDED (PER THE DESIGN) OR PLACED PRIOR TO PLANTING OF PLUGS, CUTTINGS, REEDS, RUSHES, OR SHRUBS. ALL MEASURES AND SPECIFICATIONS FOR MATERIALS USED SHALL BE PER PLAN OR AS SPECIFICALLY APPROVED BY THE ENGINEER AND CITY INSPECTOR. IF ANY ADDITIONAL AREAS BECOME EXPOSED, DISTURBED, OR STRIPPED OF VEGETATION BETWEEN OCTOBER 1ST AND MAY 31ST, THE PLAN SHALL BE REVISED OR OTHERWISE EXPANDED PER THE STANDARDS AND AS DIRECTED BY THE ENGINEER AND CITY INSPECTOR. PRIOR TO OCTOBER 1ST OF EACH YEAR, WET WEATHER MEASURES SHALL BE INSTALLED AND FULLY FUNCTIONAL.

THESE EROSION AND SEDIMENT CONTROL PLANS ASSUME "DRY WEATHER" CONSTRUCTION. "WET WEATHER" CONSTRUCTION MEASURES NEED TO BE APPLIED BETWEEN OCTOBER 1ST AND MAY 31ST.

			DESIGNED:	CAB
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			CHECKED:	CAB
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DATE	NO.	DESCRIPTION		
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HHPR

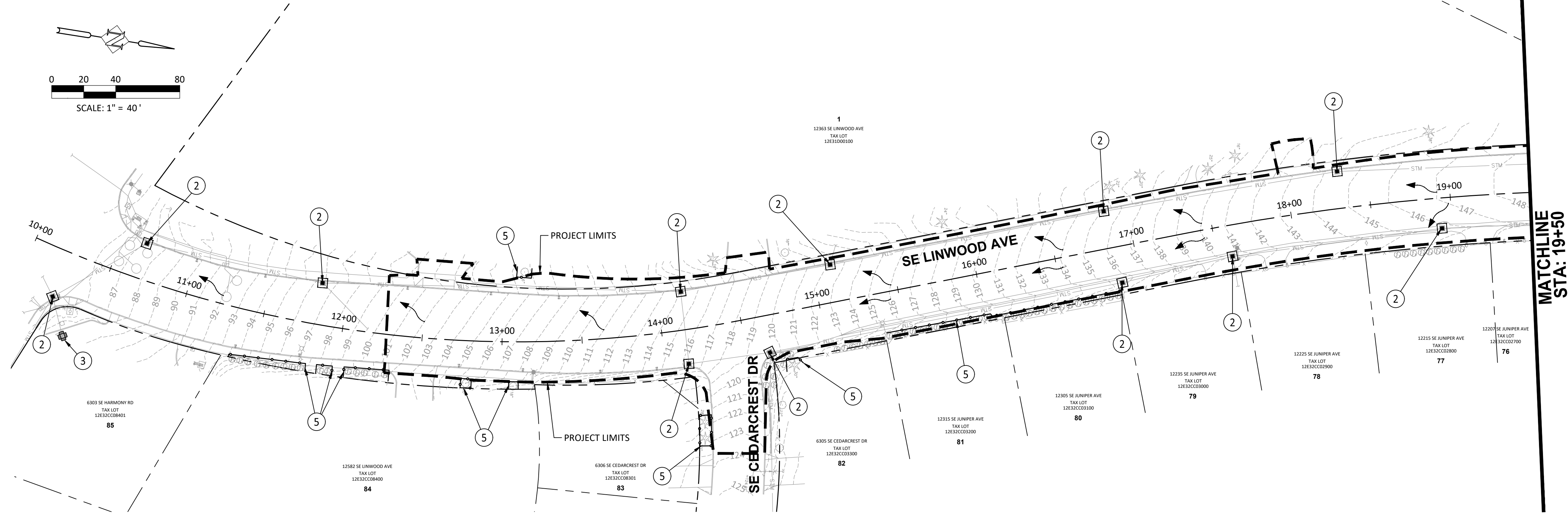
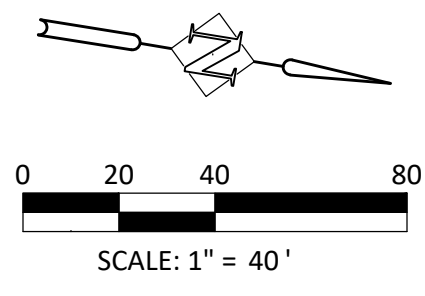
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ESCP STANDARD NOTES
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	4.2
JOB NO.	MWK-28

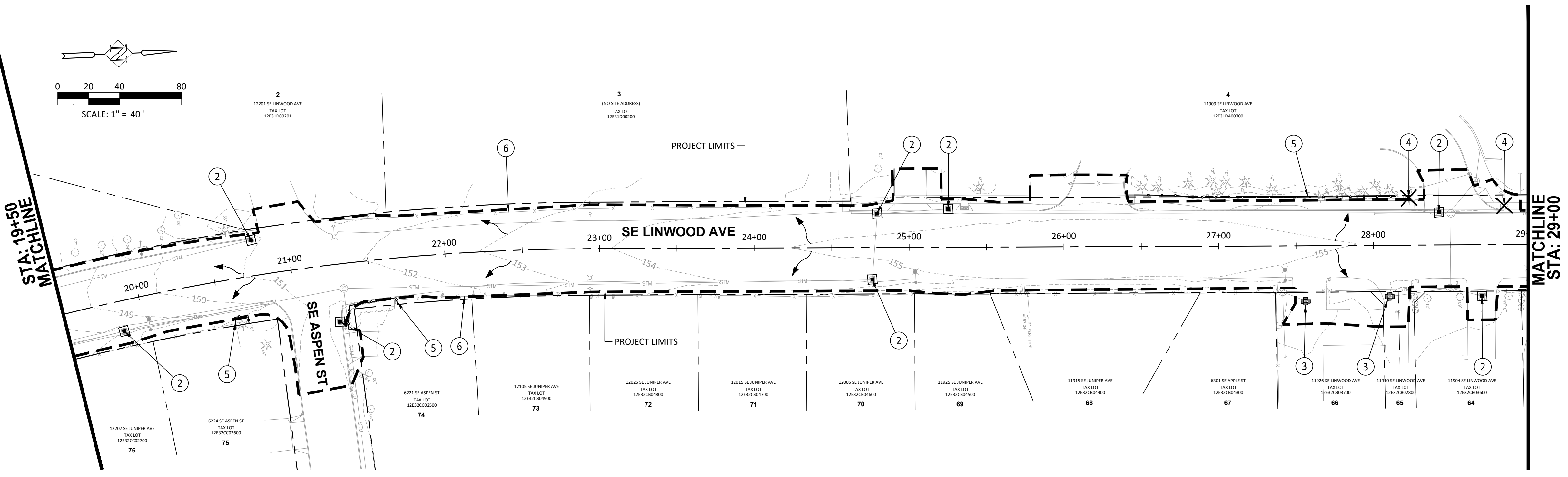
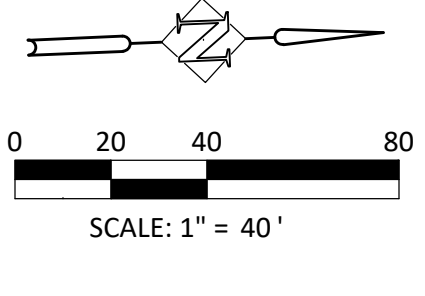


LEGEND:

- ✕ REMOVE TREE
- ★ EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- ⊗ EXISTING BUSH
- ⊙ EXISTING SHRUB
- - - PROJECT LIMIT LINE
- INLET PROTECTION TYPE 3
- ▨ INLET PROTECTION TYPE 7
- ▭ ORANGE CONSTRUCTION FENCING
- FLOW ARROW

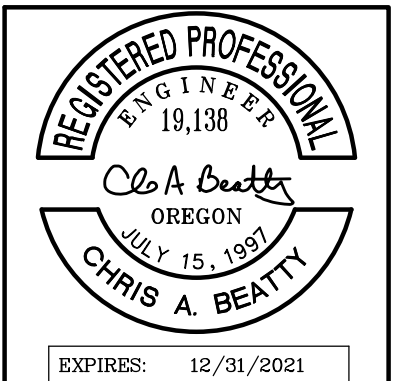
CONSTRUCTION NOTES:

- 2 INSTALL INLET PROTECTION (TYPE 3) PER DETAIL RD1010 ON SHEET 4.9.
- 3 INSTALL INLET PROTECTION (TYPE 7) PER DETAIL RD1010 ON SHEET 4.9.
- 4 REMOVE TREE OR VEGETATION.
- 5 PROTECT TREE OR VEGETATION WITH ORANGE CONSTRUCTION FENCING.
- 6 EXISTING FENCE TO BE DEMOLISHED WITHIN PROJECT LIMITS.



DATE	NO.	DESCRIPTION
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DATE:	9/1/2020



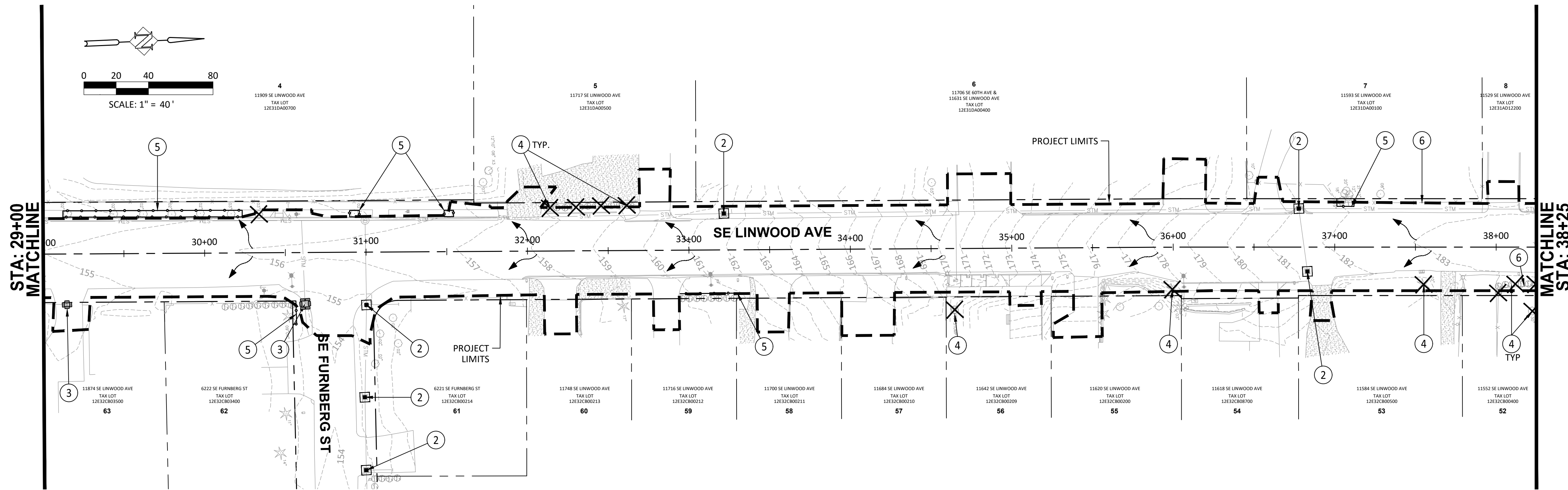
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ESCP CLEARING AND DEMOLITION PLAN
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	4.3
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK28-DIVCS(Sheets)\MWK28-4.0 EROSION CONTROL DEMO PLAN.dwg

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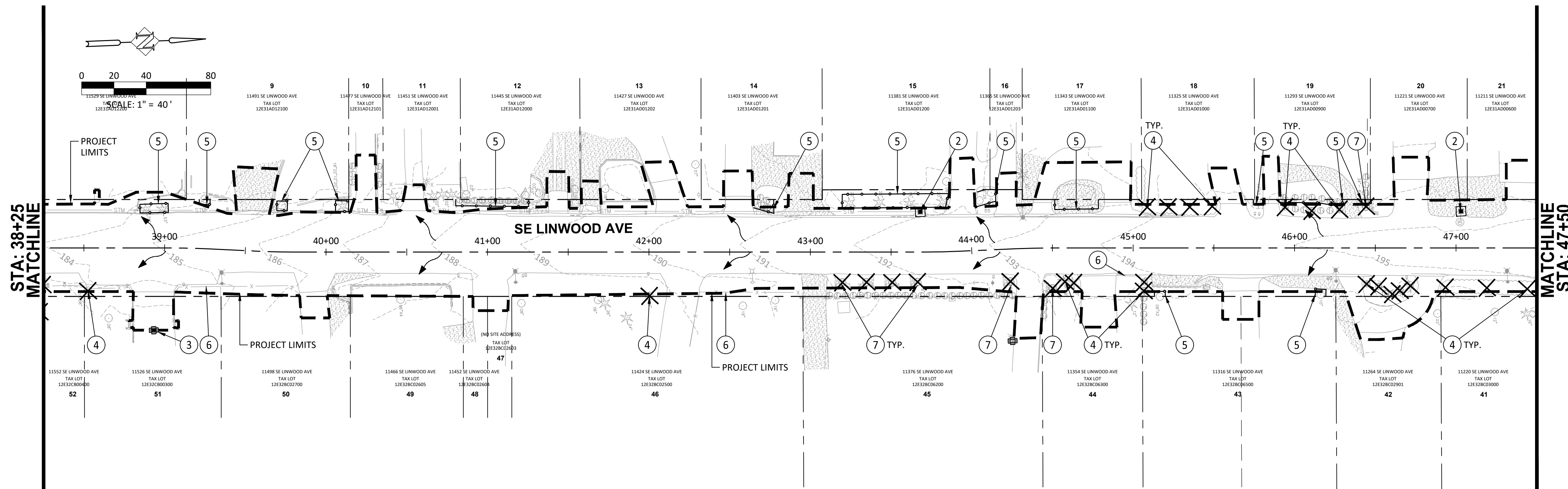


LEGEND:

- ✕ REMOVE TREE
- ★ EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- ⊗ EXISTING BUSH
- ⊙ EXISTING SHRUB
- - - PROJECT LIMIT LINE
- INLET PROTECTION TYPE 3
- ▨ INLET PROTECTION TYPE 7
- ▭ ORANGE CONSTRUCTION FENCING
- FLOW ARROW

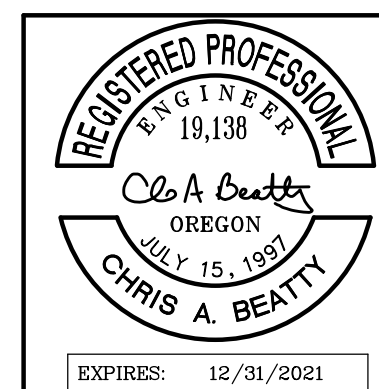
CONSTRUCTION NOTES:

- 2 INSTALL INLET PROTECTION (TYPE 3) PER DETAIL RD1010 ON SHEET 4.9.
- 3 INSTALL INLET PROTECTION (TYPE 7) PER DETAIL RD1010 ON SHEET 4.9.
- 4 REMOVE TREE OR VEGETATION.
- 5 PROTECT TREE OR VEGETATION WITH ORANGE CONSTRUCTION FENCING.
- 6 EXISTING FENCE TO BE DEMOLISHED WITHIN PROJECT LIMITS.
- 7 REMOVE EXISTING STUMP.



DATE	NO.	DESCRIPTION
R E V I S I O N S		

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DATE:	9/1/2020



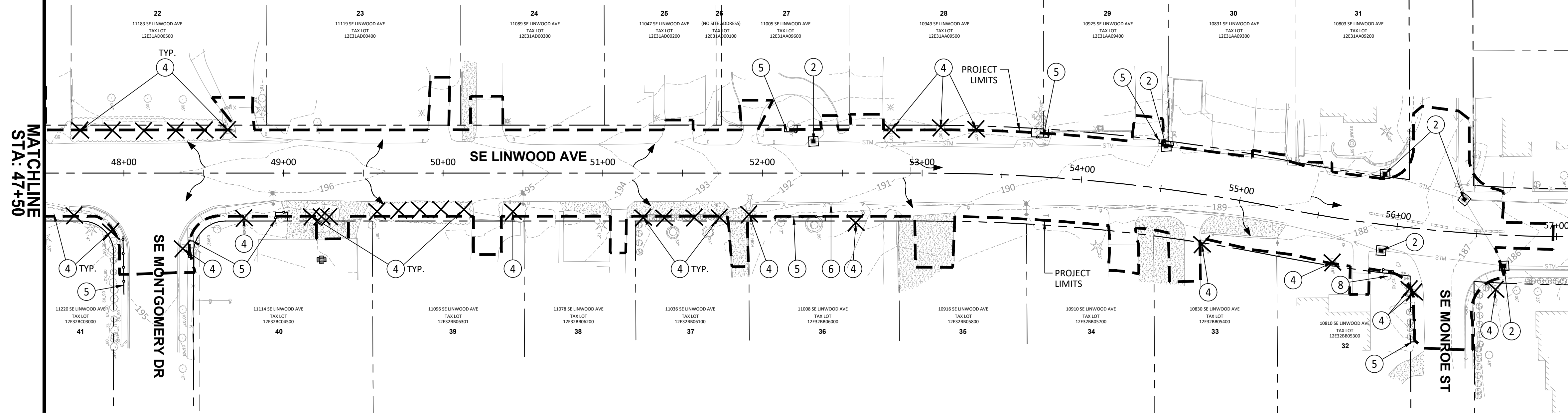
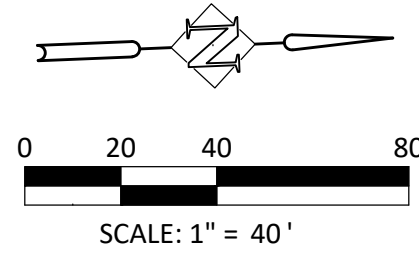
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ESCP CLEARING AND DEMOLITION PLAN
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.

4.4

JOB NO. MWK-28



LEGEND:

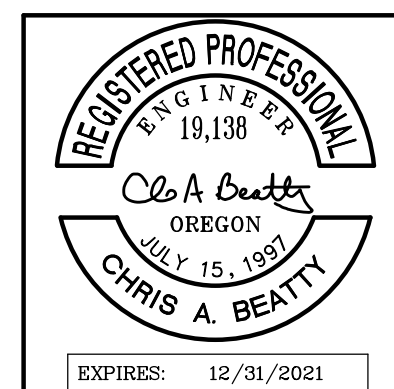
- REMOVE TREE
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- EXISTING BUSH
- EXISTING SHRUB
- PROJECT LIMIT LINE
- INLET PROTECTION TYPE 3
- INLET PROTECTION TYPE 7
- ORANGE CONSTRUCTION FENCING
- FLOW ARROW

CONSTRUCTION NOTES:

- 2 INSTALL INLET PROTECTION (TYPE 3) PER DETAIL RD1010 ON SHEET 4.9.
- 4 REMOVE TREE OR VEGETATION.
- 5 PROTECT TREE OR VEGETATION WITH ORANGE CONSTRUCTION FENCING.
- 6 EXISTING FENCE TO BE DEMOLISHED WITHIN PROJECT LIMITS.
- 8 PROTECT TREE DURING INITIAL CLEARING & DEMONLITION. TREE STATUS TO BE EVALUATED IN FIELD DURING CONSTRUCTION OF FUTURE SIDEWALK. COORDIANTE WITH ENGINEER.

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DATE:	12/4/2020	
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DATE	NO.	DESCRIPTION

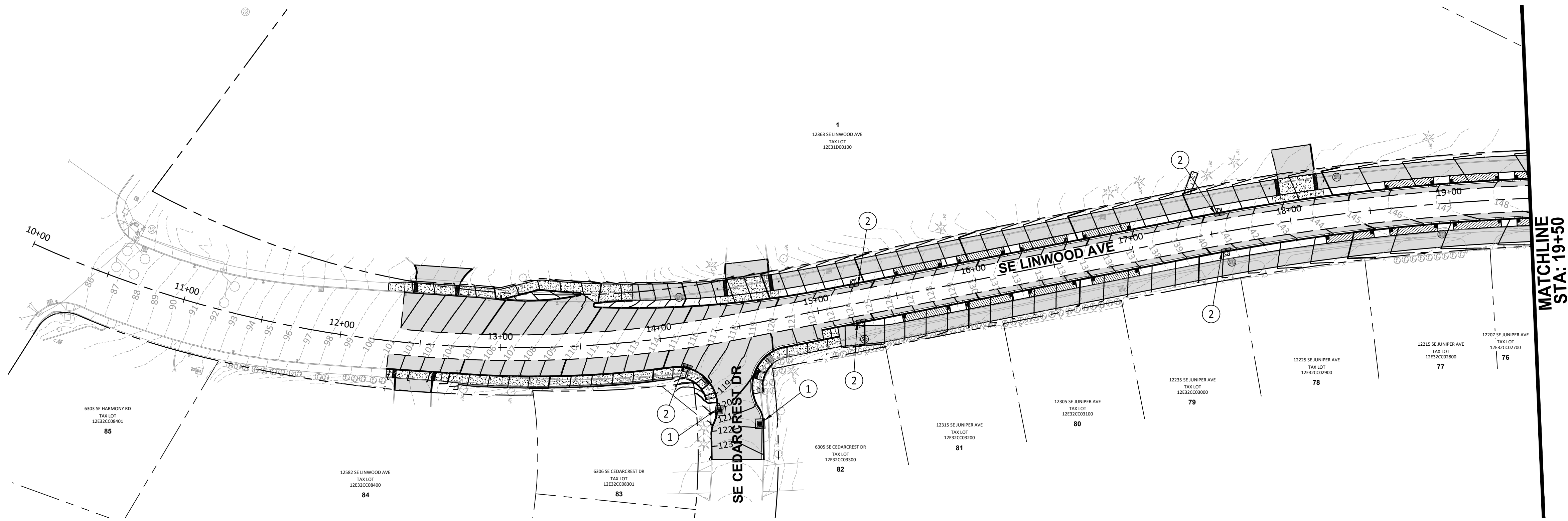


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ESCP CLEARING AND DEMOLITION PLAN
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	4.5
JOB NO.	MWK-28

P:\M\K (City of Milwaukie)\M\K-28 (Linwood Avenue)\M\K-28-DIV\GSS\Sheets\M\K-28-4.0 EROSION CONTROL PLAN.dwg

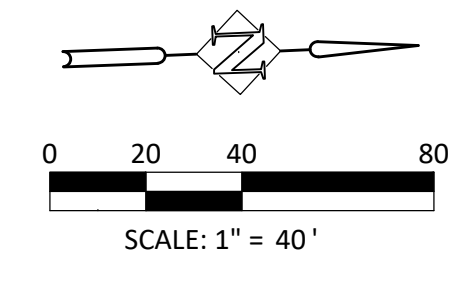
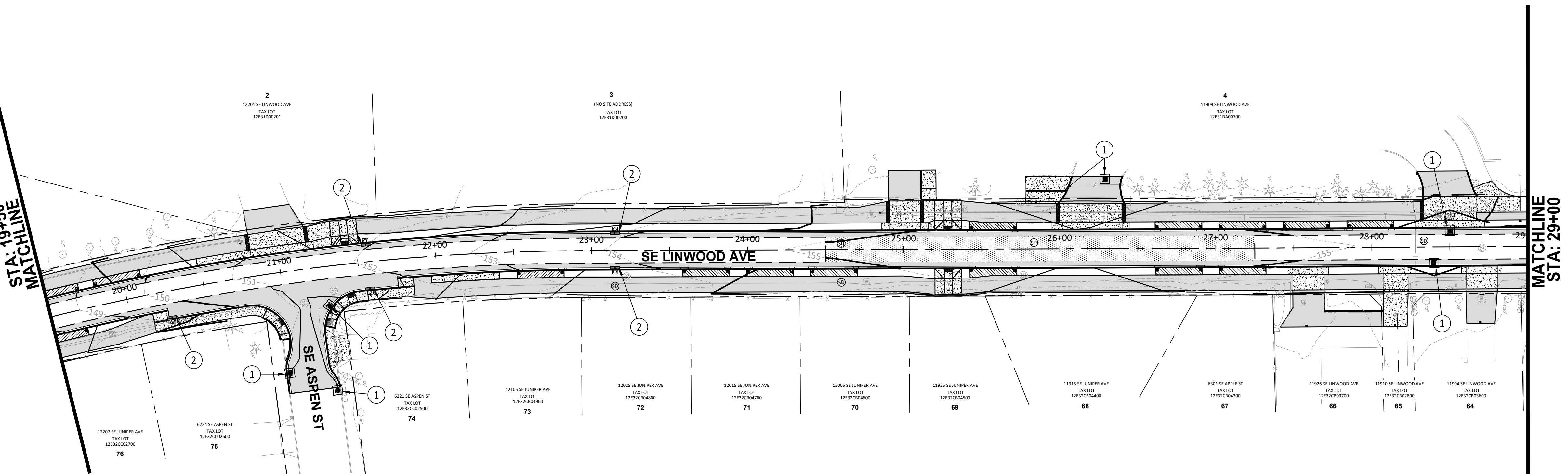
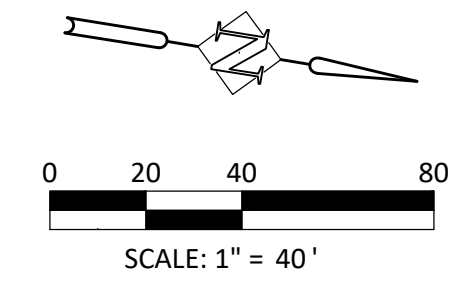


LEGEND:

- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- EXISTING BUSH
- EXISTING SHRUB
- PROJECT LIMIT LINE
- INLET PROTECTION TYPE 3
- INLET PROTECTION TYPE 7

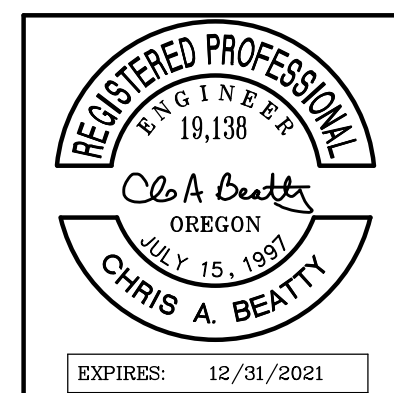
CONSTRUCTION NOTES:

- 1 INSTALL INLET PROTECTION (TYPE 3) PER DETAIL RD1010 ON SHEET 4.9.
- 2 INSTALL INLET PROTECTION (TYPE 7) PER DETAIL RD1010 ON SHEET 4.9.



DESIGNED:	CAB
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DATE:	9/1/2020

DATE	NO.	DESCRIPTION
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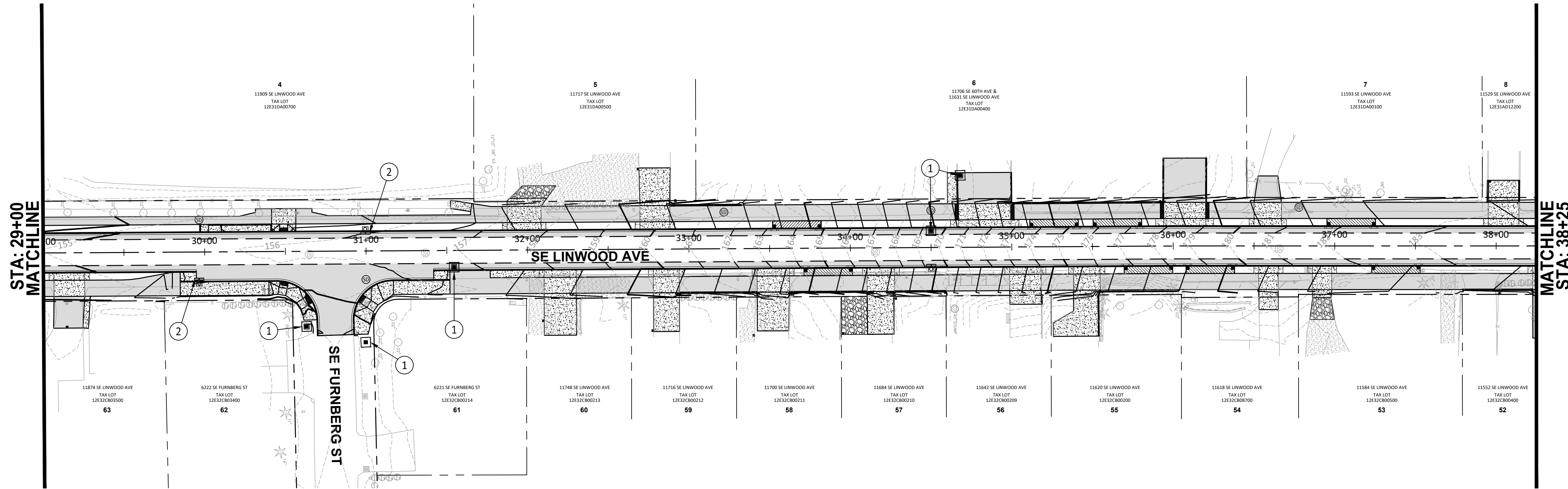


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ESCP PLAN
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	4.6
JOB NO.	MWK-28

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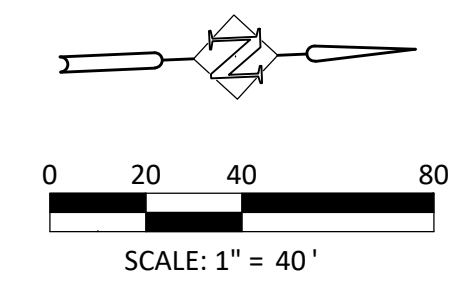
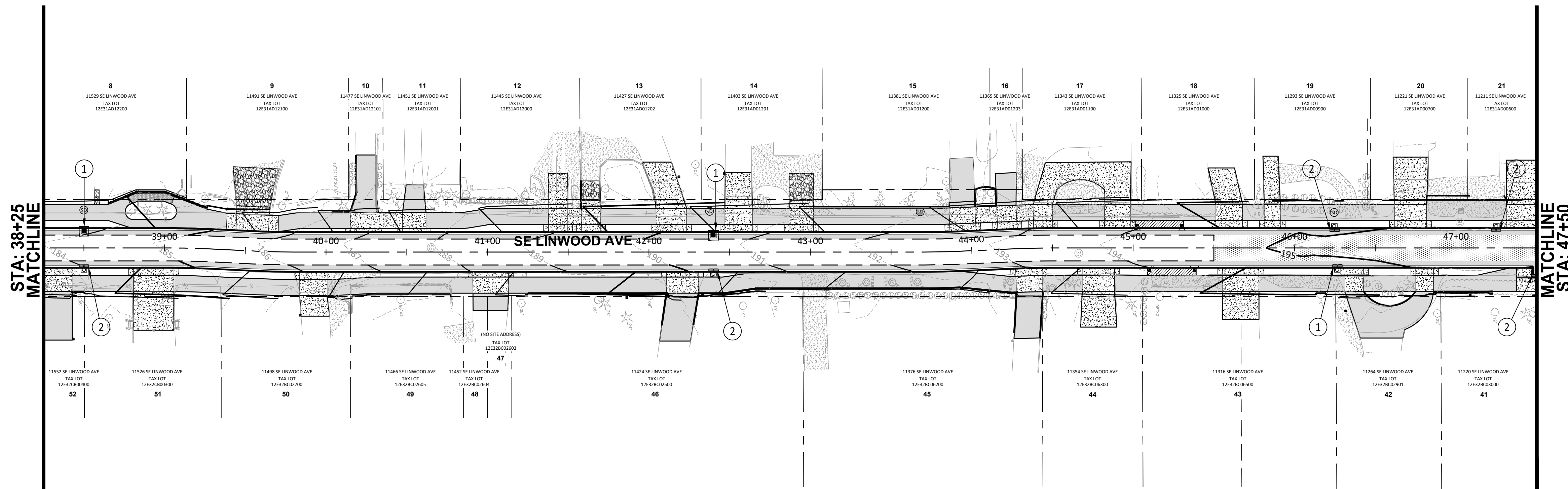
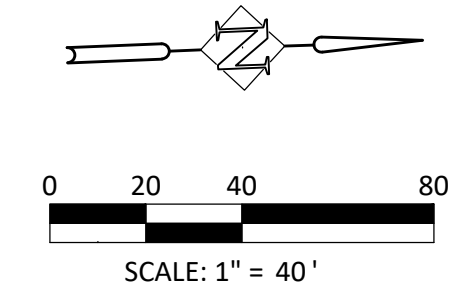


LEGEND:

- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- EXISTING BUSH
- EXISTING SHRUB
- PROJECT LIMIT LINE
- INLET PROTECTION TYPE 3
- INLET PROTECTION TYPE 7

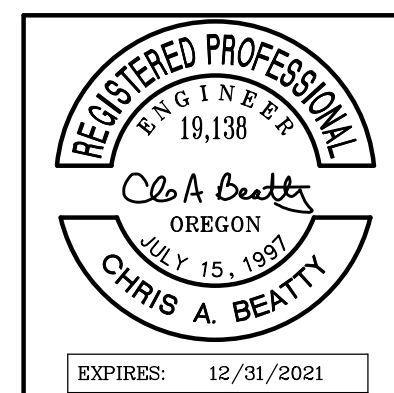
CONSTRUCTION NOTES:

- 1 INSTALL INLET PROTECTION (TYPE 3) PER DETAIL RD1010 ON SHEET 4.9.
- 2 INSTALL INLET PROTECTION (TYPE 7) PER DETAIL RD1010 ON SHEET 4.9.



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DATE:	12/4/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		

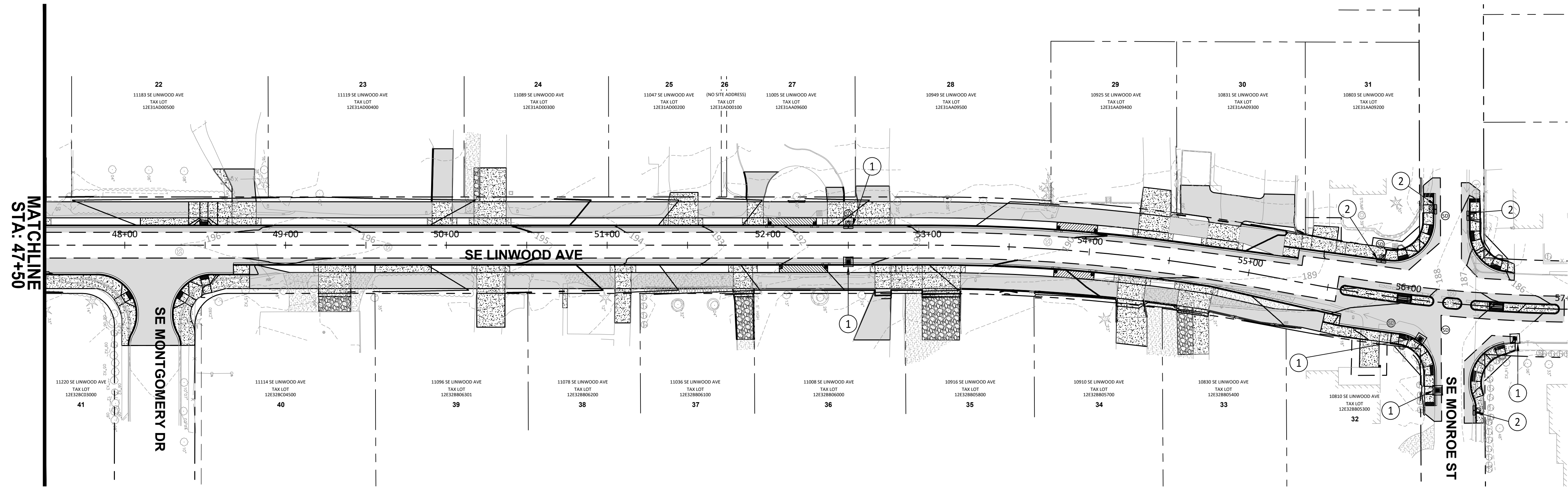


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ESCP PLAN
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	4.7
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 Linwood Avenue\MWK28-DWG\Sheets\MWK28-4.0 EROSION CONTROL PLAN.dwg

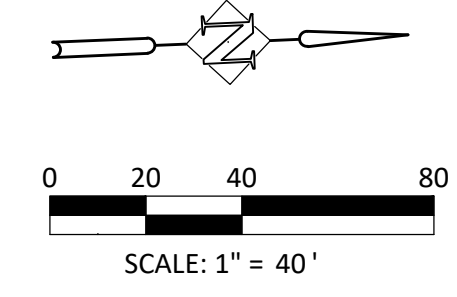


LEGEND:

- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- EXISTING BUSH
- EXISTING SHRUB
- PROJECT LIMIT LINE
- INLET PROTECTION TYPE 3
- INLET PROTECTION TYPE 7

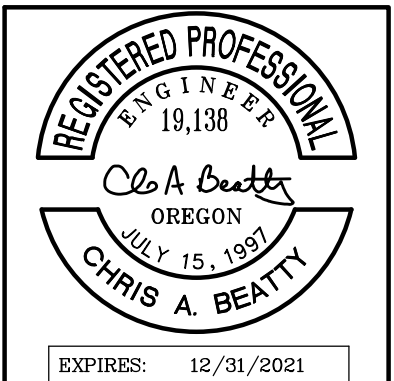
CONSTRUCTION NOTES:

- 1 INSTALL INLET PROTECTION (TYPE 3) PER DETAIL RD1010 ON SHEET 4.9.
- 2 INSTALL INLET PROTECTION (TYPE 7) PER DETAIL RD1010 ON SHEET 4.9.



DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
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ESCP PLAN
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	4.8
JOB NO.	MWK-28

GEOTEXTILE/WIRE MESH/AGGREGATE - TYPE 2

PREFABRICATED FILTER INSERT - TYPE 3

SOD PROTECTION - TYPE 6

AREA DRAIN PLAN

AREA DRAIN PERSPECTIVE VIEW

CURB INLET SEDIMENT DAM - TYPE 10

WATTLE BARRIER WITH FILTER INSERT - TYPE 11

COMPOST FILTER SOCK OR WATTLE - TYPE 7

Effective Date: December 1, 2019 - May 31, 2020 RD1010

SEDIMENT FENCE AND GEOTEXTILE BURY DETAIL - TYPE 1

TERMINATION AT CORNER OR PROPERTY LINE

GEOTEXTILE END CONNECTIONS

Effective Date: December 1, 2019 - May 31, 2020 RD1040

BIOFILTER BAG / SAND BAG BARRIER - TYPE 2 AND 4

FIBER ROLL BARRIER - TYPE 3

Effective Date: December 1, 2019 - May 31, 2020 RD1030

TOP OF BANK ANCHOR TRENCH, H > 3' AND TERMINAL SLOPE

TOP OF BANK ANCHOR TRENCH, H < 3'

CHANNEL CHECK SLOT

CHANNEL CHECK SLOT WITH ROCK BACKFILL

INITIAL CHANNEL ANCHOR TRENCH

CHANNEL ISOMETRIC VIEW

SLOPE ISOMETRIC VIEW

Effective Date: December 1, 2019 - May 31, 2020 RD1055

DATE	NO.	DESCRIPTION

R E V I S I O N S

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DATE:	9/1/2020



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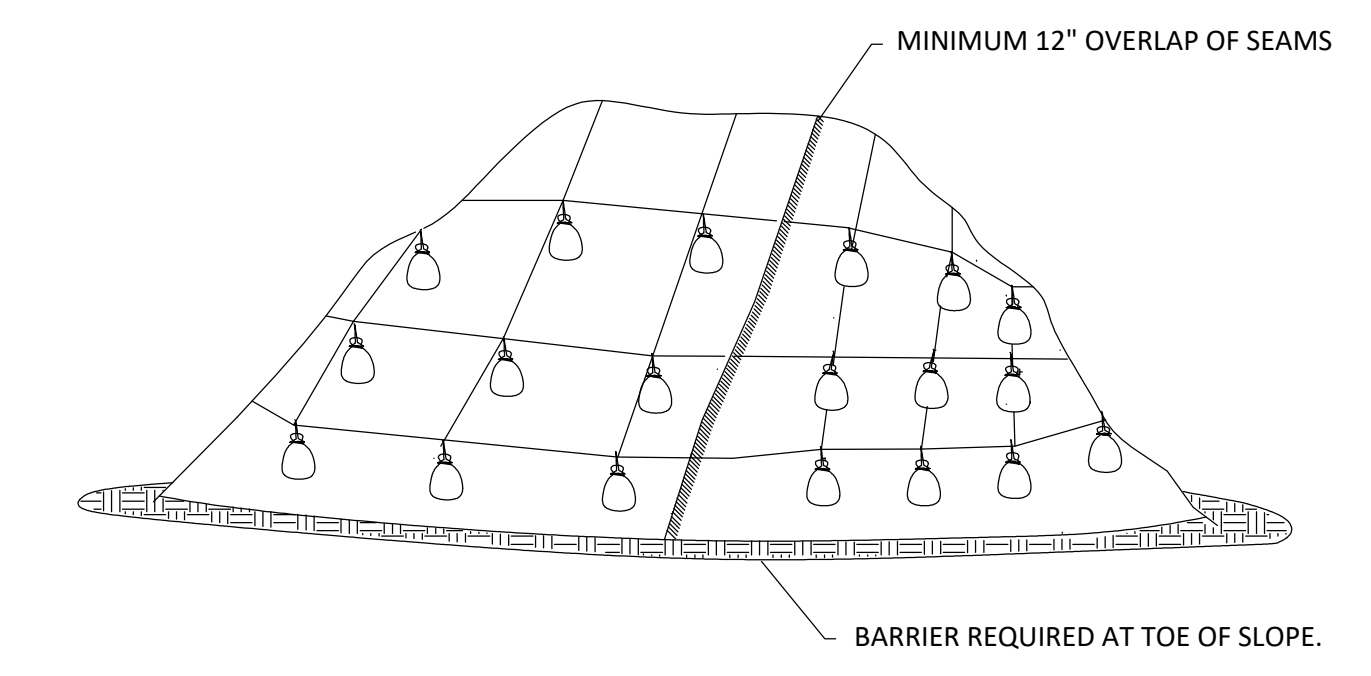
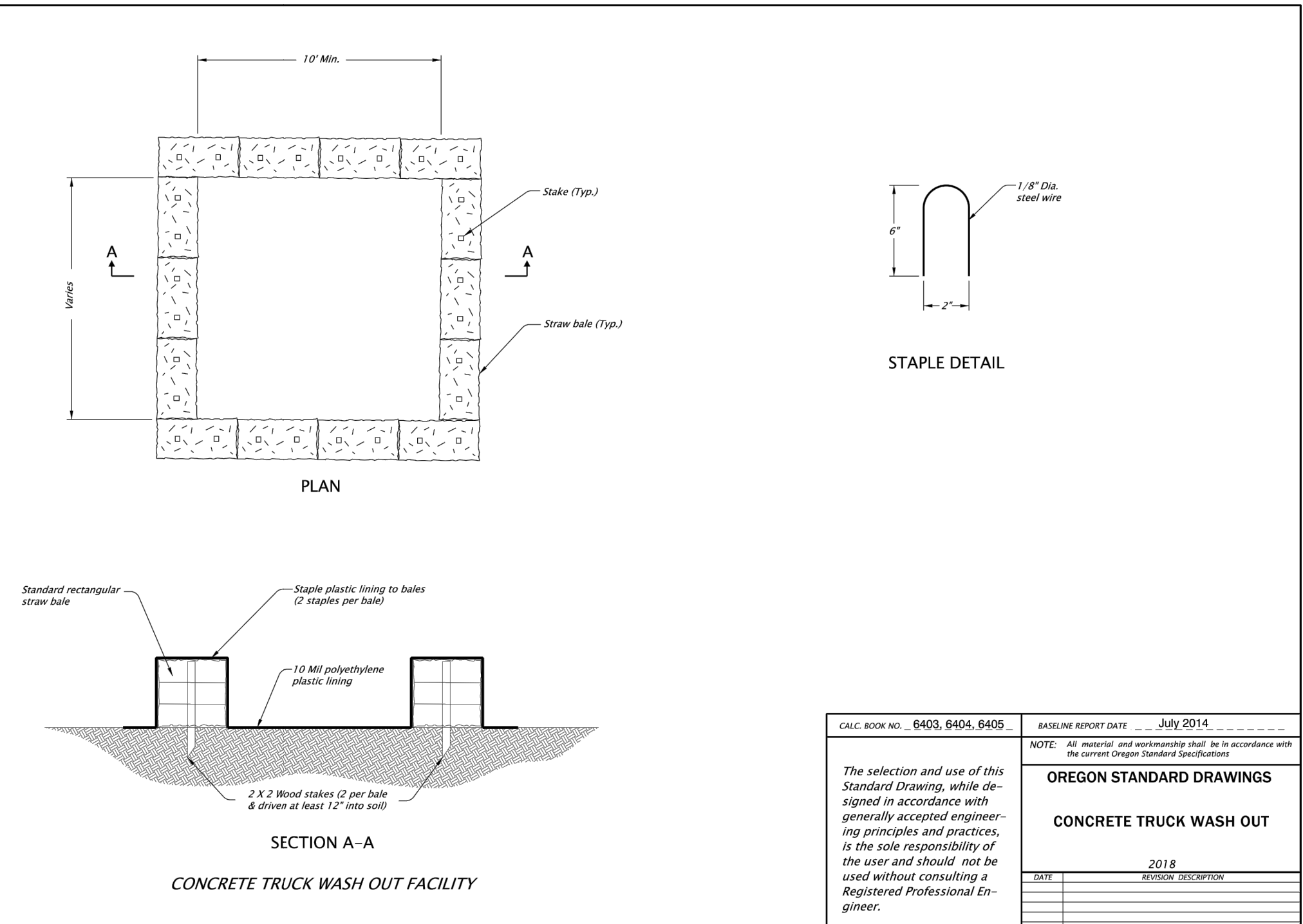
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ECSP DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	4.9
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK28-DWG(Sheets)\MWK28-4.D ESCP DETAIL S.dwg

rd1070.dwg 06-01-2017
 RD1070

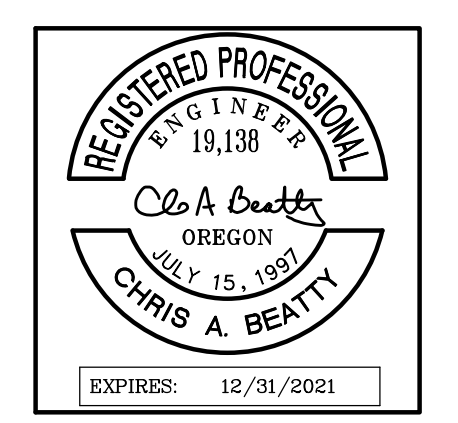


- NOTES:
1. MINIMUM 12" OVERLAP OF ALL SEAMS REQUIRED.
 2. BARRIER REQUIRED AT TOE OF STOCK PILE.
 3. COVERING MAINTAINED TIGHTLY IN PLACE BY USING SANDBAGS OR TIRES ON ROPES WITH A MAXIMUM 10' GRID SPACING IN ALL DIRECTIONS.

PLASTIC SHEETING
NTS

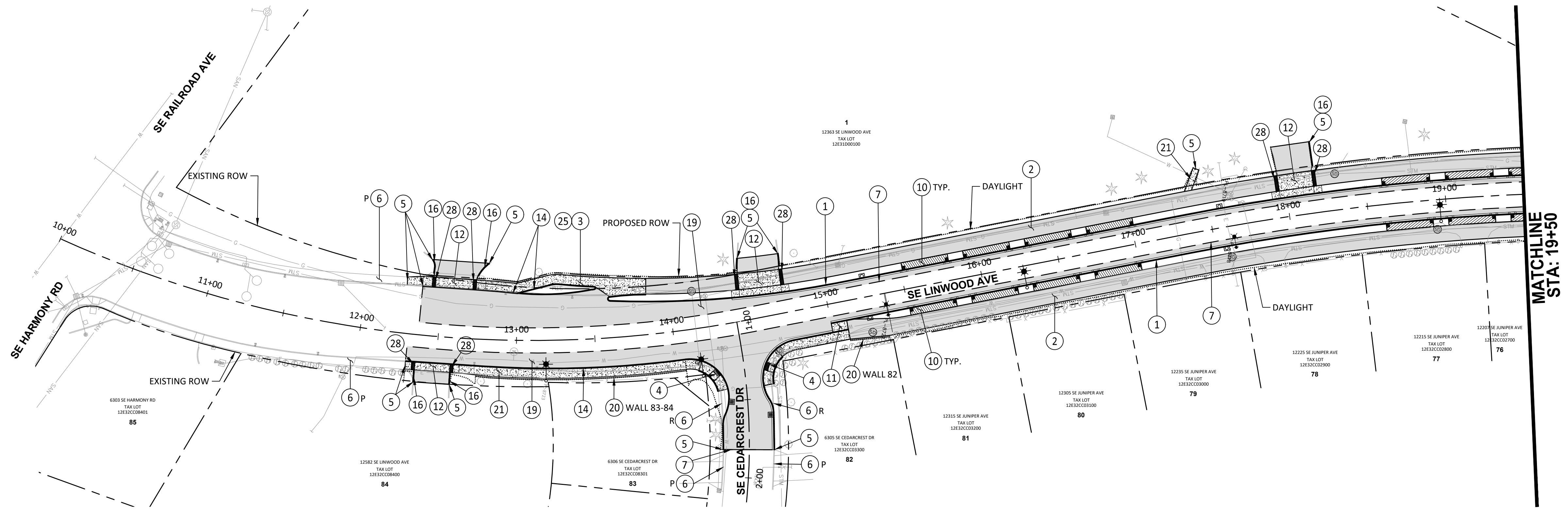
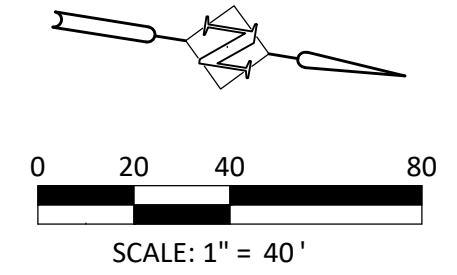
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R E V I S I O N S		
DATE	NO.	DESCRIPTION



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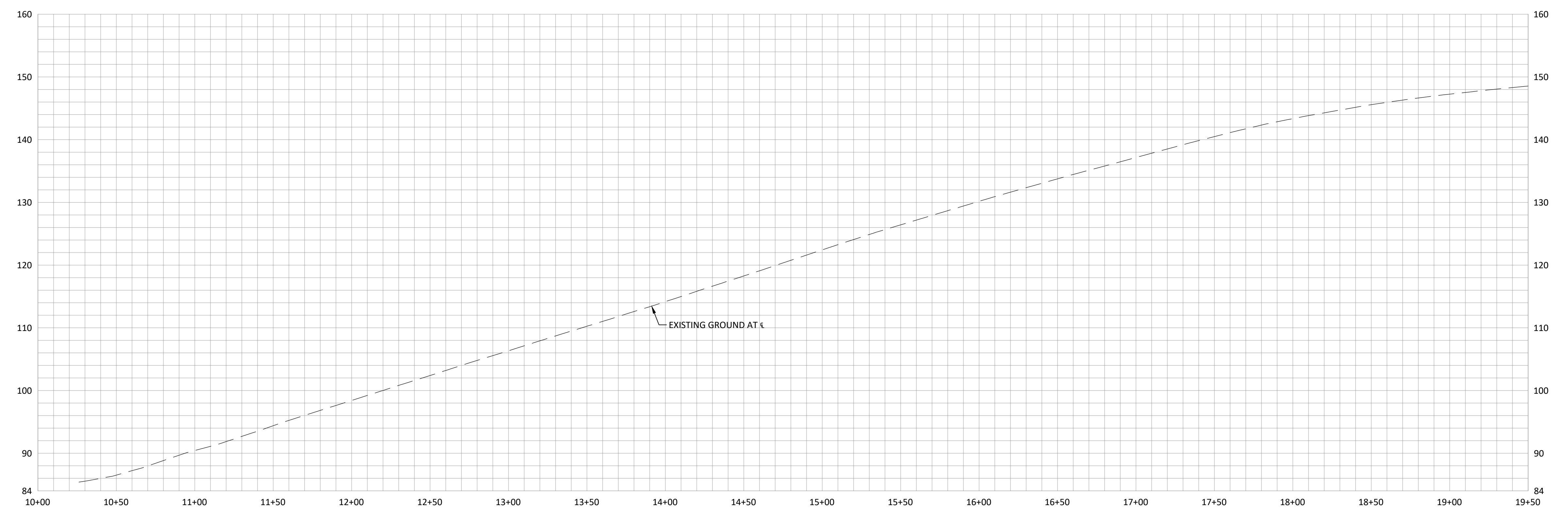
ECSP DETAILS SE LINWOOD AVENUE MILWAUKIE, OREGON	SHEET NO. <h1 style="text-align: center;">4.10</h1>
JOB NO. MWK-28	



LINWOOD AVE PLAN VIEW
SCALE: 1"=40'

CONSTRUCTION NOTES:

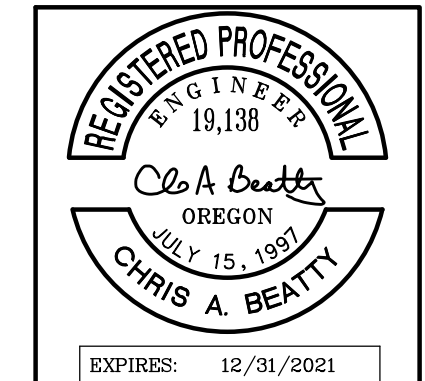
- ① CONSTRUCT CURB AND GUTTER PER DETAIL RD700 ON SHEET 3.4.
- ② CONSTRUCT PERVIOUS MULTI-USE PATH. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- ③ CONSTRUCT CONCRETE MULTI-USE PATH PER DETAIL RD720 ON SHEET 3.4. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- ④ CONSTRUCT SIDEWALK RAMP PER DETAIL RD755 & RD757 ON SHEET 3.5. SEE SPOT GRADE ELEVATIONS ON SHEET SERIES 7.0.
- ⑤ MATCH NEW CURB AND/OR SIDEWALK TO EXISTING. SAWCUT AS REQUIRED AND DIRECTED.
- ⑥ REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
- ⑦ SAWCUT EXISTING ASPHALT AND REMOVE AS REQUIRED AND DIRECTED.
- ⑩ CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.8.
- ⑪ CONSTRUCT CONCRETE MULTI-USE PATH RAMP. SEE SPOT GRADE ELEVATIONS ON SHEET SERIES 7.0.
- ⑫ CONSTRUCT DRIVEWAY APPROACH AND CONNECTION. SEE SHEET 3.9 FOR DETAILS. SEE SHEET SERIES 6.0 FOR PAVING INFORMATION.
- ⑭ CONSTRUCT STANDARD CONCRETE CURB PER DETAIL RD700 ON SHEET 3.4.
- ⑯ CONSTRUCT EXTRUDED CURB. SEE DETAIL ON SHEET 3.6.
- ⑰ CONSTRUCT AC PAVEMENT SECTION. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- ⑳ CONSTRUCT WALL. SEE WALL PLAN AND PROFILE SHEET SERIES FOR MORE INFORMATION.
- ㉑ CONSTRUCT CONCRETE SIDEWALK PER DETAIL RD720 ON SHEET 3.4. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- ㉒ SEE SHEET SERIES 7.0 FOR GRADING DETAIL.
- ㉓ INSTALL TRUNCATED DOMES. SEE SHEET 3.5 FOR DETAIL.




LINWOOD AVE - CENTERLINE PROFILE
SCALE: 1"=40' (HORIZ.)
1"=10' (VERT.)

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CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
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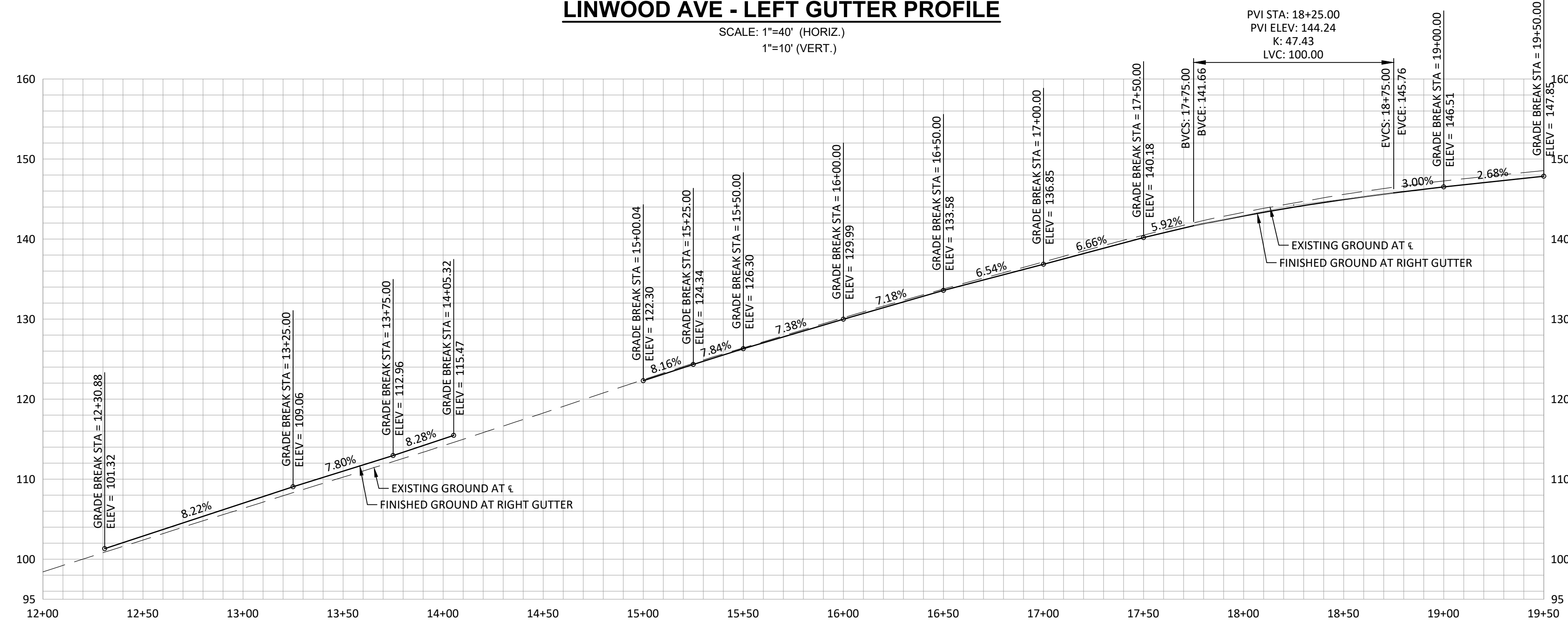
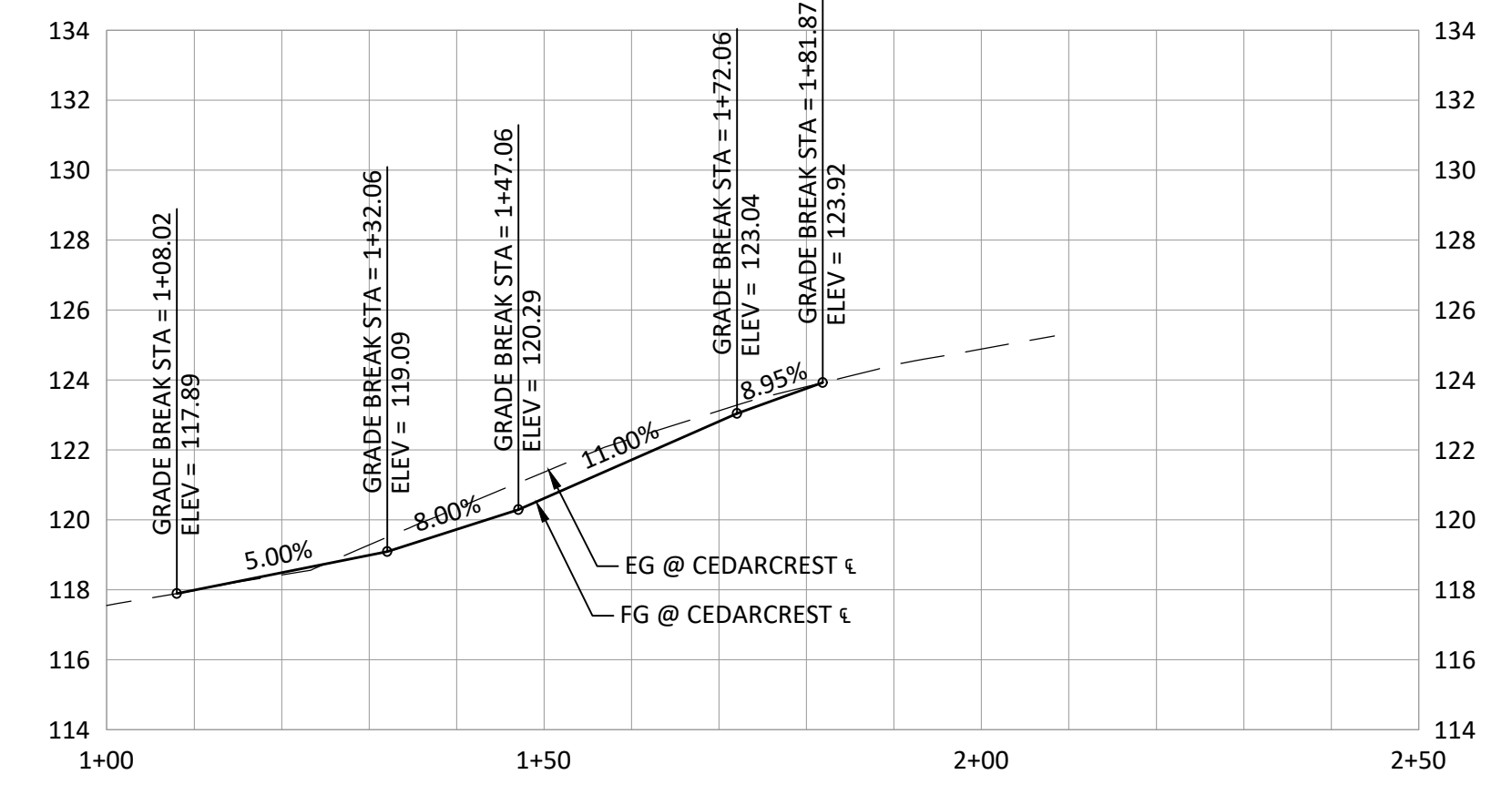
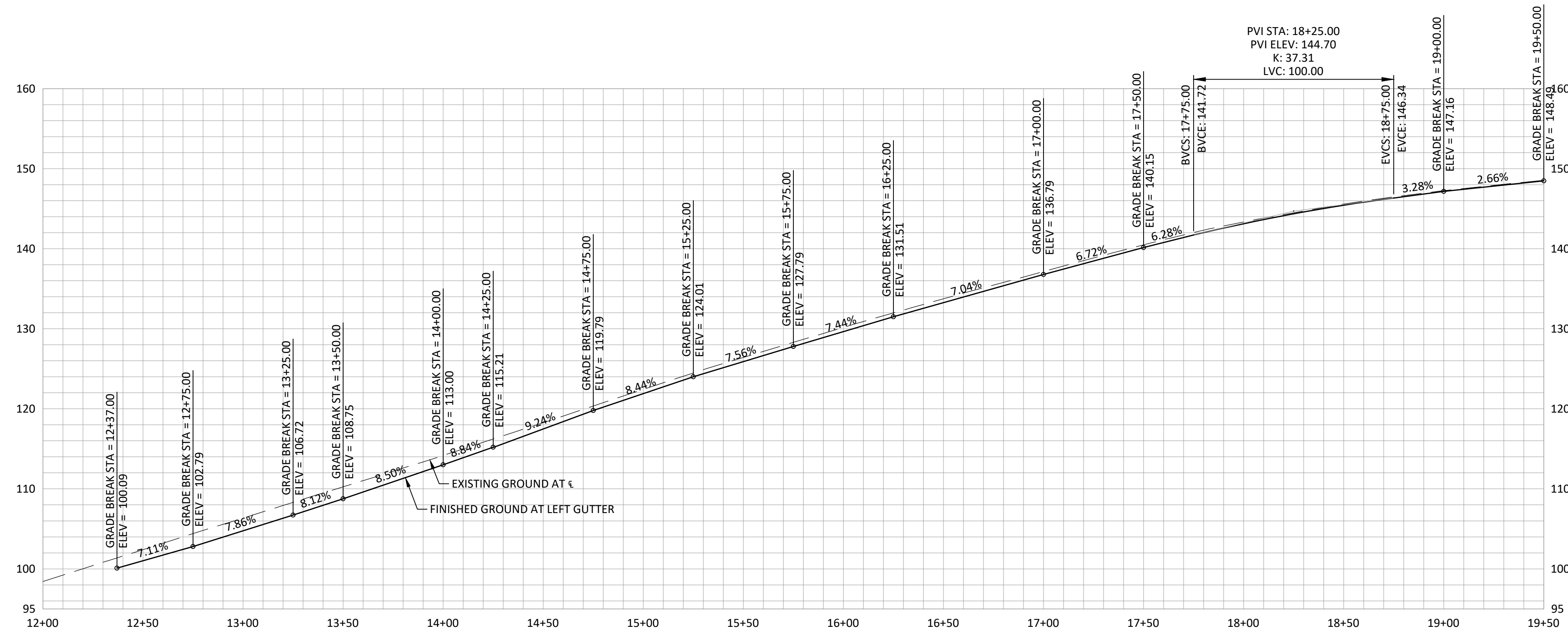

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LINWOOD AVE PLAN AND PROFILE STA 10+00 - 19+50
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	5.0A
JOB NO.	MWK-28

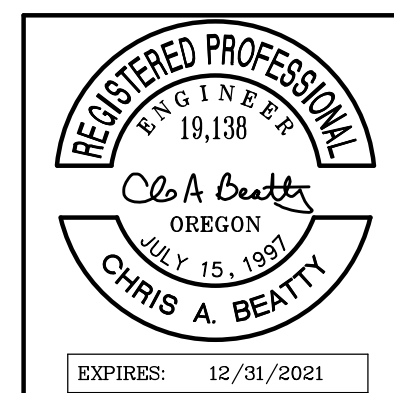
P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK28-DWG(Sheets)\MWK28-5.0 ROADWAY PLAN AND PROFILE.dwg

P:\M\K (City of Milwaukie)\M\K-28 (Linwood Avenue)\M\K-28-DWG(Sheets)\M\K-28-5.0 ROADWAY PLAN AND PROFILE.dwg



DATE	NO.	DESCRIPTION
R E V I S I O N S		

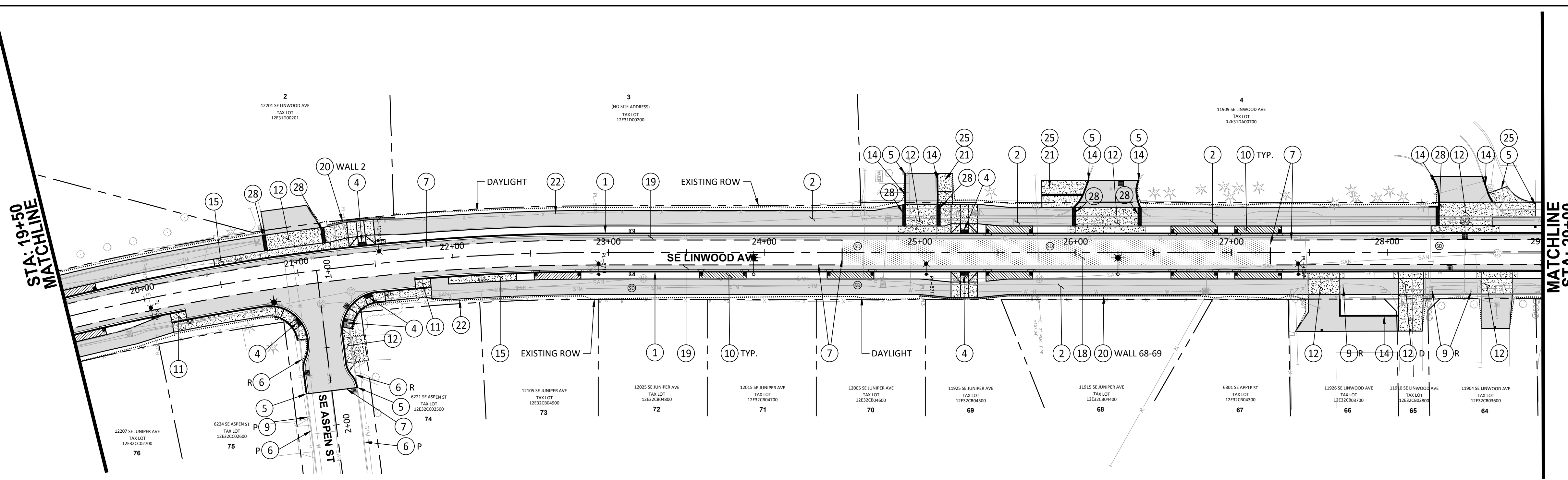
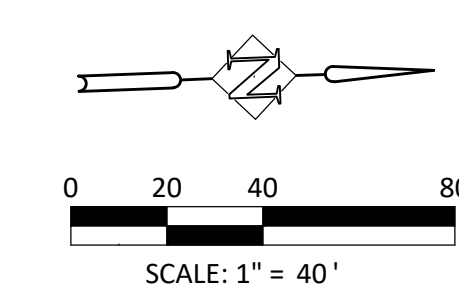
DESIGNED:	CAB
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DATE:	9/1/2020



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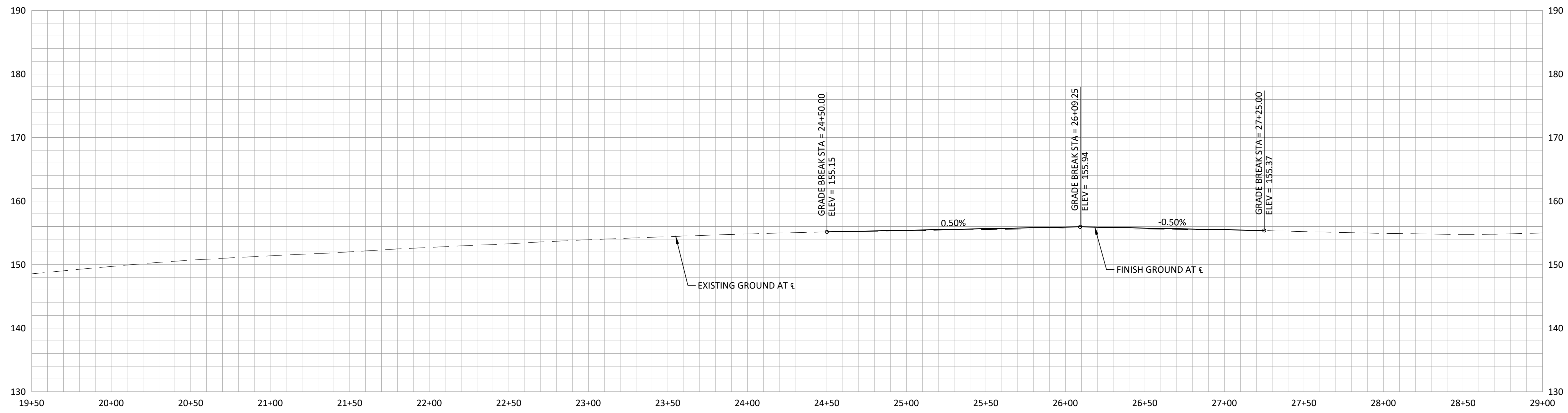
LINWOOD AVE PLAN AND PROFILE STA 10+00 - 19+50
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	5.0B
JOB NO.	MWK-28



LINWOOD AVE PLAN VIEW
SCALE: 1"=40'

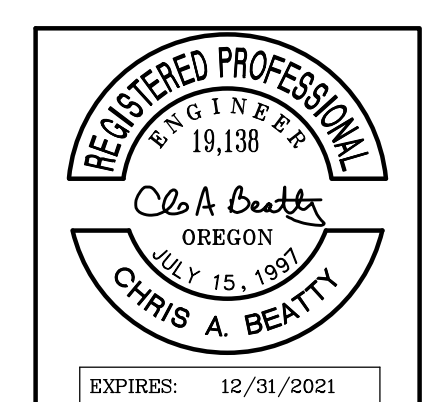
- CONSTRUCTION NOTES:**
- 1 CONSTRUCT CURB AND GUTTER PER DETAIL RD700 ON SHEET 3.4.
 - 2 CONSTRUCT PERVIOUS MULTI-USE PATH. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
 - 4 CONSTRUCT SIDEWALK RAMP PER DETAIL RD755 & RD757 ON SHEET 3.5. SEE SPOT GRADE ELEVATIONS ON SHEET SERIES 7.0.
 - 5 MATCH NEW CURB AND/OR SIDEWALK TO EXISTING. SAWCUT AS REQUIRED AND DIRECTED.
 - 6 REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
 - 7 SAWCUT EXISTING ASPHALT AND REMOVE AS REQUIRED AND DIRECTED.
 - 9 RELOCATE (R), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE OREGON STANDARD DRAWING RD100 AND RD101 ON SHEET 3.7. COORDINATE LOCATION WITH ENGINEER.
 - 10 CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.8.
 - 11 CONSTRUCT CONCRETE MULTI-USE PATH RAMP. SEE SPOT GRADE ELEVATIONS ON SHEET SERIES 7.0.
 - 12 CONSTRUCT DRIVEWAY APPROACH AND CONNECTION. SEE SHEET 3.9 FOR DETAILS. SEE SHEET SERIES 6.0 FOR PAVING INFORMATION.
 - 14 CONSTRUCT STANDARD CONCRETE CURB PER DETAIL RD700 ON SHEET 3.4.
 - 15 CONSTRUCT CONCRETE BUS PAD. SEE SHEET SERIES 6.0 FOR DIMENSIONS AND SECTION DETAIL.
 - 18 COLD PLANE REMOVE 2" OF EXISTING AC & REPLACE WITH 2-4" OF AC. SEE PROPOSED CENTERLINE PROFILE, THIS SHEET.
 - 19 CONSTRUCT AC PAVEMENT SECTION. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
 - 20 CONSTRUCT WALL. SEE WALL PLAN AND PROFILE SHEET SERIES FOR MORE INFORMATION.
 - 21 CONSTRUCT CONCRETE SIDEWALK PER DETAIL RD720 ON SHEET 3.4. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
 - 22 REMOVE AND DEMOLISH EXISTING FENCE WITHIN ROW LIMITS.
 - 25 SEE SHEET SERIES 7.0 FOR GRADING DETAIL.
 - 28 INSTALL TRUNCATED DOMES. SEE SHEET 3.5 FOR DETAIL.



LINWOOD AVE - CENTERLINE PROFILE
SCALE: 1"=40' (HORIZ.)
1"=10' (VERT.)

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		



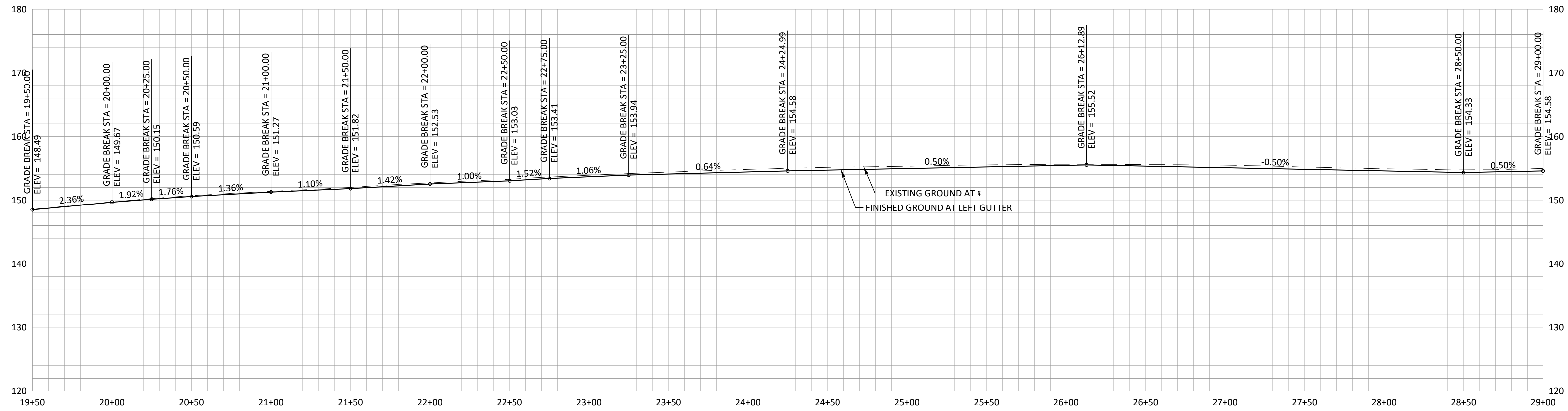
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LINWOOD AVENUE PLAN AND PROFILE STA 19+50 - 29+00
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	5.1A
JOB NO.	MWK-28

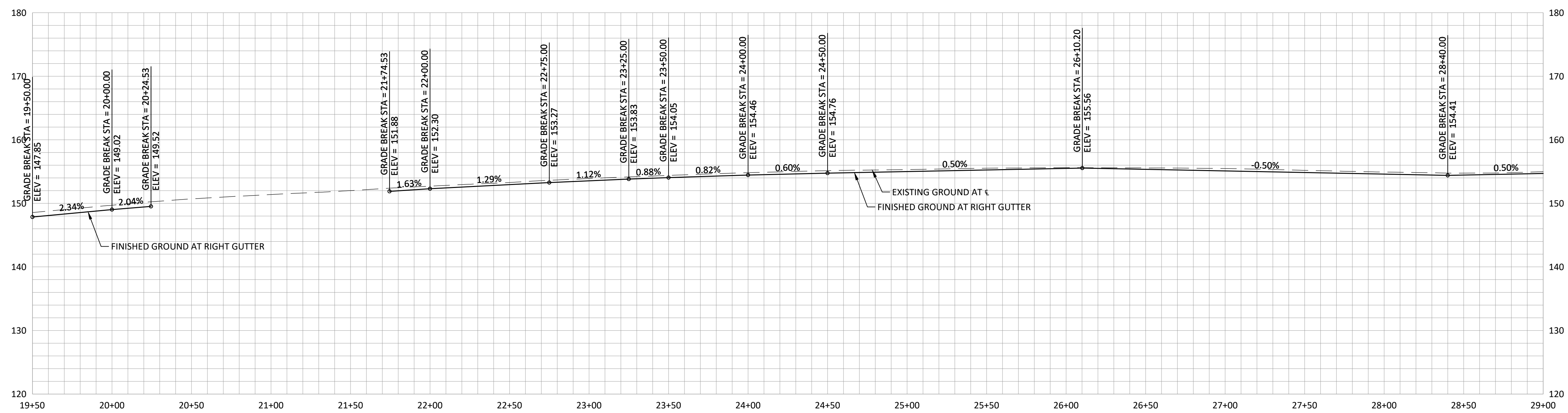
P:\MWK (City of Milwaukie)\MWK-28 Linwood Avenue\MWK28-DWG(Sheets)\MWK28-5.0 ROADWAY PLAN AND PROFILE.dwg

P:\M\K (City of Milwaukie)\M\K-28 (Linwood Avenue)\M\K28-DWG\Sheets\M\K28-5.0 ROADWAY PLAN AND PROFILE.dwg



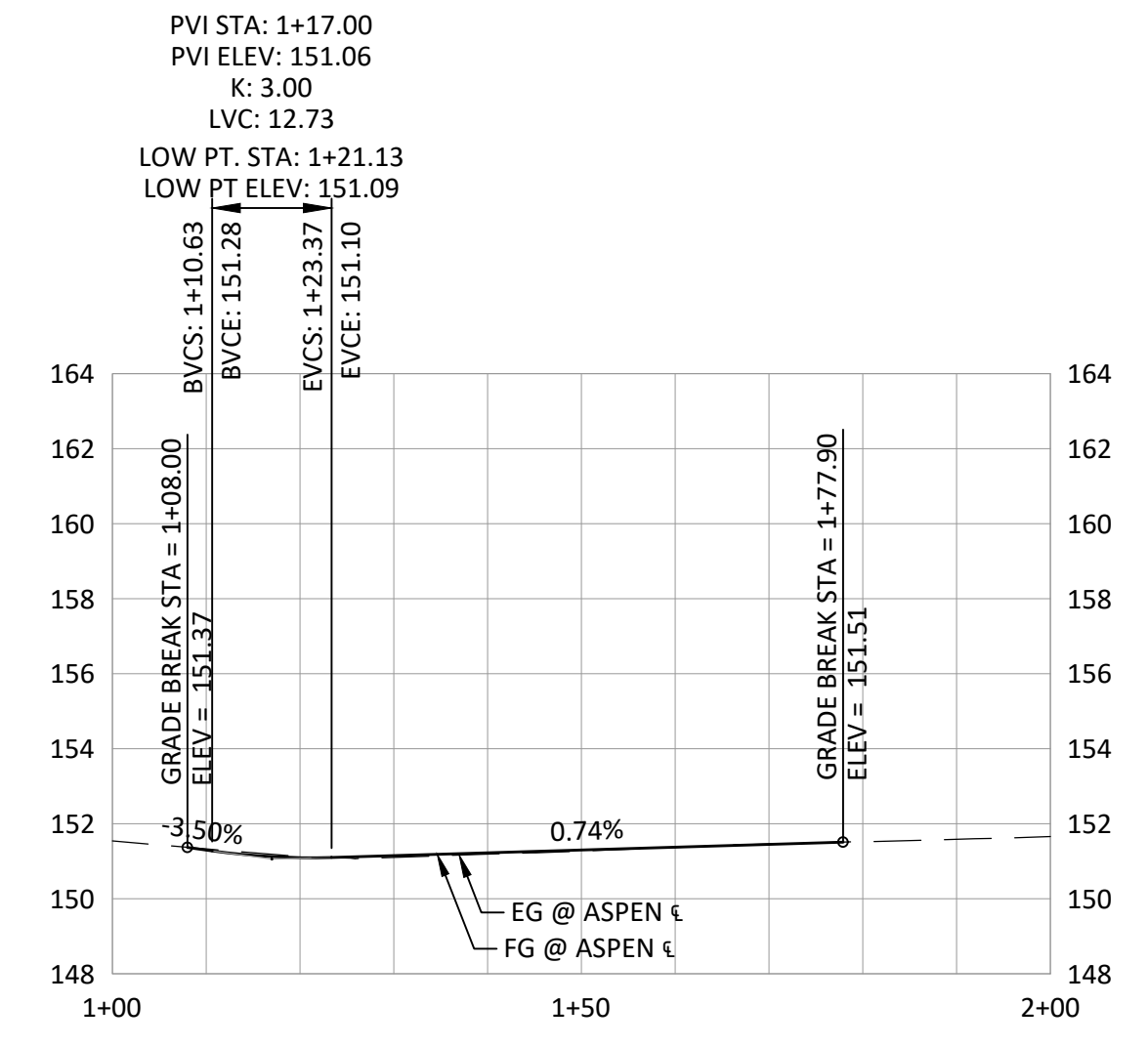
LINWOOD AVE - LEFT GUTTER PROFILE

SCALE: 1"=40' (HORIZ.)
1"=10' (VERT.)



LINWOOD AVE - RIGHT GUTTER PROFILE

SCALE: 1"=40' (HORIZ.)
1"=10' (VERT.)

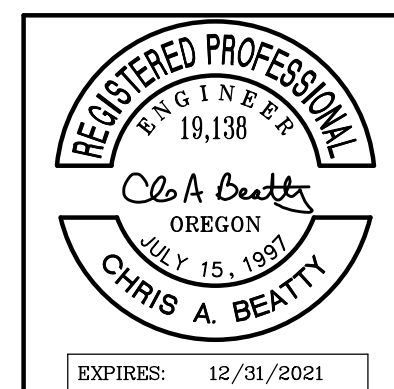


ASPEN ST - CENTERLINE PROFILE

SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

DATE	NO.	DESCRIPTION
R E V I S I O N S		

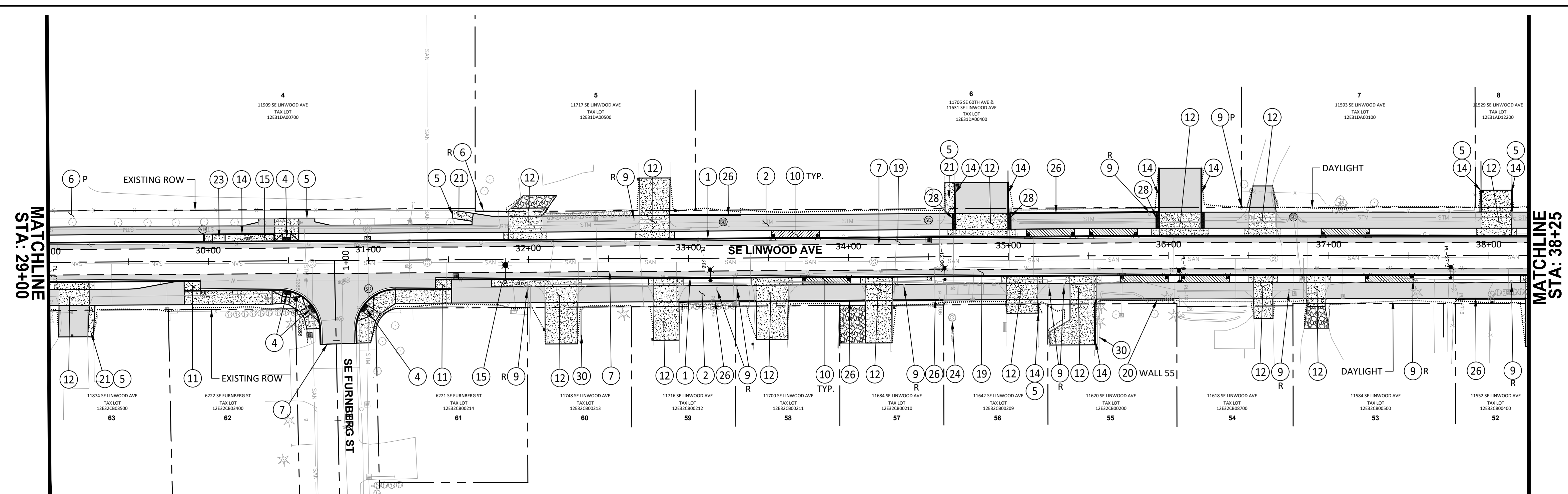
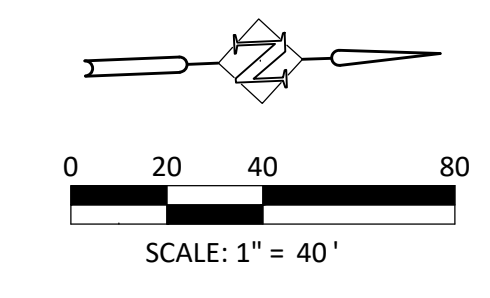
DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020



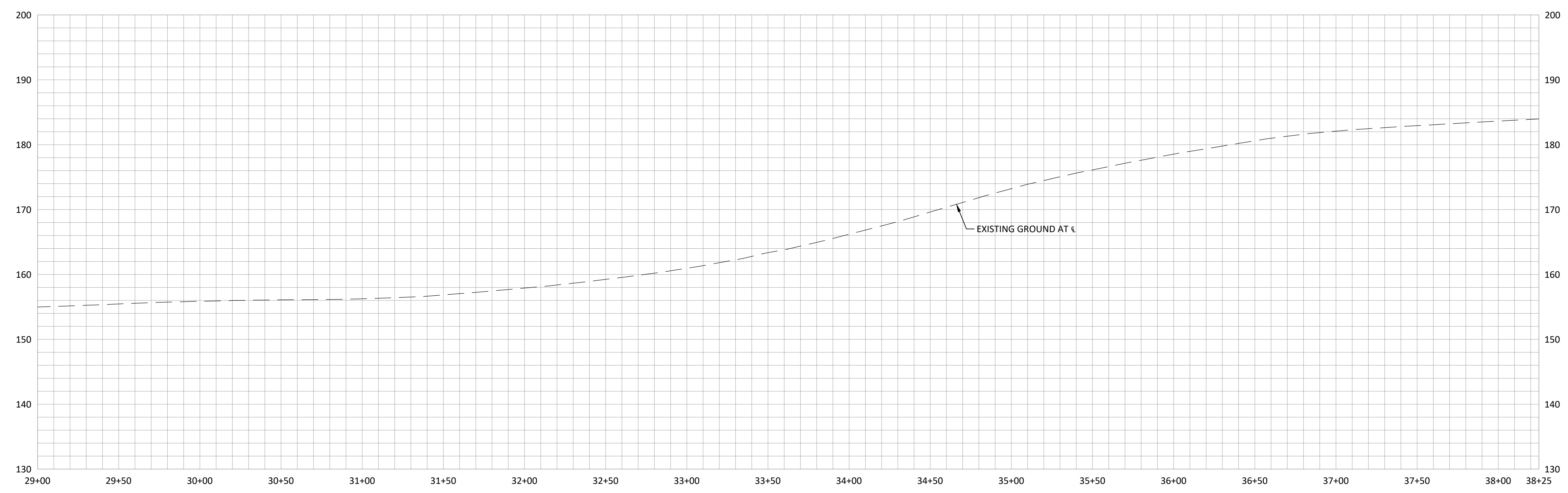
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ROADWAY PLAN AND PROFILE STA 19+50 - 29+00
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	5.1B
JOB NO.	MWK-28



LINWOOD AVE PLAN VIEW
SCALE: 1"=40'



LINWOOD AVE - CENTERLINE PROFILE
SCALE: 1"=40' (HORIZ.)
1"=10' (VERT.)

CONSTRUCTION NOTES:

- 1 CONSTRUCT CURB AND GUTTER PER DETAIL RD700 ON SHEET 3.4.
- 2 CONSTRUCT PERVIOUS MULTI-USE PATH. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- 4 CONSTRUCT SIDEWALK RAMP PER DETAIL RD755 & RD757 ON SHEET 3.5. SEE SPOT GRADE ELEVATIONS ON SHEET SERIES 7.0.
- 5 MATCH NEW CURB AND/OR SIDEWALK TO EXISTING. SAWCUT AS REQUIRED AND DIRECTED.
- 6 REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
- 7 SAWCUT EXISTING ASPHALT AND REMOVE AS REQUIRED AND DIRECTED.
- 9 RELOCATE (R), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE OREGON STANDARD DRAWING RD100 AND RD101 ON SHEET 3.7. COORDINATE LOCATION WITH ENGINEER.
- 10 CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.8.
- 11 CONSTRUCT CONCRETE MULTI-USE PATH RAMP. SEE SPOT GRADE ELEVATIONS ON SHEET SERIES 7.0.
- 12 CONSTRUCT DRIVEWAY APPROACH AND CONNECTION. SEE SHEET 3.9 FOR DETAILS. SEE SHEET SERIES 6.0 FOR PAVING INFORMATION.
- 14 CONSTRUCT STANDARD CONCRETE CURB PER DETAIL RD700 ON SHEET 3.4.
- 15 CONSTRUCT CONCRETE BUS PAD. SEE SHEET SERIES 6.0 FOR DIMENSIONS AND SECTION DETAIL.
- 19 CONSTRUCT AC PAVEMENT SECTION. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- 20 CONSTRUCT WALL. SEE WALL PLAN AND PROFILE SHEET SERIES FOR MORE INFORMATION.
- 21 CONSTRUCT CONCRETE SIDEWALK PER DETAIL RD720 ON SHEET 3.4. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- 23 CONSTRUCT RAISED CONCRETE BUS PAD. SEE SHEET 7.4 FOR SECTION AND GRADING DETAIL.
- 24 REMOVE EXISTING STUMP.
- 26 CONSTRUCT SIDEWALK THICKENED EDGE WITH STANDARD TYPE C CURB. SEE SHEET 3.7 FOR DETAIL.
- 28 INSTALL TRUNCATED DOMES. SEE SHEET 3.5 FOR DETAIL.
- 30 PROTECT EXISTING WALL.

P:\M\K (City of Milwaukie)\M\K-28 (Linwood Avenue)\M\K-28-DWG\SS\Sheets\MWK28-5.0 ROADWAY PLAN AND PROFILE.dwg

DESIGNED:	CAB	
DRAWN:	HHPR	
CHECKED:	CAB	
DATE:	12/4/2020	
REVISIONS		
DATE	NO.	DESCRIPTION

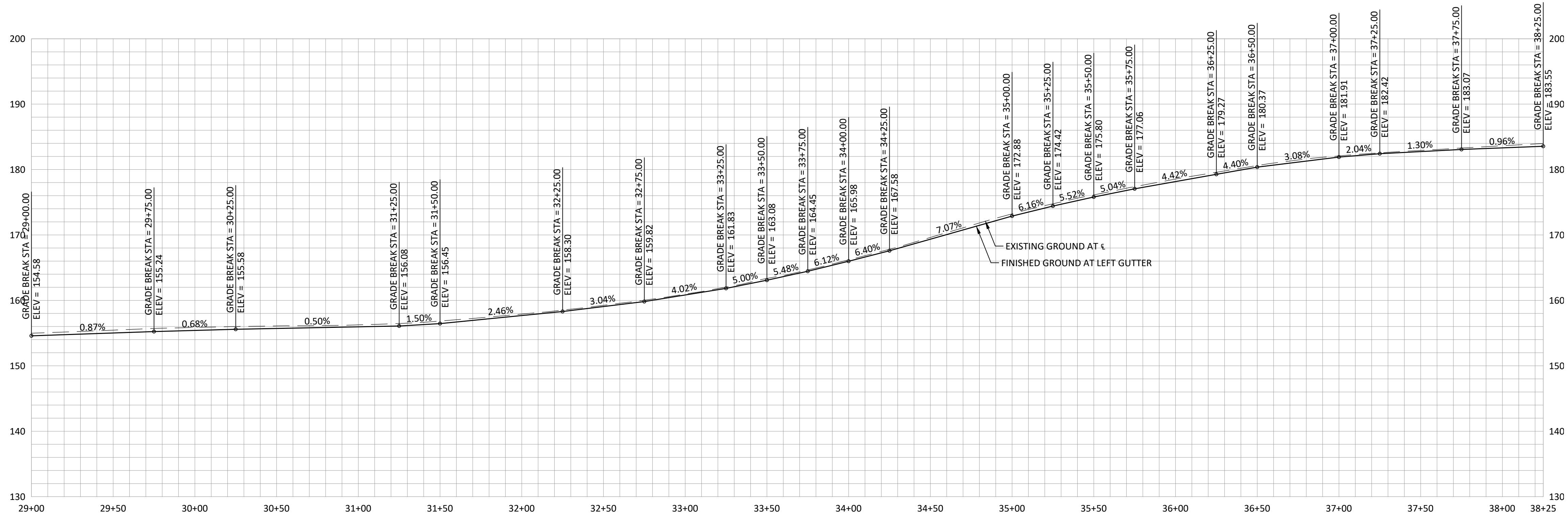


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LINWOOD AVENUE PLAN AND PROFILE STA 29+00 - 38+25
SE LINWOOD AVENUE
MILWAUKIE, OREGON

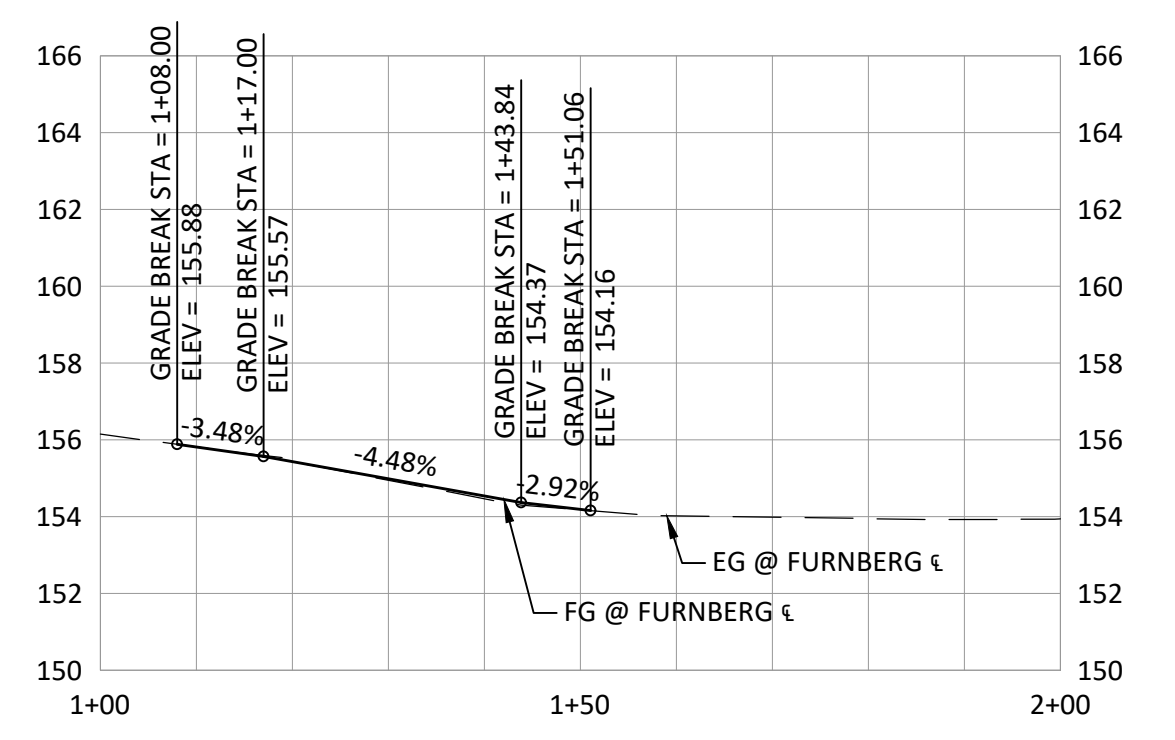
SHEET NO.	5.2A
JOB NO.	MWK-28

P:\M\K (City of Milwaukie)\M\K-28 (Linwood Avenue)\M\K28-DWG(Sheets)\M\K28-5.0 ROADWAY PLAN AND PROFILE.dwg



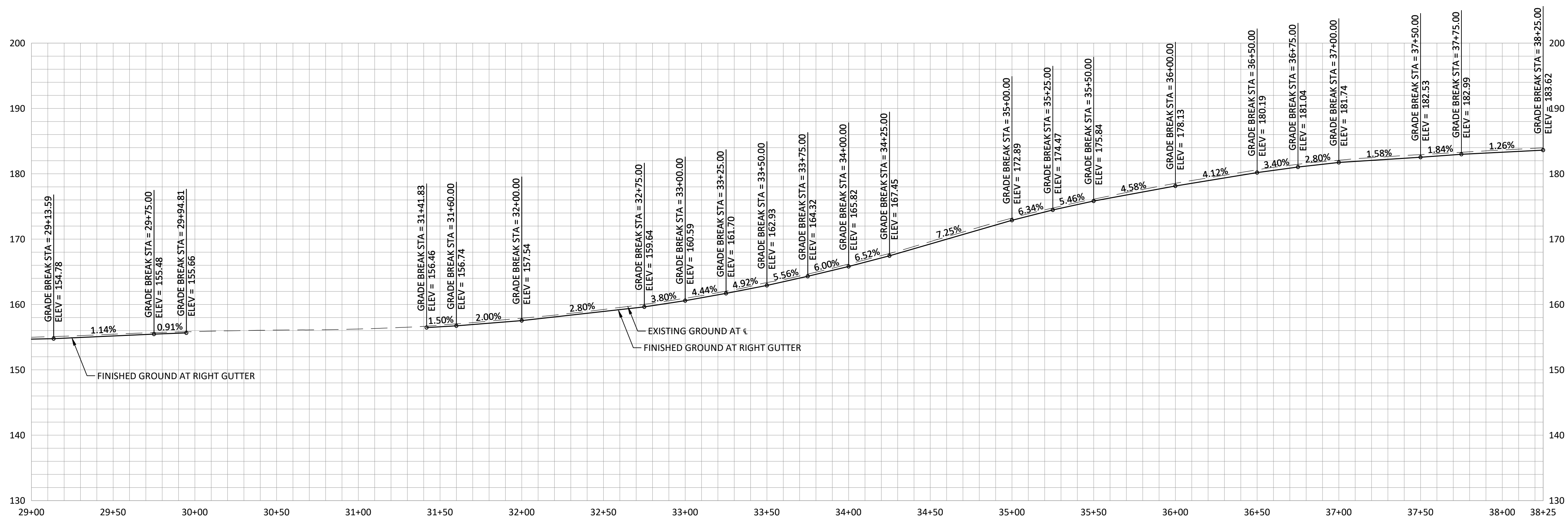
LINWOOD AVE - LEFT GUTTER PROFILE

SCALE: 1"=40' (HORIZ.)
1"=10' (VERT.)



FURNBERG ST - CENTERLINE PROFILE

SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

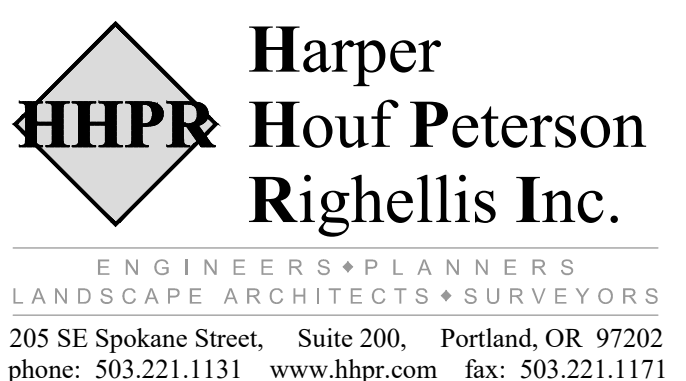
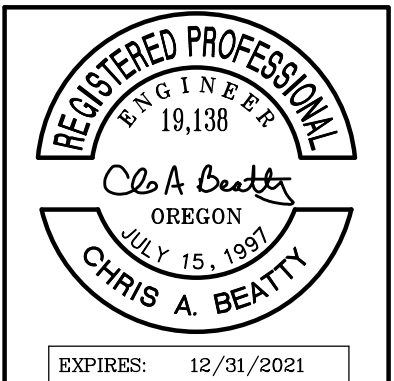


LINWOOD AVE - RIGHT GUTTER PROFILE

SCALE: 1"=40' (HORIZ.)
1"=10' (VERT.)

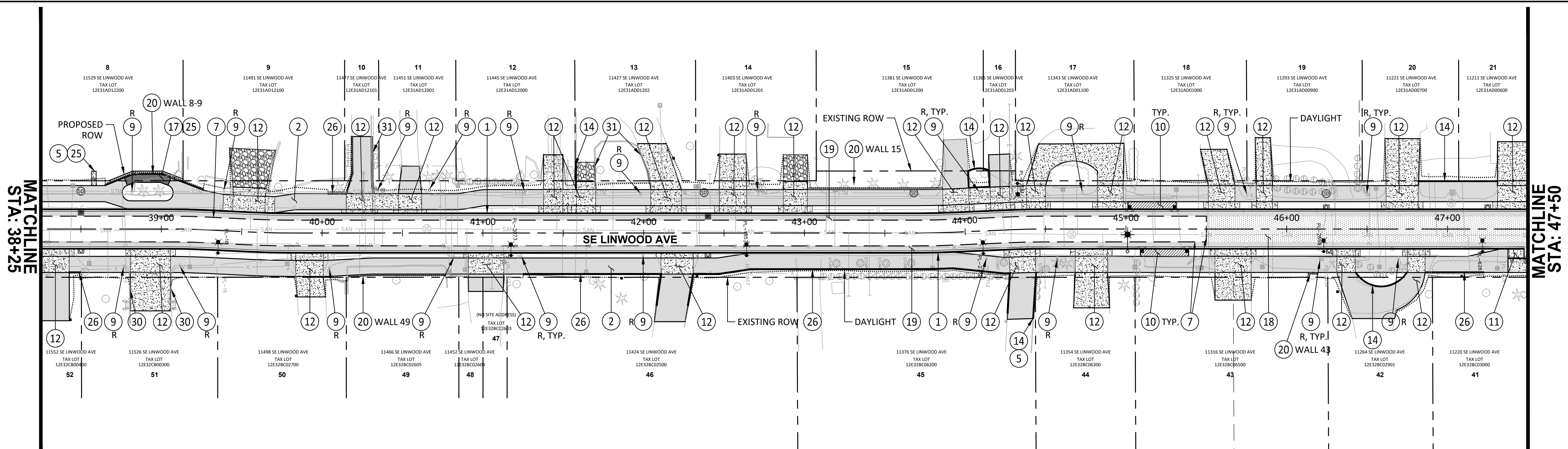
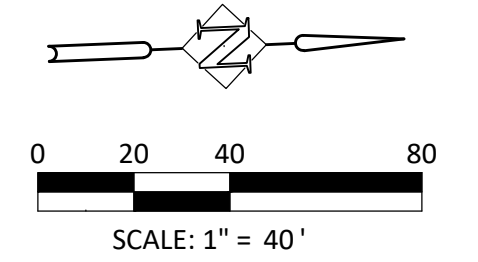
DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020

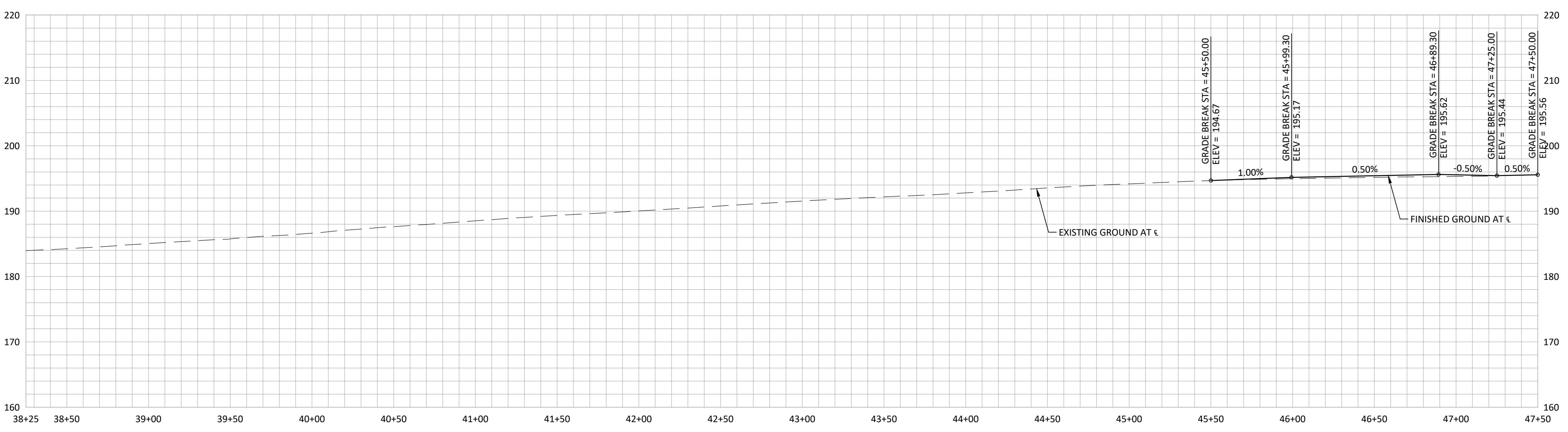


LINWOOD AVENUE PLAN AND PROFILE STA 29+00 - 38+25
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	5.2B
JOB NO.	MWK-28



LINWOOD AVE PLAN VIEW
SCALE: 1"=40'



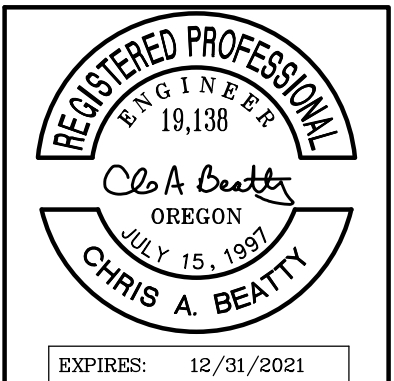
LINWOOD AVE - CENTERLINE PROFILE
SCALE: 1"=40' (HORIZ.)
1"=10' (VERT.)

CONSTRUCTION NOTES:

- 1 CONSTRUCT CURB AND GUTTER PER DETAIL RD700 ON SHEET 3.4.
- 2 CONSTRUCT PERVIOUS MULTI-USE PATH. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- 5 MATCH NEW CURB AND/OR SIDEWALK TO EXISTING. SAWCUT AS REQUIRED AND DIRECTED.
- 7 SAWCUT EXISTING ASPHALT AND REMOVE AS REQUIRED AND DIRECTED.
- 9 RELOCATE (R), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE OREGON STANDARD DRAWING RD100 AND RD101 ON SHEET 3.7. COORDINATE LOCATION WITH ENGINEER.
- 10 CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.8.
- 11 CONSTRUCT CONCRETE MULTI-USE PATH RAMP. SEE SPOT GRADE ELEVATIONS ON SHEET SERIES 7.0.
- 12 CONSTRUCT DRIVEWAY APPROACH AND CONNECTION. SEE SHEET 3.9 FOR DETAILS. SEE SHEET SERIES 6.0 FOR PAVING INFORMATION.
- 14 CONSTRUCT STANDARD CONCRETE CURB PER DETAIL RD700 ON SHEET 3.4.
- 17 CONSTRUCT PERMEABLE PAVERS. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- 18 COLD PLANE REMOVE 2" OF EXISTING AC & REPLACE WITH 2-4" OF AC. SEE PROPOSED CENTERLINE PROFILE, THIS SHEET.
- 19 CONSTRUCT AC PAVEMENT SECTION. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- 20 CONSTRUCT WALL. SEE WALL PLAN AND PROFILE SHEET SERIES FOR MORE INFORMATION.
- 25 SEE SHEET SERIES 7.0 FOR GRADING DETAIL.
- 26 CONSTRUCT SIDEWALK THICKENED EDGE WITH STANDARD TYPE C CURB. SEE SHEET 3.7 FOR DETAIL.
- 30 PROTECT EXISTING WALL.
- 31 CONSTRUCT PRIVATE WALL. MATCH SIZE & MATERIAL TO EXISTING WALL.

P:\M\K\City of Milwaukie\28 Linwood Avenue\28 Linwood Avenue\28-DWG\SS\Sheets\MWK28-5.0 ROADWAY PLAN AND PROFILE.dwg

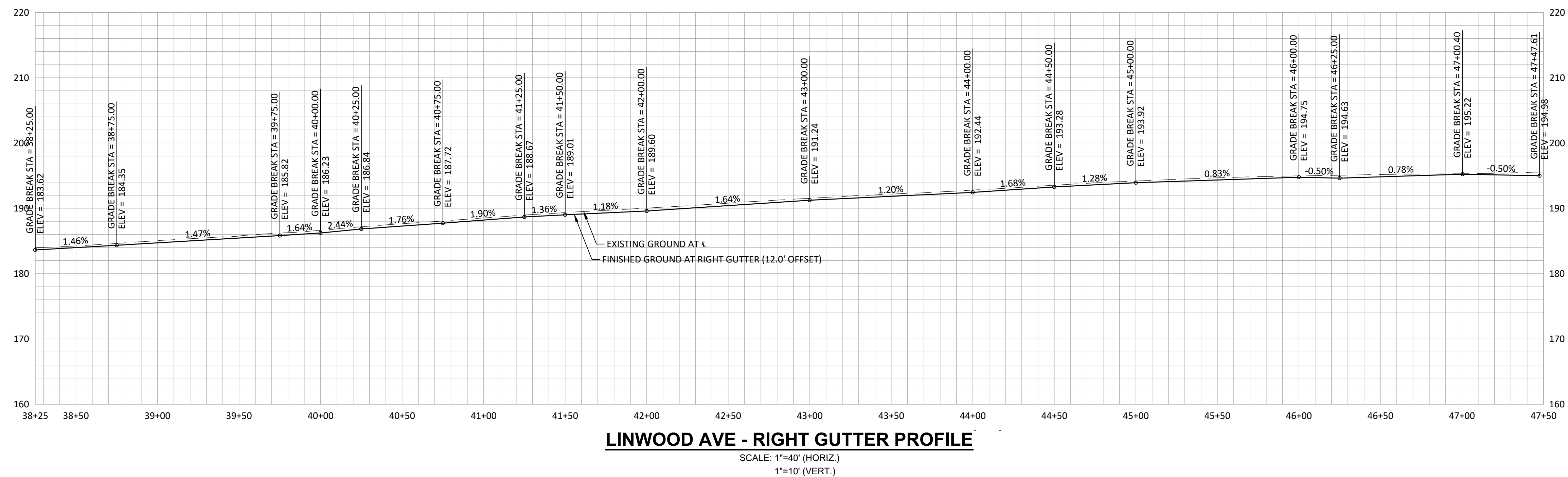
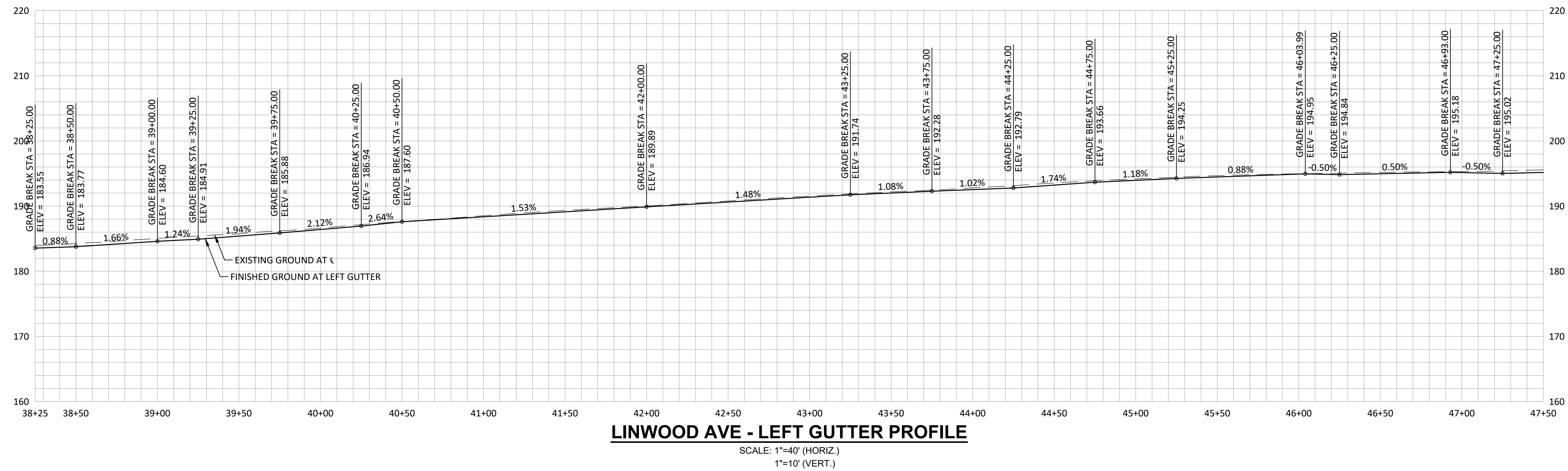
DESIGNED:	CAB	
DRAWN:	HHPR	
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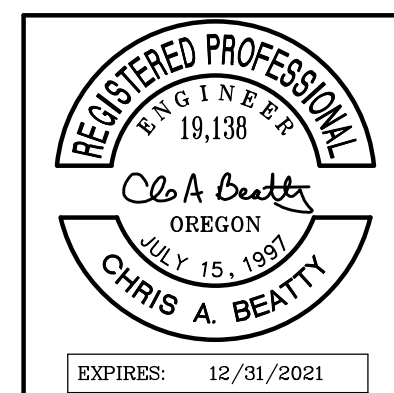
LINWOOD AVENUE PLAN AND PROFILE STA 38+25 - 47+50
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	5.3A
JOB NO.	MWK-28



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DRAWN:	HHPR
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DATE:	12/4/2020

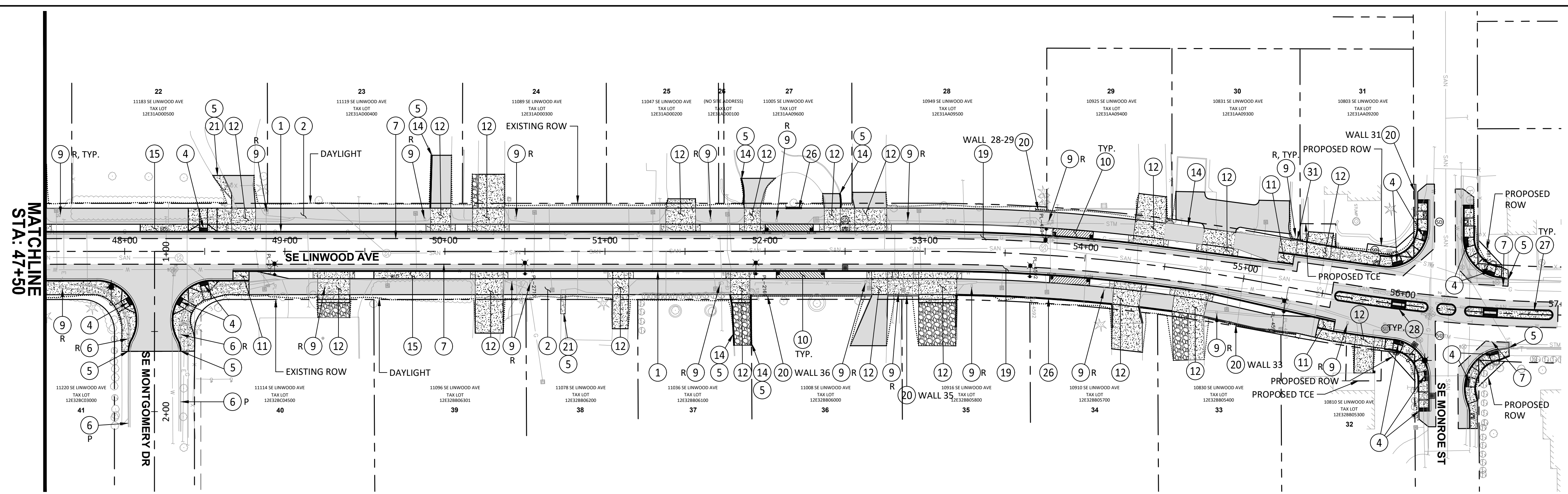
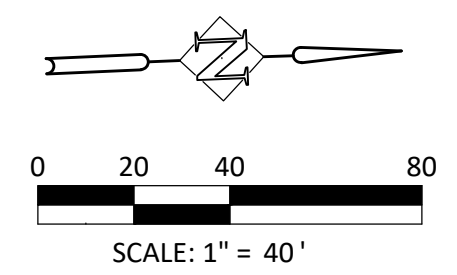
DATE	NO.	DESCRIPTION
R E V I S I O N S		



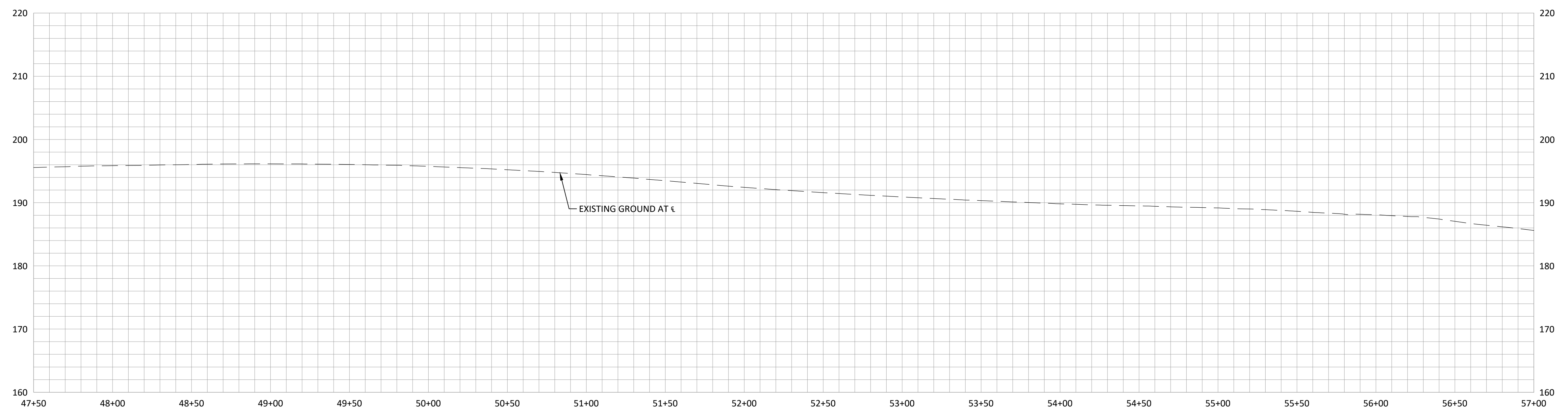
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LINWOOD AVE PLAN AND PROFILE STA 38+25 - 47+50
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	5.3B
JOB NO.	MWK-28



LINWOOD AVE PLAN VIEW
SCALE: 1"=40'



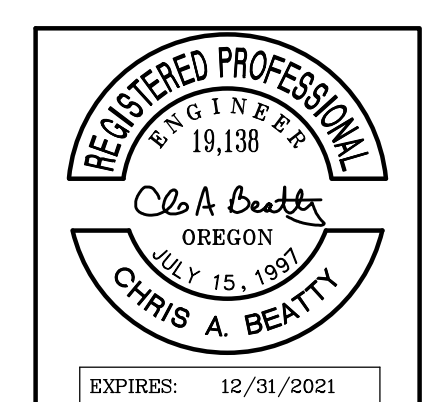
LINWOOD AVE - CENTERLINE PROFILE
SCALE: 1"=40' (HORIZ.)
1"=10' (VERT.)

CONSTRUCTION NOTES:

- 1 CONSTRUCT CURB AND GUTTER PER DETAIL RD700 ON SHEET 3.4.
- 2 CONSTRUCT PERVIOUS MULTI-USE PATH. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- 4 CONSTRUCT SIDEWALK RAMP PER DETAIL RD755 & RD757 ON SHEET 3.5. SEE SPOT GRADE ELEVATIONS ON SHEET SERIES 7.0.
- 5 MATCH NEW CURB AND/OR SIDEWALK TO EXISTING. SAWCUT AS REQUIRED AND DIRECTED.
- 6 REMOVE (R) OR PROTECT (P) EXISTING CONCRETE CURB AND/OR SIDEWALK. SAWCUT NEAT LINE AT LIMIT OF REMOVAL.
- 7 SAWCUT EXISTING ASPHALT AND REMOVE AS REQUIRED AND DIRECTED.
- 9 RELOCATE (R), PROTECT (P), OR DEMOLISH (D) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE OREGON STANDARD DRAWING RD100 AND RD101 ON SHEET 3.7. COORDINATE LOCATION WITH ENGINEER.
- 10 CONSTRUCT STORMWATER TREATMENT PLANTER PER DETAIL ON SHEET 3.8.
- 11 CONSTRUCT CONCRETE MULTI-USE PATH RAMP. SEE SPOT GRADE ELEVATIONS ON SHEET SERIES 7.0.
- 12 CONSTRUCT DRIVEWAY APPROACH AND CONNECTION. SEE SHEET 3.9 FOR DETAILS. SEE SHEET SERIES 6.0 FOR PAVING INFORMATION.
- 14 CONSTRUCT STANDARD CONCRETE CURB PER DETAIL RD700 ON SHEET 3.4.
- 15 CONSTRUCT CONCRETE BUS PAD. SEE SHEET SERIES 6.0 FOR DIMENSIONS AND SECTION DETAIL.
- 19 CONSTRUCT AC PAVEMENT SECTION. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- 20 CONSTRUCT WALL. SEE WALL PLAN AND PROFILE SHEET SERIES FOR MORE INFORMATION.
- 21 CONSTRUCT CONCRETE SIDEWALK PER DETAIL RD720 ON SHEET 3.4. SEE SHEET SERIES 6.0 FOR SECTION DETAIL.
- 26 CONSTRUCT SIDEWALK THICKENED EDGE WITH STANDARD TYPE C CURB. SEE SHEET 3.7 FOR DETAIL.
- 27 CONSTRUCT CONCRETE ISLAND WITH STANDARD CURB PER DETAIL RD705 ON SHEET 3.4. SEE SHEET 7.6 FOR GRADING DETAIL.
- 28 INSTALL TRUNCATED DOMES. SEE SHEET 3.5 FOR DETAIL.
- 31 CONSTRUCT PRIVATE WALL. MATCH SIZE & MATERIAL TO EXISTING WALL.

P:\M\K\City of Milwaukie\MWK-28_Linwood Avenue\MWK-28-DWG\Sheets\MWK-28-5.0 ROADWAY PLAN AND PROFILE.dwg

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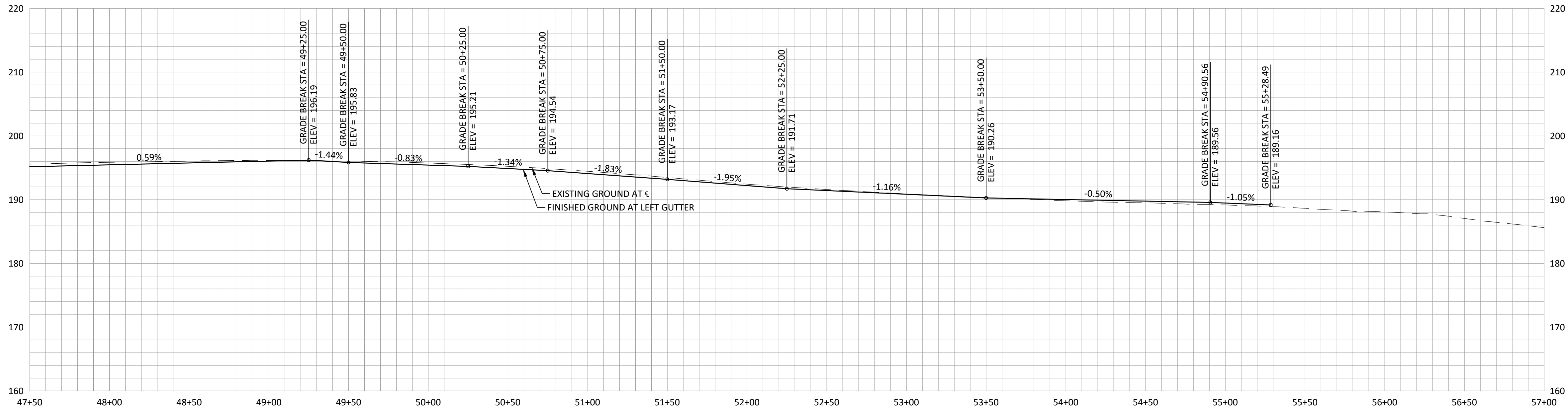


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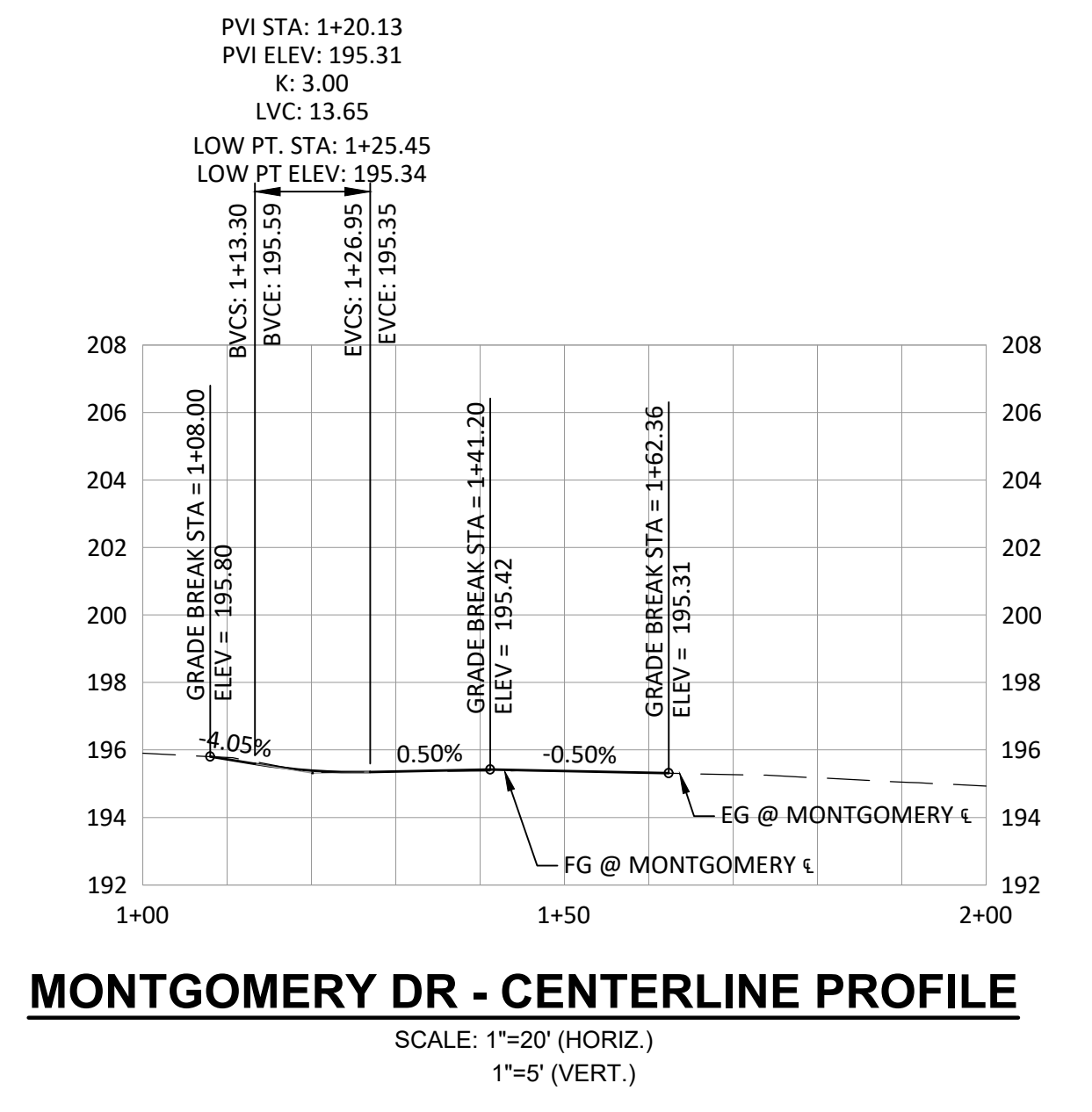
LINWOOD AVENUE PLAN AND PROFILE STA 47+50 - 57+00
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	5.4A
JOB NO.	MWK-28

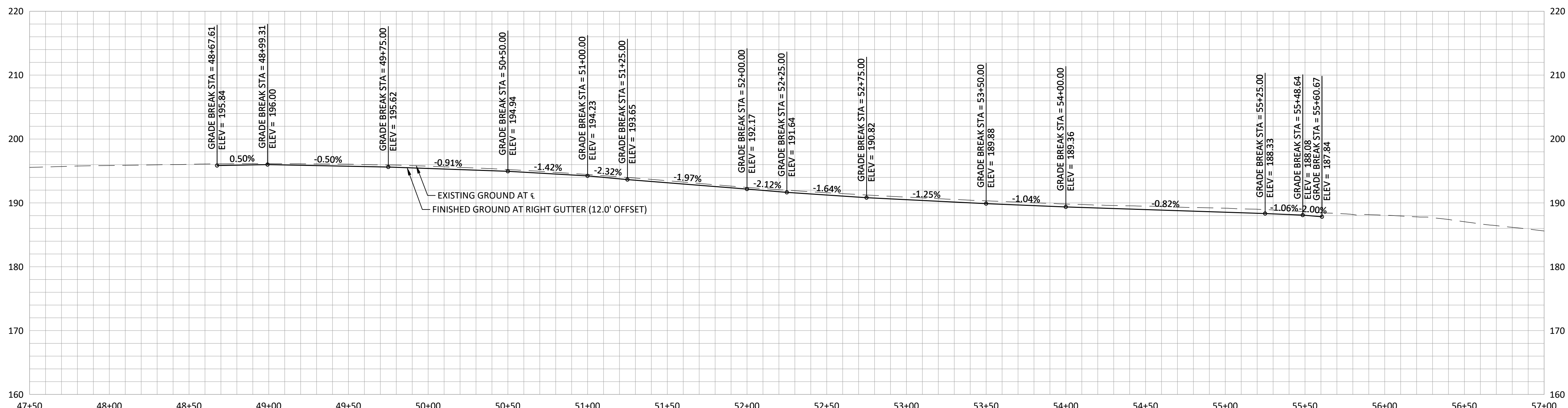
P:\M\K (City of Milwaukie)\M\K-28 (Linwood Avenue)\M\K28-DWG(Sheets)\M\K28-5.0 ROADWAY PLAN AND PROFILE.dwg



LINWOOD AVE - LEFT GUTTER PROFILE
 SCALE: 1"=40' (HORIZ.)
 1"=10' (VERT.)



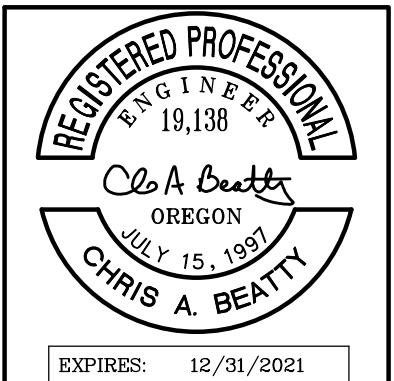
MONTGOMERY DR - CENTERLINE PROFILE
 SCALE: 1"=20' (HORIZ.)
 1"=5' (VERT.)



LINWOOD AVE - RIGHT GUTTER PROFILE
 SCALE: 1"=40' (HORIZ.)
 1"=10' (VERT.)

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020



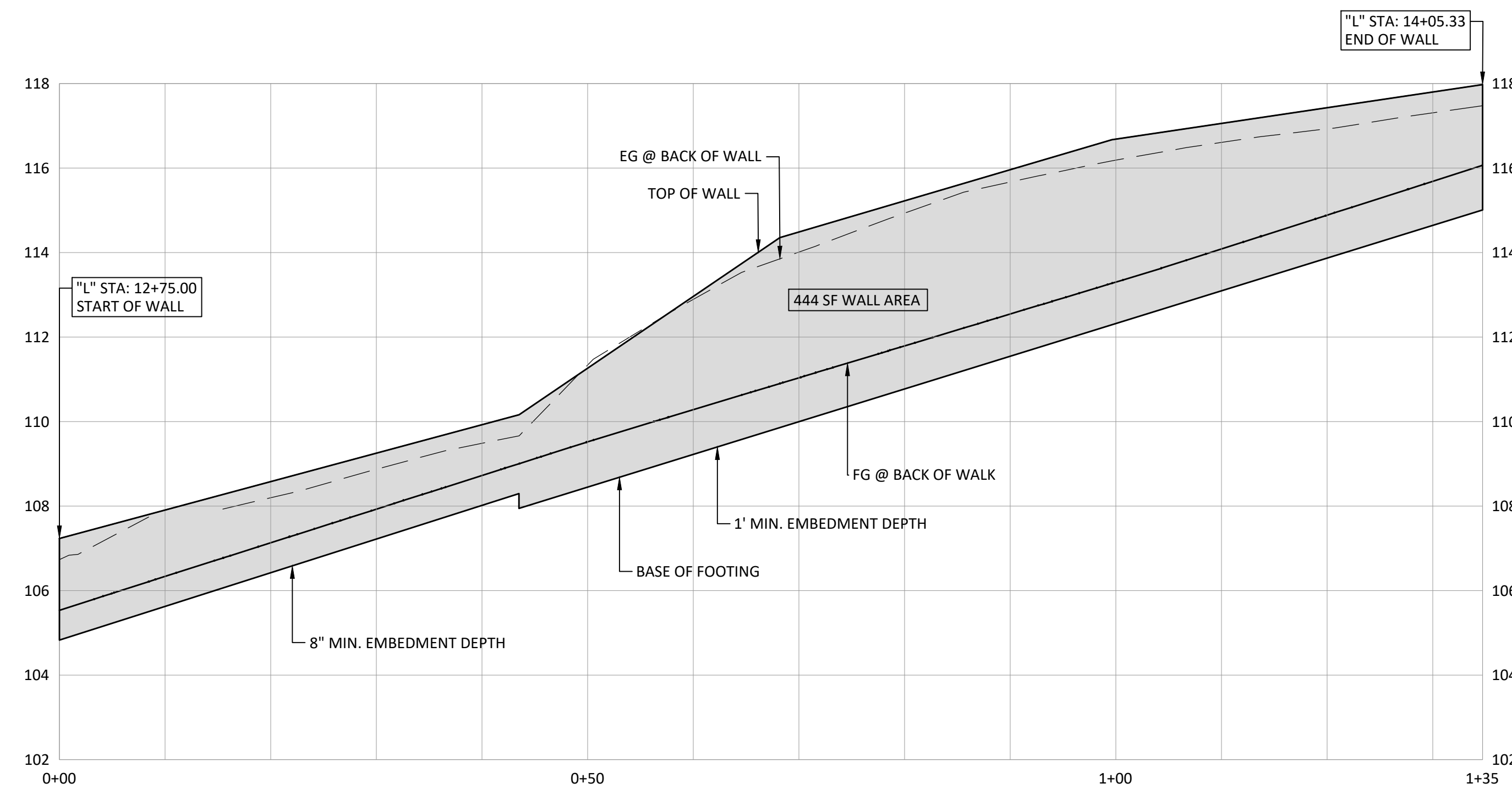
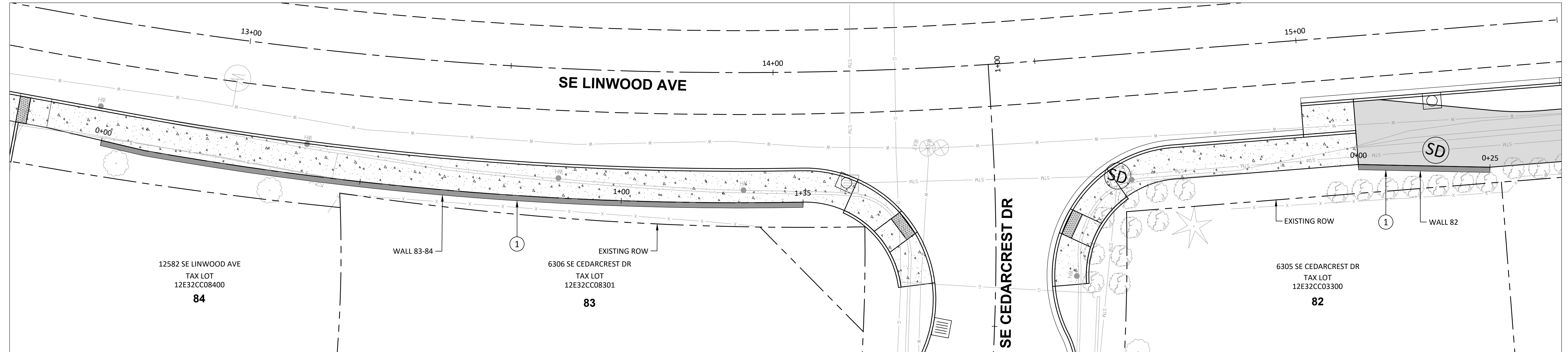
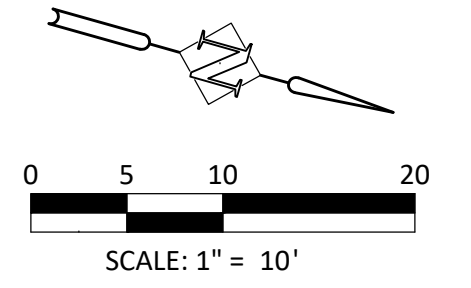
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SE LINWOOD AVENUE
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SHEET NO.	5.4B
JOB NO.	MWK-28

CONSTRUCTION NOTES:

- ① CONSTRUCT ROCKERY WALL PER DETAIL ON SHEET 5.14.

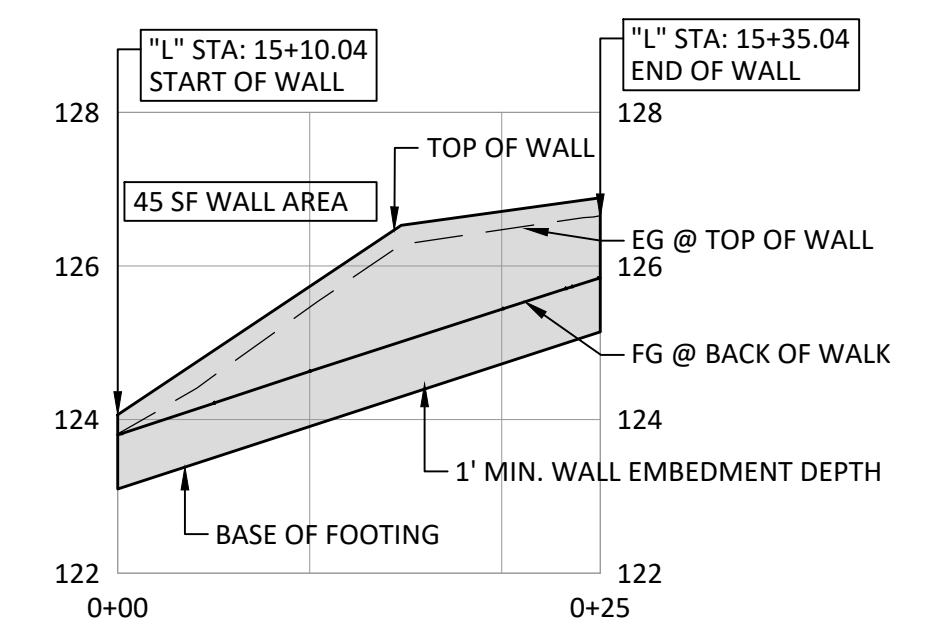


WALL 83-84 PROFILE

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

BOTTOM OF WALL		TOP OF WALL	
STATION	ELEVATION	STATION	ELEVATION
0+00.00	104.83	0+00.00	107.23
0+43.52	107.94	0+43.52	110.16
1+34.71	115.01	0+68.21	114.35
		0+99.64	116.67
		1+34.71	117.97

BOTTOM OF WALL		TOP OF WALL	
STATION	ELEVATION	STATION	ELEVATION
0+00.00	123.10	0+00.00	124.06
0+25.12	125.14	0+14.76	126.53
		0+25.12	126.89

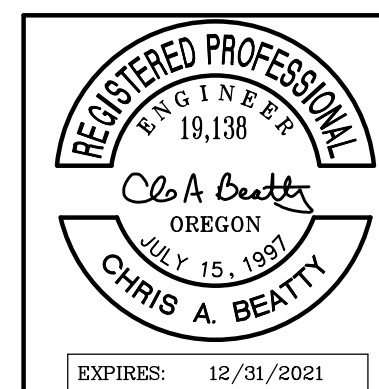


WALL 82 PROFILE

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

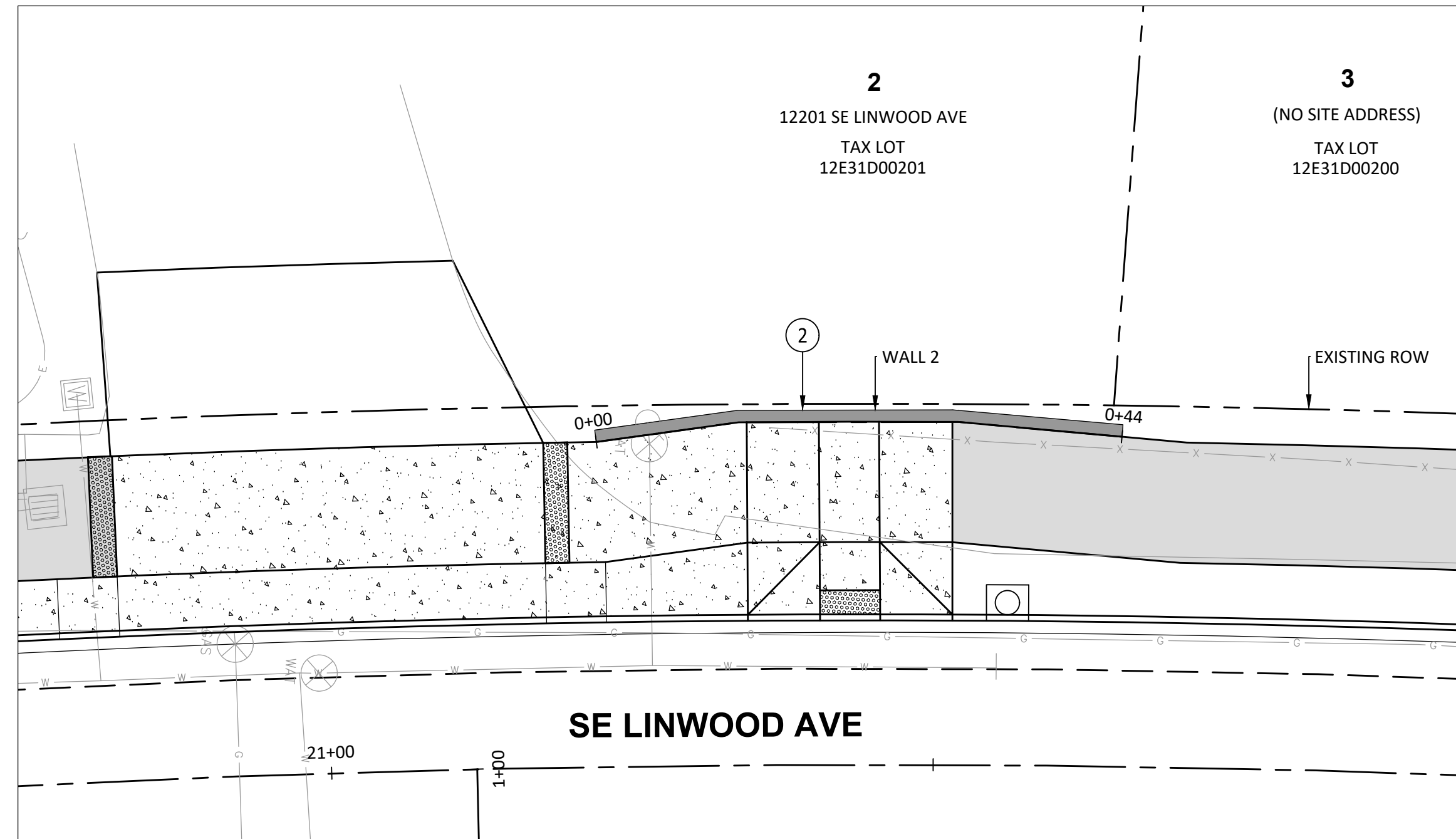


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WALL PLAN AND PROFILE
SE LINWOOD AVENUE
MILWAUKIE, OREGON

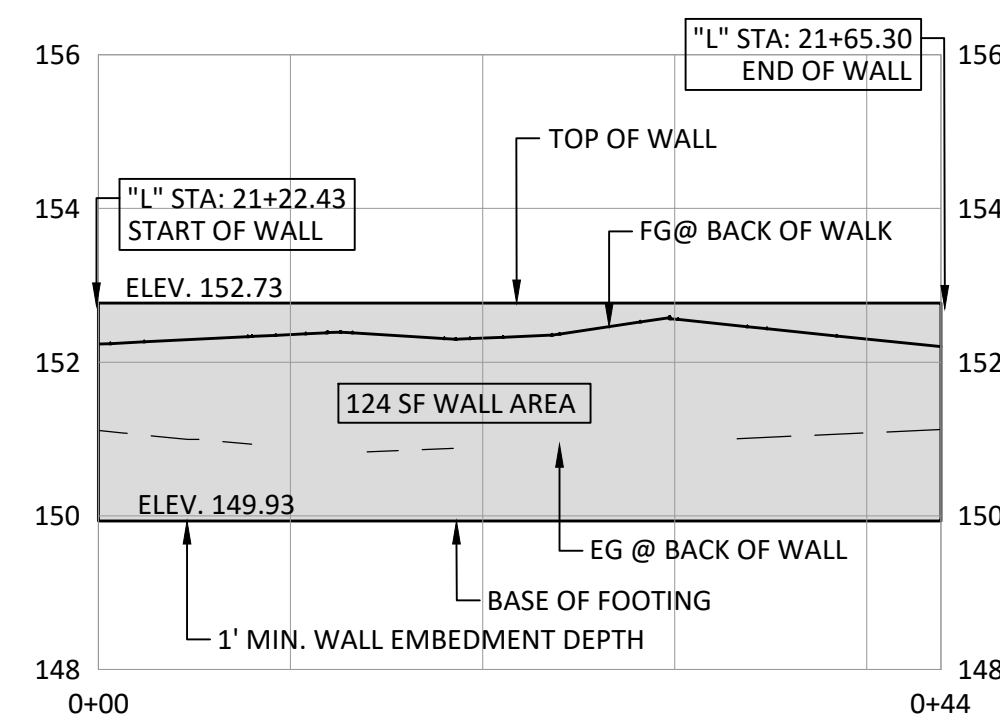
SHEET NO.	5.5
JOB NO.	MWK-28

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CONSTRUCTION NOTES:

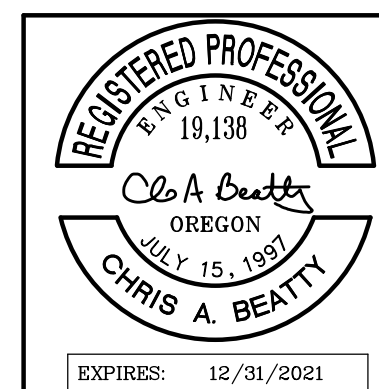
- ② CONSTRUCT ALLAN BLOCK MSE WALL PER DETAIL ON SHEET 5.14.



WALL 2 PROFILE

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

DESIGNED:	CAB	
DRAWN:	HHPR	
CHECKED:	CAB	
DATE:	12/4/2020	
R E V I S I O N S		
DATE	NO.	DESCRIPTION



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WALL PLAN AND PROFILE
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.

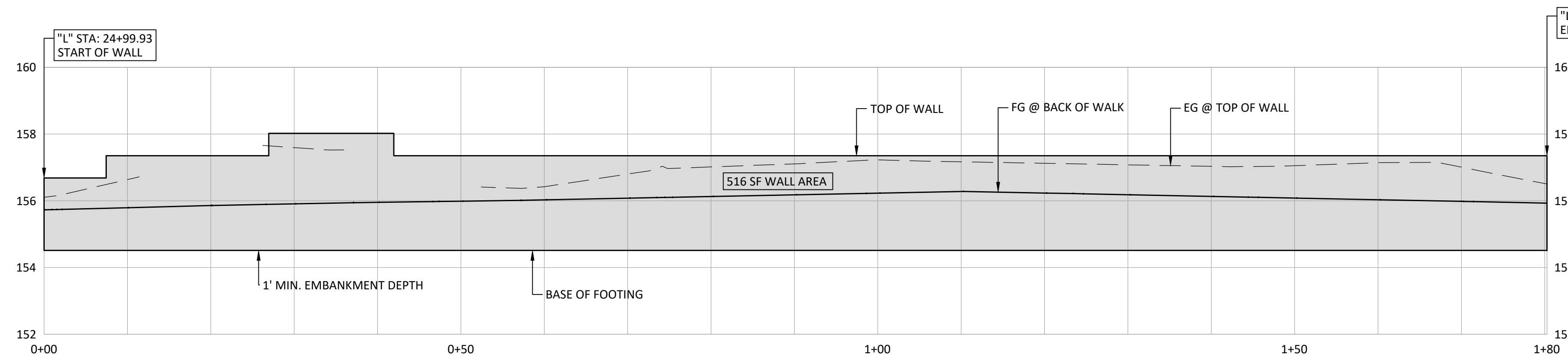
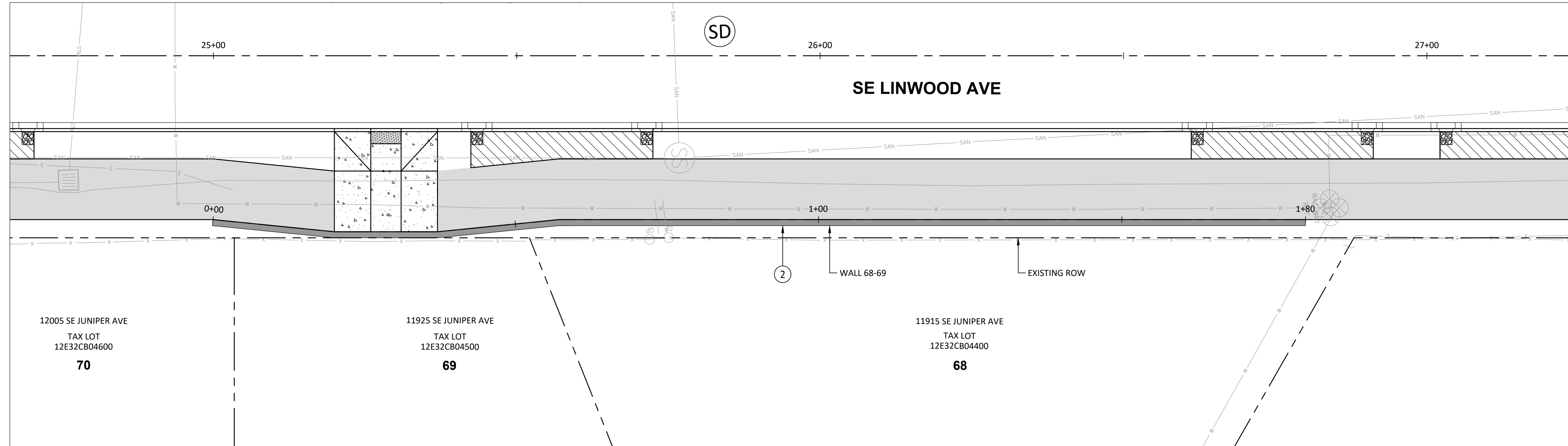
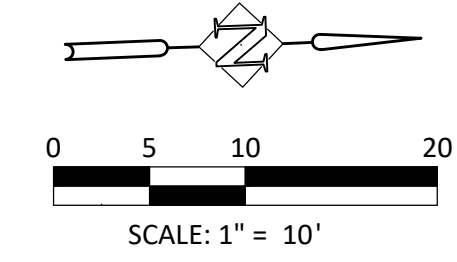
5.6

JOB NO.

MWK-28

CONSTRUCTION NOTES:

② CONSTRUCT ALLAN BLOCK MSE WALL PER DETAIL ON SHEET 5.14.



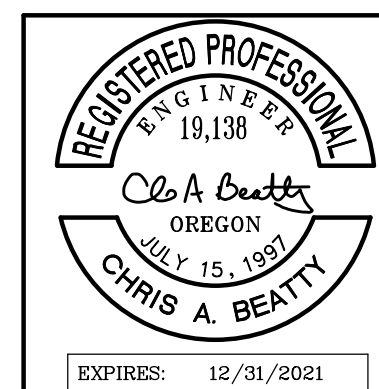
BOTTOM OF WALL		TOP OF WALL	
STATION	ELEVATION	STATION	ELEVATION
0+00.00	154.51	0+00.00	156.68
1+80.27	154.51	0+07.46	157.35
		0+26.96	158.02
		0+41.96	157.35
		1+80.27	157.35

WALL 68-69 PROFILE

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
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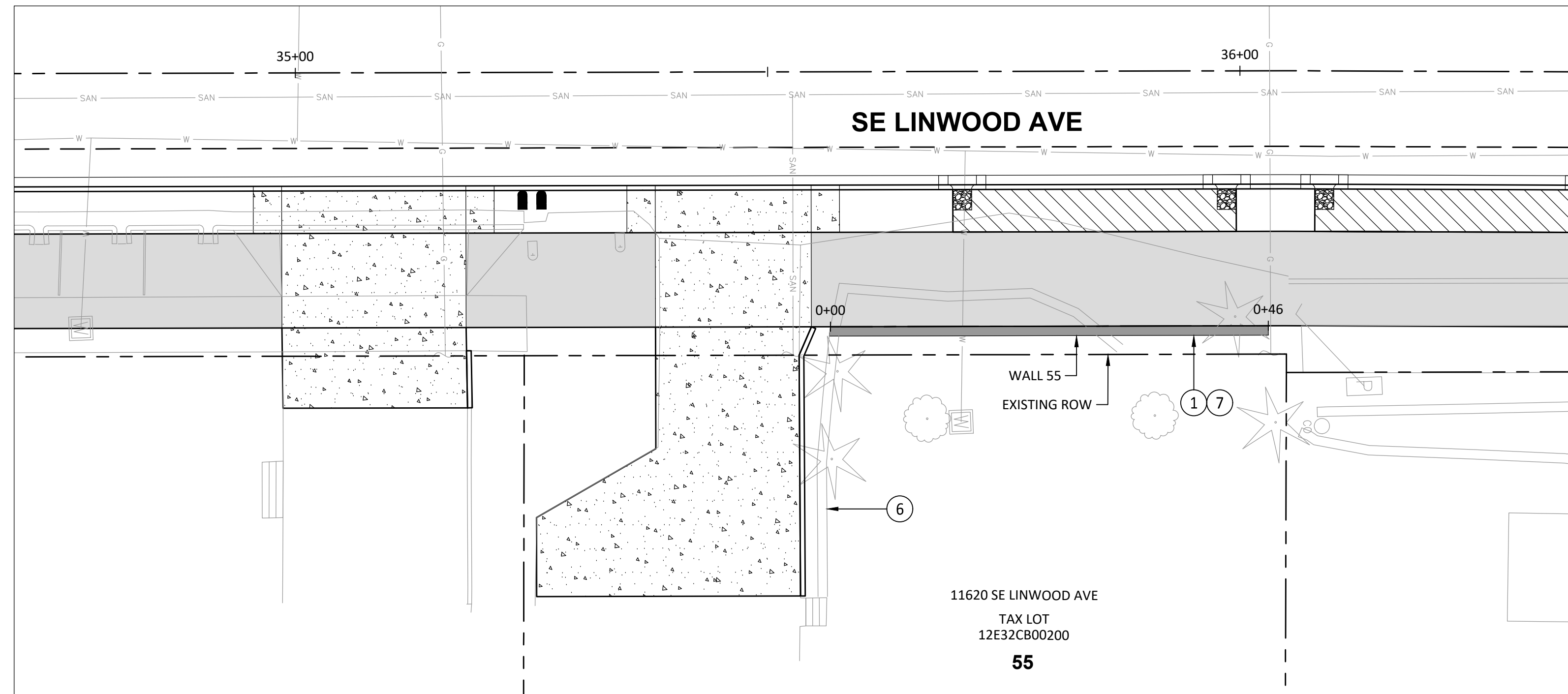
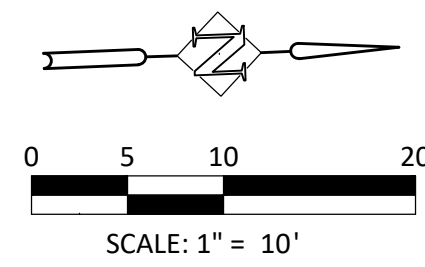


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WALL PLAN AND PROFILE
SE LINWOOD AVENUE
MILWAUKIE, OREGON

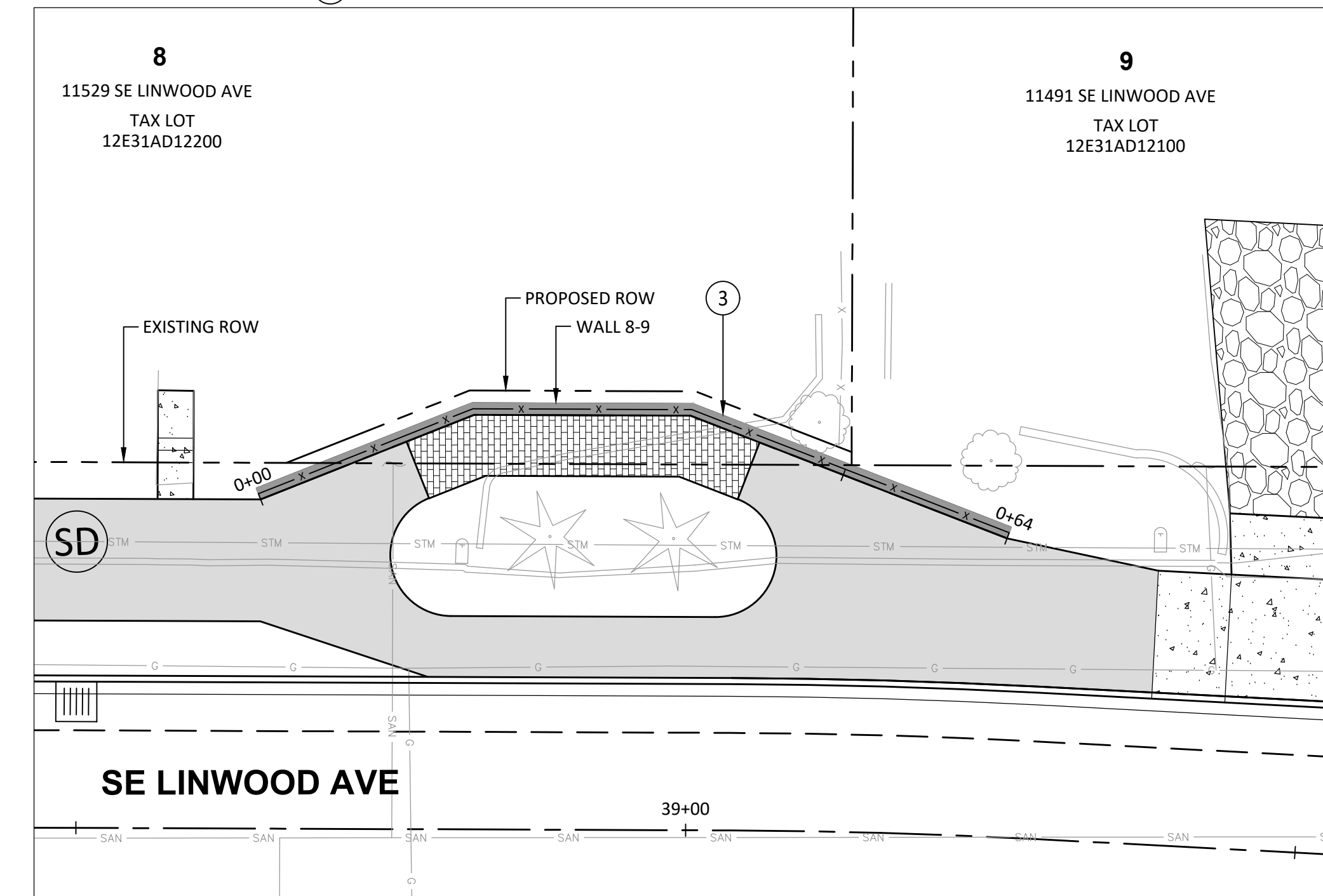
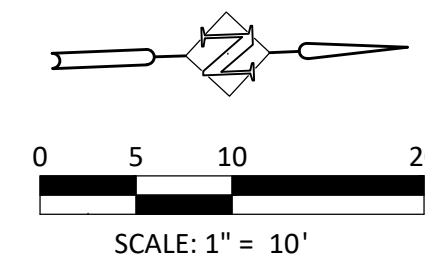
SHEET NO.	5.7
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK28-DWG(Sheets)\MWK28-5 WALL PLAN AND PROFILE.dwg

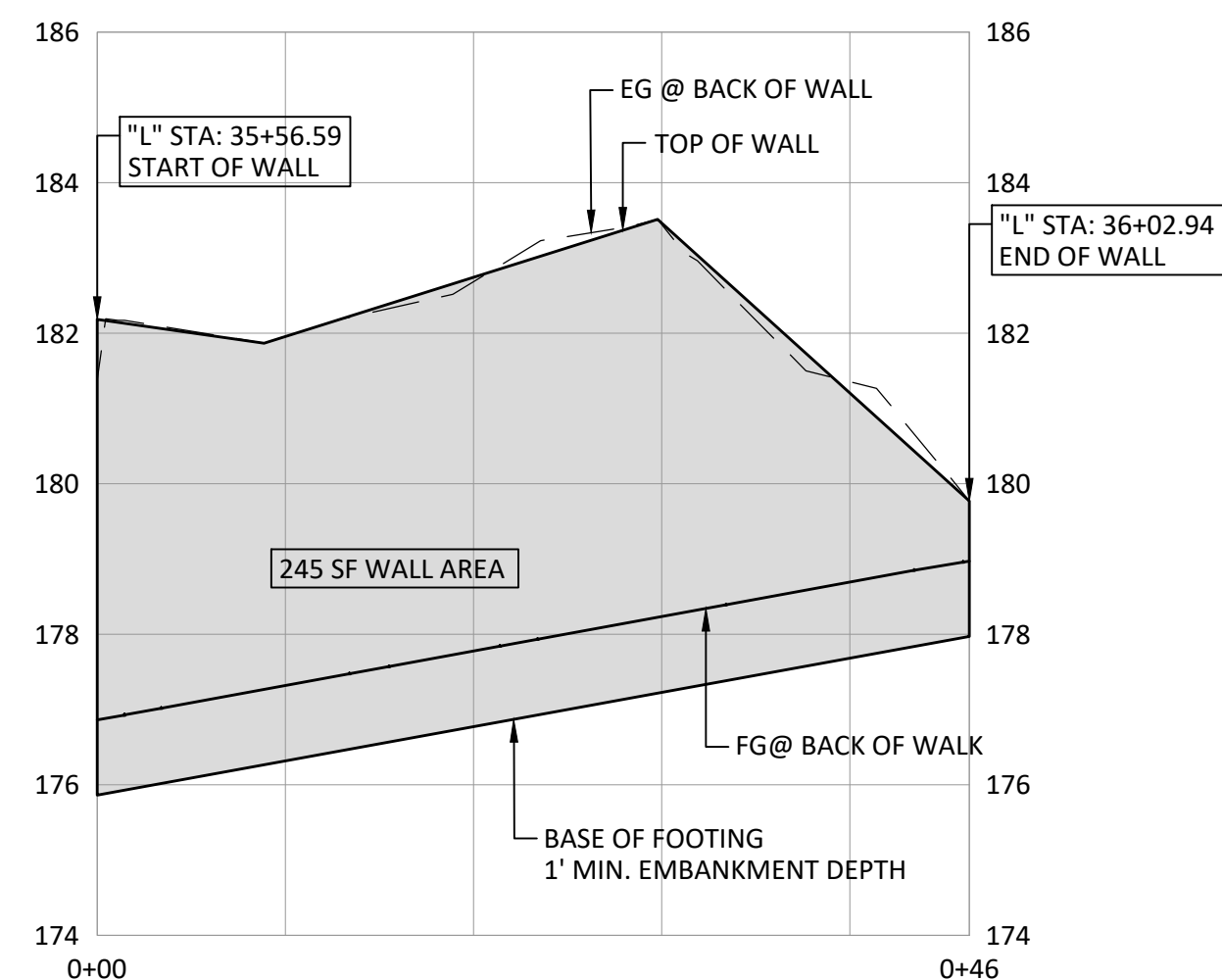


CONSTRUCTION NOTES:

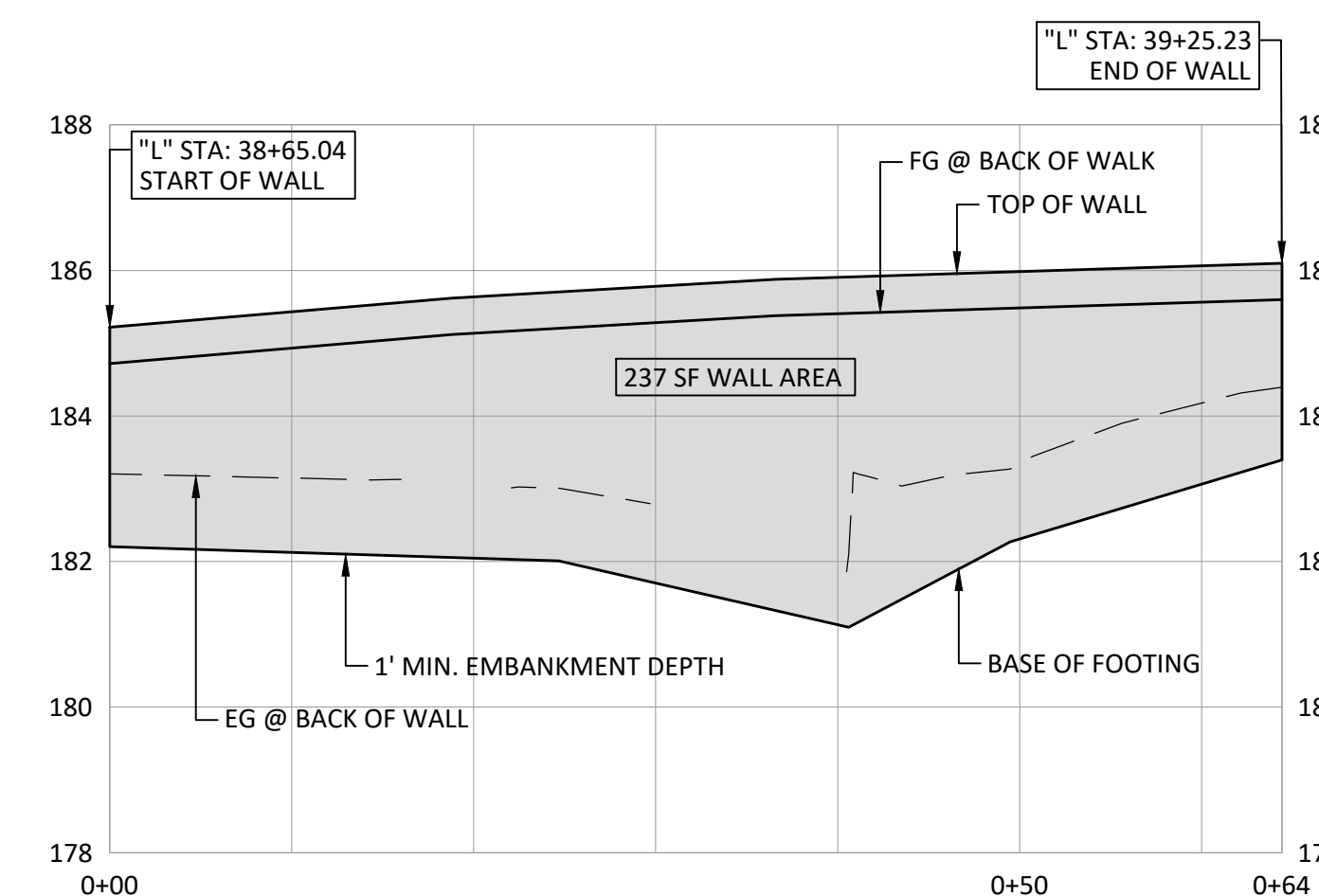
- ① CONSTRUCT ROCKERY WALL PER DETAIL ON SHEET 5.14.
- ③ CONSTRUCT CONCRETE GRAVITY WALL WITH 4' HIGH BLACK VINYL COATED CHAIN LINK FENCE. PROVIDE 6" WALL EXPOSURE AT BACK OF WALK. SEE DETAIL ON SHEET 5.14.
- ⑥ PROTECT EXISTING WALL.
- ⑦ MATCH SIZE & MATERIAL TO EXISTING WALL.



BOTTOM OF WALL		TOP OF WALL	
STATION	ELEVATION	STATION	ELEVATION
0+00.00	175.86	0+00.00	182.18
0+46.35	177.97	0+08.86	181.87
		0+29.78	183.51
		0+46.35	179.77



WALL 55 PROFILE
SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)



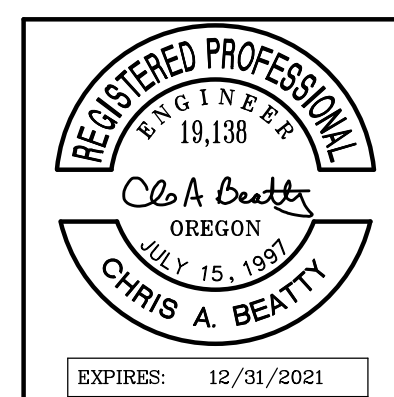
WALL 8-9 PROFILE
SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

BOTTOM OF WALL		TOP OF WALL	
STATION	ELEVATION	STATION	ELEVATION
0+00.00	182.21	0+00.00	185.22
0+24.67	182.01	0+18.83	185.62
0+40.61	181.10	0+36.58	185.88
0+49.48	182.27	0+64.41	186.10
0+64.41	183.39		

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DATE	NO.	DESCRIPTION
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DATE:	12/4/2020



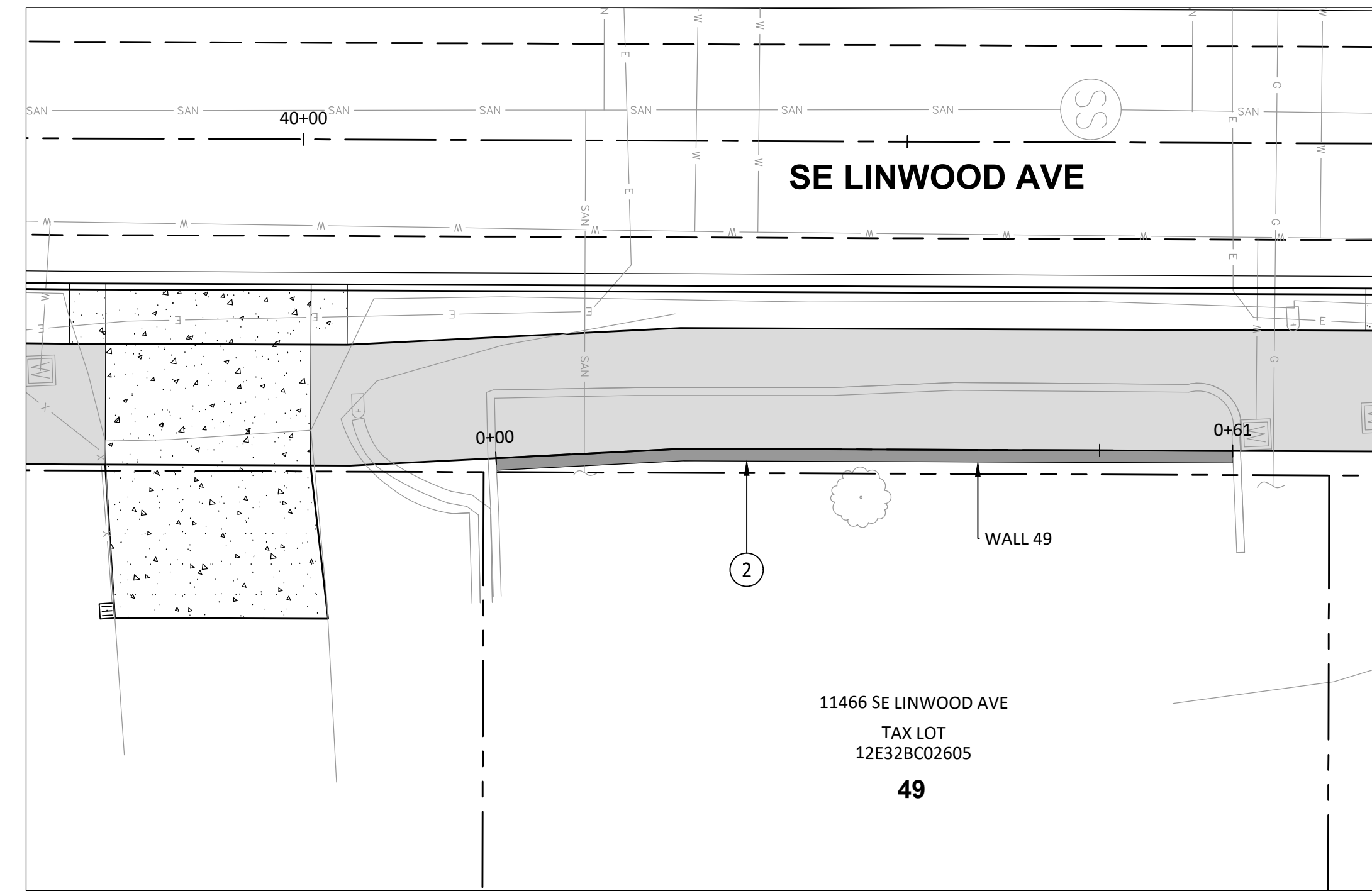
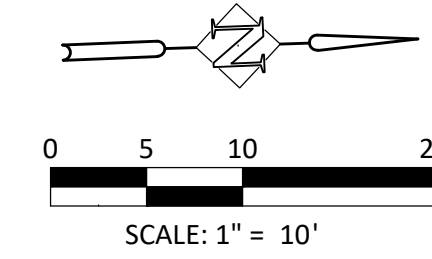
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**WALL PLAN AND PROFILE
SE LINWOOD AVENUE
MILWAUKIE, OREGON**

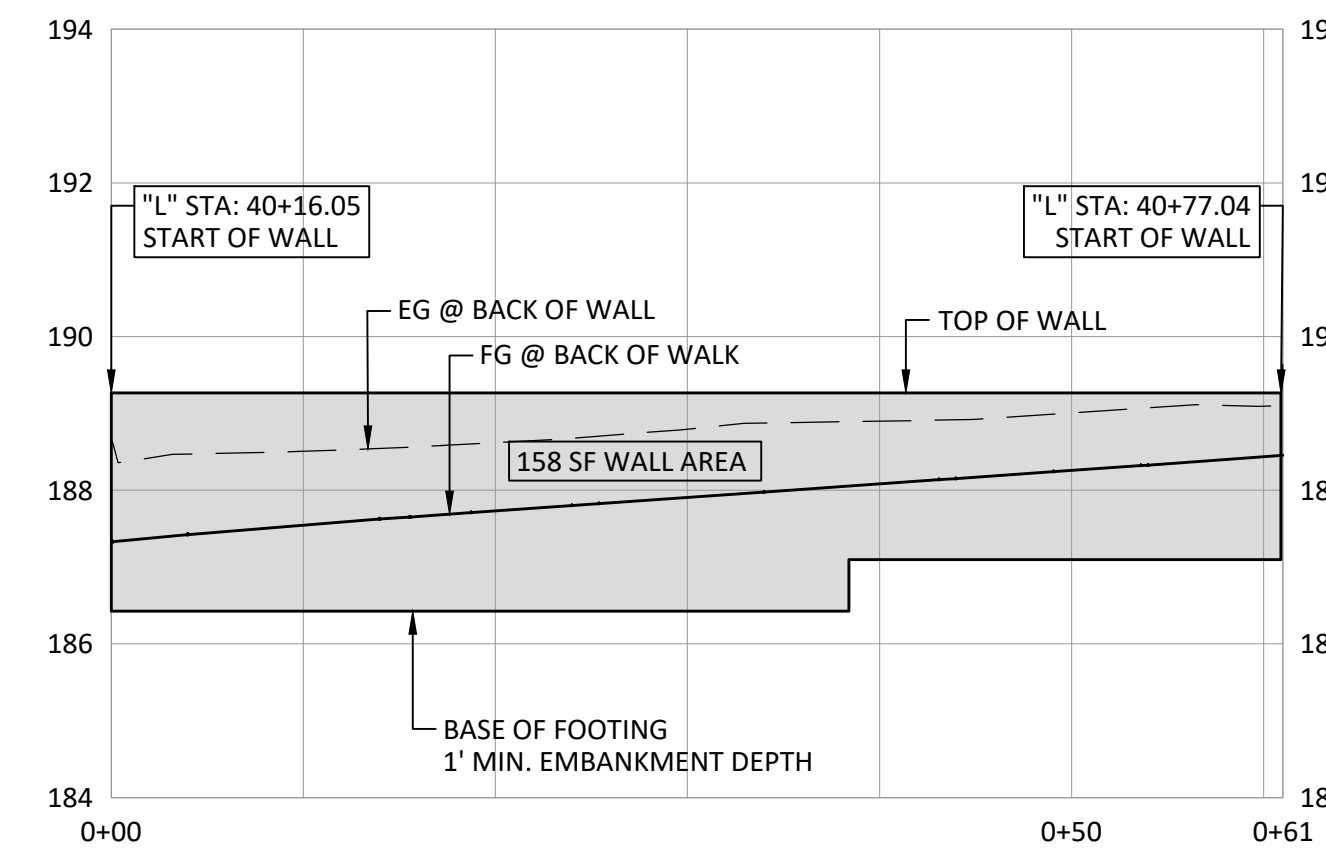
SHEET NO.
5.8
JOB NO.
MWK-28

CONSTRUCTION NOTES:

- ② CONSTRUCT ALLAN BLOCK MSE WALL PER DETAIL ON SHEET 5.14.



WALL 49 ELEVATION TABLE			
BOTTOM OF WALL		TOP OF WALL	
STATION	ELEVATION	STATION	ELEVATION
0+00.00	186.43	0+00.00	189.27
0+38.40	187.10	0+60.27	189.27
0+60.90	187.10		



WALL 49 PROFILE

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

DESIGNED:	CAB	
DRAWN:	HHPR	
CHECKED:	CAB	
DATE:	12/4/2020	
R E V I S I O N S		
DATE	NO.	DESCRIPTION

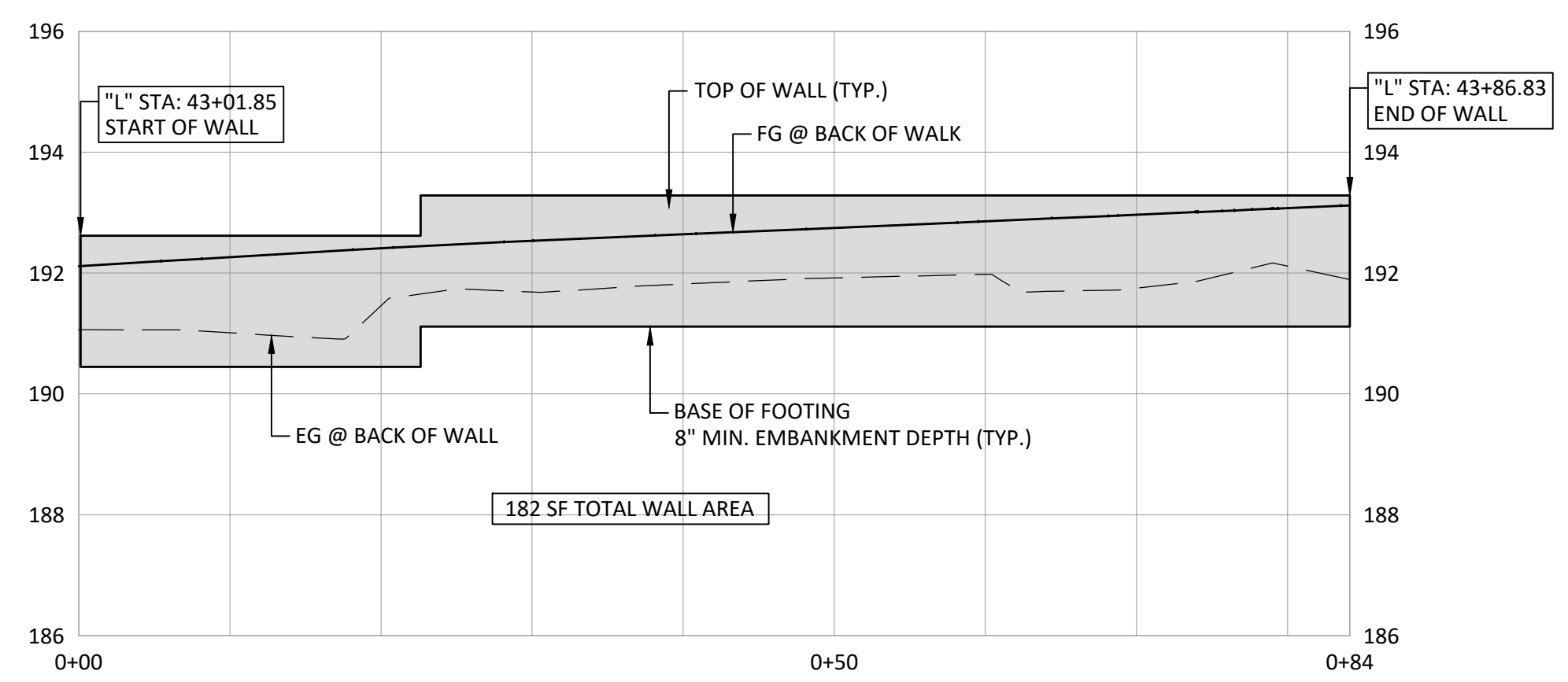
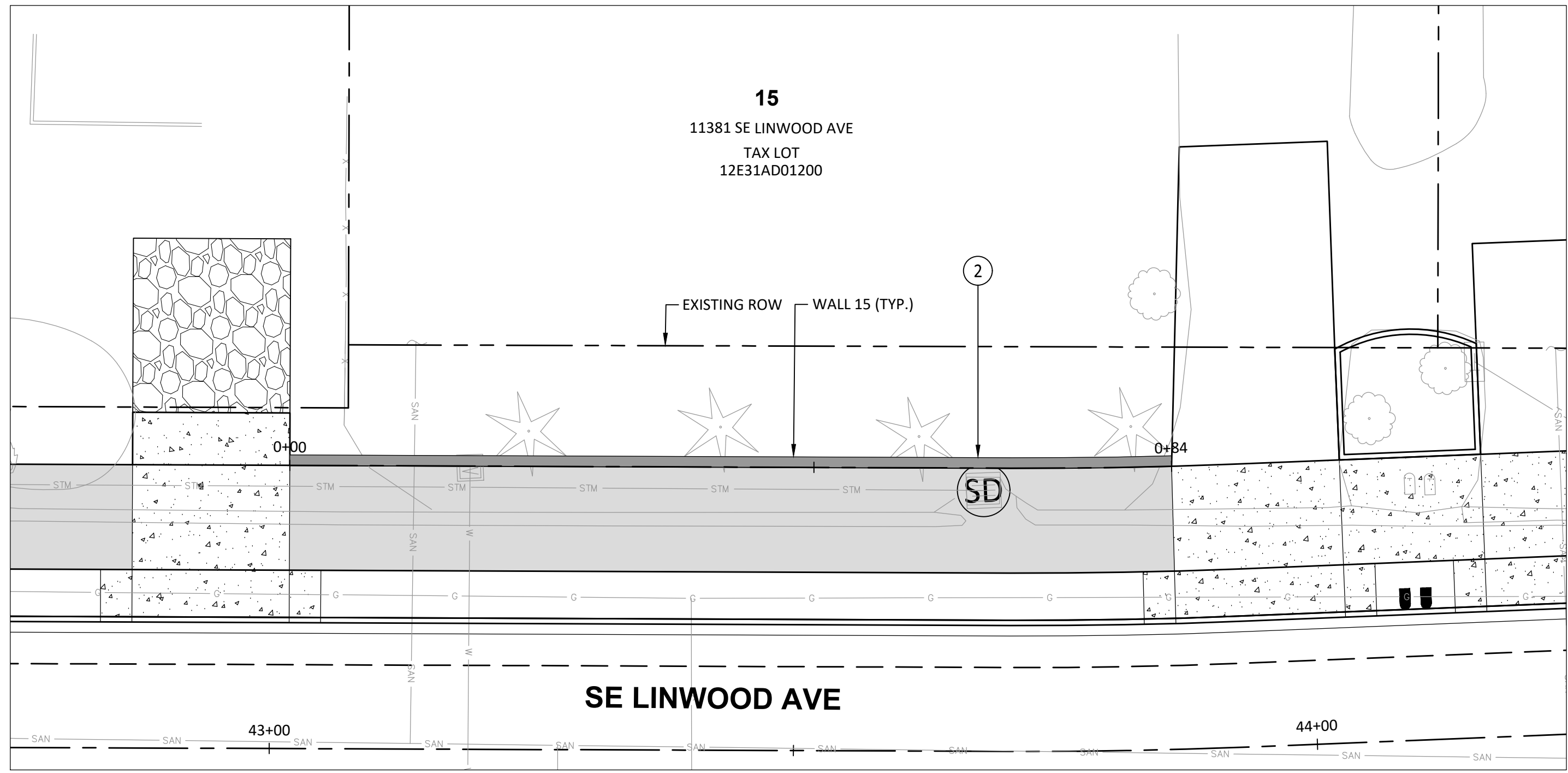
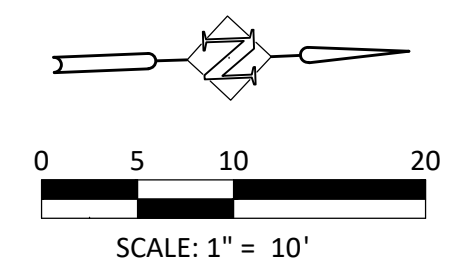


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WALL PLAN AND PROFILE
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	5.9
JOB NO.	MWK-28

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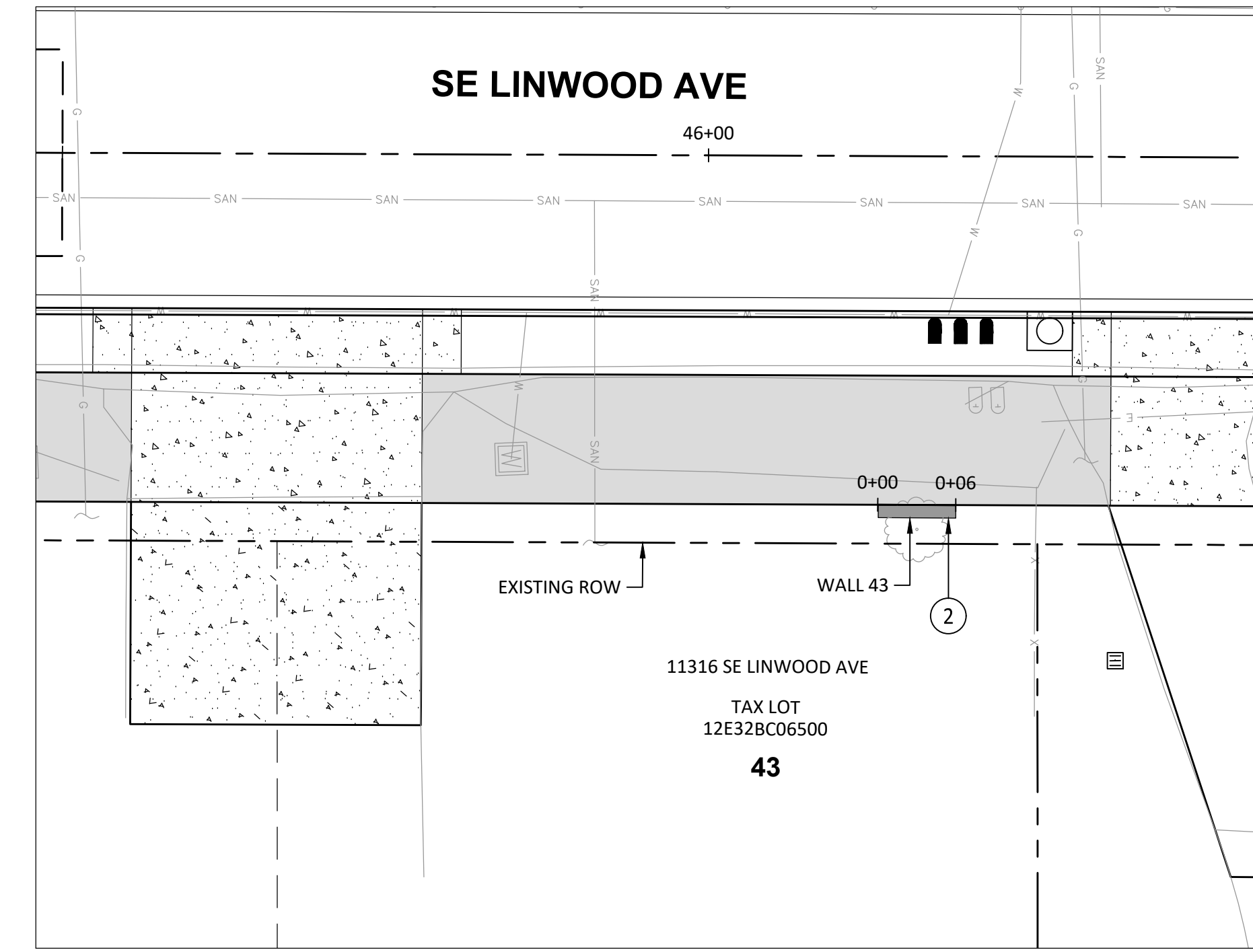
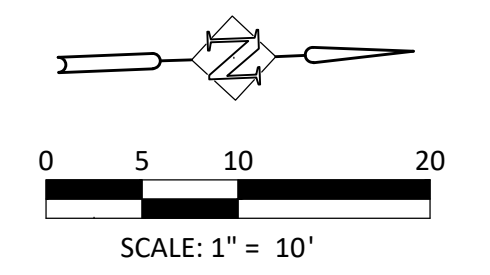
WALL 15 PROFILE
SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

WALL 15 ELEVATION TABLE

BOTTOM OF WALL		TOP OF WALL	
STATION	ELEVATION	STATION	ELEVATION
0+00.00	190.45	0+00.00	192.62
0+22.62	191.12	0+22.62	193.29
0+84.12	191.12	0+84.12	193.29

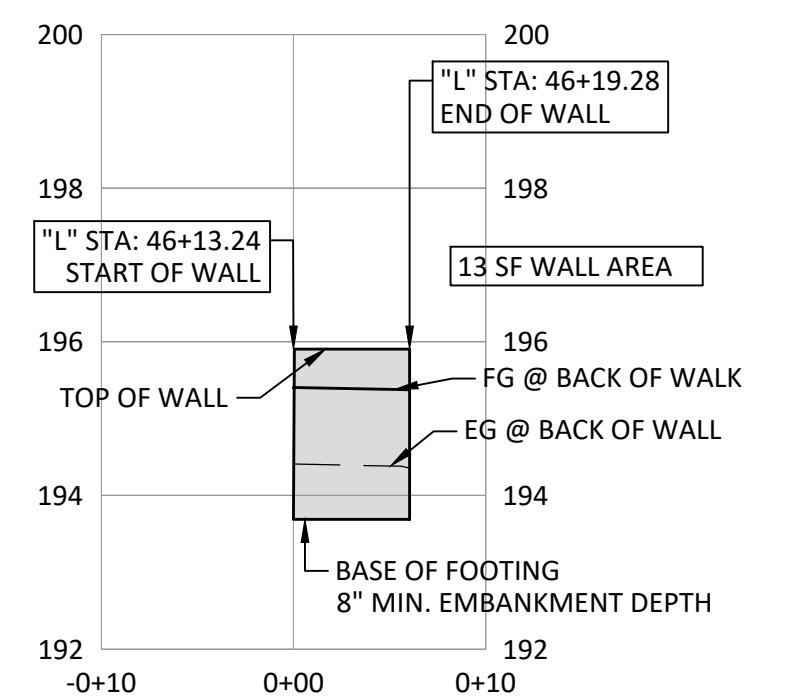
CONSTRUCTION NOTES:

- 2. CONSTRUCT ALLAN BLOCK MSE WALL PER DETAIL ON SHEET 5.14.



WALL 43 ELEVATION TABLE

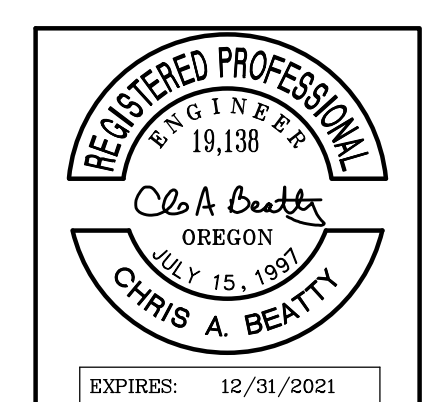
BOTTOM OF WALL		TOP OF WALL	
STATION	ELEVATION	STATION	ELEVATION
0+00.00	193.69	0+00.00	195.91
0+06.04	193.69	0+06.04	195.91



WALL 43 PROFILE
SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		



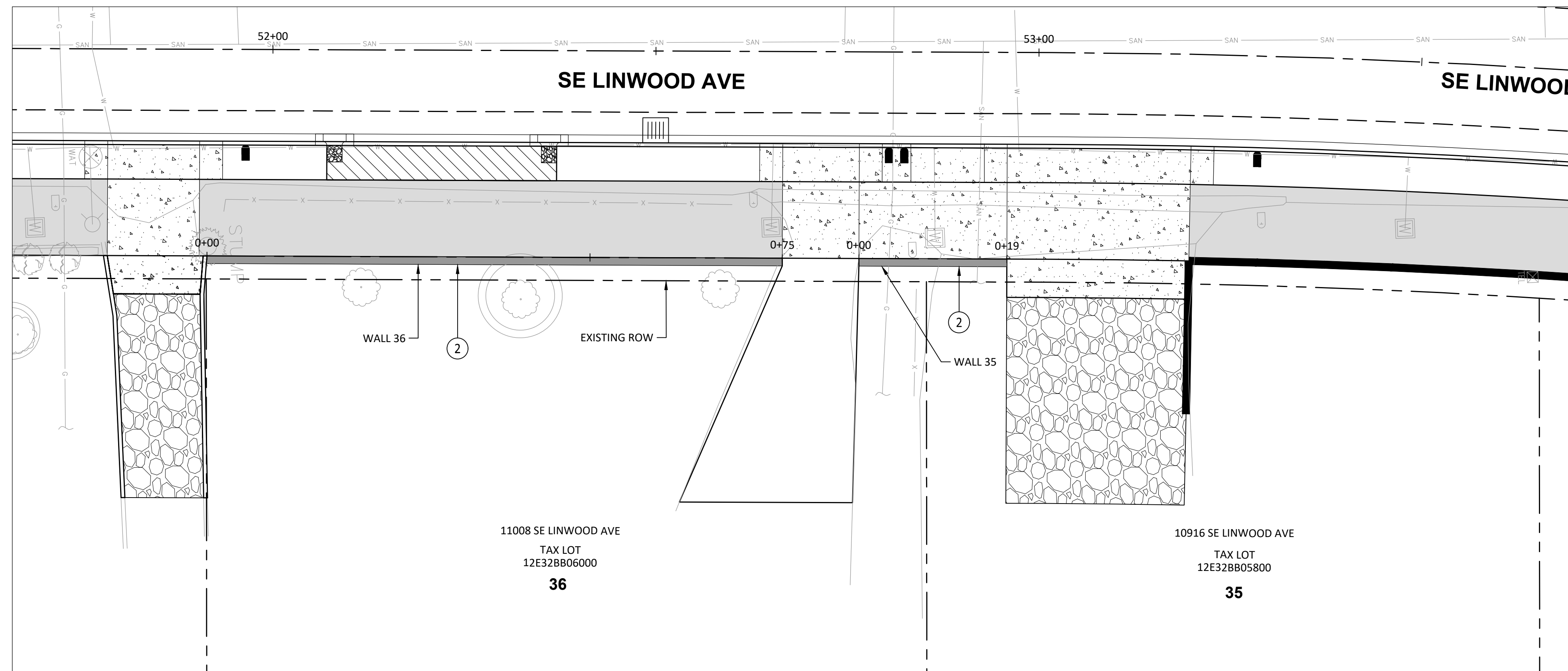
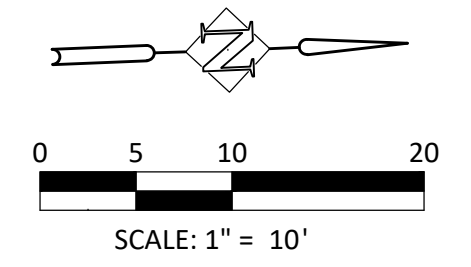
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phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

**WALL PLAN AND PROFILE
SE LINWOOD AVENUE
MILWAUKIE, OREGON**

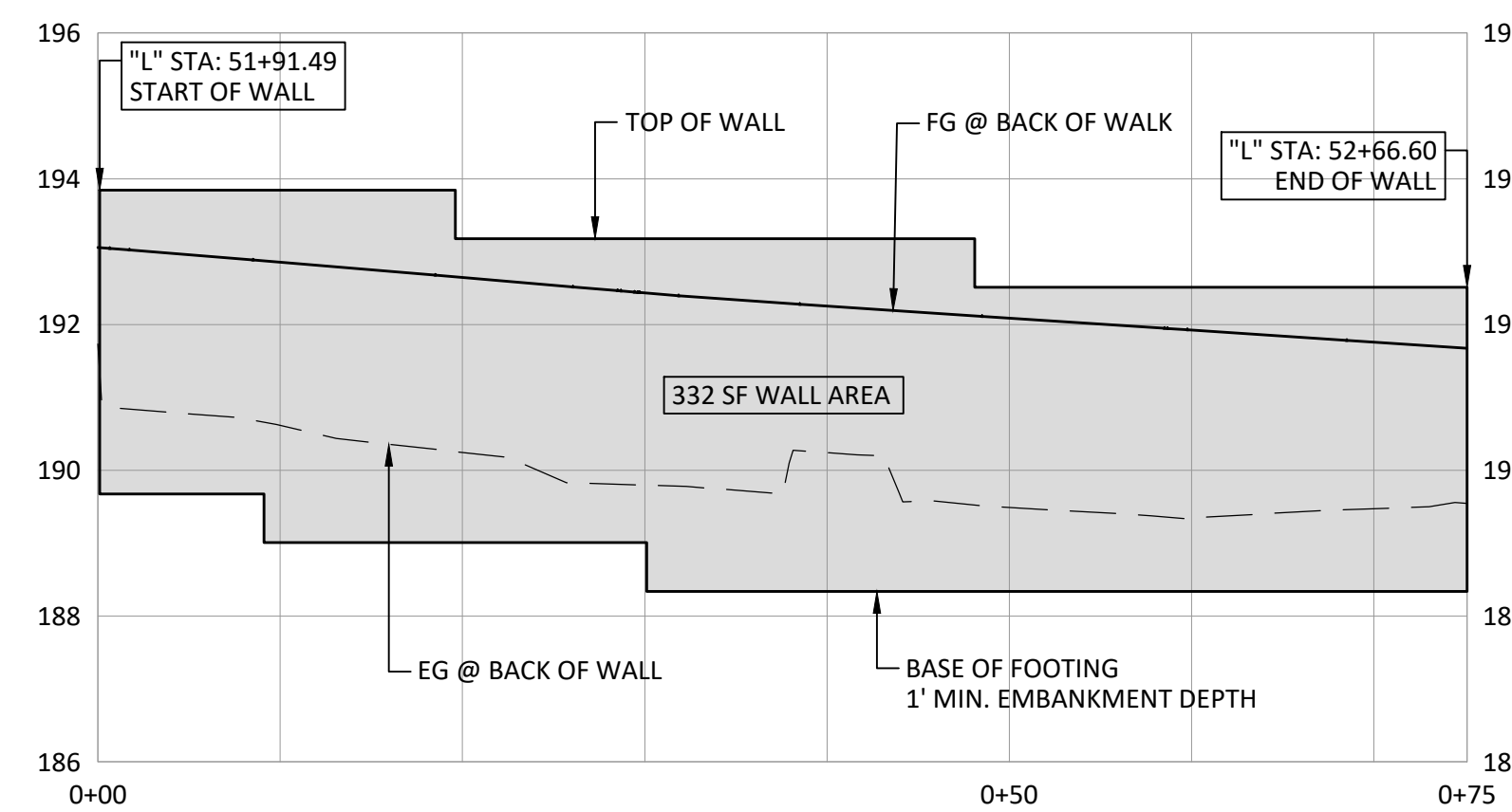
SHEET NO.	5.10
JOB NO.	MWK-28

CONSTRUCTION NOTES:

- ② CONSTRUCT ALLAN BLOCK MSE WALL PER DETAIL ON SHEET 5.14.

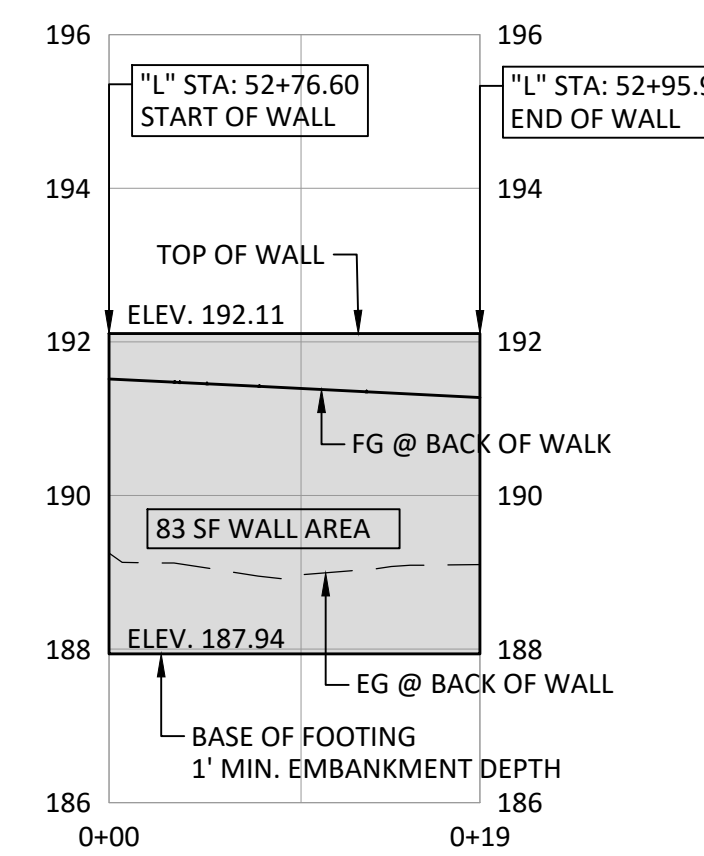


WALL 36 ELEVATION TABLE			
BOTTOM OF WALL		TOP OF WALL	
STATION	ELEVATION	STATION	ELEVATION
0+00.00	189.67	0+00.00	193.85
0+09.11	189.01	0+19.61	193.18
0+30.11	188.34	0+48.11	192.51
0+75.11	188.34	0+75.11	192.51



WALL 36 PROFILE

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

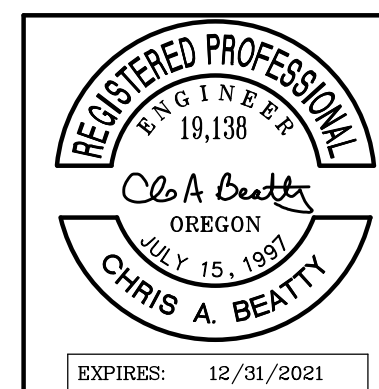


WALL 35 PROFILE

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		



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WALL PLAN AND PROFILE
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.

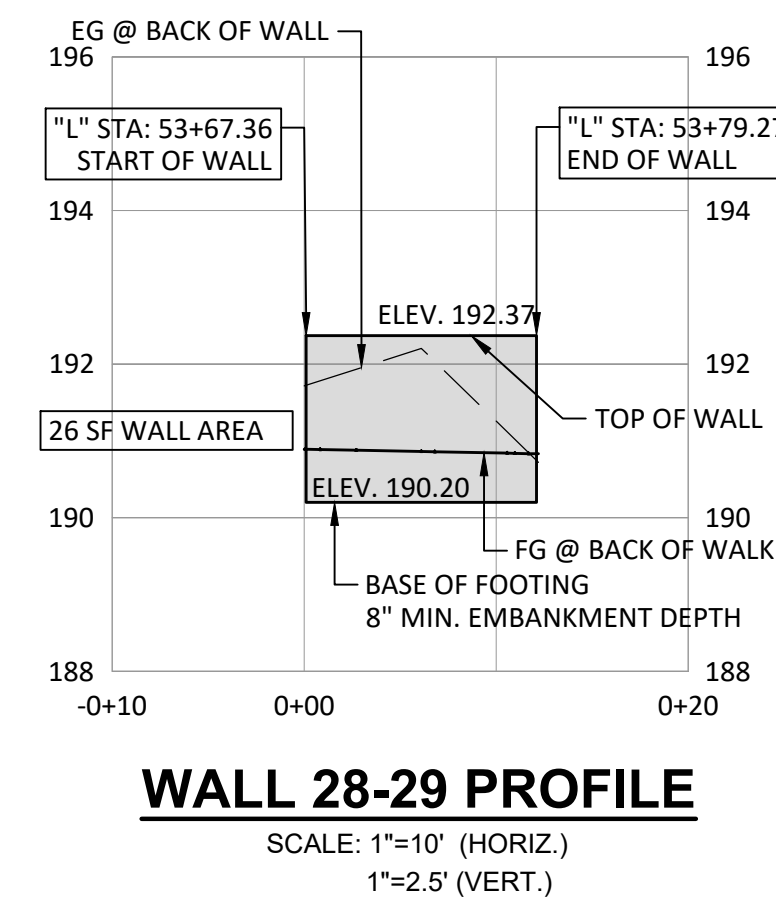
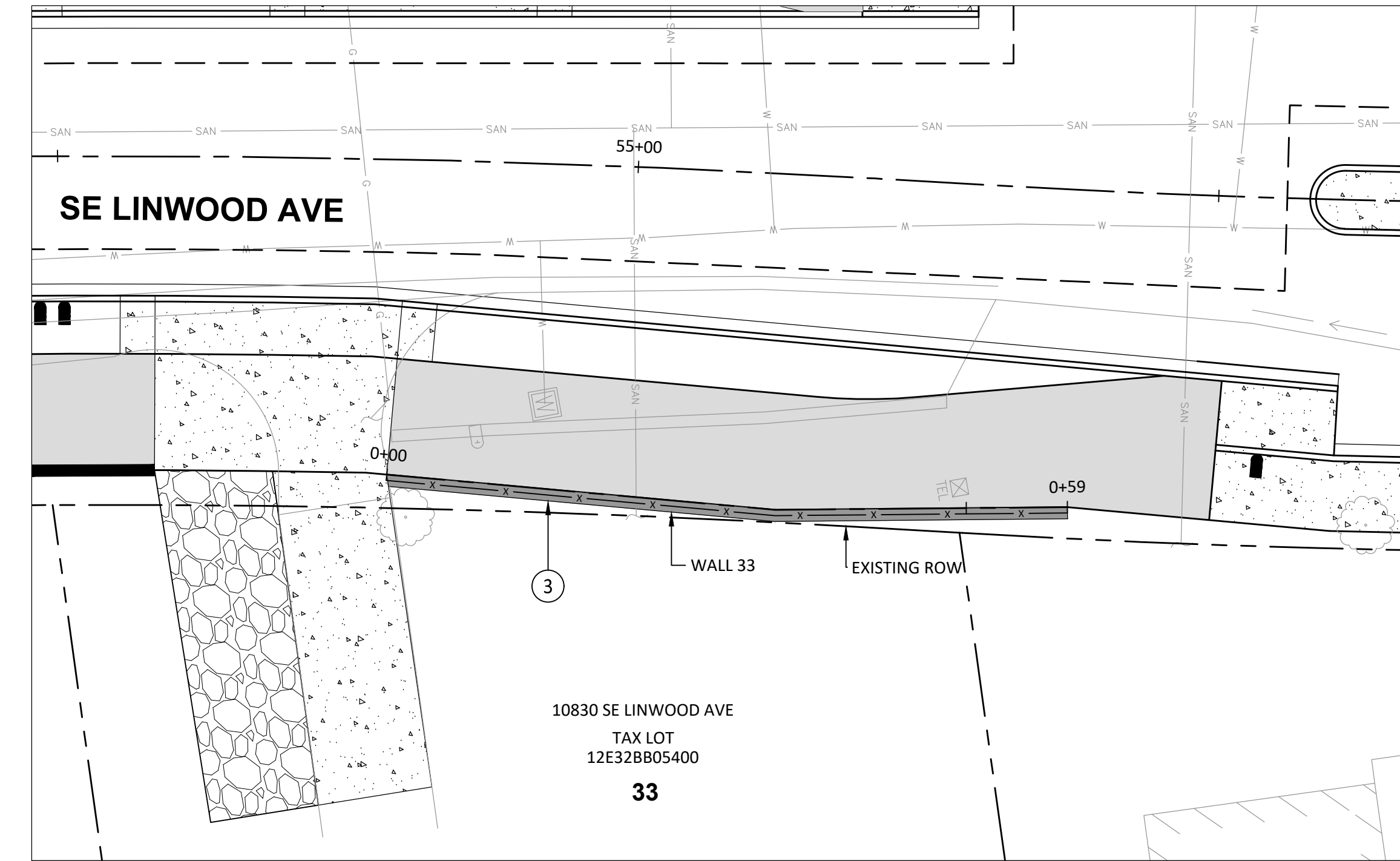
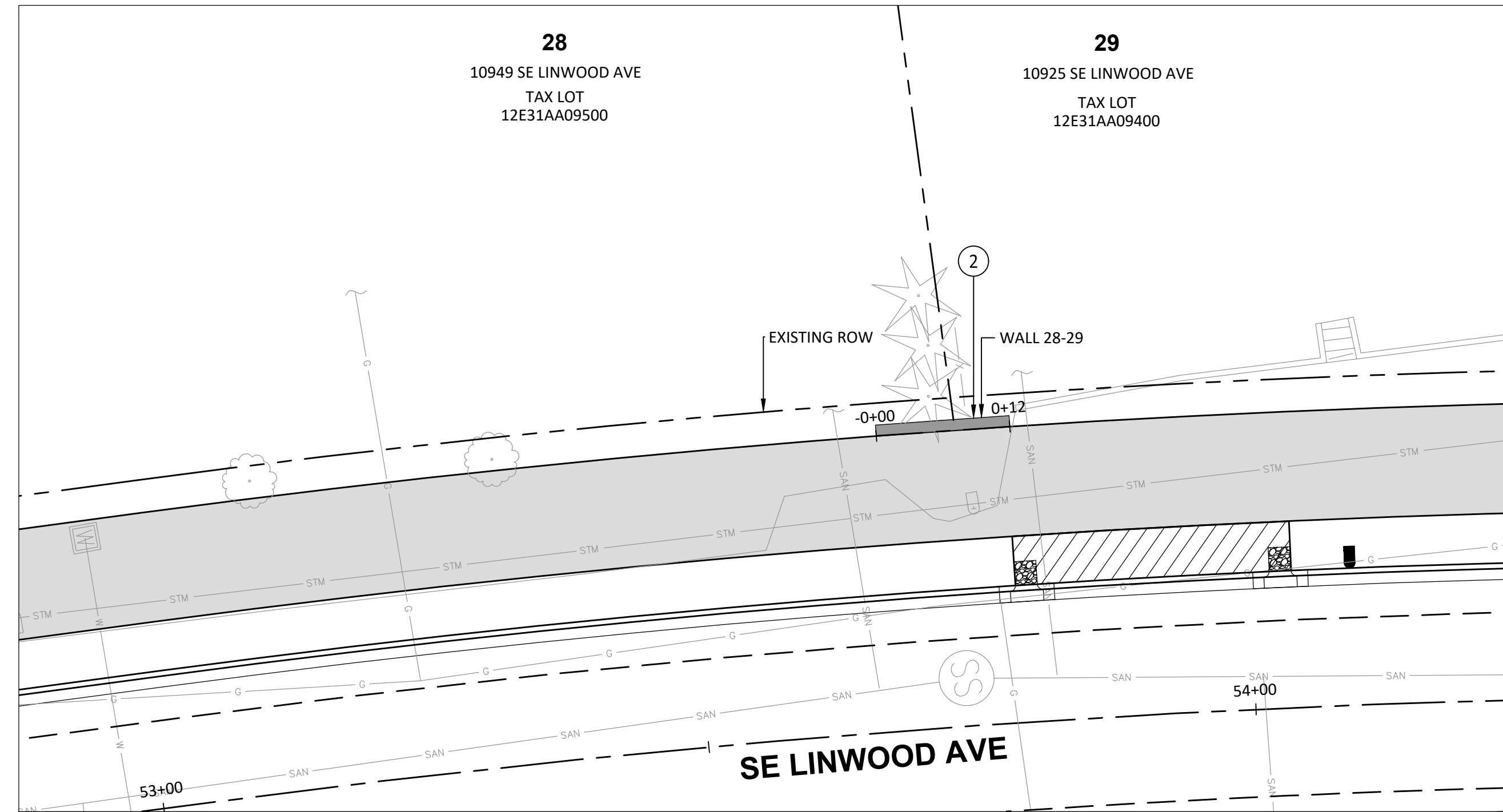
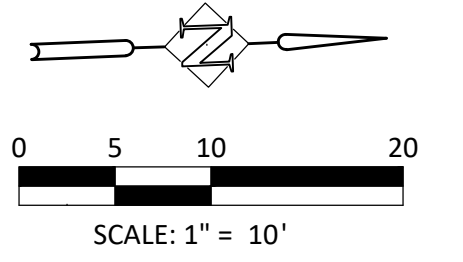
5.11

JOB NO.

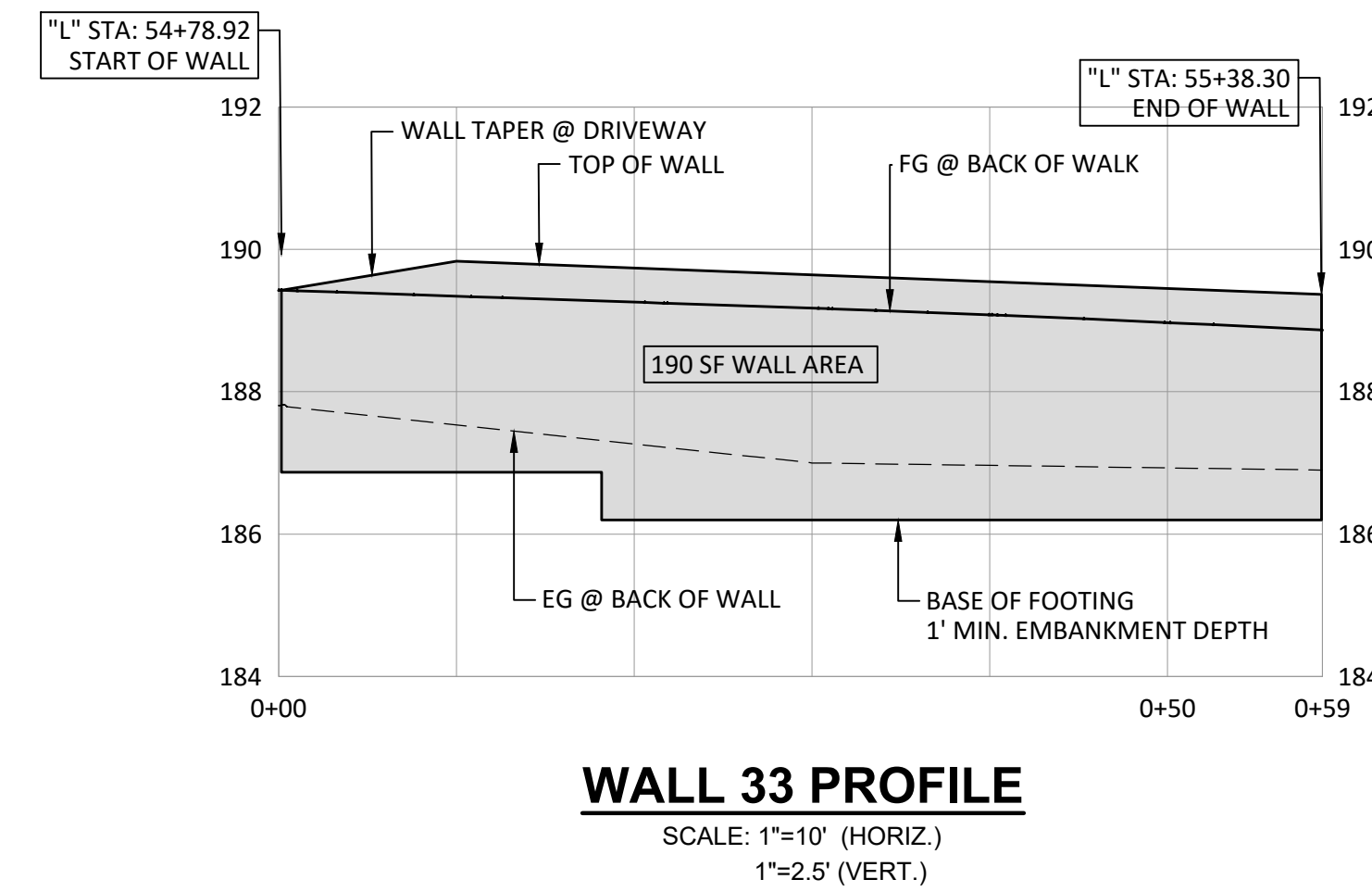
MWK-28

CONSTRUCTION NOTES:

- ② CONSTRUCT ALLAN BLOCK MSE WALL PER DETAIL ON SHEET 5.14.
- ③ CONSTRUCT CONCRETE GRAVITY WALL WITH 4' HIGH BLACK VINYL COATED CHAIN LINK FENCE. PROVIDE 6" WALL EXPOSURE AT BACK OF WALK. SEE DETAIL ON SHEET 5.14.



WALL 28-29 PROFILE
SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)



WALL 33 PROFILE
SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

WALL 33 ELEVATION TABLE			
BOTTOM OF WALL		TOP OF WALL	
STATION	ELEVATION	STATION	ELEVATION
0+00.00	186.87	0+00.00	189.63
0+18.16	186.20	0+58.66	189.37
0+58.66	186.20		

P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK28-DWG(Sheets)\MWK28-5 WALL PLAN AND PROFILE.dwg

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020



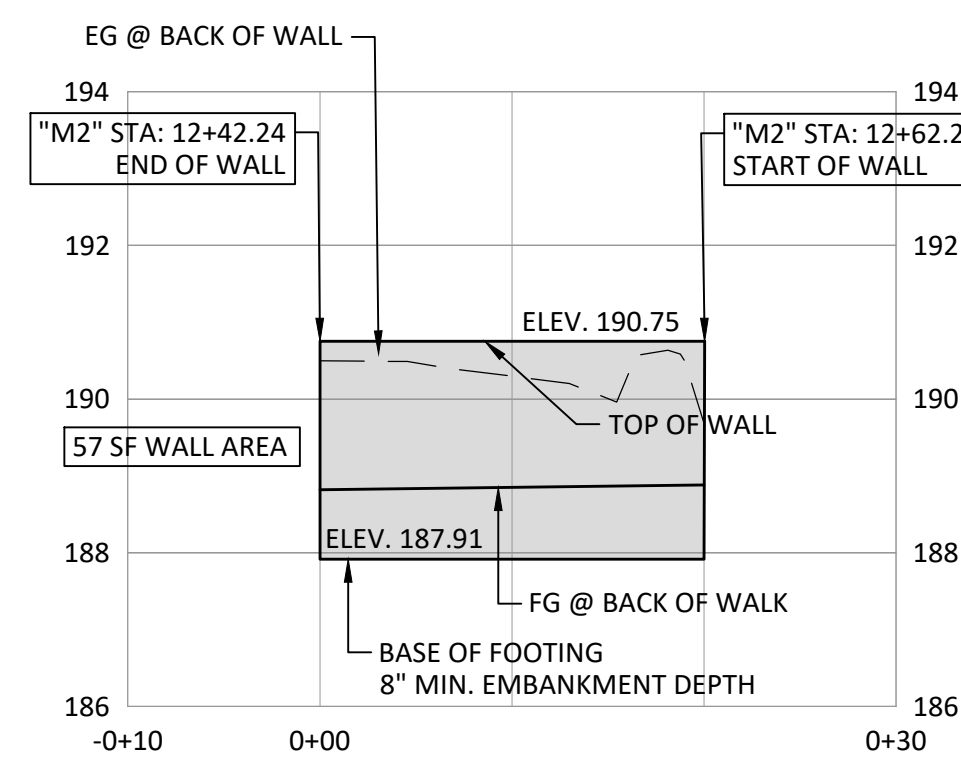
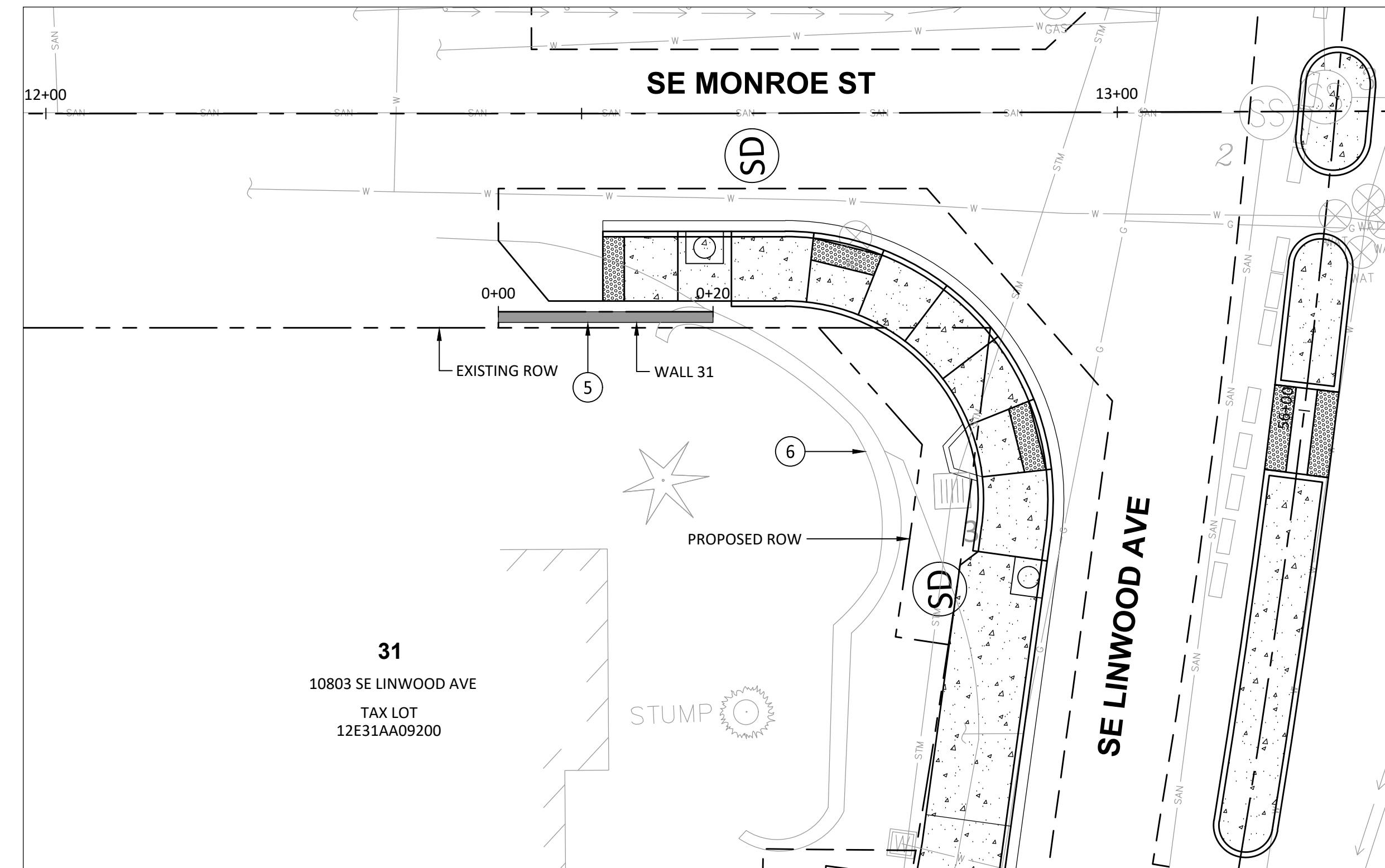
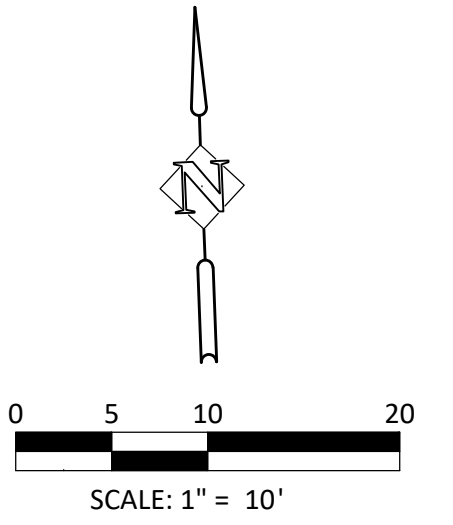
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WALL PLAN AND PROFILE
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	5.12
JOB NO.	MWK-28

CONSTRUCTION NOTES:

- 5 CONSTRUCT ALLAN BLOCK MSE WALL PER DETAIL ON SHEET 5.14. MATCH SIZE & MATERIAL TO EXISTING WALL.
- 6 PROTECT EXISTING WALL.



WALL 31 PROFILE

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

DESIGNED:	CAB	
DRAWN:	HHPR	
CHECKED:	CAB	
DATE:	12/4/2020	
DATE	NO.	DESCRIPTION
R E V I S I O N S		



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WALL PLAN AND PROFILE
SE LINWOOD AVENUE
MILWAUKIE, OREGON

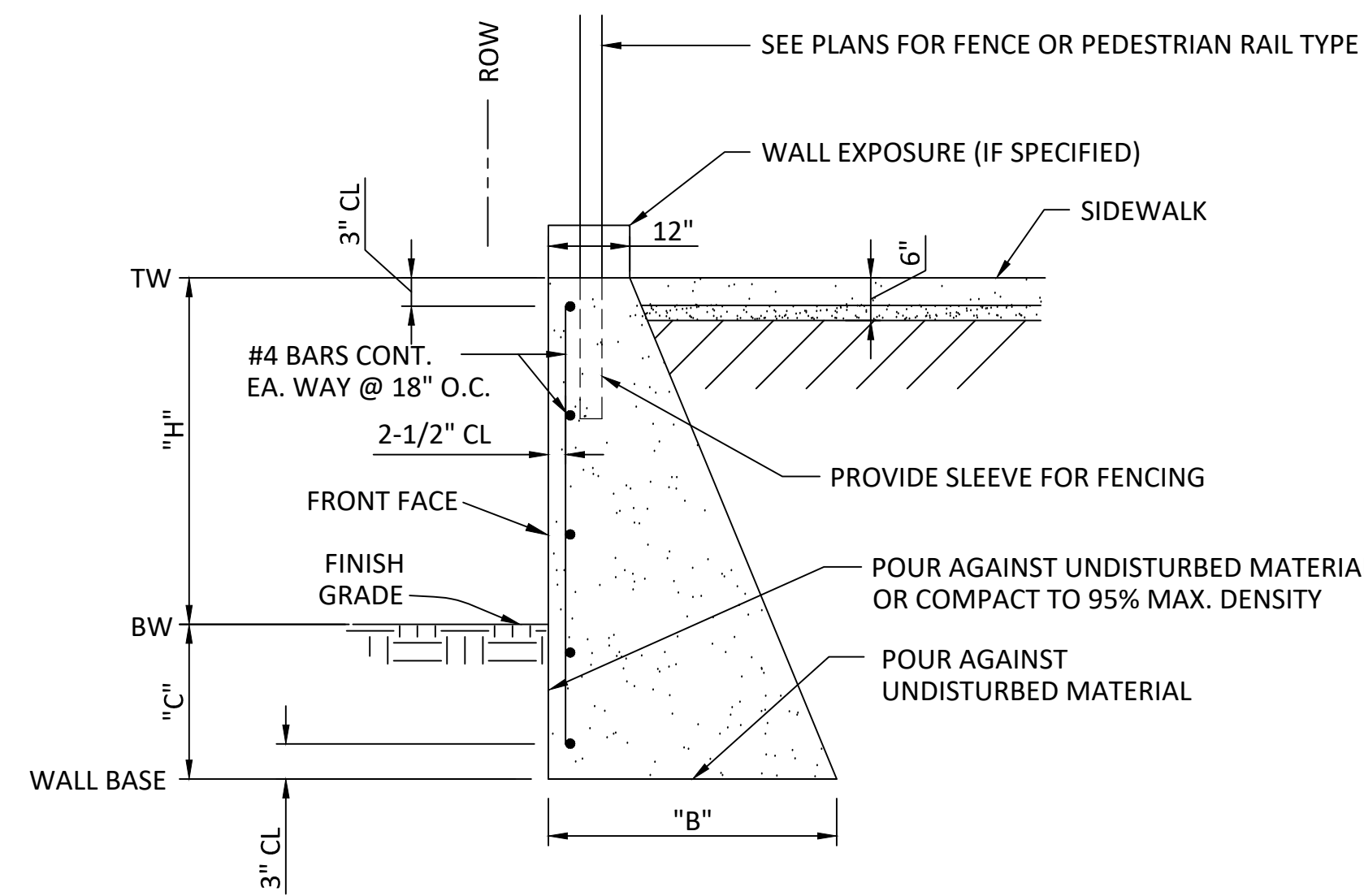
SHEET NO.

5.13

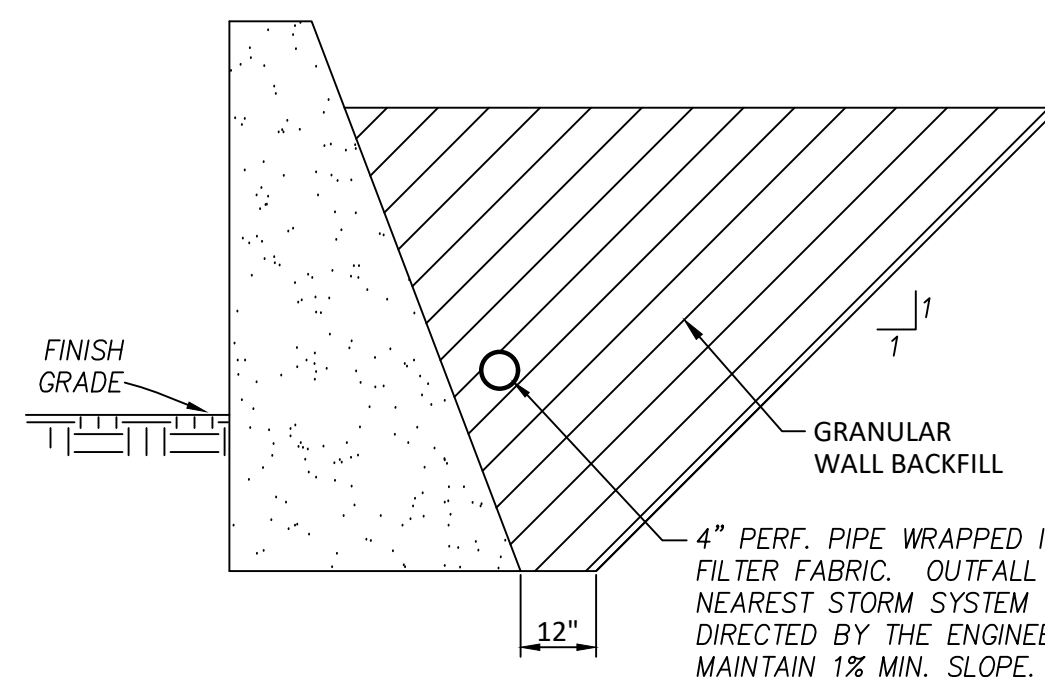
JOB NO.

MWK-28

WALL DIMENSIONS		
H (FT)	B (FT)	C (INCHES)
0-2	1.5'	12"
2-4	2.5'	18"
4-6	3.5'	24"



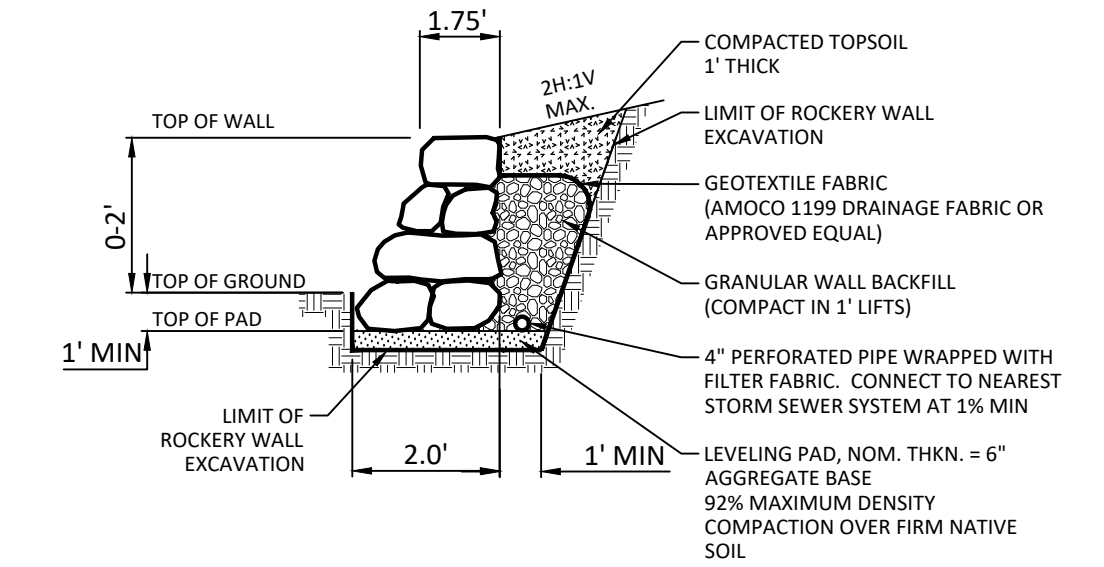
GRAVITY WALL FOR LEVEL FILL WITH SURCHARGE
NTS



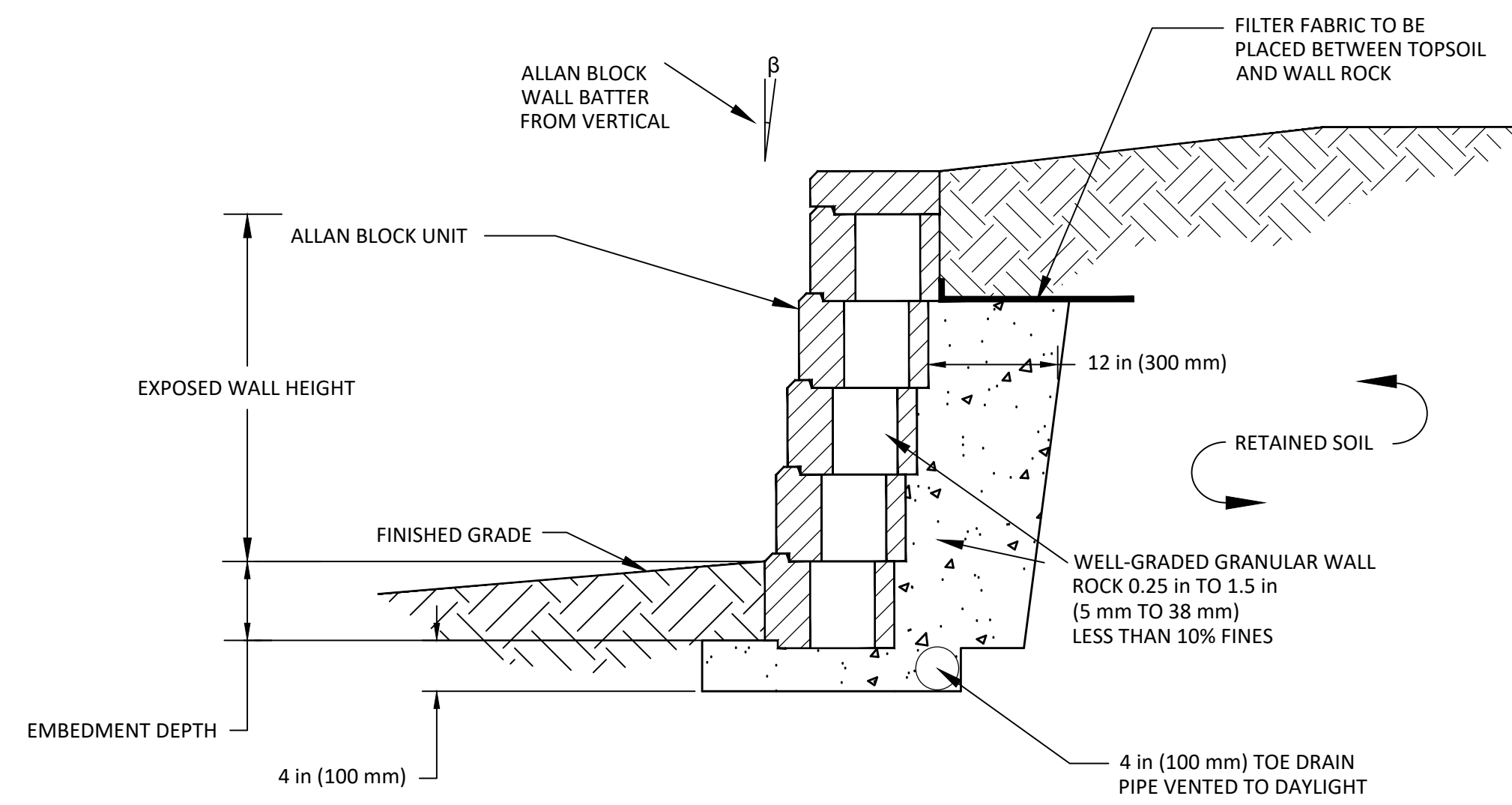
BACKFILL AND DRAINAGE DETAILS
NTS

GENERAL NOTES

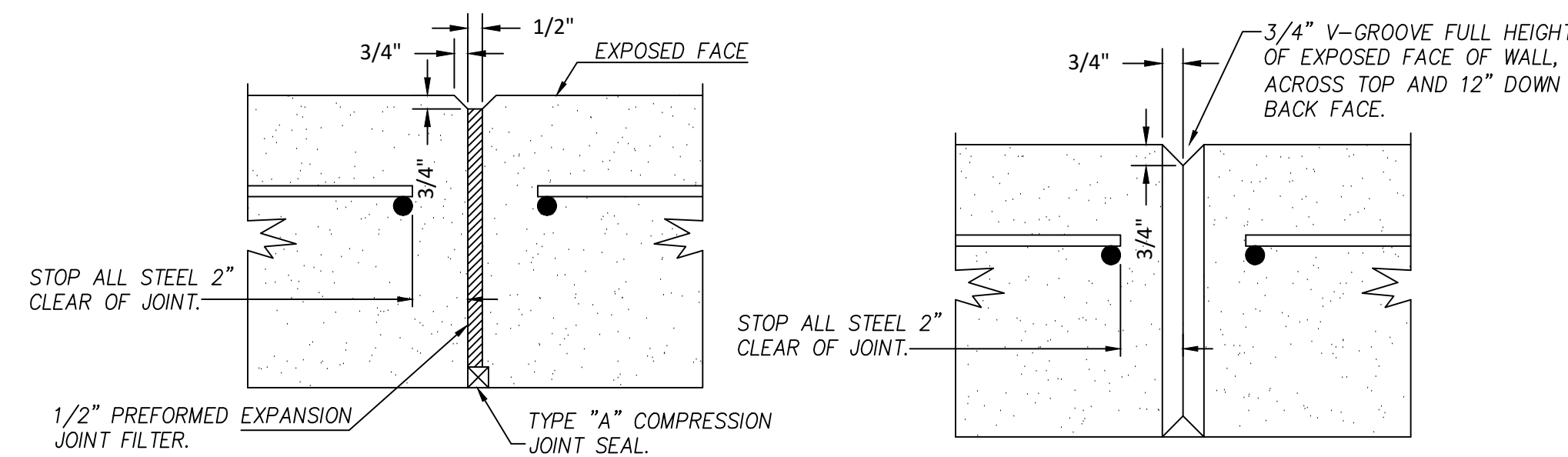
1. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO THE SPECIAL PROVISIONS.
2. ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A706M OR A615M GRADE 420. ALL #16 BAR SPLICES SHALL BE 20" OVERLAP MIN.
3. ALL CONCRETE SHALL BE "MINOR STRUCTURE CONCRETE".
4. PLACE EXPANSION JOINTS IN APPROX. 100' O.C. AND CONTRACTION JOINTS AT APPROX. 32' O.C. UNLESS OTHERWISE SHOWN.
5. THERE IS NO BATTER ON THE FRONT FACE OF WALL.



ROCKERY WALL
NTS



ALLAN BLOCK MSE WALL
NTS

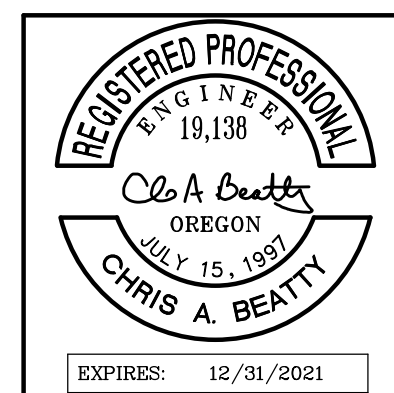


EXPANSION JOINT
NTS

P:\MWK (City of Milwaukie)\MWK28 (Linwood Avenue)\MWK28-DWG(Sheets)\MWK28-5 WALL PLAN AND PROFILE.dwg

DATE	NO.	DESCRIPTION
R E V I S I O N S		

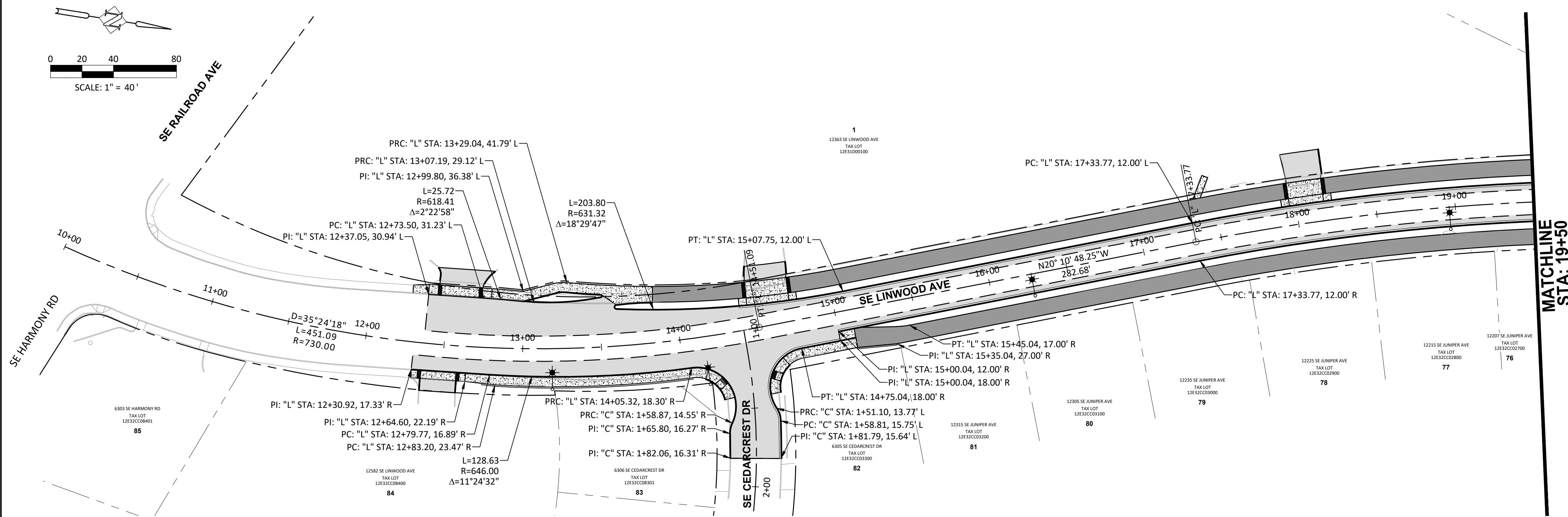
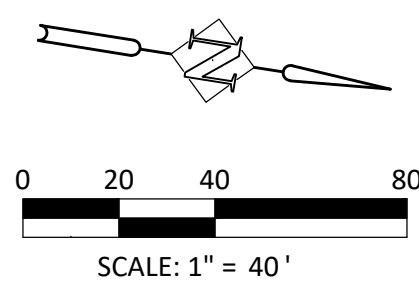
DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020



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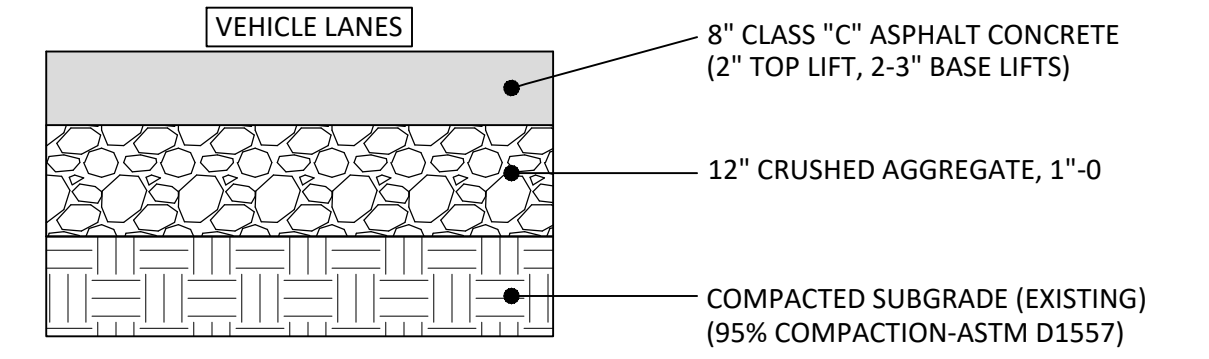
WALL DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	5.14
JOB NO.	MWK-28

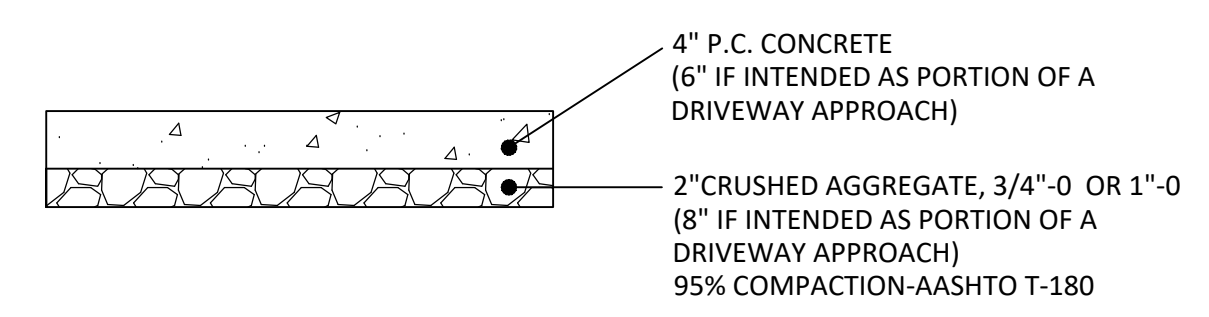


LINWOOD AVE PLAN VIEW
SCALE: 1"=40'

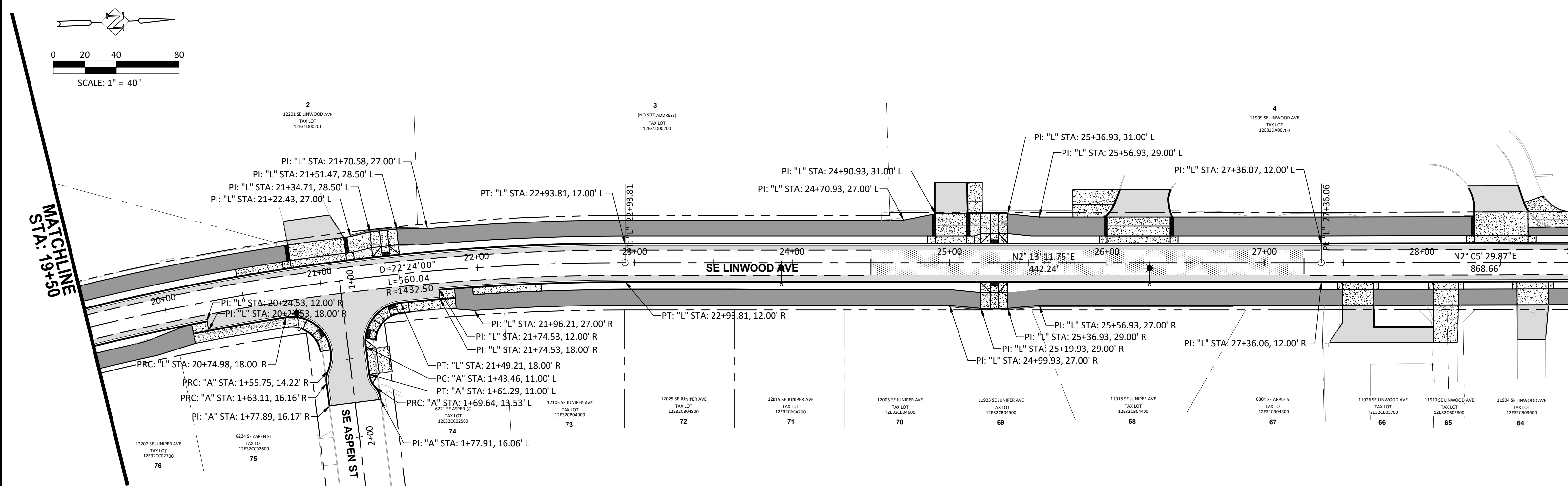
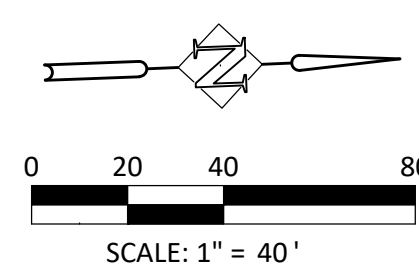
LEGEND	
[Pattern]	PROPOSED ASPHALT CONCRETE
[Pattern]	PROPOSED PERVIOUS PAVEMENT
[Pattern]	PROPOSED CONCRETE
[Pattern]	PROPOSED PERMEABLE PAVERS
"L"	- LINWOOD AVE
"C"	- CEDARCREST DR
"A"	- ASPEN ST
"F"	- FURNBERG ST
"M1"	- MONTGOMERY ST
"M2"	- MONROE ST
"S"	- SAWCUT



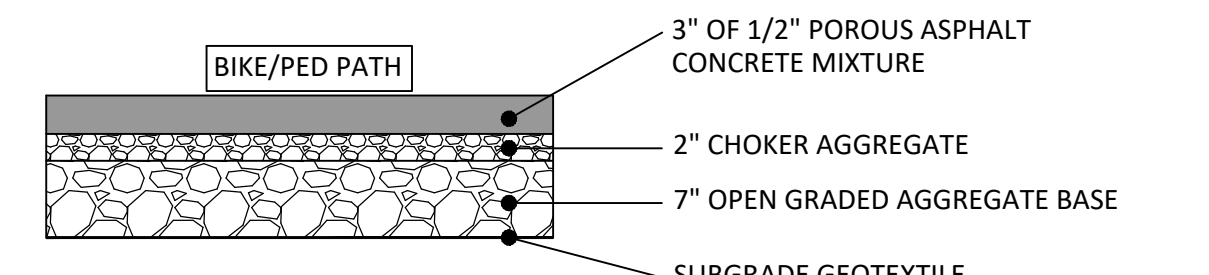
AC PAVEMENT SECTION
N.T.S.



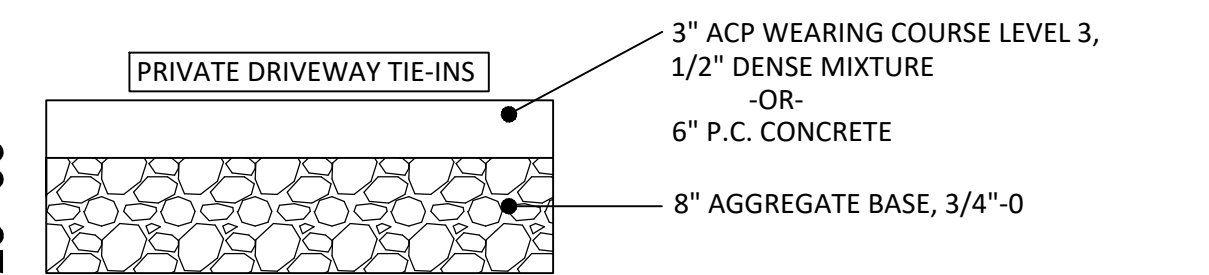
CONCRETE SIDEWALK, BUS STOP, & DRIVEWAY SECTION
N.T.S.



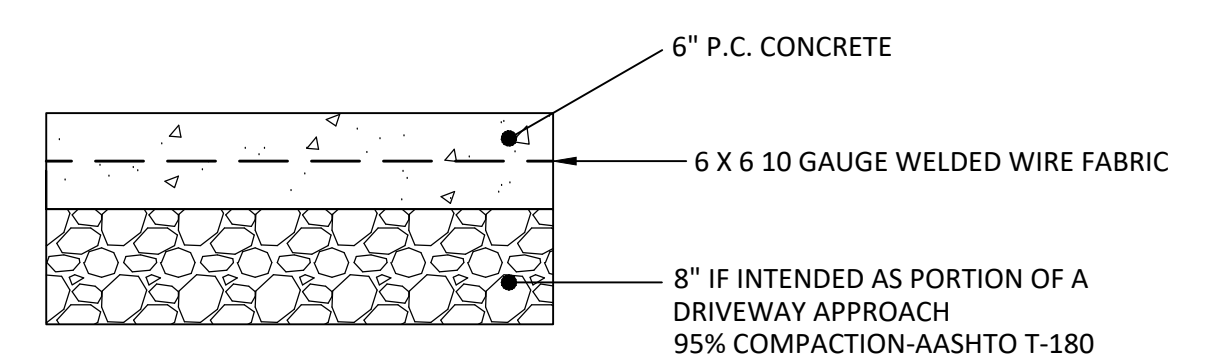
LINWOOD AVE PLAN VIEW
SCALE: 1"=40'



PERVIOUS PAVEMENT SECTION
N.T.S.



DRIVEWAY CONNECTION SECTION
N.T.S.



REINFORCED CONCRETE DRIVEWAY SECTION
N.T.S.

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

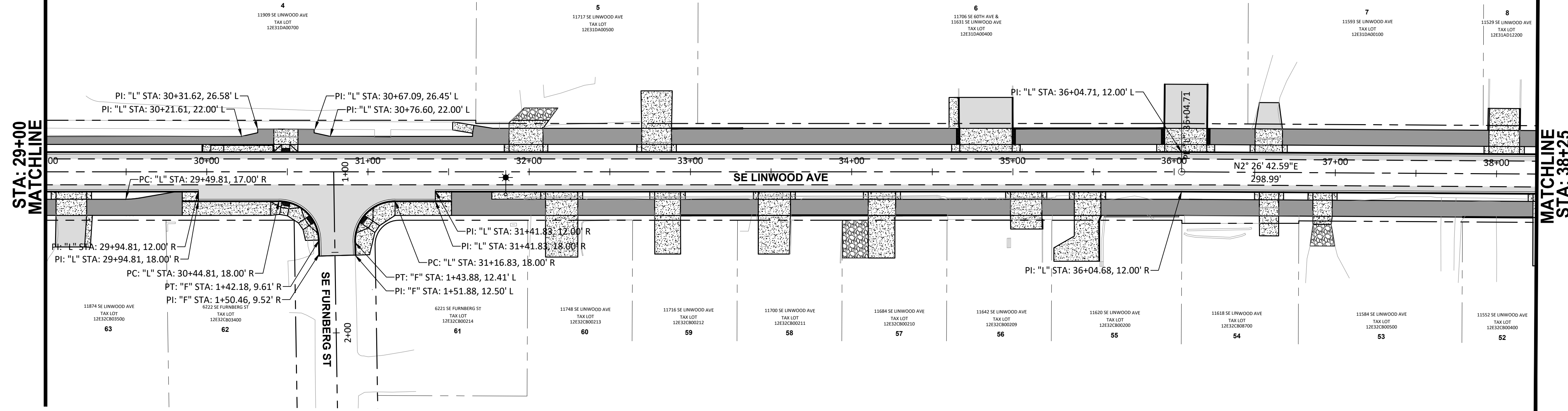
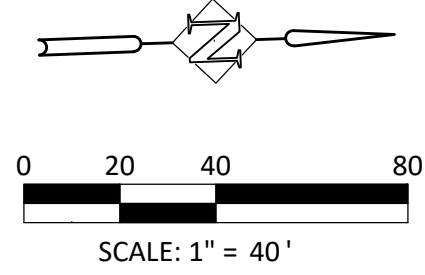


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GEOMETRY AND PAVING PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	6.0
JOB NO.	MWK-28

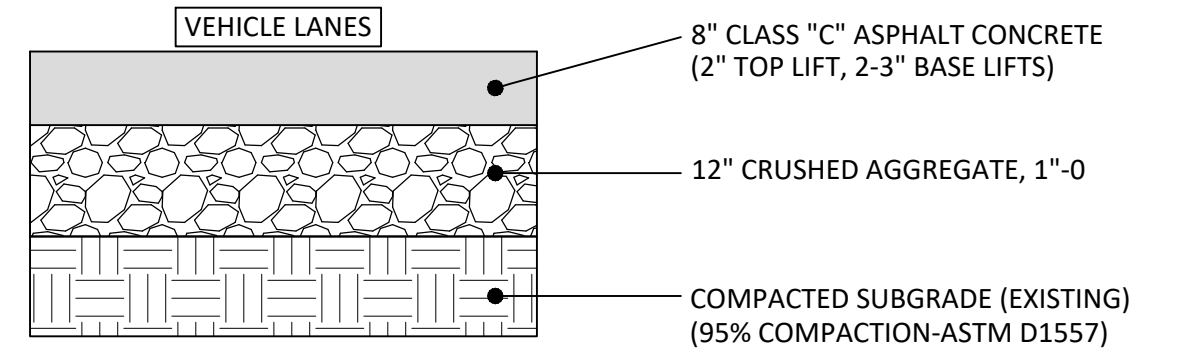
P:\MWK (City of Milwaukie)\MWK-28 Linwood Avenue\MWK-28-DWG\Sheets\MWK-28-6.GEOMETRY AND PAVING PLAN.dwg



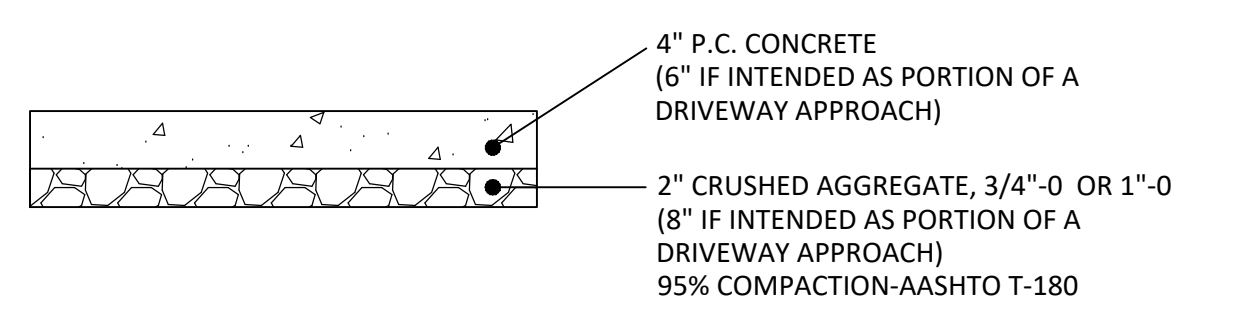
LINWOOD AVE PLAN VIEW
SCALE: 1"=40'

LEGEND

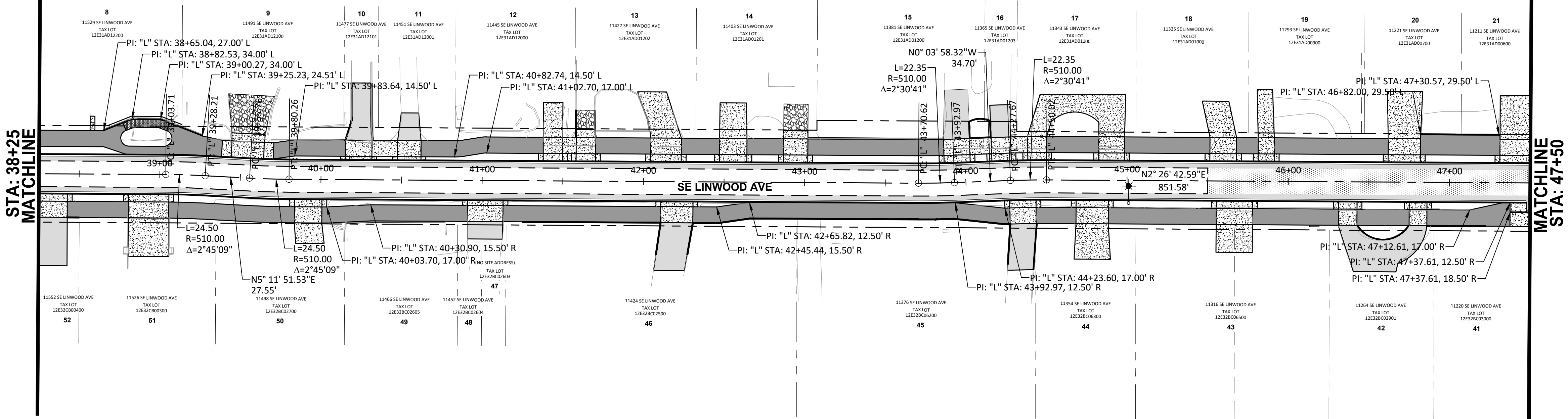
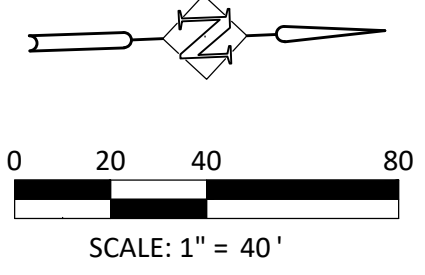
- PROPOSED ASPHALT CONCRETE
- PROPOSED PERVIOUS PAVEMENT
- PROPOSED CONCRETE
- PROPOSED PERMEABLE PAVERS
- "L" - LINWOOD AVE
- "C" - CEDARCREST DR
- "A" - ASPEN ST
- "F" - FURNBERG ST
- "M1" - MONTGOMERY ST
- "M2" - MONROE ST
- "S" - SAWCUT



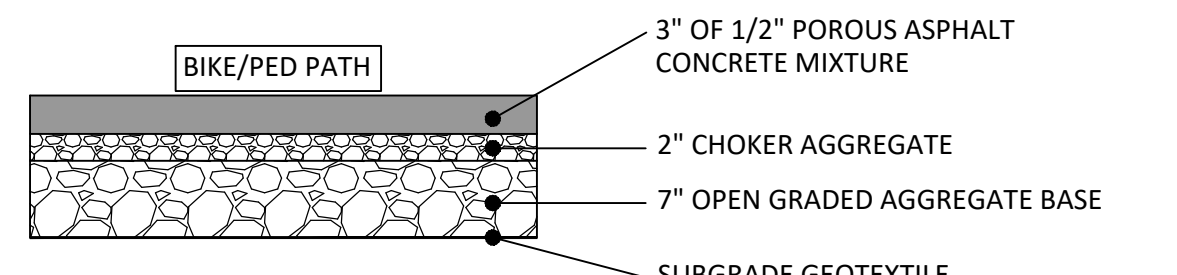
AC PAVEMENT SECTION
N.T.S.



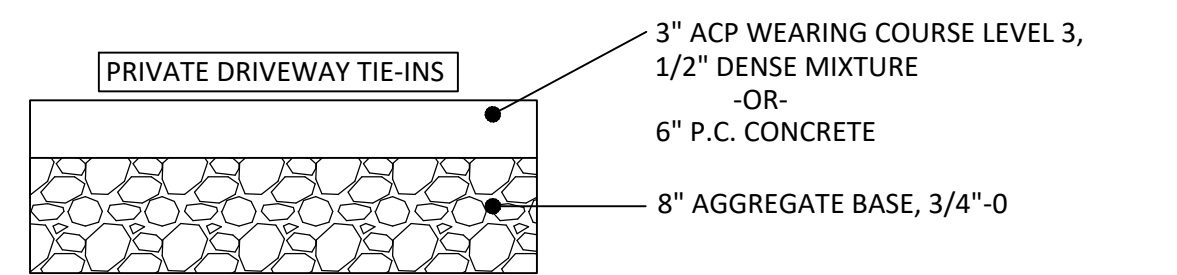
CONCRETE SIDEWALK, BUS STOP, & DRIVEWAY SECTION
N.T.S.



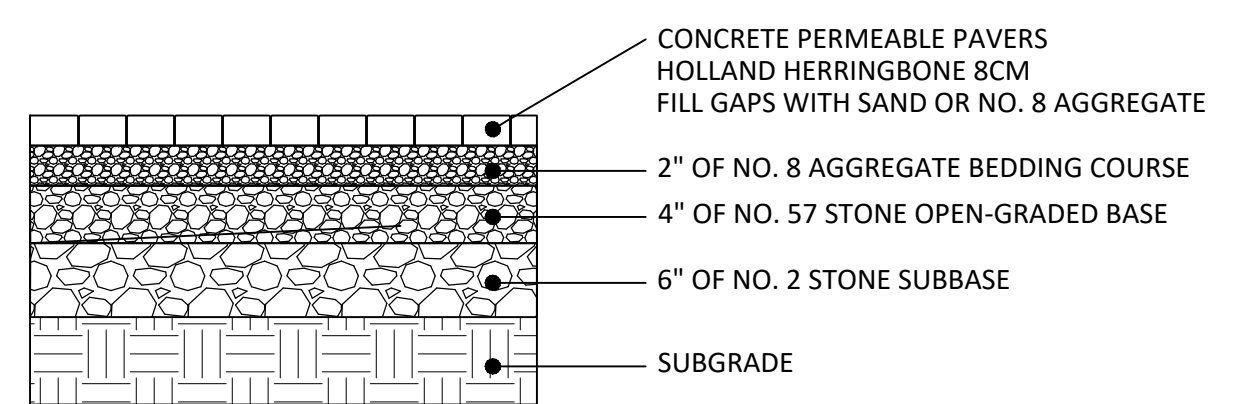
LINWOOD AVE PLAN VIEW
SCALE: 1"=40'



PERVIOUS PAVEMENT SECTION
N.T.S.



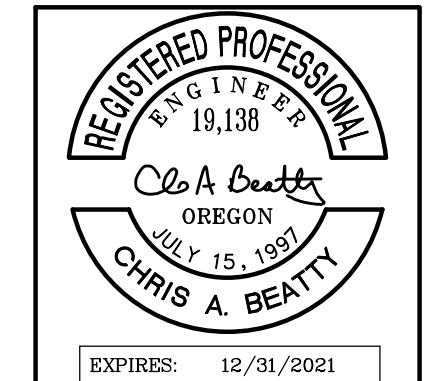
DRIVEWAY CONNECTION SECTION
N.T.S.



PERMEABLE PAVER SECTION
N.T.S.

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		

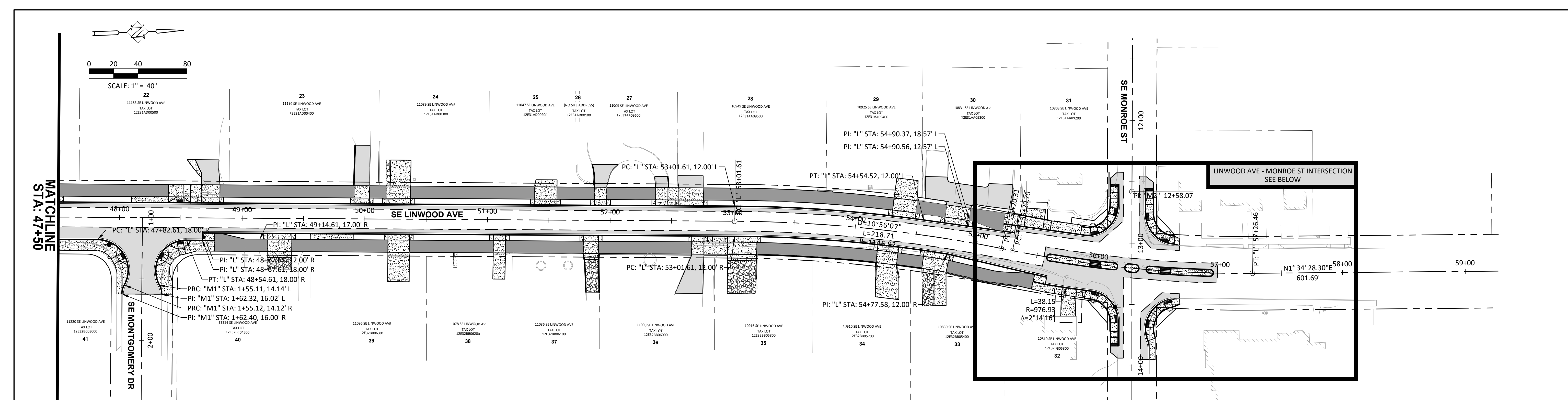


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GEOMETRY AND PAVING PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

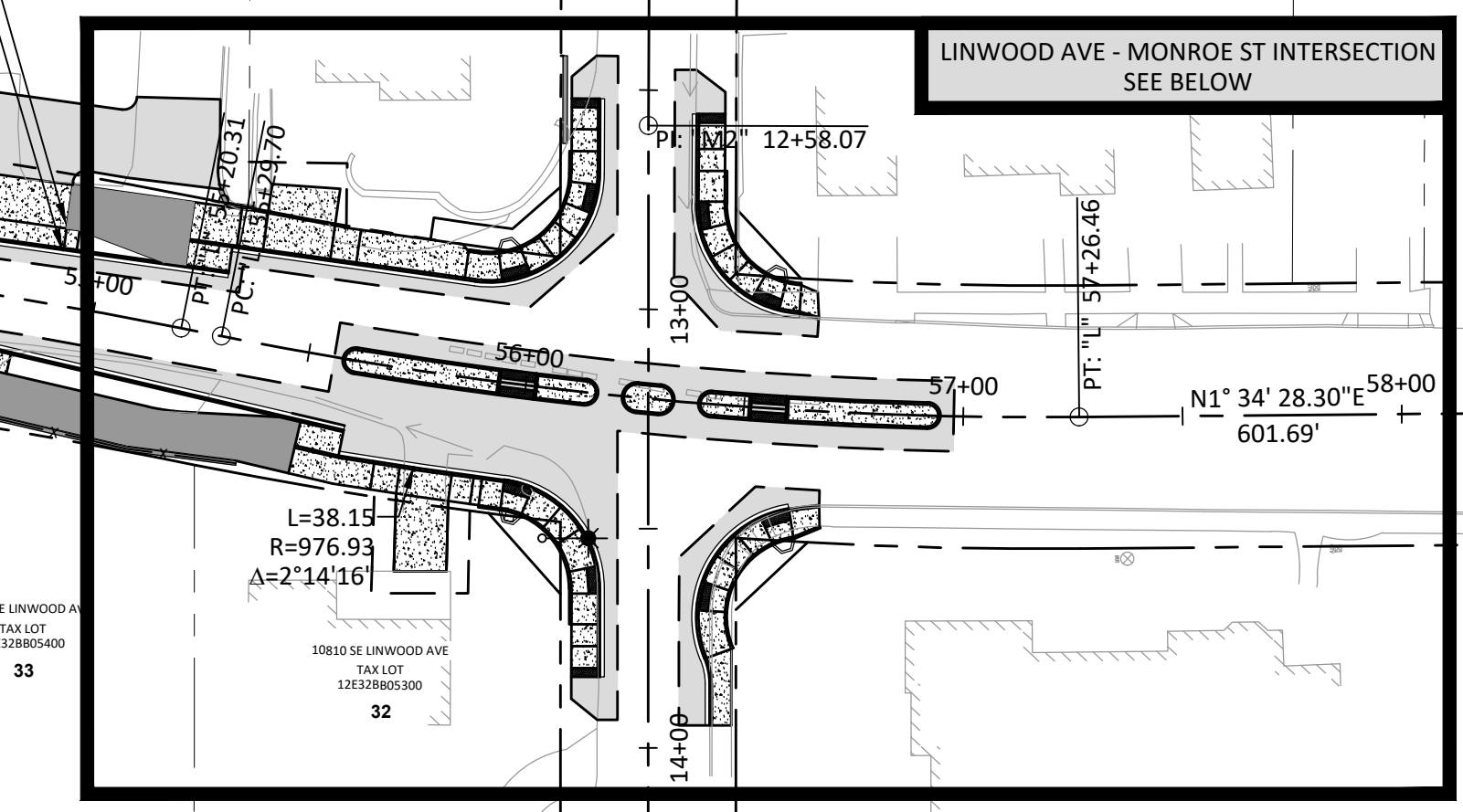
SHEET NO.	6.1
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 Linwood Avenue\MWK28-DIV\GSS\Sheets\MWK28-6.0 GEOMETRY AND PAVING PLAN.dwg



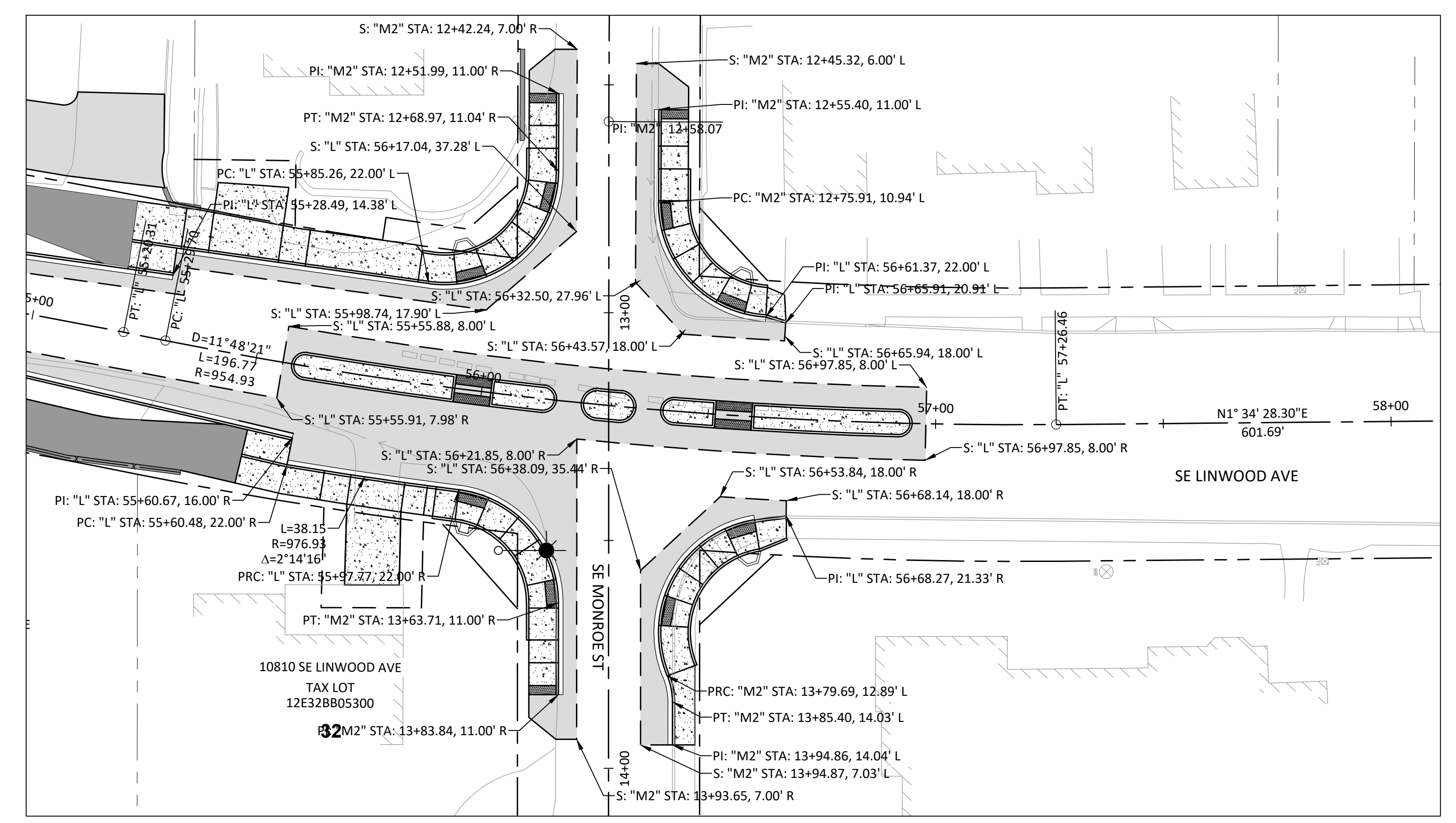
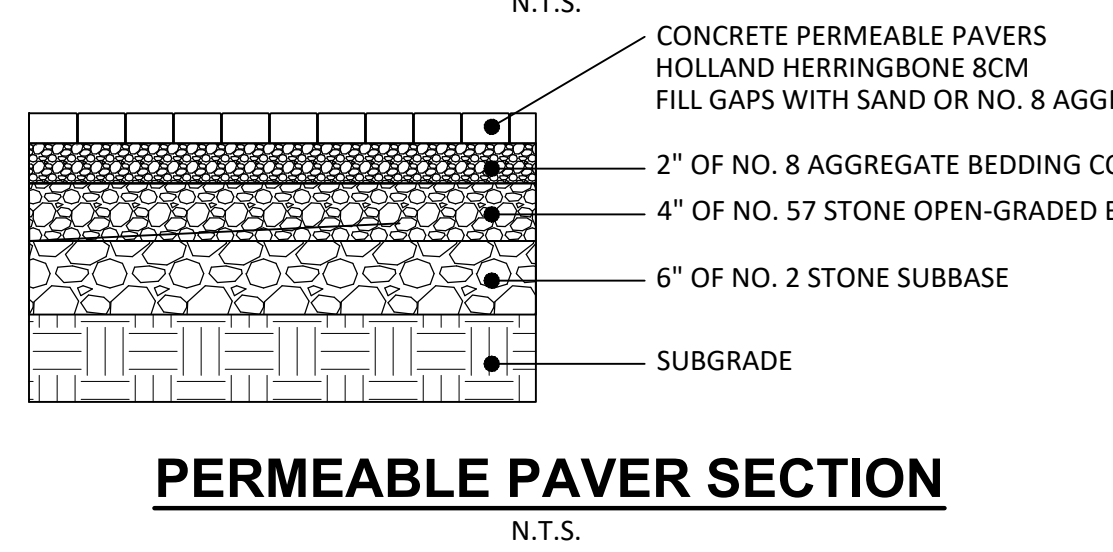
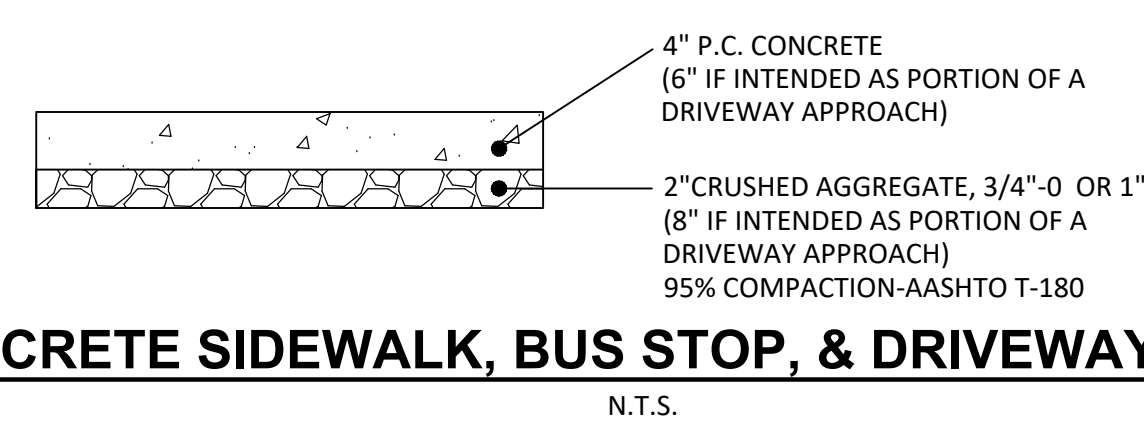
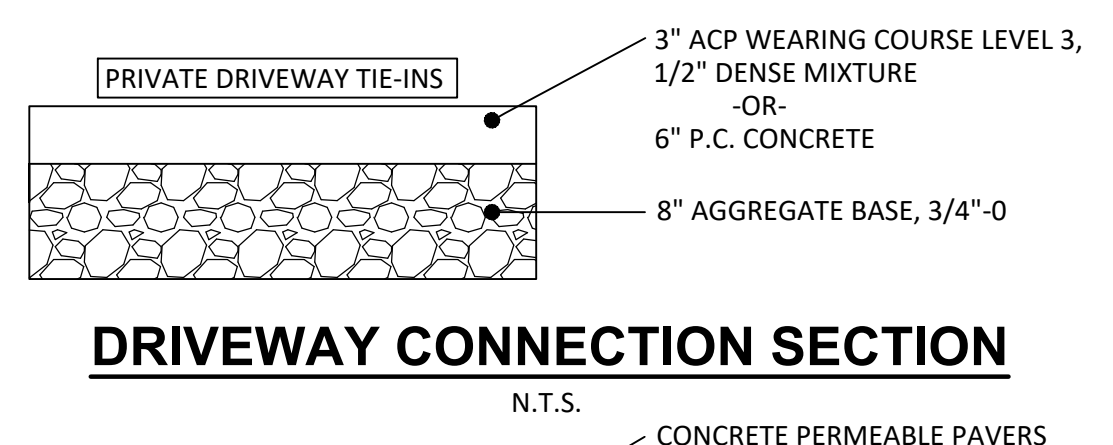
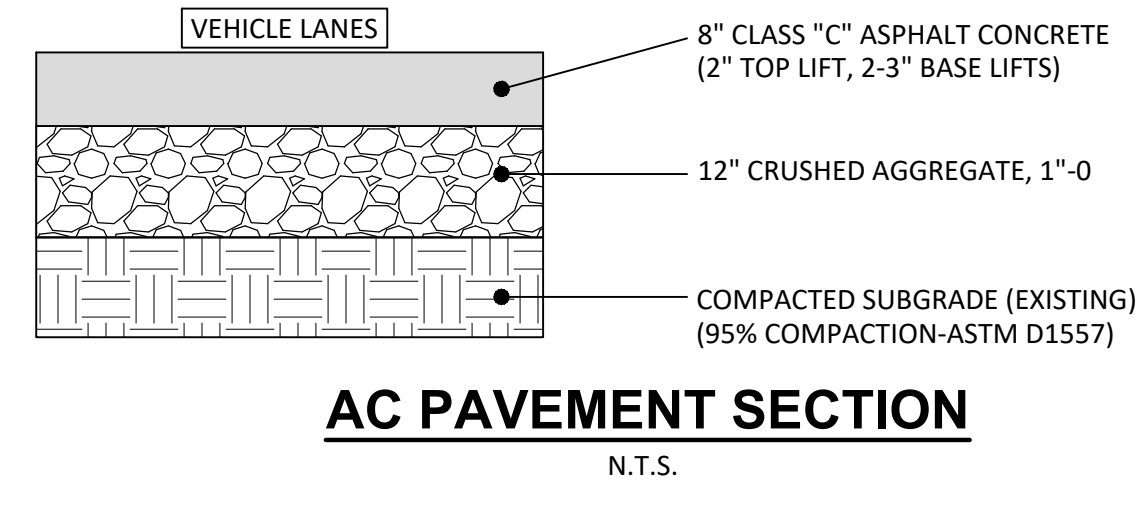
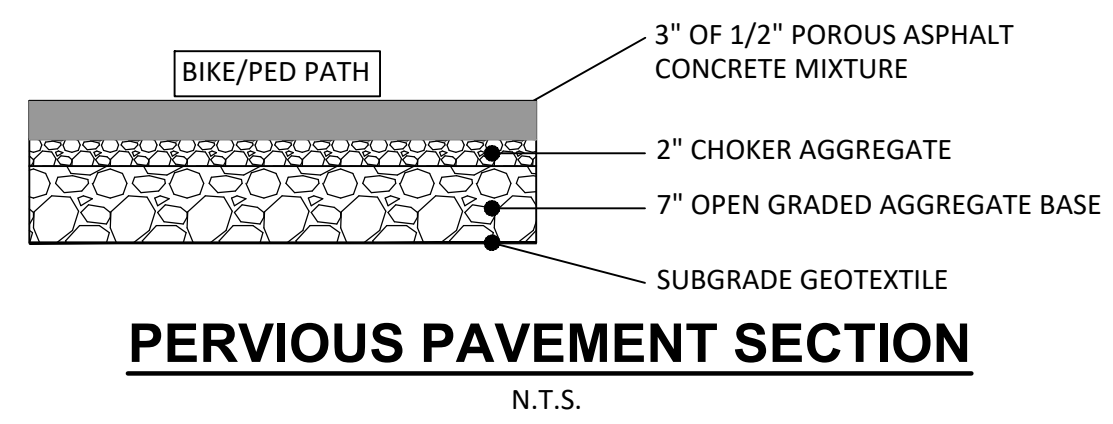
LINWOOD AVE PLAN VIEW

SCALE: 1"=40'



LEGEND

- PROPOSED ASPHALT CONCRETE
- PROPOSED PERVIOUS PAVEMENT
- PROPOSED CONCRETE
- PROPOSED PERMEABLE PAVERS
- "L" - LINWOOD AVE
- "C" - CEDARCREST DR
- "A" - ASPEN ST
- "F" - FURNBERG ST
- "M1" - MONTGOMERY ST
- "M2" - MONROE ST
- "S" - SAWCUT

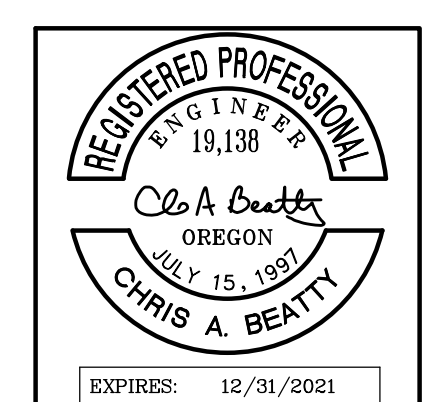


LINWOOD AVE - MONROE ST PLAN VIEW

SCALE: 1"=20'

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020



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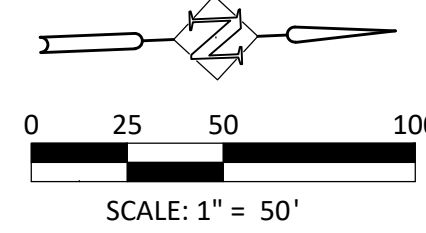
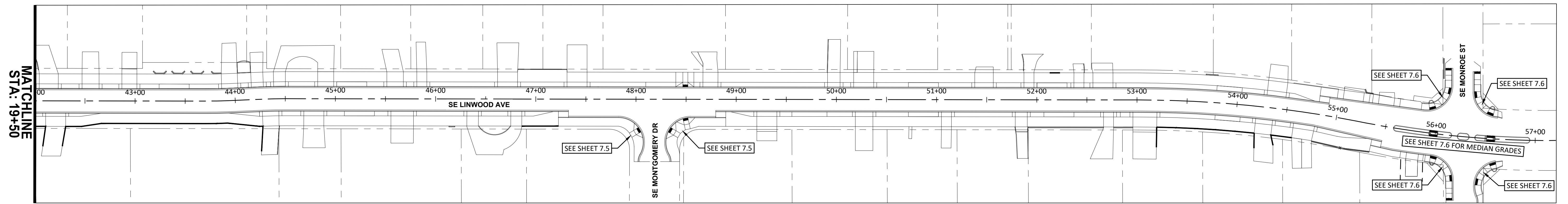
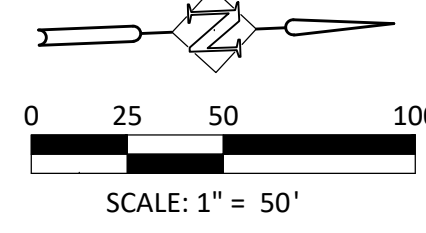
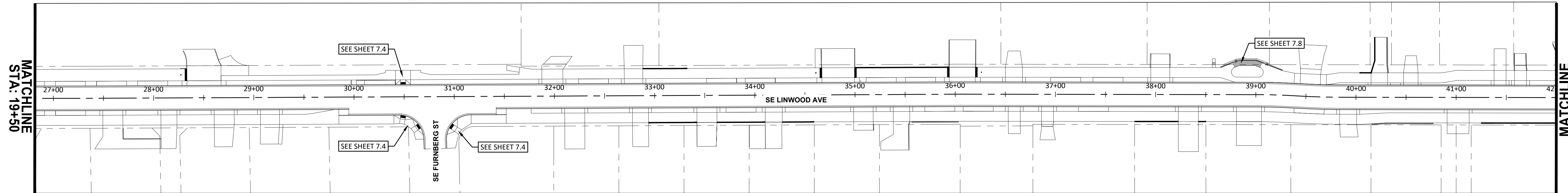
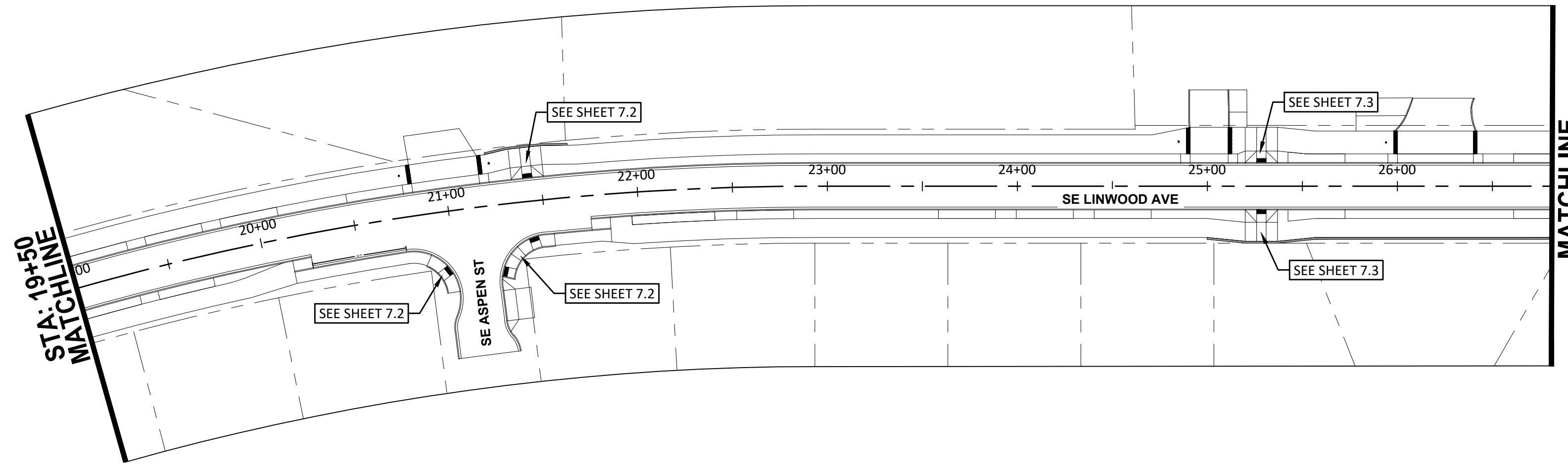
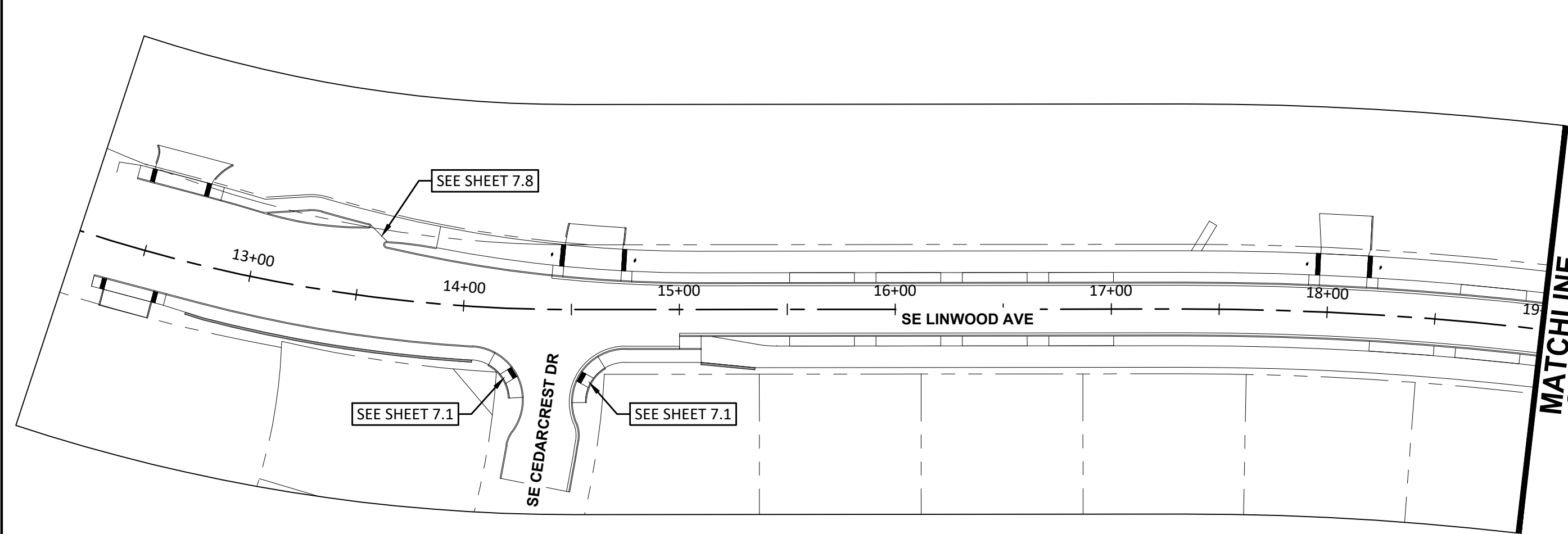
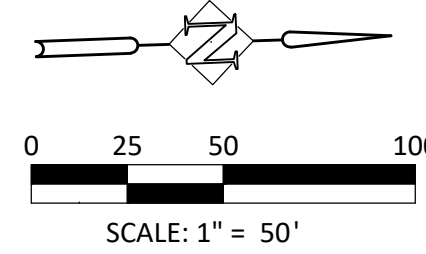
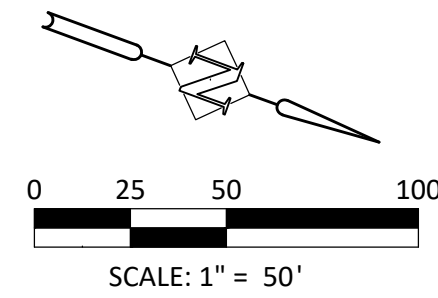
**GEOMETRY AND PAVING PLAN
SE LINWOOD AVENUE**

MILWAUKIE, OREGON

SHEET NO.	6.2
JOB NO.	MWK-28

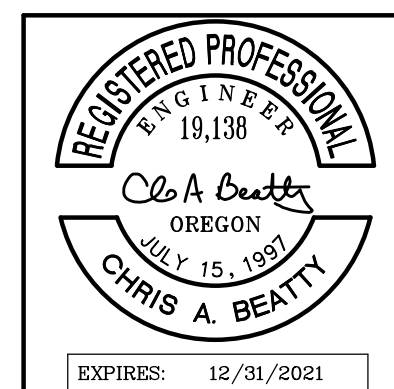
P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK28-DWG(Sheets)\MWK28-6.0 GEOMETRY AND PAVING PLAN.dwg

P:\M\WK (City of Milwaukie)\M\WK-28 Linwood Avenue\M\WK-28-DWG\SS\Sheets\M\WK-28-7.0 CURB RETURNS COVER.dwg



DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020

DATE	NO.	DESCRIPTION
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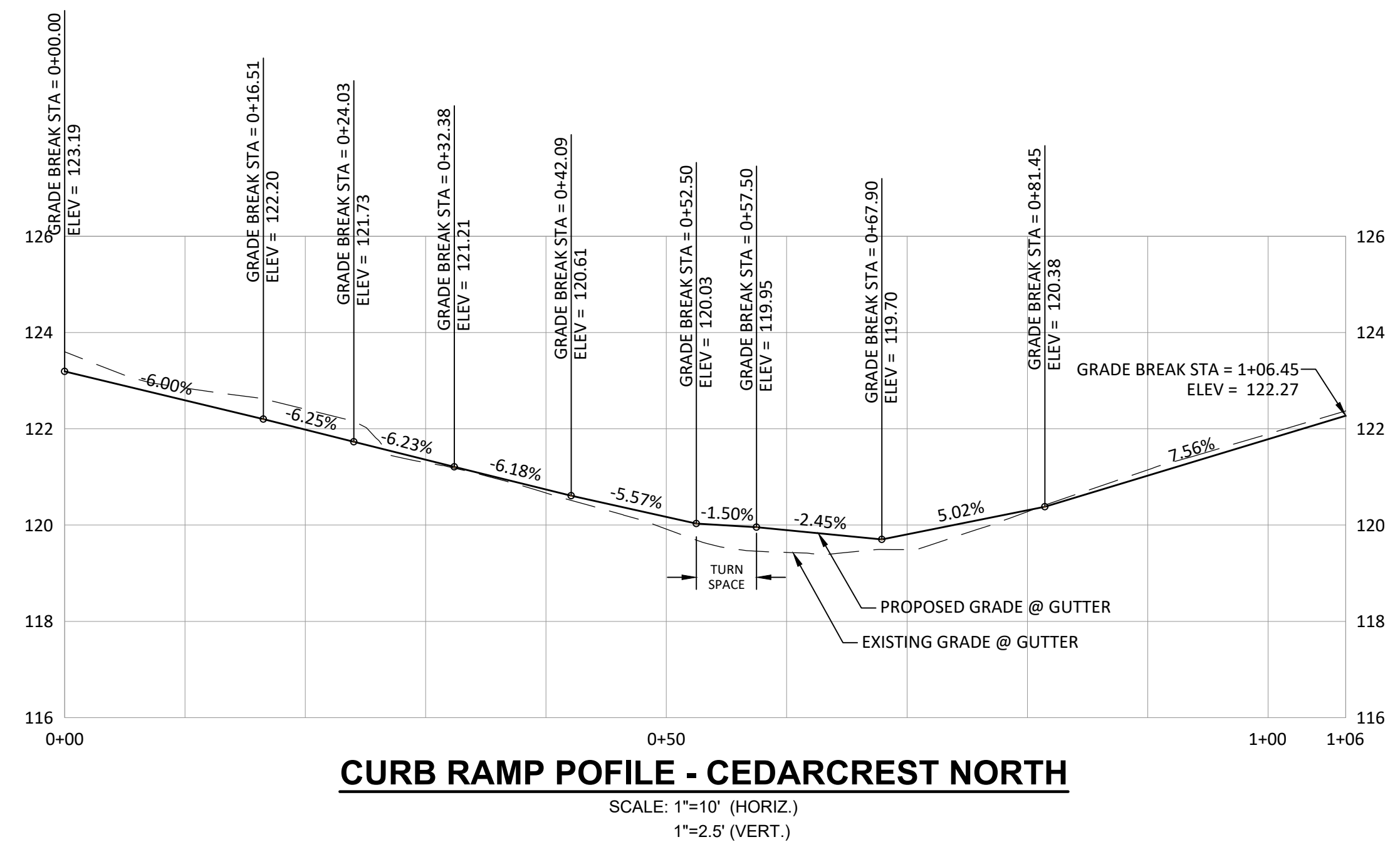
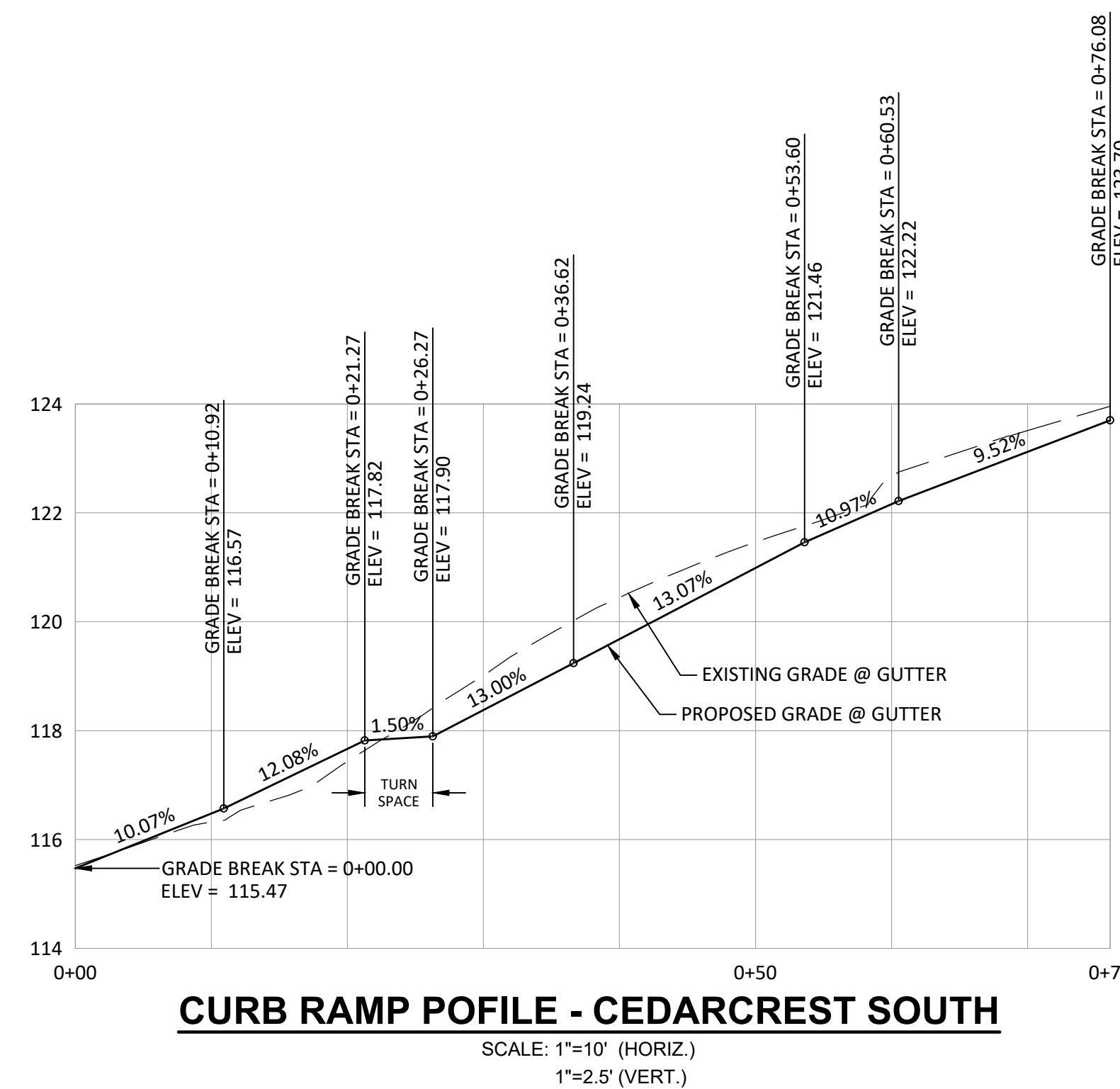
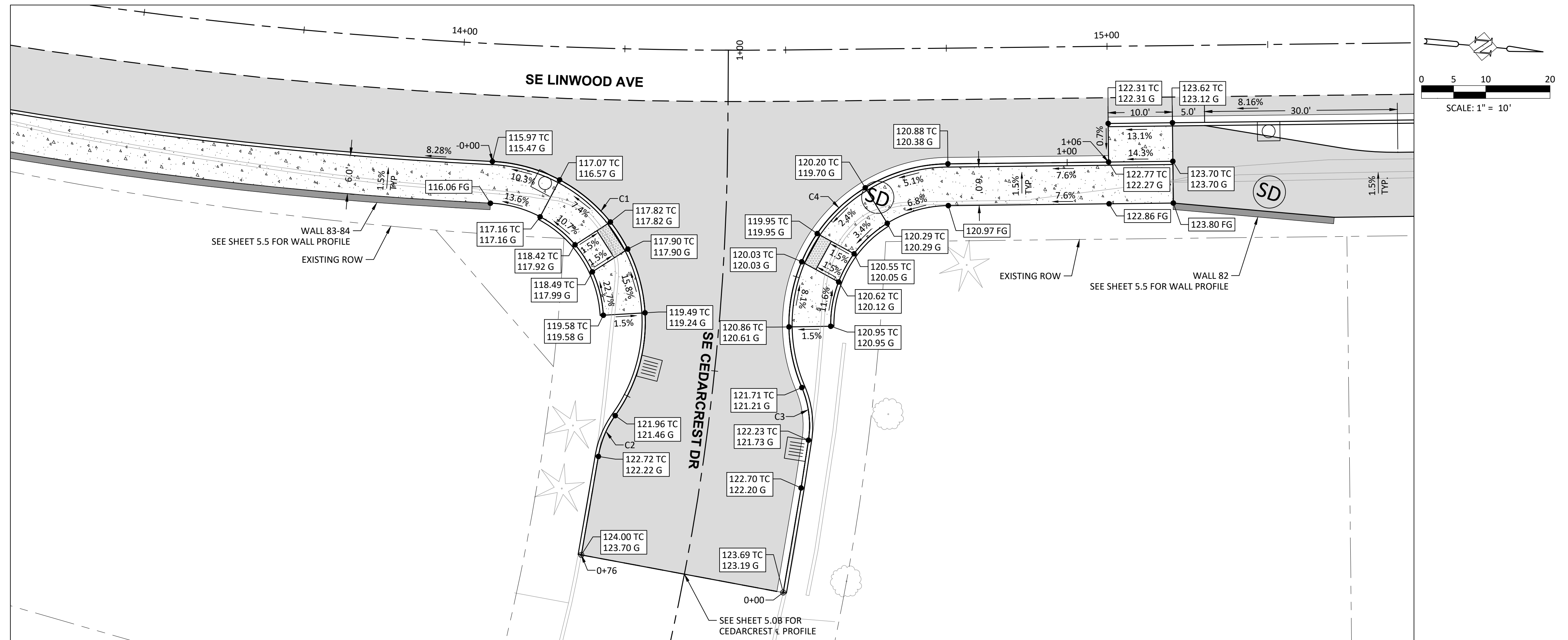
CURB RETURNS AND GRADING DETAIL COVER
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	7.0
JOB NO.	MWK-28

LEGEND

- 100.00 FG ● FG ELEVATION
- 100.00 FG ○ MATCH EXISTING CURB / SW ELEVATION

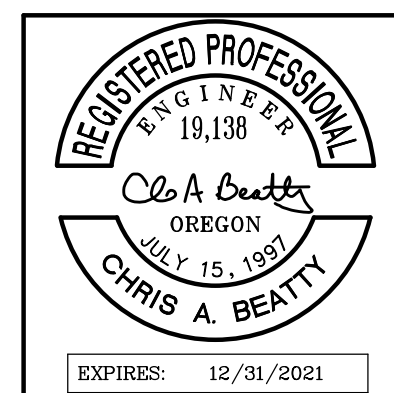
Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C1	53.60'	25.00'	122° 50' 17.87"	S44° 41' 01.92"W	43.91'
C2	6.93'	15.00'	026° 27' 36.28"	N87° 07' 37.29"W	6.87'
C3	8.35'	15.00'	031° 54' 00.29"	S63° 19' 18.24"W	8.24'
C4	49.06'	25.00'	112° 26' 53.66"	N76° 24' 15.08"W	41.56'



P:\M\K\City of Milwaukie\Linwood Avenue\MWK28-DWG\Sheets\MWK28-7.1 CURB RETURNS AND GRADING DETAIL.dwg

DATE	NO.	DESCRIPTION
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DATE:	9/1/2020



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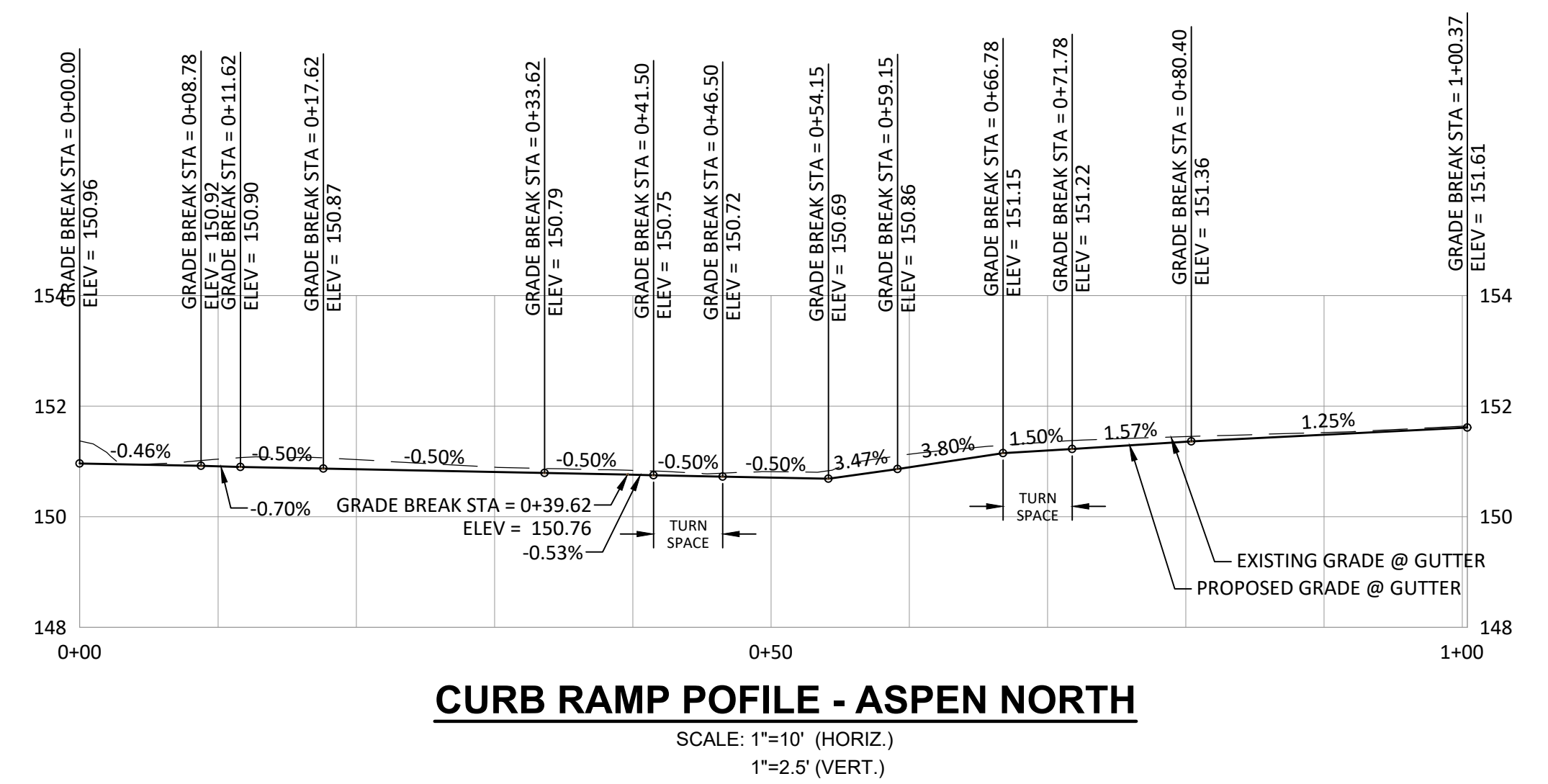
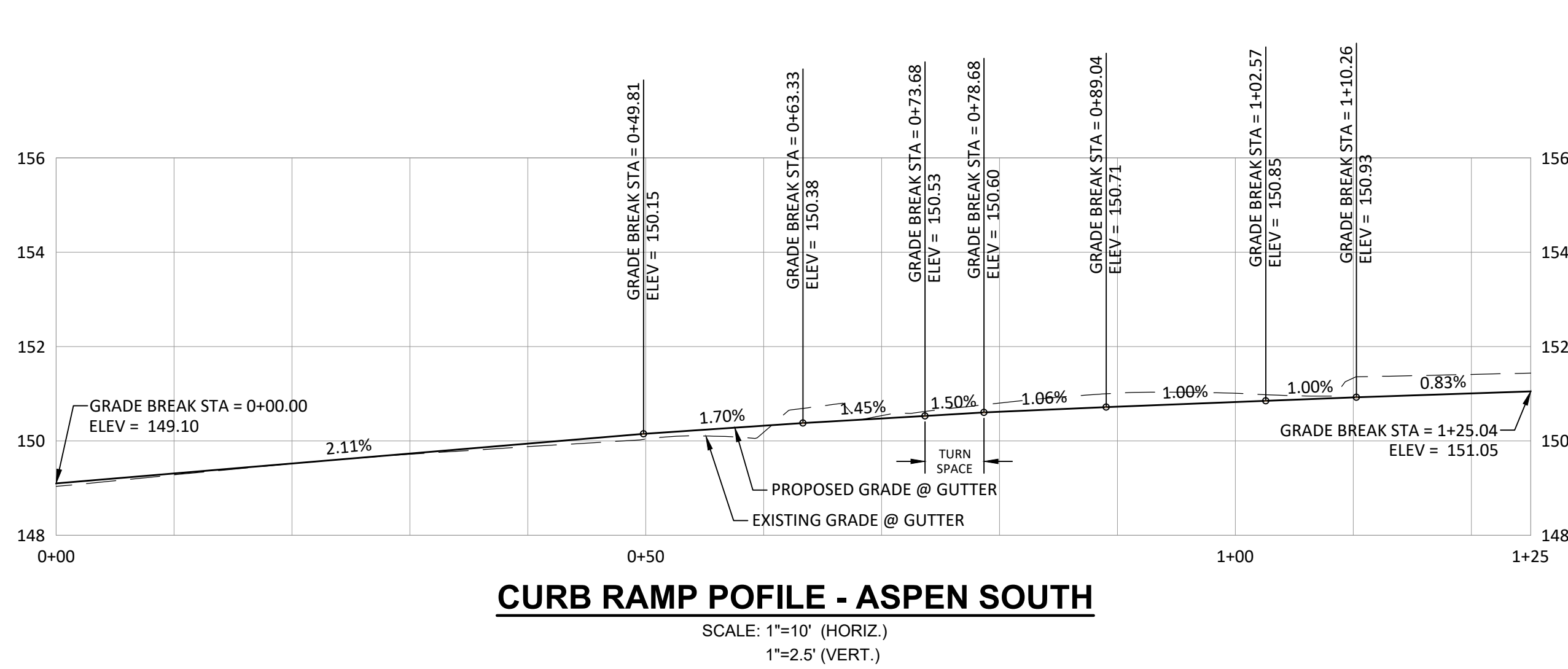
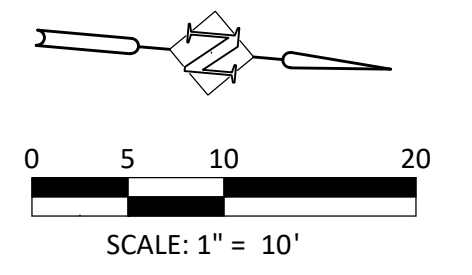
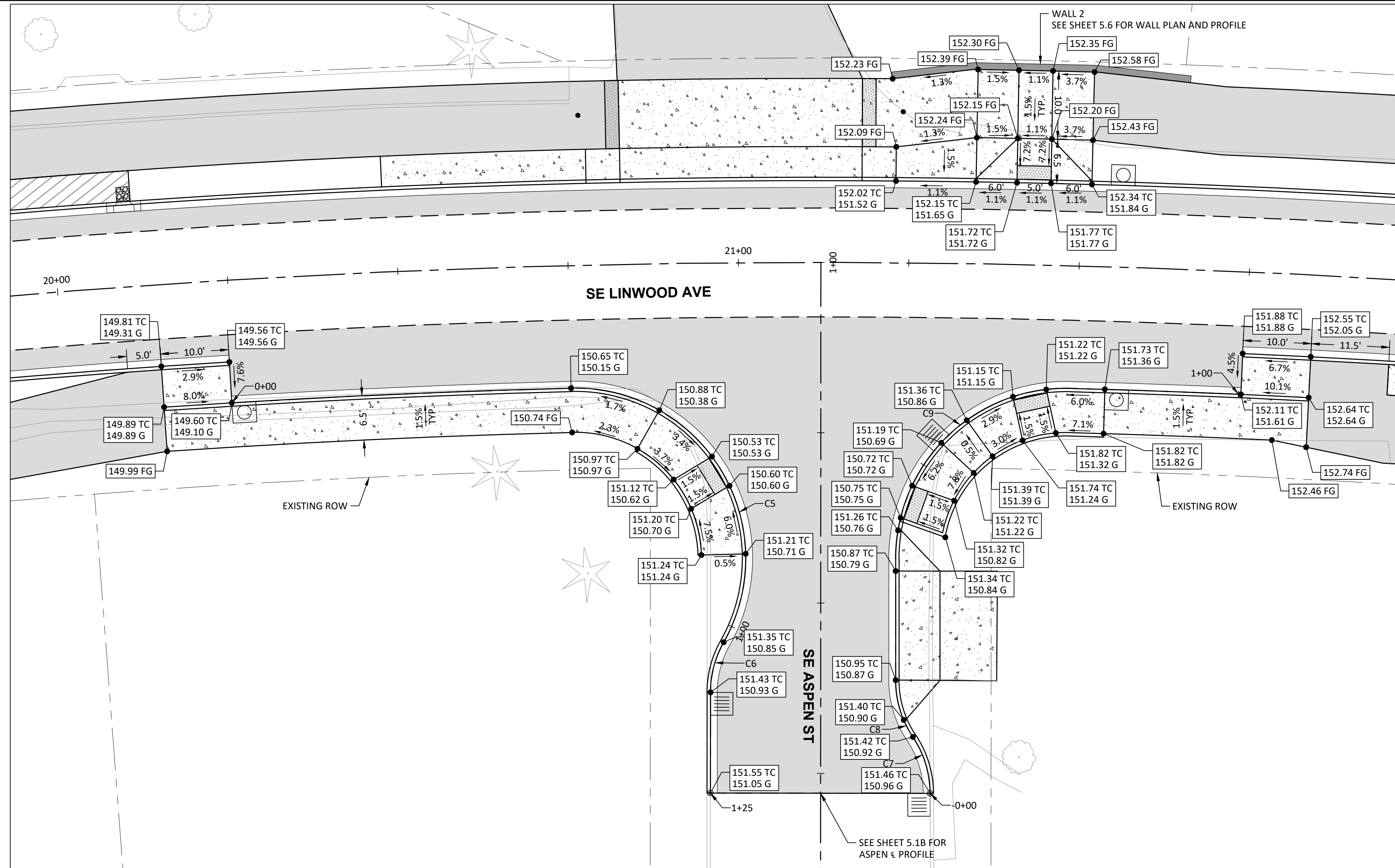
CURB RETURNS AND GRADING DETAIL
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	7.1
JOB NO.	MWK-28

LEGEND

- 100.00 FG ● FG ELEVATION
- 100.00 FG ○ MATCH EXISTING CURB / SW ELEVATION

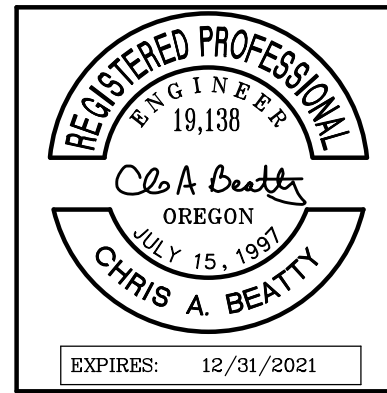
Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C5	52.76'	25.00'	120° 54' 45.25"	S53° 55' 24.19"W	43.50'
C6	7.70'	15.00'	029° 23' 44.27"	N80° 19' 05.33"W	7.61'
C7	8.78'	15.00'	033° 32' 07.93"	N67° 56' 41.55"E	8.65'
C8	8.84'	15.00'	033° 46' 48.64"	N68° 04' 01.91"E	8.72'
C9	39.92'	25.00'	091° 28' 44.60"	S49° 18' 11.47"E	35.81'



DATE	NO.	DESCRIPTION	DATE:	
			9/1/2020	

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DATE:	9/1/2020



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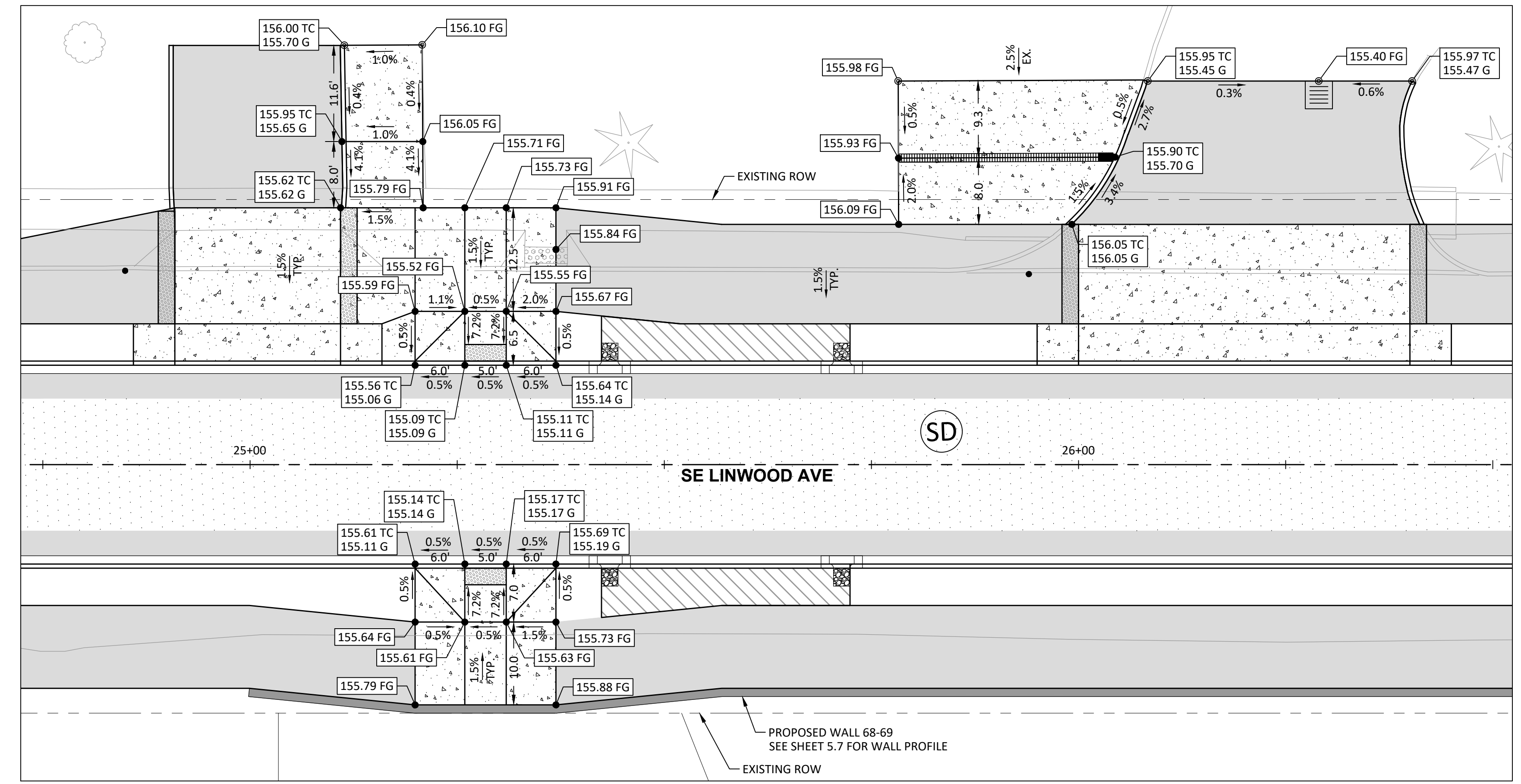
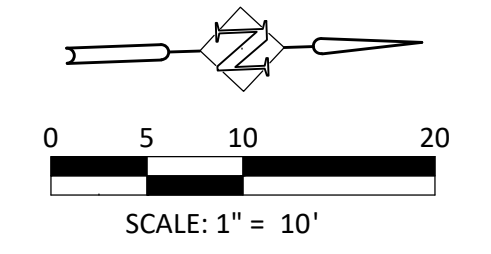
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CURB RETURNS AND GRADING DETAIL
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.

7.2

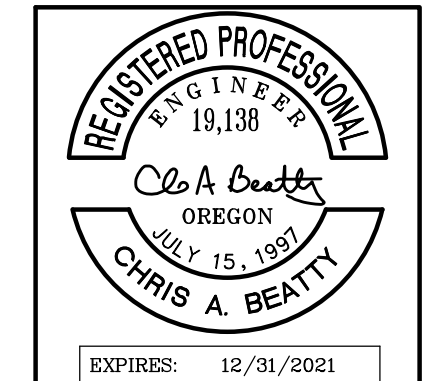
JOB NO. MWK-28



P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK28-DWG(Sheets)\MWK28-7.1 CURB RETURNS AND GRADING DETAIL.dwg

DATE	NO.	DESCRIPTION
R E V I S I O N S		

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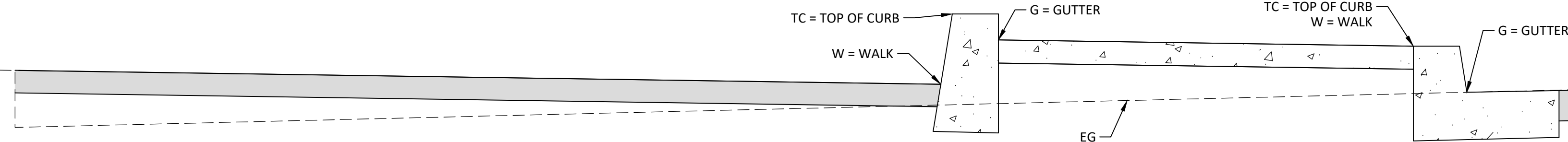
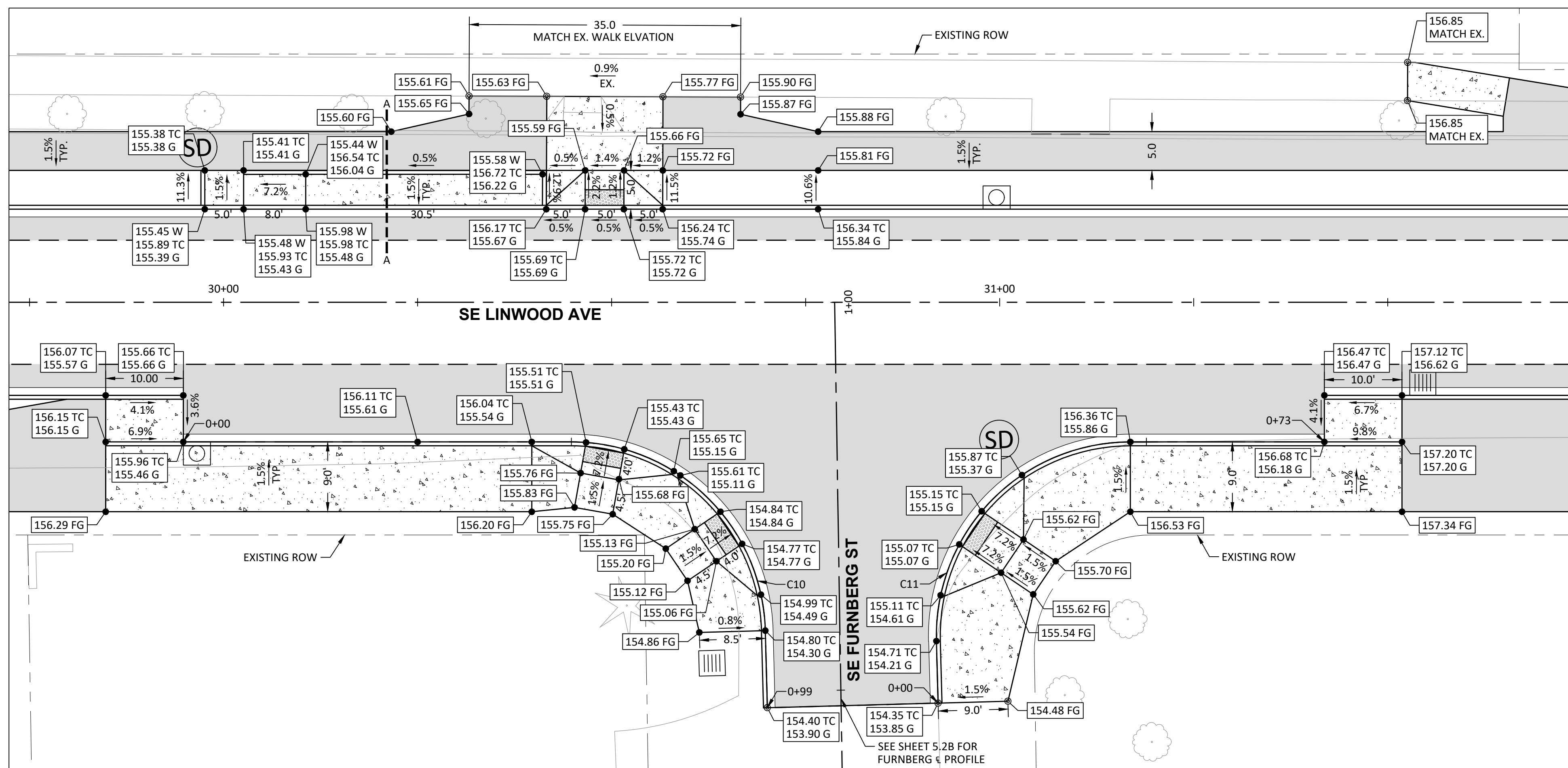
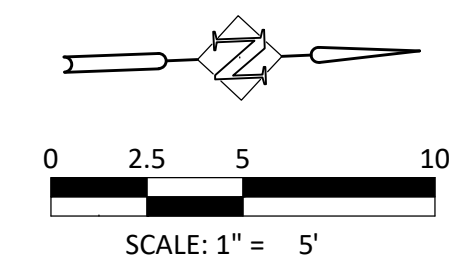
CURB RETURNS AND GRADING DETAIL
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	7.3
JOB NO.	MWK-28

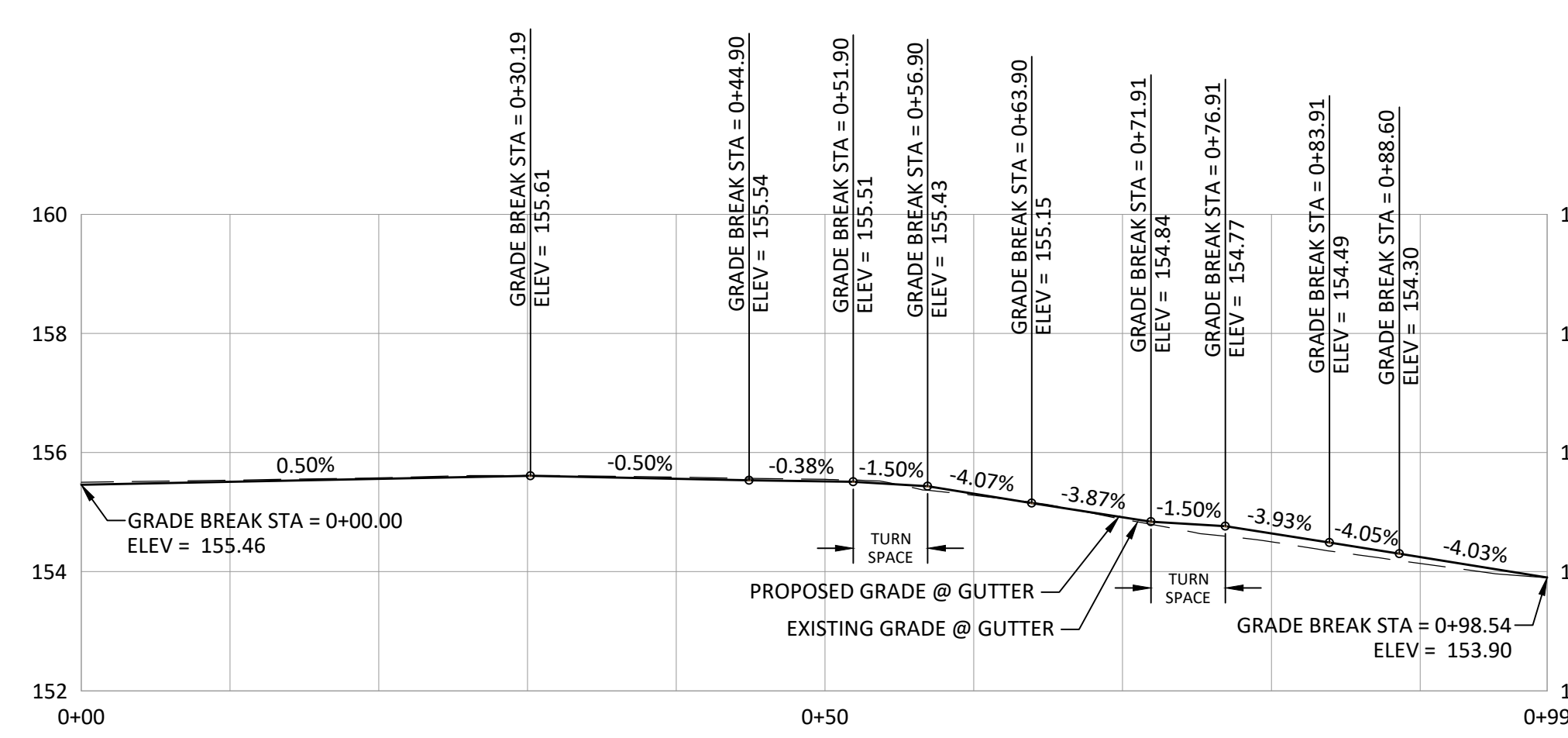
LEGEND

- 100.00 FG ● FG ELEVATION
- 100.00 FG ○ MATCH EXISTING CURB / SW ELEVATION

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C10	38.60'	25.00'	088° 27' 25.20"	S46° 19' 12.47"W	34.88'
C11	39.94'	25.00'	091° 32' 34.80"	S43° 40' 47.53"E	35.83'

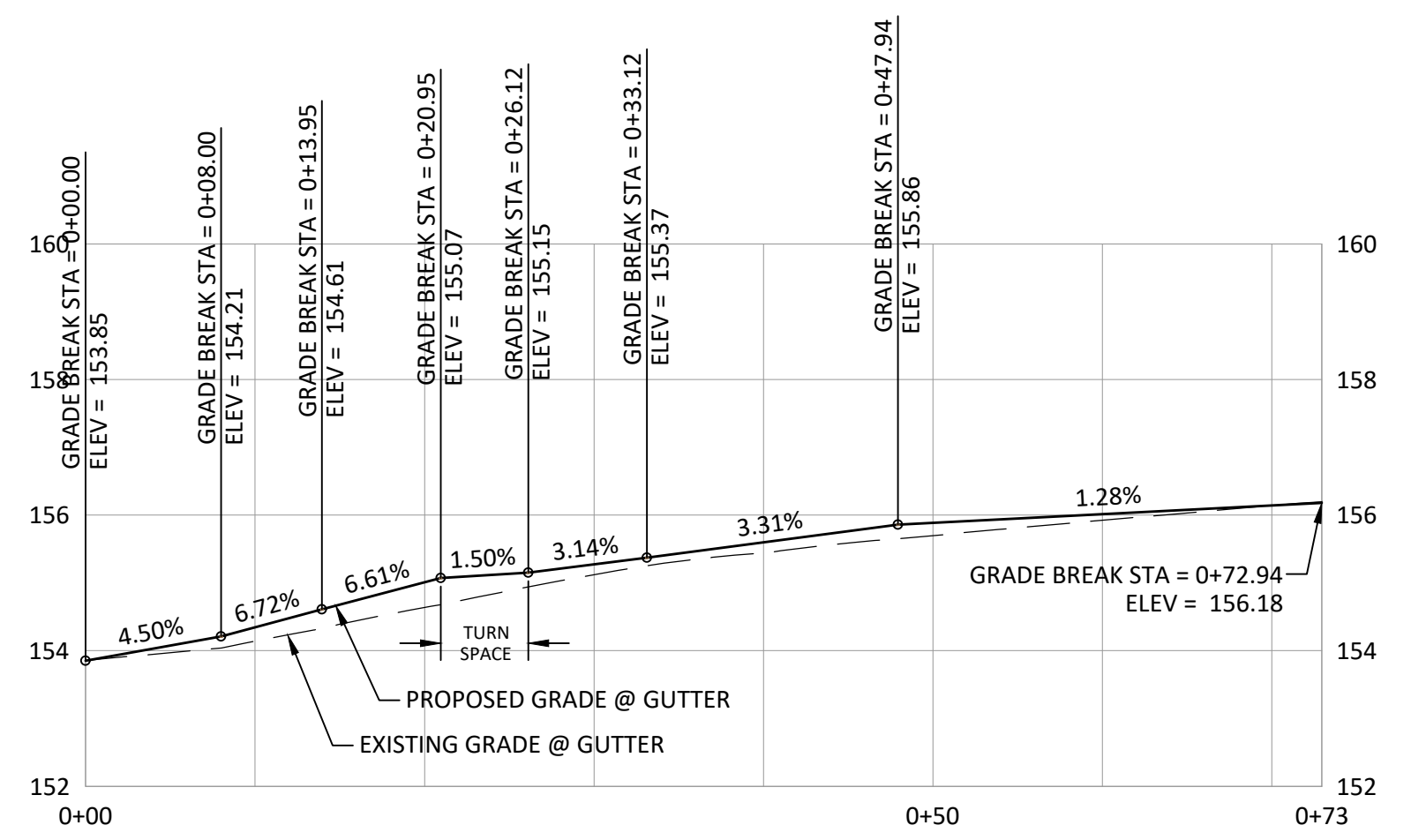


SECTION A-A
NTS



CURB RAMP PROFILE - FURNBERG SOUTH

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

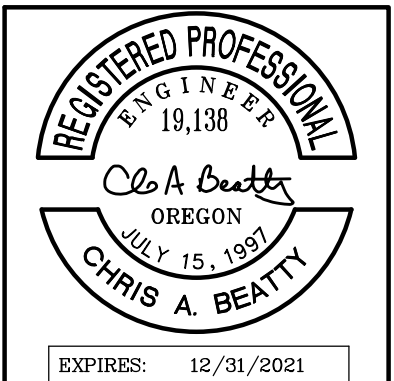


CURB RAMP PROFILE - FURNBERG SOUTH

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
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CURB RETURNS AND GRADING DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

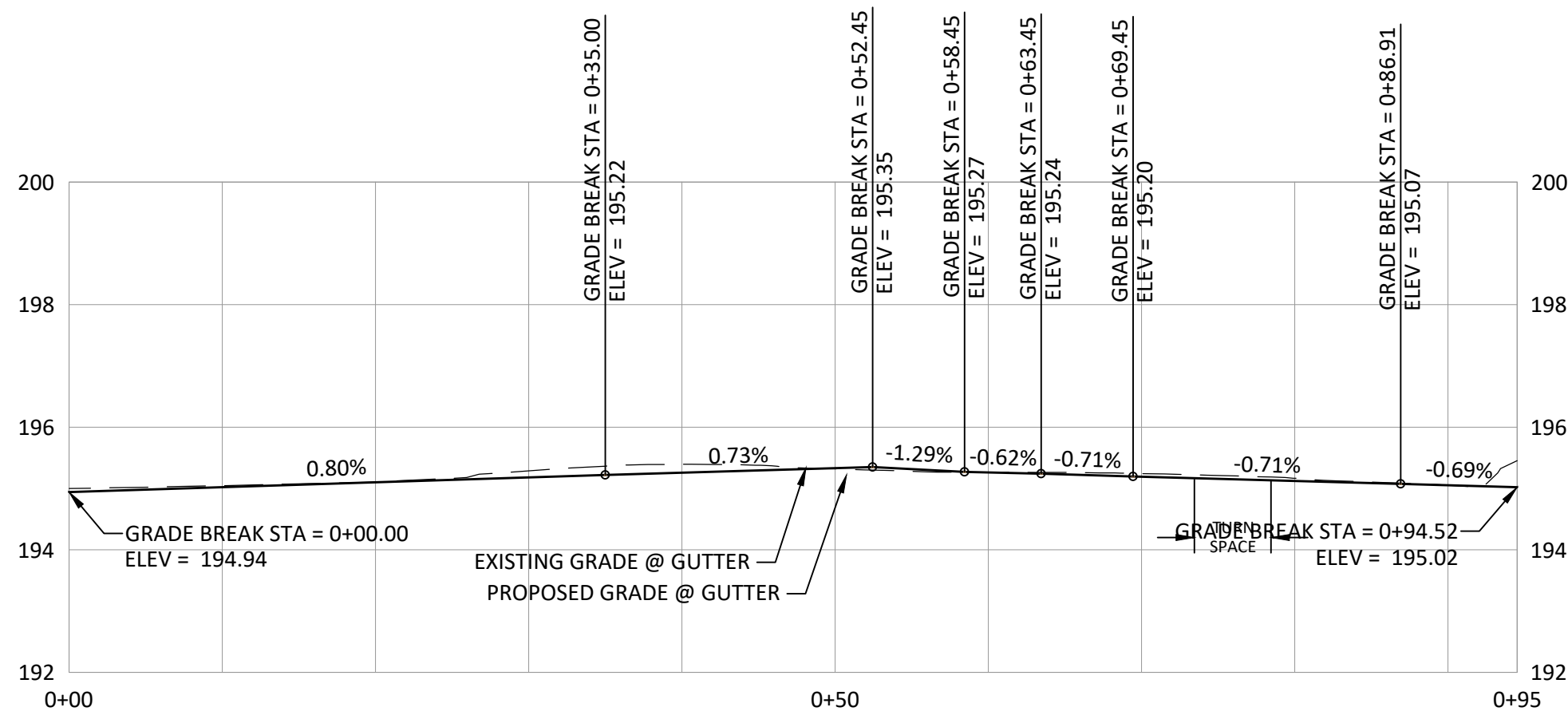
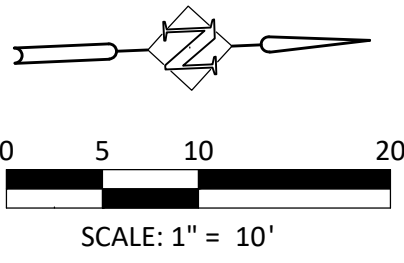
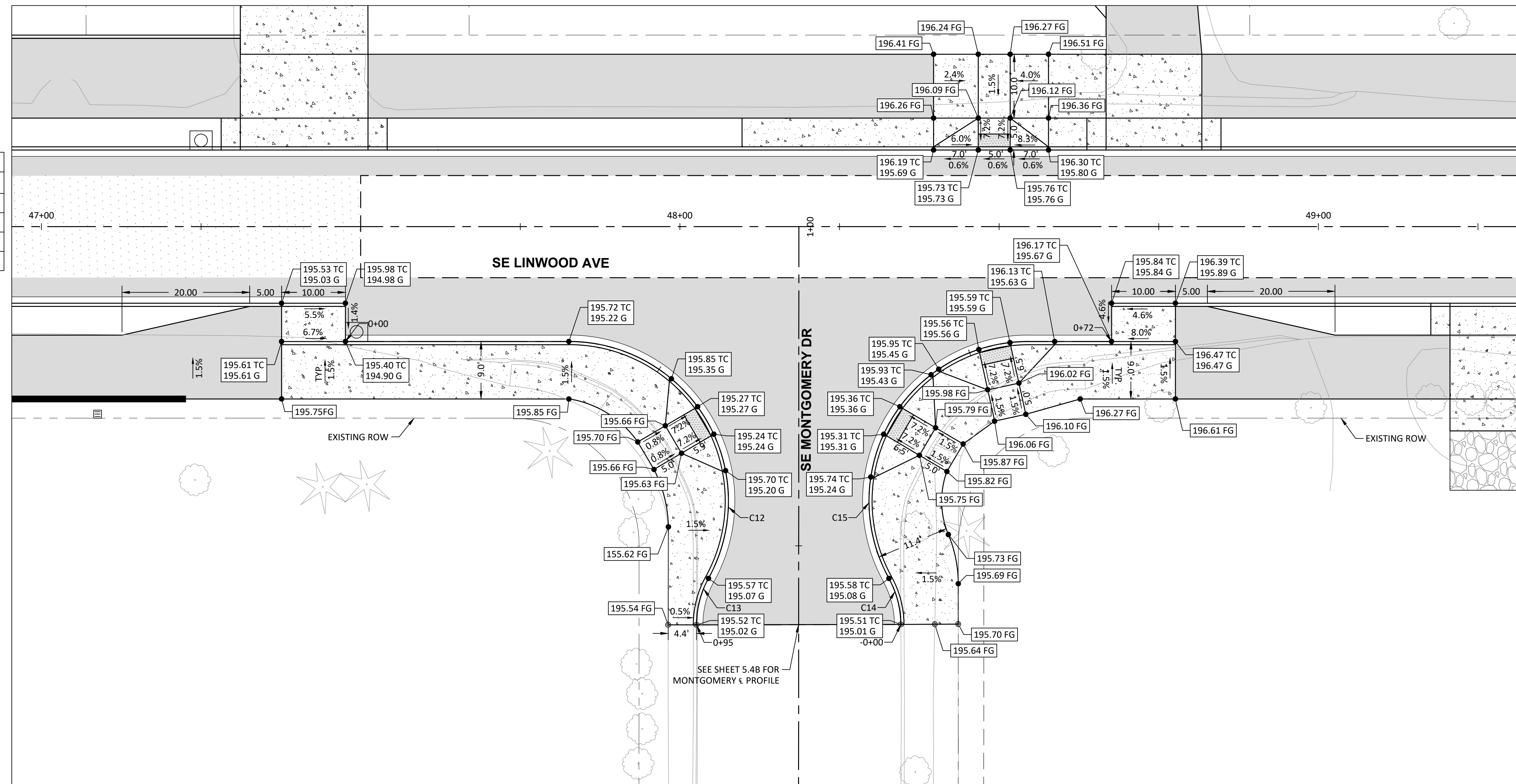
SHEET NO.	7.4
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK28-DWG(Sheets)\MWK28-7.1 CURB RETURNS AND GRADING DETAIL.dwg

LEGEND

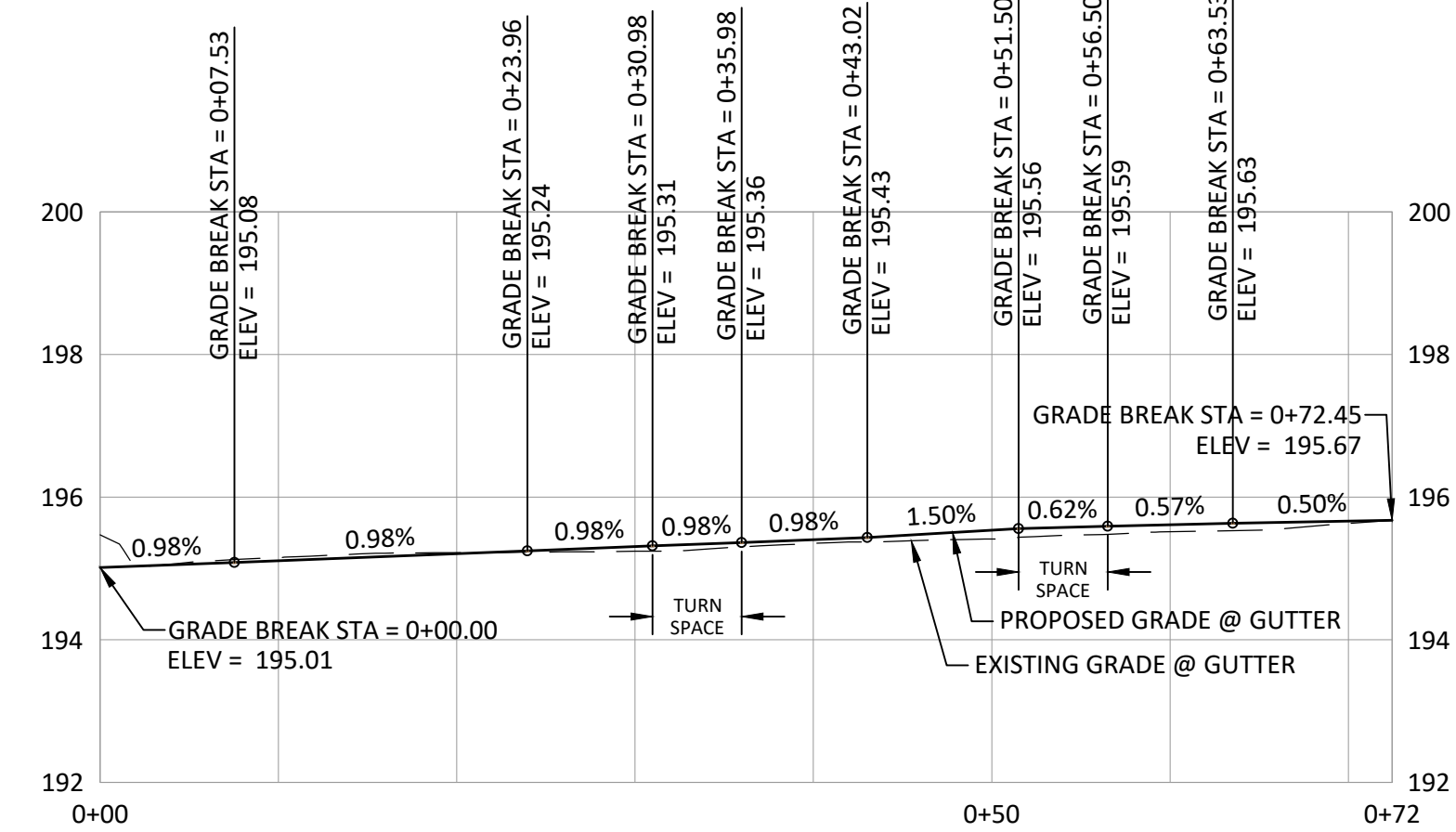
- 100.00 FG ● FG ELEVATION
- 100.00 FG ○ MATCH EXISTING CURB / SW ELEVATION

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C12	51.91'	25.00'	118° 58' 36.97"	N61° 56' 01.07"E	43.08'
C13	7.60'	15.00'	029° 02' 13.47"	S73° 05' 47.18"E	7.52'
C14	7.53'	15.00'	028° 45' 45.18"	S77° 50' 26.92"W	7.45'
C15	51.92'	25.00'	118° 59' 08.26"	N57° 02' 51.54"W	43.08'



CURB RAMP PROFILE - MONTGOMERY SOUTH

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

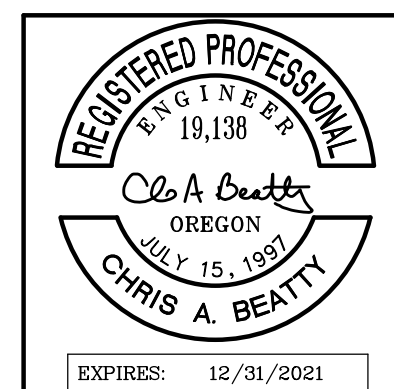


CURB RAMP PROFILE - MONTGOMERY NORTH

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
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CHECKED:	CAB
DATE:	12/4/2020



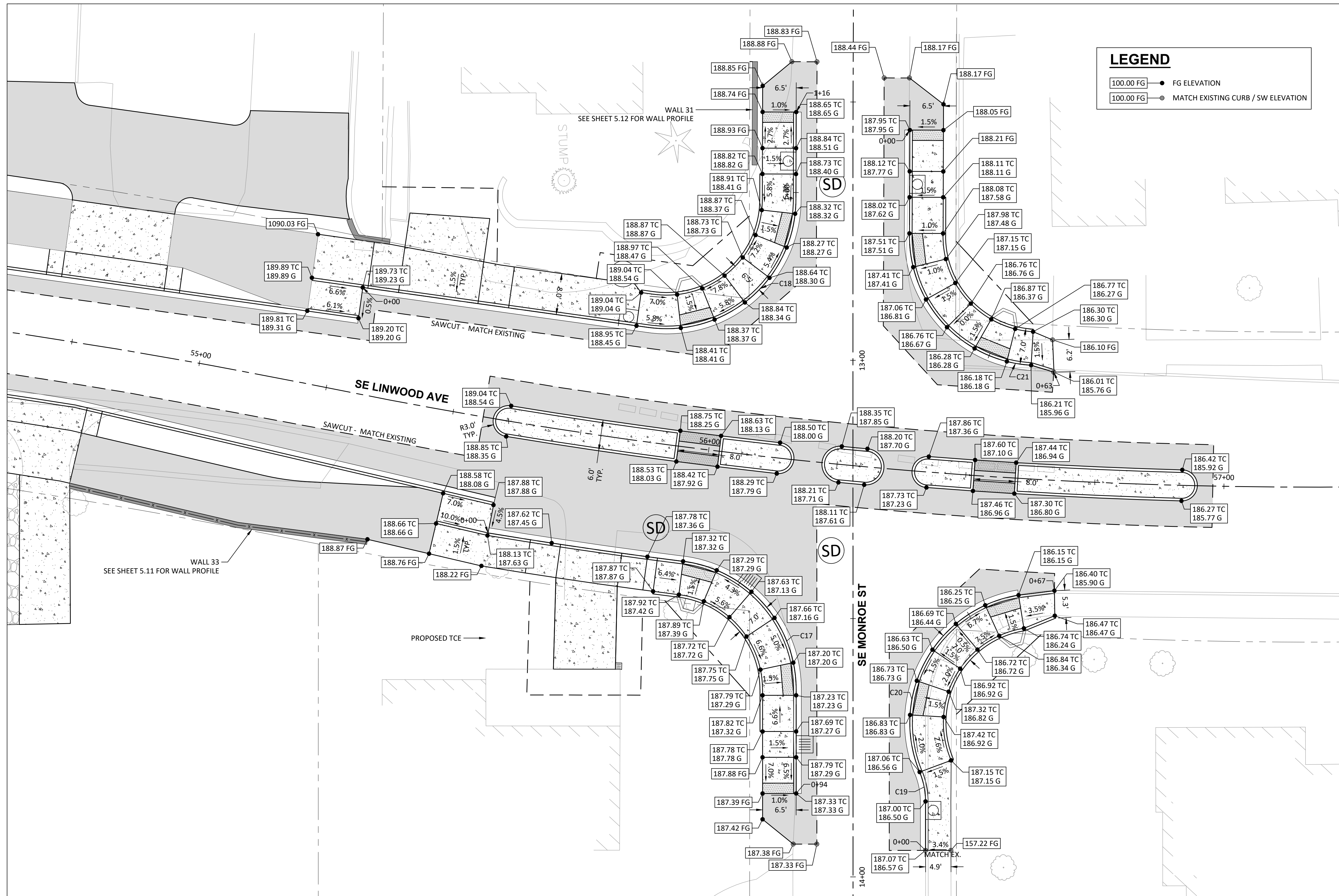
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**CURB RETURNS AND GRADING DETAIL
 SE LINWOOD AVENUE
 MILWAUKIE, OREGON**

SHEET NO.	7.5
JOB NO.	MWK-28

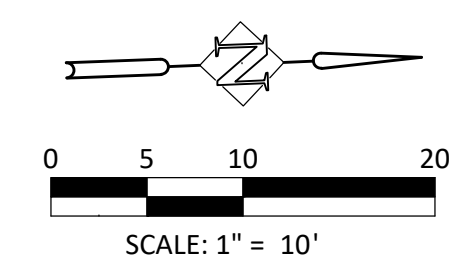
P:\MWK (City of Milwaukie)\MWK28-DIVGS\Sheets\MWK28-7.1 CURB RETURNS AND GRADING DETAIL.dwg

P:\M\K (City of Milwaukie)\M\K28 (Linwood Avenue)\M\K28-DWG(Sheets)\M\K28-7.1 CURB RETURNS AND GRADING DETAIL.dwg



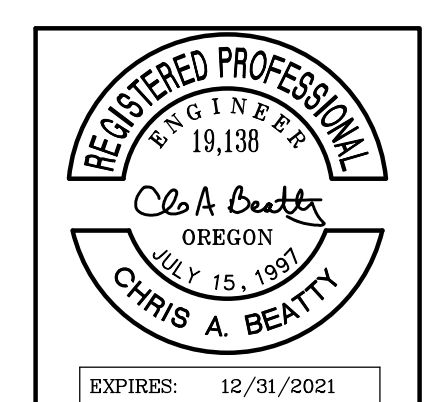
LEGEND

- 100.00 FG ● FG ELEVATION
- 100.00 FG ⊙ MATCH EXISTING CURB / SW ELEVATION



DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		



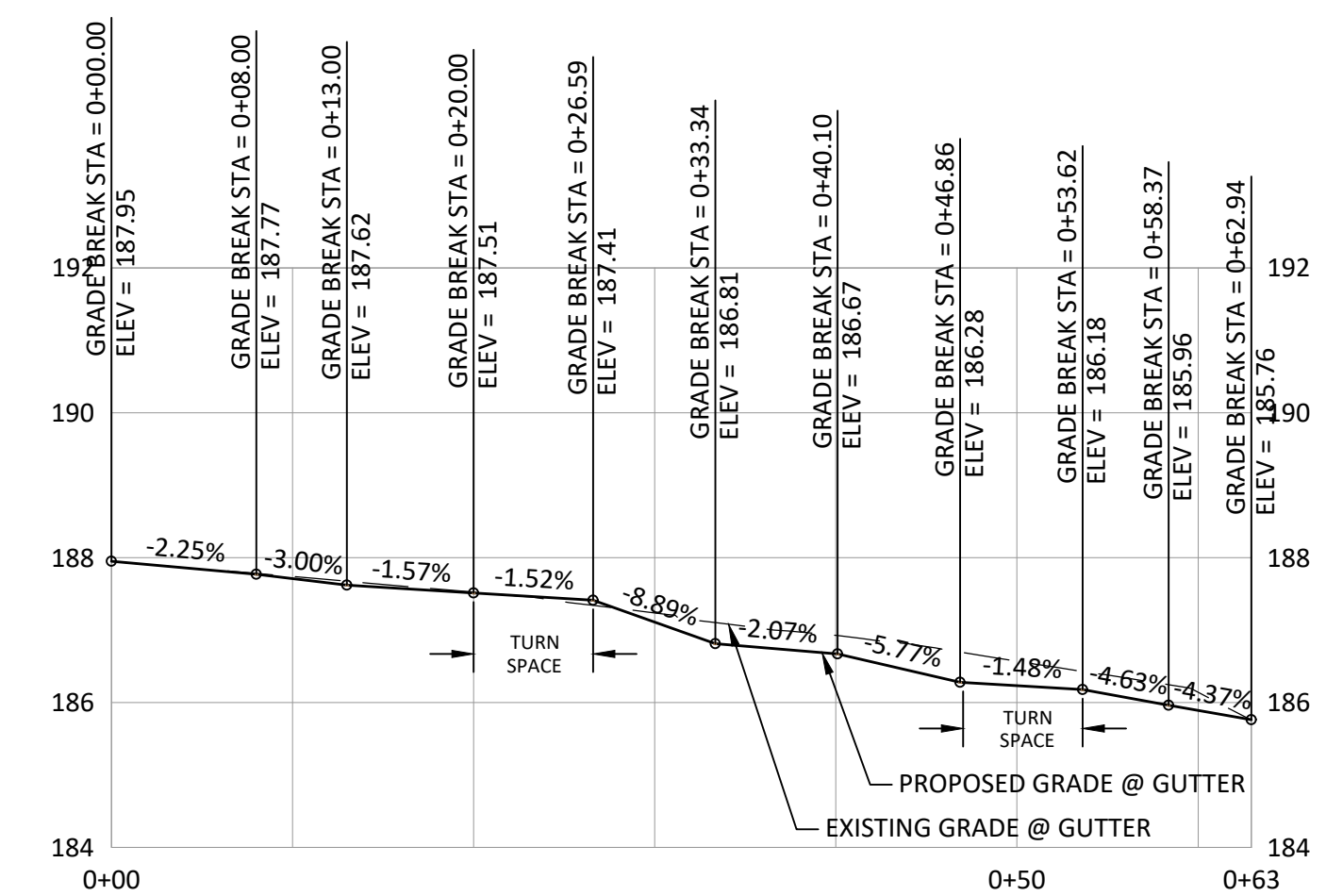
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CURB RETURNS AND GRADING DETAIL
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	7.6
JOB NO.	MWK-28

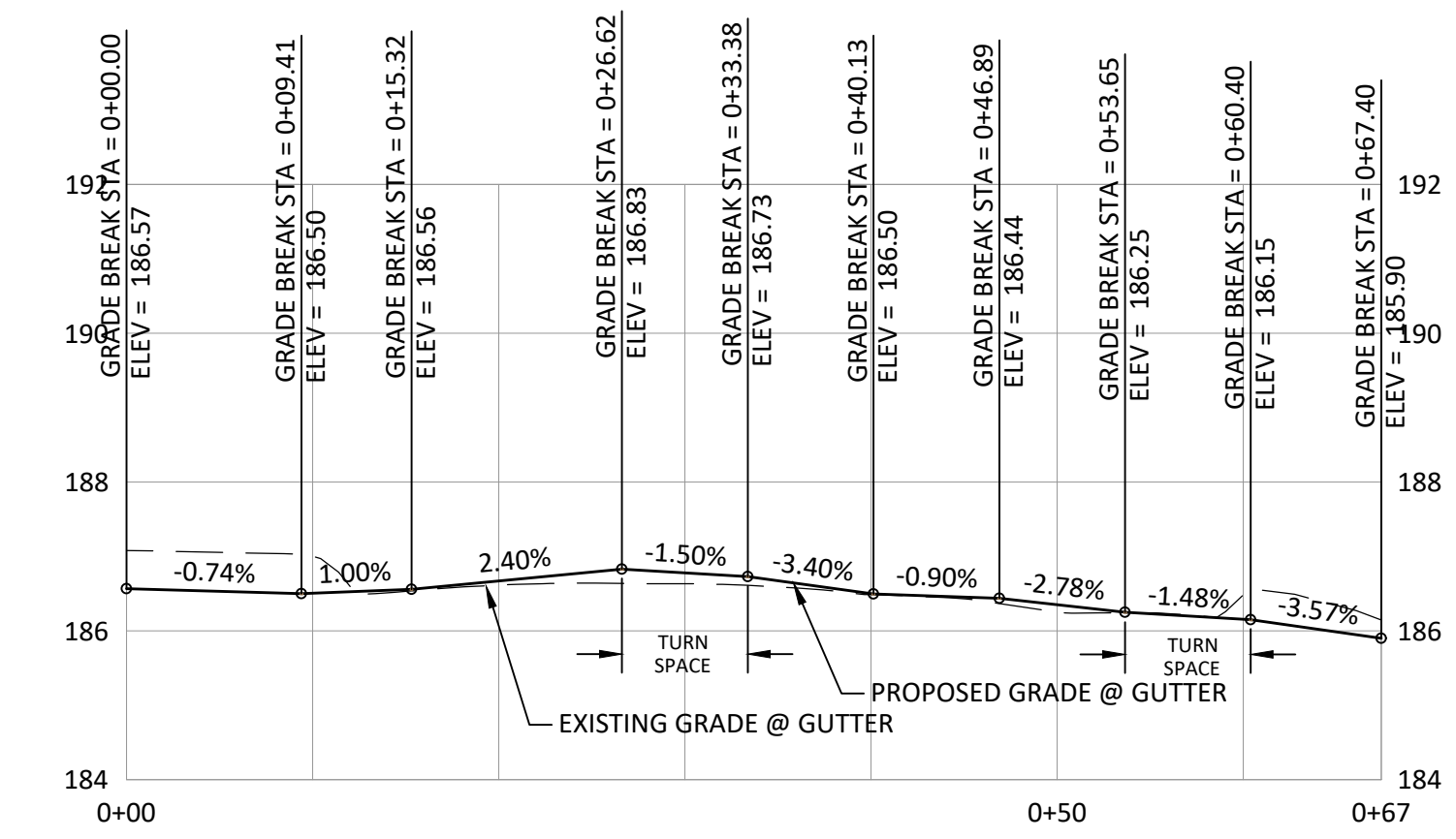
P:\M\K (City of Milwaukie)\M\K-28 (Linwood Avenue)\M\K28-DWG(Sheets)\M\K28-7.1 CURB RETURNS AND GRADING DETAIL.dwg

Curve Table					
Curve #	Length	Radius	Delta	Chord Direction	Chord Length
C17	36.14'	25.00'	082° 49' 31.95"	S50° 42' 31.63"W	33.07'
C19	5.86'	15.00'	022° 23' 20.65"	N80° 52' 21.38"E	5.82'
C20	45.08'	25.00'	103° 19' 31.99"	S58° 39' 32.94"E	39.22'
C21	37.89'	25.00'	086° 50' 02.32"	N48° 53' 49.93"E	34.37'



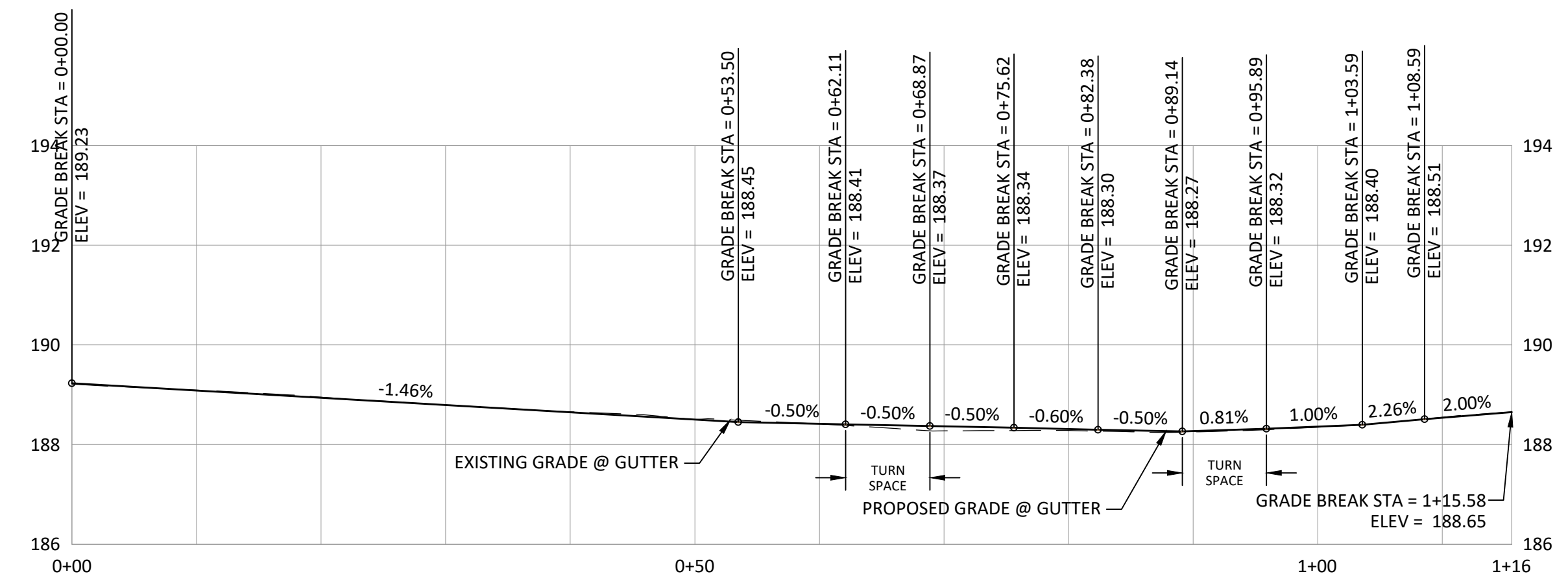
CURB RAMP PROFILE - MONROE NORTHWEST

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)



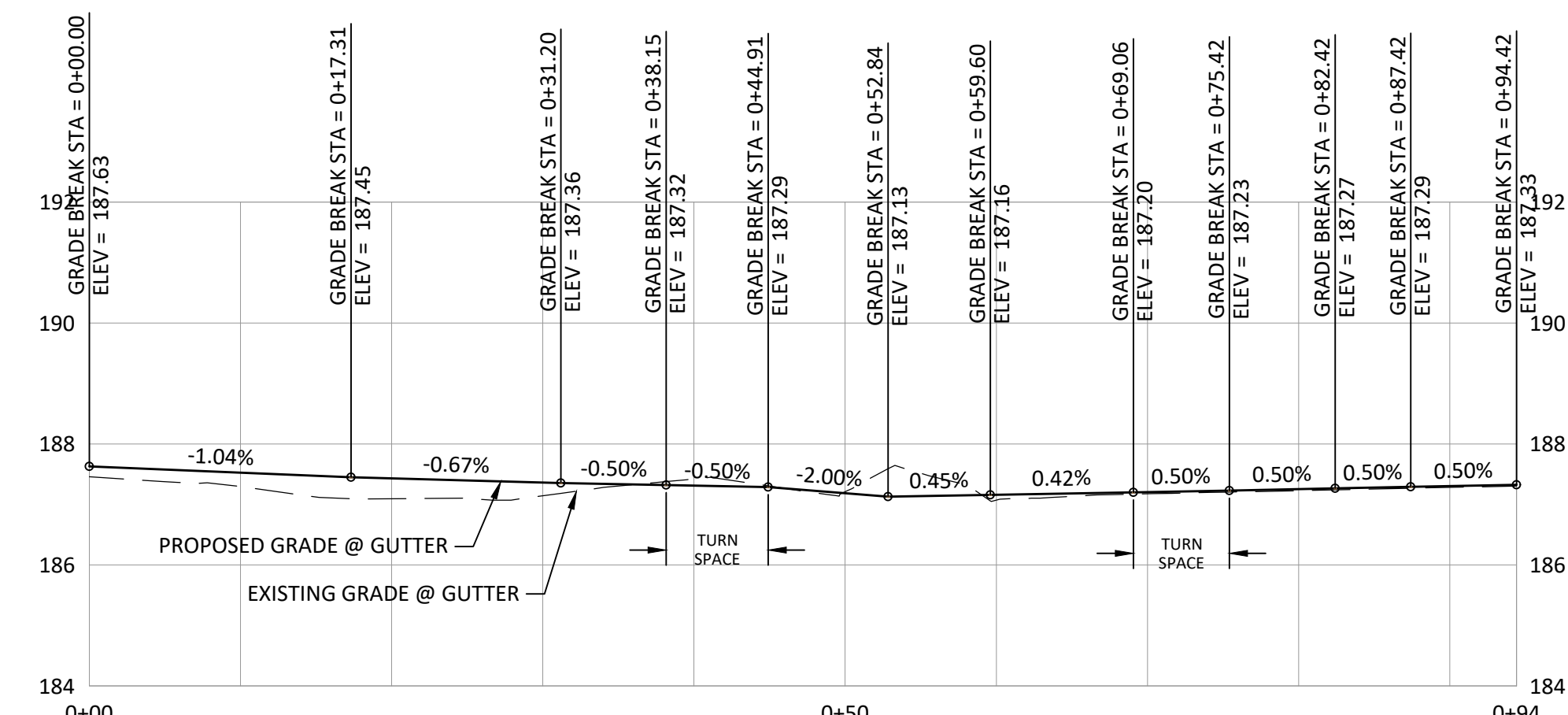
CURB RAMP PROFILE - MONROE NORTHEAST

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)



CURB RAMP PROFILE - MONROE SOUTHWEST

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)



CURB RAMP PROFILE - MONROE SOUTHEAST

SCALE: 1"=10' (HORIZ.)
1"=2.5' (VERT.)

DATE	NO.	DESCRIPTION
R E V I S I O N S		

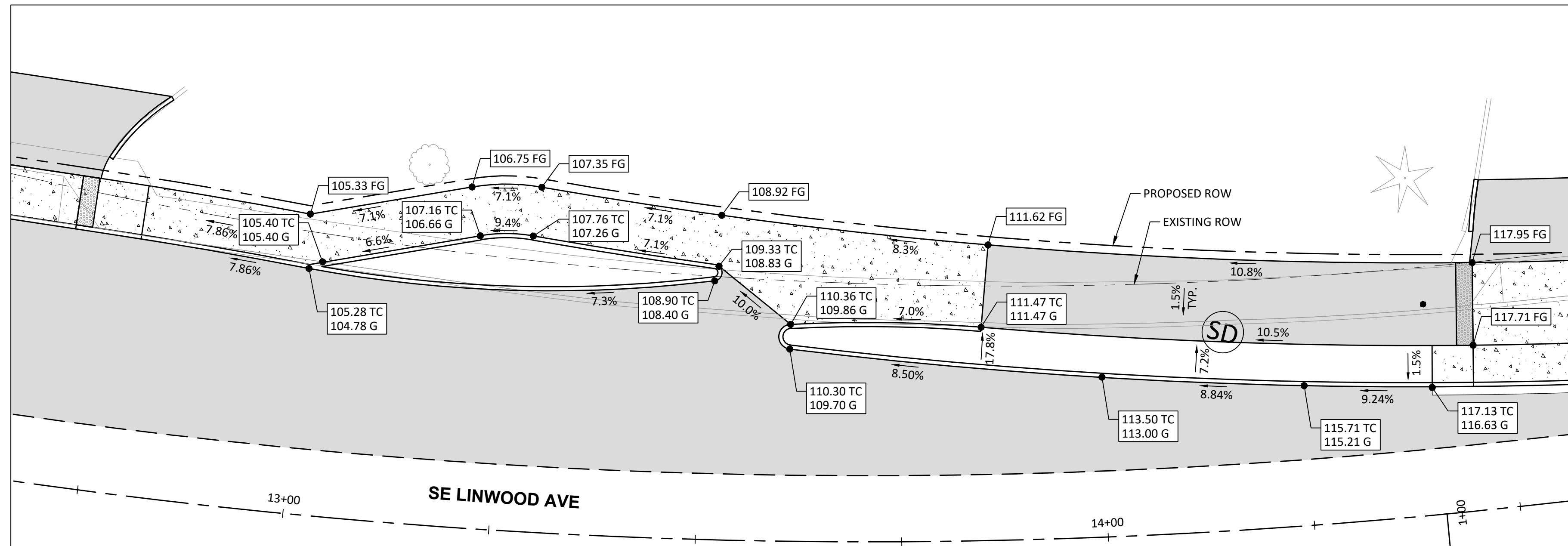
DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020



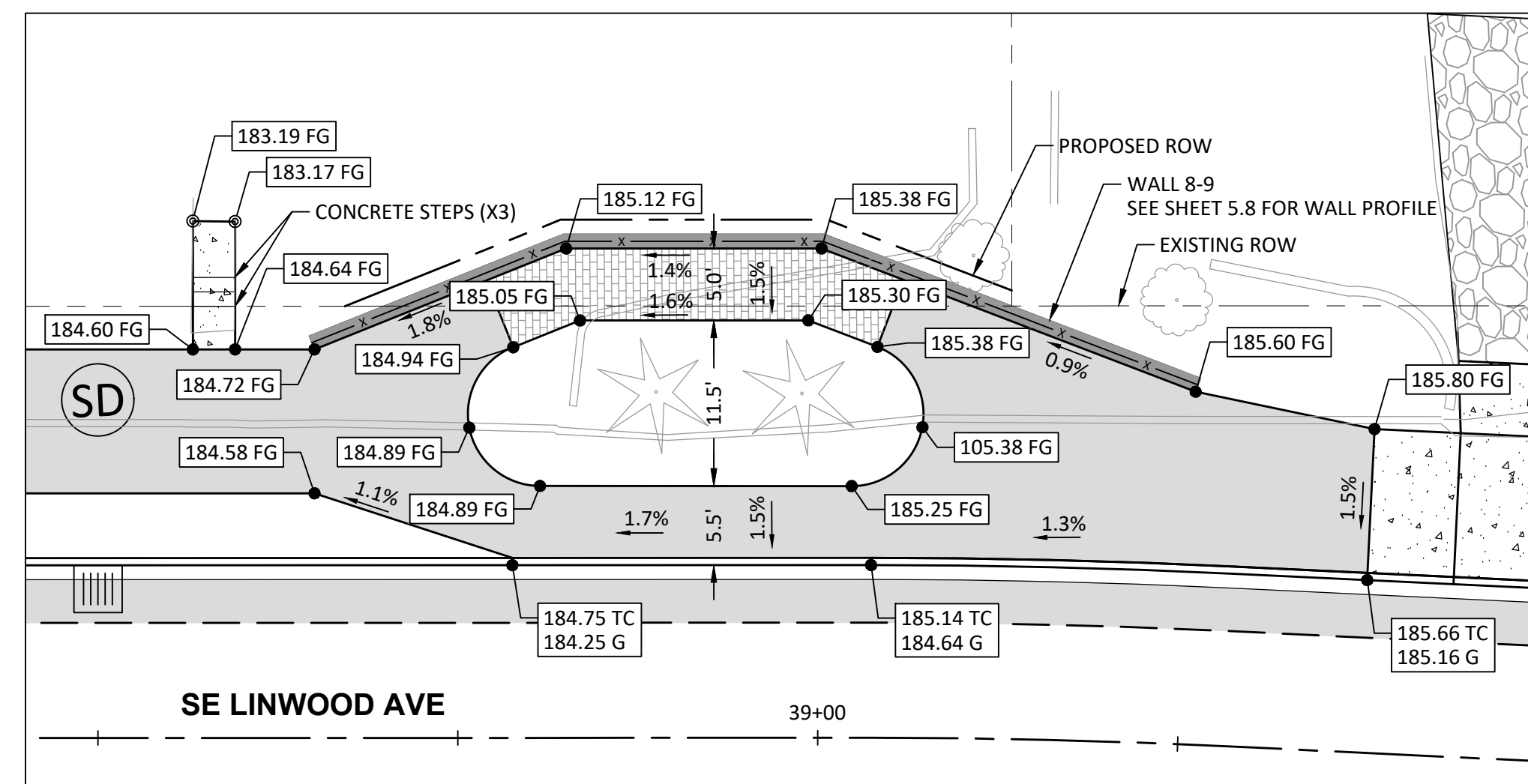
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CURB RETURNS AND GRADING DETAIL
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	7.7
JOB NO.	MWK-28



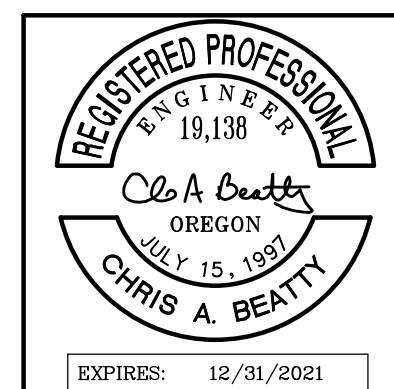
BIKE TRANSITION
SCALE: 1" = 10'



SPLIT PATH
SCALE: 1" = 10'

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		

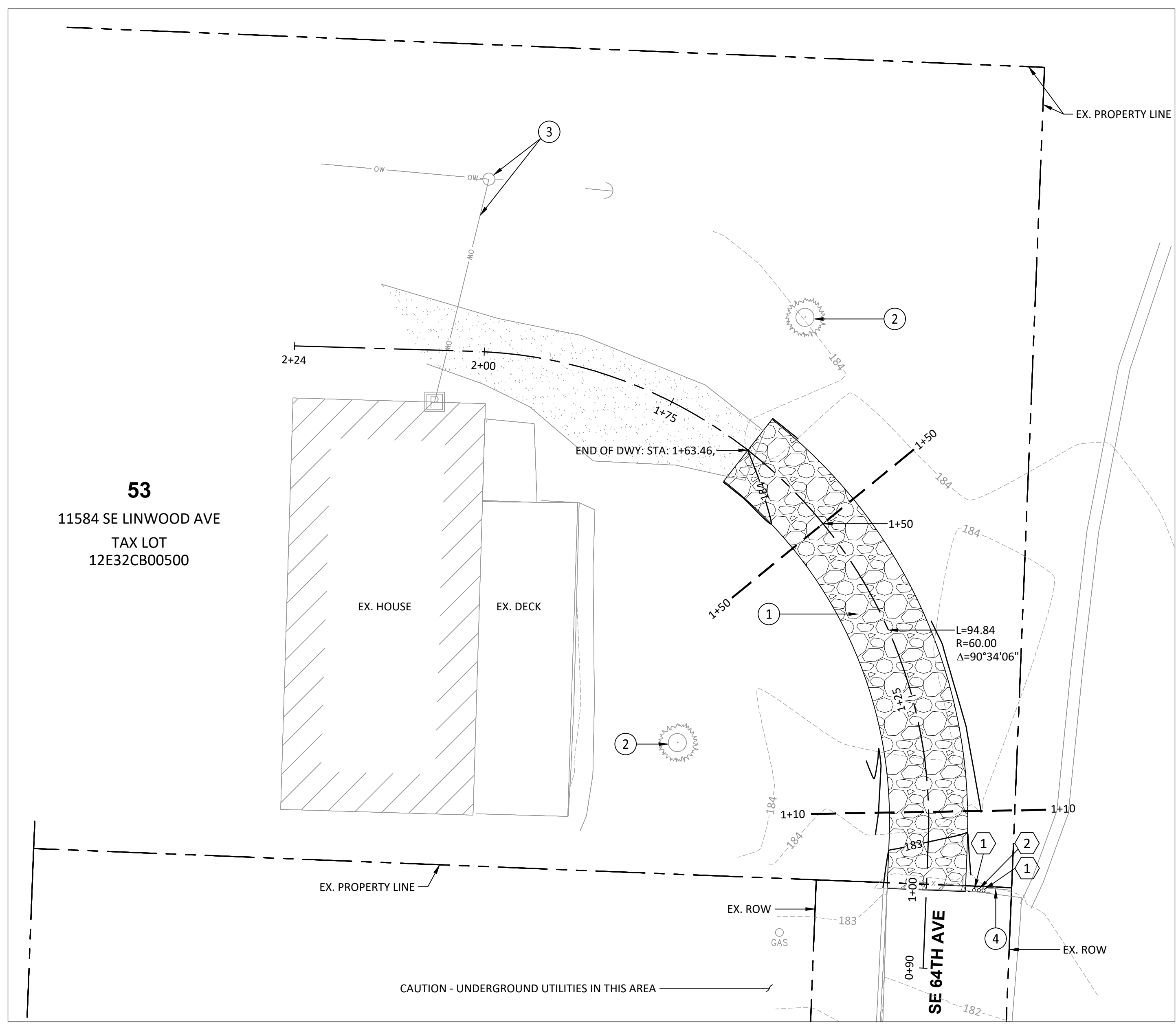


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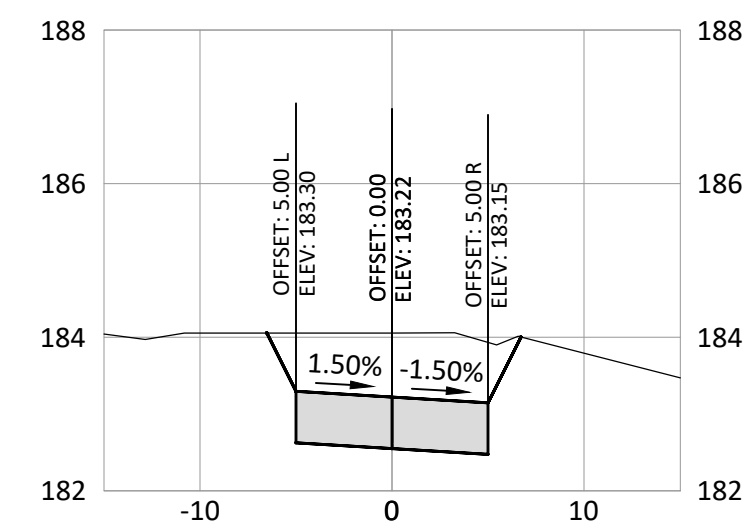
CURB RETURNS AND GRADING DETAIL
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	7.8
JOB NO.	MWK-28

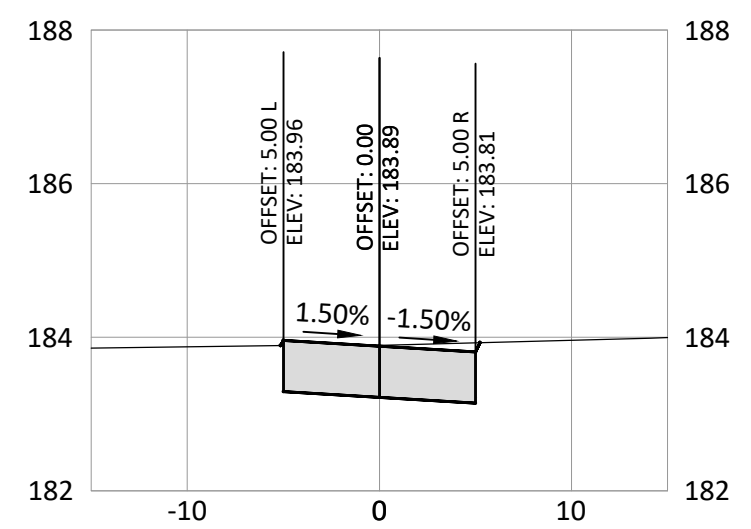
P:\MWK (City of Milwaukie)\MWK-28 Linwood Avenue\MWK28-DWG\Sheets\MWK28-7.1 CURB RETURNS AND GRADING DETAIL.dwg



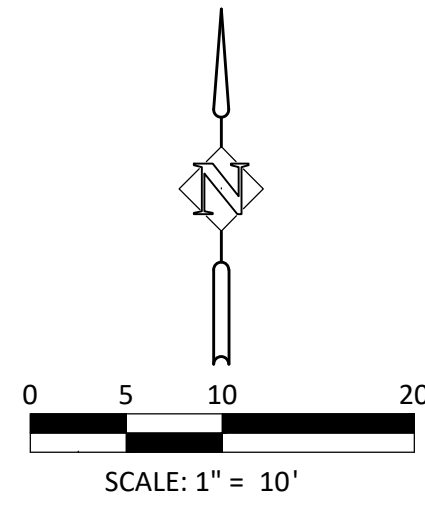
PROPERTY 53 - DRIVEWAY PLAN
SCALE: 1" = 10'



SECTION 1+10
SCALE: 1" = 10' (HORIZ.)
1" = 2.5' (VERT.)



SECTION 1+50
SCALE: 1" = 10' (HORIZ.)
1" = 2.5' (VERT.)

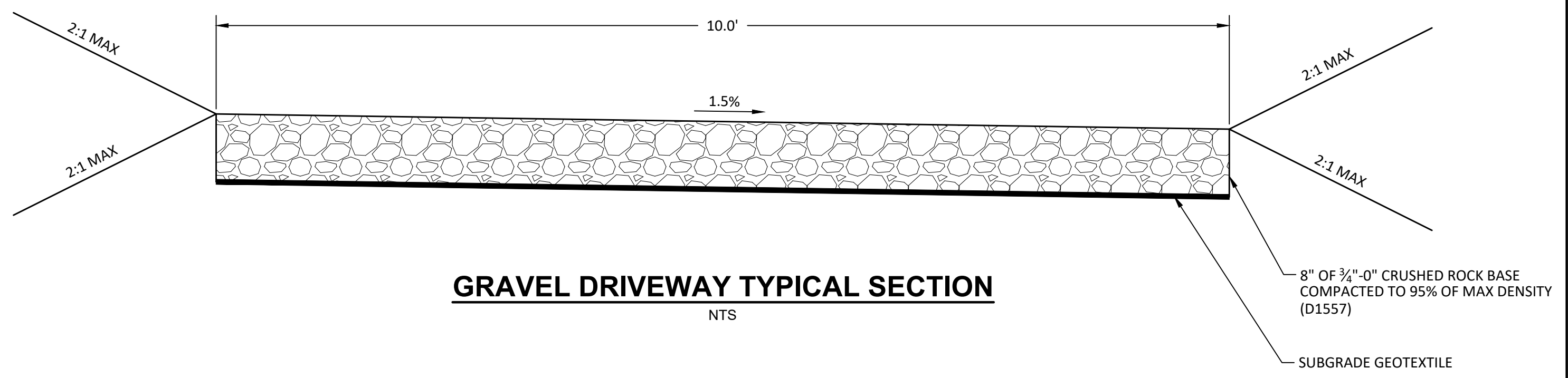
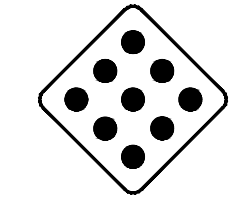


CONSTRUCTION NOTES:

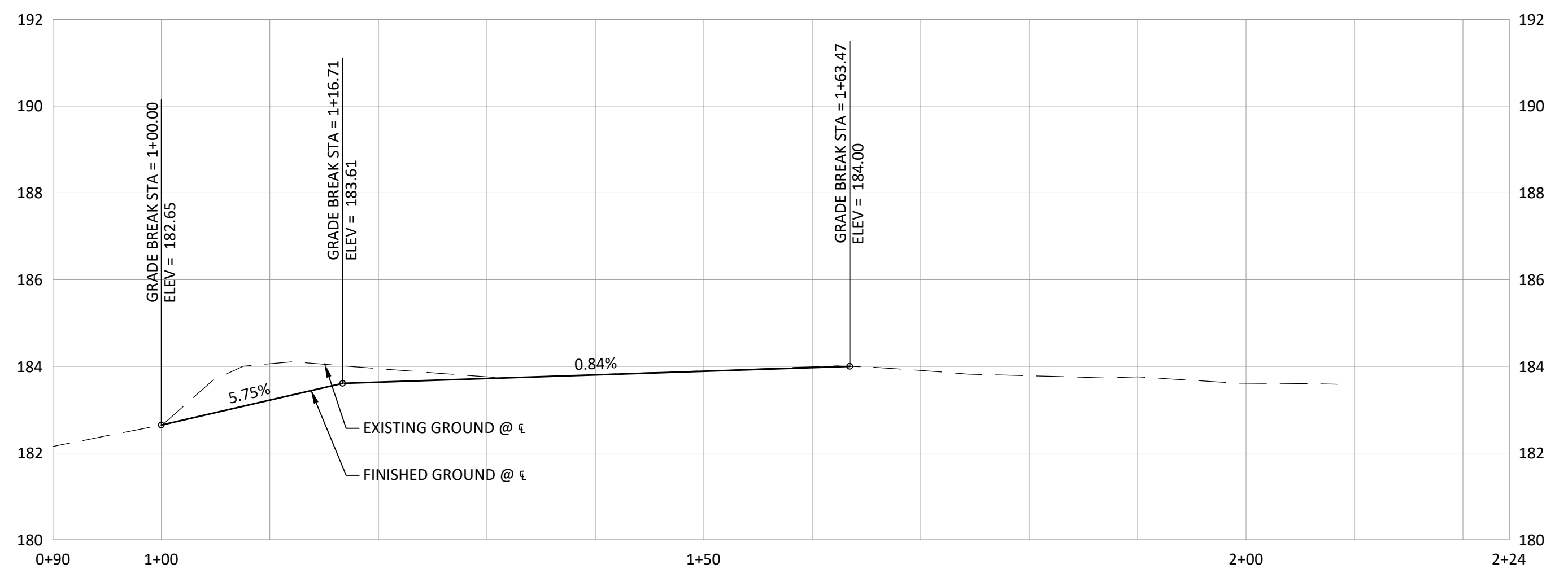
- ① CONSTRUCT GRAVEL DRIVEWAY PER SECTION DETAIL & PROFILE, THIS SHEET.
- ② PROTECT EXISTING TREE.
- ③ PROTECT EXISTING UTILITY POLE & WIRE.
- ④ REMOVE EXISTING BARRICADE.

SIGNAGE NOTES:

- ① OM4-2
18" X 18"
(MOUNT ON TSS)
- ② 18" X 24"
(MOUNT ON TSS)



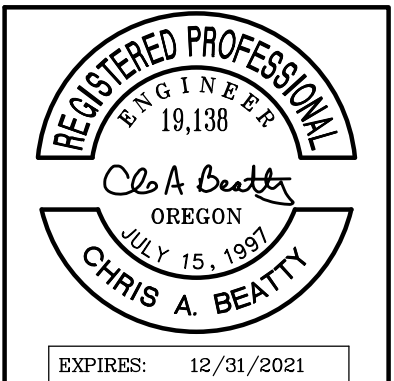
GRAVEL DRIVEWAY TYPICAL SECTION
NTS



PROPERTY 53 - CENTERLINE DRIVEWAY PROFILE
SCALE: 1" = 10' (HORIZ.)
1" = 2.5' (VERT.)

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
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DATE:	9/1/2020



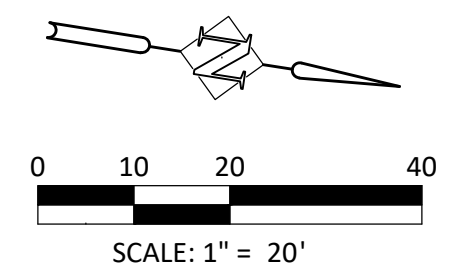
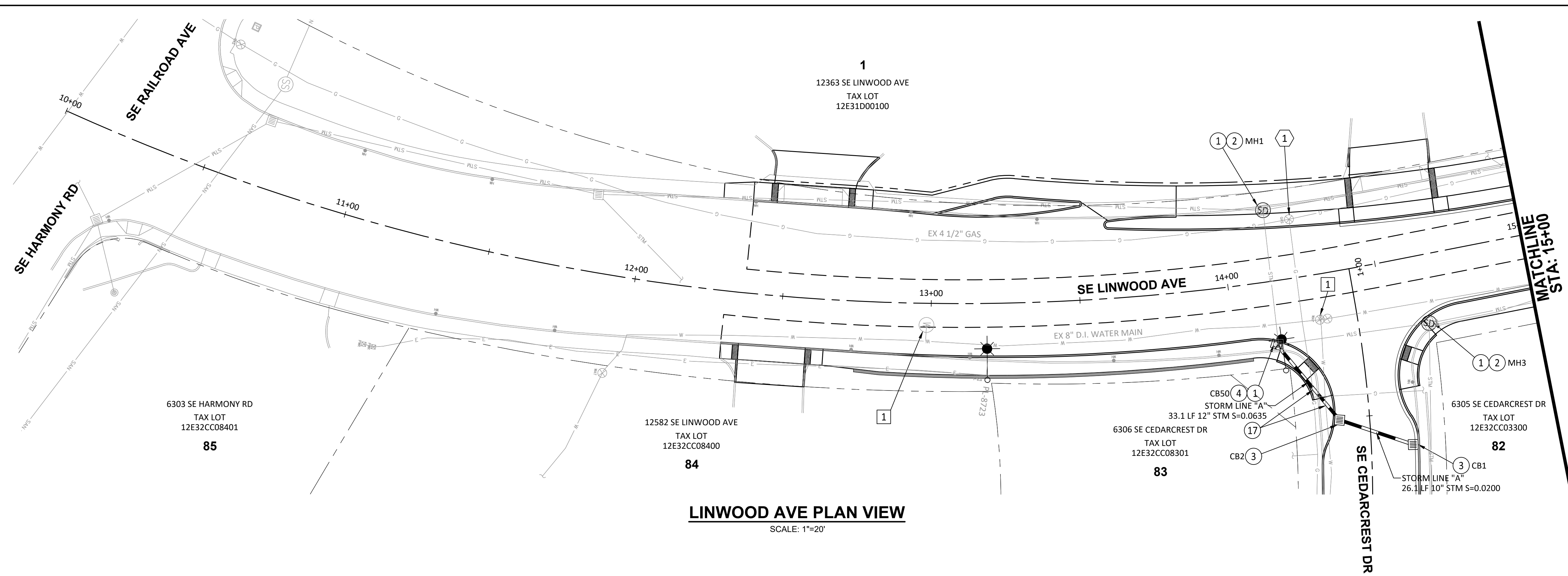
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FILE 53 - DRIVEWAY GRADING PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	7.9
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK-28-9 DRIVEWAY DETAIL.s.dwg

P:\M\K (City of Milwaukie)\M\K-28 Linwood Avenue\M\K28-DWG(S)Sheets\M\K28-8 UTILITY PLAN.dwg



WATER CONSTRUCTION NOTES:

- 1 ADJUST EXISTING WATER VALVE(S) TO FINISH GRADE.

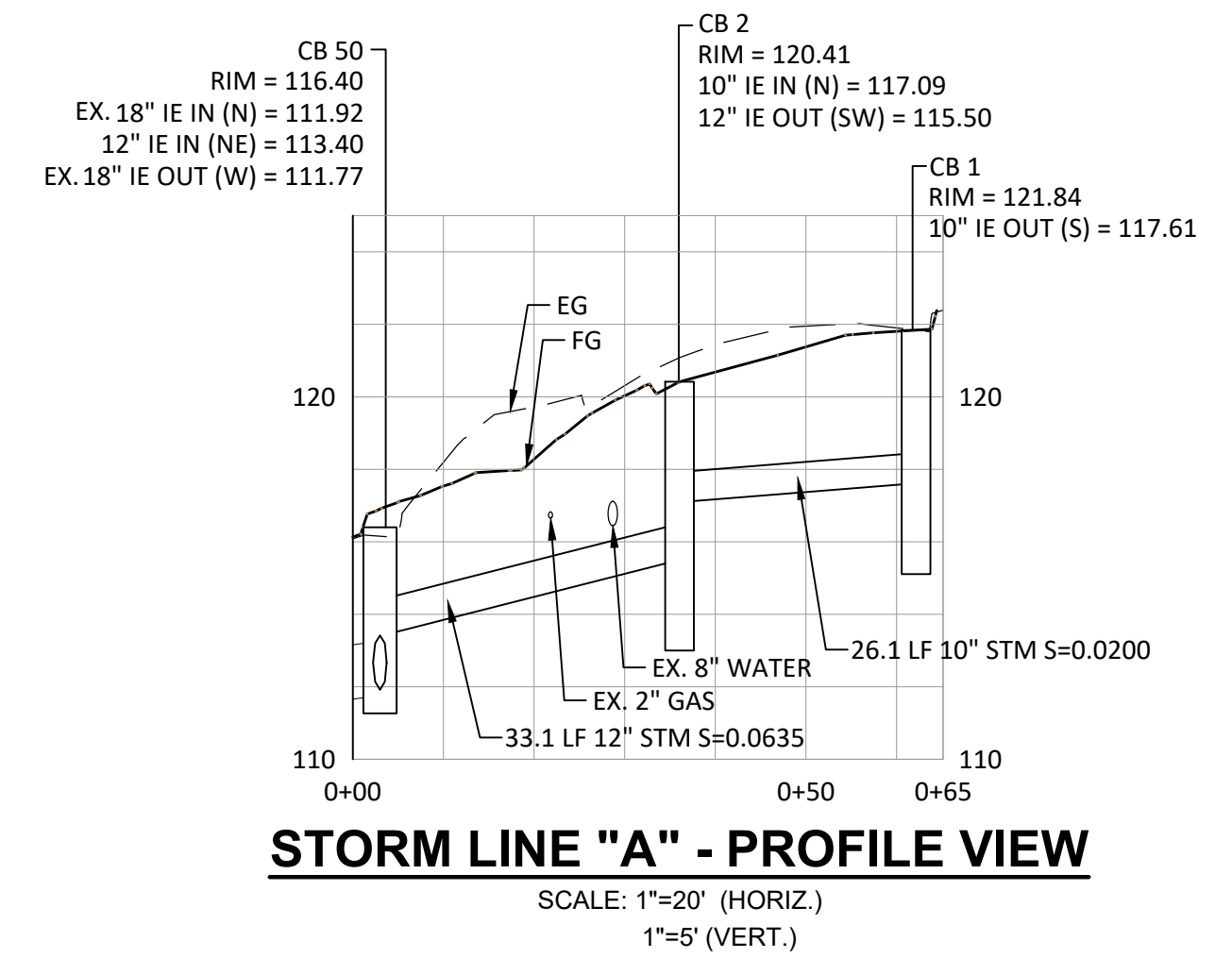
STORM CONSTRUCTION NOTES:

- 1 REMOVE EXISTING CATCH BASIN.
- 2 CONSTRUCT STANDARD STORM SEWER MANHOLE OVER EXISTING STORM LINE PER DETAIL RD335 ON SHEET C3.0.
- 3 CONSTRUCT G-2 CATCH BASIN AND LATERAL(S) PER CITY OF MILWAUKIE DETAIL 601, 602, & 605 ON SHEET C3.2.
- 4 CONSTRUCT CURB INLET CATCH BASIN AND LATERAL(S) PER DETAIL ON SHEET 3.7.
- 17 UTILITY CROSSING - PROFILE BASED ON 3' DEPTH. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY EXISTING UTILITY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITY CROSSING CONFLICTS.

GENERAL UTILITY NOTES:

- 1 ADJUST EXISTING GAS VALVE(S) TO FINISH GRADE.

LINWOOD AVE PLAN VIEW
SCALE: 1"=20'



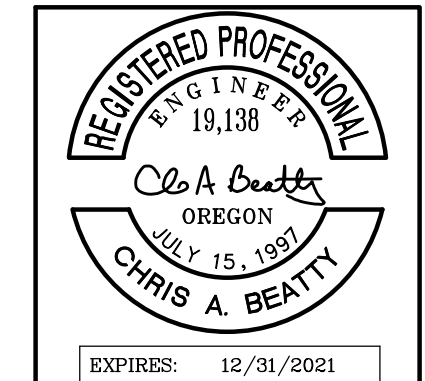
STORM LINE "A" - PROFILE VIEW
SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

STORM DRAINAGE DATA

NUMBER	DESCRIPTION	RIM/GUT ELEV.	INVERT ELEV.
CB 1	"C" STA:1+60.38, 14.07' L	121.84	10" IE Out (S): 117.61
CB 2	"C" STA:1+50.66, 10.12' R	120.41	10" IE In (N): 117.09 12" IE Out (SW): 115.50
CB 50	"L" STA:14+13.45, 21.30' R	116.40	EX. 18" IE Out (W): 111.77 EX. 18" IE In (N): 111.92 EX. 12" IE In (NE): 113.40
MH1	"L" STA:14+15.35, 24.06' L	114.57	EX. 18" IE Out (S): 110.25 EX. 18" IE In (E): 110.35 EX. 12" IE In (N): 111.92
MH3	"L" STA:14+64.08, 23.09' R	120.27	EX. 18" IE Out (S): 115.39 EX. 18" IE In (N): 116.39 EX. 12" IE In (E): 117.39

DATE	NO.	DESCRIPTION
R E V I S I O N S		

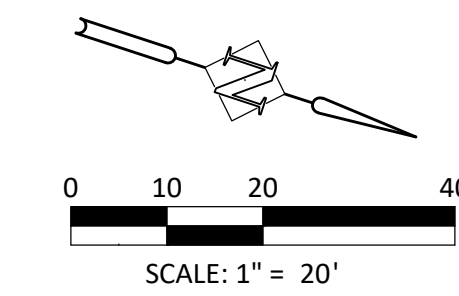
DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020



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UTILITY PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	8.0
JOB NO.	MWK-28

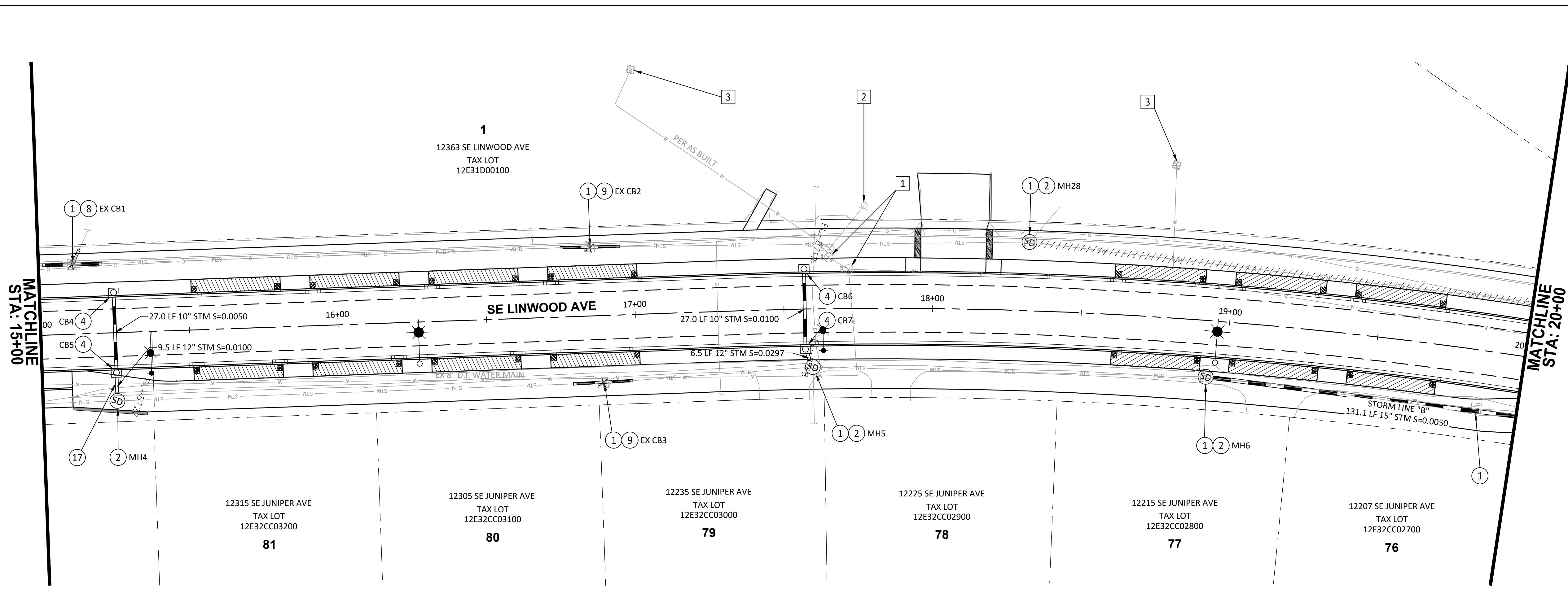


WATER CONSTRUCTION NOTES:

- 1 ADJUST EXISTING WATER VALVE(S) TO FINISH GRADE.
- 2 PROTECT EXISTING FIRE HYDRANT.
- 3 PROTECT EXISTING WATER METER.

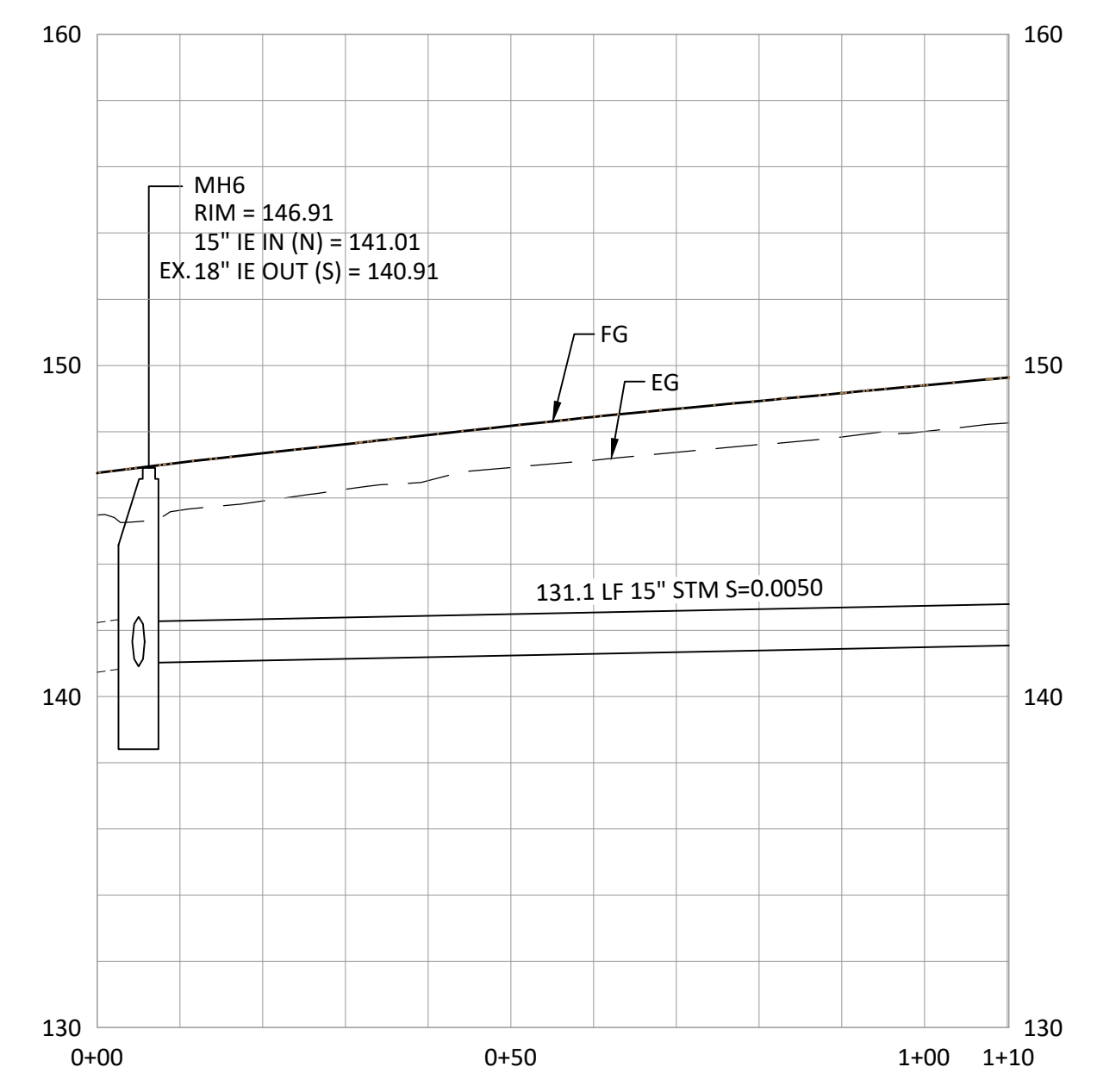
STORM CONSTRUCTION NOTES:

- 1 REMOVE EXISTING CATCH BASIN.
- 2 CONSTRUCT STANDARD STORM SEWER MANHOLE OVER EXISTING STORM LINE PER DETAIL RD335 ON SHEET C3.0.
- 4 CONSTRUCT CURB INLET CATCH BASIN AND LATERAL(S) PER DETAIL ON SHEET 3.7.
- 8 INSTALL 20 LF OF 12" PIPE. CONNECT EXISTING PIPE ENDS WITH FERINCO COUPLING. CONNECT EXISTING STORM LATERAL WITH WYE CONNECTION. SEE STORM DRAINAGE TABLE FOR INVERT INFORMATION.
- 9 INSTALL 20 LF OF 12" PIPE. CONNECT EXISTING PIPE ENDS WITH FERINCO COUPLING. SEE STORM DRAINAGE TABLE FOR INVERT INFORMATION.
- 17 UTILITY CROSSING - PROFILE BASED ON 3' DEPTH. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY EXISTING UTILITY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITY CROSSING CONFLICTS.



LINWOOD AVE PLAN VIEW
SCALE: 1"=20'

STORM DRAINAGE DATA			
NUMBER	DESCRIPTION	RIM/GUT ELEV.	INVERT ELEV.
CB 4	"L" STA:15+25.00, 13.50' L	123.99	10" IE Out (E): 121.33
CB 5	"L" STA:15+25.00, 13.50' R	124.32	10" IE In (W): 121.19 12" IE Out (E): 121.09
CB 6	"L" STA:17+57.00, 13.50' L	140.59	10" IE Out (E): 137.10
CB 7	"L" STA:17+57.00, 13.50' R	140.59	10" IE In (W): 136.83 12" IE Out (NE): 136.73
EX CB1	"L" STA:15+11.36, 23.37' L	122.19	EX. 12" IE Out (S): 119.95 EX. 12" IE In (N): 120.00 EX. 10" IE In (W): 120.10
EX CB2	"L" STA:16+85.51, 23.27' L	135.16	EX. 12" IE Out (S): 131.98 EX. 12" IE In (N): 132.11
EX CB3	"L" STA:16+88.41, 22.61' R	135.26	EX. 18" IE Out (S): 132.09 EX. 18" IE In (N): 132.29
MH4	"L" STA:15+25.00, 22.96' R	124.99	EX. 18" IE Out (S): 120.64 EX. 18" IE In (N): 120.64 12" IE In (W): 121.00
MH5	"L" STA:17+59.43, 19.57' R	141.34	EX. 18" IE Out (S): 135.76 EX. 18" IE In (N): 136.16 EX. 10" IE In (E): 138.51 12" IE In (SW): 136.54
MH6	"L" STA:18+93.33, 18.97' R	146.91	15" IE In (N): 141.01 EX. 18" IE Out (S): 140.91
MH28	"L" STA:18+31.84, 23.09' L	145.33	EX. 4" IE In (NW): 140.72 EX. 12" IE In (N): 139.87 EX. 12" IE Out (S): 139.77



STORM LINE "B" - PROFILE VIEW
SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

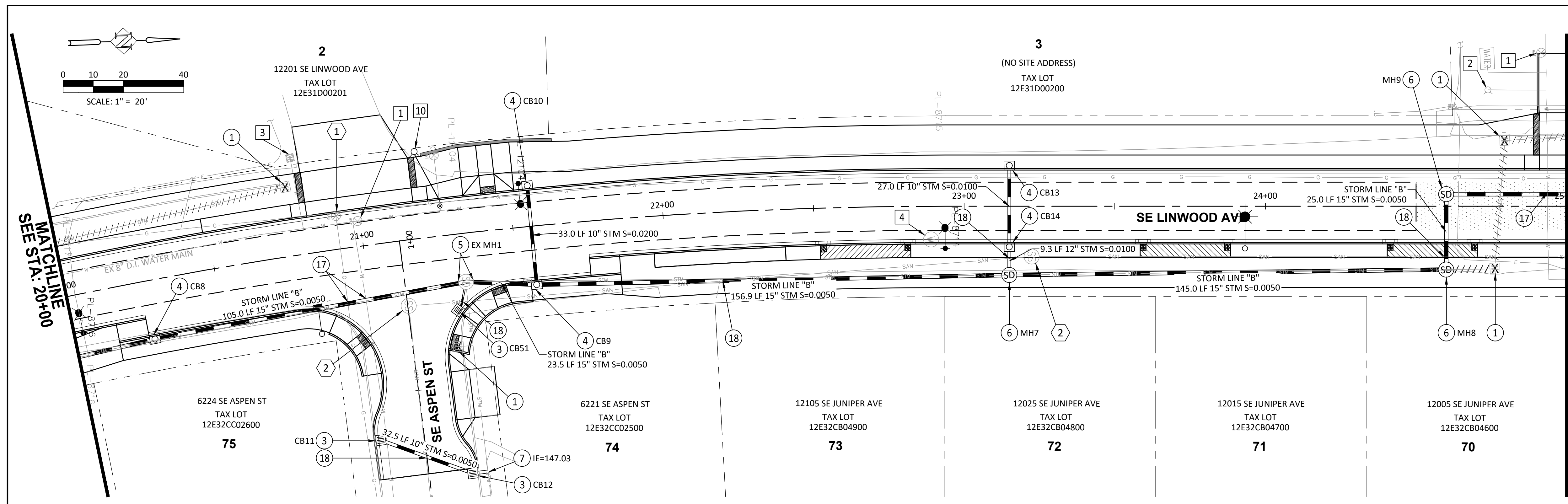


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UTILITY PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.
8.1
JOB NO.
MWK-28

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LINWOOD AVE PLAN VIEW
SCALE: 1"=20'

WATER CONSTRUCTION NOTES:

- 1 ADJUST EXISTING WATER VALVE(S) TO FINISH GRADE.
- 2 PROTECT EXISTING FIRE HYDRANT.
- 3 PROTECT EXISTING WATER METER.
- 4 REMOVE EXISTING WATER MANHOLE. FILL ABANDONED STRUCTURE WITH CDF TO SUBGRADE.
- 10 REPLACE FIRE HYDRANT PER CITY OF MILWAUKIE DETAIL 406 ON SHEET 3.3.

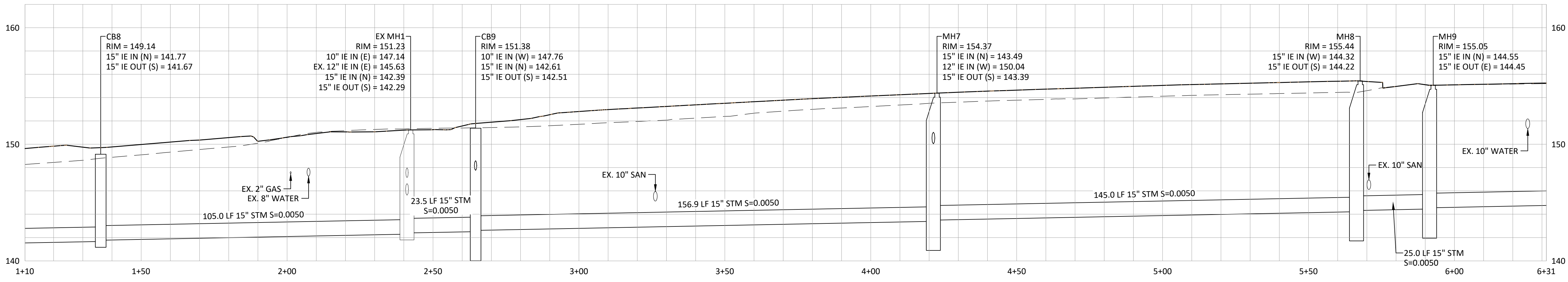
GENERAL UTILITY NOTES:

- 1 ADJUST EXISTING GAS VALVE(S) TO FINISH GRADE.
- 2 ADJUST EXISTING SANITARY MANHOLE TO FINISH GRADE.

STORM DRAINAGE DATA			
NUMBER	DESCRIPTION	RIM/GUT ELEV.	INVERT ELEV.
CB8	"L" STA:20+26.31, 19.50' R	149.14	15" IE Out (S): 141.67 15" IE In (N): 141.77
CB9	"L" STA:21+56.08, 19.50' R	151.38	15" IE Out (S): 142.51 10" IE In (W): 147.76 15" IE In (N): 142.61
CB10	"L" STA:21+56.25, 13.50' L	151.91	10" IE Out (E): 148.42
CB11	"A" STA:1+64.79, 14.52' R	150.99	10" IE Out (N): 147.34
CB12	"A" STA:1+79.60, 14.43' L	151.05	10" IE In (S): 147.18 12" IE Out (N): 147.08
CB13	"L" STA:23+15.00, 13.50' L	153.84	10" IE Out (E): 150.50
CB14	"L" STA:23+15.00, 13.50' R	153.72	10" IE In (W): 150.23 12" IE Out (E): 150.13
CB51	"A" STA:1+25.32, 16.44' L	150.74	10" IE Out (W): 147.24
EX MH1	"L" STA:21+32.55, 16.12' R	151.23	15" IE Out (S): 142.29 10" IE In (E): 147.14 EX. 12" IE In (E): 145.63 15" IE In (N): 142.39
MH7	"L" STA:23+15.01, 22.83' R	154.37	15" IE Out (S): 143.39 15" IE In (N): 143.49 12" IE In (W): 150.04
MH8	"L" STA:24+60.00, 21.02' R	155.44	15" IE Out (S): 144.22 15" IE In (W): 144.32
MH9	"L" STA:24+60.00, 4.00' L	155.05	15" IE Out (E): 144.45 15" IE In (N): 144.55

STORM CONSTRUCTION NOTES:

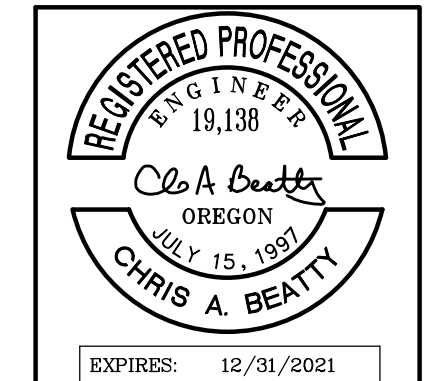
- 1 REMOVE EXISTING CATCH BASIN.
- 3 CONSTRUCT G-2 CATCH BASIN AND LATERAL(S) PER CITY OF MILWAUKIE DETAIL 601, 602, & 605 ON SHEET C3.2.
- 4 CONSTRUCT CURB INLET CATCH BASIN AND LATERAL(S) PER DETAIL ON SHEET 3.7.
- 5 CONNECT NEW STORM LINE TO EXISTING MANHOLE. ADJUST RIM TO FINISH GRADE.
- 6 CONSTRUCT STANDARD STORM SEWER MANHOLE PER DETAIL RD335 ON SHEET C3.0.
- 7 CONNECT NEW STORM LINE TO EXISTING STORM.
- 17 UTILITY CROSSING - PROFILE BASED ON 3' DEPTH. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY EXISTING UTILITY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITY CROSSING CONFLICTS.
- 18 SANITARY CROSSING - SEE PROFILE FOR SIZE & ELEVATION. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY SANITARY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SANITARY CROSSING CONFLICTS.



STORM LINE "B" - PROFILE VIEW
SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		

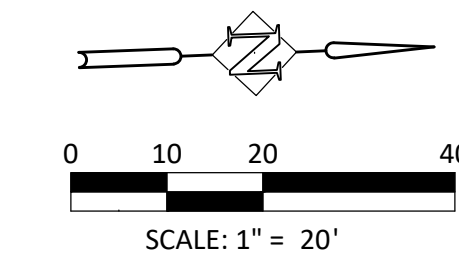


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UTILITY PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	8.2
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK-28-DWG(Sheets)\MWK-28-0 UTILITY PLAN.dwg



WATER CONSTRUCTION NOTES:

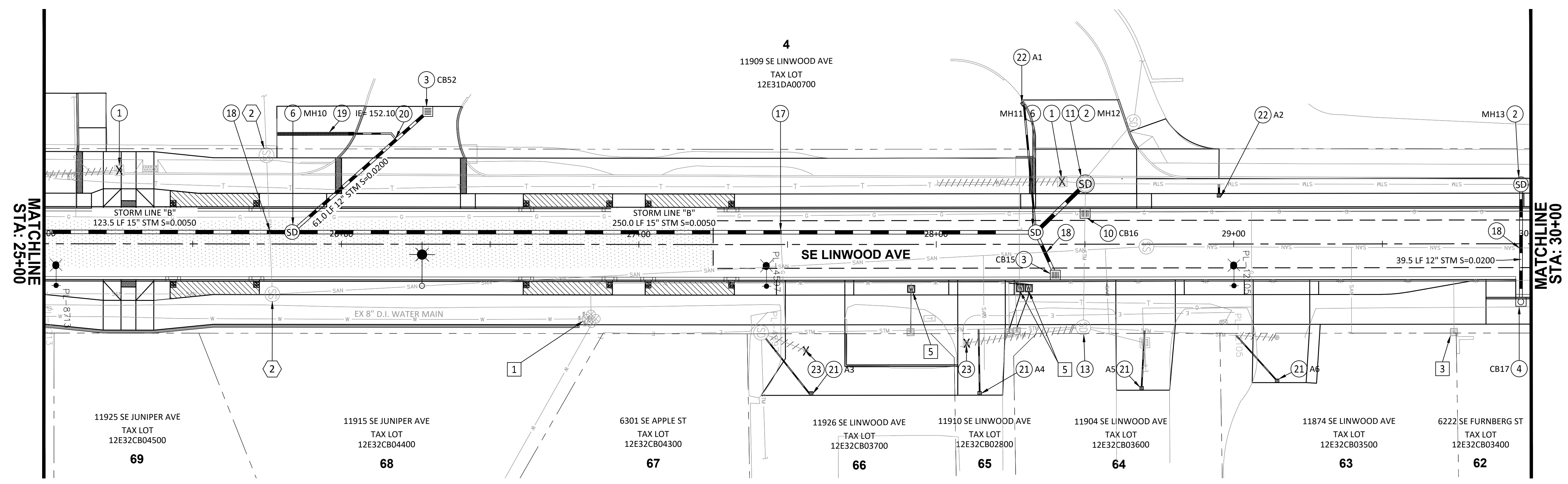
- 1 ADJUST EXISTING WATER VALVE(S) TO FINISH GRADE.
- 3 PROTECT EXISTING WATER METER.
- 5 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED BEHIND THE PROPOSED CURB IN THE PLANTER STRIP. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.

STORM CONSTRUCTION NOTES:

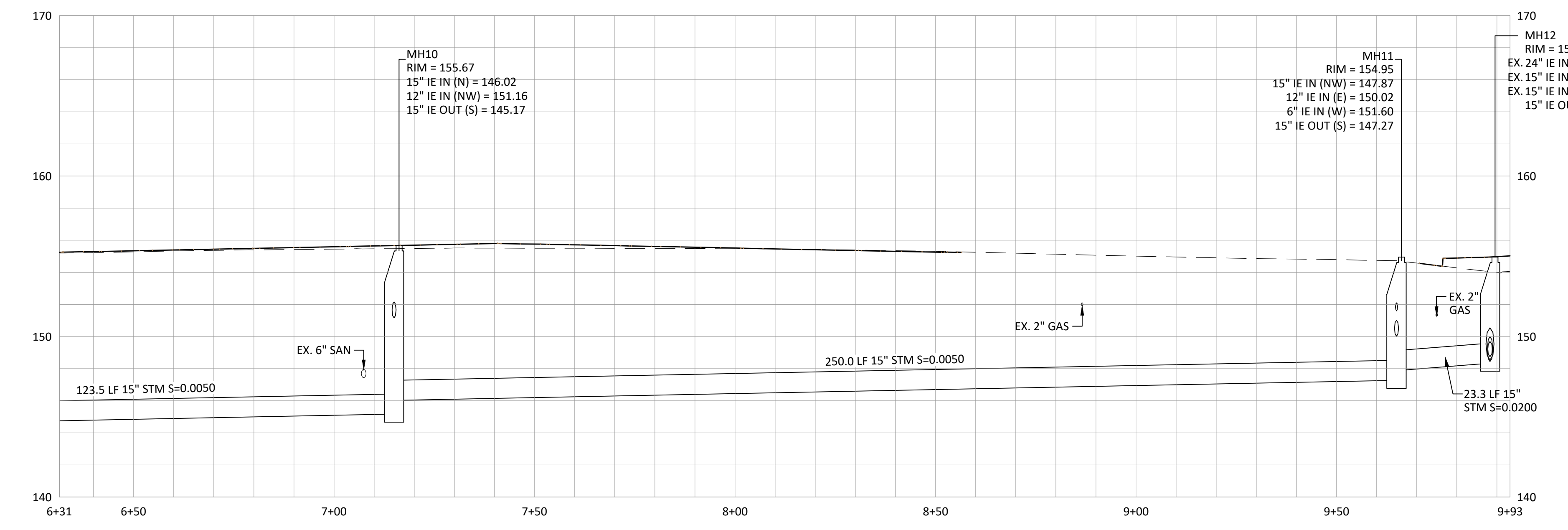
- 1 REMOVE EXISTING CATCH BASIN.
- 2 CONSTRUCT STANDARD STORM SEWER MANHOLE OVER EXISTING STORM LINE PER DETAIL RD335 ON SHEET C3.0.
- 3 CONSTRUCT G-2 CATCH BASIN AND LATERAL(S) PER CITY OF MILWAUKIE DETAIL 601, 602, & 605 ON SHEET C3.2.
- 4 CONSTRUCT CURB INLET CATCH BASIN AND LATERAL(S) PER DETAIL ON SHEET 3.7.
- 6 CONSTRUCT STANDARD STORM SEWER MANHOLE PER DETAIL RD335 ON SHEET C3.0.
- 10 CONSTRUCT G-2 CATCH BASIN OVER EXISTING STORM LINE PER CITY OF MILWAUKIE DETAIL 601, 602, & 605 ON SHEET 3.2.
- 11 REMOVE EXISTING MANHOLE.
- 13 PROTECT EXISTING MANHOLE. ADJUST RIM TO FINISH GRADE.
- 17 UTILITY CROSSING - PROFILE BASED ON 3' DEPTH. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY EXISTING UTILITY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITY CROSSING CONFLICTS.
- 18 SANITARY CROSSING - SEE PROFILE FOR SIZE & ELEVATION. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY SANITARY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SANITARY CROSSING CONFLICTS.
- 19 CONSTRUCT TRENCH DRAIN. IE PIPE OUTFALL = 152.24.
- 20 CONNECT TO PROPOSED STORM LATERAL WITH WYE CONNECTION.
- 21 CONSTRUCT TRAPPED AREA DRAIN WITH DUCTILE IRON GRATE AND LATERAL(S). SEE DETAIL ON SHEET 3.7.
- 22 CONSTRUCT AREA DRAIN CATCH BASIN AND LATERAL(S). SEE DETAIL ON SHEET 3.7.
- 23 REMOVE EXISTING AREA DRAIN AND LATERAL.

GENERAL UTILITY NOTES:

- 2 ADJUST EXISTING SANITARY MANHOLE TO FINISH GRADE.



LINWOOD AVE PLAN VIEW
SCALE: 1"=20'



STORM LINE "B" - PROFILE VIEW
SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

STORM DRAINAGE DATA			
NUMBER	DESCRIPTION	RIM/GUT ELEV.	INVERT ELEV.
A1	"L" STA:28+29.23, 47.23' L	152.84	6" IE Out (E): 151.82
A2	"L" STA:28+95.07, 16.37' L	154.62	6" IE Out (W): 151.62
A3	"L" STA:27+57.89, 50.08' R	154.65	6" IE Out (SW): 152.00
A4	"L" STA:28+14.54, 50.07' R	154.40	6" IE Out (W): 151.40
A5	"L" STA:28+69.01, 48.47' R	154.71	6" IE Out (W): 151.71
A6	"L" STA:29+14.56, 45.97' R	154.74	6" IE Out (SW): 151.74
CB15	"L" STA:28+40.00, 10.36' R	154.49	12" IE Out (W): 150.49
CB16	"L" STA:28+50.06, 10.36' L	154.41	EX. 15" IE Out (W): 148.68 EX. 15" IE In (E): 148.68
CB17	"L" STA:29+96.56, 19.50' R	155.47	12" IE Out (W): 151.36
CB52	"L" STA:26+29.00, 44.62' L	155.38	12" IE Out (SE): 152.38
MH10	"L" STA:25+83.47, 4.00' L	155.67	15" IE Out (S): 145.17 15" IE In (N): 146.02 12" IE In (NW): 151.16
MH11	"L" STA:28+33.48, 4.01' L	154.95	15" IE Out (S): 147.27 15" IE In (NW): 147.87 12" IE In (E): 150.02 6" IE In (W): 151.60
MH12	"L" STA:28+50.19, 20.27' L	154.95	15" IE Out (SE): 148.34 EX. 24" IE In (N): 148.54 EX. 15" IE In (NW): 148.44 EX. 15" IE In (E): 148.74
MH13	"L" STA:29+96.65, 19.95' L	155.41	EX. 24" IE Out (S): 148.70 EX. 24" IE In (N): 148.70 12" IE In (E): 150.57

P:\M\K (City of Milwaukie)\M\K-28 (Linwood Avenue)\M\K-28-DWG(Sheets)\M\K-28-8 UTILITY PLAN.dwg

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		

REGISTERED PROFESSIONAL
ENGINEER
19,138
Chris A. Beatty
OREGON
JULY 15, 1991
CHRIS A. BEATTY

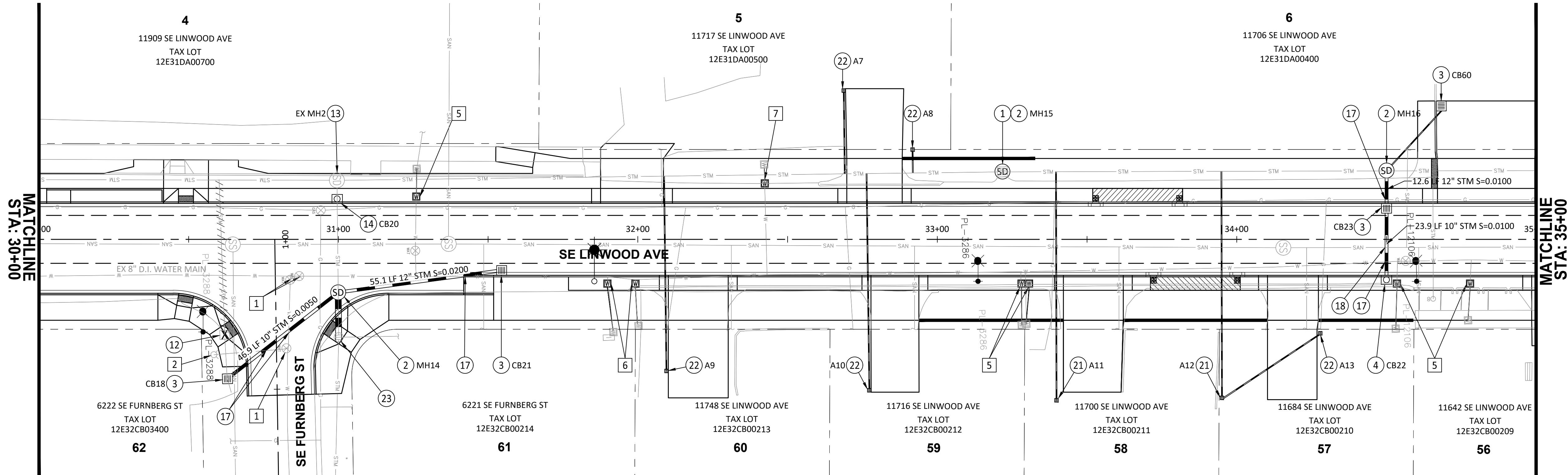
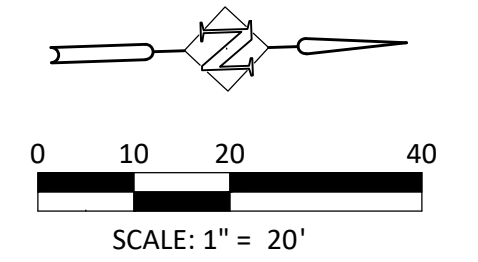
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UTILITY PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.
8.3

JOB NO.
MWK-28



LINWOOD AVE PLAN VIEW
SCALE: 1"=20'

WATER CONSTRUCTION NOTES:

- 1 ADJUST EXISTING WATER VALVE(S) TO FINISH GRADE.
- 2 PROTECT EXISTING FIRE HYDRANT.
- 5 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED BEHIND THE PROPOSED CURB IN THE PLANTER STRIP. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 6 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED BEHIND THE PROPOSED CURB IN THE CONCRETE BUS PAD. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 7 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED IN THE MIX-USE PATH. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.

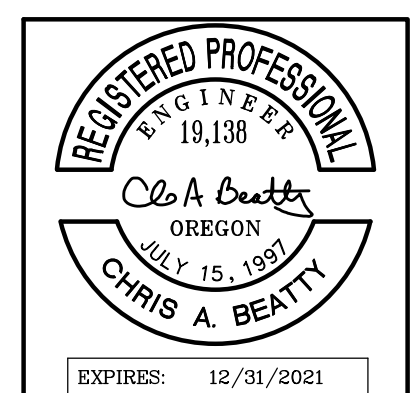
STORM CONSTRUCTION NOTES:

- 1 REMOVE EXISTING CATCH BASIN.
- 2 CONSTRUCT STANDARD STORM SEWER MANHOLE OVER EXISTING STORM LINE PER DETAIL RD335 ON SHEET C3.0.
- 3 CONSTRUCT G-2 CATCH BASIN AND LATERAL(S) PER CITY OF MILWAUKIE DETAIL 601, 602, & 605 ON SHEET C3.2.
- 4 CONSTRUCT CURB INLET CATCH BASIN AND LATERAL(S) PER DETAIL ON SHEET 3.7.
- 12 REMOVE EXISTING DITCH INLET.
- 13 PROTECT EXISTING MANHOLE. ADJUST RIM TO FINISH GRADE.
- 14 CONSTRUCT CURB INLET CATCH BASIN OVER EXISTING STORM LINE PER DETAIL ON SHEET 3.7.
- 17 UTILITY CROSSING - PROFILE BASED ON 3' DEPTH. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY EXISTING UTILITY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITY CROSSING CONFLICTS.
- 18 SANITARY CROSSING - SEE PROFILE FOR SIZE & ELEVATION. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY SANITARY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SANITARY CROSSING CONFLICTS.
- 21 CONSTRUCT TRAPPED AREA DRAIN WITH DUCTILE IRON GRATE AND LATERAL(S). SEE DETAIL ON SHEET 3.7.
- 22 CONSTRUCT AREA DRAIN CATCH BASIN AND LATERAL(S). SEE DETAIL ON SHEET 3.7.
- 23 REMOVE EXISTING AREA DRAIN AND LATERAL.

STORM DRAINAGE DATA			
NUMBER	DESCRIPTION	RIM/GUT ELEV.	INVERT ELEV.
A7	"L" STA:32+68.76, 49.66' L	159.66	6" IE Out (E): 157.00
A8	"L" STA:32+91.75, 29.95' L	159.56	6" IE Out (E): 156.50
A9	"L" STA:32+09.57, 43.90' R	157.13	6" IE Out (W): 153.72
A10	"L" STA:32+77.31, 50.38' R	156.84	6" IE Out (W): 155.68
A11	"L" STA:33+39.81, 53.70' R	160.43	6" IE Out (W): 159.22
A12	"L" STA:33+95.07, 52.89' R	165.09	6" IE Out (W): 162.10 6" IE In (NW): 162.20
A13	"L" STA:???, ???' ???	332.78	6" IE Out (SE): 163.50
CB18	"F" STA:1+46.25, 16.54' R	153.67	10" IE Out (NW): 149.53
CB20	"L" STA:30+99.60, 13.50' L	155.96	EX. 24" IE In (E): 148.93 EX. 24" IE Out (W): 148.93
CB21	"L" STA:31+54.51, 10.36' R	156.71	12" IE Out (S): 152.71
CB22	"L" STA:34+50.00, 13.50' R	169.26	10" IE Out (W): 165.78
CB23	"L" STA:34+50.04, 10.36' L	169.41	10" IE In (E): 165.54 12" IE Out (W): 165.44
CB60	"L" STA:34+68.32, 44.53' L	170.62	6" IE Out (SE): 167.00
EX MH2	"L" STA:30+99.51, 19.71' L	155.98	EX. 24" IE Out (S): 148.82 EX. 12" IE In (N): 150.07 EX. 24" IE In (E): 148.87
MH14	"LI STA:30+99.94, 17.71' R	155.54	10" IE In (SE): 149.30 12" IE In (N): 151.61 24" IE In (E): 149.20 EX. 24" IE Out (W): 149.20
MH15	"L" STA:33+21.80, 22.53' L	162.36	EX. 12" IE Out (S): 156.84 EX. 12" IE In (N): 158.14
MH16	"L" STA:34+50.06, 22.95' L	170.01	EX. 12" IE Out (S): 164.84 EX. 12" IE In (N): 164.84 12" IE In (E): 165.31 6" IE In (NW): 166.86

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

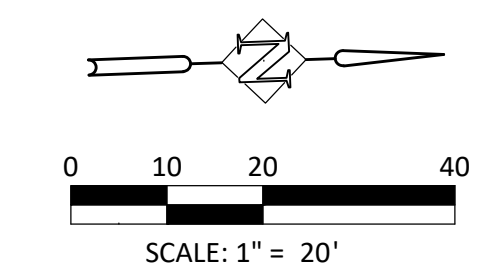


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UTILITY PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	8.4
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK-28-DWG(Sheets)\MWK-28-8-UTILITY PLAN.dwg



WATER CONSTRUCTION NOTES:

- 1 ADJUST EXISTING WATER VALVE(S) TO FINISH GRADE.
- 3 PROTECT EXISTING WATER METER.
- 5 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED BEHIND THE PROPOSED CURB IN THE PLANTER STRIP. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 8 RELOCATE EXISTING FIRE HYDRANT 1' CLEAR OF PROPOSED BACK OF WALK. SEE CITY OF MILWAUKIE DETAIL 406 ON SHEET 3.3.

STORM CONSTRUCTION NOTES:

- 1 REMOVE EXISTING CATCH BASIN.
- 2 CONSTRUCT STANDARD STORM SEWER MANHOLE OVER EXISTING STORM LINE PER DETAIL RD335 ON SHEET C3.0.
- 3 CONSTRUCT G-2 CATCH BASIN AND LATERAL(S) PER CITY OF MILWAUKIE DETAIL 601, 602, & 605 ON SHEET C3.2.
- 4 CONSTRUCT CURB INLET CATCH BASIN AND LATERAL(S) PER DETAIL ON SHEET 3.7.
- 15 REMOVE EXISTING MANHOLE WITH GRATED LID.
- 17 UTILITY CROSSING - PROFILE BASED ON 3' DEPTH. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY EXISTING UTILITY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITY CROSSING CONFLICTS.
- 21 CONSTRUCT TRAPPED AREA DRAIN WITH DUCTILE IRON GRATE AND LATERAL(S). SEE DETAIL ON SHEET 3.7.
- 22 CONSTRUCT AREA DRAIN CATCH BASIN AND LATERAL(S). SEE DETAIL ON SHEET 3.7.
- 25 PROTECT EXISTING AREA DRAIN.

LINWOOD AVE PLAN VIEW
SCALE: 1"=20'

STORM DRAINAGE DATA			
NUMBER	DESCRIPTION	RIM/GUT ELEV.	INVERT ELEV.
A14	"L" STA:37+95.99, 39.97' L	183.32	6" IE Out (E): 182.00
A15	"L" STA:38+02.27, 29.36' R	182.09	6" IE Out (W): 179.36
A16	"L" STA:38+43.39, 56.37' R	182.82	6" IE Out (W): 180.82
A17	"L" STA:39+83.91, 39.12' R	186.53	6" IE Out (W): 182.53
CB24	"L" STA:38+50.00, 13.50' R	183.99	12" IE Out (W): 180.50 6" IE In (E): 180.60
CB25	"L" STA:38+50.00, 10.36' L	183.85	12" IE In (E): 180.26 12" IE Out (W): 180.16
MH17	"L" STA:36+77.83, 23.85' L	181.90	EX. 12" IE Out (S): 176.82 EX. 12" IE In (N): 176.97
MH18	"L" STA:38+50.00, 23.48' L	184.43	EX. 12" IE Out (S): 179.92 EX. 12" IE In (N): 179.92 12" IE In (E): 180.03

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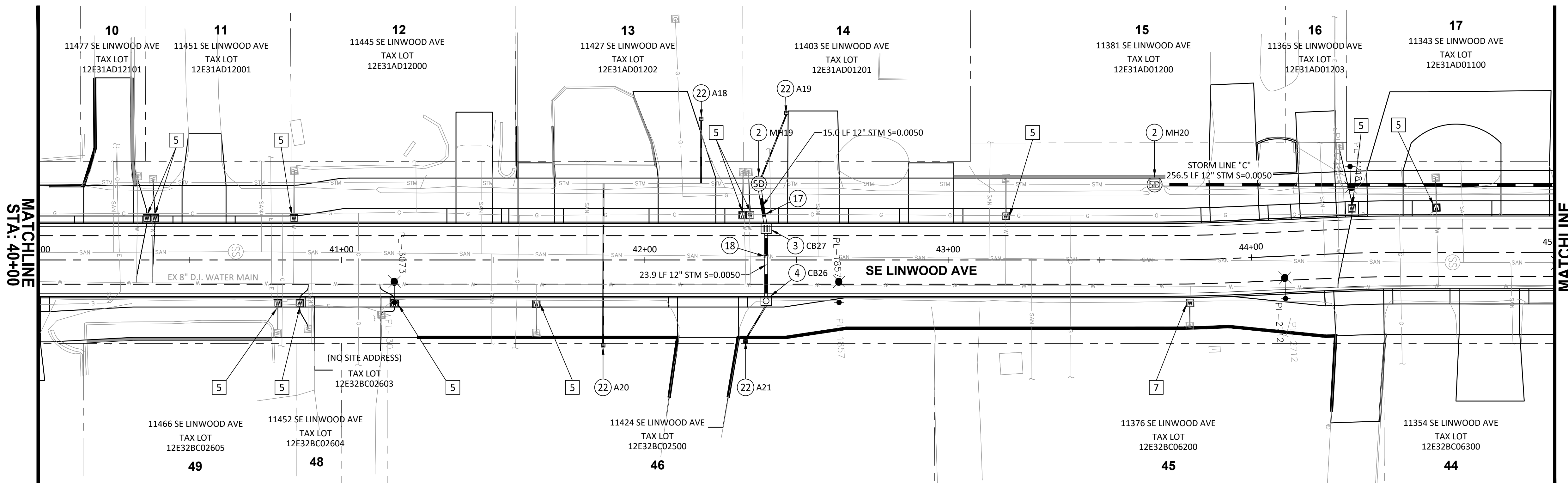
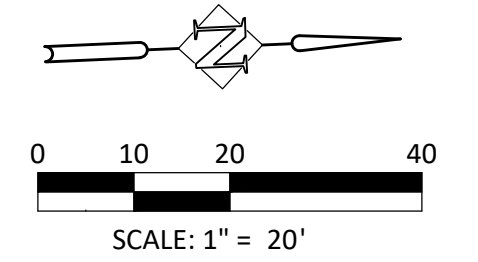
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UTILITY PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	8.5
JOB NO.	MWK-28



LINWOOD AVE PLAN VIEW
SCALE: 1"=20'

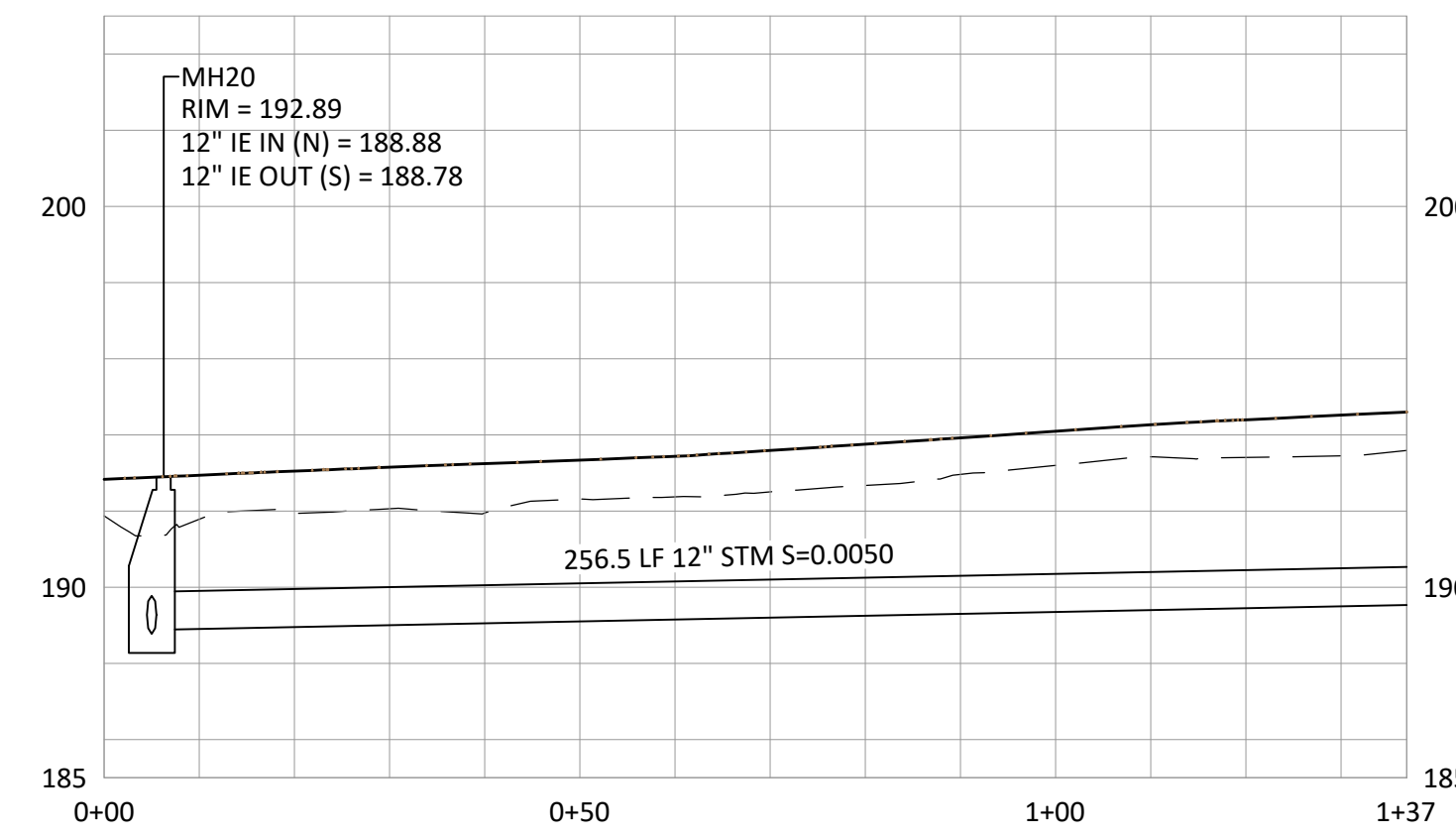
WATER CONSTRUCTION NOTES:

- 5 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED BEHIND THE PROPOSED CURB IN THE PLANTER STRIP. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 7 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED IN THE MIX-USE PATH. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.

STORM CONSTRUCTION NOTES:

- 2 CONSTRUCT STANDARD STORM SEWER MANHOLE OVER EXISTING STORM LINE PER DETAIL RD335 ON SHEET C3.0.
- 3 CONSTRUCT G-2 CATCH BASIN AND LATERAL(S) PER CITY OF MILWAUKIE DETAIL 601, 602, & 605 ON SHEET C3.2.
- 4 CONSTRUCT CURB INLET CATCH BASIN AND LATERAL(S) PER DETAIL ON SHEET 3.7.
- 17 UTILITY CROSSING - PROFILE BASED ON 3' DEPTH. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY EXISTING UTILITY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITY CROSSING CONFLICTS.
- 18 SANITARY CROSSING - SEE PROFILE FOR SIZE & ELEVATION. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY SANITARY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SANITARY CROSSING CONFLICTS.
- 22 CONSTRUCT AREA DRAIN CATCH BASIN AND LATERAL(S). SEE DETAIL ON SHEET 3.7.

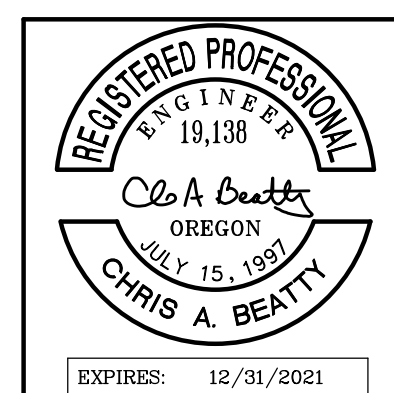
STORM DRAINAGE DATA			
NUMBER	DESCRIPTION	RIM/GUT ELEV.	INVERT ELEV.
A18	"L" STA:42+18.58, 46.51' L	189.22	6" IE Out (E): 186.50
A19	"L" STA:42+46.66, 48.48' L	190.43	6" IE Out (SE): 187.00
A20	"L" STA:41+86.27, 28.12' R	188.46	6" IE Out (W): 185.94
A21	"L" STA:42+33.18, 26.88' R	190.41	6" IE Out (NW): 187.23
CB26	"L" STA:42+40.00, 13.50' R	190.26	12" IE In (E): 186.86 12" IE In (SE): 187.08
CB27	"L" STA:42+40.00, 10.36' L	190.55	12" IE In (E): 186.86 12" IE Out (W): 186.76
MH19	"L" STA:42+37.61, 25.15' L	191.14	EX. 12" IE Out (S): 186.55 EX. 12" IE In (N): 186.55 12" IE In (E): 186.69 6" IE In (NW): 186.75
MH20	"L" STA:43+68.05, 24.87' L	192.89	EX. 12" IE Out (S): 188.78 EX. 12" IE In (N): 188.88



STORM LINE "C" - PROFILE VIEW
SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

DESIGNED:	CAB
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DATE:	12/4/2020

DATE	NO.	DESCRIPTION
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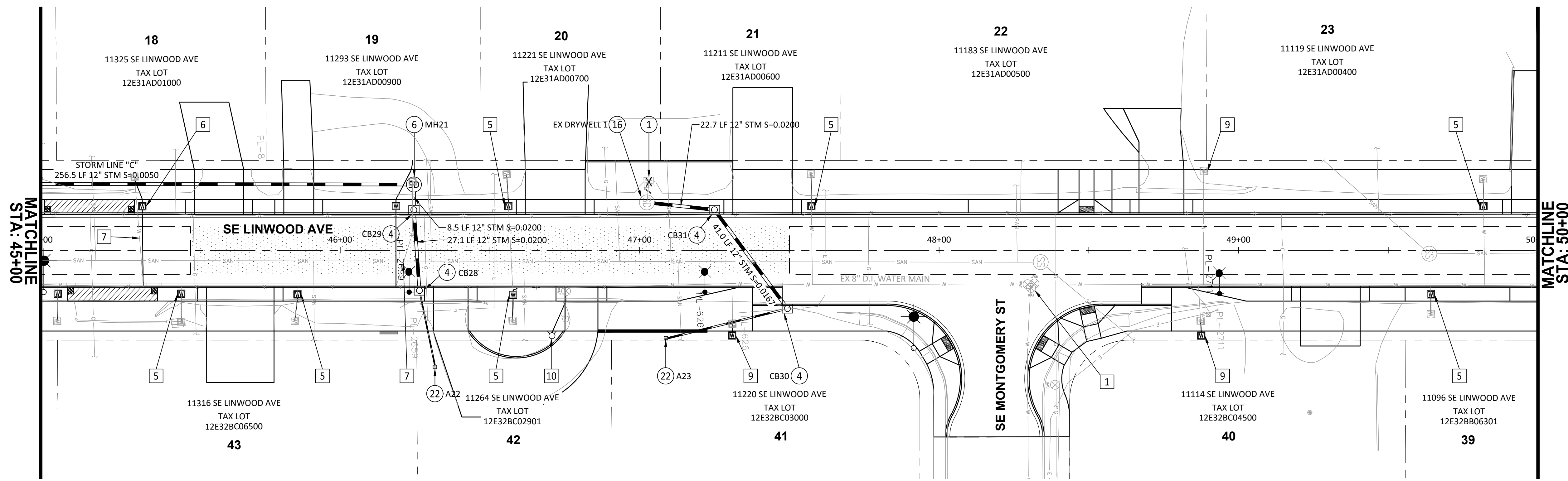
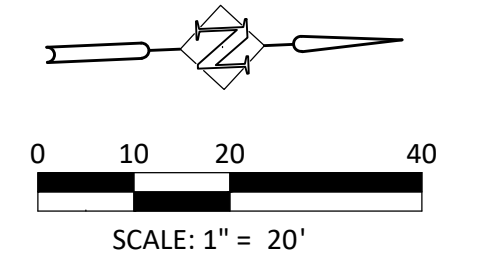


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UTILITY PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	8.6
JOB NO.	MWK-28

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LINWOOD AVE PLAN VIEW
SCALE: 1"=20'

WATER CONSTRUCTION NOTES:

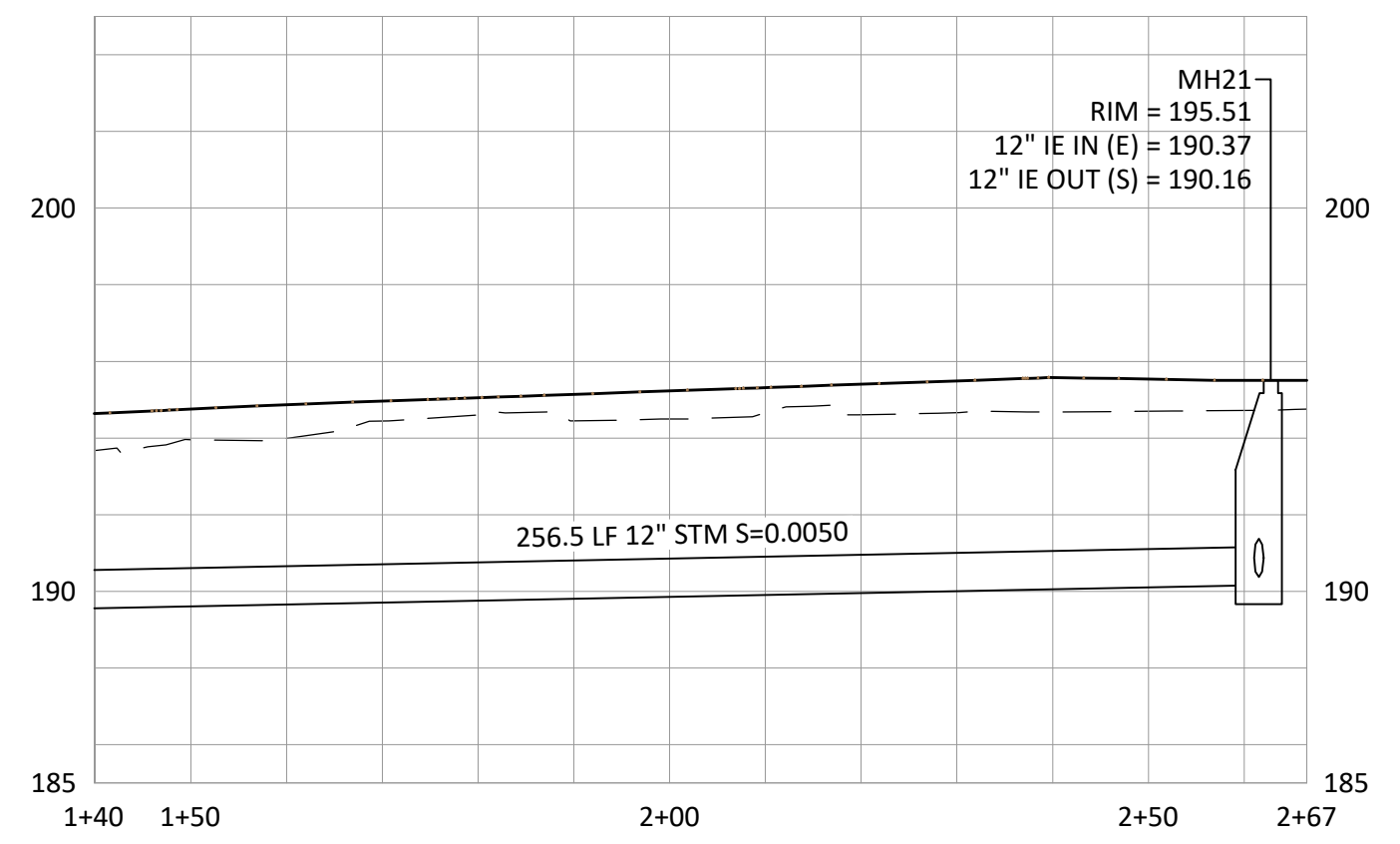
- 1 ADJUST EXISTING WATER VALVE(S) TO FINISH GRADE.
- 5 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED BEHIND THE PROPOSED CURB IN THE PLANTER STRIP. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 6 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED BEHIND THE PROPOSED CURB IN THE CONCRETE BUS PAD. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 7 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED IN THE MIX-USE PATH. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 9 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED BEHIND THE PROPOSED BACK OF WALK. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 10 REPLACE FIRE HYDRANT PER CITY OF MILWAUKIE DETAIL 406 ON SHEET 3.3.

STORM CONSTRUCTION NOTES:

- 1 REMOVE EXISTING CATCH BASIN.
- 4 CONSTRUCT CURB INLET CATCH BASIN AND LATERAL(S) PER DETAIL ON SHEET 3.7.
- 6 CONSTRUCT STANDARD STORM SEWER MANHOLE PER DETAIL RD335 ON SHEET C3.0.
- 16 PROTECT EXISTING DRYWELL. ADJUST RIM TO FINISH GRADE.
- 22 CONSTRUCT AREA DRAIN CATCH BASIN AND LATERAL(S). SEE DETAIL ON SHEET 3.7.

STORM DRAINAGE DATA

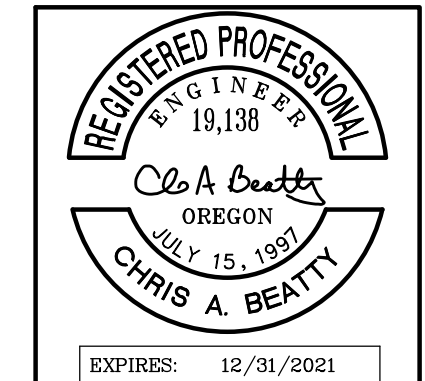
NUMBER	DESCRIPTION	RIM/GUT ELEV.	INVERT ELEV.
A22	"L" STA:46+31.62, 38.99' R	193.87	6" IE Out (W): 191.41
A23	"L" STA:47+08.79, 29.37' R	194.22	6" IE Out (N): 191.82
CB28	"L" STA:46+26.46, 13.50' R	194.67	12" IE Out (W): 191.18 6" IE In (E): 191.28
CB29	"L" STA:46+24.62, 13.50' L	194.87	12" IE In (E): 190.64 12" IE Out (W): 190.54
CB30	"L" STA:47+49.36, 19.50' R	194.98	12" IE Out (SW): 191.68 6" IE In (S): 191.68
CB31	"L" STA:47+25.00, 13.50' L	195.05	12" IE In (NE): 190.99 12" IE Out (S): 190.89
EX DRYWELL 1	"L" STA:47+02.44, 15.98' L	195.69	12" IE In (N): 190.44
MH21	"L" STA:46+24.63, 21.96' L	195.51	12" IE Out (S): 190.16 12" IE In (E): 190.37



STORM LINE "C" - PROFILE VIEW
SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

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DATE:	12/4/2020

DATE	NO.	DESCRIPTION
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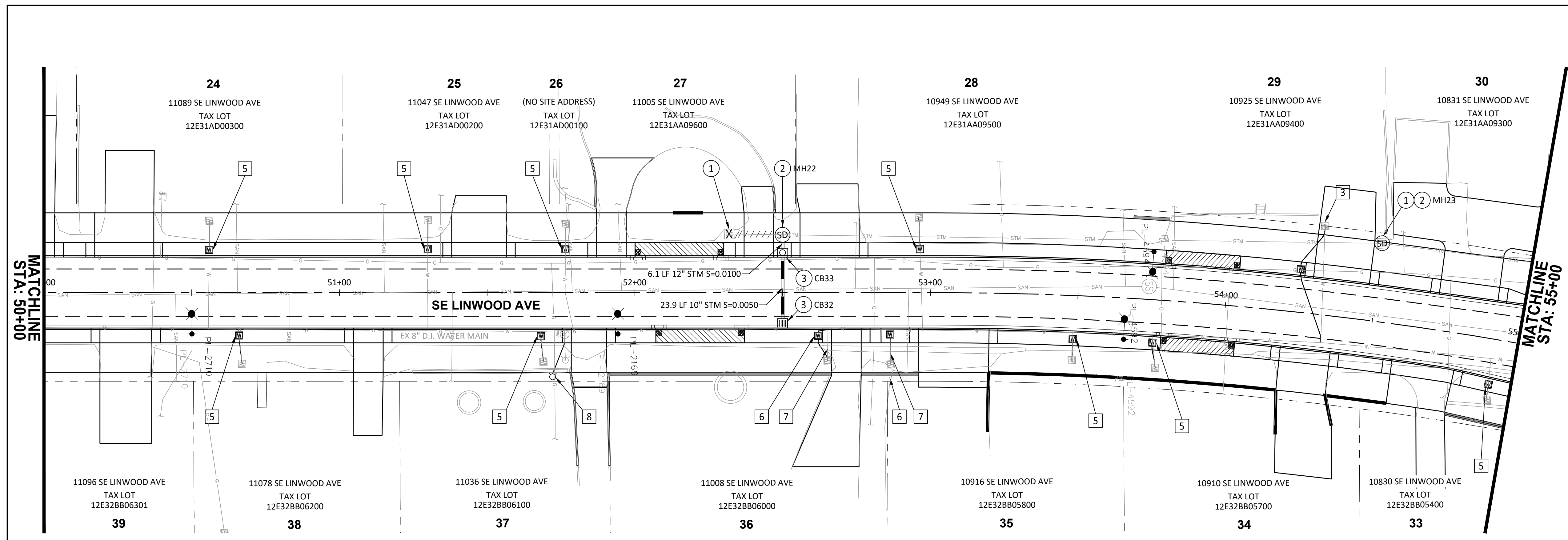
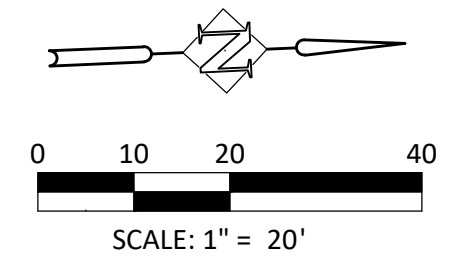


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UTILITY PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	8.7
JOB NO.	MWK-28

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WATER CONSTRUCTION NOTES:

- 3 PROTECT EXISTING WATER METER.
- 5 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED BEHIND THE PROPOSED CURB IN THE PLANTER STRIP. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 6 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED BEHIND THE PROPOSED CURB IN THE CONCRETE BUS PAD. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 7 RELOCATE EXISTING WATER METER BY FREEZING THE SERVICE LINE AND ADDING COPPER. THE WATER METER SHALL BE RELOCATED IN THE MIX-USE PATH. USE EXISTING METER AND BOX. SERVICE CONNECTION PER CITY OF MILWAUKIE DETAIL 401 ON SHEET 3.3.
- 8 RELOCATE EXISTING FIRE HYDRANT 1' CLEAR OF PROPOSED BACK OF WALK. SEE CITY OF MILWAUKIE DETAIL 406 ON SHEET 3.3.

STORM CONSTRUCTION NOTES:

- 1 REMOVE EXISTING CATCH BASIN.
- 2 CONSTRUCT STANDARD STORM SEWER MANHOLE OVER EXISTING STORM LINE PER DETAIL RD335 ON SHEET C3.0.
- 3 CONSTRUCT G-2 CATCH BASIN AND LATERAL(S) PER CITY OF MILWAUKIE DETAIL 601, 602, & 605 ON SHEET C3.2.

LINWOOD AVE PLAN VIEW
SCALE: 1"=20'

STORM DRAINAGE DATA			
NUMBER	DESCRIPTION	RIM/GUT ELEV.	INVERT ELEV.
CB32	"L" STA:52+50.00, 10.36' R	191.29	10" IE Out (W): 188.29
CB33	"L" STA:52+50.00, 13.50' L	191.42	10" IE In (E): 188.17 12" IE Out (W): 188.16
MH22	"L" STA:52+50.00, 19.57' L	192.03	EX. 12" IE Out (N): 187.88 12" IE In (E): 188.10
MH23	"L" STA:54+49.96, 26.51' L	190.47	EX. 12" IE In (S): 185.48 EX. 12" IE Out (N): 185.38

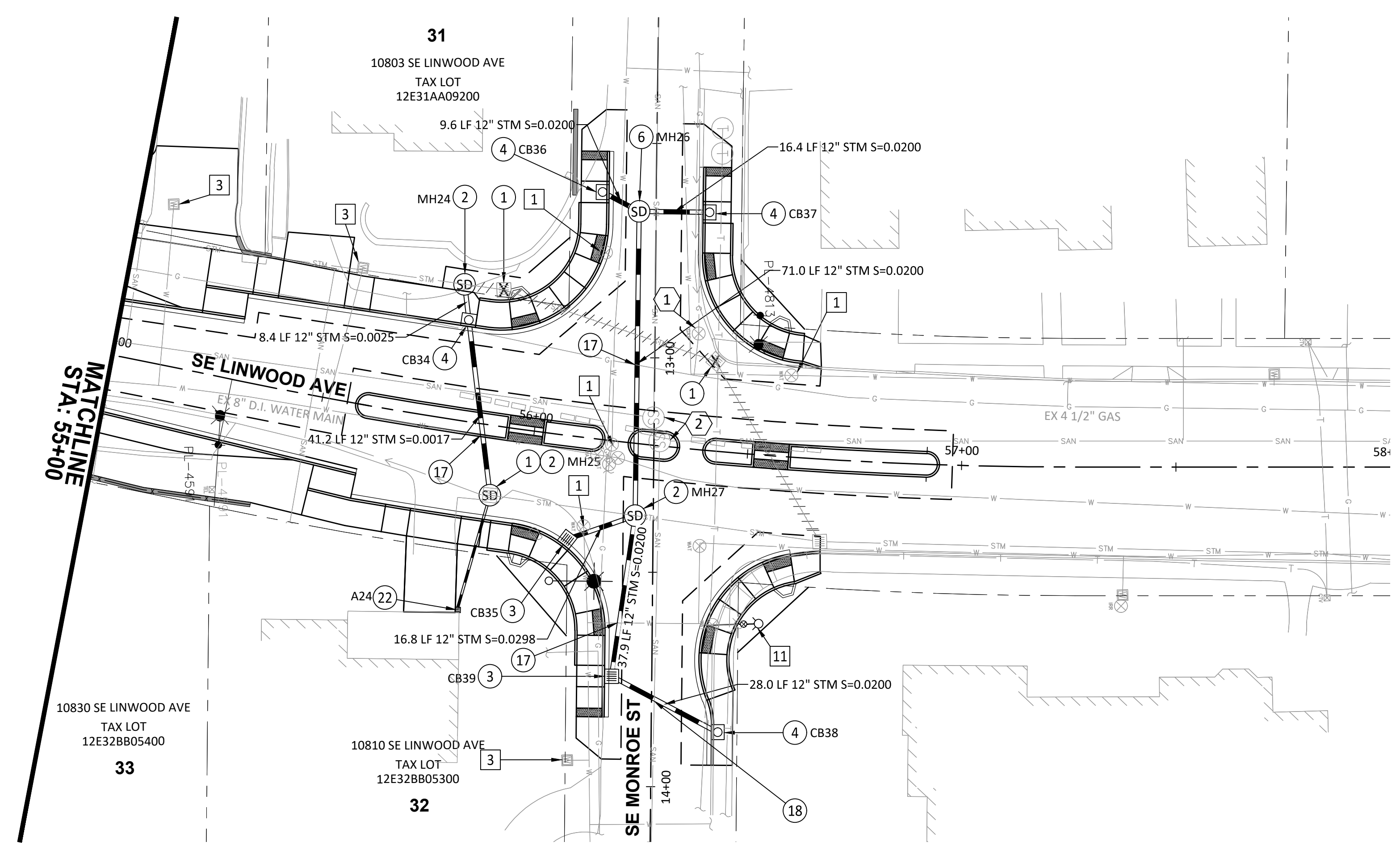
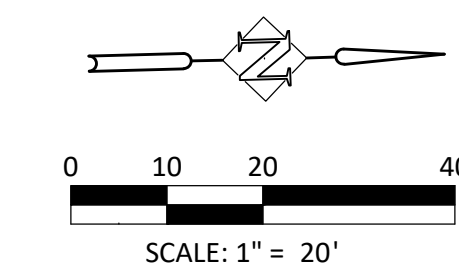
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DATE	NO.	DESCRIPTION



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<p>UTILITY PLAN SE LINWOOD AVENUE MILWAUKIE, OREGON</p>	<p>SHEET NO. 8.8</p>
<p>JOB NO. MWK-28</p>	



LINWOOD AVE PLAN VIEW
SCALE: 1"=20'

WATER CONSTRUCTION NOTES:

- 1 ADJUST EXISTING WATER VALVE(S) TO FINISH GRADE.
- 3 PROTECT EXISTING WATER METER.
- 11 REPLACE FIRE HYDRANT 4' CLEAR OF PROPOSED BACK OF WALK. SEE CLACKAMAS RIVER WATER DETAIL 110A ON SHEET 3.3.

STORM CONSTRUCTION NOTES:

- 1 REMOVE EXISTING CATCH BASIN.
- 2 CONSTRUCT STANDARD STORM SEWER MANHOLE OVER EXISTING STORM LINE PER DETAIL RD335 ON SHEET C3.0.
- 3 CONSTRUCT G-2 CATCH BASIN AND LATERAL(S) PER CITY OF MILWAUKIE DETAIL 601, 602, & 605 ON SHEET C3.2.
- 4 CONSTRUCT CURB INLET CATCH BASIN AND LATERAL(S) PER DETAIL ON SHEET 3.7.
- 6 CONSTRUCT STANDARD STORM SEWER MANHOLE PER DETAIL RD335 ON SHEET C3.0.
- 17 UTILITY CROSSING - PROFILE BASED ON 3' DEPTH. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY EXISTING UTILITY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY UTILITY CROSSING CONFLICTS.
- 18 SANITARY CROSSING - SEE PROFILE FOR SIZE & ELEVATION. CONTRACTOR SHALL POTHOLE PRIOR TO STORM PIPE INSTALLATION TO VERIFY SANITARY SIZE, ALIGNMENT & ELEVATION. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY SANITARY CROSSING CONFLICTS.
- 22 CONSTRUCT AREA DRAIN CATCH BASIN AND LATERAL(S). SEE DETAIL ON SHEET 3.7.

GENERAL UTILITY NOTES:

- 1 ADJUST EXISTING GAS VALVE(S) TO FINISH GRADE.
- 2 ADJUST EXISTING SANITARY MANHOLE TO FINISH GRADE.

STORM DRAINAGE DATA

NUMBER	DESCRIPTION	RIM/GUT ELEV.	INVERT ELEV.
A24	"L" STA:55+88.35, 43.72' R	187.19	6" IE Out (W): 184.00
CB34	"L" STA:55+81.00, 23.49' L	188.47	12" IE Out (E): 182.27 12" IE In (W): 182.37
CB35	"L" STA:56+10.67, 24.02' R	187.20	12" IE Out (N): 184.50
CB36	"M2" STA:12+61.44, 12.51' R	188.45	12" IE Out (NE): 184.47
CB37	"M2" STA:12+65.94, 12.47' L	187.70	12" IE Out (S): 183.76
CB38	"M2" STA:13+87.13, 15.53' L	186.51	12" IE Out (SW): 183.09
CB39	"M2" STA:13+74.34, 9.36' R	187.29	12" IE Out (W): 182.43 12" IE In (NE): 182.53
MH24	"L" STA:55+78.67, 31.56' L	189.13	EX. 12" IE In (S): 182.49 12" IE Out (E): 182.39
MH25	"L" STA:55+91.86, 16.21' R	187.56	6" IE In (E): 183.86 12" IE In (W): 182.20 EX. 12" IE Out (N): 182.10
MH26	"M2" STA:12+65.88, 3.97' R	188.31	12" IE In (SW): 184.28 12" IE Out (E): 183.33 12" IE In (N): 183.43
MH27	"L" STA:56+25.48, 16.77' R	187.44	EX. 12" IE In (S): 181.44 EX. 12" IE Out (N): 181.44 12" IE In (W): 181.91 12" IE In (E): 181.67 12" IE In (S): 184.00

DATE	NO.	DESCRIPTION
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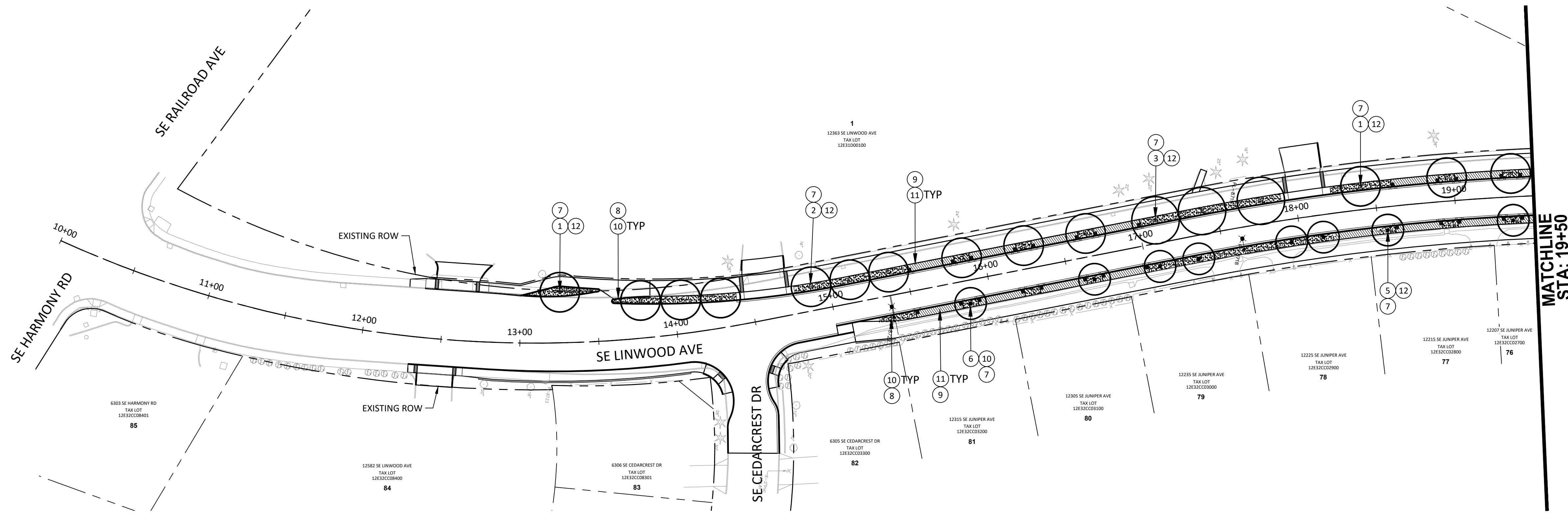
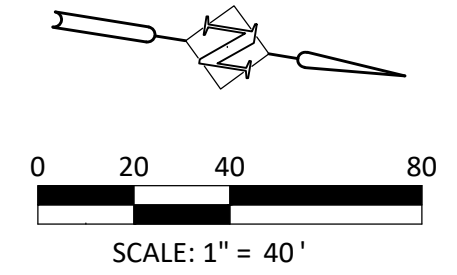


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UTILITY PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

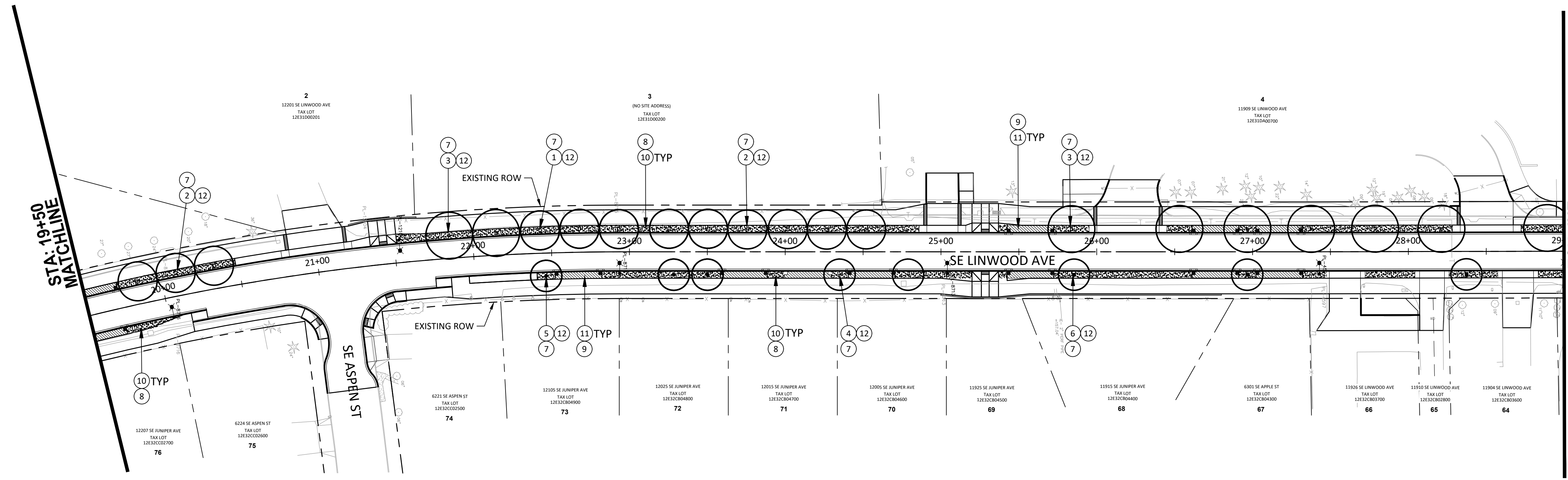
SHEET NO.
8.9
JOB NO.
MWK-28

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LINWOOD AVE PLAN VIEW
SCALE: 1"=40'

- CONSTRUCTION NOTES:**
- ① INSTALL MAGNOLIA GRANDIFLORA "DD BLANCHARD" AS SHOWN - 1.5" CAL 12 EA
 - ② INSTALL PHELLODENDRON AMURENSE 'SEPTEMBER' AS SHOWN - 1.5" CAL 13 EA
 - ③ INSTALL GINKGO BILOBA 'SARATOGA' AS SHOWN - 1.5" CAL 11 EA
 - ④ INSTALL ARBUTUS UNEDO AS SHOWN - 1.5" CAL 2 EA
 - ⑤ INSTALL CHIONANTHUS RETUSUS AS SHOWN - 1.5" CAL 5 EA
 - ⑥ INSTALL MAAKIA AMURENSIS AS SHOWN - 1.5" CAL 9 EA
 - ⑦ INSTALL 36" WIDE X 18" DEEP TOPSOIL IN TREE AREAS 19 CY
 - ⑧ INSTALL 6" TOPSOIL IN SEEDED AREAS 121 CY
 - ⑨ INSTALL 18" STORM WATER MEDIA IN STORM WATER TREATMENT PLANTERS 197 CY
 - ⑩ INSTALL PERMANENT SEEDING AS SHOWN 0.15 AC
 - ⑪ INSTALL JUNCUS PATENS AS SHOWN - #1 CONTAINER
 - ⑫ INSTALL 2' DEEP X 10' LONG ROOT BARRIER PER DETAIL X/X 1040 LF



LINWOOD AVE PLAN VIEW
SCALE: 1"=40'

DESIGNED:	CAB
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DATE:	12/4/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		

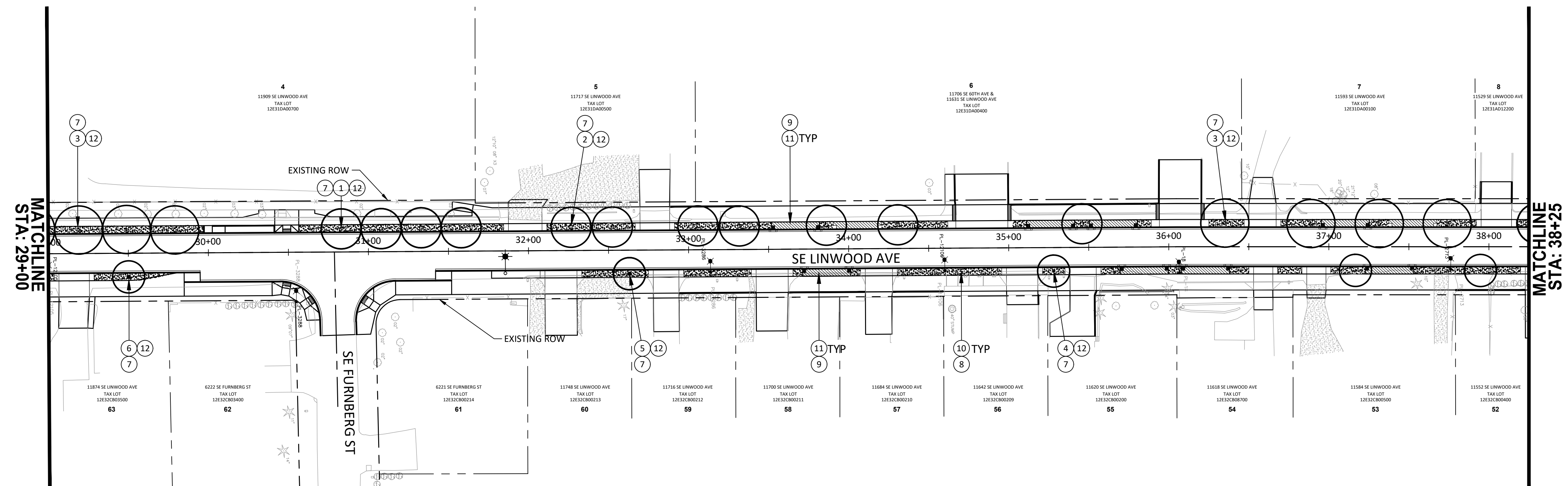
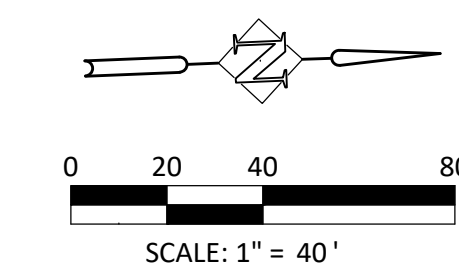


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LANDSCAPE PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

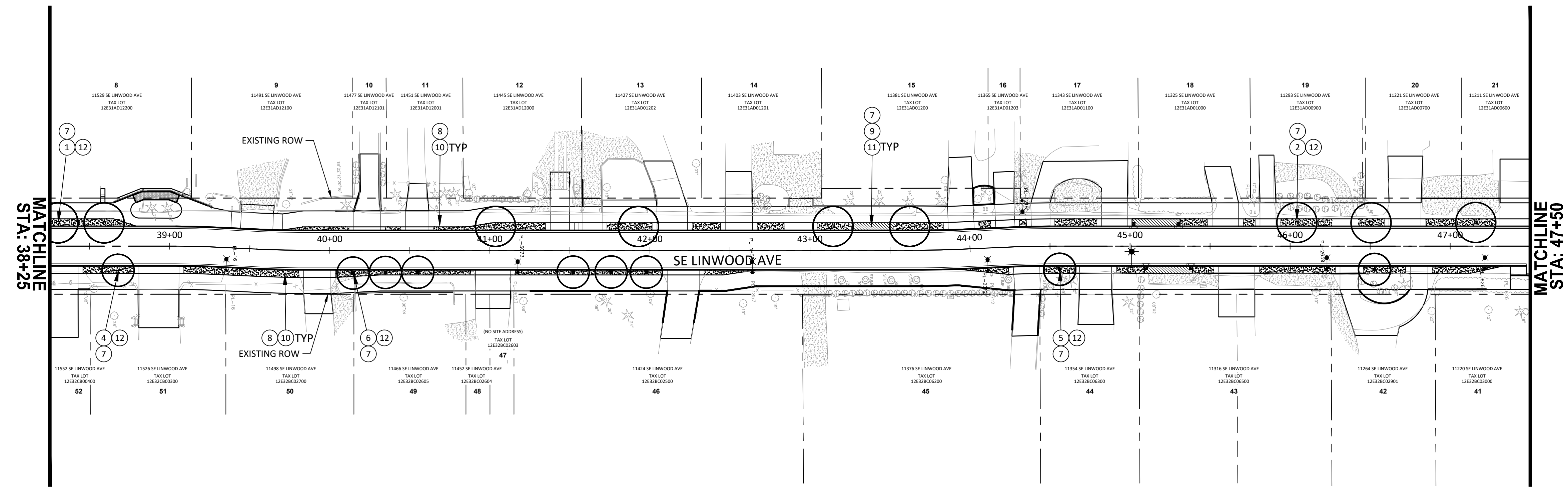
SHEET NO.	9.0
JOB NO.	MWK-28

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LINWOOD AVE PLAN VIEW
SCALE: 1"=40'

- CONSTRUCTION NOTES:**
- ① INSTALL MAGNOLIA GRANDIFLORA "DD BLANCHARD" AS SHOWN - 1.5" CAL 10 EA
 - ② INSTALL PHELLODENDRON AMURENSE "SEPTEMBER" AS SHOWN - 1.5" CAL 10 EA
 - ③ INSTALL GINKGO BILOBA "SARATOGA" AS SHOWN - 1.5" CAL 7 EA
 - ④ INSTALL ARBUTUS UNEDO AS SHOWN - 1.5" CAL 4 EA
 - ⑤ INSTALL CHIONANTHUS RETUSUS AS SHOWN - 1.5" CAL 3 EA
 - ⑥ INSTALL MAAKIA AMURENSIS AS SHOWN - 1.5" CAL 8 EA
 - ⑦ INSTALL 36" WIDE X 18" DEEP TOPSOIL IN TREE AREAS 16 CY
 - ⑧ INSTALL 6" TOPSOIL IN SEEDED AREAS 129 CY
 - ⑨ INSTALL 18" STORM WATER MEDIA IN STORM WATER TREATMENT PLANTERS 105 CY
 - ⑩ INSTALL PERMANENT SEEDING AS SHOWN 0.15 AC
 - ⑪ INSTALL JUNCUS PATENS AS SHOWN - #1 CONTAINER
 - ⑫ INSTALL 2' DEEP X 10' LONG ROOT BARRIER PER DETAIL X/X 840 LF



LINWOOD AVE PLAN VIEW
SCALE: 1"=40'

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	12/4/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		

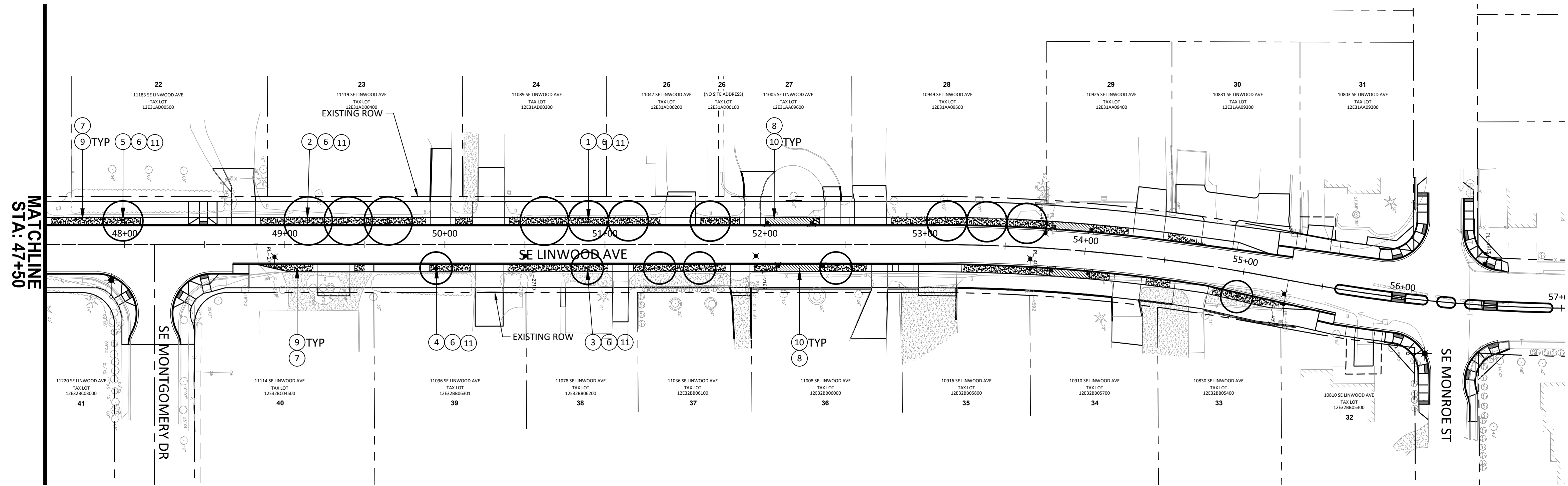
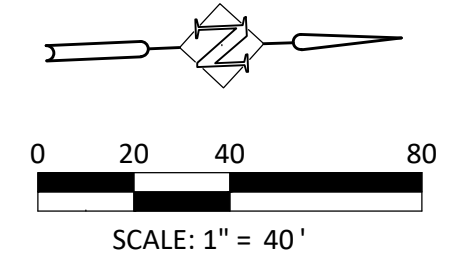


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LANDSCAPE PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	9.1
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 (Linwood Avenue)\MWK-28-DWG(S)\Sheets\MWK-28-9.0 LANDSCAPE PLAN.dwg



LINWOOD AVE PLAN VIEW
SCALE: 1"=40'

CONSTRUCTION NOTES:

- 1 INSTALL MAGNOLIA GRANDIFLORA "DD BLANCHARD" AS SHOWN - 1.5" CAL 6 EA
- 2 INSTALL GINKGO BILOBA 'SARATOGA' AS SHOWN - 1.5" CAL 4 EA
- 3 INSTALL ARBUTUS UNEDO AS SHOWN - 1.5" CAL 5 EA
- 4 INSTALL CHIONANTHUS RETUSUS AS SHOWN - 1.5" CAL 1 EA
- 5 INSTALL PHELLODENDRON AMURENSE 'SEPTEMBER' AS SHOWN - 1.5" CAL 1 EA
- 6 INSTALL 36" WIDE X 18" DEEP TOPSOIL IN TREE AREAS 6 CY
- 7 INSTALL 6" TOPSOIL IN SEEDED AREAS 57 CY
- 8 INSTALL 18" STORM WATER MEDIA IN STORM WATER TREATMENT PLANTERS 40 CY
- 9 INSTALL PERMANENT SEEDING AS SHOWN 0.07 AC
- 10 INSTALL JUNCUS PATENS AS SHOWN - #1 CONTAINER
- 11 INSTALL 2' DEEP X 10' LONG ROOT BARRIER PER DETAIL X1X 340 LF

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LANDSCAPE PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	9.2
JOB NO.	MWK-28

BID ITEM LOG											
BID ITEM	DECIDUOUS TREES - 2" CAL.						WETLAND PLANTS -#1 CONTAINER	PERMANENT SEEDING	TOP SOIL	WATER QUALITY MIXTURE	ROOT BARRIER
DESCRIPTION	MAGNOLIA GRANDIFLORA 'D.D. BLANCHARD' - D.D. BLANCHARD MAGNOLIA	PHILODENDRON AMURENSE - AMUR CORK TREE	GINKGO BILOBA 'SARATOGA' - SARATOGA GINKGO	ARBUTUS UNEDO - STRAWBERRY TREE	CHIONANTHUS RETIUSUS - CHINESE FRINGE TREE	MAAKIA AMURENSIS - AMUR MAAKIA	JUNCUS PATENS - GRAY RUSH				
UNTIS	EA.	EA.	EA.	EA.	EA.	EA.					
PAGE											
8.0	12	13	11	2	5	9	4078	0.15	140	197	1040
8.1	10	10	7	4	3	8	2178	0.15	145	105	840
8.2	6	1	4	5	1		3068	0.07	63	40	340
TOTAL	28	24	22	11	9	17					
	111						9324	0.37	348	342	2220

GENERAL PLANTING NOTES

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT CITY OF MILWAUKIE STANDARDS AND OREGON BUILDING AND SPECIALITY CODES.
- INSTALL EROSION CONTROL SYSTEMS IN ACCORDANCE WITH CITY OF MILWAUKIE STANDARDS PRIOR TO SITE WORK AND LANDSCAPE INSTALLATION.
- CONTRACTOR SHALL MARK AND PROTECT ALL UTILITIES, SITE FEATURES, AND VEGETATION TO REMAIN IN PLACE.
- CONTRACTOR SHALL REMOVE ALL WEEDS AND INVASIVE SPECIES PRIOR TO PLANTING OR SEEDING.
- ALL DISTURBED AREAS SHALL BE SEEDDED.
- PRIOR TO PLANTING, CONTRACTOR SHALL TEST ON-SITE SOILS FOR SOIL FERTILITY BY CERTIFIED TESTING LAB. IF NECESSARY, BACKFILL SOILS FOR TREE PITS, SHRUB AND GROUND COVER AREAS SHALL BE AMENDED AS RECOMMENDED BY SOIL ANALYSIS REPORT.
- ALL SEEDDED AREAS SHALL BE STRIPPED OF VEGETATION, SCARIFIED AND RECEIVE 6" OF TOPSOIL PRIOR TO APPLICATION OF SEED.
- ALL PLANTER BEDS SHALL BE SCARIFIED 12" BELOW FINISHED GRADE AND HAVE 12" OF TOPSOIL ADDED TO BRING BACK TO FINISHED GRADE PRIOR TO PLANTING.
- LANDSCAPE INSTALLATION SHALL INCLUDE PROVISION OF AN AUTOMATIC IRRIGATION SYSTEM TO SUSTAIN LANDSCAPE PLANTINGS, MEETING LOCAL AND STATE BUILDING CODES.
- PLANT MATERIAL INSTALLED SHALL CONFORM IN SIZE AND GRADE TO THE "AMERICAN STANDARD FOR NURSERY STOCK" CURRENT EDITION.
- QUANTITIES OF PLANT MATERIALS SHALL BE AS DETERMINED BY CONTRACTOR IN ACCORDANCE WITH SPECIFIED SPACING OR LOCATION ON PLAN. MATERIAL QUANTITIES SHOWN ON PLAN ARE FOR CONTRACTOR CONVENIENCE ONLY AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO INSTALLATION. SURPLUS OR SHORTAGES OF PLANT QUANTITIES SHALL BE RESPONSIBILITY OF CONTRACTOR.
- LANDSCAPE CONTRACTOR SHALL WATER PLANTINGS FOR DURATION OF 2 YEAR WARRANTY PERIOD AFTER INSTALLATION AND GUARANTEE ALL PLANTINGS TO BE IN SATISFACTORY HEALTH. LANDSCAPE CONTRACTOR SHALL REPLACE ALL DAMAGED, DEAD, OR DYING PLANTS COVERED BY WARRANTY WITHIN 30 DAYS OF INITIAL IDENTIFICATION OF CONDITION.

PLANT SCHEDULE

TREES

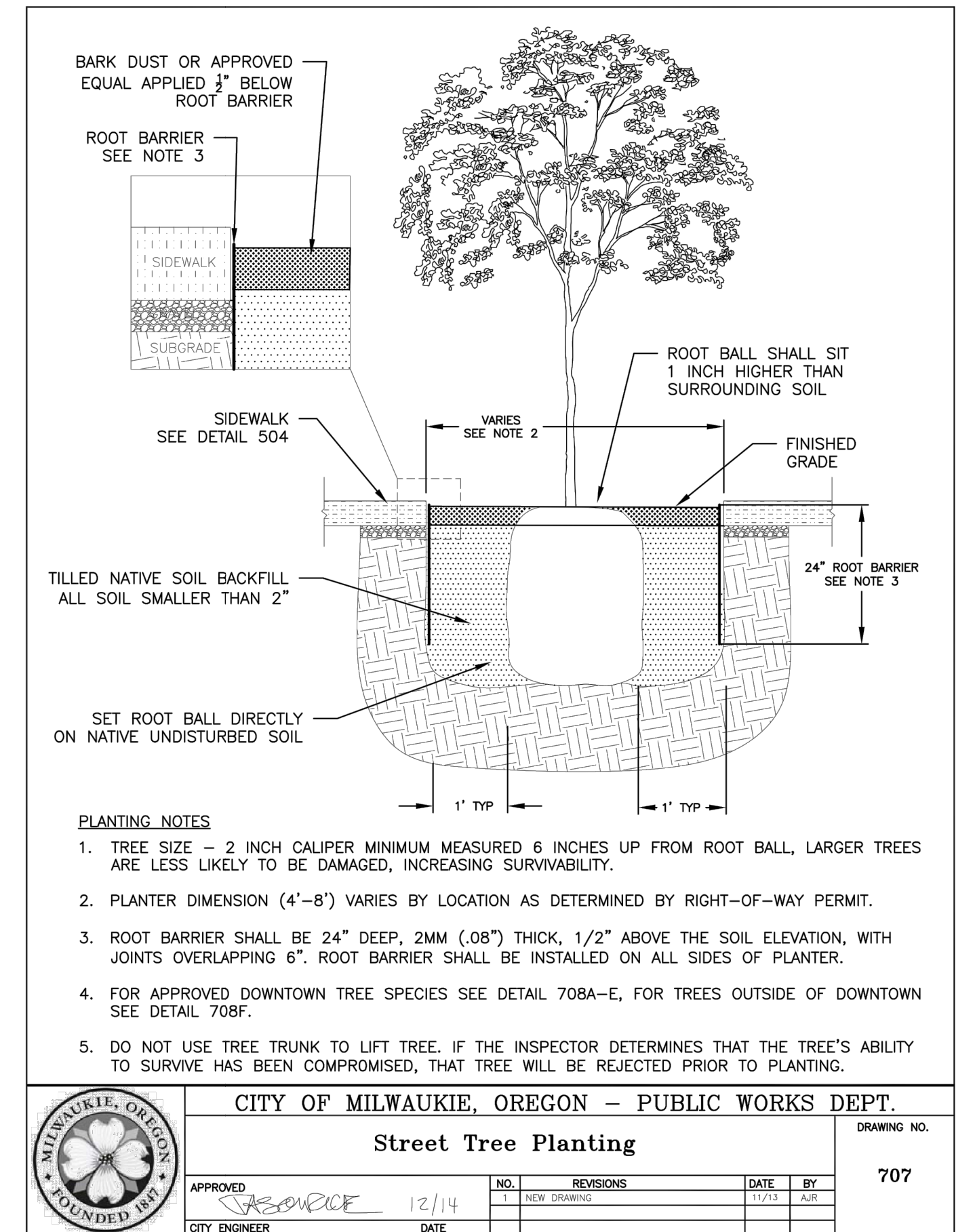
- 28 *Magnolia grandiflora* 'D.D. Blanchard' - D.D. Blanchard Magnolia
2" CAL. B&B, WELL BRANCHED, LIMBED TO 6'
- 21 *Phellodendron amurense* - Amur Cork Tree
2" CAL. B&B, WELL BRANCHED, LIMBED TO 6'
- 23 *Ginkgo biloba* 'Saratoga' - Saratoga Ginkgo
2" CAL. B&B, WELL BRANCHED, LIMBED TO 6'
- 11 *Arbutus unedo* - Strawberry Tree
2" CAL. B&B, WELL BRANCHED, LIMBED TO 6'
- 10 *Chionanthus retusus* - Chinese fringe tree
2" CAL. B&B, WELL BRANCHED, LIMBED TO 6'
- 17 *Maackia amurensis* - Amur Maackia
2" CAL. B&B, WELL BRANCHED, LIMBED TO 6'

SEED MIXES

	SEED MIX 2 (NON-IRRIGATED)	% PLS	LBS OF PLA/ 100SF
	<i>Festuca rubra</i> 'Cibraltar'	10	0.364
	<i>Festuca rubra</i> 'Silhouette'	10	0.364
	<i>Lolium perenne</i> 'Delaware Dwarf'	40	5.563
	<i>Lolium perenne</i> 'Amazing'	40	2.696
	TOTAL		8.987

STORMWATER TREATMENT PLANTERS

- 9324 *Juncus patens* - Gray Rush
1 GAL. CONT., FULL PLANTS, 115/100 SF



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R E V I S I O N S		

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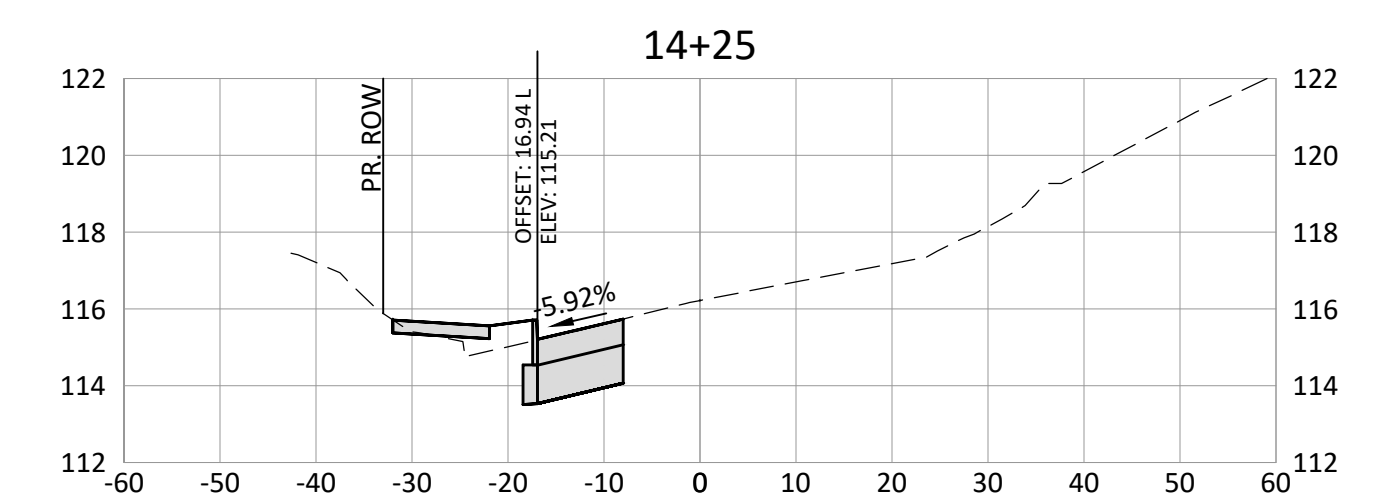
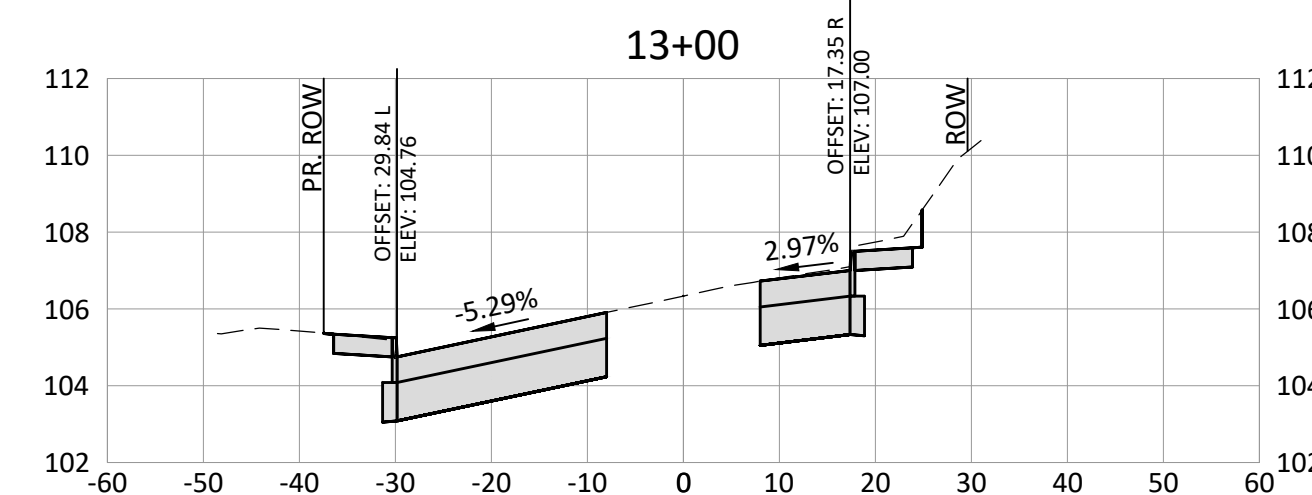
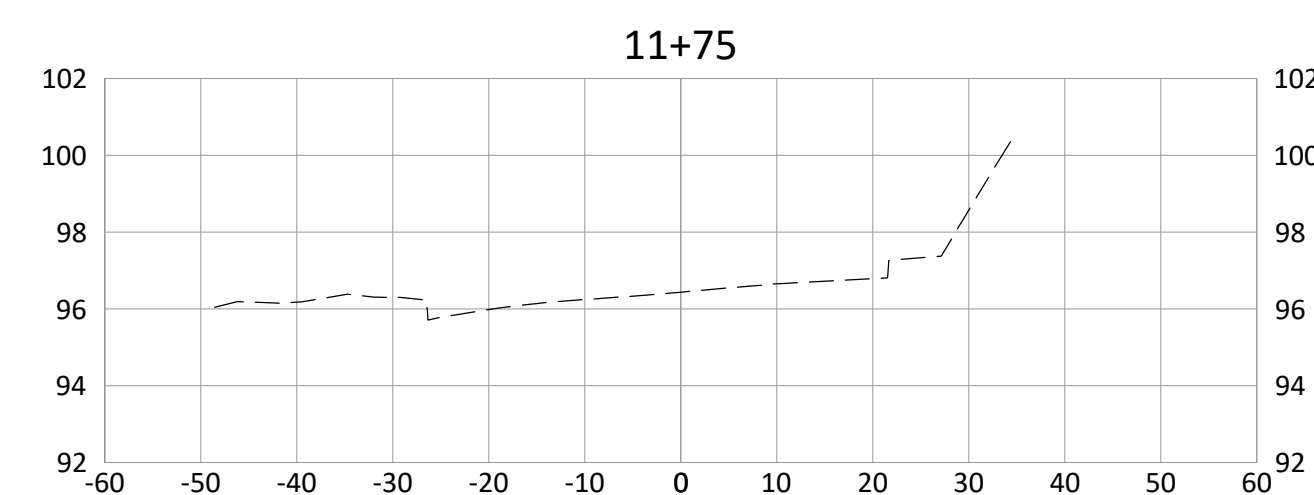
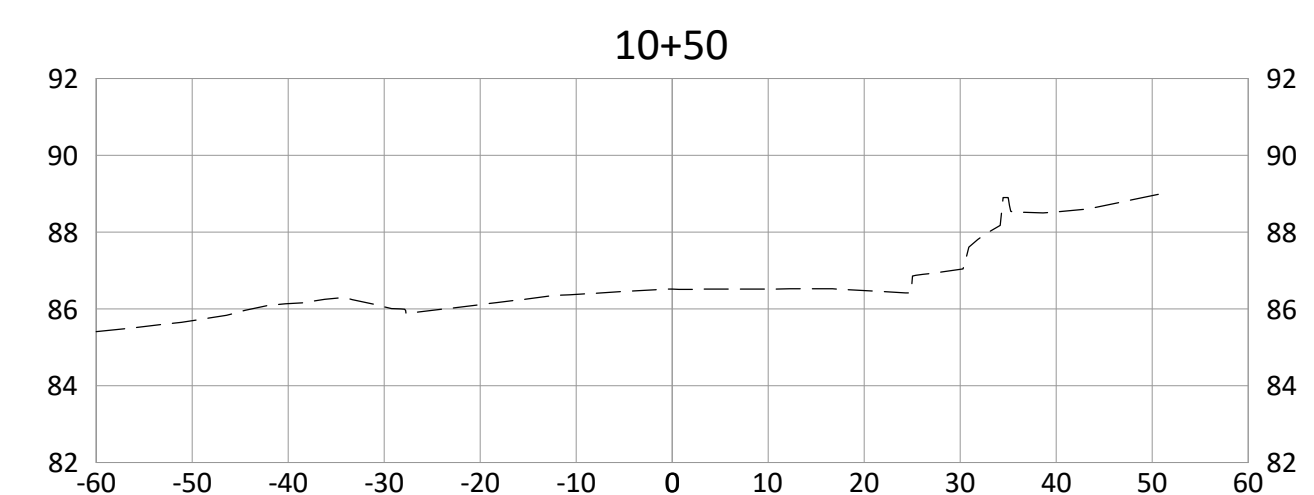
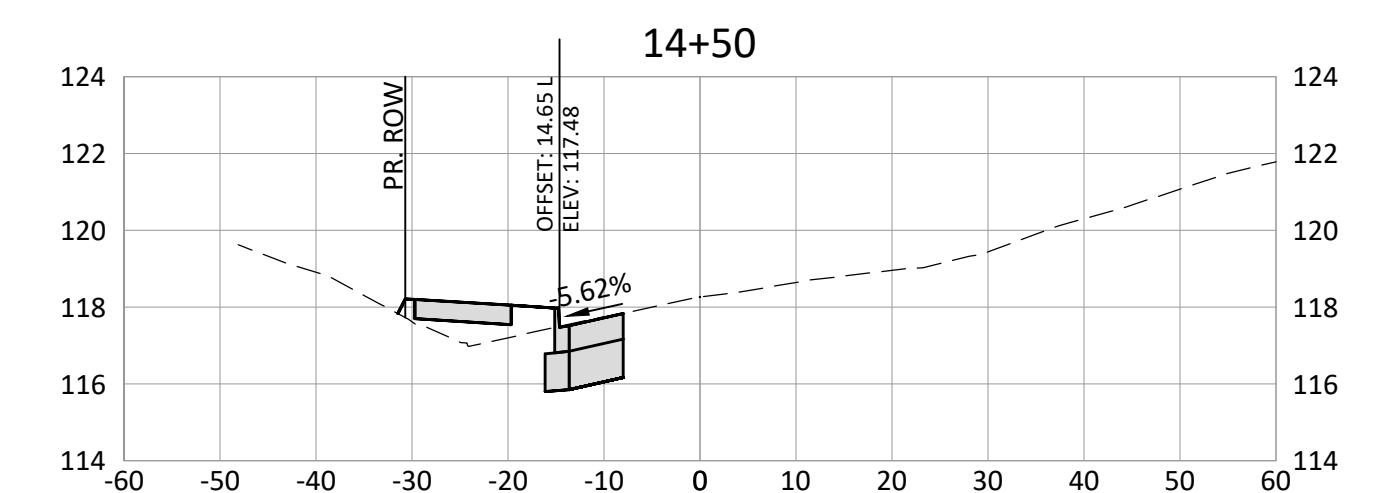
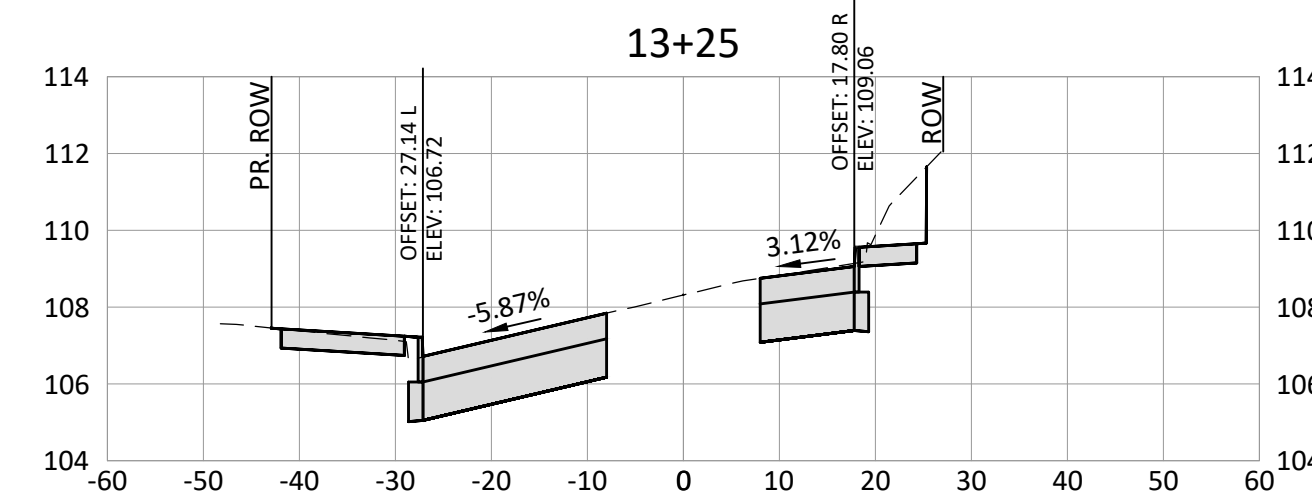
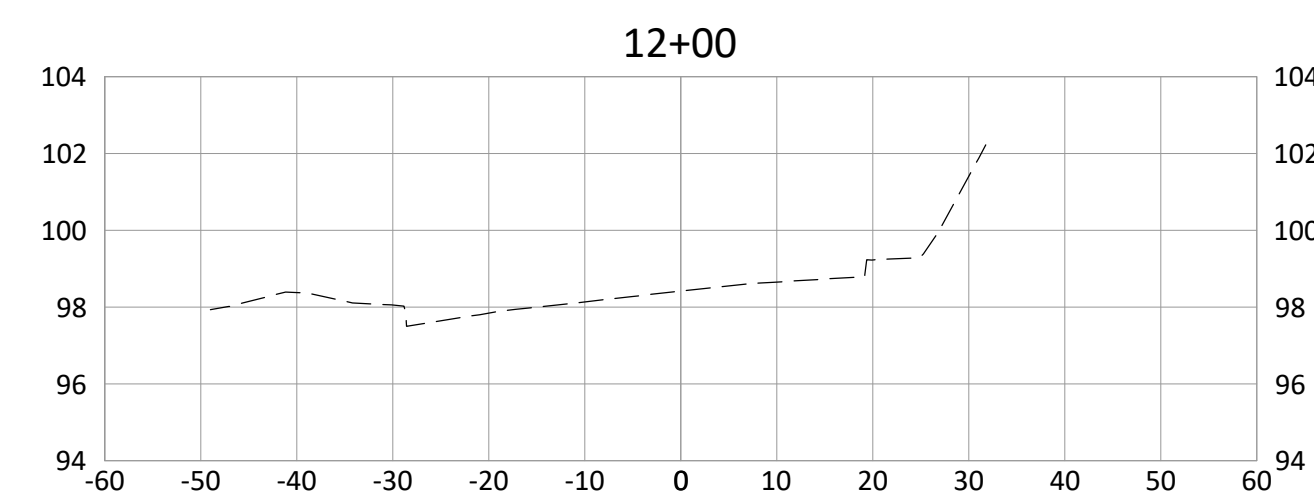
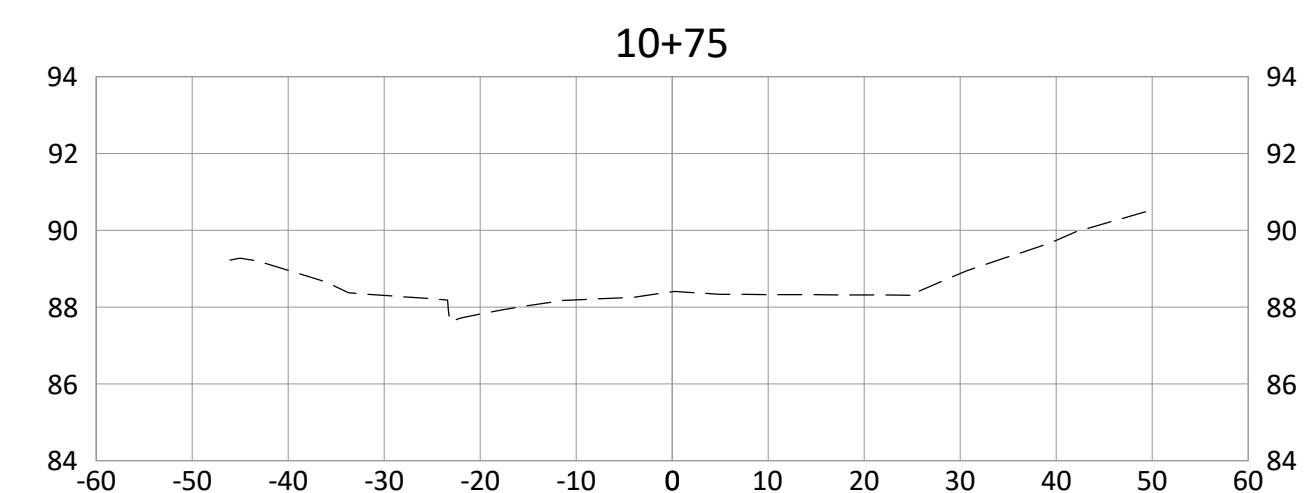
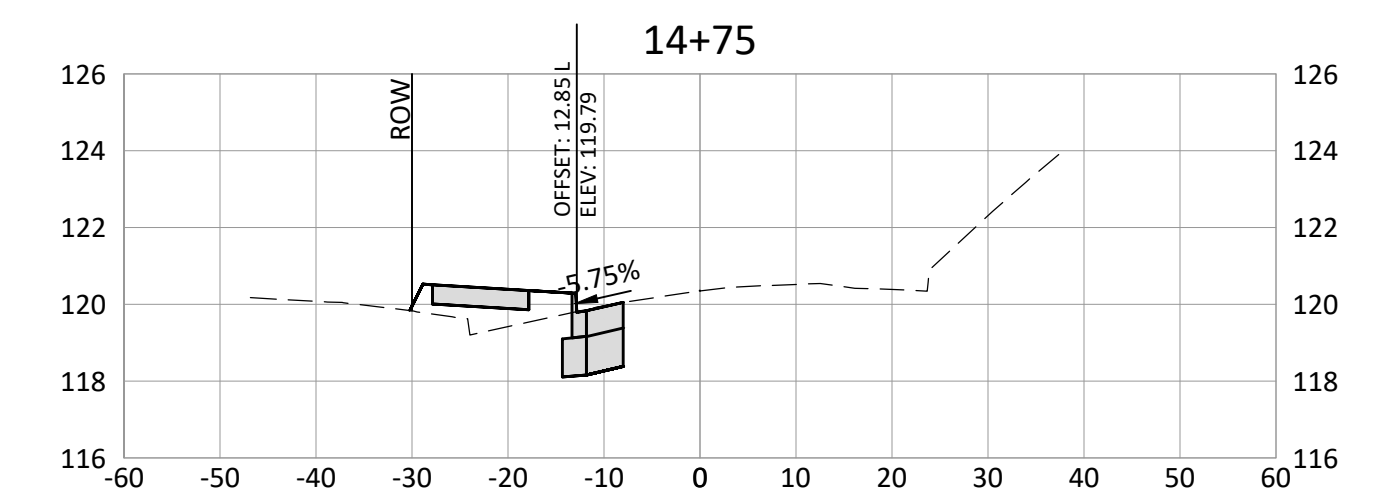
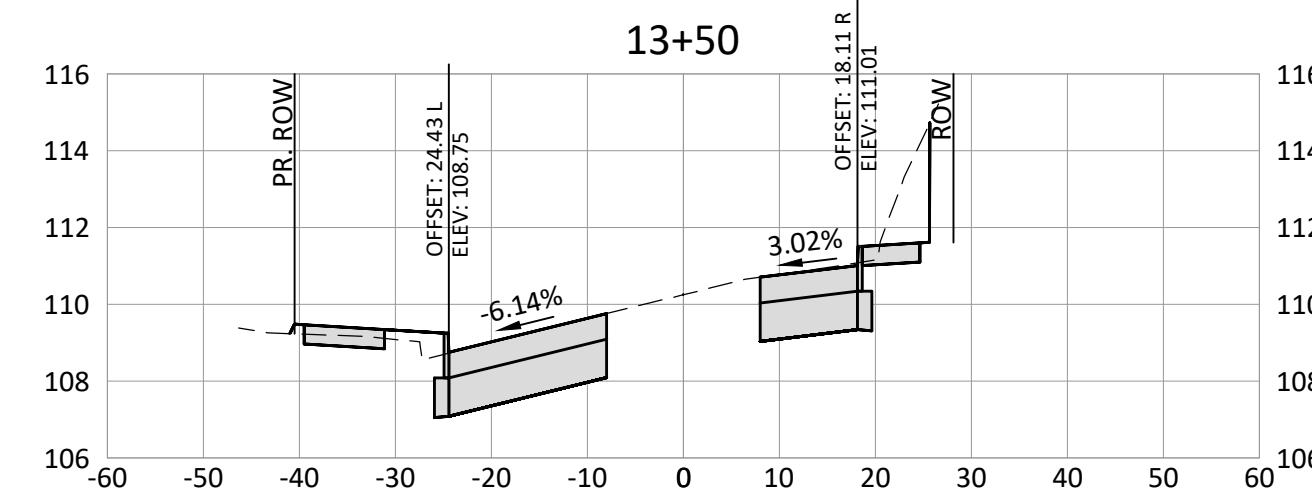
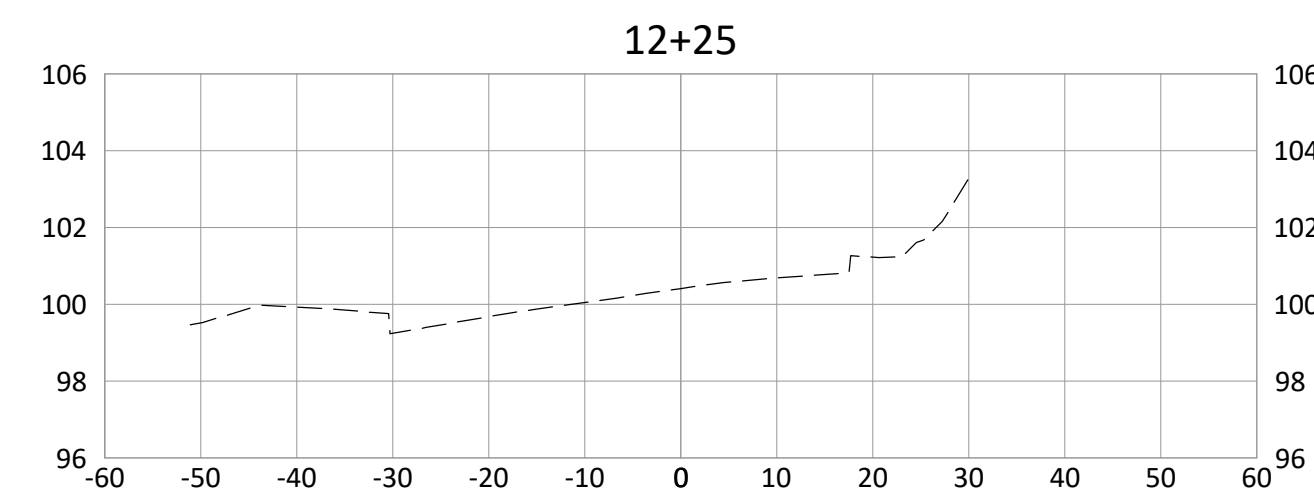
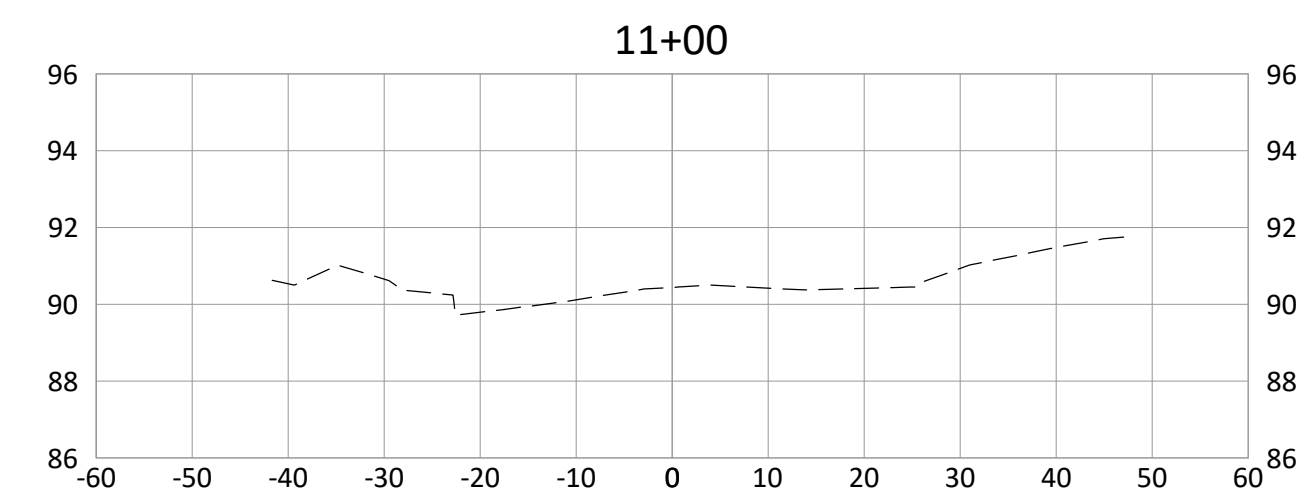
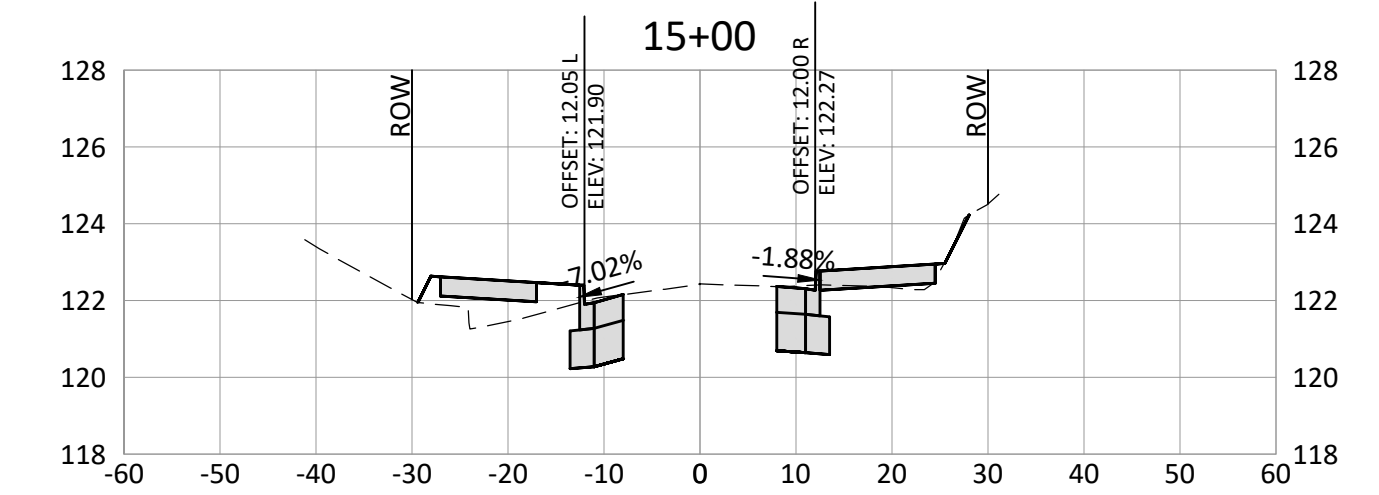
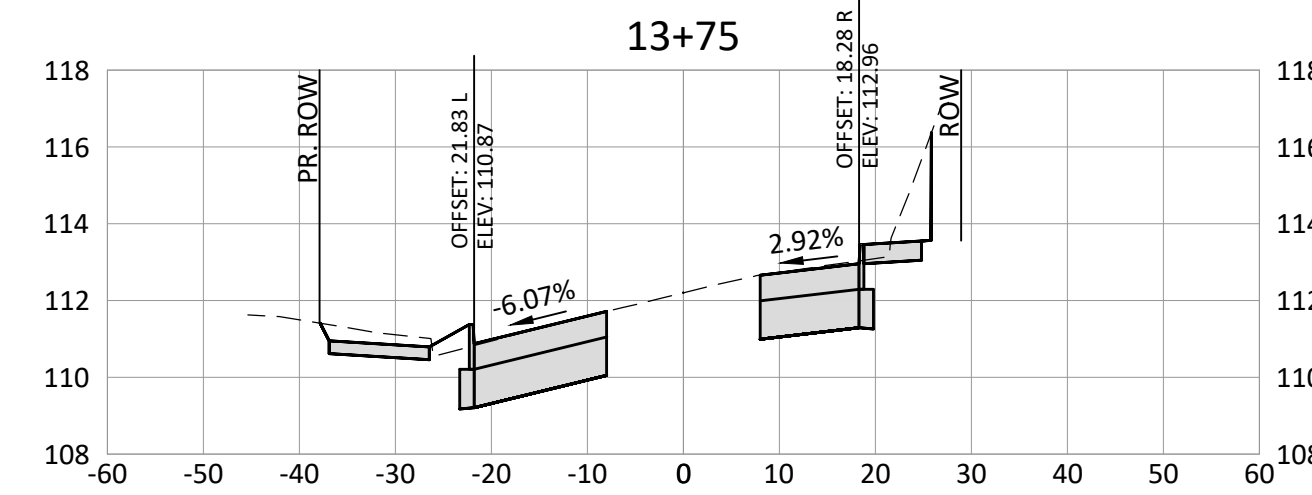
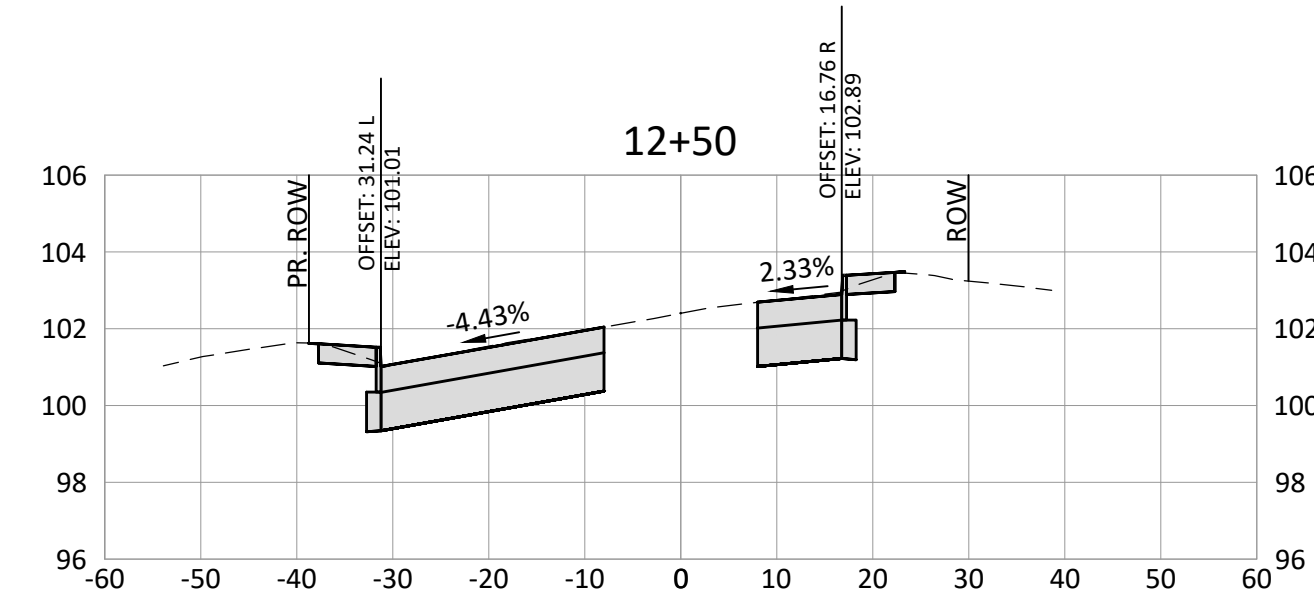
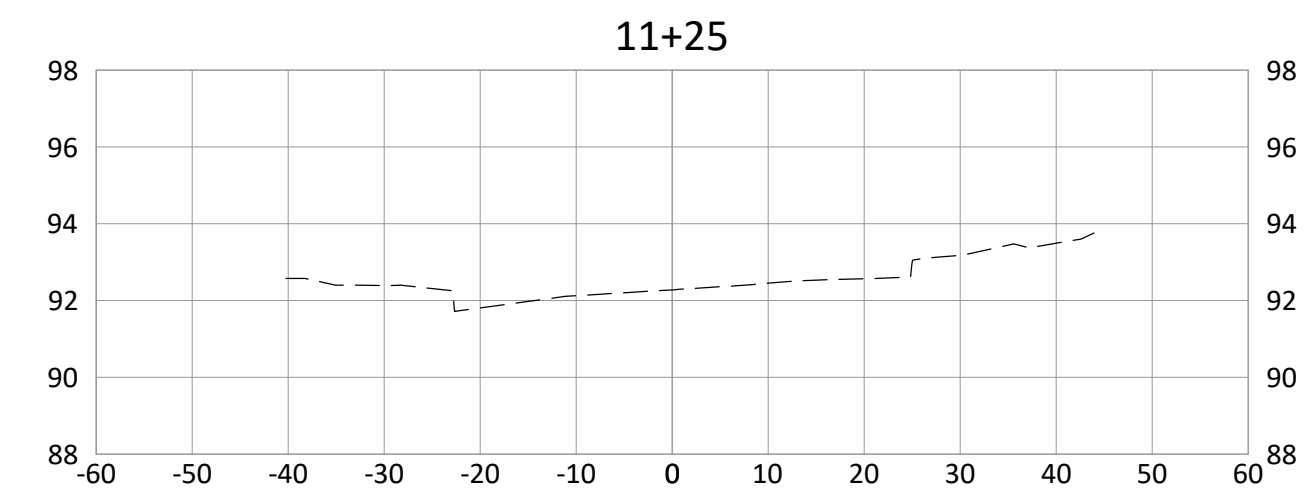
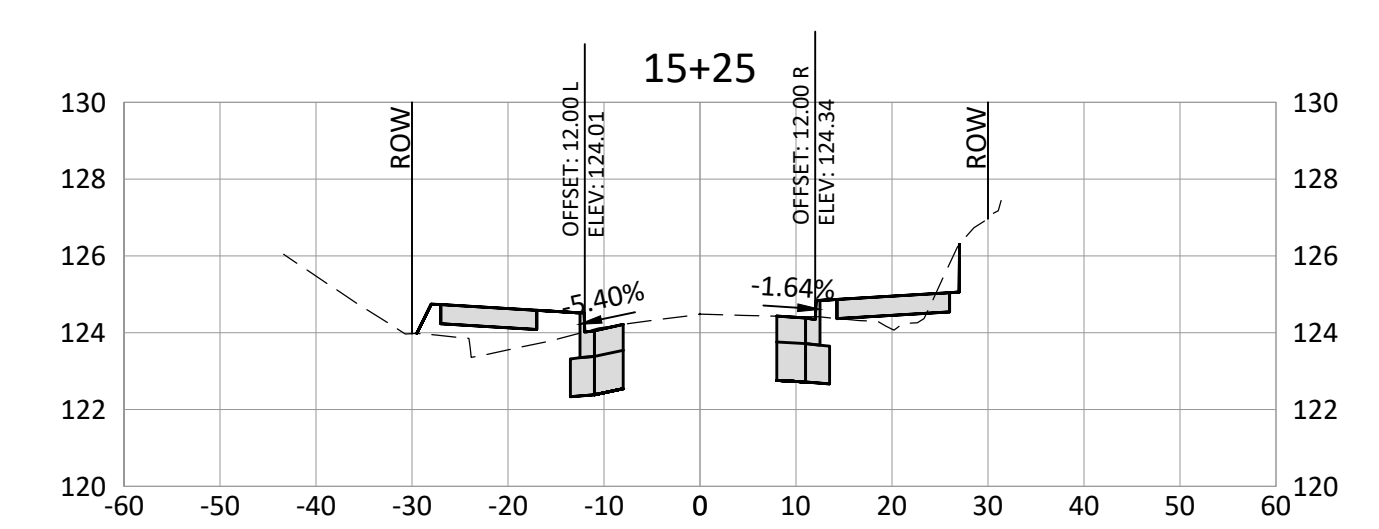
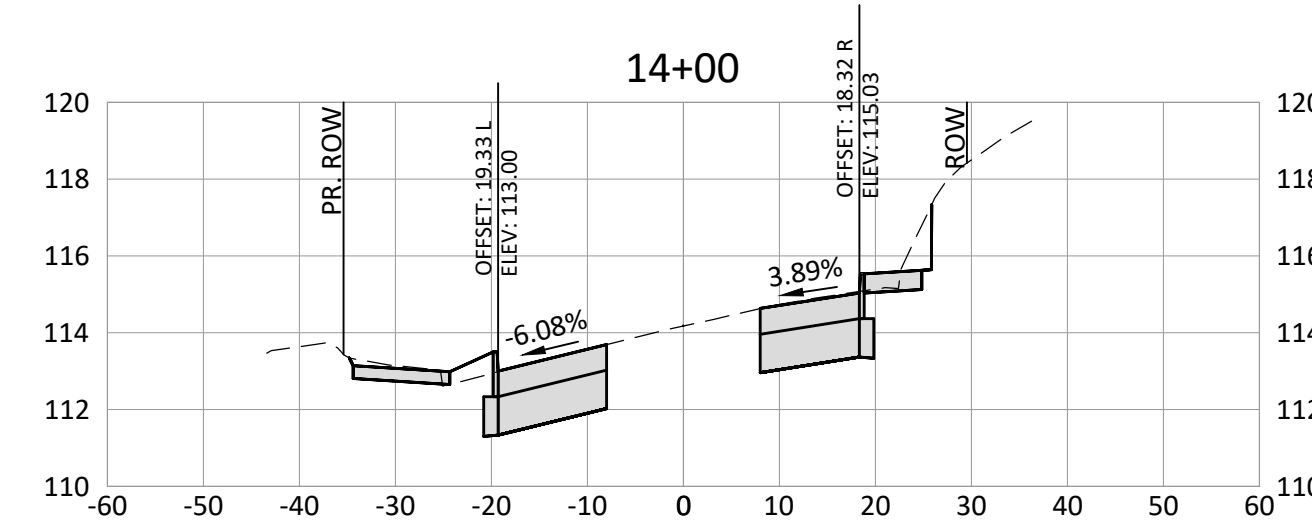
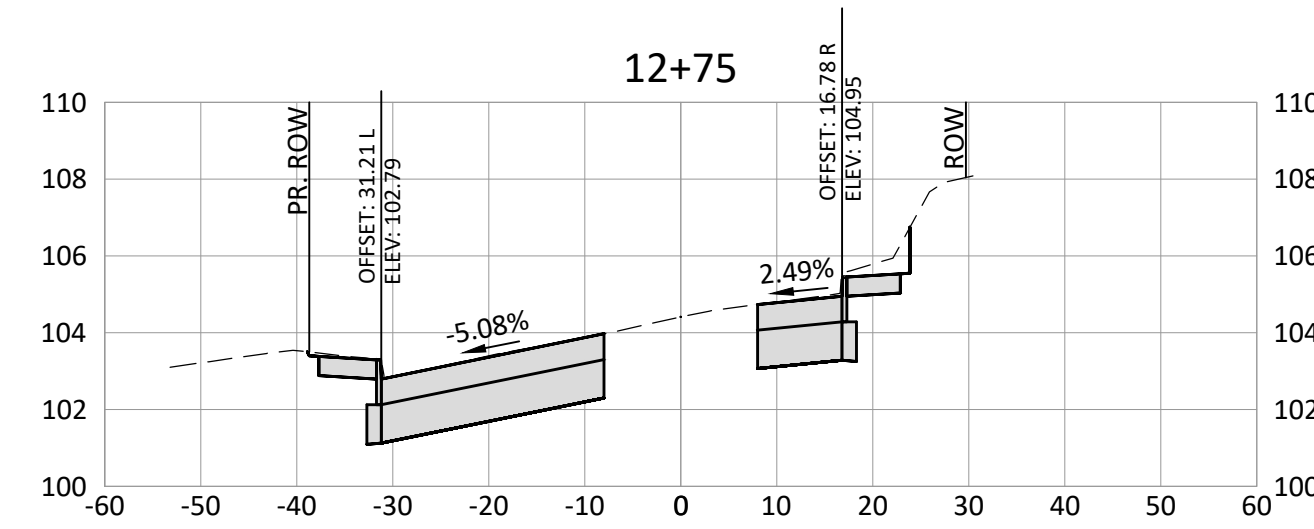
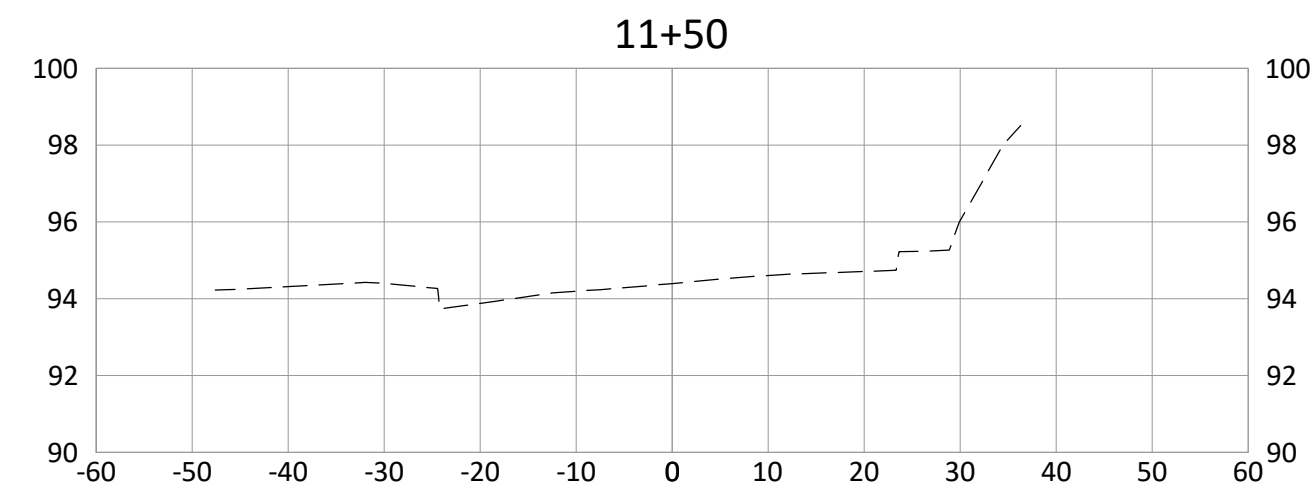


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LANDSCAPE LEGEND & NOTES
SE LINWOOD AVENUE
MILWAUKIE, OREGON

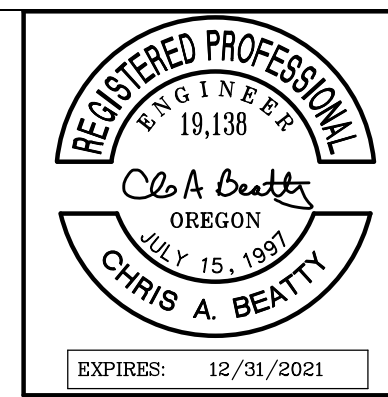
SHEET NO.	9.3
JOB NO.	MWK-28

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DATE	NO.	DESCRIPTION
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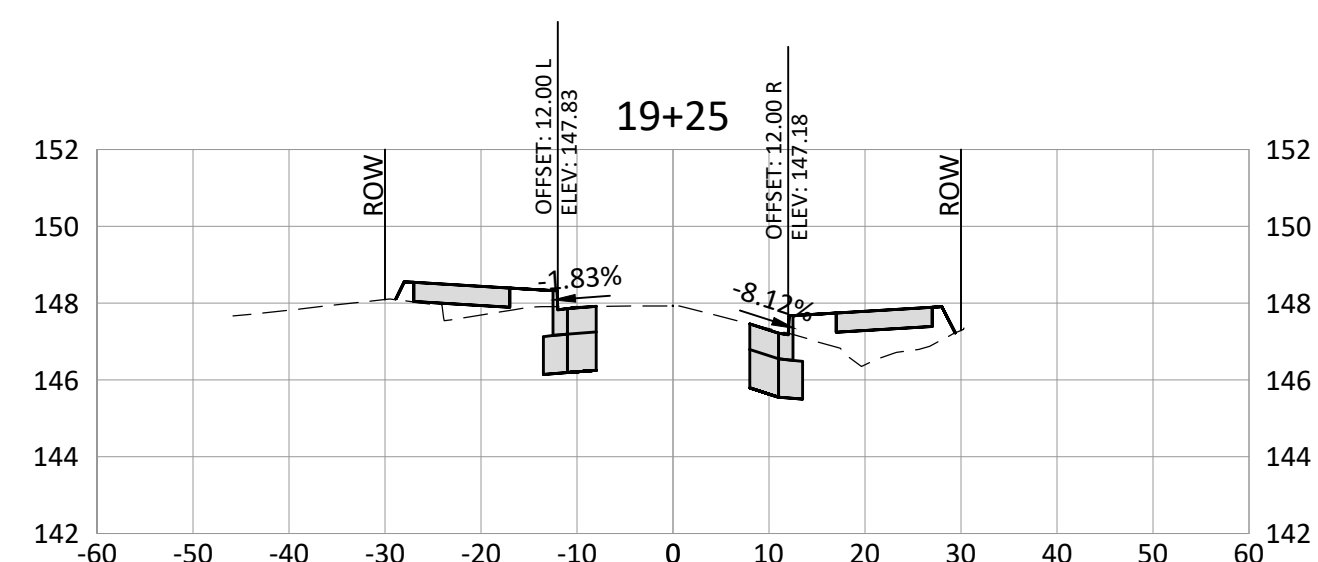
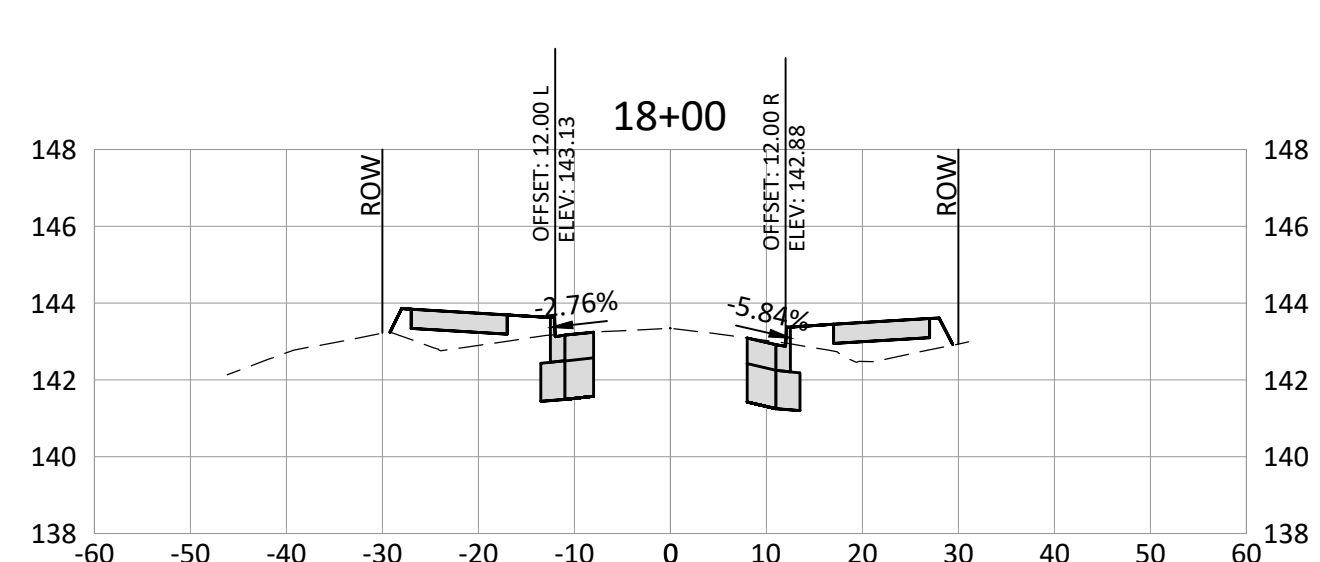
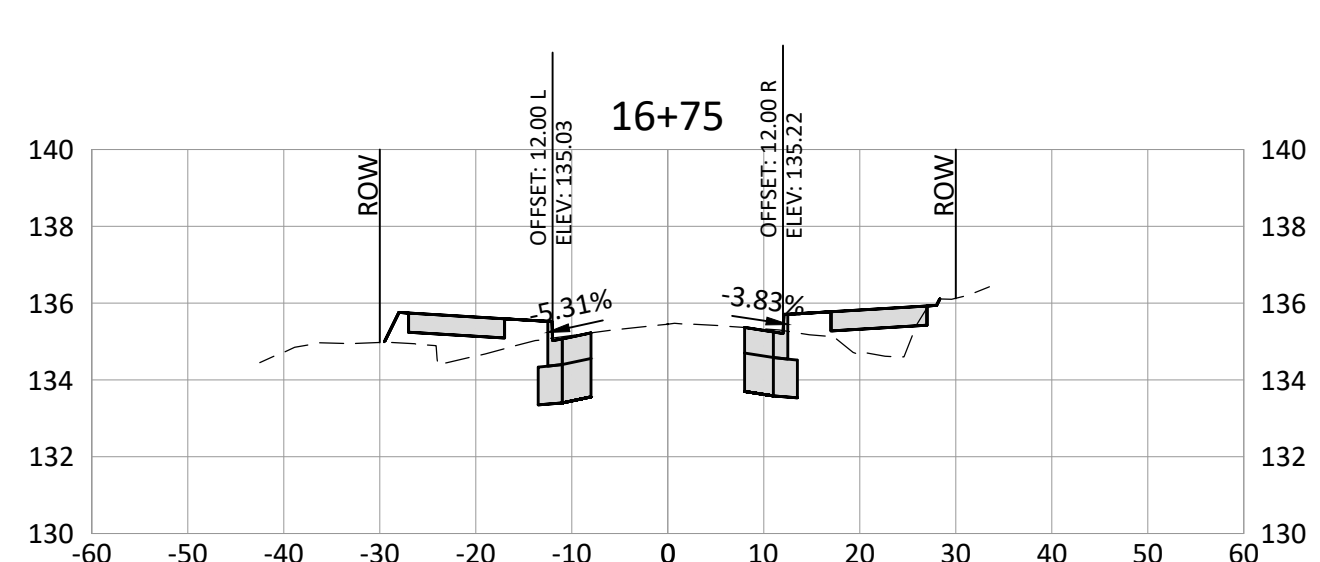
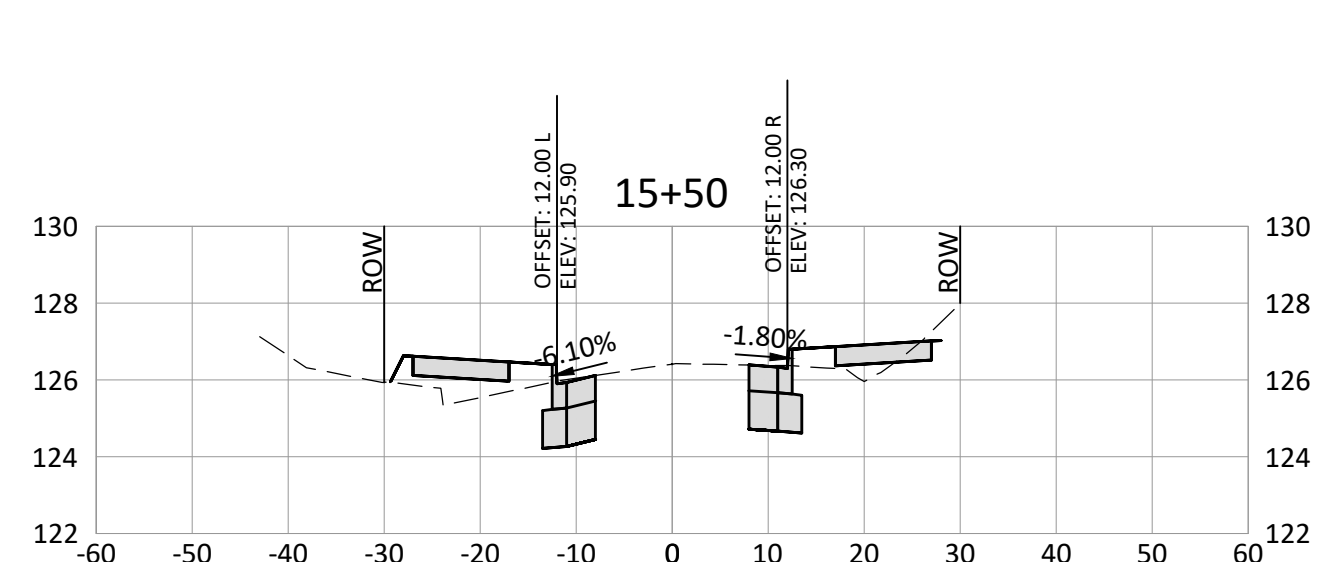
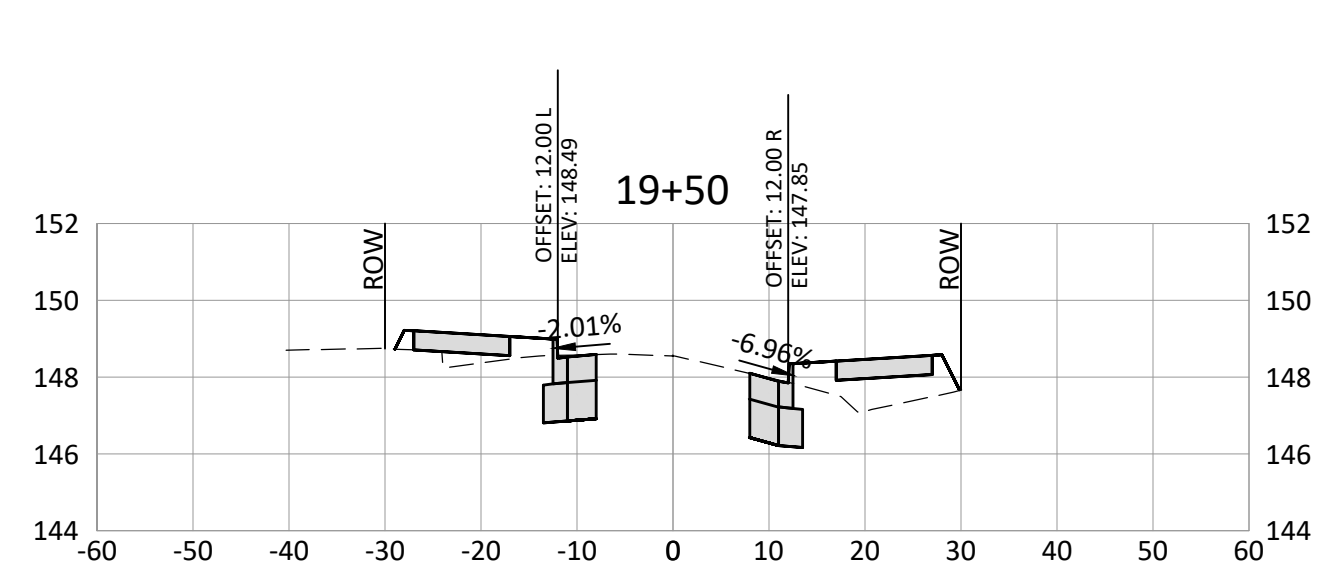
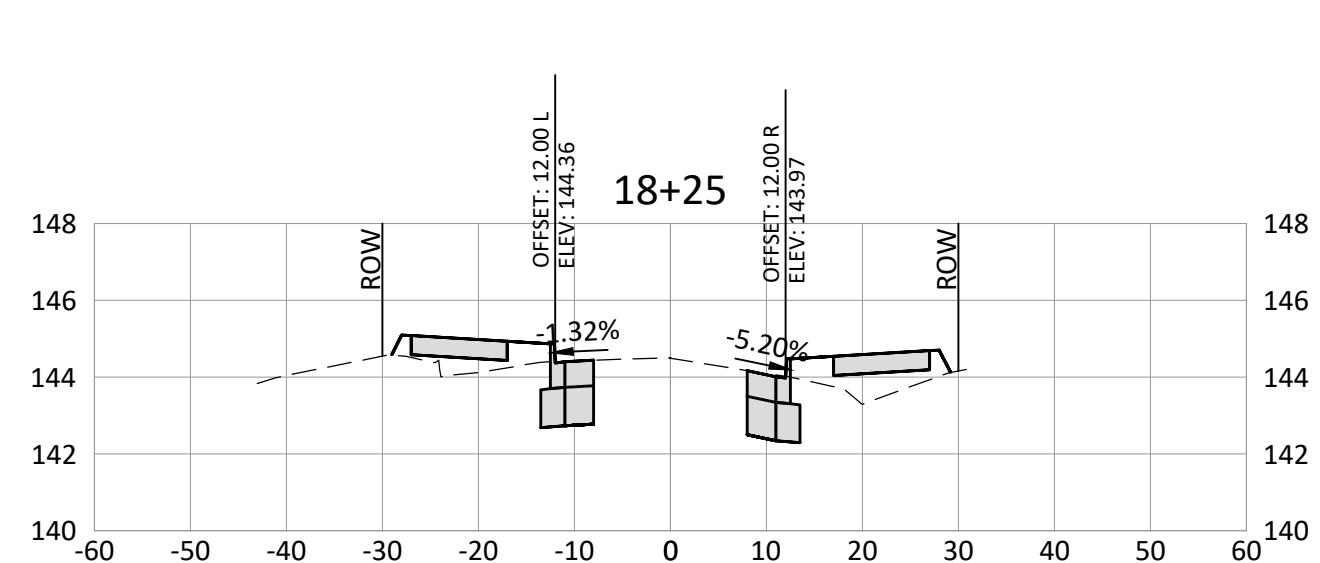
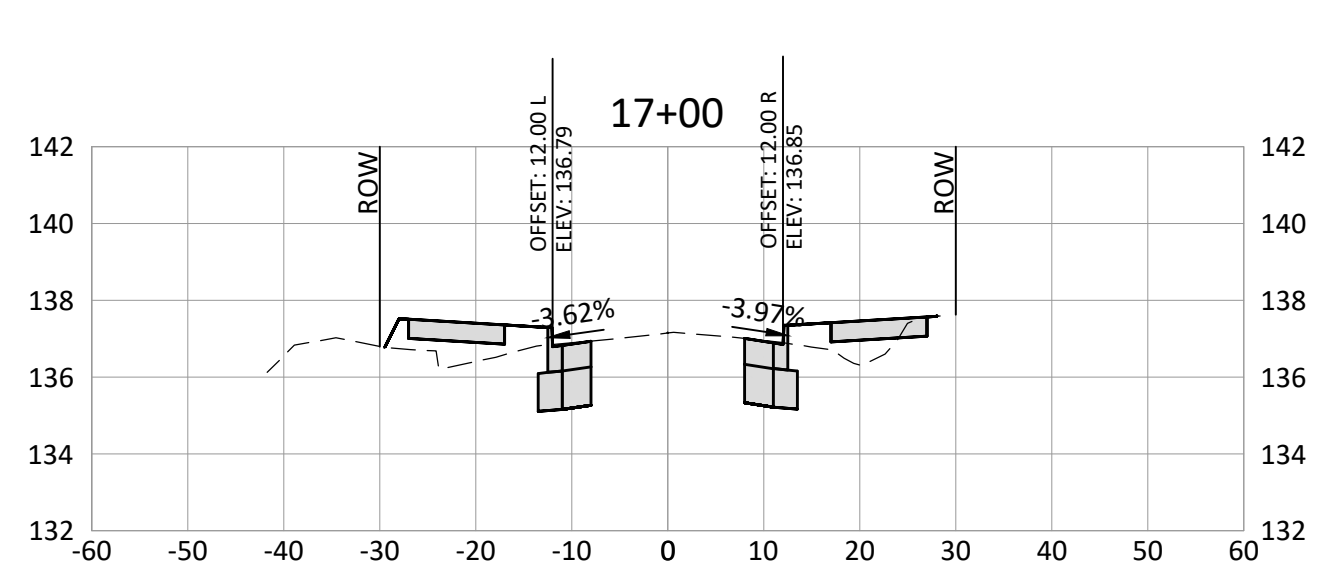
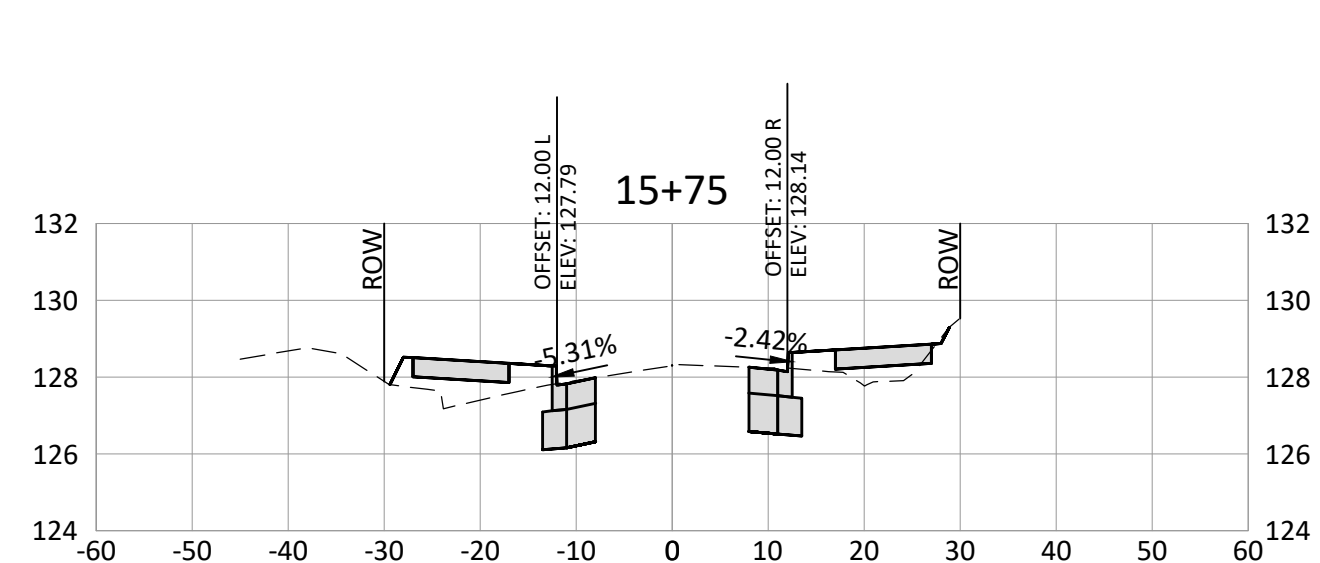
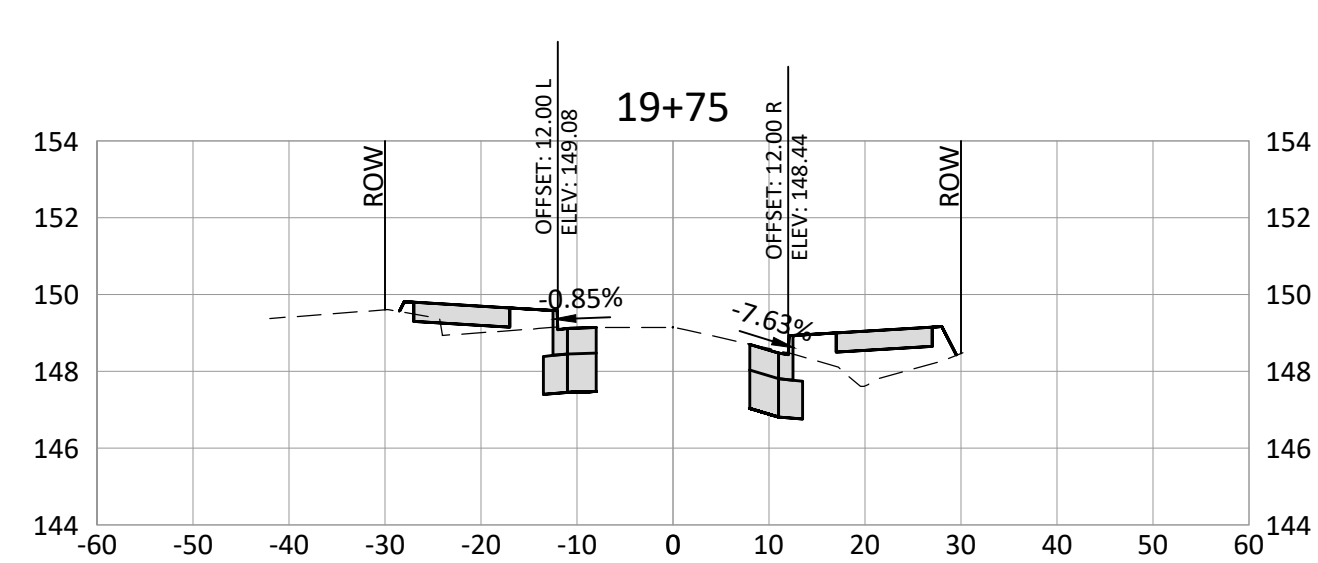
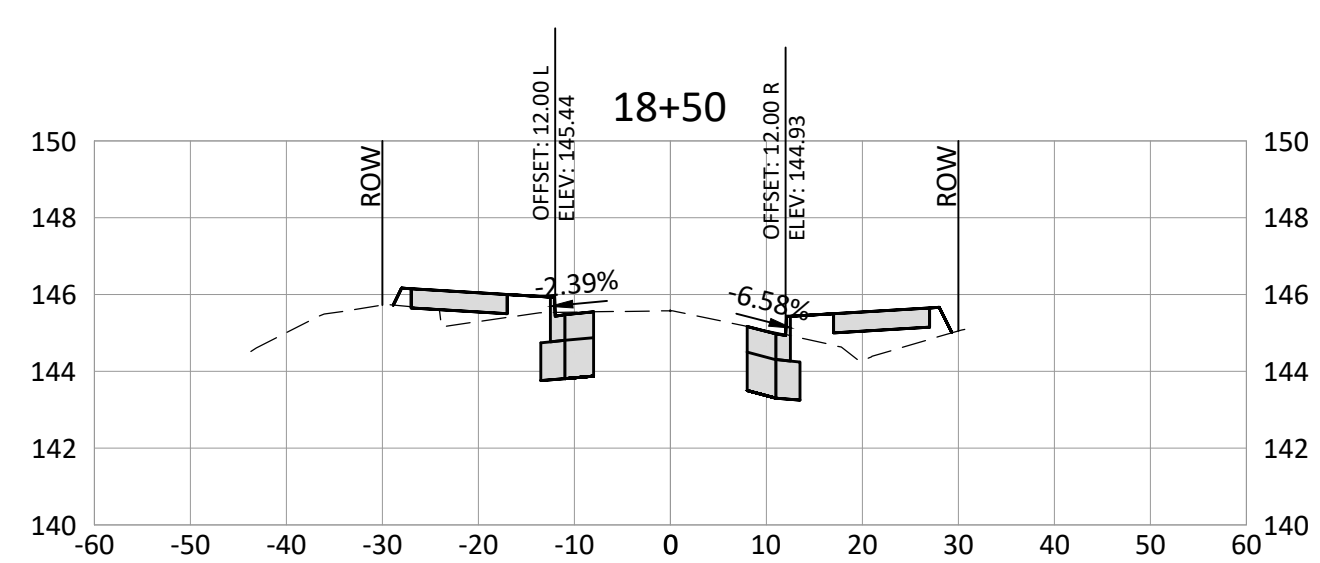
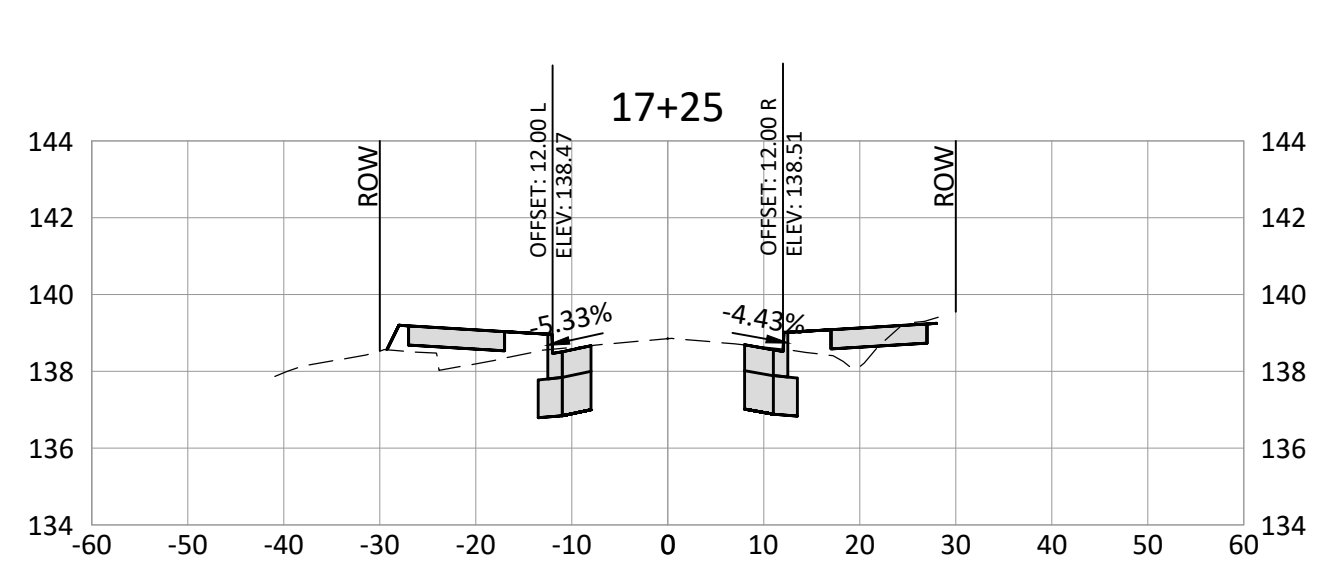
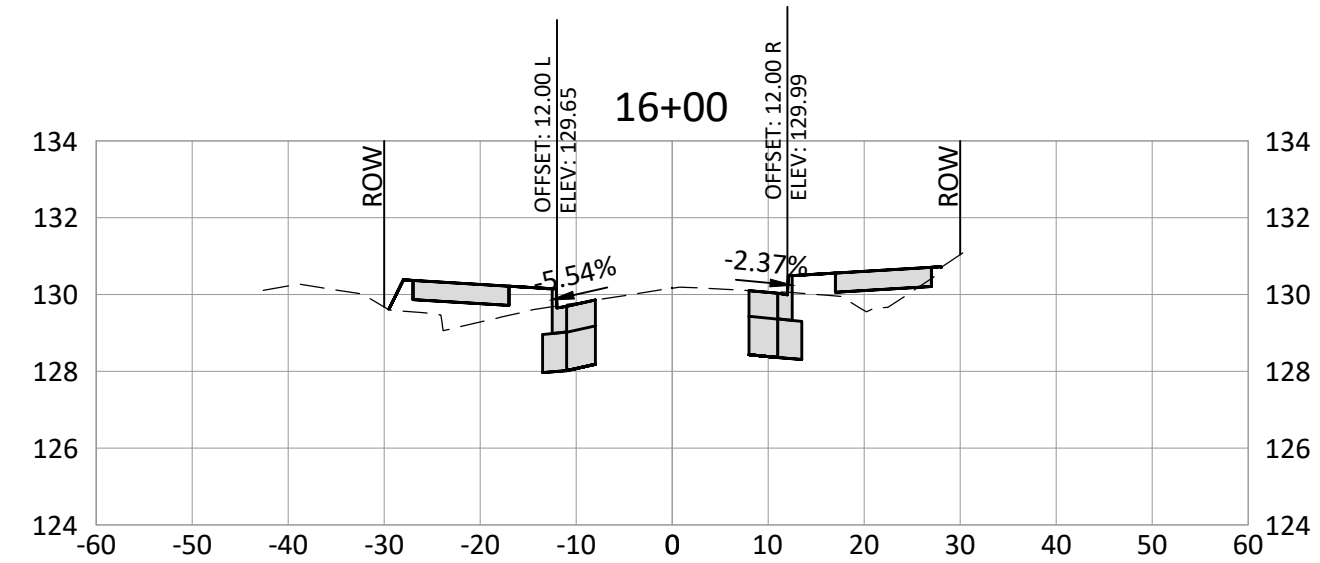
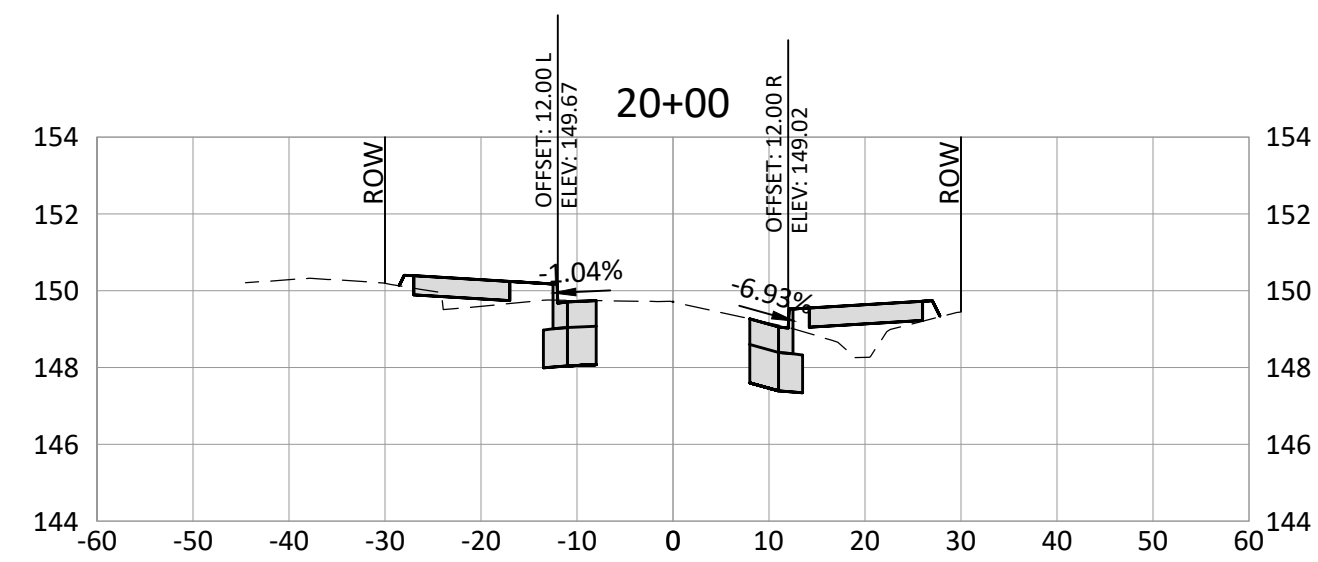
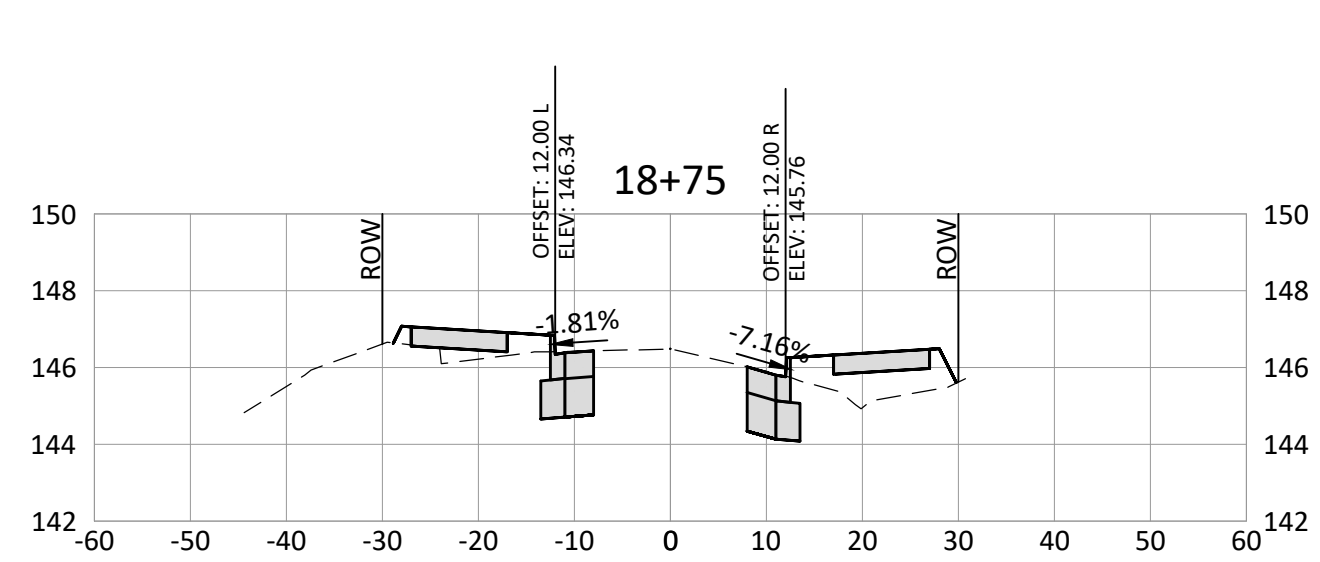
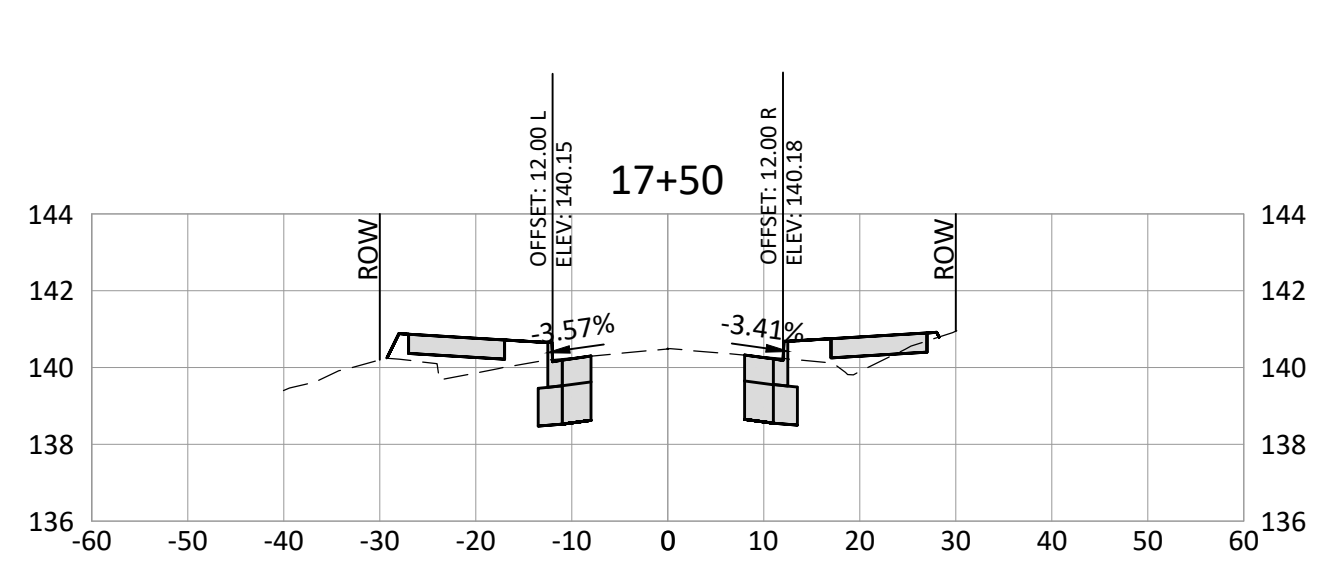
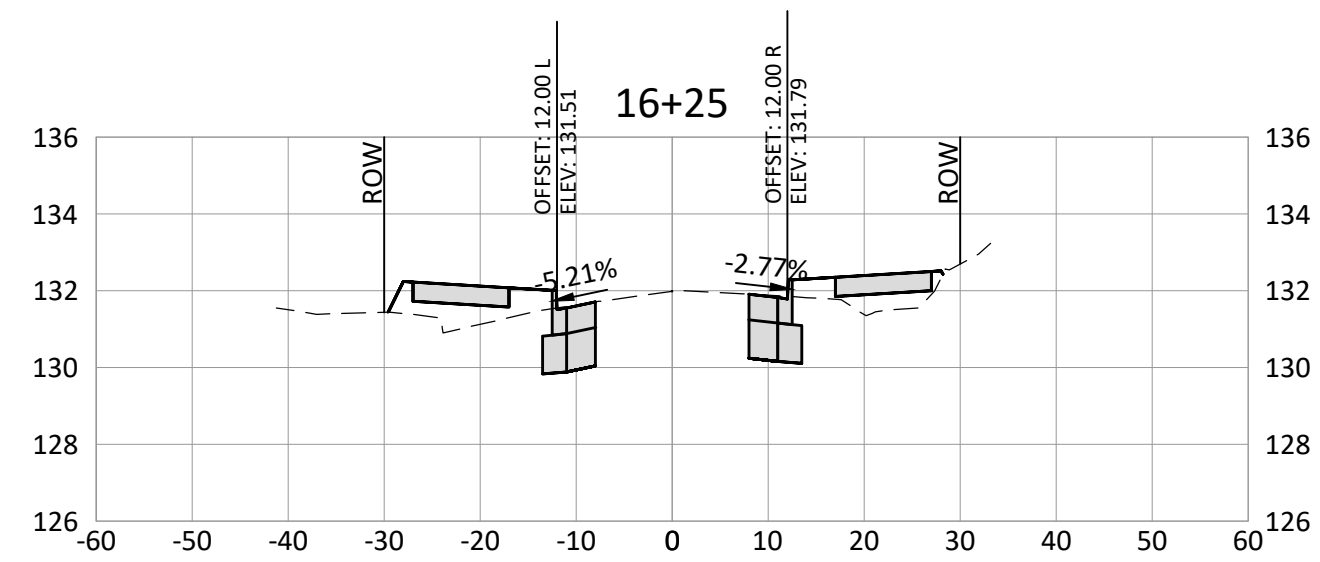
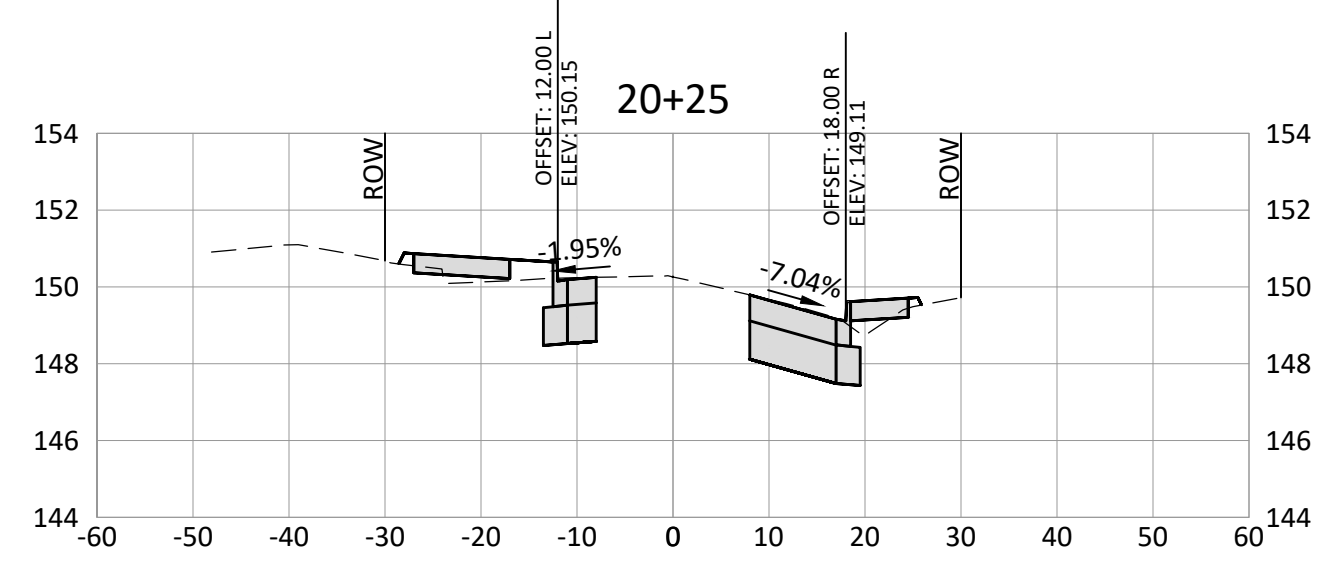
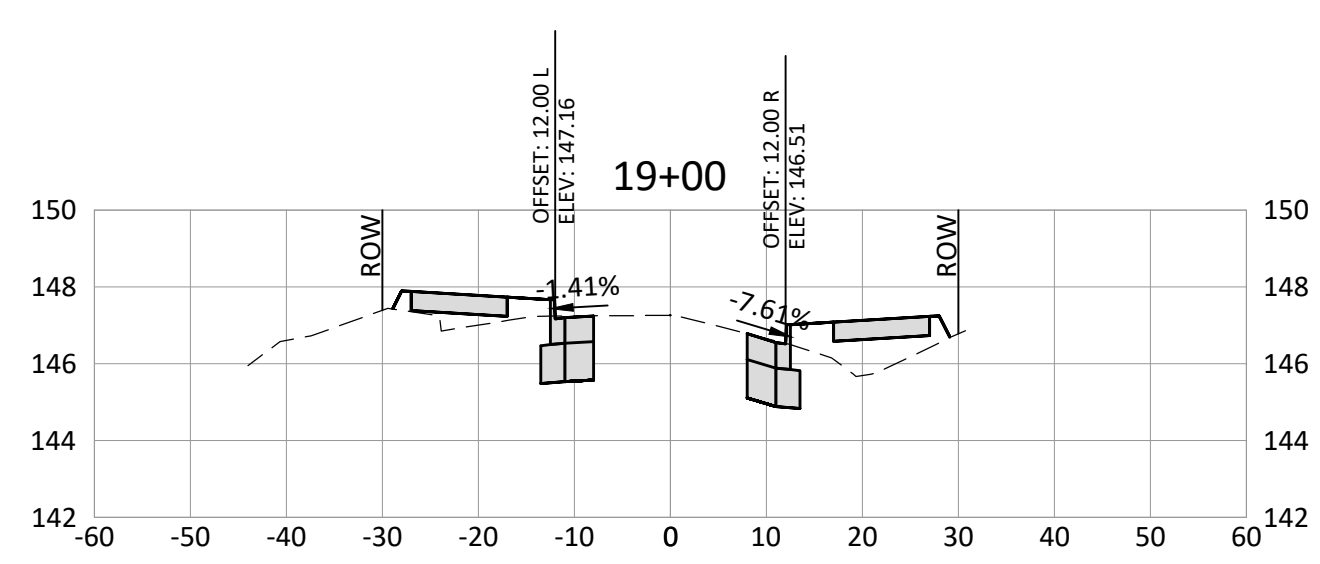
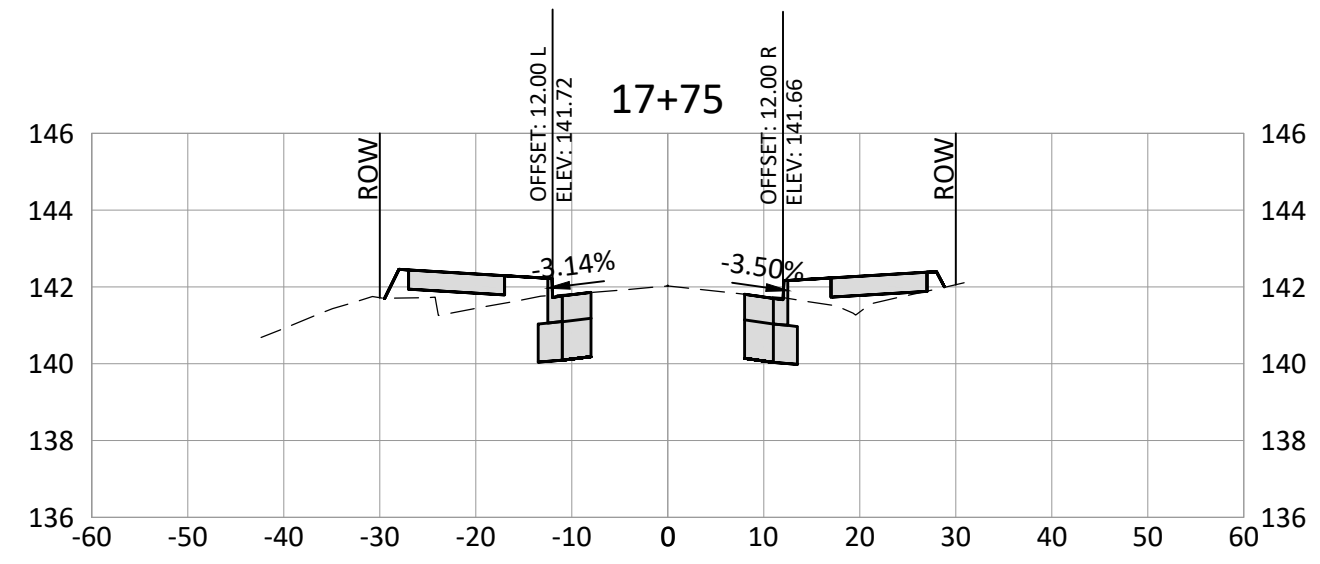
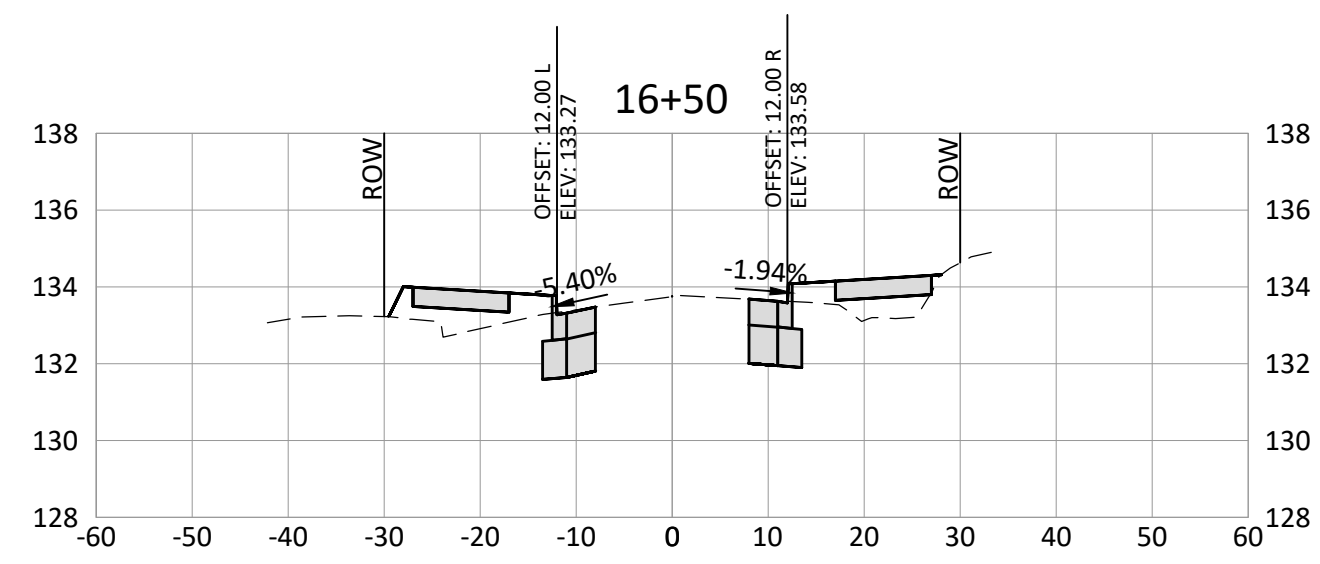
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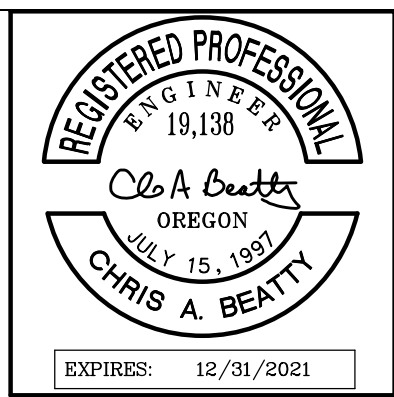
CROSS SECTIONS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	10.0
JOB NO.	MWK-28



DATE	NO.	DESCRIPTION
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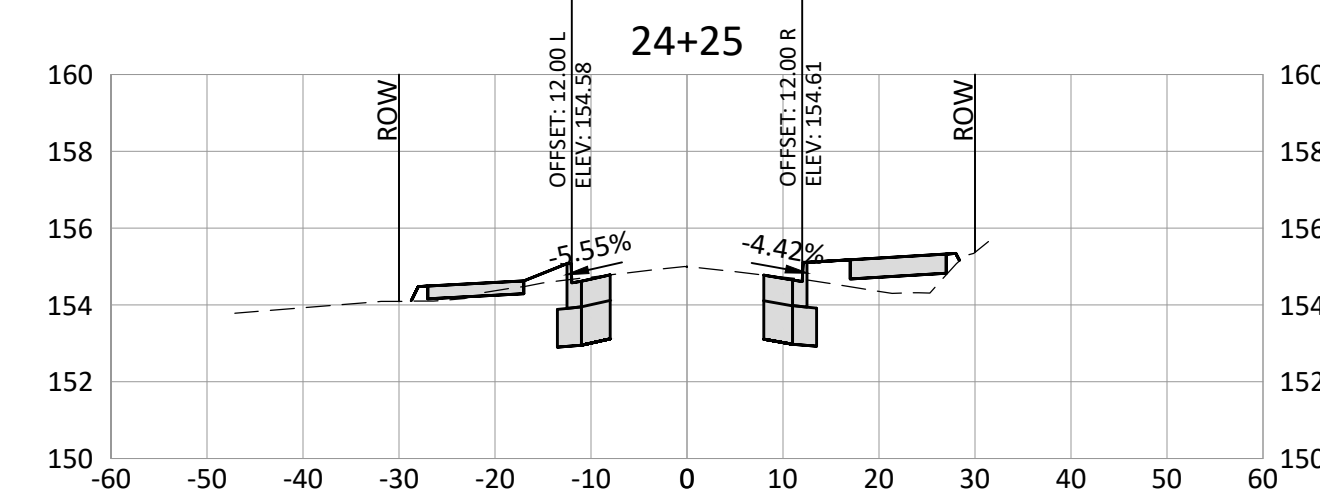
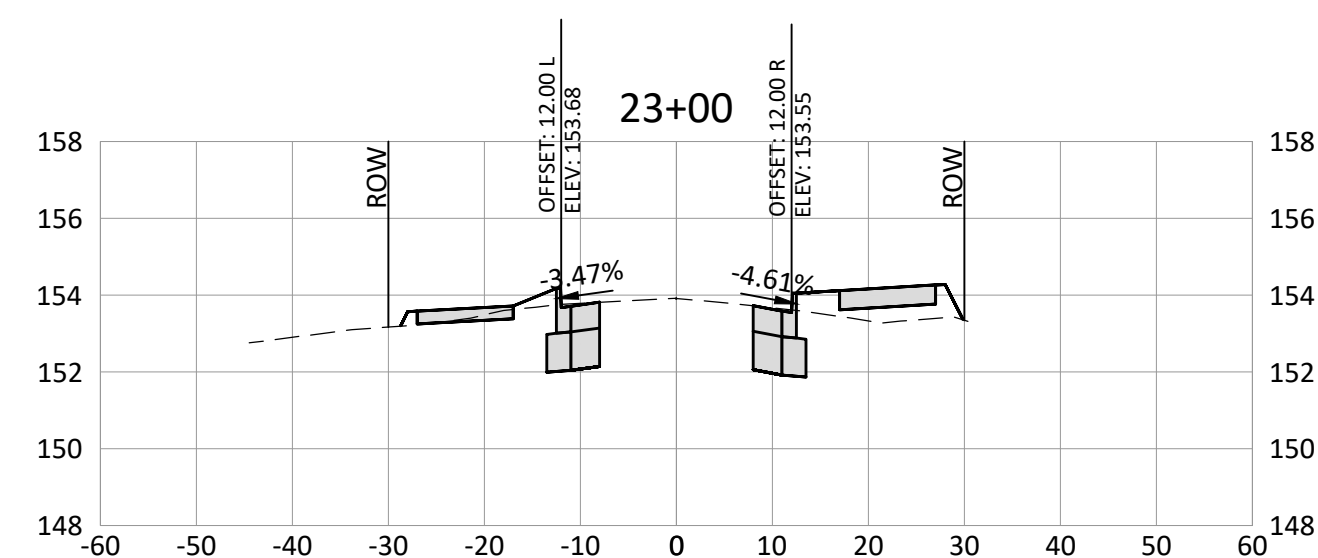
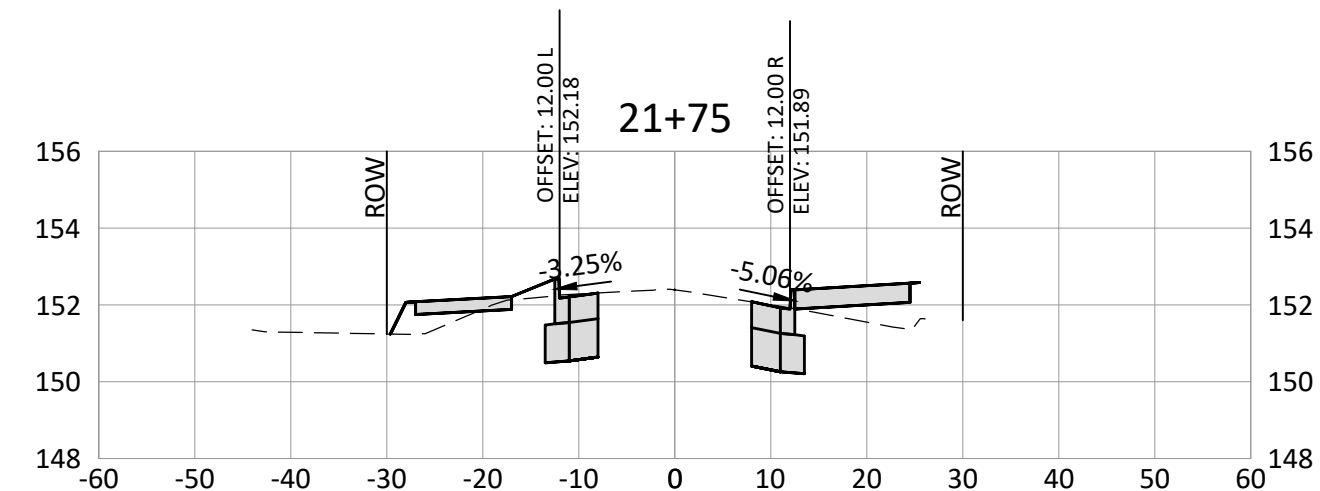
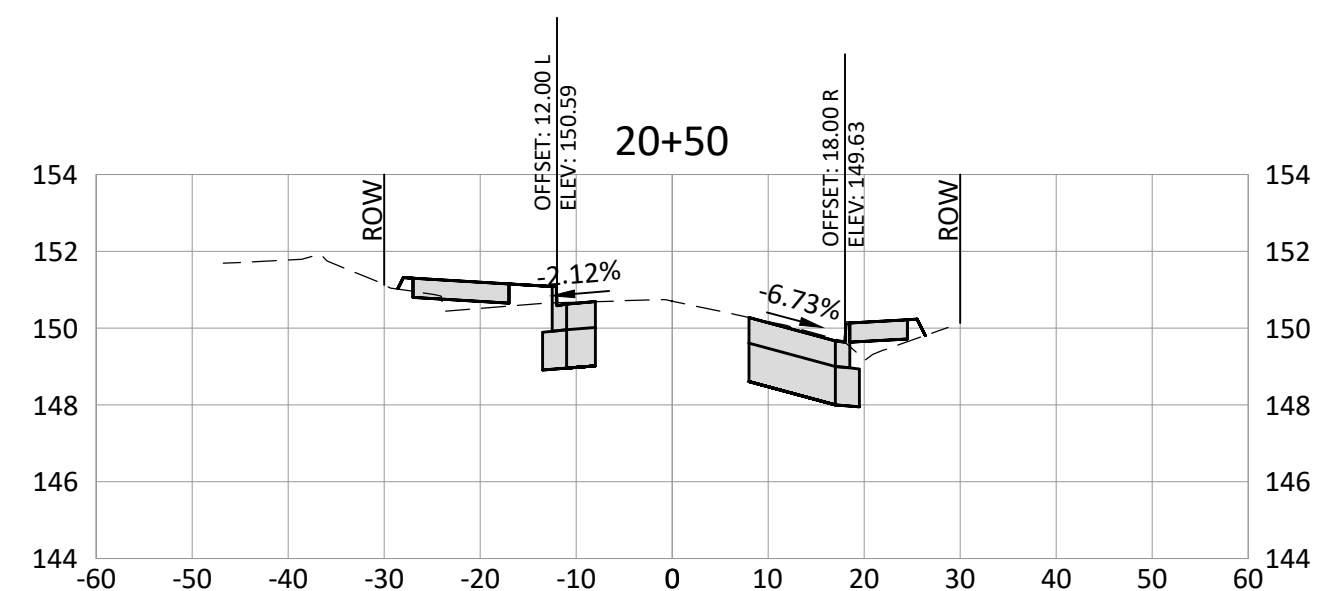
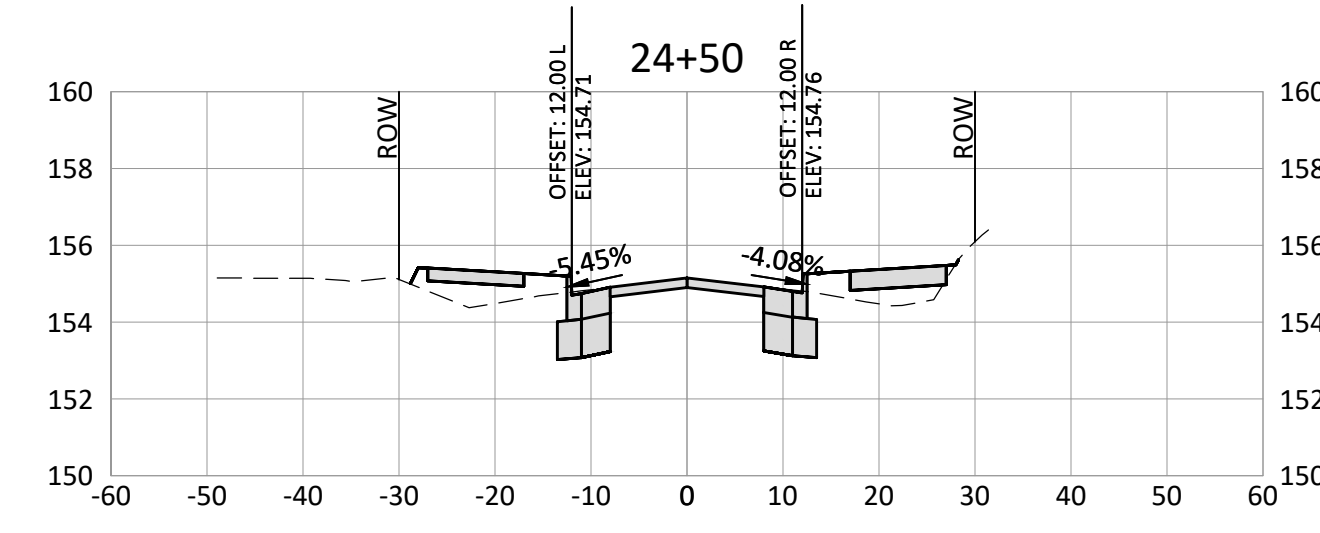
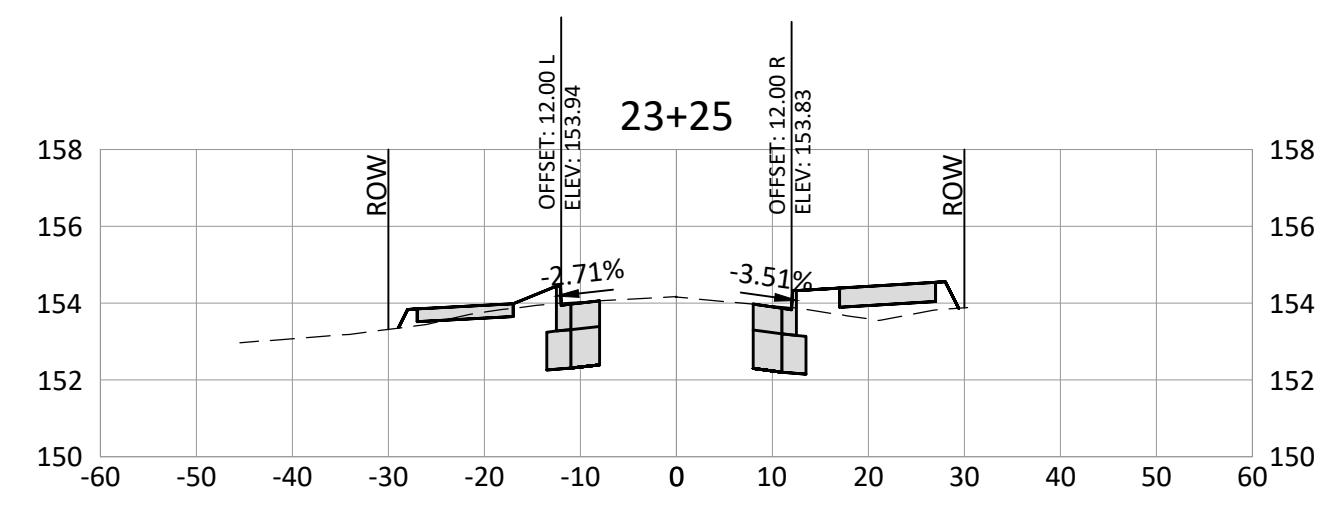
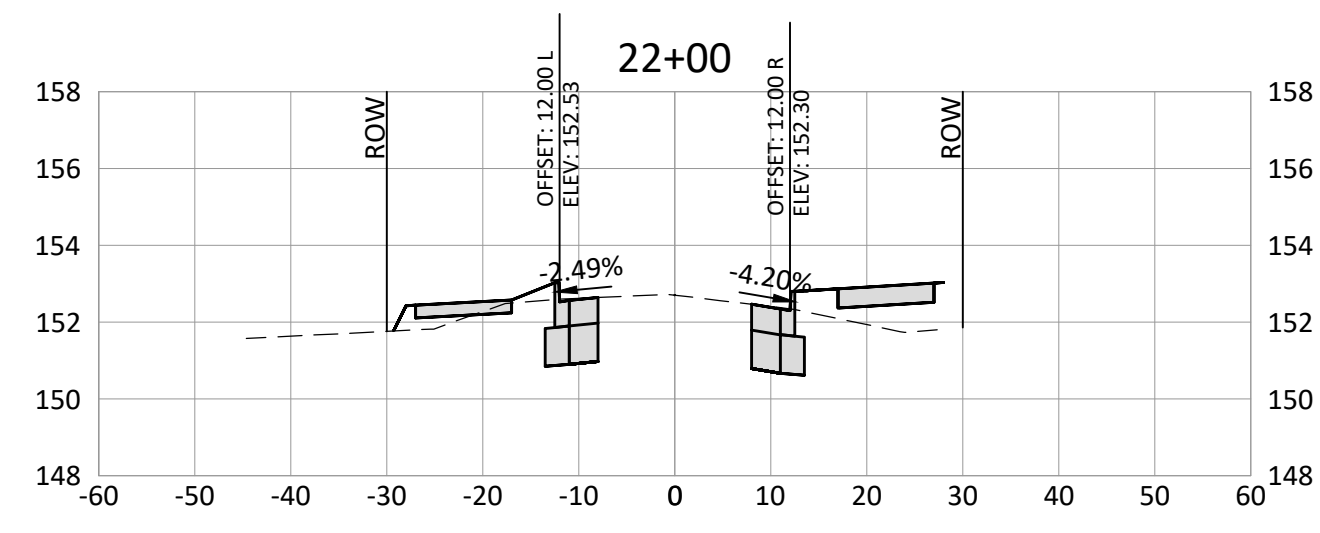
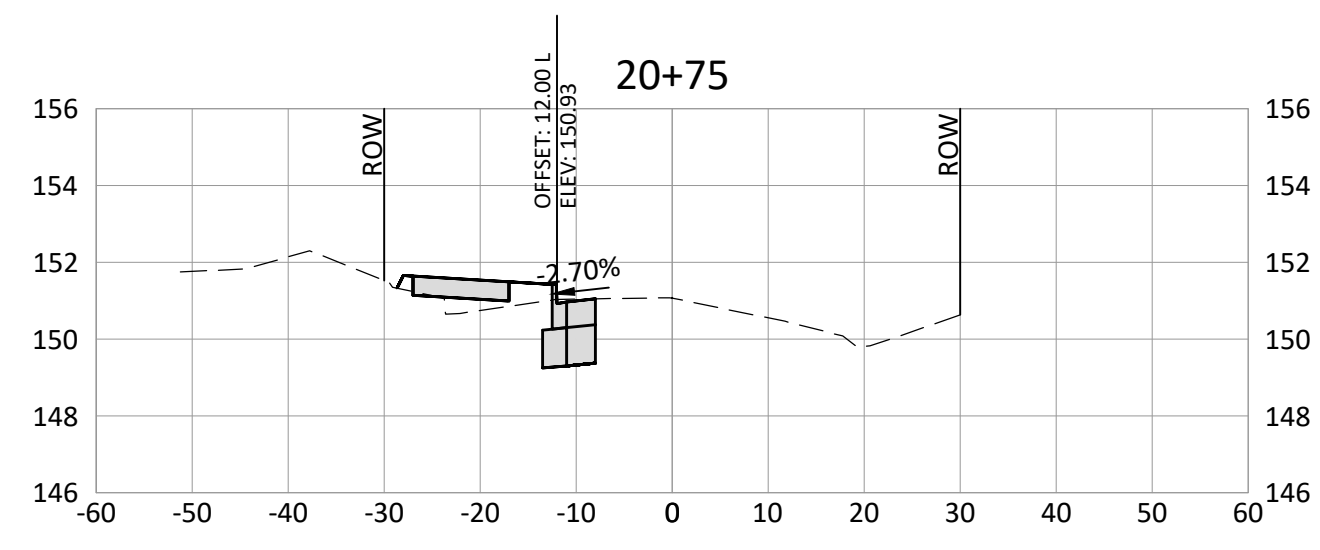
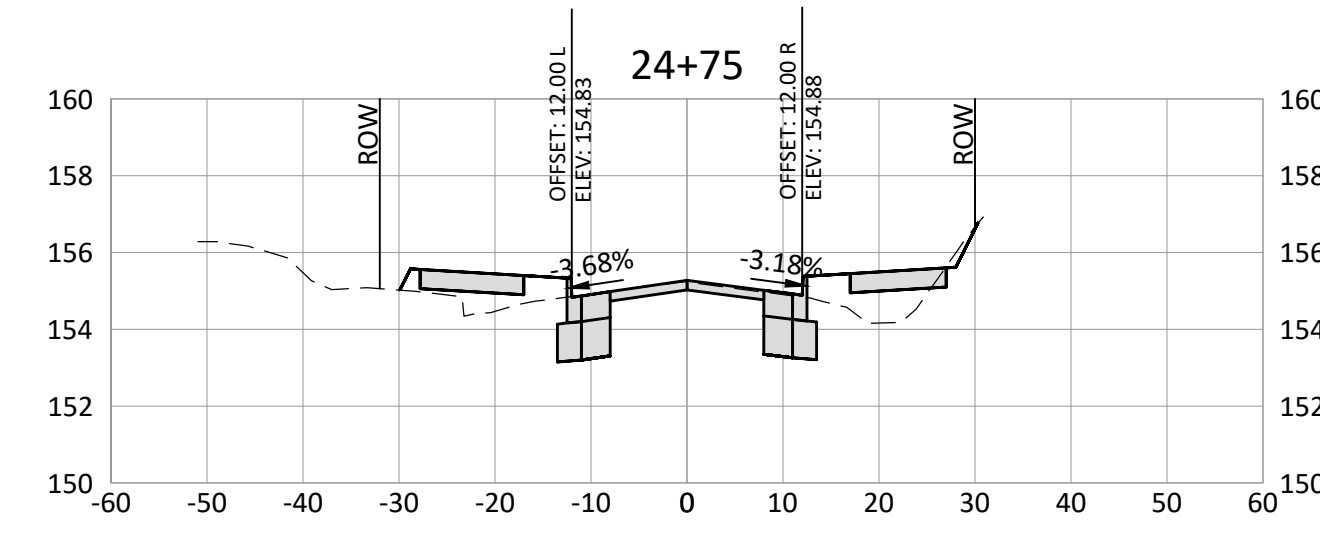
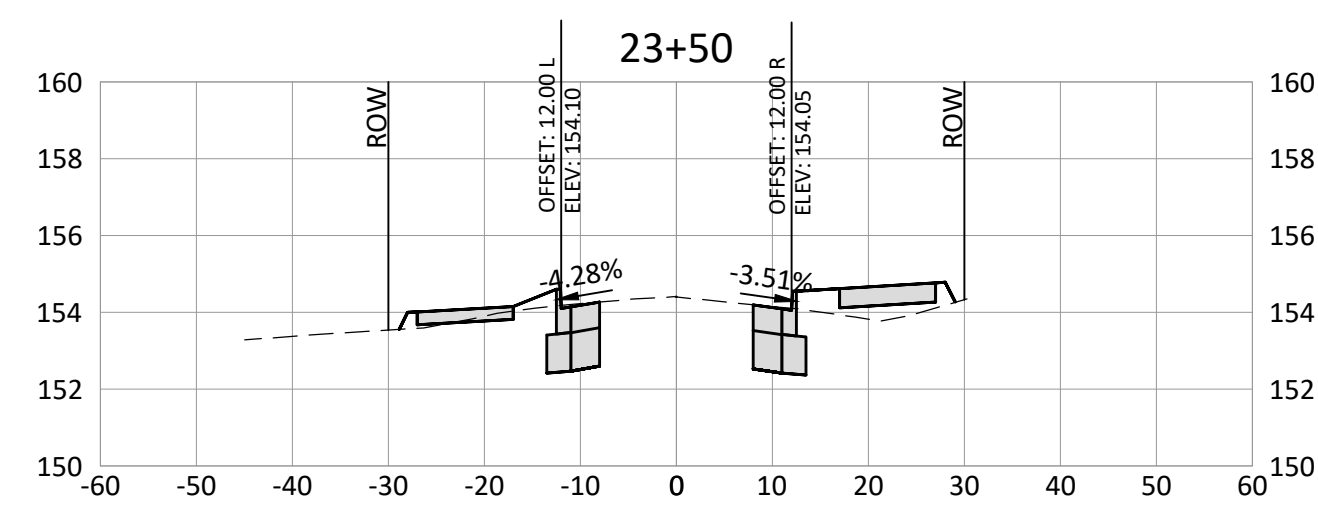
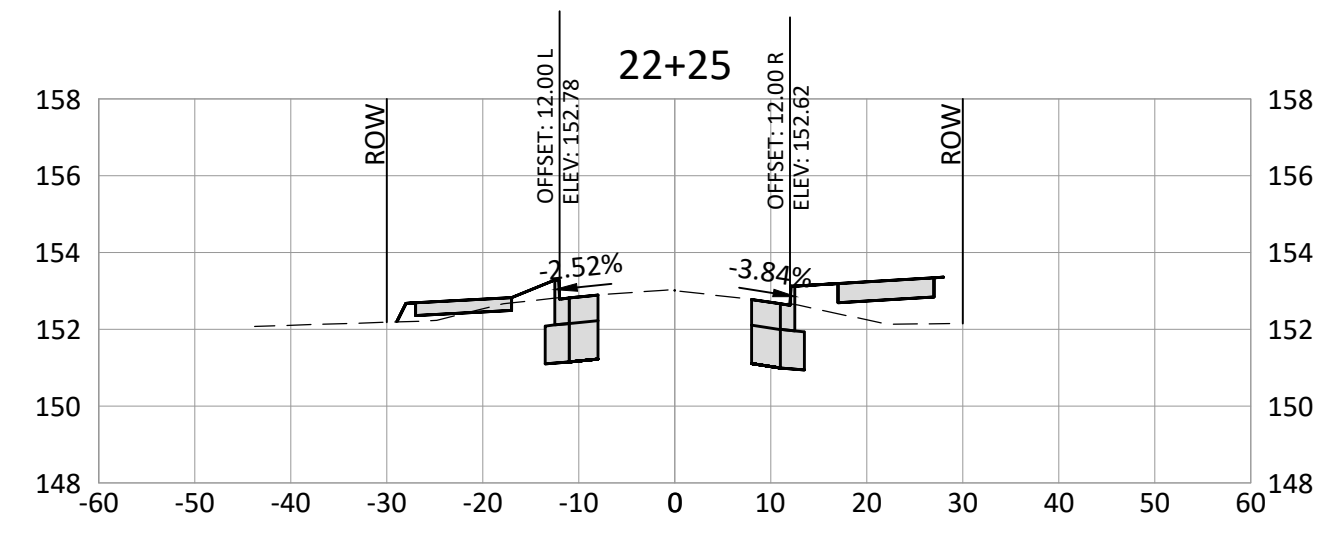
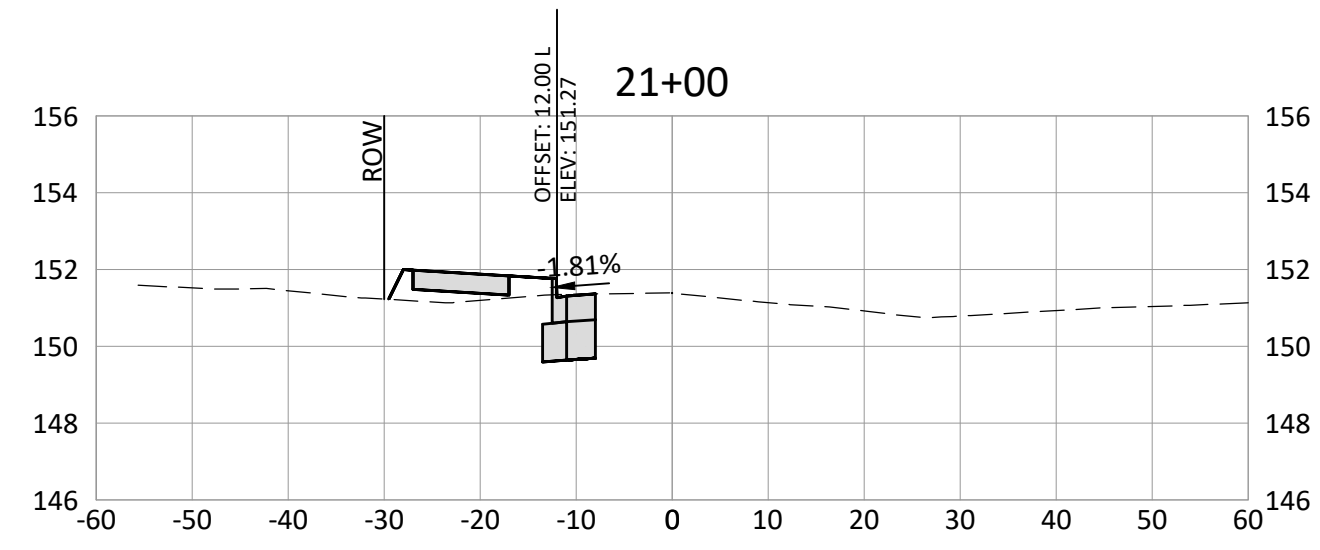
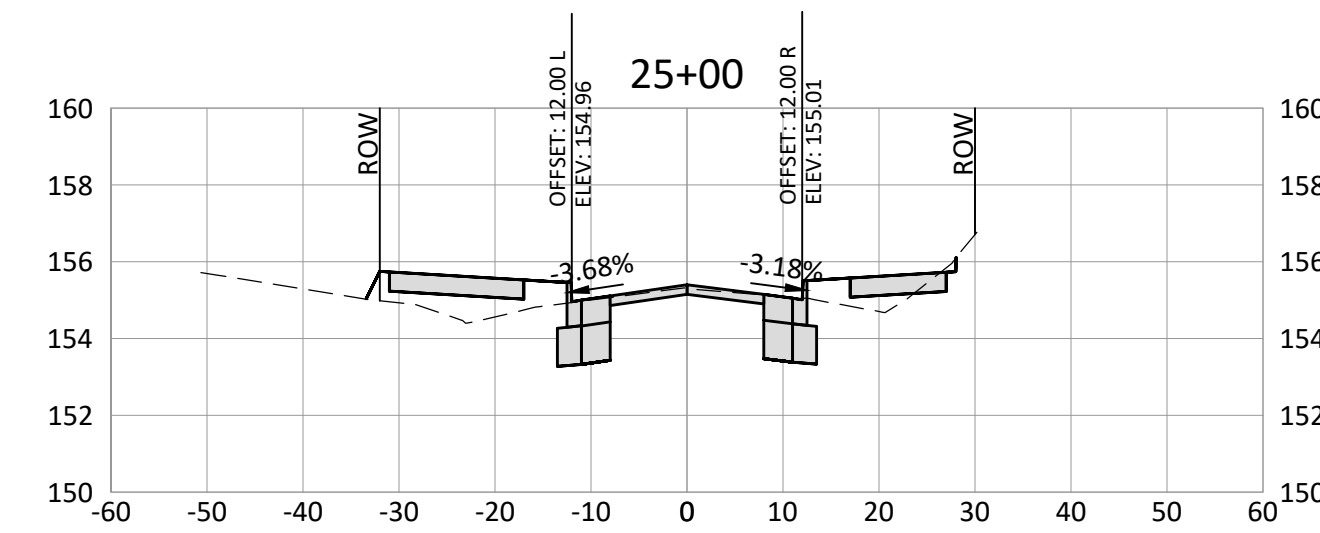
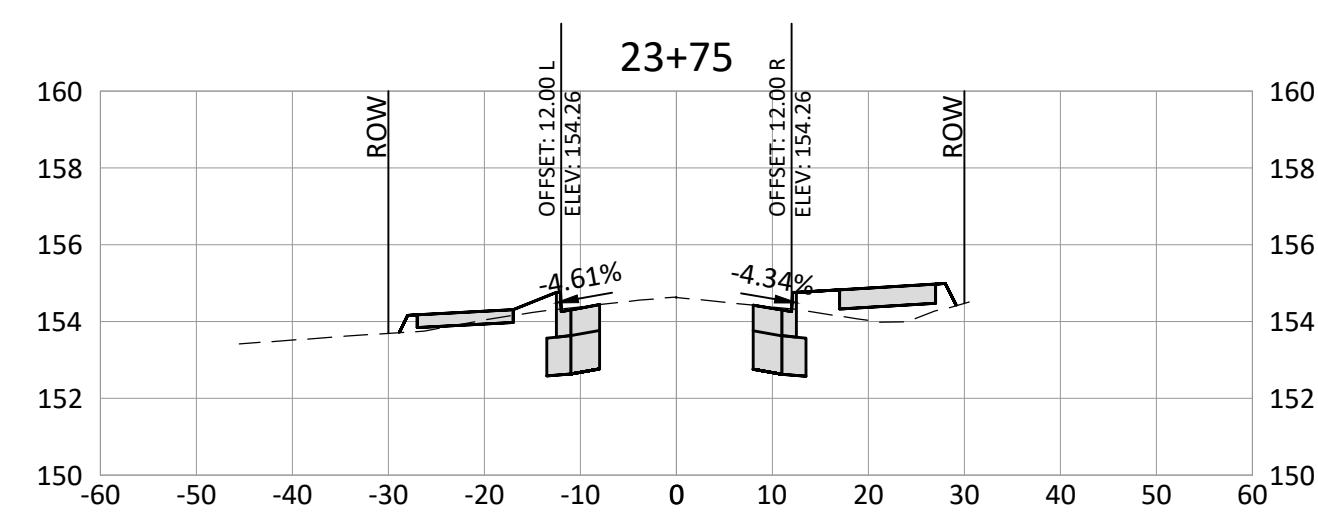
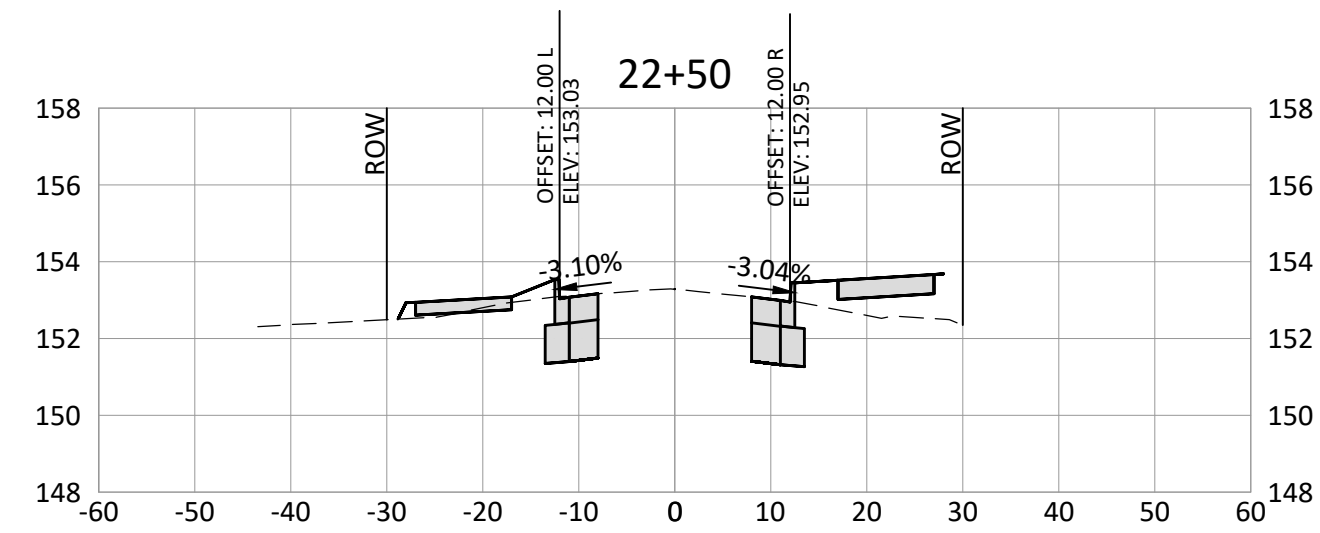
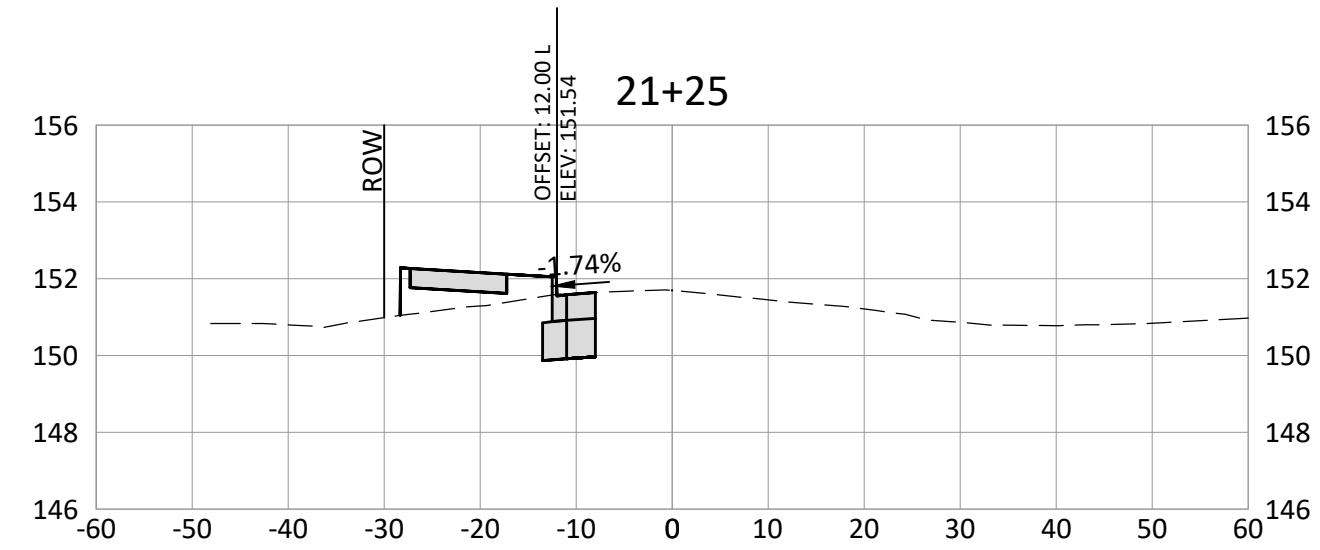
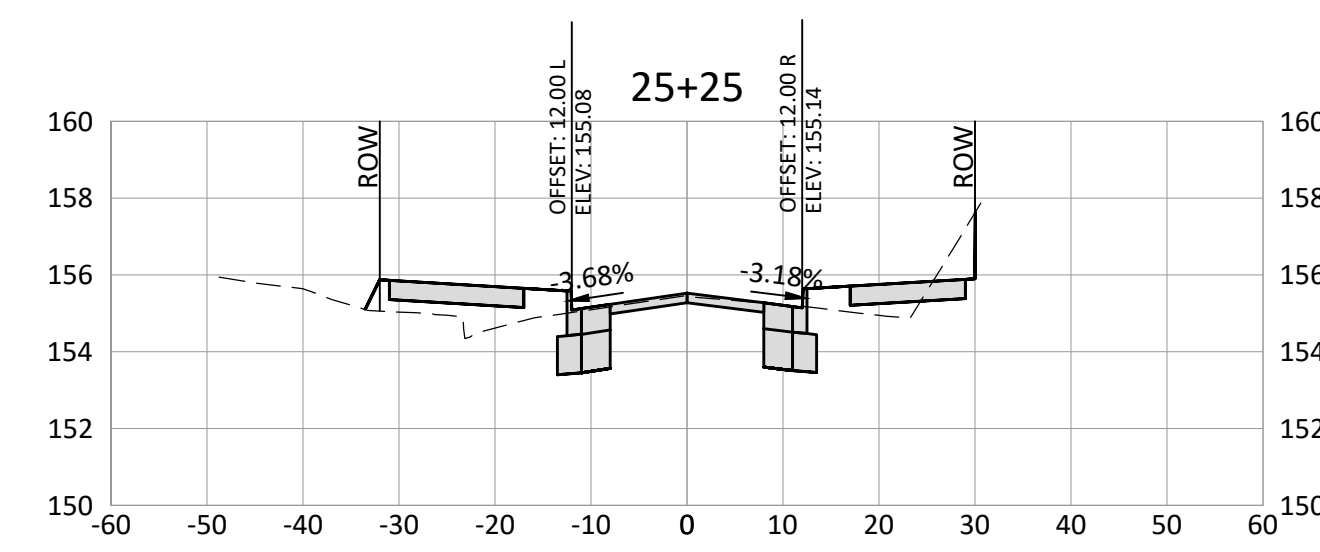
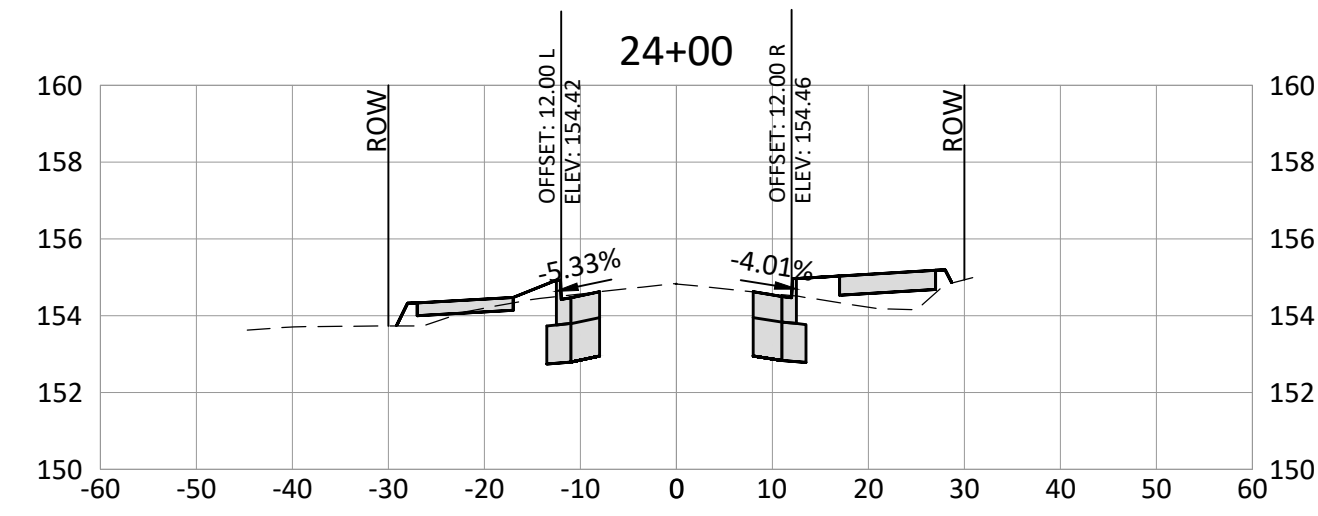
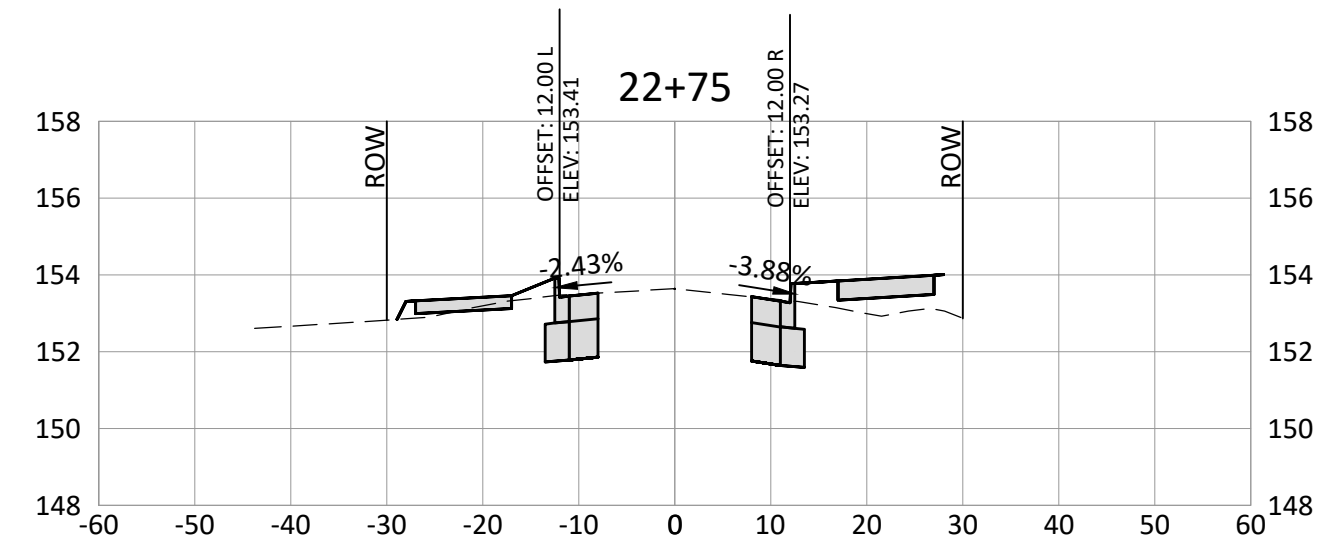
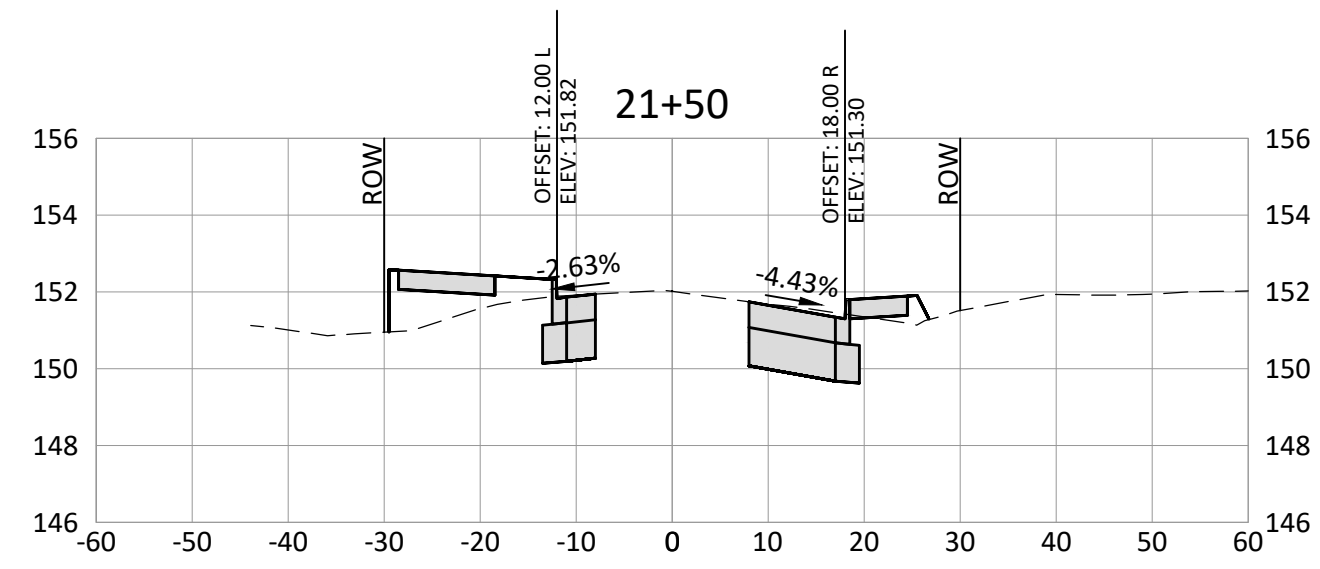


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**CROSS SECTIONS
 SE LINWOOD AVENUE
 MILWAUKIE, OREGON**

SHEET NO.	10.1
JOB NO.	MWK-28

P:\M\K (City of Milwaukie)\M\K-28 Linwood Avenue\M\K-28-DWG(Sheets)\M\K-28-10.0 CROSS SECTIONS.dwg



DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
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CHECKED:	CAB
DATE:	9/1/2020

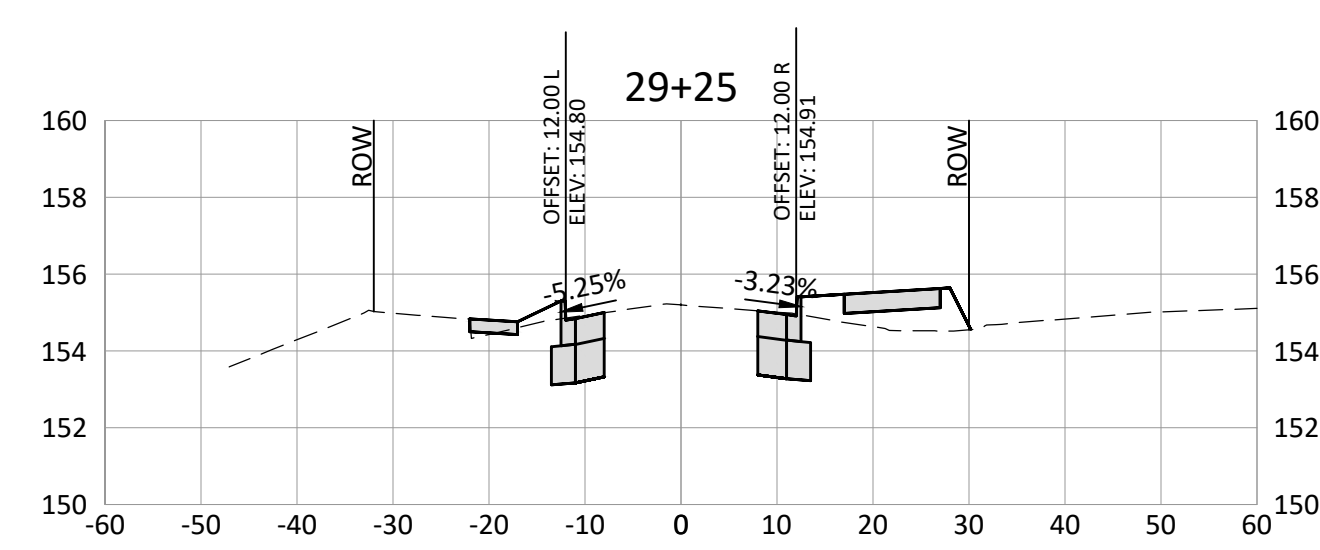
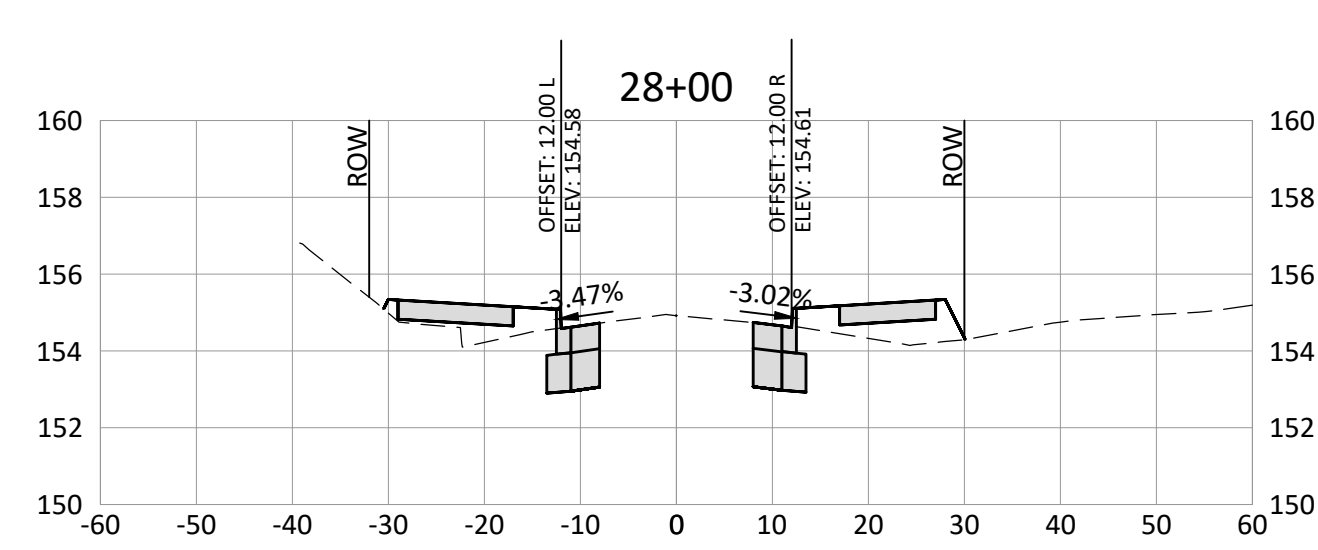
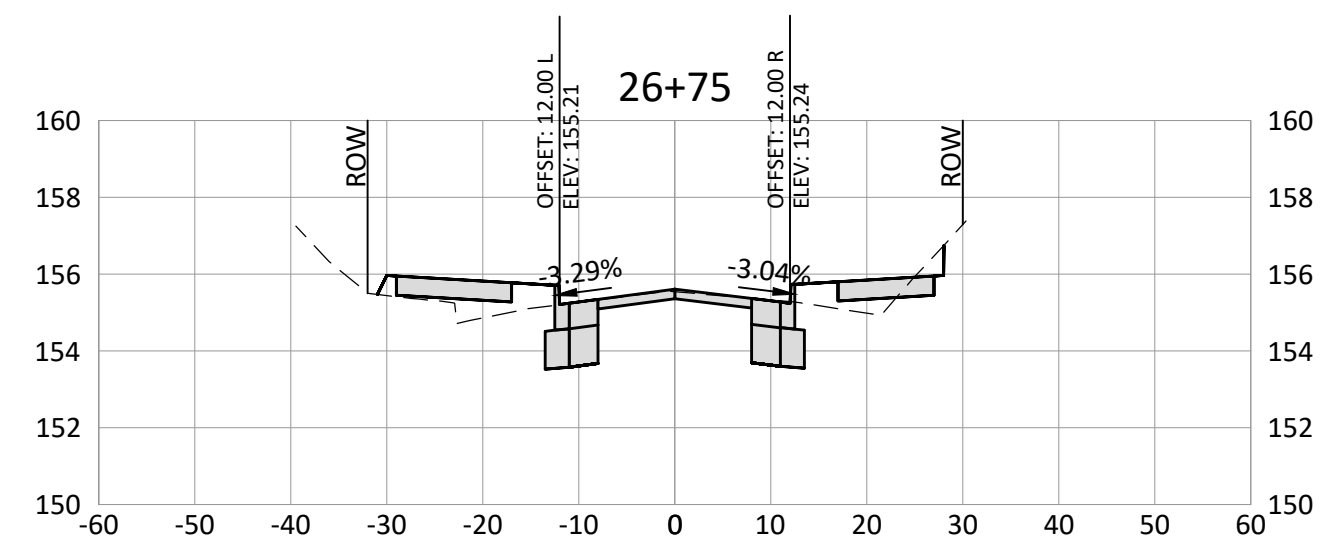
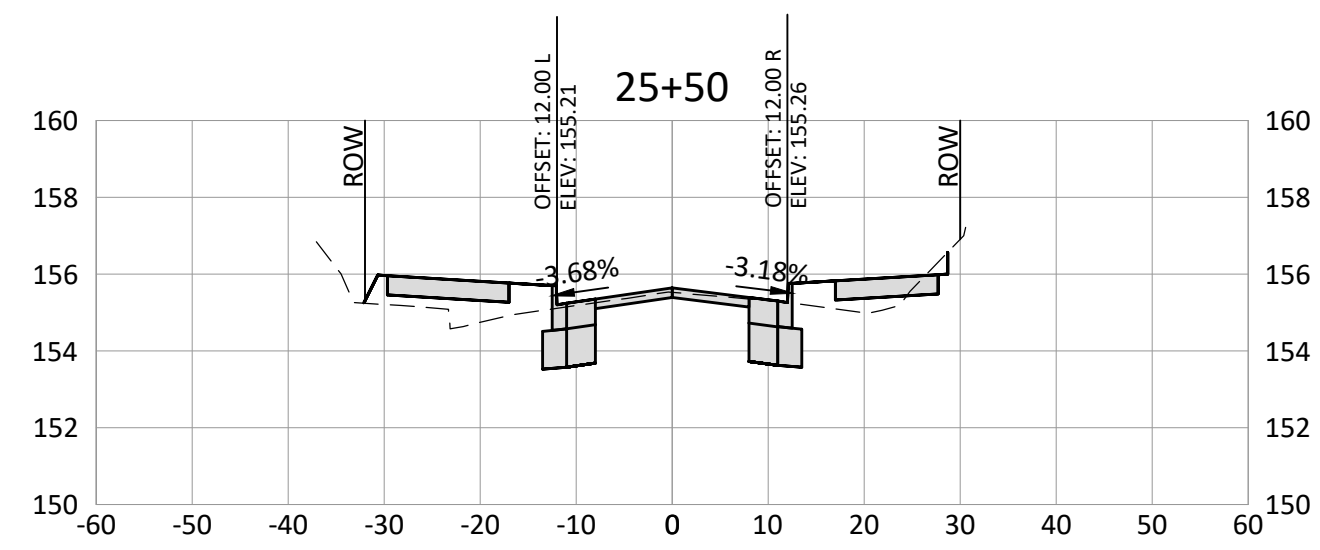
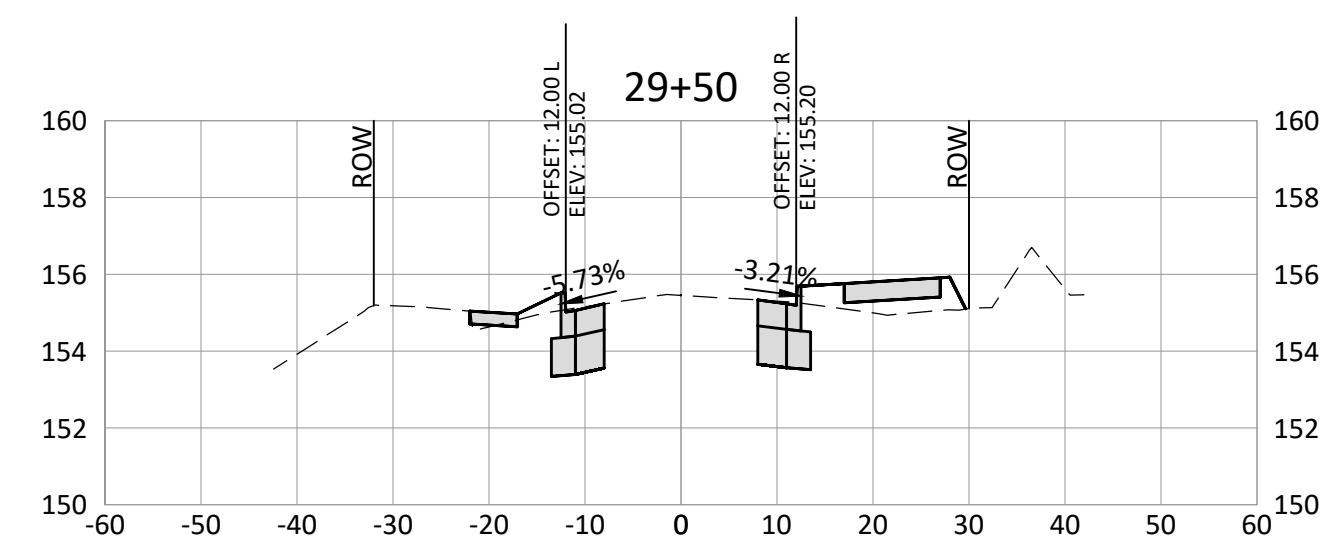
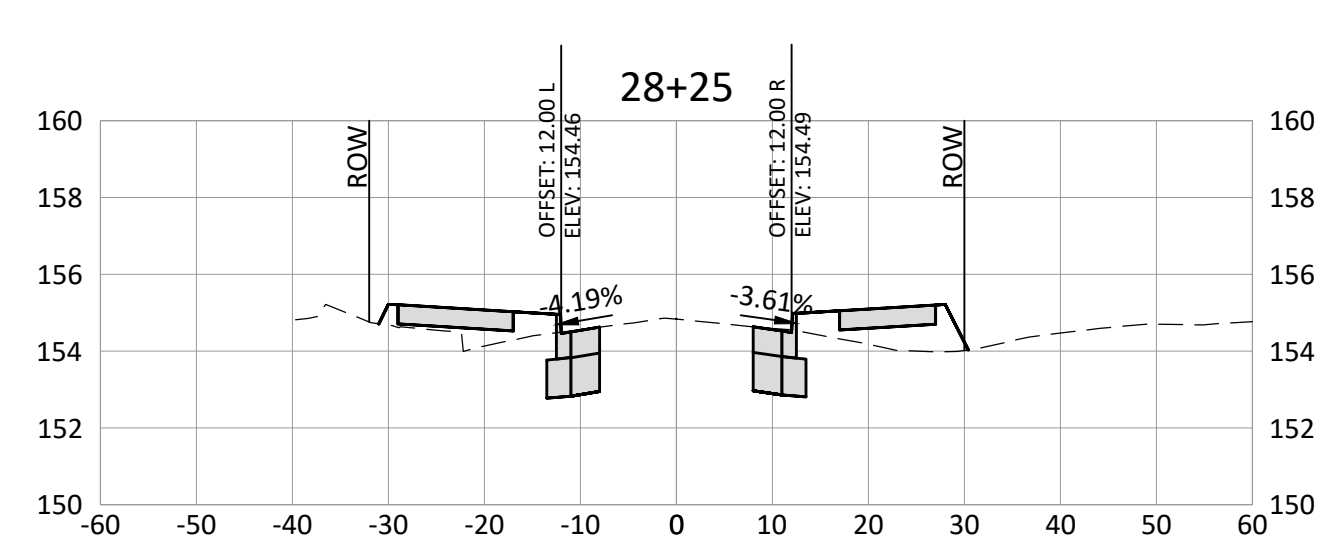
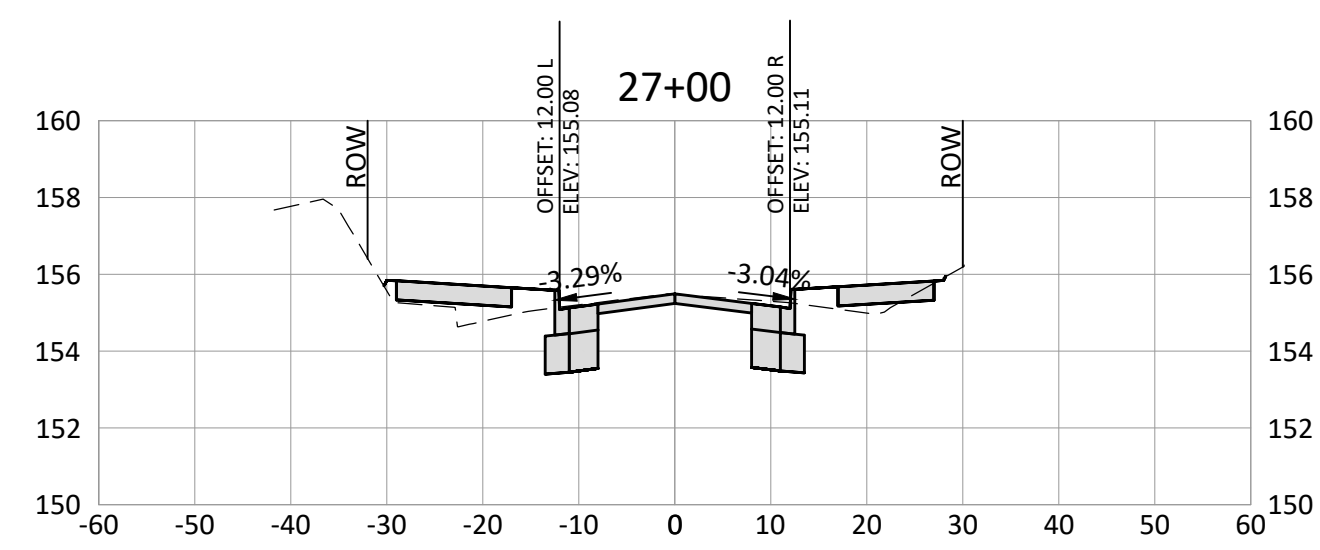
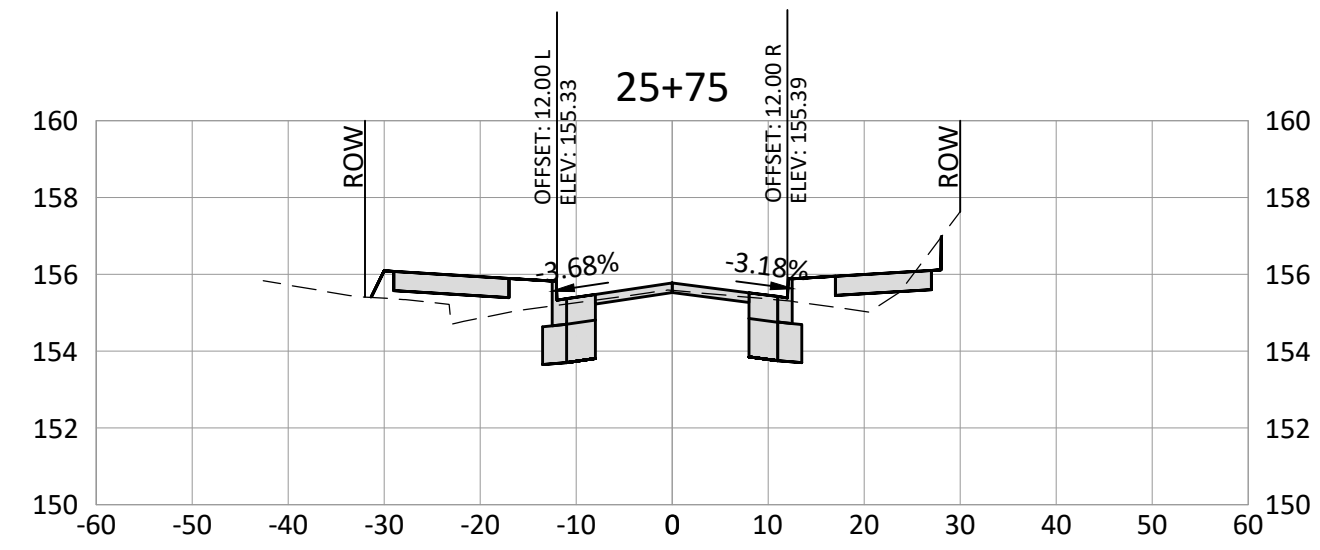
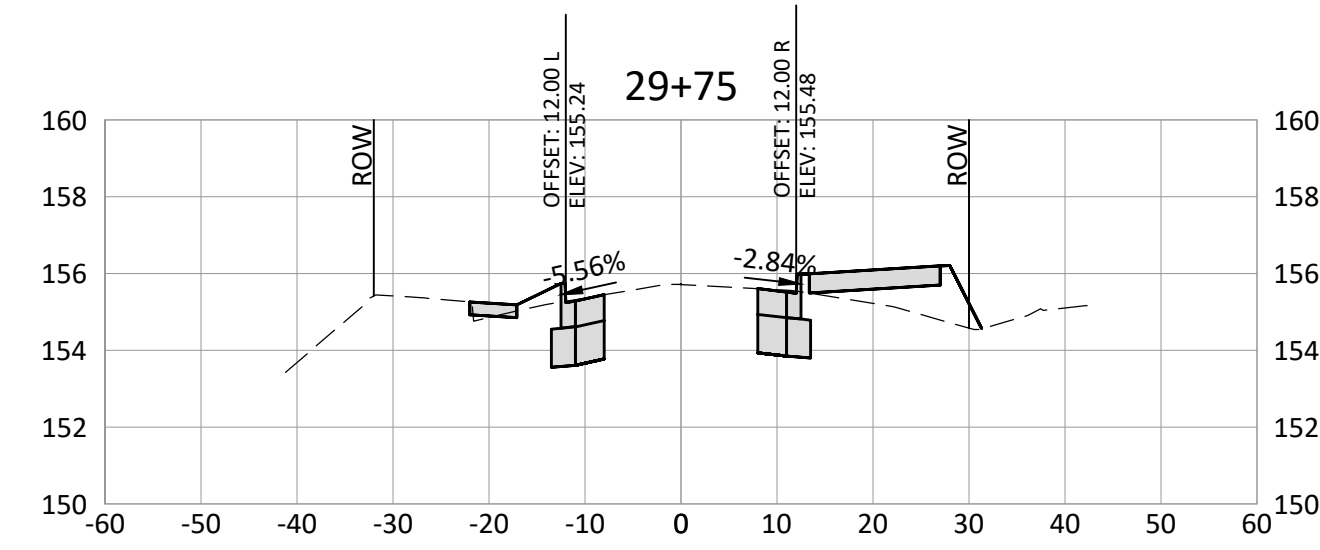
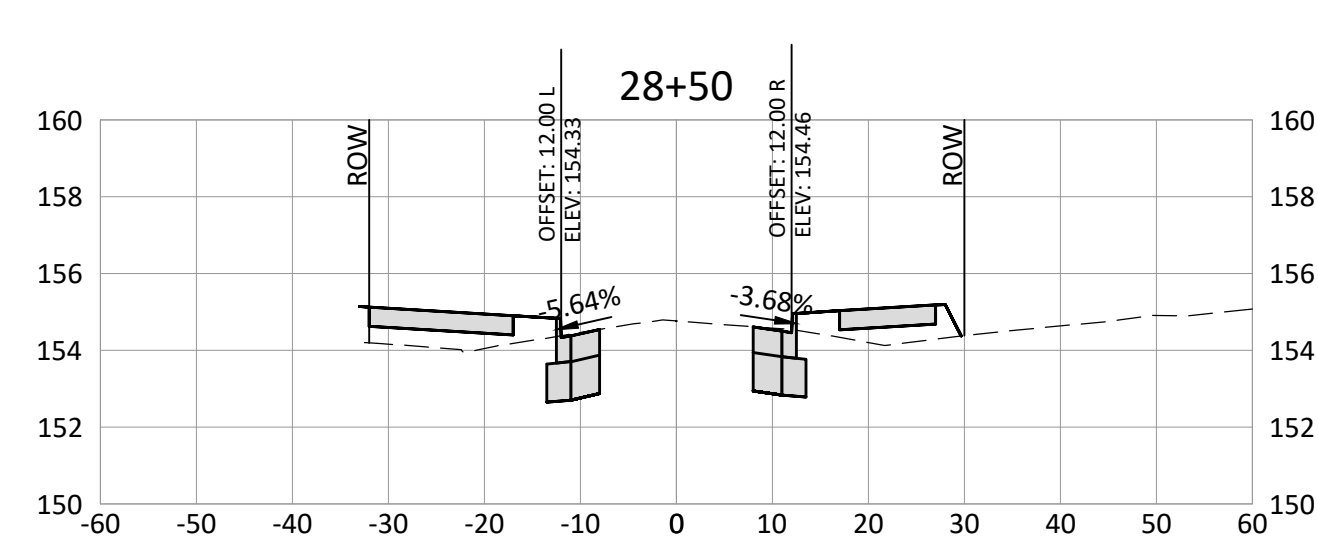
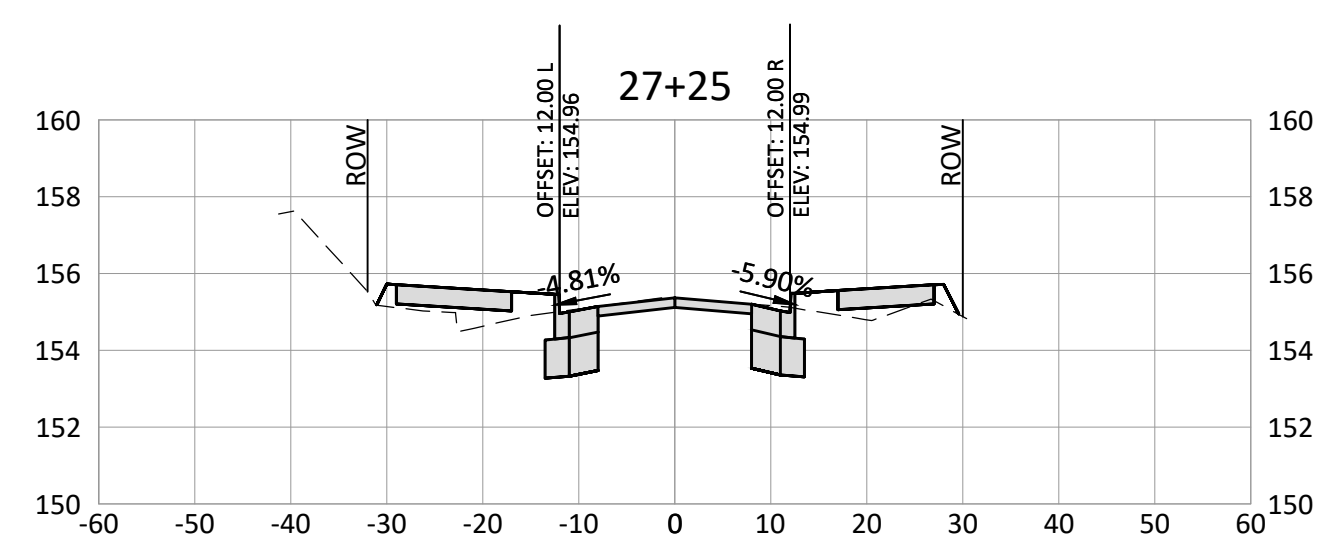
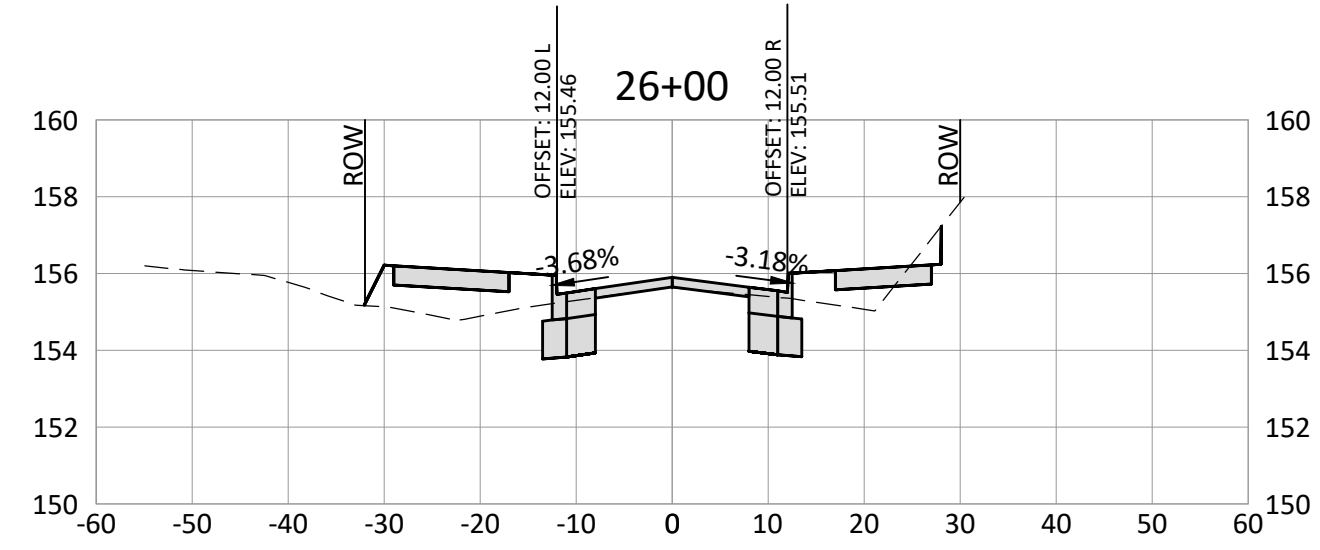
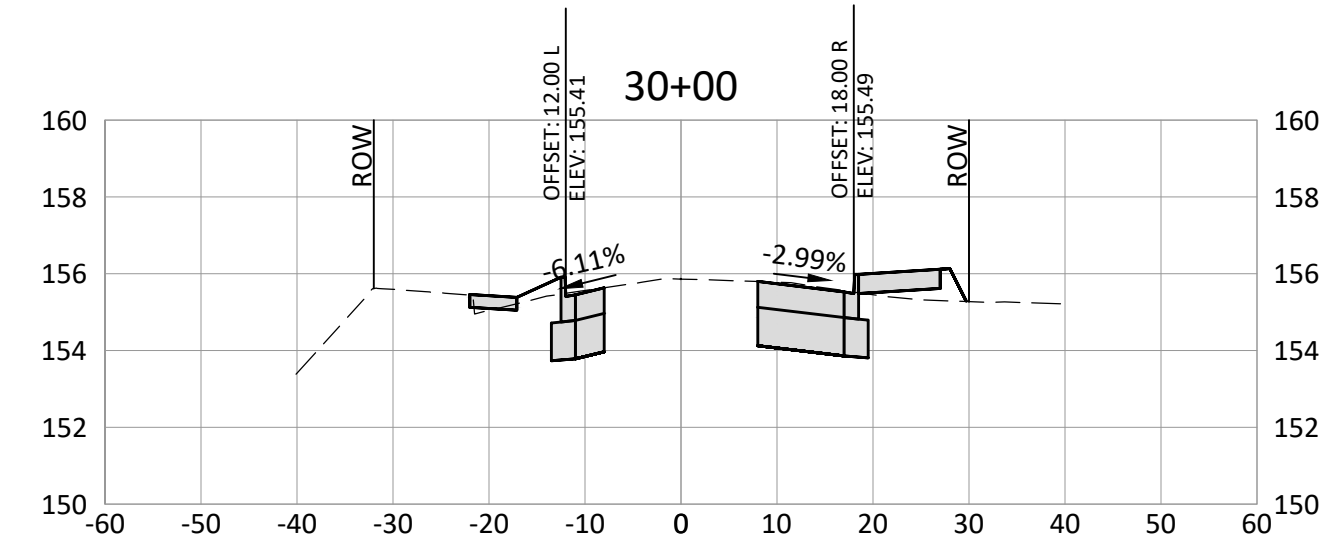
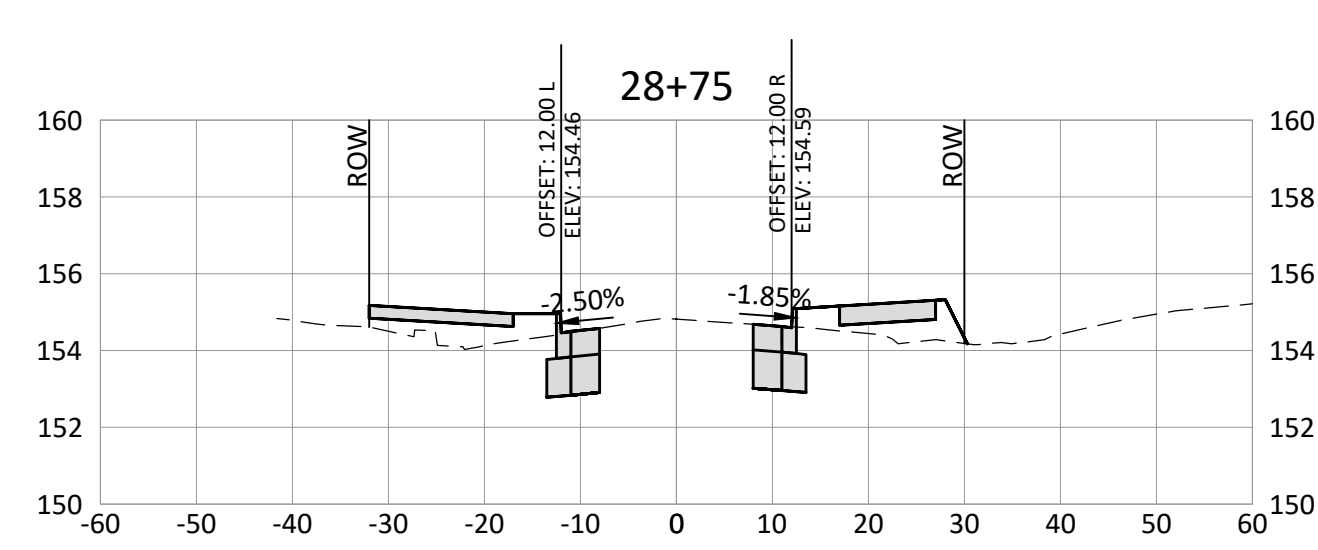
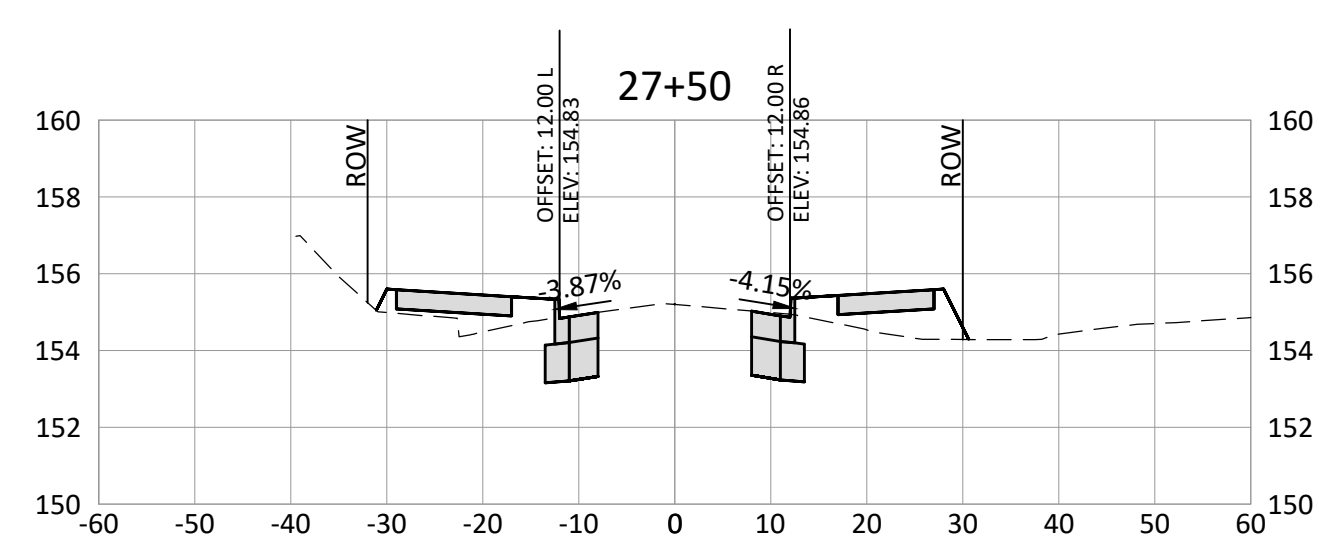
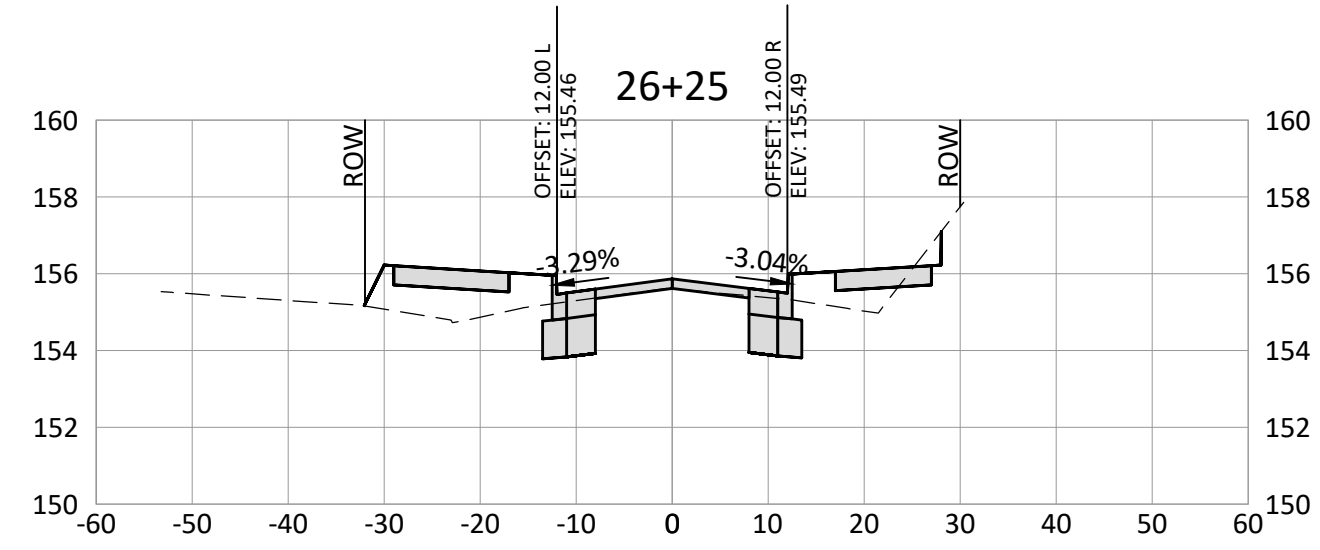
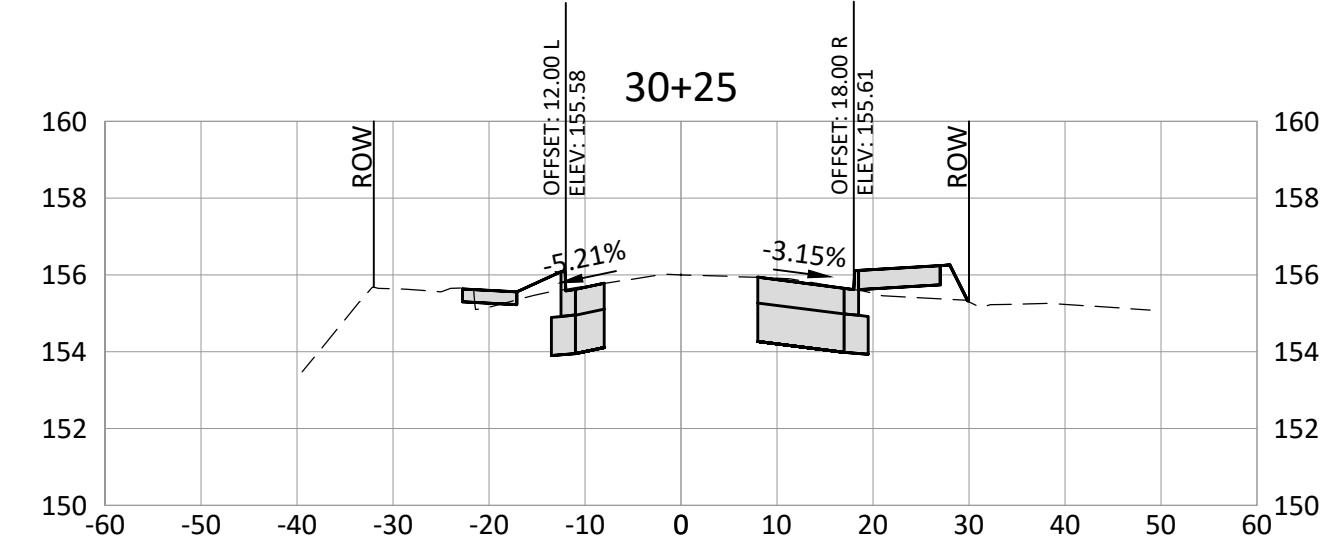
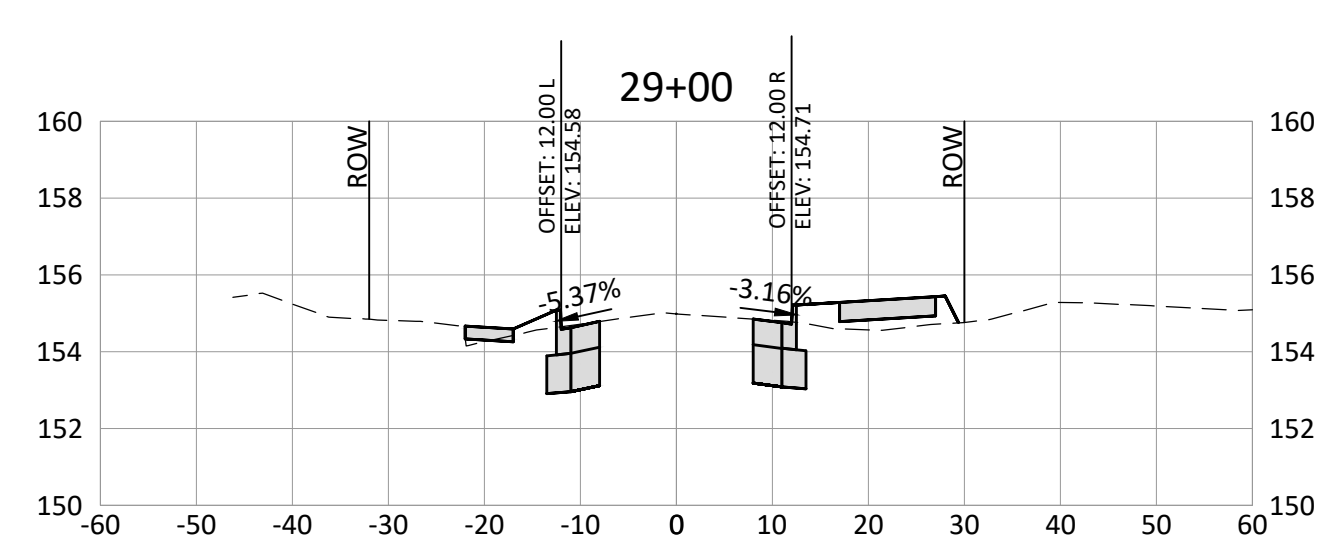
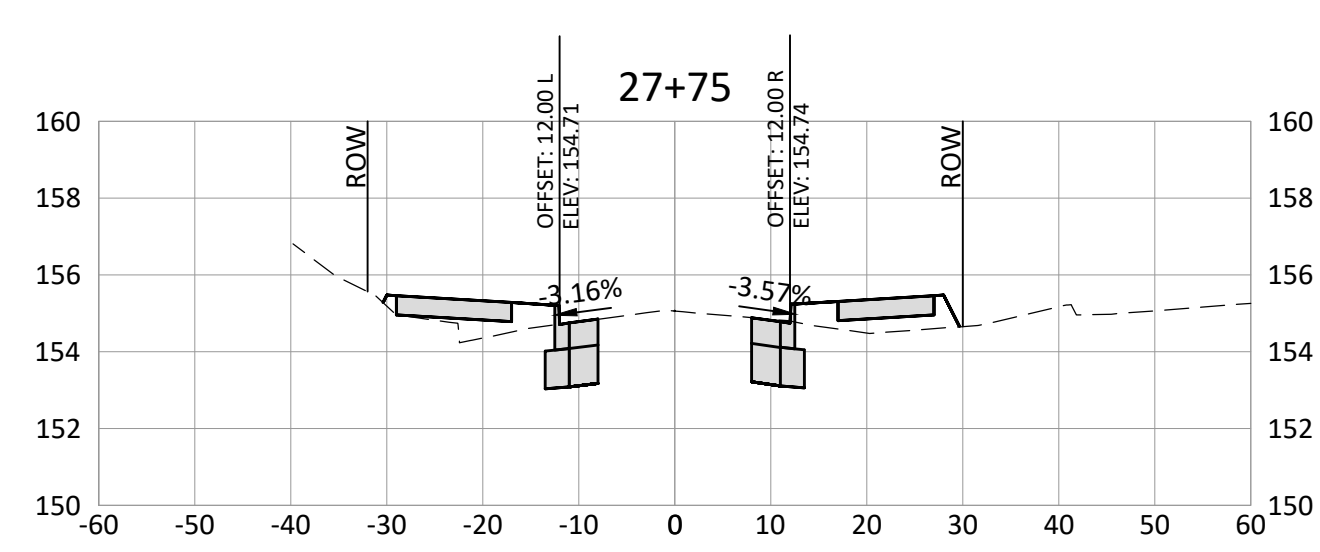
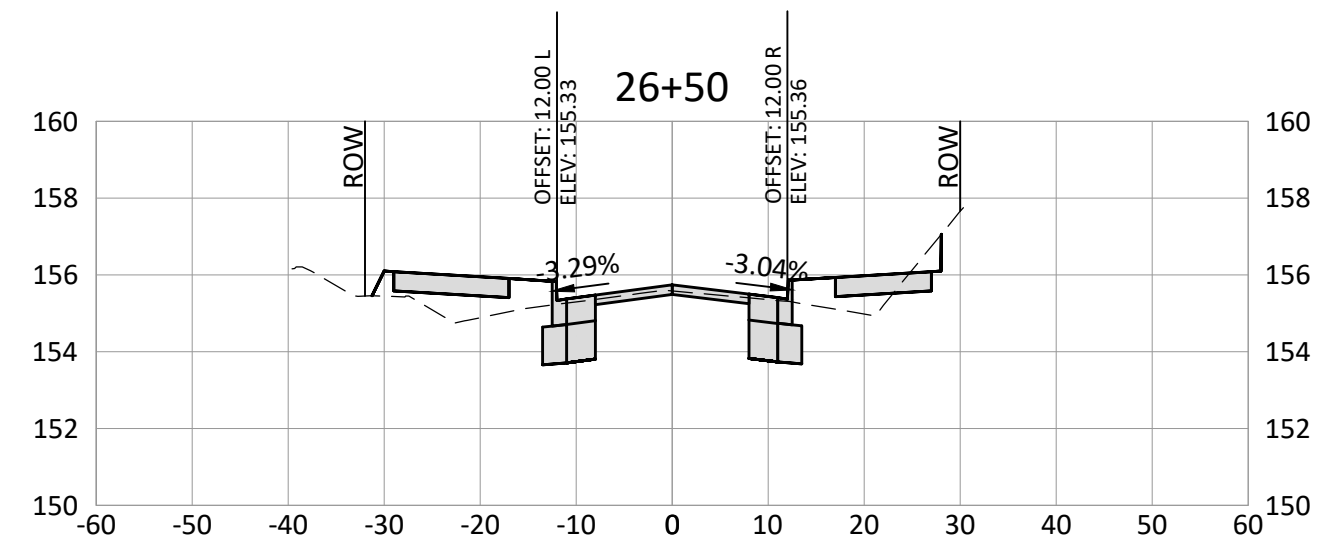


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CROSS SECTIONS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	10.2
JOB NO.	MWK-28

P:\M\K (City of Milwaukie)\M\K-28 (Linwood Avenue)\M\K-28-10.0 CROSS SECTIONS.dwg



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CHECKED:	CAB
DATE:	9/1/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		

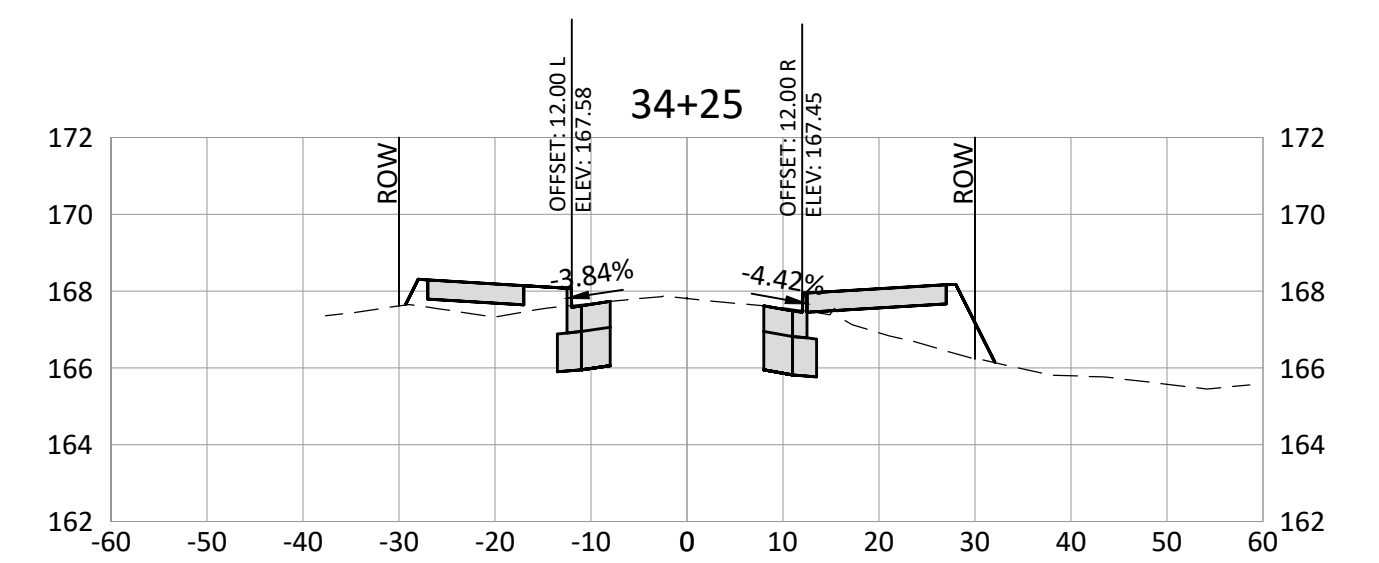
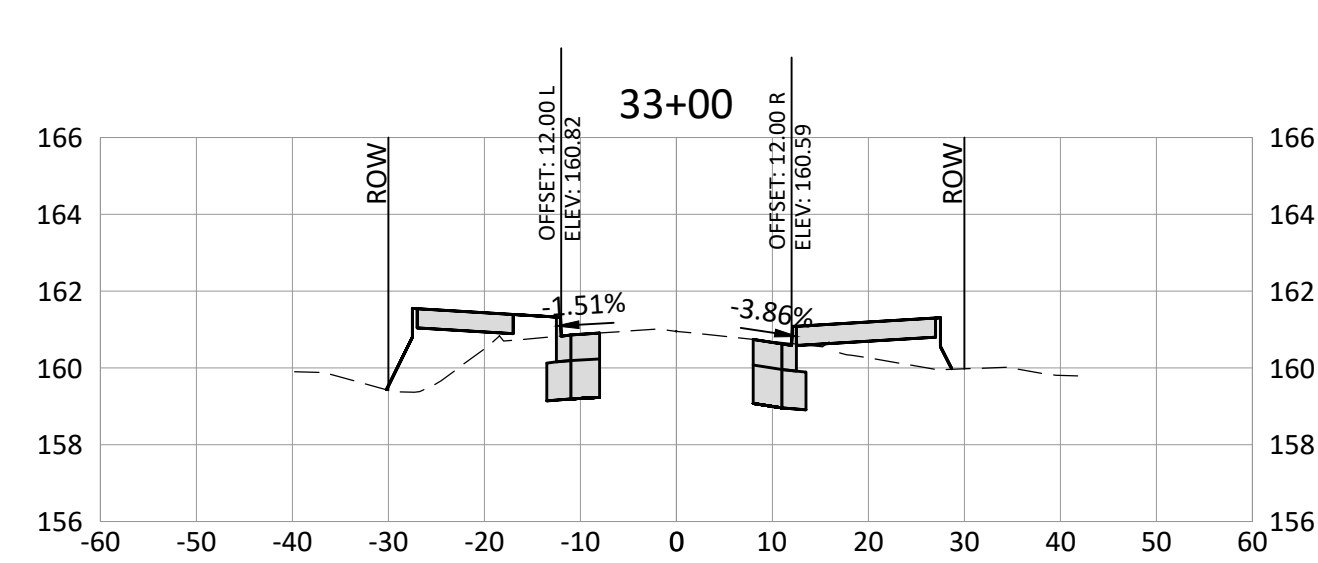
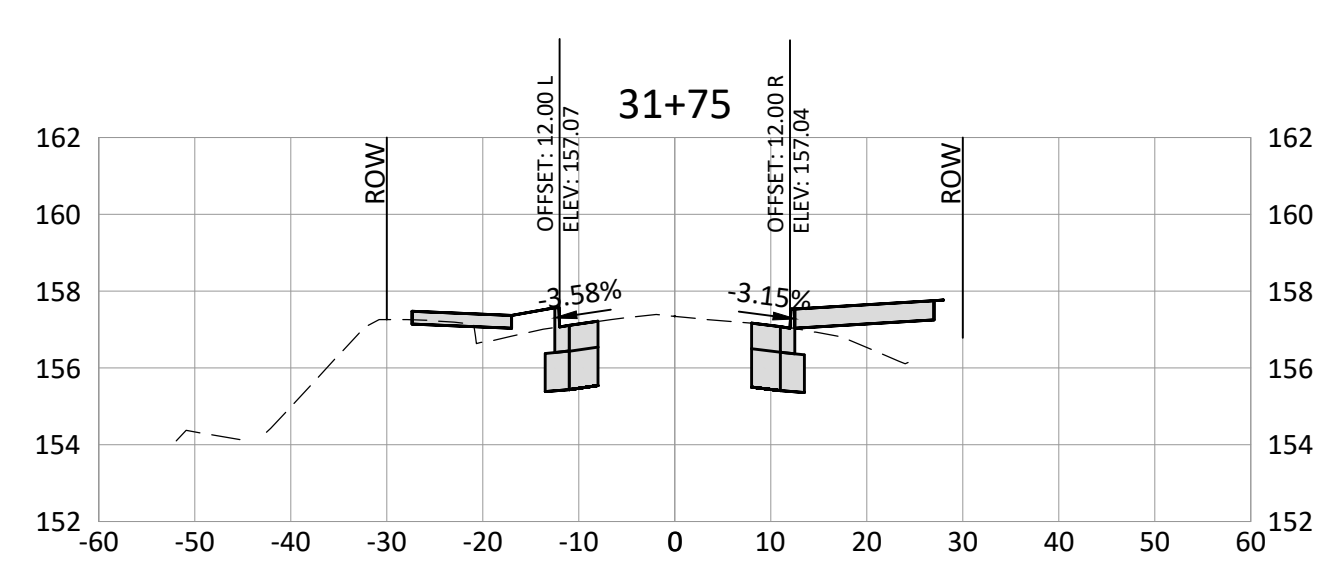
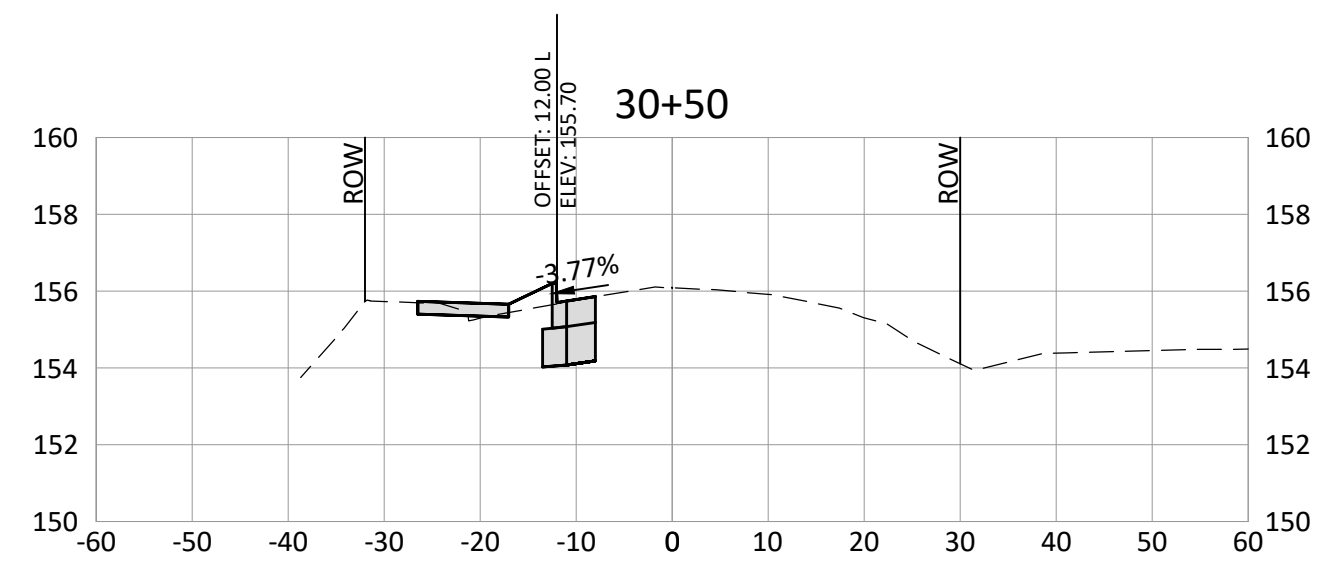
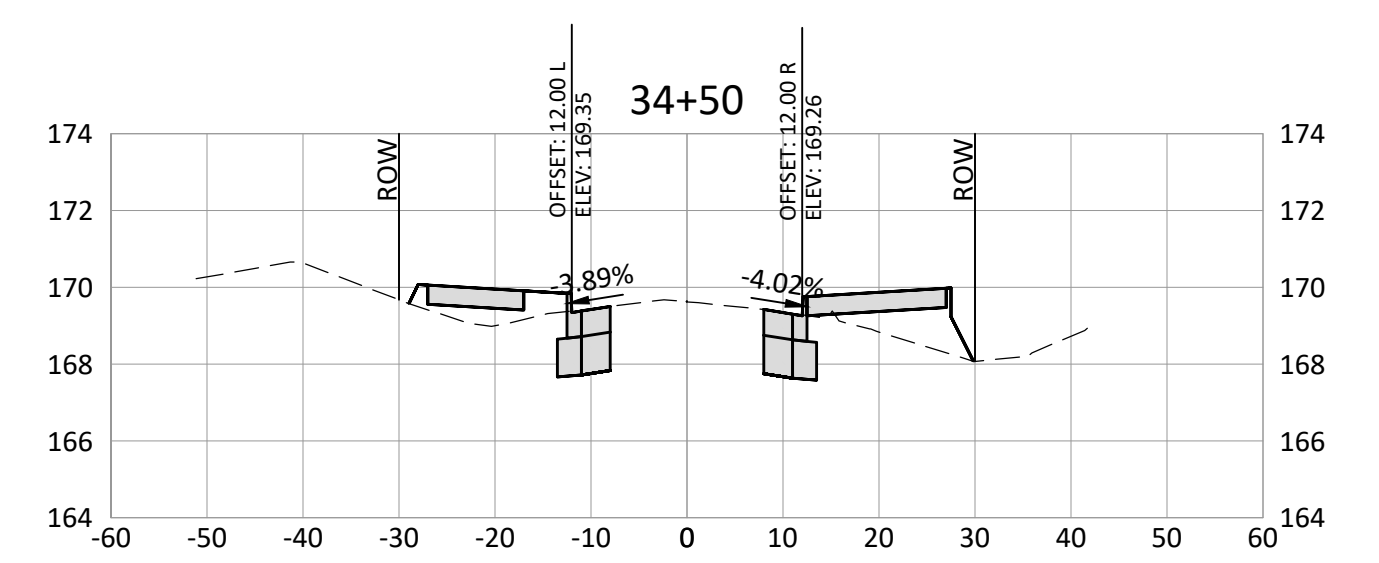
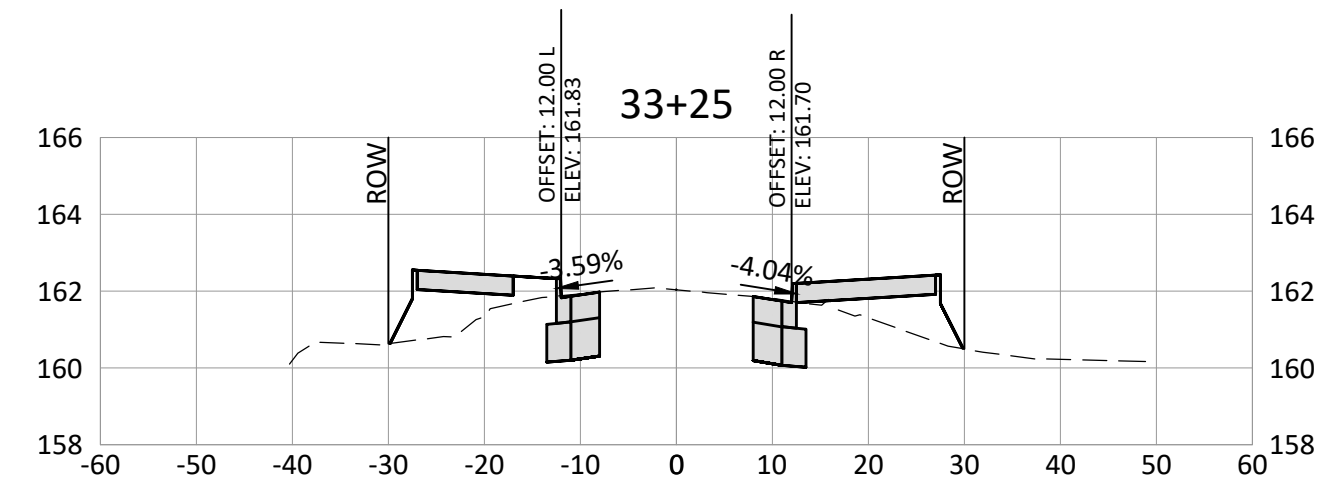
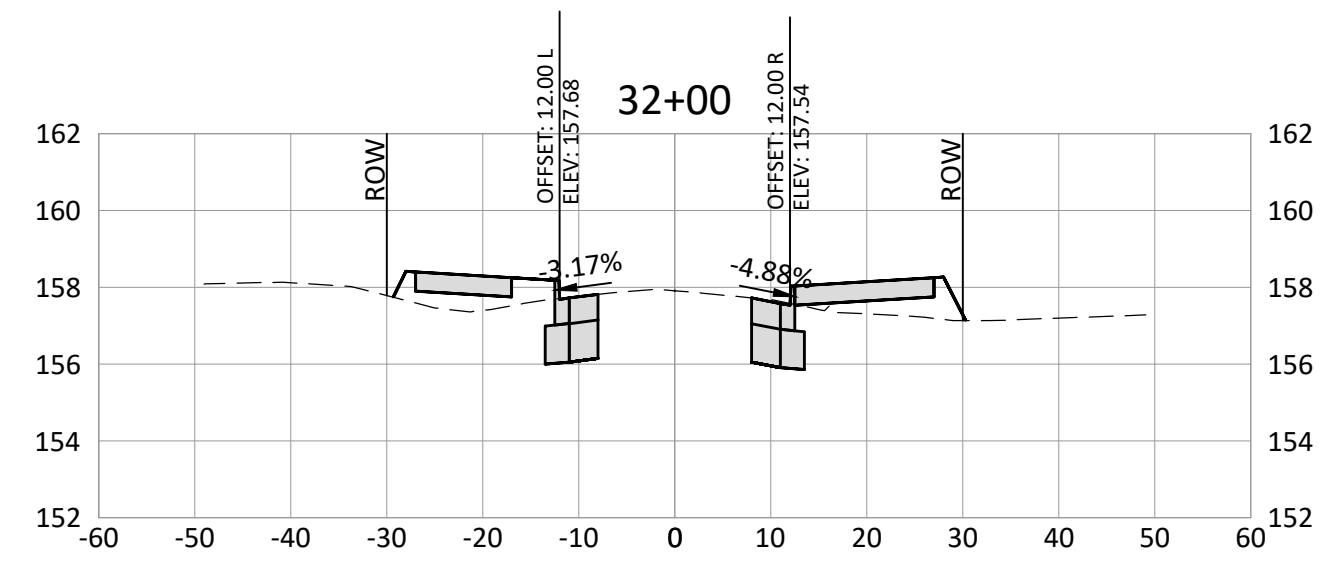
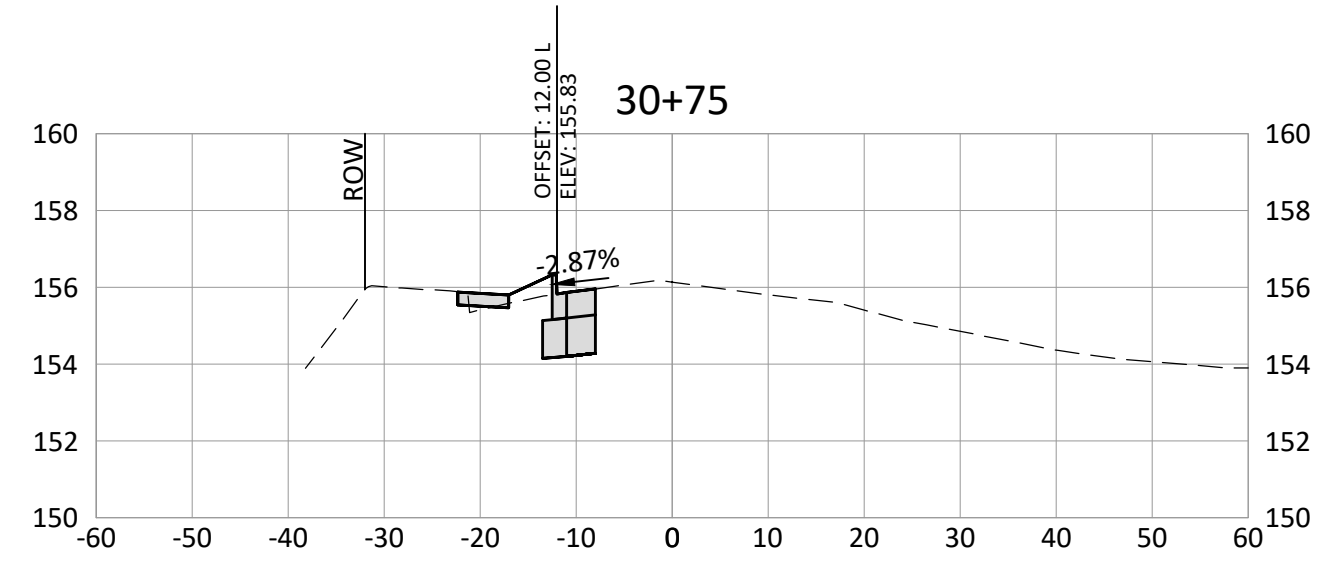
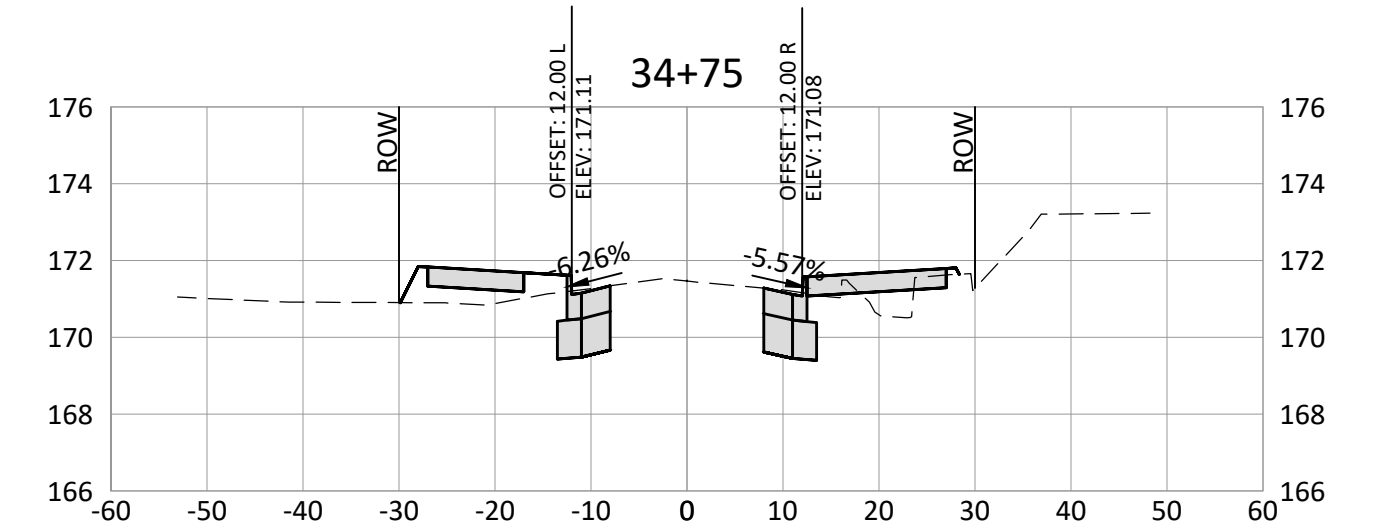
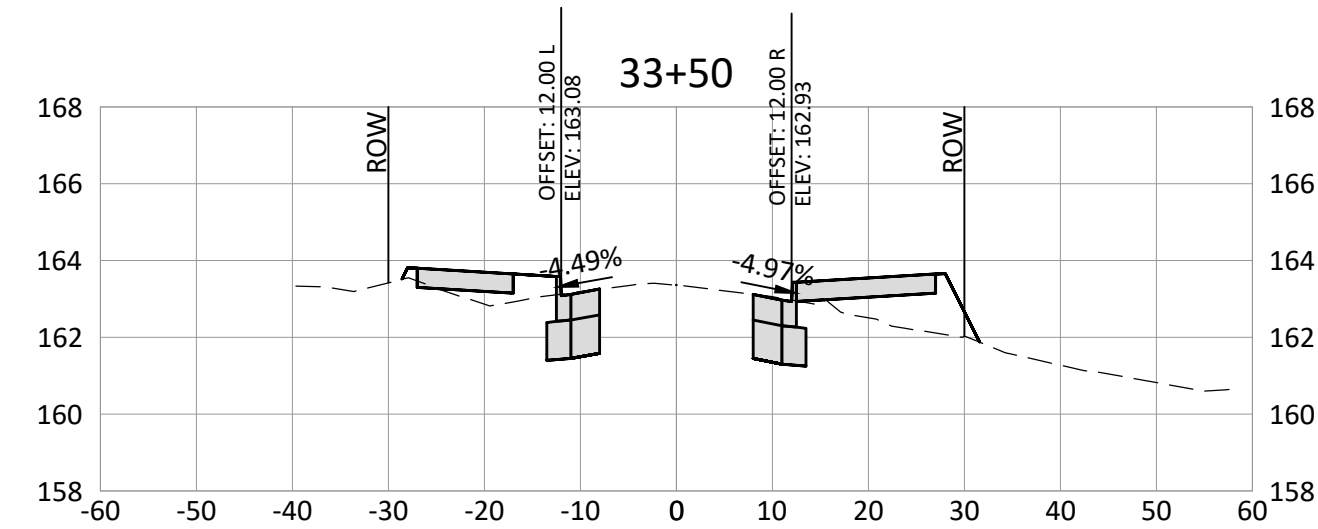
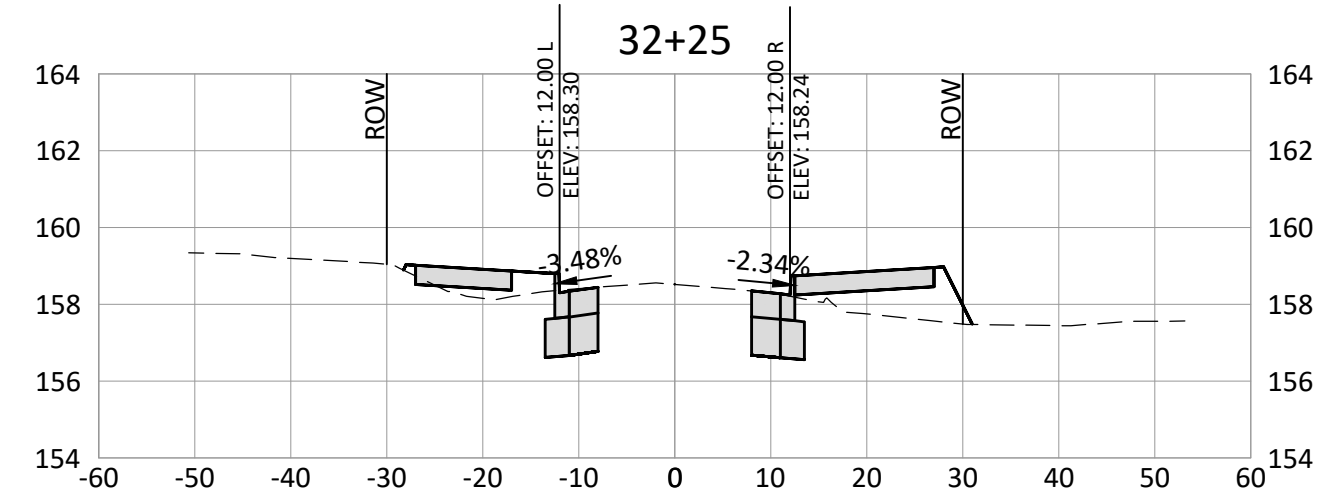
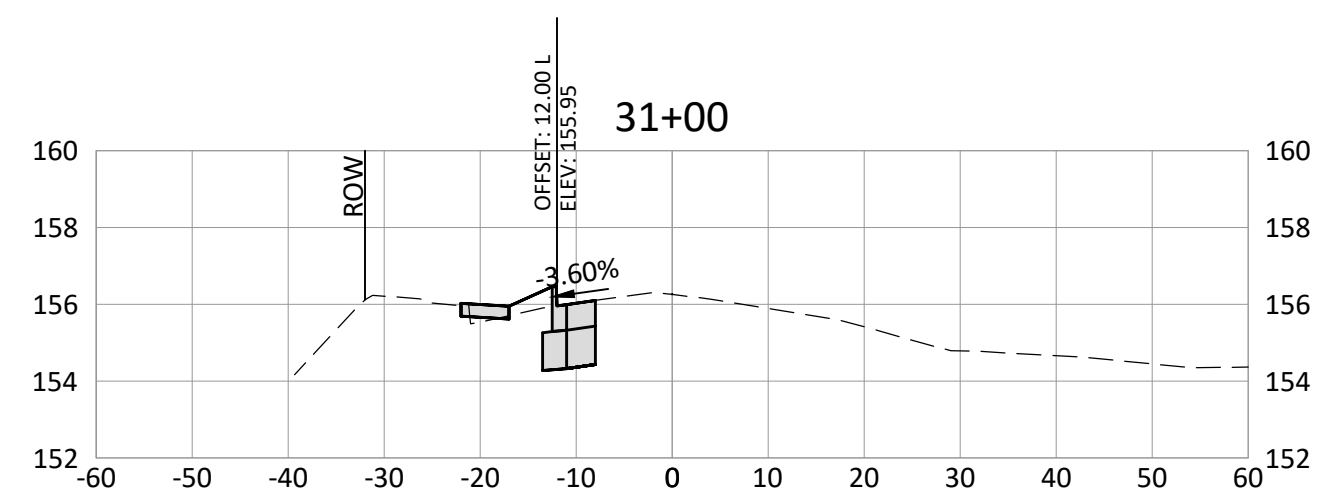
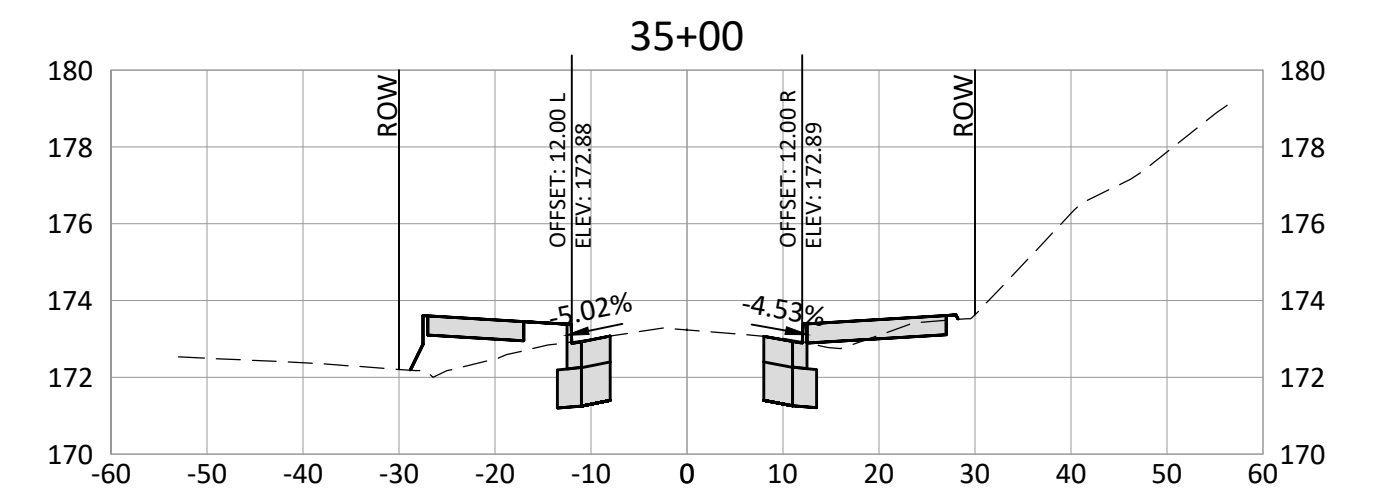
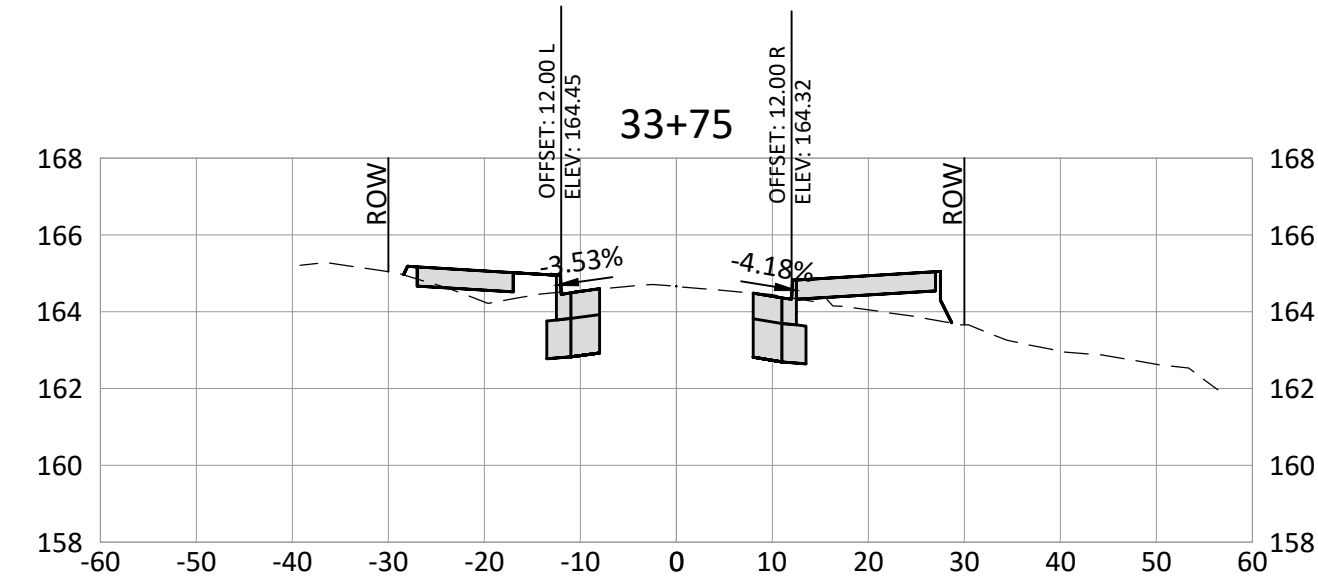
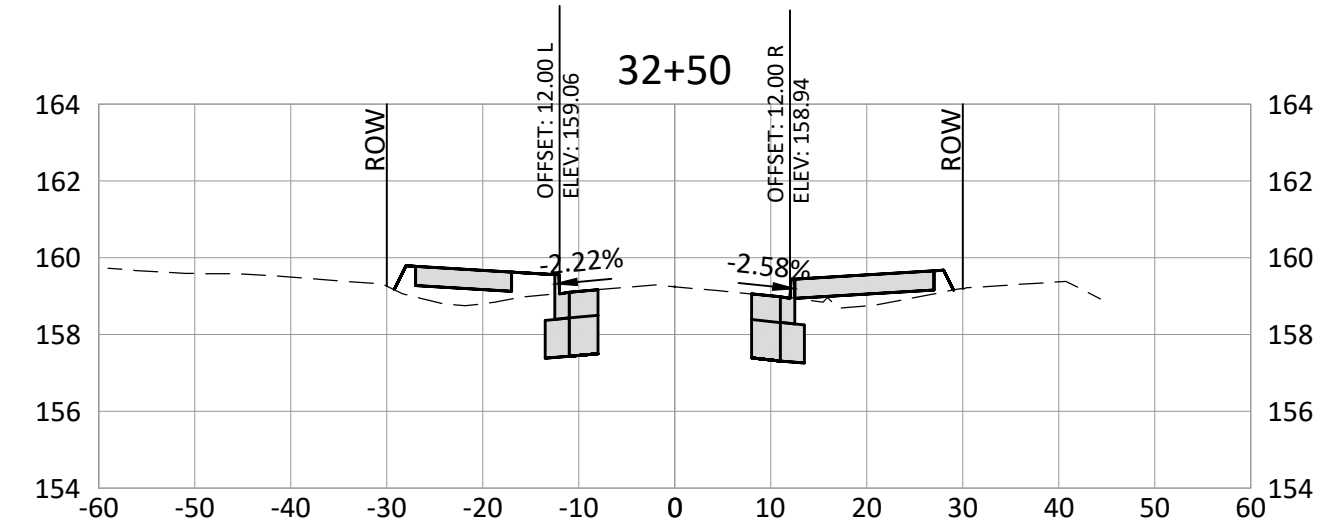
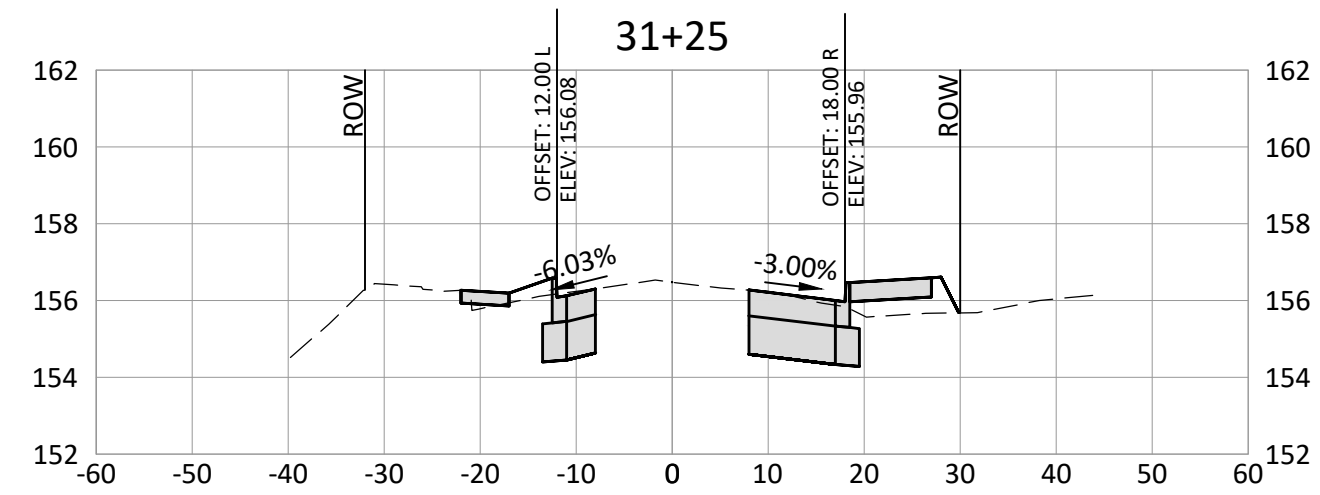
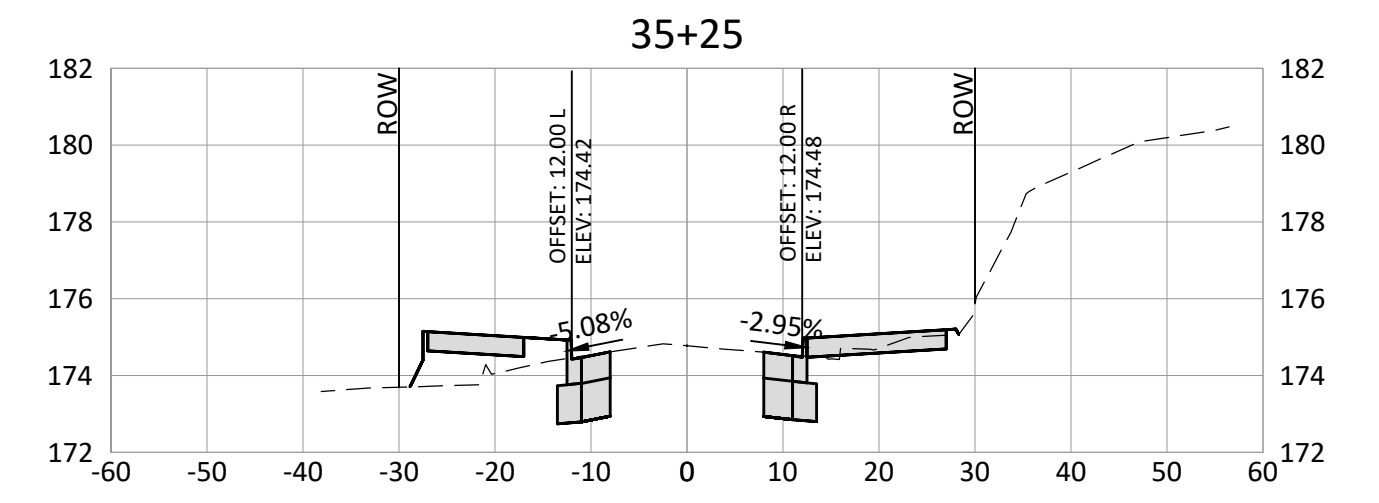
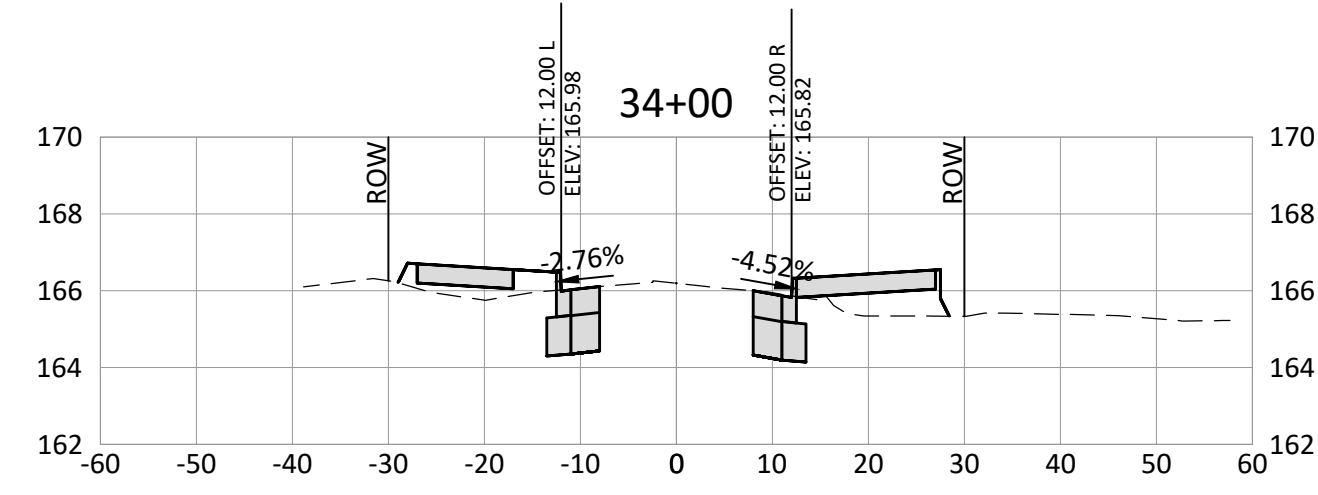
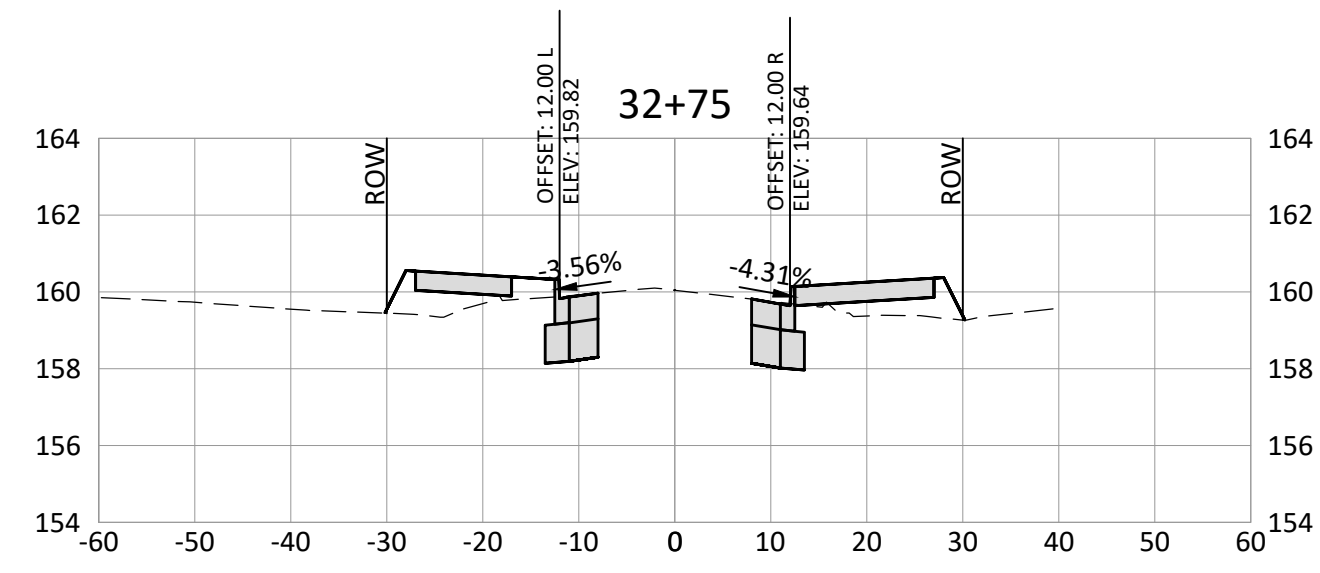
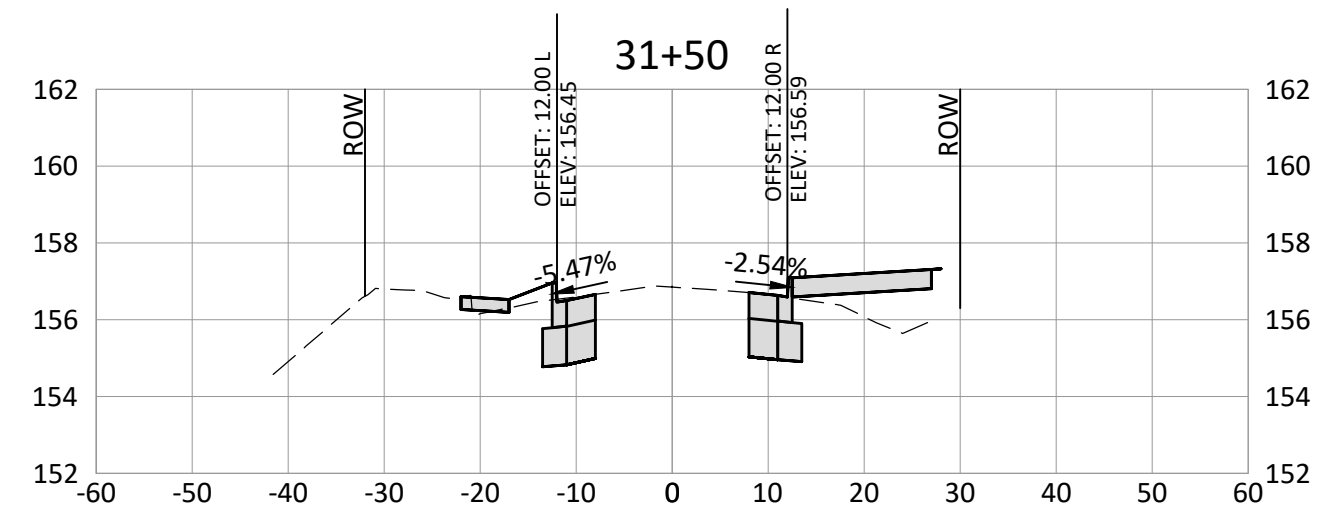


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CROSS SECTIONS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	10.3
JOB NO.	MWK-28

P:\M\K (City of Milwaukie)\M\K-28 Linwood Avenue\M\K-28-DWG\Sheets\M\K-28-10.0 CROSS SECTIONS.dwg



DESIGNED:	CAB
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DATE:	9/1/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		

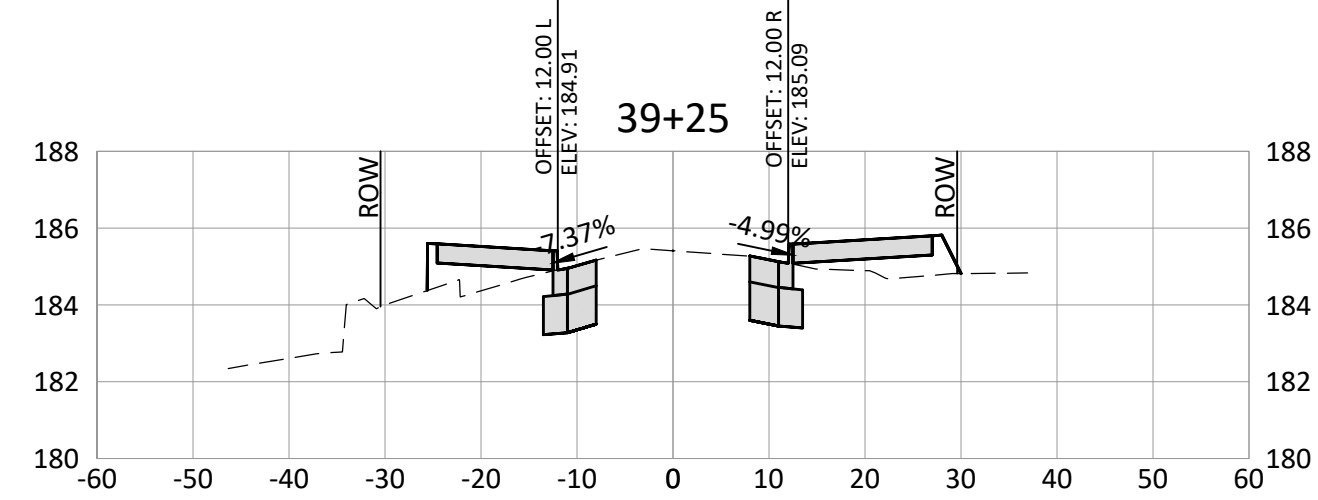
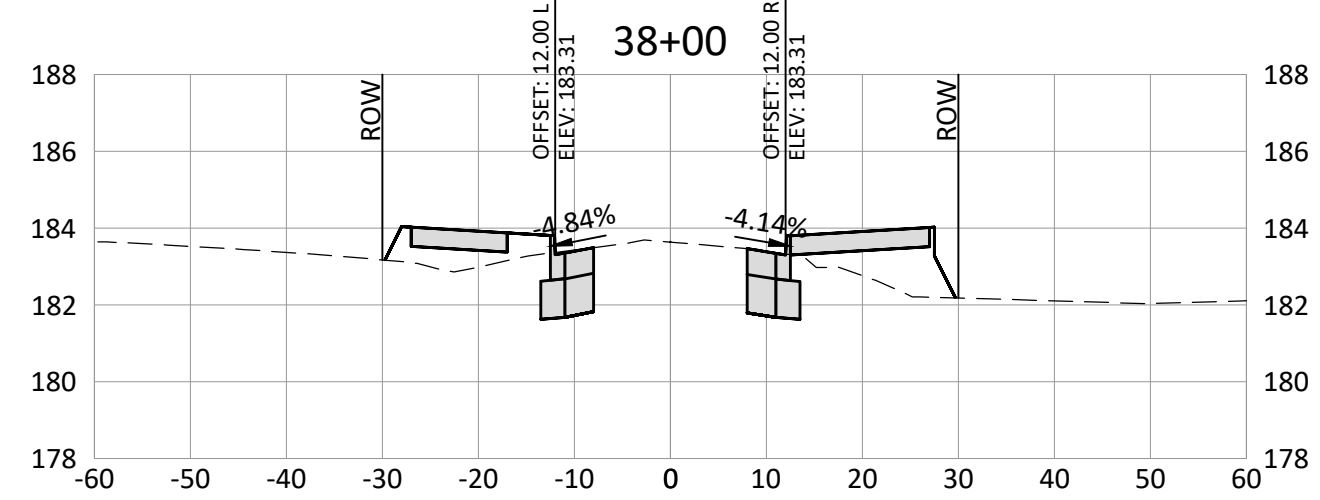
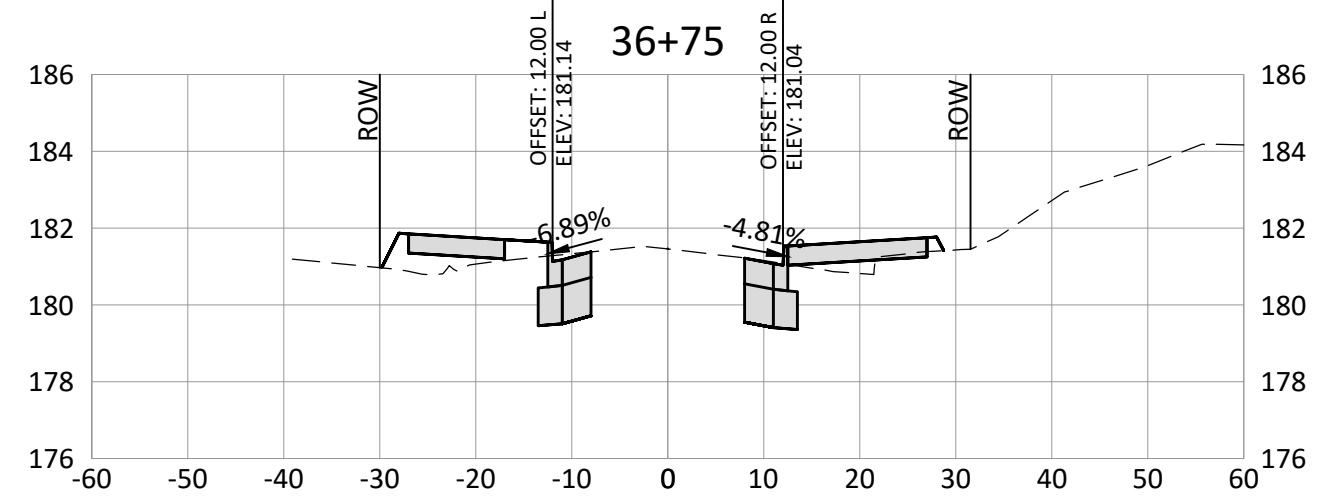
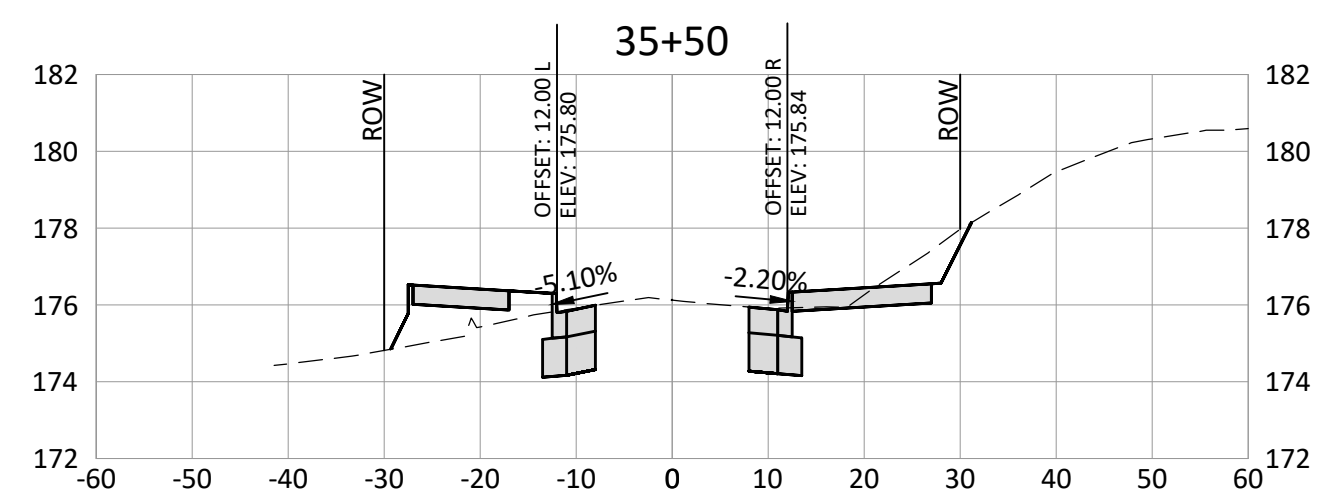
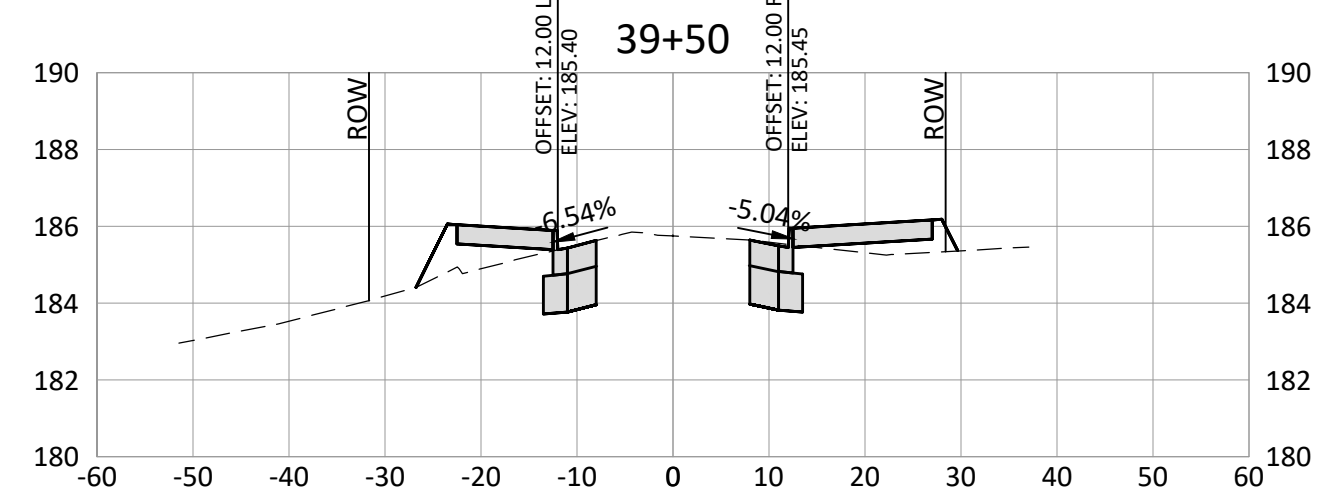
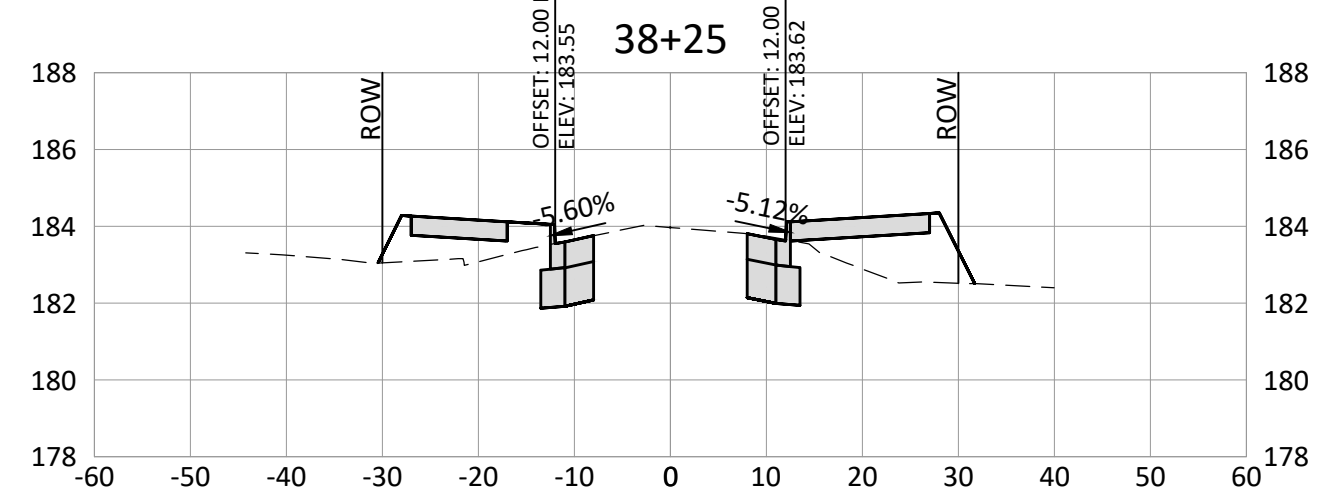
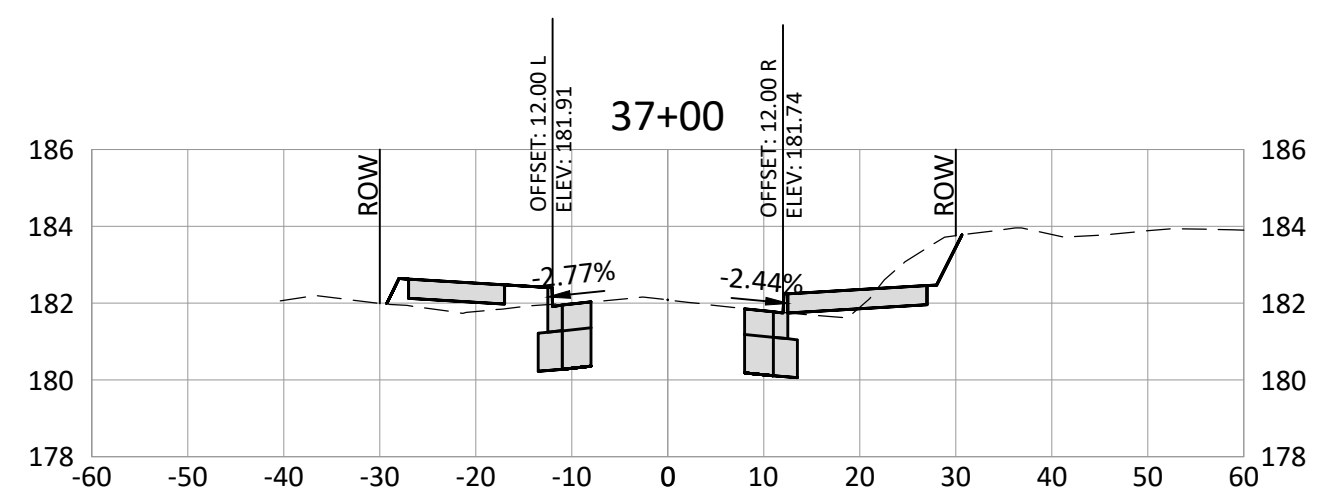
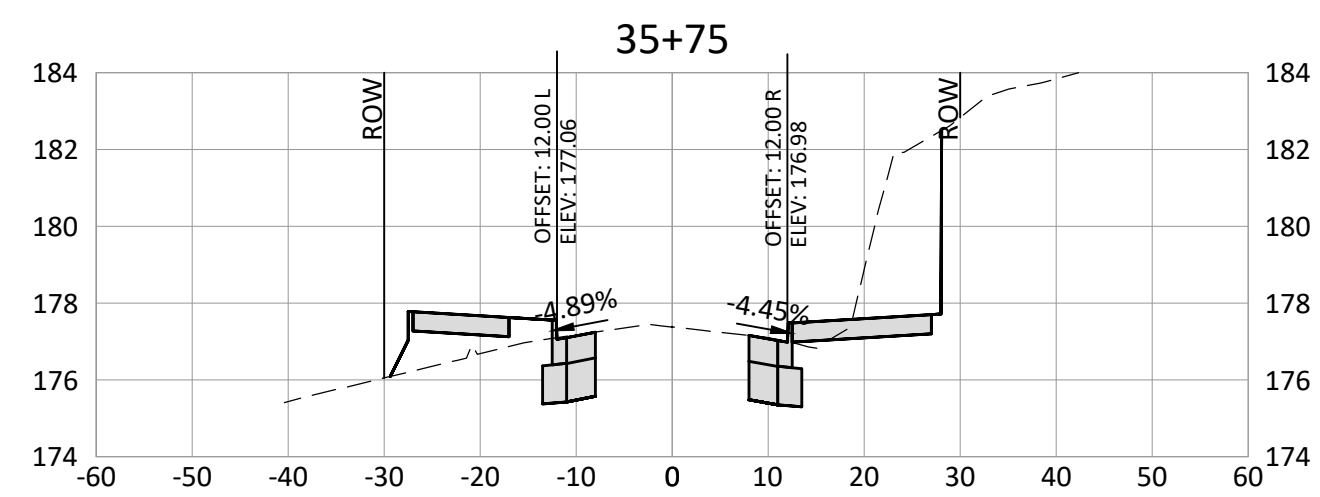
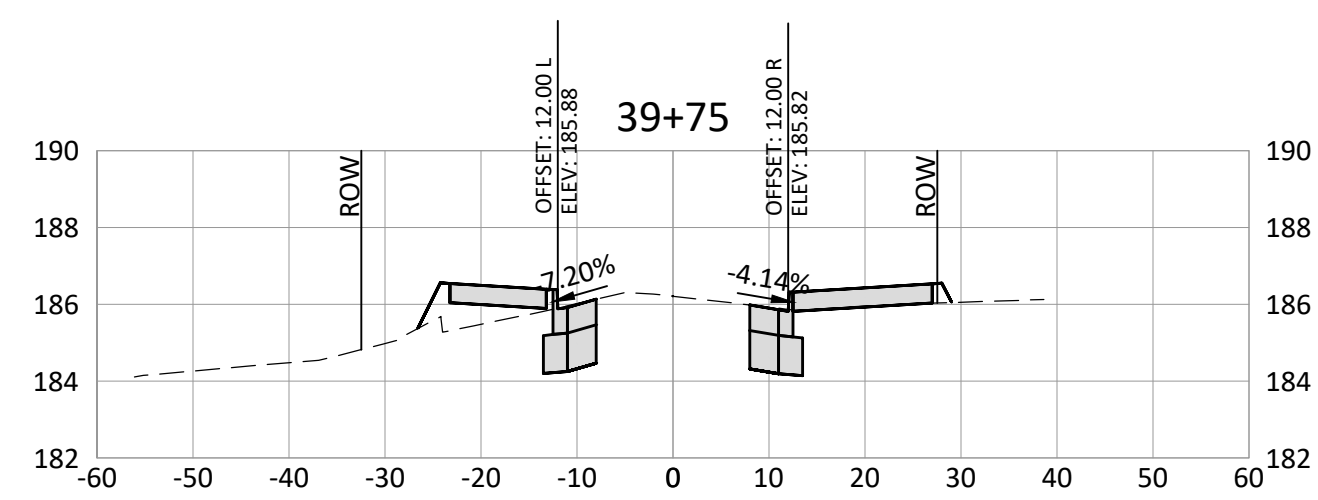
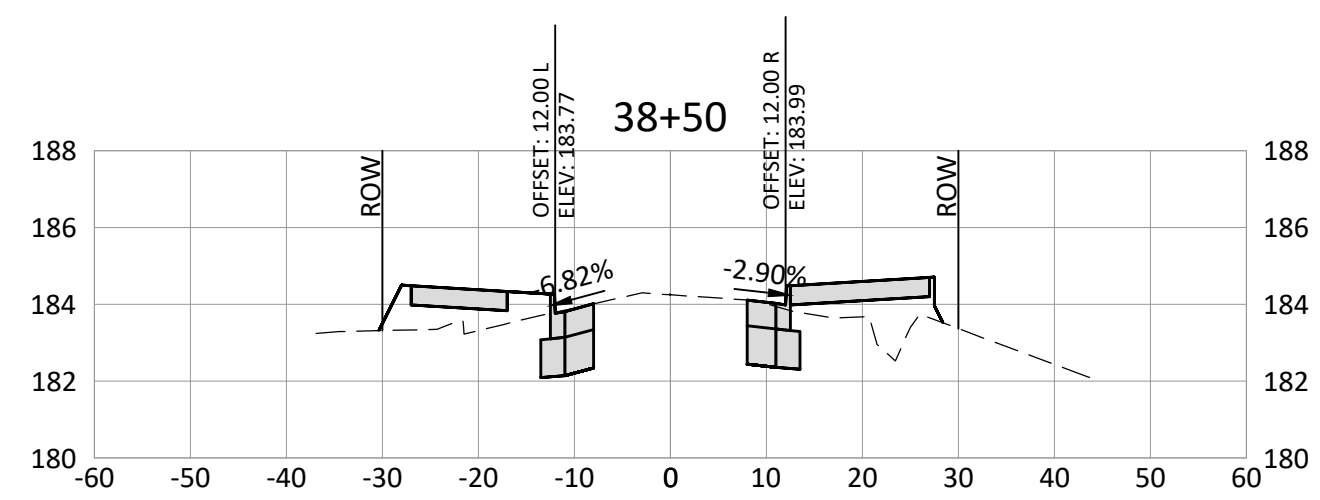
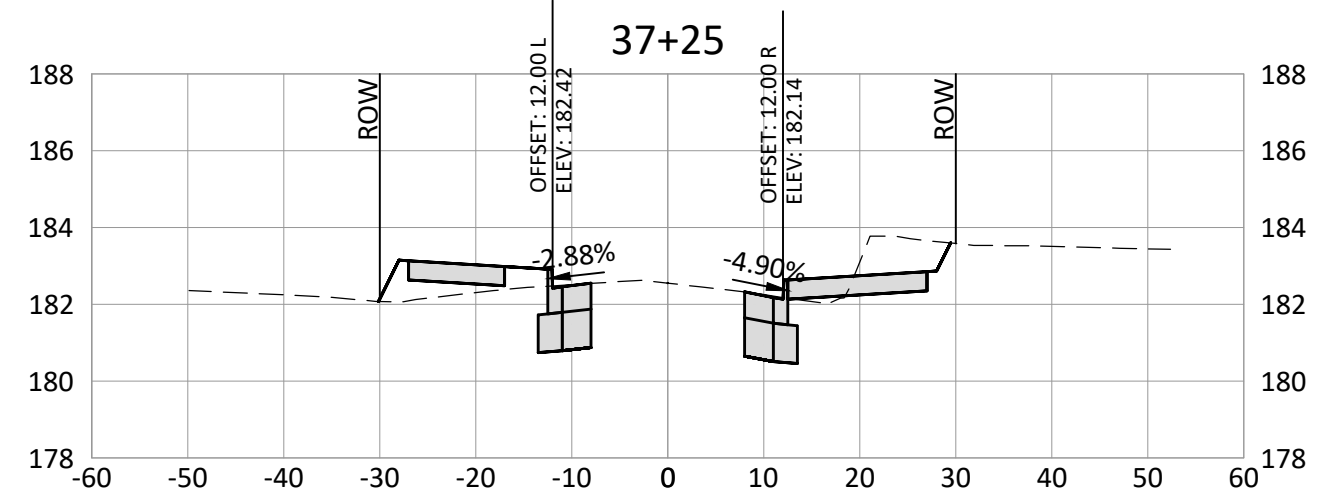
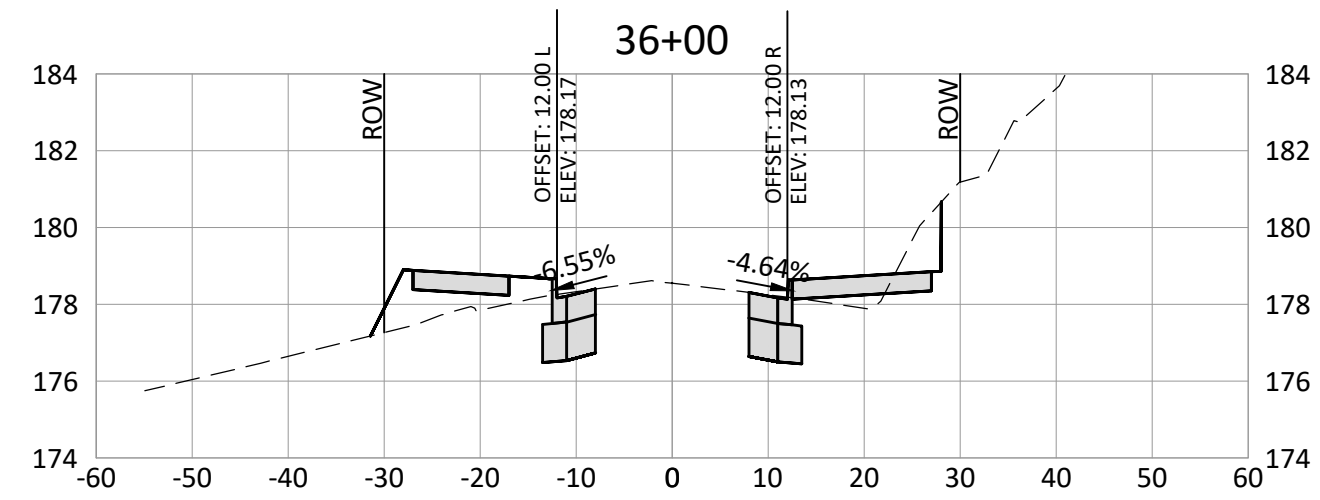
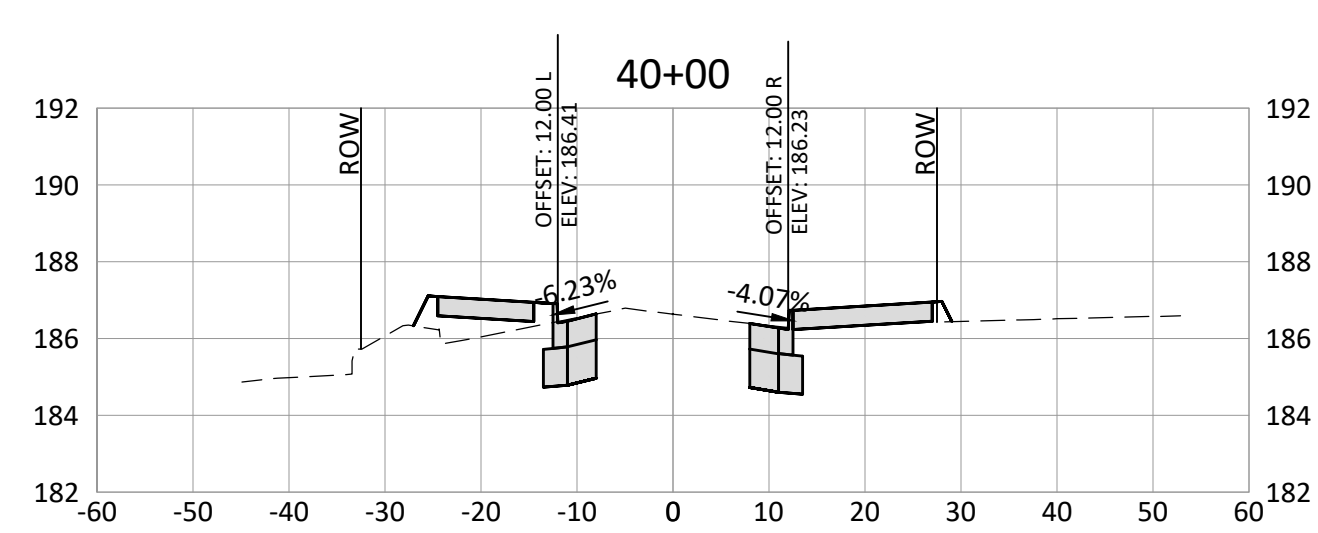
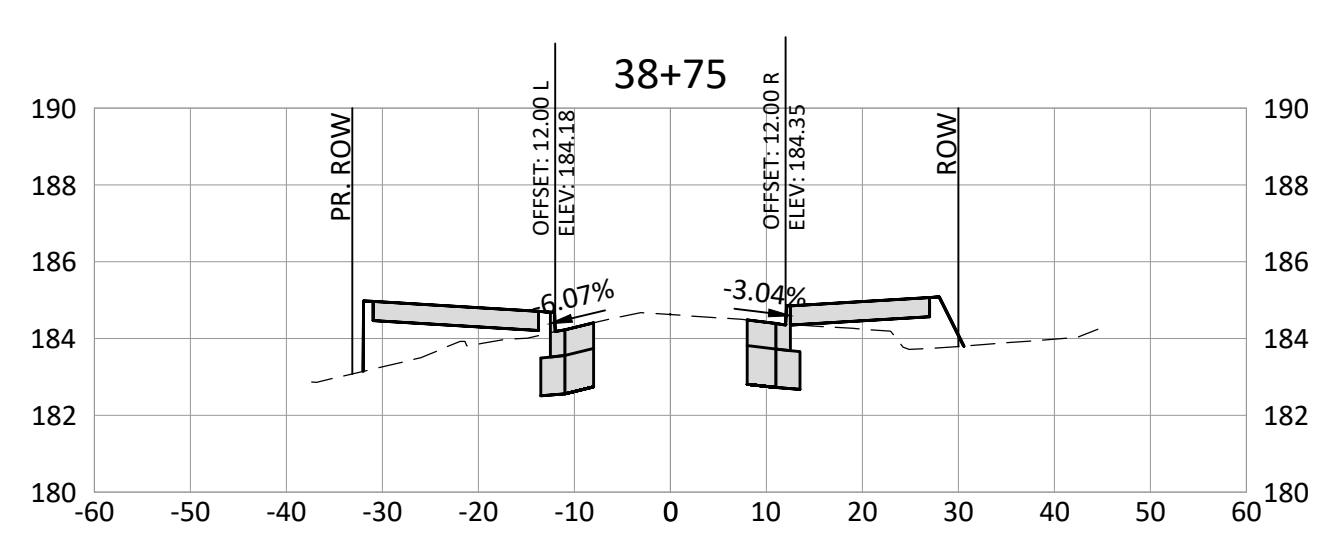
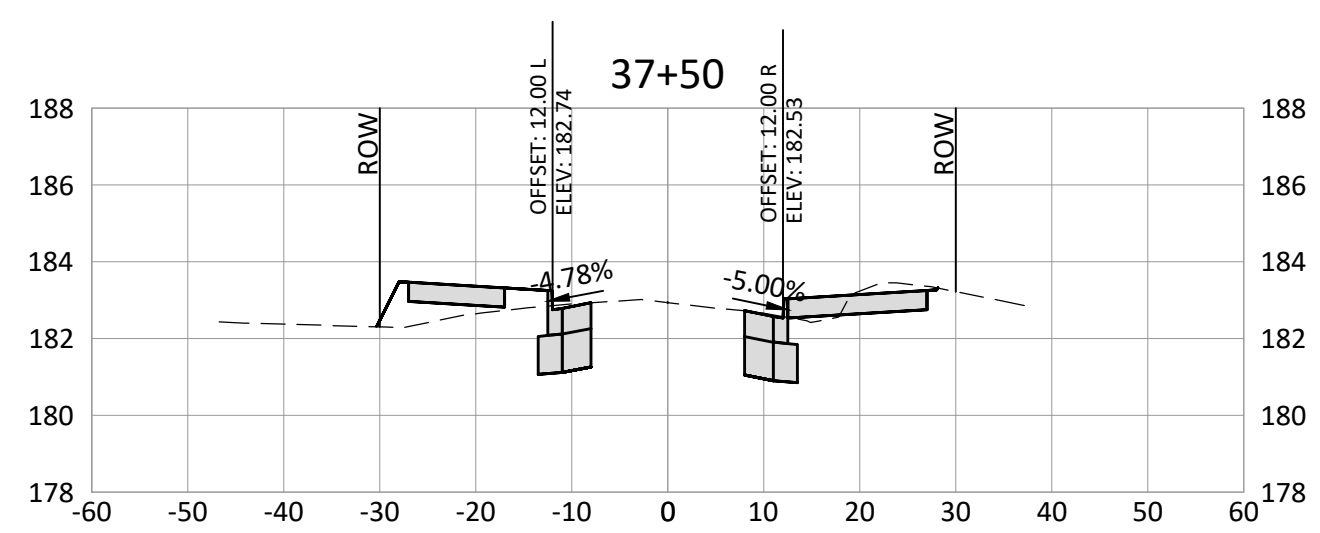
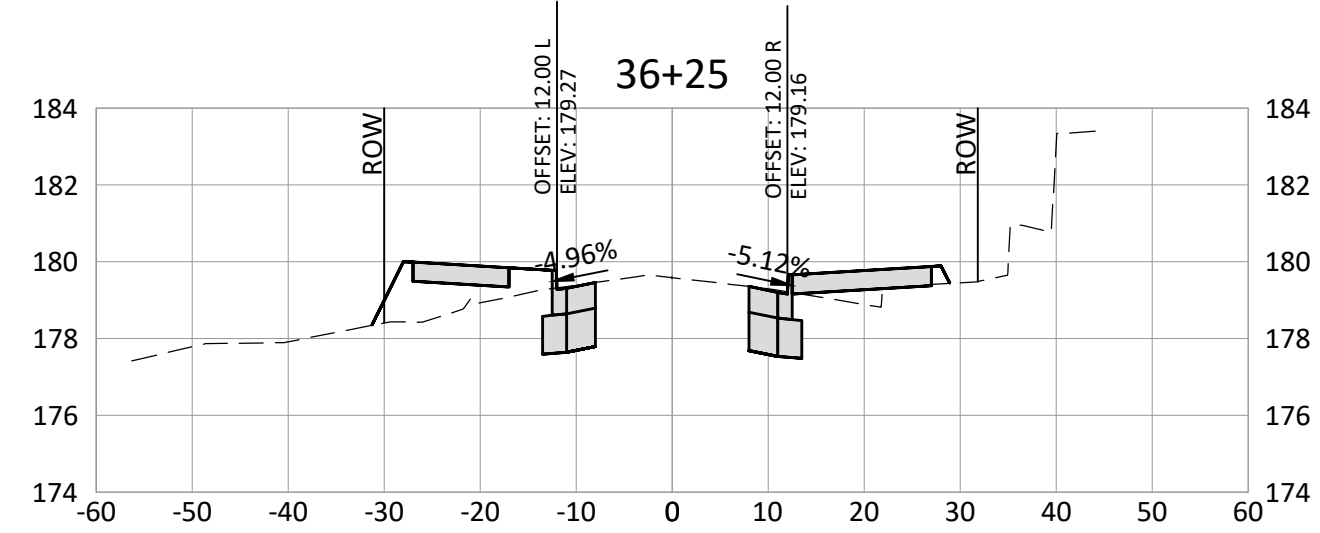
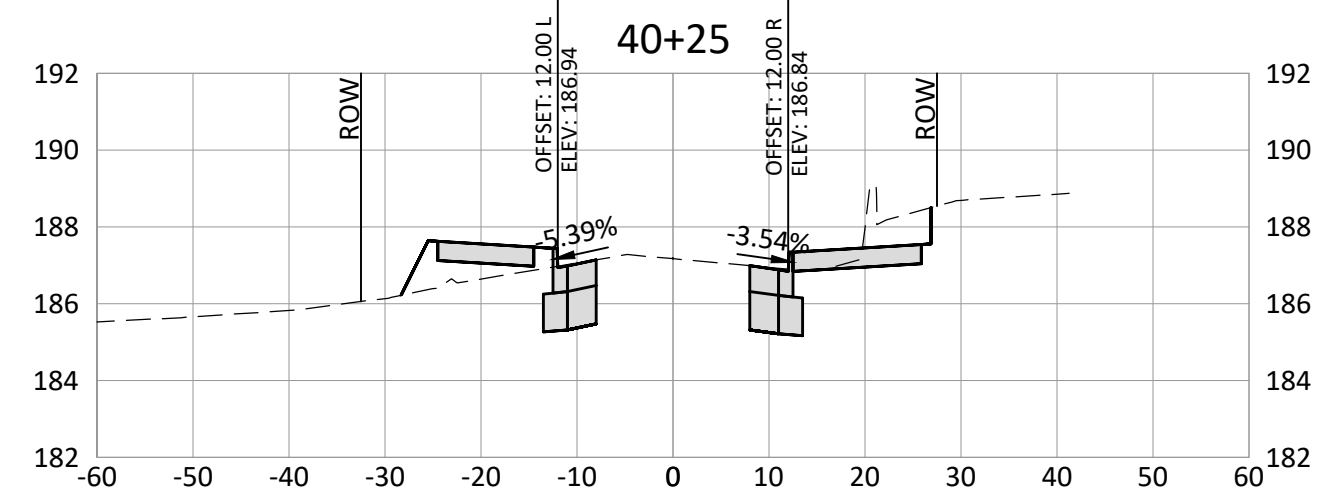
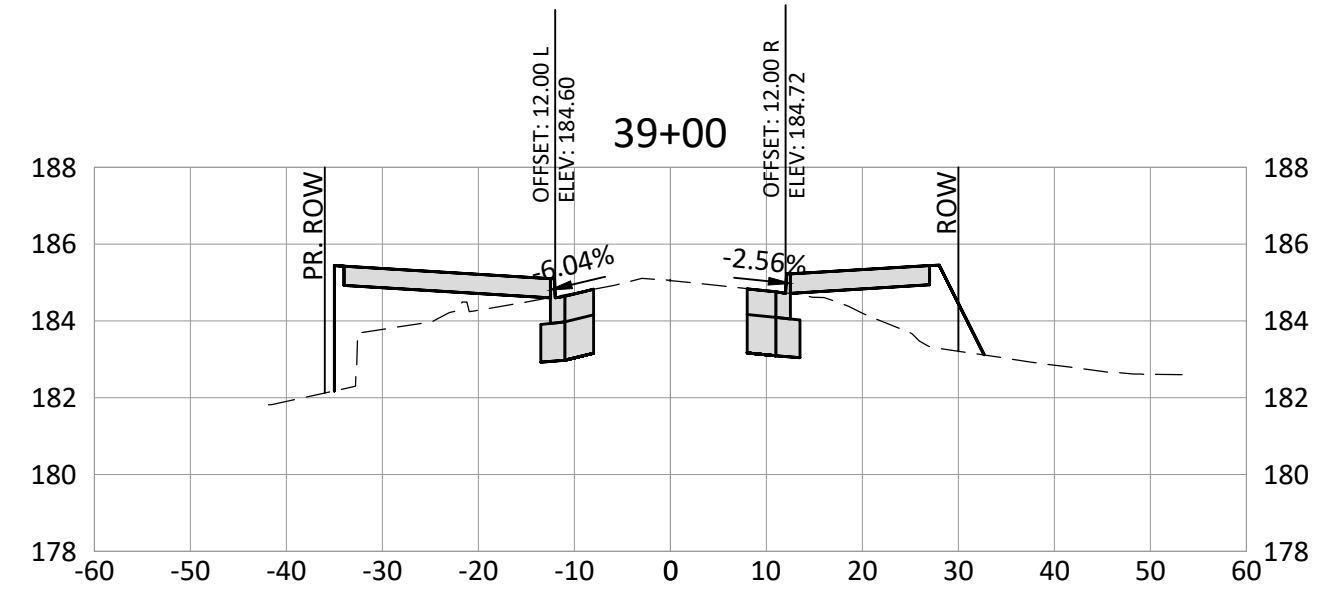
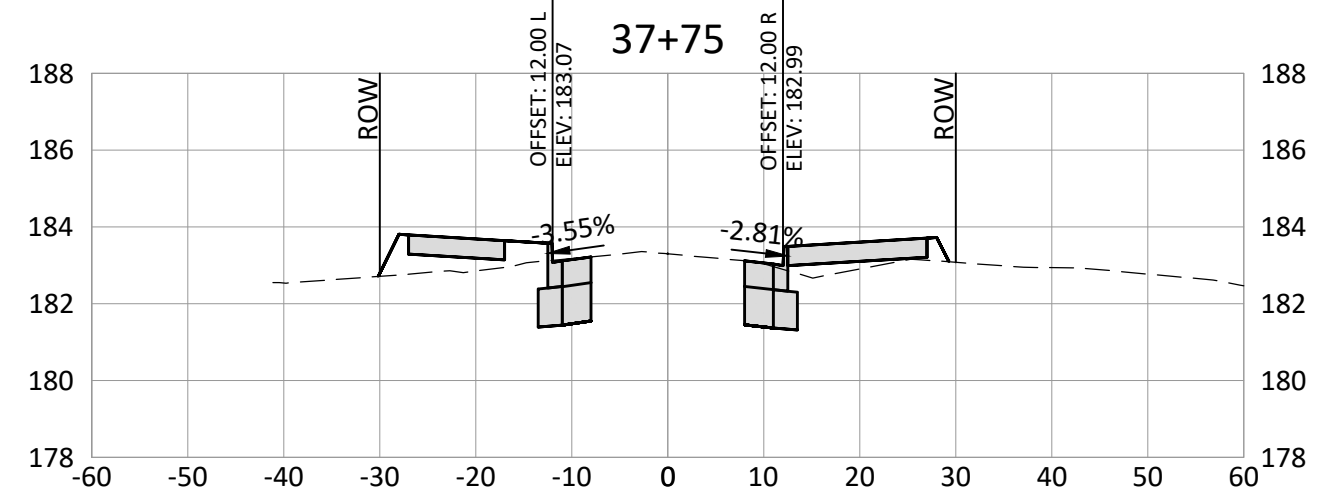
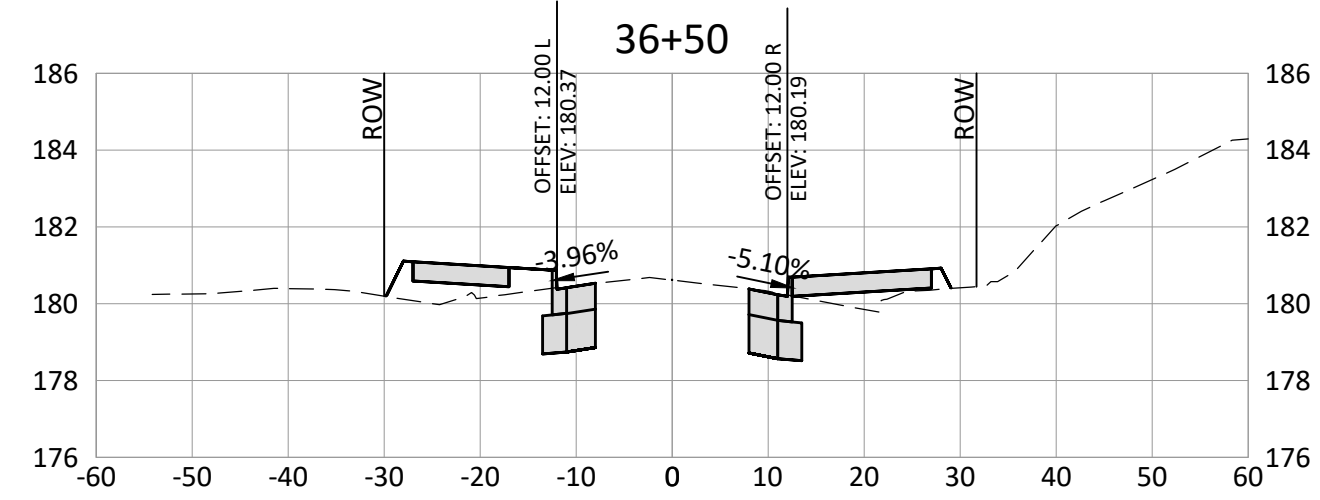


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CROSS SECTIONS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

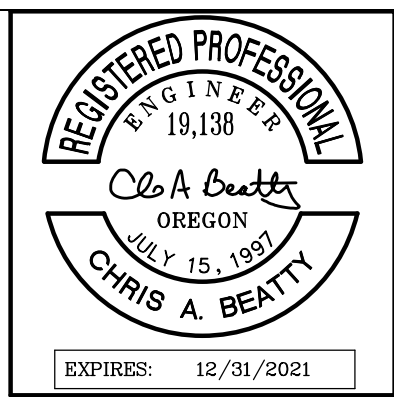
SHEET NO.
10.4
 JOB NO.
 MWK-28

P:\M\K (City of Milwaukie)\M\K-28 Linwood Avenue\M\K-28-10.0 CROSS SECTIONS.dwg



DESIGNED:	CAB
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CHECKED:	CAB
DATE:	9/1/2020

DATE	NO.	DESCRIPTION
R E V I S I O N S		

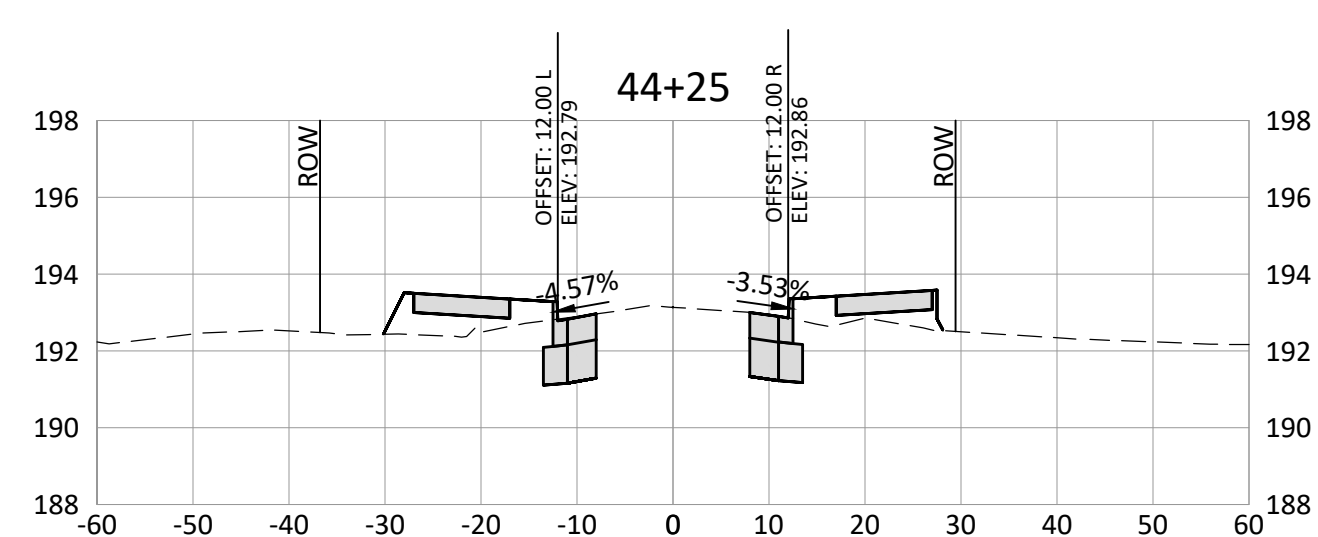
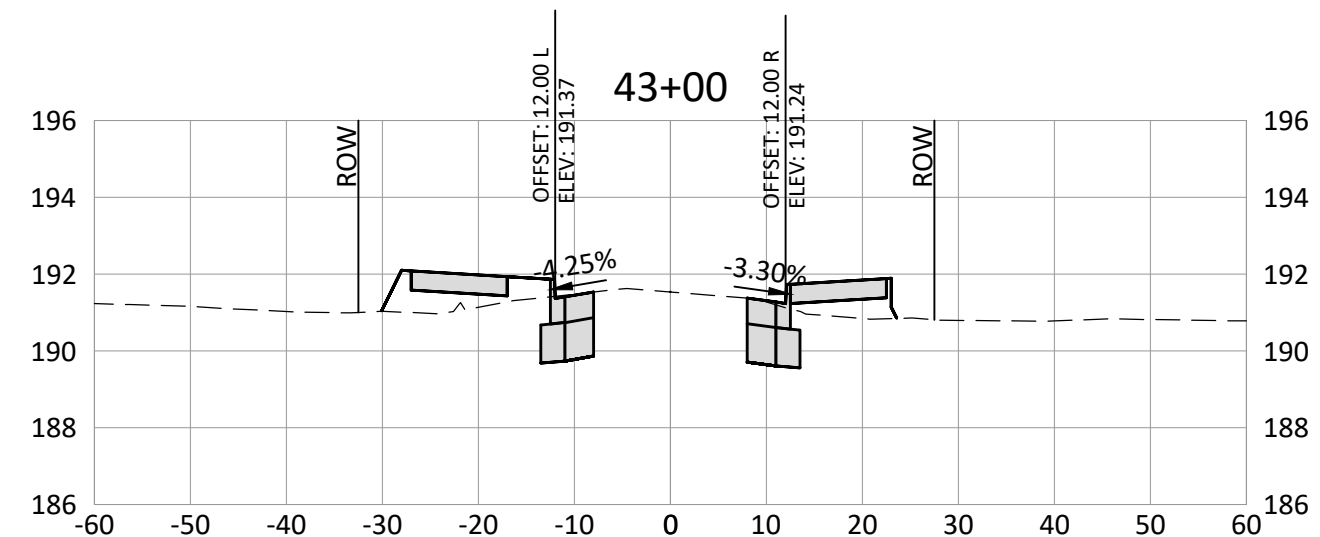
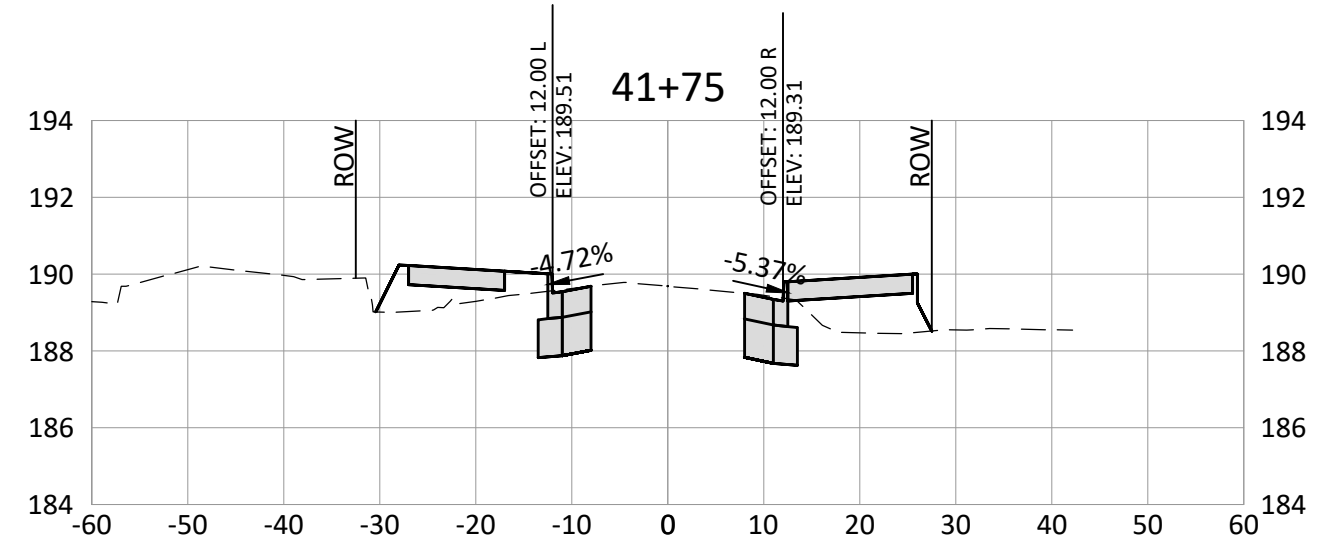
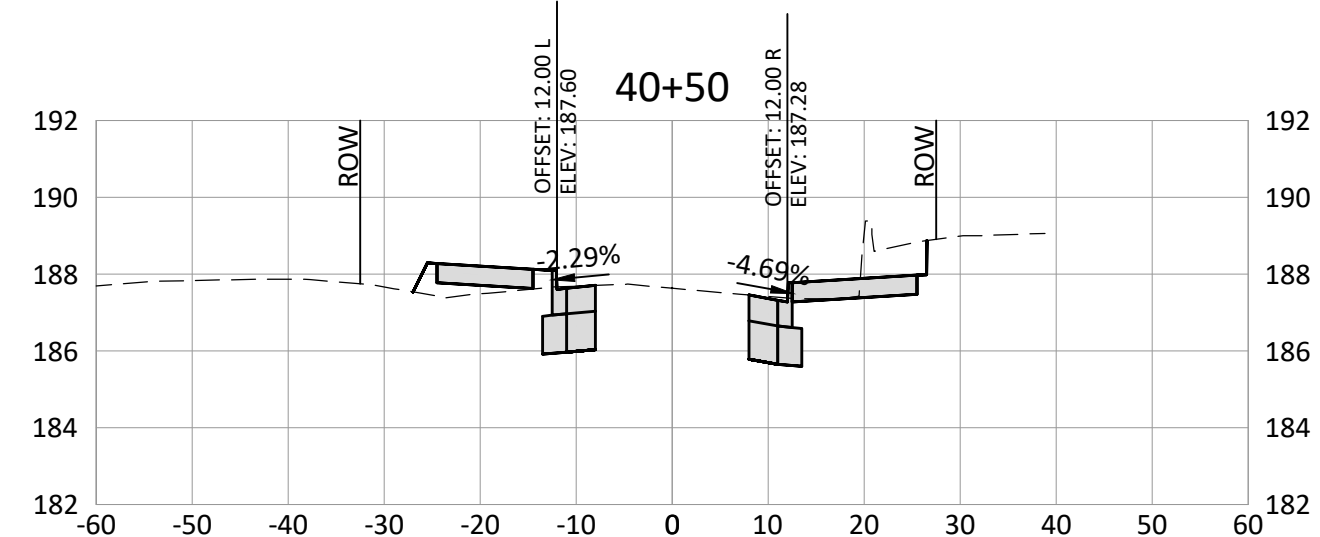
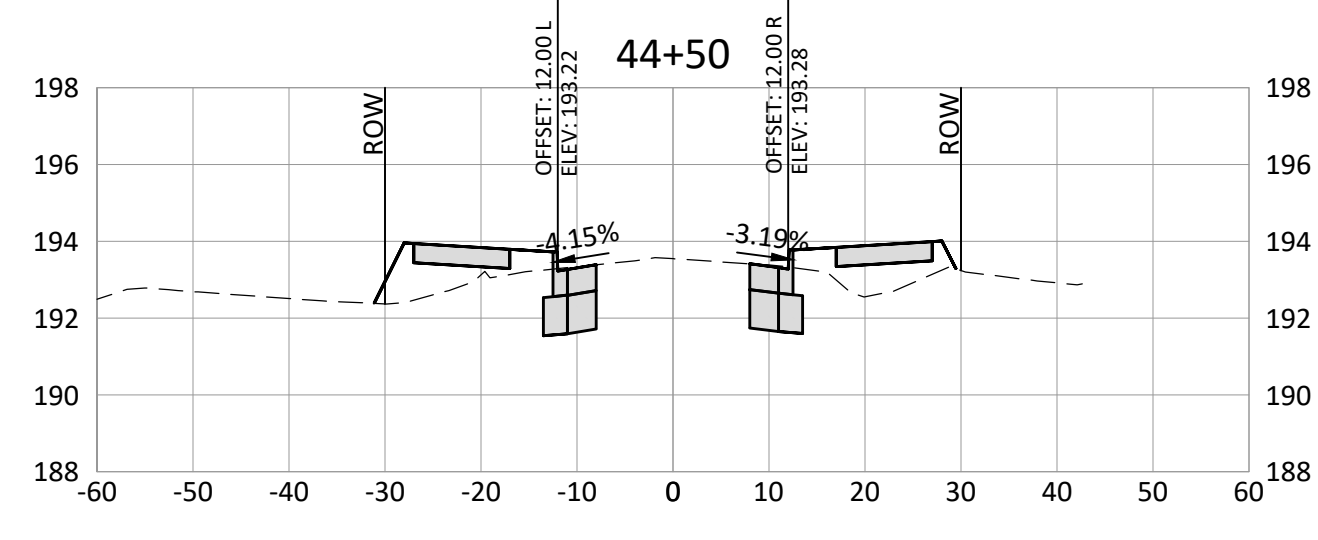
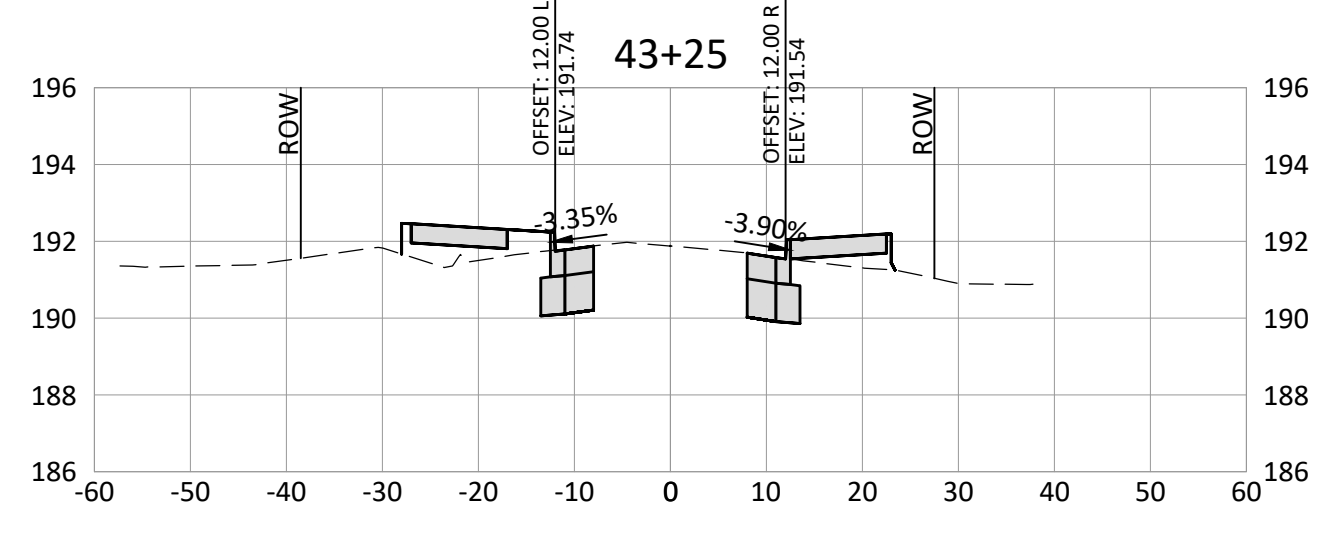
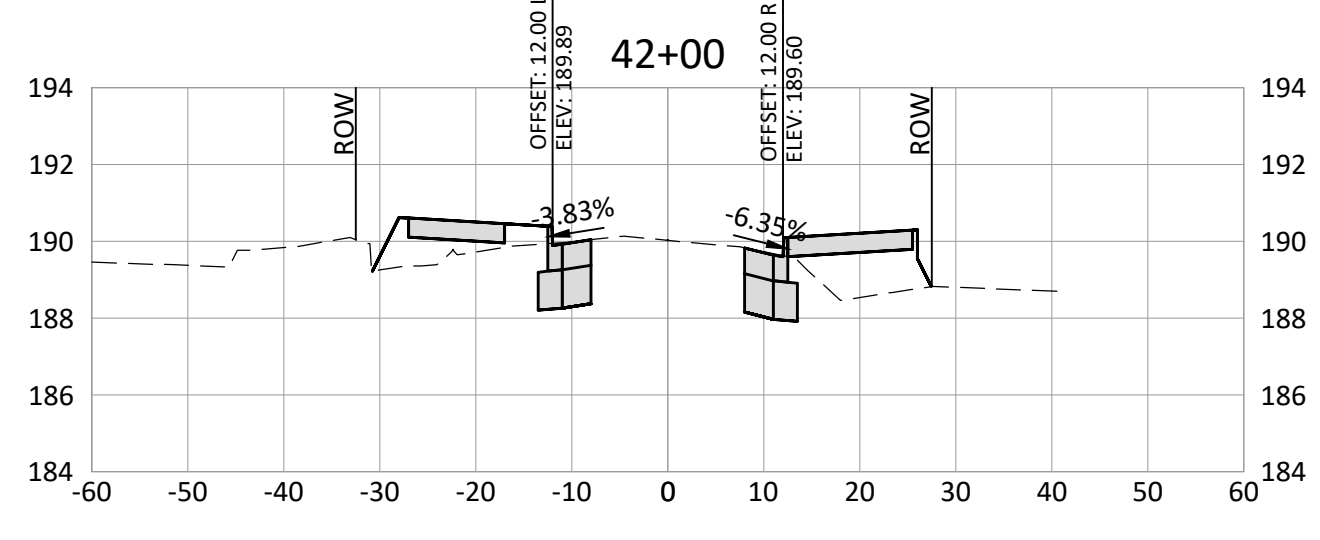
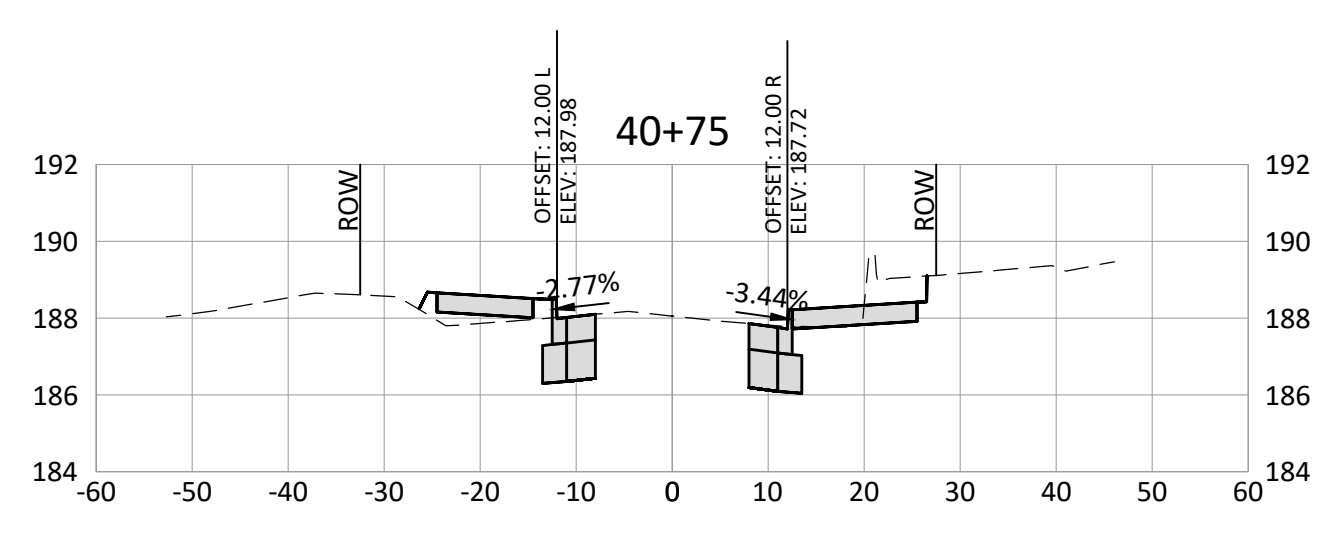
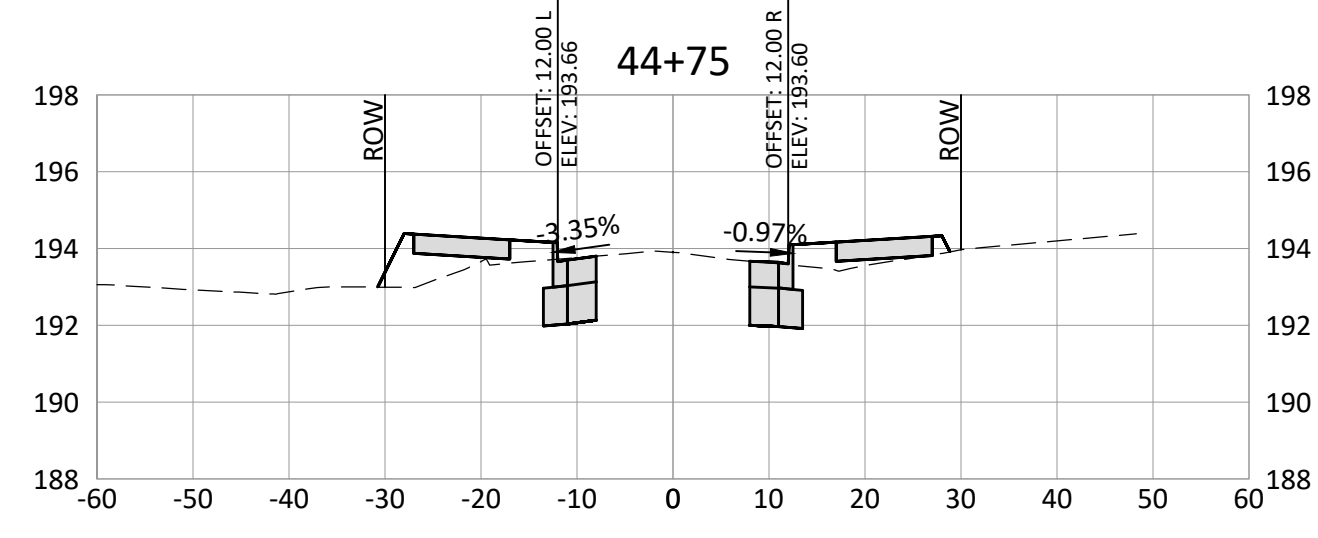
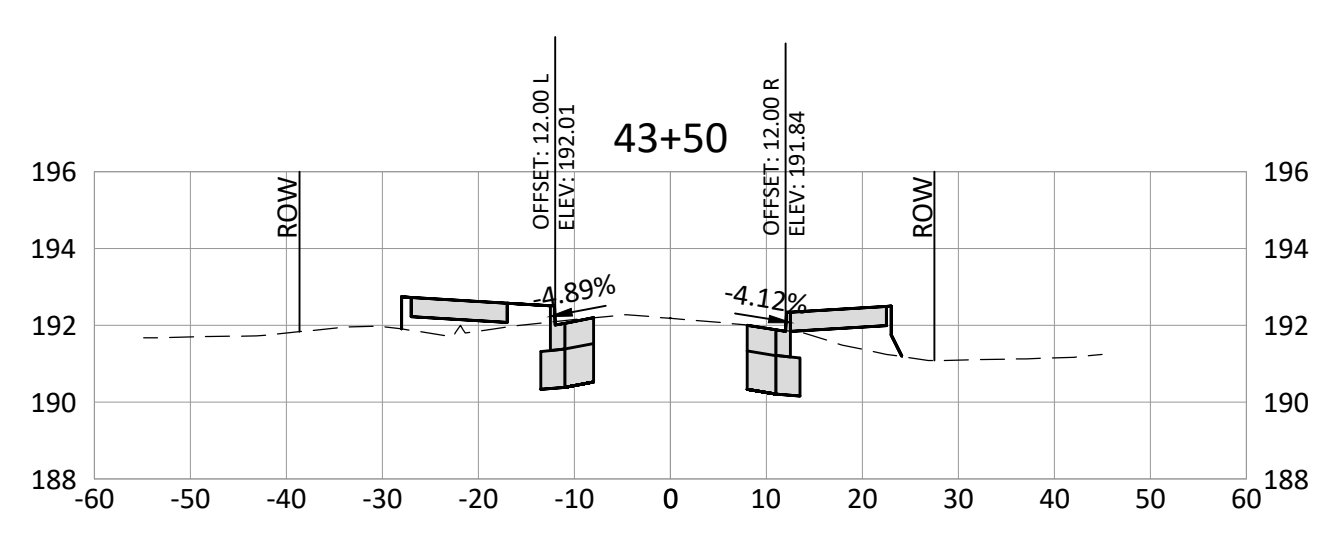
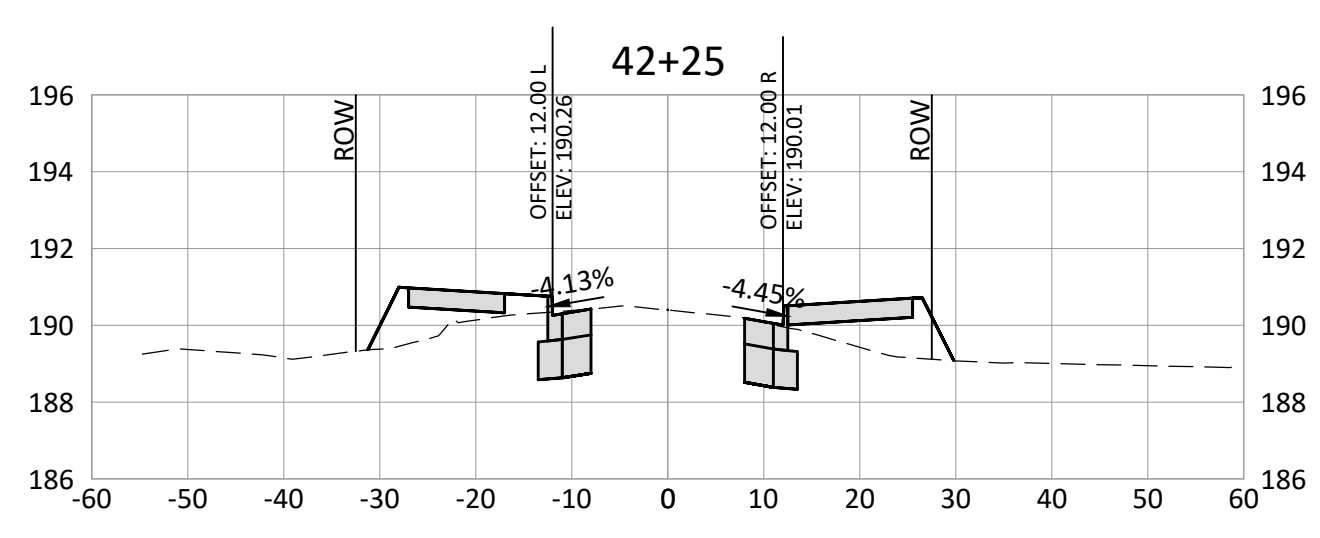
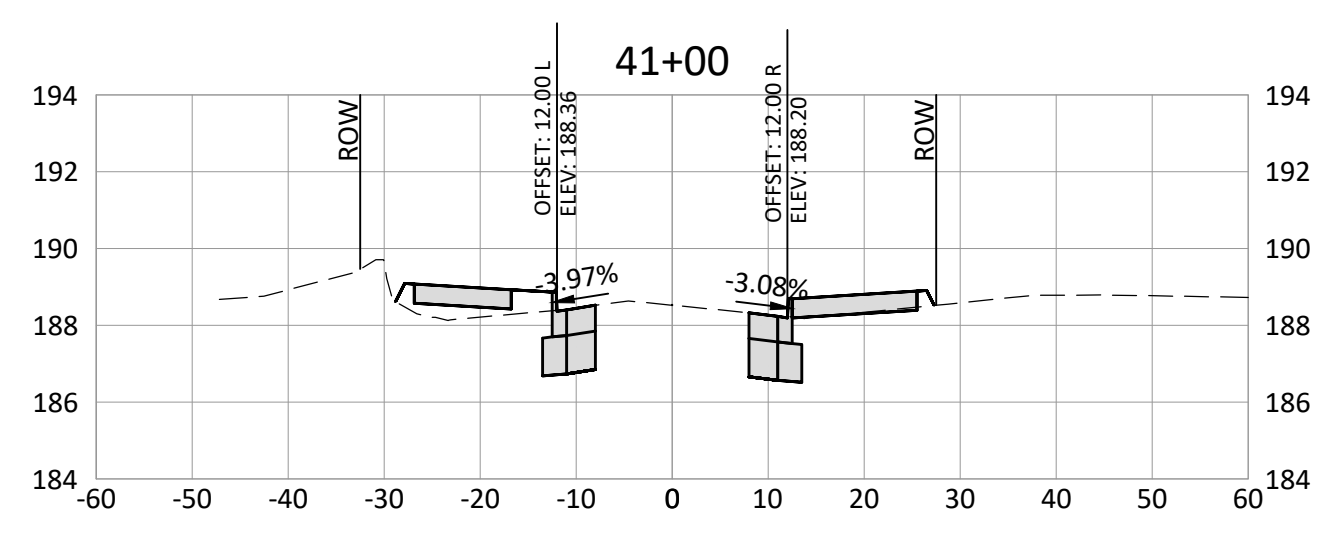
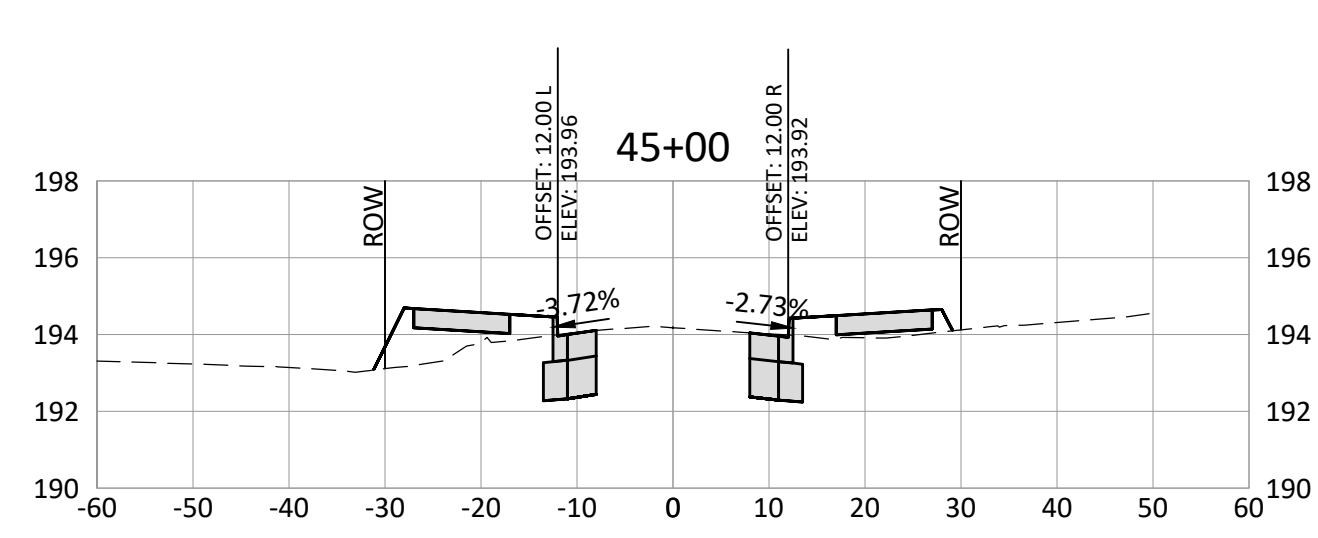
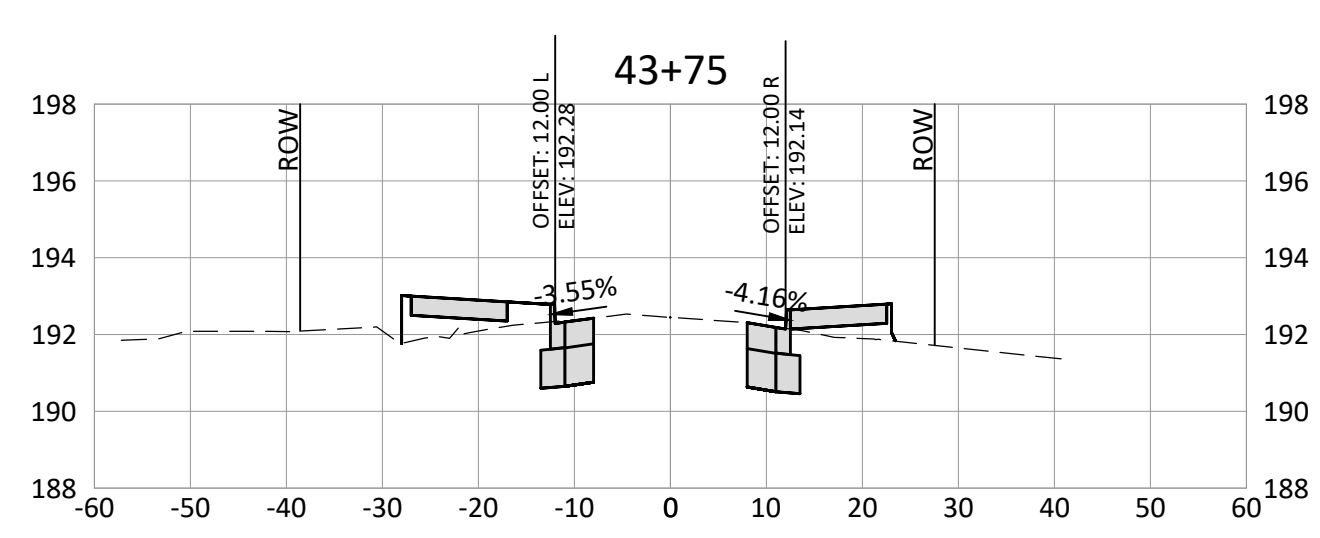
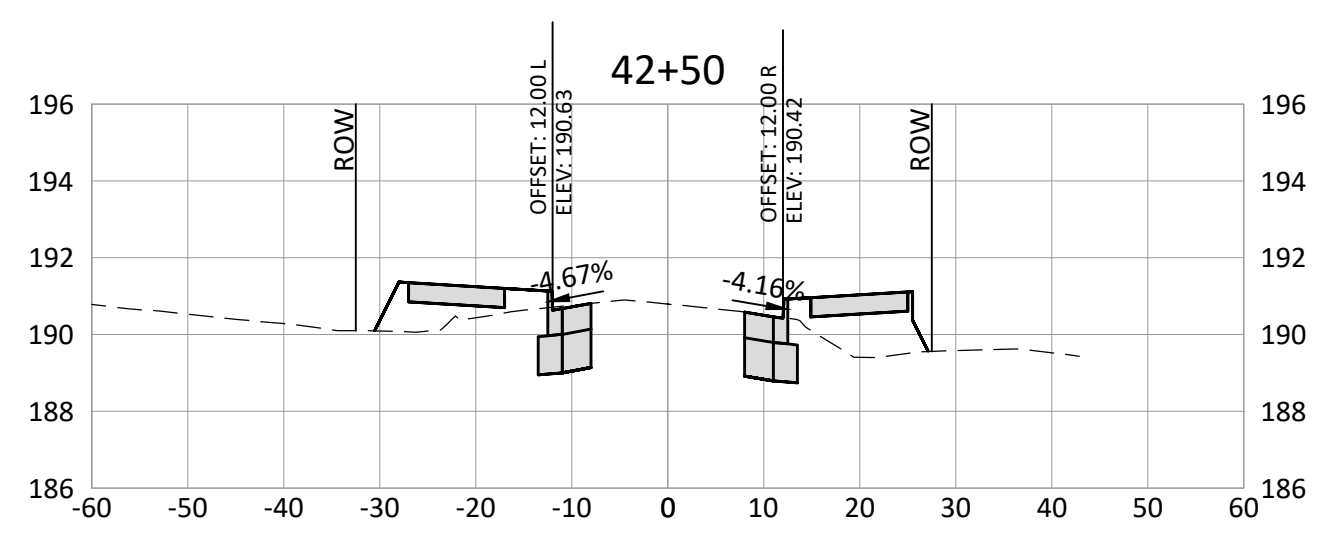
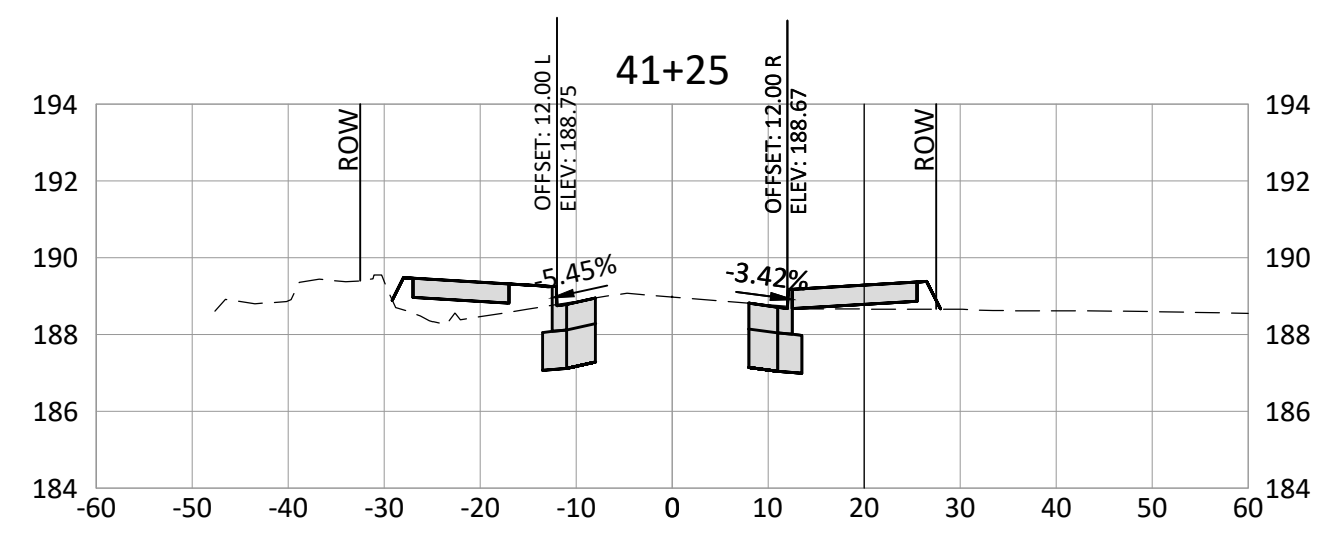
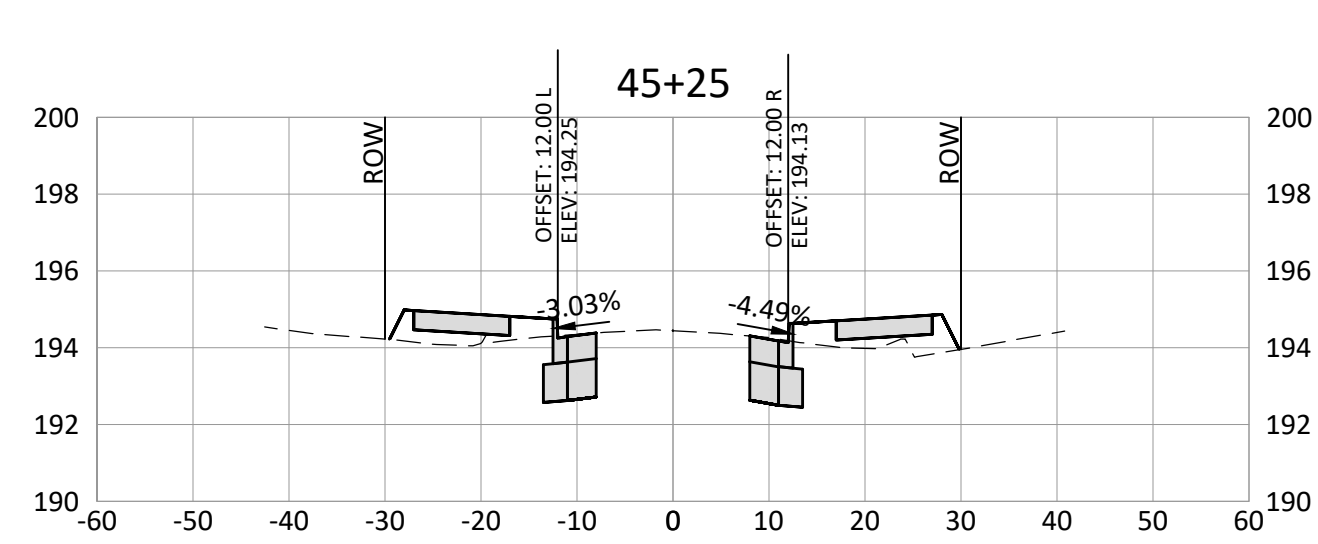
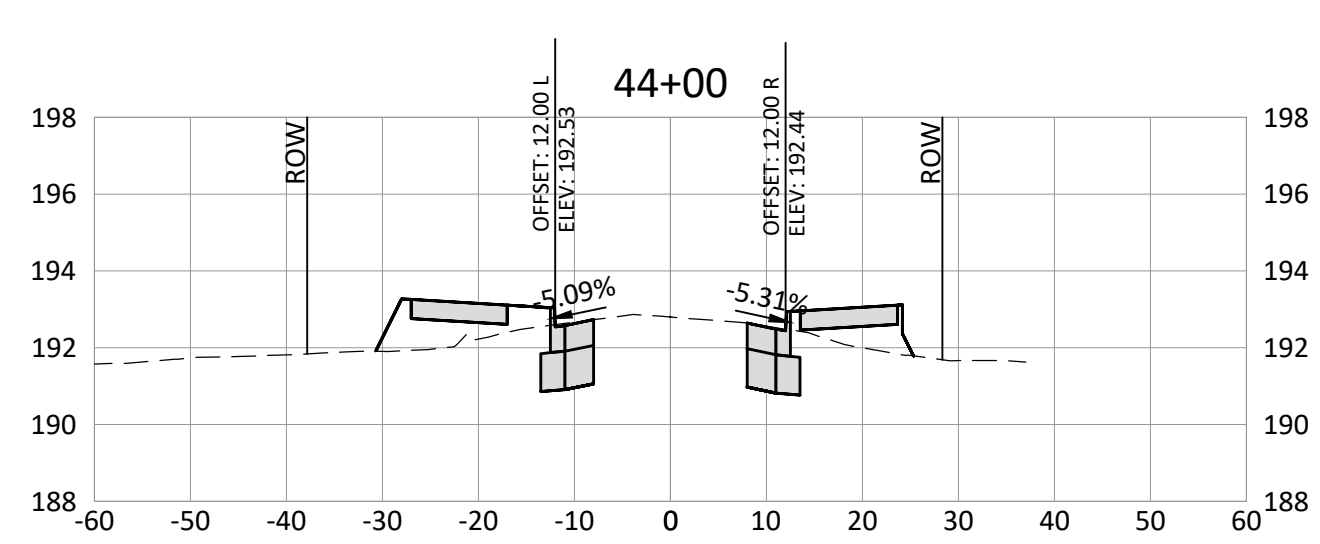
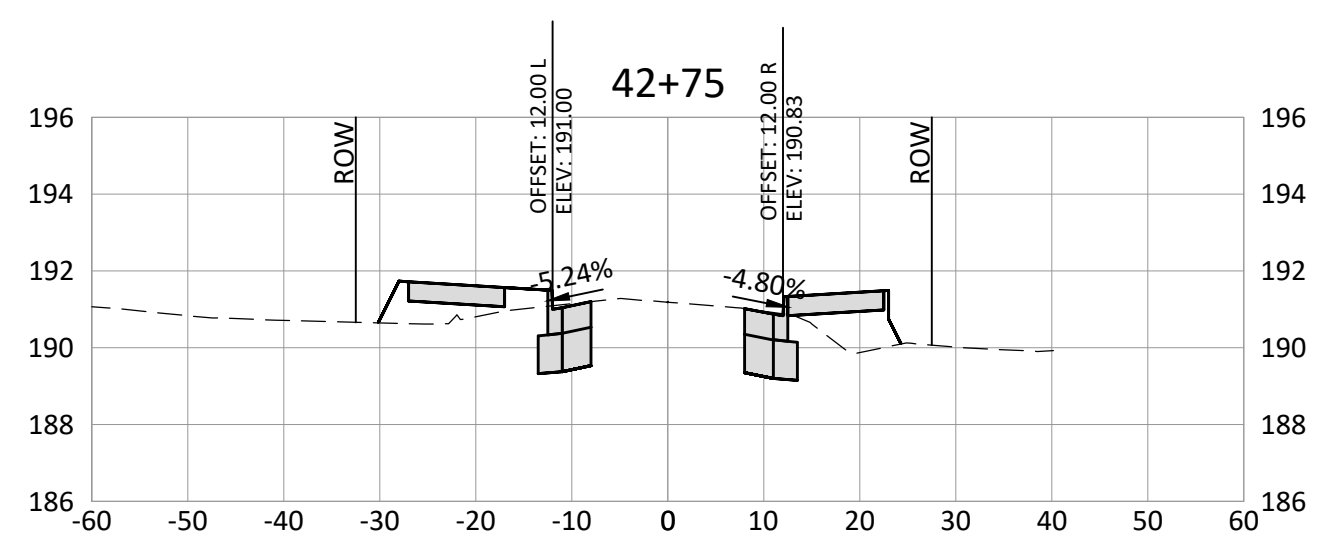
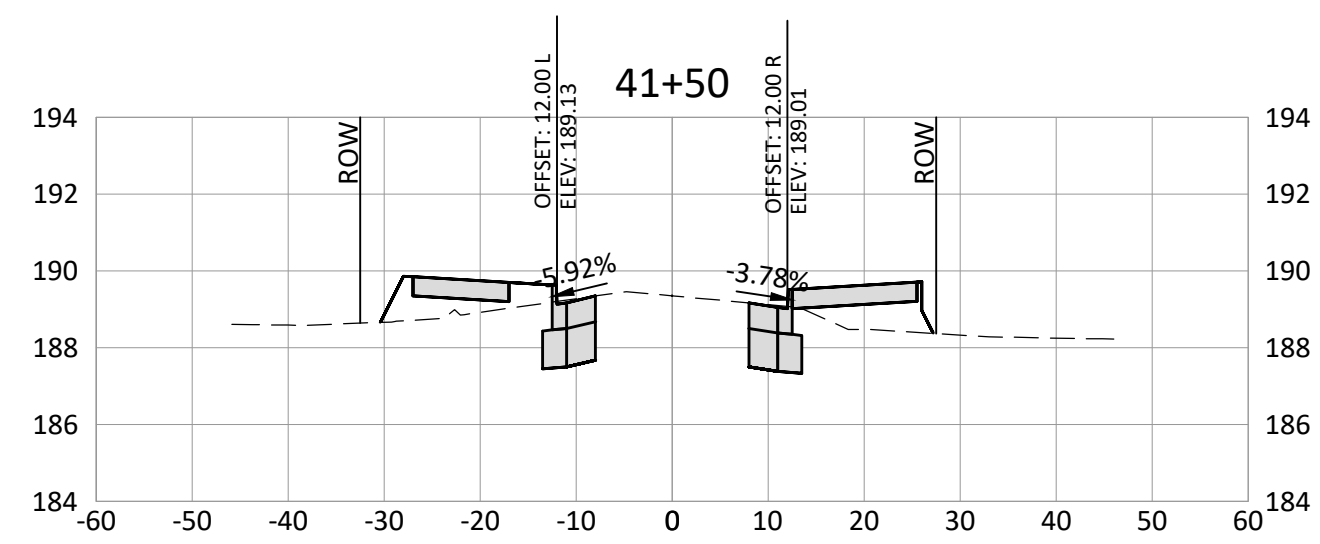


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**CROSS SECTIONS
 SE LINWOOD AVENUE
 MILWAUKIE, OREGON**

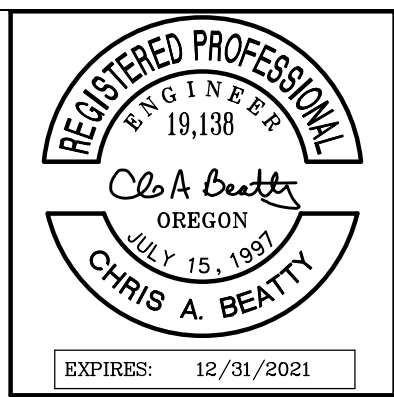
SHEET NO.	10.5
JOB NO.	MWK-28

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DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020

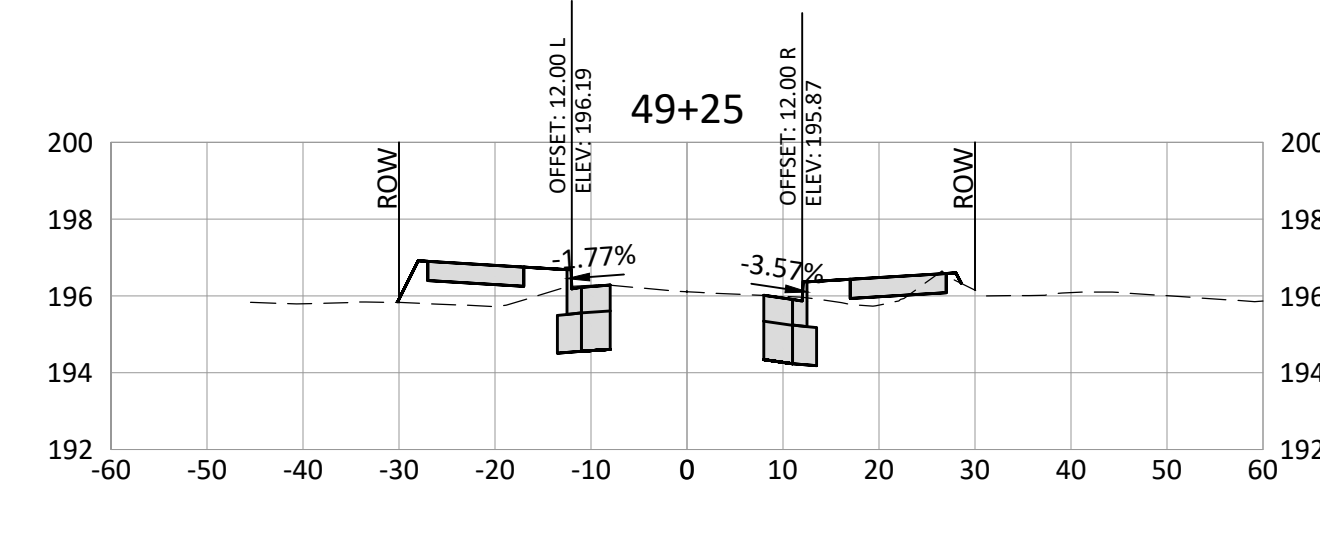
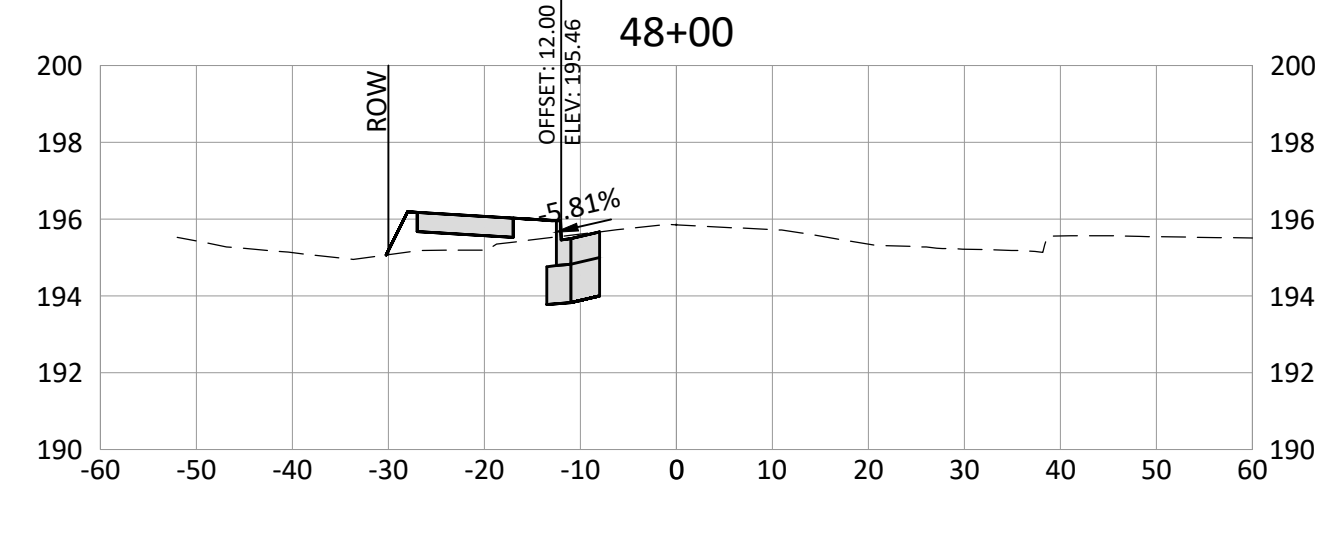
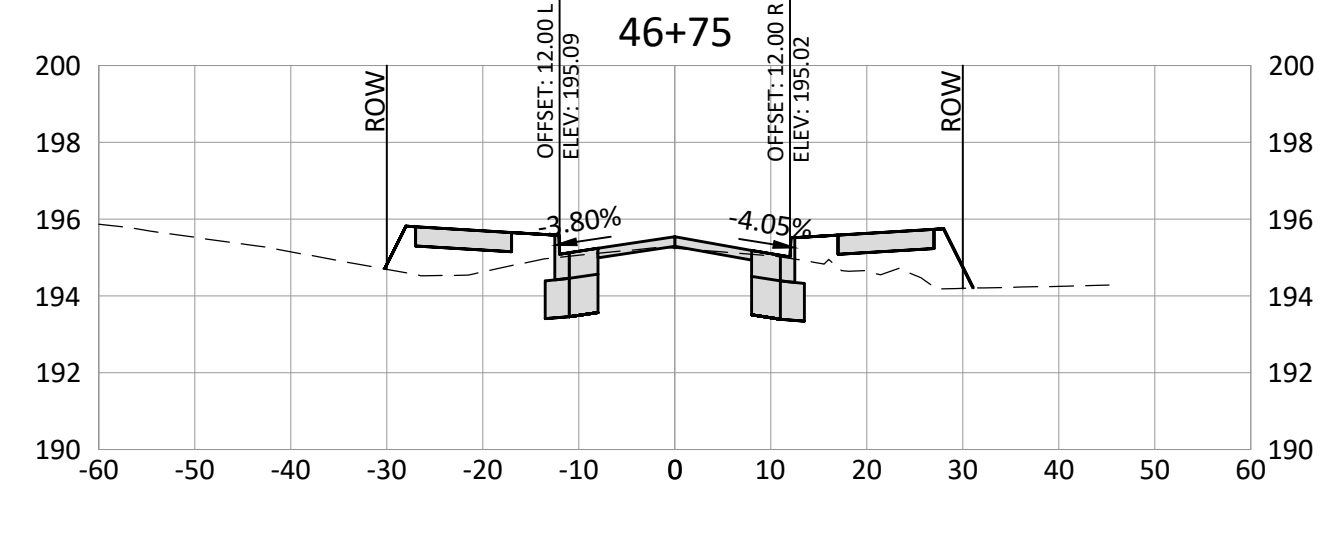
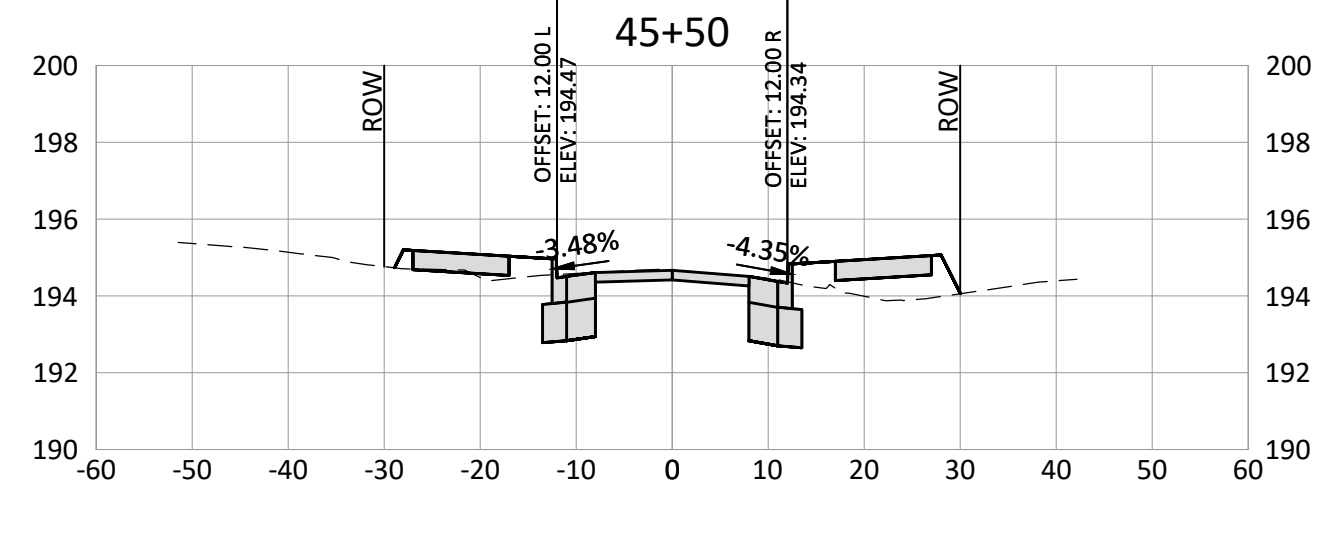
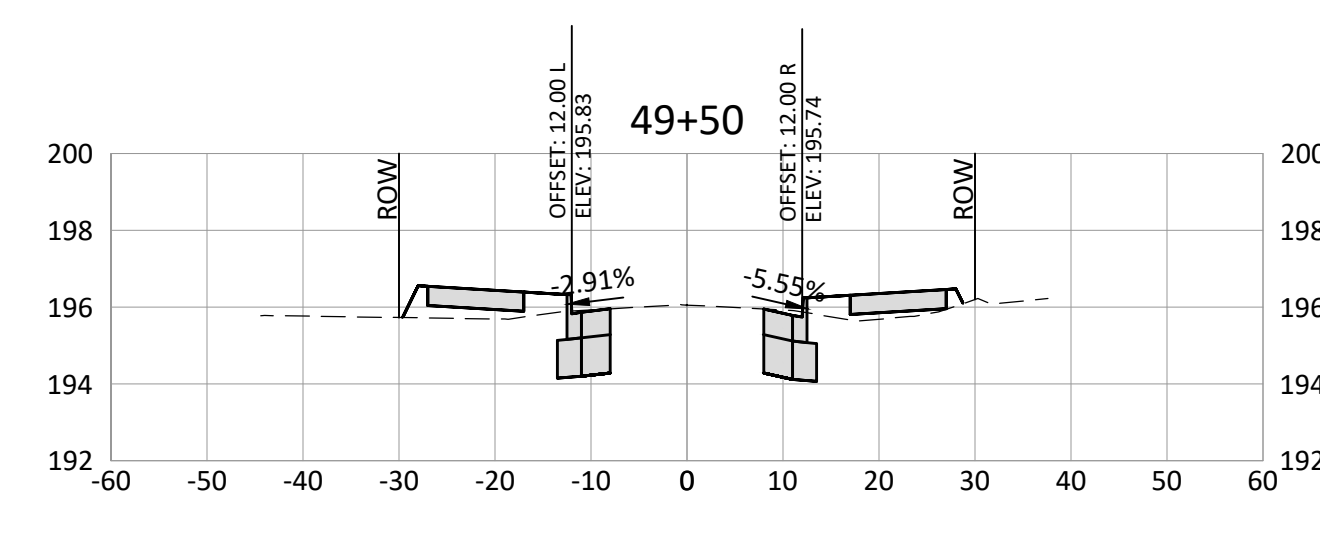
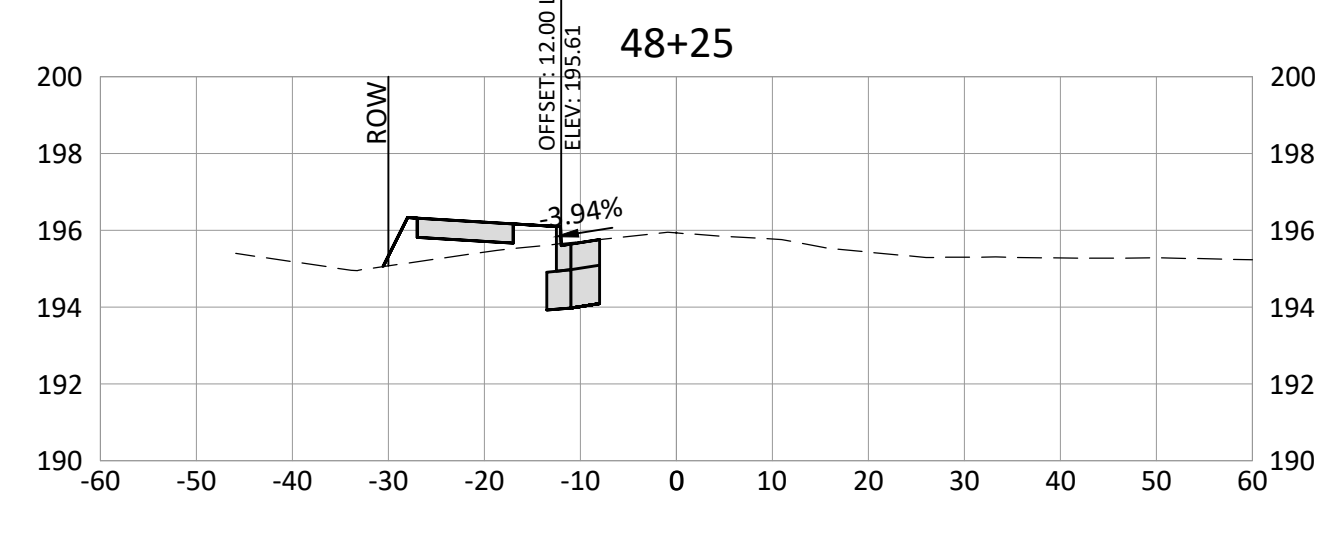
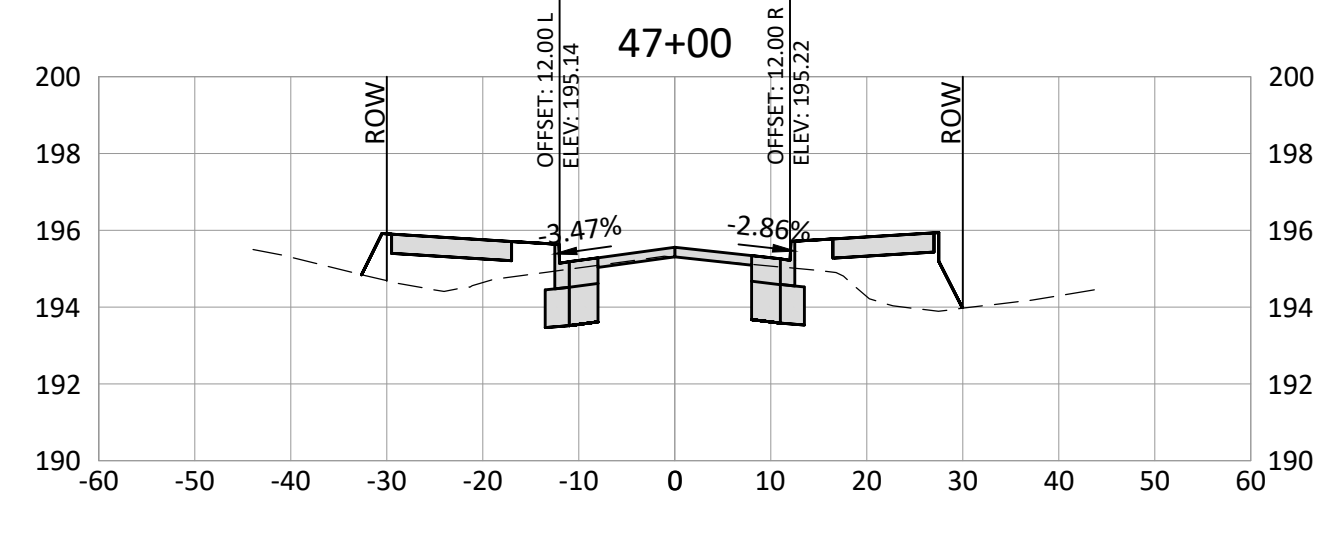
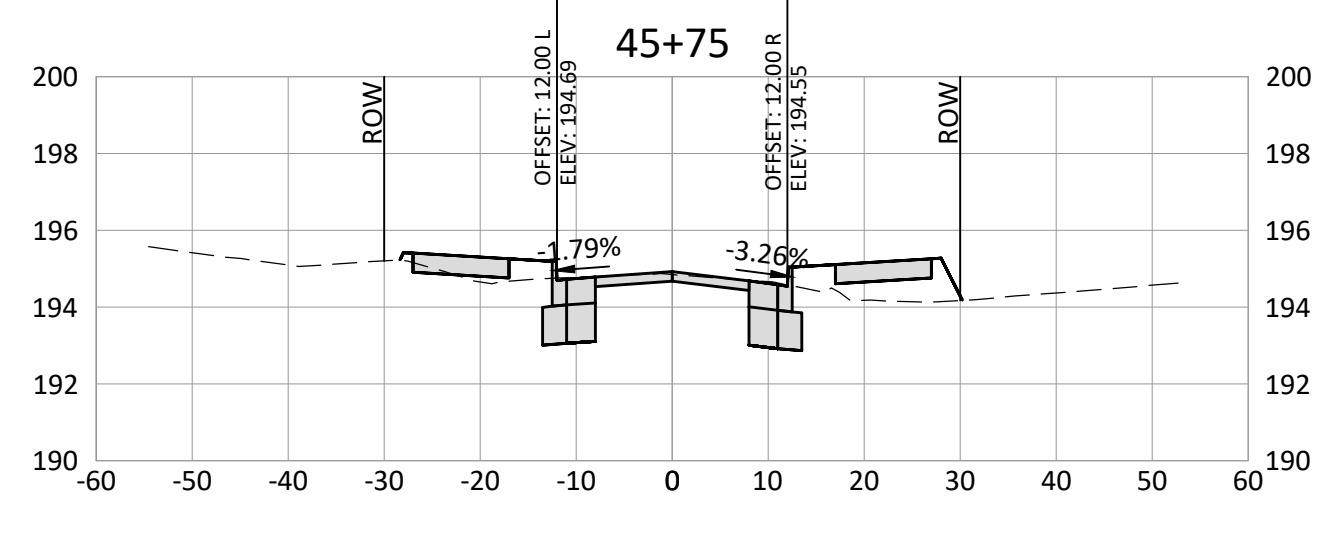
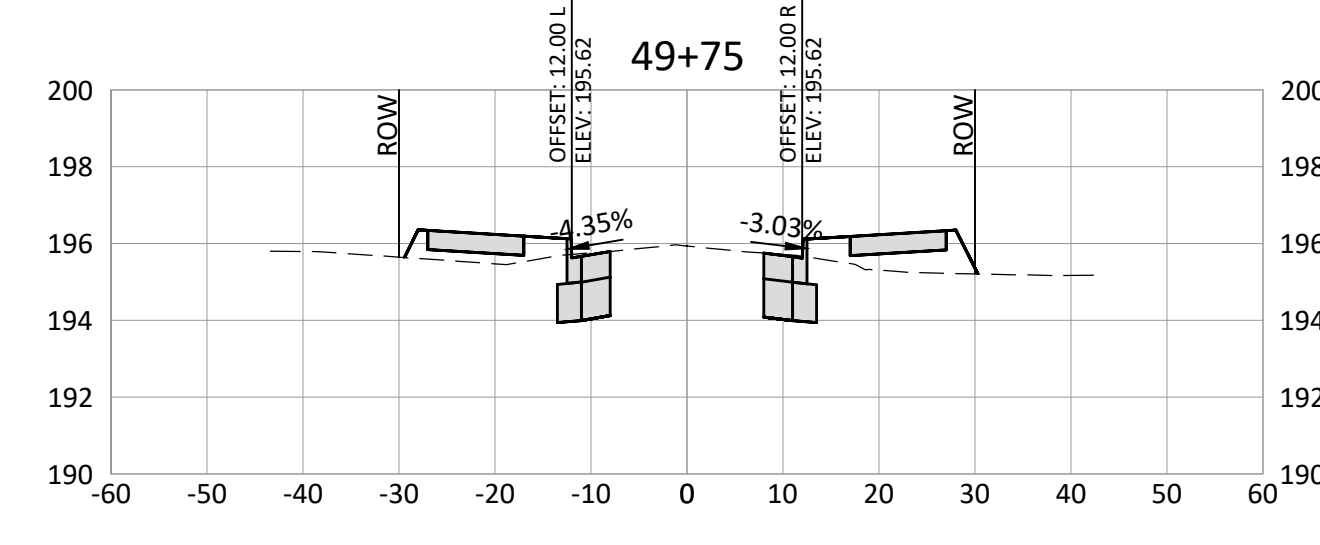
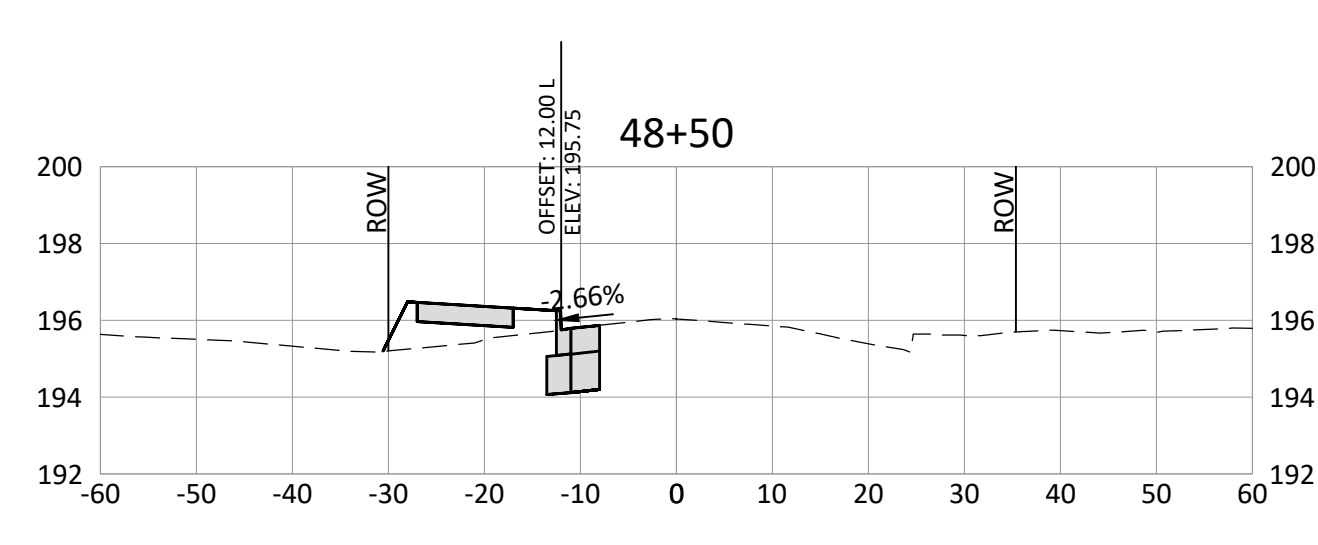
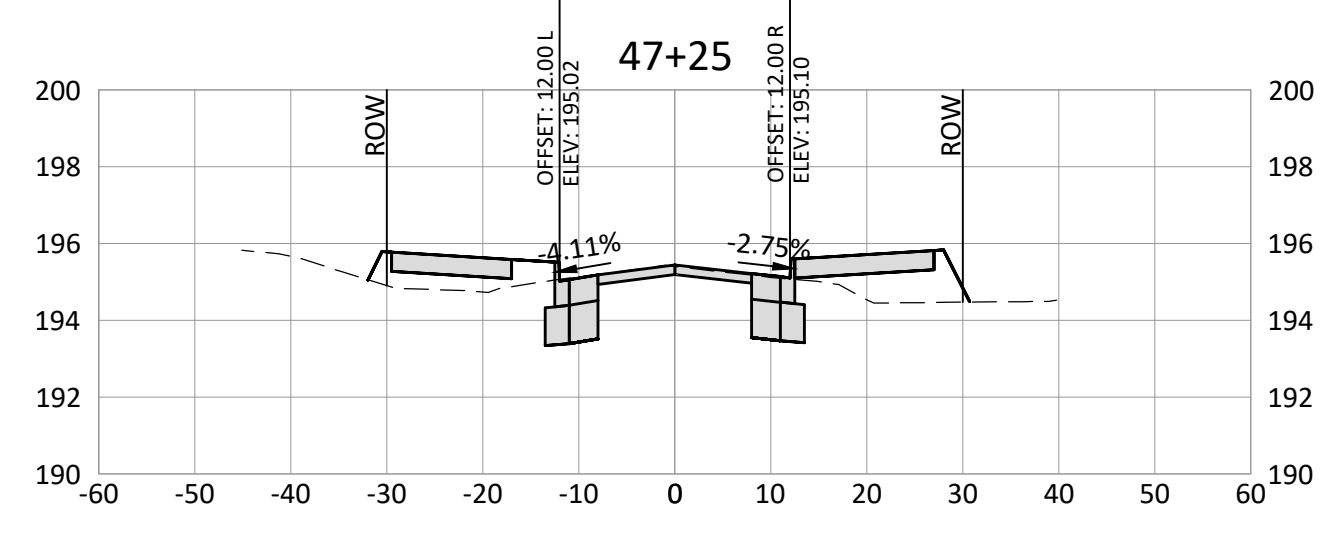
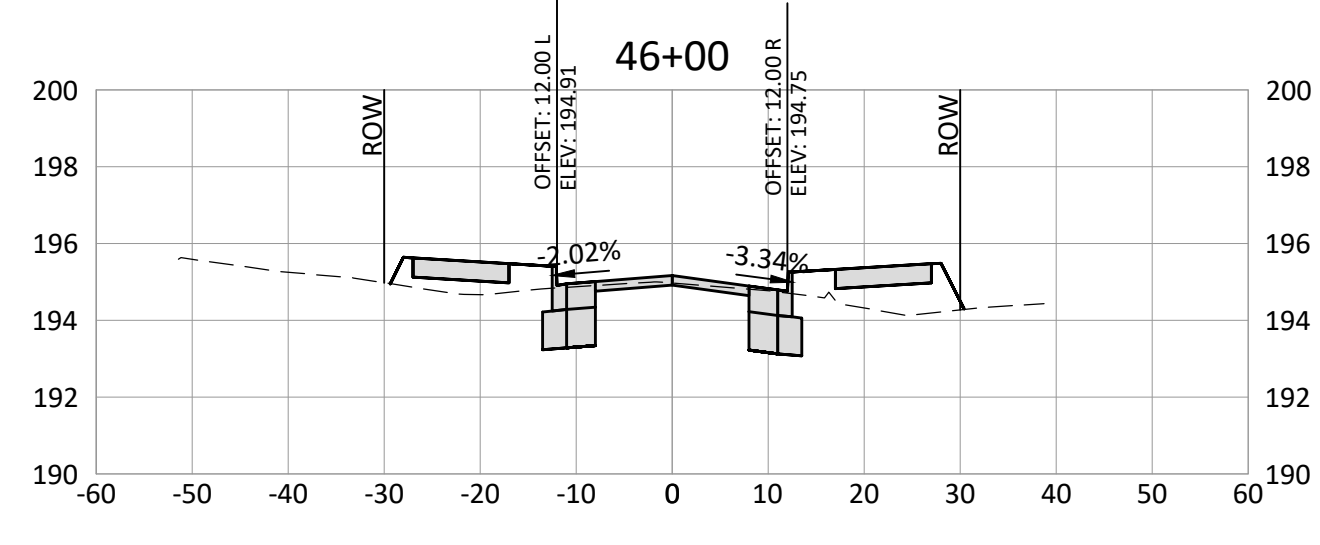
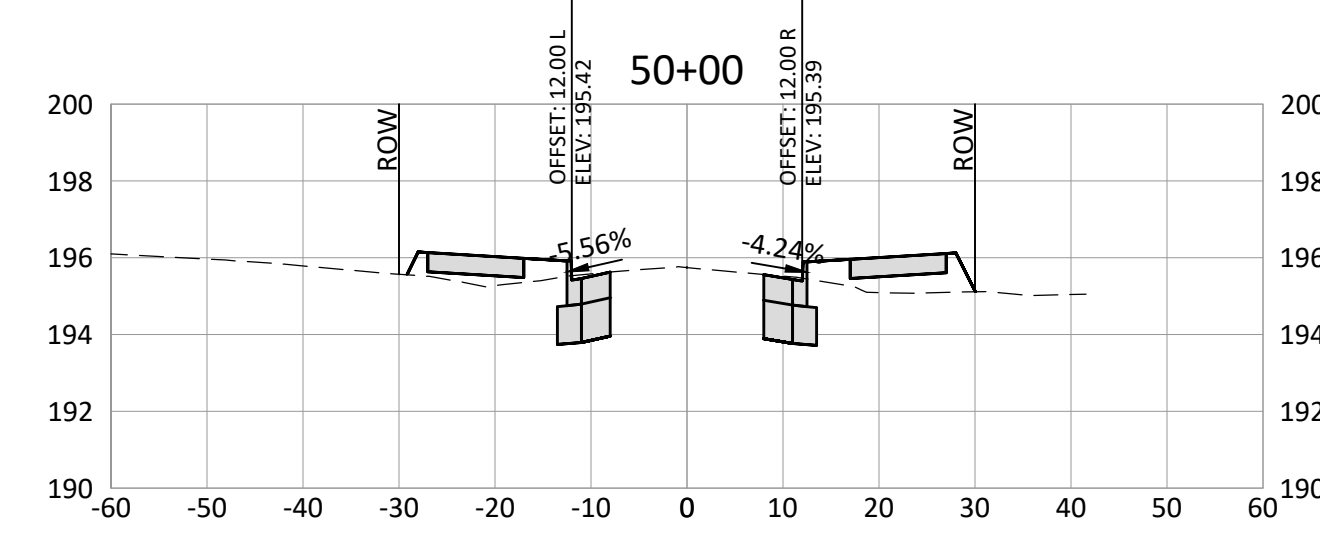
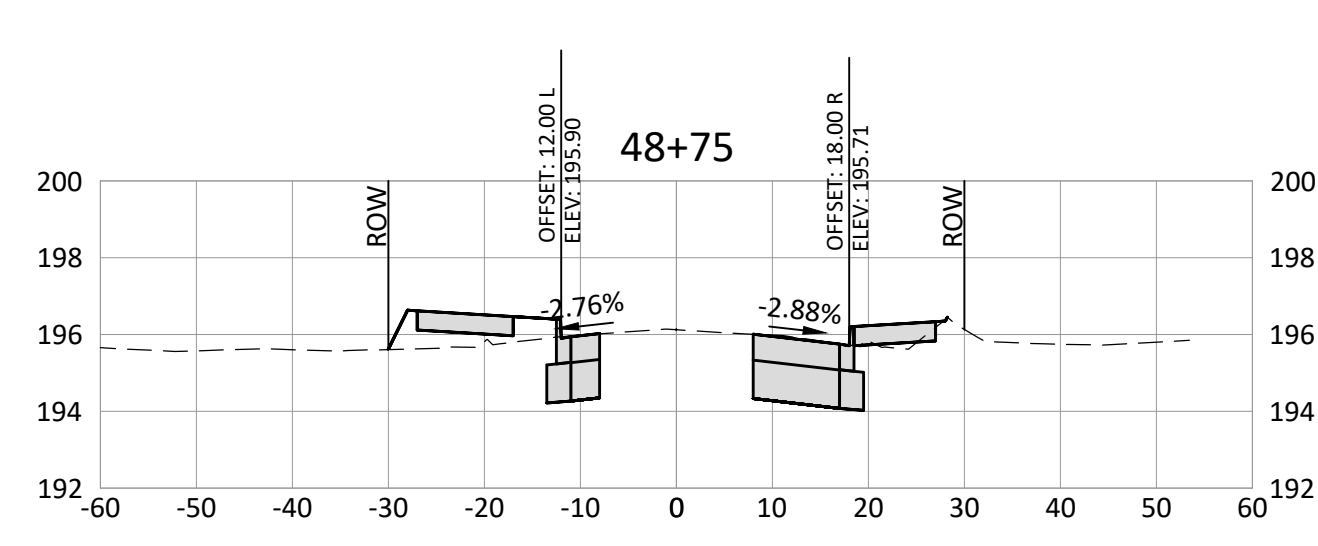
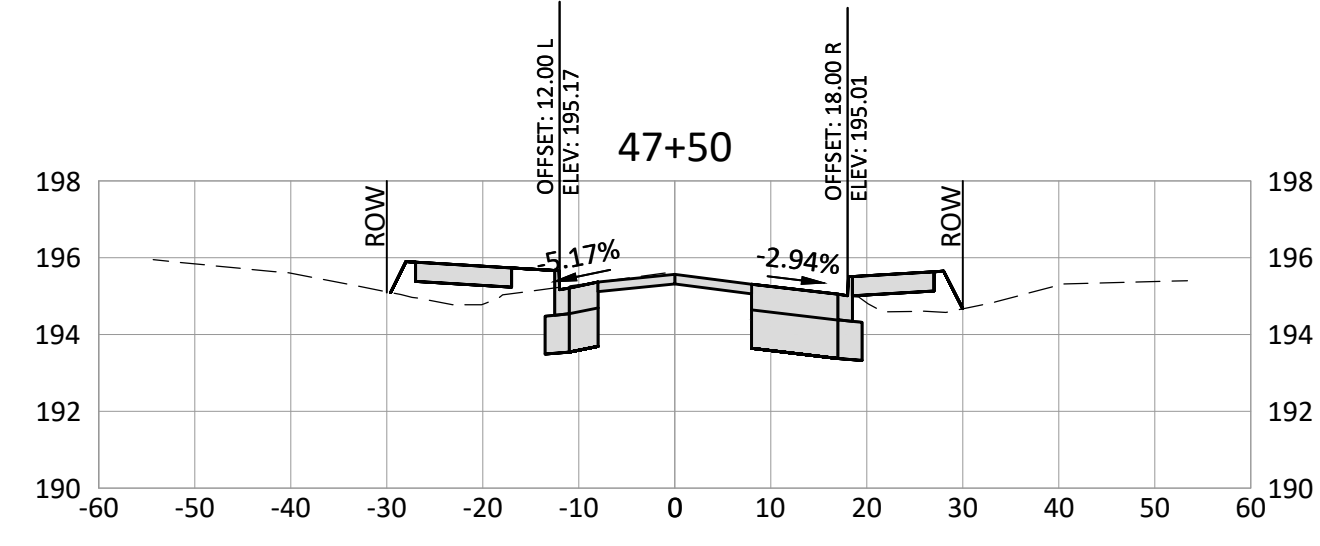
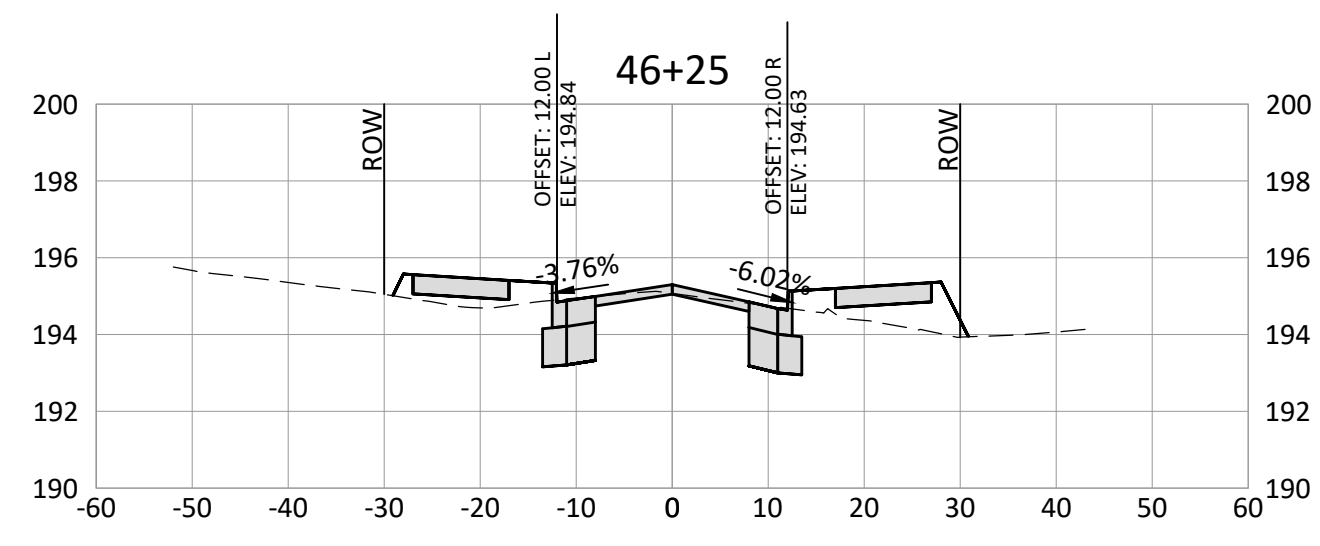
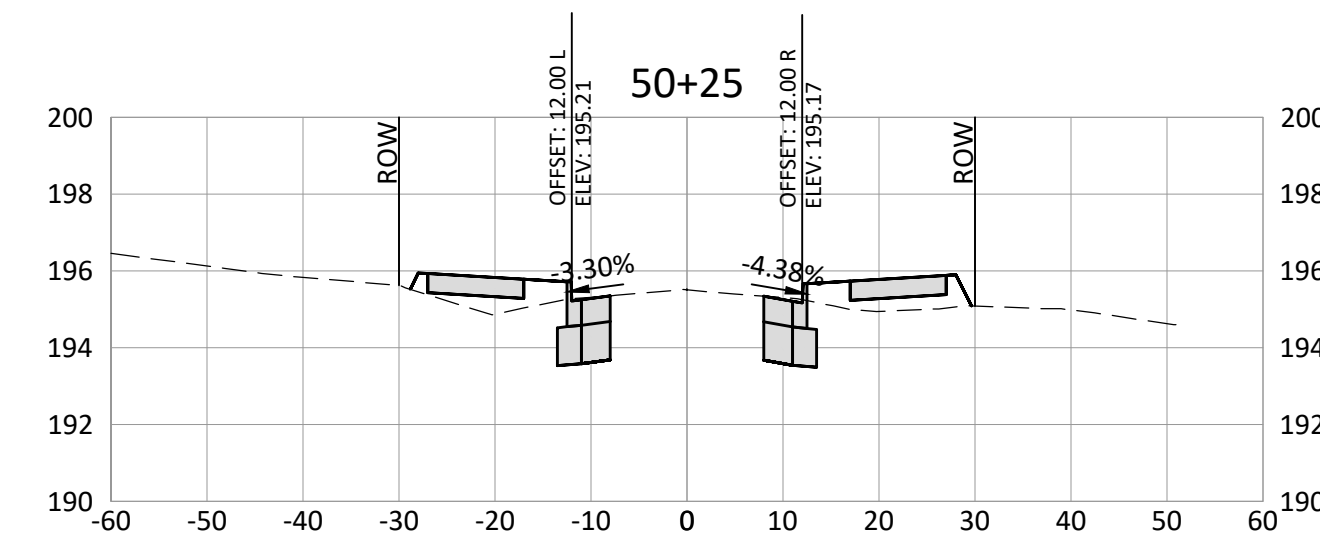
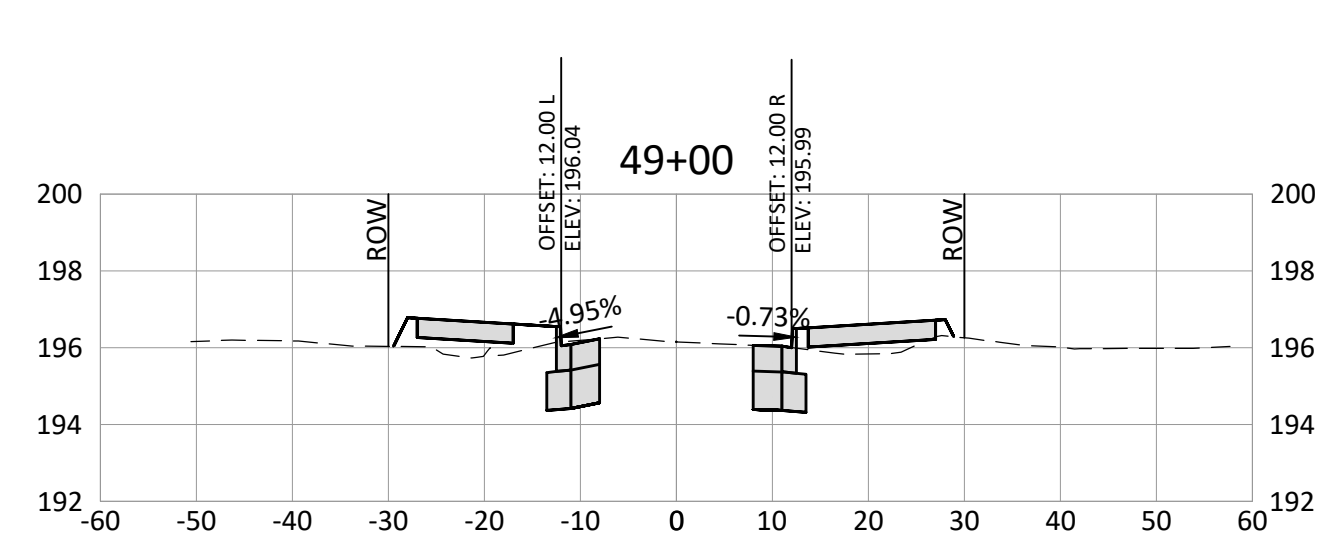
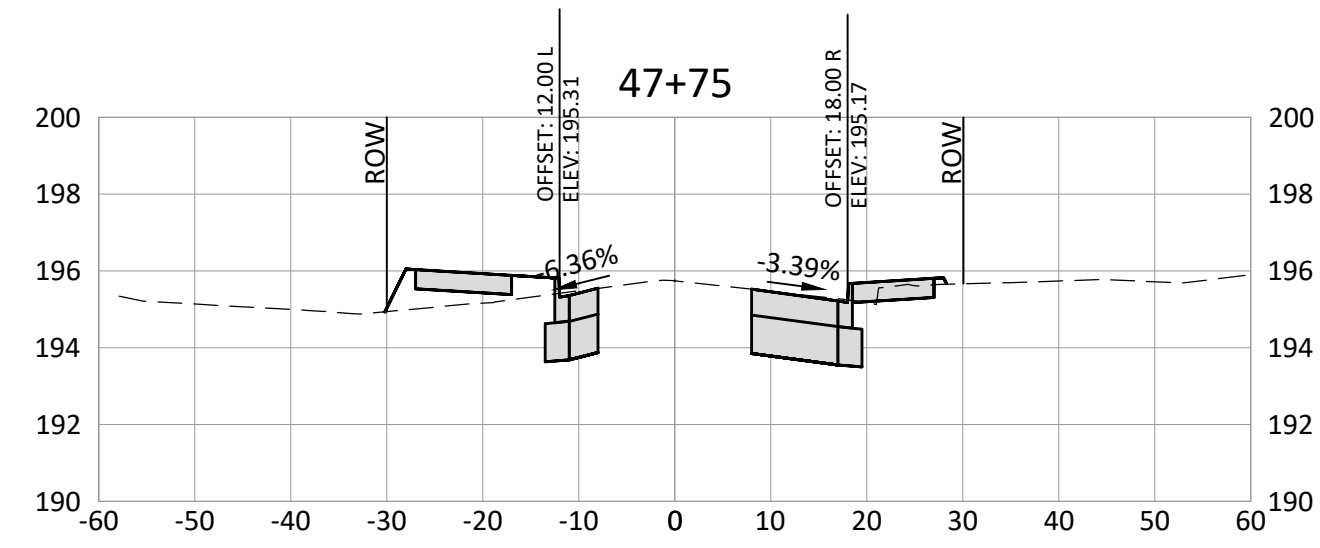
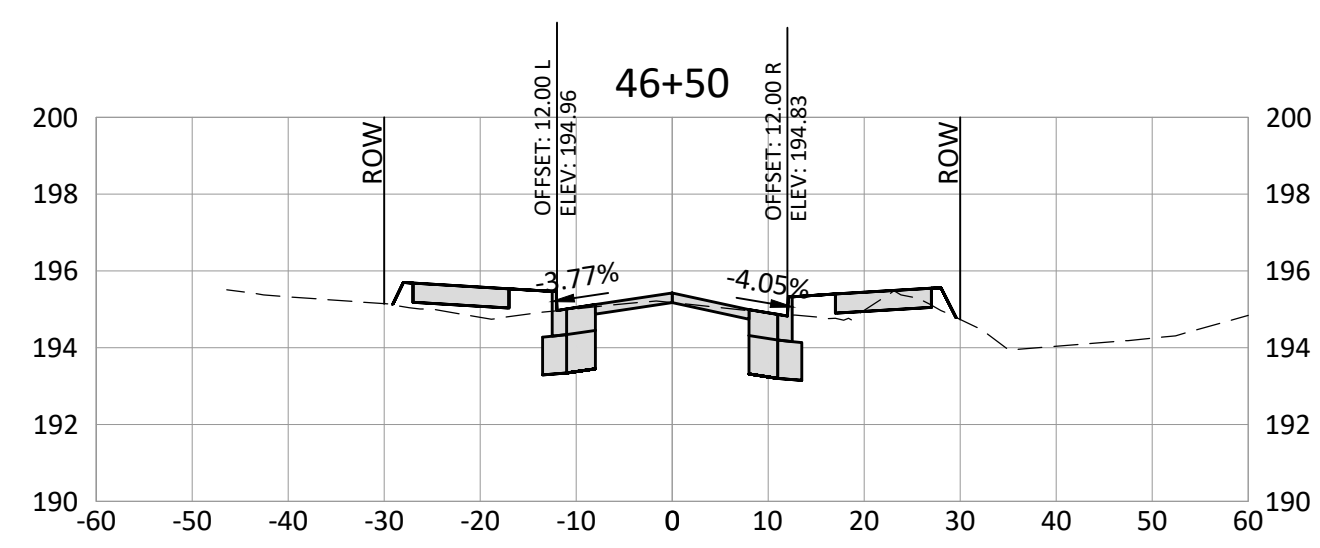


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CROSS SECTIONS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

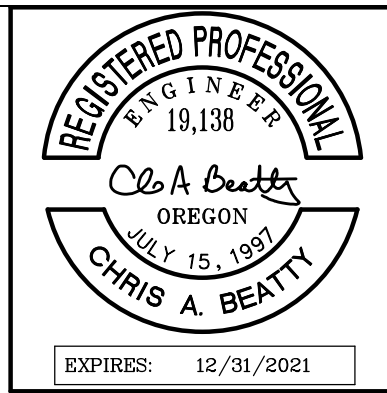
SHEET NO.	10.6
JOB NO.	MWK-28

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DATE	NO.	DESCRIPTION
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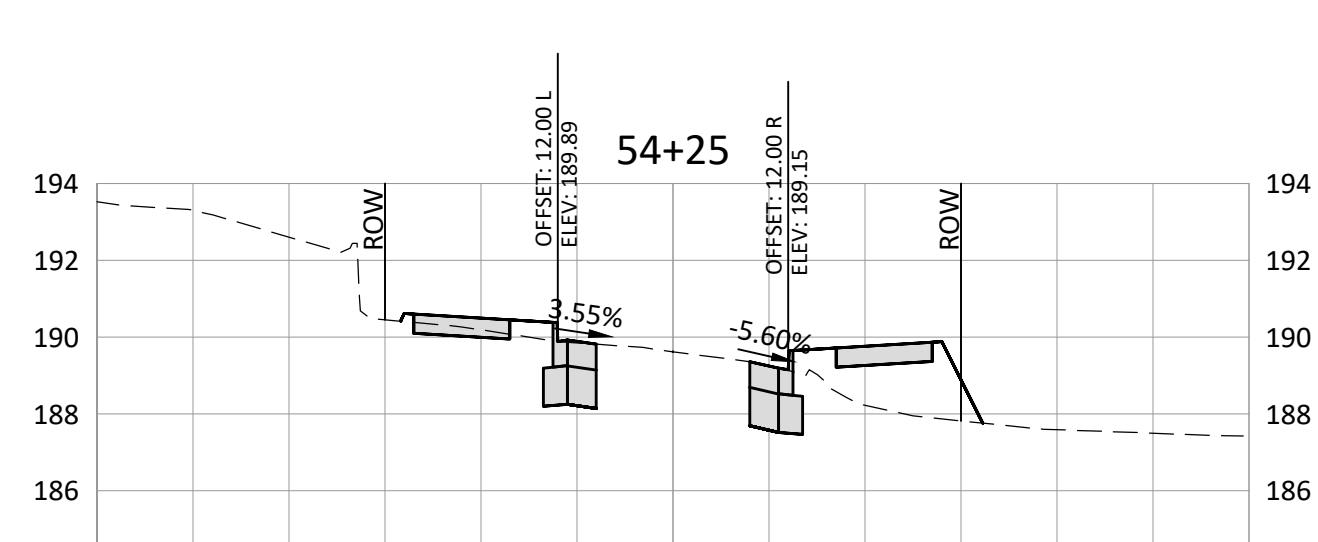
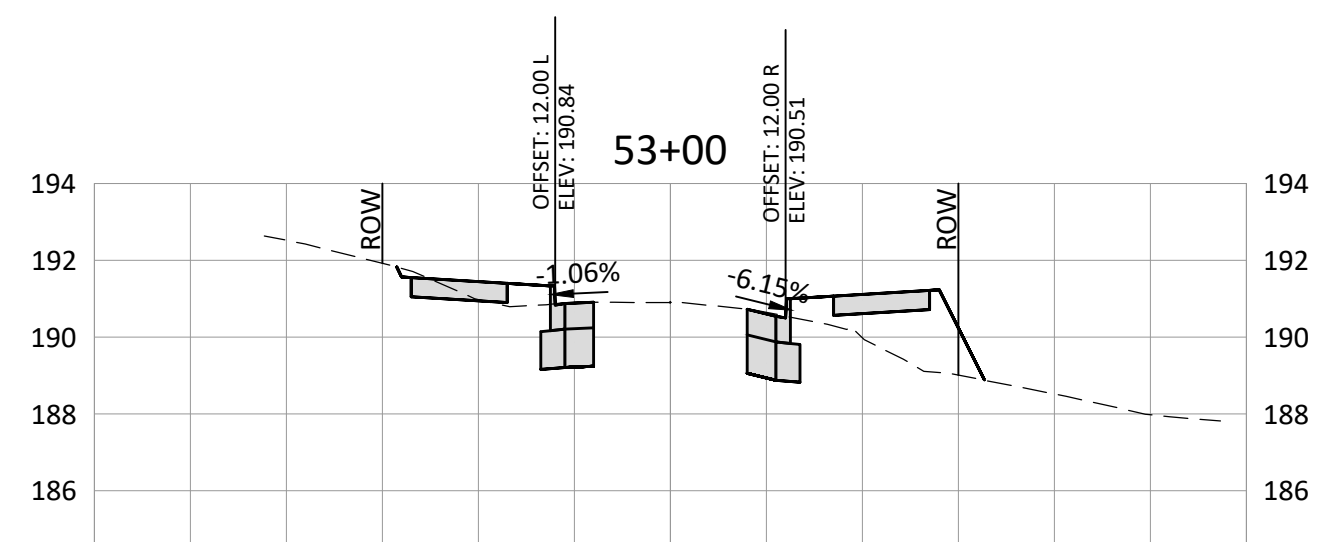
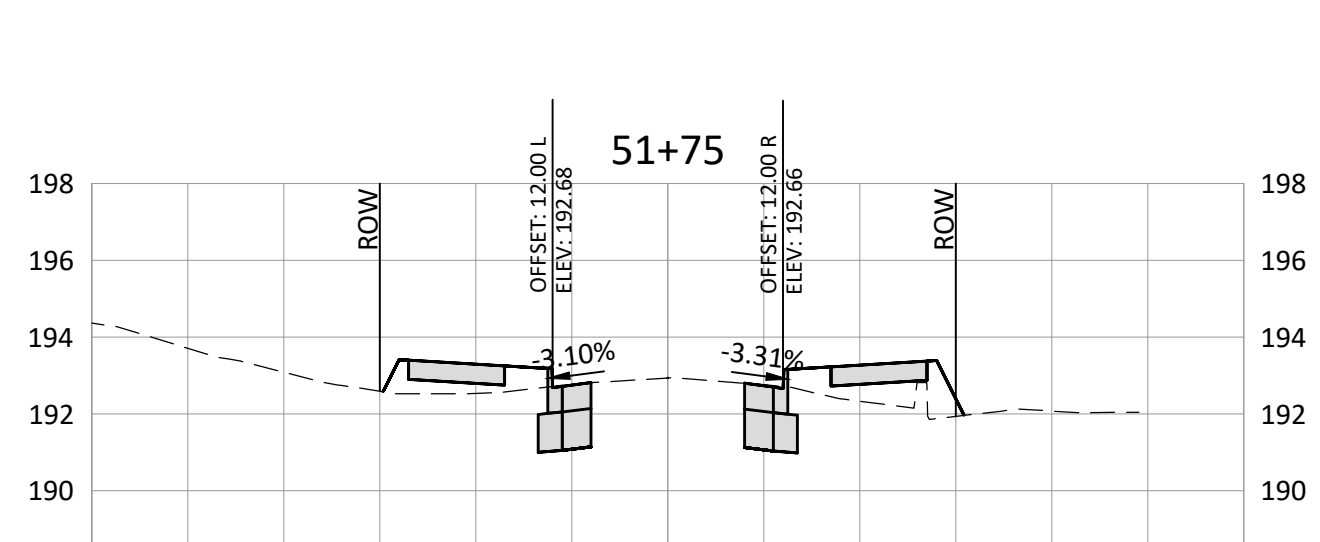
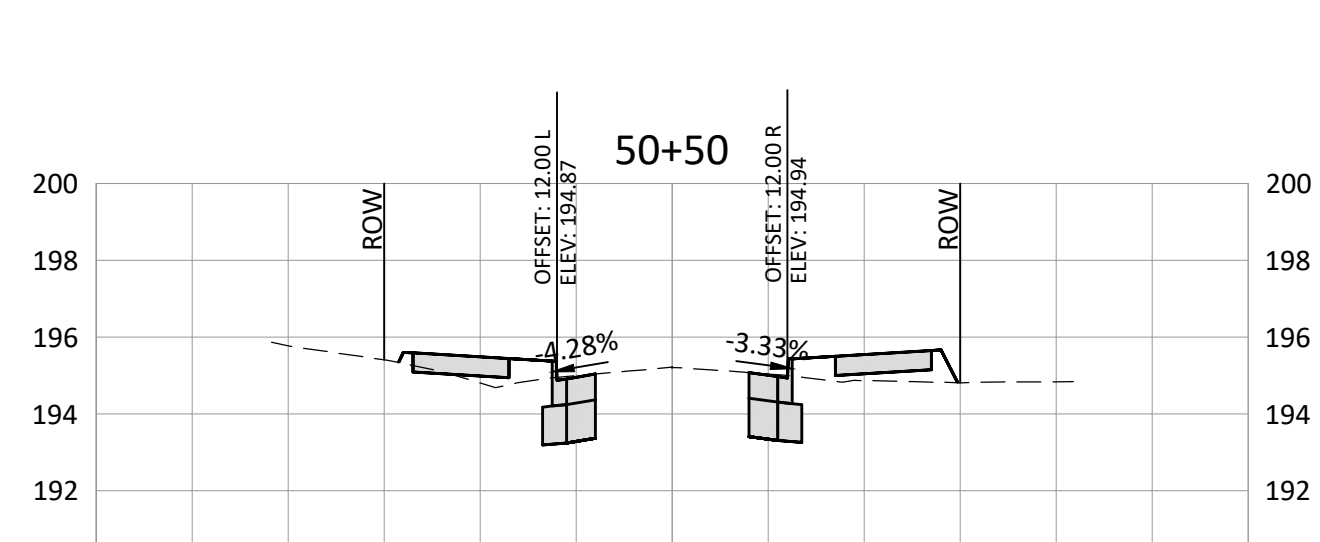
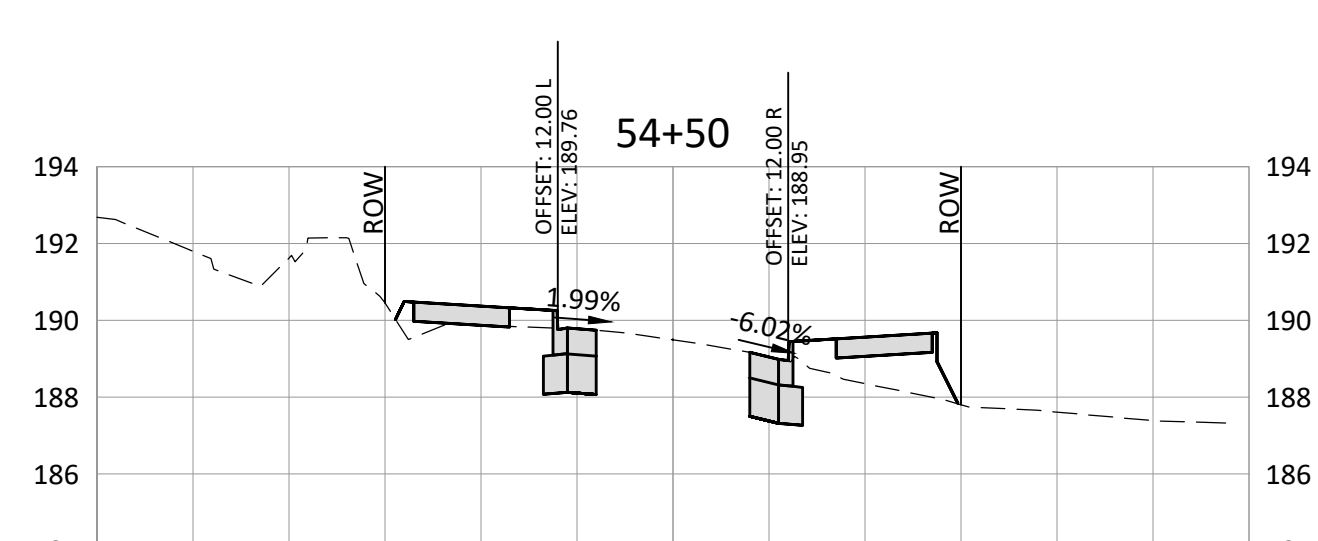
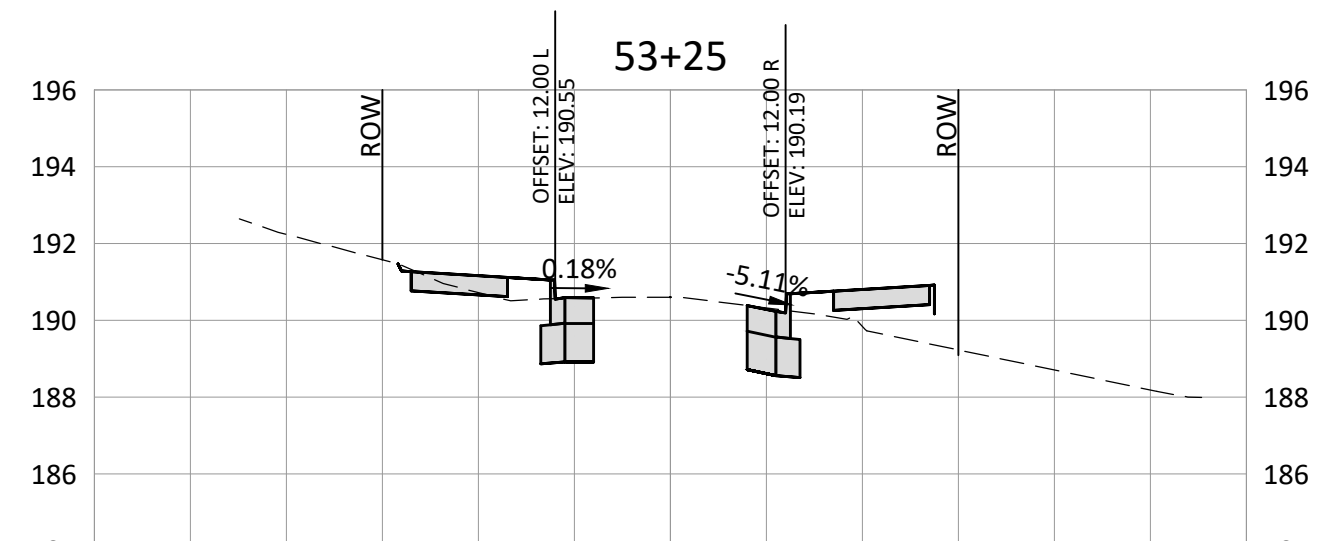
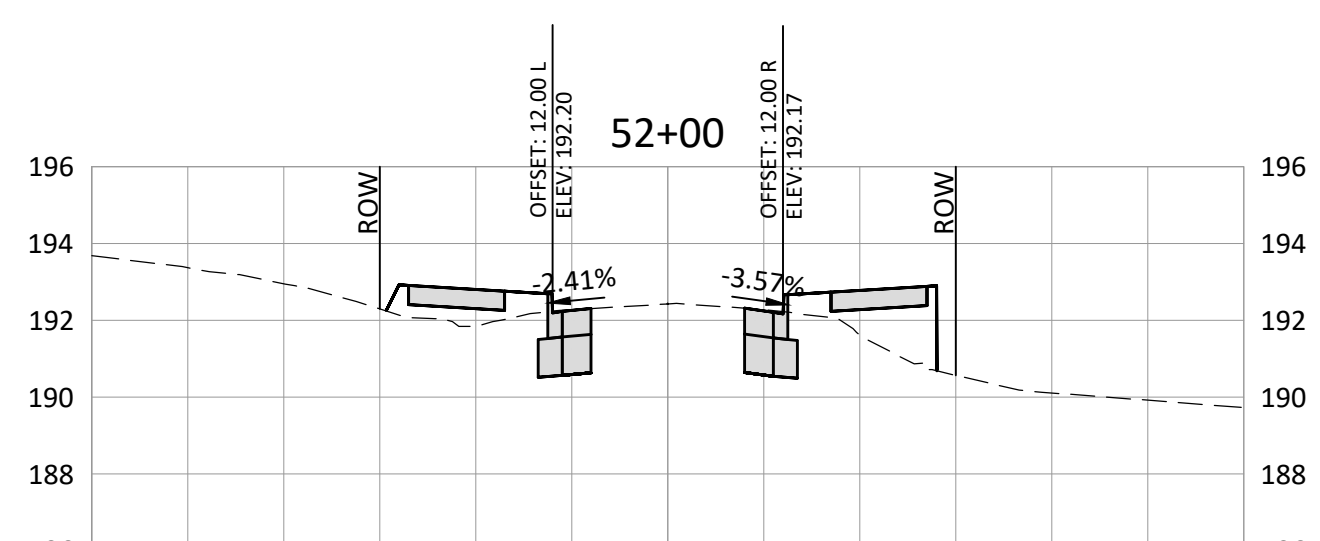
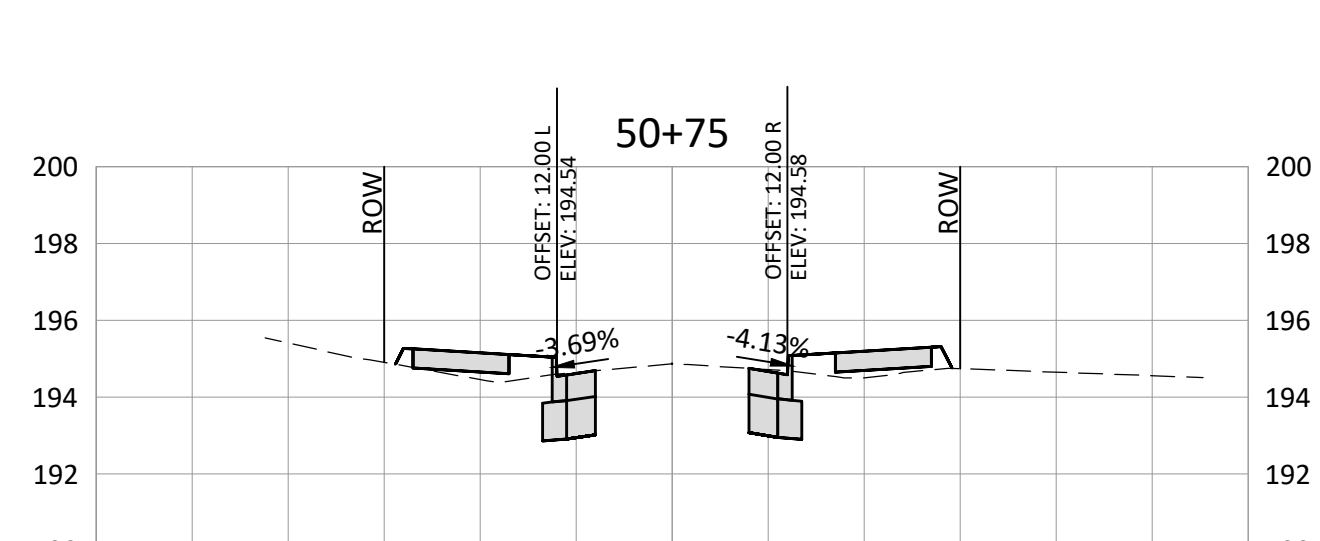
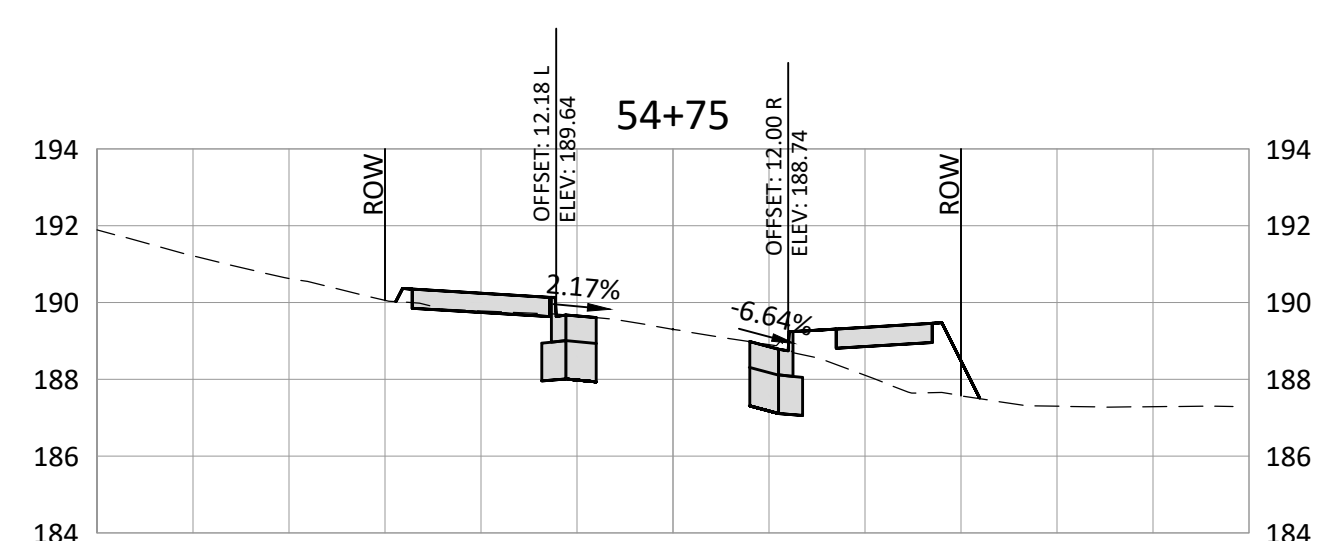
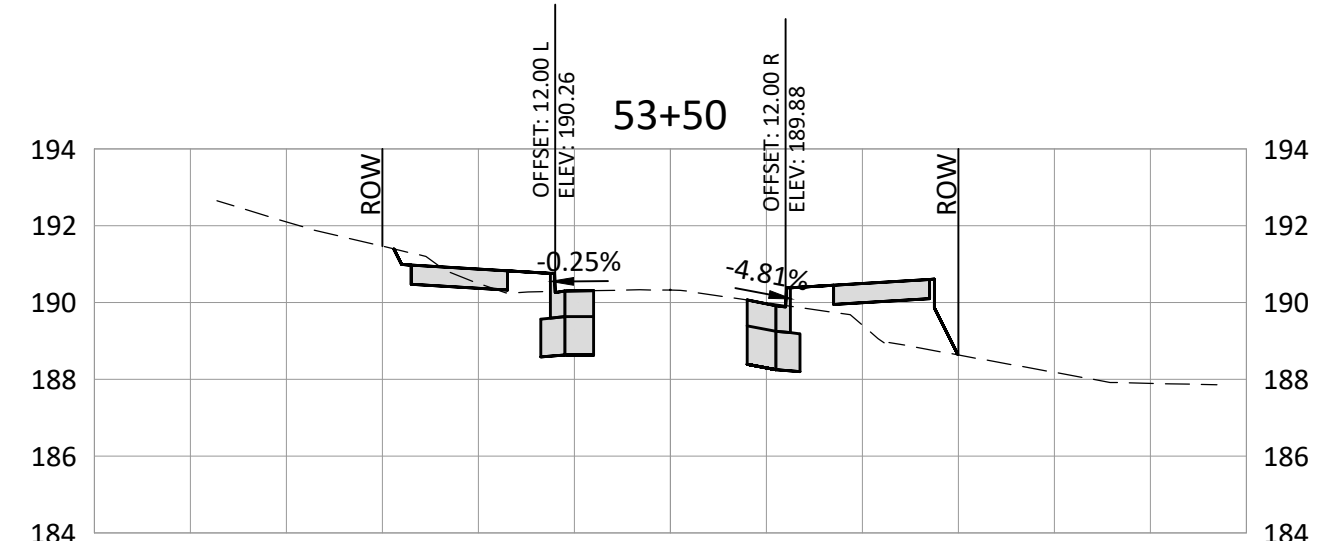
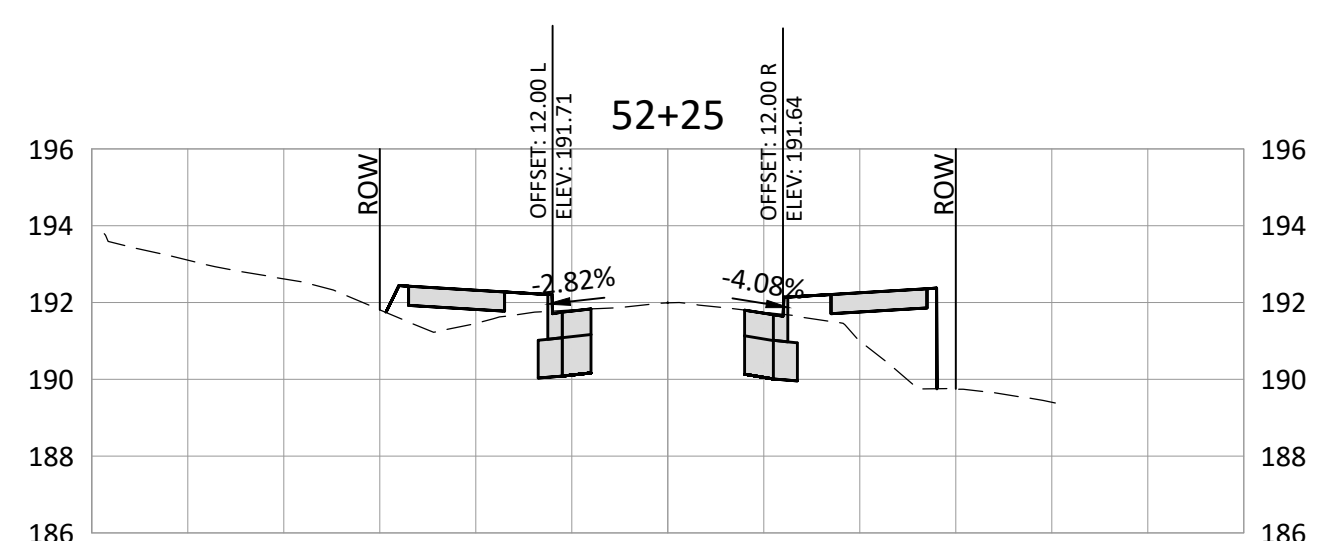
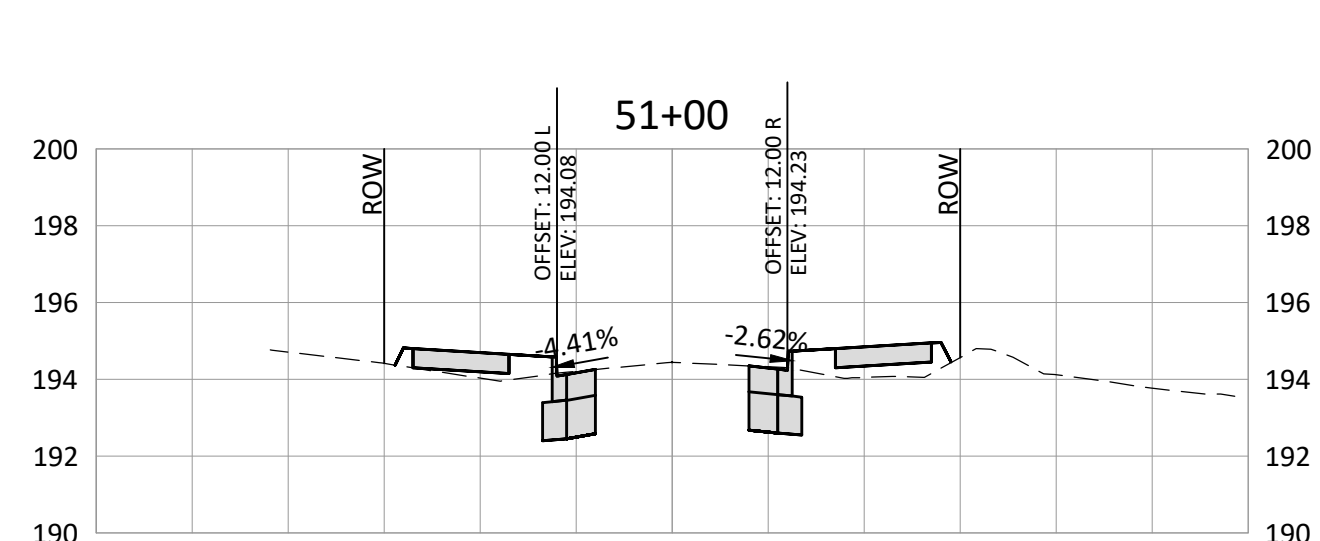
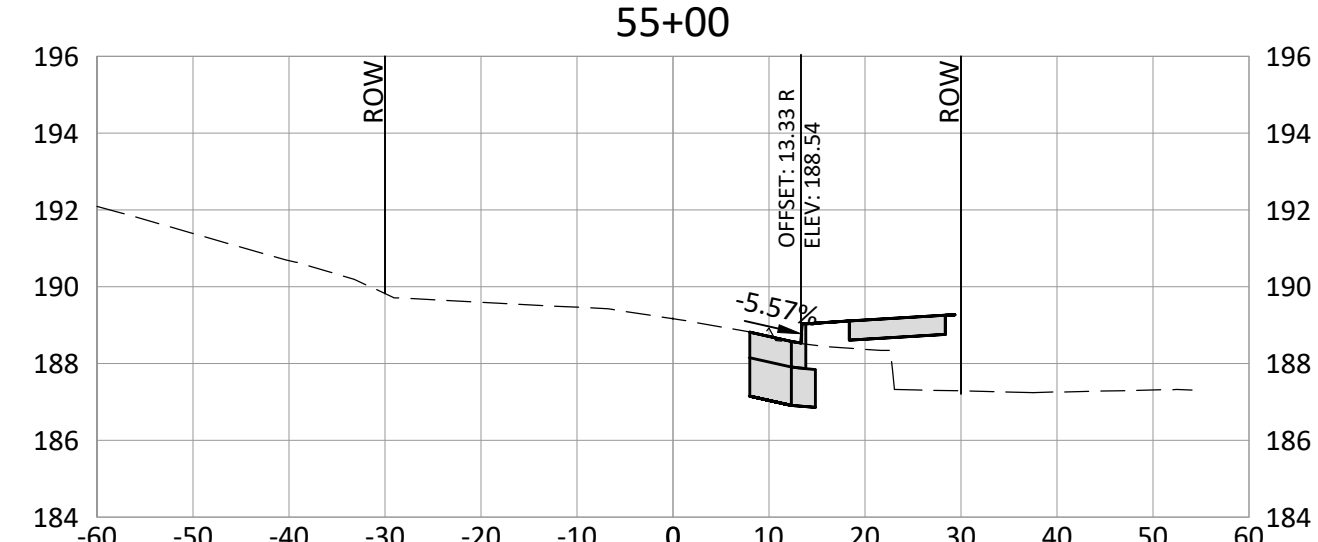
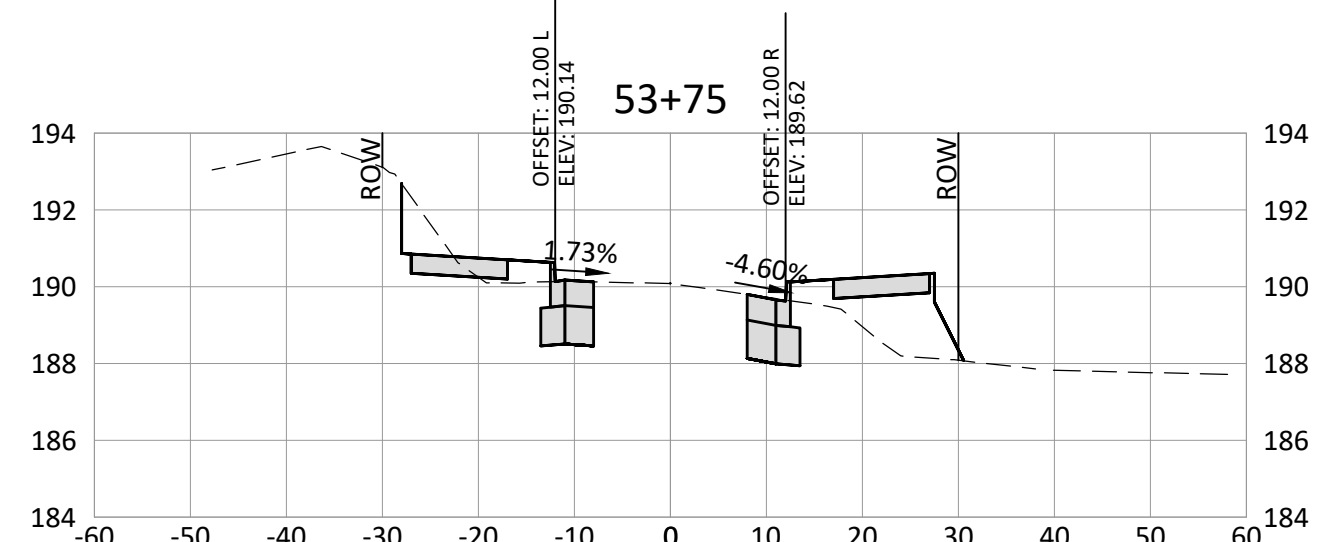
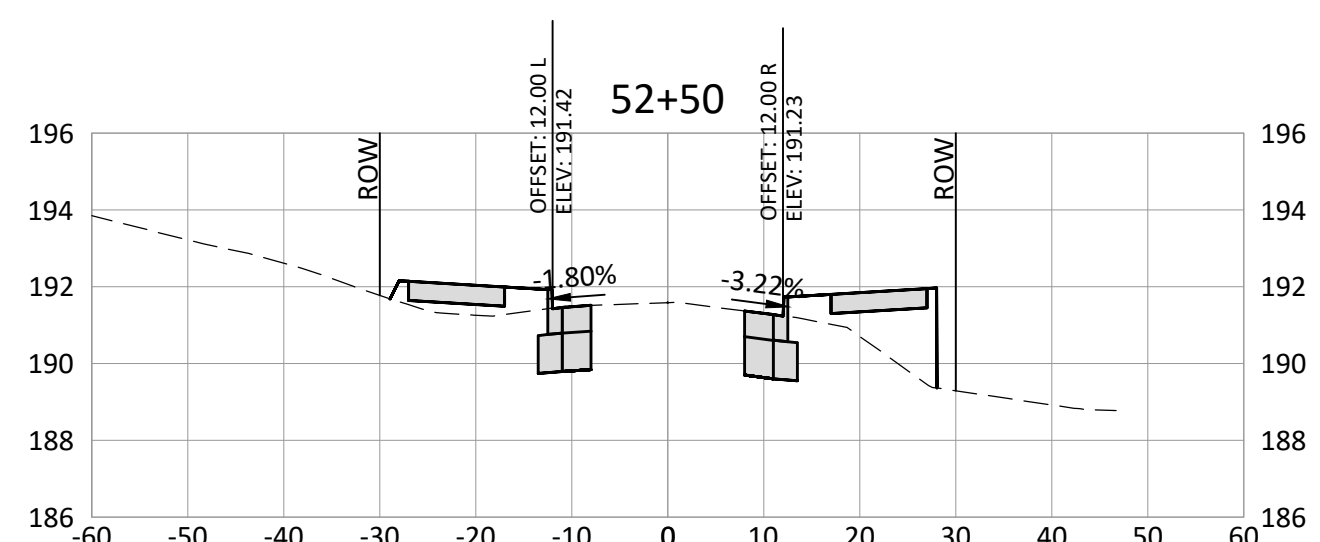
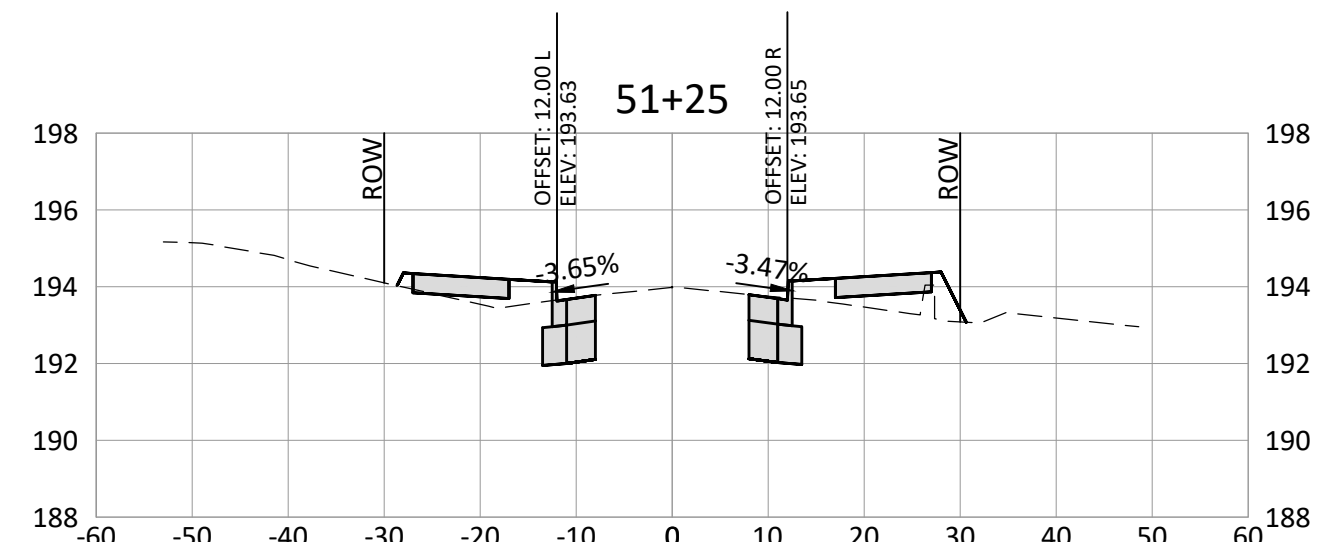
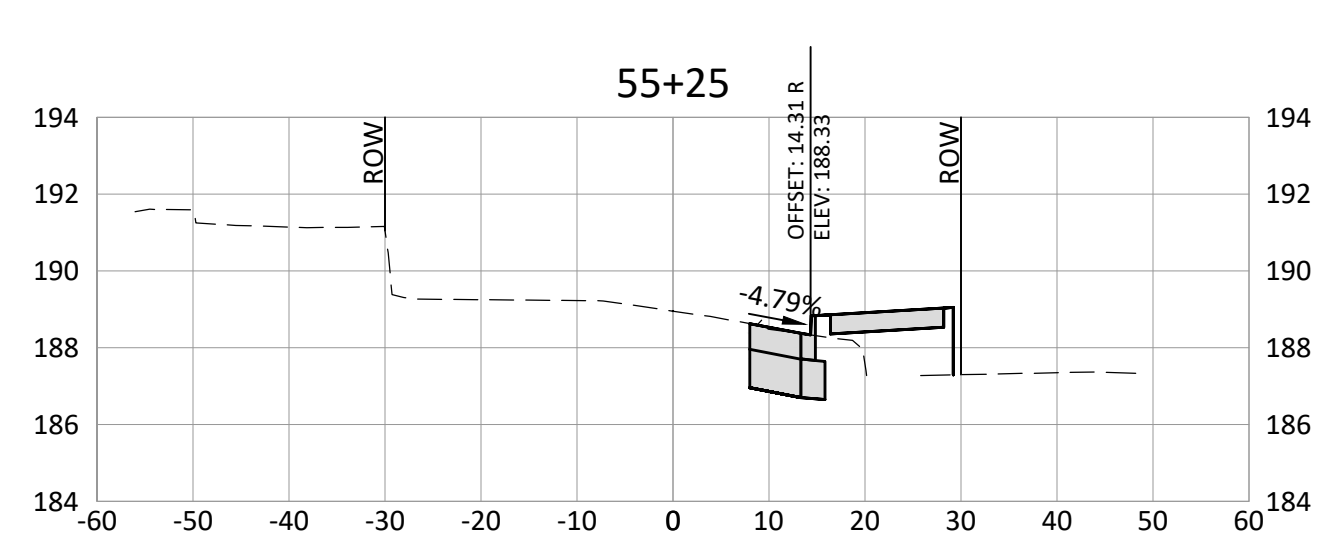
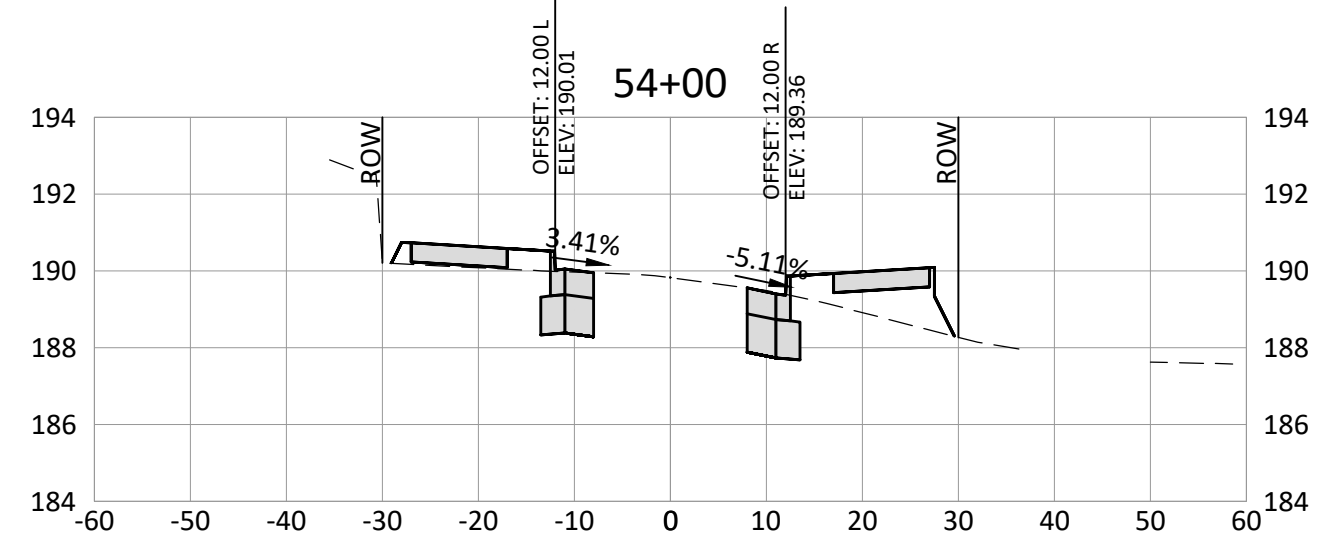
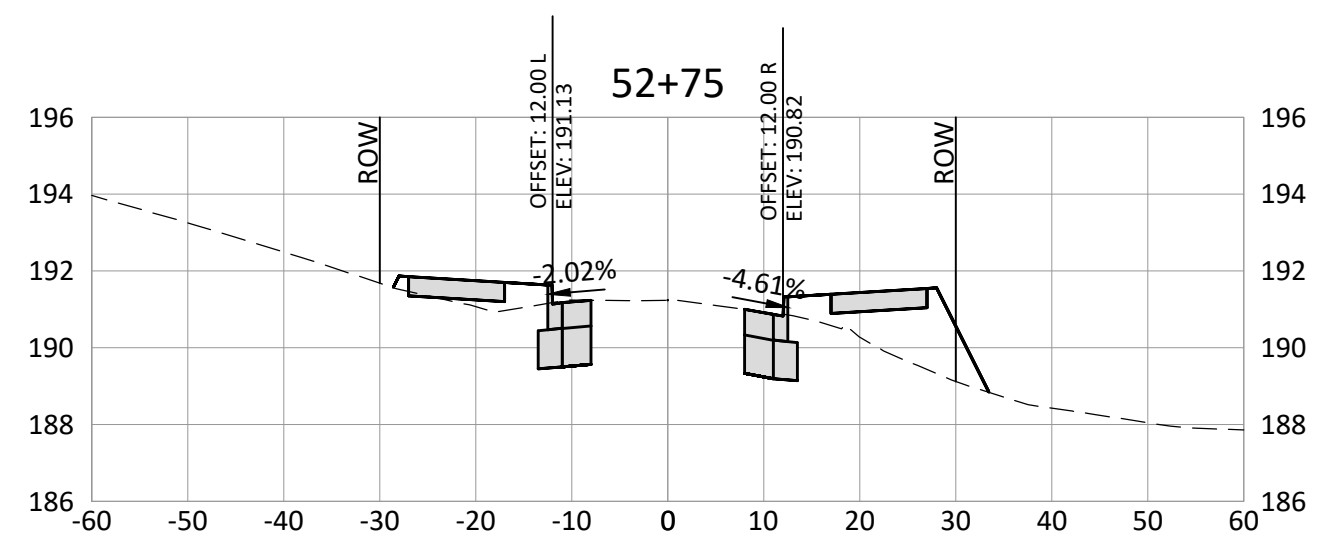
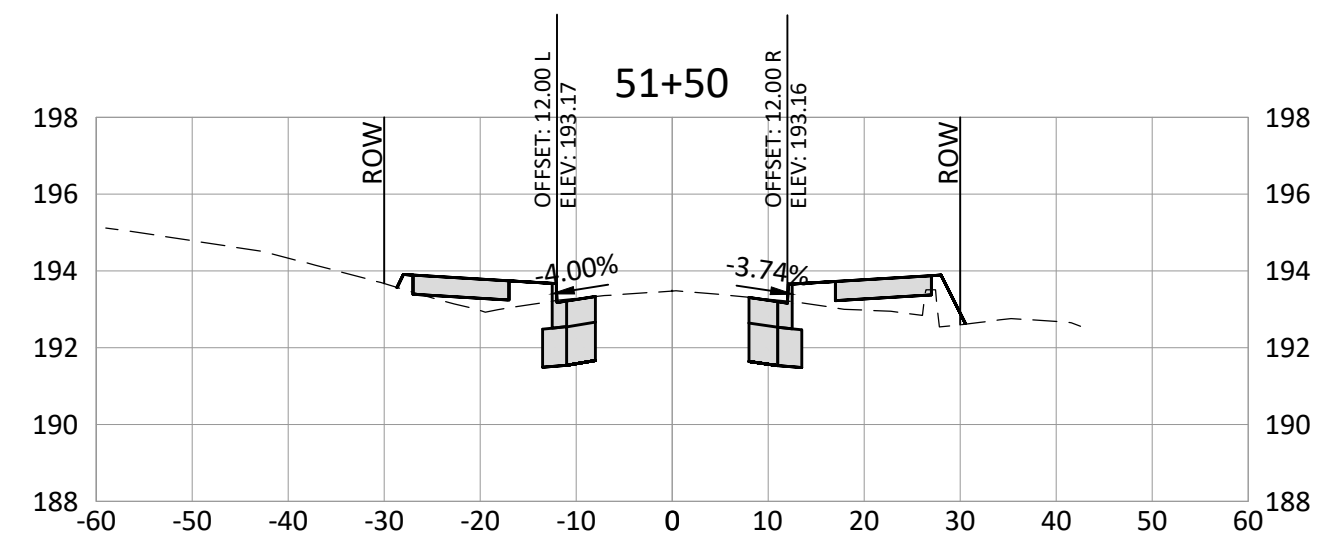
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DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020



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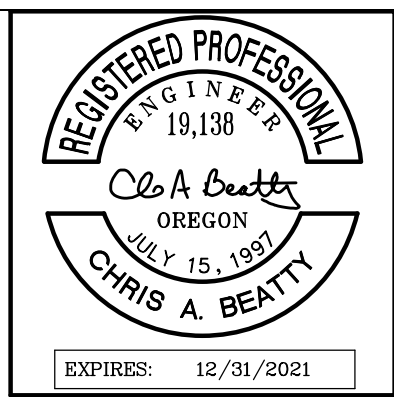
CROSS SECTIONS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	10.7
JOB NO.	MWK-28



DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	CAB
DRAWN:	HHPR
CHECKED:	CAB
DATE:	9/1/2020

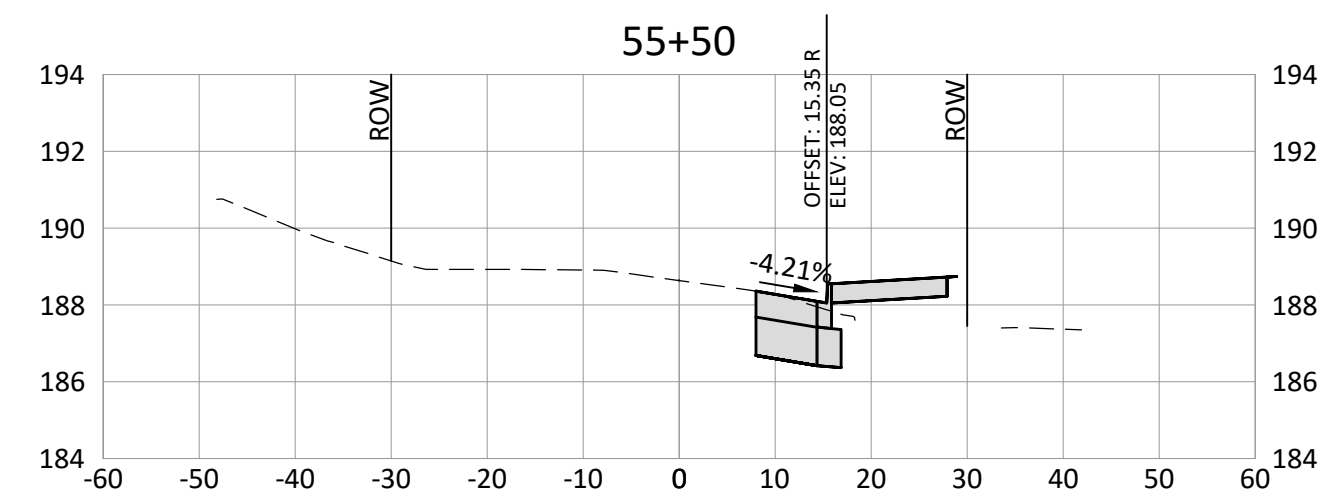
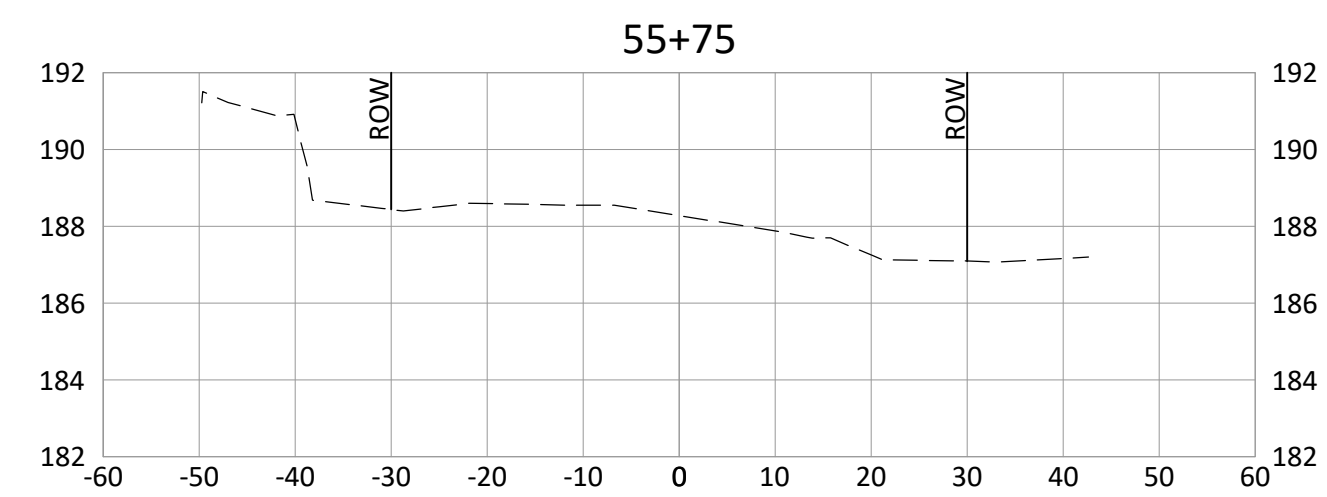
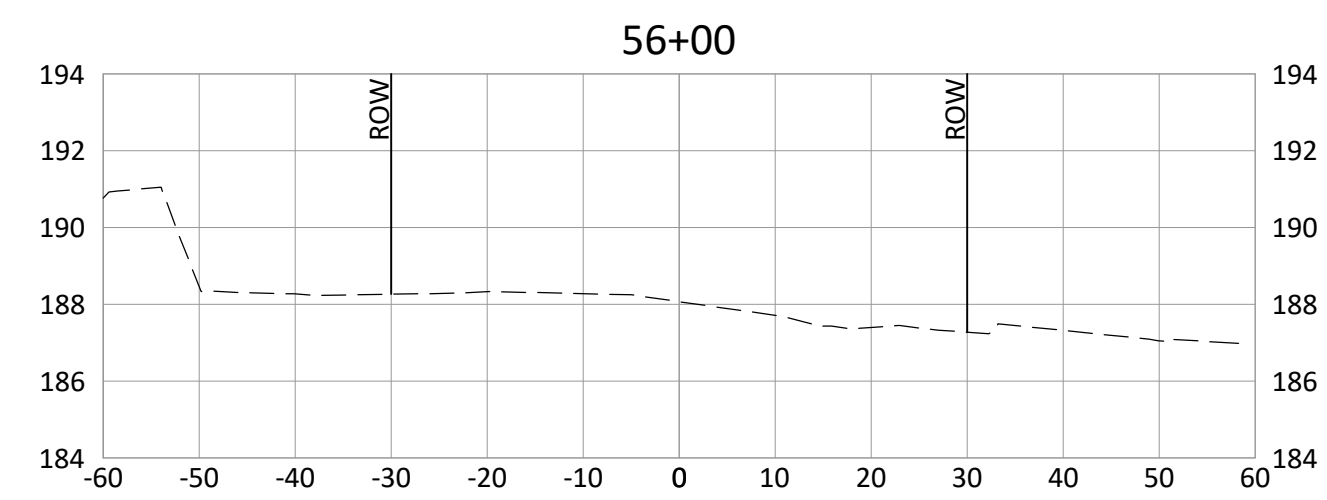
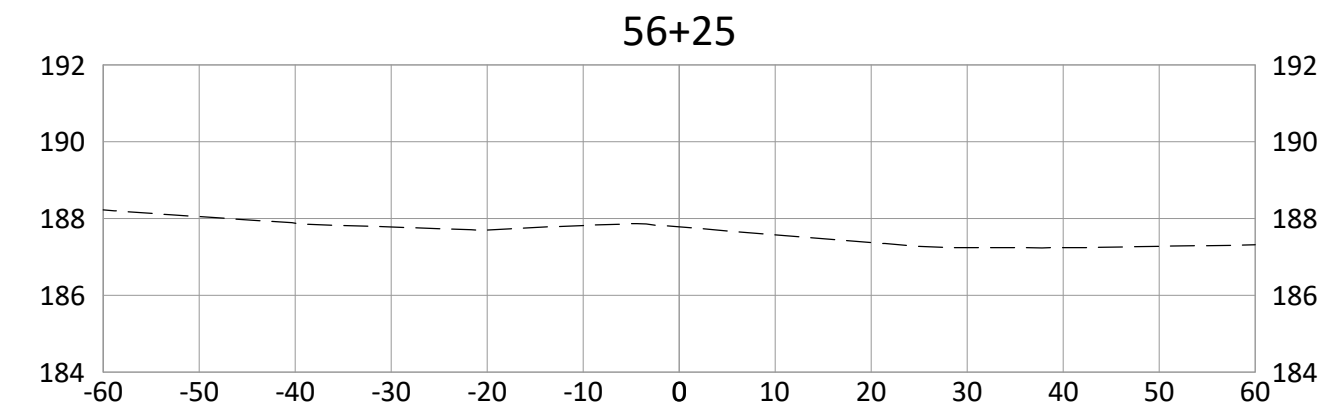


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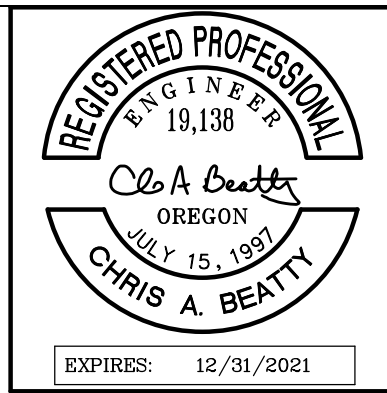
**CROSS SECTIONS
 SE LINWOOD AVENUE
 MILWAUKIE, OREGON**

SHEET NO.	10.8
JOB NO.	MWK-28

P:\MWK (City of Milwaukie)\MWK-28 Linwood Avenue\MWK28-DWG(Sheets)\MWK28-10.0 CROSS SECTIONS.dwg



DESIGNED:	CAB	
DRAWN:	HHPR	
CHECKED:	CAB	
DATE:	12/4/2020	
R E V I S I O N S		
DATE	NO.	DESCRIPTION



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CROSS SECTIONS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	10.9
JOB NO.	MWK-28

SIGNING LEGEND

- INSTALL NEW SIGN (N) ON NEW (M) SIGN SUPPORT.
- INSTALL NEW SIGN (N).
- MAINTAIN AND PROTECT EXISTING SIGN (N) AND SUPPORT.
- REMOVE AND SAVE EXISTING SIGN (N) AND REMOVE (M) SIGN SUPPORT.
- REINSTALL EXISTING SIGN (N) ON NEW (M) SIGN SUPPORT.
- REINSTALL EXISTING SIGN (N) AND (M) SIGN SUPPORT.
- REMOVE EXISTING SIGN (N) AND (M) SIGN SUPPORT.
- REMOVE EXISTING SIGN (N).
- REMOVE AND SAVE EXISTING SIGN (N).
- REINSTALL EXISTING SIGN (N).

N = SIGN NUMBER
M = MATERIAL
MATERIAL OPTIONS:
P = ROUND PIPE SUPPORT
PP = PEDESTRIAN POLE
SSC = SIGN SUPPORT CLAMP
ST = PERFORATED STEEL SQUARE TUBE SIGN SUPPORT
W = WOOD POST
CCB = CROSSWALK CLOSED BARRICADE
FB = PERMANENTLY MOUNTED FIXED BASE.

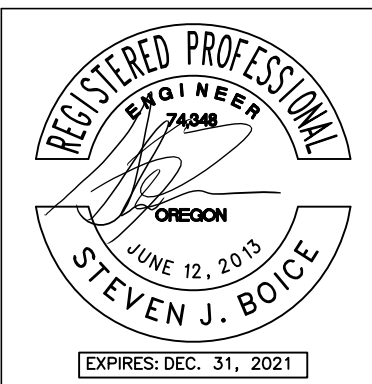
STRIPING LEGEND

- INSTALL 4" WHITE LINE.
- INSTALL 8" WHITE LINE.
- INSTALL 8" WHITE DOTTED LINE.
- INSTALL NARROW DOUBLE NO-PASS.
- INSTALL BICYCLE YIELD LANE (WHITE).
- INSTALL RAILROAD CROSSING (WHITE).
- INSTALL LEFT TURN ARROW (WHITE).
- INSTALL RIGHT TURN ARROW (WHITE).
- INSTALL RIGHT TURN STRAIGHT ARROW (WHITE).
- INSTALL STAGGERED CONTINENTAL CROSSWALK.
- INSTALL 12" WHITE STOP BAR.
- INSTALL BIKE MARKING (WHITE).
- INSTALL BIKE RIGHT TURN MARKING (WHITE).
- INSTALL BIKE LEFT TURN MARKING (WHITE).
- INSTALL BIKE STENCIL (WHITE).
- INSTALL SHARED LANE MARKING (WHITE).
- INSTALL GREEN SUPPLEMENTAL BICYCLE LANE SOLID LINE (GREEN).
- INSTALL "SCHOOL" (WHITE).
- INSTALL SHARED USE PATH PEDESTRIAN MARKING (WHITE).
- INSTALL SHARED USE PATH BICYCLE MARKING (WHITE).
- INSTALL YELLOW BI-DIRECTIONAL RAISED PAVEMENT MARKERS ON MEDIAN (2' MAXIMUM SPACING ALONG ISLAND NOSE AND 5' MAXIMUM SPACING ALONG ISLAND LENGTH).
- REMOVE EXISTING RAILROAD CROSSING MARKING (WHITE).

GENERAL NOTES

1. MATCH POINTS TO EXISTING PAVEMENT MARKINGS AND STATION CALL-OUTS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
2. REMOVE ALL PAVEMENT MARKINGS THAT CONFLICT WITH THESE PLANS. REMOVAL OF EXISTING PAVEMENT MARKINGS IS TO BE DETERMINED IN THE FIELD. STRIPING SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
3. ALL LONGITUDINAL PAVEMENT MARKINGS SHALL BE INSTALLED METHOD A-NON-PROFILED EXTRUDED OR SPRAYED MARKING FOR THERMOPLASTIC.
4. ALL TRANSVERSE PAVEMENT MARKINGS INCLUDE LEGENDS AND BARS SHALL BE TYPE BH-S, PREFORMED FUSED THERMOPLASTIC FILM HIGH SKID.
5. COORDINATE WITH TRI-MET ENGINEER FOR RELOCATION OF BUS STOP SIGNS. CONTACT NUMBER (503)-962-2103.

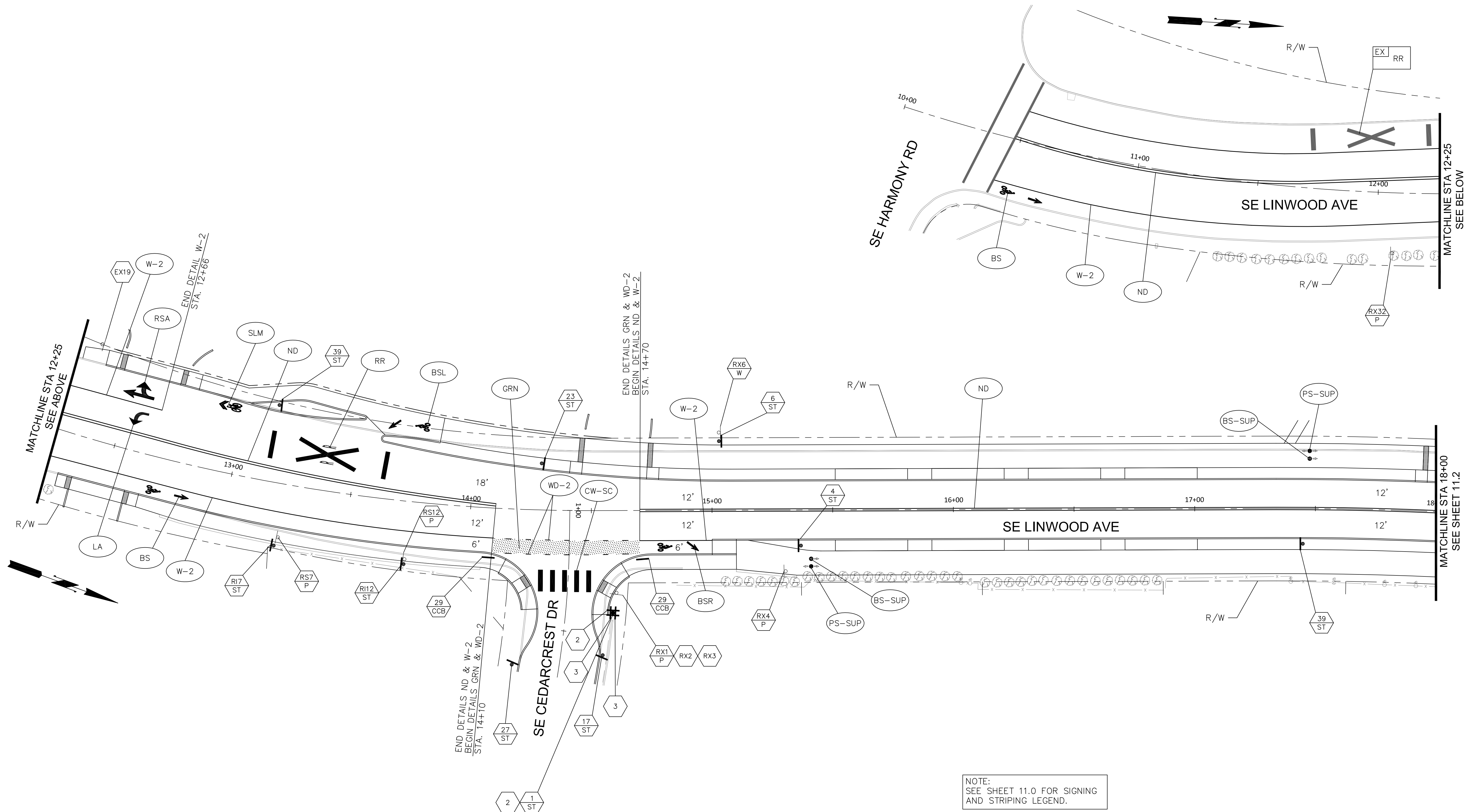
DESIGNED:	JWS	
DRAWN:	KCD	
CHECKED:	SJB	
DATE:	08/28/2020	
DATE	NO.	DESCRIPTION
R E V I S I O N S		



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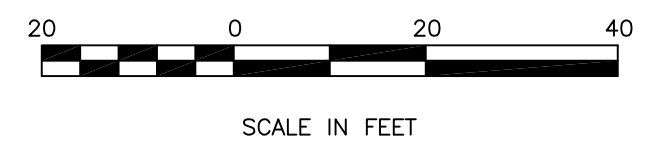
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X:\Projects\2019\19104-000 (Milwaukie Linwood Ave Safe Routes to School)\CAD\11.1.dwg



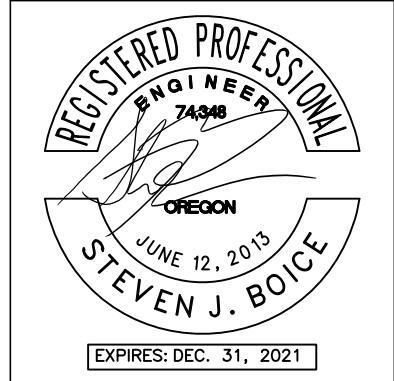
NOTE:
SEE SHEET 11.0 FOR SIGNING
AND STRIPING LEGEND.

NOTE:
SEE SHEETS 11.9 THRU 11.15 FOR
SIGNING AND STRIPING DETAILS.



DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	JWS
DRAWN:	KCD
CHECKED:	SJB
DATE:	08/28/2020

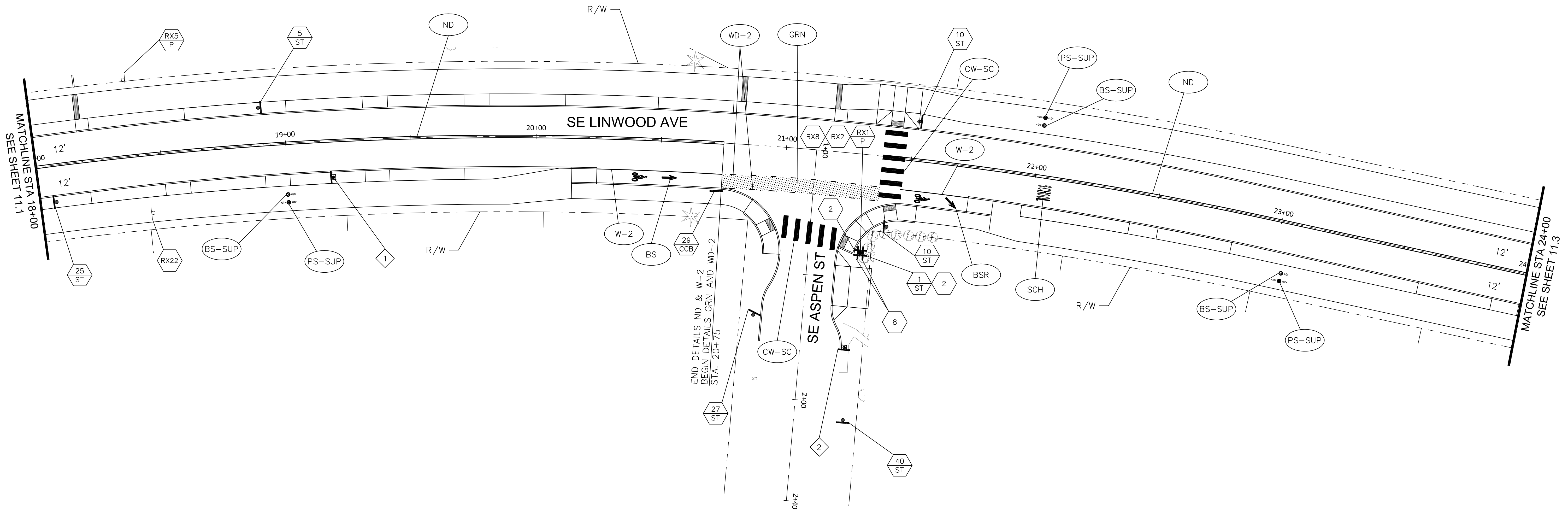


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SIGNING/STRIPING PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	11.1
	85 OF 122
JOB NO.	MWK-28

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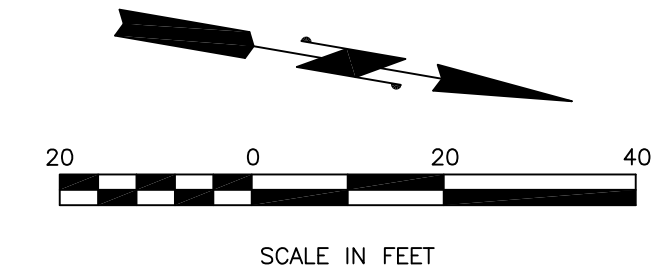


CONSTRUCTION NOTES

- 1 FOR SIGNAGE SEE DETAILS ON SHEET 12.7.
- 2 FOR SIGNAGE SEE DETAILS ON SHEET 12.9.

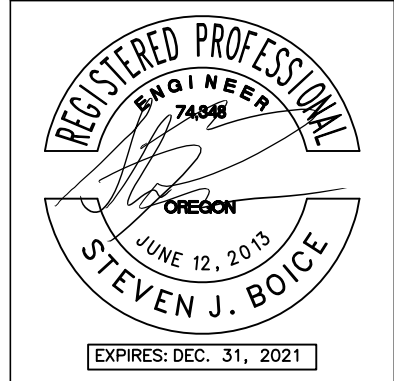
NOTE:
SEE SHEET 11.0 FOR SIGNING
AND STRIPING LEGEND.

NOTE:
SEE SHEETS 11.9 THRU 11.15 FOR
SIGNING AND STRIPING DETAILS.



DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	JWS
DRAWN:	KCD
CHECKED:	SJB
DATE:	08/28/2020

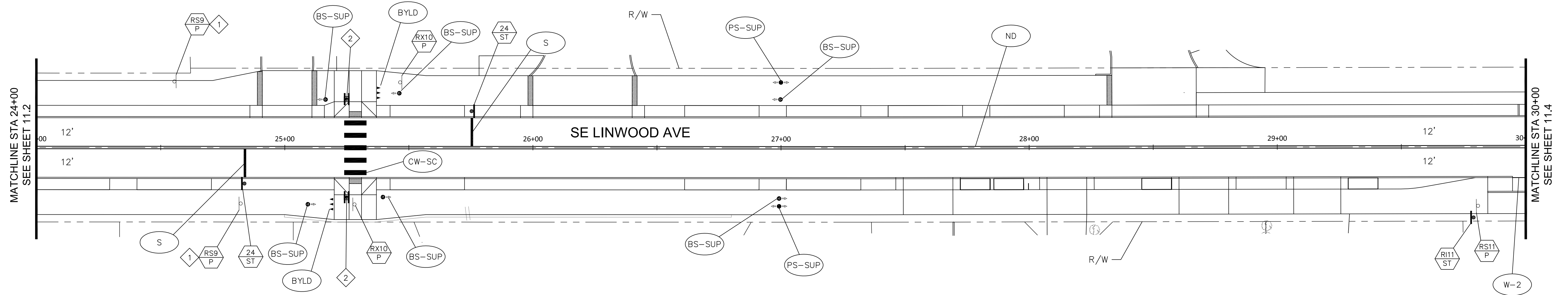


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SIGNING/STRIPING PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	11.2
	86 OF 122
JOB NO.	MWK-28

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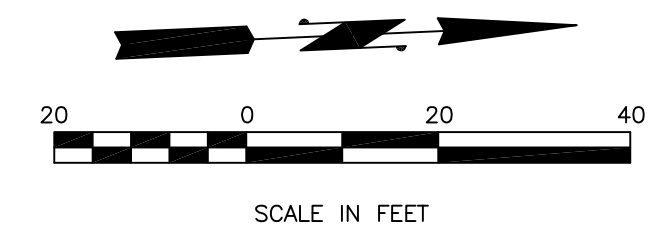


CONSTRUCTION NOTES

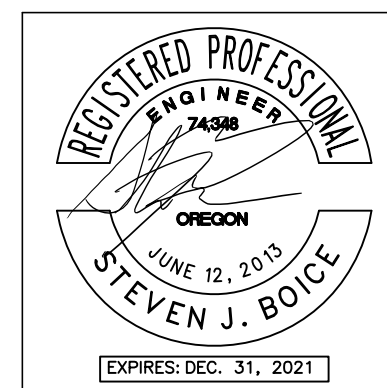
- 1 COORDINATE WITH TRIMET ON REMOVAL AND RELOCATION OF TRIMET SIGNS.
- 2 FOR SIGNAGE SEE DETAILS ON SHEET 12.7.

NOTE:
SEE SHEET 11.0 FOR SIGNING
AND STRIPING LEGEND.

NOTE:
SEE SHEETS 11.9 THRU 11.15 FOR
SIGNING AND STRIPING DETAILS.



		DESIGNED:	JWS
		DRAWN:	KCD
		CHECKED:	SJB
		DATE:	08/28/2020
DATE	NO.	DESCRIPTION	
R E V I S I O N S			

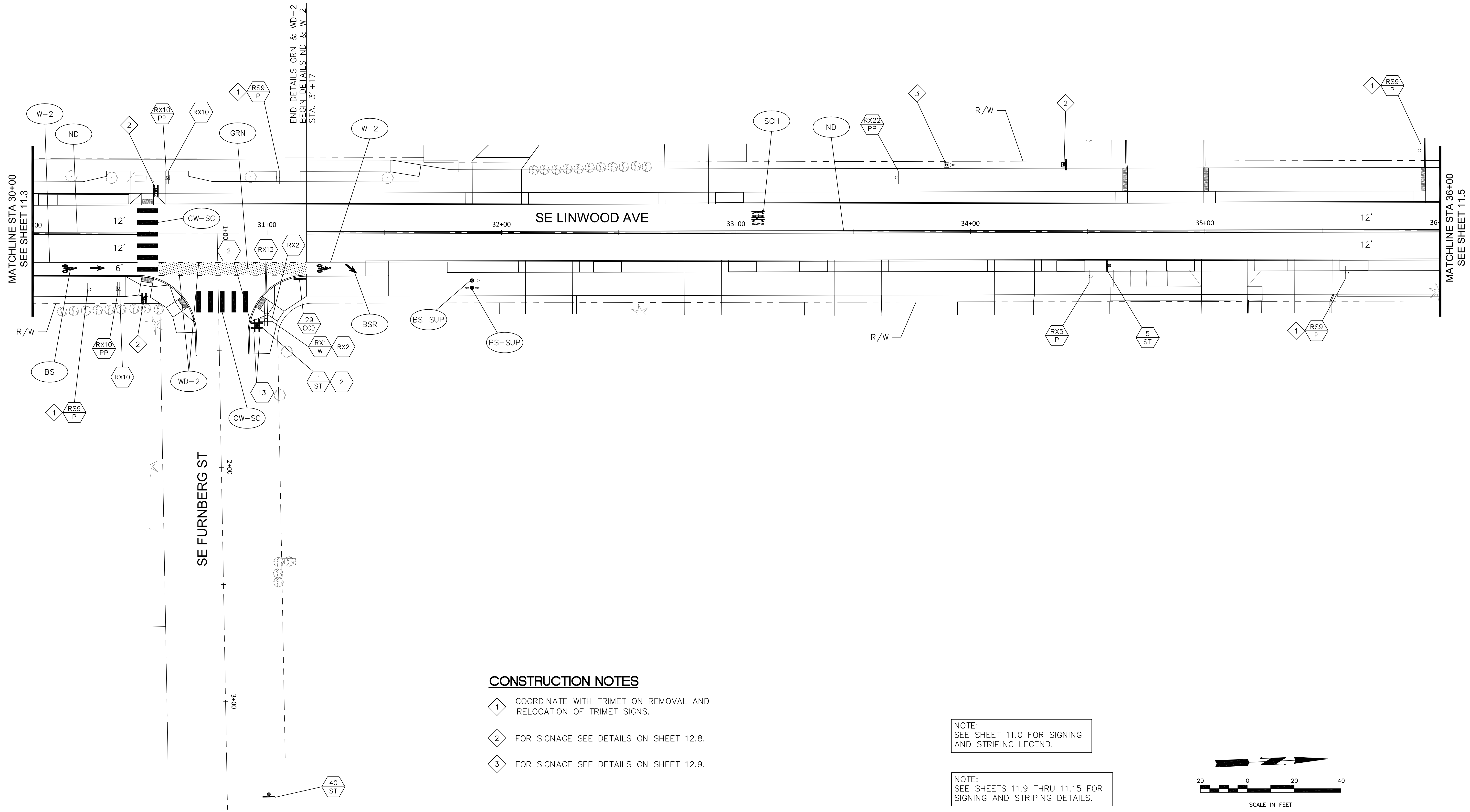


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**SIGNING/STRIPING PLAN
SE LINWOOD AVENUE
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11.3
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X:\Projects\2019\19104-000 (Milwaukie Linwood Ave Safe Routes to School)\CAD\11.4.dwg

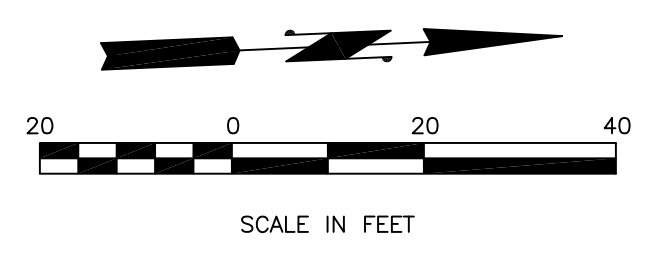


CONSTRUCTION NOTES

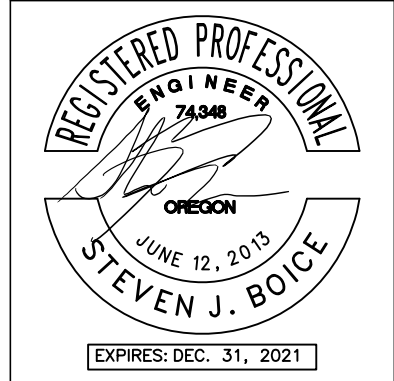
- 1 COORDINATE WITH TRIMET ON REMOVAL AND RELOCATION OF TRIMET SIGNS.
- 2 FOR SIGNAGE SEE DETAILS ON SHEET 12.8.
- 3 FOR SIGNAGE SEE DETAILS ON SHEET 12.9.

NOTE:
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AND STRIPING LEGEND.

NOTE:
SEE SHEETS 11.9 THRU 11.15 FOR
SIGNING AND STRIPING DETAILS.



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DRAWN:	KCD	
CHECKED:	SJB	
DATE:	08/28/2020	
DATE	NO.	DESCRIPTION
R E V I S I O N S		

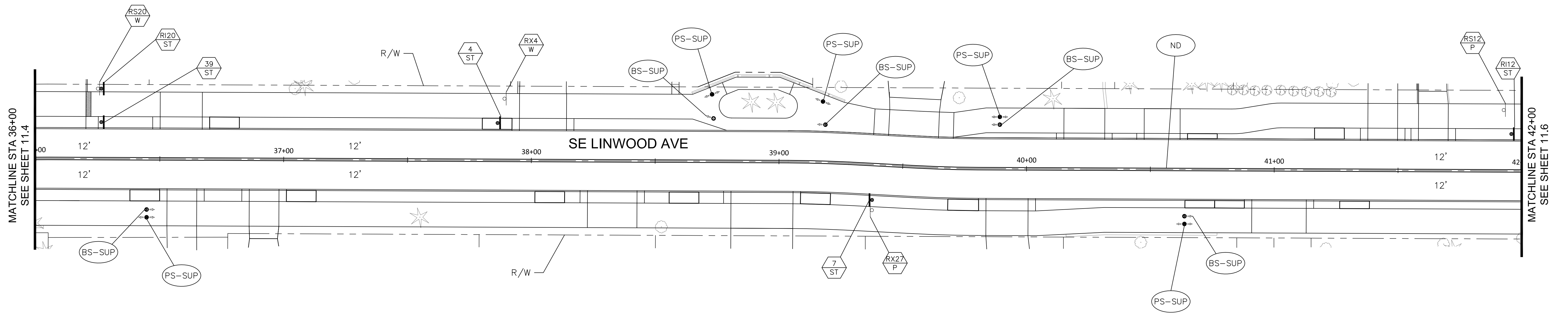


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**SIGNING/STRIPING PLAN
SE LINWOOD AVENUE
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MWK-28

X:\Projects\2019\19104-000 (Milwaukie Linwood Ave Safe Routes to School)\CAD\11.5.dwg

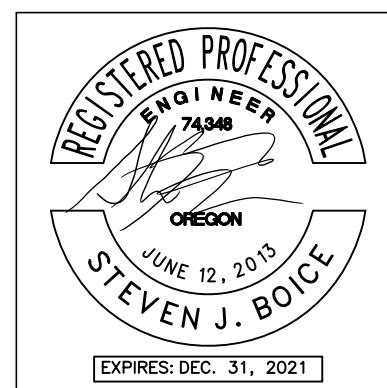


NOTE:
SEE SHEET 11.0 FOR SIGNING
AND STRIPING LEGEND.

NOTE:
SEE SHEETS 11.9 THRU 11.15 FOR
SIGNING AND STRIPING DETAILS.



		DESIGNED:	JWS
		DRAWN:	KCD
		CHECKED:	SJB
		DATE:	08/28/2020
DATE	NO.	DESCRIPTION	
R E V I S I O N S			

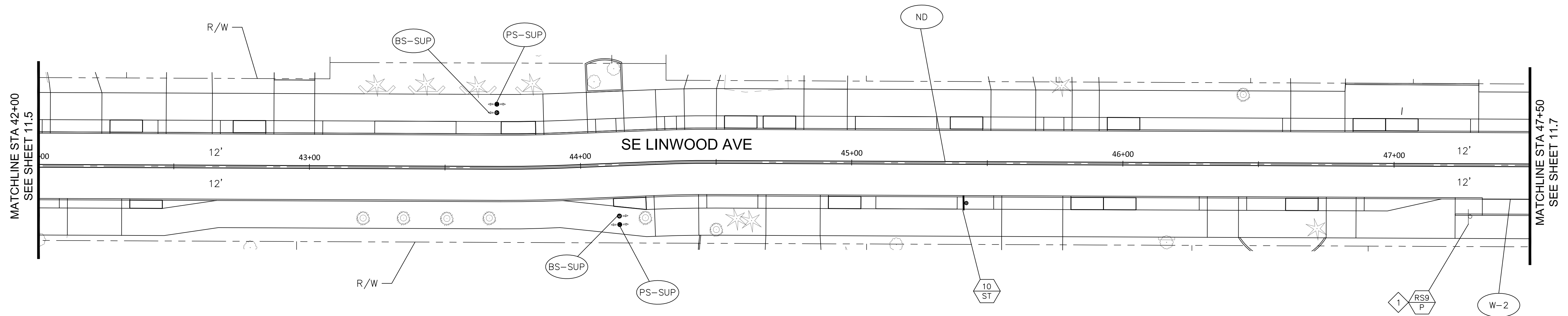


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SIGNING/STRIPING PLAN
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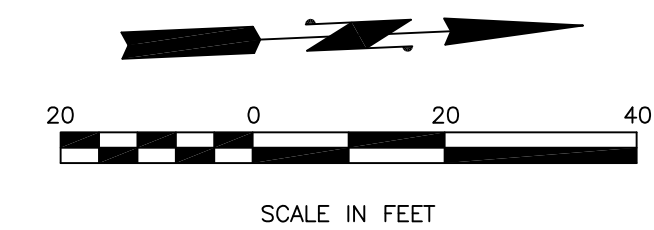


CONSTRUCTION NOTE

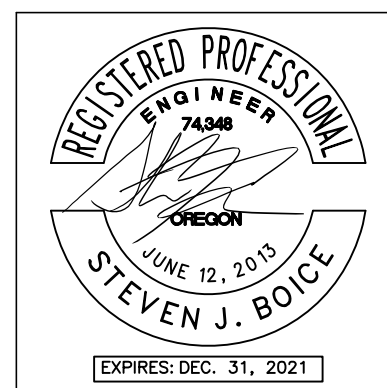
1 COORDINATE WITH TRIMET ON REMOVAL AND RELOCATION OF TRIMET SIGNS.

NOTE:
SEE SHEET 11.0 FOR SIGNING AND STRIPING LEGEND.

NOTE:
SEE SHEETS 11.9 THRU 11.15 FOR SIGNING AND STRIPING DETAILS.



		DESIGNED:	JWS
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		CHECKED:	SJB
		DATE:	08/28/2020
DATE	NO.	DESCRIPTION	
R E V I S I O N S			

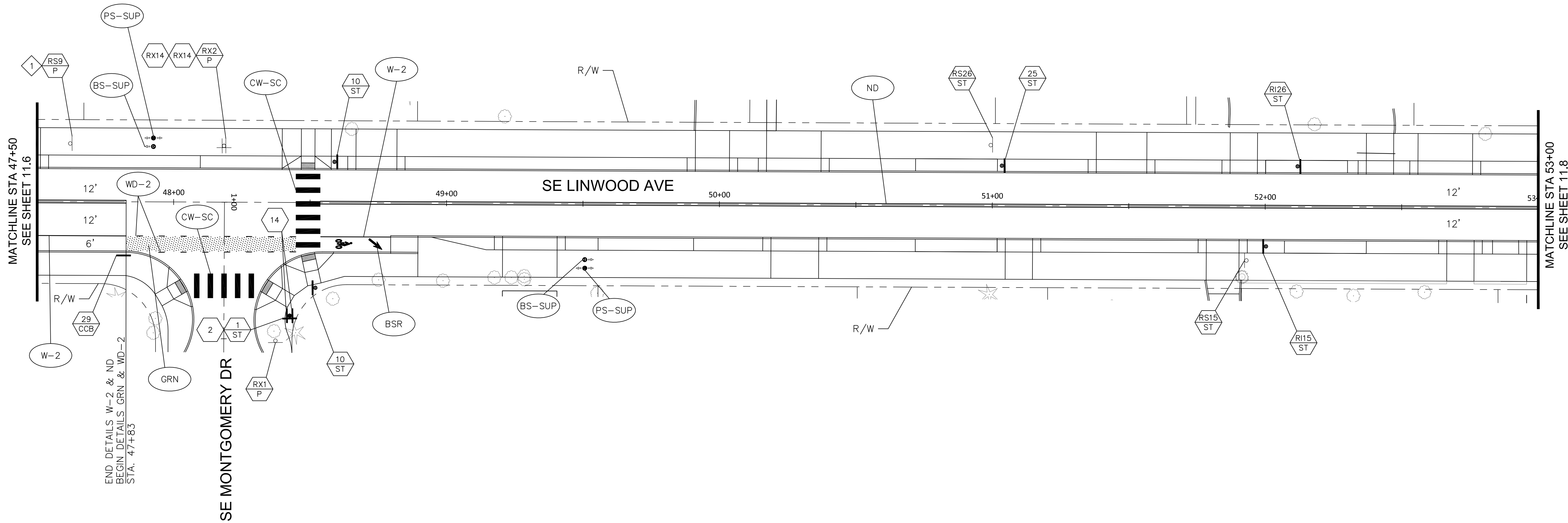


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**SIGNING/STRIPING PLAN
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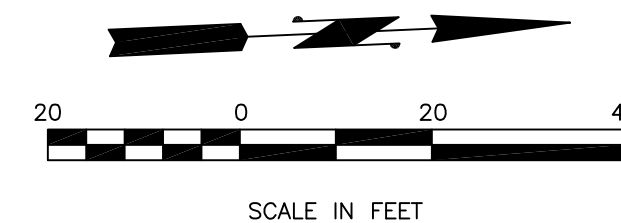


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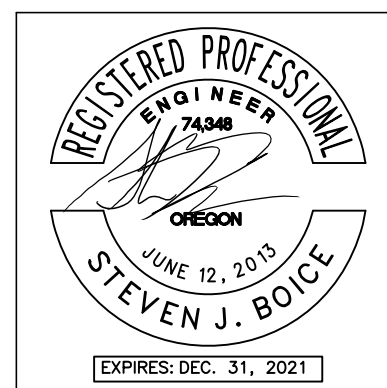
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NOTE:
SEE SHEET 11.0 FOR SIGNING AND STRIPING LEGEND.

NOTE:
SEE SHEETS 11.9 THRU 11.15 FOR SIGNING AND STRIPING DETAILS.



DESIGNED:	JWS	
DRAWN:	KCD	
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DATE:	08/28/2020	
R E V I S I O N S		
DATE	NO.	DESCRIPTION

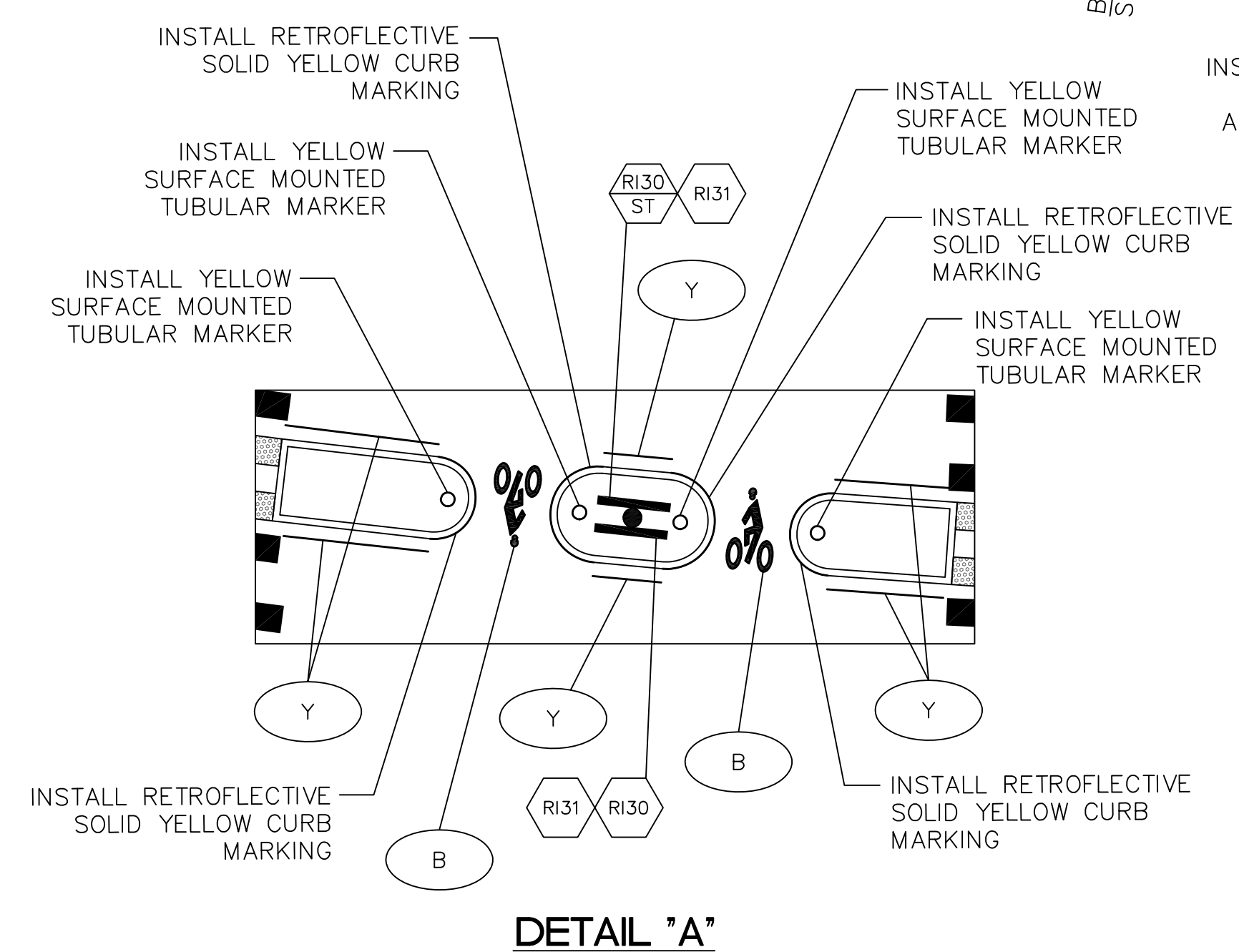
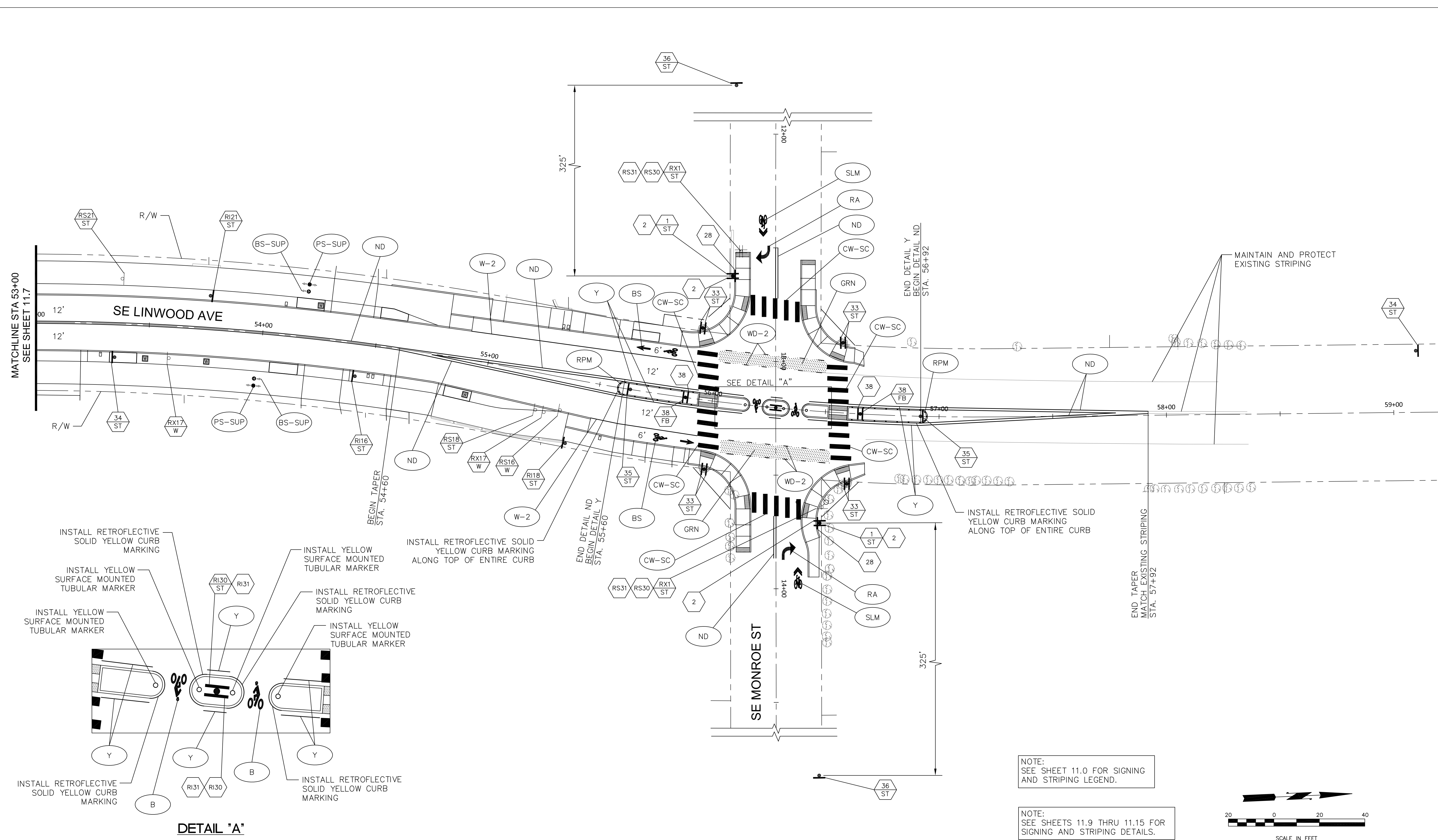


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SIGNING/STRIPING PLAN
SE LINWOOD AVENUE
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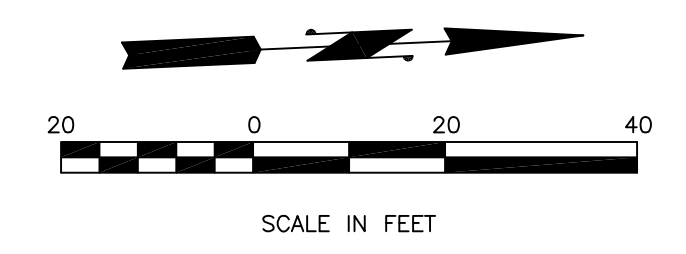
SHEET NO.
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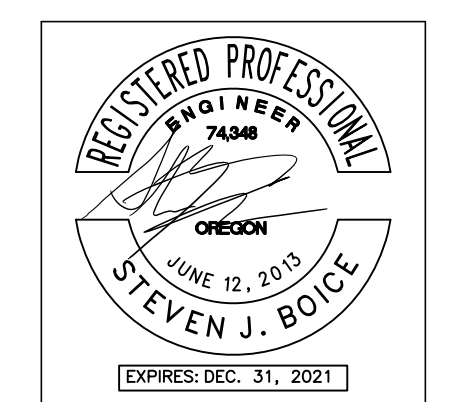
NOTE:
SEE SHEET 11.0 FOR SIGNING
AND STRIPING LEGEND.

NOTE:
SEE SHEETS 11.9 THRU 11.15 FOR
SIGNING AND STRIPING DETAILS.



DATE	NO.	DESCRIPTION
R E V I S I O N S		

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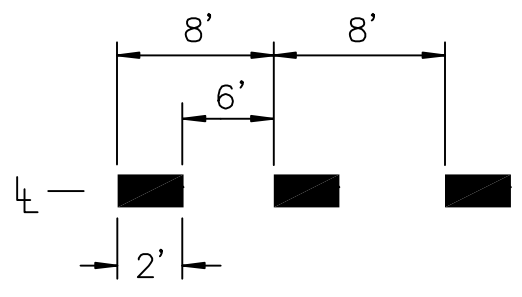
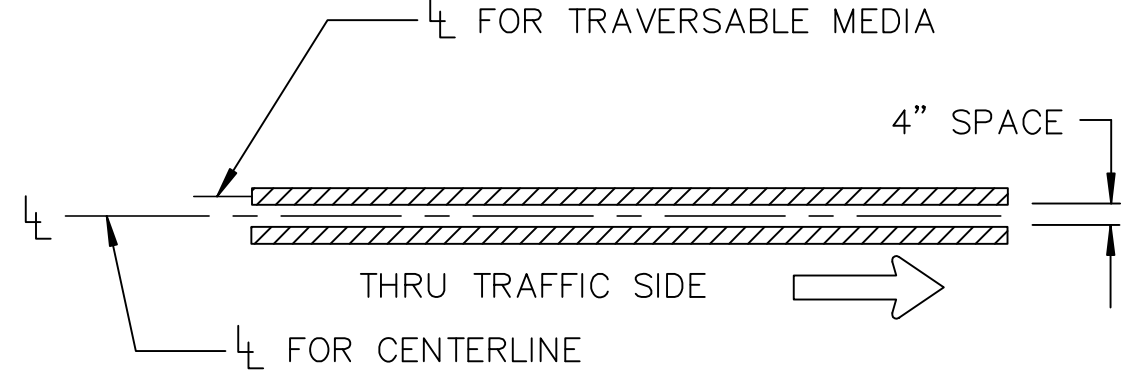
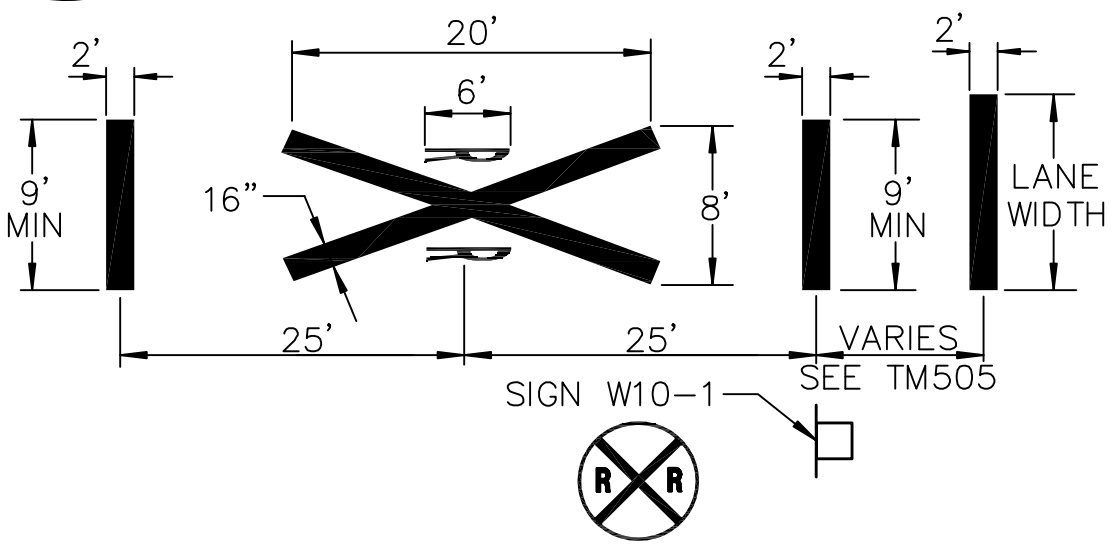
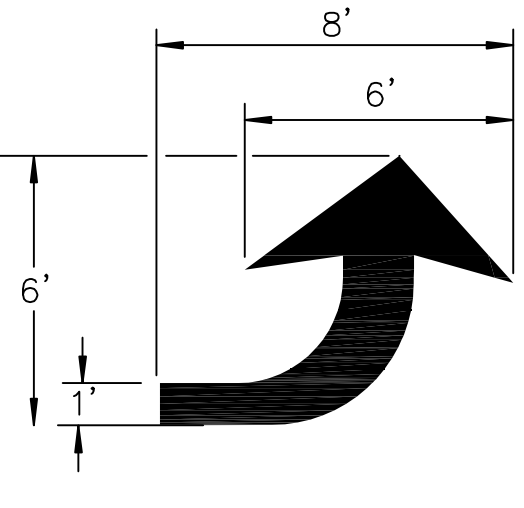
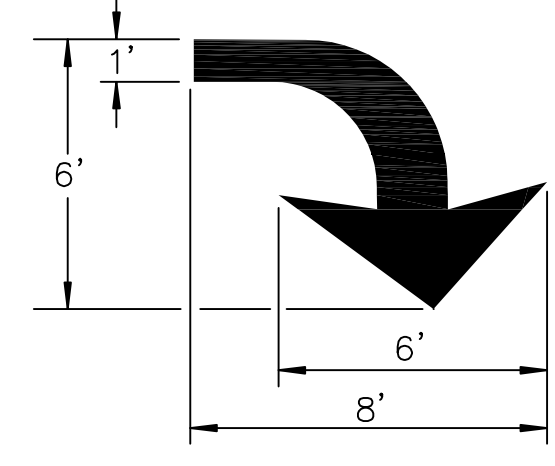
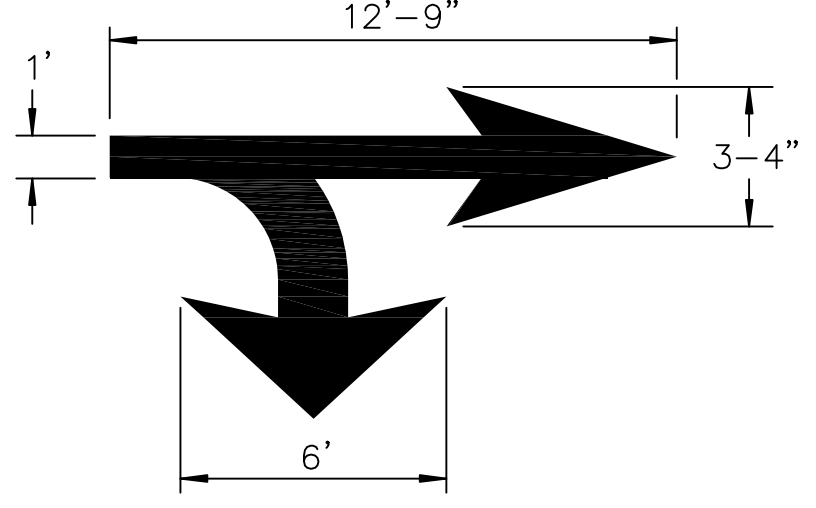
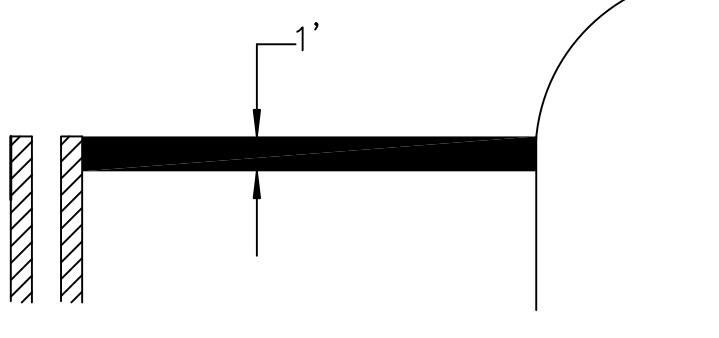
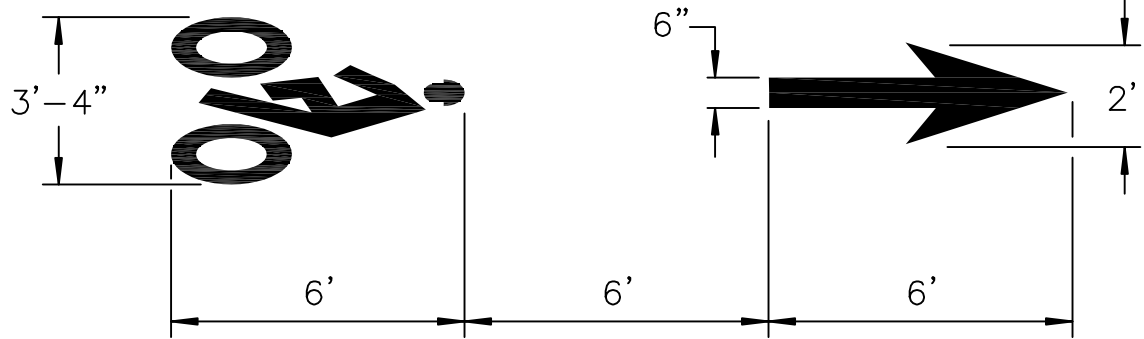
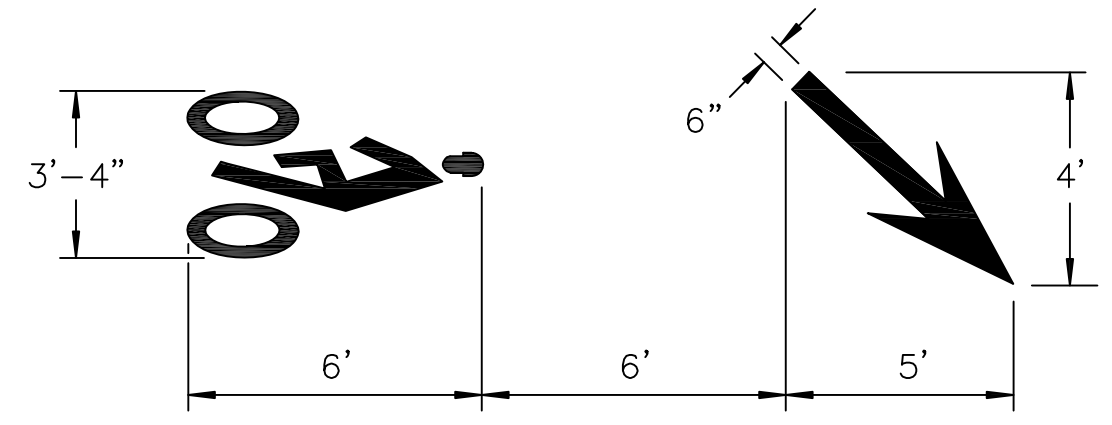
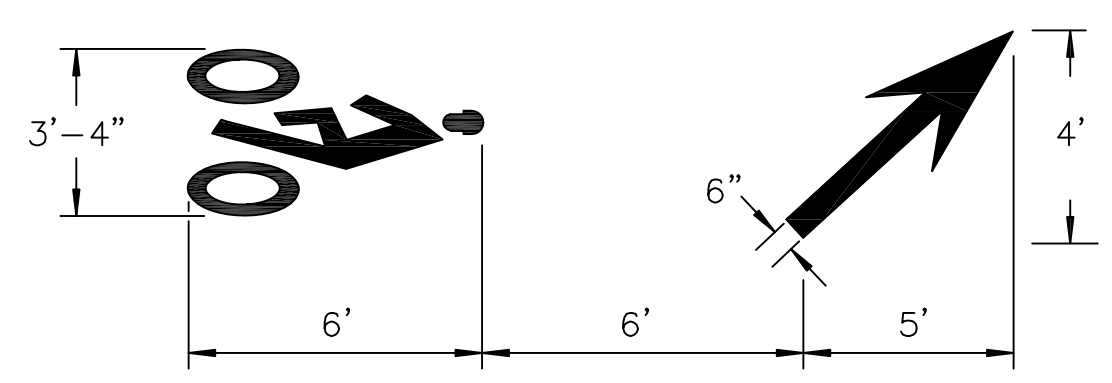
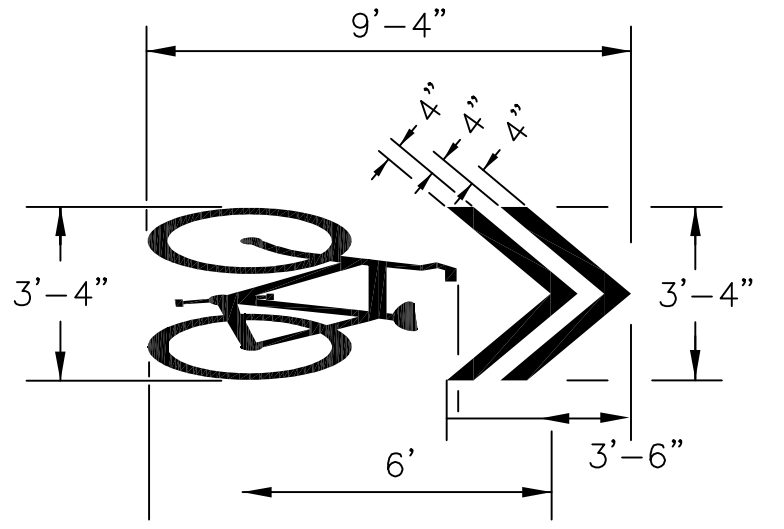
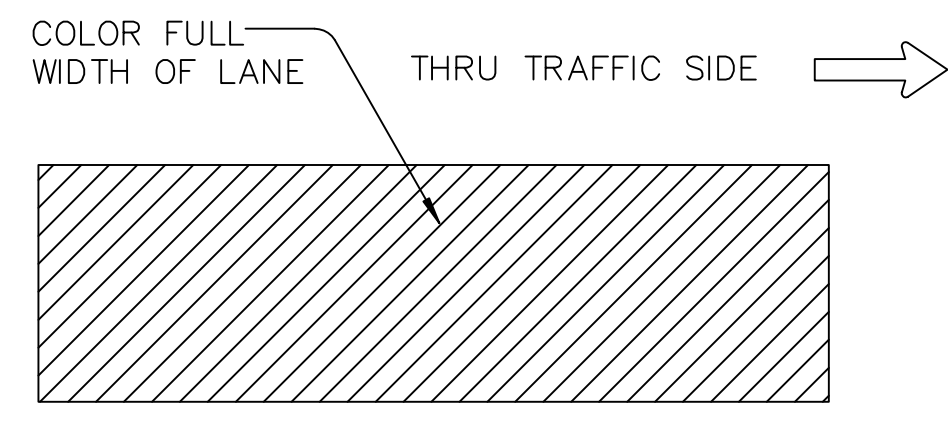
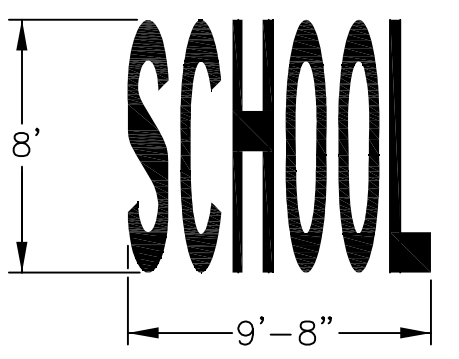
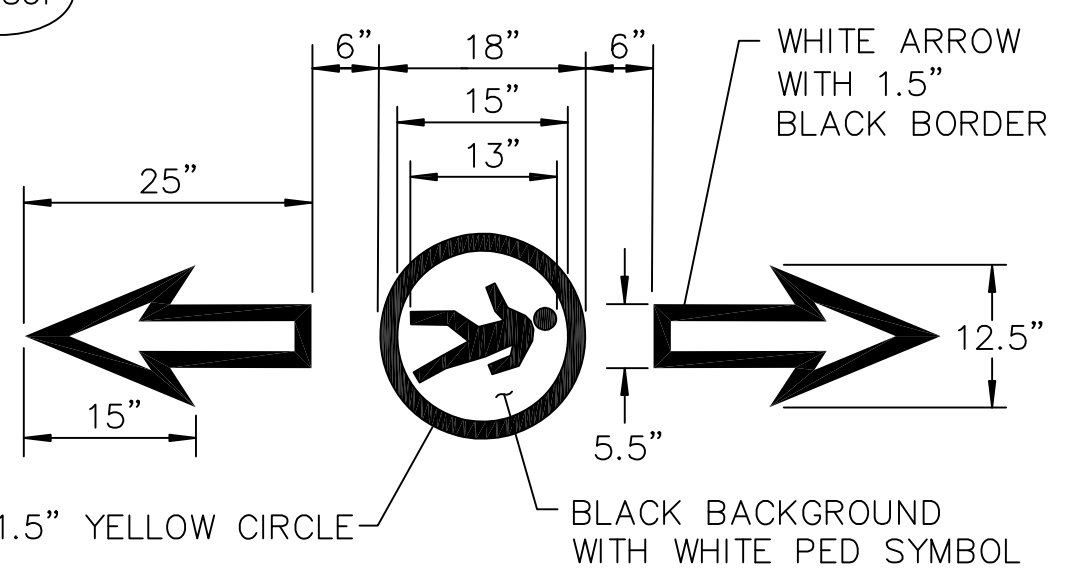
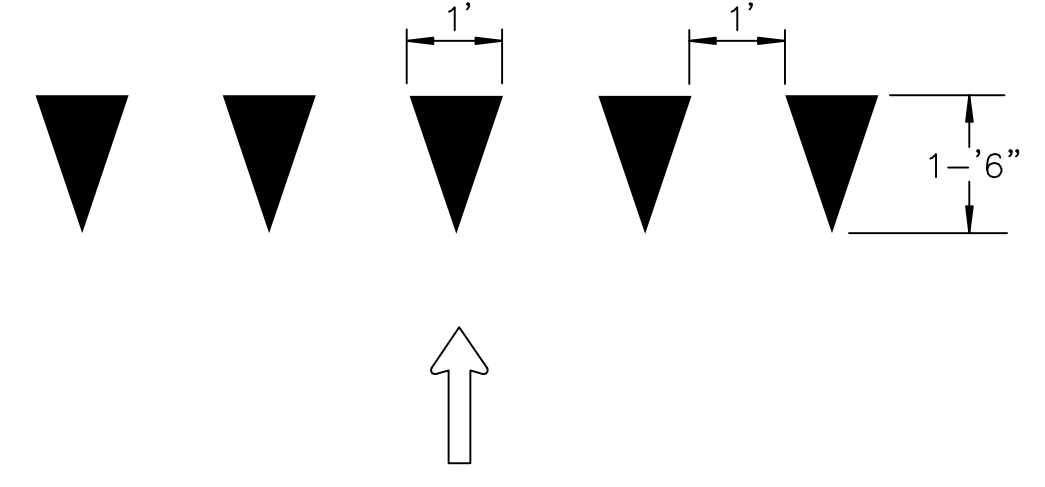
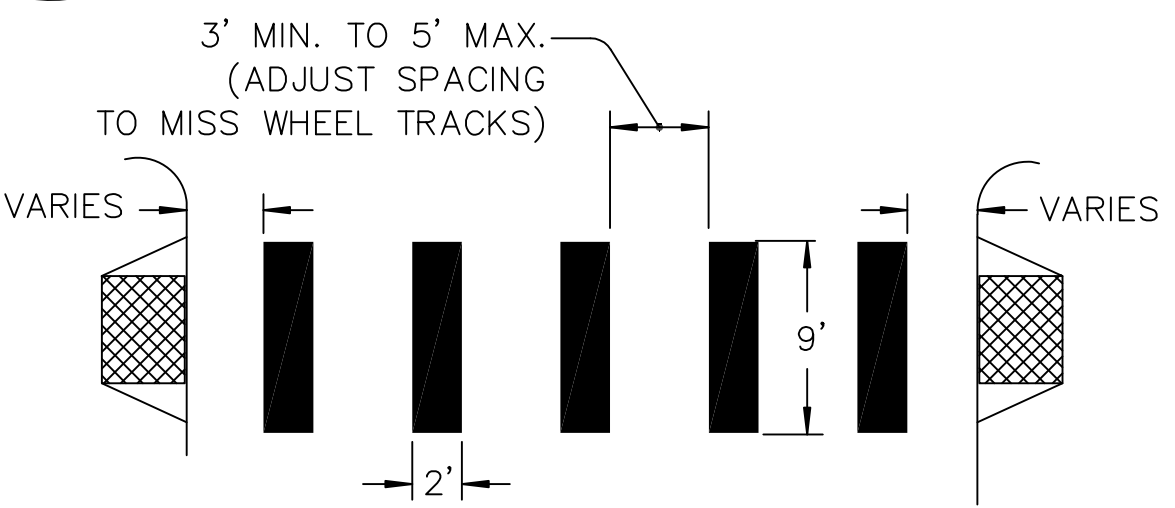
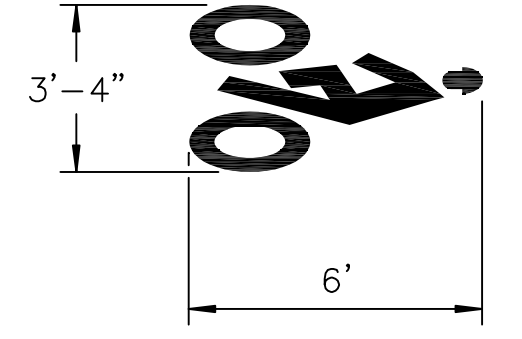
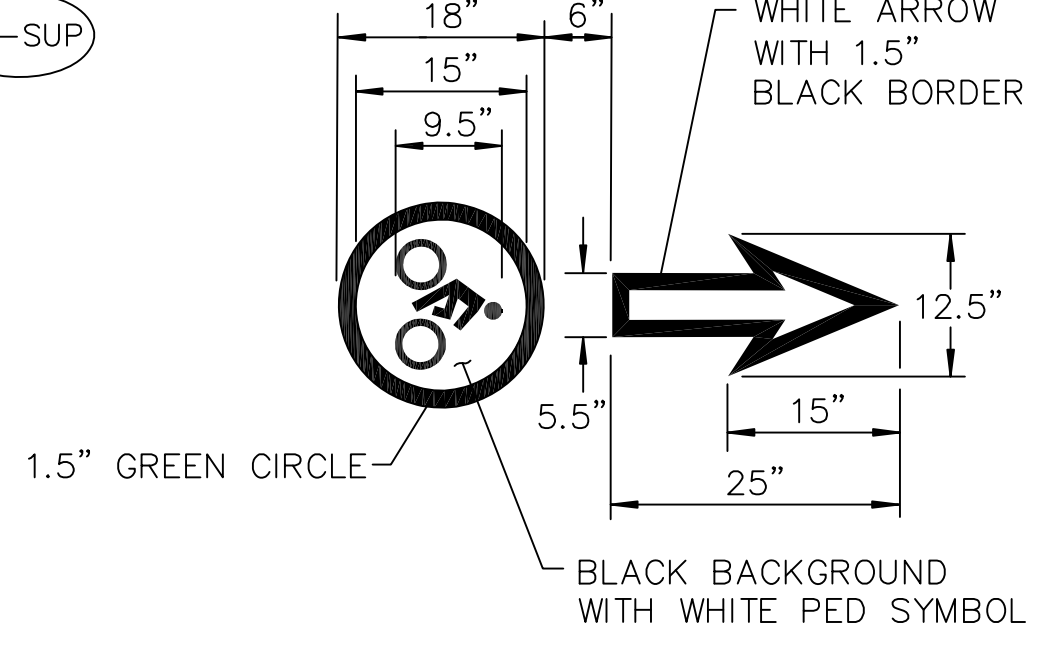


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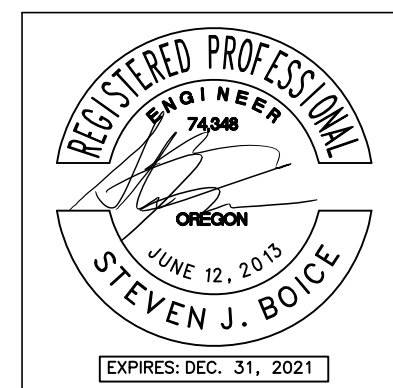
SIGNING/STRIPING PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.
11.8
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MWK-28

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<p style="text-align: center;">W</p>  <p style="text-align: center;">4" WHITE LINE</p>	<p style="text-align: center;">W-2</p>  <p style="text-align: center;">8" WHITE LINE</p>	<p style="text-align: center;">WD-2</p>  <p style="text-align: center;">8" WHITE DOTTED LINE FOR LANE EXTENSIONS AND BIKE LANE EXTENSIONS</p>	<p style="text-align: center;">ND</p>  <p style="text-align: center;">NARROW DOUBLE NO-PASS TWO 4" YELLOW LINES</p>	
<p style="text-align: center;">RR</p>  <p style="text-align: center;">RAILROAD CROSSING (WHITE) INSTALL PER ODOT RAIL CROSSING ORDER OR AS SHOWN. FOR LETTER PROPORTION DETAILS, SEE CURRENT VERSION OF STANDARD HIGHWAY SIGNS</p>	<p style="text-align: center;">LA</p>  <p style="text-align: center;">LEFT TURN ARROW (WHITE) FOR ARROW PROPORTION DETAILS, SEE CURRENT VERSION OF STANDARD HIGHWAY SIGNS.</p>	<p style="text-align: center;">RA</p>  <p style="text-align: center;">RIGHT TURN ARROW (WHITE) FOR ARROW PROPORTION DETAILS, SEE CURRENT VERSION OF STANDARD HIGHWAY SIGNS.</p>	<p style="text-align: center;">RSA</p>  <p style="text-align: center;">RIGHT TURN STRAIGHT ARROW (WHITE) FOR ARROW PROPORTION DETAILS, SEE CURRENT VERSION OF STANDARD HIGHWAY SIGNS.</p>	
<p style="text-align: center;">S</p>  <p style="text-align: center;">STOP BAR 1" WHITE BAR INSTALL PER OREGON STANDARD DRAWING TM530</p>	<p style="text-align: center;">BS</p>  <p style="text-align: center;">BIKE LANE STANDARD STENCIL (WHITE) CENTER MARKING WITHIN LANE WIDTH FOR PROPORTION DETAILS, SEE CURRENT VERSION OF STANDARD HIGHWAY SIGNS.</p>	<p style="text-align: center;">BSR</p>  <p style="text-align: center;">BIKE RIGHT TURN STENCIL (WHITE) CENTER MARKING WITHIN LANE WIDTH FOR PROPORTION DETAILS, SEE CURRENT VERSION OF STANDARD HIGHWAY SIGNS.</p>	<p style="text-align: center;">BSL</p>  <p style="text-align: center;">BIKE LEFT TURN STENCIL (WHITE) CENTER MARKING WITHIN LANE WIDTH FOR PROPORTION DETAILS, SEE CURRENT VERSION OF STANDARD HIGHWAY SIGNS.</p>	
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				<p style="text-align: center;">BYLD</p>  <p style="text-align: center;">BICYCLE YIELD LANE (WHITE)</p>
				<p style="text-align: center;">CW-SC</p>  <p style="text-align: center;">STAGGERED CONTINENTAL CROSSWALK 2" WHITE BARS INSTALL PER OREGON STANDARD DRAWING TM530</p>
				<p style="text-align: center;">B</p>  <p style="text-align: center;">BIKE STENCIL (WHITE) CENTER MARKING WITHIN LANE WIDTH FOR PROPORTION DETAILS, SEE CURRENT VERSION OF STANDARD HIGHWAY SIGNS.</p>
				<p style="text-align: center;">BS-SUP</p>  <p style="text-align: center;">SHARED USE PATH BICYCLE SYMBOL COLOR AS NOTED ABOVE</p>

								DESIGNED:	JWS
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								DATE:	08/28/2020
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STRIPING DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.

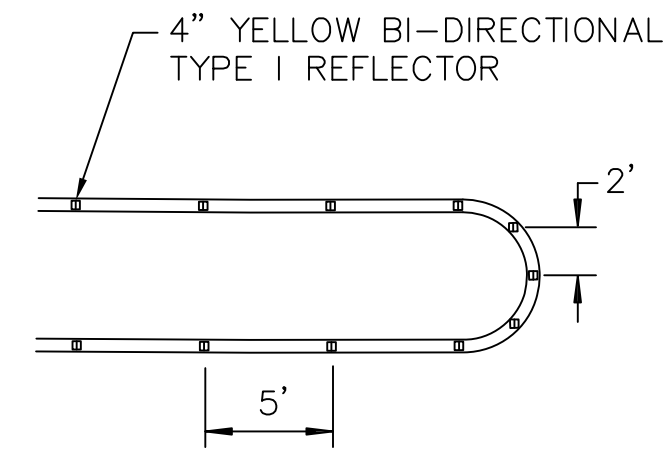
11.9

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JOB NO.

MWK-28

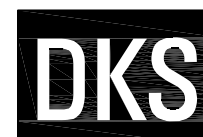
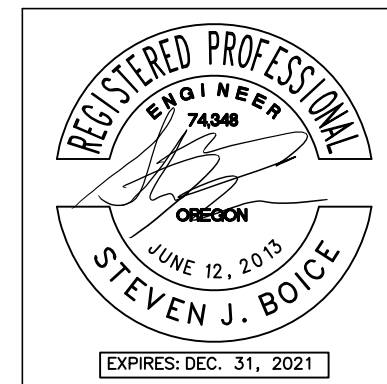
RPM



BI-DIRECTIONAL RAISED PAVEMENT MARKERS

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STRIPING DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.

11.10

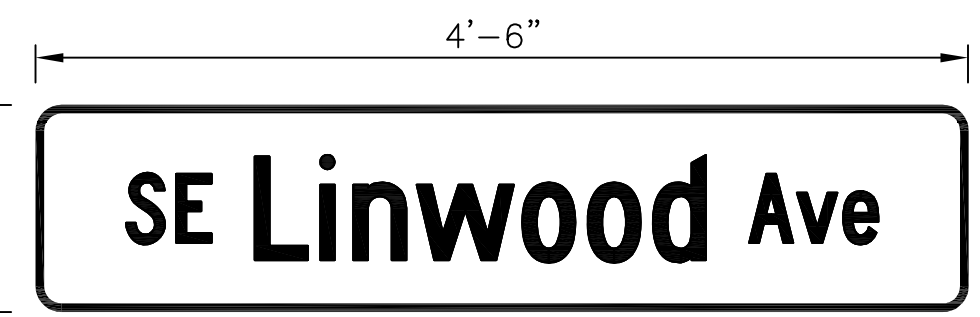
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JOB NO.

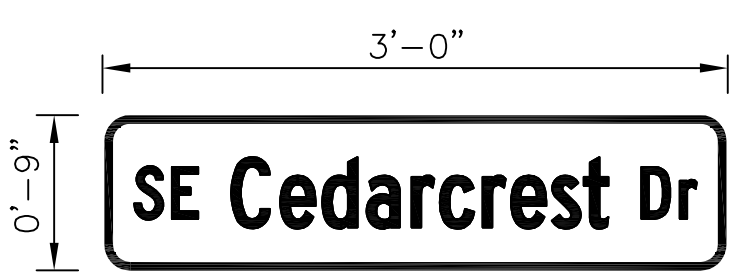
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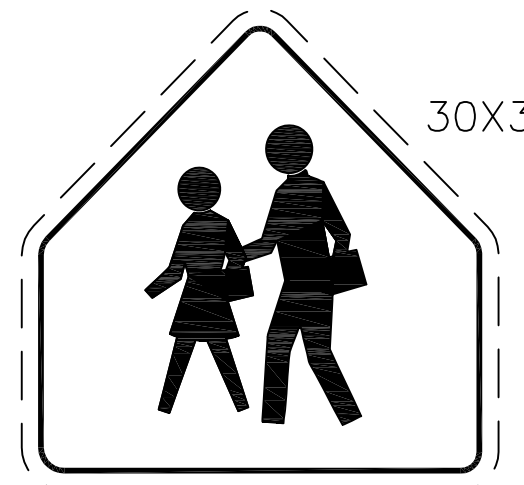
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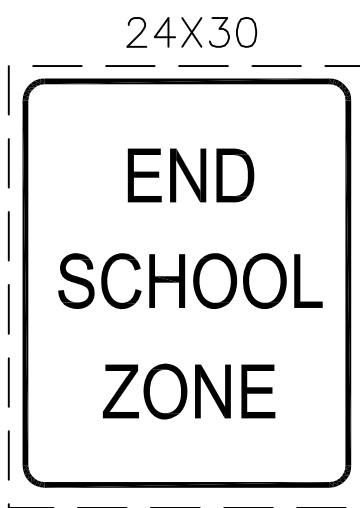
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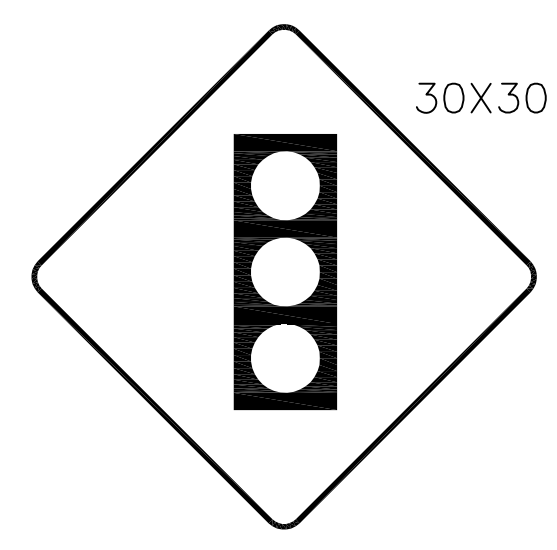
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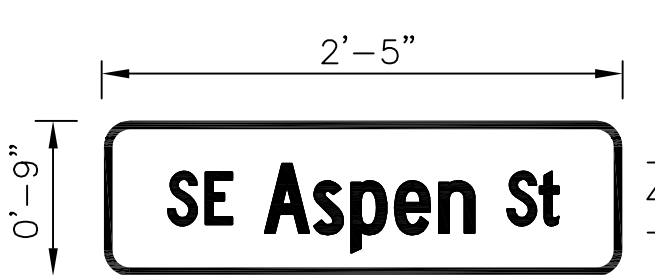
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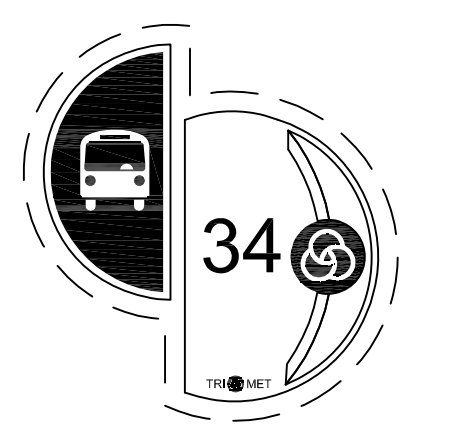
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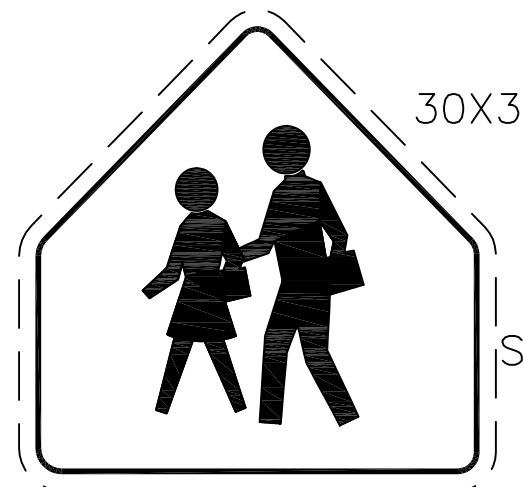
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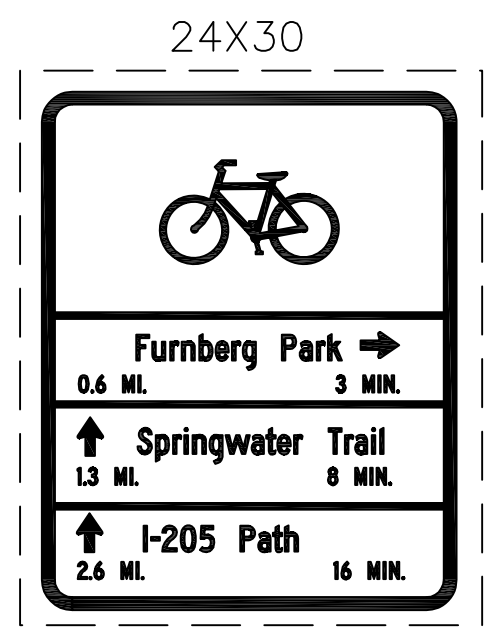
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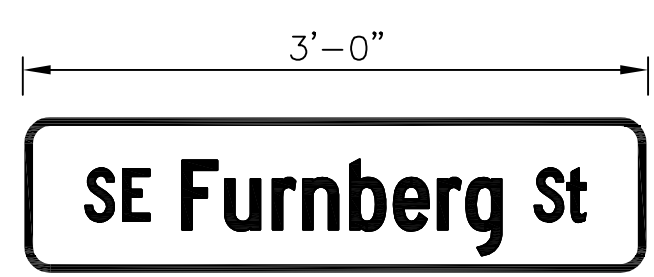
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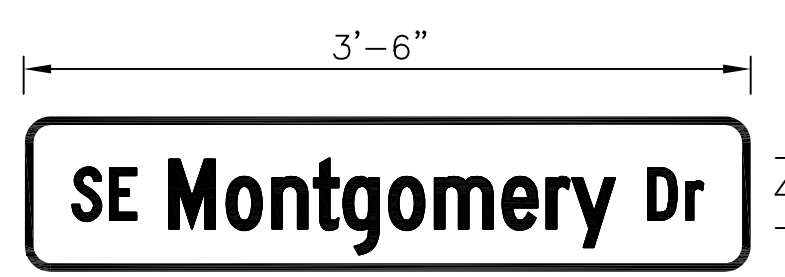
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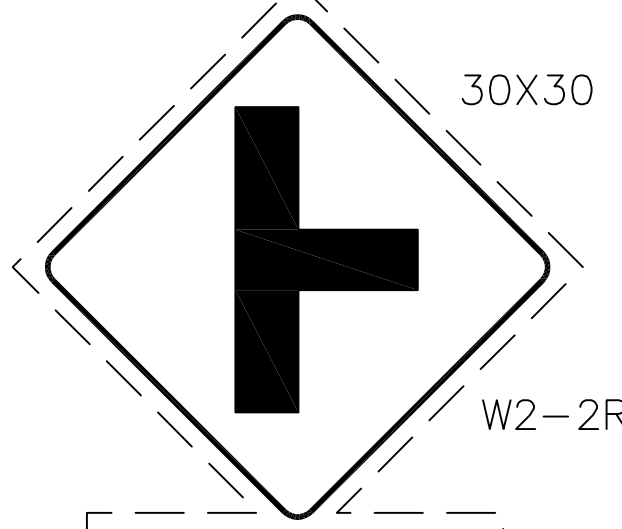
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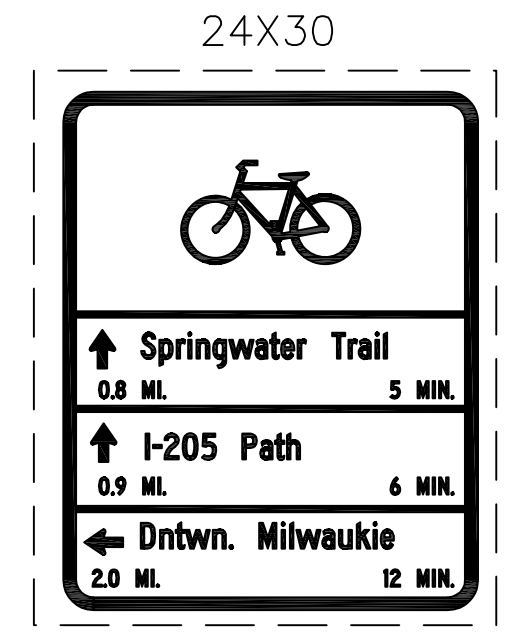
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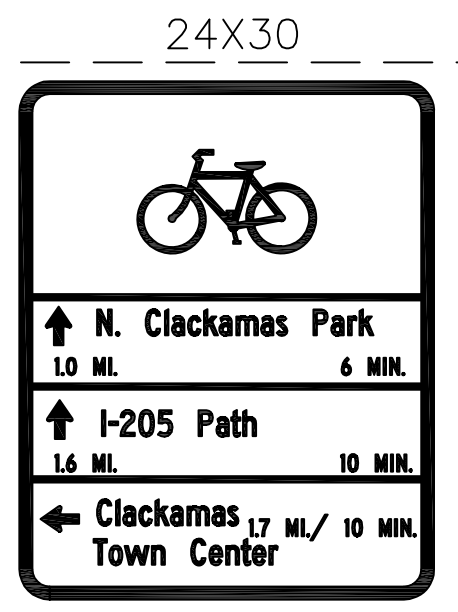
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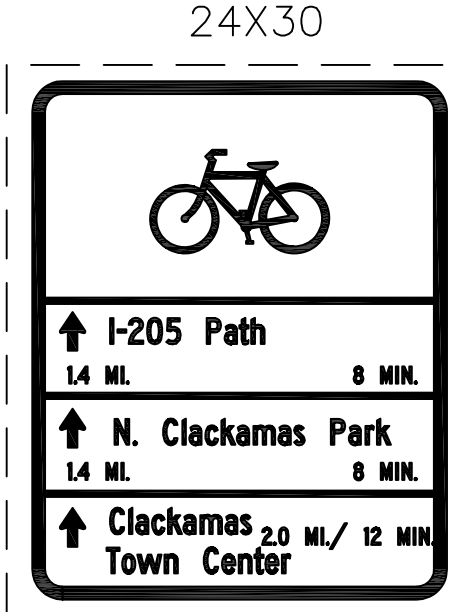
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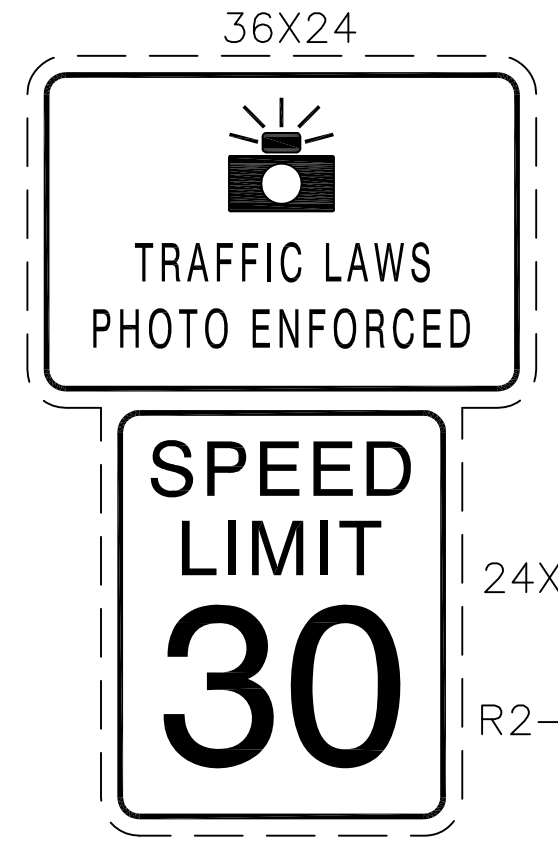
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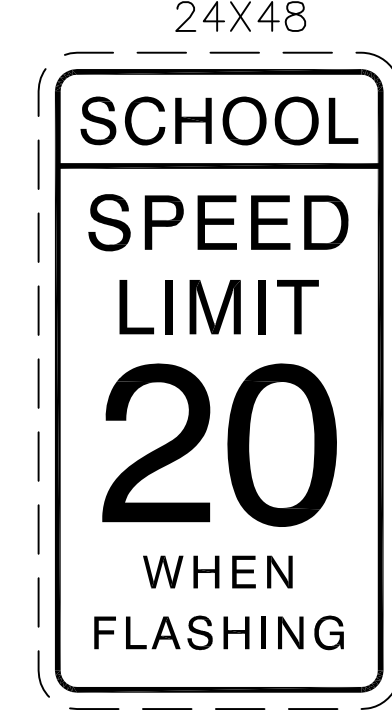
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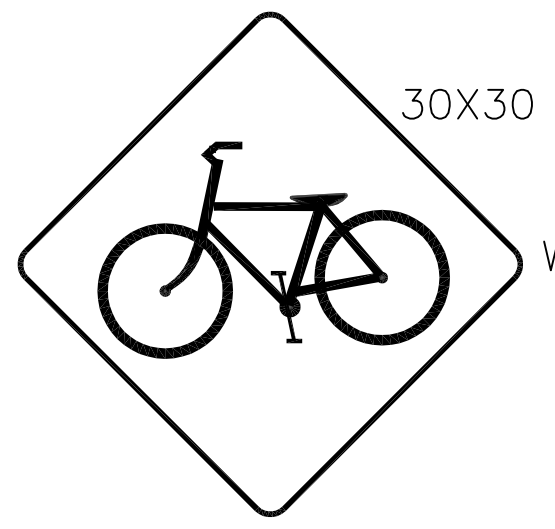
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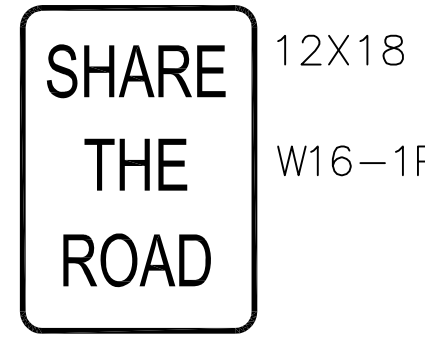
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SIGN NO. 22
S5-1



SIGN NO. 23



W16-1P



SIGN NO. 24
R1-5b



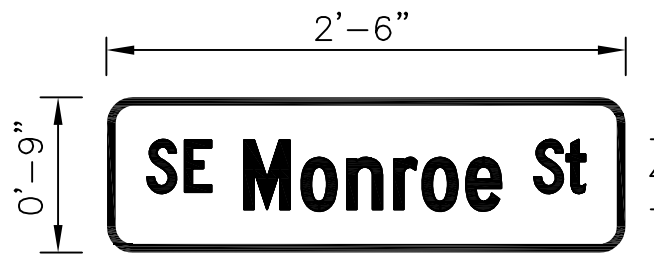
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SIGN NO. 26



SIGN NO. 27

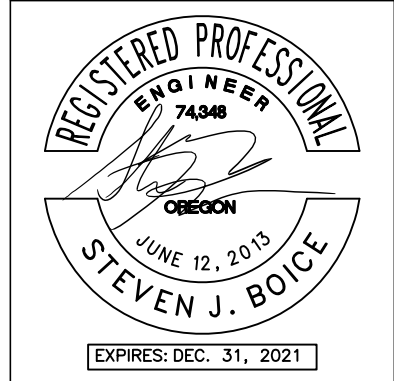


SIGN NO. 28

NOTE:
SIGNS WITH DASHED BORDER
ARE EXISTING SIGNS.

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED: JWS
 DRAWN: KCD
 CHECKED: SJB
 DATE: 08/28/2020



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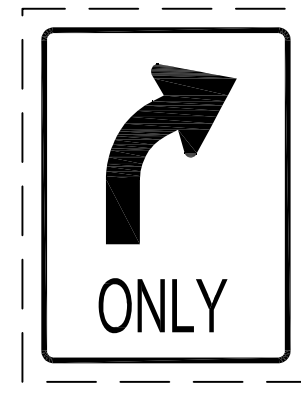
SIGNING DETAILS
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.
11.11
 95 OF 122
 JOB NO. MWK-28

X:\Projects\2019\19104-000 (Milwaukie Linwood Ave Safe Routes to School)\CAD\11.11.dwg



SIGN NO. 29



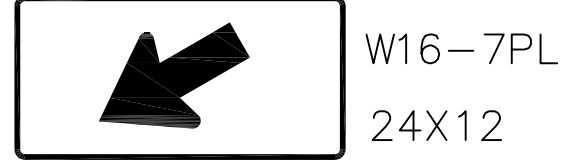
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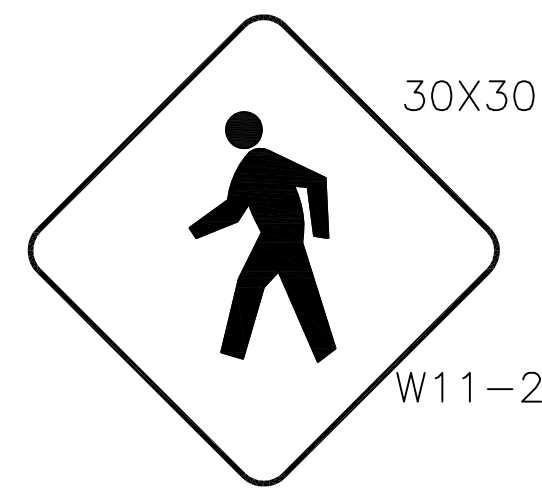
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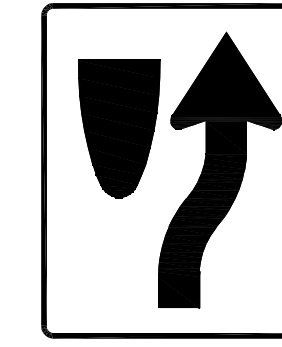
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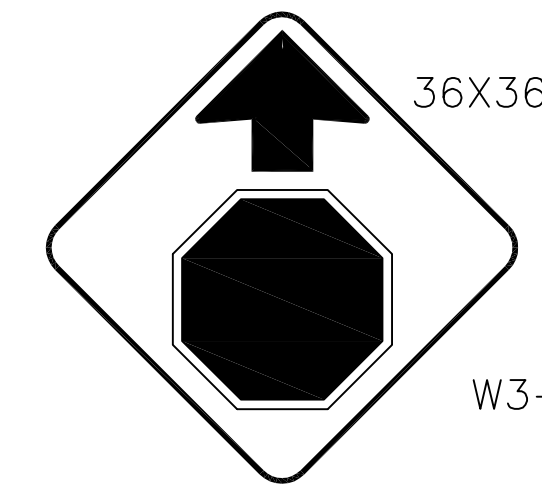
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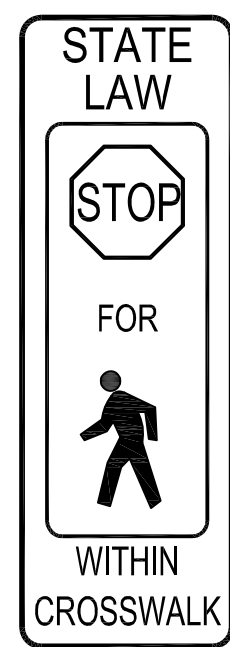
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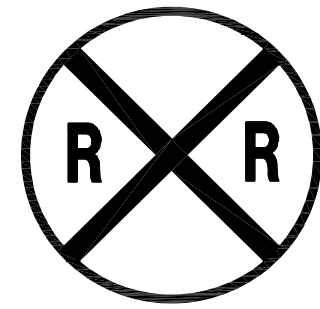
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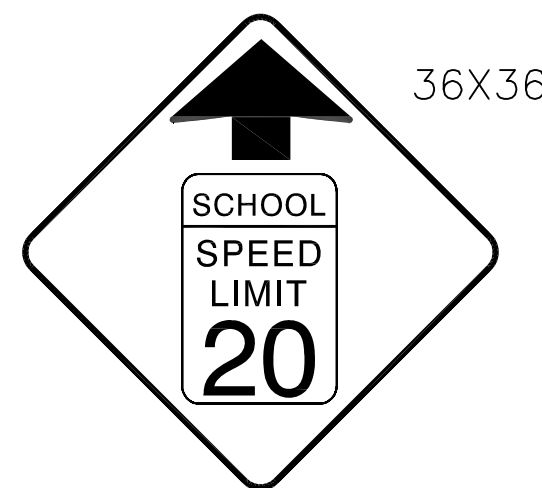
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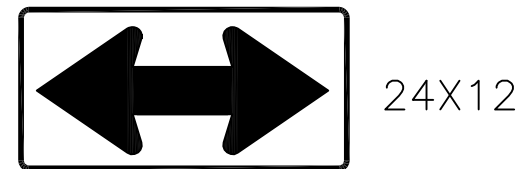
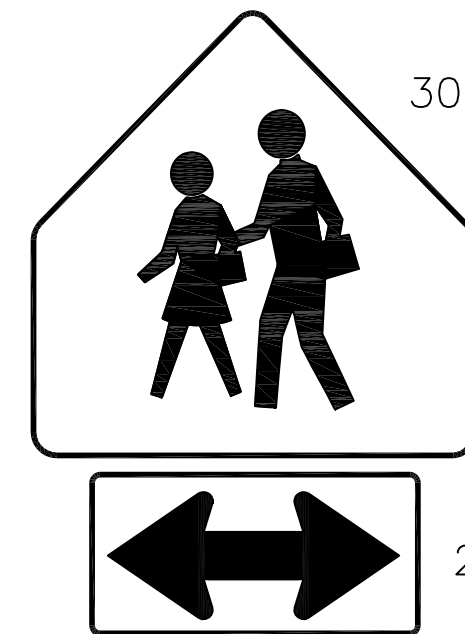
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R1-6



SIGN NO. 38
W10-1



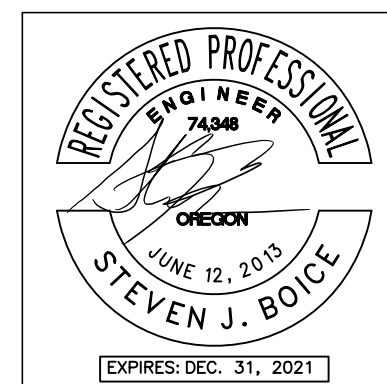
SIGN NO. 39
S4-5



SIGN NO. 40

NOTE:
SIGNS WITH DASHED BORDER
ARE EXISTING SIGNS.

DESIGNED:	JWS	
DRAWN:	KCD	
CHECKED:	SJB	
DATE:	08/28/2020	
DATE	NO.	DESCRIPTION
R E V I S I O N S		



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SIGNING DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.

11.12

96 OF 122

JOB NO.

MWK-28

SIGN NO.	STREET NAME	SIGN LOCATION 4/	SIGN DIMENSIONS		SUB-STRATE	COLOR 1/				LEGEND TYPE	SIGN NO.	TYPE OF SUPPORT	POST		FOOTING		REMARKS
			WIDTH	HEIGHT		BACK-GROUND	LEGEND						SIZE (BASED ON ESTIMATED LENGTH)	LENGTH (MUST BE FIELD VERIFIED)	LOCATION 3/	MIN. DEPTH	
16	LINWOOD AVE	55+37 R	24	30	✓	G	SW		✓	16		2-1/2 x 2-1/2 12ga	12'-0"	13'-6"	3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
17	CEDARCREST DR	1+60 R	12	18	✓		SW	R	✓	17		2'-0" x 2'-0" 12ga	11'-0"	3'-0"	3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
18	LINWOOD AVE	55+87 R	24	30	✓	G	SW		✓	18		2-1/2 x 2-1/2 12ga	12'-0"	3'-0"	3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
20	LINWOOD AVE	36+26 L	24	30	✓	G	SW		✓	20		2'-0" x 2'-0" 12ga	11'-0"	3'-0"	3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
21	LINWOOD AVE	53+76 L	36	24	✓	SW		BK	✓	21		2-1/2" x 2-1/2" 12ga	12'-0"	3'-6"	5'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	53+76 L	24	30	✓	SW		BK	✓								
23	LINWOOD AVE	14+29 L	30	30	✓			Y	✓	23		2-1/2 x 2-1/2 12ga	12'-0"	3'-0"	3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	14+29 L	12	18	✓			Y	✓			2-1/2 x 2-1/2 12ga					
24	LINWOOD AVE	24+83 R	24	24	✓	SW		BK	✓	24		2-1/2 x 2-1/2 12ga	12'-0"	3'-6"	3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	25+75 L	24	24	✓	SW		BK	✓			2-1/2 x 2-1/2 12ga	12'-0"				MOUNT UNDER SIGN 23
25	LINWOOD AVE	18+11 R	30	30	✓	YG		BK	✓	25		2-1/2 x 2-1/2 12ga	12'-0"	3'-0"	3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	18+11 R	24	12	✓	YG		BK	✓								MOUNT UNDER SIGN 25
	LINWOOD AVE	51+08 L	30	30	✓	YG		BK	✓			2-1/2 x 2-1/2 12ga	12'-0"	3'-0"	3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	51+08 L	24	12	✓	YG		BK	✓								MOUNT UNDER SIGN 25
26	LINWOOD AVE	52+15 L	24	24	✓	SW		BK	✓	26		2-1/2 x 2-1/2 12ga	12'-0"	3'-0"	3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	52+15 L	24	12	✓	SW		BK	✓								
27	CEDARCREST DR	1+65 L	12	18	✓	SW	R		✓			2'-0" x 2'-0" 12ga	11'-0"	3'-0"	3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
28	MONROE ST	12+62 R	30	12	✓	G	SW		✓	28							MOUNT ABOVE SIGN 2
	MONROE ST	13+70 L	30	12	✓	G	SW		✓								MOUNT ABOVE SIGN 2
29	LINWOOD AVE	14+08 R	36	18	✓	SW		BK	✓	29		2-1/2 x 2-1/2 12ga	12'-0"		3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	14+71 R	36	18	✓	SW		BK	✓			2-1/2 x 2-1/2 12ga	12'-0"		3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	20+73 R	36	18	✓	SW		BK	✓			2-1/2 x 2-1/2 12ga	12'-0"		3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	47+82 R	36	18	✓	SW		BK	✓			2-1/2 x 2-1/2 12ga	12'-0"		3'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
30	LINWOOD AVE	56+28 C	30	36	✓	SW		BK	✓	30							MOUNT ON CENTERLINE
	LINWOOD AVE	56+28 C	30	36	✓	SW		BK	✓			2-1/2 x 2-1/2 12ga	12'-0"		3'-0"		MOUNT ON CENTERLINE
31	LINWOOD AVE	56+28 C	24	12	✓	SW		BK	✓	31							MOUNT BELOW SIGN 30
	LINWOOD AVE	56+28 C	24	12	✓	SW		BK	✓								MOUNT BELOW SIGN 30
33	LINWOOD AVE	55+91 L	30	30	✓	Y		BK	✓	33		2-1/2 x 2-1/2 12ga	12'-0"	7'-0"	5'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	55+91 L	24	12	✓	Y		BK	✓								
	LINWOOD AVE	55+91 L	30	30	✓	Y		BK	✓								
	LINWOOD AVE	55+91 L	24	12	✓	Y		BK	✓								
	LINWOOD AVE	56+00 R	30	30	✓	Y		BK	✓			2-1/2 x 2-1/2 12ga	12'-0"	7'-0"	5'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	56+00 R	24	12	✓	Y		BK	✓								
	LINWOOD AVE	56+00 R	30	30	✓	Y		BK	✓								
	LINWOOD AVE	56+00 R	24	12	✓	Y		BK	✓								
	LINWOOD AVE	56+58 L	30	30	✓	Y		BK	✓			2-1/2 x 2-1/2 12ga	12'-0"	7'-0"	5'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	56+58 L	24	12	✓	Y		BK	✓								
	LINWOOD AVE	56+58 L	30	30	✓	Y		BK	✓								
	LINWOOD AVE	56+58 L	24	12	✓	Y		BK	✓								
	LINWOOD AVE	56+59 R	30	30	✓	Y		BK	✓			2-1/2 x 2-1/2 12ga	12'-0"	7'-0"	5'-0"	3/	FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	56+59 R	24	12	✓	Y		BK	✓								
	LINWOOD AVE	56+59 R	30	30	✓	Y		BK	✓								
	LINWOOD AVE	56+59 R	24	12	✓	Y		BK	✓								

- 1/ BK=BLACK
 BL=BLUE
 BR=BROWN
 FY=FLUORESCENT YELLOW
 G=GREEN
 O=ORANGE
 P=PURPLE
 R=RED
 RB=RED-BLUE
 SW=SILVER-WHITE
 W=WHITE
 Y=YELLOW
 YG=FLUORESCENT YELLOW-GREEN

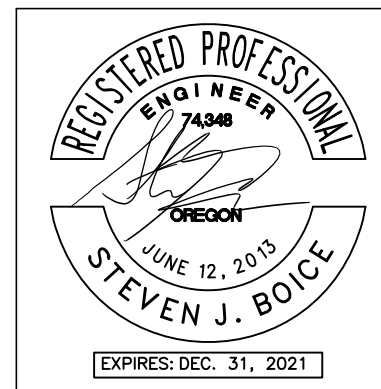
- 2/ NOTE: L,C,R ARE LOCATIONS OF POSTS
 FACING THE SIGN.
 L=LEFT POST
 C=CENTER POST
 R=RIGHT POST

- 3/ DISTANCE FROM EDGE OF TRAVEL LANE,
 FACE OF CURB, GUARDRAIL, OR BARRIER
 TO THE CENTERLINE OF FOOTING. FOR
 ADDITIONAL INFORMATION SEE
 STANDARD DRAWING TM635

- 4/ NOTE: THE LOCATIONS SHOWN ARE
 APPROXIMATE EXCEPT FOR SPEED
 ZONES, SCHOOL ZONES, OBJECT
 MARKERS AND MILEPOST MARKERS.
 EXACT LOCATIONS ARE TO BE
 DETERMINED BY THE ENGINEER.

DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	JWS
DRAWN:	KCD
CHECKED:	SJB
DATE:	08/28/2020



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**SIGN & POST DATA TABLE
 SE LINWOOD AVENUE
 MILWAUKIE, OREGON**

SIGN NO.	STREET NAME	SIGN LOCATION 4j	SIGN DIMENSIONS		SUB-STRATE			COLOR 1j				LEGEND TYPE	SIGN NO. 2j	TYPE OF SUPPORT													POST		FOOTING		REMARKS				
			WIDTH	HEIGHT	PLYWOOD	SHEET ALUMINUM	EXTRUDED ALUMINUM (ODOT TM675)	DOUBLE-SIDED	BACK-GROUND	LEGEND				WOOD POST (ODOT TM670-671, TM676)	PERF. STEEL SQUARE TUBE (ODOT TM671, TM676, TM681, TM687-689)	TRIANGULAR BASE BREAKAWAY (ODOT TM682)	MULTIPOST BREAKAWAY (ODOT TM220, TM600-601)	STAINLESS STEEL CLAMP (SSC) (TM677)	SIGNAL POLE MOUNT (ODOT TM680)	BRIDGE RAIL MOUNT	STRUCTURE MOUNT	CANTILEVER	CROSSWALK CLOSURE BARRICADE BOARD (ODOT TM683)	VERTICAL SIGN MOUNT ON EXISTING STRUCTURE	ADJUSTABLE SIGN MOUNT	MAST ARM SNS MOUNT	C 4 X 6.4	C 4 X 7.25	ROUTE MARKER FRAME (ODOT TM676 & TM678)	LENGTH (FT.)		SIZE (BASED ON ESTIMATED LENGTH)	LENGTH (MUST BE FIELD VERIFIED)	LOCATION 3j	MIN. DEPTH
34	LINWOOD AVE	53+34 R	30	30									34																						3/ FACE OF CURB TO CENTERLINE OF FOOTING
	LINWOOD AVE	53+34 R	24	12																														MOUNT BELOW SIGN 34	
	LINWOOD AVE	59+09 L	30	30																														3/ FACE OF CURB TO CENTERLINE OF FOOTING	
	LINWOOD AVE	59+09 L	24	12																														MOUNT BELOW SIGN 34	
35	LINWOOD AVE	55+63	36	12									35																					MOUNT ON CENTERLINE	
	LINWOOD AVE	56+92	36	12																														MOUNT ON CENTERLINE	
36	MONROE ST	09+38 R	36	36									36																					3/ FACE OF CURB TO CENTERLINE OF FOOTING	
	MONROE ST	16+40 L	36	36																														3/ FACE OF CURB TO CENTERLINE OF FOOTING	
37	LINWOOD AVE	55+88	12	36									37																					MOUNT ON CENTERLINE	
	LINWOOD AVE	55+88	12	36																														MOUNT ON CENTERLINE	
	LINWOOD AVE	56+65	12	36																														MOUNT ON CENTERLINE	
	LINWOOD AVE	56+65	12	36																														MOUNT ON CENTERLINE	
38	LINWOOD AVE	13+13 L	36	36									38																					3/ FACE OF CURB TO CENTERLINE OF FOOTING	
39	LINWOOD AVE	17+24 R	36	36						YG			39																					3/ FACE OF CURB TO CENTERLINE OF FOOTING	
	LINWOOD AVE	36+26 L	36	36						YG																								3/ FACE OF CURB TO CENTERLINE OF FOOTING	
40	ASPEN ST	2+10 R	30	42						YG			40																					3/ FACE OF CURB TO CENTERLINE OF FOOTING	
	FURNBERG ST	3+45 R	30	42						YG																								3/ FACE OF CURB TO CENTERLINE OF FOOTING	

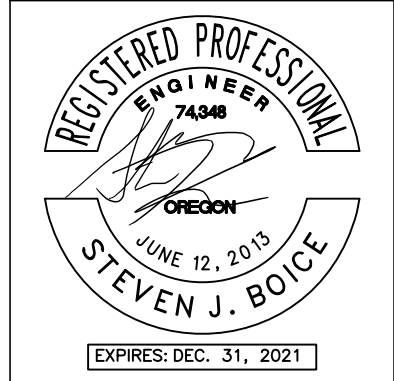
- 1j BK=BLACK
 BL=BLUE
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 W=WHITE
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 YG=FLUORESCENT YELLOW-GREEN

- 2j NOTE: L,C,R ARE LOCATIONS OF POSTS
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- 3j DISTANCE FROM EDGE OF TRAVEL LANE,
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- 4j NOTE: THE LOCATIONS SHOWN ARE
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 ZONES, SCHOOL ZONES, OBJECT
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DESIGNED:			JWS
DRAWN:			KCD
CHECKED:			SJB
DATE:			08/28/2020
DATE	NO.	DESCRIPTION	
R E V I S I O N S			



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SIGN & POST DATA TABLE
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.	11.15
	99 OF 122
JOB NO.	MWK-28

POLES

- REMOVE EXISTING WOOD POLE.
- REMOVE AND RELOCATE EXISTING PEDESTRIAN PEDESTAL.
- REINSTALL EXISTING PEDESTRIAN PEDESTAL ON NEW FOUNDATION.
- INSTALL PEDESTRIAN PEDESTAL.
- INSTALL (X=NUMBER) SIDED FLASHING BEACON SYSTEM ON PEDESTRIAN PEDESTAL (SEE SHEET 12.8 FOR DETAILS).
- INSTALL SCHOOL ZONE FLASHER SYSTEM ON PEDESTRIAN PEDESTAL (SEE SHEET 12.7 FOR DETAILS).
- FUTURE LOCATION OF PEDESTRIAN PEDESTAL FOR FUTURE PEDESTRIAN FLASHING BEACON SYSTEM.

CABINETS

- INSTALL BASE MOUNTED SERVICE CABINET, 120/240 VOLT METERED.
- INSTALL FLASHER CABINET.
- REMOVE EXISTING FLASHER CABINET.
- REMOVE EXISTING SERVICE CABINET.
- REMOVE EXISTING METER SERVICE.
- REMOVE AND RELOCATE EXISTING FLASHER CABINET.
- REINSTALL EXISTING FLASHER CABINET.

SIGNALS

- INSTALL 12 INCH FLASHING YELLOW BEACON (SEE SHEET 12.7 FOR DETAILS).
- INSTALL APS PUSH BUTTON WITH MOUNT ("PUSH BUTTON TO TURN ON WARNING LIGHTS" R10-25).
- REMOVE EXISTING PUSH BUTTON AND INSTRUCTION SIGN.
- REMOVE AND RELOCATE EXISTING YELLOW FLASHING BEACON.
- REINSTALL EXISTING YELLOW FLASHING BEACON.

JUNCTION BOXES

- INSTALL 17"x10"x12" PRECAST CONCRETE JUNCTION BOX.
- INSTALL 17"x10"x12" PRECAST CONCRETE JUNCTION BOX WITH CONCRETE APRON.
- INSTALL 22"x12"x12" PRECAST CONCRETE JUNCTION BOX.
- INSTALL 22"x12"x12" PRECAST CONCRETE JUNCTION BOX WITH CONCRETE APRON.

CONDUITS

- INSTALL (S=SIZE) INCH ELECTRICAL CONDUIT.
- INSTALL CONDUIT AND WIRE AS REQUIRED BY POWER COMPANY.
- INSTALL (S=SIZE) INCH CONDUIT STUB.

SIGNS

- SEE SIGNING PLANS FOR DETAILS ON SIGNS AND ATTACHMENTS.
- INSTALL CROSSWALK CLOSURE SUPPORT WITH SIGNS (BOTH SIDES OF SUPPORT AS PER TM490).

EQUIPMENT

- REMOVE AND RELOCATE EXISTING SOLAR SYSTEM.
- REINSTALL EXISTING SOLAR SYSTEM.

WIRES

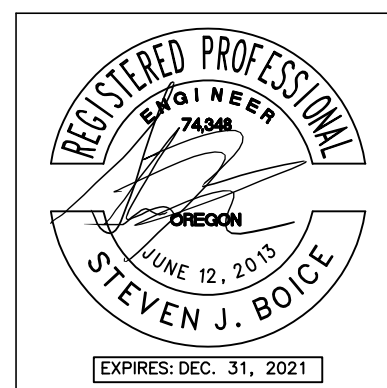
- REMOVE EXISTING WIRING.
 - INSTALL (X=NUMBER OF CABLES) CONTROL CABLES WITH (N=NUMBER) (G=AWG WIRE SIZE) AWG CONDUCTORS.
 - INSTALL POLY PULL LINE.
 - INSTALL (N=NUMBER) NO. (G=AWG WIRE SIZE) XHHW WIRES.
 - INSTALL ONE NO. 16 AWG THWN LOCATE WIRE.
- * USE SPARE #14AWG FOR PEDESTRIAN SIGNAL COMMON.

GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO CLACKAMAS COUNTY ORDINANCES AND SPECIAL PROVISIONS, THE 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND THE OREGON STANDARD DRAWINGS LISTED BELOW
2. THE CONTRACTOR SHALL SUPPLY ALL EQUIPMENT , MATERIALS, AND LABOR REQUIRED FOR THE SIGNAL OPERATIONS SHOWN ON THIS PLAN.
3. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF EXISTING UTILITIES AND COORDINATE THIS WORK WITH THE UTILITY COMPANIES/AGENCIES TO ELIMINATE ANY CONFLICTS.
4. THE CONTRACTOR SHALL COORDINATE WORK WITH PGE FOR POWER SERVICE CONNECTION. CONTRACTOR SHALL COORDINATE WITH PGE (SERVICE DESK, 503-736-5450) FOR ALL POWER REQUIREMENTS.
5. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL SIGNAL EQUIPMENT BEFORE INSTALLATION.
6. CLACKAMAS COUNTY WILL PROVIDE SIGNAL TIMING.
7. EQUIPMENT SUBMITTALS AND POLE DRAWINGS SHALL BE PROVIDED TO CLACKAMAS COUNTY BY THE CONTRACTOR AFTER AN INITIAL REVIEW HAS BEEN COMPLETED BY THE PROJECT ENGINEER. CLACKAMAS COUNTY APPROVAL OF THESE SUBMITTALS MUST BE OBTAINED PRIOR TO CONSTRUCTION.
8. RETAIN AND PROTECT EXISTING SCHOOL ZONE FLASHER AND FLASHING BEACON SYSTEMS DURING CONSTRUCTION UNTIL NEW SYSTEM INSTALLATION IS COMPLETE AND READY FOR TURN-ON. MAINTAIN MINIMUM SIGNAL OPERATION DOWN TIME.
9. ALL JUNCTION BOXES SHALL BE PLACED IN SIDEWALK OR CONCRETE APRON.
10. INSTALL #12 STRANDED COPPER (ORANGE) TRACER WIRE IN ALL CONDUITS. GROUND ALL TRACER WIRES.
11. CONDUIT SHALL BE PLACED IN THE SAME TRENCH WITH OTHER CONDUITS WHEN POSSIBLE.
12. TOP OF SIGNAL AND PEDESTRIAN FOUNDATIONS SHALL MATCH TOP OF FINISHED GRADE OF SIDEWALK.
13. ALL CONDUIT RUNS SHALL BE WITHIN RIGHT-OF WAY.
14. INSTALL POLY PULL TAPE (500 LBF MIN. STRENGTH, NON CONDUCTIVE) IN ALL CONDUITS.
15. ALL UNDERGROUND CONDUITS AND FITTINGS SHALL BE SCHEDULE 80 PVC.

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			DESIGNED:	JWS
			DRAWN:	KCD
			CHECKED:	SJB
			DATE:	08/28/2020
10/05/2020	▲	ADDED GENERAL NOTES, ADDITIONAL BUBBLE NOTES		
DATE	NO.	DESCRIPTION		
R E V I S I O N S				



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FLASHING BEACON LEGEND
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.

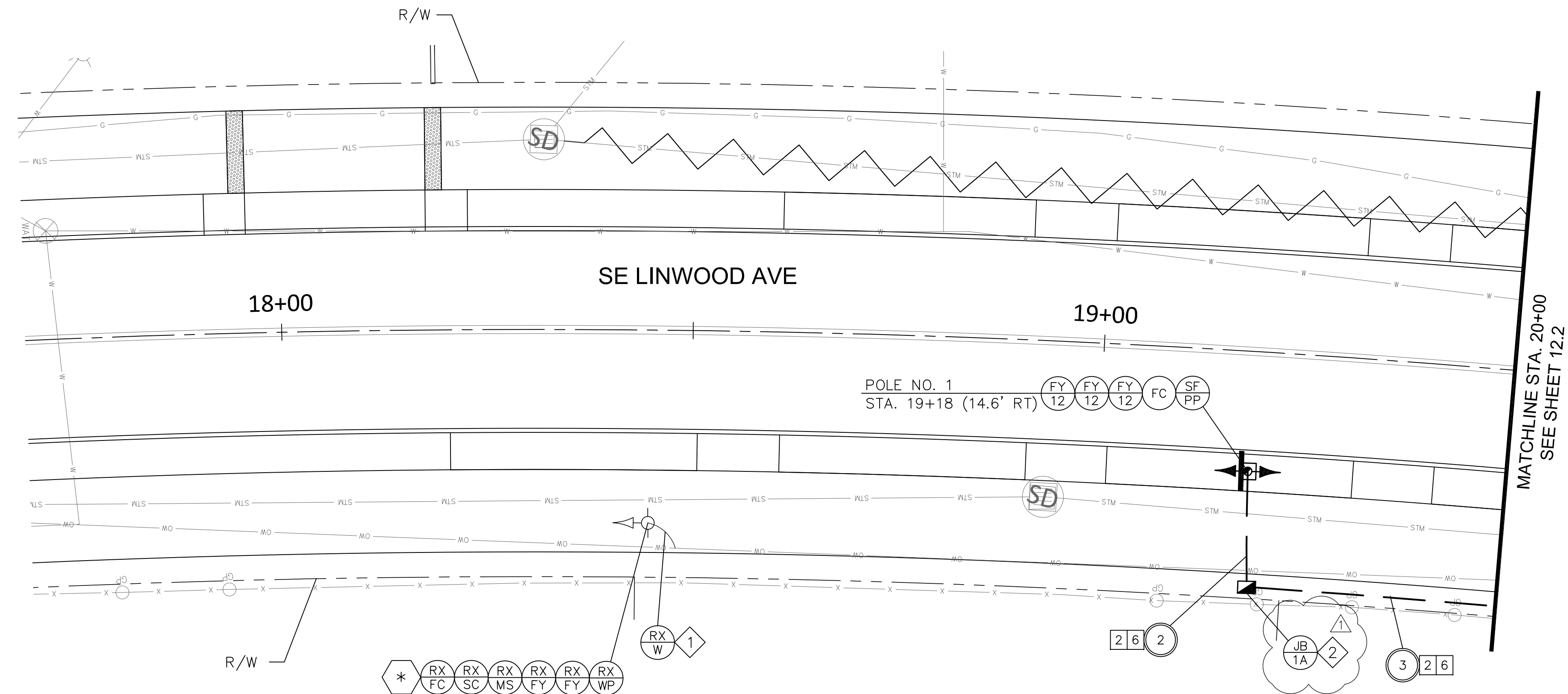
12.0

100 OF 122

JOB NO.

MWK-28

**FLASHING BEACON PLAN
LINWOOD AVE AT SCHOOL ACCESS
(MILWAUKIE)**



COMMUNICATION REQUIREMENTS

- EACH SCHOOL ZONE FLASHER ASSEMBLY SHALL INCLUDE AN AI-500-070 SCHOOL BEACON TIMER SWITCH, AND CELLULAR MODEM INSTALLED IN THE FLASHER CONTROL CABINET. EACH MODEM SHALL COME WITH A 5 YEAR DATA/SERVICE PLAN. START DATE FOR DATA-SERVICE ACTIVATION SHALL BE COORDINATED WITH CLACKAMAS COUNTY.

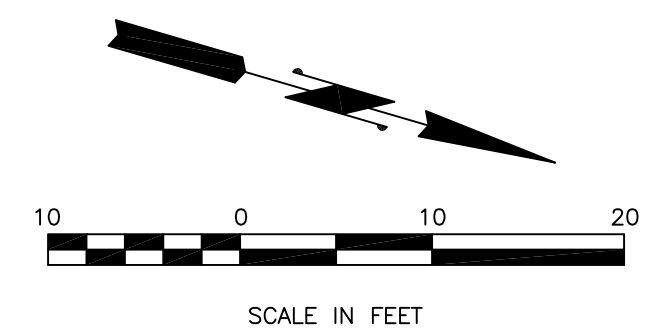
CONSTRUCTION NOTE

- REMOVE EXISTING 120V AERIAL SERVICE DROP TO EXISTING WOOD POLE.
- SECOND GROUND ROD REQUIRED FOR FLASHER POLE INSTALLATION. LOCATE IN NEARBY JUNCTION BOX.

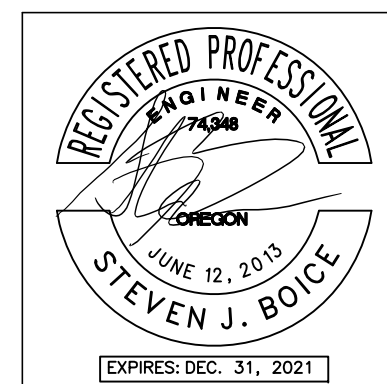
NOTE:
SEE SHEET 12.0 FOR LEGEND.

GENERAL NOTES

- ALL SCHOOL ZONE FLASHERS SHALL BE ACTIVATED ON THE SAME DAY.
- EXISTING SCHOOL ZONE SIGNS SHALL NOT BE REMOVED UNTIL NEW FLASHER UNITS ARE OPERATIONAL.
- INSTALLATIONS THAT HAVE NOT BEEN ACTIVATED SHALL BE COVERED.
- COORDINATE INSPECTION AND TURN ON OF FLASHER UNITS WITH CITY. PROVIDE ONE WEEK NOTICE PRIOR TO TURN ON.
- AIM FLASHER HEADS SO THEY ARE VISIBLE TO ON-COMING VEHICLE TRAFFIC.
- SEE SHEET 12.3 FOR POLE ENTRANCE CHART.
- ALL BOLTS, NUTS AND WASHERS SHALL CONFORM TO 02560.20 AND BE GALVANIZED STEEL ACCORDING TO 02560.40 UNLESS NOTED OTHERWISE.
- ALL ANCHOR RODS SHALL BE GALVANIZED STEEL CONFORMING TO 02560.30.
- ALL POLE ENTRANCES CONTAINING WIRING SHALL BE SMOOTH.
- INSTALL 1/4" THICK PREFORMED EXPANSION JOINT FILLER AROUND FOOTING IN SIDEWALK AREA AS PER TM653.
- TOP OF FOUNDATION SHALL HAVE 0"-1/4" EXPOSURE ABOVE FINISH GRADE.
- FLAT SIDE OF FOUNDATION SHOULD LINE UP WITH BACK OF SIDEWALK.
- SEE ODOT STANDARD DRAWING TM471 FOR ADDITIONAL INSTALLATION DETAILS.



		DESIGNED:	JWS
		DRAWN:	KCD
10/05/2020	▲	CHECKED:	SJB
		DATE:	08/28/2020
DATE	NO.	DESCRIPTION	
R E V I S I O N S			

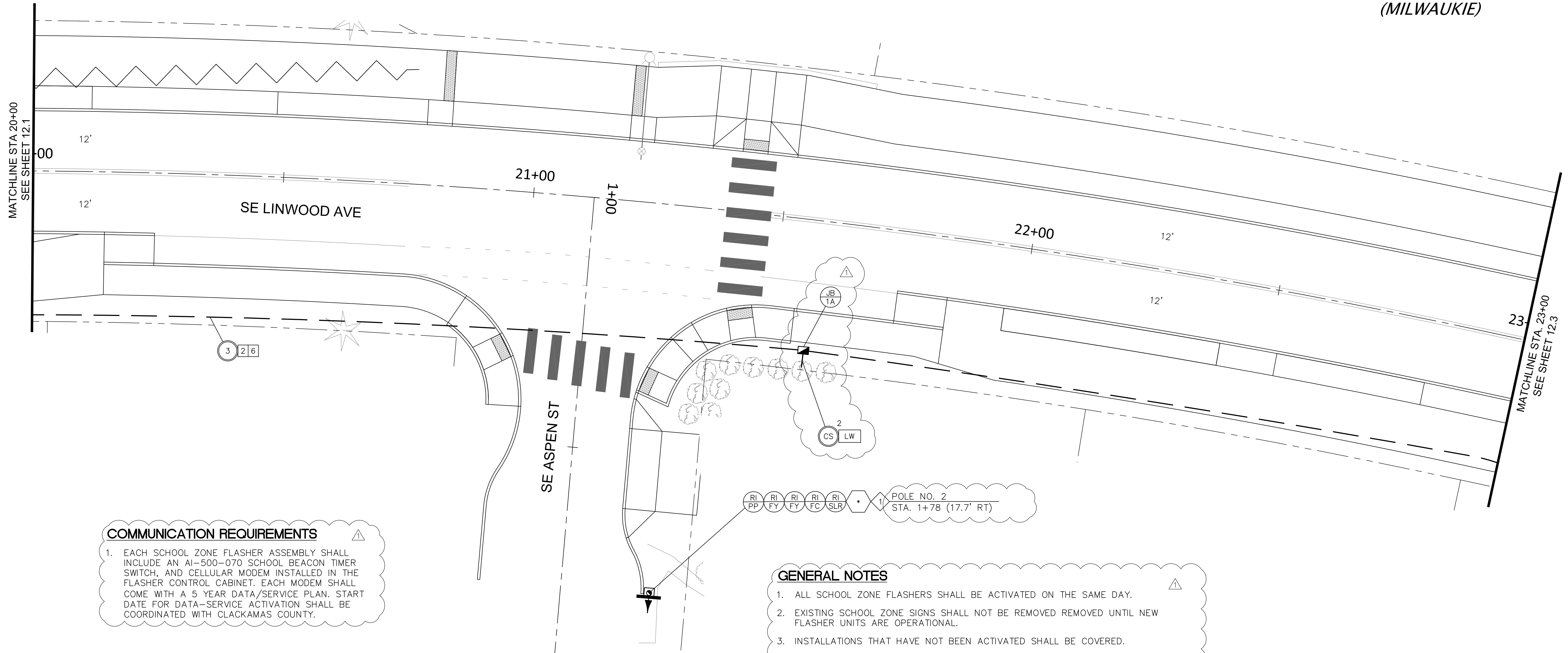


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**FLASHING BEACON PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON**

SHEET NO.
12.1
101 OF 122
JOB NO.
MWK-28

FLASHING BEACON PLAN
LINWOOD AVE AT ASPEN ST
(MILWAUKIE)



COMMUNICATION REQUIREMENTS

1. EACH SCHOOL ZONE FLASHER ASSEMBLY SHALL INCLUDE AN AI-500-070 SCHOOL BEACON TIMER SWITCH, AND CELLULAR MODEM INSTALLED IN THE FLASHER CONTROL CABINET. EACH MODEM SHALL COME WITH A 5 YEAR DATA/SERVICE PLAN. START DATE FOR DATA-SERVICE ACTIVATION SHALL BE COORDINATED WITH CLACKAMAS COUNTY.

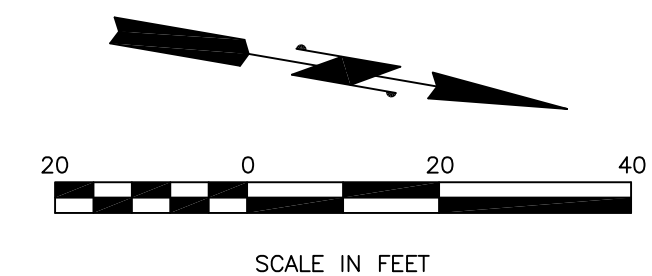
CONSTRUCTION NOTE

1. CONSTRUCT FOUNDATION ACCORDING TO TM457, "VEHICLE SIGNAL PEDESTAL."

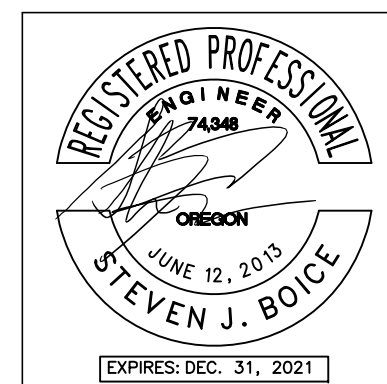
NOTE:
SEE SHEET 12.0 FOR LEGEND.

GENERAL NOTES

1. ALL SCHOOL ZONE FLASHERS SHALL BE ACTIVATED ON THE SAME DAY.
2. EXISTING SCHOOL ZONE SIGNS SHALL NOT BE REMOVED UNTIL NEW FLASHER UNITS ARE OPERATIONAL.
3. INSTALLATIONS THAT HAVE NOT BEEN ACTIVATED SHALL BE COVERED.
4. COORDINATE INSPECTION AND TURN ON OF FLASHER UNITS WITH CITY. PROVIDE ONE WEEK NOTICE PRIOR TO TURN ON.
5. AIM FLASHER HEADS SO THEY ARE VISIBLE TO ON-COMING VEHICLE TRAFFIC.
6. SEE SHEET 12.3 FOR POLE ENTRANCE CHART.
7. ALL BOLTS, NUTS AND WASHERS SHALL CONFORM TO 02560.20 AND BE GALVANIZED STEEL ACCORDING TO 02560.40 UNLESS NOTED OTHERWISE.
8. ALL ANCHOR RODS SHALL BE GALVANIZED STEEL CONFORMING TO 02560.30.
9. ALL POLE ENTRANCES CONTAINING WIRING SHALL BE SMOOTH.
10. INSTALL 1/4" THICK PREFORMED EXPANSION JOINT FILLER AROUND FOOTING IN SIDEWALK AREA AS PER TM653.
11. TOP OF FOUNDATION SHALL HAVE 0"-1/4" EXPOSURE ABOVE FINISH GRADE.
12. FLAT SIDE OF FOUNDATION SHOULD LINE UP WITH BACK OF SIDEWALK.
13. SEE ODOT STANDARD DRAWING TM471 FOR ADDITIONAL INSTALLATION DETAILS.



DATE	NO.	DESCRIPTION	DESIGNED:	DATE:
			JWS	08/28/2020
			DRAWN:	
			KCD	
			CHECKED:	
			SJB	
REVISIONS				

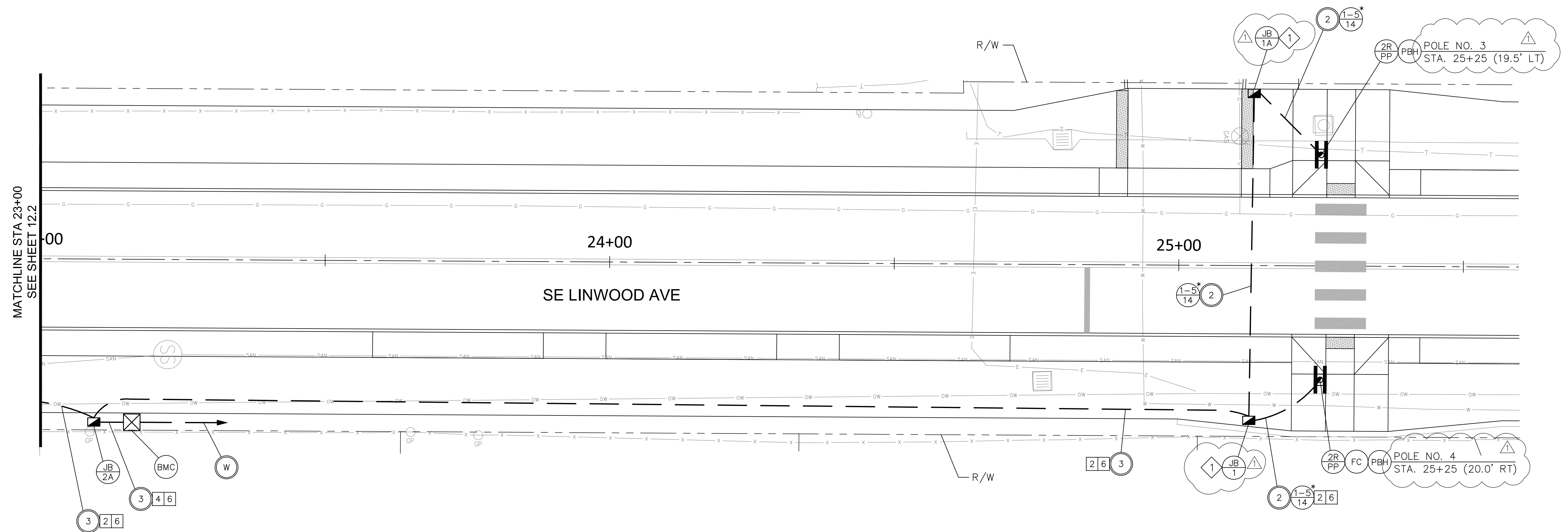


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FLASHING BEACON PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.
12.2
102 OF 122
JOB NO.
MWK-28

**FLASHING BEACON PLAN
LINWOOD AVE AT SCHOOL ACCESS
(MILWAUKIE)**



MATCHLINE STA 23+00
SEE SHEET 12.2

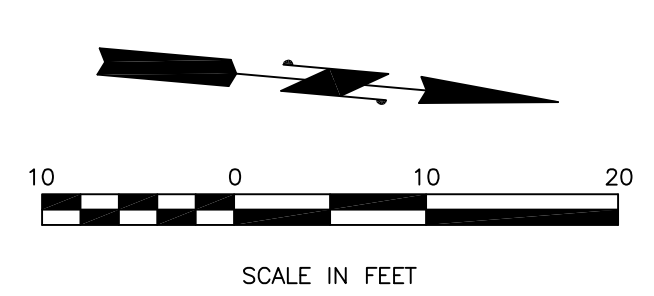
POLE ENTRANCE CHART

POLE NO.	TYPE	EQUIPMENT ON POLE		
		PED. PUSHBUTTON DEG.	SIGN DEG.	TRAFFIC SIGNAL DEG.
1	PP		160	160/340
2	PP		85	85
3	PP	355	175/355	
4	PP	175	175/355	

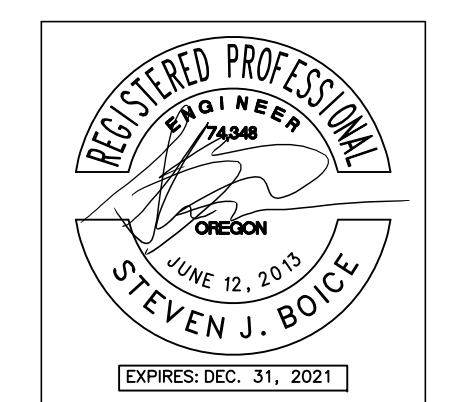
GENERAL NOTES
1. SEE SHEET 12.1 FOR POLE NO.1 INSTALLATION.

CONSTRUCTION NOTE
1. SECOND GROUND ROD REQUIRED FOR FLASHER POLE INSTALLATION. LOCATE IN NEARBY JUNCTION BOX.

NOTE:
SEE SHEET 12.0 FOR LEGEND.



DATE	NO.	DESCRIPTION	DESIGNED:	DRAWN:	CHECKED:	DATE:
10/05/2020	1	UPDATE POLE NUMBERS, POLE ENTRANCE CHART AND ADDITION OF CONSTRUCTION NOTES.	JWS	KCD	SJB	08/28/2020
R E V I S I O N S						

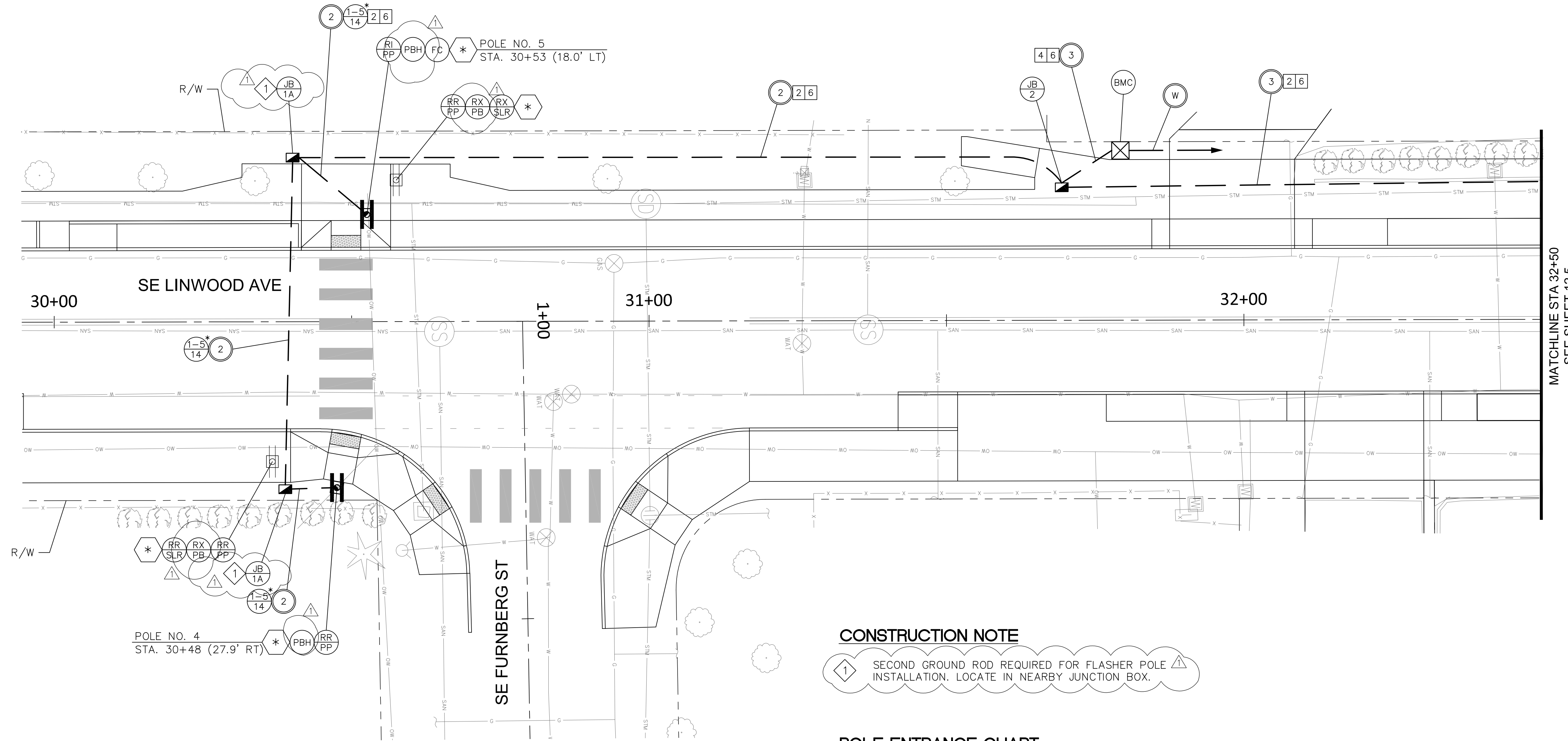


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FLASHING BEACON PLAN SE LINWOOD AVENUE MILWAUKIE, OREGON		SHEET NO. <h1 align="center">12.3</h1> 103 OF 122 JOB NO. MWK-28
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FLASHING BEACON PLAN
 LINWOOD AVE AT FURNBERG ST
 (MILWAUKIE)



MATCHLINE STA 32+50
 SEE SHEET 12.5

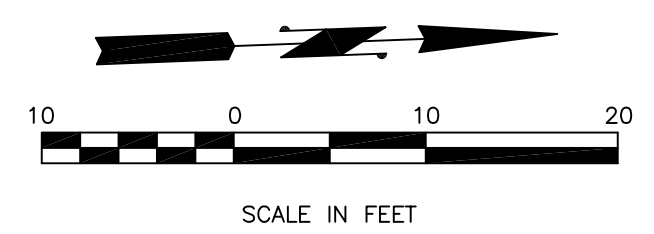
CONSTRUCTION NOTE

⚠ SECOND GROUND ROD REQUIRED FOR FLASHER POLE INSTALLATION. LOCATE IN NEARBY JUNCTION BOX.

POLE ENTRANCE CHART

POLE NO.	TYPE	EQUIPMENT ON POLE	
		PED. PUSHBUTTON DEG.	SIGN DEG.
4	PP	180	0/180
5	PP	180	0/180

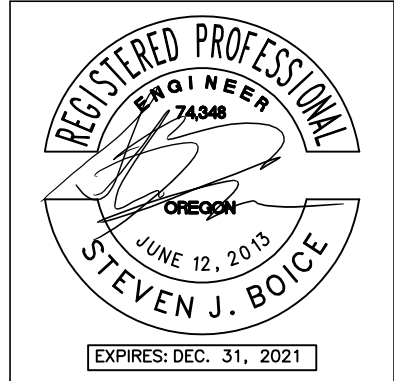
NOTE:
 SEE SHEET 12.0 FOR LEGEND.



DATE	NO.	DESCRIPTION
10/05/2020	1	UPDATE PUSH BUTTON CALL OUTS AND DEGREE. ADD CONSTRUCTION NOTE FOR GROUND ROD.

R E V I S I O N S

DESIGNED: JWS
 DRAWN: KCD
 CHECKED: SJB
 DATE: 08/28/2020



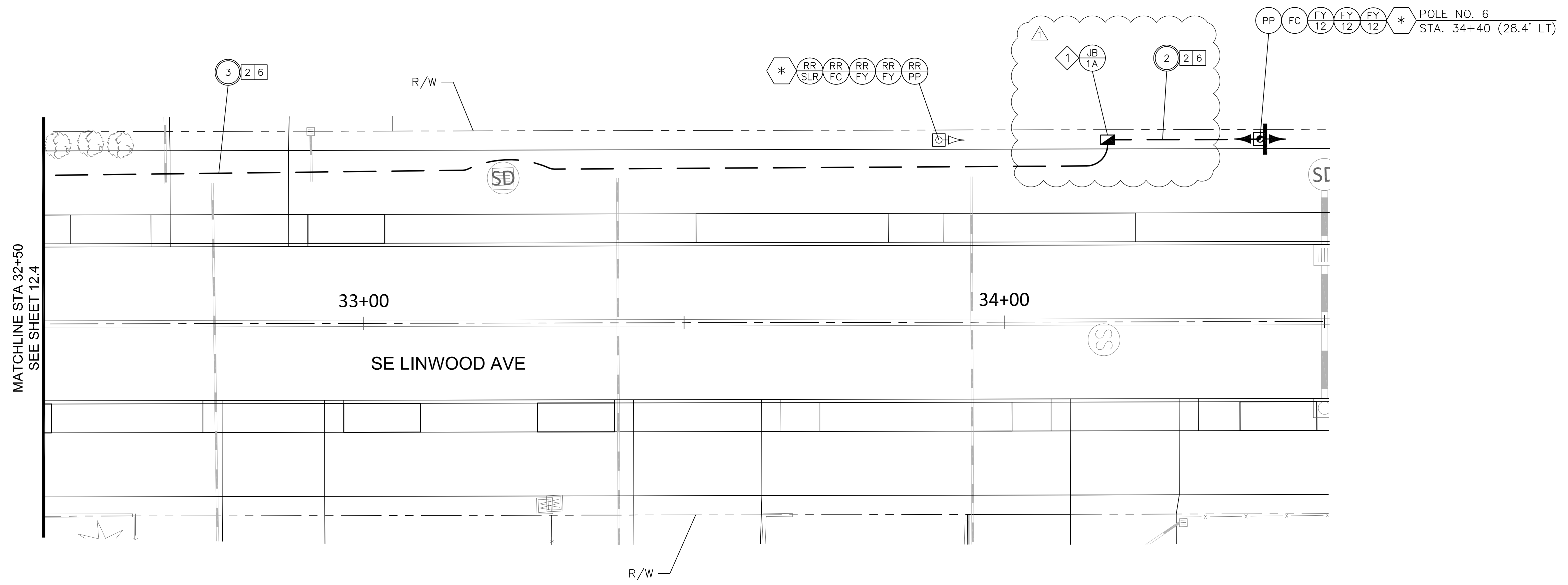
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FLASHING BEACON PLAN
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.
12.4
 104 OF 122
 JOB NO. MWK-28

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**FLASHING BEACON PLAN
LINWOOD AVE AT FURNBERG ST
(MILWAUKIE)**



COMMUNICATION REQUIREMENTS

1. EACH SCHOOL ZONE FLASHER ASSEMBLY SHALL INCLUDE AN AI-500-070 SCHOOL BEACON TIMER SWITCH, AND CELLULAR MODEM INSTALLED IN THE FLASHER CONTROL CABINET. EACH MODEM SHALL COME WITH A 5 YEAR DATA/SERVICE PLAN. START DATE FOR DATA-SERVICE ACTIVATION SHALL BE COORDINATED WITH CLACKAMAS COUNTY.

CONSTRUCTION NOTE

1 SECOND GROUND ROD REQUIRED FOR FLASHER POLE INSTALLATION. LOCATE IN NEARBY JUNCTION BOX.

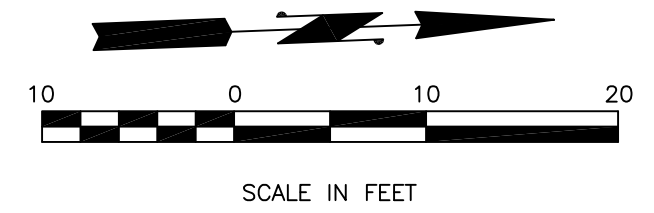
POLE ENTRANCE CHART

POLE NO.	TYPE	EQUIPMENT ON POLE	
		SIGN DEG.	TRAFFIC SIGNAL DEG.
6	PP	0	0/180

NOTE:
SEE SHEET 12.0 FOR LEGEND.

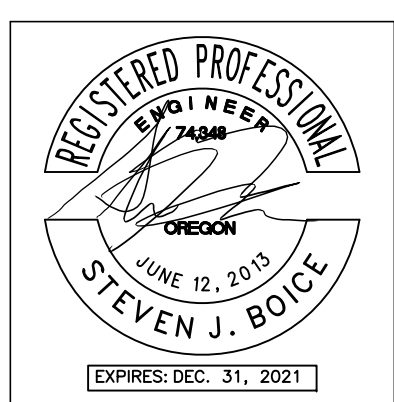
GENERAL NOTES

- ALL SCHOOL ZONE FLASHERS SHALL BE ACTIVATED ON THE SAME DAY.
- EXISTING SCHOOL ZONE SIGNS SHALL NOT BE REMOVED UNTIL NEW FLASHER UNITS ARE OPERATIONAL.
- INSTALLATIONS THAT HAVE NOT BEEN ACTIVATED SHALL BE COVERED.
- COORDINATE INSPECTION AND TURN ON OF FLASHER UNITS WITH CITY. PROVIDE ONE WEEK NOTICE PRIOR TO TURN ON.
- AIM FLASHER HEADS SO THEY ARE VISIBLE TO ON-COMING VEHICLE TRAFFIC.
- ALL BOLTS, NUTS AND WASHERS SHALL CONFORM TO 02560.20 AND BE GALVANIZED STEEL ACCORDING TO 02560.40 UNLESS NOTED OTHERWISE.
- ALL ANCHOR RODS SHALL BE GALVANIZED STEEL CONFORMING TO 02560.30.
- ALL POLE ENTRANCES CONTAINING WIRING SHALL BE SMOOTH.
- INSTALL 1/4" THICK PREFORMED EXPANSION JOINT FILLER AROUND FOOTING IN SIDEWALK AREA AS PER TM653.
- TOP OF FOUNDATION SHALL HAVE 0"-1/4" EXPOSURE ABOVE FINISH GRADE.
- FLAT SIDE OF FOUNDATION SHOULD LINE UP WITH BACK OF SIDEWALK.
- SEE ODOT STANDARD DRAWING TM471 FOR ADDITIONAL INSTALLATION DETAILS.



DATE	NO.	DESCRIPTION	DESIGNED:
			JWS
			DRAWN:
			KCD
			CHECKED:
			SJB
			DATE:
			08/28/2020

R E V I S I O N S



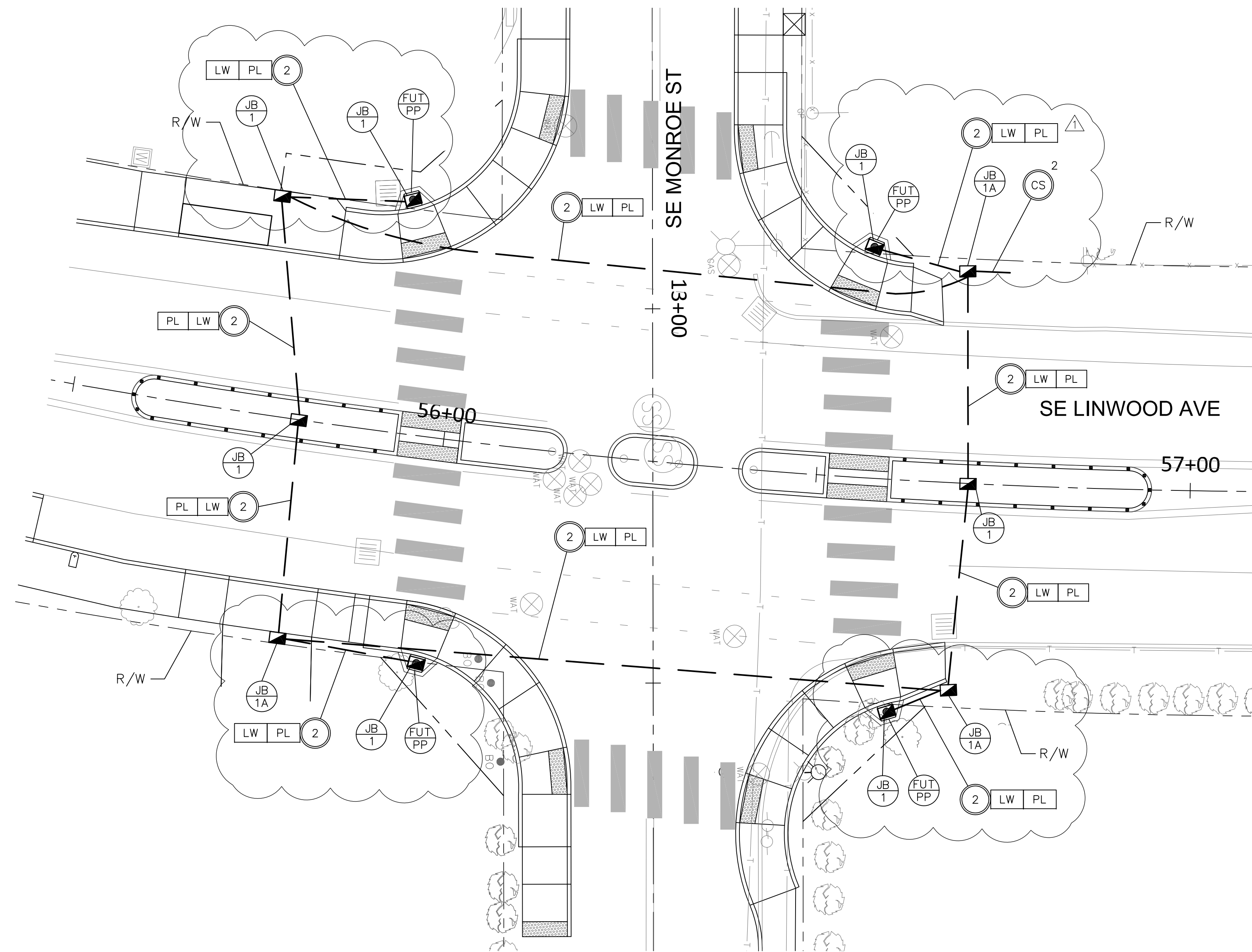
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**FLASHING BEACON PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON**

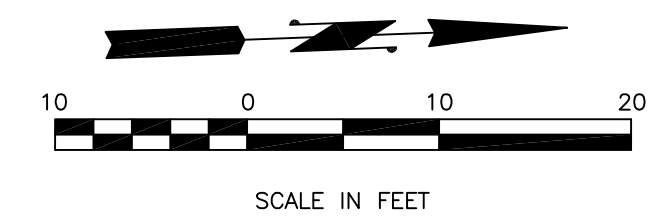
SHEET NO.	12.5
	105 OF 122
JOB NO.	MWK-28

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FLASHING BEACON PLAN
 LINWOOD AVE AT MONROE ST
 (MILWAUKIE)



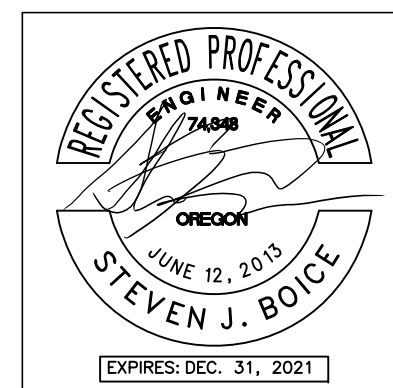
NOTE:
 SEE SHEET 12.0 FOR LEGEND.



DATE	NO.	DESCRIPTION
10/05/2020	1	ADD JUNCTION BOXES AND CONDUIT AT FUTURE POLE LOCATION FOR EASIER FUTURE INSTALLATION.

R E V I S I O N S

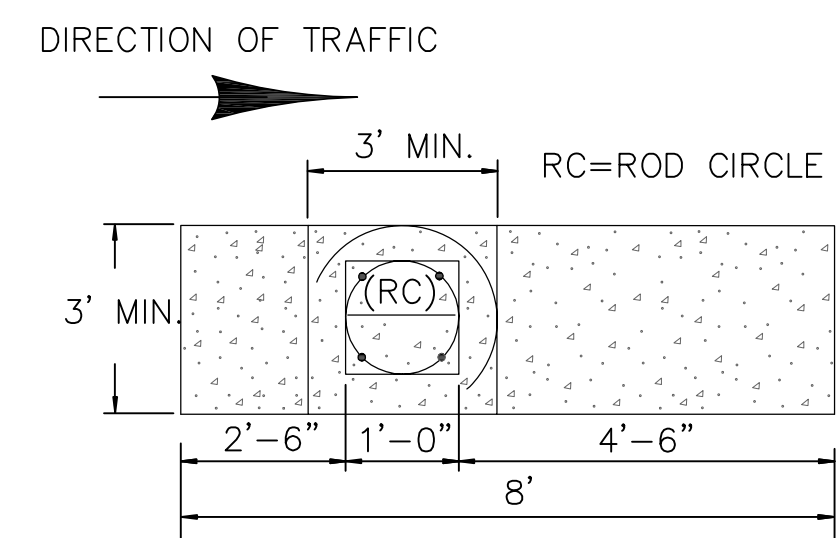
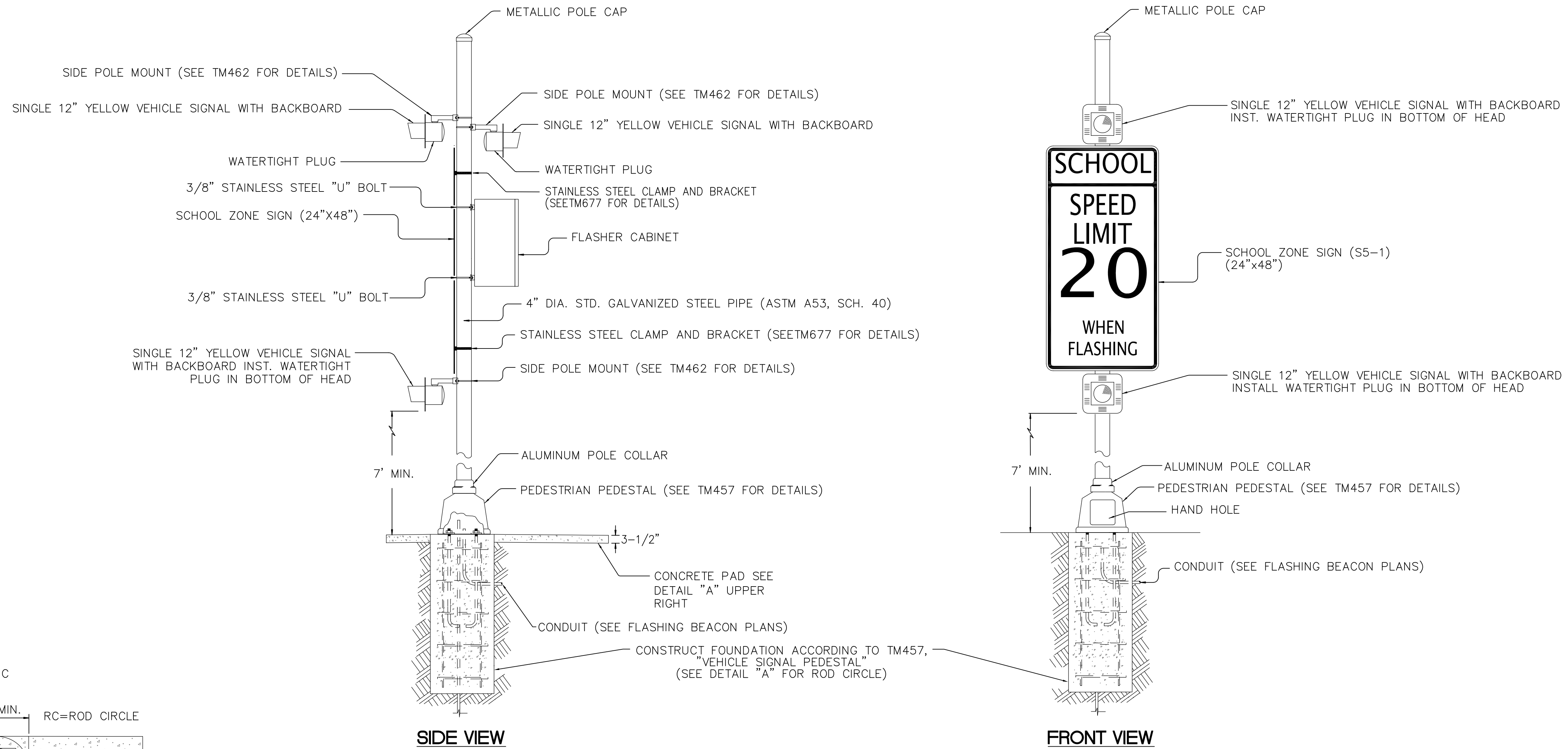
DESIGNED:	JWS
DRAWN:	KCD
CHECKED:	SJB
DATE:	08/28/2020



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FLASHING BEACON PLAN
SE LINWOOD AVENUE
 MILWAUKIE, OREGON

SHEET NO.
12.6
 106 OF 122
 JOB NO. MWK-28



DETAIL "A"
CONCRETE PAD AND
ROD CIRCLE

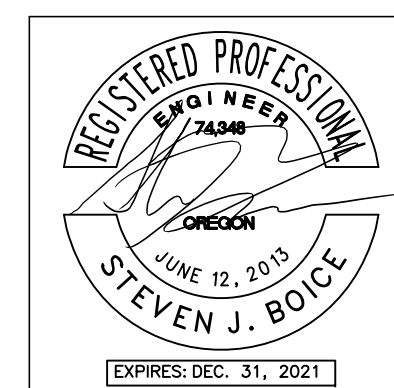
SCHOOL ZONE FLASHER

NOTES

1. AIM FRONT & REAR FLASHER HEADS SO THEY ARE VISIBLE TO MOTORISTS.
2. USE GREEN SHEET LISTED SYSTEMS ONLY.

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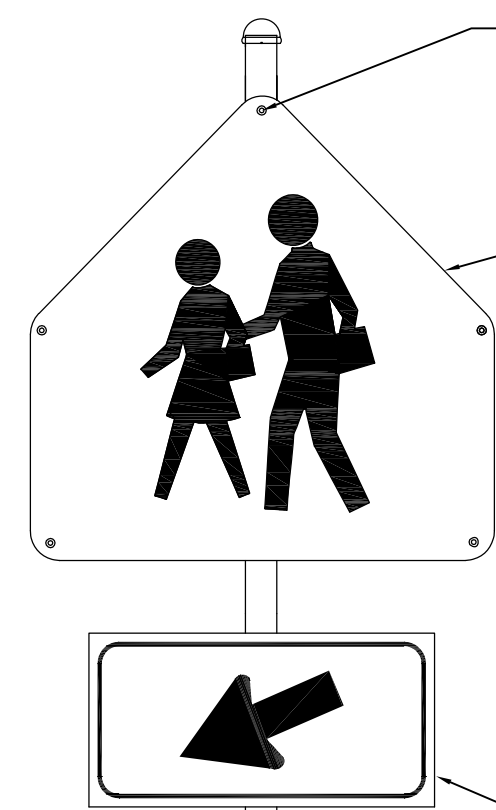
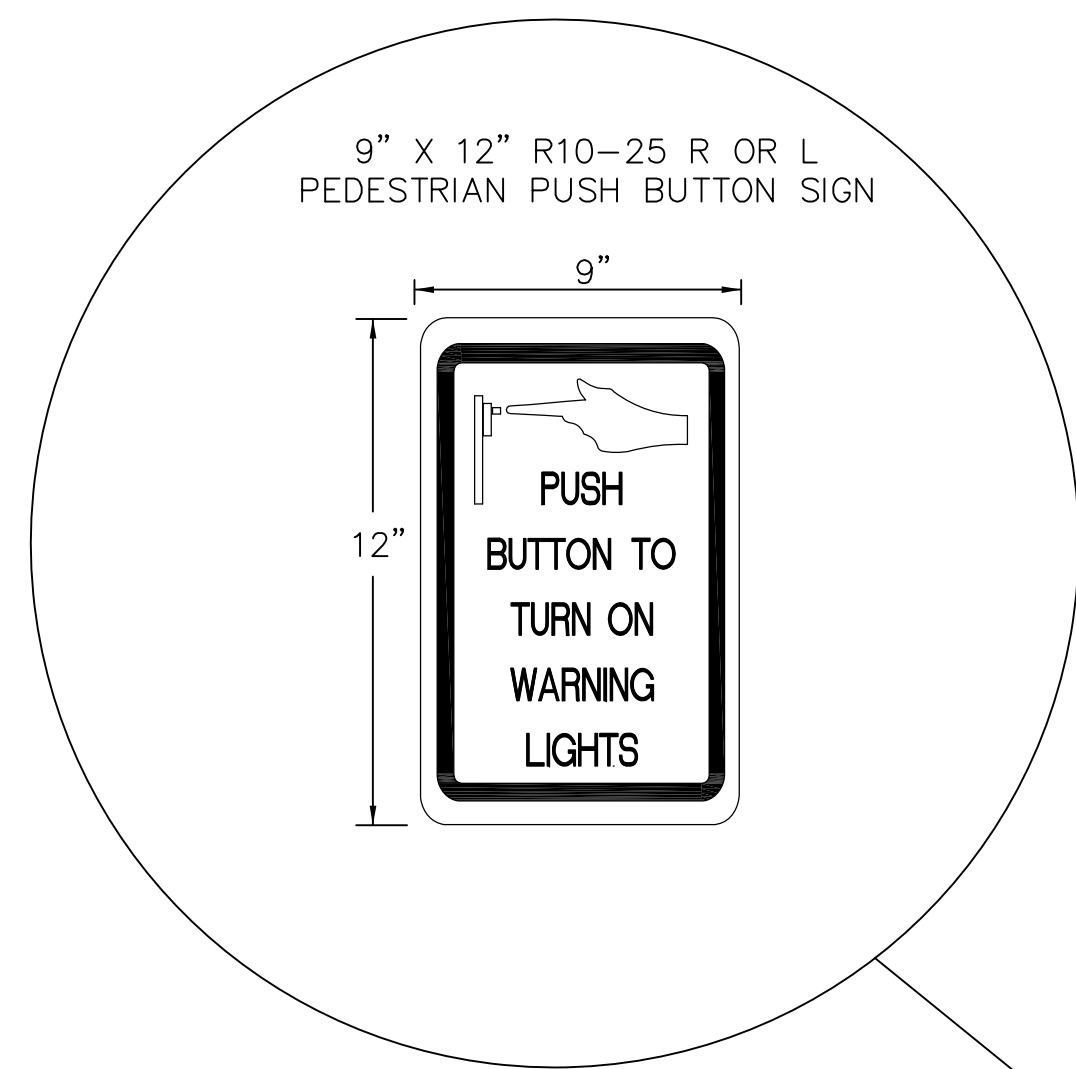
DESIGNED:	JWS	
DRAWN:	KCD	
CHECKED:	SJB	
DATE:	08/28/2020	
R E V I S I O N S		
DATE	NO.	DESCRIPTION



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<p>SCHOOL ZONE FLASHING BEACON DETAILS</p> <p>SE LINWOOD AVENUE</p> <p>MILWAUKIE, OREGON</p>		<p>SHEET NO.</p> <p style="font-size: 2em;">12.7</p> <p>107 OF 122</p> <p>JOB NO. MWK-28</p>
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SCHOOL CROSSING FLASHING BEACON DETAILS



RAPID FLASHING SINGLE WATT AMBER LEDS

36"x36" W11-2 FLUORESCENT YELLOW GREEN (Y1) PEDESTRIAN CROSSING SIGN (2 EACH). SEE TM677 FOR (SSC) STAINLESS STEEL CLAMP DETAIL.

18"x30" W16-7P SUPPLEMENTAL FLUORESCENT YELLOW GREEN (Y1) ARROW PLAQUE (2 EACH). SEE TM677 FOR (SSC) STAINLESS STEEL CLAMP DETAIL.

FRANGIBLE BASE MOUNTED FLUSH WITH SIDEWALK OR ISLAND. SEE TM457 FOR ADDITIONAL INFORMATION. TAPCO 203-00014 OR EQUIVALENT.

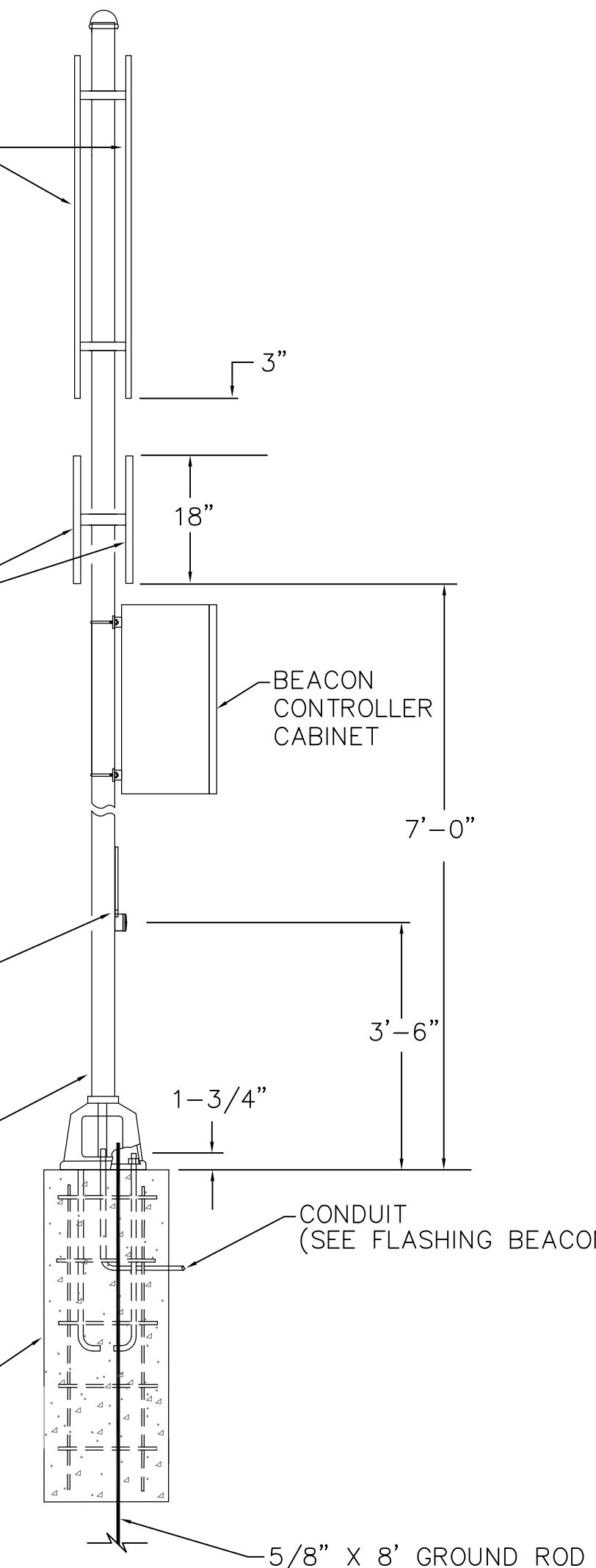
30 LB. BUILDING PAPER GASKET (TYP)

INSTALL PEDESTRIAN PUSHBUTTON AND R10-25 INSTRUCTION SIGN SEE TM458 & TM487 FOR DETAILS. POLARA NAVIGATOR OR EQUIVALENT.

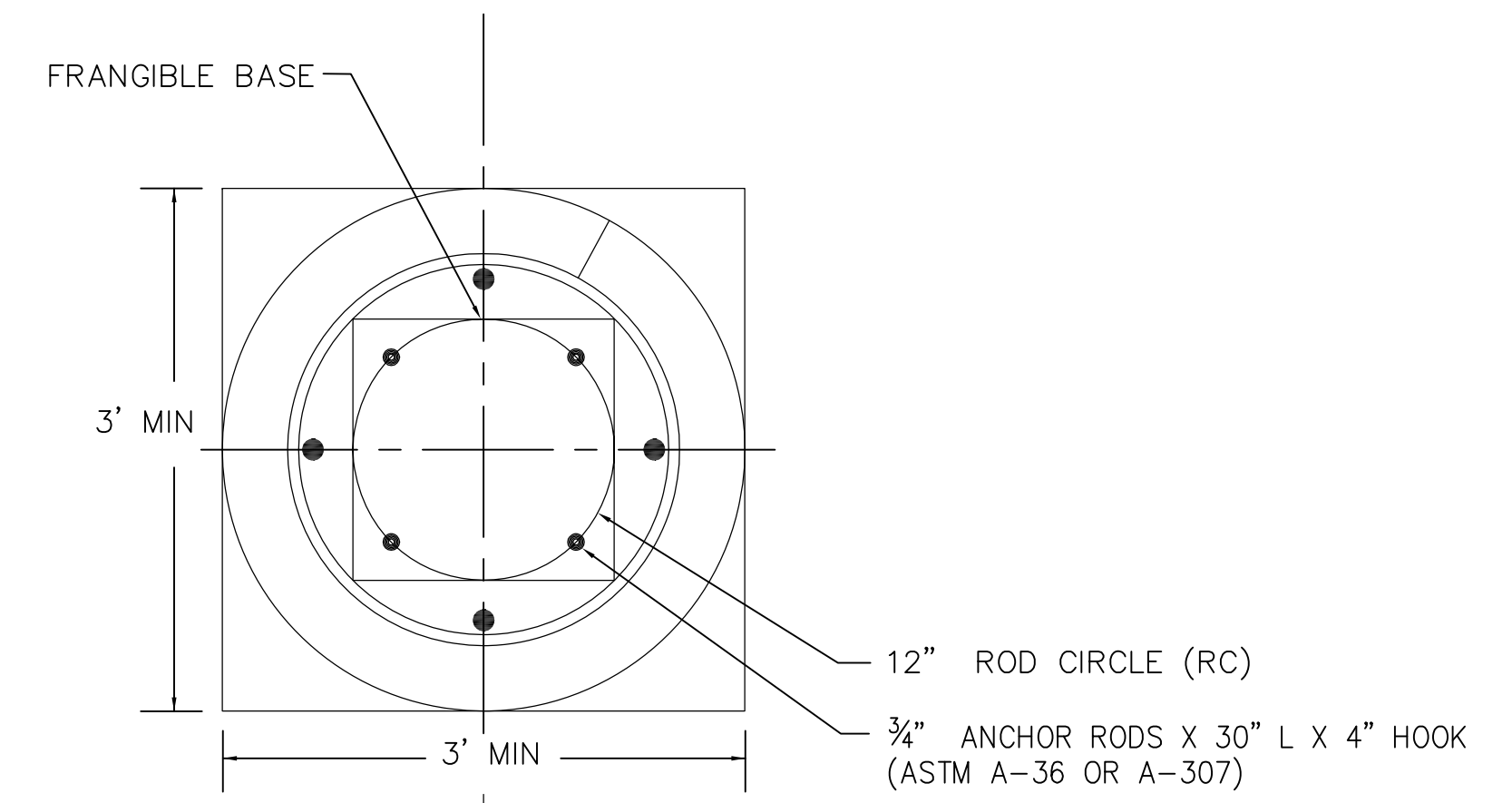
STD. PEDESTRIAN SIGNAL PEDESTAL 4" DIA. STD. GALVANIZED STEEL PIPE (ASTM A53, SCH. 40, 4 1/2" O.D.) W/FRANGIBLE BASE SEE TM457 FOR ADDITIONAL DETAILS. TAPCO 373-13 OR EQUIVALENT

CONSTRUCT FOUNDATION ACCORDING TO TM457 "VEHICLE SIGNAL PEDESTAL" (SEE DETAIL "A" AT RIGHT FOR ROD CIRCLE)

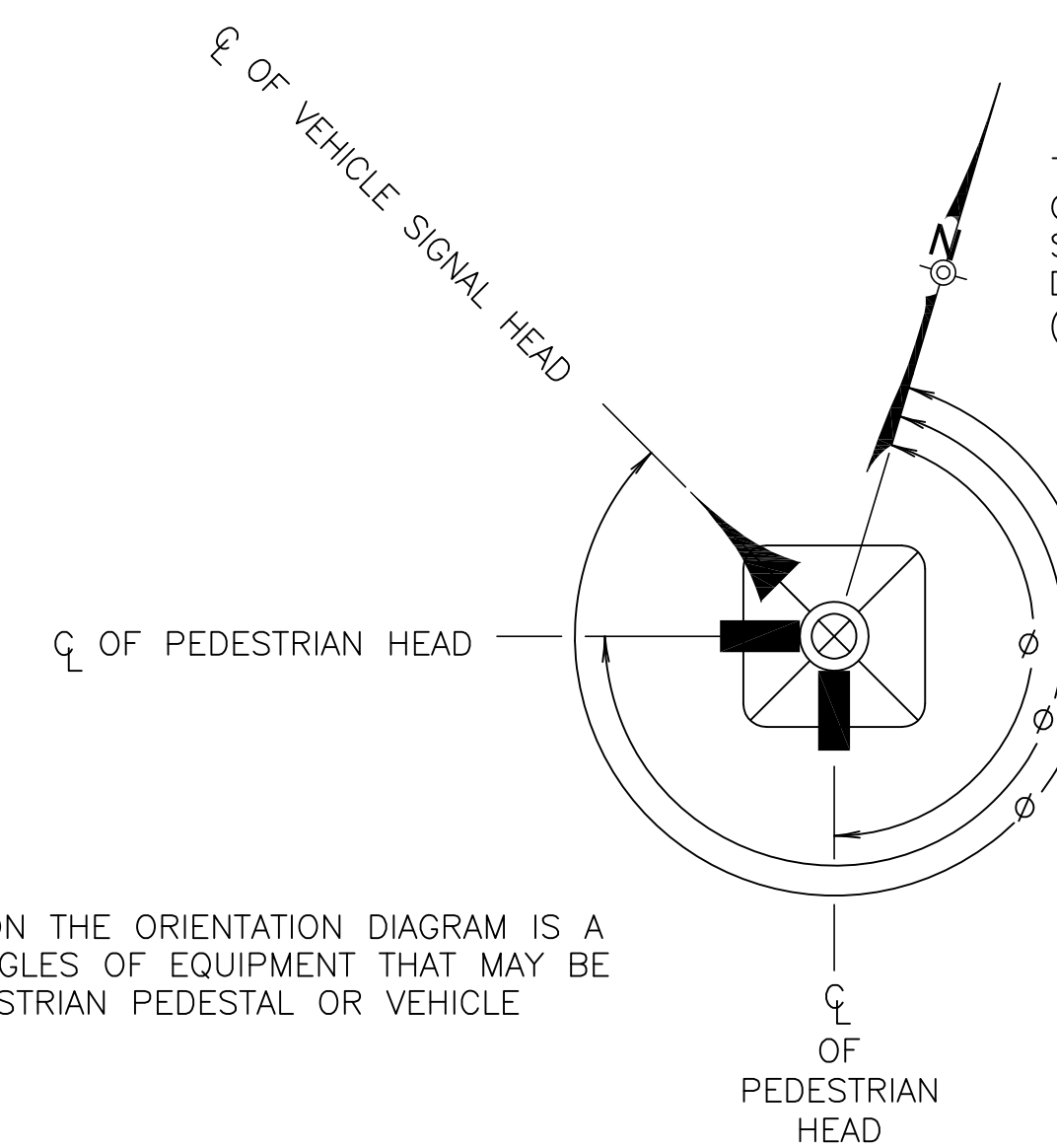
FRONT VIEW



SIDE VIEW



DETAIL "A"



THE NORTH ARROW SHOWN RELATES TO ZERO DEGREES ON PEDESTRIAN AND VEHICLE SIGNAL POLES. DEGREES SHOWN IN THE POLE ENTRANCE CHART SHOW THE DEGREES CLOCKWISE FROM PLAN SHEET NORTH ARROW (ZERO) TO EQUIPMENT LOCATED ON THE POLE.

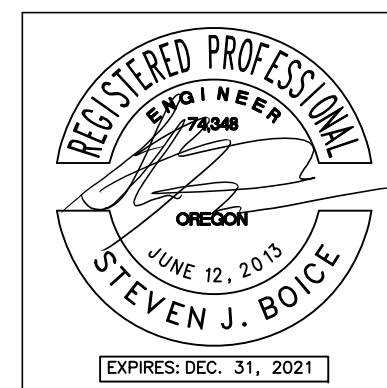
NOTE

EQUIPMENT SHOWN ON THE ORIENTATION DIAGRAM IS A CLARIFICATION OF ANGLES OF EQUIPMENT THAT MAY BE LOCATED ON A PEDESTRIAN PEDESTAL OR VEHICLE PEDESTAL

PEDESTRIAN PEDESTAL / VEHICLE PEDESTAL ORIENTATION DIAGRAM

FLASHING BEACON SYSTEM PEDESTRIAN PEDESTAL INSTALLATION (TWO SIDED)

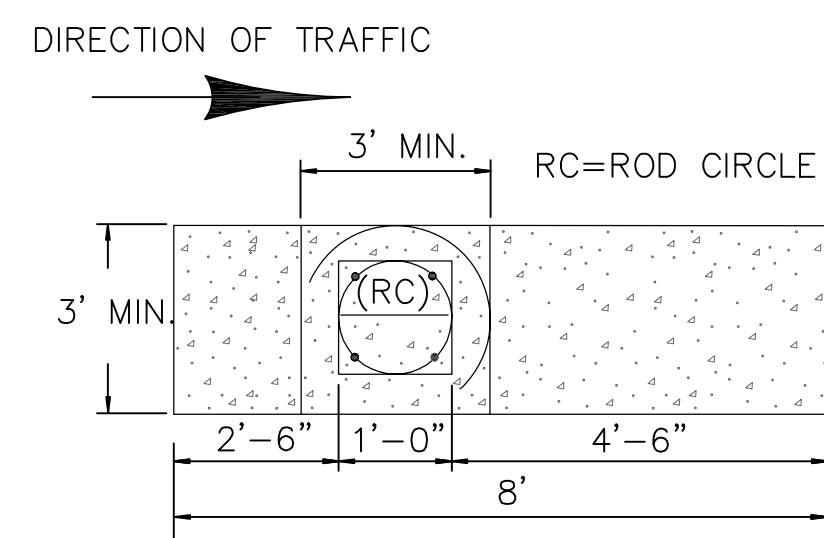
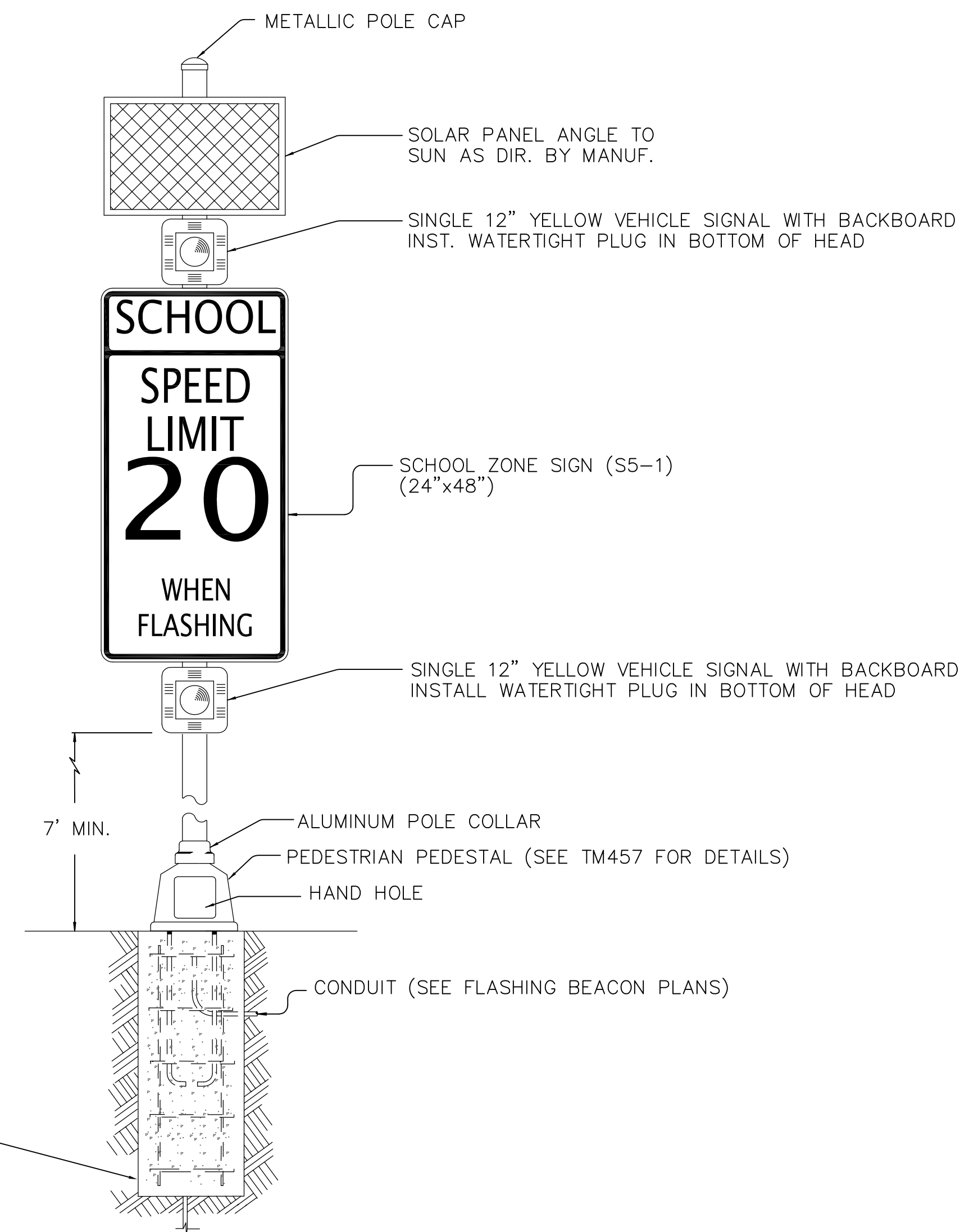
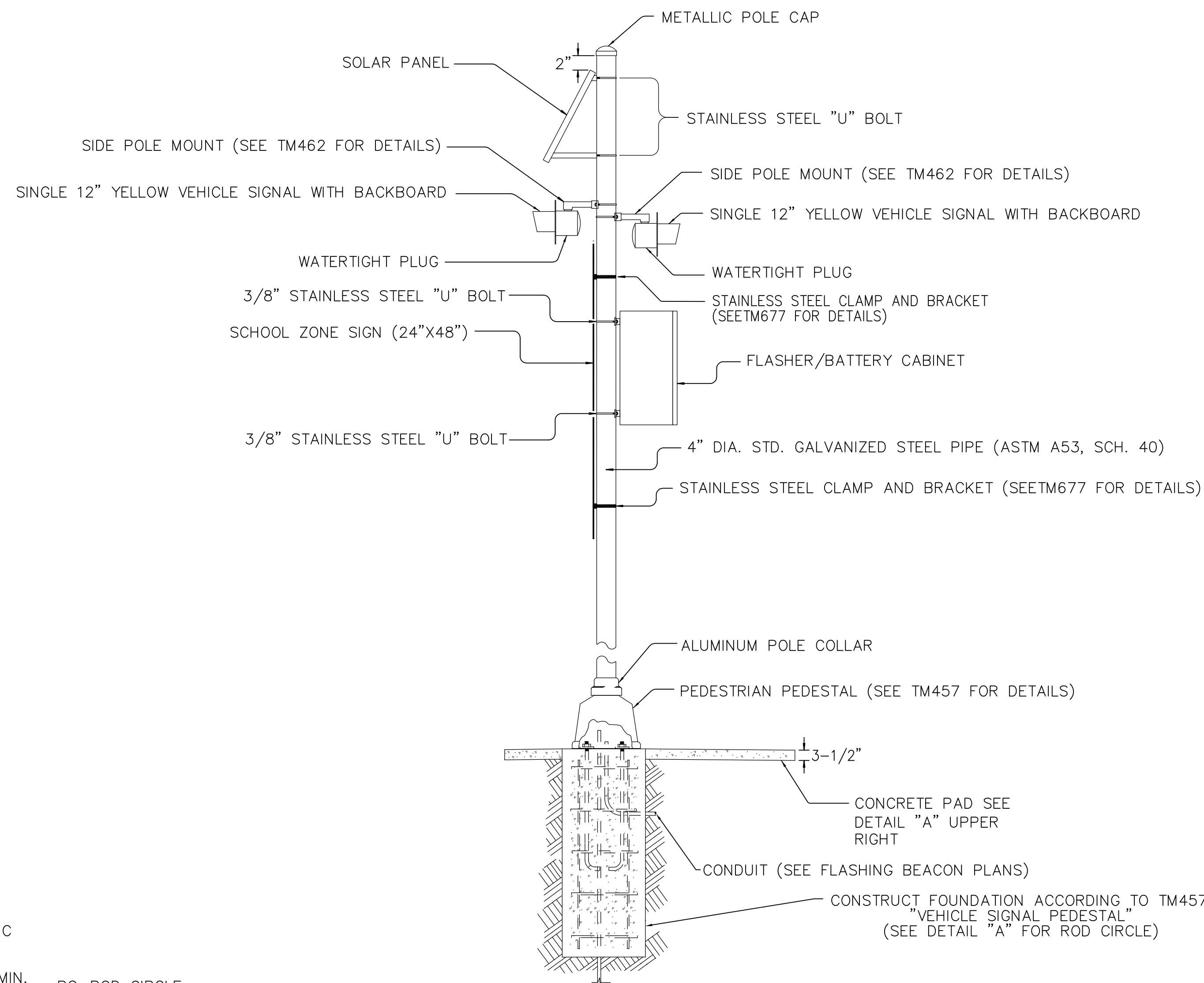
DESIGNED:	JWS						
DRAWN:	KCD						
CHECKED:	SJB						
DATE:	08/28/2020						
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DATE	NO.	DESCRIPTION					
10/05/2020	1	UPDATE PEDESTRIAN PUSH BUTTON MANUFACTURER AND SHEET NAME.					
R E V I S I O N S							



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SCHOOL CROSSING FLASHING BEACON DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.
12.8
108 OF 122
JOB NO.
MWK-28



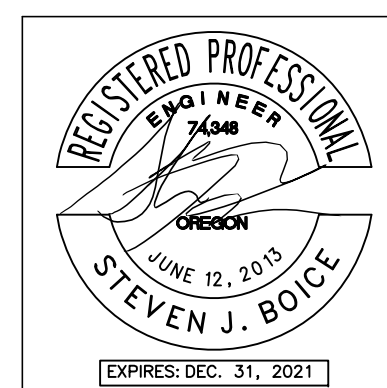
DETAIL "A"
CONCRETE PAD AND
ROD CIRCLE

SCHOOL ZONE FLASHER

NOTES

1. AIM FRONT & REAR FLASHER HEADS SO THEY ARE VISIBLE TO MOTORISTS.
2. USE GREEN SHEET LISTED SYSTEMS ONLY.

DESIGNED:	JWS
DRAWN:	KCD
CHECKED:	SJB
DATE:	08/28/2020
10/05/2020	UPDATE SHEET NAME.
DATE	NO. DESCRIPTION
R E V I S I O N S	



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SCHOOL ZONE FLASHING BEACON DETAILS
SE LINWOOD AVENUE
MILWAUKIE, OREGON

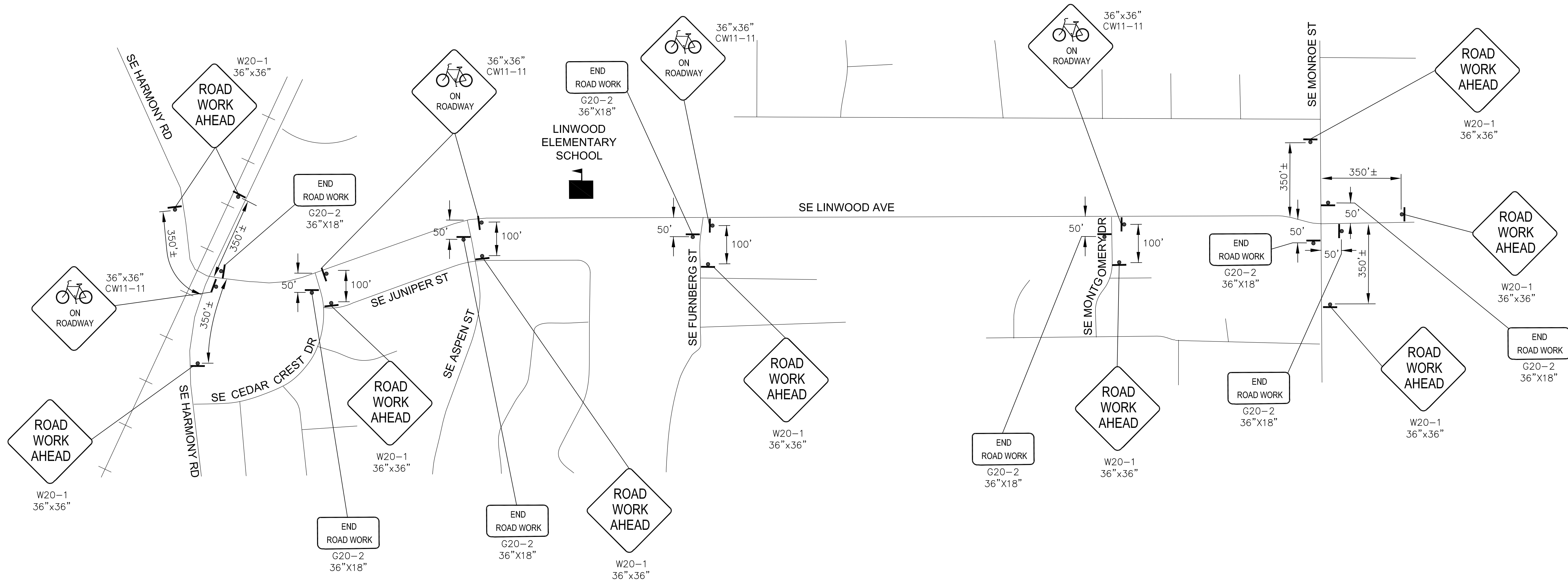
SHEET NO.

12.9

109 OF 122

JOB NO. MWK-28

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GENERAL NOTES

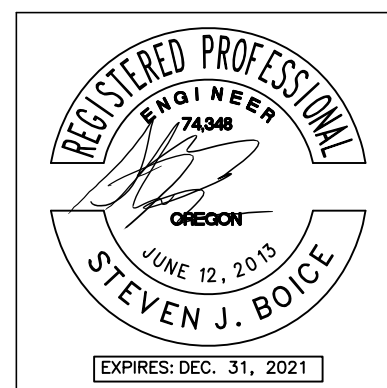
1. SIGN SPACING MAY NEED TO BE ADJUSTED TO FIT FIELD CONDITIONS.
2. LOCATIONS OF ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE APPROVED IN THE FIELD BY THE ENGINEER.
3. ALL TRAFFIC CONTROL DEVICES SHALL BE COMPLIANT FOR NIGHT REFLECTIVITY.
4. CONSTRUCT THE EAST SIDE OF SE LINWOOD AVE AND THE MULTI-USE PATH PRIOR TO THE WEST SIDE. MAINTAIN PEDESTRIANS ALONG THE WEST SIDE OF SE LINWOOD AVE DURING THE CONSTRUCTION OF THE EAST SIDE.
5. MAINTAIN PEDESTRIAN FACILITIES ALONG ONE SIDE OF ASPEN ST, FURNBERG ST, MONTGOMERY DR, AND MONROE ST AT ALL TIMES. FACILITATE PEDESTRIAN CROSSING OF LINWOOD AVE AT THESE INTERSECTIONS.
6. DURING CONSTRUCTION OF THE WEST SIDE OF SE LINWOOD AVE, MAINTAIN PEDESTRIANS ALONG THE EAST SIDE OF SE LINWOOD AVE ON THE NEW MULTI-USE PATH.

LEGEND

┆ TEMPORARY SIGN ON TEMPORARY SIGN SUPPORT



DESIGNED:	JWS	
DRAWN:	KCD	
CHECKED:	SJB	
DATE:	08/28/2020	
R E V I S I O N S		
DATE	NO.	DESCRIPTION

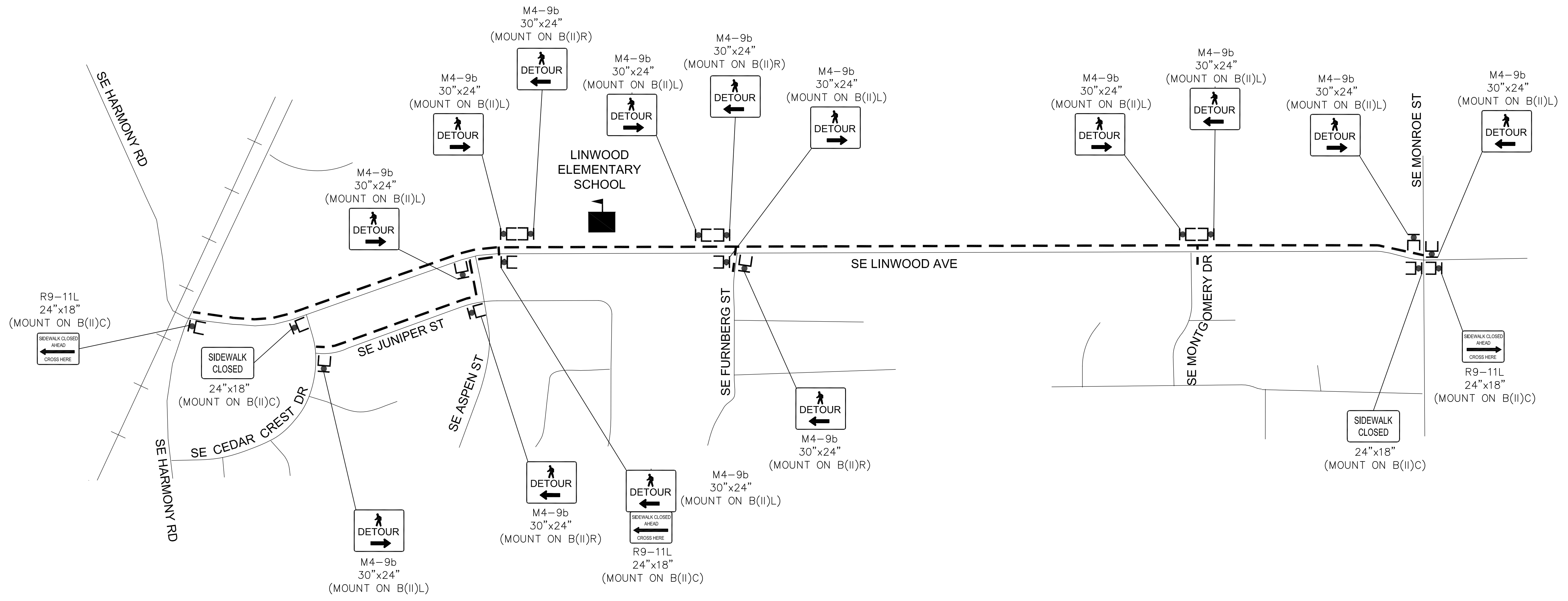


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ADVANCE SIGN PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.
13.0
110 OF 122
JOB NO. MWK-28

X:\Projects\2019\19104-000 (Milwaukie Linwood Ave Safe Routes to School)\CAD\13.1.dwg

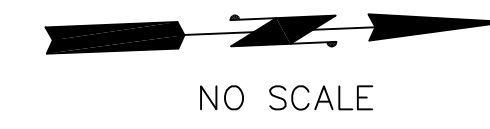


GENERAL NOTES

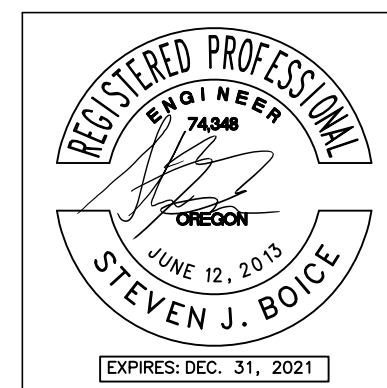
1. THIS PLAN IS TO BE USED DURING SIDEWALK AND ROAD CONSTRUCTION ALONG THE EAST SIDE OF LINWOOD AVE. USE ALONG WITH ADVANCED SIGNING ON SHEET 13.0.
2. ALLOW ACCESS AND USE OF MIDBLOCK CROSSWALK AND FLASHING BEACON DURING CONSTRUCTION.

LEGEND

-  SIGN ON BARRICADE
-  TEMPORARY PEDESTRIAN ROUTE



DESIGNED:	JWS	
DRAWN:	KCD	
CHECKED:	SJB	
DATE:	08/28/2020	
DATE	NO.	DESCRIPTION
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CONSTRUCTION PEDESTRIAN ROUTING
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.

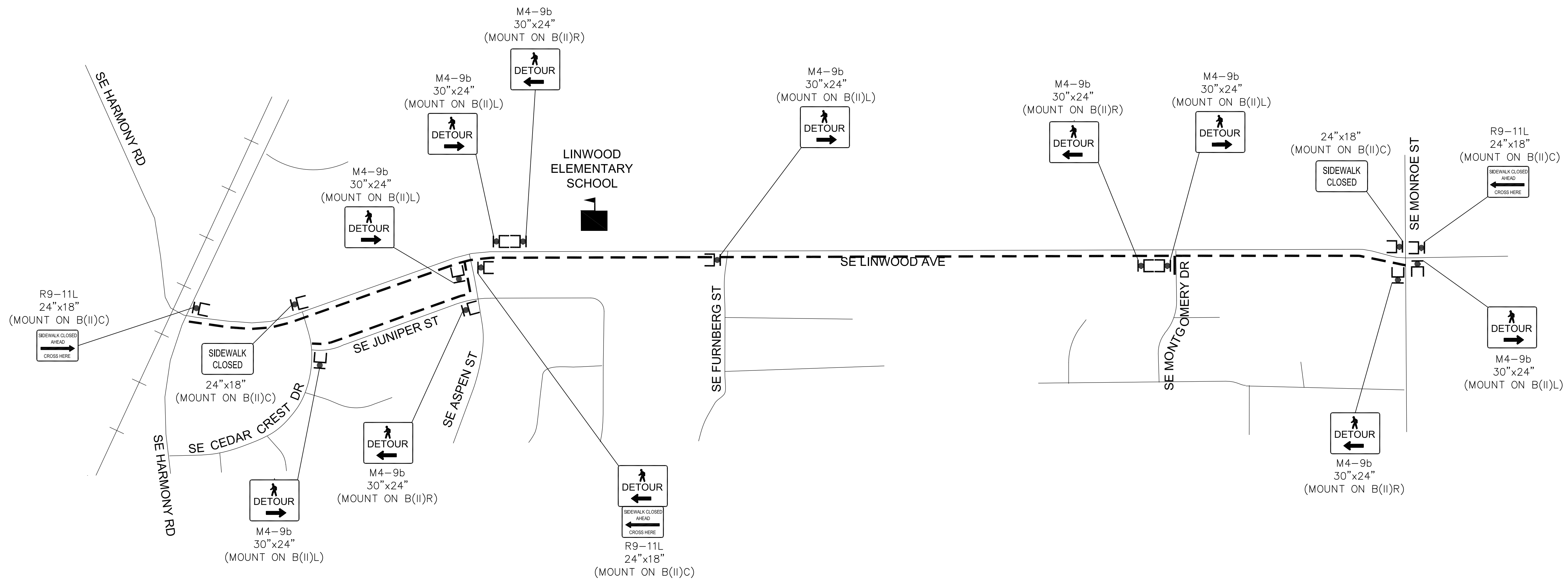
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111 OF 122

JOB NO.

MWK-28

X:\Projects\2019\19104-000 (Milwaukie Linwood Ave Safe Routes to School)\CAD\13.2.dwg

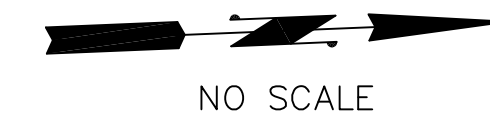


GENERAL NOTES

1. THIS PLAN IS TO BE USED DURING SIDEWALK AND ROAD CONSTRUCTION ALONG THE WEST SIDE OF LINWOOD AVE. USE ALONG WITH ADVANCED SIGNING ON SHEET 13.0.
2. ALLOW ACCESS AND USE OF MIDBLOCK CROSSWALK AND FLASHING BEACON DURING CONSTRUCTION.

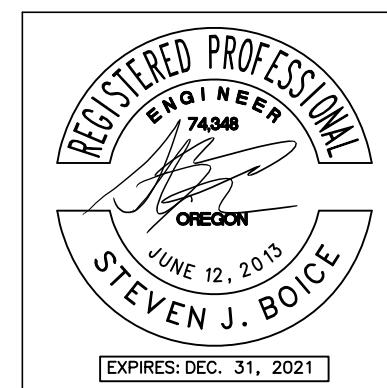
LEGEND

-  SIGN ON BARRICADE
-  TEMPORARY PEDESTRIAN ROUTE



DATE	NO.	DESCRIPTION
R E V I S I O N S		

DESIGNED:	JWS
DRAWN:	KCD
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DATE:	08/28/2020



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CONSTRUCTION PEDESTRIAN ROUTING
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	13.2
	112 OF 122
JOB NO.	MWK-28

LEGEND

- (EX/UP) RETAIN AND PROTECT EXISTING WOOD POLE.
- (RX/UP) PGE TO REMOVE EXISTING UTILITY POLE.
- (RX/LA) PGE TO REMOVE EXISTING LUMINAIRE ARM AND EXISTING LUMINAIRE.
- (RR/UP) PGE TO REMOVE AND RELOCATE EXISTING WOOD UTILITY POLE.
- (RI/UP) PGE TO REINSTALL EXISTING WOOD UTILITY POLE.
- (N) LUMINAIRE NO. (N) FOR ROADWAY ILLUMINATION (SEE LUMINAIRE TABLE).
- (UP) PGE TO INSTALL WOOD UTILITY POLE.
- (LA/N) PGE TO FURNISH AND INSTALL NEW LUMINAIRE ARM, (N) = LENGTH.
- (LED) PGE TO FURNISH AND INSTALL NEW LIGHT EMITTING DIODE LUMINAIRE (SEE LUMINAIRE TABLE).
- (HSS) PGE TO INSTALL LUMINAIRE HOUSE SIDE SHIELD.

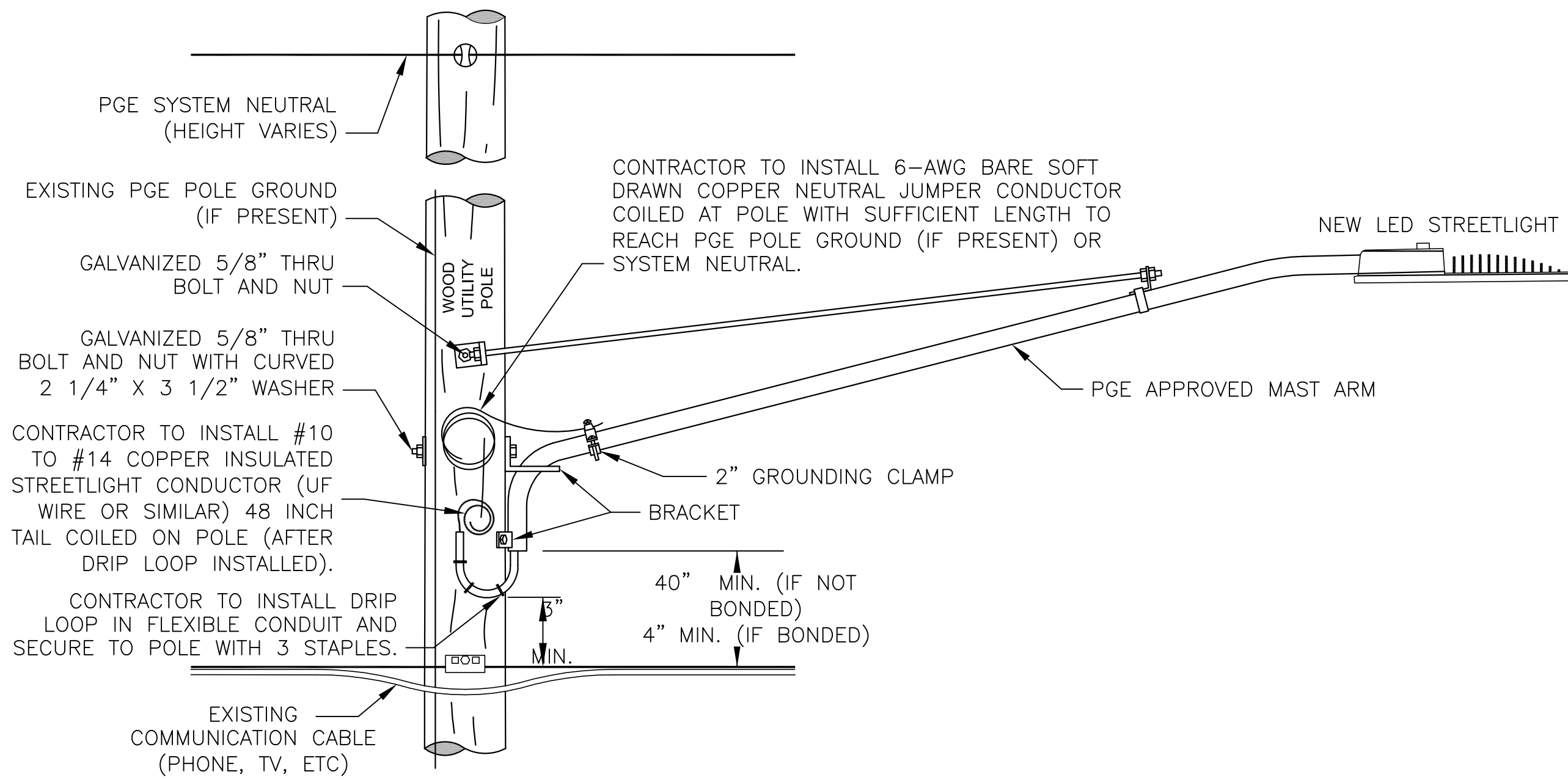
GENERAL NOTES

1. STREET LIGHTING MATERIALS AND INSTALLATIONS ALONG LINWOOD AVE SHALL CONFORM TO PORTLAND GENERAL ELECTRIC (P.G.E) SCHEDULE 95 OPTION "A" SPECIFICATIONS. MATERIALS AND INSTALLATION SHALL BE APPROVED BY P.G.E., UNLESS NOTED OTHERWISE.
2. CONTACT JASON MORIN (503) 672-5474 FOR PGE APPROVED LIGHTING MATERIALS. REFER TO PGE WORK ORDER #M2921438.

LIGHTING VALUES TABLE				
LOCATION	TARGETED AVERAGE ILLUMINANCE (fc)	ACHIEVED AVERAGE ILLUMINANCE (fc)	TARGETED UNIFORMITY (Avg/Min)	ACHIEVED UNIFORMITY (Avg/Min)
INTERSECTIONS				
SE LINWOOD AVE/ SE MONROE ST	≥2.2	2.4	≤3:1	2.4
SE LINWOOD AVE/ SE MONTGOMERY DR	≥2.0	2.1	≤3:1	1.9
SE LINWOOD AVE/ SE FURNBERG ST	≥2.0	2.0	≤3:1	2.2
SE LINWOOD AVE/ SE ASPEN ST	≥2.0	2.0	≤3:1	1.8
SE LINWOOD AVE/ SE CEDARCREST DR	≥2.0	2.0	≤3:1	2.0
ROADWAY SEGMENTS - SE LINWOOD AVE				
SE MONROE ST TO SE MONTGOMERY DR	≥1.3	1.3	≤3:1	3.3
SE MONTGOMERY DR TO SE FURNBERG ST	≥1.3	1.3	≤3:1	3.1
SE FURNBERG ST TO SE ASPEN ST	≥1.3	1.3	≤3:1	2.6
SE ASPEN ST TO SE CEDARCREST DR	≥1.3	1.5	≤3:1	2.9
MULTI-USE PATH- SE LINWOOD AVE				
SE MONROE ST TO SE HARMONY RD (WEST)	≥0.5	1.0	≤4:1	5.0
SE MONROE ST TO SE HARMONY RD (EAST)	≥0.5	0.5	≤4:1	4.7

LIGHT POLE TABLE												
POLE NO.	STREET	STATION	OFFSET* (ft)	POLE TYPE	MOUNTING HEIGHT (ft)	ARM LENGTH (ft)	LUMINAIRE					
							MANUFACTURER	PGE PART NUMBER	LIGHT SOURCE	WATTAGE	TYPE	LIGHT LOSS FACTOR
1	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
2	LINWOOD AVENUE	14+13	8.5	UP	35	8	LEOTEK	GCL-80G-MV-WW-3R-GY-610-PCR7-RWG-WL-FDC-PGE	LED	160	III	0.85
3	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
4	LINWOOD AVENUE	16+27	2.0	UP	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
5	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
6	LINWOOD AVENUE	18+96	2.0	UP	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
7	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
8	LINWOOD AVENUE	20+82	8.5	UP	35	8	LEOTEK	GCL-80G-MV-WW-3R-GY-610-PCR7-RWG-WL-FDC-PGE	LED	160	III	0.85
9	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
10	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
11	LINWOOD AVENUE	23+93	2.0	UP	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
12	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
13	LINWOOD AVENUE	26+27	2.0	UP	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
14	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
15	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
16	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCL-80G-MV-WW-3R-GY-610-PCR7-RWG-WL-FDC-PGE	LED	160	III	0.85
17	LINWOOD AVENUE	31+81	2.0	UP	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
18	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
19	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
20	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
21	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
22	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
23	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
24	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
25	LINWOOD AVENUE	44+10	2.0	UP	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
26	LINWOOD AVENUE	45+01	2.0	UP	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
27	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
28	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
29	LINWOOD AVENUE	47+92	8.5	UP	35	8	LEOTEK	GCL-80G-MV-WW-3R-GY-610-PCR7-RWG-WL-FDC-PGE	LED	160	III	0.85
30	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
31	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
32	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
33	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
34	LINWOOD AVENUE	55+12	5.0	UP	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
35	LINWOOD AVENUE	56+08	8.0	UP	35	8	LEOTEK	GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE	LED	88	II	0.88
36	LINWOOD AVENUE	EX	EX	EX	35	8	LEOTEK	GCL-80G-MV-WW-3R-GY-610-PCR7-RWG-WL-FDC-PGE	LED	160	III	0.85

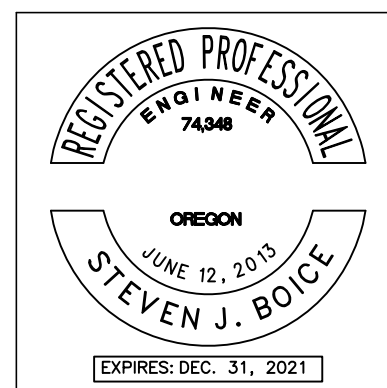
* OFFSET IS MEASURED FROM FACE OF CURB TO FACE OF POLE (2.0 FT MIN).
EX = EXISITNG



LUMINAIRE CONNECTION DETAILS

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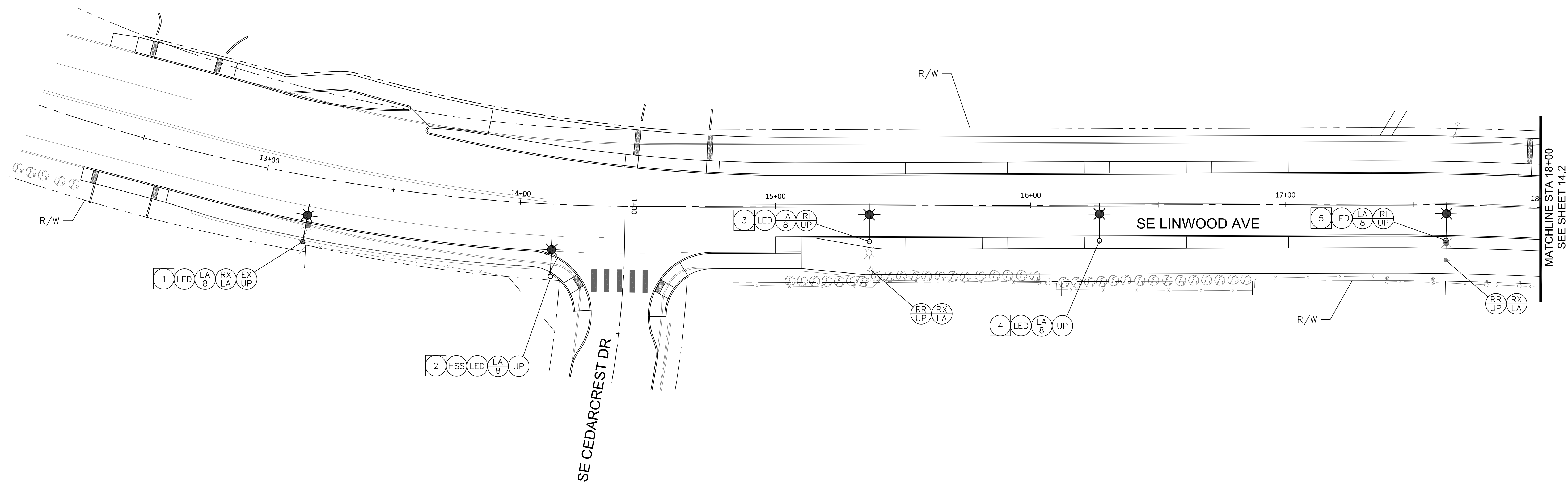
ILLUMINATION LEGEND
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.

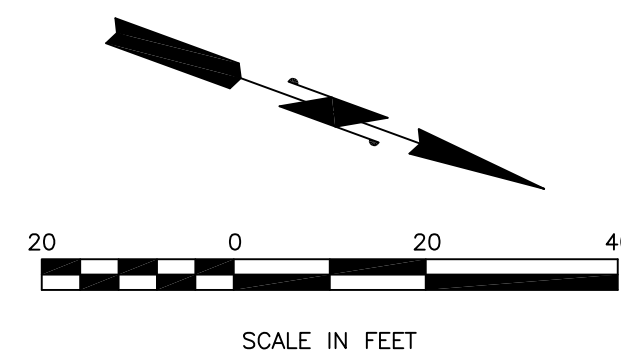
14.0
113 OF 122

JOB NO. MWK-28

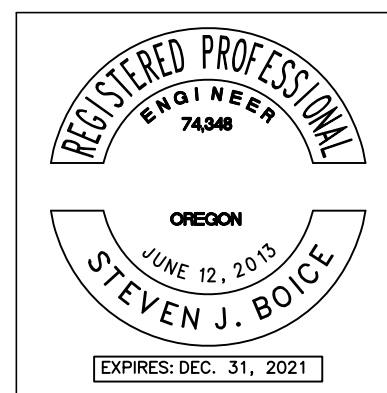
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NOTE:
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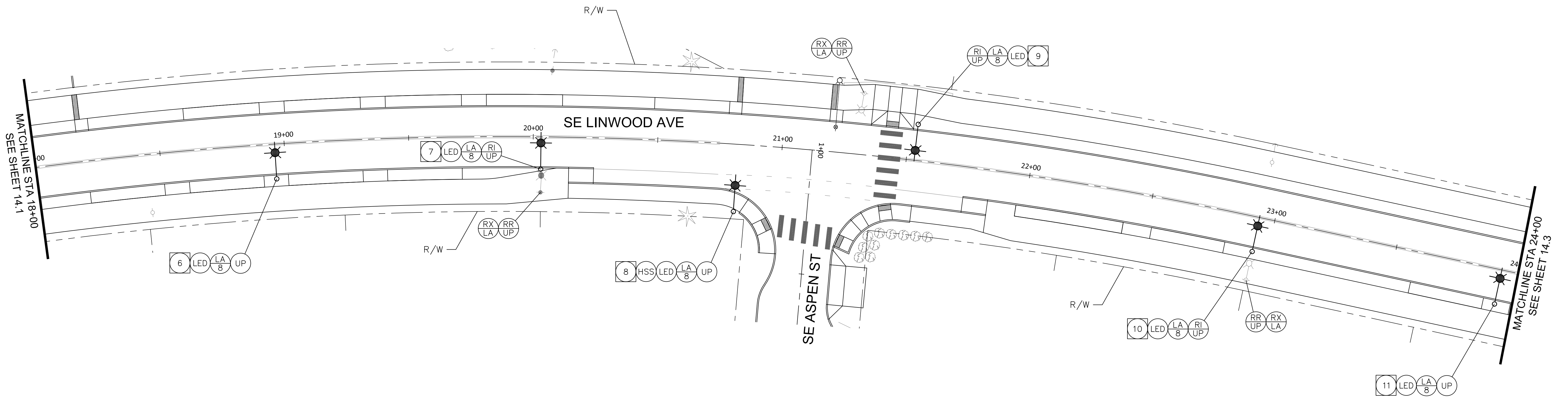


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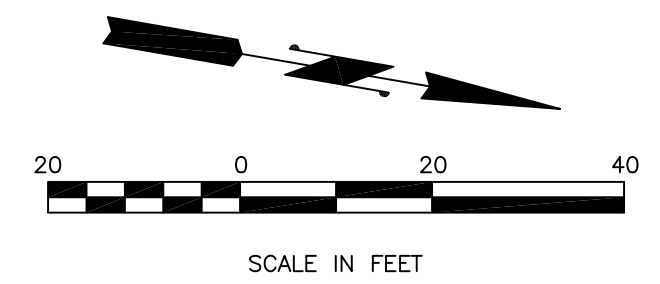
ILLUMINATION PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	14.1
	114 OF 122
JOB NO.	MWK-28

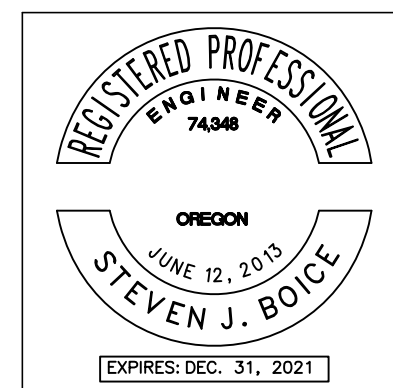
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NOTE:
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DATE	NO.	DESCRIPTION
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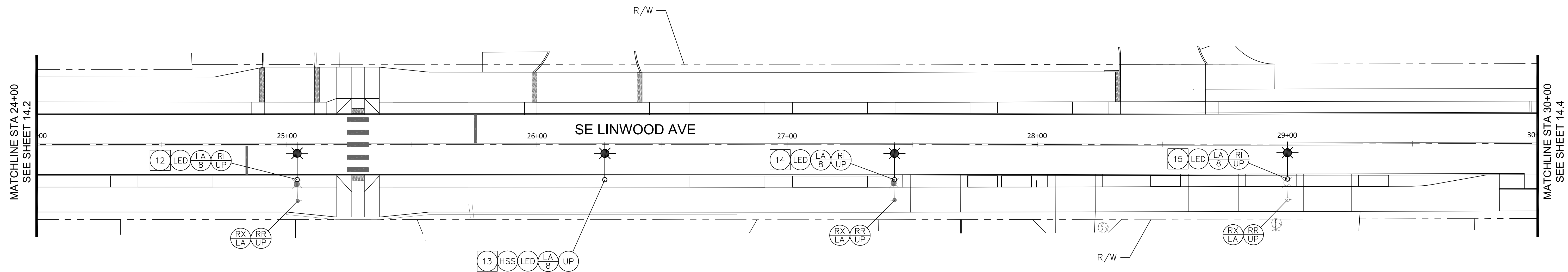


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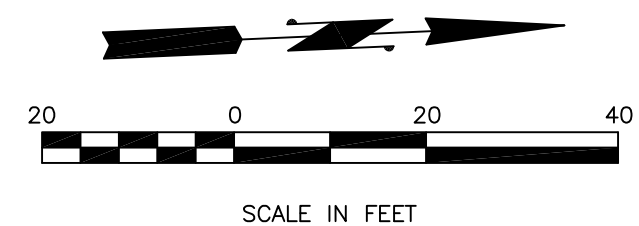
ILLUMINATION PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.
14.2
115 OF 122
JOB NO.
MWK-28

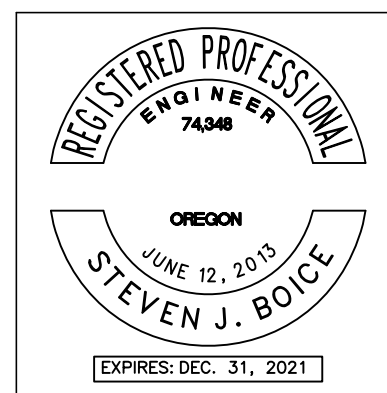
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			DATE:	08/28/2020
DATE	NO.	DESCRIPTION		
R E V I S I O N S				

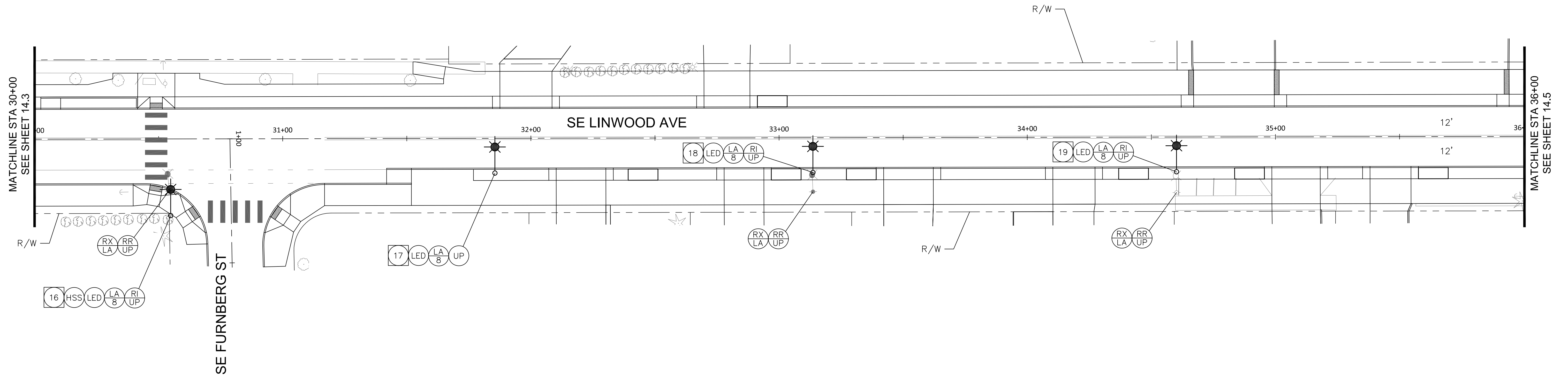


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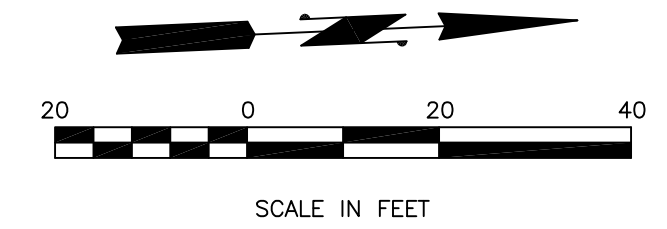
ILLUMINATION PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	14.3
	116 OF 122
JOB NO.	MWK-28

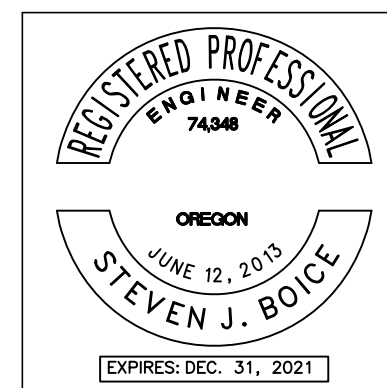
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NOTE:
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DATE	NO.	DESCRIPTION	
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ILLUMINATION PLAN
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MILWAUKIE, OREGON

SHEET NO.

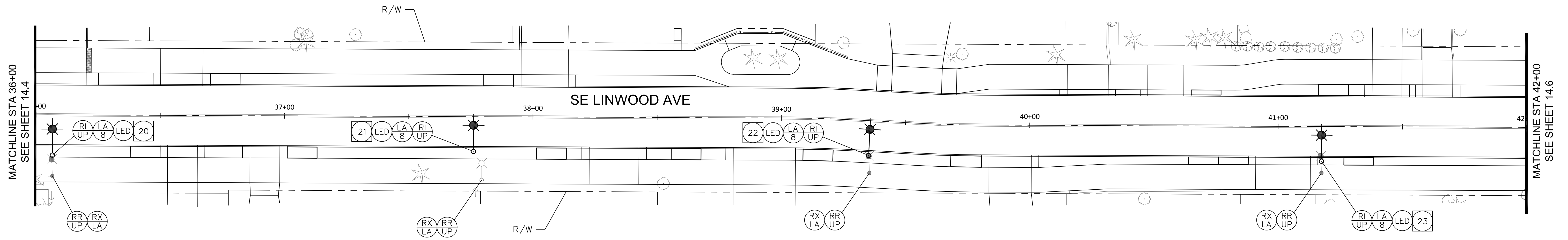
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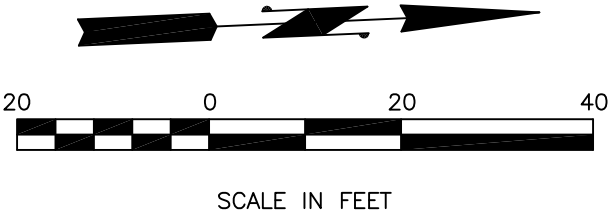
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MWK-28

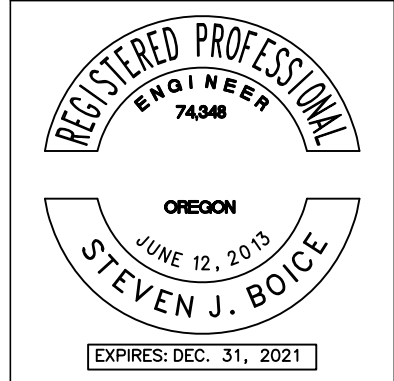
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NOTE:
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DATE	NO.	DESCRIPTION		
R E V I S I O N S				

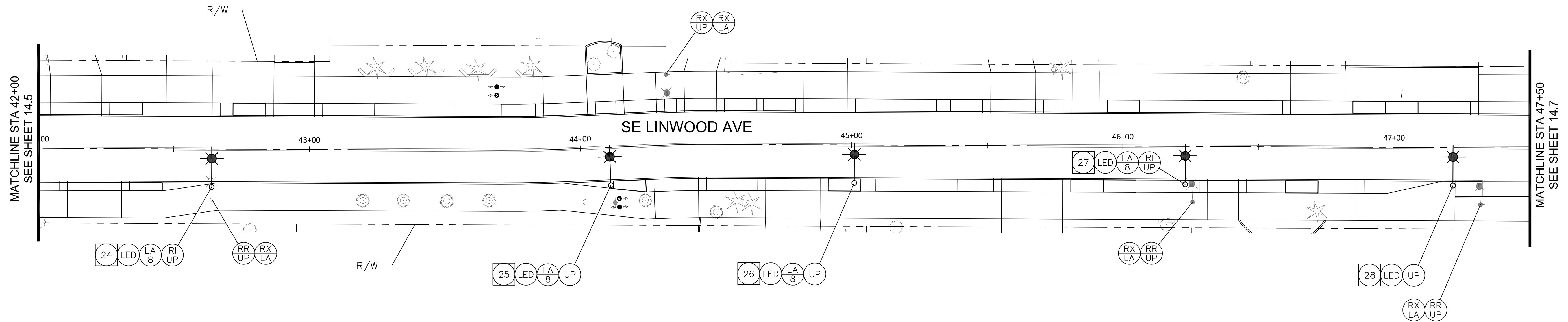


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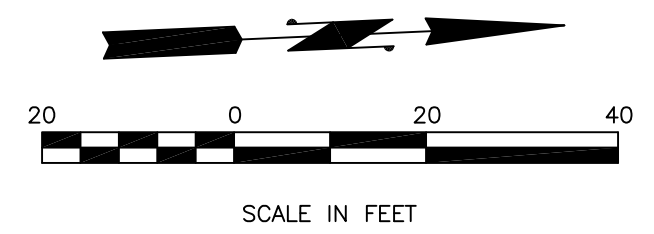
ILLUMINATION PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	14.5
	118 OF 122
JOB NO.	MWK-28

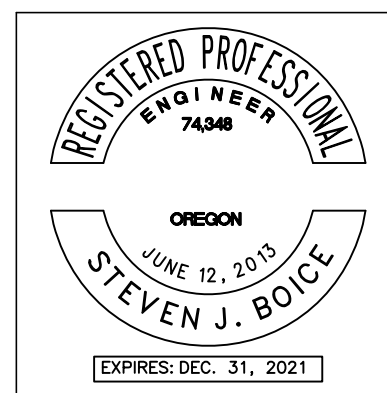
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NOTE:
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			DRAWN:	KCD
			CHECKED:	SJB
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DATE	NO.	DESCRIPTION		
R E V I S I O N S				

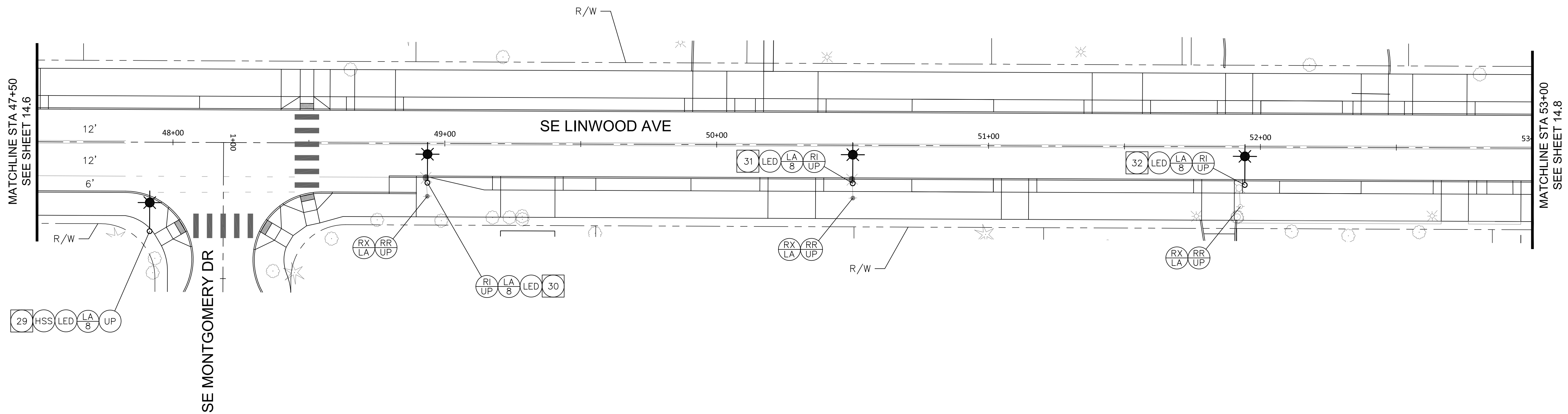


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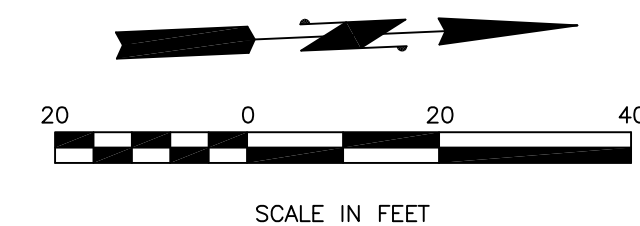
ILLUMINATION PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.	14.6
	119 OF 122
JOB NO.	MWK-28

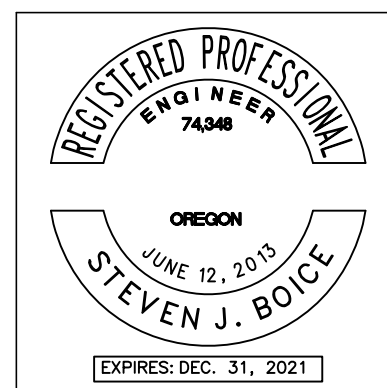
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NOTE:
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		CHECKED:	SJB
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DATE	NO.	DESCRIPTION	
R E V I S I O N S			

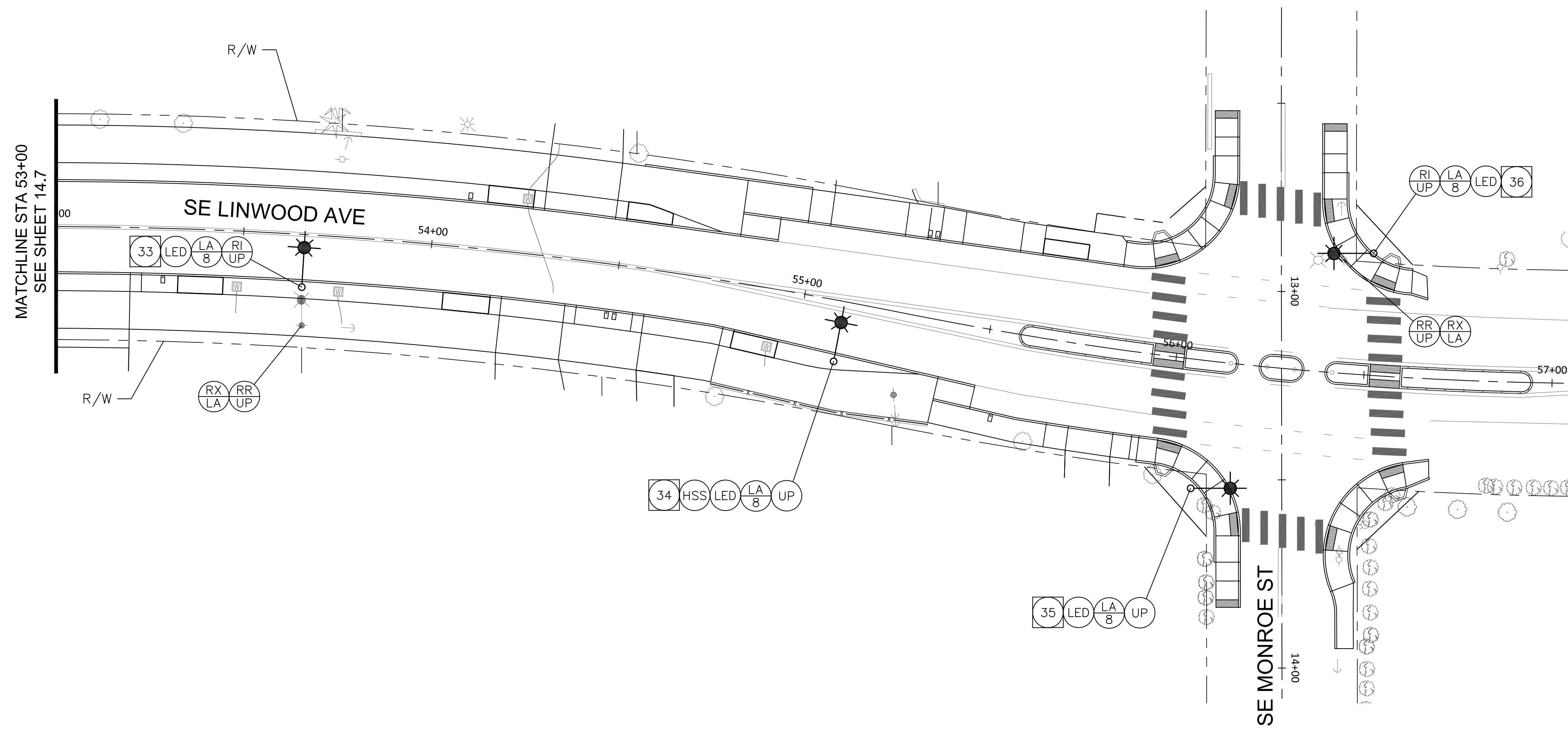


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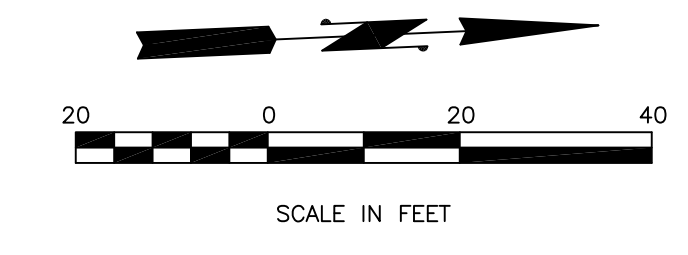
ILLUMINATION PLAN
SE LINWOOD AVENUE
MILWAUKIE, OREGON

SHEET NO.
14.7
120 OF 122
JOB NO.
MWK-28

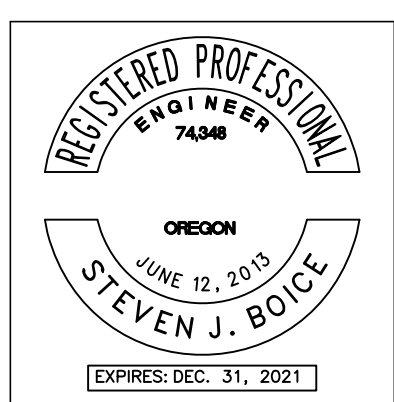
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NOTE:
SEE SHEET 14.0 FOR ILLUMINATION
LEGEND.



DESIGNED:	JWS	
DRAWN:	KCD	
CHECKED:	SJB	
DATE:	08/28/2020	
DATE	NO.	DESCRIPTION
R E V I S I O N S		



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