

CITY OF MILWAUKIE, OREGON

# SOUTH DOWNTOWN IMPROVEMENTS

CIP2017-T36, CIP2017-Y16, CIP2018-Y18, CIP2018-T44

PROJECT DESCRIPTION

The project consists of storm pipe relocation and upgrades along Main Street and Washington Street as indicated. Main Street will be regraded and built per plan. Washington Street will have curbs relocated, sidewalks reconstructed and repaved as indicated.

PROJECT MANAGER

Name: Jennifer Garbely, PE  
Title: Civil Engineer  
Phone Number: (503) 786-7609  
Email Address: GarbelyJ@milwaukieoregon.gov

MILWAUKIE OPERATIONS

Name: Emergency On-Call  
Phone Number: (503) 348-8833

MILWAUKIE INSPECTIONS

Phone Number: (888) 299-2821  
Website: buildingpermits.oregon.gov

PORTLAND GENERAL ELECTRIC

Name: Toby Anderson  
Phone Number (Emergency): (503) 464-7777  
Phone Number (Service): (503) 736-8280

NORTHWEST NATURAL

Name: Raymond Stauss  
Phone Number: (503) 226-4211 ext. 6746

CENTURY LINK

Name: Kenneth Sciulli  
Phone Number: (503) 242-0304

COMCAST

Name: Kenneth Wills  
Phone Number: (503) 596-3767

Oregon law requires contractors to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through 952-001-0090. Contractors may obtain copies of the rules by calling the Oregon Utility Notification Center at 503-232-1987.



CITY OF MILWAUKIE  
ENGINEERING DEPARTMENT  
6101 SE JOHNSON CREEK BLVD  
MILWAUKIE, OR 97206  
PHONE (503) 786-7600  
FAX (503) 774-8236



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM



720 SW WASHINGTON STREET,  
STE. 500  
PORTLAND, OR 97205  
WWW.DKSASSOCIATES.COM



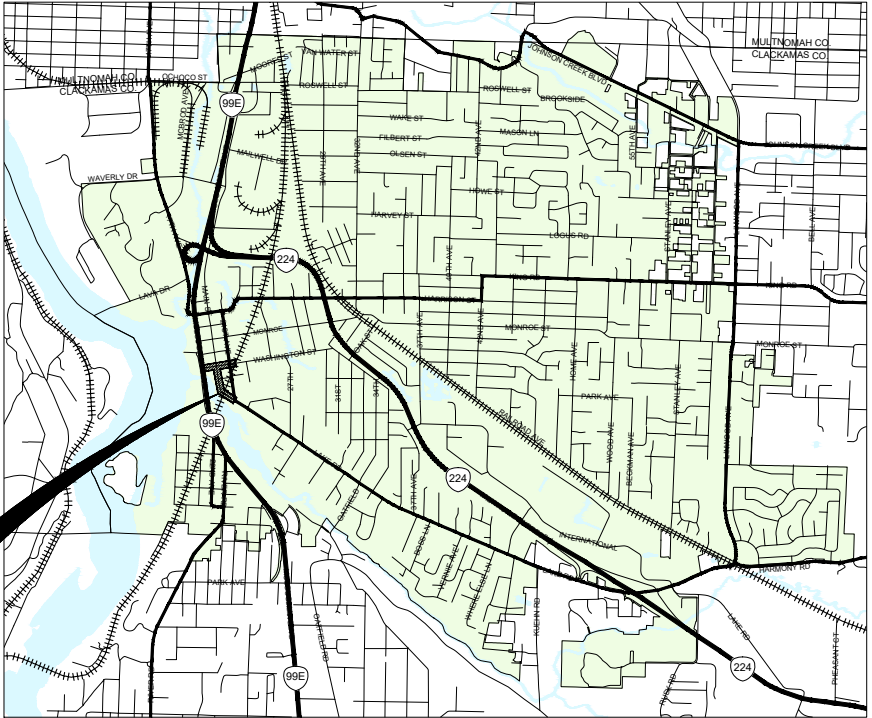
Otak, Inc.  
700 Washington St., Suite 300  
Vancouver, WA 98660  
360.737.9613  
www.otak.com



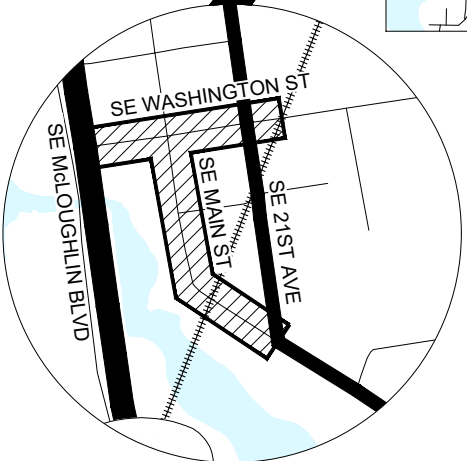
WWW.PAE-ENGINEERS.COM



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM



PROJECT MAP  
Scale: N.T.S.



PROJECT VICINITY  
(SEWER LINE)  
Scale: N.T.S.

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

COVER SHEET

PROJECT NO.: CIP2018 CONTRACT NO.: C2018-051 DATE: 08/14/2018 SHEET NO.: CV01





1

2

3

4

5

6

7

GENERAL NOTES:

1. THE LOCATION AND DESCRIPTION OF UTILITIES AND PROPERTY LINES SHOWN ARE COMPILED FROM AVAILABLE RECORDS AND FIELD SURVEYS. THE CITY AND UTILITY COMPANIES DO NOT GUARANTEE THE ACCURACY NOR THE COMPLETENESS OF SUCH RECORDS.

2. 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 ENGINEER.

3. THE CONTRACTOR SHALL HAVE AT ALL TIMES ON-SITE, THE APPROVED CONSTRUCTION PLANS & SPECIAL SPECIFICATIONS, CITY OF MILWAUKIE STANDARD SPECIFICATIONS & STANDARD PLANS, AND ALL OTHER APPLICABLE SPECIFICATIONS BOOKS AND MANUALS.

4. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THESE PLANS AND THE APPLICABLE REQUIREMENTS OF THE 2018 EDITION OF THE OREGON (ODOT/APWA) STANDARD SPECIFICATIONS FOR CONSTRUCTION.

5. THE CONTRACTOR SHALL REMOVE ALL MATERIALS EXCAVATED FROM WORK IN THE RIGHT-OF-WAY AND DISPOSE AT A PROPER LANDFILL. FOR ON-SITE DISPOSAL ON PRIVATE PROPERTY, SECURE A FILL PERMIT, PRIOR TO BEGINNING WORK FROM THE CITY OF MILWAUKIE.

6. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE CITY OF MILWAUKIE ENGINEERING DEPARTMENT PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL PROVIDE 2 WEEKS' NOTICE TO SCHEDULE A PRE-CONSTRUCTION MEETING.

7. CONTRACTOR SHALL CALL CITY OF MILWAUKIE INSPECTION LINE 24 HOURS IN ADVANCE TO SCHEDULE INSPECTION 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

8. 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.

9. ANY LANDSCAPING/TREES DAMAGED OR DESTROYED DURING CONSTRUCTION SHALL BE REPAIRED IN CONFORMANCE WITH CITY OF MILWAUKIE STANDARDS.

10. CONTRACTOR SHALL NOT USE THE PUBLIC RIGHT OF WAY FOR STORAGE OF EQUIPMENT, MATERIALS, CONSTRUCTION TRAILERS, AND CONSTRUCTION VEHICLES UNLESS OTHERWISE APPROVED.

11. 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.

12. APPLICANT TO PROVIDE AN APPROVED SET OF "AS CONSTRUCTED" DRAWINGS TO THE CITY OF MILWAUKIE ENGINEERING DEPARTMENT PRIOR TO FINAL ACCEPTANCE. PLANS SHALL SHOW WATER SERVICE LOCATIONS, MAJOR WATERLINE ALIGNMENT OR VALVE PLACEMENT ADJUSTMENTS AND OTHER OBVIOUS CHANGES TO THE ORIGINAL PLANS. THE CONTRACTOR SHALL KEEP A COMPLETE SET OF "AS BUILT" ON SITE THAT MUST BE KEPT UP TO DATE AT ALL TIMES AND AVAILABLE FOR CITY INSPECTION.

13. CONTRACTOR SHALL INSTALL, UTILIZE, AND MAINTAIN EROSION PREVENTION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION PREVENTION & SEDIMENT CONTROL PLAN.

UTILITIES:

1. 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 CALL CENTER. YOU MUST NOTIFY THE CENTER AT LEAST 2 BUSINESS DAYS, BUT NOT MORE THAN 10 BUSINESS DAYS, BEFORE COMMENCING AN EXCAVATION. CALL 503.246.6699 OR 1.800.332.2344.

2. UTILITY LOCATIONS SHALL BE VERIFIED BY OREGON UTILITIES NOTIFICATION CENTER IMMEDIATELY PRIOR TO ANY EXCAVATION. 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.

3. PROVISIONS SHALL BE MADE BY THE CONTRACTOR TO KEEP ALL EXISTING UTILITIES IN SERVICE AND PROTECT THEM DURING CONSTRUCTION. THE UTILITY OWNER SHALL BE NOTIFIED IN THE EVENT OF DAMAGE. REPAIRS WILL BE MADE AT THE CONTRACTOR'S EXPENSE. WHEN SERVICE DISRUPTIONS ARE REQUIRED CONTRACTOR SHALL NOTIFY AFFECTED BUSINESS OF THE DATE AND DURATION OF THE DISRUPTION 24 HOURS IN ADVANCE OF THE DISRUPTION.

4. FOR ANY EXISTING UNDERGROUND UTILITY CONFLICTING WITH PROPOSED WATER SYSTEM IMPROVEMENTS, CONTRACTOR SHALL COORDINATE PROTECTION OR RELOCATION WITH UTILITY COMPANY.

5. 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.

6. 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 2 FEET INTO THE PIPE OR INSTALL RESTRAINING CAPS, WHICHEVER IS CALLED OUT ON THE PLANS.

7. 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.

8. CONTRACTOR WILL PROVIDE FOR CONTINUOUS FUNCTION OF STORMWATER SYSTEM DURING CONSTRUCTION.

STREET PAVEMENT:

1. THE CONTRACTOR SHALL ADJUST ALL VALVE BOXES, MANHOLES AND WATER METERS TO FINISHED STREET OR DRIVEWAY GRADE.

2. THE CONTRACTOR SHALL SAWCUT STRAIGHT MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING PAVEMENT AND NEW PAVEMENT. SEAL ALL NEW PAVEMENT JOINTS WITH RUBBERIZED SEALANT.

3. 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.

4. AGGREGATE BASE SHALL BE COMPACTED TO 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.

5. ASPHALT CONCRETE SHALL BE COMPACTED TO OSSC STANDARDS. 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.

6. 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.

PERMANENT SIGNAGE AND STRIPING:

1. CONTRACTOR SHALL NOT REMOVE ANY STREET SIGNAGE NOT INDICATED IN THE PLANS WITHOUT PRIOR CITY APPROVAL.

2. 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 PLAN.

CURBS / SIDEWALKS / DRIVEWAYS:

1. THE CONTRACTOR TO CONSTRUCT CURB, SIDEWALKS, AND DRIVEWAYS IN ACCORDANCE WITH APPROVED CITY OF MILWAUKIE STANDARDS.

2. CONTRACTOR TO PROTECT NEW CONCRETE FINISH. CONTRACTOR RESPONSIBLE FOR REMOVING, REPLACING, AND DISPOSING OF MATERIAL IF FINISH DOES NOT MEET ENGINEERING STANDARDS.

TRAFFIC CONTROL:

1. 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.

2. 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.

3. THESE TRAFFIC CONTROL PLANS ARE SCHEMATIC IN NATURE AND ARE CONSIDERED THE MINIMUM NECESSARY TO ADEQUATELY MANAGE TRAFFIC DURING CONSTRUCTION.

4. 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.

5. CONTRACTOR SHALL INSTALL AND MAINTAIN ALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THIS PLAN THROUGHOUT THE DURATION OF CONSTRUCTION.

6. 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.

7. 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, 14 DAYS IN ADVANCE OF THE CLOSURE.

8. SIGN LOCATIONS ARE APPROXIMATE. FINAL SIGN LOCATION SHALL BE DETERMINED BY CITY ENGINEER IN THE FIELD.

9. TRAFFIC CONTROL SIGNS SHALL BE SIZED IN ACCORDANCE WITH CONVENTIONAL ROADWAY STANDARDS OF THE MUTCD.

10. TRAFFIC CONTROL SIGNS SHALL BE SPACED IN ACCORDANCE WITH THE MUTCD AND OTTCH FOR 35 MPH VEHICULAR SPEEDS.

11. LANE SHIFTING AND MERGER TAPERS SHALL HAVE A LENGTH NECESSARY TO ACCOMMODATE 35 MPH VEHICULAR SPEEDS.

12. 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.

13. THE MINIMUM VEHICLE TRAVEL LANE WIDTH SHALL BE A 12-FOOT CLEAR DISTANCE PERPENDICULAR TO THE DIRECTION OF TRAVEL.

14. CONTRACTOR TO PROVIDE TRAFFIC CONTROL PLAN FOR ASPHALT CONCRETE PAVING AT THE PRE-PAVING MEETING.

15. 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.

16. WORK AT SIGNALIZED INTERSECTIONS REQUIRES FLAGGERS TO BE STATIONED AT EACH LEG OF THE INTERSECTION AND THE TRAFFIC SIGNAL TURNED OFF. CONTACT ODOT DISTRICT 2B PERMITTING OFFICE AT 971-673-6201 TO SCHEDULE SIGNAL SHUT DOWNS.

4

08/14/18

NMR

100% DESIGN

3

06/27/18

NMR

90% DESIGN

2

03/12/18

SLM

60% DESIGN

1

11/13/17

SLM

30% DESIGN

NO.

DATE

BY

REVISIONS

NMR

DESIGNED

08/14/2018

DATE

AMF

DRAFTED

08/14/2018

DATE

JGR

CHECKED

08/14/2018

DATE

JGR

APPROVED

08/14/2018

DATE

REGISTERED PROFESSIONAL

ENGINEER

88690PE

*Nathan M. Robinson*

OREGON

MAY 21, 2014

NATHAN M. ROBINSON

RENEWAL DATE 12-31-18

CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

GENERAL NOTES

PROJECT NO.: CIP2018

CONTRACT NO.: C2018-051

DATE: 08/14/2018

SHEET NO.: CV03

STORMWATER FACILITY:

1. 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.
2. FOLLOWING VEGETATED STORMWATER FACILITY 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 INSTALLED THROUGH HOLES CUT IN THE EROSION CONTROL FABRIC, AND FABRIC SHALL BE RESTAKED SECURELY FOR STABILIZATION AND SOIL COVERAGE FOLLOWING PLANTING.
3. 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).
4. FACILITY AND SURROUNDING SITE WILL BE STABILIZED TO PREVENT MEASURABLE SEDIMENT FROM ERODING FROM THE SITE AND INTO ADJACENT AREAS.

STORM SEWER:

1. PIPE BEDDING AND BACKFILL SHALL BE CLASS "B".
2. ALL PVC PIPE SHALL BE TESTED FOR DEFLECTION USING A 95% MANDREL PER CITY SPECIFICATIONS.
3. ALL DRAIN TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE PIPED DIRECTLY TO THE STORM SYSTEM.

SANITARY SEWER:

1. ALL WORK AND MATERIALS TO CONFORM WITH THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE CITY OF MILWAUKIE.
2. MATERIALS: POLYVINYL CHLORIDE PIPE (PVC) SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-3034, SDR 35 AND JOINT TYPE SHALL MEET THE REQUIREMENTS OF ASTM C-3212.
3. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS. PVC SEWER PIPE SHALL BE CONNECTED TO CONCRETE MANHOLES BY MEANS OF AN APPROVED COUPLING WITH AN ELASTOMERIC GASKET. AN APPROVED WATER STOP OR FLEXIBLE SLEEVE.
4. ALL SANITARY SEWER TESTING TO BE IN CONFORMANCE WITH OSSC STANDARDS.
5. GRANULAR PIPE BEDDING AND TRENCH BACKFILL SHALL CONFORM TO APWA CLASS B PAVED AREAS AND CLASS A IN LANDSCAPE AREAS.
6. MATERIALS SHALL BE COMPACTED IN ACCORDANCE WITH OSSC STANDARDS.
7. TRENCHES WITHIN PAVED AREAS SHALL BE BACKFILLED WITH GRANULAR MATERIAL. CONTRACTOR TO DETERMINE TYPE OF EQUIPMENT AND METHOD TO USE TO ACHIEVE THE REQUIRED COMPACTION. SUBSEQUENT SETTLEMENT OF THE FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE AS A RESULT OF IMPROPER COMPACTION AND SHALL BE PROMPTLY REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
8. MANHOLES SHALL BE PRECAST CONCRETE SECTIONS WITH MINIMUM INSIDE DIAMETER OF 48-INCHES. CONFORMING TO THE REQUIREMENTS OF ASTM C-478, EXCEPT AS NOTED ON THE PLANS.
9. SANITARY SEWER LATERALS SHALL BE 4" OR 6" PIPE CONFORMING AS SPECIFIED TO THE SAME SPECIFICATIONS AS SEWER MAINS.
10. THE SERVICE LATERALS SHALL BE 6-INCH MINIMUM AND INSTALLED WITH A MINIMUM GRADE OF 2% UNLESS OTHERWISE SHOWN ON THE PLANS.
11. ALL SERVICE LATERALS THAT ARE NOT CONNECTED TO AN

EXISTING SERVICE SHALL EXTEND BEYOND THE PROPERTY LINE PER THE STANDARD DETAIL. THE END SHALL BE MARKED WITH A SINGLE 2X4 WHICH SHALL EXTEND 2 FT ABOVE FINISH GRADE. THE EXPOSED PORTIONS OF THE 2X4 SHALL BE PAINTED WHITE. DEPTH OF LATERAL SHALL BE PAINTED ON THE 2X4.

12. SANITARY LATERAL LOCATIONS SHALL BE STAMPED WITH AN "S" ON THE CURB FACE FOR FUTURE LOCATION.
13. IN EASEMENT AREAS ALL MANHOLES SHALL HAVE TAMPER-PROOF LIDS OR APPROVED EQUAL. THE FRAME AND COVER SHALL BE 6" ABOVE FINISH GRADE.
14. THE CONTRACTOR WILL TV SANITARY SEWER LINES PRIOR TO ACCEPTANCE. LINES WILL BE THOROUGHLY CLEANED PRIOR TO REQUEST FOR INSPECTION. DEBRIS FROM THE CLEANING WILL BE TRAPPED FOR DISPOSAL AND NOT FLUSHED INTO THE SYSTEM.

WATER:

1. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CITY OF MILWAUKIE STANDARDS. OREGON STATE HEALTH DIVISION ADMINISTRATIVE RULES, CHAPTER 333, AND AWWA STANDARDS.
2. ALL POINTS OF CONNECTION TO THE EXISTING WATER SYSTEM SHALL BE POTHOLED PRIOR TO THE START OF NEW WATER MAIN INSTALLATION TO VERIFY ALIGNMENT, DEPTH, PIPE SIZE, AND PIPE MATERIAL. THE CONTRACTOR SHALL ATTEND A PRE-CONNECTION MEETING WITH THE CITY PRIOR TO THE START OF CONNECTION WORK.
3. 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.
4. WATER METERS TO BE FURNISHED AND INSTALLED BY CONTRACTOR UNLESS OTHERWISE INDICATED. CONTRACTOR TO FURNISH AND INSTALL ALL FITTINGS, METER BOX, AND LID PER CITY OF MILWAUKIE STANDARDS.
5. GATE VALVES 4" THROUGH 12" SHALL BE RESILIENT WEDGE, NON-RISING STEM WITH "O" RING PACKING, COMPLYING WITH THE AWWA CLASS C SPECIFICATIONS.
6. BUTTERFLY VALVES SHALL BE NON-RISING STEM WITH "O" RING PACKING AND COMPLY WITH THE AWWA CLASS C SPECIFICATIONS.
7. 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.
8. THRUST BLOCKS SHALL NOT BE USED ON TEES, BENDS OR BLOW-OFFS, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL PLACE 8-MIL PLASTIC SHEETING BETWEEN THRUST BLOCKS AND PIPE FITTINGS. IF A THRUST BLOCK IS USED, SEE STANDARD DRAWING NO. 400, 406, 408, FOR ADDITIONAL REQUIREMENTS.
9. PIPE BEDDING AND PIPE ZONE SHALL BE CLASS B AND COMPACTED PER OSSC STANDARDS IN ALL PUBLIC RIGHT-OF-WAYS 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.
10. ALL BOLTED TOGETHER JOINTS AND VALVES SHALL HAVE CORROSION RESISTANT 8MIL WRAP IN ACCORDANCE WITH THE MILWAUKIE STANDARDS.
11. CITY WATER CREWS HAVE THE RIGHT TO REMOVE OR KEEP ANY OR ALL OLD WATER INFRASTRUCTURE THAT IS EXPOSED BY CONTRACTOR.
12. THE MAXIMUM ALLOWABLE JOINT THE MAXIMUM ALLOWABLE JOINT DEFLECTION SHALL NOT EXCEED 3".
13. 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.
14. 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.

15. 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.
16. 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.
17. 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.
18. OPERATION OF ALL EXISTING VALVES TO ISOLATE WATERLINES FOR THE REQUIRED WORK SHALL BE CONDUCTED BY CITY OF MILWAUKIE EMPLOYEES ONLY.
19. "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.
20. CONTRACTOR SHALL REQUEST WATER SYSTEM SHUT DOWN FROM THE CITY OF MILWAUKIE PROJECT MANAGER AT LEAST 10 BUSINESS DAYS IN ADVANCE OF ANY PLANNED SERVICE DISRUPTIONS. UPON APPROVAL OF REQUEST, CITY OF MILWAUKIE OR CONTRACTOR WILL PROVIDE NOTIFICATION OF SERVICE DISRUPTIONS TO THE AFFECTED WATER CUSTOMERS 24 IN ADVANCE OF SERVICE DISRUPTIONS.
21. 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.
22. HOT TAPS SHALL HAVE A POURED-IN-PLACE CONCRETE THRUST BLOCK. CONTRACTOR SHALL PLACE 8-MIL PLASTIC SHEETING BETWEEN THRUST BLOCKS AND PIPE FITTINGS. SEE STANDARD DRAWING NO. 406 FOR ADDITIONAL REQUIREMENTS.
23. 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.
24. 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.
25. 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. SEE CITY OF MILWAUKIE STANDARD DETAIL 408.

## ABBREVIATIONS LIST

|      |                                  |
|------|----------------------------------|
| CoM  | CITY OF MILWAUKIE                |
| PVC  | POLYVINYL CHLORINE               |
| DTL  | DETAIL                           |
| SHT  | SHEET                            |
| MH   | MANHOLE                          |
| FL   | FLANGE                           |
| GUT  | GUTTER                           |
| TC   | TOP OF CURB                      |
| FG   | FINISHED GRADE                   |
| PT   | POINT OF TANGENCY                |
| PC   | POINT OF CURVATURE               |
| TW   | TOP OF WALL                      |
| OSSC | OREGON STRUCTURAL SPECIALTY CODE |

|     |          |     |             |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| NO. | DATE     | BY  | REVISIONS   |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

## SOUTH DOWNTOWN IMPROVEMENTS

## GENERAL NOTES

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: CV04 |
|----------------------|-------------------------|------------------|-----------------|



D

◆

C

◆

B

◆

A

DEMOLITION NOTES:

- 1 SAW CUT AT SIDEWALK JOINT.
- 2 SAWCUT
- 3 PROTECT EXISTING SIDEWALK.
- 4 REMOVE SIDEWALK.
- 5 REMOVE CURB AND GUTTER.
- 6 REMOVE EXISTING CATCH BASIN.
- 7 REMOVE STORM MANHOLE
- 8 REMOVE TREE.
- 9 REMOVE STORM PIPE.
- 10 PROTECT GAS VALVE AND ADJUST TO FINAL GRADE.
- 11 PROTECT WATER VALVE AND ADJUST TO FINAL GRADE.
- 12 PROTECT WATER METER AND ADJUST TO FINAL GRADE.
- 13 SALVAGE FIRE HYDRANT.
- 14 NOT USED
- 15 REMOVE WOOD FENCE
- 16 REMOVE SIGN.
- 17 RELOCATE EXISTING SIGN.
- 18 REMOVE AND RELOCATE USPS MAIL BOXES.
- 19 REMOVE POWER POLE (BY OTHERS).
- 20 PROTECT STREET LIGHT.
- 21 REMOVE EXISTING SIGN BRIDGE
- 22 REMOVE ROCK AND CONCRETE AROUND BRIDGE SUPPORTS.
- 23 PROTECT FIRE HYDRANT AND VALVE.
- 24 REMOVE PAVEMENT BETWEEN SAW CUT LIMITS.
- 25 NOT USED.
- 26 REMOVE GATE VALVE AND CROSS.
- 27 REMOVE WATER LINE AS NEEDED.

- 28 WATER CONNECTION TO BE REMOVED BY OTHERS.
- 29 CAP AND ABANDON WATERLINE.
- 30 PROTECT BUILDING ENTRANCE.
- 31 NOT USED.
- 32 FILL AND ABANDON EXISTING STORM PIPE IN PLACE. SEE SHEET SD01–SD07 FOR MORE DETAILS.
- 33 ABANDON EXISTING MANHOLE. REMOVE STRUCTURE TO DEPTH OF EXISTING LATERAL. SEE SHEET SD01–SD07 FOR MORE DETAILS.
- 34 NOT USED.
- 35 PROTECT EXISTING PAVEMENT.
- 36 ABANDON EXISTING WATER MAIN.
- 37 REMOVE WATER METER.
- 38 RELOCATE EXISTING POWER POLE (BY OTHERS).
- 39 SALVAGE WATER METER.
- 40 REMOVE SEWER LINE.

STREET CONSTRUCTION NOTES:

- 100 CONSTRUCT CONCRETE DRIVEWAY. SEE DTL 4 ON SHT DT05.
- 101 CONSTRUCT ASPHALT DRIVEWAY. SEE DETAIL 2 ON SHT DT06.
- 102 CONSTRUCT DOWNTOWN CURB AND GUTTER PER CoM STANDARD 700. SEE SHEET DT01.
- 103 CONSTRUCT 24" DOWNTOWN CURB PER CoM STANDARD 701. SEE SHEET DT01.
- 104 CONSTRUCT CONCRETE WALKS. SEE CoM STANDARD 703A ON SHEET DT02.
- 105 CONSTRUCT NEW ROADWAY. SEE TYPICAL SECTIONS ON SHEETS PV13–PV16.
- 106 COLD PLANE PAVEMENT REMOVAL. 2 INCHES.
- 107 2 INCH ASPHALT OVERLAY. LEVEL 2, 1/2" ACP.
- 108 CONSTRUCT 12" CURB PER CoM STANDARD DETAIL 701 ON SHEET DT01.
- 109 CONSTRUCT THICKENED CURB AND GUTTER. SEE DETAIL 2 ON SHEET DT11.
- 110 CONSTRUCT CURB CUT INLET. SEE DETAIL 1 & 2 ON SHEET DT12.
- 111 INSTALL BLACK TRUNCATED DOMES. REPLACEABLE CAST-IN-PLACE, MANUFACTURED BY ACCESS TILE OR APPROVED EQUAL. 24" STRAIGHT OR RADIUS AS SHOWN.
- 112 CONSTRUCT 5.0' ASPHALT SIDEWALK.
- 113 NOT USED.
- 114 NOT USED.
- 115 MATCH EXISTING ROADWAY ELEVATION.
- 116 NOT USED.
- 117 CONSTRUCT CAST IN PLACE RETAINING WALL. SEE SHEET PV12.
- 118 CONSTRUCT CAST-IN-PLACE STRUT SLAB. SEE SHEET PV12. TOP OF BARRIER VARIES. SEE SHEET PV11 FOR PROFILE.
- 119 CONSTRUCT NEW ODOT ADA RAMPS. COORDINATION WITH ODOT REQUIRED. COORDINATE WITH PROJECT ENGINEER.
- 120 CONSTRUCT THICKENED EDGE SIDEWALK. SEE DETAIL 2 ON SHEET DT05.
- 121 CONSTRUCT DECORATIVE FENCE. SEE CoM STANDARD DETAIL 709 ON SHEET DT05.
- 122 CONNECT TO EXISTING CROSSWALK WITH 18" DOWELS, 12" OC.

- 123 CONSTRUCT TEMPORARY ASPHALT TRANSITION TO EXISTING SURFACES.
- 124 REPLACE DETECTION LOOP. SEE ODOT STANDARD DRAWING TM475 AND TM480.
- 125 NOT USED.
- 126 ADJUST UTILITY VAULT TO GRADE.
- 127 ADJUST WATER METER VALVE COVER TO GRADE.
- 128 NOT USED.
- 129 INSTALL CITY MEDALLIONS (FURNISHED BY CITY).
- 130 FURNISH & INSTALL BOLLARDS. SPACE 5 FEET ON CENTER.
- 131 INSTALL USPS MAIL BOXES.
- 132 CONSTRUCT ADA ACCESSIBLE ENTRANCE TO BUILDING. COORDINATE WITH PROJECT ENGINEER.
- 133 INSTALL FLASHING BEACON. SEE SHEET SN10 FOR MORE DETAILS.
- 134 CONSTRUCT ADA RAMP ACROSS EXISTING PLANTER. SEE DETAIL 3 ON SHEET DT06.
- 135 INSTALL YELLOW DOMES INTENDED FOR USE ON TEMPORARY ASPHALT WALK.
- 136 NOT USED.
- 137 PLANT LANDSCAPE STRIP W/LAWN SEED PER SPECIFICATIONS.
- 138 INSTALL SINGLE HEAD LUMINAIRE FOUNDATION.
- 139 INSTALL DOUBLE HEAD LUMINAIRE FOUNDATION.
- 140 LUMINAIRE TO BE INSTALLED BY OTHERS.
- 141 EXISTING LUMINAIRE TO REMAIN.
- 142 REMOVE AND REUSE LUMINAIRE BASE. REPLACE LUMINAIRE HEAD.
- 143 CONSTRUCT ORNAMENTAL PLANTER. SEE DETAIL 2 ON SHEET DT15.
- 144 CONSTRUCT STORMWATER PLANTER. SEE DETAIL 1 ON SHEET DT11.
- 145 CONSTRUCT PLANTER WALL. SEE DETAIL 3 ON SHEET DT11.
- 146 CONSTRUCT 8' X 4' TREE WELL. SEE DETAIL 706 ON SHEET DT04. SEE SHEETS ST05–ST06 FOR LOCATIONS.
- 147 INSTALL STREET TREE IN 8' X 4' TREE WELL PER STANDARD 707 SHEET DT15.
- 148 EXISTING STREET TREE TO REMAIN.

- 149 CONSTRUCT CAST-IN-PLACE TALL SHOULDER BARRIER. TOP OF BARRIER VARIES. SEE SHEET PV11 FOR PROFILE. SEE ODOT STANDARD DRAWINGS RD 516, DET 1545, AND DET 1549. 6" FULL WIDTH CONTINUOUS KEY REQUIRED.
- 150 INSTALL 8" THICK REINFORCED CONCRETE PAVING. SEE DETAIL 1 ON SHEET DT05.
- 151 SAW CUT EXISTING SIDEWALK TO NEAREST JOINT TO ALLOW INSTALLATION OF FLASHING BEACON (SHEET SN09). CONSTRUCT CONCRETE WALK PER CoM STD DWG 701 ON SHEET DT01.
- 152 CONSTRUCT STREET SIDE PLANTER WALL. SEE DETAIL 4 ON SHEET DT11

ODOT STANDARD DRAWINGS

|         |                                                                |
|---------|----------------------------------------------------------------|
| RD250   | THRUST BLOCKING                                                |
| RD254   | HYDRANT INSTALLATION                                           |
| RD258   | VALVE BOX AND OPERATOR EXTENSION ASSEMBLY                      |
| RD300   | TRENCH BACKFILL, BEDDING, PIPE ZONE AND MULTIPLE INSTALLATIONS |
| RD302   | STREET CUT                                                     |
| RD335   | STANDARD STORM SEWER MANHOLE                                   |
| RD339   | PIPE TO STRUCTURE CONNECTIONS                                  |
| RD344   | STANDARD MANHOLE BASE SECTION                                  |
| RD345   | PIPE TO MANHOLE CONNECTIONS                                    |
| RD346   | LARGE PRECAST MANHOLE                                          |
| RD356   | MANHOLE COVERS AND FRAMES                                      |
| RD363   | GUTTER TRANSITION AT INLET                                     |
| RD364   | CONCRETE INLETS TYPE G–1, G–2, G–2M, & G–2MA                   |
| RD365   | FRAMES AND GRATES FOR CONCRETE INLETS                          |
| RD516   | SECURING CONCRETE BARRIER TO ROADWAY                           |
| TM472   | TRAFFIC SIGNAL JUNCTION BOX/HAND HOLES                         |
| TM475   | LOOP DETAILS                                                   |
| TM480   | LOOP ENTRANCE DETAILS                                          |
| TM800   | TABLES, ABRUPT EDGE AND PCMS DETAILS                           |
| TM820   | TEMPORARY BARRICADES                                           |
| TM821   | TEMPORARY SIGN SUPPORTS                                        |
| TM822   | TEMPORARY SIGN SUPPORTS                                        |
| TM840   | CLOSURE DETAILS                                                |
| TM841   | INTERSECTION WORK ZONE DETAILS                                 |
| TM842   | SIGNALIZED INTERSECTION DETAILS                                |
| TM844   | TEMPORARY PEDESTRIAN ACCESS ROUTING                            |
| TM850   | 2-LANE, 2-WAY ROADWAYS                                         |
| DET1545 | CAST-IN-PLACE TALL CONCRETE BARRIER TO TALL CONCRETE BARRIER   |
| DET1549 | CAST-IN-PLACE TALL CONCRETE BARRIER TO CURB TRANSITION         |

NOTE: ALL MANHOLES HAVE CoM FRAME AND COVER PER SHEET DT10 DRAWING NO. 617.



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

|     |          |     |             |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 3   | 09/21/18 |     | ADDENDUM 3  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| NO. | DATE     | BY  | REVISIONS   |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



RENEWAL DATE 12–31–18



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503–786–7600  
FAX: 503–774–8236

SOUTH DOWNTOWN IMPROVEMENTS

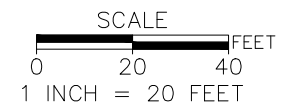
CONSTRUCTION CALLOUTS

|              |         |               |           |       |            |            |      |
|--------------|---------|---------------|-----------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | C2018–051 | DATE: | 08/14/2018 | SHEET NO.: | CV05 |
|--------------|---------|---------------|-----------|-------|------------|------------|------|





|    |                                                                                      |
|----|--------------------------------------------------------------------------------------|
| 24 | REMOVE PAVEMENT BETWEEN SAW CUT LIMITS.                                              |
| 30 | PROTECT BUILDING ENTRANCE.                                                           |
| 32 | FILL AND ABANDON EXISTING STORM PIPE IN PLACE. SEE SHEET SD01—SD07 FOR MORE DETAILS. |
| 36 | ABANDON EXISTING WATER MAIN.                                                         |
| 38 | RELOCATE EXISTING POWER POLE (BY OTHERS).                                            |



REGISTERED PROFESSIONAL  
ENGINEER  
88690PE  
*Nathan Robinson*  
OREGON  
MAY 21, 2014  
NATHAN M. ROBINSON

RENEWAL DATE 12-31-18

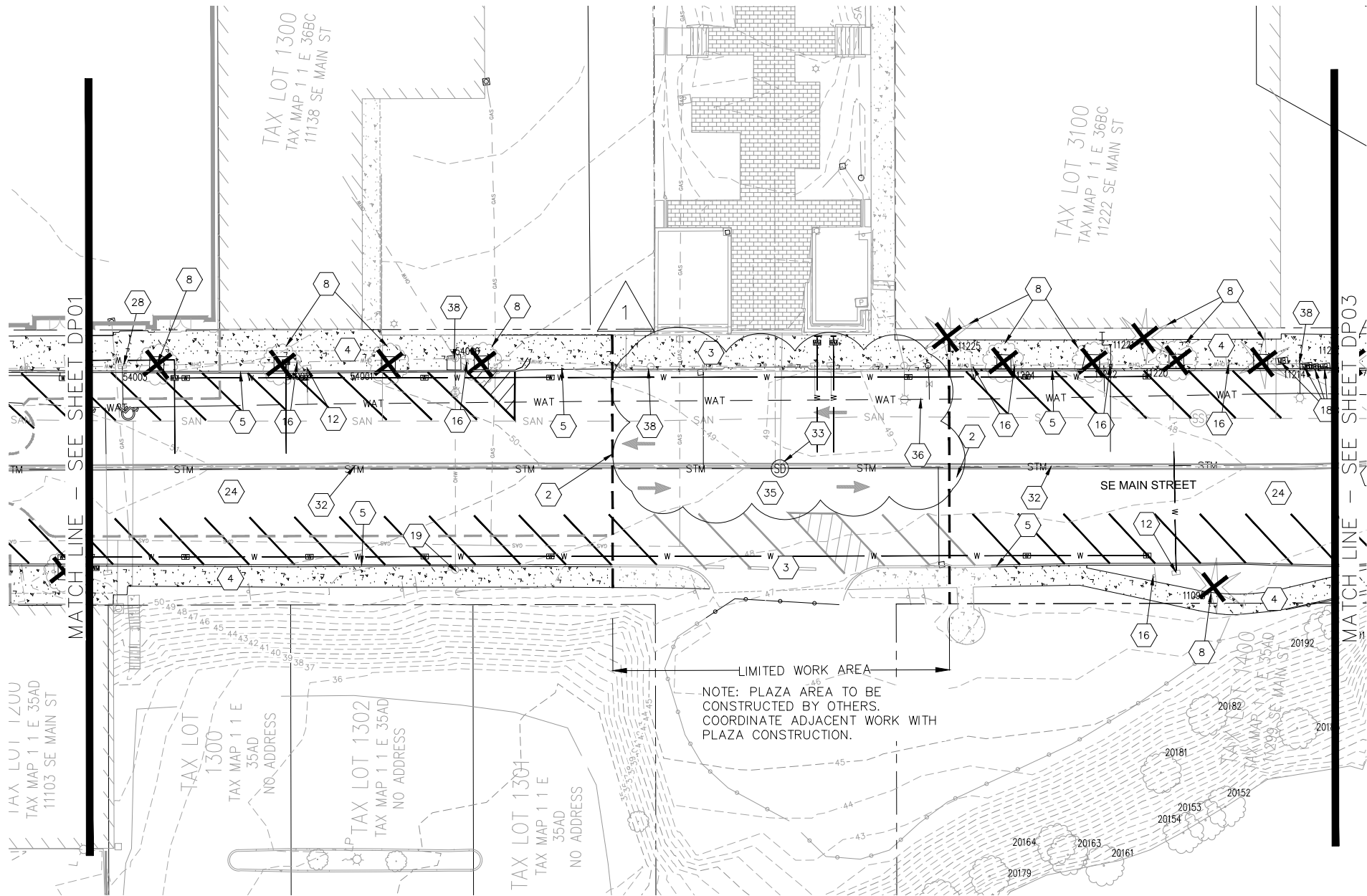


PHONE: 503-786-7600  
FAX: 503-774-8236

## DEMOLITION PLAN 1

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: DP01 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\Projects\2017\01095.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T36 DP.dwg Sep. 06, 2018 -- 4:48 PM alaina floor  
Plot Date: 9/7/2018 4:32 PM alaina floor



- DEMOLITION NOTES:
- 2 SAWCUT
  - 3 PROTECT EXISTING SIDEWALK.
  - 4 REMOVE SIDEWALK.
  - 5 REMOVE CURB AND GUTTER.
  - 8 REMOVE TREE.
  - 12 PROTECT WATER METER AND ADJUST TO FINAL GRADE.
  - 16 REMOVE SIGN.
  - 17 RELOCATE EXISTING SIGN.
  - 18 REMOVE AND RELOCATE USPS MAIL BOXES.
  - 24 REMOVE PAVEMENT BETWEEN SAW CUT LIMITS.
  - 28 WATER CONNECTION TO BE REMOVED BY OTHERS.
  - 32 FILL AND ABANDON EXISTING STORM PIPE IN PLACE. SEE SHEET SD01-SD07 FOR MORE DETAILS.
  - 33 ABANDON EXISTING MANHOLE. REMOVE STRUCTURE TO DEPTH OF EXISTING LATERAL. SEE SHEET SD01-SD07 FOR MORE DETAILS.
  - 35 PROTECT EXISTING PAVEMENT.
  - 36 ABANDON EXISTING WATERLINE
  - 38 RELOCATE EXISTING POWER POLE (BY OTHERS).

SCALE  
0 20 40 FEET  
1 INCH = 20 FEET

819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 5   | 09/06/18 |     | ADDENDUM 1  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |

RENEWAL DATE 12-31-18

CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

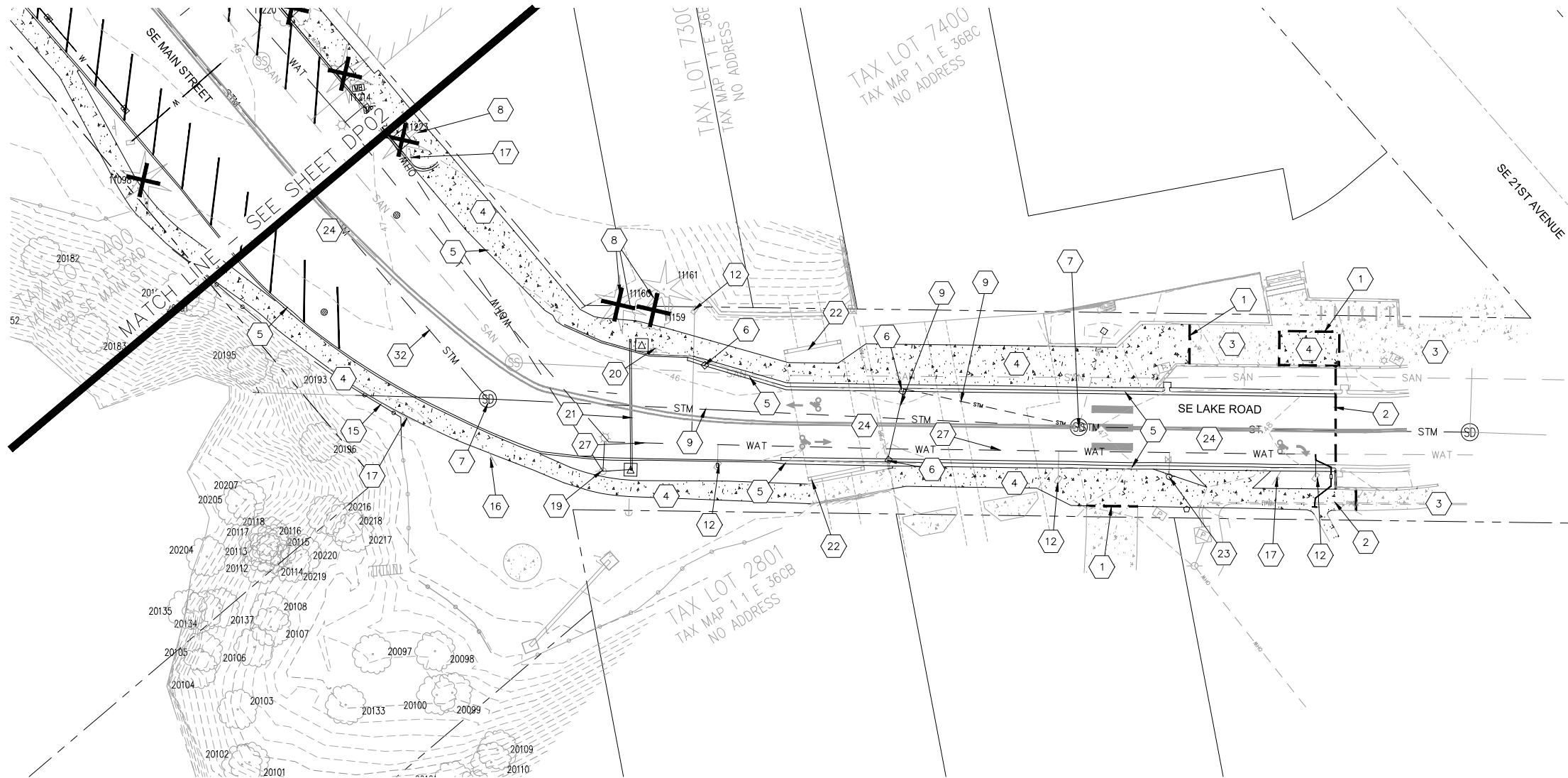
DEMOLITION PLAN 2

|              |         |               |           |       |            |            |      |
|--------------|---------|---------------|-----------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | C2018-051 | DATE: | 08/14/2018 | SHEET NO.: | DP02 |
|--------------|---------|---------------|-----------|-------|------------|------------|------|



U:\PROJECTS\PD\Projects\2017\01095.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017\T36 DP.dwg Sep. 06, 2018 - 4:48 PM alaina floor  
Plot Date: 9/7/2018 4:32 PM alaina floor

D  
C  
B  
A



DEMOLITION NOTES:

- 1 SAW CUT AT SIDEWALK JOINT.
- 2 SAWCUT
- 3 PROTECT EXISTING SIDEWALK.
- 4 REMOVE SIDEWALK.
- 5 REMOVE CURB AND GUTTER.
- 6 REMOVE EXISTING CATCH BASIN.
- 7 REMOVE STORM MANHOLE
- 8 REMOVE TREE.
- 9 REMOVE STORM PIPE.
- 11 PROTECT WATER VALVE AND ADJUST TO FINAL GRADE.
- 12 PROTECT WATER METER AND ADJUST TO FINAL GRADE.
- 15 REMOVE WOOD FENCE
- 16 REMOVE SIGN.
- 17 RELOCATE EXISTING SIGN.
- 19 REMOVE POWER POLE AND RELOCATE SERVICE.
- 20 PROTECT STREET LIGHT.
- 21 REMOVE EXISTING SIGN BRIDGE.
- 22 REMOVE ROCK AND CONCRETE AROUND BRIDGE SUPPORTS.
- 23 PROTECT FIRE HYDRANT AND VALVE.
- 24 REMOVE PAVEMENT BETWEEN SAW CUT LIMITS.
- 27 REMOVE WATER LINE AS NEEDED.
- 32 FILL AND ABANDON EXISTING STORM PIPE IN PLACE. SEE SHEET SD01-SD04 FOR MORE DETAILS.

NOTES:

1. CONTACT RAILROAD AND TRIMET PRIOR TO CONSTRUCTION.



SCALE  
0 20 40 FEET  
1 INCH = 20 FEET



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 4   | 08/14/18 | NMR | ADDENDUM 1  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

DEMOLITION PLAN 3

|              |         |               |           |       |            |            |      |
|--------------|---------|---------------|-----------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | C2018-051 | DATE: | 08/14/2018 | SHEET NO.: | DP03 |
|--------------|---------|---------------|-----------|-------|------------|------------|------|

U:\PROJECTS\PD\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 DP.dwg Aug. 15, 2018 -- 5:39 PM alaina floor  
Plot Date: 8/15/2018 5:43 PM\_alaina floor

|     |          |     |             |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| NO. | DATE     | BY  | REVISIONS   |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |





# CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

|                             |            |               |           |
|-----------------------------|------------|---------------|-----------|
| SOUTH DOWNTOWN IMPROVEMENTS |            |               |           |
| TREE TABLE                  |            |               |           |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: | C2018-051 |
| DATE:                       | 08/14/2018 | SHEET NO.:    | DP04      |



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

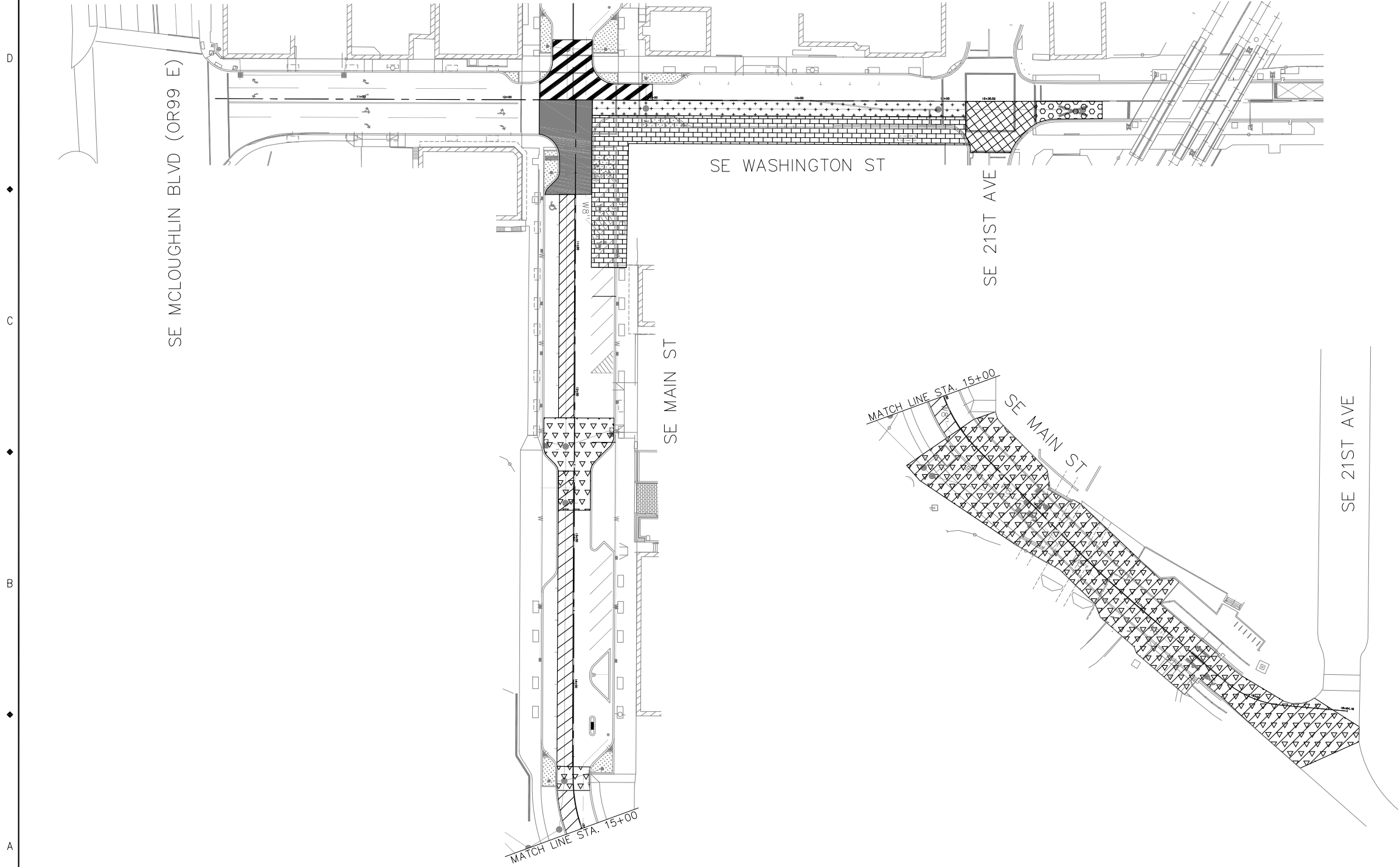
| TREE TABLE |            |          |        |
|------------|------------|----------|--------|
| NO         | TYPE       | DIAMETER | REMOVE |
| 11076      | DECIDUOUS  | ”        | X      |
| 11077      | DECIDUOUS  | ”        | X      |
| 11098      | CONIFEROUS | 19”      | X      |
| 11159      | DECIDUOUS  | 22”      | X      |
| 11160      | CONIFEROUS | 12”      | X      |
| 11161      | CONIFEROUS | 10”      |        |
| 11214      | CONIFEROUS | 9”       | X      |
| 11220      | DECIDUOUS  | 7”       | X      |
| 11221      | CONIFEROUS | 9”       | X      |
| 11222      | DECIDUOUS  | 7”       | X      |
| 11223      | CONIFEROUS | 6” & 6”  | X      |
| 11224      | DECIDUOUS  | 7”       | X      |
| 11225      | CONIFEROUS | 8”       | X      |
| 11426      | DECIDUOUS  | ”        | X      |
| 11528      | DECIDUOUS  | ”        | X      |
| 11547      | DECIDUOUS  | ”        | X      |
| 11552      | DECIDUOUS  | ”        | X      |
| 11553      | DECIDUOUS  | ”        |        |
| 12085      | DECIDUOUS  | ”        | X      |
| 12088      | DECIDUOUS  | ”        | X      |
| 12090      | DECIDUOUS  | ”        | X      |
| 12898      | CONIFEROUS | ”        |        |
| 20097      | DECIDUOUS  | ”        |        |
| 20098      | DECIDUOUS  | ”        |        |
| 20099      | DECIDUOUS  | ”        |        |

| TREE TABLE |           |          |        |
|------------|-----------|----------|--------|
| NO         | TYPE      | DIAMETER | REMOVE |
| 20100      | DECIDUOUS | ”        |        |
| 20101      | DECIDUOUS | ”        |        |
| 20102      | DECIDUOUS | ”        |        |
| 20103      | DECIDUOUS | ”        |        |
| 20104      | DECIDUOUS | ”        |        |
| 20105      | DECIDUOUS | ”        |        |
| 20106      | DECIDUOUS | ”        |        |
| 20107      | DECIDUOUS | ”        |        |
| 20108      | DECIDUOUS | ”        |        |
| 20109      | DECIDUOUS | ”        |        |
| 20110      | DECIDUOUS | ”        |        |
| 20111      | DECIDUOUS | ”        |        |
| 20112      | DECIDUOUS | ”        |        |
| 20113      | DECIDUOUS | ”        |        |
| 20114      | DECIDUOUS | ”        |        |
| 20115      | DECIDUOUS | ”        |        |
| 20116      | DECIDUOUS | ”        |        |
| 20117      | DECIDUOUS | ”        |        |
| 20118      | DECIDUOUS | ”        |        |
| 20120      | DECIDUOUS | ”        |        |
| 20121      | DECIDUOUS | ”        |        |
| 20126      | DECIDUOUS | ”        |        |
| 20127      | DECIDUOUS | ”        |        |
| 20133      | DECIDUOUS | ”        |        |
| 20134      | DECIDUOUS | ”        |        |

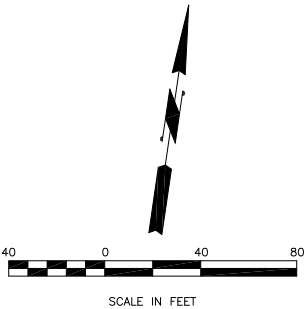
| TREE TABLE |            |           |        |
|------------|------------|-----------|--------|
| NO         | TYPE       | DIAMETER  | REMOVE |
| 20135      | DECIDUOUS  | ”         |        |
| 20137      | DECIDUOUS  | ”         |        |
| 20152      | DECIDUOUS  | ”         |        |
| 20153      | DECIDUOUS  | ”         |        |
| 20154      | DECIDUOUS  | ”         |        |
| 20161      | DECIDUOUS  | ”         |        |
| 20163      | DECIDUOUS  | ”         |        |
| 20164      | TRUD 8 7 7 | ”         |        |
| 20176      | DECIDUOUS  | ”         |        |
| 20178      | DECIDUOUS  | ”         |        |
| 20179      | DECIDUOUS  | ”         |        |
| 20181      | DECIDUOUS  | ”         |        |
| 20182      | DECIDUOUS  | 6”        |        |
| 20183      | DECIDUOUS  | 9”        |        |
| 20191      | DECIDUOUS  | 9”        |        |
| 20192      | DECIDUOUS  | 8”        |        |
| 20193      | DECIDUOUS  | 11” & 15” |        |
| 20195      | DECIDUOUS  | 36”       |        |
| 20196      | DECIDUOUS  | 19”       |        |
| 20204      | DECIDUOUS  | ”         |        |
| 20205      | DECIDUOUS  | ”         |        |
| 20207      | DECIDUOUS  | ”         |        |
| 20216      | DECIDUOUS  | ”         |        |
| 20217      | DECIDUOUS  | ”         |        |
| 20218      | DECIDUOUS  | ”         |        |

| TREE TABLE |           |          |        |
|------------|-----------|----------|--------|
| NO         | TYPE      | DIAMETER | REMOVE |
| 20219      | DECIDUOUS | ”        |        |
| 20220      | DECIDUOUS | ”        |        |
| 54000      | DECIDUOUS | ”        | X      |
| 54001      | DECIDUOUS | ”        | X      |
| 54002      | DECIDUOUS | ”        | X      |
| 54003      | DECIDUOUS | ”        | X      |
| 54004      | DECIDUOUS | ”        | X      |
| 54005      | DECIDUOUS | ”        |        |
| 54006      | DECIDUOUS | ”        |        |
| 54007      | DECIDUOUS | ”        |        |
| 54008      | DECIDUOUS | ”        |        |
| 54009      | DECIDUOUS | ”        |        |
| 54010      | DECIDUOUS | ”        |        |
| 54011      | DECIDUOUS | ”        |        |
| 54012      | DECIDUOUS | ”        |        |
| 54013      | DECIDUOUS | ”        |        |

TRAFFIC STAGING PLAN  
PHASE 1 & PHASE 2



- LEGEND**
- FULL CLOSURE FOR LOWERING OF MAIN STREET (PHASE 1).
  - SOUTHBOUND MAIN STREET CLOSURE FOR THE INSTALLATION OF STORM PIPE ON WEST SIDE OF MAIN STREET (PHASE 2/STAGE 1).
  - NIGHTTIME FULL CLOSURE FOR THE INSTALLATION OF LATERAL PIPES ON MAIN STREET (PHASE 2/STAGE 2). REFER TO SHEET TC-2 FOR SIGN LOCATION. FOR FULL-CLOSURE DETAILS REFER TO ODOT TM-840.
  - NIGHTTIME CLOSURE FOR THE INSTALLATION OF STORM PIPE ON SOUTH SIDE OF WASHINGTON STREET AT THE INTERSECTION OF WASHINGTON STREET/MAIN STREET (PHASE 2/STAGE 3).
  - NIGHTTIME CLOSURE FOR THE INSTALLATION OF STORM PIPE ON NORTH SIDE OF WASHINGTON STREET AT THE INTERSECTION OF WASHINGTON STREET/MAIN STREET (PHASE 2/STAGE 4).
  - NIGHTTIME CLOSURE FOR THE INSTALLATION OF STORM PIPE ON SOUTH SIDE OF WASHINGTON STREET (PHASE 2/STAGE 5).
  - NIGHTTIME CLOSURE FOR THE INSTALLATION OF STORM PIPE ON SOUTH SIDE OF WASHINGTON STREET AT THE WASHINGTON STREET/21ST AVENUE INTERSECTIONS. (PHASE 2/STAGE 6).
  - NIGHTTIME CLOSURE FOR THE INSTALLATION OF STORM PIPE ON SOUTH SIDE OF WASHINGTON STREET (PHASE 2/STAGE 7).
  - SIDEWALK CLOSURE WILL BE IN PLACE THE ENTIRE DURATION OF THE PROJECT (BY OTHERS).



**DKS** 720 SW Washington St, Suite 500  
Portland, Oregon 97205  
www.dksassociates.com

|     |      |    |           |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
| NO. | DATE | BY | REVISIONS |

|          |      |
|----------|------|
| LEC      | DATE |
| DESIGNED |      |
| DKS CAD  | DATE |
| DRAFTED  |      |
| PLC      | DATE |
| CHECKED  |      |
| APPROVED | DATE |





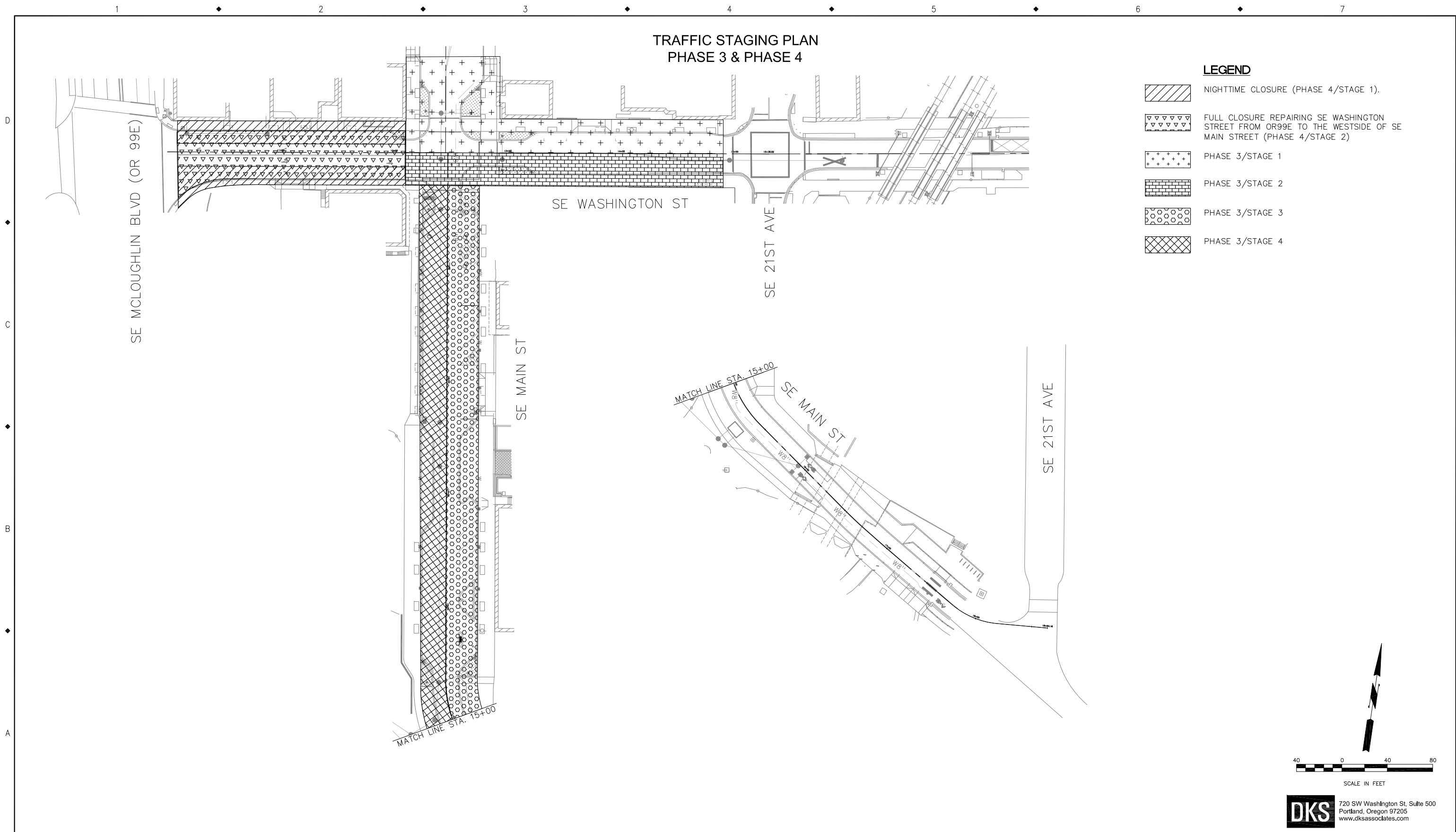
**MILWAUKIE**  
*Dogwood City of the West*

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

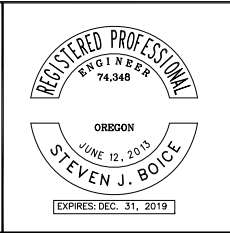
|                             |            |               |      |
|-----------------------------|------------|---------------|------|
| SOUTH DOWNTOWN IMPROVEMENTS |            |               |      |
| TRAFFIC STAGING PLAN        |            |               |      |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: |      |
| DATE:                       | 07/10/2018 | SHEET NO.:    | TC-1 |





|     |      |    |           |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
| NO. | DATE | BY | REVISIONS |

|          |      |
|----------|------|
| LEC      | DATE |
| DESIGNED |      |
| DKS CAD  | DATE |
| DRAFTED  |      |
| PLC      | DATE |
| CHECKED  |      |
| APPROVED | DATE |



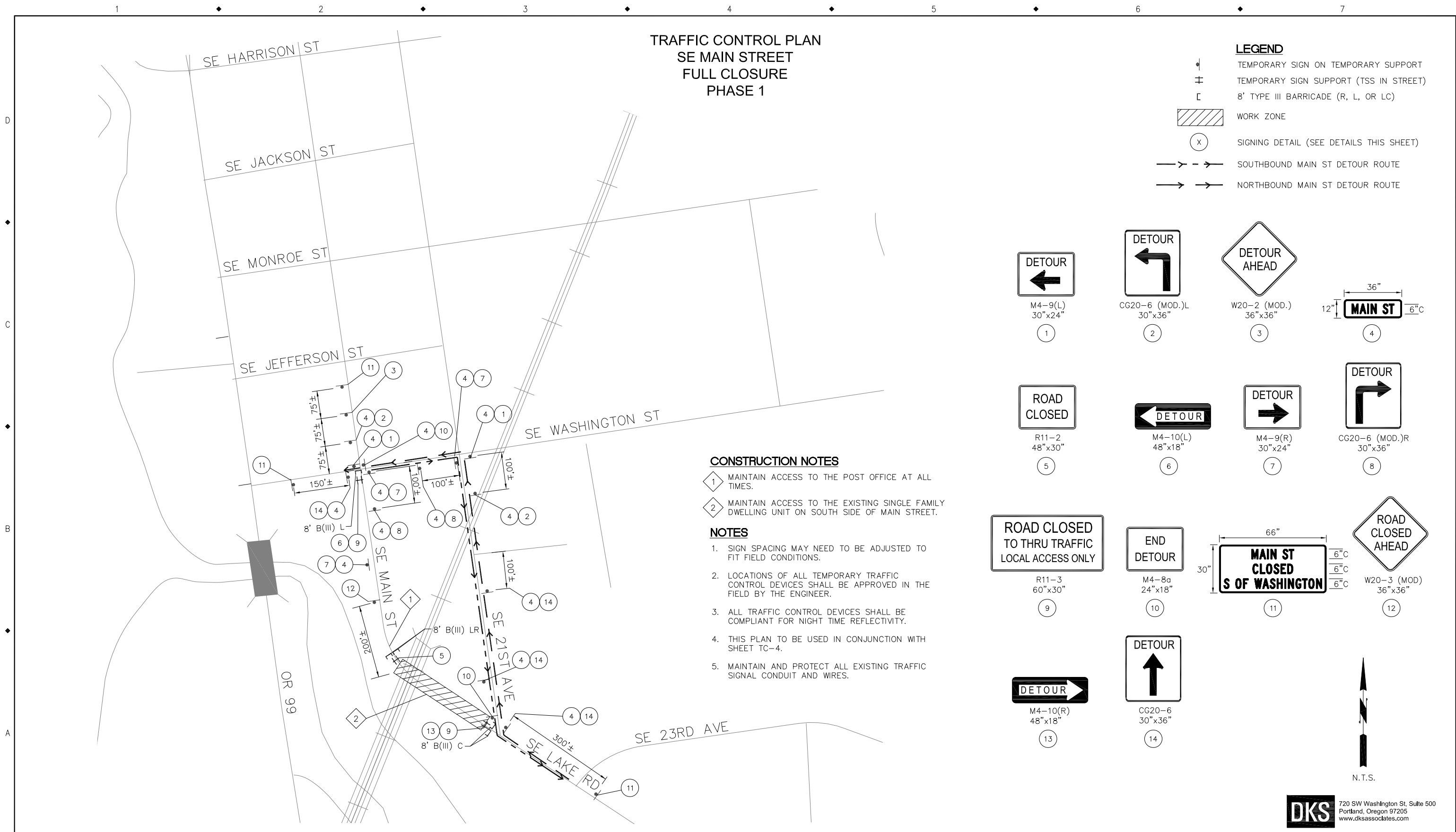
**MILWAUKIE**  
*Dogwood City of the West*

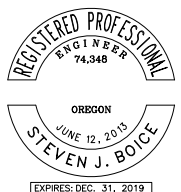
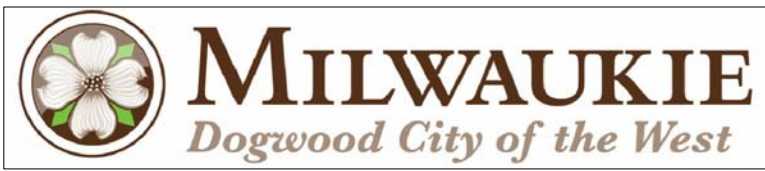
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

|                             |            |               |      |
|-----------------------------|------------|---------------|------|
| SOUTH DOWNTOWN IMPROVEMENTS |            |               |      |
| TRAFFIC STAGING PLAN        |            |               |      |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: |      |
| DATE:                       | 07/10/2018 | SHEET NO.:    | TC-2 |

X:\Projects\2018\18031-000 (Milwaukie Downtown Traffic Control Plans)\CAD\TC-2.dwg 7/16/2018 4:03 PM Maria Ralls



|     |      |    |           |                    |      |                                                                                       |                                                                                       |                                                    |  |  |  |                                          |                      |               |                  |                 |
|-----|------|----|-----------|--------------------|------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------|--|--|--|------------------------------------------|----------------------|---------------|------------------|-----------------|
|     |      |    |           | LEC<br>DESIGNED    | DATE |  |  | SOUTH DOWNTOWN IMPROVEMENTS                        |  |  |  |                                          |                      |               |                  |                 |
|     |      |    |           | DKS CAD<br>DRAFTED | DATE |                                                                                       |                                                                                       | TRAFFIC CONTROL PLAN                               |  |  |  |                                          |                      |               |                  |                 |
|     |      |    |           | PLC<br>CHECKED     | DATE |                                                                                       |                                                                                       |                                                    |  |  |  |                                          |                      |               |                  |                 |
|     |      |    |           | APPROVED           | DATE |                                                                                       |                                                                                       |                                                    |  |  |  |                                          |                      |               |                  |                 |
|     |      |    |           |                    |      |                                                                                       |                                                                                       |                                                    |  |  |  |                                          |                      |               |                  |                 |
| NO. | DATE | BY | REVISIONS |                    |      |                                                                                       |                                                                                       | 6101 SE JOHNSON CREEK BLVD.<br>MILWAUKIE, OR 97206 |  |  |  | PHONE: 503-786-7600<br>FAX: 503-774-8236 | PROJECT NO.: CIP2018 | CONTRACT NO.: | DATE: 07/10/2018 | SHEET NO.: TC-3 |

X:\Projects\2018\18031-000 (Milwaukie Downtown Traffic Control Plans)\CAD\TC-3.dwg 7/16/2018 4:03 PM Maria Ralls

PEDESTRIAN DETOUR PLAN  
SE LAKE ROAD  
FULL CLOSURE  
PHASE 1

LEGEND

- TEMPORARY SIGN ON BARRICADE (TYPE II)
- WORK ZONE
- SIGNING DETAIL (SEE DETAILS THIS SHEET)
- SIDEWALK CLOSURE WILL BE IN PLACE DURING THE CONSTRUCTION OF THE ENTIRE PROJECT

CROSSWALK CLOSED  
OR22-8  
24"x24"  
1

SIDEWALK CLOSED  
R9-9  
24"x12"  
2

DETOUR  
M4-9b(R)  
30"x24"  
3

DETOUR  
M4-9b(MOD)  
30"x24"  
4

SIDEWALK CLOSED  
CROSS HERE  
R9-11a(R)  
24"x12"  
5

W11-2  
36"x36"  
6

M6-2a(L)  
21"x15"  
7

W11-2  
36"x36"  
7

M6-2a(R)  
21"x15"  
8

SIDEWALK CLOSED  
AHEAD  
CROSS HERE  
R9-11a(L)  
24"x18"  
8

NOTES

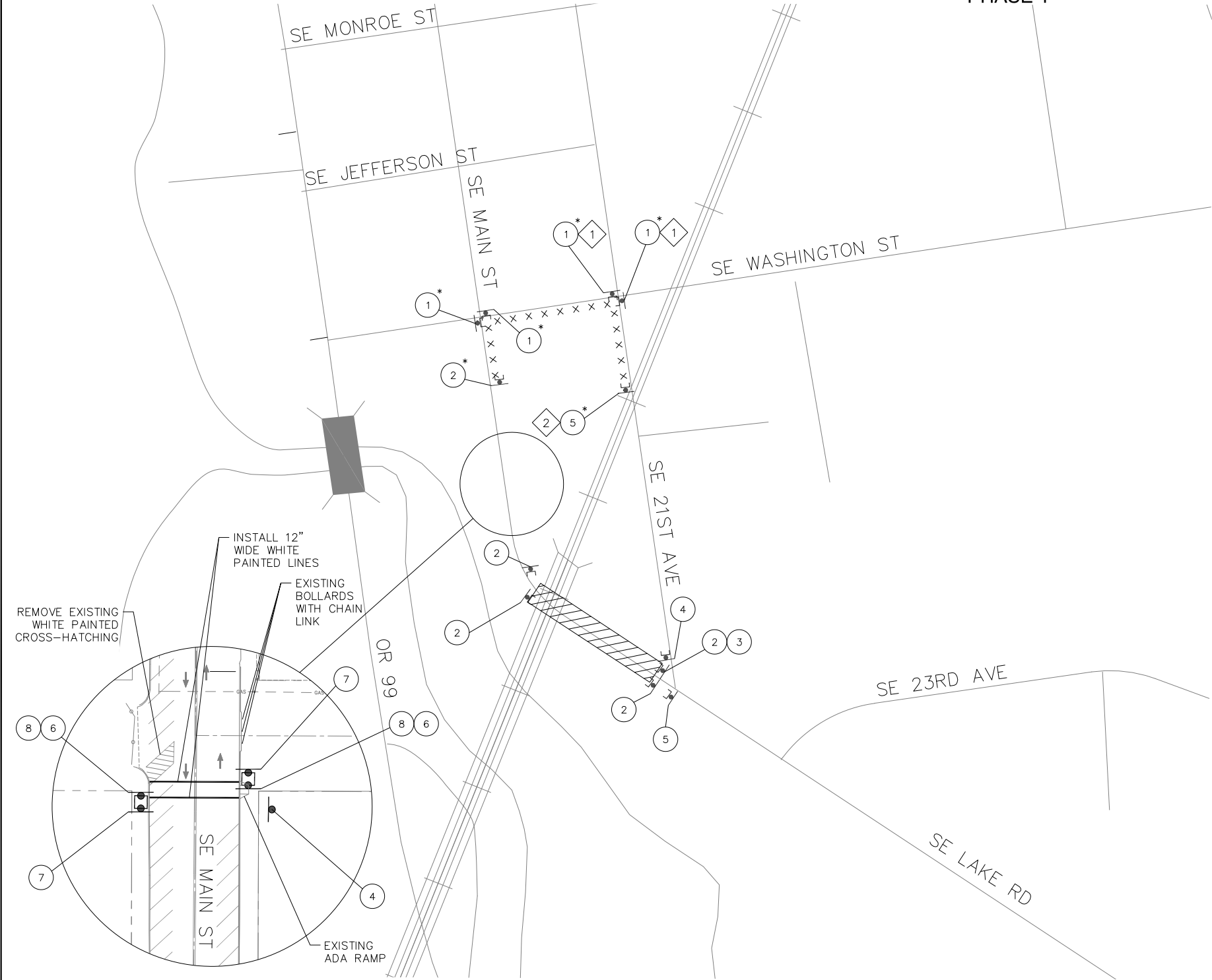
1. ONLY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN.
2. SIGN SPACING MAY NEED TO BE ADJUSTED TO FIT FIELD CONDITIONS.
3. LOCATIONS OF ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE APPROVED IN THE FIELD BY THE ENGINEER.
4. ALL TRAFFIC CONTROL DEVICES SHALL BE COMPLIANT FOR NIGHT TIME REFLECTIVITY.
5. THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-3.
6. MAINTAIN AND PROTECT ALL EXISTING TRAFFIC SIGNAL CONDUIT AND WIRES.
- \* INSTALLED BY OTHERS.

CONSTRUCTION NOTES

- 1 CONTRACTOR NEEDS TO COVER PEDESTRIAN SIGNALS FOR WEST AND SOUTH LEGS. COORDINATE WITH BIKRAM RAGHUBANSH CLACKAMAS COUNTY (503-819-9626).
- 2 LOCATE SIGN AND BARRICADE AT EXISTING SIGNALIZED CROSSING.



DKS 720 SW Washington St, Suite 500  
Portland, Oregon 97205  
www.dksassociates.com



| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |

|          |  |      |
|----------|--|------|
| LEC      |  |      |
| DESIGNED |  | DATE |
| DKS CAD  |  |      |
| DRAFTED  |  | DATE |
| PLC      |  |      |
| CHECKED  |  | DATE |
| APPROVED |  | DATE |



**MILWAUKIE**  
*Dogwood City of the West*

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

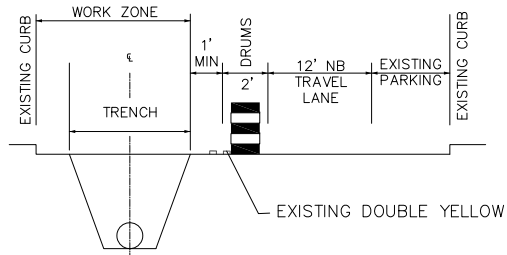
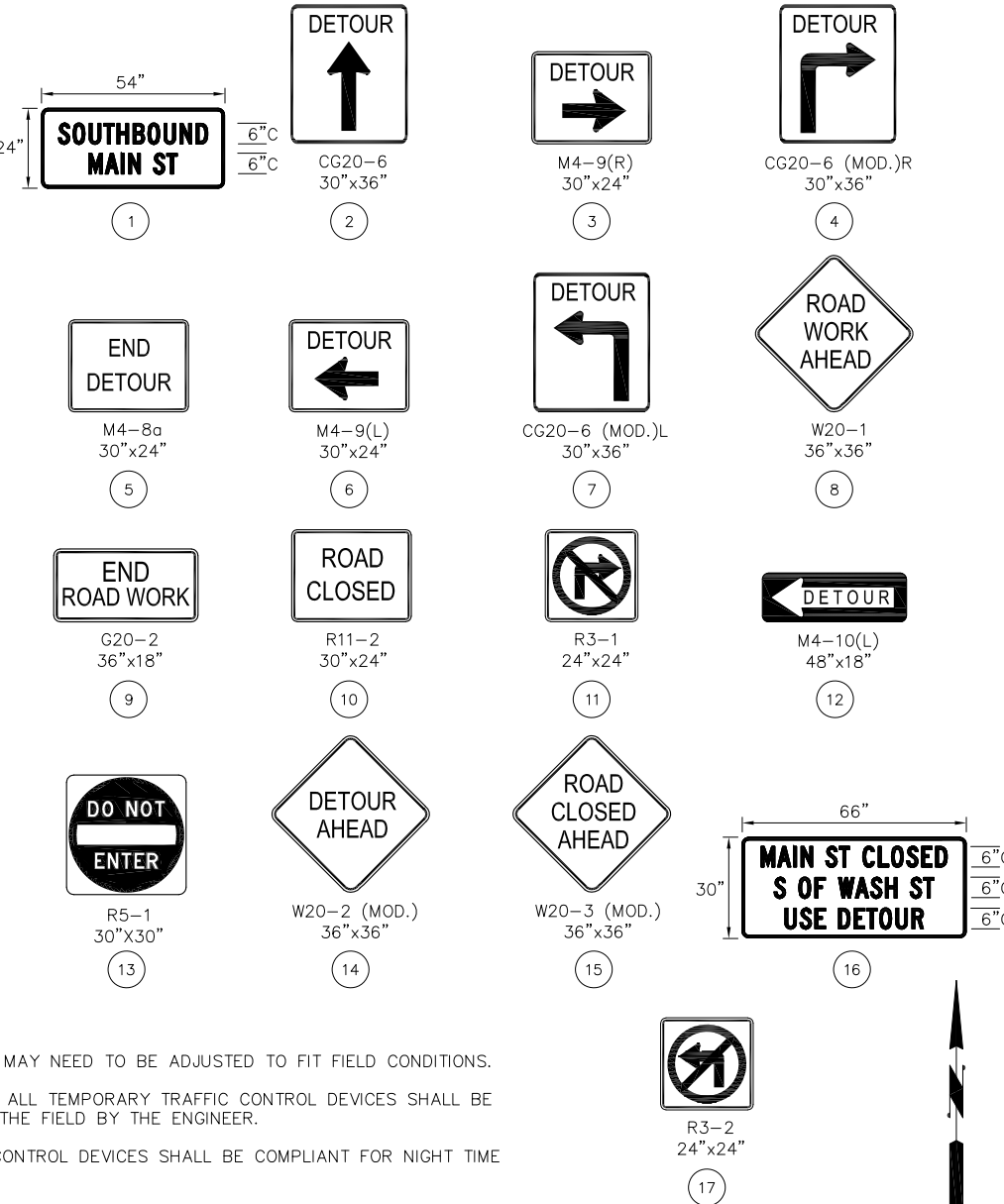
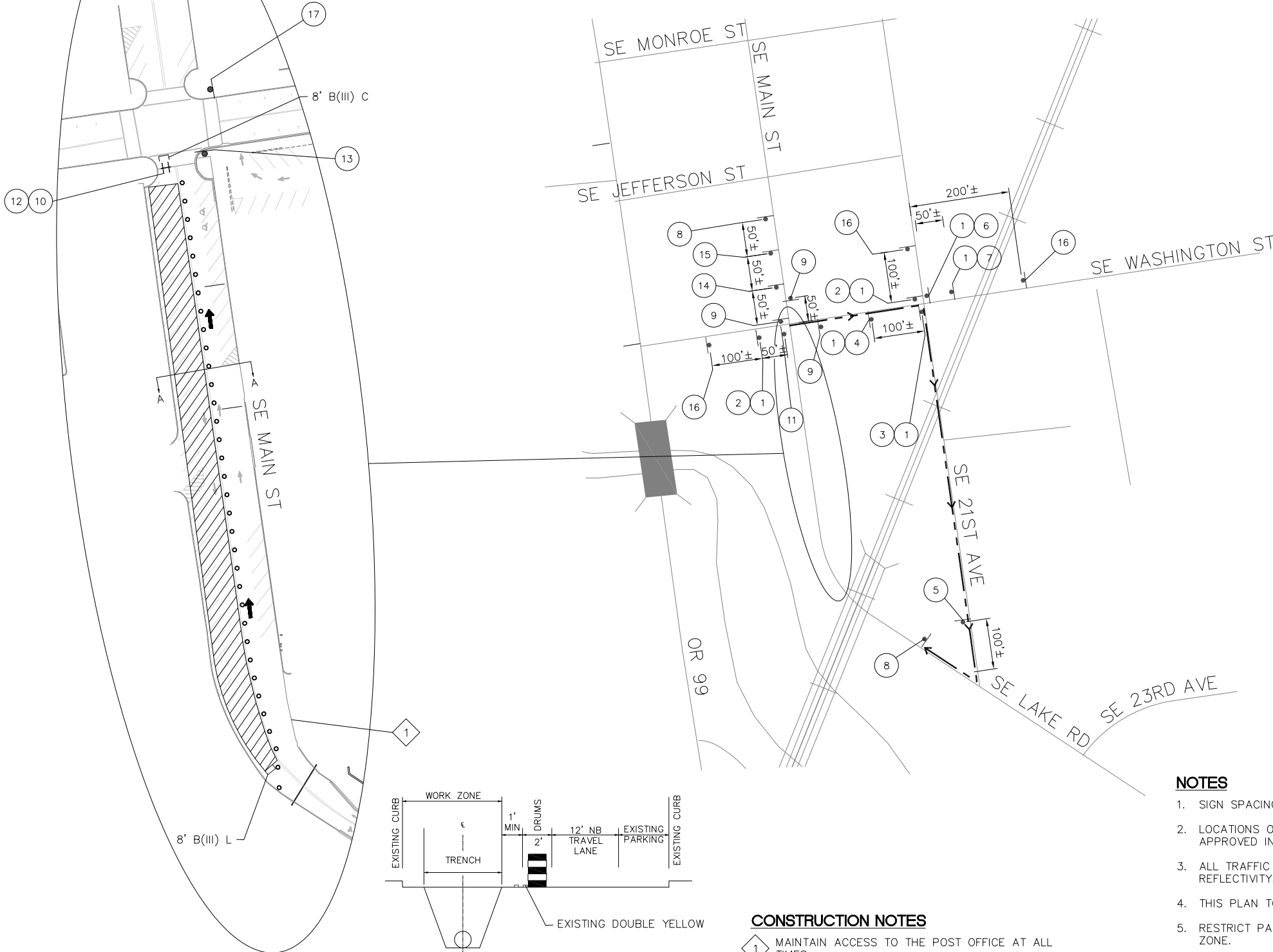
| SOUTH DOWNTOWN IMPROVEMENTS |            |               |      |
|-----------------------------|------------|---------------|------|
| PEDESTRIAN DETOUR PLAN      |            |               |      |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: |      |
| DATE:                       | 07/10/2018 | SHEET NO.:    | TC-4 |



TRAFFIC CONTROL PLAN  
SE MAIN STREET  
SOUTHBOUND CLOSURE  
PHASE 2/STAGE 1

LEGEND

- TEMPORARY SIGN ON TEMPORARY SUPPORT
- TEMPORARY SIGN ON TEMPORARY SUPPORT (TSS IN STREET)
- 8' TYPE III BARRICADE (R, L, OR C)
- WORK ZONE
- SIGNING DETAIL (SEE DETAILS THIS SHEET)
- SOUTHBOUND MAIN ST DETOUR ROUTE
- TEMPORARY PLASTIC DRUMS ON 20' MAX. SPACING
- DIRECTION OF TRAFFIC



**CONSTRUCTION NOTES**

1 MAINTAIN ACCESS TO THE POST OFFICE AT ALL TIMES.

- 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 TIME REFLECTIVITY.
  - 4. THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-6.
  - 5. RESTRICT PARKING AREA ALONG WEST SIDE OF MAIN ST. WITHIN WORK ZONE.
  - 6. MAINTAIN AND PROTECT ALL EXISTING TRAFFIC SIGNAL CONDUIT AND WIRES.



**DKS** 720 SW Washington St, Suite 500  
Portland, Oregon 97205  
www.dksassociates.com

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |

|          |          |      |
|----------|----------|------|
| LEC      | DESIGNED | DATE |
| DKS CAD  | DRAFTED  | DATE |
| PLC      | CHECKED  | DATE |
| APPROVED | DATE     |      |

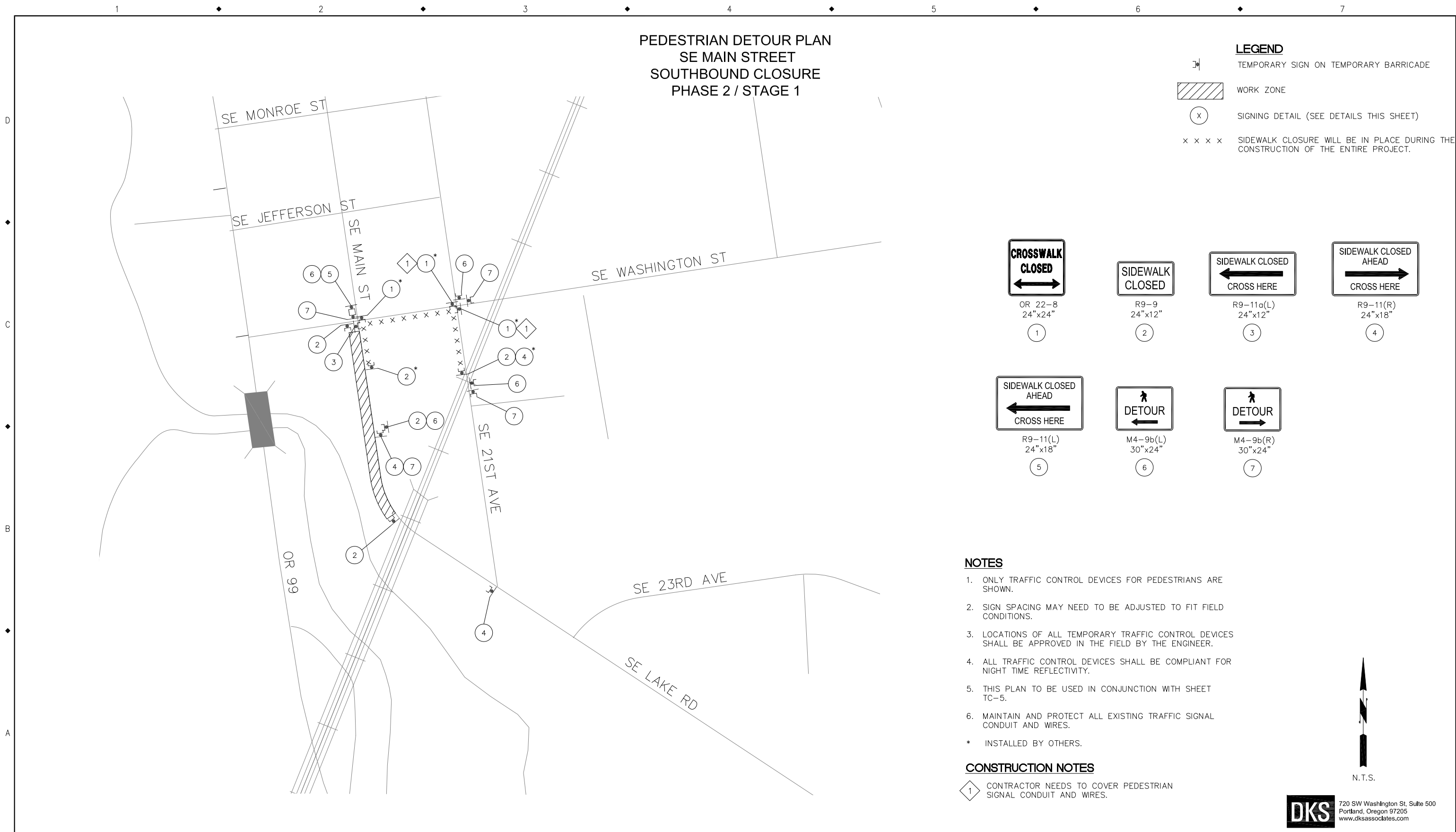


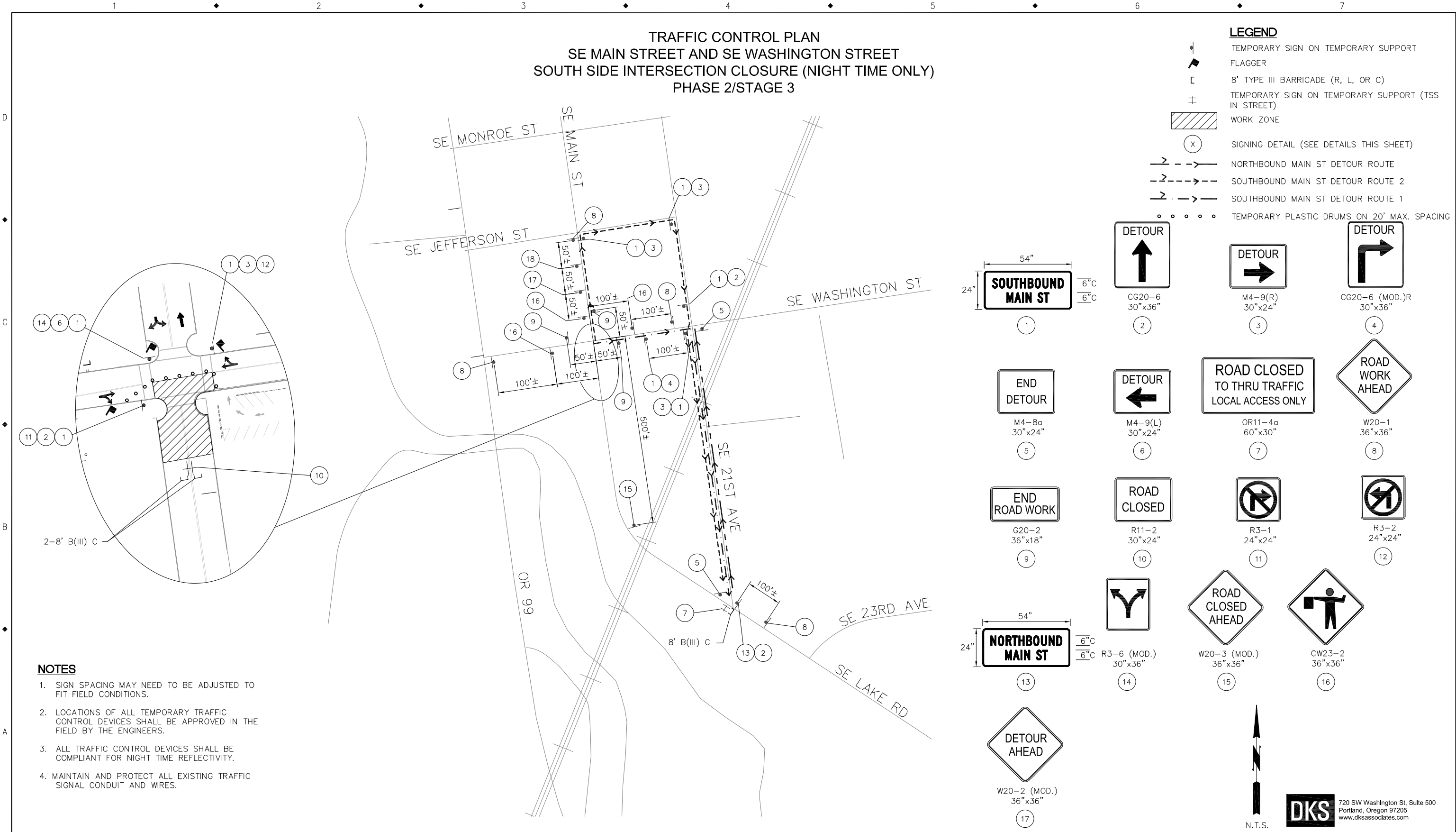
**MILWAUKIE**  
*Dogwood City of the West*

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

| SOUTH DOWNTOWN IMPROVEMENTS |            |               |      |
|-----------------------------|------------|---------------|------|
| TRAFFIC CONTROL PLAN        |            |               |      |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: |      |
| DATE:                       | 07/10/2018 | SHEET NO.:    | TC-5 |





|     |      |    |           |          |      |                                                                                       |                                                                                                                                                                                                                                                                    |                             |         |               |  |       |            |            |      |
|-----|------|----|-----------|----------|------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------|---------------|--|-------|------------|------------|------|
|     |      |    |           | CDZ      | DATE |  |  <div>MILWAUKIE<br/><i>Dogwood City of the West</i></div> <div>6101 SE JOHNSON CREEK BLVD.<br/>MILWAUKIE, OR 97206</div> <div>PHONE: 503-786-7600<br/>FAX: 503-774-8236</div> | SOUTH DOWNTOWN IMPROVEMENTS |         |               |  |       |            |            |      |
|     |      |    |           | DESIGNED | DATE |                                                                                       |                                                                                                                                                                                                                                                                    | TRAFFIC CONTROL PLAN        |         |               |  |       |            |            |      |
|     |      |    |           | DKS CAD  | DATE |                                                                                       |                                                                                                                                                                                                                                                                    |                             |         |               |  |       |            |            |      |
|     |      |    |           | DRAFTED  | DATE |                                                                                       |                                                                                                                                                                                                                                                                    |                             |         |               |  |       |            |            |      |
|     |      |    |           | PLC      | DATE |                                                                                       |                                                                                                                                                                                                                                                                    |                             |         |               |  |       |            |            |      |
|     |      |    |           | CHECKED  | DATE |                                                                                       |                                                                                                                                                                                                                                                                    | PROJECT NO.:                | CIP2018 | CONTRACT NO.: |  | DATE: | 07/10/2018 | SHEET NO.: | TC-7 |
| NO. | DATE | BY | REVISIONS | APPROVED | DATE |                                                                                       |                                                                                                                                                                                                                                                                    |                             |         |               |  |       |            |            |      |



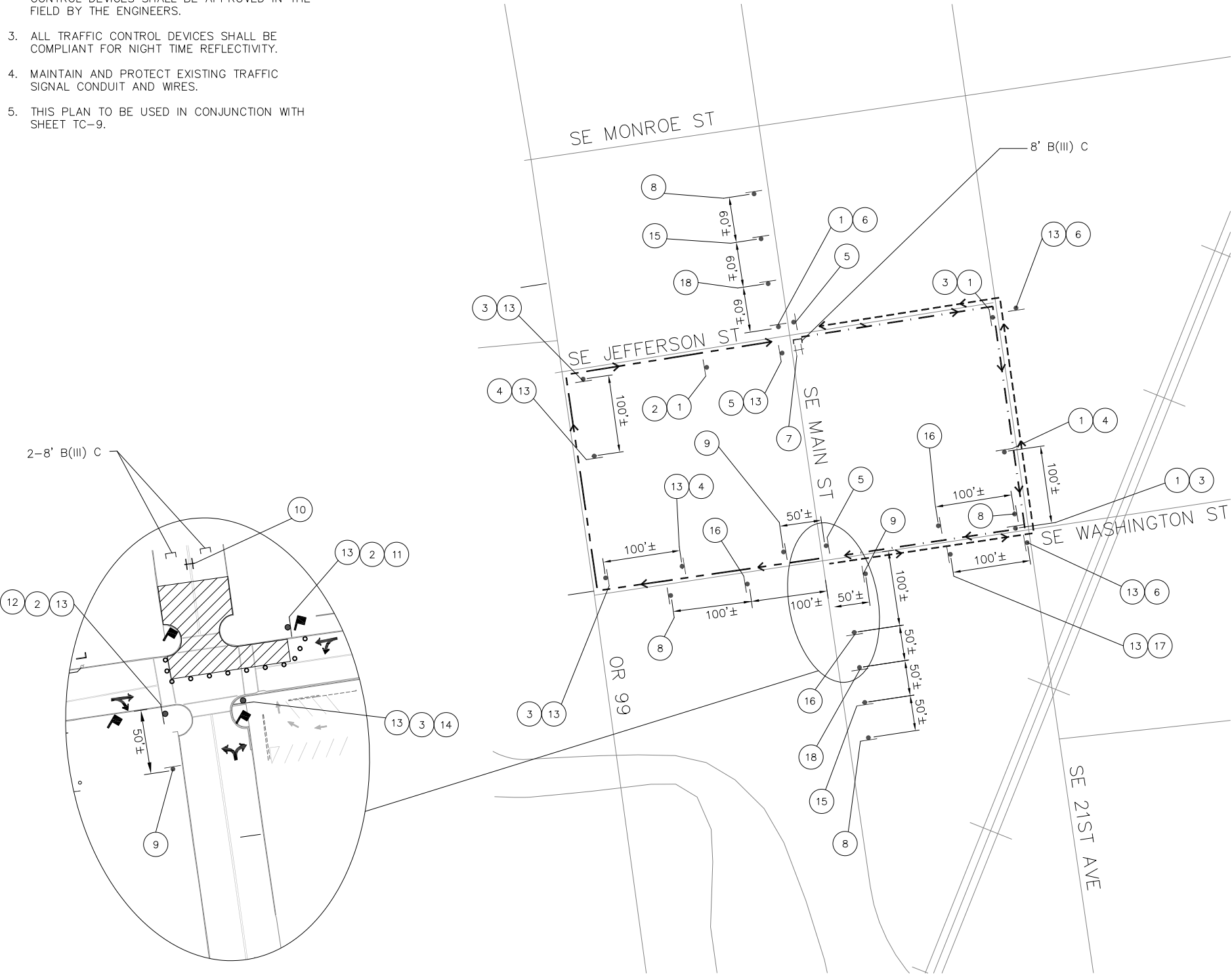
NOTES

- 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 ENGINEERS.
- 3. ALL TRAFFIC CONTROL DEVICES SHALL BE COMPLIANT FOR NIGHT TIME REFLECTIVITY.
- 4. MAINTAIN AND PROTECT EXISTING TRAFFIC SIGNAL CONDUIT AND WIRES.
- 5. THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-9.

TRAFFIC CONTROL PLAN  
SE MAIN STREET AND SE WASHINGTON STREET  
NORTH SIDE INTERSECTION CLOSURE (NIGHT TIME ONLY)  
PHASE 2/STAGE 4

LEGEND

- TEMPORARY SIGN ON TEMPORARY SUPPORT
- FLAGGER
- 8' TYPE III BARRICADE (R, L, OR C)
- TEMPORARY SIGN ON TEMPORARY SUPPORT (TSS IN STREET)
- WORK ZONE
- SIGNING DETAIL (SEE DETAILS THIS SHEET)
- NORTHBOUND MAIN ST DETOUR ROUTE 1
- NORTHBOUND MAIN ST DETOUR ROUTE 2
- SOUTHBOUND MAIN ST DETOUR ROUTE
- TEMPORARY PLASTIC DRUMS ON 20' MAX. SPACING



SOUTHBOUND  
MAIN ST

1

END  
DETOUR

5

END  
ROAD WORK

9

NORTHBOUND  
MAIN ST

13

DETOUR  
AHEAD

18

DETOUR

CG20-6  
30"x36"

2

DETOUR

M4-9(R)  
30"x24"

3

DETOUR

CG20-6 (MOD.)R  
30"x36"

4

DETOUR

M4-9(L)  
30"x24"

6

ROAD CLOSED

R11-2  
30"x24"

10

ROAD CLOSED

R3-6 (MOD.)  
30"x36"

14

ROAD CLOSED  
TO THRU TRAFFIC  
LOCAL ACCESS ONLY

OR11-4a  
60"x30"

7

ROAD CLOSED  
AHEAD

W20-3 (MOD.)  
36"x36"

15

ROAD WORK  
AHEAD

W20-1  
36"x36"

8

ROAD CLOSED

R3-1  
24"x24"

11

ROAD CLOSED

W20-2 (MOD.)  
36"x36"

16

ROAD CLOSED

R3-2  
24"x24"

12

DETOUR

CG20-6 (MOD.)L  
30"x36"

17

DETOUR

CG20-6 (MOD.)R  
30"x36"

4

ROAD WORK  
AHEAD

W20-1  
36"x36"

8

ROAD CLOSED

R3-2  
24"x24"

12

DETOUR

CG20-6 (MOD.)L  
30"x36"

17

N.T.S.

**DKS** 720 SW Washington St, Suite 500  
Portland, Oregon 97205  
www.dksassociates.com

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |

|          |      |
|----------|------|
| CDZ      |      |
| DESIGNED | DATE |
| DKS CAD  |      |
| DRAFTED  | DATE |
| PLC      |      |
| CHECKED  | DATE |
| APPROVED | DATE |



**MILWAUKIE**  
*Dogwood City of the West*

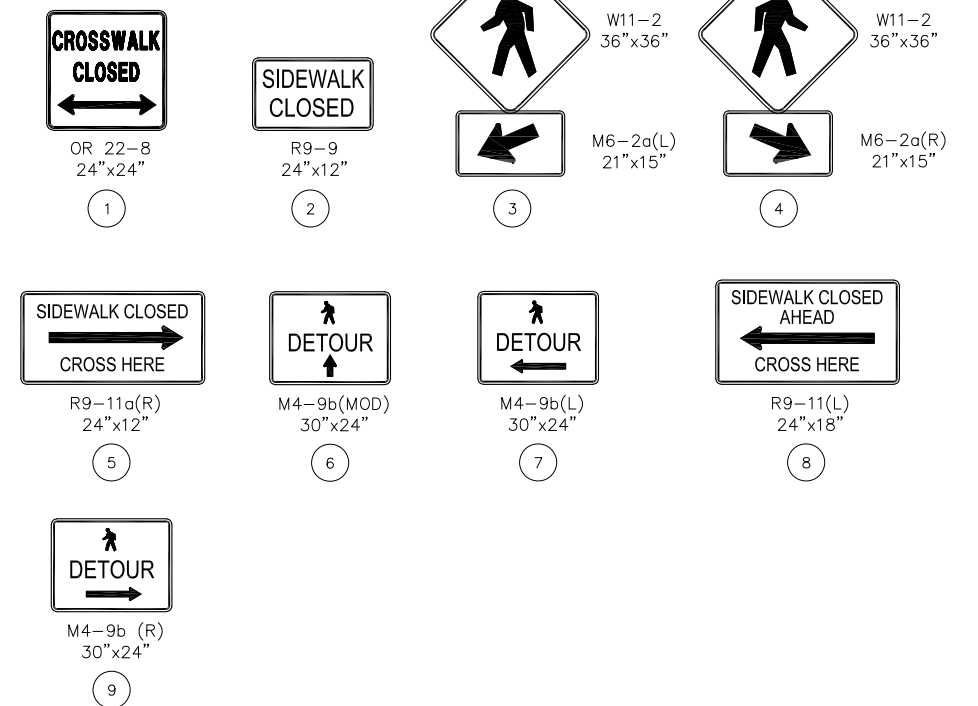
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

|                             |            |               |      |
|-----------------------------|------------|---------------|------|
| SOUTH DOWNTOWN IMPROVEMENTS |            |               |      |
| TRAFFIC CONTROL PLAN        |            |               |      |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: |      |
| DATE:                       | 07/10/2018 | SHEET NO.:    | TC-8 |



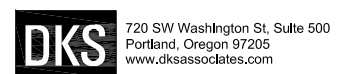
|                                                                                     |                                                                                 |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|  | TEMPORARY SIGN ON TEMPORARY BARRICADE                                           |
|  | SIGNING DETAIL (SEE DETAILS THIS SHEET)                                         |
|  | SIDEWALK CLOSURE WILL BE IN PLACE DURING THE CONSTRUCTION OF THE ENTIRE PROJECT |



1. ONLY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN.
2. SIGN SPACING MAY NEED TO BE ADJUSTED TO FIT FIELD CONDITIONS.
3. LOCATIONS OF ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE APPROVED IN THE FIELD BY THE ENGINEER.
4. ALL TRAFFIC CONTROL DEVICES SHALL BE COMPLIANT FOR NIGHT TIME REFLECTIVITY.
5. THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-8.
6. MAINTAIN AND PROTECT ALL EXISTING TRAFFIC SIGNAL CONDUIT AND WIRES.

\* INSTALLED BY OTHERS.

- 1 CONTRACTOR NEEDS TO COVER PEDESTRIAN SIGNALS FOR WEST AND SOUTH LEGS.
- 2 LOCATE SIGN AND BARRICADE AT EXISTING SIGNALIZED CROSSING.



|     |      |    |           |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
| No. | Date | By | Revisions |

|          |      |
|----------|------|
| CDZ      |      |
| DESIGNED | DATE |
| DKS CAD  |      |
| DRAFTED  | DATE |
| PLC      |      |
| CHECKED  | DATE |
| APPROVED | DATE |



6101 SE JOHNSON CREEK BLVD. PHONE: 503-786-7600  
MILWAUKIE, OR 97206 FAX: 503-774-8236

## SOUTH DOWNTOWN IMPROVEMENTS

PEDESTRIAN DETOUR PLAN

|                      |               |                  |                 |
|----------------------|---------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: | DATE: 07/10/2018 | SHEET NO.: TC-9 |
|----------------------|---------------|------------------|-----------------|

TRAFFIC CONTROL PLAN  
SE WASHINGTON STREET  
EASTBOUND CLOSURE (NIGHT TIME ONLY)  
PHASE 2/ STAGE 5

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 TIME REFLECTIVITY.
4. THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-11.
5. MAINTAIN AND PROTECT ALL EXISTING TRAFFIC SIGNAL CONDUIT AND WIRES.

LEGEND

- TEMPORARY SIGN ON TEMPORARY SUPPORT
- TEMPORARY SIGN ON TEMPORARY SUPPORT (TSS IN STREET)
- 8' TYPE III BARRICADE (R, L, OR C)
- WORK ZONE
- SIDEWALK CLOSURE WILL BE IN PLACE DURING THE CONSTRUCTION OF THE ENTIRE PROJECT
- SIGNING DETAIL (SEE DETAILS THIS SHEET)
- EASTBOUND WASHINGTON ST DETOUR ROUTE
- TEMPORARY PLASTIC DRUMS ON 20' MAX. SPACING
- DIRECTION OF TRAFFIC



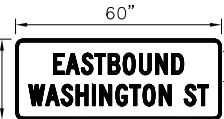
1



2



3



4



5



6



7



8



9



10



11



12



13



14



15



16



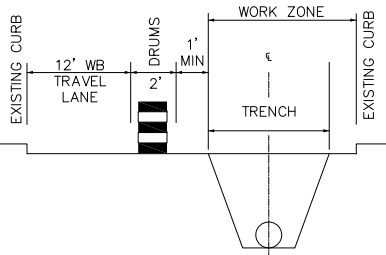
17



N.T.S.



720 SW Washington St, Suite 500  
Portland, Oregon 97205  
www.dksassociates.com



SECTION A-A  
N.T.S.

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |

|          |          |      |
|----------|----------|------|
| LEC      | DESIGNED | DATE |
| DKS CAD  | DRAFTED  | DATE |
| PLC      | CHECKED  | DATE |
| APPROVED | DATE     |      |



6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206  
PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

TRAFFIC CONTROL PLAN

|                      |               |                  |                  |
|----------------------|---------------|------------------|------------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: | DATE: 07/10/2018 | SHEET NO.: TC-10 |
|----------------------|---------------|------------------|------------------|



PEDESTRIAN DETOUR PLAN  
SE WASHINGTON STREET  
EASTBOUND CLOSURE  
PHASE 2/STAGE 5

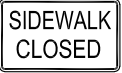
LEGEND

- TEMPORARY SIGN ON TEMPORARY BARRICADE
- SIGNING DETAIL (SEE DETAILS THIS SHEET)
- SIDEWALK CLOSURE WILL BE IN PLACE DURING THE CONSTRUCTION OF THE ENTIRE PROJECT



OR 22-8  
24"x24"

1



R9-9  
24"x12"

2



W11-2  
36"x36"



M6-2a(L)  
21"x15"

3

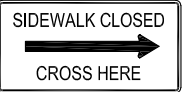


W11-2  
36"x36"



M6-2a(R)  
21"x15"

4



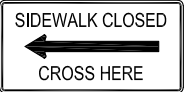
R9-11a(R)  
24"x12"

5



M4-9b(MOD.)  
30"x24"

6



R9-11a(L)  
24"x12"

7

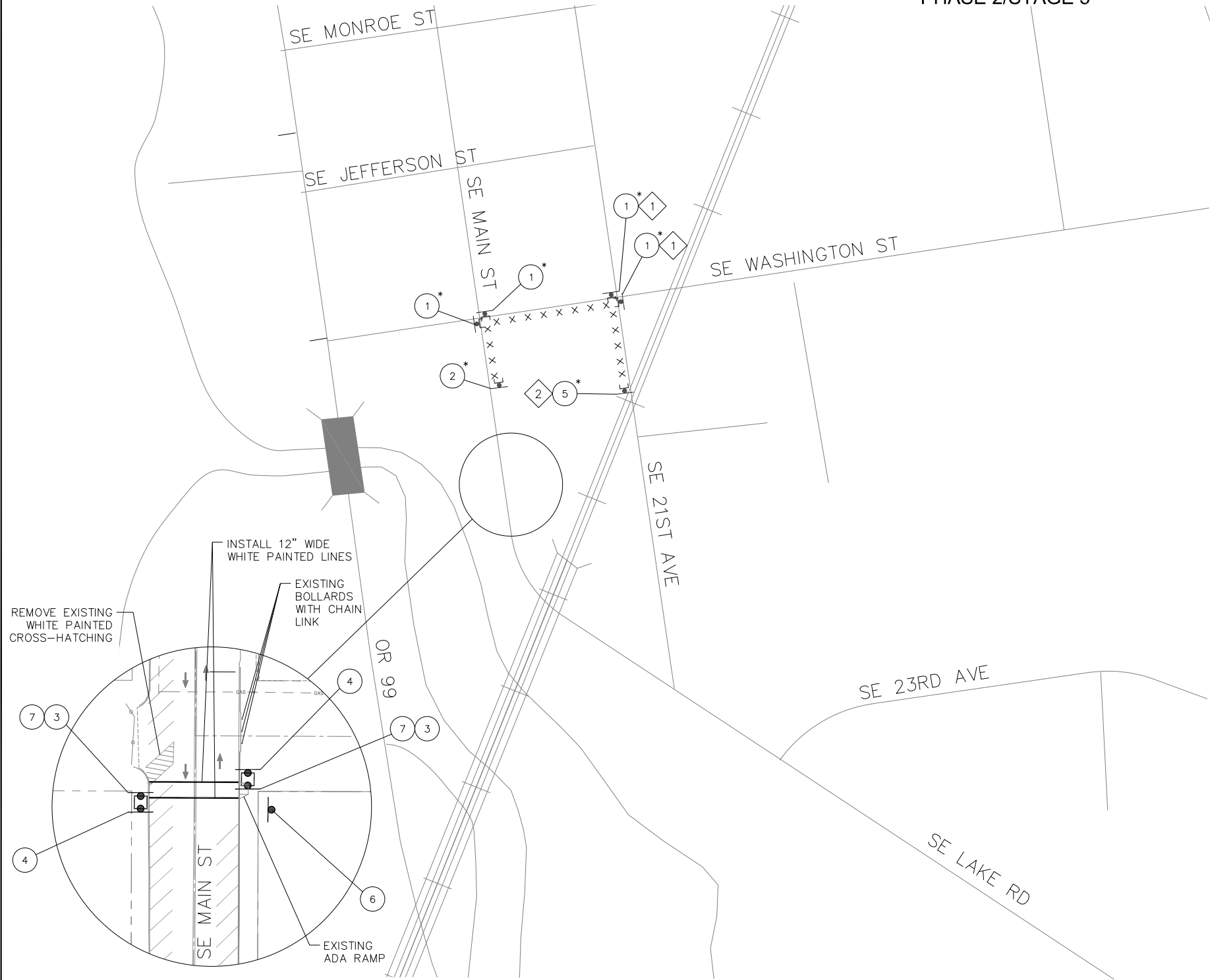
NOTES

- ONLY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN.
- SIGN SPACING MAY NEED TO BE ADJUSTED TO FIT FIELD CONDITIONS.
- LOCATIONS OF ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE APPROVED IN THE FIELD BY THE ENGINEER.
- ALL TRAFFIC CONTROL DEVICES SHALL BE COMPLIANT FOR NIGHT TIME REFLECTIVITY.
- THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-10.
- MAINTAIN AND PROTECT ALL EXISTING TRAFFIC SIGNAL CONDUIT AND WIRES.

\* INSTALLED BY OTHERS.

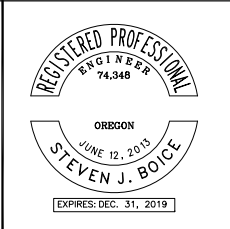
CONSTRUCTION NOTES

- CONTRACTOR NEEDS TO COVER PEDESTRIAN SIGNALS FOR WEST AND SOUTH LEGS.
- LOCATE SIGN AND BARRICADE AT EXISTING SIGNALIZED CROSSING.



| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |

|          |          |      |
|----------|----------|------|
| LEC      | DESIGNED | DATE |
| DKS      | CAD      | DATE |
| PLC      | CHECKED  | DATE |
| APPROVED | DATE     |      |



**MILWAUKIE**  
*Dogwood City of the West*

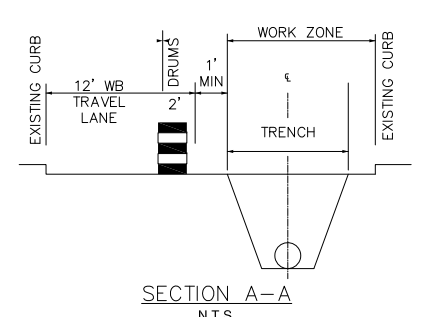
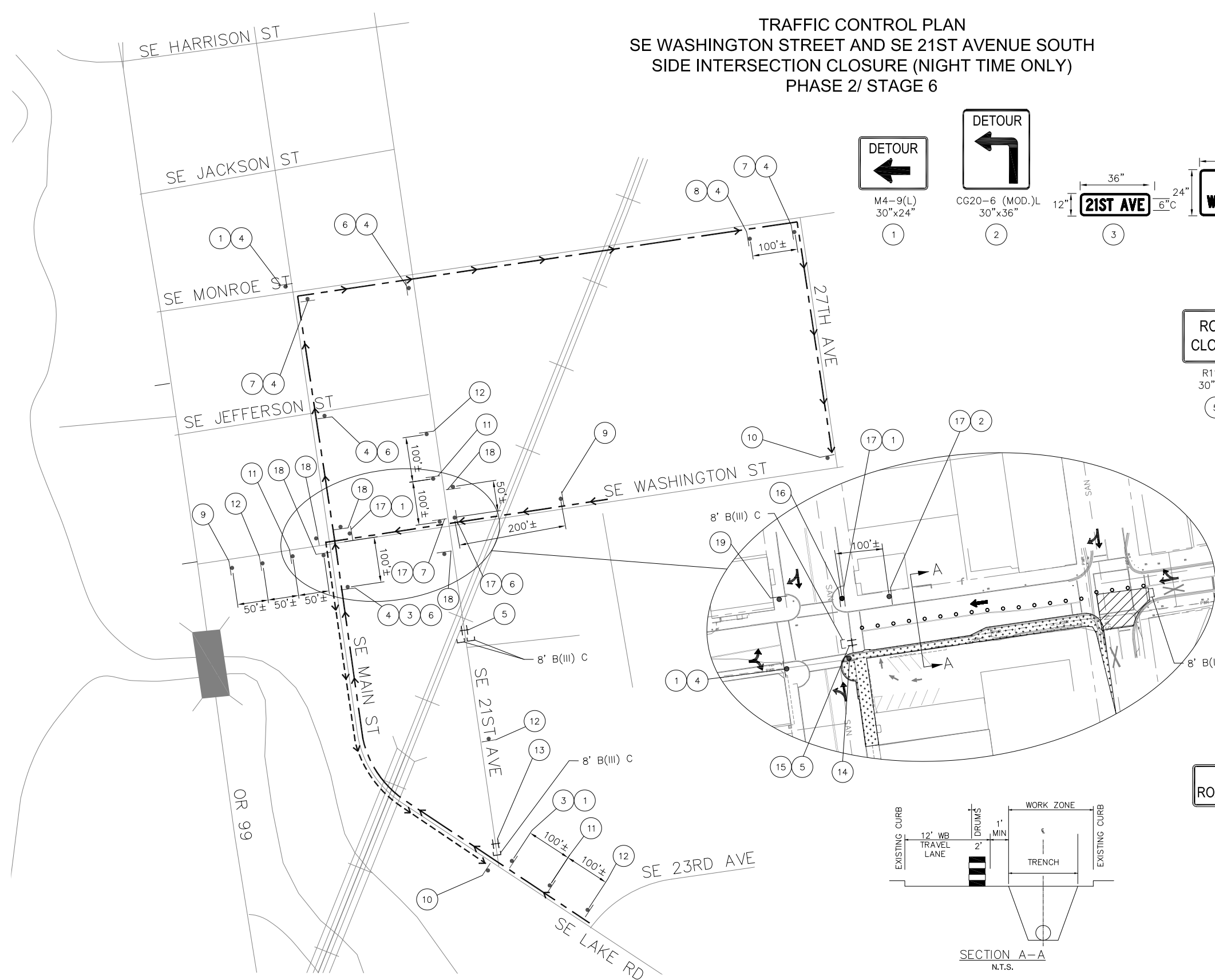
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

| SOUTH DOWNTOWN IMPROVEMENTS |            |               |       |
|-----------------------------|------------|---------------|-------|
| PEDESTRIAN DETOUR PLAN      |            |               |       |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: |       |
| DATE:                       | 07/10/2018 | SHEET NO.:    | TC-11 |

DKS 720 SW Washington St, Suite 500  
Portland, Oregon 97205  
www.dksassociates.com

TRAFFIC CONTROL PLAN  
SE WASHINGTON STREET AND SE 21ST AVENUE SOUTH  
SIDE INTERSECTION CLOSURE (NIGHT TIME ONLY)  
PHASE 2/ STAGE 6



- LEGEND**
- TEMPORARY SIGN ON TEMPORARY SUPPORT
- TEMPORARY SIGN ON TEMPORARY SUPPORT (TSS  
IN STREET)
- 8' TYPE III BARRICADE (R, L, OR C)
- WORK ZONE
- SIDEWALK CLOSURE WILL BE IN PLACE DURING THE  
CONSTRUCTION OF THE ENTIRE PROJECT
- SIGNING DETAIL (SEE DETAILS THIS SHEET)
- EASTBOUND LAKE RD DETOUR ROUTE
- SOUTHBOUND 21ST AVE DETOUR ROUTE
- EASTBOUND WASHINGTON ST DETOUR ROUTE
- TEMPORARY PLASTIC DRUMS ON 20' MAX. SPACING
- DIRECTION OF TRAFFIC

- 
- 8' B(III) L
5. ROAD CLOSED  
R11-2  
30"x24"
6. DETOUR  
CG20-6  
30"x36"
7. DETOUR  
M4-9(R)  
30"x24"
8. DETOUR  
CG20-6 (MOD.)R  
30"x36"
9. ROAD WORK AHEAD  
W20-1  
36"x36"
10. END DETOUR  
M4-8a  
30"x24"
11. DETOUR AHEAD  
W20-2 (MOD.)  
36"x36"
12. ROAD CLOSED AHEAD  
W20-3(MOD.)  
36"x36"
13. ROAD CLOSED TO THRU TRAFFIC LOCAL ACCESS ONLY  
OR11-4a  
60"x30"
14. R3-1  
24"x24"
15. DETOUR  
M4-10(L)  
48"x18"
16. DO NOT ENTER  
R5-1  
30"x30"
17. SOUTHBOUND 21ST AVE  
54"  
24"  
6"  
6"

- ## 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 TIME REFLECTIVITY.
  4. THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-13.
  5. MAINTAIN AND PROTECT ALL EXISTING TRAFFIC SIGNAL AND WIRES.
- 
- N.T.S.

|     |      |    |           |          |      |
|-----|------|----|-----------|----------|------|
|     |      |    |           | LEC      |      |
|     |      |    |           | DESIGNED | DATE |
|     |      |    |           | DKS CAD  |      |
|     |      |    |           | DRAFTED  | DATE |
|     |      |    |           | PLC      |      |
|     |      |    |           | CHECKED  | DATE |
|     |      |    |           | APPROVED | DATE |
| NO. | DATE | BY | REVISIONS |          |      |

|                                                                                                                        |            |               |       |
|------------------------------------------------------------------------------------------------------------------------|------------|---------------|-------|
| <p style="text-align: center;">SOUTH DOWNTOWN IMPROVEMENTS</p> <p style="text-align: center;">TRAFFIC CONTROL PLAN</p> |            |               |       |
| PROJECT NO.:                                                                                                           | CIP2018    | CONTRACT NO.: |       |
| DATE:                                                                                                                  | 07/10/2018 | SHEET NO.:    | TC-12 |

**PEDESTRIAN DETOUR PLAN  
SE WASHINGTON STREET AND SE 21ST AVENUE  
SOUTH SIDE INTERSECTION CLOSURE  
PHASE 2/STAGE 6**

**LEGEND**

- TEMPORARY SIGN ON TEMPORARY BARRICADE
- SIGNING DETAIL (SEE DETAILS THIS SHEET)
- SIDEWALK CLOSURE WILL BE IN PLACE DURING THE CONSTRUCTION OF THE ENTIRE PROJECT

**NOTES**

- ONLY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN.
- SIGN SPACING MAY NEED TO BE ADJUSTED TO FIT FIELD CONDITIONS.
- LOCATIONS OF ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE APPROVED IN THE FIELD BY THE ENGINEER.
- ALL TRAFFIC CONTROL DEVICES SHALL BE COMPLIANT FOR NIGHT TIME REFLECTIVITY.
- THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-12.
- MAINTAIN AND PROTECT ALL EXISTING TRAFFIC SIGNAL CONDUIT AND WIRES.
- \* INSTALLED BY OTHERS.

**CONSTRUCTION NOTES**

- CONTRACTOR NEEDS TO COVER PEDESTRIAN SIGNALS FOR WEST, EAST, AND SOUTH LEGS.
- LOCATE SIGN AND BARRICADE AT EXISTING SIGNALIZED CROSSING.

**Legend Details:**

- CROSSWALK CLOSED OR 22-8 24"x24"
- SIDEWALK CLOSED R9-9 24"x12"
- W11-2 36"x36"
- M6-2a(L) 21"x15"
- M6-2a(R) 21"x15"
- DETOUR M4-9b(R) 30"x24"
- DETOUR M4-9b(MOD.) 30"x24"
- DETOUR M4-9b(L) 30"x24"
- SIDEWALK CLOSED AHEAD R9-11(R) 24"x18"

**Map Labels:**

- SE MONROE ST
- SE JEFFERSON ST
- SE MAIN ST
- SE WASHINGTON ST
- SE 21ST AVE
- SE 23RD AVE
- SE LAKE RD
- OR 99
- EXISTING ADA RAMP
- EXISTING BOLLARDS WITH CHAIN LINK
- INSTALL 12" WIDE WHITE PAINTED LINES
- REMOVE EXISTING WHITE PAINTED CROSS-HATCHING

**North Arrow:** N.T.S.

**DKS Associates, Inc.**  
720 SW Washington St., Suite 500  
Portland, Oregon 97205  
www.dksassociates.com

|     |      |    |           |                    |      |                                                                                       |                                                                                                                                           |                             |               |                  |                  |
|-----|------|----|-----------|--------------------|------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------|------------------|------------------|
|     |      |    |           | LEC<br>DESIGNED    | DATE |  |  <b>MILWAUKIE</b><br><i>Dogwood City of the West</i> | SOUTH DOWNTOWN IMPROVEMENTS |               |                  |                  |
|     |      |    |           | DKS CAD<br>DRAFTED | DATE |                                                                                       |                                                                                                                                           | PEDESTRIAN DETOUR PLAN      |               |                  |                  |
|     |      |    |           | PLC<br>CHECKED     | DATE |                                                                                       |                                                                                                                                           |                             |               |                  |                  |
|     |      |    |           | APPROVED           | DATE |                                                                                       |                                                                                                                                           |                             |               |                  |                  |
| NO. | DATE | BY | REVISIONS |                    |      |                                                                                       |                                                                                                                                           |                             |               |                  |                  |
|     |      |    |           |                    |      | 6101 SE JOHNSON CREEK BLVD.<br>MILWAUKIE, OR 97206                                    | PHONE: 503-786-7600<br>FAX: 503-774-8236                                                                                                  | PROJECT NO.: CIP2018        | CONTRACT NO.: | DATE: 07/10/2018 | SHEET NO.: TC-13 |

X:\Projects\2018\P18051-000 (Milwaukee Downtown Traffic Control Plans)\CAD\TC-13.dwg 7/16/2018 4:05 PM Maria Rellis



[illegible][illegible]

|          |      |
|----------|------|
| LEC      |      |
| DESIGNED | DATE |
| DKS CAD  |      |
| DRAFTED  | DATE |
| PLC      |      |
| CHECKED  | DATE |
| APPROVED | DATE |



# MILWAUKIE

*Dogwood City of the West*

PHONE: 503-786-7600  
FAX: 503-774-8236

TRAFFIC CONTROL PLAN

|                      |               |                  |                  |
|----------------------|---------------|------------------|------------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: | DATE: 07/10/2018 | SHEET NO.: TC-14 |
|----------------------|---------------|------------------|------------------|

[illegible][illegible]

|          |      |
|----------|------|
| LEC      |      |
| DESIGNED | DATE |
| DKS CAD  |      |
| DRAFTED  | DATE |
| PLC      |      |
| CHECKED  | DATE |
| APPROVED | DATE |



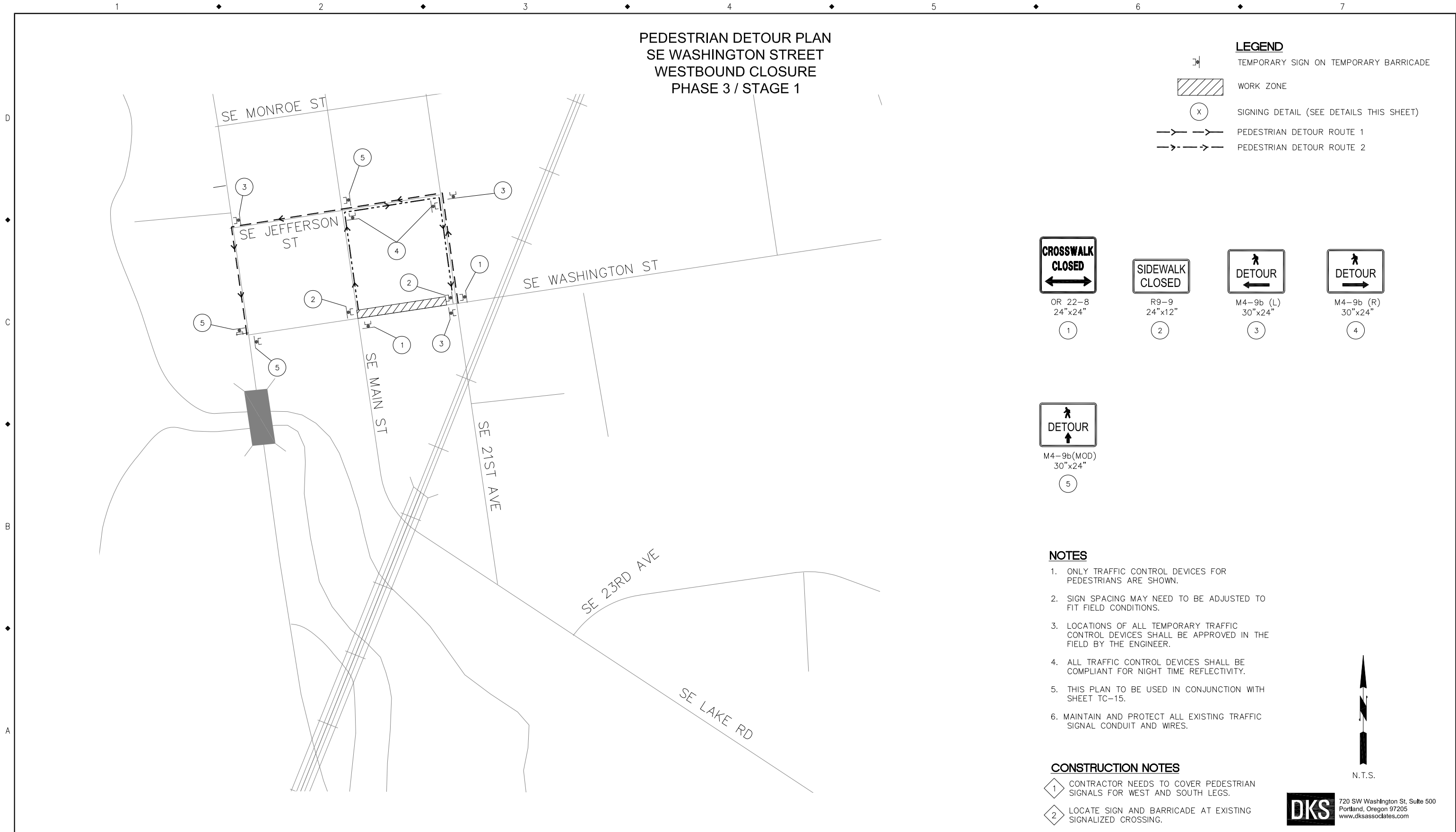
# MILWAUKIE

*Dogwood City of the West*

PHONE: 503-786-7600  
FAX: 503-774-8236

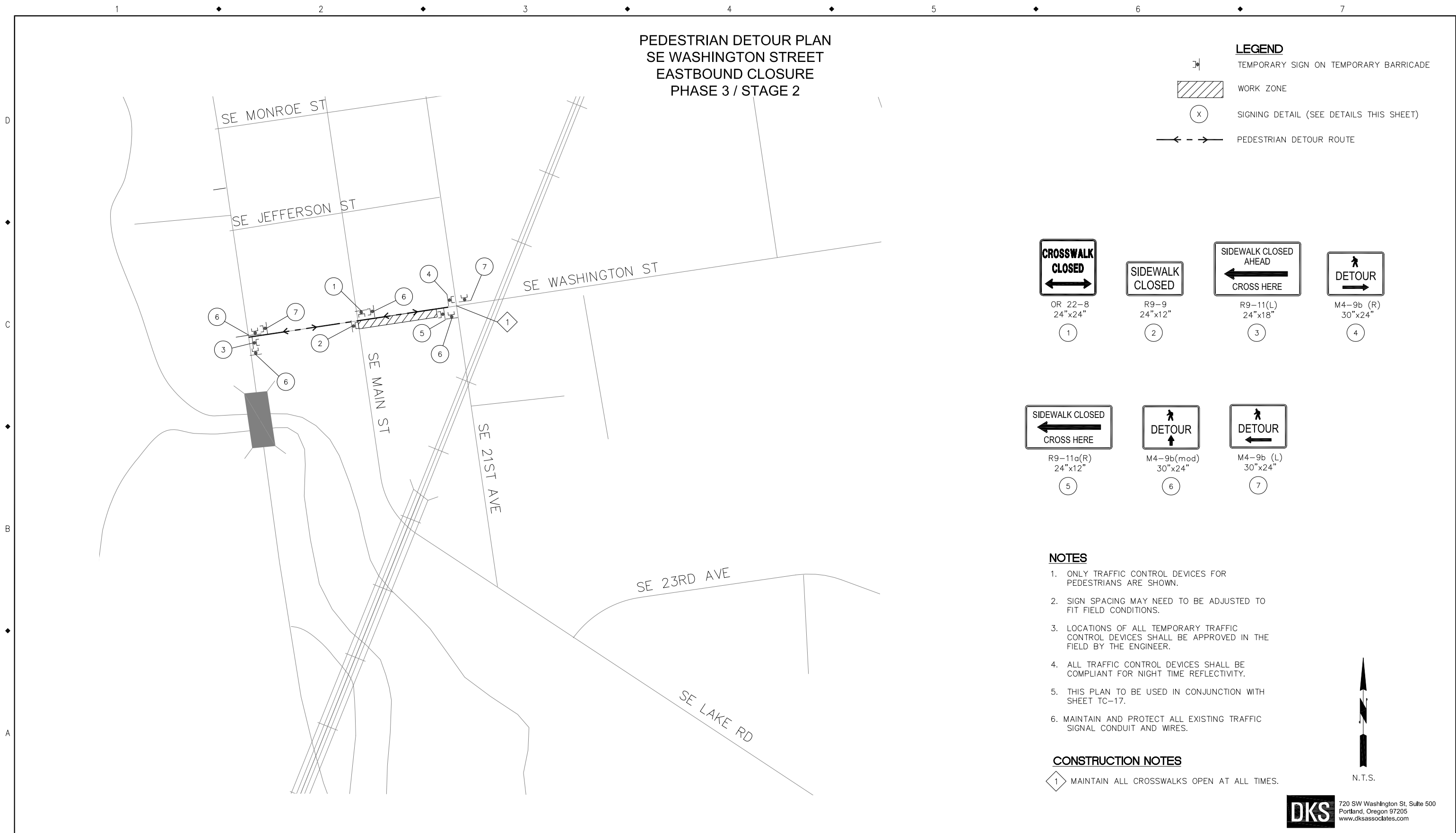
TRAFFIC CONTROL PLAN

|                      |               |                  |                  |
|----------------------|---------------|------------------|------------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: | DATE: 07/10/2018 | SHEET NO.: TC-15 |
|----------------------|---------------|------------------|------------------|



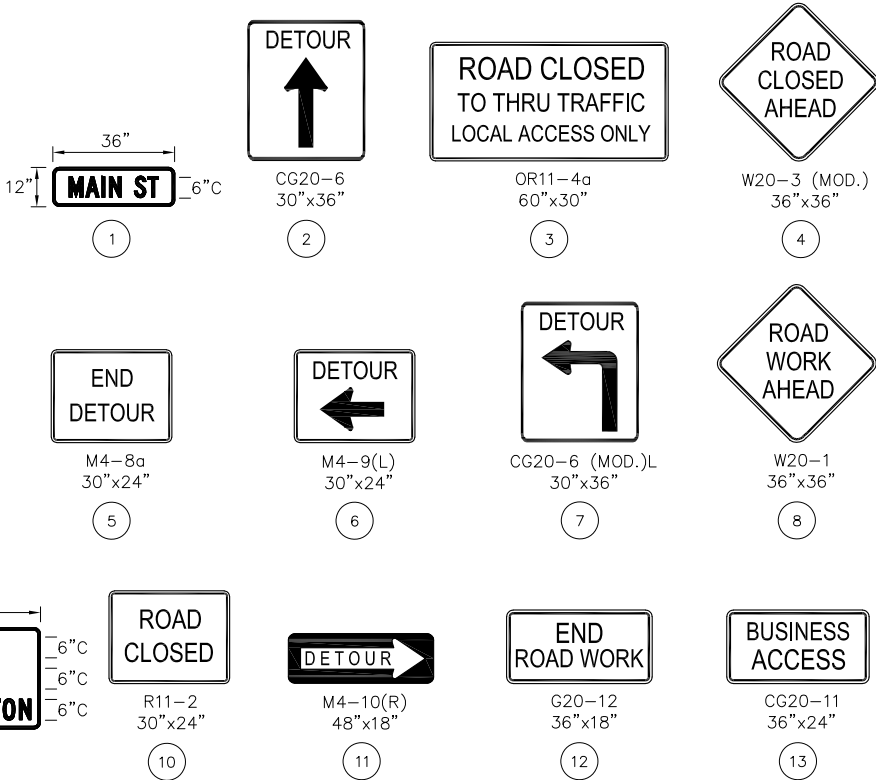
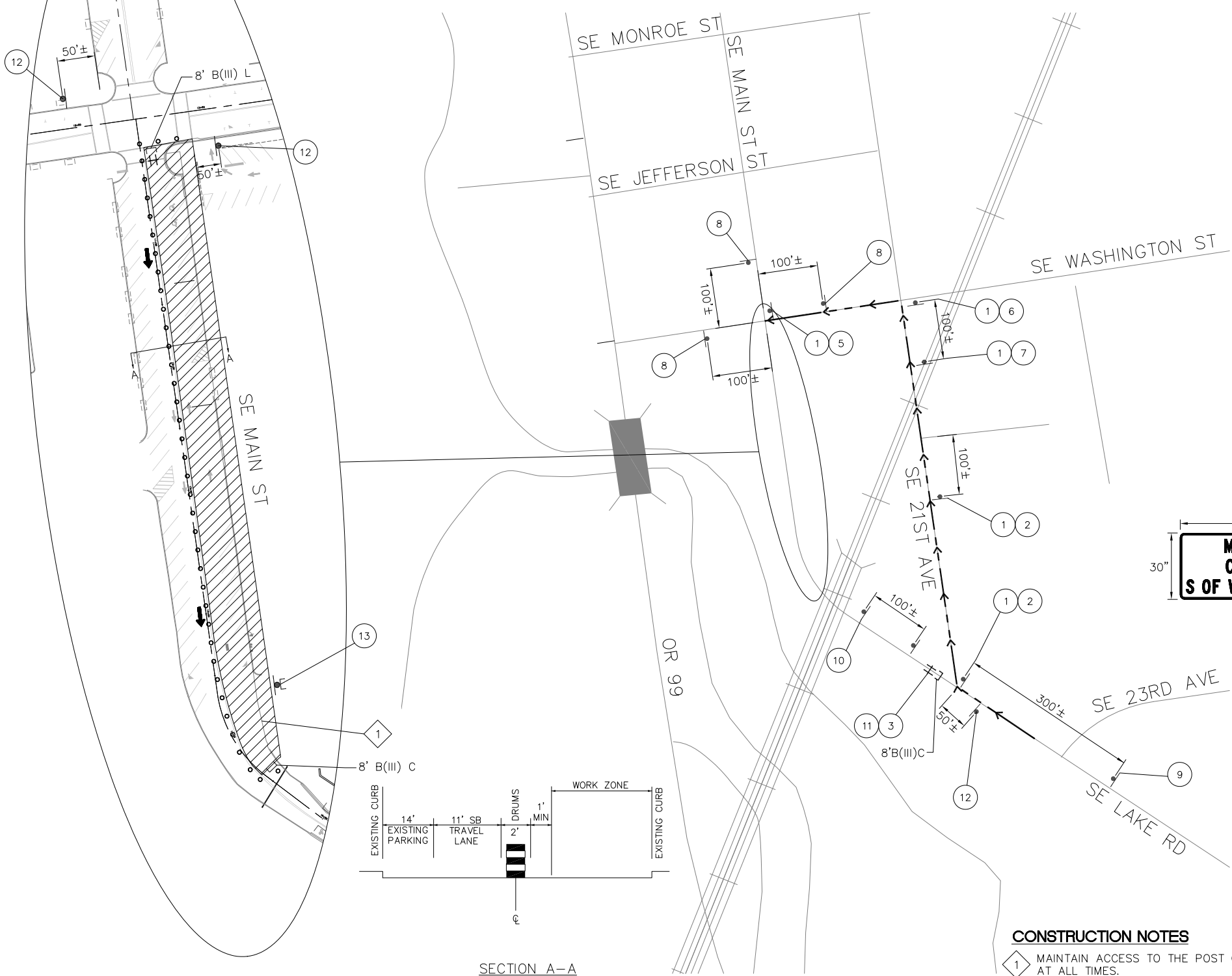






TRAFFIC CONTROL PLAN  
SE MAIN STREET NORTHBOUND  
CLOSURE  
PHASE 3 / STAGE 3

- LEGEND**
- TEMPORARY SIGN ON TEMPORARY SUPPORT
  - TEMPORARY SIGN ON TEMPORARY BARRIER
  - 8' TYPE III BARRICADE (R, L, OR C)
  - WORK ZONE
  - SIGNING DETAIL (SEE DETAILS THIS SHEET)
  - NORTHBOUND MAIN ST DETOUR ROUTE
  - TEMPORARY PLASTIC DRUMS ON 20' MAX. SPACING
  - DIRECTION OF TRAFFIC



- NOTES**
- SIGN SPACING MAY NEED TO BE ADJUSTED TO FIT FIELD CONDITIONS.
  - LOCATIONS OF ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE APPROVED IN THE FIELD BY THE ENGINEERS.
  - ALL TRAFFIC CONTROL DEVICES SHALL BE COMPLIANT FOR NIGHT TIME REFLECTIVITY.
  - THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-20.
  - RESTRICT PARKING AREA ALONG EAST SIDE OF MAIN ST. WITHIN WORK ZONE.
  - MAINTAIN AND PROTECT ALL EXISTING TRAFFIC SIGNAL CONDUIT AND WIRES.

**CONSTRUCTION NOTES**

1 MAINTAIN ACCESS TO THE POST OFFICE AT ALL TIMES.



**DKS** 720 SW Washington St, Suite 500  
Portland, Oregon 97205  
www.dksassociates.com

| NO. | DATE | BY | REVISIONS |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |

|          |      |
|----------|------|
| LEC      |      |
| DESIGNED | DATE |
| DKS CAD  |      |
| DRAFTED  | DATE |
| PLC      |      |
| CHECKED  | DATE |
| APPROVED | DATE |



**MILWAUKIE**  
*Dogwood City of the West*

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

TRAFFIC CONTROL PLAN

|                      |               |                  |                  |
|----------------------|---------------|------------------|------------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: | DATE: 07/10/2018 | SHEET NO.: TC-19 |
|----------------------|---------------|------------------|------------------|



1 2 3 4 5 6 7

D

C

B

A

PEDESTRIAN DETOUR PLAN  
SE MAIN STREET  
NORTHBOUND CLOSURE (NIGHT TIME ONLY)  
PHASE 3 / STAGE 3

SE MONROE ST  
SE JEFFERSON ST  
SE MAIN ST  
SE WASHINGTON ST  
SE 21ST AVE  
SE 23RD AVE  
SE LAKE RD  
OR 99

LEGEND

TEMPORARY SIGN ON TEMPORARY BARRICADE

WORK ZONE

SIGNING DETAIL (SEE DETAILS THIS SHEET)

PEDESTRIAN DETOUR ROUTE

CROSSWALK CLOSED  
OR 22-8  
24"x24"  
1

SIDEWALK CLOSED  
R9-9  
24"x12"  
2

SIDEWALK CLOSED  
CROSS HERE  
R9-11a(L)  
24"x12"  
3

SIDEWALK CLOSED  
AHEAD  
CROSS HERE  
R9-11(R)  
24"x18"  
4

DETOUR  
M4-9b(MOD.)  
30"x24"  
5

DETOUR  
M4-9b(L)  
30"x24"  
6

DETOUR  
M4-9b(R)  
30"x24"  
7

NOTES

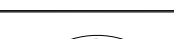
- ONLY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN.
- SIGN SPACING MAY NEED TO BE ADJUSTED TO FIT FIELD CONDITIONS.
- LOCATIONS OF ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE APPROVED IN THE FIELD BY THE ENGINEER.
- ALL TRAFFIC CONTROL DEVICES SHALL BE COMPLIANT FOR NIGHT TIME REFLECTIVITY.
- THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-19.
- MAINTAIN AND PROTECT ALL EXISTING TRAFFIC SIGNAL CONDUIT AND WIRES.

CONSTRUCTION NOTES

1 CLOSE CROSSWALK ON SOUTH & EAST LEG OF SE MAIN ST/SE WASHINGTON ST INTERSECTION.

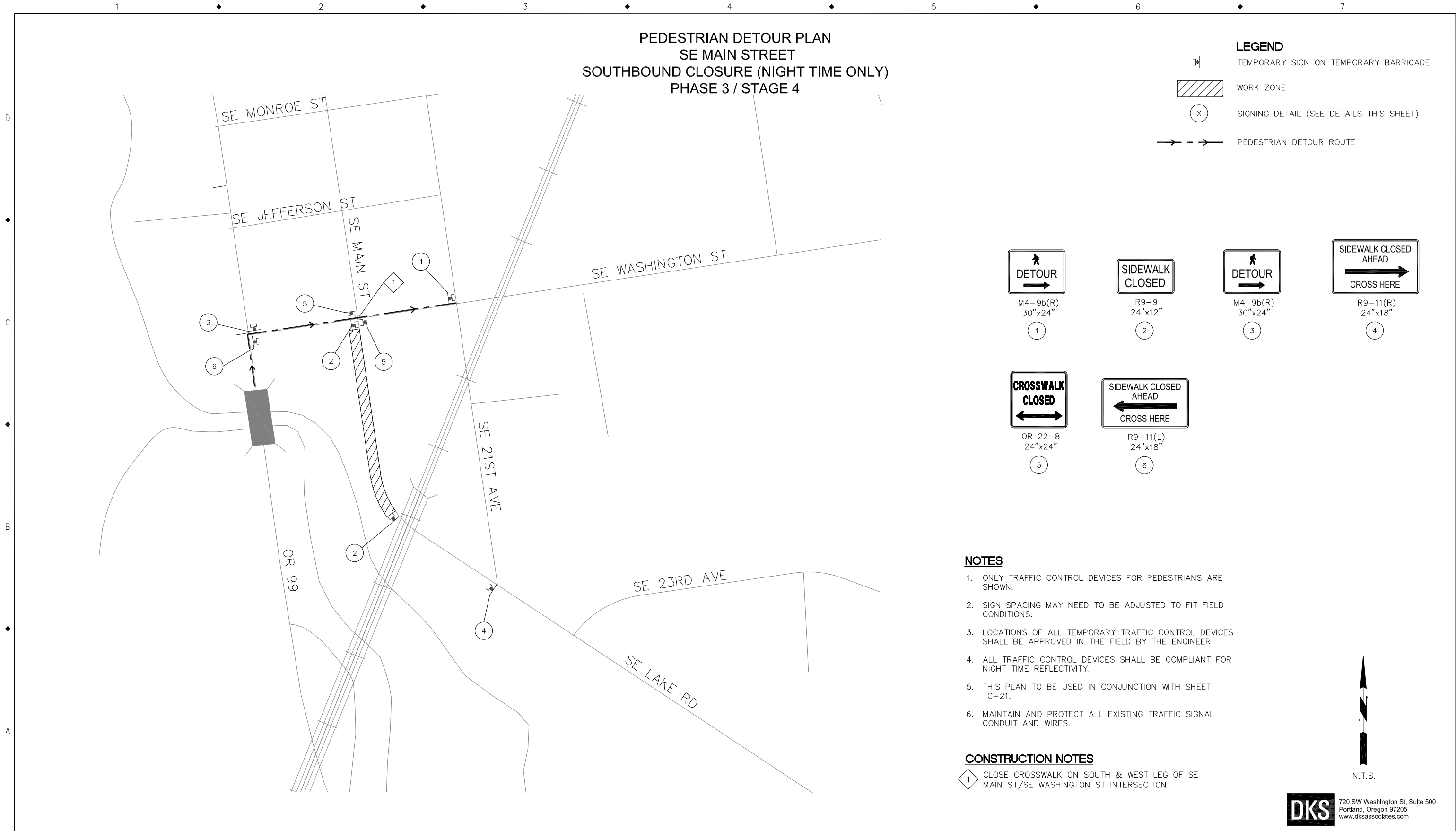
N. T. S.

DKS 720 SW Washington St. Suite 500  
Portland, Oregon 97205  
www.dksassociates.com

|     |      |    |           |                    |      |                                                                                       |                                                                                                                                           |                                                    |               |                                          |                  |
|-----|------|----|-----------|--------------------|------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|---------------|------------------------------------------|------------------|
|     |      |    |           | LEC<br>DESIGNED    | DATE |  |  <b>MILWAUKIE</b><br><i>Dogwood City of the West</i> | SOUTH DOWNTOWN IMPROVEMENTS                        |               |                                          |                  |
|     |      |    |           | DKS CAD<br>DRAFTED | DATE |                                                                                       |                                                                                                                                           | PEDESTRIAN DETOUR PLAN                             |               |                                          |                  |
|     |      |    |           | PLC<br>CHECKED     | DATE |                                                                                       |                                                                                                                                           |                                                    |               |                                          |                  |
|     |      |    |           | APPROVED           | DATE |                                                                                       |                                                                                                                                           |                                                    |               |                                          |                  |
| NO. | DATE | BY | REVISIONS |                    |      |                                                                                       |                                                                                                                                           | 6101 SE JOHNSON CREEK BLVD.<br>MILWAUKIE, OR 97206 |               | PHONE: 503-786-7600<br>FAX: 503-774-8236 |                  |
|     |      |    |           |                    |      |                                                                                       |                                                                                                                                           | PROJECT NO.: CIP2018                               | CONTRACT NO.: | DATE: 07/10/2018                         | SHEET NO.: TC-20 |

\\Projects\2018\PI8051-000 (Milwaukee Downtown Traffic Control Plans)\CAD\TC-20.dwg 7/16/2018 4:06 PM Maria Ralis









PEDESTRIAN DETOUR PLAN  
SE WASHINGTON STREET  
PHASE 4 / STAGE 1 & STAGE 2

LEGEND

- TEMPORARY SIGN ON TEMPORARY BARRICADE
- WORK ZONE
- SIGNING DETAIL (SEE DETAILS THIS SHEET)
- SIDEWALK CLOSURE WILL BE IN PLACE DURING THE CONSTRUCTION OF THE ENTIRE PROJECT

CROSSWALK  
CLOSED

OR 22-8  
24"x24"

1

SIDEWALK  
CLOSED

R9-9  
24"x12"

2

SIDEWALK CLOSED  
CROSS HERE

R9-11a(L)  
24"x12"

3

SIDEWALK CLOSED  
AHEAD  
CROSS HERE

R9-11(R)  
24"x18"

4

DETOUR

M4-9b(L)  
30"x24"

5

DETOUR

M4-9b(MOD.)  
30"x24"

6

DETOUR

M4-9b(R)  
30"x24"

7

CONSTRUCTION NOTES

1 CONTRACTOR NEEDS TO COVER PEDESTRIAN SIGNALS FOR WEST AND SOUTH LEGS. COORDINATE WITH BIKRAM RAGHUBANSH CLACKAMAS COUNTY (503-819-9626).

NOTES

- ONLY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN.
- SIGN SPACING MAY NEED TO BE ADJUSTED TO FIT FIELD CONDITIONS.
- LOCATIONS OF ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE APPROVED IN THE FIELD BY THE ENGINEER.
- ALL TRAFFIC CONTROL DEVICES SHALL BE COMPLIANT FOR NIGHT TIME REFLECTIVITY.
- THIS PLAN TO BE USED IN CONJUNCTION WITH SHEET TC-21 & TC-23.
- MAINTAIN AND PROTECT ALL EXISTING TRAFFIC SIGNAL CONDUIT AND WIRES.
- \* INSTALLED BY OTHERS.



**DKS** 720 SW Washington St, Suite 500  
Portland, Oregon 97205  
www.dksassociates.com

|     |      |    |           |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
| NO. | DATE | BY | REVISIONS |

|          |      |
|----------|------|
| LEC      |      |
| DESIGNED | DATE |
| DKS CAD  |      |
| DRAFTED  | DATE |
| PLC      |      |
| CHECKED  | DATE |
| APPROVED | DATE |



# MILWAUKIE

*Dogwood City of the West*

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

|                             |            |               |       |
|-----------------------------|------------|---------------|-------|
| SOUTH DOWNTOWN IMPROVEMENTS |            |               |       |
| PEDESTRIAN DETOUR PLAN      |            |               |       |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: |       |
| DATE:                       | 07/10/2018 | SHEET NO.:    | TC-24 |

x:\Projects\2018\18031-000 (Milwaukie Downtown Traffic Control Plans)\CAD\TC-24.dwg 7/16/2018 4:06 PM Maria Ralls





LEGEND

- AX D ABANDON EXISTING VEHICLE DETECTOR LOOP.
- AX SPB ABANDON EXISTING LOOP ACCESS POINT, SAND POCKET BLOCK-OUT WITH CONDUIT TO JUNCTION BOX.
- EX C RETAIN AND PROTECT EXISTING CONTROLLER AND CABINET.
- EX MP RETAIN AND PROTECT EXISTING TRAFFIC SIGNAL MAST ARM POLE.
- VDF T INSTALL VIDEO DETECTION COAXIAL AND POWER CABLE FOR CAMERA (T=CAMERA)
- EX W RETAIN AND PROTECT EXISTING WIRING.
- EX JB RETAIN AND PROTECT EXISTING JUNCTION BOX.
- PhT X INSTALL PHASE (Ph=PHASE) VIDEO DETECTION ZONE ON CAMERA (T=CAMERA) WITH VOYAGE DETECTOR NUMBER (X=NUMBER).
- CAM T INSTALL VIDEO DETECTOR CAMERA (T=NUMBER).
- EX EC RETAIN AND PROTECT EXISTING (S=SIZE IN INCHES WHEN SHOWN) ELECTRICAL CONDUIT.
- EX DC RETAIN AND PROTECT EXISTING (S=SIZE IN INCHES WHEN SHOWN) DETECTOR CONDUIT.
- EX IC RETAIN AND PROTECT EXISTING INTERCONNECT CONDUIT.

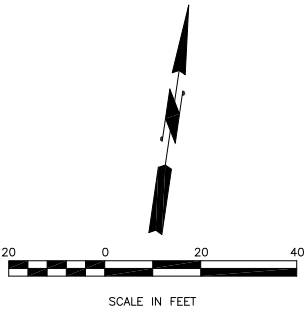
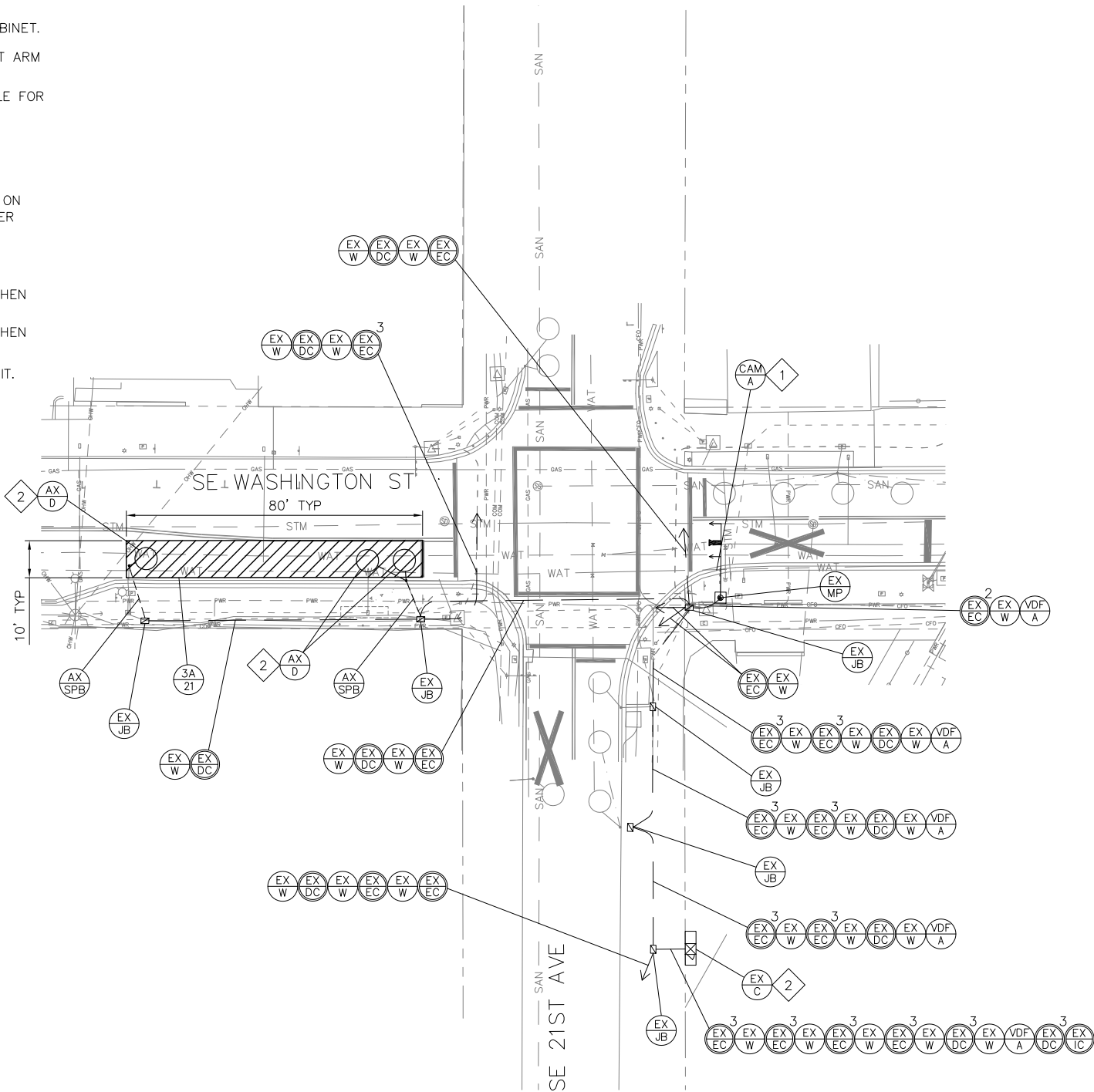
CONSTRUCTION NOTES

- 1 MOUNT CAMERA ON MAST ARM
- 2 ABANDON EXISTING LOOPS FOR PHASE 3 DURING CONSTRUCTION. DISCONNECT EXISTING LOOP AMPS IN CABINET (SLOT J3)
- 3 INSTALL VIDEO IMAGE PROCESSOR IN INPUT FILE SLOT J3

GENERAL NOTES

- 1. MAINTAIN AND PROTECT ALL OTHER SIGNAL AND DETECTOR APPURTENANCES EXCEPT AS SHOWN IN THIS PLAN.

TEMPORARY DETECTOR PLAN  
SE 21ST AVE & SE WASHINGTON ST



**DKS** 720 SW Washington St, Suite 500  
Portland, Oregon 97205  
www.dksassociates.com

|     |      |    |           |
|-----|------|----|-----------|
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
|     |      |    |           |
| NO. | DATE | BY | REVISIONS |

|          |          |      |
|----------|----------|------|
| CDZ      | DESIGNED | DATE |
| DKS CAD  | DRAFTED  | DATE |
| PLC      | CHECKED  | DATE |
| APPROVED |          | DATE |



6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206  
PHONE: 503-786-7600  
FAX: 503-774-8236

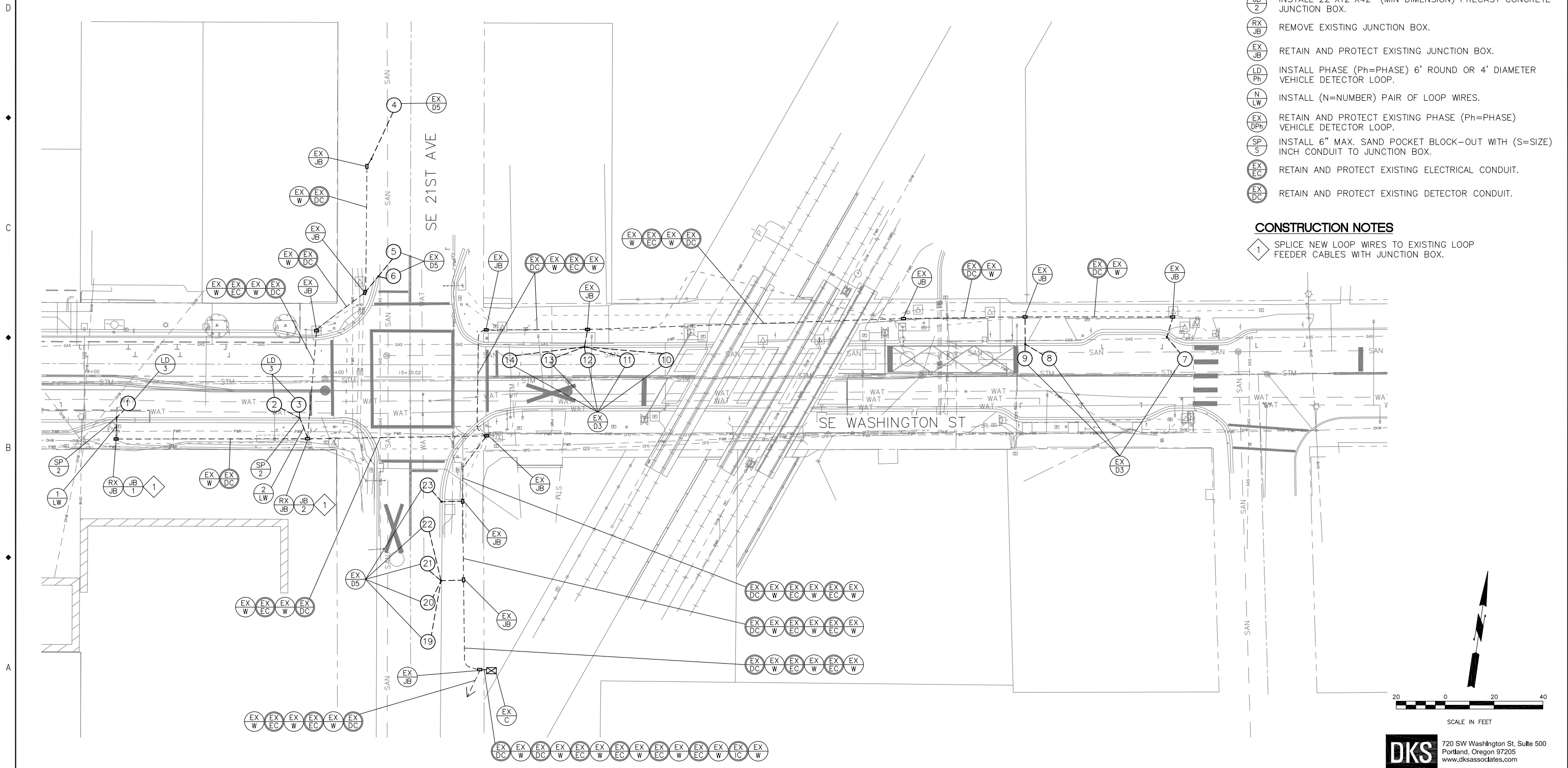
SOUTH DOWNTOWN IMPROVEMENTS

TEMPORARY DETECTOR PLAN

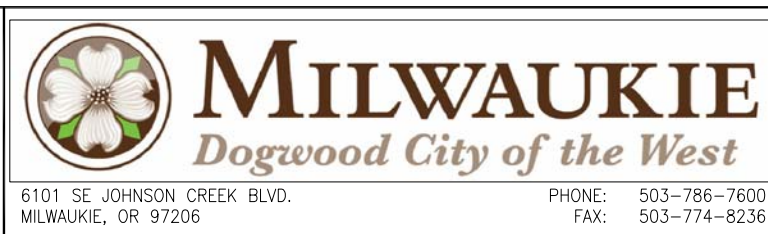
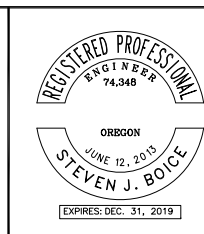
|                      |               |                  |                 |
|----------------------|---------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: | DATE: 07/10/2018 | SHEET NO.: TS-1 |
|----------------------|---------------|------------------|-----------------|

|                                                                                     |                                                                                   |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|  | RETAIN AND PROTECT EXISTING CONTROLLER AND CABINET.                               |
|  | RETAIN AND PROTECT EXISTING WIRING.                                               |
|  | INSTALL 17"x10"x12" (MIN DIMENSION) PRECAST CONCRETE JUNCTION BOX.                |
|  | INSTALL 22"x12"x42" (MIN DIMENSION) PRECAST CONCRETE JUNCTION BOX.                |
|  | REMOVE EXISTING JUNCTION BOX.                                                     |
|  | RETAIN AND PROTECT EXISTING JUNCTION BOX.                                         |
|  | INSTALL PHASE (Ph=PHASE) 6' ROUND OR 4' DIAMETER VEHICLE DETECTOR LOOP.           |
|  | INSTALL (N=NUMBER) PAIR OF LOOP WIRES.                                            |
|  | RETAIN AND PROTECT EXISTING PHASE (Ph=PHASE) VEHICLE DETECTOR LOOP.               |
|  | INSTALL 6" MAX. SAND POCKET BLOCK-OUT WITH (S=SIZE) INCH CONDUIT TO JUNCTION BOX. |
|  | RETAIN AND PROTECT EXISTING ELECTRICAL CONDUIT.                                   |
|  | RETAIN AND PROTECT EXISTING DETECTOR CONDUIT.                                     |

1 SPLICE NEW LOOP WIRES TO EXISTING LOOP FEEDER CABLES WITH JUNCTION BOX.

[illegible]

|          |          |
|----------|----------|
| CDZ      | MAY 2018 |
| DESIGNED | DATE     |
| DKS CAD  | MAY 2018 |
| DRAFTED  | DATE     |
| PLC      | MAY 2018 |
| CHECKED  | DATE     |
| APPROVED | DATE     |



## SOUTH DOWNTOWN IMPROVEMENTS

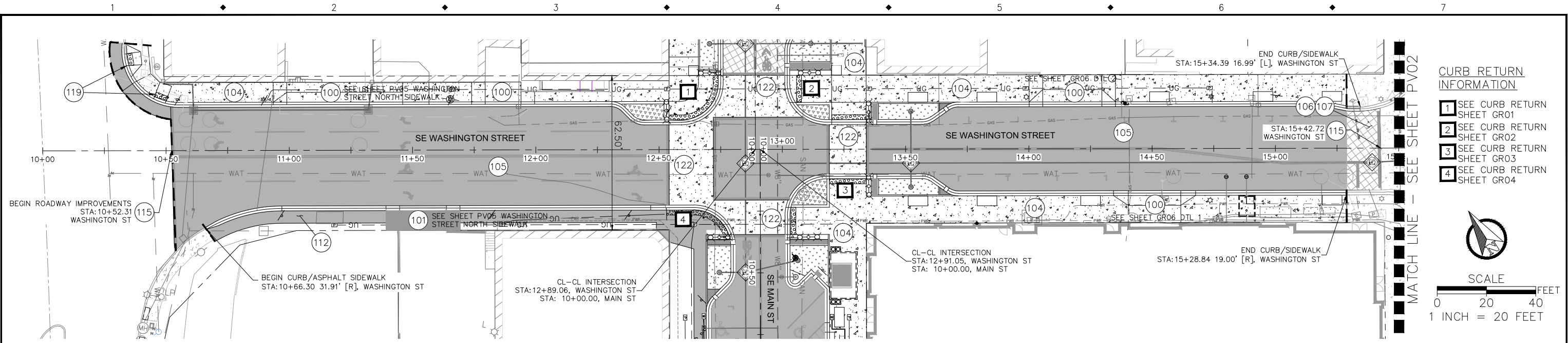
## DETECTOR PLAN

|                      |               |                  |                 |
|----------------------|---------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: | DATE: 07/10/2018 | SHEET NO.: TS-2 |
|----------------------|---------------|------------------|-----------------|



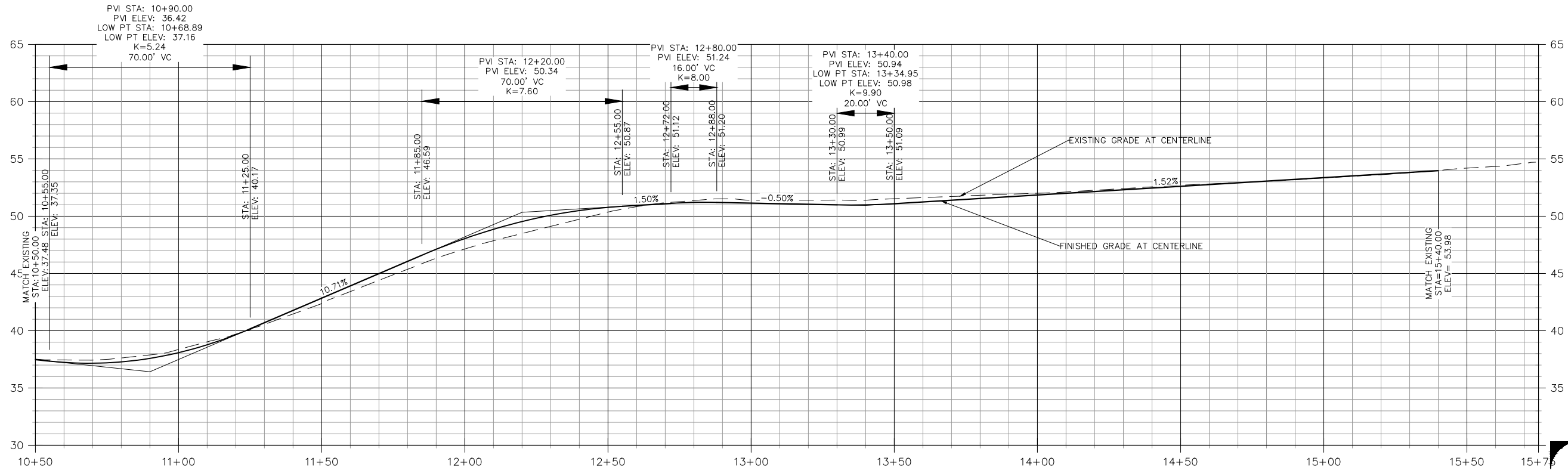


U:\PROJECTS\PD\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017\136 PVI.dwg Aug. 15, 2018 -- 5:39 PM alaina floor  
Plot Date: 8/15/2018 5:44 PM alaina floor



SE WASHINGTON STREET — PLAN 1  
SCALE: 1"=20'

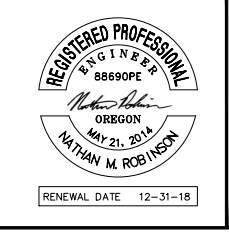
- STREET CONSTRUCTION NOTES:
- 100 CONSTRUCT CONCRETE DRIVEWAY. SEE DTL 5 ON SHT DT05.
  - 101 CONSTRUCT ASPHALT DRIVEWAY. SEE DTL 2 ON SHEET DT06.
  - 104 CONSTRUCT CONCRETE WALKS. SEE CoM STANDARD 703A ON SHEET DT02.
  - 105 CONSTRUCT NEW ROADWAY. SEE TYPICAL SECTION ON SHEETS PV13-PV16.
  - 106 COLD PLANE PAVEMENT REMOVAL. 2 INCHES.
  - 107 2 INCH ASPHALT OVERLAY. LEVEL 2, 1/2" ACP.
  - 112 CONSTRUCT 5.0' ASPHALT SIDEWALK.
  - 115 MATCH EXISTING ROADWAY ELEVATION.
  - 119 CONSTRUCT NEW ODOT ADA RAMPS. COORDINATION WITH ODOT REQUIRED. COORDINATE WITH PROJECT ENGINEER.
  - 122 CONSTRUCT DOWNTOWN CROSSWALK PER CoM STANDARD 702. SEE SHEET DT02.



SE WASHINGTON STREET — PROFILE 1  
SCALE: 1"=5' VERTICAL 1"=20' HORIZONTAL

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

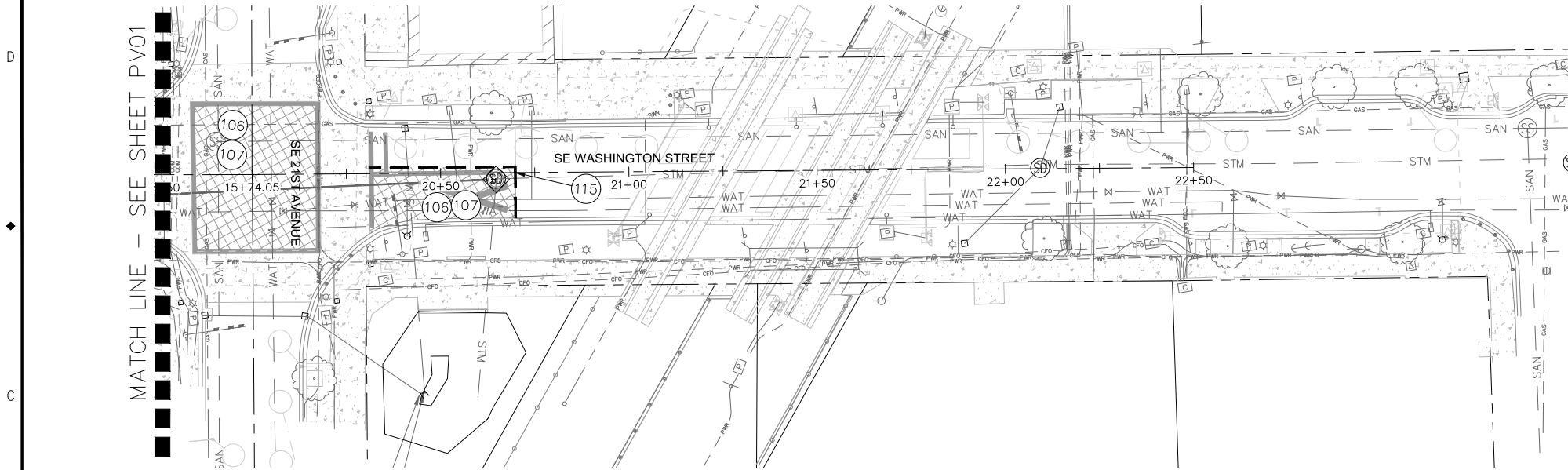
PHONE: 503-786-7600  
FAX: 503-774-8236

**SOUTH DOWNTOWN IMPROVEMENTS**

WASHINGTON STREET PLAN & PROFILE

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV01 |
|----------------------|-------------------------|------------------|-----------------|

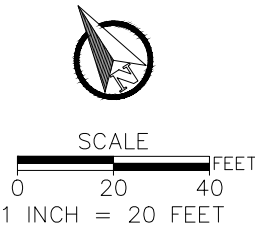




SE WASHINGTON STREET - PLAN 2  
SCALE: 1" = 20'

STREET CONSTRUCTION NOTES:

- 106 COLD PLANE PAVEMENT REMOVAL. 2 INCHES.
- 107 2 INCH ASPHALT OVERLAY. LEVEL 2, 1/2"ACP.
- 115 MATCH EXISTING ROADWAY ELEVATION.



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

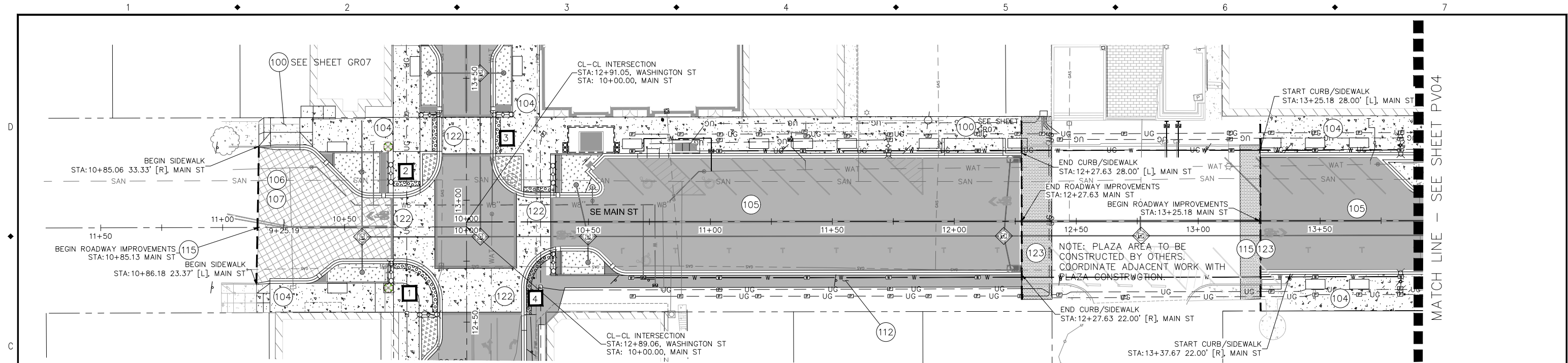
PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

WASHINGTON STREET PLAN & PROFILE

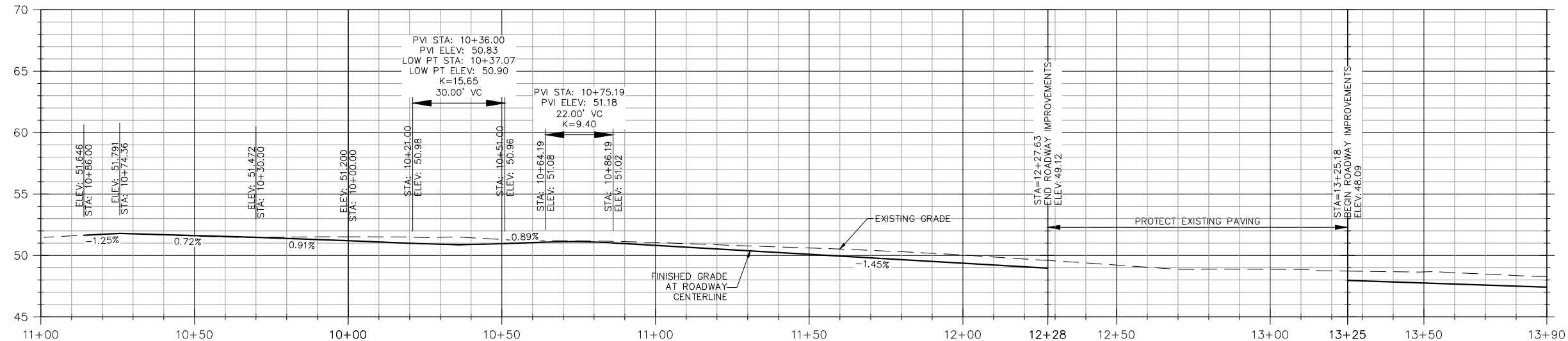
|              |         |               |           |       |            |            |      |
|--------------|---------|---------------|-----------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | C2018-051 | DATE: | 08/14/2018 | SHEET NO.: | PV02 |
|--------------|---------|---------------|-----------|-------|------------|------------|------|

U:\PROJECTS\PD\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 PVI.dwg Aug. 15, 2018 -- 5:39 PM alaina floor  
Plot Date: 8/15/2018 5:44 PM alaina floor



SE MAIN STREET - PLAN 1

SCALE: 1"=20'



SE MAIN STREET - PROFILE 1

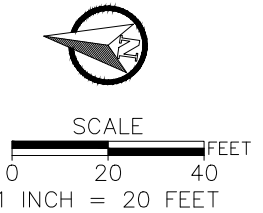
SCALE: 1"=5' VERTICAL 1"=20' HORIZONTAL

STREET CONSTRUCTION NOTES:

- (100) CONSTRUCT CONCRETE DRIVEWAY. SEE DTL 4 ON SHT DT05.
- (104) CONSTRUCT CONCRETE WALKS. SEE CoM STANDARD 703A ON SHEET DT02.
- (105) CONSTRUCT NEW ROADWAY. SEE TYPICAL SECTION ON SHEETS PV13-PV16.
- (106) COLD PLANE PAVEMENT REMOVAL. 2 INCHES.
- (107) 2 INCH ASPHALT OVERLAY. LEVEL 2, 1/2" ACP.

- (112) CONSTRUCT 5.0' ASPHALT SIDEWALK.
- (115) MATCH EXISTING ROADWAY ELEVATION.
- (122) CONSTRUCT DOWNTOWN CROSSWALK PER CoM STANDARD 702. SEE SHEET DT02.
- (123) CONSTRUCT TEMPORARY ASPHALT TRANSITION TO EXISTING SURFACES.

- 1 SEE CURB RETURN SHEET GR01
- 2 SEE CURB RETURN SHEET GR02
- 3 SEE CURB RETURN SHEET GR03
- 4 SEE CURB RETURN SHEET GR04



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

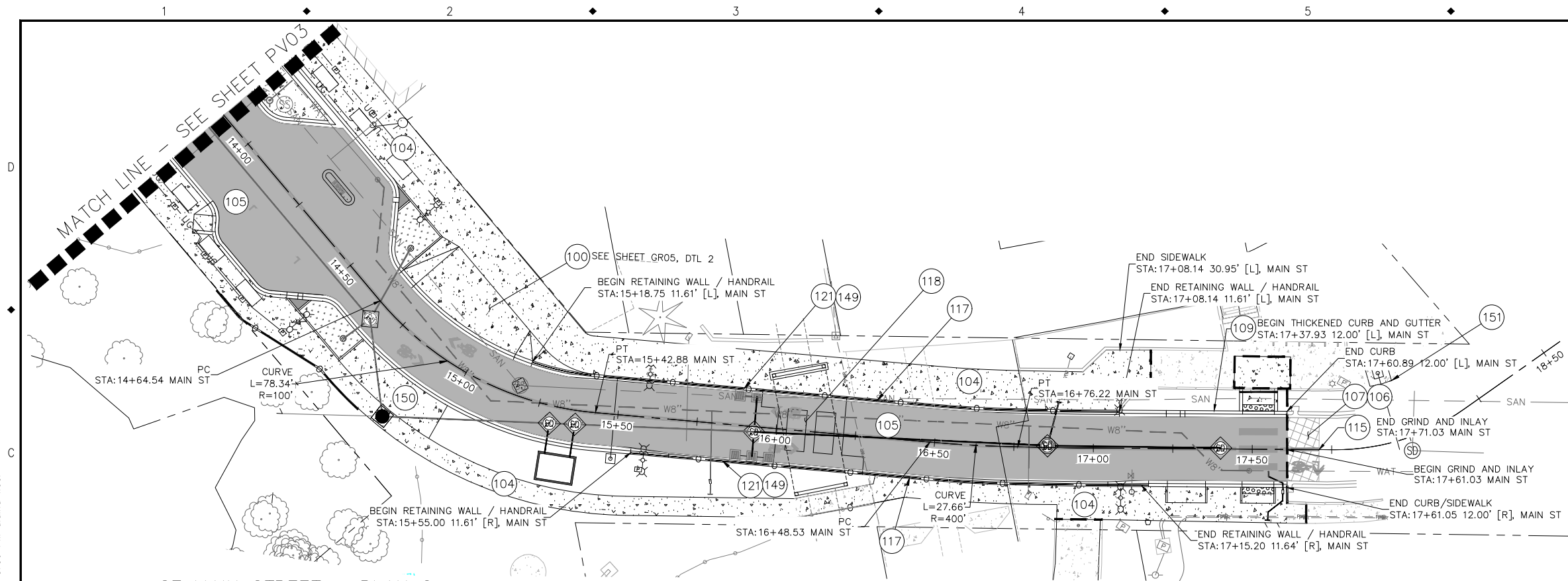
**SOUTH DOWNTOWN IMPROVEMENTS**

**MAIN STREET PLAN & PROFILE**

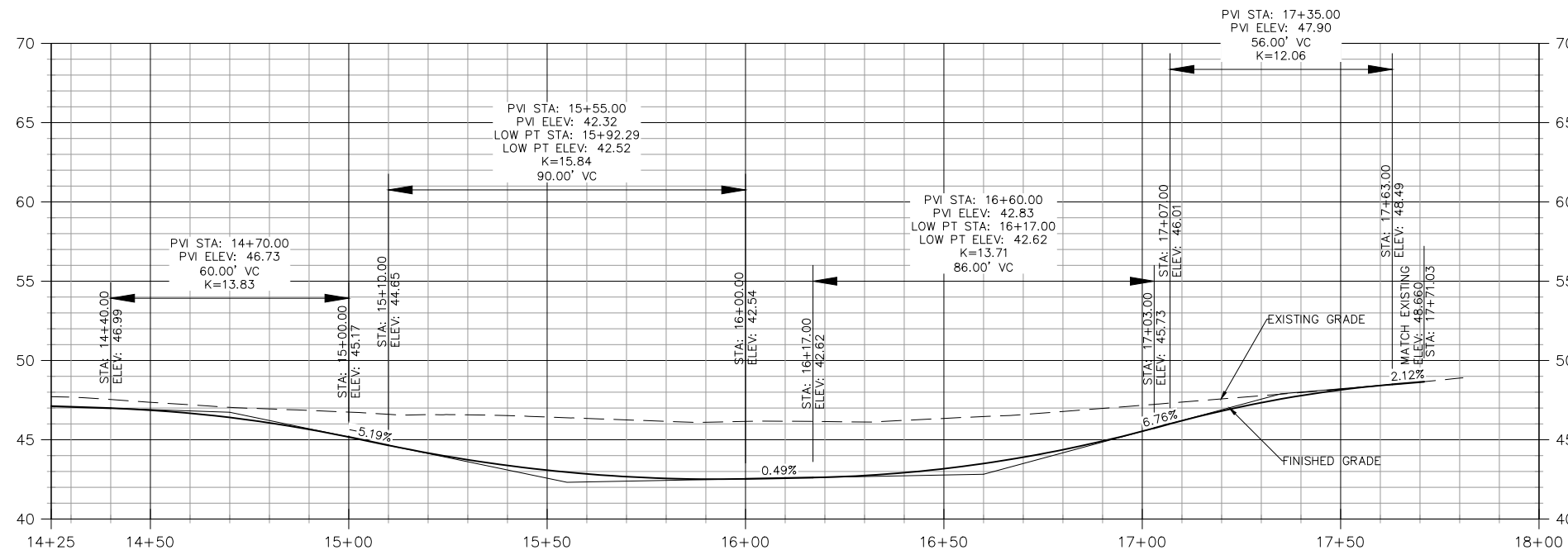
PROJECT NO.: CIP2018 CONTRACT NO.: C2018-051 DATE: 08/14/2018 SHEET NO.: PV03



U:\PROJECTS\PD\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 PV1.dwg Aug. 15, 2018 - 5:39 PM alaina floor  
Plot Date: 8/15/2018 5:44 PM alaina floor



SE MAIN STREET - PLAN 2  
SCALE: 1"=20'



SE MAIN STREET - PROFILE 4  
SCALE: 1"=5' VERTICAL 1"=20' HORIZONTAL

STREET CONSTRUCTION NOTES:

- 100 CONSTRUCT CONCRETE DRIVEWAY. SEE DTL 4 ON SHT DT05.
- 104 CONSTRUCT CONCRETE WALKS. SEE CoM STANDARD 703A ON SHEET DT02.
- 105 CONSTRUCT NEW ROADWAY. SEE TYPICAL SECTION ON SHEETS PV13-PV16..
- 106 COLD PLANE PAVEMENT REMOVAL. 2 INCHES.
- 107 2 INCH ASPHALT OVERLAY. LEVEL 2, 1/2" ACP.
- 109 CONSTRUCT THICKENED CURB AND GUTTER. SEE DETAIL 2 ON SHEET DT11.
- 115 MATCH EXISTING ROADWAY ELEVATION.
- 117 CONSTRUCT CAST IN PLACE RETAINING WALL. SEE SHEET PV12.
- 118 CONSTRUCT CAST-IN-PLACE STRUT SLAB. SEE SHEET PV12. TOP OF BARRIER VARIES. SEE SHEET PV11 FOR PROFILE.
- 121 CONSTRUCT DECORATIVE FENCE. SEE CoM STANDARD DETAIL 709 ON SHEET DT05.
- 149 CONSTRUCT CAST-IN-PLACE TALL SHOULDER BARRIER. TOP OF BARRIER VARIES. SEE SHEET PV11 FOR PROFILE. SEE ODOT STANDARD DRAWINGS RD516, DET 1545, AND DET 1549. 6" FULL WIDTH CONTINUOUS KEY REQUIRED.
- 150 INSTALL 8" THICK REINFORCED CONCRETE PAVING. SEE DETAIL 1 ON SHEET DT05.
- 151 SAW CUT EXISTING SIDEWALK TO NEAREST JOINT TO ALLOW INSTALLATION OF FLASHING BEACON (SHEET SN09). CONSTRUCT CONCRETE WALK PER CoM STD DWG 701 ON SHEET DT01.



SCALE  
0 20 40  
1 INCH = 20 FEET



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

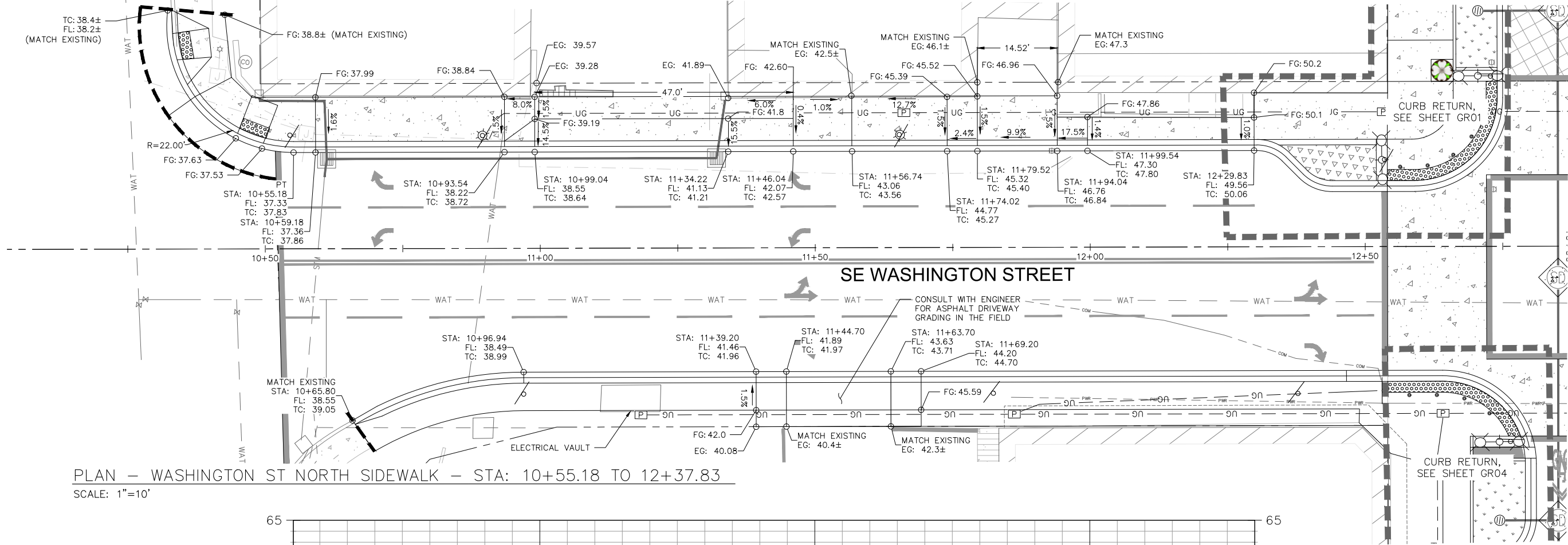
PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

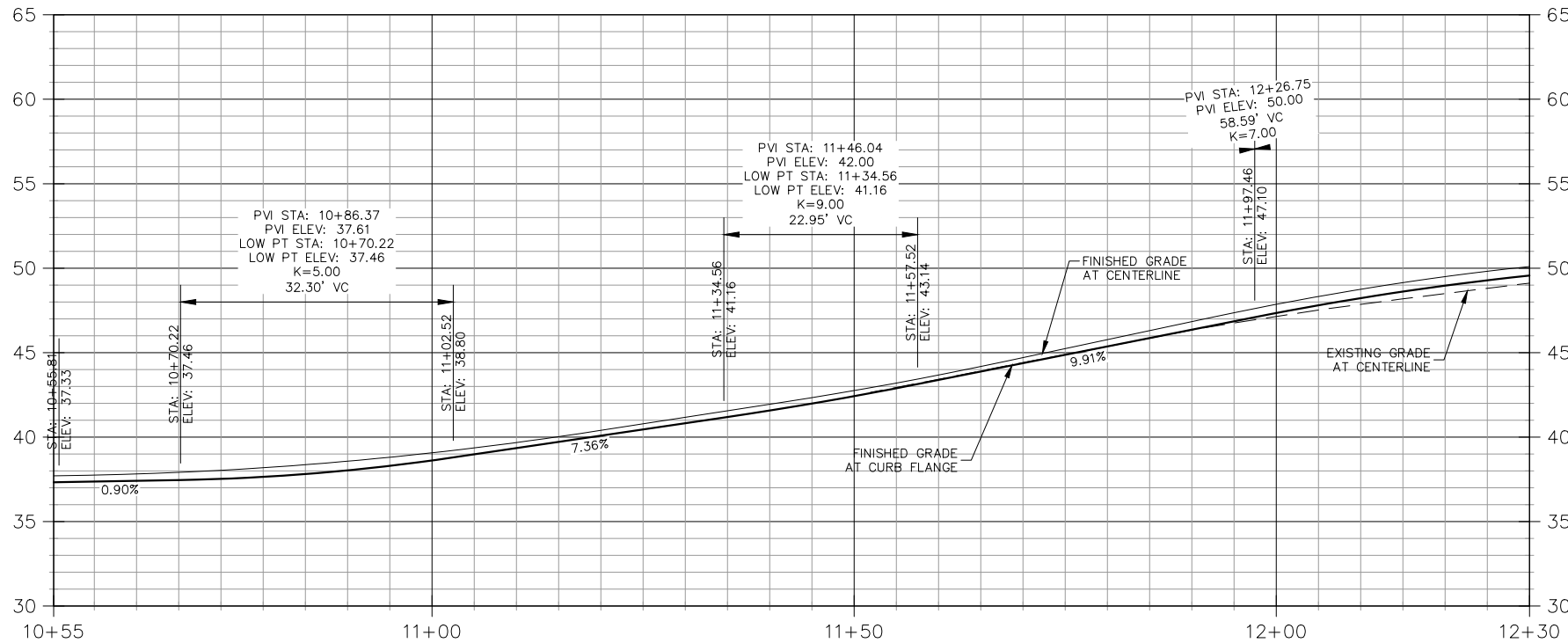
MAIN STREET PLAN & PROFILE

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV04 |
|----------------------|-------------------------|------------------|-----------------|

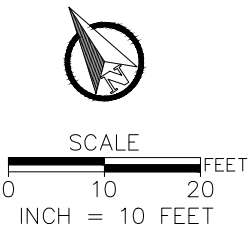
U:\PROJECTS\PD\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 PV1-sidewalks.dwg Aug. 15, 2018 - 4:33 PM alaina floor  
Plot Date: 8/15/2018 5:44 PM alaina floor



PLAN - WASHINGTON ST NORTH SIDEWALK - STA: 10+55.18 TO 12+37.83  
SCALE: 1"=10'



PROFILE - WASHINGTON ST NORTH CURB - STA: 10+55.18 TO 12+37.83  
SCALE: 1"=5' VERTICAL 1"=10' HORIZONTAL



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

SIDEWALK PLAN AND PROFILE-SE WASHINGTON

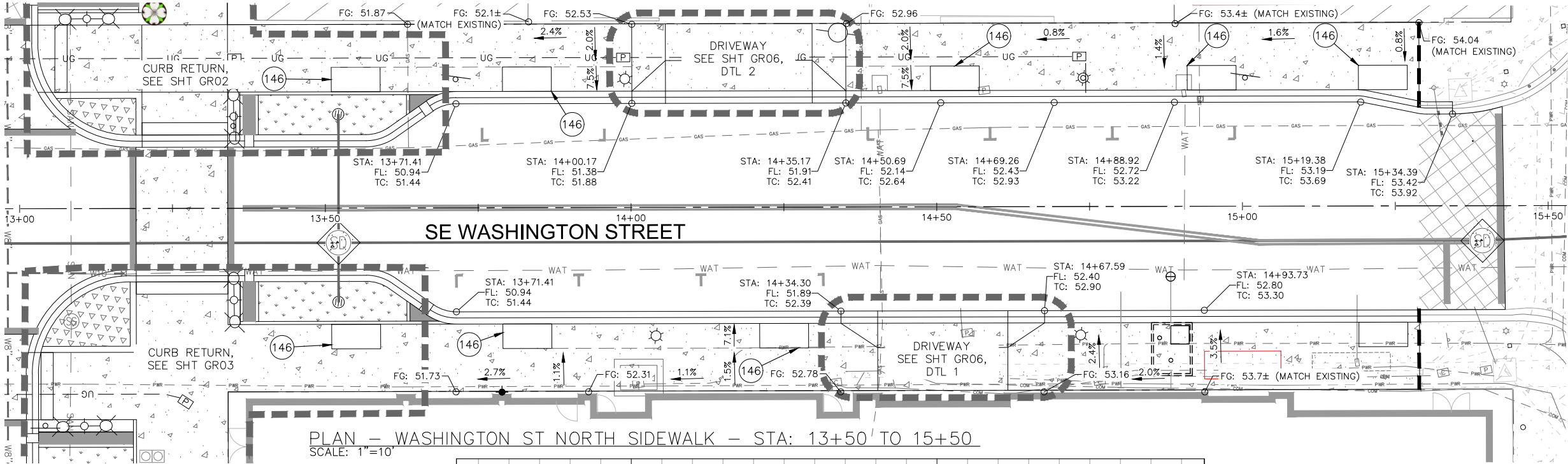
|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV05 |
|----------------------|-------------------------|------------------|-----------------|

**ESA**  
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

STREET CONSTRUCTION NOTES:

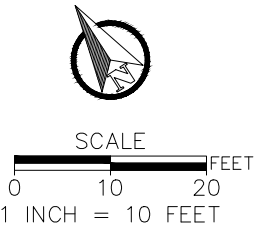
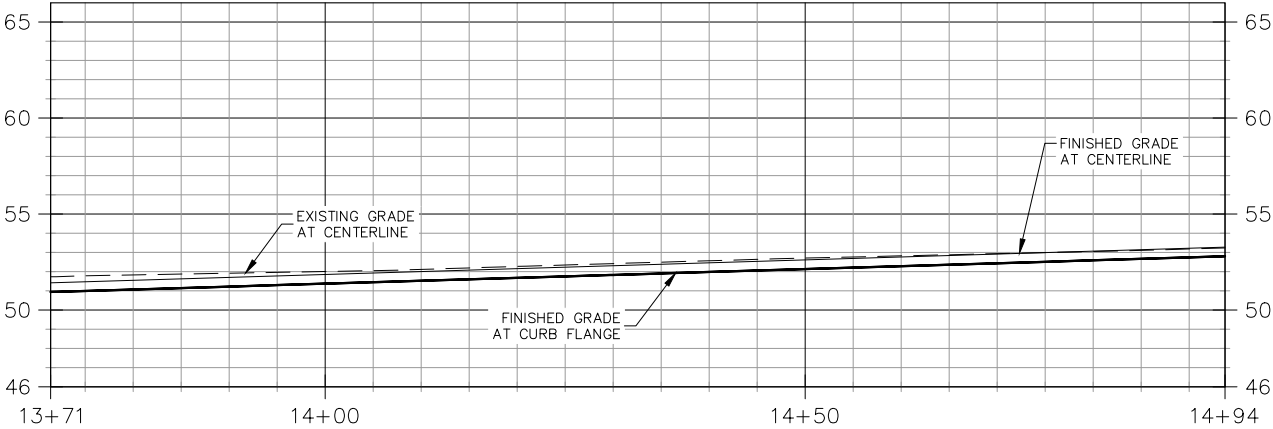
146 CONSTRUCT 8' x 4' TREE WELL. SEE  
DTL 706 ON SHT DT04. SEE SHEETS  
ST05-ST06 FOR LOCATIONS.

PROFILE — WASHINGTON ST NORTH CURB — STA: 13+71.41 TO 15+34.39  
SCALE: 1"=5' VERTICAL 1"=10' HORIZONTAL



PLAN — WASHINGTON ST NORTH SIDEWALK — STA: 13+50 TO 15+50  
SCALE: 1"=10'

PROFILE — WASHINGTON ST SOUTH EAST CURB — STA: 13+71.41 TO 14+93.73  
SCALE: 1"=5' VERTICAL 1"=10' HORIZONTAL



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206  
PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

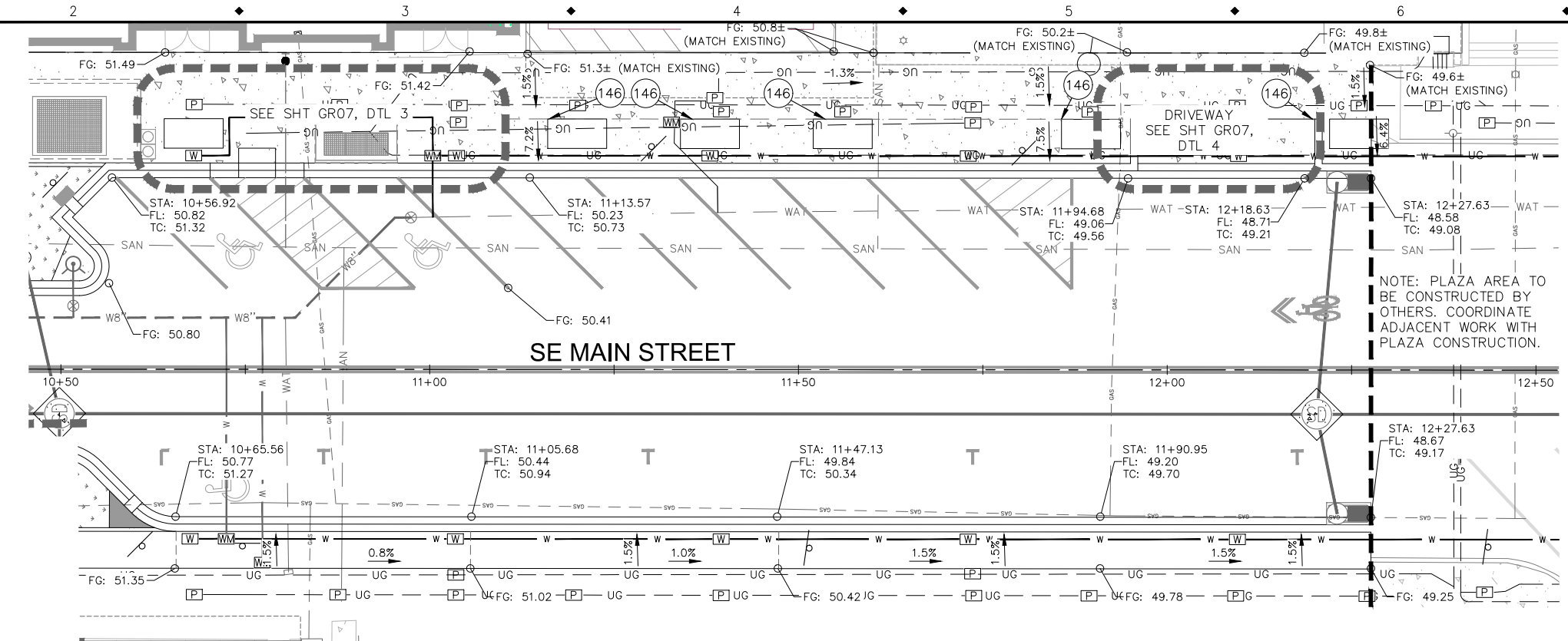
SIDEWALK PLAN AND PROFILE-SE WASHINGTON STREET

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV06 |
|----------------------|-------------------------|------------------|-----------------|

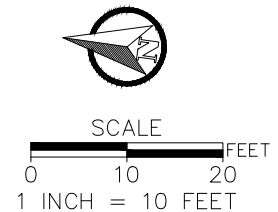


U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 PV1-sidewalks.dwg Aug. 15, 2018 - 4:33 PM alaina floor  
Plot Date: 8/15/2018 5:44 PM alaina floor

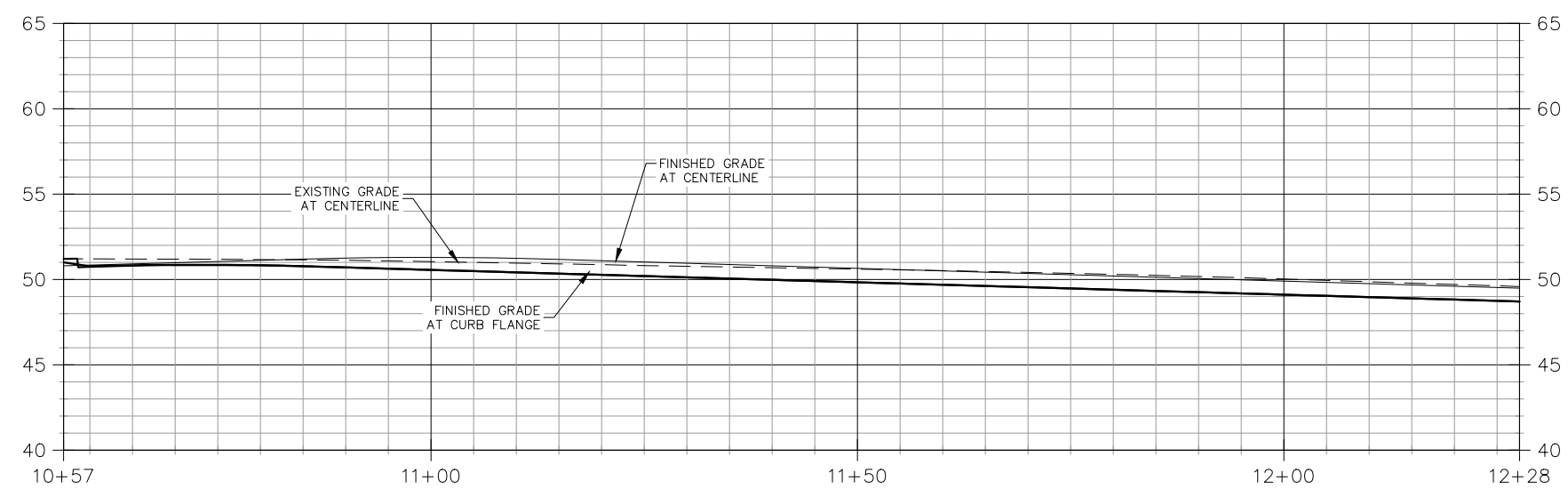
STREET CONSTRUCTION NOTES:  
(146) CONSTRUCT 8' x 4' TREE WELL. SEE DTL 706 ON SHT DT04. SEE SHEETS ST05-ST06 FOR LOCATIONS.



MATCH LINE - SEE SHEET PV08



PLAN - MAIN ST EAST SIDEWALK - STA: 10+50 TO 12+50  
SCALE: 1"=10'



PROFILE - MAIN ST EAST CURB - STA: 13+71.41 TO 15+34.39  
SCALE: 1"=5' VERTICAL 1"=10' HORIZONTAL

**ESA**  
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |      |
|----------|------------|------|
| NMR      | 08/14/2018 | DATE |
| DESIGNED |            |      |
| AMF      | 08/14/2018 | DATE |
| DRAFTED  |            |      |
| JGR      | 08/14/2018 | DATE |
| CHECKED  |            |      |
| JGR      | 08/14/2018 | DATE |
| APPROVED |            |      |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

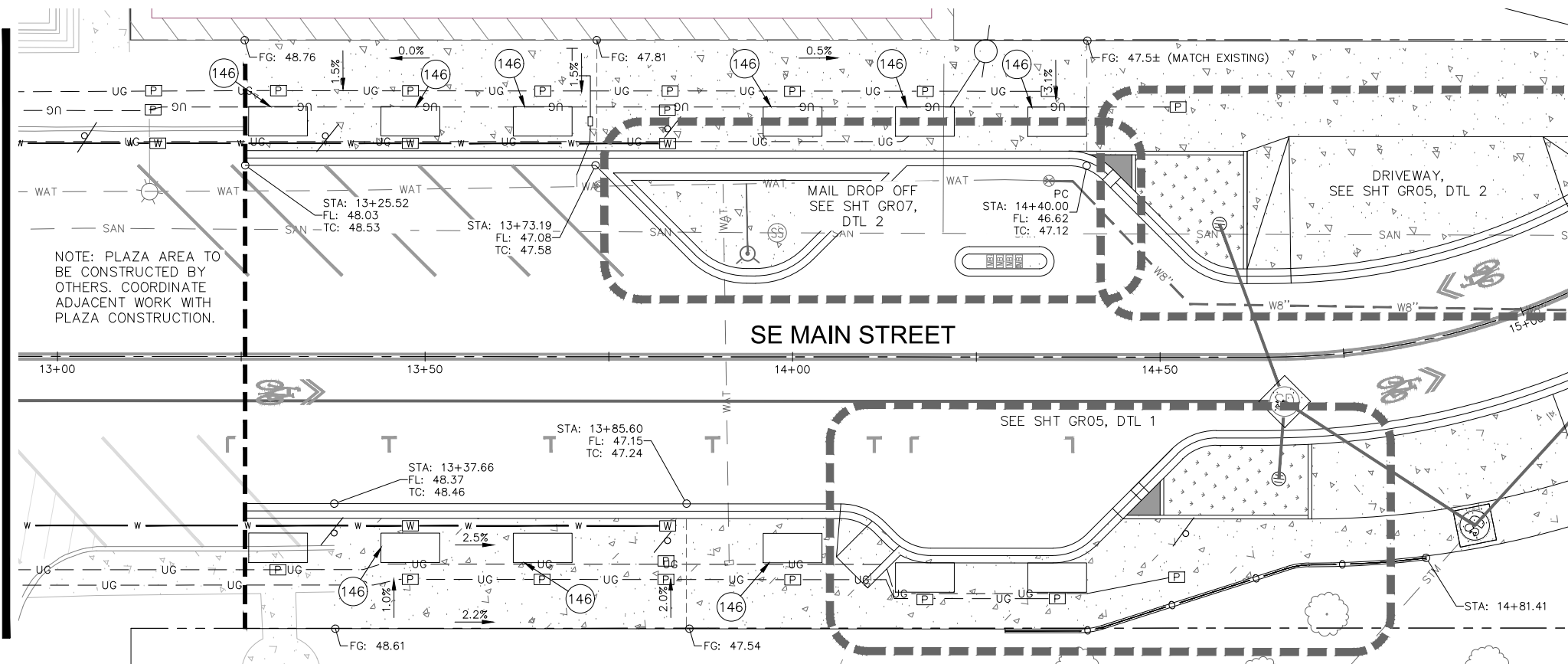
**SOUTH DOWNTOWN IMPROVEMENTS**

**SIDEWALK PLAN AND PROFILE-SE MAIN ST**

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV07 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 PV1-sidewalks.dwg Aug. 15, 2018 -- 4:33 PM alaina floor  
Plot Date: 8/15/2018 5:44 PM alaina floor

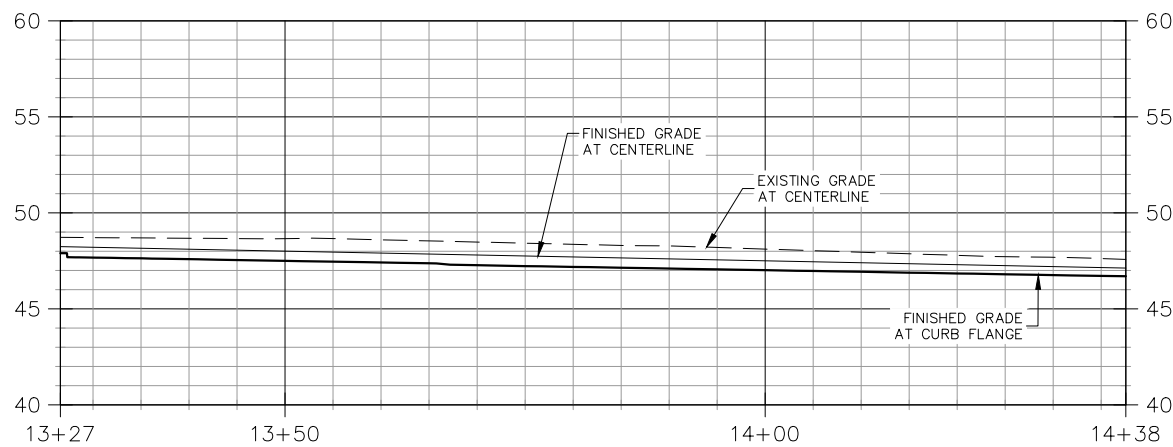
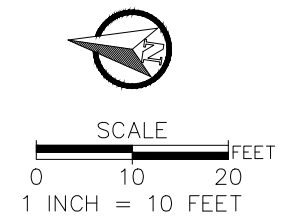
MATCH LINE - SEE SHEET PV07



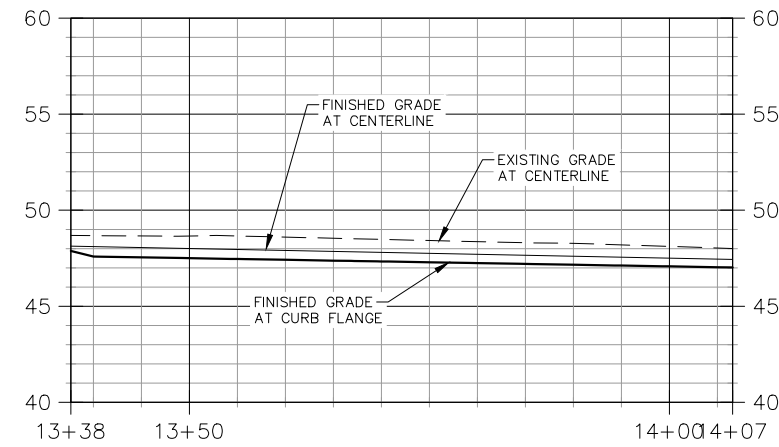
PLAN - MAIN ST SIDEWALK - STA: 12+50 TO 14+75  
SCALE: 1"=10'

STREET CONSTRUCTION NOTES:

- (146) CONSTRUCT 8'x4' TREE WELL. SEE DTL 706 ON SHT DT04. SEE LOCATIONS ON SHEETS ST05-ST06 FOR LOCATIONS.



PROFILE - MAIN ST EAST/LEFT CURB - STA: 13+26.60 TO 14+38.00  
SCALE: 1"=5' VERTICAL 1"=10' HORIZONTAL



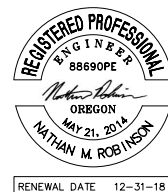
PROFILE - MAIN ST WEST/RIGHT CURB - STA: 13+38.00 TO 14+06.59  
SCALE: 1"=5' VERTICAL 1"=10' HORIZONTAL



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

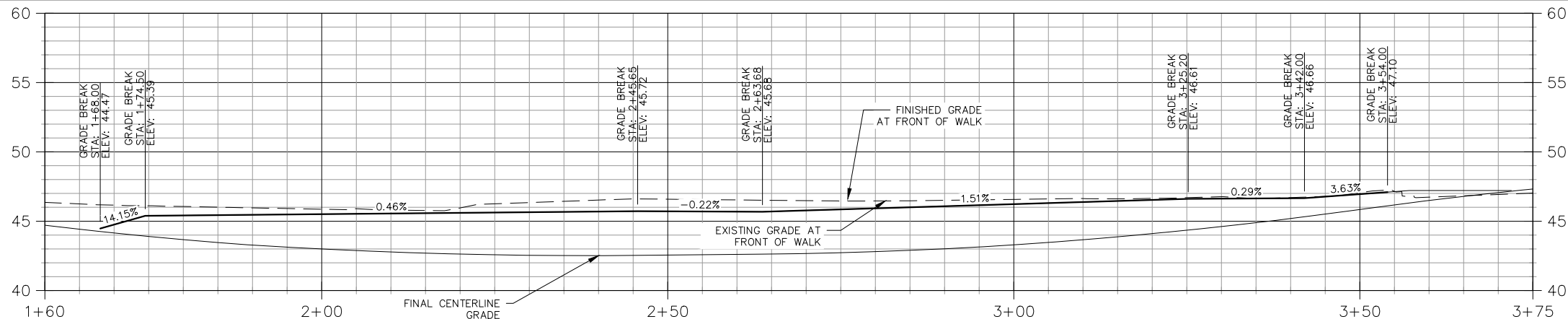
SIDEWALK PLAN AND PROFILE-SE MAIN ST

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV08 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\X\Projects\2017\0170195.00 City of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 PVI--sidewalks.dwg Aug. 15, 2018 -- 4:33 PM alaina floor  
Plot Date: 8/15/2018 5:44 PM alaina floor

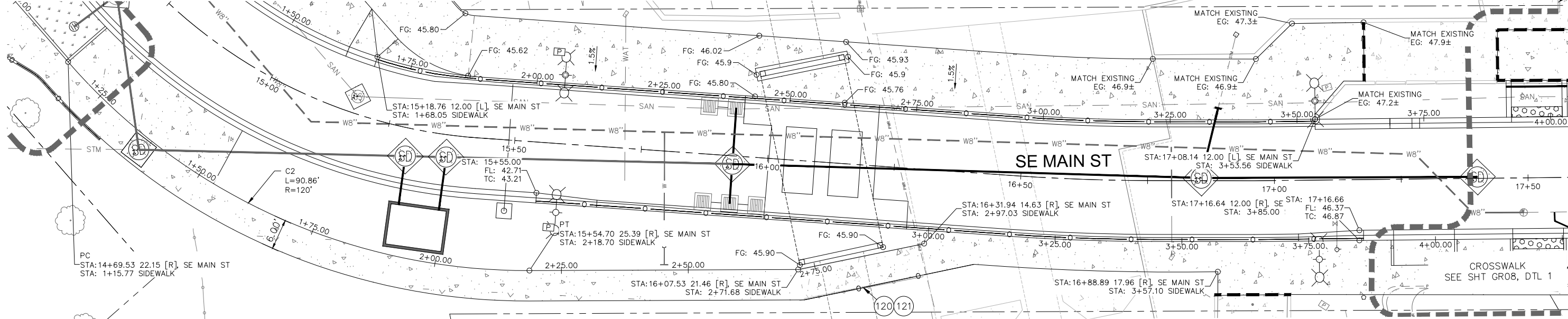
STREET CONSTRUCTION NOTES:

- (120) CONSTRUCT THICKENED EDGE SIDEWALK.  
SEE DETAIL 2 ON SHEET DT05.  
(121) CONSTRUCT DECORATIVE FENCE. SEE  
CoM STANDARD DETAIL 709 ON SHEET  
DT05.



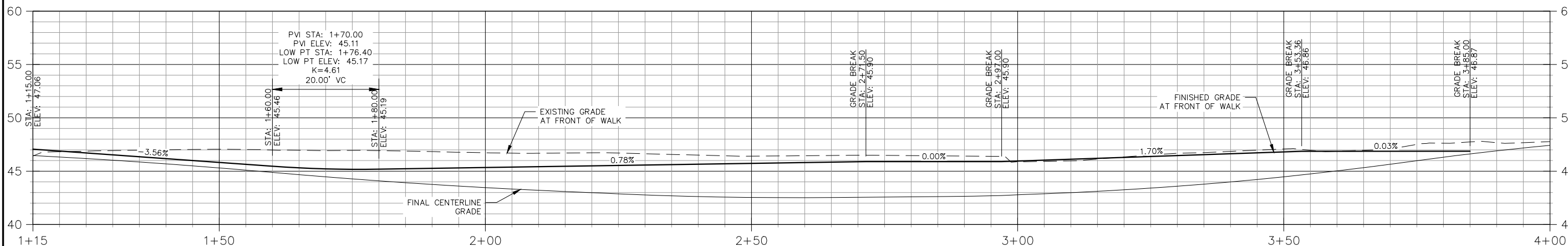
PROFILE-SE MAIN STREET - NORTH/LEFT FRONT OF WALK

SCALE: 1"=5' VERTICAL 1"=10' HORIZONTAL



PLAN - MAIN ST SIDEWALK - STA: 12+50 TO 14+75

SCALE: 1"=10'



PROFILE-SE MAIN STREET - SOUTH/RIGHT FRONT OF WALK

SCALE: 1"=5' VERTICAL 1"=10' HORIZONTAL

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |      |
|----------|------------|------|
| NMR      | 08/14/2018 | DATE |
| DESIGNED |            |      |
| AMF      | 08/14/2018 | DATE |
| DRAFTED  |            |      |
| JGR      | 08/14/2018 | DATE |
| CHECKED  |            |      |
| JGR      | 08/14/2018 | DATE |
| APPROVED |            |      |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

SIDEWALK PLAN AND PROFILE-SE MAIN

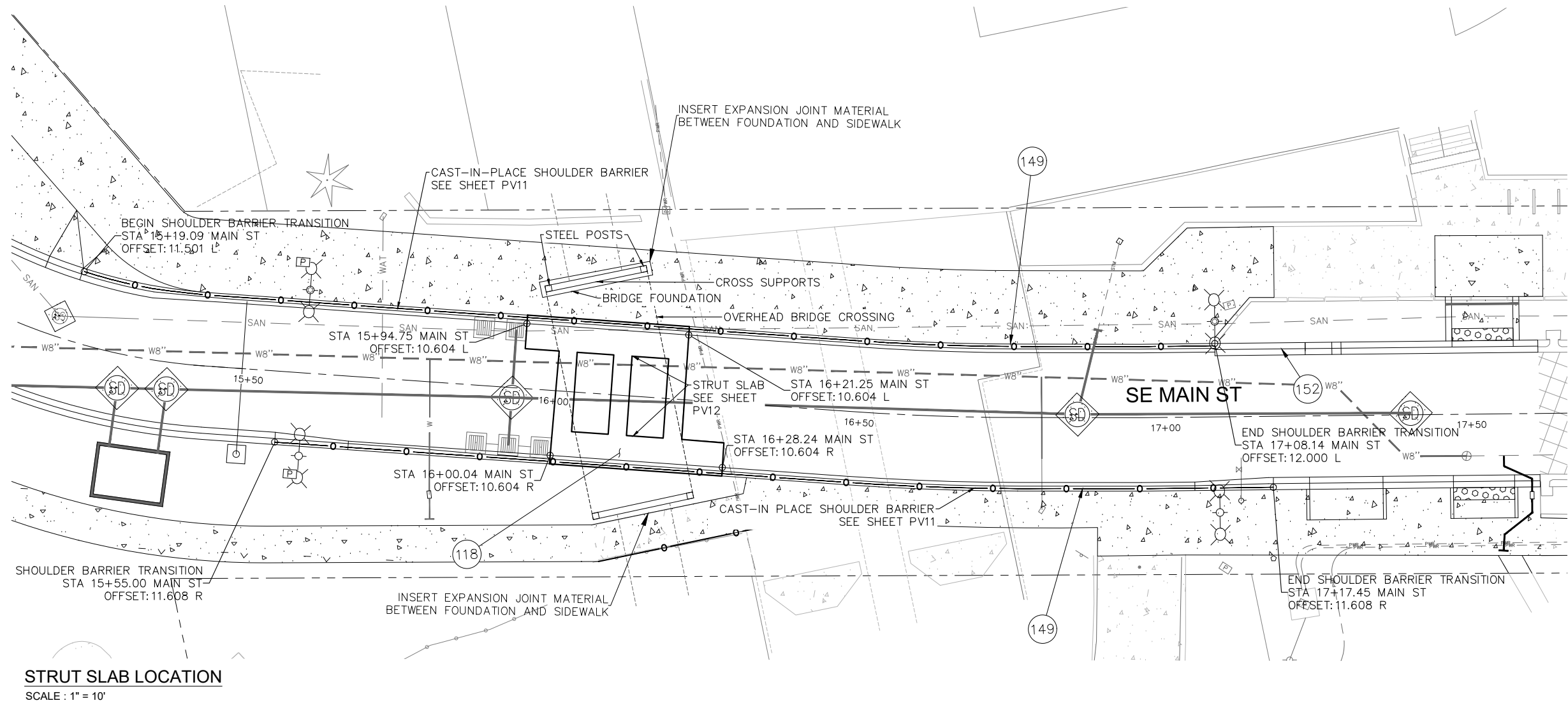
PROJECT NO.: CIP2018 CONTRACT NO.: C2018-051 DATE: 08/14/2018 SHEET NO.: PV09



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE: 503.274.2010  
WWW.ESASSOC.COM



G:\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T36 PV06-07-RAIL CLEARANCE.dwg Aug. 15, 2018 -- 4:33 PM alaina floor  
Plot Date: 8/15/2018 5:44 PM\_alaina floor



STREET CONSTRUCTION NOTES:

- (118) CONSTRUCT CAST-IN-PLACE STRUT SLAB. SEE SHEET PV12. TOP OF BARRIER VARIES. SEE SHEET PV11 FOR PROFILE.
- (149) CONSTRUCT CAST-IN-PLACE TALL SHOULDER BARRIER. TOP OF BARRIER VARIES. SEE SHEET PV11 FOR PROFILE. SEE ODOT STANDARD DRAWINGS RD 516, DET 1545, AND DET 1549. 6" FULL WIDTH CONTINUOUS KEY REQUIRED.
- (152) CONSTRUCT STREET SIDE PLANTER WALL.

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

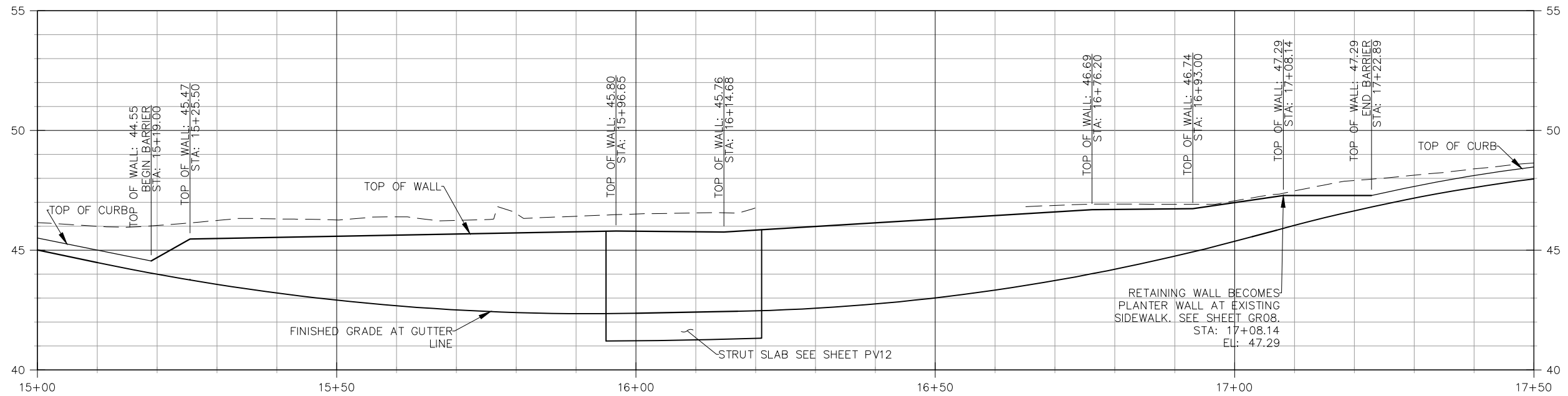
STRUT SLAB LOCATION

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV10 |
|----------------------|-------------------------|------------------|-----------------|

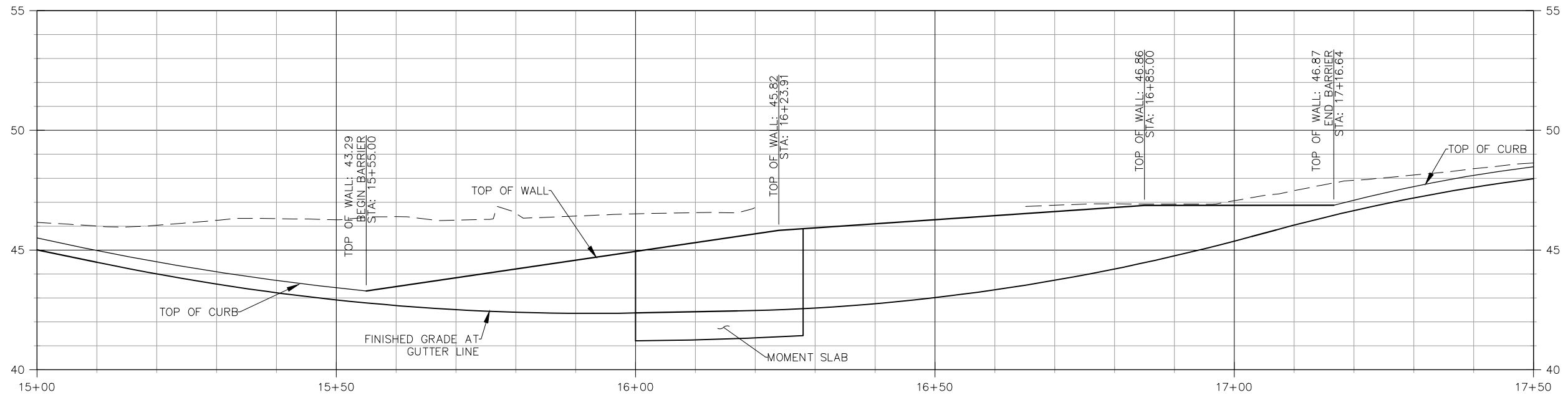


819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

\\esa\proj\PROJECTS\PD\Projects\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017\16 PV1.dwg Aug. 15, 2018 -- 6:17 PM nate robinson  
Plot Date: 8/15/2018 6:18 PM nate robinson



SE MAIN STREET - NORTH RETAINING WALL PROFILE  
SCALE : 1" = 5' VERTICAL 1" = 20' HORIZONTAL



SE MAIN STREET - SOUTH RETAINING WALL PROFILE  
SCALE : 1" = 5' VERTICAL 1" = 20' HORIZONTAL



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

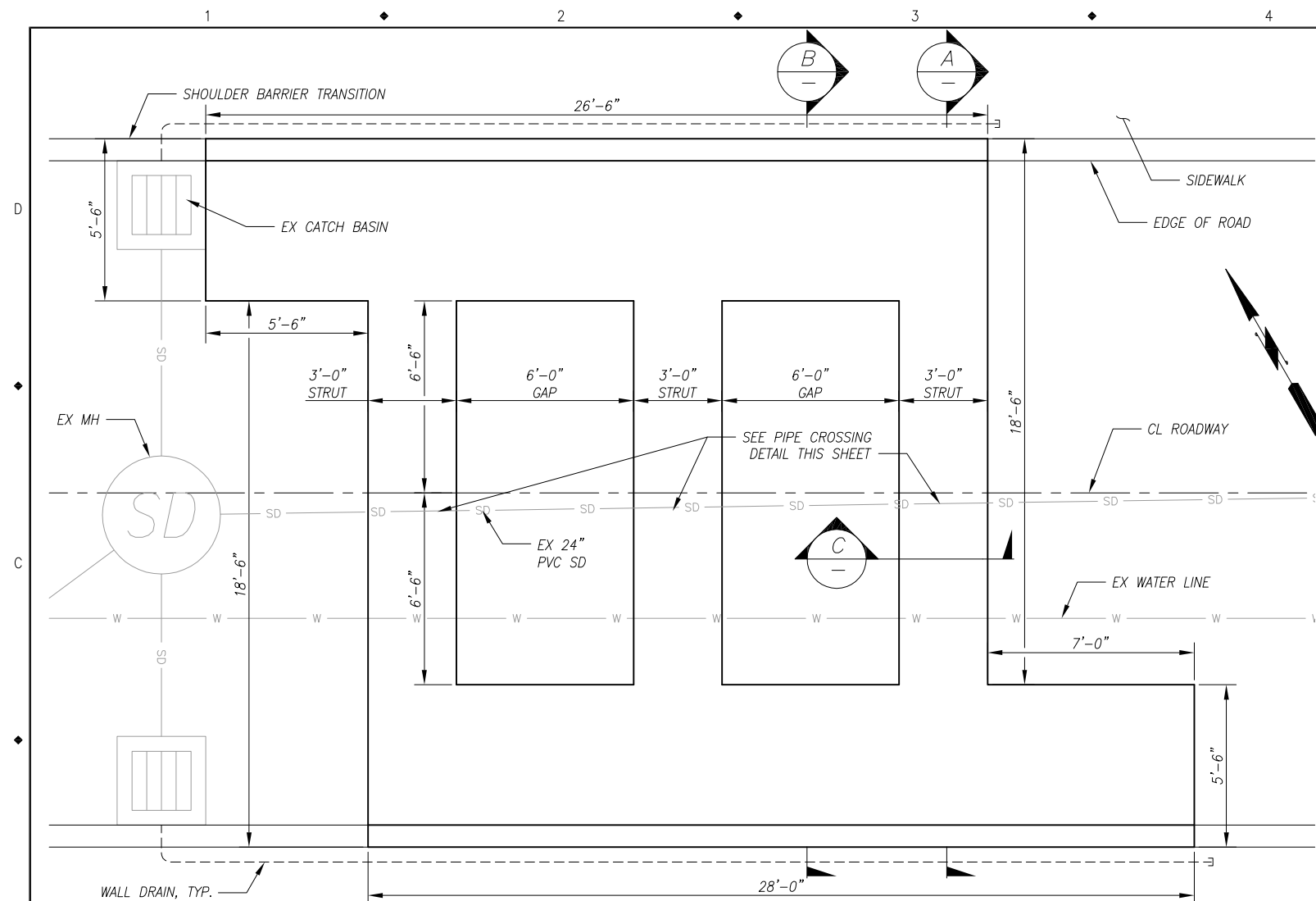
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

## SOUTH DOWNTOWN IMPROVEMENTS

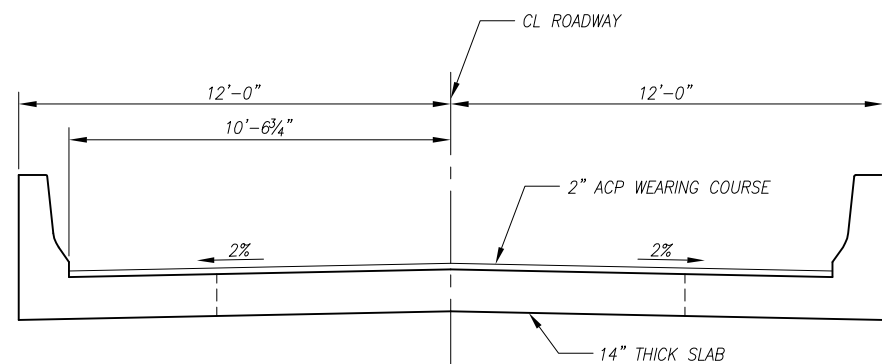
### STRUT WALL PROFILES

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV11 |
|----------------------|-------------------------|------------------|-----------------|

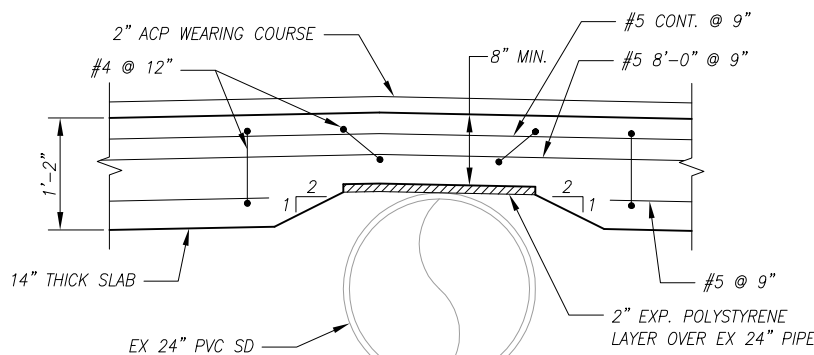


**STRUT SLAB PLAN**  
3/8" = 1'-0"

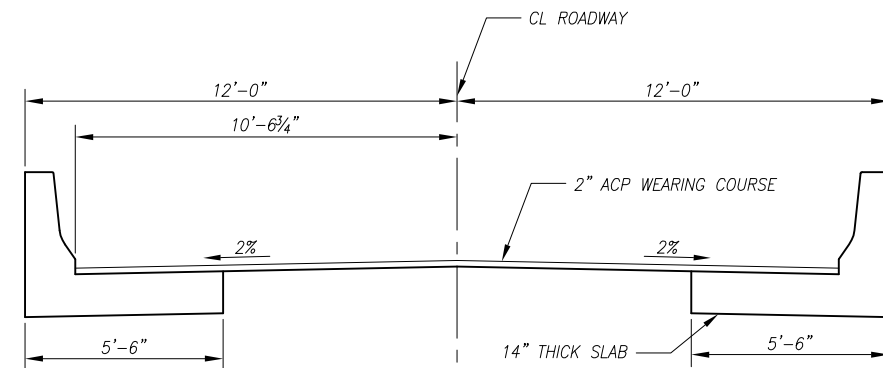
- NOTES**  
1. CONCRETE IS CLASS 4000  
2. REINFORCING IS ASTM A615 GRADE 60



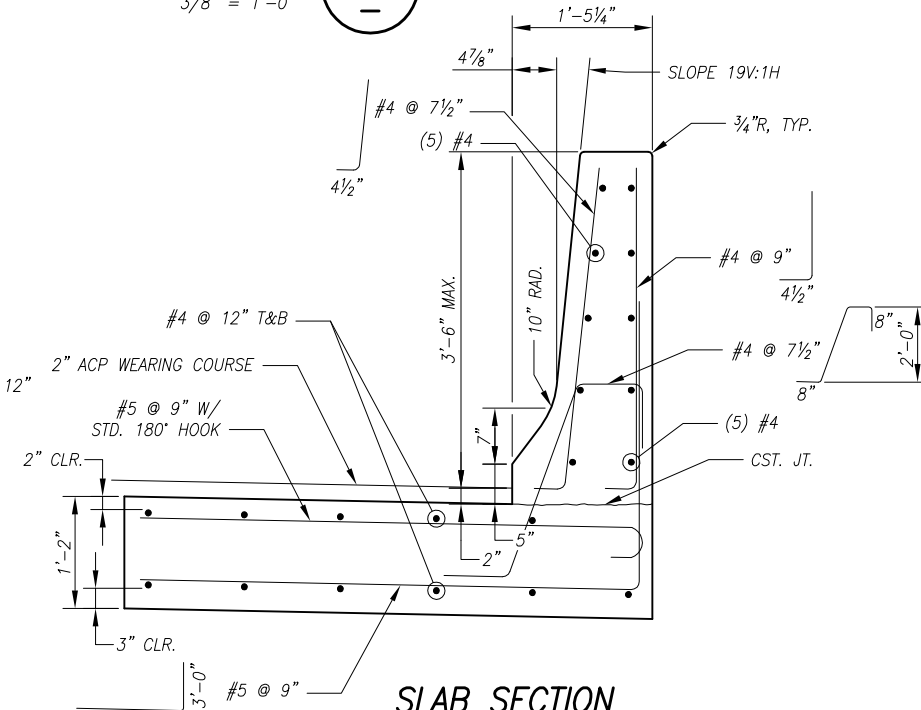
**STRUT SECTION A**  
3/8" = 1'-0"



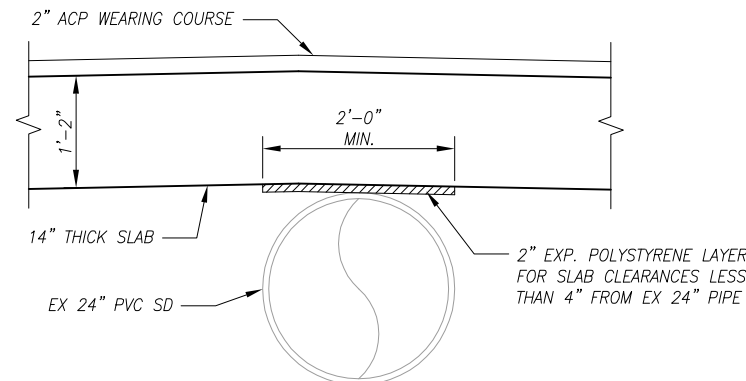
**ENCROACHING PIPE DETAIL**  
1" = 1'-0"



**GAP SECTION B**  
3/8" = 1'-0"



**SLAB SECTION**  
1" = 1'-0"



**PIPE CROSSING DETAIL**  
1" = 1'-0"

| NO. | DATE    | BY  | REVISIONS               |
|-----|---------|-----|-------------------------|
| 1   | 8/07/18 | NJB | BARRIER HEIGHT REVISION |

|          |         |
|----------|---------|
| NJB      | 5/09/18 |
| DESIGNED | DATE    |
| NJB      | 5/10/18 |
| DRAFTED  | DATE    |
| KBK      | 5/10/18 |
| CHECKED  | DATE    |
| APPROVED | DATE    |



**MILWAUKIE**  
*Dogwood City of the West*

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

## MAIN STREET CROSSING IMPROVEMENTS CIVIL STRUT SLAB DETAILS

PROJECT NO.: CIP2017-T36

CONTRACT NO.:

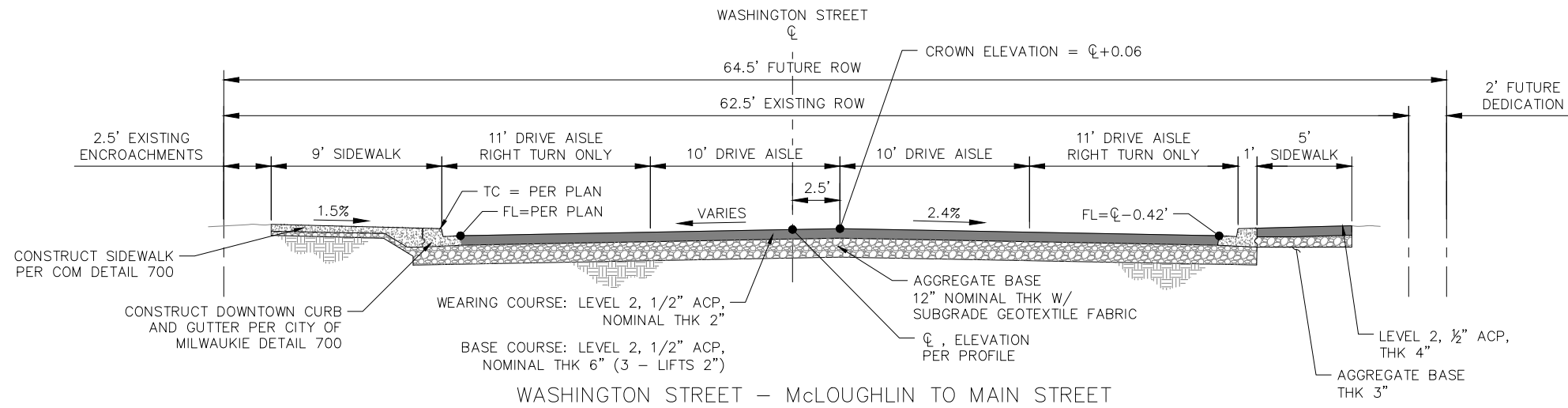
DATE:

SHEET NO.: PV12

**Otak**  
Otak, Inc.  
700 Washington St., Suite 300  
Vancouver, WA 98660  
360.737.9613  
www.otak.com



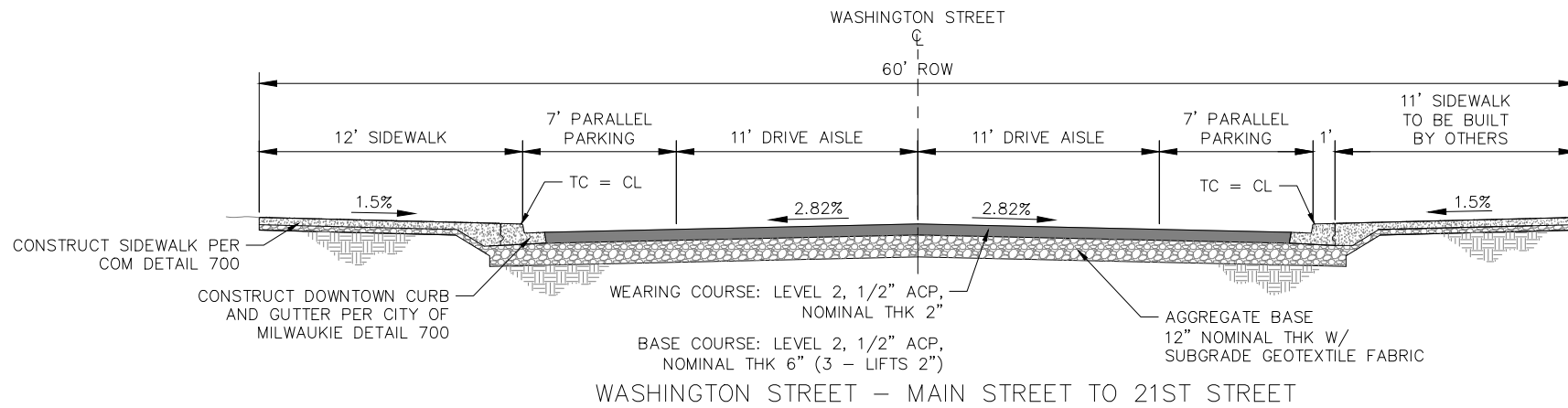
U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 PV2.dwg Aug. 15, 2018 - 5:00 PM alaina floor  
Plot Date: 8/15/2018 5:45 PM alaina floor



TYPICAL SECTION

SCALE: 1" = 4'  
STA: 10+55.18 TO 12+30.34

1



TYPICAL SECTION

SCALE: 1" = 4'  
STA: 13+71.41 TO 14+93.75

2



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

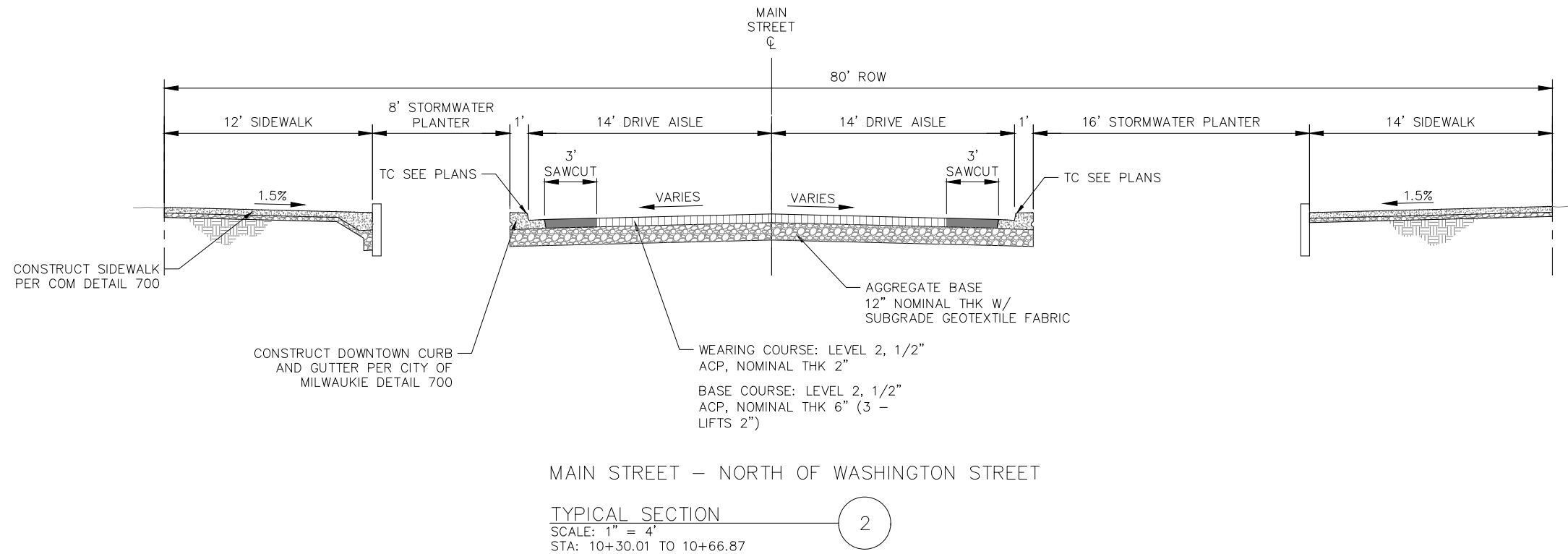
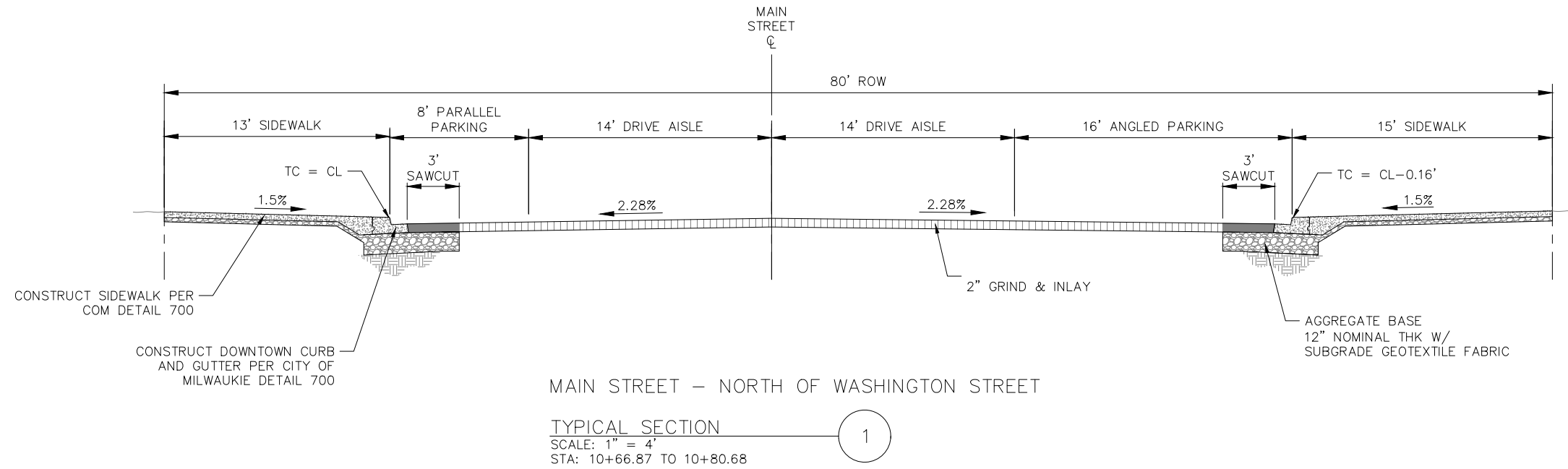
PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

WASHINGTON STREET TYPICAL SECTIONS

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV13 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 PV2.dwg Aug. 15, 2018 - 5:00 PM alaina floor  
Plot Date: 8/15/2018 5:45 PM alaina floor



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

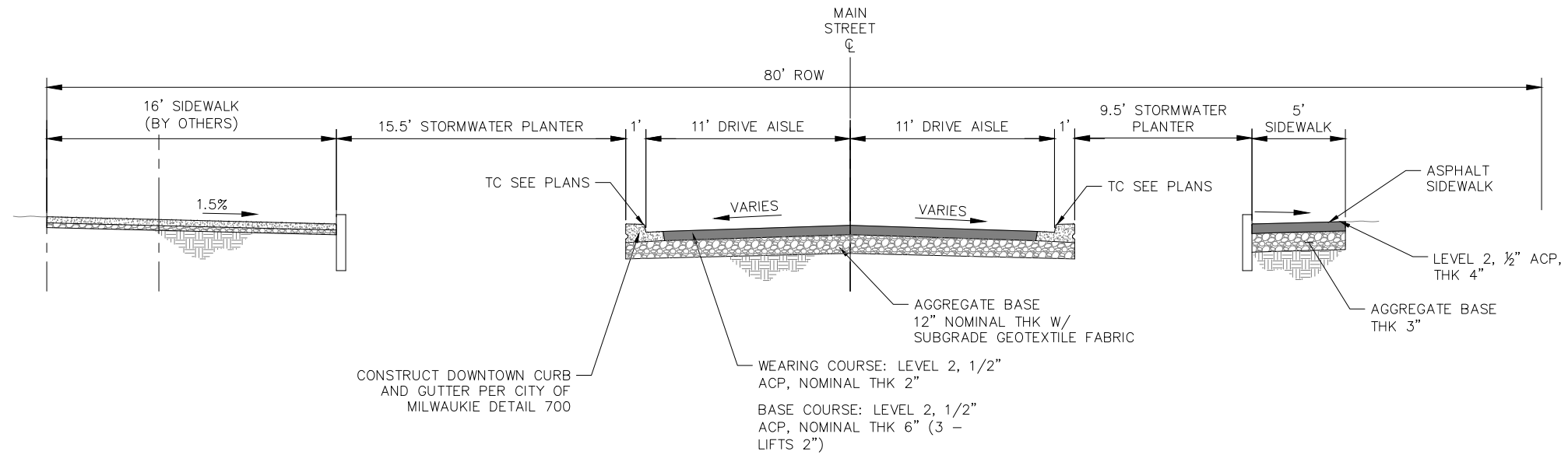
## SOUTH DOWNTOWN IMPROVEMENTS

### MAIN STREET TYPICAL SECTIONS-1

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV14 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 PV2.dwg Aug. 15, 2018 - 5:00 PM alaina floor  
Plot Date: 8/15/2018 5:45 PM alaina floor

D  
C  
B  
A

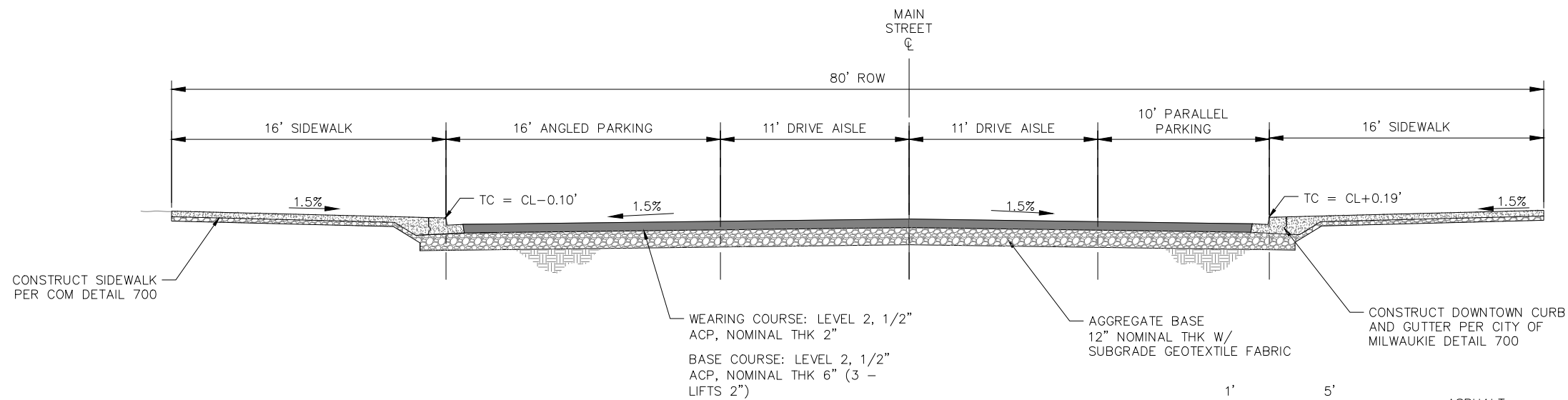


MAIN STREET - SOUTH OF WASHINGTON STREET

TYPICAL SECTION

SCALE: 1" = 4'  
STA: 10+39.5 TO 10+49.4

1

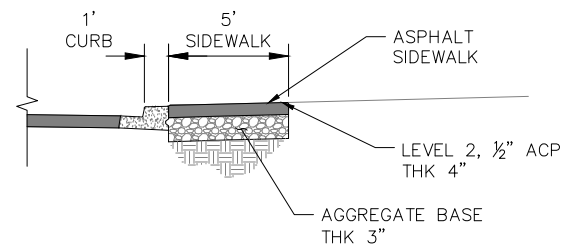


MAIN STREET - SOUTH OF WASHINGTON STREET

TYPICAL SECTION

SCALE: 1" = 4'  
STA: 10+65.6 TO 14+41.4

2



TYPICAL SECTION

SCALE: 1" = 4'  
STA: 10+65.6 TO 12+27.6



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

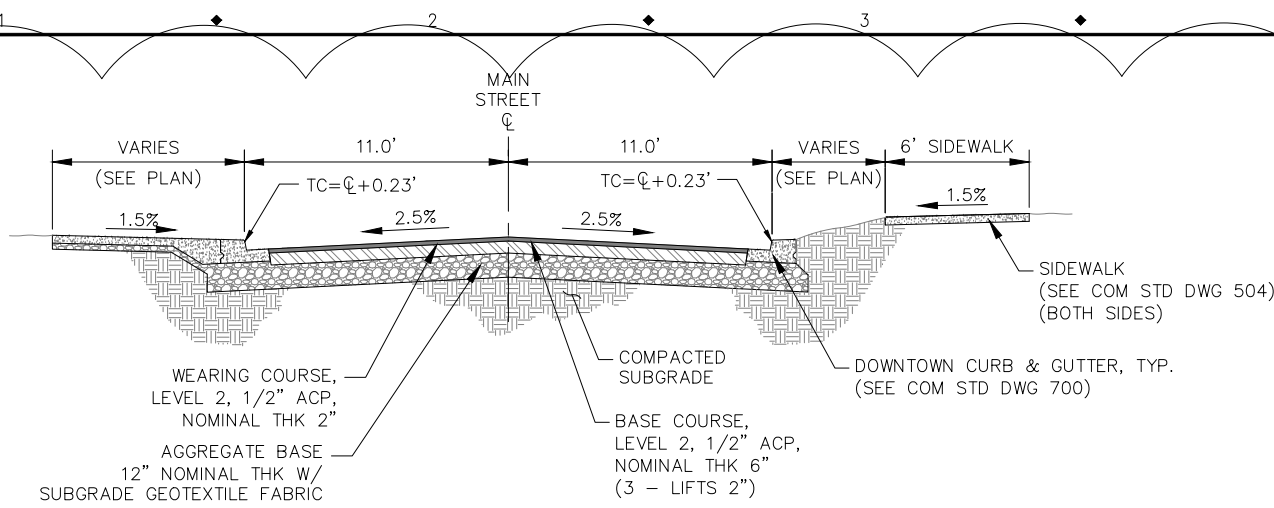
PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

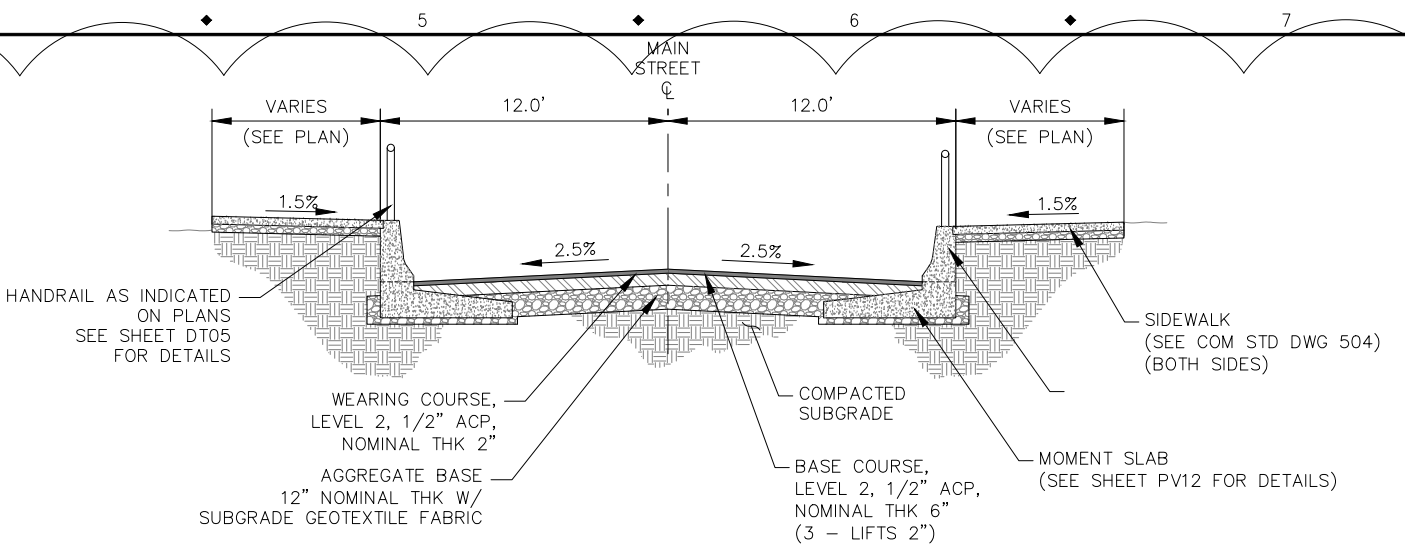
MAIN STREET TYPICAL SECTIONS-2

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV15 |
|----------------------|-------------------------|------------------|-----------------|

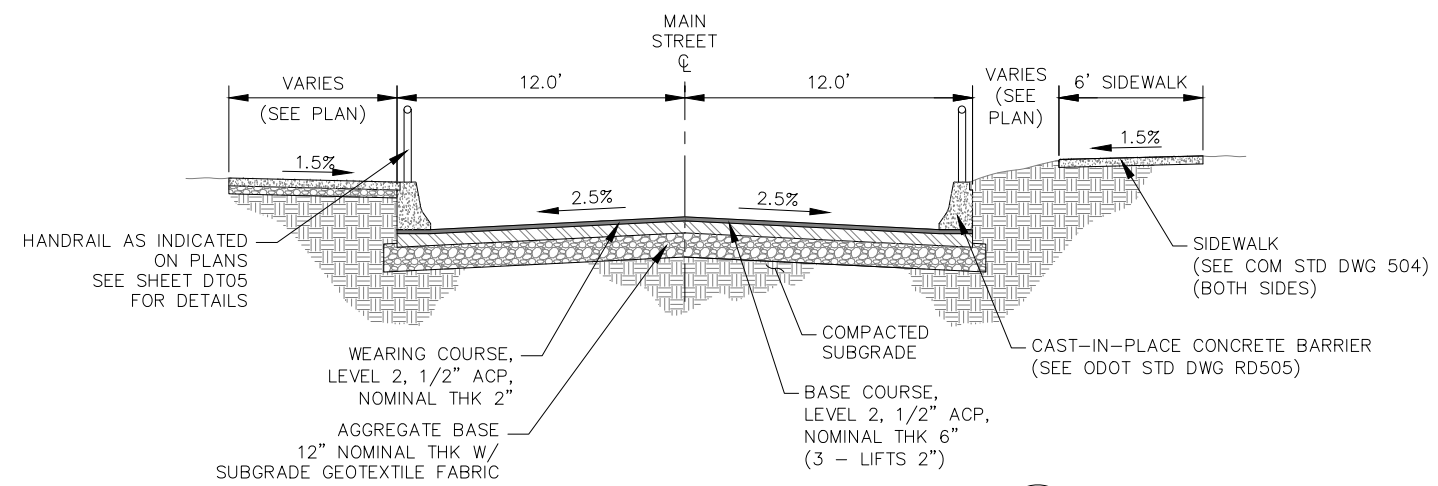




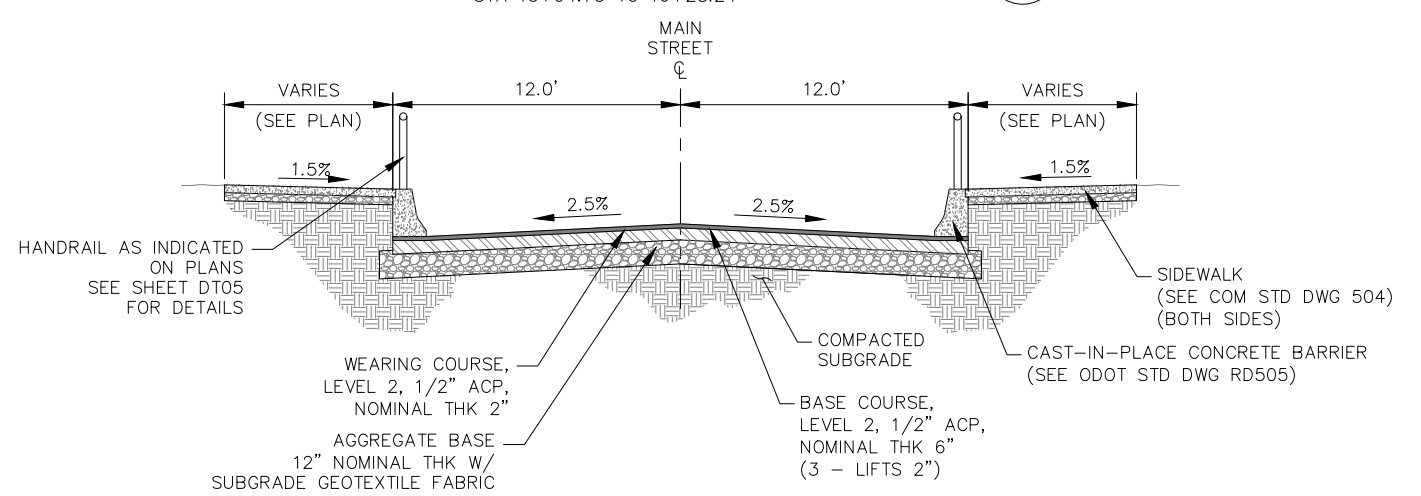
MAIN STREET TYPICAL SECTION  
SCALE: 1" = 4'  
STA 14+70.08 TO 15+32.40



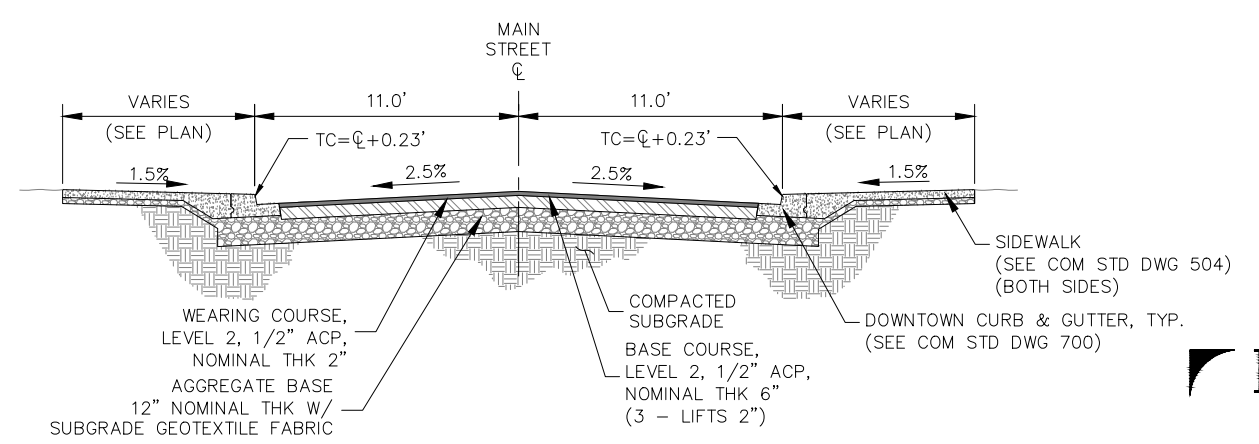
MAIN STREET TYPICAL SECTION  
SCALE: 1" = 4'  
STA 15+94.75 TO 16+28.24



MAIN STREET TYPICAL SECTION  
SCALE: 1" = 4'  
STA 15+32.40 TO 15+94.75



MAIN STREET TYPICAL SECTION  
SCALE: 1" = 4'  
STA 16+28.24 TO 17+16.64



MAIN STREET TYPICAL SECTION  
SCALE: 1" = 4'  
STA 17+08.8 TO 17+61.03

**ESA**  
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 09/06/18 | NMR | ADDENDUM 1  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

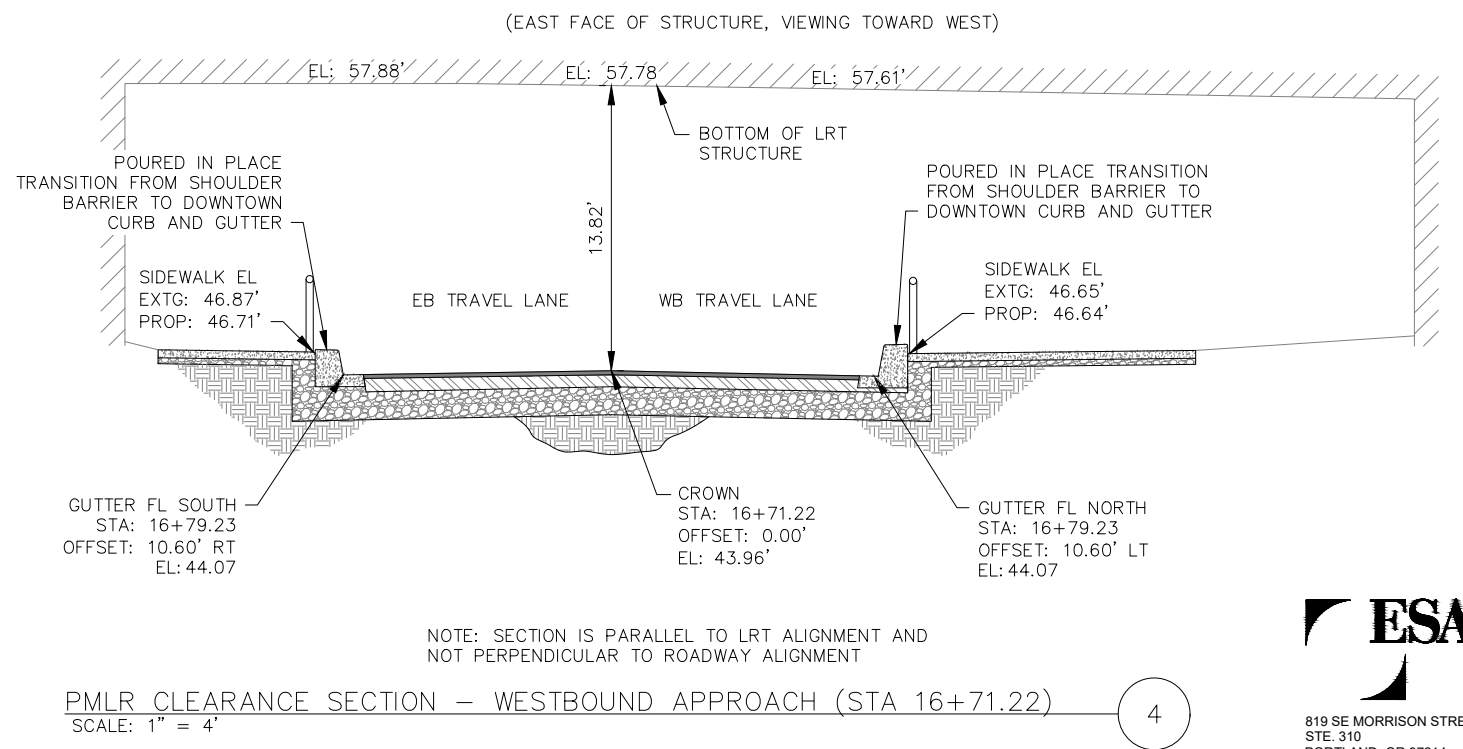
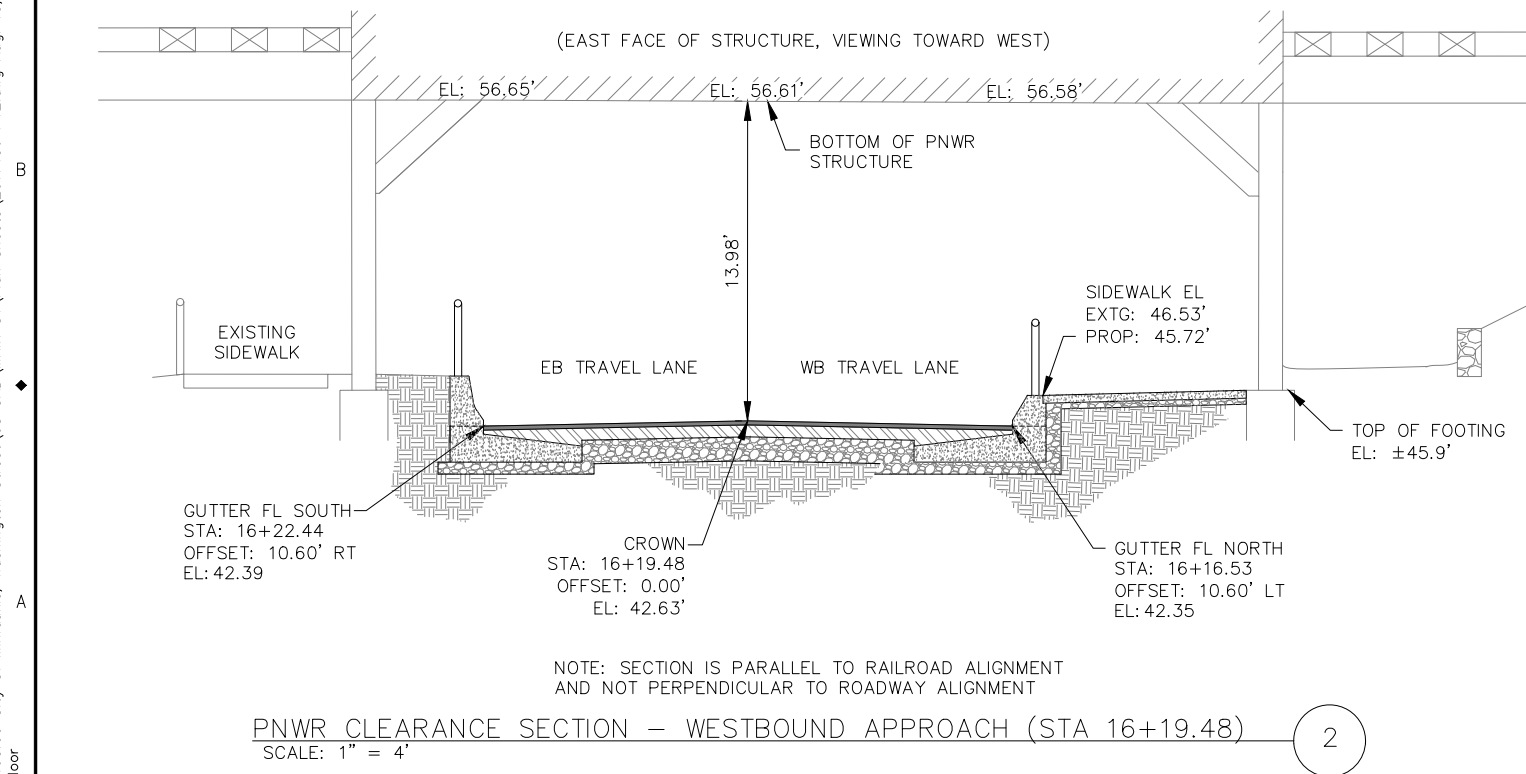
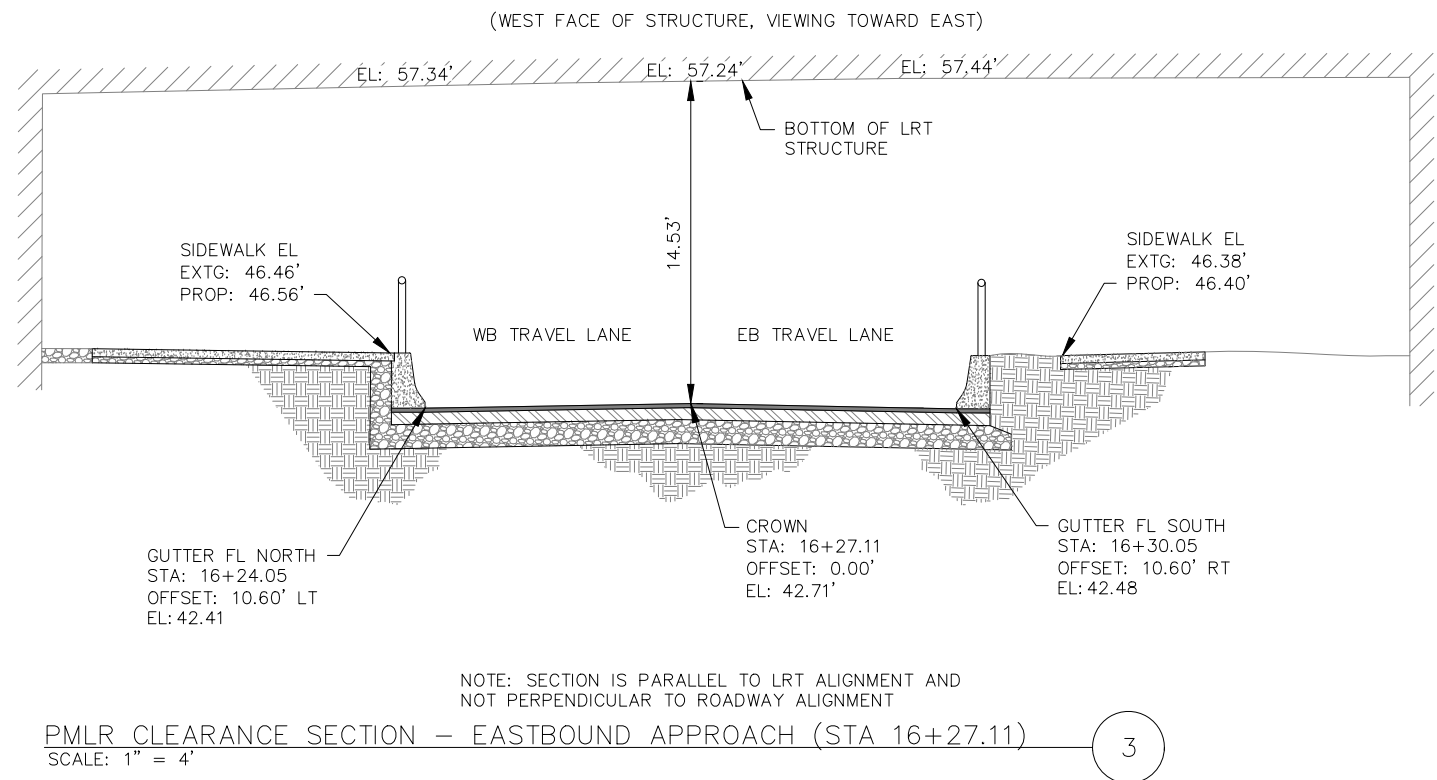
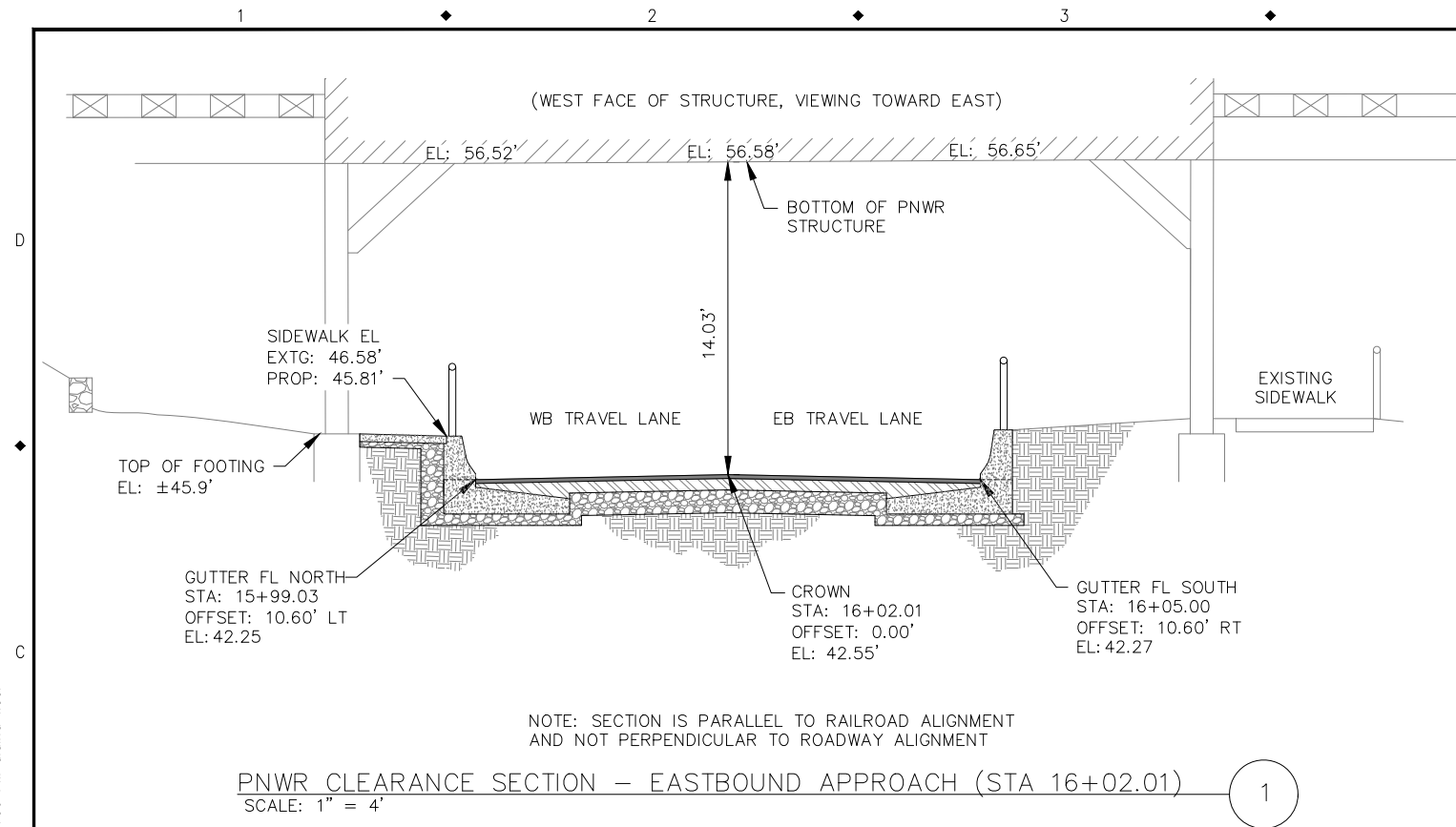
**SOUTH DOWNTOWN IMPROVEMENTS**

MAIN STREET CROSSING TYPICAL SECTIONS

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: PV16 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\Projects\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T136 PV2.dwg Sep. 06, 2018 - 4:50 PM alaina floor  
Plot Date: 9/7/2018 4:32 PM alaina floor

U:\PROJECTS\PD\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 PV2.dwg Aug. 15, 2018 - 5:00 PM alaina floor  
Plot Date: 8/15/2018 5:45 PM alaina floor



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

## SOUTH DOWNTOWN IMPROVEMENTS

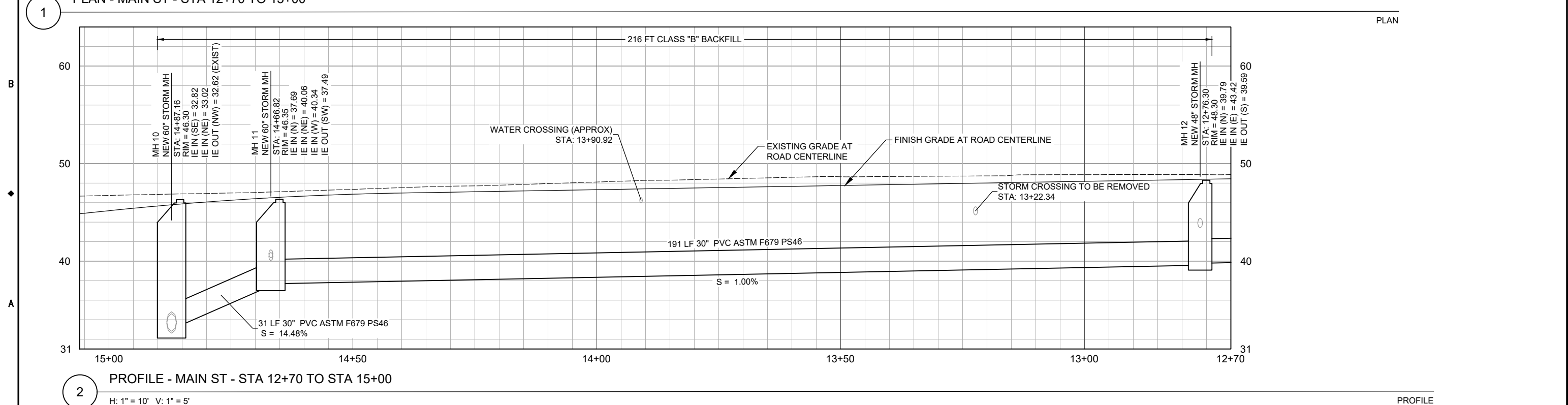
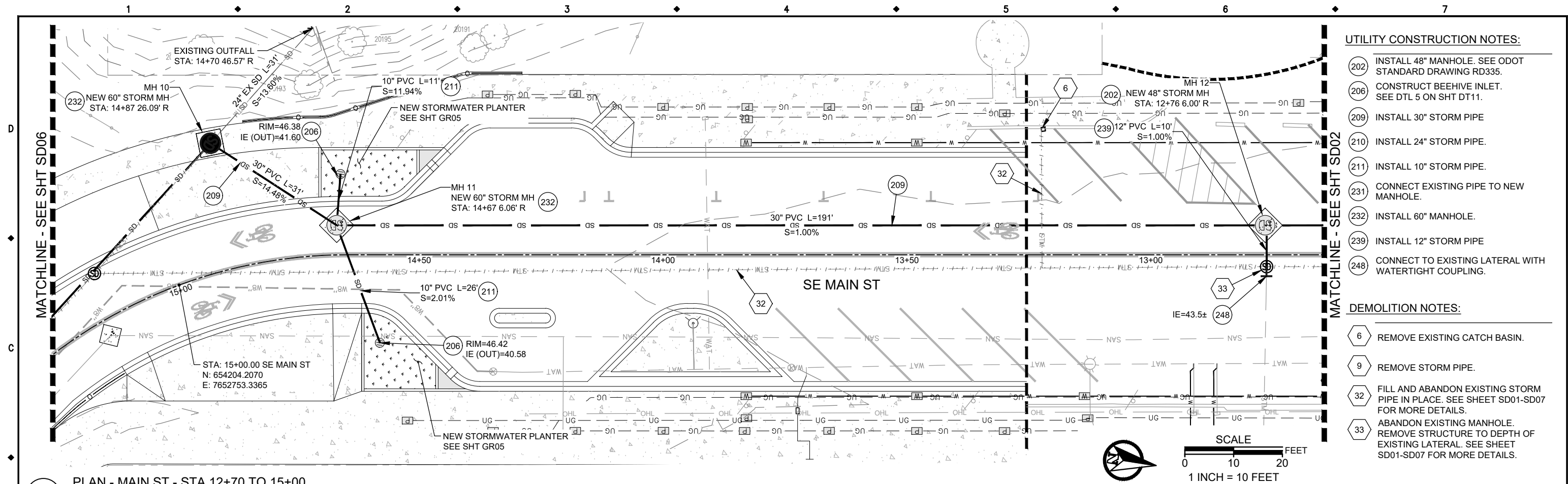
### RAIL STRUCTURE CLEARANCE DIAGRAMS

PROJECT NO.: CIP2018

CONTRACT NO.: C2018-051

DATE: 08/14/2018

SHEET NO.: PV17

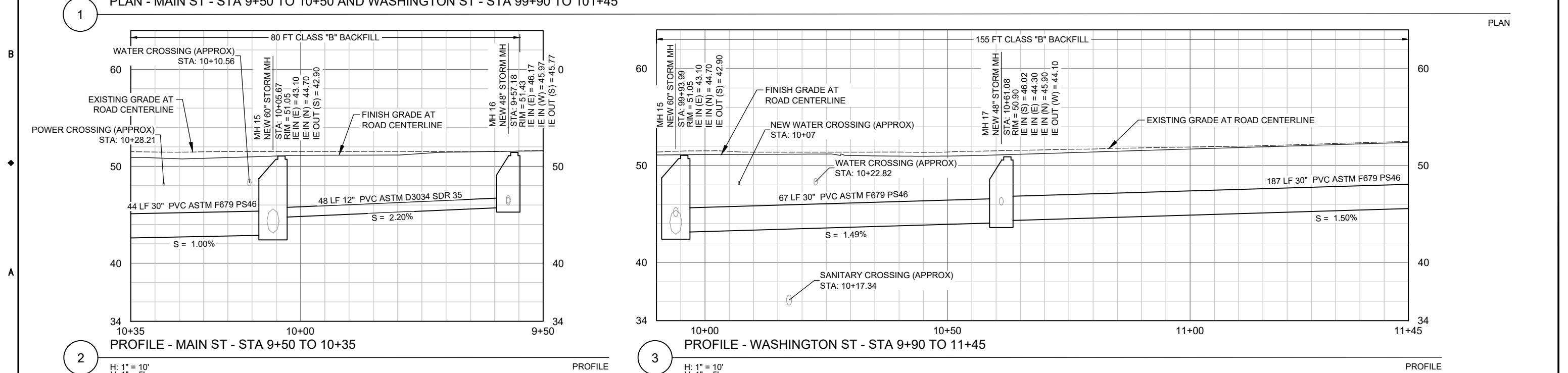
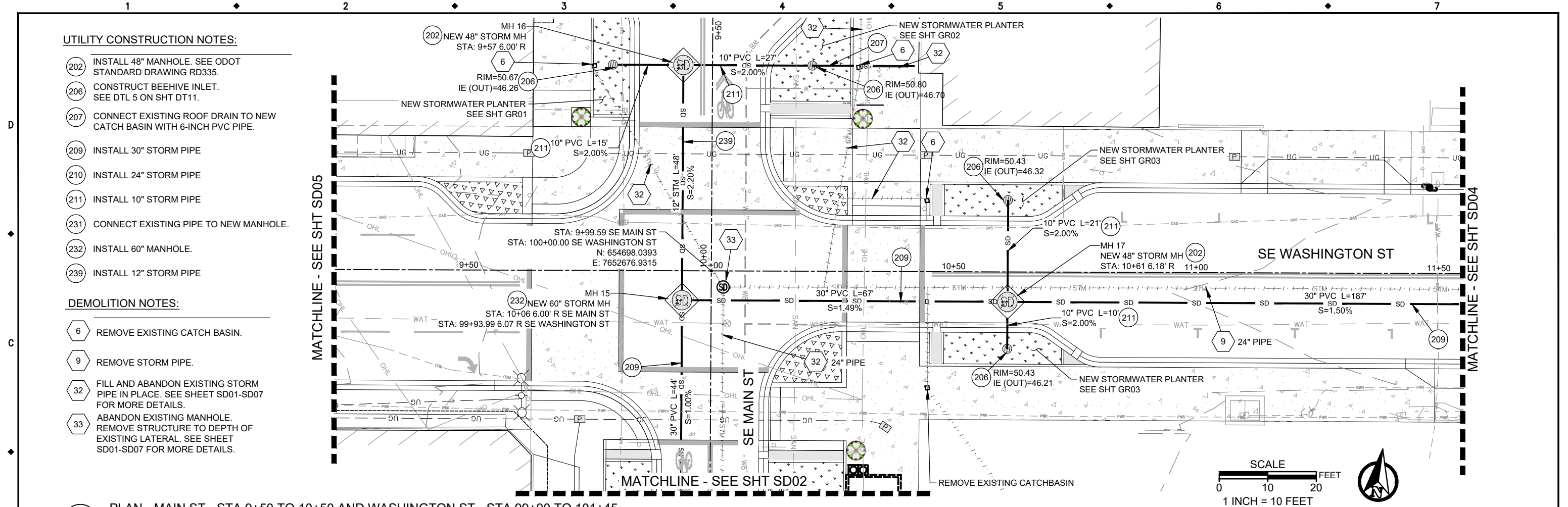


|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|



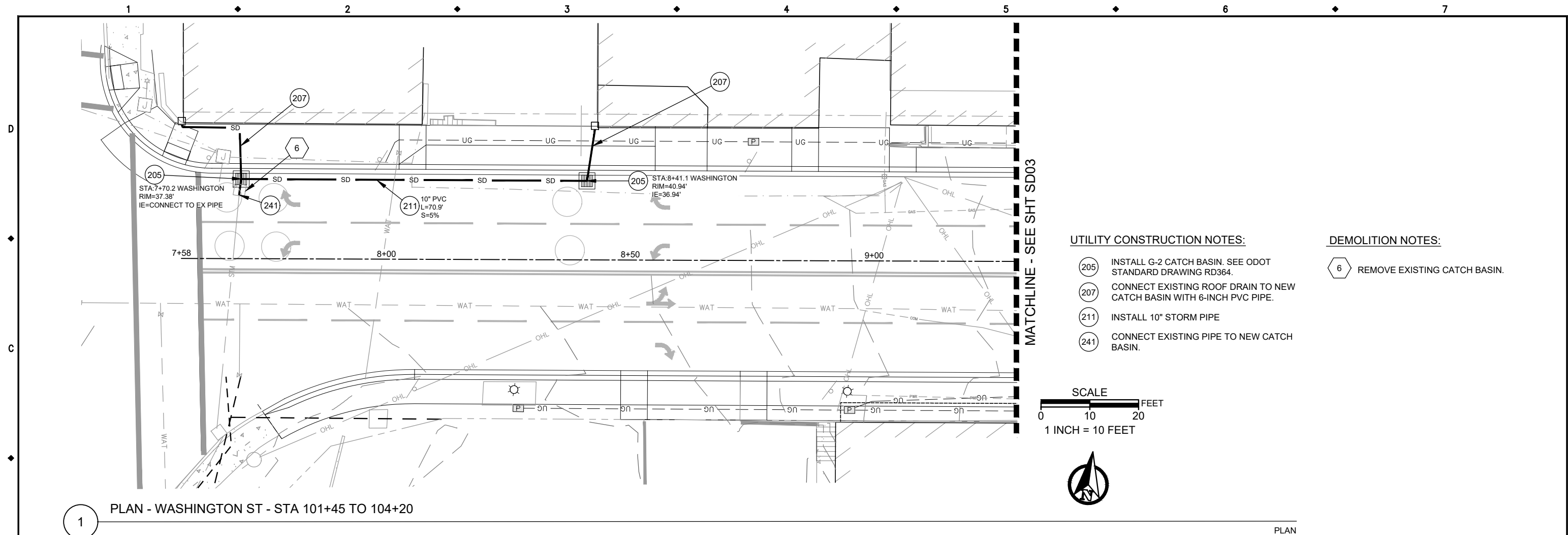






|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | </ |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|





|     |           |     |             |
|-----|-----------|-----|-------------|
|     |           |     |             |
|     |           |     |             |
|     |           |     |             |
|     |           |     |             |
|     |           |     |             |
| 2   | 8/14/2018 | CTF | 100% DESIGN |
| 1   | 3/12/2018 | CTF | 60% DESIGN  |
| NO. | DATE      | BY  | REVISIONS   |

|          |            |
|----------|------------|
| NMR/CTF  | 03/23/2018 |
| DESIGNED | DATE       |
| CTF      | 03/23/2018 |
| DRAFTED  | DATE       |
| NMR/JGR  | 03/23/2018 |
| CHECKED  | DATE       |
| JGR      | 03/23/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

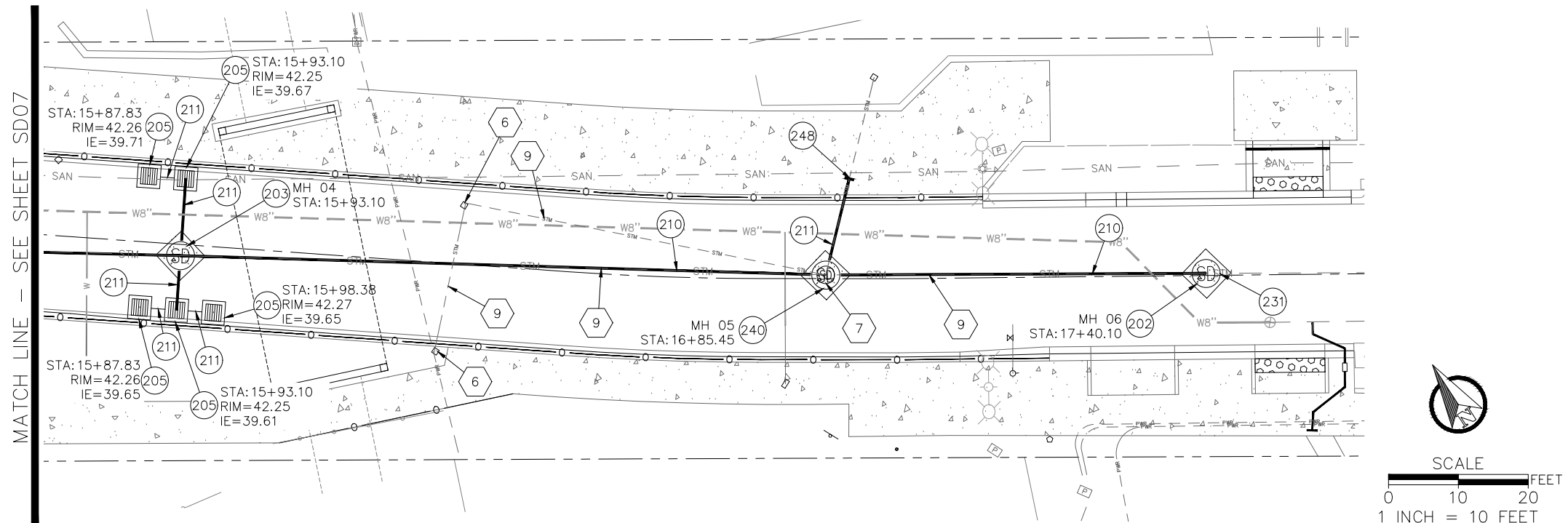
PHONE: 503-786-7600  
FAX: 503-774-8236

## MAIN STREET RECONSTRUCTION

STORM PIPE PLAN AND PROFILE  
WASHINGTON ST STA: 101+45 TO 104+20

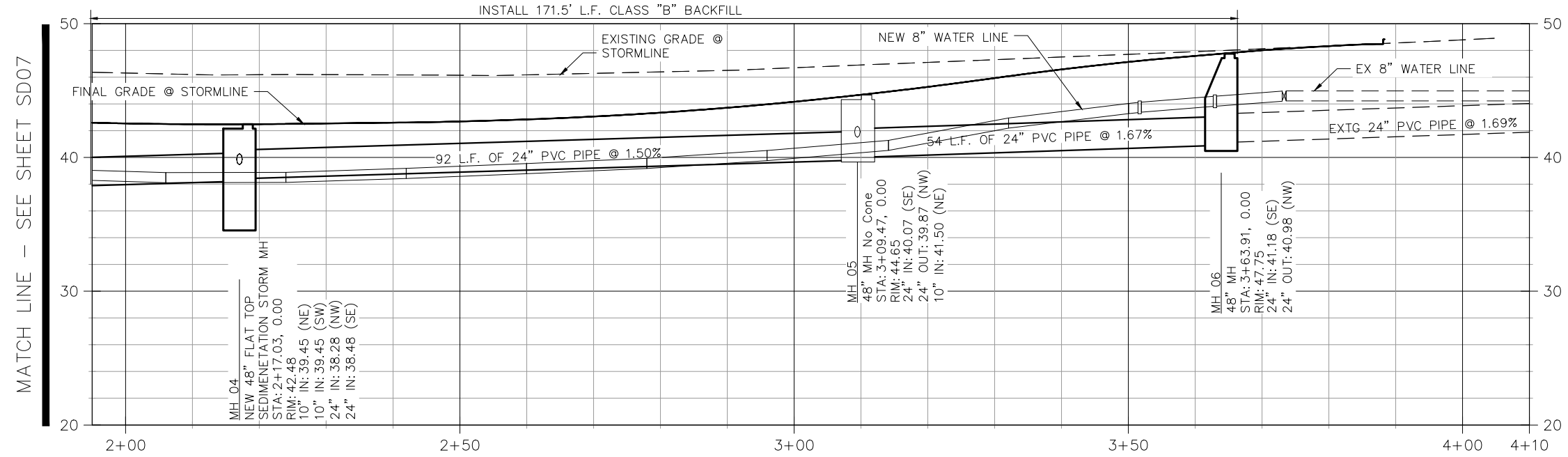
|                          |                         |                  |                 |
|--------------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018-Y18 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: SD05 |
|--------------------------|-------------------------|------------------|-----------------|





- UTILITY CONSTRUCTION NOTES:**
- 202 INSTALL 48" MANHOLE. SEE ODOT STANDARD DRAWING RD335.
  - 203 INSTALL 48" SEDIMENTATION MANHOLE. SEE CoM STANDARD DRAWING 611 ON SHEET DT10.
  - 205 INSTALL G-2 CATCH BASIN. SEE ODOT STANDARD DRAWING RD364.
  - 210 INSTALL 24" STORM PIPE
  - 211 INSTALL 10" STORM PIPE
  - 231 CONNECT EXISTING PIPE TO NEW MANHOLE.
  - 240 INSTALL 48" FLAT TOP MANHOLE.
  - 248 CONNECT TO EXISTING LATERAL WITH WATERTIGHT COUPLING.
- DEMOLITION NOTES:**
- 6 REMOVE EXISTING CATCH BASIN.
  - 7 REMOVE STORM MANHOLE.
  - 9 REMOVE STORM PIPE.

SE MAIN STREET STORM – PLAN  
SCALE: 1"=10'



SE MAIN STREET STORM – PROFILE  
SCALE: 1"=5' VERTICAL 1"=10' HORIZONTAL



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |





**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

**SOUTH DOWNTOWN IMPROVEMENTS**

**STORM PIPE PLAN AND PROFILE**

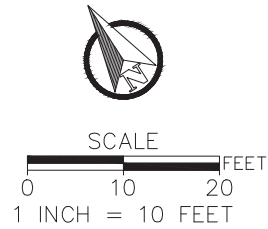
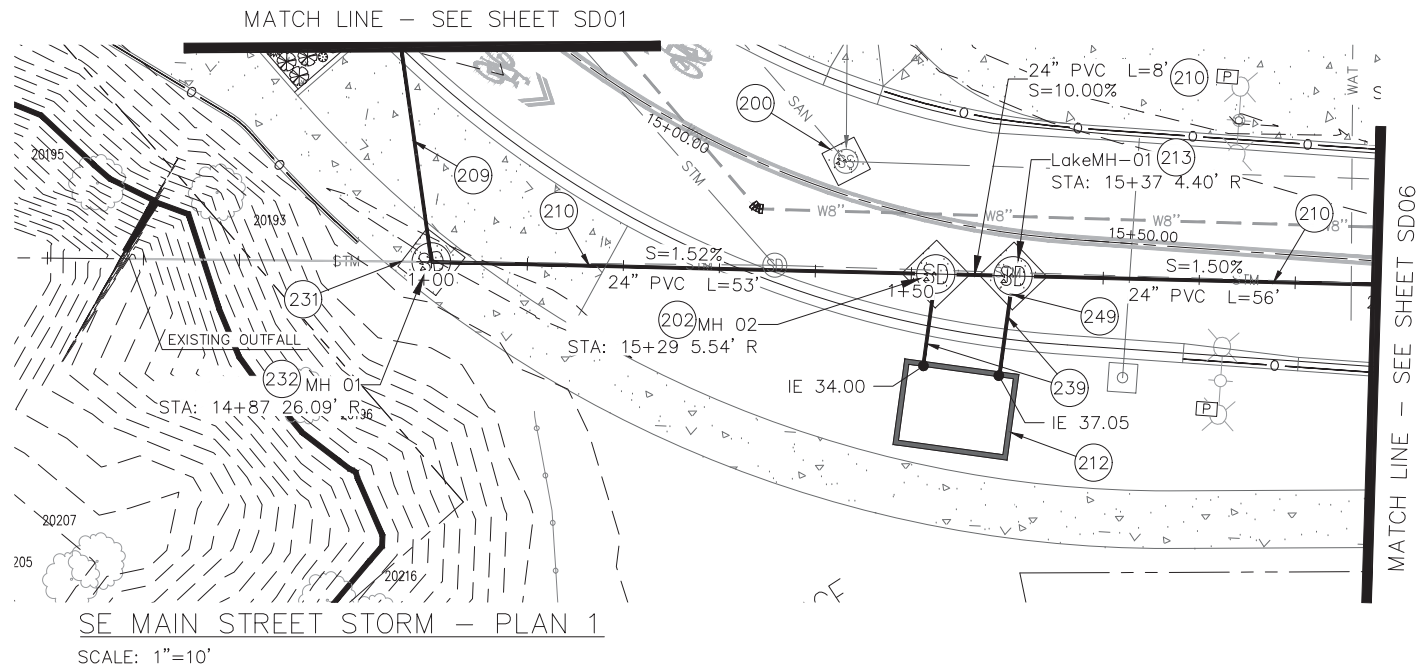
**SE MAIN ST STA: 1+95 TO 4+10**

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: SD06 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 SD2.dwg Aug. 15, 2018 - 5:00 PM alaina floor  
Plot Date: 8/15/2018 5:46 PM alaina floor

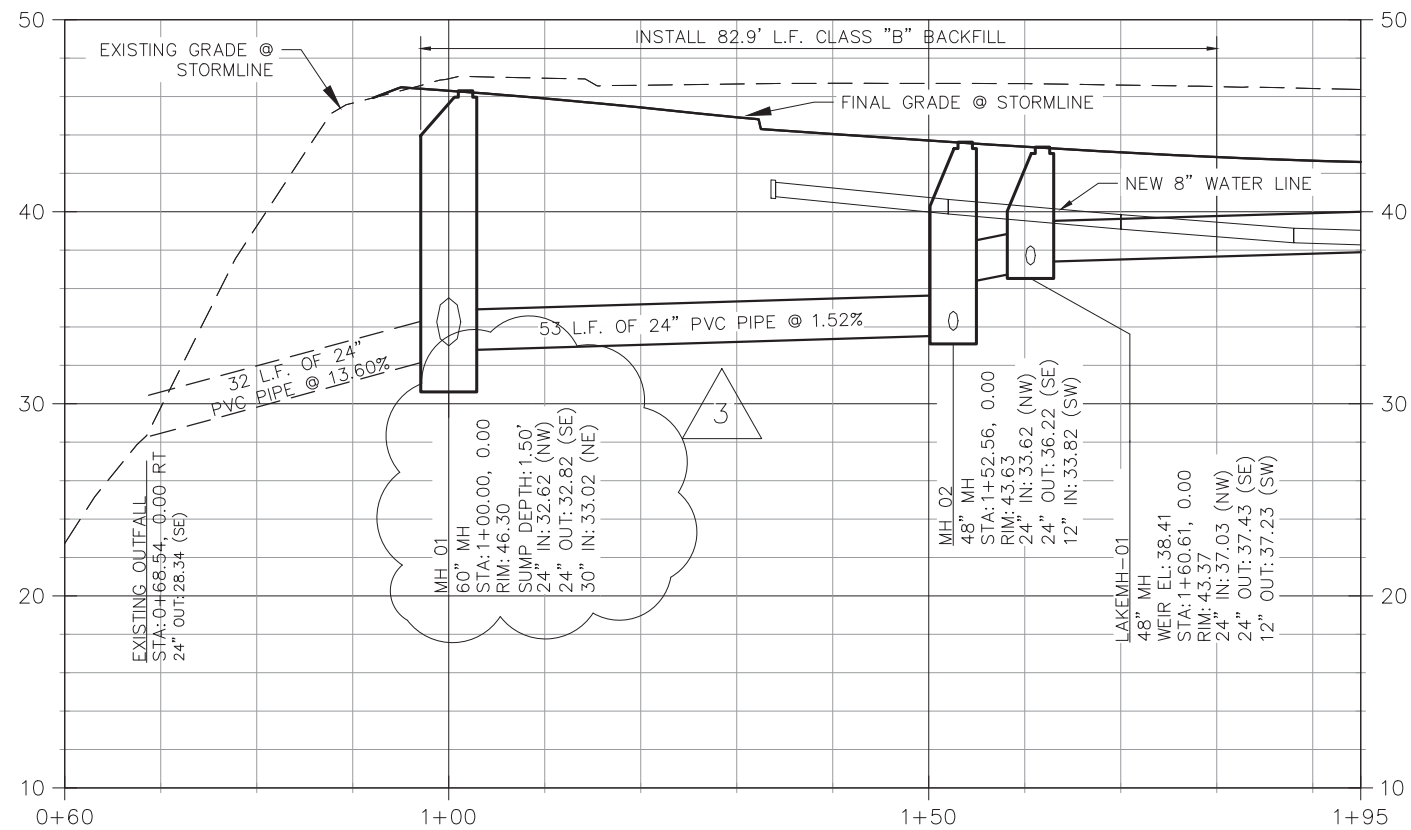


U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 SD2.dwg Sep. 21, 2018 - 12:01 PM alaina floor  
Plot Date: 9/21/2018 12:03 PM alaina floor



UTILITY CONSTRUCTION NOTES:

- (200) ADJUST MANHOLE TO FINISH GRADE
- (202) INSTALL 48" MANHOLE. SEE ODOT STANDARD DRAWING RD335.
- (209) INSTALL 30" STORM PIPE
- (210) INSTALL 24" STORM PIPE
- (211) INSTALL 11" STORM PIPE
- (212) INSTALL CONTECH STORM FILTER VAULT PER DETAILS ON SHEET DT07. RIM = 44.15
- (213) INSTALL CONTECH STORMGATE MANHOLE PER DETAILS ON SHEET DT09.
- (231) CONNECT EXISTING PIPE TO NEW MANHOLE.
- (232) INSTALL 60" MANHOLE.
- (239) INSTALL 12" STORM PIPE.
- (249) INSTALL 4" ORIFICE AT 12" PIPE CONNECTION TO MANHOLE.



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

STORM PIPE PLAN AND PROFILE

SE MAIN ST STA: 0+60 TO 1+95

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: SD07 |
|----------------------|-------------------------|------------------|-----------------|

G:\2017\170195.00 City of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T36 ST.dwg Aug. 14, 2018 - 3:36 PM alaina floor  
Plot Date: 8/15/2018 5:46 PM\_alaina floor

GENERAL PLANTING NOTES

1. SEE SHEET ST07 FOR PLANTING SCHEDULE.
2. COORDINATE WORK SHOWN ON THIS DRAWING WITH OTHER EXISTING OR PROPOSED SITE WORK. SEE CIVIL DRAWINGS.
3. CONTRACTOR TO VERIFY ALL QUANTITIES, MEASUREMENTS, AND SITE CONDITIONS.
4. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES. REFER TO UTILITY SHEETS FOR LOCATIONS.
5. QUANTITY OF PLANTS ON PLAN TAKES PRECEDENCE OVER QUANTITY OF PLANTS IN THE PLANT SCHEDULE.
6. MEASUREMENTS, CALIPER, BRANCHING, GRADING QUALITY, BALLING AND BURLAPPING SHALL FOLLOW THE AMERICAN STANDARD OF NURSERY STOCK BY THE AMERICAN ASSOCIATION FOR NURSERYMEN, LATEST EDITION.
7. ALL PLANT MATERIAL AND LOCATIONS TO BE INSPECTED AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
8. CONTRACTOR SHALL PROVIDE FOR ESTABLISHMENT WATERING OF ALL PLANTINGS FOR THE DURATION OF SITE CONSTRUCTION UNTIL FINAL ACCEPTANCE. ALL REPLACEMENT PLANT MATERIAL SHALL BE UNDER WARRANTY FOR ONE YEAR FROM THE TIME OF INSTALLATION. THE CONTRACTOR SHALL MAINTAIN AND WATER THE PLANT MATERIAL AS NECESSARY TO MAINTAIN THE PLANTS IN A THRIVING CONDITION THROUGH COMPLETION OF THE WARRANTY PERIOD.
9. MAINTENANCE OF THE PLANTED AREAS THROUGH THE ACCEPTANCE PERIOD SHALL INCLUDE WATERING, PROTECTION FROM INSECTS AND DISEASES, WEEDING AND PRUNING, AS WELL AS REPLACEMENT OF ANY PLANTS WHICH APPEAR TO BE IN DISTRESS. DEFECTIVE MATERIALS AS DETERMINED BY THE OWNER'S REPRESENTATIVE SHALL BE REPLACED IMMEDIATELY WITH SPECIMENS OF THE SAME SPECIES AND SIZE AS THE ORIGINALS.
10. DURING INSTALLATION, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY CONDITIONS WHICH MAY BE HARMFUL TO PLANT LIFE, SUCH AS POOR DRAINAGE, HAZARDOUS MATERIALS., ETC. THE LANDSCAPE CONTRACTOR SHALL MAKE A RECOMMENDATION TO ADDRESS THE SPECIFIC SITUATION.
11. ROCK & DEBRIS (LARGER THAN 1" IN DIAMETER) IN PLANTING AREAS SHALL BE REMOVED AND REPLACED WITH APPROVED PLANTING MIX.
12. THE CONTRACTOR SHALL PRUNE ALL VEGETATION AS NECESSARY AWAY AND UP FROM NEW PAVED AREAS OR STRUCTURES AND PERFORM ANY ROOT REMOVAL TO ANSI A-300 PRUNING STANDARDS. IF ROOTS ARE ENCOUNTERED, ROOT PRUNE AND CUT CLEANLY WITH A HAND SAW. DO NOT RIP OR SHATTER ROOTS. RELOCATE ANY NEW UTILITIES AWAY FROM THIS AREA.
13. MAINTENANCE PRUNING SHALL ONLY BE PERFORMED TO REMOVE DEAD OR BROKEN BRANCHES. DO NOT SHAPE SHRUBS.
14. ADJUST PLANT LOCATIONS TO AVOID CONFLICT WITH SIGNS, SIGHT LINES, UTILITY POLES AND LINES, AND OTHER APPURTENANCES. IN CASE OF CONFLICT, DEFER TO OWNER'S REPRESENTATIVE FOR PLACEMENT.
15. SUBMIT TO THE OWNER'S REPRESENTATIVE A WRITTEN REQUEST FOR FINAL INSPECTION FOR LANDSCAPE WORK. NOTIFICATION OF ACCEPTANCE OF ALL WORK WILL BE MADE BY THE OWNER'S REPRESENTATIVE TO THE CONTRACTOR IN WRITING, EXCLUSIVE OF THE POSSIBLE REPLACEMENT OF PLANTS SUBJECT TO GUARANTEE, OR IF THERE ARE DEFICIENCIES OF THE REQUIREMENTS FOR COMPLETION.

STORMWATER PLANTING NOTES

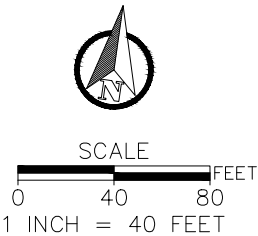
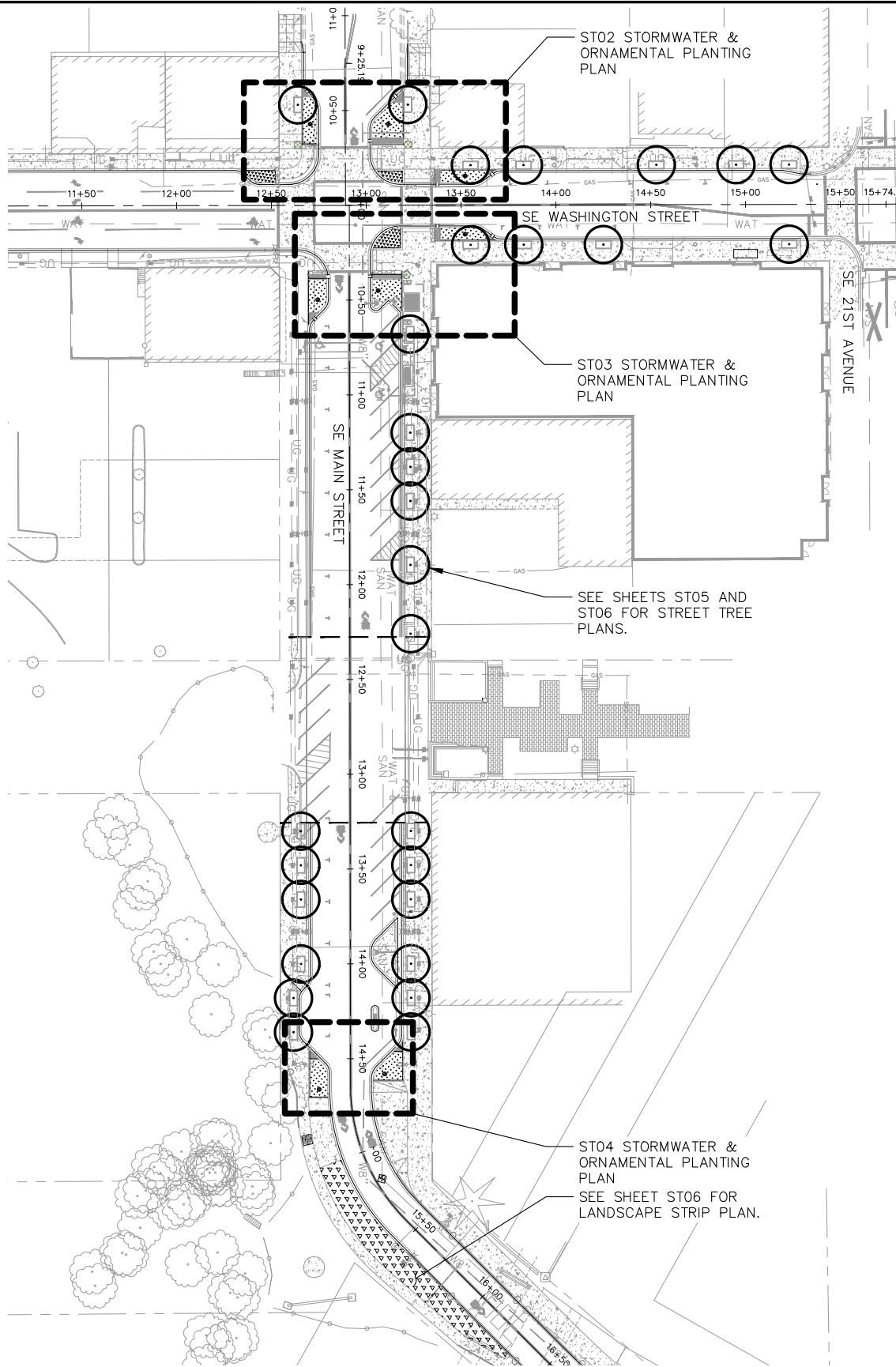
1. PROVIDE AND PLACE STORMWATER FACILITY TOPSOIL AS SHOWN IN DETAIL 1, SHEET DT12.
2. PREPARE PLANTING AREA USING METHOD "A" IN THE SPECIFICATIONS. NO OTHER SOIL CONDITIONER, AMENDMENTS, BIO-AMENDMENTS, OR FERTILIZER IS REQUIRED.
3. MULCH PLANTED AREA WITH COMMERCIALY MANUFACTURED COMPOST TO A DEPTH OF 3".
4. MAINTENANCE AND ESTABLISHMENT PERIOD SHALL BE ONE YEAR AS DESCRIBED IN THE SPECIFICATIONS.
5. SEE SHEET DT16 FOR STORMWATER PLANTING DETAILS.

ORNAMENTAL PLANTING NOTES

1. PROVIDE AND PLACE IMPORTED TOPSOIL TO A MINIMUM DEPTH OF 12" OR AS REQUIRED TO MEET FINISH GRADE IDENTIFIED ON PLANS.
2. PREPARE PLANTING AREA USING METHOD "A" IN THE SPECIFICATIONS. SOIL CONDITIONER SHALL BE COMMERCIALY MANUFACTURED COMPOST. NO OTHER AMENDMENTS, BIO-AMENDMENTS, OR FERTILIZER IS REQUIRED.
3. MULCH PLANTED AREA WITH BARK MULCH TO A DEPTH OF 2".
4. PLANT ESTABLISHMENT PERIOD SHALL BE ONE YEAR AS DESCRIBED IN THE SPECIFICATIONS.
5. SEE SHEET DT16 FOR ORNAMENTAL PLANTING DETAILS.

TREE PLANTING NOTES

1. CLEAR ROCKS, BROKEN CONCRETE, AND BASE ROCK FROM THE TREE WELL.
2. INSTALL ROOT BARRIER PER MANUFACTURER'S INSTRUCTIONS.
3. PLANT PER SECTION 01040.49 AND DETAIL 707, SHEET DT16.
4. MULCH TREE WELLS WITH ROCK MULCH TO A DEPTH OF 2".
5. INSTALL TREE GRATE. GRATE SHALL BE MIN. 1" ABOVE ROCK MULCH. SEE DETAIL 706, SHEET DT04.
6. PLANT ESTABLISHMENT PERIOD SHALL BE ONE YEAR AS DESCRIBED IN THE SPECIFICATIONS.



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| DNR      | 08/14/2018 |
| DESIGNED | DATE       |
| DNR      | 08/14/2018 |
| DRAFTED  | DATE       |
| MFR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

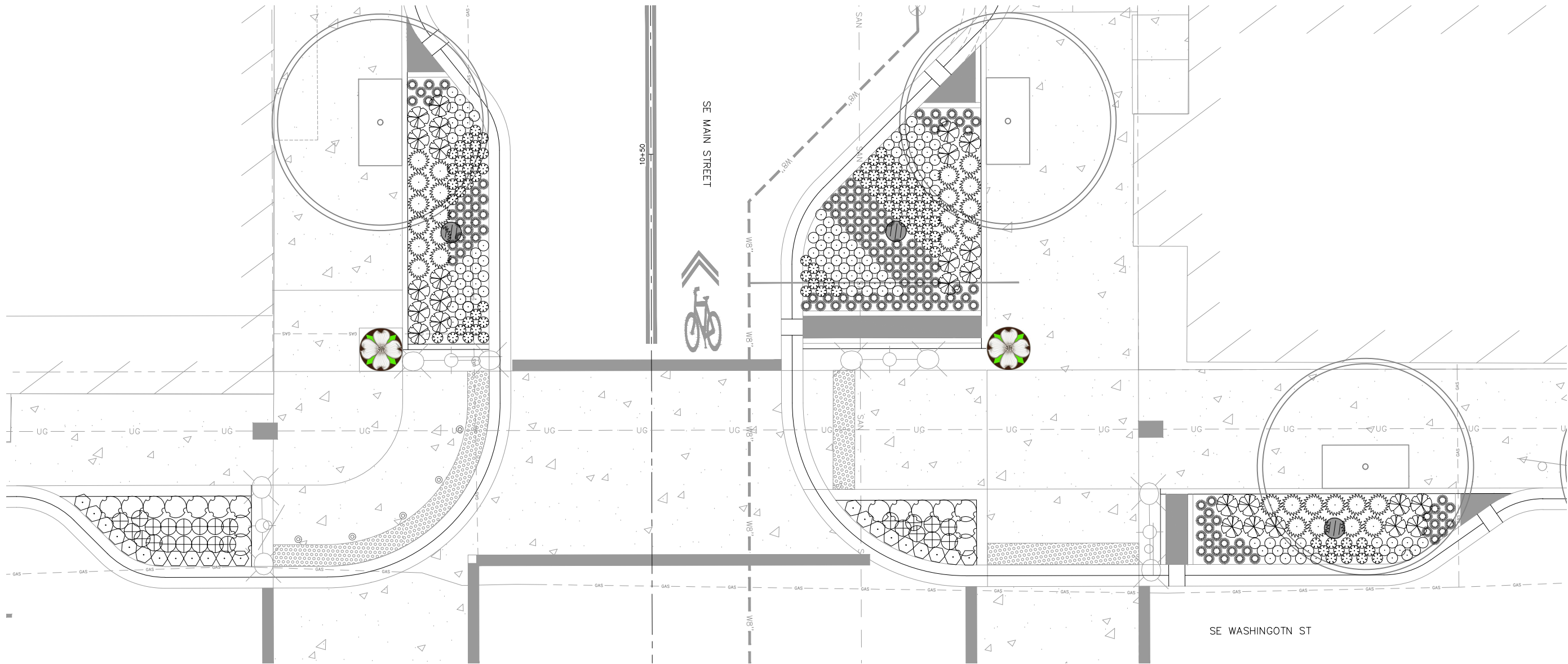
PHONE: 503-786-7600  
FAX: 503-774-8236

**SOUTH DOWNTOWN IMPROVEMENTS**

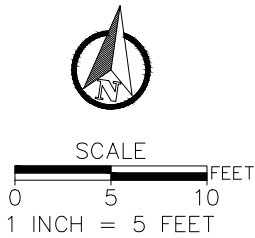
**PLANTING OVERVIEW**

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: ST01 |
|----------------------|-------------------------|------------------|-----------------|

G:\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017\T36 ST.dwg Aug. 14, 2018 - 3:36 PM alaina floor  
Plot Date: 8/15/2018 5:46 PM alaina floor



NOTE  
SEE SHEET ST07 FOR PLANTING SCHEDULE



**ESA**  
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|     |          |            |      |
|-----|----------|------------|------|
| DNR | DESIGNED | 08/14/2018 | DATE |
| DNR | DRAFTED  | 08/14/2018 | DATE |
| MFR | CHECKED  | 08/14/2018 | DATE |
| JGR | APPROVED | 08/14/2018 | DATE |

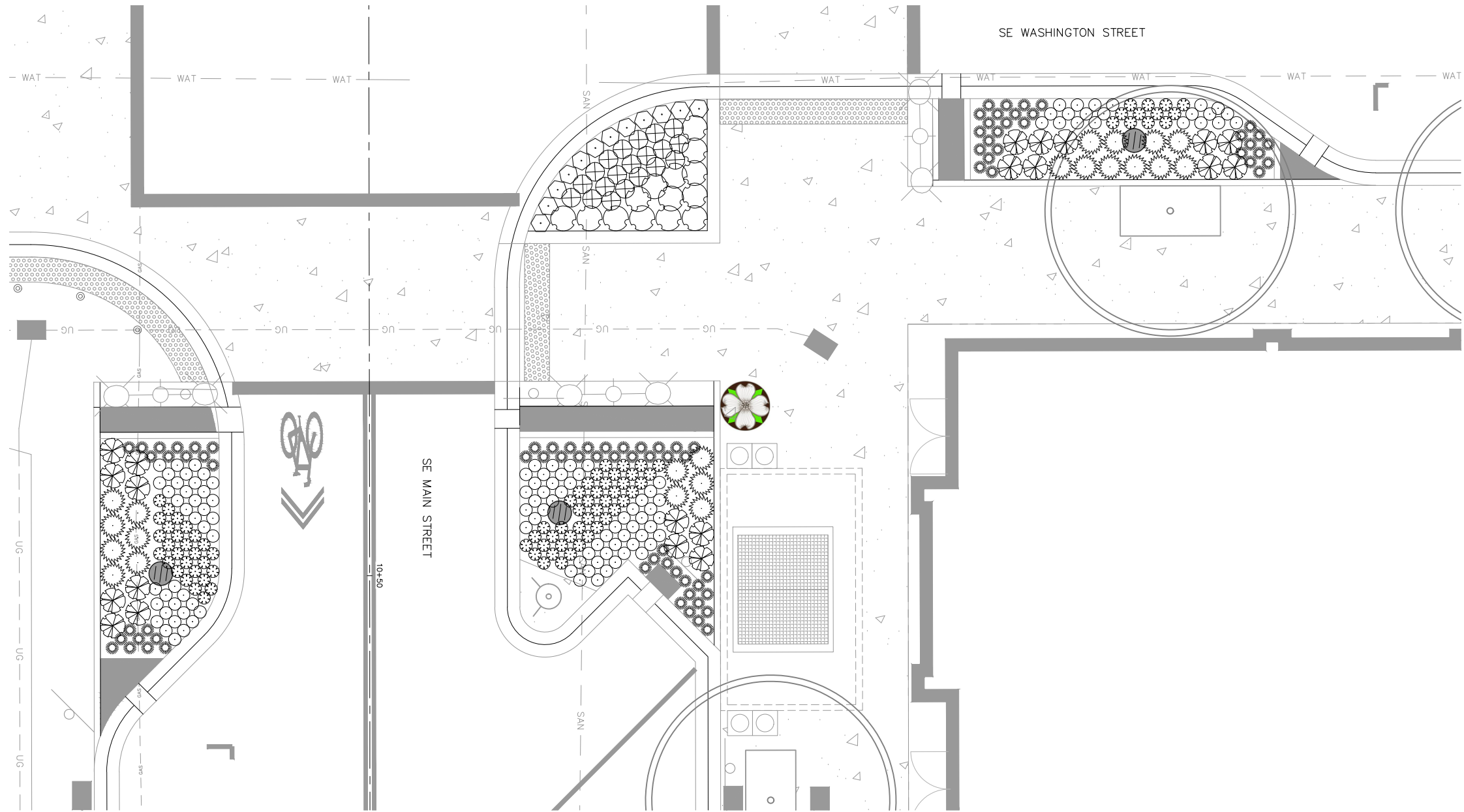
REGISTERED  
680  
*Maureen F. Raad*  
MAUREEN F. RAAD  
OREGON  
11/14/08  
LANDSCAPE ARCHITECT  
EXPIRES: 11/30/18

 **CITY OF MILWAUKIE**  
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206  
PHONE: 503-786-7600  
FAX: 503-774-8236

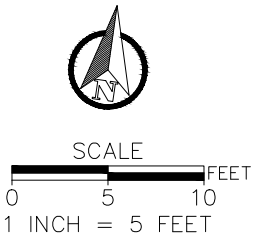
|                                       |                         |                  |                 |
|---------------------------------------|-------------------------|------------------|-----------------|
| SOUTH DOWNTOWN IMPROVEMENTS           |                         |                  |                 |
| STORMWATER & ORNAMENTAL PLANTING PLAN |                         |                  |                 |
| PROJECT NO.: CIP2018                  | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: ST02 |



G:\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T36 ST.dwg Aug. 14, 2018 -- 3:36 PM alaina floor  
Plot Date: 8/15/2018 5:46 PM\_alaina floor



NOTE  
SEE SHEET ST07 FOR PLANTING SCHEDULE



**ESA**  
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|                 |                    |
|-----------------|--------------------|
| DNR<br>DESIGNED | 08/14/2018<br>DATE |
| DNR<br>DRAFTED  | 08/14/2018<br>DATE |
| MFR<br>CHECKED  | 08/14/2018<br>DATE |
| JGR<br>APPROVED | 08/14/2018<br>DATE |

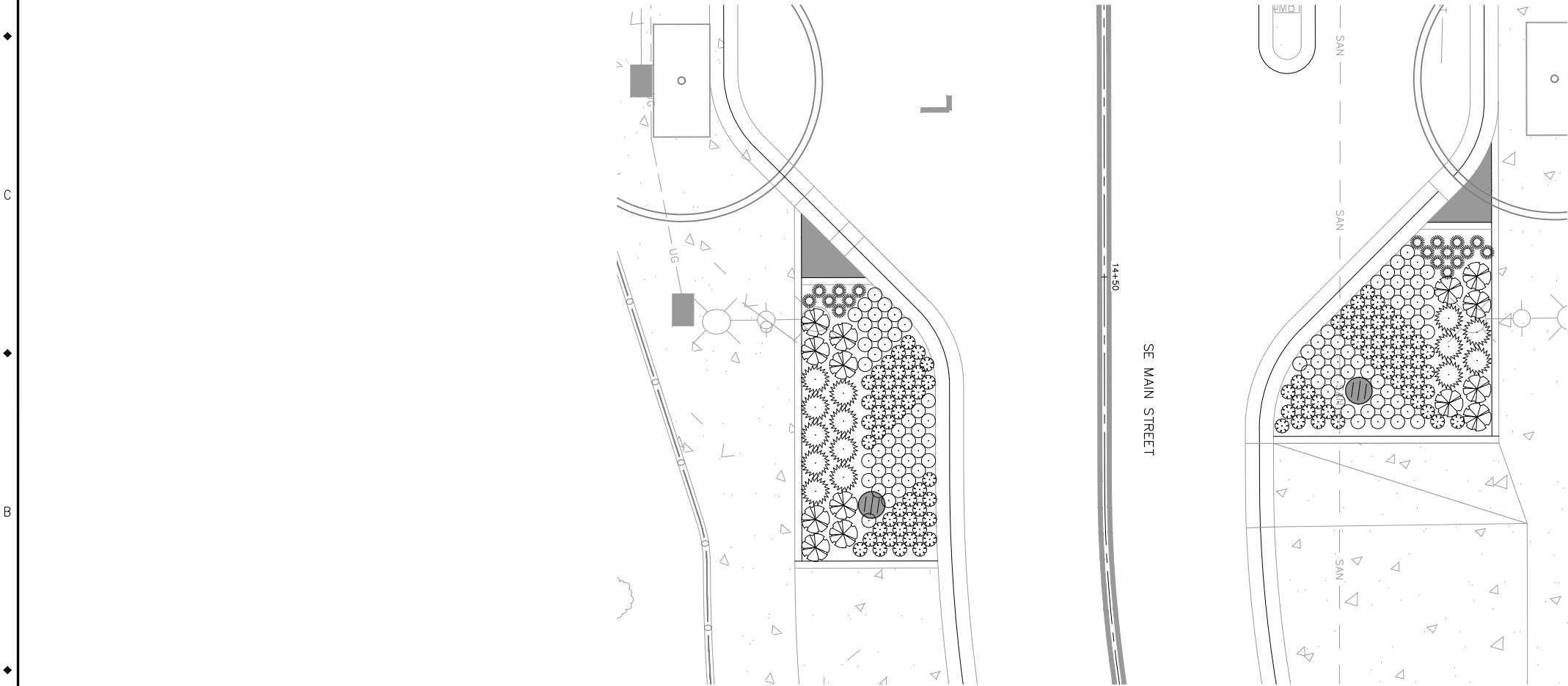
REGISTERED  
680  
*Maureen F. Raad*  
MAUREEN F. RAAD  
OREGON  
11/14/08  
LANDSCAPE ARCHITECT  
EXPIRES: 11/30/18

 **CITY OF MILWAUKIE**  
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206  
PHONE: 503-786-7600  
FAX: 503-774-8236

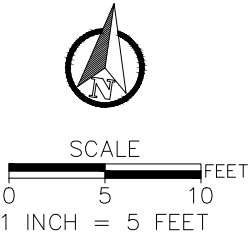
|                                       |                         |                  |                 |
|---------------------------------------|-------------------------|------------------|-----------------|
| SOUTH DOWNTOWN IMPROVEMENTS           |                         |                  |                 |
| STORMWATER & ORNAMENTAL PLANTING PLAN |                         |                  |                 |
| PROJECT NO.: CIP2018                  | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: ST03 |



G:\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T36 ST.dwg Aug. 14, 2018 -- 3:36 PM alaina floor  
Plot Date: 8/15/2018 5:46 PM\_alaina floor



NOTE  
SEE SHEET ST07 FOR PLANTING SCHEDULE



**ESA**  
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

|     |          |     |             |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| NO. | DATE     | BY  | REVISIONS   |

|          |            |
|----------|------------|
| DNR      | 08/14/2018 |
| DESIGNED | DATE       |
| DNR      | 08/14/2018 |
| DRAFTED  | DATE       |
| MFR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |





# CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

|                                       |            |               |           |
|---------------------------------------|------------|---------------|-----------|
| SOUTH DOWNTOWN IMPROVEMENTS           |            |               |           |
| STORMWATER & ORNAMENTAL PLANTING PLAN |            |               |           |
| PROJECT NO.:                          | CIP2018    | CONTRACT NO.: | C2018-051 |
| DATE:                                 | 08/14/2018 | SHEET NO.:    | ST04      |

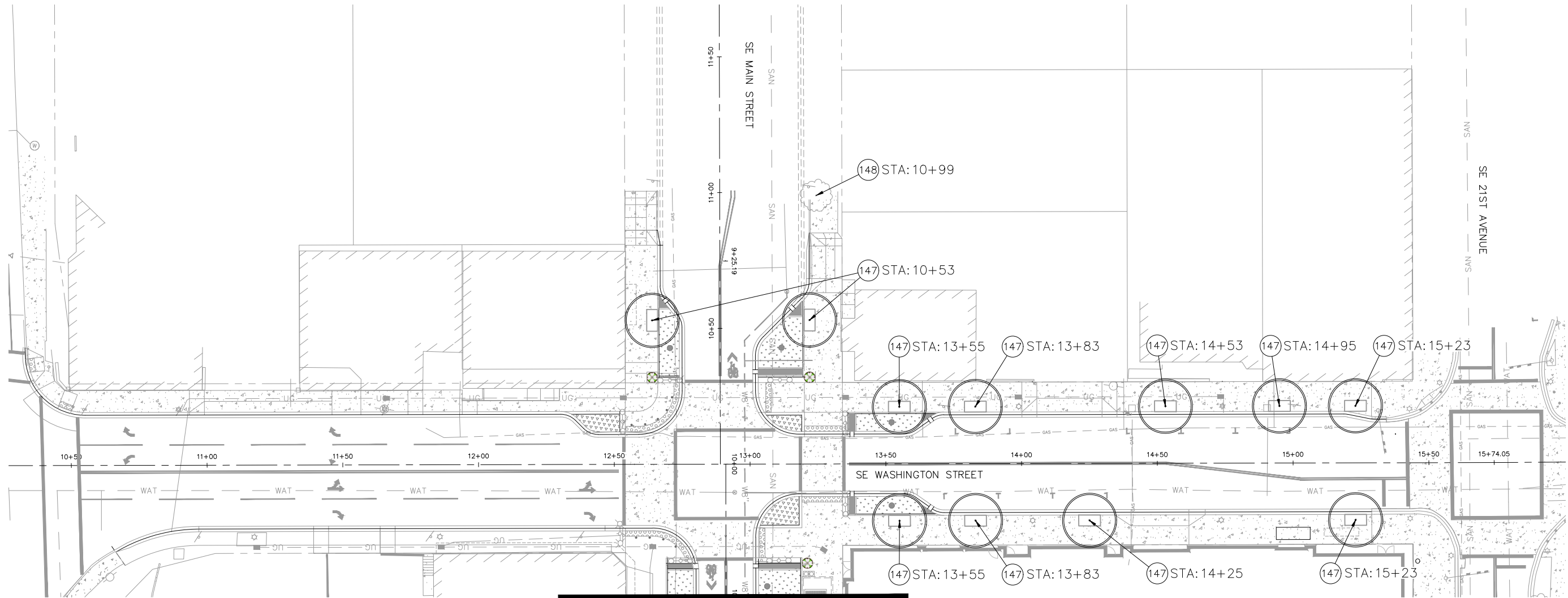
G:\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 ST.dwg Aug. 14, 2018 - 3:36 PM alaina floor  
Plot Date: 8/15/2018 5:46 PM alaina floor

D  
C  
B  
A

1 2 3 4 5 6 7

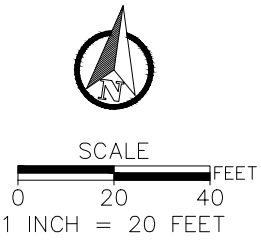
STREET TREE CONSTRUCTION NOTES:

- (147) INSTALL STREET TREE IN 8' X 4' TREE WELL PER STANDARD 707 SHEET DT15.  
(148) EXISTING STREET TREE TO REMAIN.



MATCH LINE – SEE SHEET ST06

NOTE  
SEE SHEET ST07 FOR PLANTING SCHEDULE



**ESA**  
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| DNR      | 08/14/2018 |
| DESIGNED | DATE       |
| DNR      | 08/14/2018 |
| DRAFTED  | DATE       |
| MFR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |

REGISTERED  
680  
*Maureen F. Raad*  
MAUREEN F. RAAD  
OREGON  
11/14/08  
LANDSCAPE ARCHITECT  
EXPIRES: 11/30/18

 **CITY OF MILWAUKIE**  
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206  
PHONE: 503-786-7600  
FAX: 503-774-8236

|                             |                         |                  |                 |
|-----------------------------|-------------------------|------------------|-----------------|
| SOUTH DOWNTOWN IMPROVEMENTS |                         |                  |                 |
| STREET TREE PLAN            |                         |                  |                 |
| PROJECT NO.: CIP2018        | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: ST05 |

G:\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T36 ST.dwg Aug. 14, 2018 - 3:36 PM alaina floor  
Plot Date: 8/15/2018 5:47 PM alaina floor

MATCH LINE - SEE SHEET ST05

STREET TREE CONSTRUCTION NOTES:

- (137) PLANT LANDSCAPE STRIP W/ LAWN SEED PER SPECIFICATIONS.  
(147) INSTALL STREET TREE IN 8' X 4' TREE WELL PER STANDARD 707 SHEET DT15.

NOTE

SEE SHEET ST07 FOR PLANTING SCHEDULE



SCALE  
0 20 40 FEET  
1 INCH = 20 FEET

**ESA**  
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| DNR      | 08/14/2018 |
| DESIGNED | DATE       |
| DNR      | 08/14/2018 |
| DRAFTED  | DATE       |
| MFR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

STREET TREE PLAN

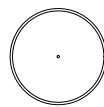
PROJECT NO.: CIP2018 CONTRACT NO.: C2018-051 DATE: 08/14/2018 SHEET NO.: ST06

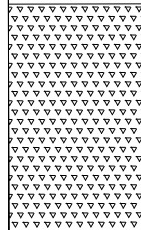


G:\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T36 ST.dwg Aug. 14, 2018 -- 3:36 PM alaina floor  
Plot Date: 8/15/2018 5:47 PM\_alaina floor

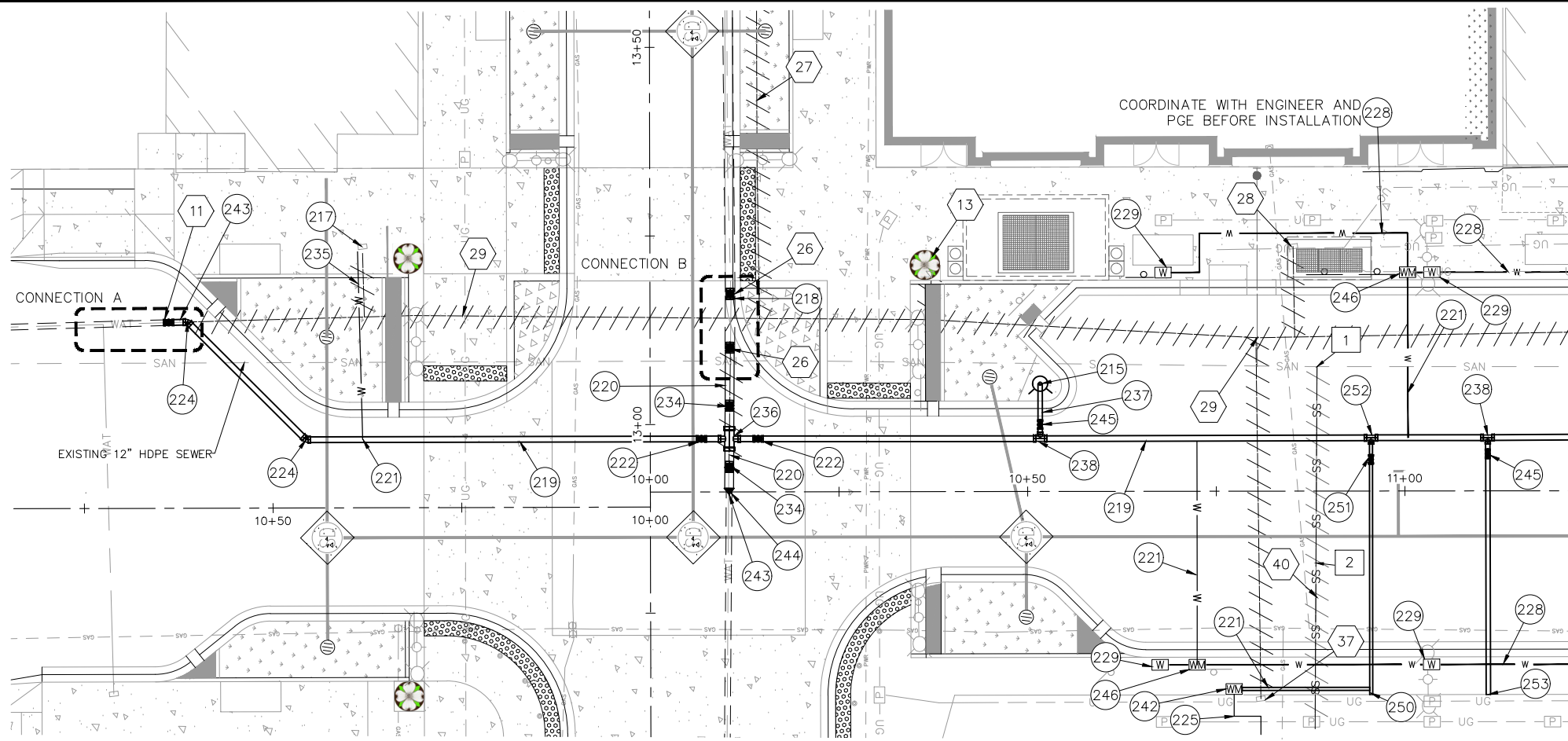
| STORMWATER PLANTERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |              |     |                                    |                                  |          |           |          |                             |               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----|------------------------------------|----------------------------------|----------|-----------|----------|-----------------------------|---------------|
| SYMBOL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ABBR         | QTY | SCIENTIFIC NAME                    | COMMON NAME                      | SIZE     | CONDITION | SPACING  | SOIL                        | MULCH         |
| <div><div></div><div></div><div></div><div></div><div></div></div> | SHRUBS       |     |                                    |                                  |          |           |          |                             |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | COSE         | 65  | Cornus sericea 'Kelseyi'           | Kelsey's dwarf red—osier dogwood | 1 GALLON | CONTAINER | AS SHOWN | STORMWATER FACILITY TOPSOIL | COMPOST MULCH |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | SPJA         | 62  | Spiraea japonica 'Anthony Waterer' | Anthony Waterer spirea           |          |           |          |                             |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | GROUND COVER |     |                                    |                                  |          |           |          |                             |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | CADE         | 262 | Carex densa                        | dense sedge                      |          |           |          |                             |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | JUPA         | 308 | Juncus patens                      | spreading rush                   |          |           |          |                             |               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LISP         | 240 | Liriope spicata                    | creeping lilyturf                |          |           |          |                             |               |

| ORNAMENTAL PLANTERS                                                                                                                                                                                                                                                                             |                         |     |                                       |                               |          |           |          |                  |            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----|---------------------------------------|-------------------------------|----------|-----------|----------|------------------|------------|
| SYMBOL                                                                                                                                                                                                                                                                                          | ABBR                    | QTY | SCIENTIFIC NAME                       | COMMON NAME                   | SIZE     | CONDITION | SPACING  | SOIL             | MULCH      |
| <div><div></div><div></div><div></div></div> | SHRUBS AND GROUND COVER |     |                                       |                               |          |           |          |                  |            |
|                                                                                                                                                                                                                                                                                                 | HASE                    | 33  | Helichtotrichon sempervirens          | blue oat grass                | 1 GALLON | CONTAINER | AS SHOWN | IMPORTED TOPSOIL | BARK MULCH |
|                                                                                                                                                                                                                                                                                                 | LAAN                    | 30  | Lavandula angustifolia 'Hidcote Blue' | Hidcote Blue English lavender |          |           |          |                  |            |
|                                                                                                                                                                                                                                                                                                 | MARE                    | 44  | Mahonia repens                        | creeping Oregon grape         |          |           |          |                  |            |

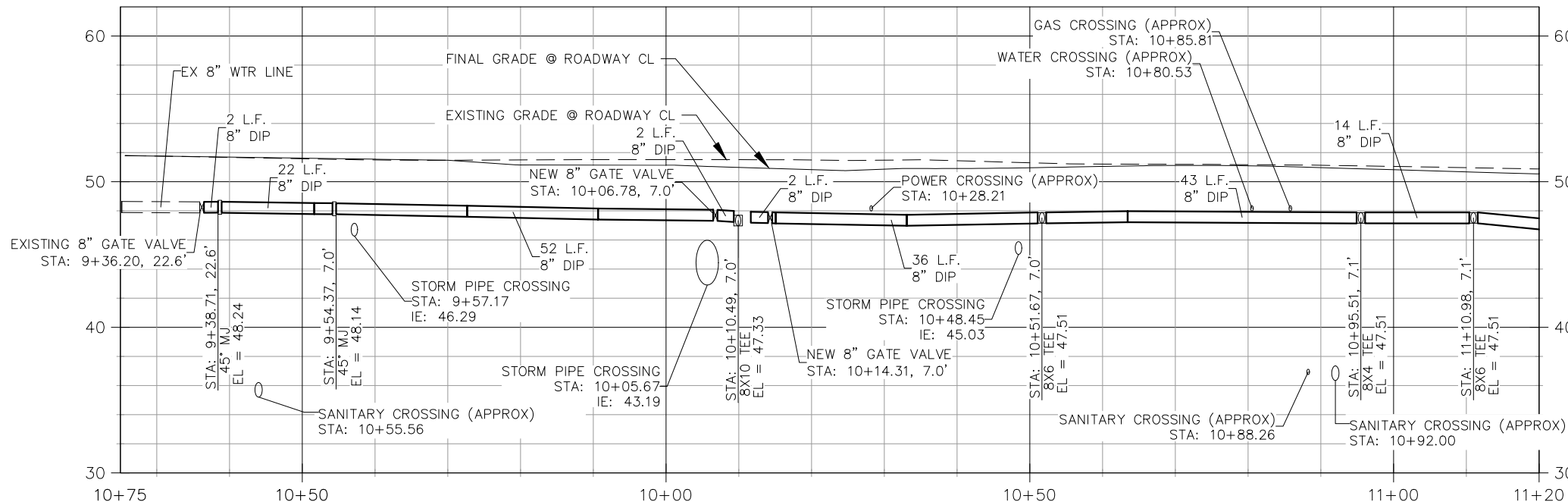
| STREET TREES                                                                                   |       |    |                                              |                                |            |                                             |          |                                                      |            |
|------------------------------------------------------------------------------------------------|-------|----|----------------------------------------------|--------------------------------|------------|---------------------------------------------|----------|------------------------------------------------------|------------|
| SYMBOL                                                                                         | ABBR  |    | SCIENTIFIC NAME                              | COMMON NAME                    | SIZE       | CONDITION                                   | SPACING  | SOIL                                                 | MULCH      |
| <div></div> | TREES |    |                                              |                                |            |                                             |          |                                                      |            |
|                                                                                                | GLTR  | 29 | Gleditsia triacanthos var. inermis 'Impcole' | Imperial thornless honeylocust | 2–1/2" CAL | B&B TYPE 1 SHADE TREE MIN ROOTBALL DIA. 24" | AS SHOWN | IMPORTED TOPSOIL BACKFILL PER DETAIL 707, SHEET DT07 | ROCK MULCH |

| SEED: LANDSCAPE STRIP (1,570 SF)                                                               |                                               |                                |                      |
|------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------|----------------------|
| SYMBOL                                                                                         | SCIENTIFIC NAME                               | COMMON NAME                    | APPLICATION RATE     |
| <div></div> | SEED MIX: PT 755 Fleur de Lawn                |                                |                      |
|                                                                                                | Lolium perenne 'Banfield'                     | Banfield perennial ryegrass    | 1.5 LBS PER 1,000 SF |
|                                                                                                | Festuca trachyphylla 'Eureka II'              | Eureka II hard fescue          |                      |
|                                                                                                | Festuca ovina 'Quatro'                        | Quatro Tetraploid sheep fescue |                      |
|                                                                                                | Achillea millefolium                          | white yarrow                   |                      |
|                                                                                                | Trifolium repens var Pipolina ssp Microclover | microclover                    |                      |
|                                                                                                | Nemophila menziesii (annual)                  | baby blue eyes                 |                      |
|                                                                                                | Lobularia maritima (annual)                   | sweet dlyssum                  |                      |
|                                                                                                | Trifolium fragiferum                          | strawberry clover              |                      |
|                                                                                                | Bellis perennis                               | English daisy                  |                      |

U:\PROJECTS\PD\Projects\2017\010105.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017\T36 WT.dwg Sep. 21, 2018 - 12:03 PM alaina floor  
Plot Date: 9/21/2018 12:06 PM alaina floor



SE MAIN STREET WATER - PLAN  
SCALE : 1" = 10'



SE MAIN STREET WATER - PROFILE  
SCALE : 1" = 5' VERTICAL 1" = 10' HORIZONTAL

#### SEWER CONSTRUCTION NOTES

1. CONNECT NEW 8" PVC SEWER LATERAL TO EXIST. 12" SEWER MAIN AT IE=36.46±. SEE CoM STD DETAIL 308 ON SHT DT13.
2. INSTALL 45 LF OF 8" PVC SEWER PER CoM STANDARD DETAIL 309 SCHEME 2 ON SHEET DT14. S=0.01 FT/FT. CONNECT TO EXISTING BUILDING LATERAL WITH FITTINGS AS NEEDED.

#### GENERAL NOTES:

1. MEGALUG ALL MECHANICAL JOINTS AT FITTINGS AND VALVES.
2. CONTRACTOR TO VERIFY ALL WATER METER SIZES THAT WILL BE REPLACED WITH NEW METER PRIOR TO MAINLINE CONSTRUCTION. CUSTOMERS SHALL RETAIN EXISTING WATER METER SIZE.
3. LOCATION AND SIZE FOR ALL STORM, SANITARY, AND WATER STUB OUTS TO BE VERIFIED PRIOR TO INSTALLATION.

#### UTILITY CONSTRUCTION NOTES:

215. INSTALL FIRE HYDRANT ASSEMBLY. SEE COM PW DRAWING 400.
216. RELOCATE WATER METER.
217. ADJUST WATER METER BOX TO FINISH GRADE.
218. CONNECT TO EXISTING 10" WATER LINE WITH 10" LONG BODY SLEEVE. MEGALUG ALL JOINTS BETWEEN VALVE AND CONNECTION. CLEAN AND HAND SWAB PIPE PRIOR TO CONNECTION.
219. INSTALL 8" DI WATER LINE.
220. INSTALL 10" DI WATER LINE.
221. INSTALL 1" WATER SERVICE PER CITY STANDARD.
222. INSTALL 8" FLANGE GATE VALVE.
224. INSTALL 8" DI MECHANICAL JOINT 45° ELBOW.
225. CONNECT EXISTING WATER SERVICE TO NEW METER. CONTRACTOR TO VERIFY SIZE PRIOR TO CONSTRUCTION.
228. INSTALL 1" WATER LINE.
229. INSTALL QUICK COUPLER AND FRP BOX. SEE SHEET DT13.
234. INSTALL 10" FLANGE GATE VALVE.
235. INSTALL NEW 1" SERVICE LATERAL TO EXISTING WATER METER. CONTRACTOR TO VERIFY SIZE OF METER PRIOR TO CONSTRUCTION.
236. INSTALL 10"x8" FLANGE CROSS FITTING.
237. INSTALL 6" DI SPOOL TO FIRE HYDRANT.
238. INSTALL 8"x6" MECHANICAL JOINT BY FLANGE TEE.
242. INSTALL 3/4" WATER METER ASSEMBLY.
243. CONNECT TO EXISTING 8" WATER LINE WITH 8" LONG BODY SLEEVE AND 8" DI SPOOL. CLEAN AND HAND SWAB ALL PIPE AND MATERIALS PRIOR TO CONNECTION.
244. INSTALL 10"x8" MECHANICAL JOINT BY FLANGE REDUCER.
245. INSTALL 6" MECHANICAL JOINT BY FLANGE GATE VALVE.
246. INSTALL 1" WATER METER ASSEMBLY.
250. INSTALL 4" DI WATER SERVICE. CAP FOR FUTURE.
251. INSTALL 4" MECHANICAL JOINT BY FLANGE GATE VALVE.
252. INSTALL 8"x4" MECHANICAL JOINT BY FLANGE TEE.
253. INSTALL 6" DI WATER SERVICE. CAP FOR FUTURE.

#### DEMOLITION NOTES:

11. PROTECT WATER VALVE AND ADJUST TO FINAL GRADE.
13. SALVAGE FIRE HYDRANT.
26. REMOVE GATE VALVE AND CROSS.
27. REMOVE WATER LINE AND TRENCH PATCH ROADWAY, AS NEEDED.
28. WATER CONNECTION TO BE REMOVED BY OTHERS.
29. CAP AND ABANDON WATERLINE.
37. REMOVE WATER METER.
40. REMOVE SEWER LINE.



SCALE  
0 10 20 FEET  
1 INCH = 10 FEET



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 09/21/18 |     | ADDENDUM 3  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NRM | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|         |          |            |      |
|---------|----------|------------|------|
| NMR     | DESIGNED | 08/14/2018 | DATE |
| AMF/CTF | DRAFTED  | 08/14/2018 | DATE |
| JGR     | CHECKED  | 08/14/2018 | DATE |
| JGR     | APPROVED | 08/14/2018 | DATE |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

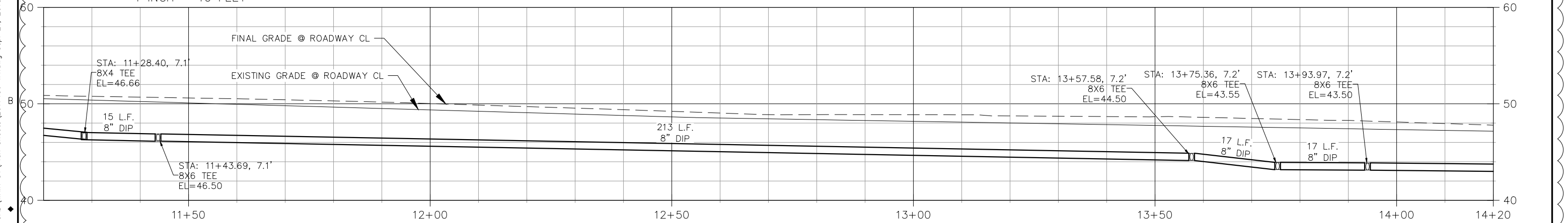
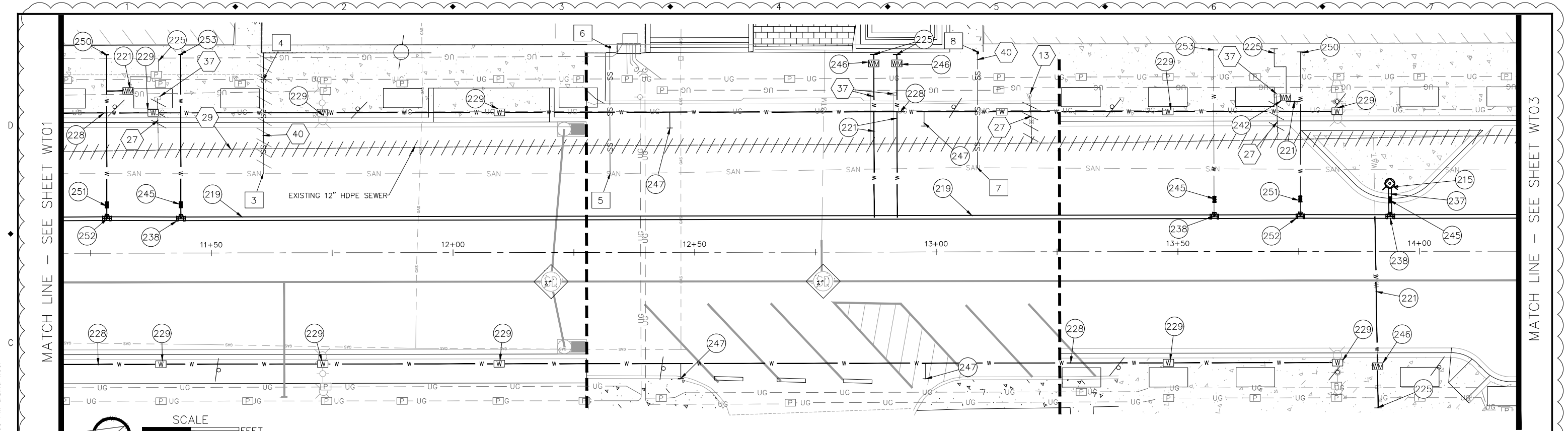
PHONE: 503-786-7600  
FAX: 503-774-8236

## SOUTH DOWNTOWN IMPROVEMENTS

### WATERLINE AND SEWER IMPROVEMENTS

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: WT01 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\Projects\2017\010195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017\T36 WT.dwg Sep. 21, 2018 - 12:03 PM alaina floor  
Plot Date: 9/21/2018 12:06 PM alaina floor



UTILITY CONSTRUCTION NOTES:

- (215) INSTALL FIRE HYDRANT ASSEMBLY. SEE COM PW DRAWING 400.
- (217) ADJUST WATER METER BOX TO FINISH GRADE.
- (219) INSTALL 8" DI WATER LINE
- (221) INSTALL 1" WATER SERVICE PER CITY STANDARD.
- (225) CONNECT EXISTING WATER SERVICE TO NEW METER. CONTRACTOR TO VERIFY SIZE PRIOR TO CONSTRUCTION.

- (226) INSTALL 1" WATER SERVICE TO EXISTING CORP STOP.
- (227) INSTALL 6" HOT TOP AND THRUST BLOCK.
- (228) INSTALL 1" WATER LINE.
- (229) INSTALL QUICK COUPLER AND FRP BOX. SEE DT13. INSTALL TRAFFIC RATED BOX WHEN APPROPRIATE.
- (237) INSTALL 6" DI SPOOL TO FIRE HYDRANT.
- (238) INSTALL 8"x6" MECHANICAL JOINT BY FLANGE TEE.

- (242) INSTALL NEW 3/4" WATER METER ASSEMBLY.
- (245) INSTALL 6" MECHANICAL JOINT BY FLANGE GATE VALVE.
- (246) INSTALL NEW 1" WATER METER ASSEMBLY.
- (247) INSTALL 1" WATER LINE STUB FOR FUTURE USE. STUB AND CAP AS DIRECTED IN THE FIELD.
- (250) INSTALL 4" DI WATER SERVICE. CAP FOR FUTURE.
- (251) INSTALL 4" MECHANICAL JOINT BY FLANGE GATE VALVE.

- (252) INSTALL 8"x4" MECHANICAL JOINT BY FLANGE TEE.
- (253) INSTALL 6" DI WATER SERVICE. CAP FOR FUTURE.

GENERAL NOTES:

- SEE SHEET WT02B FOR SEWER IMPROVEMENT NOTES.
- MEGALUG ALL MECHANICAL JOINTS AT FITTINGS AND VALVES.
- CONTRACTOR TO VERIFY ALL WATER METER SIZES THAT WILL BE REPLACED WITH NEW METER PRIOR TO MAINLINE CONSTRUCTION. CUSTOMERS SHALL RETAIN EXISTING WATER METER SIZE.
- LOCATION AND SIZE FOR ALL STORM, SANITARY, AND WATER STUB OUTS TO BE VERIFIED PRIOR TO INSTALLATION.

DEMOLITION NOTES:

- (13) SALVAGE FIRE HYDRANT.
- (27) REMOVE WATER LINE AND TRENCH PATCH ROADWAY, AS NEEDED.
- (29) CAP AND ABANDON WATERLINE.
- (37) REMOVE WATER METER.
- (40) REMOVE SEWER LINE.

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 09/21/18 |     | ADDENDUM 3  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

WATERLINE AND SEWER IMPROVEMENTS

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: WT02 |
|----------------------|-------------------------|------------------|-----------------|

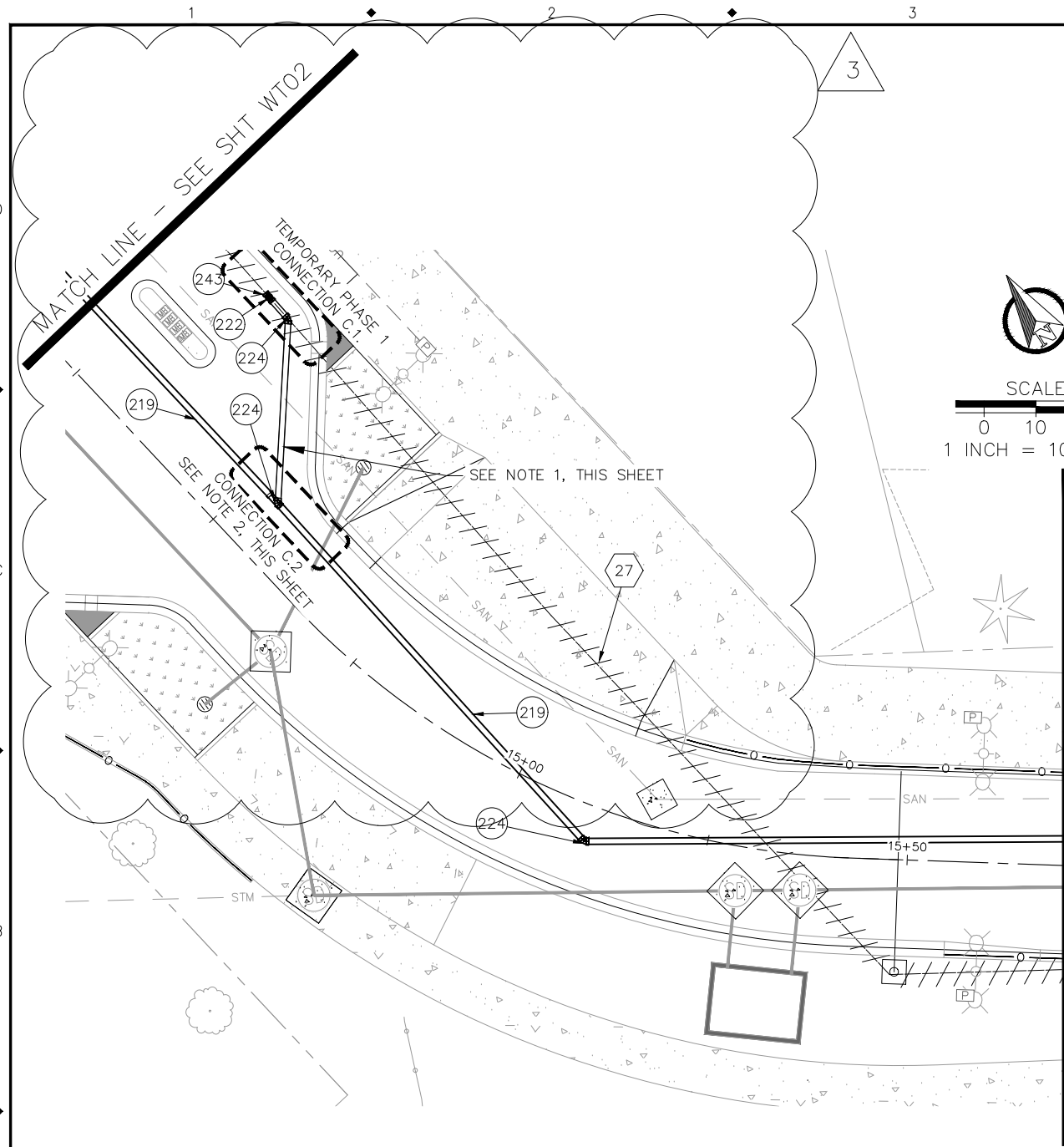


819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASOC.COM





U:\PROJECTS\PD\Projects\2017\010105.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017\T36 WT.dwg Sep. 21, 2018 -- 12:03 PM alaina floor  
Plot Date: 9/21/2018 12:06 PM alaina floor



SE MAIN STREET WATER - PLAN  
SCALE : 1" = 10'

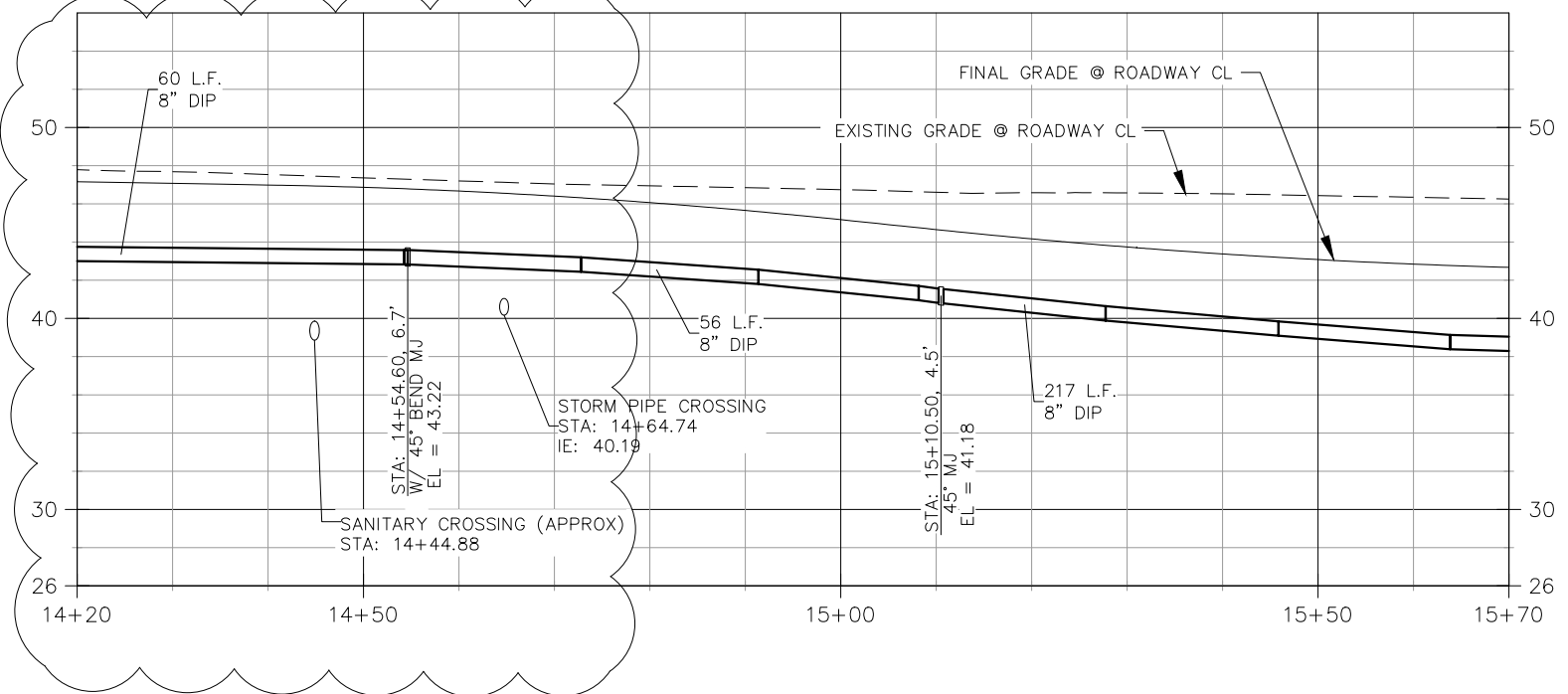
- NOTES:**
1. DURING PHASE 1 CONSTRUCTION TEMPORARILY CONNECT NEW 8" DIP TO EXISTING WATERLINE PER TEMPORARY PHASE CONNECTION C.1.
  2. AFTER PHASE 1 CONSTRUCTION REMOVE 45° ELBOW AND CONNECT WITH DI SPOOL AND (2) 8" LONG BODY SLEEVES AND HAND SWAB ALL PIPE AND MATERIALS PRIOR TO CONNECTION. SEE CONNECTION C.2. CAP AND ABANDON PIPING AND APPURTENANCES FROM TEMPORARY PHASE 1 CONNECTION C.1.
- GENERAL NOTES:**
1. MEGALUG ALL MECHANICAL JOINTS AT FITTINGS AND VALVES.
  2. CONTRACTOR TO VERIFY ALL WATER METER SIZES THAT WILL BE REPLACED WITH NEW METER PRIOR TO MAINLINE CONSTRUCTION. CUSTOMERS SHALL RETAIN EXISTING WATER METER SIZE.
  3. LOCATION AND SIZE FOR ALL STORM, SANITARY, AND WATER STUB OUTS TO BE VERIFIED PRIOR TO INSTALLATION.

**UTILITY CONSTRUCTION NOTES:**

- (219) INSTALL 8" DI WATER LINE
- (222) INSTALL 8" FLANGE GATE VALVE
- (224) INSTALL 8" DI MECHANICAL JOINT 45° ELBOW.
- (243) CONNECT TO EXISTING 8" WATER LINE WITH 8" LONG BODY SLEEVE AND 8" DI SPOOL. CLEAN AND HAND SWAB ALL PIPE AND MATERIALS PRIOR TO CONNECTION.

**DEMOLITION NOTES:**

- (27) REMOVE WATER LINE AND TRENCH PATCH ROADWAY, AS NEEDED.



SE MAIN STREET WATER - PROFILE  
SCALE : 1" = 5' VERTICAL 1" = 10' HORIZONTAL

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 4   | 09/07/18 |     | ADDENDUM 1  |
| 4   | 09/21/18 |     | ADDENDUM 3  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

**SOUTH DOWNTOWN IMPROVEMENTS**

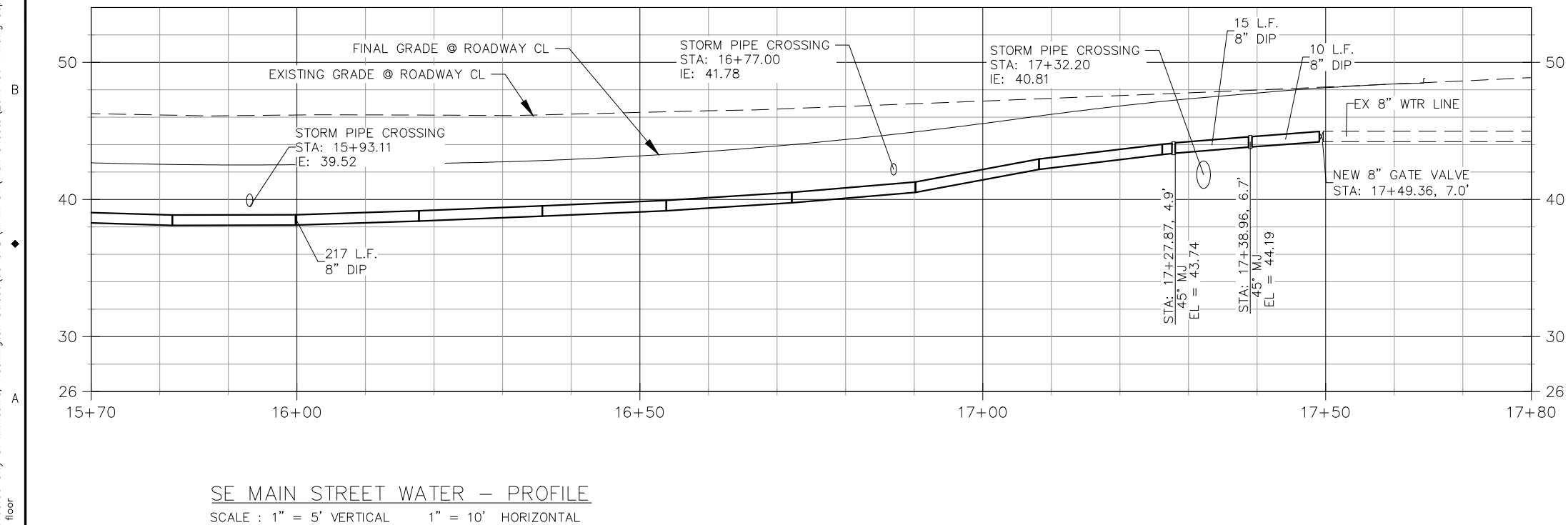
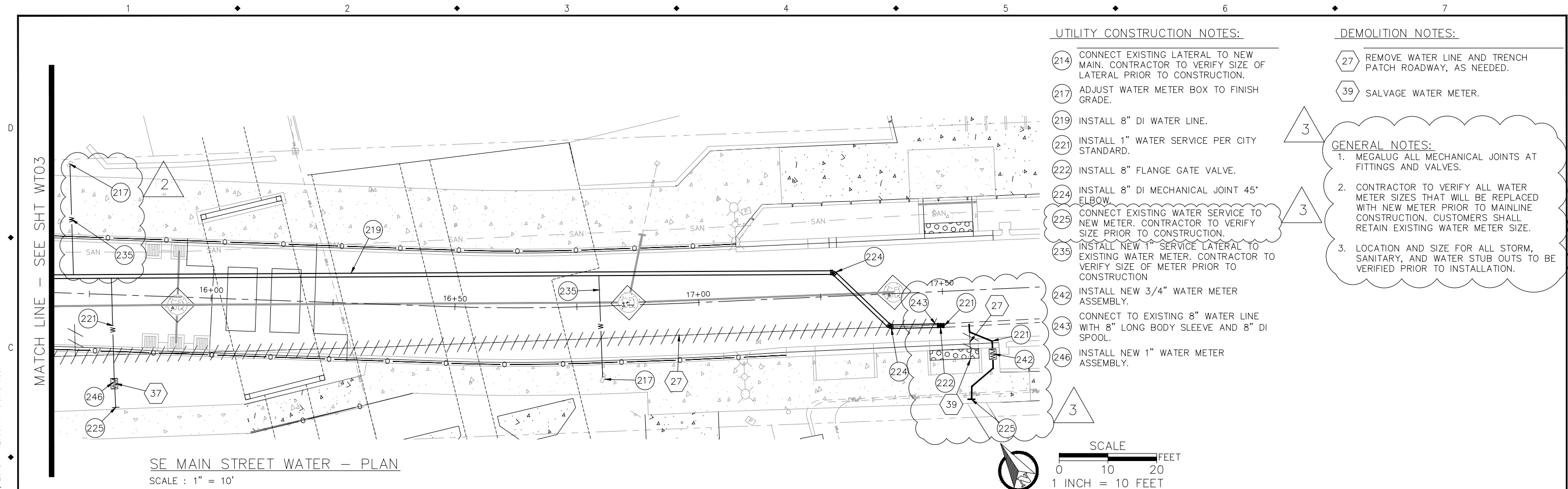
**WATERLINE IMPROVEMENTS**

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: WT03 |
|----------------------|-------------------------|------------------|-----------------|



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASOC.COM

U:\PROJECTS\PD\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 WT.dwg Sep. 21, 2018 -- 12:03 PM alaina floor  
Plot Date: 9/21/2018 12:06 PM alaina floor



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| △   | 09/07/18 |     | ADDENDUM 1  |
| △   | 09/21/18 |     | ADDENDUM 3  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

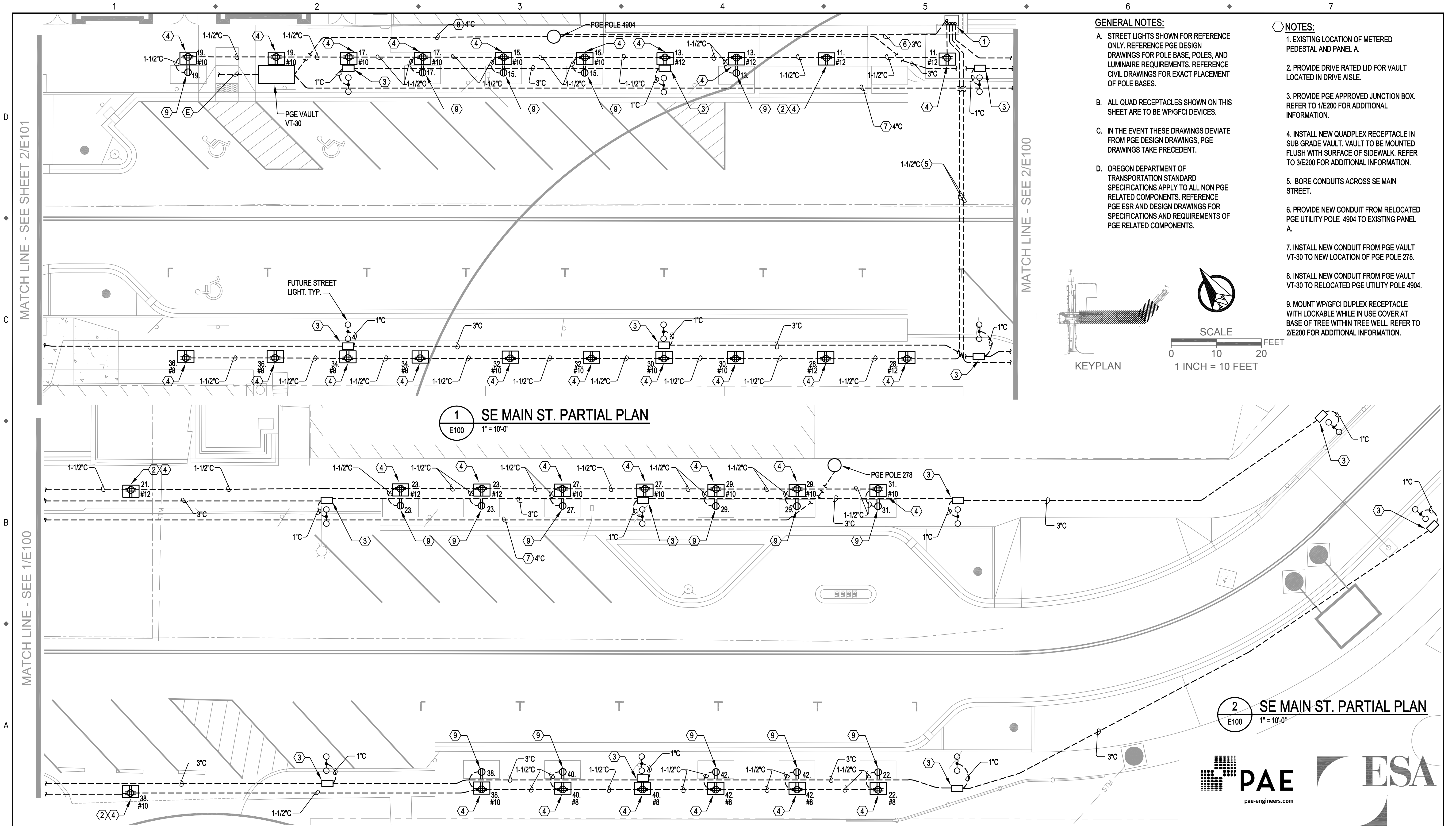
SOUTH DOWNTOWN IMPROVEMENTS

WATERLINE IMPROVEMENTS

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: WT04 |
|----------------------|-------------------------|------------------|-----------------|







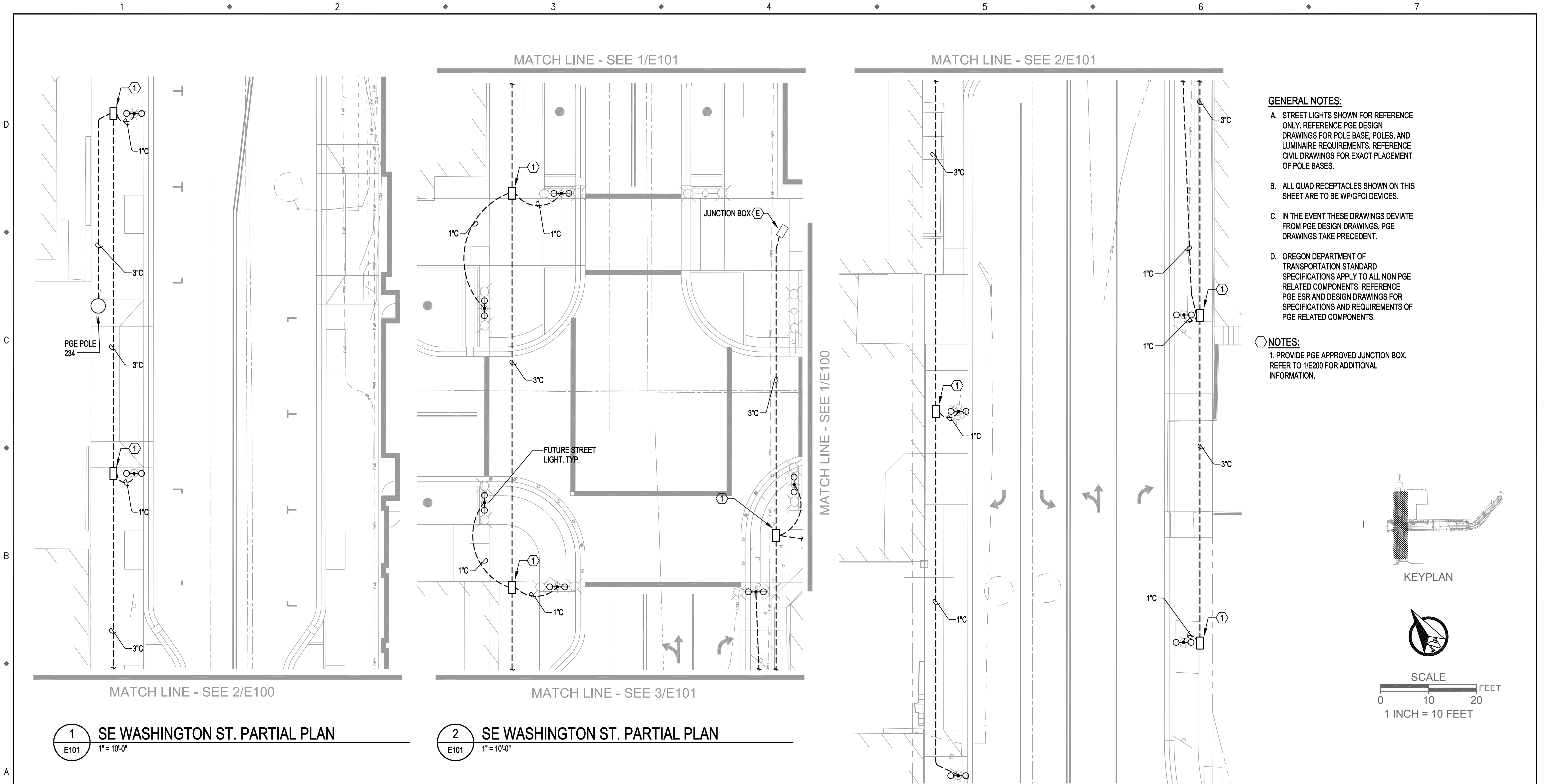
- GENERAL NOTES:**

  - A. STREET LIGHTS SHOWN FOR REFERENCE ONLY. REFERENCE PGE DESIGN DRAWINGS FOR POLE BASE, POLES, AND LUMINAIRE REQUIREMENTS. REFERENCE CIVIL DRAWINGS FOR EXACT PLACEMENT OF POLE BASES.
  - B. ALL QUAD RECEPTACLES SHOWN ON THIS SHEET ARE TO BE WP/GFCI DEVICES.
  - C. IN THE EVENT THESE DRAWINGS DEVIATE FROM PGE DESIGN DRAWINGS, PGE DRAWINGS TAKE PRECEDENT.
  - D. OREGON DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS APPLY TO ALL NON PGE RELATED COMPONENTS. REFERENCE PGE ESR AND DESIGN DRAWINGS FOR SPECIFICATIONS AND REQUIREMENTS OF PGE RELATED COMPONENTS.
- NOTES:**

  - 1. EXISTING LOCATION OF METERED PEDESTAL AND PANEL A.
  - 2. PROVIDE DRIVE RATED LID FOR VAULT LOCATED IN DRIVE AISLE.
  - 3. PROVIDE PGE APPROVED JUNCTION BOX. REFER TO 1/E200 FOR ADDITIONAL INFORMATION.
  - 4. INSTALL NEW QUADPLEX RECEPTACLE IN SUB GRADE VAULT. VAULT TO BE MOUNTED FLUSH WITH SURFACE OF SIDEWALK. REFER TO 3/E200 FOR ADDITIONAL INFORMATION.
  - 5. BORE CONDUITS ACROSS SE MAIN STREET.
  - 6. PROVIDE NEW CONDUIT FROM RELOCATED PGE UTILITY POLE 4904 TO EXISTING PANEL A.
  - 7. INSTALL NEW CONDUIT FROM PGE VAULT VT-30 TO NEW LOCATION OF PGE POLE 278.
  - 8. INSTALL NEW CONDUIT FROM PGE VAULT VT-30 TO RELOCATED PGE UTILITY POLE 4904.
  - 9. MOUNT WP/GFCI DUPLEX RECEPTACLE WITH LOCKABLE WHILE IN USE COVER AT BASE OF TREE WITHIN TREE WELL. REFER TO 2/E200 FOR ADDITIONAL INFORMATION.

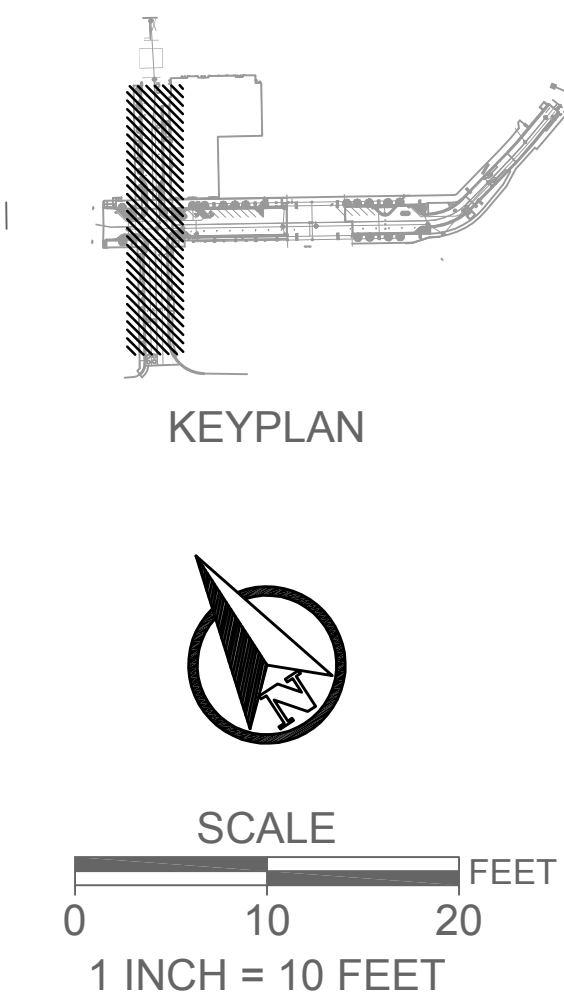
|                                                                                                                                                                                                                                                                                         |            |     |            |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----|------------|----------|------------|---------|------------|---------|------------|----------|------------|---|----------|---------------------------------------------------------------------------------------------------------|------------|---|----------|-----|------------|-------------------------------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------|---------------|--|-------|------------|------------|------|
| <table><tr><td>DESIGNED</td><td>XX/XX/2017</td></tr><tr><td>DRAFTED</td><td>XX/XX/2017</td></tr><tr><td>CHECKED</td><td>XX/XX/2017</td></tr><tr><td>APPROVED</td><td>XX/XX/2017</td></tr></table>                                                                                       |            |     |            | DESIGNED | XX/XX/2017 | DRAFTED | XX/XX/2017 | CHECKED | XX/XX/2017 | APPROVED | XX/XX/2017 |   |          | <p><b>SOUTH DOWNTOWN IMPROVEMENTS</b></p> <p>SOUTH DOWNTOWN PLAZA UTILITY IMPROVEMENTS - ELECTRICAL</p> |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| DESIGNED                                                                                                                                                                                                                                                                                | XX/XX/2017 |     |            |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| DRAFTED                                                                                                                                                                                                                                                                                 | XX/XX/2017 |     |            |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| CHECKED                                                                                                                                                                                                                                                                                 | XX/XX/2017 |     |            |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| APPROVED                                                                                                                                                                                                                                                                                | XX/XX/2017 |     |            |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| <table><tr><td>NO.</td><td>DATE</td><td>BY</td><td>REVISIONS</td></tr><tr><td>3</td><td>05/25/18</td><td>NMR</td><td>90% DESIGN</td></tr><tr><td>2</td><td>03/12/18</td><td>SLM</td><td>60% DESIGN</td></tr><tr><td>1</td><td>11/13/17</td><td>SLM</td><td>30% DESIGN</td></tr></table> |            |     |            | NO.      | DATE       | BY      | REVISIONS  | 3       | 05/25/18   | NMR      | 90% DESIGN | 2 | 03/12/18 | SLM                                                                                                     | 60% DESIGN | 1 | 11/13/17 | SLM | 30% DESIGN | <p>6101 SE JOHNSON CREEK BLVD.<br/>MILWAUKIE, OR 97206</p> <p>PHONE: 503-786-7600<br/>FAX: 503-774-8236</p> |  |  | <table><tr><td>PROJECT NO.:</td><td>CIP2018</td></tr><tr><td>CONTRACT NO.:</td><td></td></tr><tr><td>DATE:</td><td>08/10/2018</td></tr><tr><td>SHEET NO.:</td><td>E100</td></tr></table> | PROJECT NO.: | CIP2018 | CONTRACT NO.: |  | DATE: | 08/10/2018 | SHEET NO.: | E100 |
| NO.                                                                                                                                                                                                                                                                                     | DATE       | BY  | REVISIONS  |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| 3                                                                                                                                                                                                                                                                                       | 05/25/18   | NMR | 90% DESIGN |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| 2                                                                                                                                                                                                                                                                                       | 03/12/18   | SLM | 60% DESIGN |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| 1                                                                                                                                                                                                                                                                                       | 11/13/17   | SLM | 30% DESIGN |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| PROJECT NO.:                                                                                                                                                                                                                                                                            | CIP2018    |     |            |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| CONTRACT NO.:                                                                                                                                                                                                                                                                           |            |     |            |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| DATE:                                                                                                                                                                                                                                                                                   | 08/10/2018 |     |            |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |
| SHEET NO.:                                                                                                                                                                                                                                                                              | E100       |     |            |          |            |         |            |         |            |          |            |   |          |                                                                                                         |            |   |          |     |            |                                                                                                             |  |  |                                                                                                                                                                                          |              |         |               |  |       |            |            |      |





- GENERAL NOTES:**
- A. STREET LIGHTS SHOWN FOR REFERENCE ONLY. REFERENCE PGE DESIGN DRAWINGS FOR POLE BASE, POLES, AND LUMINAIRE REQUIREMENTS. REFERENCE CIVIL DRAWINGS FOR EXACT PLACEMENT OF POLE BASES.
  - B. ALL QUAD RECEPTACLES SHOWN ON THIS SHEET ARE TO BE WP/GFCI DEVICES.
  - C. IN THE EVENT THESE DRAWINGS DEVIATE FROM PGE DESIGN DRAWINGS, PGE DRAWINGS TAKE PRECEDENT.
  - D. OREGON DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS APPLY TO ALL NON PGE RELATED COMPONENTS. REFERENCE PGE ESR AND DESIGN DRAWINGS FOR SPECIFICATIONS AND REQUIREMENTS OF PGE RELATED COMPONENTS.

**NOTES:**  
1. PROVIDE PGE APPROVED JUNCTION BOX. REFER TO 1/E200 FOR ADDITIONAL INFORMATION.



**1 SE WASHINGTON ST. PARTIAL PLAN**  
E101 1" = 10'-0"

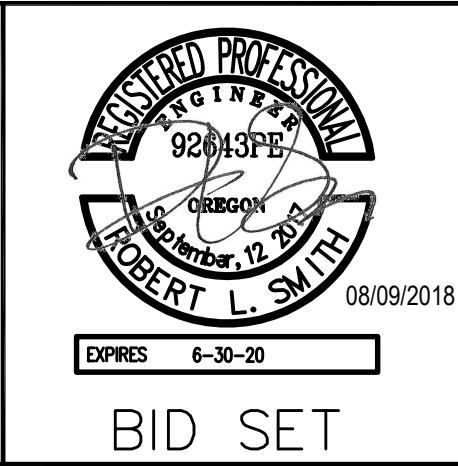
**2 SE WASHINGTON ST. PARTIAL PLAN**  
E101 1" = 10'-0"

**3 SE WASHINGTON ST. PARTIAL PLAN**  
E101 1" = 10'-0"



| NO. | DATE     | BY  | REVISIONS  |
|-----|----------|-----|------------|
| 3   | 05/25/18 | NMR | 90% DESIGN |
| 2   | 03/12/18 | SLM | 60% DESIGN |
| 1   | 11/13/17 | SLM | 30% DESIGN |

|          |            |
|----------|------------|
| JRP      | XX/XX/2017 |
| DESIGNED | DATE       |
| JRP      | XX/XX/2017 |
| DRAFTED  | DATE       |
| RLS      | XX/XX/2017 |
| CHECKED  | DATE       |
| APPROVED | DATE       |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

**SOUTH DOWNTOWN IMPROVEMENTS**  
**SOUTH DOWNTOWN PLAZA UTILITY IMPROVEMENTS - ELECTRICAL**

|              |         |               |       |            |            |      |
|--------------|---------|---------------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | DATE: | 08/10/2018 | SHEET NO.: | E101 |
|--------------|---------|---------------|-------|------------|------------|------|



D  
C  
B  
A

| DESIGNATION: PANEL A |  |                 | VOLTAGE: 120/240V - 1 PH - 3 Wire |            |                      |    |     | PROJECT NAME: MILWAUKIE PLAZA |      |                    |                   |       |  |  |  |  |       |       |
|----------------------|--|-----------------|-----------------------------------|------------|----------------------|----|-----|-------------------------------|------|--------------------|-------------------|-------|--|--|--|--|-------|-------|
| BUS RATING(A): 400   |  | MAIN(A): 400    | AVAILABLE FAULT: 7068             |            |                      |    |     | MOUNTING: PEDESTAL            |      | ENCLOSURE: NEMA 3R |                   |       |  |  |  |  |       |       |
|                      |  |                 |                                   |            |                      |    |     |                               |      |                    |                   |       |  |  |  |  |       |       |
| DESCRIPTION          |  | DEMAND CATEGORY | VA                                | BKR A/P    | CKT                  | PH | CKT | BKR A/P                       | VA   | DEMAND CATEGORY    | DESCRIPTION       |       |  |  |  |  |       |       |
| EXISTING LOAD        |  | Receptacles     |                                   | 20/1       | 1                    | A  | 2   | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| EXISTING LOAD        |  | Receptacles     |                                   | 20/1       | 3                    | B  | 4   | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| EXISTING LOAD        |  | Lighting        |                                   | 20/1       | 5                    | A  | 6   | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| EXISTING LOAD        |  | Equipment       |                                   | 20/1       | 7                    | B  | 8   | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| EXISTING LOAD        |  | Equipment       |                                   | 20/1       | 9                    | A  | 10  | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| NORTHEAST BOX        |  | Receptacles     | 720                               | 20/1       | 11                   | B  | 12  | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| NORTHEAST BOX        |  | Receptacles     | 900                               | 20/1       | 13                   | A  | 14  | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| NORTHEAST BOX        |  | Receptacles     | 1080                              | 20/1       | 15                   | B  | 16  | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| NORTHEAST BOX        |  | Receptacles     | 900                               | 20/1       | 17                   | A  | 18  | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| NORTHEAST BOX        |  | Receptacles     | 900                               | 20/1       | 19                   | B  | 20  | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| SOUTHEAST BOX        |  | Receptacles     | 360                               | 20/1       | 21                   | A  | 22  | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| SOUTHEAST BOX        |  | Receptacles     | 1080                              | 20/1       | 23                   | B  | 24  | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| EXISTING LOAD        |  | Receptacles     |                                   | 20/1       | 25                   | A  | 26  | 20/1                          |      | Receptacles        | EXISTING LOAD     |       |  |  |  |  |       |       |
| SOUTHEAST BOX        |  | Receptacles     | 900                               | 20/1       | 27                   | B  | 28  | 20/1                          | 720  | Receptacles        | NORTHWEST BOX     |       |  |  |  |  |       |       |
| SOUTHEAST BOX        |  | Receptacles     | 1080                              | 20/1       | 29                   | A  | 30  | 20/1                          | 720  | Receptacles        | NORTHWEST BOX     |       |  |  |  |  |       |       |
| SOUTHEAST BOX        |  | Receptacles     | 540                               | 20/1       | 31                   | B  | 32  | 20/1                          | 720  | Receptacles        | NORTHWEST BOX     |       |  |  |  |  |       |       |
| SOUTHWEST BOX        |  | Receptacles     | 540                               | 20/1       | 33                   | A  | 34  | 20/1                          | 720  | Receptacles        | NORTHWEST BOX     |       |  |  |  |  |       |       |
| SPACE                |  |                 |                                   |            | 35                   | B  | 36  | 20/1                          | 720  | Receptacles        | NORTHWEST BOX     |       |  |  |  |  |       |       |
| SPACE                |  |                 |                                   |            | 37                   | A  | 38  | 20/1                          | 900  | Receptacles        | SOUTHWEST BOX     |       |  |  |  |  |       |       |
| SPACE                |  |                 |                                   |            | 39                   | B  | 40  | 20/1                          | 900  | Receptacles        | SOUTHWEST BOX     |       |  |  |  |  |       |       |
| SPACE                |  |                 |                                   |            | 41                   | A  | 42  | 20/1                          | 1080 | Receptacles        | SOUTHWEST BOX     |       |  |  |  |  |       |       |
|                      |  |                 |                                   |            |                      |    |     |                               |      |                    |                   |       |  |  |  |  |       |       |
| DEMAND CATEGORY      |  | A ph (VA)       | B ph (VA)                         | TOTAL (VA) | TOTAL CONNECTED LOAD |    |     |                               |      |                    | VA:               | 15480 |  |  |  |  |       |       |
| Receptacles          |  | 6100            | 6640                              | 12740      |                      |    |     |                               |      |                    | AMPS:             | 69.0  |  |  |  |  |       |       |
| Equipment            |  | 0               | 0                                 | 0          |                      |    |     |                               |      |                    | TOTAL DESIGN LOAD |       |  |  |  |  | VA:   | 12740 |
| Lighting             |  | 0               | 0                                 | 0          |                      |    |     |                               |      |                    |                   |       |  |  |  |  | AMPS: | 55.3  |
| DESIGN LOAD:         |  | 6100            | 6640                              | 12740      |                      |    |     |                               |      |                    |                   |       |  |  |  |  |       |       |

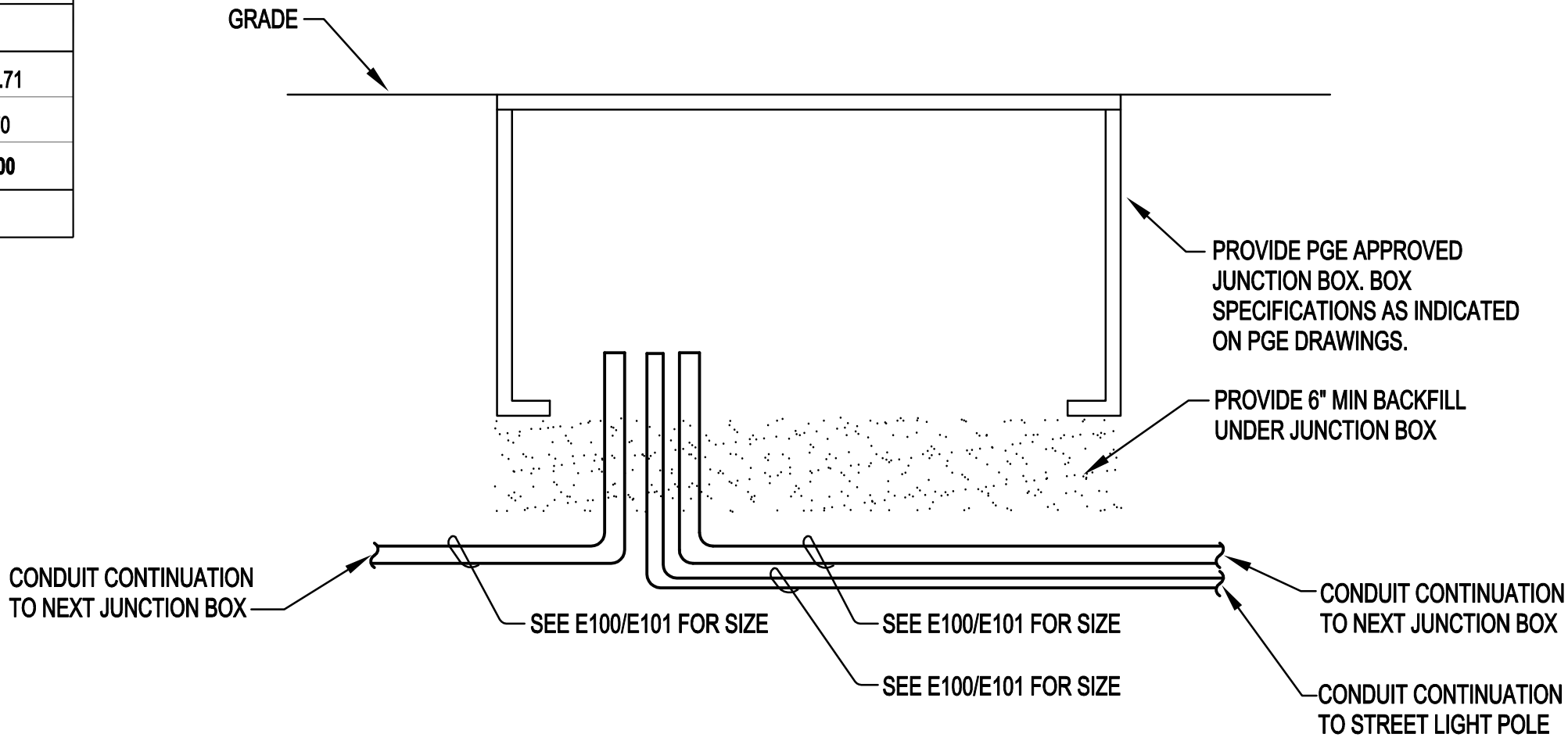
| EXISTING LOAD SUMMARY                            |       |
|--------------------------------------------------|-------|
| PANEL A                                          |       |
| 400A 120/240V 1 PH 3W                            |       |
| EXISTING LOAD                                    | kVA   |
| PEAK EXISTING LOAD FROM 06/07/2017 TO 06/07/2018 | 1.05  |
| NEC ARTICLE 220.87 (125%)                        | 1.31  |
| ADDED LOAD                                       | kVA   |
| RECEPTACLE                                       | 15.4  |
| TOTAL NEW AND EXISTING LOAD (kVA)                | 16.71 |
| TOTAL PROJECTED AMPERAGE (A)                     | 70    |
| EXISTING SERVICE RATED AMPERAGE (A)              | 400   |

GENERAL NOTES:

A. REFER TO PGE APPROVED DESIGN DRAWINGS FOR ADDITIONAL INFORMATION.

NOTES:

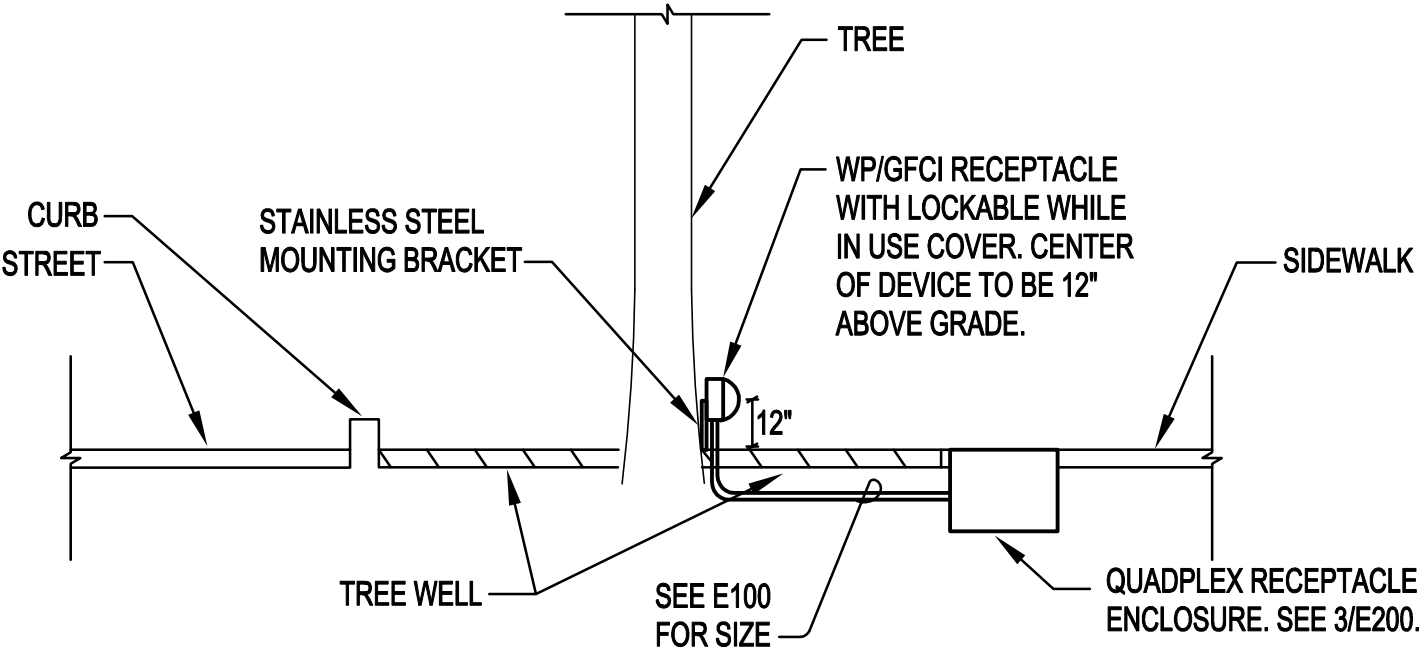
1. PROVIDE NEW 20A/1P BREAKER IN EXISTING PANEL SPACE. MATCH EXISTING MANUFACTURER AND AIC RATING.



1 UTILITY JUNCTION BOX DETAIL  
E200 SCALE: NONE

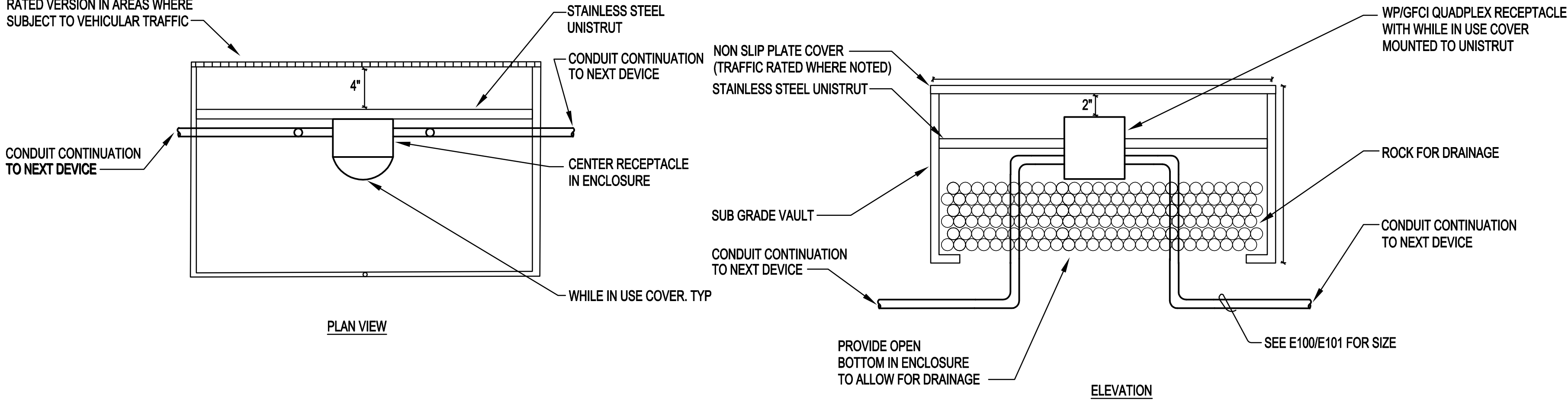
GENERAL NOTES:

A. REFER TO PGE APPROVED DESIGN DRAWINGS FOR ADDITIONAL INFORMATION.



2 TREE WELL RECEPTACLE DETAIL  
E200 SCALE: NONE

10"x15" FRP FLARED BOX WITH 10K RATED LID ASSEMBLY (ARMORCAST OR APPROVED EQUAL) - PROVIDE ALTERNATE DRIVE RATED VERSION IN AREAS WHERE SUBJECT TO VEHICULAR TRAFFIC



3 RECEPTACLE ENCLOSURE  
E200 SCALE: NONE

|     |          |     |            |
|-----|----------|-----|------------|
|     |          |     |            |
|     |          |     |            |
|     |          |     |            |
|     |          |     |            |
| 3   | 05/25/18 | NMR | 90% DESIGN |
| 2   | 03/12/18 | SLM | 60% DESIGN |
| 1   | 11/13/17 | SLM | 30% DESIGN |
| NO. | DATE     | BY  | REVISIONS  |

|          |            |
|----------|------------|
| JRP      | XX/XX/2017 |
| DESIGNED | DATE       |
| JRP      | XX/XX/2017 |
| DRAFTED  | DATE       |
| RLS      | XX/XX/2017 |
| CHECKED  | DATE       |
| APPROVED | XX/XX/2017 |
|          | DATE       |



BID SET



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

DETAILS - ELECTRICAL

|              |         |               |       |            |            |      |
|--------------|---------|---------------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | DATE: | 08/10/2018 | SHEET NO.: | E200 |
|--------------|---------|---------------|-------|------------|------------|------|



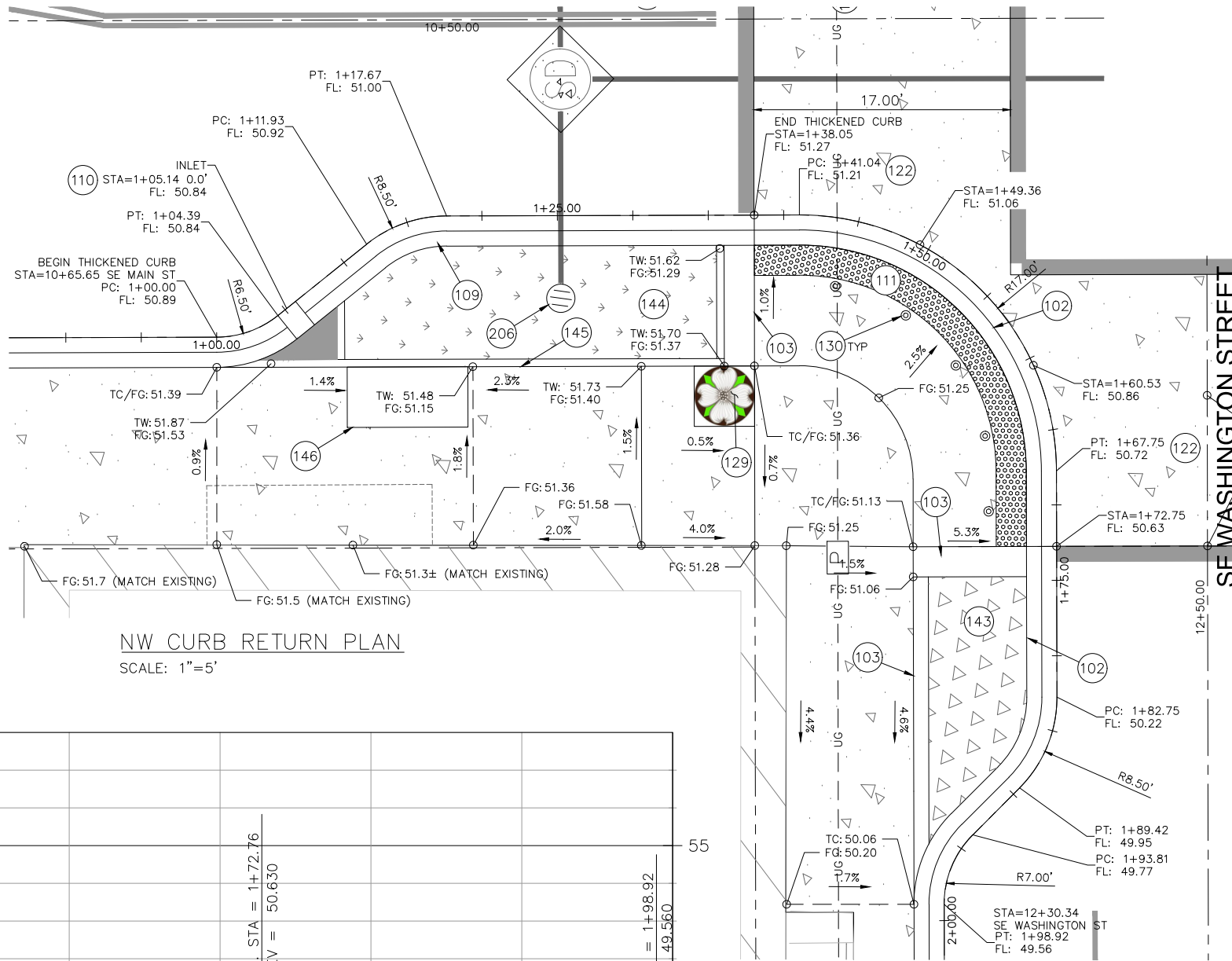
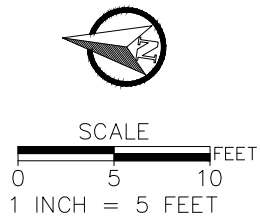
U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 GR2.dwg Aug. 15, 2018 - 4:59 PM alaina floor  
Plot Date: 8/15/2018 5:47 PM alaina floor

STREET AND UTILITY CONSTRUCTION NOTES:

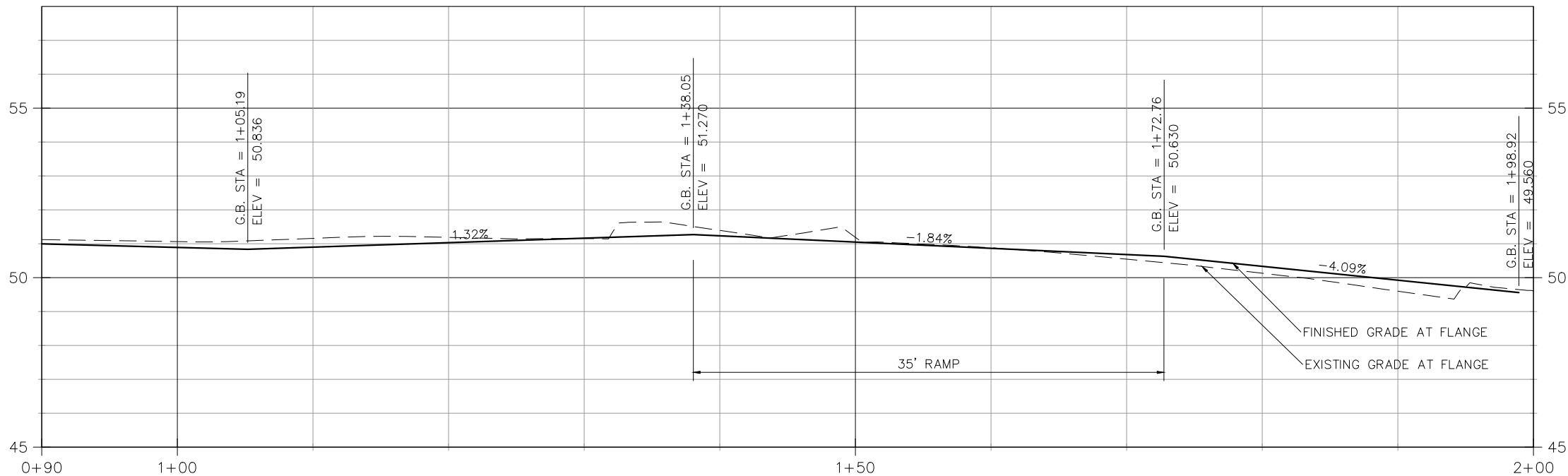
- (102) CONSTRUCT DOWNTOWN CURB AND GUTTER PER CoM STANDARD 700. SEE SHEET DT01.
- (103) CONSTRUCT 24" DOWNTOWN CURB PER CoM STANDARD 701. SEE SHEET DT01.
- (108) CONSTRUCT 12" CURB PER CoM STANDARD DETAIL 701 ON SHEET DT01.
- (109) CONSTRUCT THICKENED CURB AND GUTTER. SEE DETAIL 2 ON SHEET DT11.
- (110) CONSTRUCT CURB CUT INLET. SEE DETAIL 1 & 2 ON SHEET DT12.
- (111) INSTALL BLACK TRUNCATED DOMES. REPLACEABLE CAST-IN-PLACE, MANUFACTURED BY ACCESS TILE OR APPROVED EQUAL. 24" STRAIGHT OR RADIUS AS SHOWN.
- (122) CONSTRUCT DOWNTOWN CROSSWALK PER CoM STANDARD 702. SEE SHEET DT02.
- (129) INSTALL CITY MEDALLIONS (FURNISHED BY CITY).
- (130) FURNISH & INSTALL BOLLARDS. SPACE 5 FEET ON CENTER.
- (143) CONSTRUCT ORNAMENTAL PLANTER. SEE DETAIL 2 ON SHEET DT15.
- (144) CONSTRUCT STORMWATER PLANTER. SEE DETAIL 1 ON SHT DT11.
- (145) CONSTRUCT PLANTER WALL. SEE DETAIL 3 ON SHEET DT11.
- (146) CONSTRUCT 8' x 4' TREE WELL. SEE DTL 706 ON SHEET DT04. SEE SHEETS ST05-ST06 FOR LOCATIONS.
- (206) CONSTRUCT BEEHIVE INLET, SEE DTL 5 ON SHT DT11.

ABBREVIATIONS

FL = FLANGE  
GT = GUTTER  
TC = TOP OF CURB  
FG = FINAL GRADE  
PT = POINT OF TANGENCY  
PC = POINT OF CURVATURE  
TW = TOP OF WALL  
Δ = DELTA (MID-POINT)



NW CURB RETURN PLAN  
SCALE: 1"=5'



NW CURB RETURN PROFILE  
SCALE: 1"=5'



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NRM | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF/CTF  | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

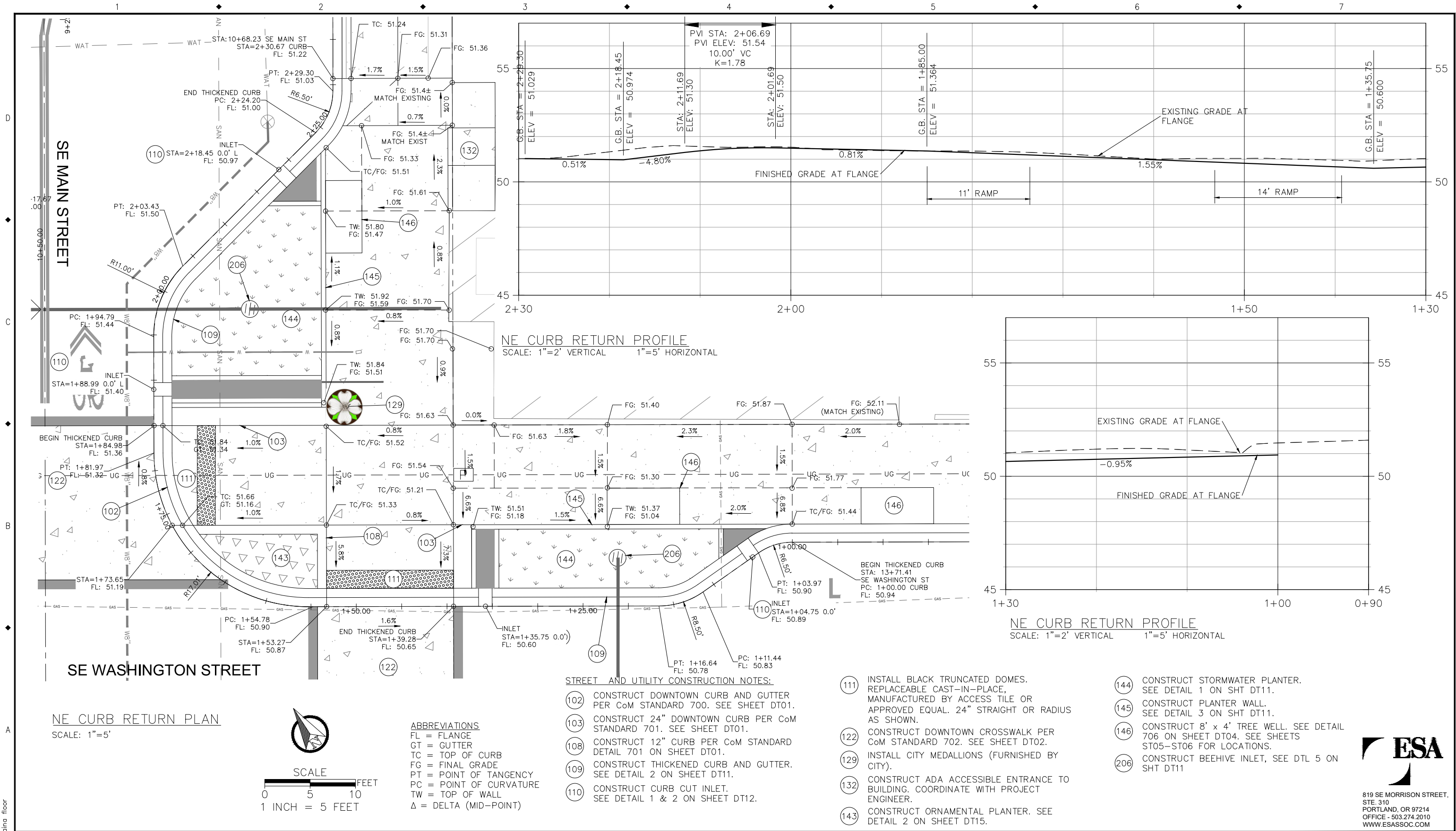
SOUTH DOWNTOWN IMPROVEMENTS

NW CURB RETURN

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: GR01 |
|----------------------|-------------------------|------------------|-----------------|



U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 GR2.dwg Aug. 15, 2018 - 4:59 PM alaina floor  
Plot Date: 8/15/2018 5:47 PM alaina floor



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NRM | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF/CTF  | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



 **CITY OF MILWAUKIE**

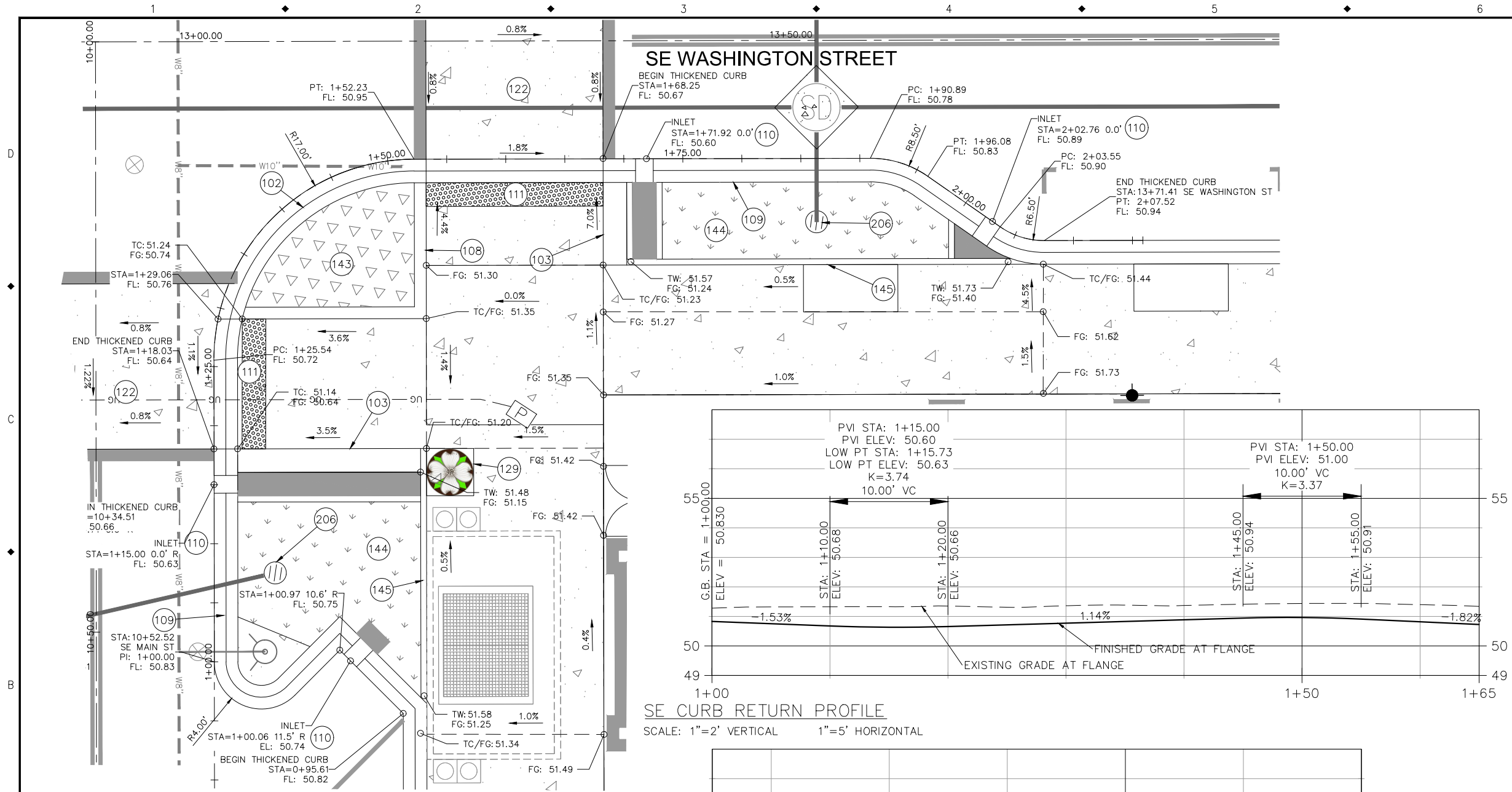
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

| SOUTH DOWNTOWN IMPROVEMENTS |            |               |           |
|-----------------------------|------------|---------------|-----------|
| NE CURB RETURN              |            |               |           |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: | C2018-051 |
| DATE:                       | 08/14/2018 | SHEET NO.:    | GR02      |



U:\PROJECTS\PD\Projects\2017\070195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 GR2.dwg Aug. 15, 2018 - 4:59 PM alaina floor  
Plot Date: 8/15/2018 5:47 PM alaina floor



**STREET AND UTILITY CONSTRUCTION NOTES:**

- 102 CONSTRUCT DOWNTOWN CURB AND GUTTER PER CoM STANDARD 700. SEE SHEET DT01.
- 103 CONSTRUCT 24" DOWNTOWN CURB PER CoM STANDARD 701. SEE SHEET DT01.
- 108 CONSTRUCT 12" CURB PER CoM STANDARD DETAIL 701 ON SHEET DT01.
- 109 CONSTRUCT THICKENED CURB AND GUTTER. SEE DETAIL 2 ON SHEET DT11.
- 110 CONSTRUCT CURB CUT INLET. SEE DETAIL 1 & 2 ON SHEET DT12.
- 111 INSTALL BLACK TRUNCATED DOMES. REPLACEABLE CAST-IN-PLACE, MANUFACTURED BY ACCESS TILE OR APPROVED EQUAL. 24" STRAIGHT OR RADIUS AS SHOWN.
- 122 CONSTRUCT DOWNTOWN CROSSWALK PER CoM STANDARD 702. SEE SHEET DT02.
- 129 INSTALL CITY MEDALLIONS (FURNISHED BY CITY).
- 143 CONSTRUCT ORNAMENTAL PLANTER. SEE DETAIL 2 ON SHEET DT15.
- 144 CONSTRUCT STORMWATER PLANTER. SEE DETAIL 1 ON SHEET DT11.
- 145 CONSTRUCT PLANTER WALL. SEE DETAIL 3 ON SHEET DT11.
- 206 CONSTRUCT BEEHIVE INLET, SEE DETAIL 5 ON SHEET DT11.

**ABBREVIATIONS**

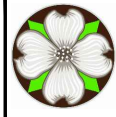
FL = FLANGE  
GT = GUTTER  
TC = TOP OF CURB  
FG = FINAL GRADE  
PT = POINT OF TANGENCY  
PC = POINT OF CURVATURE  
TW = TOP OF WALL



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NRM | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF/CTF  | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

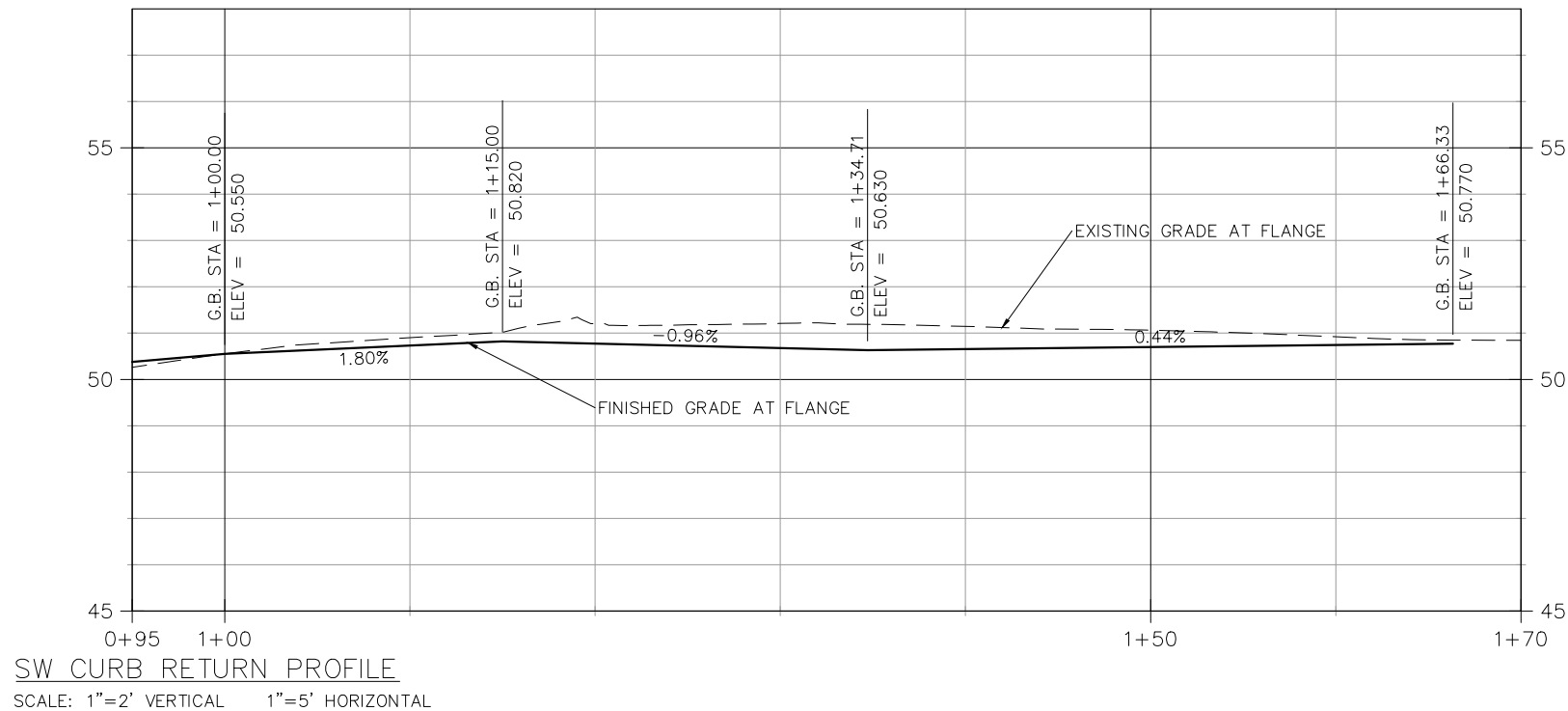
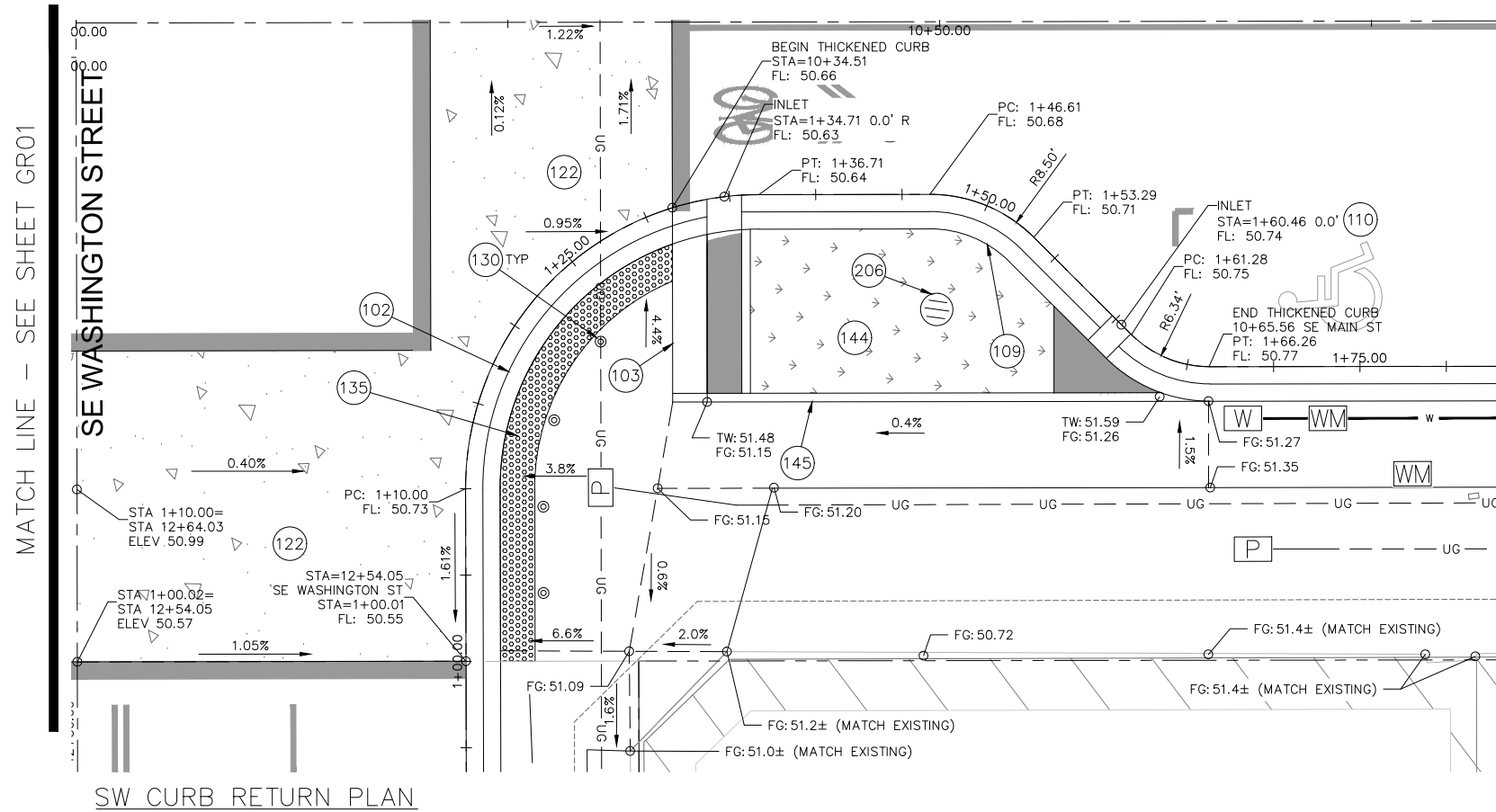
PHONE: 503-786-7600  
FAX: 503-774-8236

**SOUTH DOWNTOWN IMPROVEMENTS**

**SE CURB RETURN**

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: GR03 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 GR2.dwg Aug. 15, 2018 - 4:59 PM alaina floor  
Plot Date: 8/15/2018 5:48 PM alaina floor



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NRM | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF/CTF  | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

## SOUTH DOWNTOWN IMPROVEMENTS

### SW CURB RETURN

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: GR04 |
|----------------------|-------------------------|------------------|-----------------|



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM



U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 GR2.dwg Aug. 15, 2018 - 4:59 PM alaina floor  
Plot Date: 8/15/2018 5:48 PM alaina floor

NOTE:

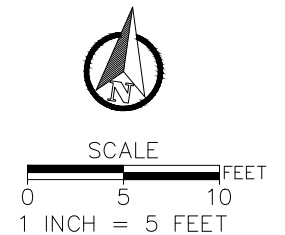
SIDEWALK CONSTRUCTION  
STAKING LAYOUT TO BE  
REVIEWED BY ENGINEER IN  
THE FIELD PRIOR TO  
CONSTRUCTION.

1 SE MAIN STREET STORM PLANTER - PLAN 1  
SCALE : 1" = 5'

2 SE MAIN STREET STORM PLANTER- PLAN 2  
SCALE : 1" = 5'

STREET AND UTILITY CONSTRUCTION  
NOTES:

- (102) CONSTRUCT DOWNTOWN CURB AND  
GUTTER PER CoM STANDARD 700. SEE  
SHEET DT01.
- (103) CONSTRUCT 24" DOWNTOWN CURB PER  
CoM STANDARD 701. SEE SHEET DT01.
- (109) CONSTRUCT THICKENED CURB AND  
GUTTER. SEE DETAIL 2 ON SHEET DT11.
- (110) CONSTRUCT CURB CUT INLET.  
SEE DETAIL 1 & 2 ON SHT DT12.
- (111) INSTALL BLACK TRUNCATED DOMES.  
REPLACEABLE CAST-IN-PLACE,  
MANUFACTURED BY ACCESS TILE OR  
APPROVED EQUAL. 24" STRAIGHT OR  
RADIUS AS SHOWN.
- (120) CONSTRUCT THICKENED EDGE SIDEWALK.  
SEE DETAIL 2 ON SHEET DT05.
- (121) CONSTRUCT DECORATIVE FENCE. SEE  
CoM STANDARD DETAIL 709 ON SHEET.
- (122) CONSTRUCT DOWNTOWN CROSSWALK  
PER CoM STANDARD 702. SEE SHEET  
DT02.
- (130) FURNISH & INSTALL BOLLARDS. SPACE  
5 FEET ON CENTER.
- (144) CONSTRUCT STORMWATER PLANTER.  
SEE DETAIL 1 ON SHEET DT11.
- (145) CONSTRUCT PLANTER WALL.  
SEE DETAIL 3 ON SHEET DT11.
- (146) CONSTRUCT 8'x4' TREE WELL. SEE DTL  
706 ON SHT DT04. SEE SHEETS  
ST05-ST06 FOR LOCATIONS.
- (206) CONSTRUCT BEEHIVE INLET, SEE DTL 5  
ON SHT DT11



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

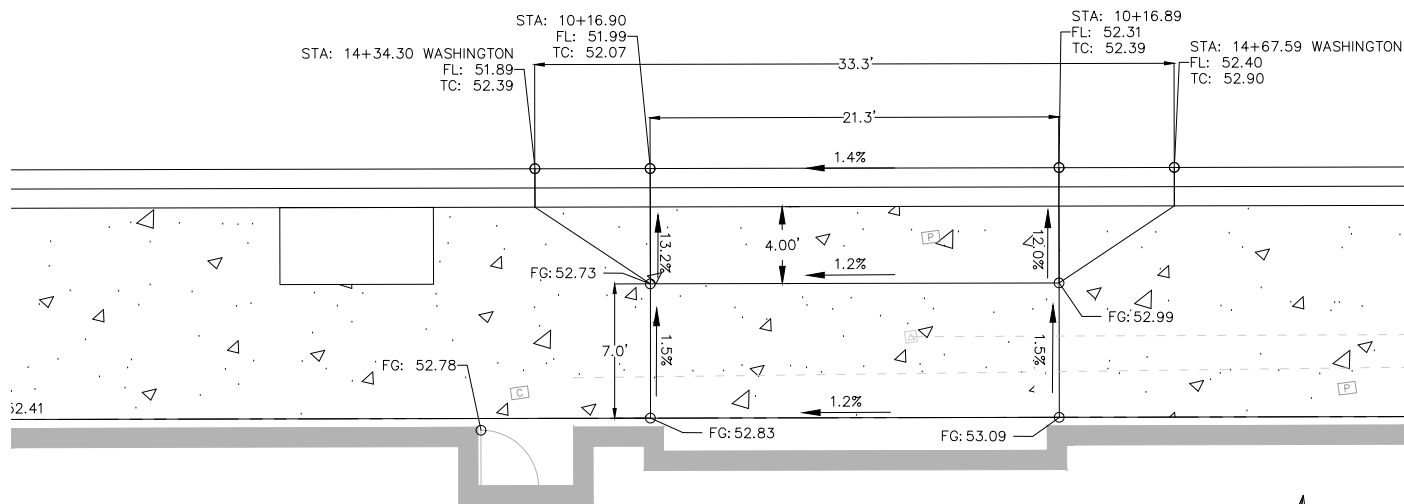
PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

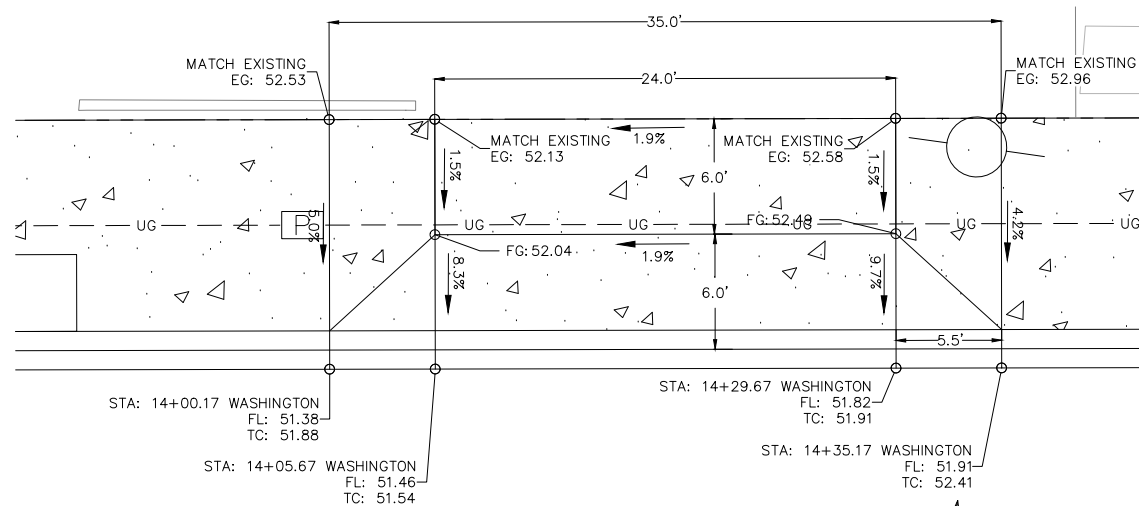
STORMWATER PLANTERS DETAILS

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: GR05 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 GR.dwg Aug. 15, 2018 -- 4:59 PM alaina floor  
Plot Date: 8/15/2018 5:48 PM alaina floor



1 SE WASHINGTON - DRIVEWAY  
SCALE: 1"=5'



2 SE WASHINGTON - DRIVEWAY  
SCALE: 1"=5'

ABBREVIATIONS  
FL = FLANGE  
GT = GUTTER  
TC = TOP OF CURB  
FG = FINAL GRADE  
PT = POINT OF TANGENCY  
PC = POINT OF CURVATURE  
TW = TOP OF WALL  
Δ = DELTA (MID-POINT)

← X.X% DOWNWARD GRADE



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NRM | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF/CTF  | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

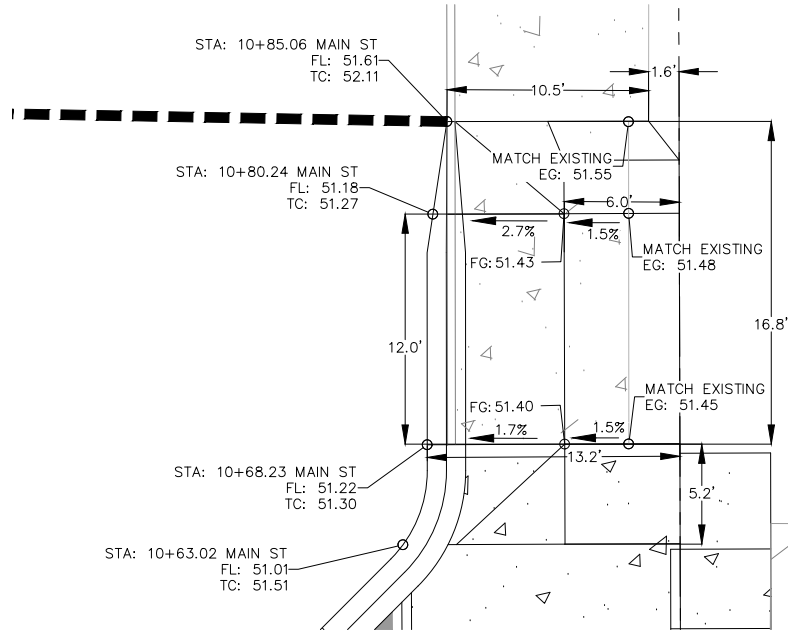
## SOUTH DOWNTOWN IMPROVEMENTS

### GRADING DETAILS - DRIVEWAYS

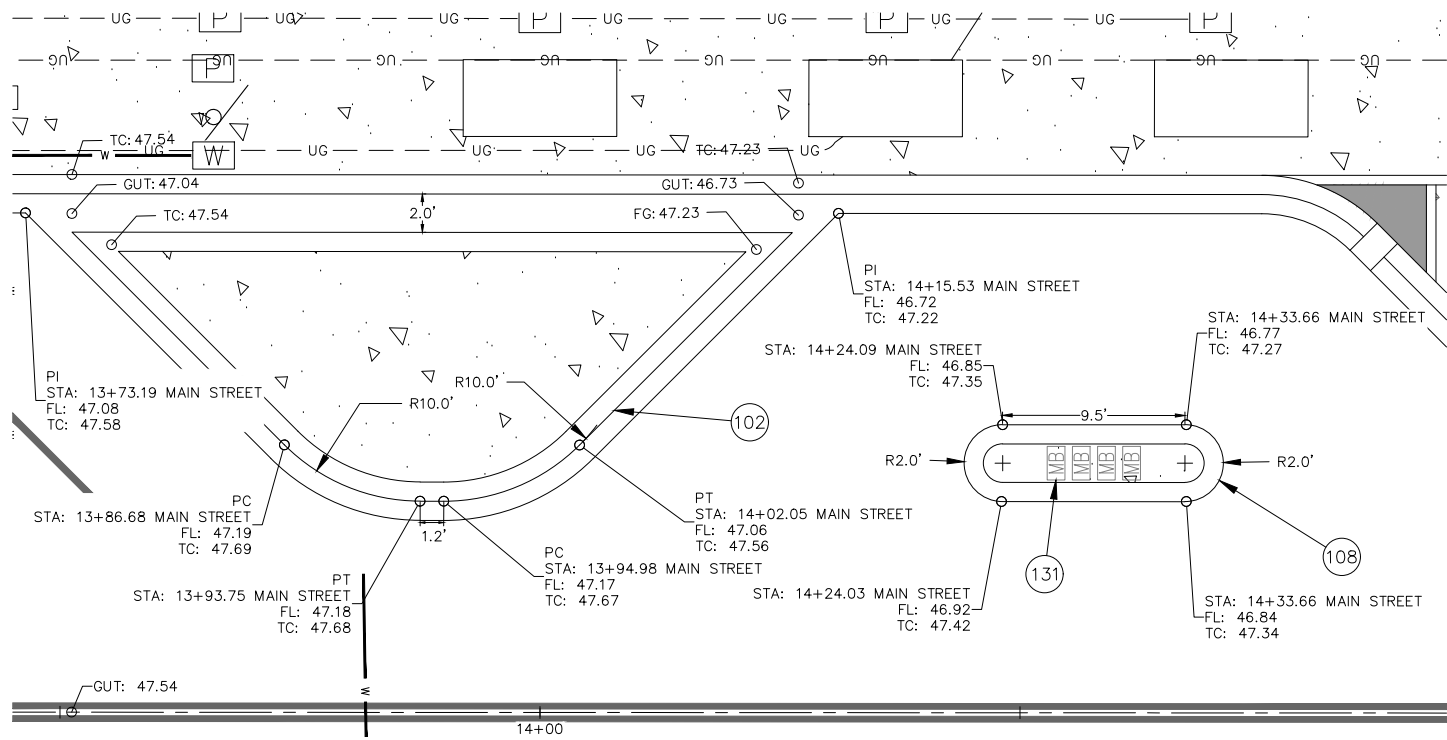
|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: GR06 |
|----------------------|-------------------------|------------------|-----------------|

U:\PROJECTS\PD\Projects\2017\0195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T36 GR.dwg Sep. 06, 2018 - 4:47 PM alaina floor  
Plot Date: 9/7/2018 4:33 PM alaina floor

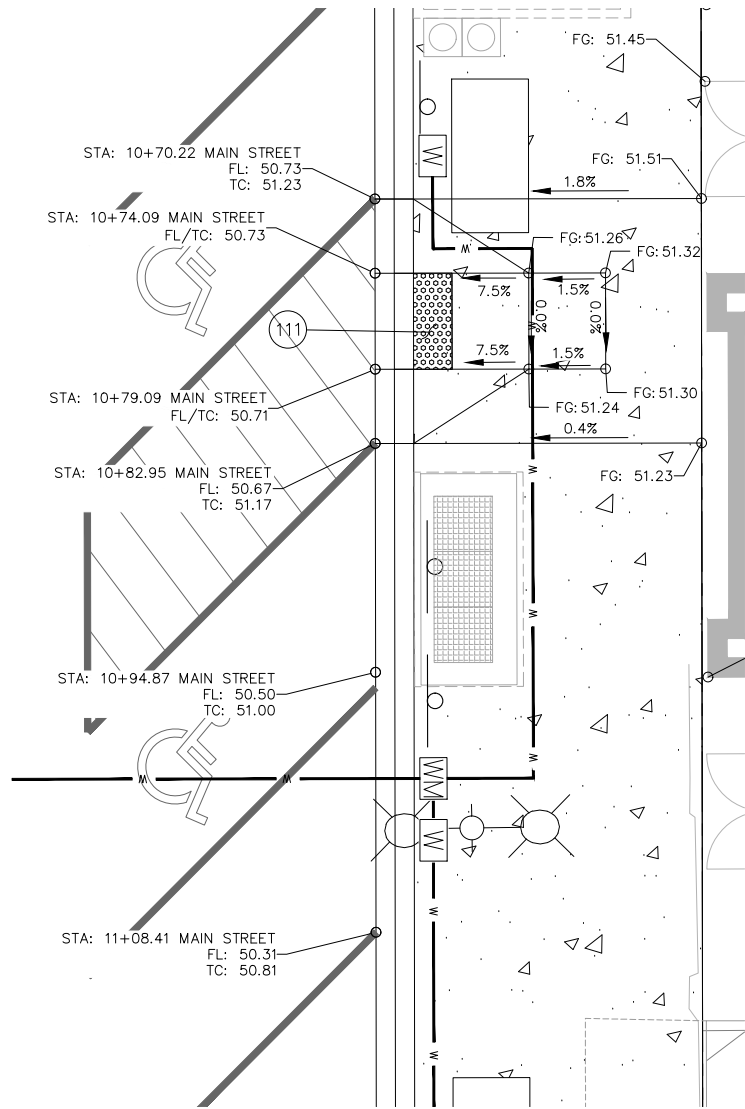
1 2 3 4 5 6 7



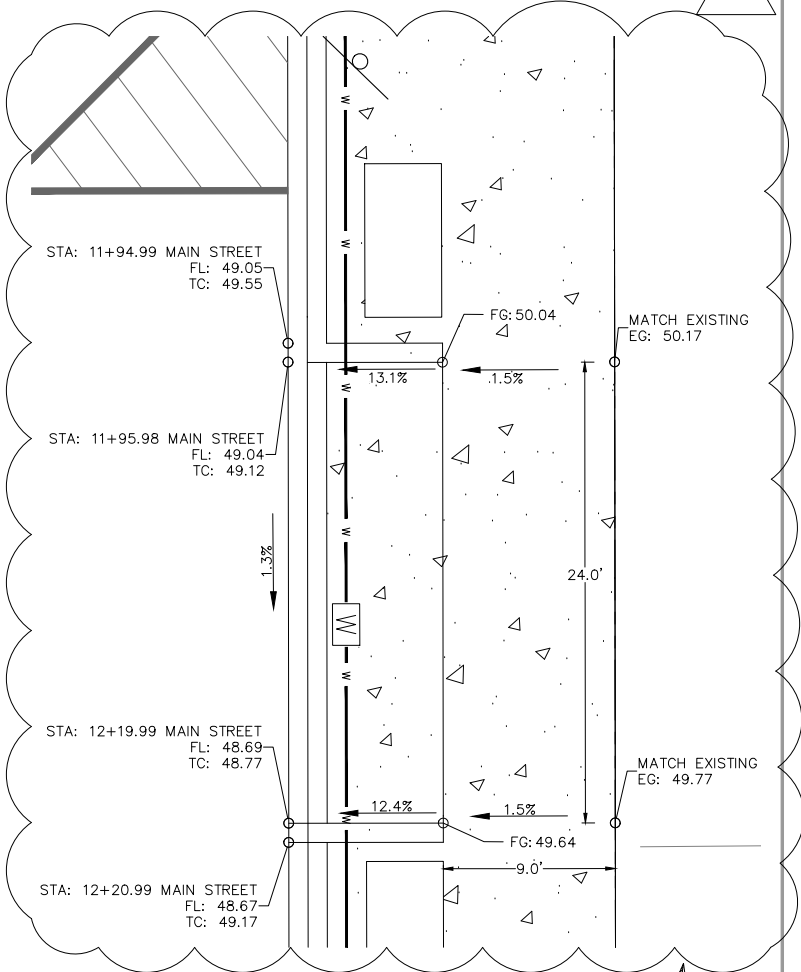
1 NE MAIN - DRIVEWAY  
SCALE: 1"=5'



2 SE MAIN - MAIL DROP-OFF  
SCALE: 1"=5'



3 SE MAIN - ADA PARKING RAMP  
SCALE: 1"=5'



4 SE MAIN - DRIVEWAY  
SCALE: 1"=5'

STREET CONSTRUCTION NOTES:

- 102 CONSTRUCT DOWNTOWN CURB AND GUTTER PER CoM STANDARD 700. SEE SHEET DT01.
- 108 CONSTRUCT 6" CURB PER CoM STANDARD DETAIL 701 ON SHEET DT01.

- 111 INSTALL BLACK TRUNCATED DOMES. REPLACEABLE CAST-IN-PLACE MANUFACTURED BY ACCESS TILE OR APPROVED EQUAL. 24" STRAIGHT OR RADIUS AS SHOWN.
- 131 INSTALL USPS MAIL BOXES.

ABBREVIATIONS  
FL = FLANGE  
GT = GUTTER  
TC = TOP OF CURB  
FG = FINAL GRADE  
PT = POINT OF TANGENCY  
PC = POINT OF CURVATURE  
TW = TOP OF WALL

← X.X% DOWNWARD GRADE



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206  
PHONE: 503-786-7600  
FAX: 503-774-8236

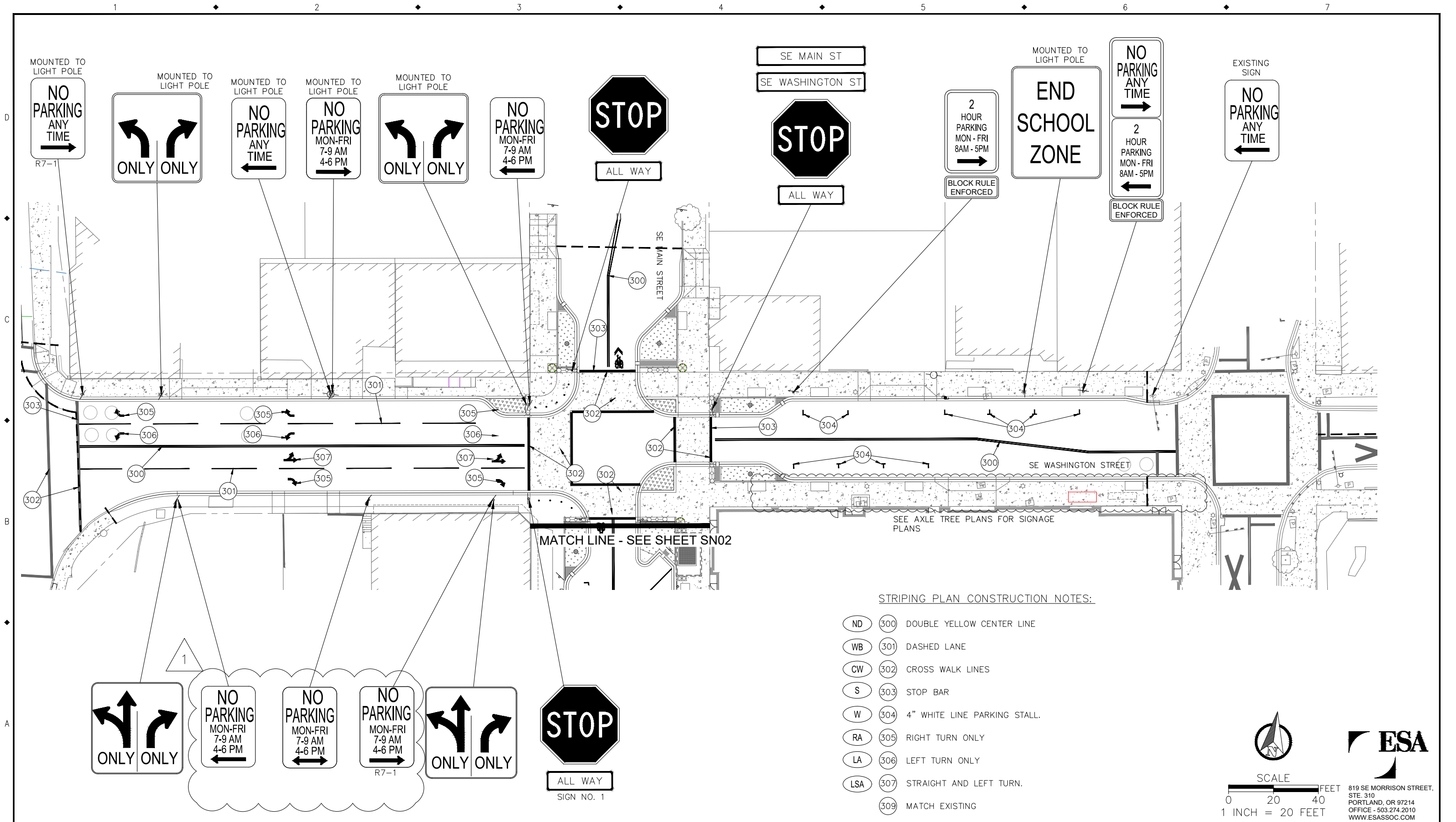
SOUTH DOWNTOWN IMPROVEMENTS

GRADING DETAILS - DRIVEWAYS & ADA RAMP

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: GR07 |
|----------------------|-------------------------|------------------|-----------------|







| NO.        | DATE     | BY  | REVISIONS   |
|------------|----------|-----|-------------|
| 1          | 11/13/17 | SLM | 30% DESIGN  |
| 2          | 03/12/18 | SLM | 60% DESIGN  |
| 3          | 05/25/18 | NRM | 90% DESIGN  |
| 4          | 08/14/18 | NMR | 100% DESIGN |
| ADDENDUM 1 |          |     |             |
| 1          | 09/06/18 |     |             |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF/CTF  | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



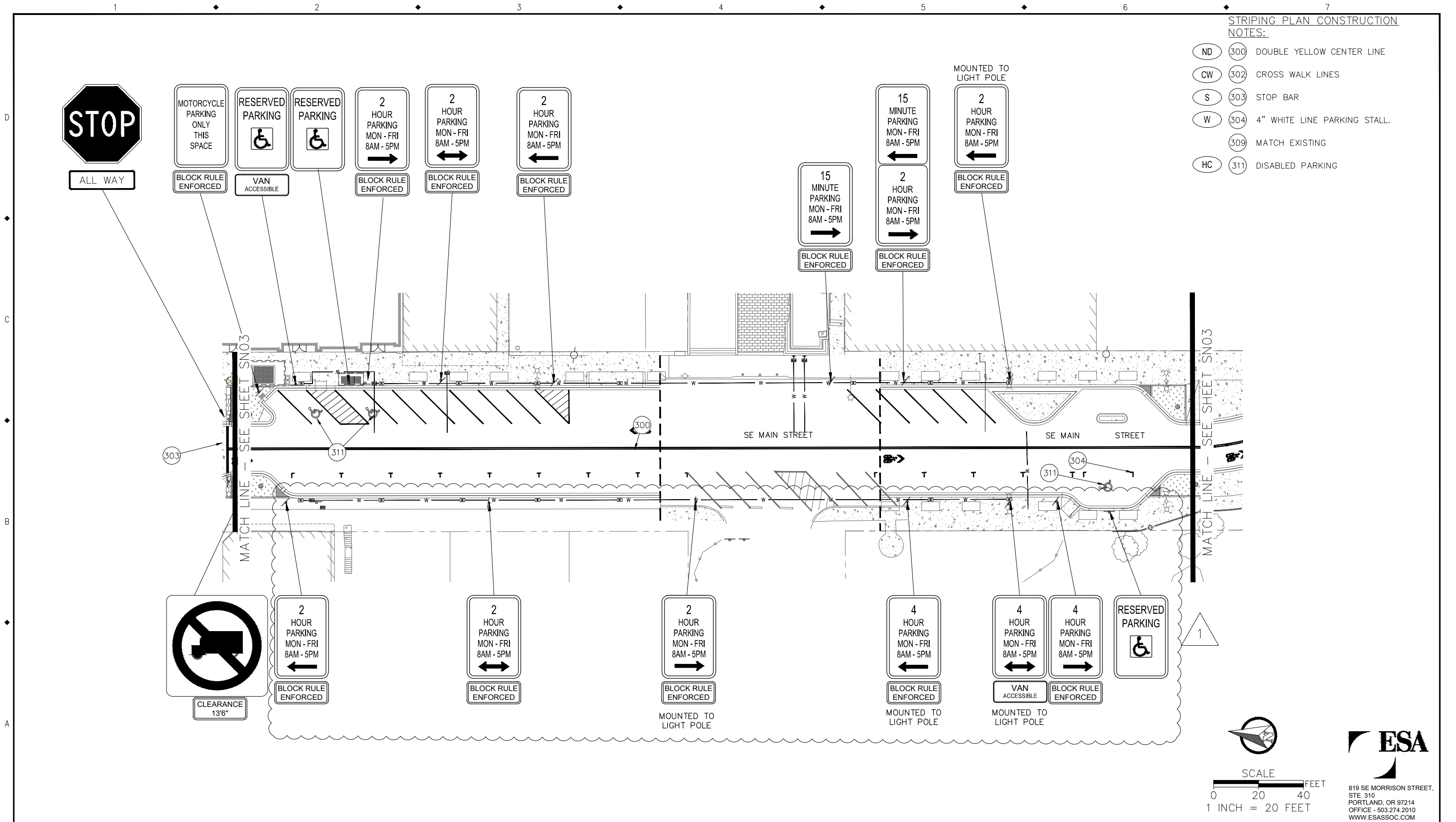


# CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

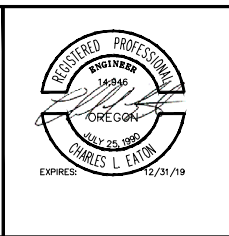
PHONE: 503-786-7600  
FAX: 503-774-8236

| SOUTH DOWNTOWN IMPROVEMENTS            |            |               |           |
|----------------------------------------|------------|---------------|-----------|
| WASHINGTON STREET SIGNAGE AND STRIPING |            |               |           |
| PROJECT NO.:                           | CIP2018    | CONTRACT NO.: | C2018-051 |
| DATE:                                  | 08/14/2018 | SHEET NO.:    | SN01      |



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 09/06/18 |     | ADDENDUM 1  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NRM | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF/CTF  | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



 **CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

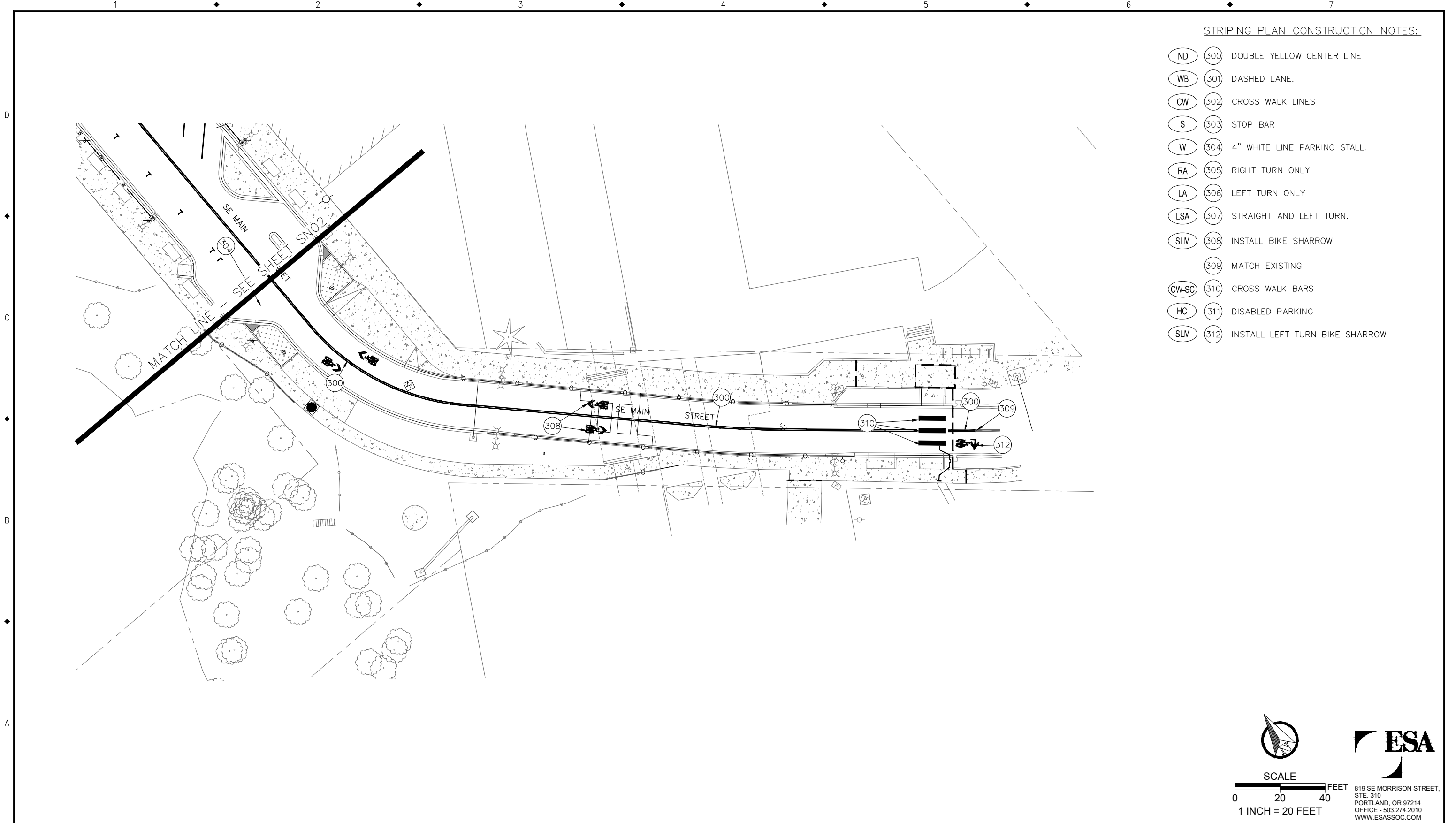
PHONE: 503-786-7600  
FAX: 503-774-8236

**SOUTH DOWNTOWN IMPROVEMENTS**

MAIN STREET SIGNAGE AND STRIPING

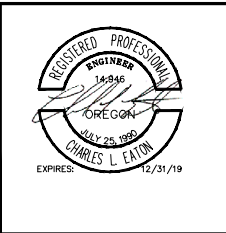
|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: SN02 |
|----------------------|-------------------------|------------------|-----------------|





|     |          |     |             |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| NO. | DATE     | BY  | REVISIONS   |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |





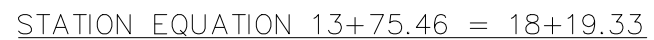
**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

**SOUTH DOWNTOWN IMPROVEMENTS**  
**MAIN STREET SIGNAGE AND STRIPING**

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: SN03 |
|----------------------|-------------------------|------------------|-----------------|



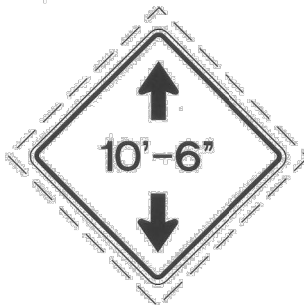
I. MAINTAIN AND PROTECT ALL SIGNS UNLESS OTHERWISE NOTED IN THESE PLANS.

[illegible]

X:\Projects\2017\11\11\027-000 (TriMet) PMLR East Segment Final Design\Lake Road Signing\ACAD\T15LK-201.dwg Jon. 31, 2017 - 9:14 AM mike zorkos  
Plot Date: 2/1/2017 10:07 AM mike zorkos



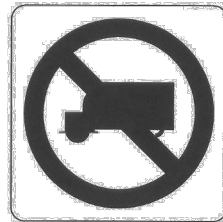
SIGN NO. 1



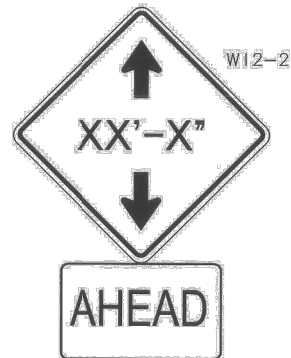
SIGN NO. 2



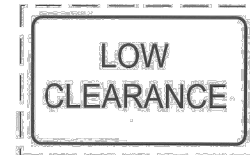
SIGN NO. 3



SIGN NO. 4  
R3-2



SIGN NO. 5 \*  
W16-9p



SIGN NO. 6



SIGN NO. 7



SIGN NO. 8



SIGN NO. 9



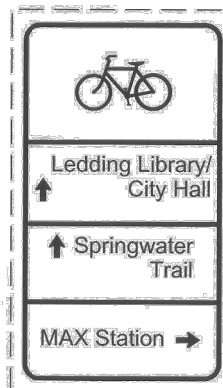
SIGN NO. 10



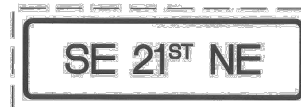
SIGN NO. 11



SIGN NO. 12



SIGN NO. 13



SIGN NO. 14



SIGN NO. 15



SIGN NO. 15  
R7-1

| SIGN NO. | SIGN LOCATION | SIGN DIMENSIONS |        | BORDER WIDTH | RADIUS |    |    |        | ARROW SIZE (IN) | SIGN TYPE | SUB-STRATE | COLOR |    | LEGEND TYPE | SIGN NO. | TYPE OF SUPPORT |     |             |        |                 |                         |                           |                      |                             |                   | POST              |                 | FOOTING    |              | REFER TO OREGON STANDARD DRAWING | REMARKS |       |        |          |            |                        |           |                      |                                                                 |
|----------|---------------|-----------------|--------|--------------|--------|----|----|--------|-----------------|-----------|------------|-------|----|-------------|----------|-----------------|-----|-------------|--------|-----------------|-------------------------|---------------------------|----------------------|-----------------------------|-------------------|-------------------|-----------------|------------|--------------|----------------------------------|---------|-------|--------|----------|------------|------------------------|-----------|----------------------|-----------------------------------------------------------------|
|          |               | WIDTH           | HEIGHT |              | 1/2"   | 1" | 2" | 1 1/2" |                 |           |            | 3"    | 6" |             |          | 9"              | 12" | BACK-GROUND | LEGEND | TYPE OF SUPPORT |                         |                           |                      |                             |                   |                   |                 |            |              |                                  |         | SIZE  | LENGTH | LOCATION | MIN. DEPTH |                        |           |                      |                                                                 |
|          |               |                 |        |              |        |    |    |        |                 |           |            |       |    |             |          |                 |     |             |        | WOOD POST       | PERF. STEEL SQUARE TUBE | TRIANGULAR BASE BREAKAWAY | MULTI-POST BREAKAWAY | STAINLESS STEEL CLAMP (SSC) | SIGNAL POLE MOUNT | BRIDGE RAIL MOUNT | STRUCTURE MOUNT | CANTILEVER | SIGN BRIDGE  |                                  |         |       |        |          |            | EXT. NUMBER SIGN MOUNT | "H" FRAME | ROUTE MARKER FRAME   | MILEPOST MARKER POST                                            |
| 4        | 17+95         | 24"             | 24"    |              |        |    |    |        |                 | EXIST     | ✓          | SW    | R  | BK          | ✓        | 4               | ✓   |             |        |                 |                         |                           |                      |                             |                   |                   |                 |            | 2 x 2 - 12ga | 14'                              | 3'      | 3'-0" | ✓      |          |            |                        |           | ✓                    | 3' from face of curb, see sheet T15LK-201, construction note #3 |
|          | 18+26         | 24"             | 24"    |              |        |    |    |        |                 | "W2"      | ✓          | SW    | R  | BK          | ✓        |                 |     |             | ✓      |                 |                         |                           |                      |                             |                   |                   |                 |            |              |                                  |         |       | ✓      |          |            |                        | ✓         | See Signal Plan SN10 |                                                                 |
|          |               |                 |        |              |        |    |    |        |                 | "W2"      | ✓          | SW    | R  | BK          | ✓        |                 |     |             |        |                 |                         |                           |                      |                             |                   |                   |                 |            |              |                                  |         |       | ✓      |          |            |                        | ✓         | Mount on light pole  |                                                                 |
| 5        | 15+46         | 48"             | 48"    |              |        |    |    |        |                 | "Y3"      | ✓          | Y     |    | BK          | ✓        | 5               |     |             |        |                 |                         |                           |                      |                             |                   |                   |                 |            |              |                                  |         |       |        | ✓        |            |                        | ✓         | See Signal Plan SN09 |                                                                 |
| 5a       |               | 36"             | 24"    |              |        |    |    |        |                 | "Y3"      | ✓          | Y     |    | BK          | ✓        | 5a              |     |             |        |                 |                         |                           |                      |                             |                   |                   |                 |            |              |                                  |         |       |        | ✓        |            |                        | ✓         | See Signal Plan SN09 |                                                                 |
| 6        | 17+96         | 48"             | 48"    |              |        |    |    |        |                 | "Y3"      | ✓          | Y     |    | BK          | ✓        | 5               |     |             |        |                 |                         |                           |                      |                             |                   |                   |                 |            |              |                                  |         |       |        | ✓        |            |                        | ✓         | See Signal Plan SN10 |                                                                 |
| 5a       |               | 36"             | 24"    |              |        |    |    |        |                 | "Y3"      | ✓          | Y     |    | BK          | ✓        | 5a              |     |             |        |                 |                         |                           |                      |                             |                   |                   |                 |            |              |                                  |         |       |        | ✓        |            |                        | ✓         | See Signal Plan SN10 |                                                                 |
| 15       | 15+54         | 12"             | 18"    |              |        |    |    |        |                 | "R"       | ✓          | SW    | R  |             | ✓        | 15              | ✓   |             |        |                 |                         |                           |                      |                             |                   |                   |                 |            | 2 x 2 - 12ga | 11'                              | 3'      | 3'-0" | ✓      |          |            | ✓                      |           | ✓                    | 3' from face of curb                                            |

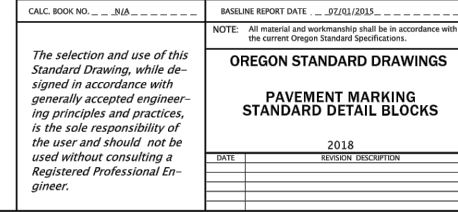
\* SEE CONSTRUCTION NOTE #2 ON SHEET SN04 FOR DETAILS.

NOTE:  
SIGNS SHOWN WITH BROKEN  
BORDERS ARE EXISTING SIGNS.

|     |      |    |       |           |                                      |  |                                                                                   |  |  |  |  |                                                                                         |  |  |                 |  |  |  |  |                         |  |  |  |  |                   |  |  |  |  |                 |  |  |  |  |
|-----|------|----|-------|-----------|--------------------------------------|--|-----------------------------------------------------------------------------------|--|--|--|--|-----------------------------------------------------------------------------------------|--|--|-----------------|--|--|--|--|-------------------------|--|--|--|--|-------------------|--|--|--|--|-----------------|--|--|--|--|
|     |      |    |       |           | ELV<br>DESIGNED<br>11-11-16<br>DATE  |  | TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON                         |  |  |  |  | LAKE ROAD REALIGNMENT<br>TRAFFIC<br>SIGN DETAILS                                        |  |  |                 |  |  |  |  |                         |  |  |  |  |                   |  |  |  |  |                 |  |  |  |  |
|     |      |    |       |           | DKS CAD<br>DRAWN<br>11-14-16<br>DATE |  | 720 SW Washington St Suite 500<br>Portland, Oregon 97203<br>www.dksassociates.com |  |  |  |  | CAPITAL PROJECTS<br>DIVISION<br>1800 SW FIRST AVE., SUITE 300<br>PORTLAND, OREGON 97201 |  |  |                 |  |  |  |  |                         |  |  |  |  |                   |  |  |  |  |                 |  |  |  |  |
|     |      |    |       |           | NNS<br>CHECKED<br>01-31-17<br>DATE   |  | APPROVED: _____ DATE: _____                                                       |  |  |  |  | APPROVED: _____ DATE: _____                                                             |  |  |                 |  |  |  |  |                         |  |  |  |  |                   |  |  |  |  |                 |  |  |  |  |
|     |      |    |       |           | APPROVED<br>DATE                     |  | SUBMITTED: _____ DATE: _____                                                      |  |  |  |  | APPROVED: _____ DATE: _____                                                             |  |  |                 |  |  |  |  |                         |  |  |  |  |                   |  |  |  |  |                 |  |  |  |  |
| NO. | DATE | BY | APPD. | REVISIONS |                                      |  |                                                                                   |  |  |  |  |                                                                                         |  |  | SCALE: AS SHOWN |  |  |  |  | PROJECT NUMBER: CIP2018 |  |  |  |  | CONTRACT NO.: --- |  |  |  |  | SHEET NO.: SN05 |  |  |  |  |



A



TM500

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



PHONE: 503-786-7600  
FAX: 503-774-8236

## STRIPING DETAILS

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: SN06 |
|----------------------|-------------------------|------------------|-----------------|

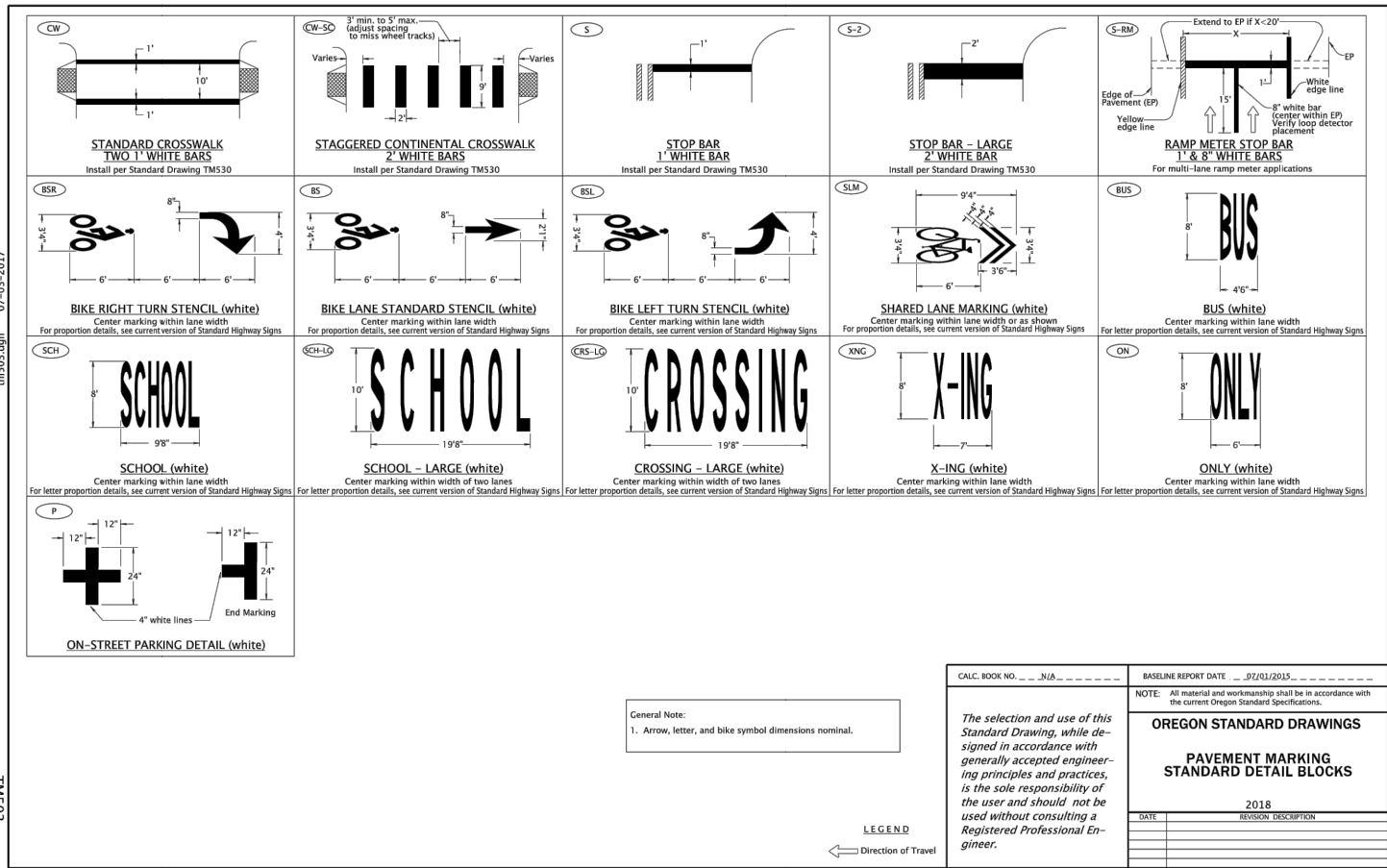
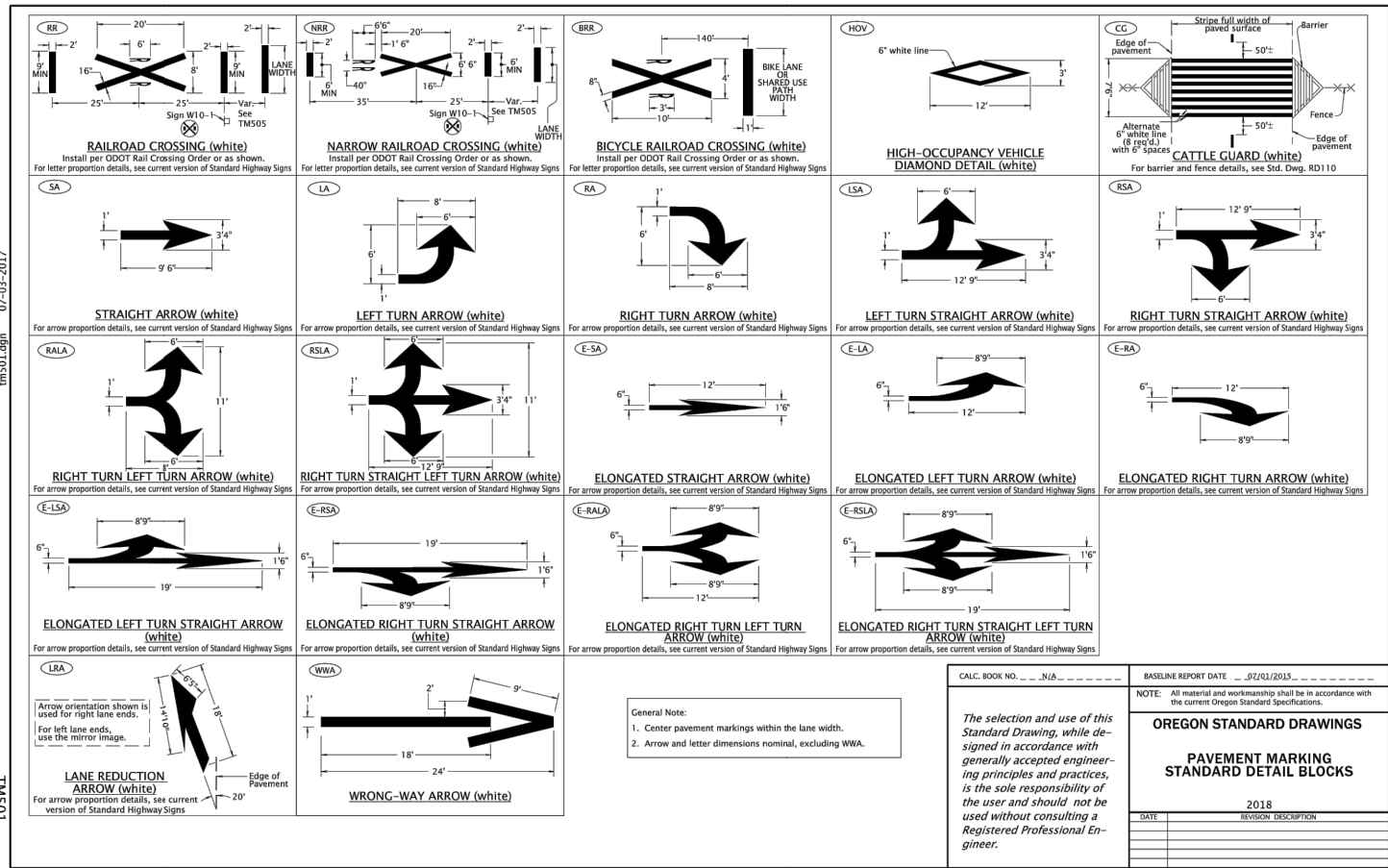


D

C

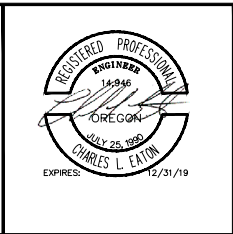
B

A



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |      |
|----------|------------|------|
| NMR      | 08/14/2018 | DATE |
| AMF      | 08/14/2018 | DATE |
| DRAFTED  |            |      |
| JGR      | 08/14/2018 | DATE |
| CHECKED  |            |      |
| JGR      | 08/14/2018 | DATE |
| APPROVED |            |      |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

| SOUTH DOWNTOWN IMPROVEMENTS |            |               |           |
|-----------------------------|------------|---------------|-----------|
| STRIPING DETAILS            |            |               |           |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: | C2018-051 |
| DATE:                       | 08/14/2018 | SHEET NO.:    | SN07      |

**ESA**

819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM





1. 
2. 
3. 
4. 
5. 

PNF  
BATTERY BACKUP AND SOLAR PANEL, FOR FLASHING  
BEACON, SEE SHEET SN12 FOR DETAILS. USE  
MANUFACTURER AND SYSTEM FROM ODOT GREEN SHEETS.



INSTALL 12" FLASHING YELLOW BEACON.

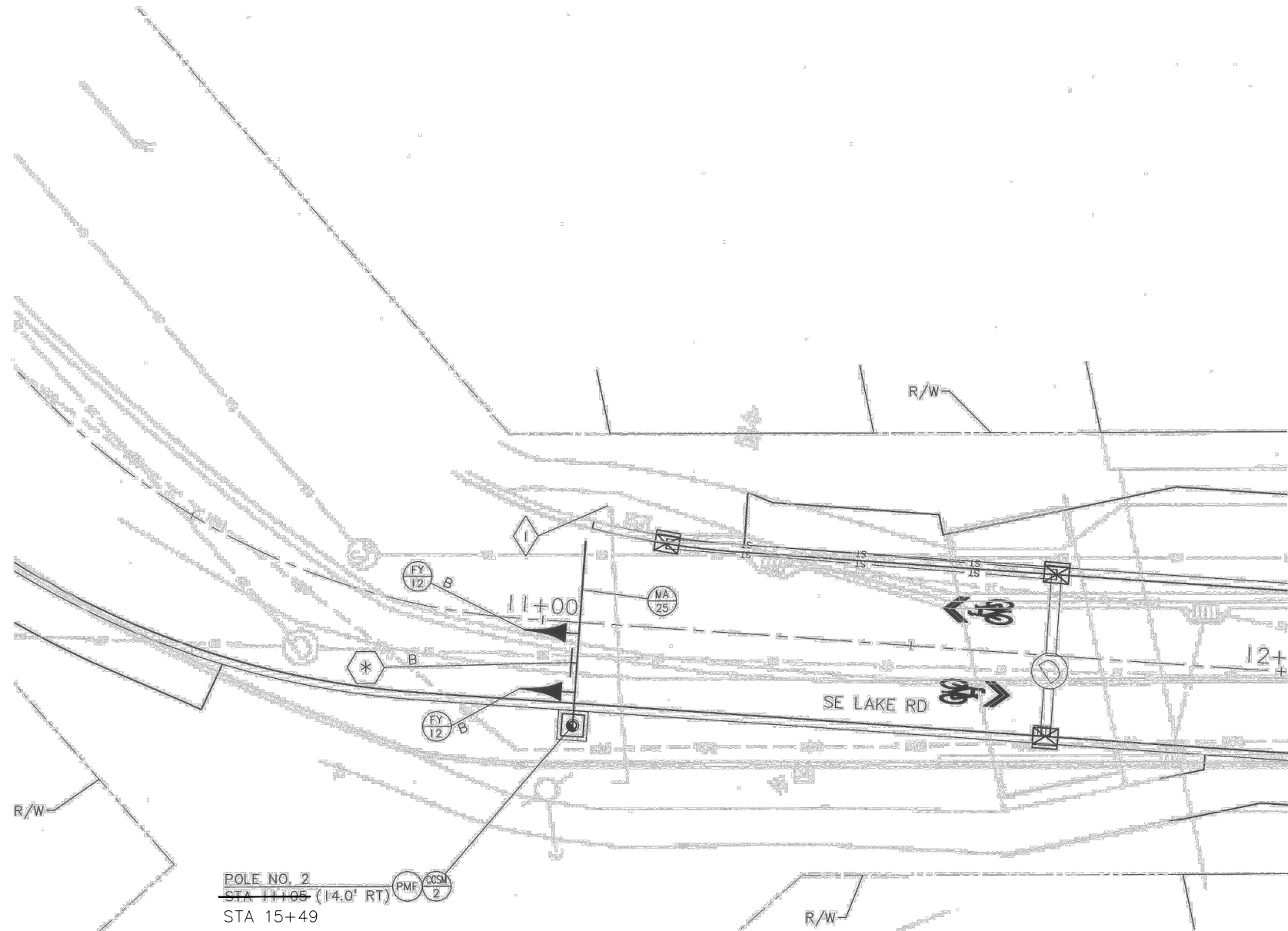
 SEE SIGNING PLANS FOR DETAILS ON SIGN.

CSM  
(T)

INSTALL TYPE (T) TRAFFIC SIGNAL MAST ARM POLE PER CLACKAMAS COUNTY STANDARDS. SEE SHEETS SN12 THROUGH SN13 AND SPECIAL PROVISIONS. FOUNDATION TO BE FLUSH WITH FINISHED GRADE OF SIDEWALK.

 INSTALL (L=LENGTH) FOOT TRAFFIC SIGNAL MAST ARM.

B = ADJUSTABLE BRACKET (NO TENON), PER ODOT BLUE SHEETS.



1 REMOVE EXISTING SIGN STRUCTURE, INCLUDING FOUNDATION, SIGNS, AND SIGNAL INDICATIONS. REMOVE WIRING AND ABANDON EXISTING CONDUIT AND DISCONNECT EXISTING POWER SOURCE, SEE SHEET #### FOR DETAILS.

1. SEE TRAFFIC SIGNAL DETAILS FOR INSTALLATION  
DETAILS, SHEETS SN12 THROUGH SN13

2. FIELD VERIFY SIGNAL POLE AND FOUNDATION DOES NOT CONFLICT WITH EXISTING UTILITIES.

3. USE MATERIALS FROM THE CURRENT VERSION OF THE ODOT BLUE AND GREEN SHEETS. SUBMIT TO CITY FOR APPROVAL, PRIOR TO BEGINNING CONSTRUCTION.

STATION EQUATION 13+75.46 = 18+19.33

[illegible]

TRAFFIC SIGNAL LEGEND CODE

CABINETS

PMF INSTALL POLE MOUNTED SOLAR FLASHER CABINET WITH BATTERY BACKUP AND SOLAR PANEL, FOR FLASHING BEACON. SEE SHEET SN12 FOR DETAILS, USE MANUFACTURER AND SYSTEM FROM ODOT GREEN SHEETS.

SIGNALS

FY 12 INSTALL 12" FLASHING YELLOW BEACON.

SIGNS

\* SEE SIGNING PLANS FOR DETAILS ON SIGN.

POLES

CCSM (T) INSTALL TYPE (T) TRAFFIC SIGNAL MAST ARM POLE PER CLACKAMAS COUNTY STANDARDS. SEE SHEETS SN12 THROUGH SN13 AND SPECIAL PROVISIONS. FOUNDATION TO BE FLUSH WITH FINISHED GRADE OF SIDEWALK.

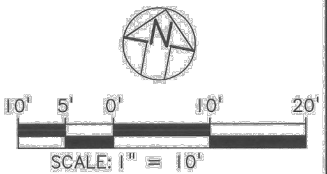
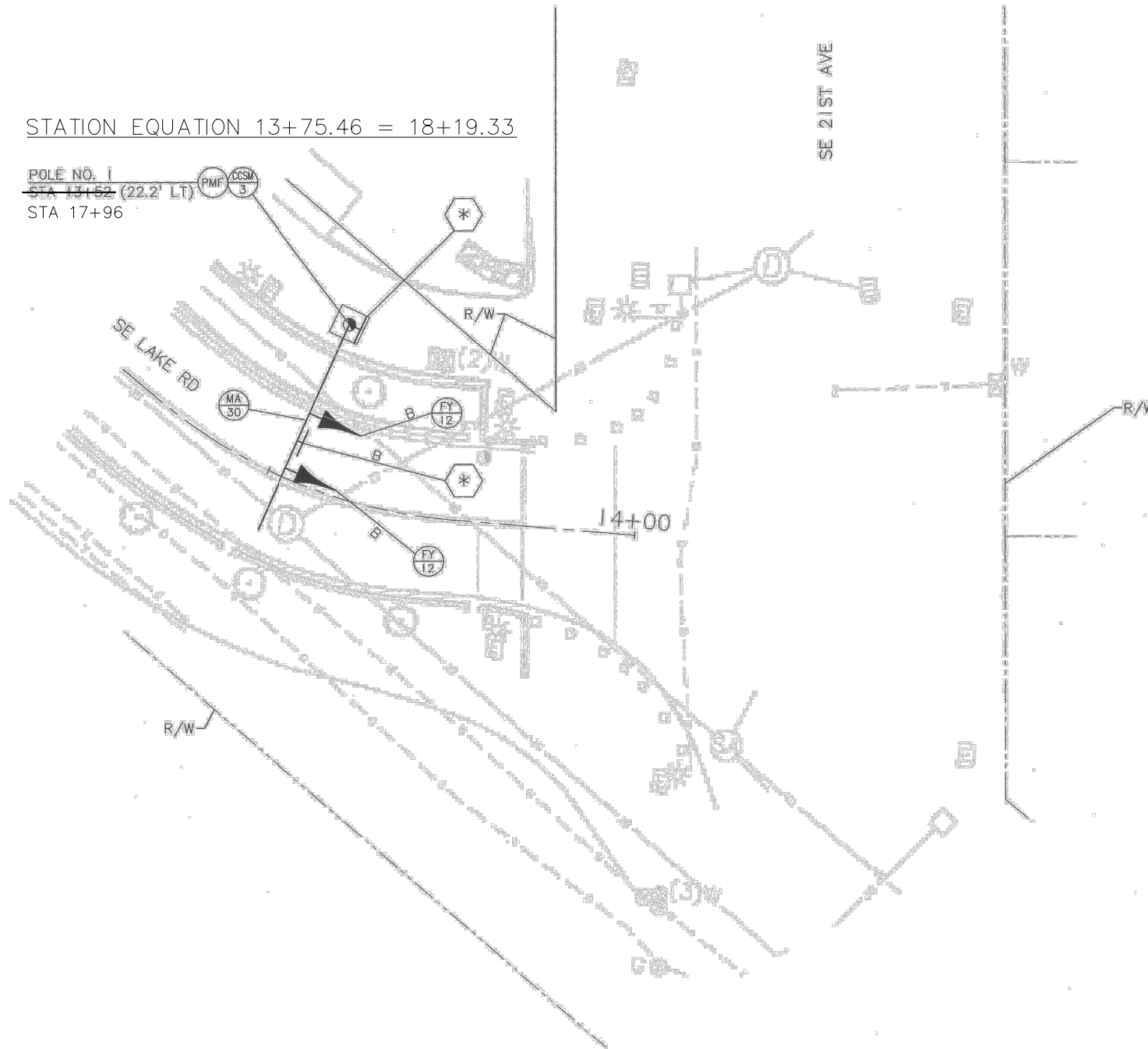
MA L INSTALL (L=LENGTH) FOOT TRAFFIC SIGNAL MAST ARM.

SIGN AND SIGNAL HEAD MOUNTING OPTIONS

B = ADJUSTABLE BRACKET (NO TENON), PER ODOT BLUE SHEETS.

STATION EQUATION  $13+75.46 = 18+19.33$

POLE NO. 1  
STA 13+52 (22.2' LT)  
STA 17+96



NOTE:

- SEE TRAFFIC SIGNAL DETAILS FOR INSTALLATION DETAILS, SHEETS SN12 THROUGH SN13
- FIELD VERIFY SIGNAL POLE AND FOUNDATION DOES NOT CONFLICT WITH EXISTING UTILITIES.
- USE MATERIALS FROM THE CURRENT VERSION OF THE ODOT BLUE AND GREEN SHEETS. SUBMIT TO CITY FOR APPROVAL, PRIOR TO BEGINNING CONSTRUCTION.

X:\Projects\2011\1027-000 TriMet PMLR East Segment Final Design\Lake Road Signing\ACAD\T151K-202.dwg Feb. 01, 2017 9:45 AM mike zorkos  
Plot Date: 2/1/2017 10:08 AM mike zorkos

|     |      |      |       |           |                                      |  |                                                                                        |                 |               |                                                         |  |  |
|-----|------|------|-------|-----------|--------------------------------------|--|----------------------------------------------------------------------------------------|-----------------|---------------|---------------------------------------------------------|--|--|
|     |      |      |       |           | ELV<br>DESIGNED<br>11-11-16<br>DATE  |  | TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON                              |                 |               | LAKE ROAD REALIGNMENT<br>TRAFFIC                        |  |  |
|     |      |      |       |           | DKS CAD<br>DRAWN<br>11-14-16<br>DATE |  | DKS 720 SW Washington St, Suite 500<br>Portland, Oregon 97205<br>www.dksassociates.com |                 |               | CAPITAL PROJECTS<br>DIVISION                            |  |  |
|     |      |      |       |           | NNS<br>CHECKED<br>01-31-17<br>DATE   |  | TRI MET                                                                                |                 |               | 1800 SW FIRST AVE., SUITE 300<br>PORTLAND, OREGON 97201 |  |  |
|     |      |      |       |           | APPROVED<br>DATE                     |  | SUBMITTED: DATE: APPROVED: DATE:                                                       |                 |               | FLASHING BEACON PLAN                                    |  |  |
| NO. | DATE | BY   | APPD. | REVISIONS |                                      |  | SCALE:                                                                                 | PROJECT NUMBER: | CONTRACT NO.: | SHEET NO.:                                              |  |  |
|     |      | CHK. |       |           |                                      |  | AS SHOWN                                                                               | CIP2018         |               | SN10                                                    |  |  |

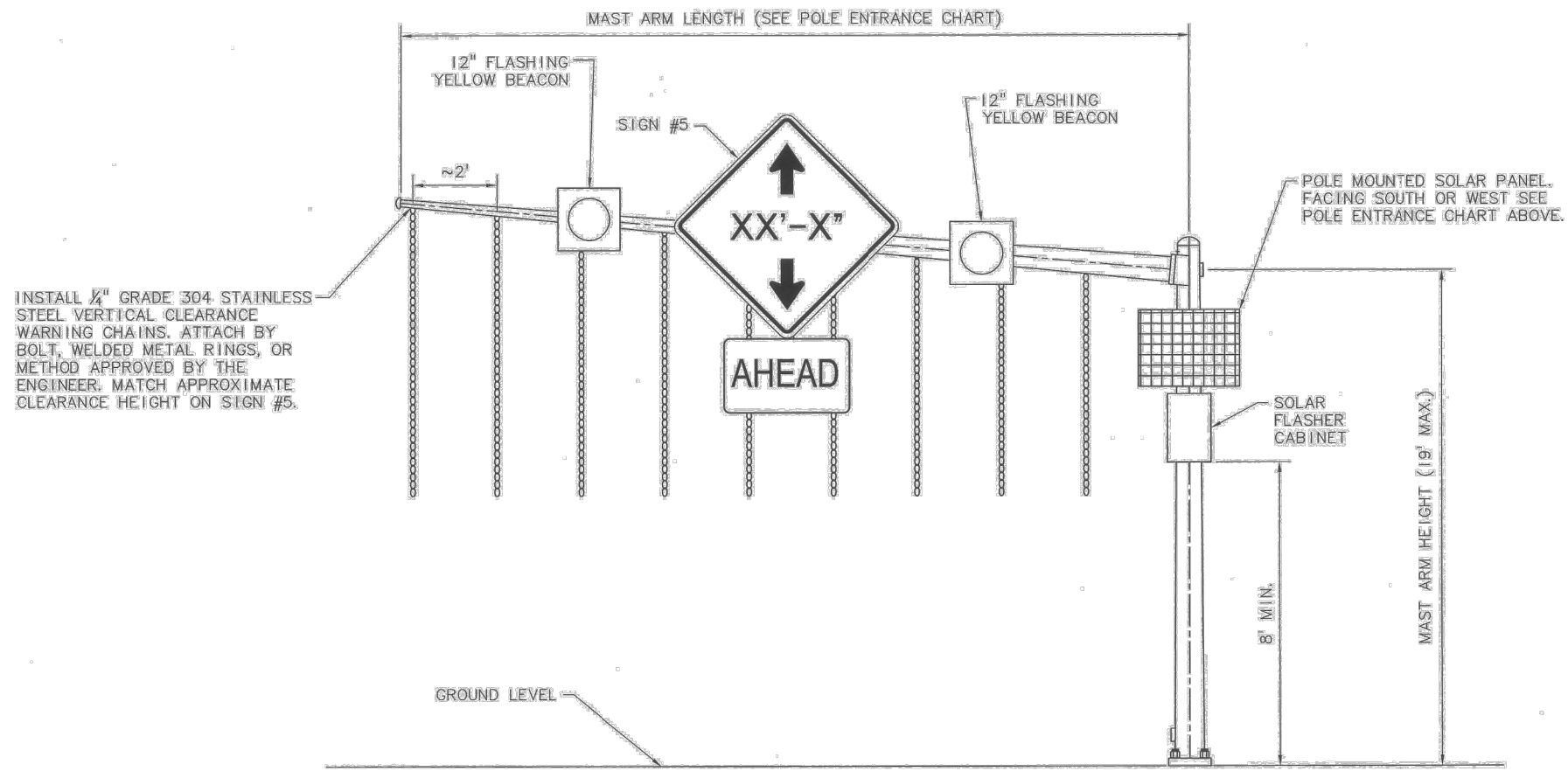




POLE ENTRANCE CHART

|          |          |       | EQUIPMENT ON POLE  |             |                    | EQUIPMENT ON MAST ARM<br>(Length in Feet and Equipment Type) |            |            |            |       |       |       |       |       | FOUNDATION INFORMATION<br>(See Sheet T15LK-206) |                           |
|----------|----------|-------|--------------------|-------------|--------------------|--------------------------------------------------------------|------------|------------|------------|-------|-------|-------|-------|-------|-------------------------------------------------|---------------------------|
| POLE NO. | DWG. NO. | TYPE  | CONTROLLER CABINET | SOLAR PANEL | TERM. CABINET DEG. | ARM LENGTH                                                   | D 1        | D 2        | D 3        | D 4   | D 5   | D 6   | D 7   | D 8   | POLE DESIGNATION                                | REQUIRED FOUNDATION DEPTH |
| 1        | SN10     | CCSM3 | 90                 | 90          | 180                | 30                                                           | 9.0<br>FY  | 13.0<br>SA | 17.0<br>FY | _____ | _____ | _____ | _____ | _____ | CCSM3                                           | 9.5' <sup>1</sup>         |
| 2        | SN09     | CCSM2 | 90                 | 270         | 180                | 25                                                           | 12.5<br>FY | 16.5<br>SA | 20.5<br>FY | _____ | _____ | _____ | _____ | _____ | CCSM2                                           | 8.0' <sup>1</sup>         |
|          |          |       |                    |             |                    |                                                              | _____      | _____      | _____      | _____ | _____ | _____ | _____ | _____ |                                                 |                           |
|          |          |       |                    |             |                    |                                                              | _____      | _____      | _____      | _____ | _____ | _____ | _____ | _____ |                                                 |                           |
|          |          |       |                    |             |                    |                                                              | _____      | _____      | _____      | _____ | _____ | _____ | _____ | _____ |                                                 |                           |
|          |          |       |                    |             |                    |                                                              | _____      | _____      | _____      | _____ | _____ | _____ | _____ | _____ |                                                 |                           |
|          |          |       |                    |             |                    |                                                              | _____      | _____      | _____      | _____ | _____ | _____ | _____ | _____ |                                                 |                           |
|          |          |       |                    |             |                    |                                                              | _____      | _____      | _____      | _____ | _____ | _____ | _____ | _____ |                                                 |                           |
|          |          |       |                    |             |                    |                                                              | _____      | _____      | _____      | _____ | _____ | _____ | _____ | _____ |                                                 |                           |
|          |          |       |                    |             |                    |                                                              | _____      | _____      | _____      | _____ | _____ | _____ | _____ | _____ |                                                 |                           |

BRACKET MOUNT  
FY = 12" LED FLASHING YELLOW BEACON  
SA = SIGN, ALUMINUM WITH ADJUSTABLE BRACKET MOUNT

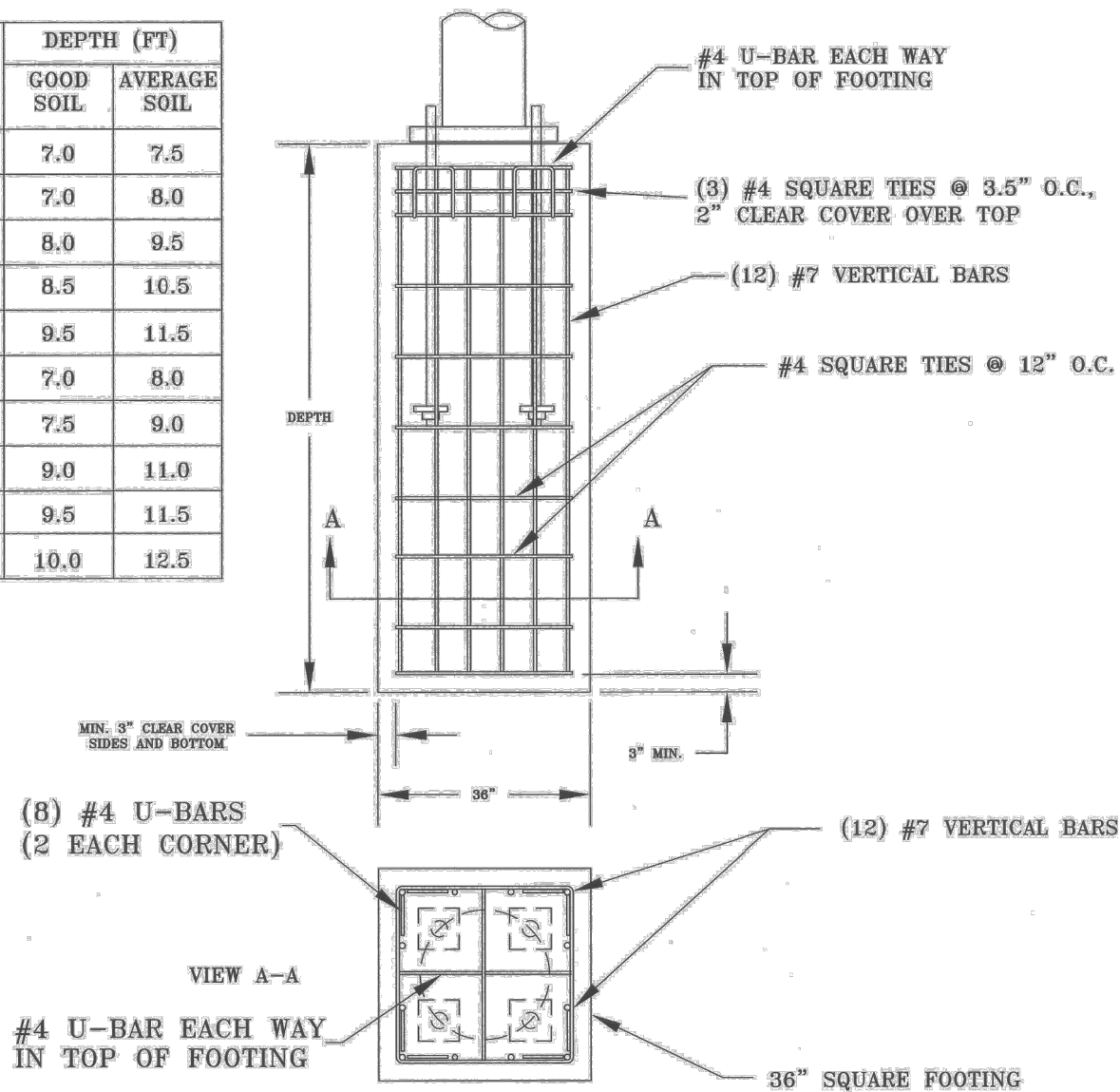


X:\Projects\2017\1027-000 TriMet PMLR East Segment Final Design\ACAD\T15LK-204.dwg (Feb. 01, 2017 - 9:55 AM) mike zorkas  
Plot Date: 2/1/2017 10:11 AM mike zorkas

|     |      |      |       |           |                                      |  |  |                                                                                        |  |  |  |                                                                                         |  |  |  |  |
|-----|------|------|-------|-----------|--------------------------------------|--|--|----------------------------------------------------------------------------------------|--|--|--|-----------------------------------------------------------------------------------------|--|--|--|--|
|     |      |      |       |           | ELV<br>DESIGNED<br>11-11-16<br>DATE  |  |  | TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON                              |  |  |  | LAKE ROAD REALIGNMENT<br>TRAFFIC                                                        |  |  |  |  |
|     |      |      |       |           | DKS CAD<br>DRAWN<br>11-14-16<br>DATE |  |  | DKS 720 SW Washington St, Suite 500<br>Portland, Oregon 97205<br>www.dksassociates.com |  |  |  | CAPITAL PROJECTS<br>DIVISION<br>1800 SW FIRST AVE., SUITE 300<br>PORTLAND, OREGON 97201 |  |  |  |  |
|     |      |      |       |           | NNS<br>CHECKED<br>01-31-17<br>DATE   |  |  | TRI MET                                                                                |  |  |  | SIGNAL DETAILS                                                                          |  |  |  |  |
|     |      |      |       |           | APPROVED<br>DATE                     |  |  | SUBMITTED: DATE: APPROVED: DATE:                                                       |  |  |  | SCALE: AS SHOWN PROJECT NUMBER: CIP2018 CONTRACT NO.: SHEET NO.: SN12                   |  |  |  |  |
| NO. | DATE | BY   | APPD. | REVISIONS |                                      |  |  |                                                                                        |  |  |  |                                                                                         |  |  |  |  |
|     |      | CHK. |       |           |                                      |  |  |                                                                                        |  |  |  |                                                                                         |  |  |  |  |

X:\Projects\2011\PI\1027-000 (Trimet PMLR East Segment Final Design)\Lake Road Signing\CAD\TISLK-206.dwg Jan. 31, 2017 - 9:28 AM mike zarkos  
Plot Date: 2/1/2017 10:13 AM mike zarkos

| POLE<br>DESIGATION | DEPTH (FT)   |                 |
|--------------------|--------------|-----------------|
|                    | GOOD<br>SOIL | AVERAGE<br>SOIL |
| CCSM1              | 7.0          | 7.5             |
| CCSM2              | 7.0          | 8.0             |
| CCSM3              | 8.0          | 9.5             |
| CCSM4              | 8.5          | 10.5            |
| CCSM5              | 9.5          | 11.5            |
| CCSM1L             | 7.0          | 8.0             |
| CCSM2L             | 7.5          | 9.0             |
| CCSM3L             | 9.0          | 11.0            |
| CCSM4L             | 9.5          | 11.5            |
| CCSM5L             | 10.0         | 12.5            |



#### NOTES:

1. Vertical steel bars should be equally spaced around the perimeter of the footing allowing for a minimum of 3" of concrete cover over the ties.
2. Vertical steel shall be ASTM A615 Gr 60 (rebar).
3. Minimum concrete strength,  $f'_c = 3,000$  psi
4. Concrete shall be poured against undisturbed soil. If the top layer of the soil is disturbed it shall be discounted and the footing depth shall be increased accordingly.
5. The top 4" shall be placed (using concrete or a non-shrinking grout) after installing the pole and appurtenances.

| NO.         | REVISION                 | DATE      | <div><div><b>CLACKAMAS COUNTY</b><br/>DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT<br/>901 SE SUNNYBROOK BLVD. CLACKAMAS, OREGON</div></div> <div><b>CLACKAMAS COUNTY MAST ARM<br/>FOUNDATION STANDARD</b></div> <table><tr><th>DESIGNED BY</th><th>DATE</th><th>DRAWN BY</th><th>DATE</th></tr><tr><td>D. EMSLIE</td><td>3/21/07</td><td>D. EMSLIE</td><td>3/21/07</td></tr></table> |  |  |  | DESIGNED BY | DATE | DRAWN BY | DATE | D. EMSLIE | 3/21/07 | D. EMSLIE | 3/21/07 | DRAWING NUMBER |
|-------------|--------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|-------------|------|----------|------|-----------|---------|-----------|---------|----------------|
| DESIGNED BY | DATE                     | DRAWN BY  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  | DATE        |      |          |      |           |         |           |         |                |
| D. EMSLIE   | 3/21/07                  | D. EMSLIE |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  | 3/21/07     |      |          |      |           |         |           |         |                |
| 1           | FOUNDATION DEPTH UPDATED | 11/19/07  | NWS4710                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           | SHEET 1 OF 1                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |
|             |                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |  |             |      |          |      |           |         |           |         |                |

|     |      |            |       |           |                                      |  |                                                                                       |                                                                                       |                                                                                    |           |                                                                                       |                                                                                         |                    |                            |                     |                    |
|-----|------|------------|-------|-----------|--------------------------------------|--|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------|----------------------------|---------------------|--------------------|
|     |      |            |       |           | ELV<br>DESIGNED<br>11-11-16<br>DATE  |  |  | TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON                             |                                                                                    |           |                                                                                       | LAKE ROAD REALIGNMENT<br>TRAFFIC                                                        |                    |                            |                     |                    |
|     |      |            |       |           | DKS CAD<br>DRAWN<br>11-14-16<br>DATE |  |                                                                                       |  | 720 SW Washington St, Suite 500<br>Portland, Oregon 97209<br>www.dksassociates.com |           |  | CAPITAL PROJECTS<br>DIVISION<br>1800 SW FIRST AVE., SUITE 300<br>PORTLAND, OREGON 97201 |                    | SIGNAL DETAILS             |                     |                    |
|     |      |            |       |           | NNS<br>CHECKED<br>01-31-17<br>DATE   |  |                                                                                       |                                                                                       |                                                                                    |           |                                                                                       |                                                                                         |                    |                            |                     |                    |
|     |      |            |       |           | APPROVED<br>DATE                     |  |                                                                                       |                                                                                       |                                                                                    |           |                                                                                       |                                                                                         |                    |                            |                     |                    |
| NO. | DATE | BY<br>CHK. | APPD. | REVISIONS |                                      |  | SUBMITTED:                                                                            |                                                                                       | DATE:                                                                              | APPROVED: |                                                                                       | DATE:                                                                                   | SCALE:<br>AS SHOWN | PROJECT NUMBER:<br>CIP2018 | CONTRACT NO.:<br>-- | SHEET NO.:<br>SN13 |

U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 LT.dwg Aug. 15, 2018 -- 5:00 PM alaina floor  
Plot Date: 8/15/2018 5:49 PM alaina floor

D  
C  
B  
A

1

2

3

4

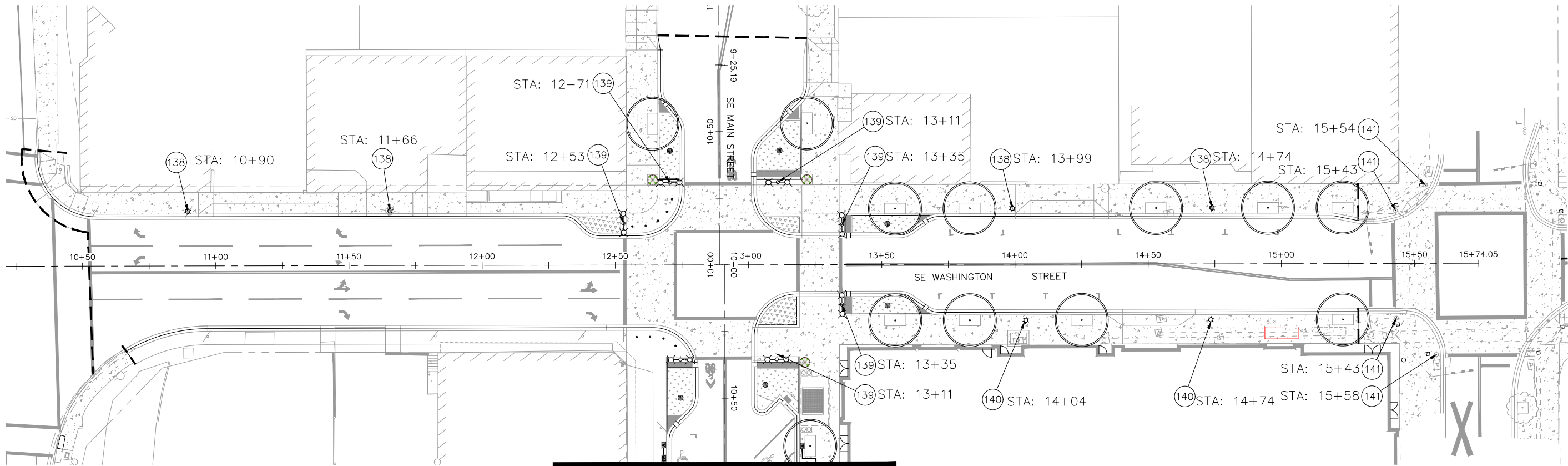
5

6

7

STREET LIGHT CONSTRUCTION NOTES:

- 138 INSTALL SINGLE HEAD LUMINAIRE FOUNDATION.
- 139 INSTALL DOUBLE HEAD LUMINAIRE FOUNDATION.
- 140 LUMINAIRE TO BE INSTALLED BY OTHERS
- 141 EXISTING LUMINAIRE TO REMAIN.
- 142 REMOVE AND REUSE LUMINAIRE BASE. REPLACE LUMINAIRE HEAD.



MATCH LINE — SEE SHEET LT02



SCALE  
0 20 40 FEET  
1 INCH = 20 FEET



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

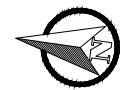
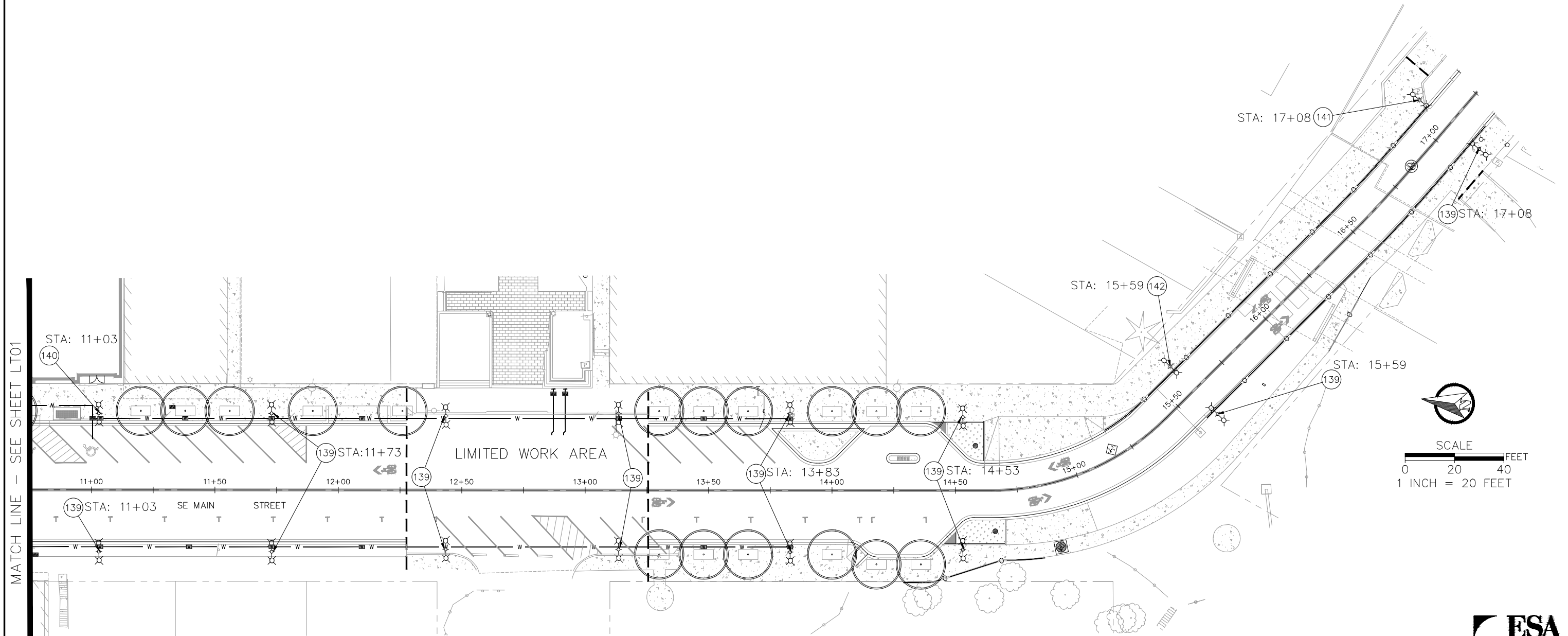
SOUTH DOWNTOWN IMPROVEMENTS

STREET LIGHTING PLAN

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: LT01 |
|----------------------|-------------------------|------------------|-----------------|



|     |                                                          |
|-----|----------------------------------------------------------|
| 138 | INSTALL SINGLE HEAD LUMINAIRE FOUNDATION                 |
| 139 | INSTALL DOUBLE HEAD LUMINAIRE FOUNDATION                 |
| 140 | LUMINAIRE TO BE INSTALLED BY OTHERS                      |
| 141 | EXISTING LUMINAIRE TO REMAIN.                            |
| 142 | REMOVE AND REUSE LUMINAIRE BASE. REPLACE LUMINAIRE HEAD. |



SCALE

0 20 40 FEET

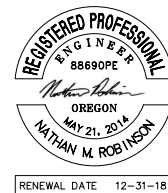
1 INCH = 20 FEET



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

|     |          |     |             |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| NO. | DATE     | BY  | REVISIONS   |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |

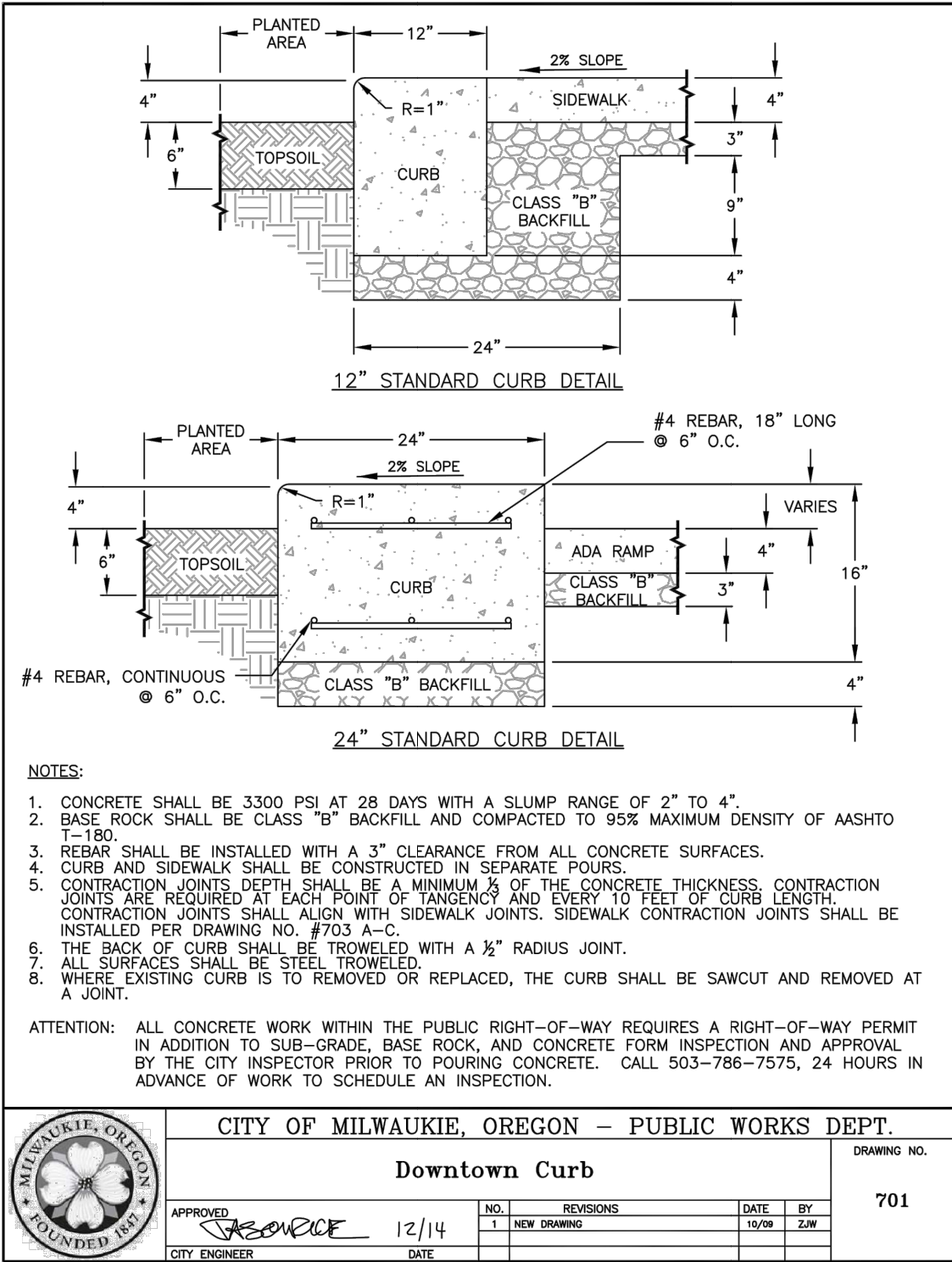
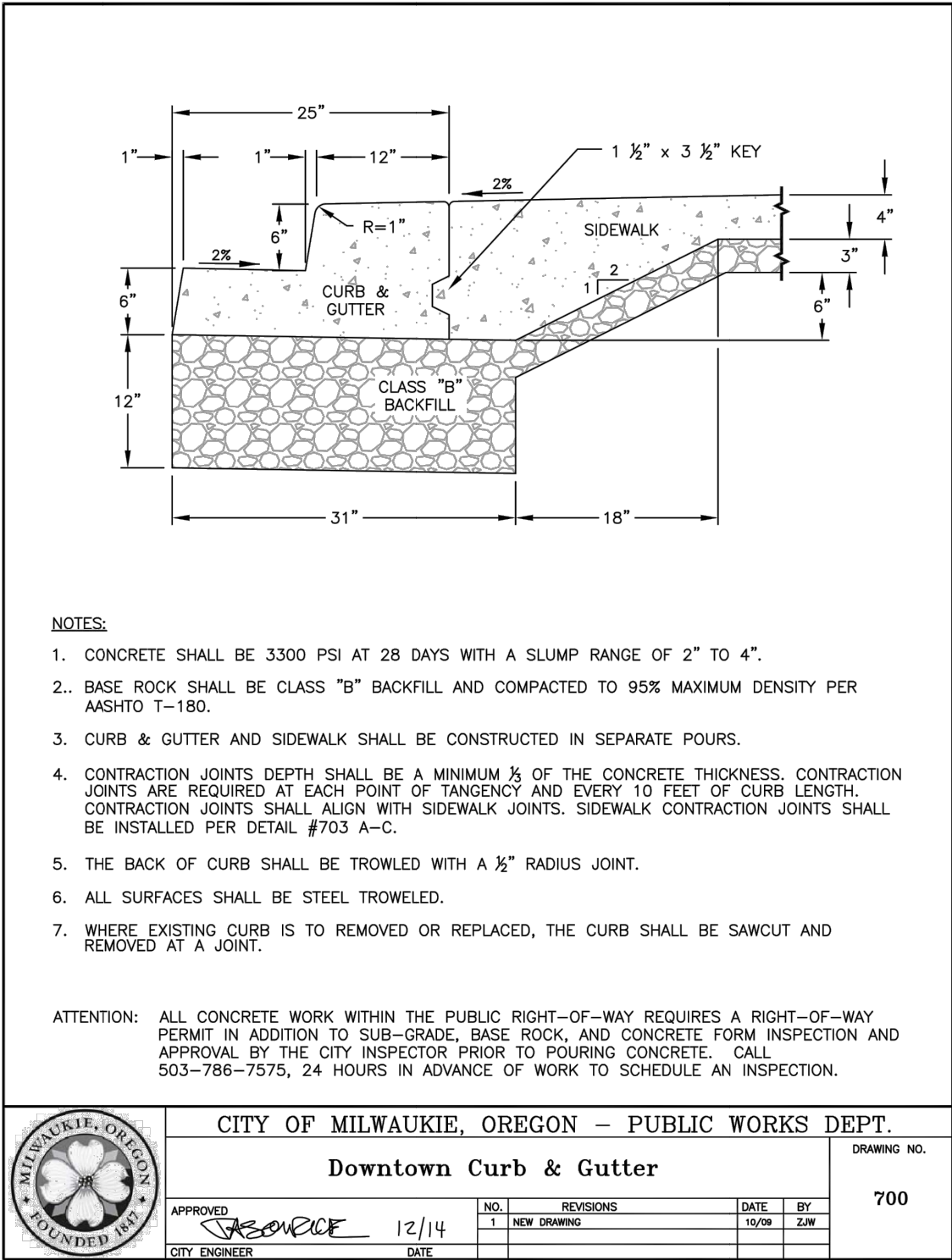


CITY OF MILWAUKIE

PHONE: 503-786-7600  
FAX: 503-774-8236

## STREET LIGHTING PLAN

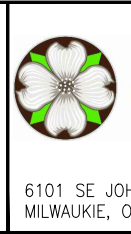
|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: LT02 |
|----------------------|-------------------------|------------------|-----------------|



|     |          |     |             |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| NO. | DATE     | BY  | REVISIONS   |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |





CITY OF MILWAUKIE

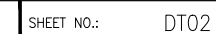
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

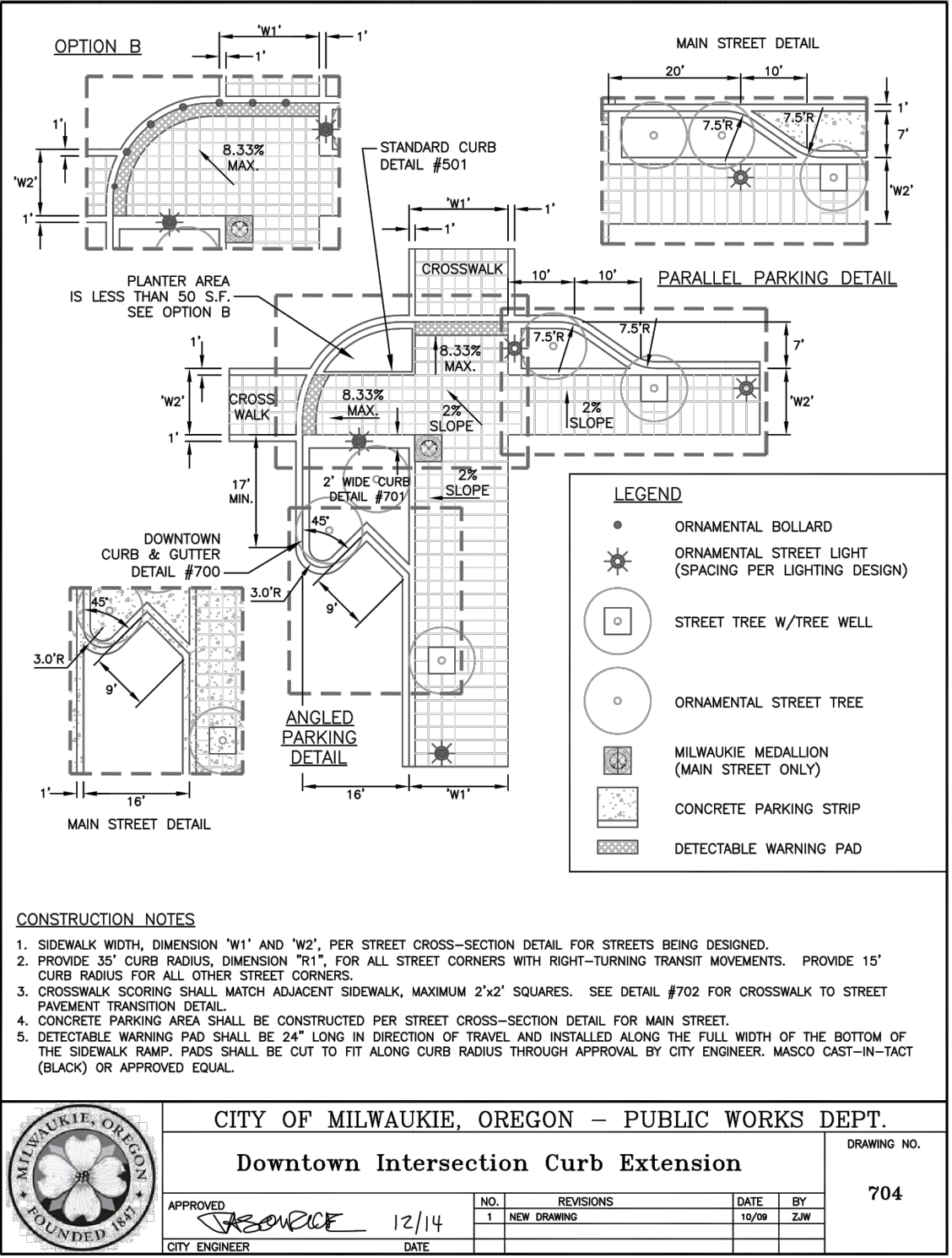
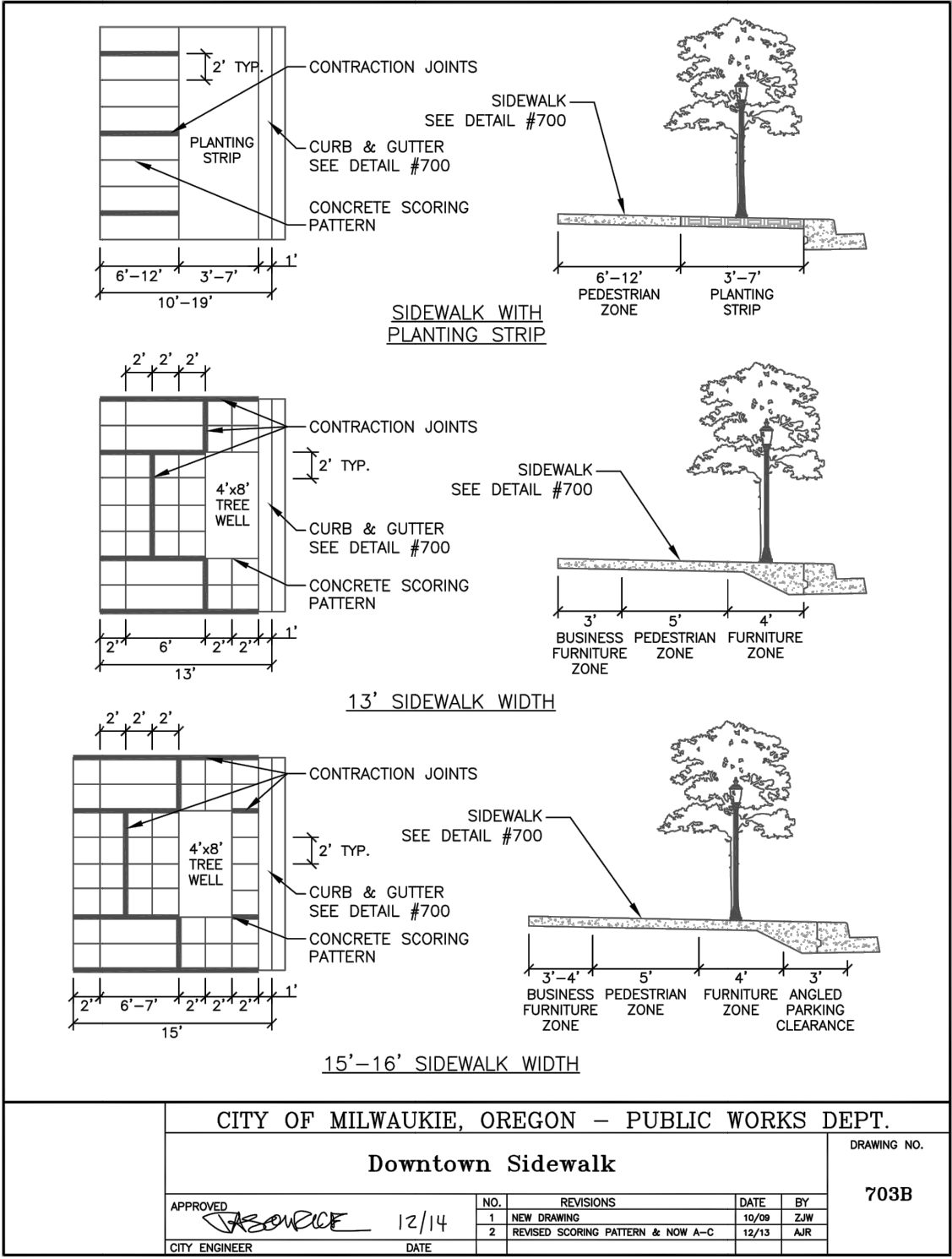
|                             |            |               |           |
|-----------------------------|------------|---------------|-----------|
| SOUTH DOWNTOWN IMPROVEMENTS |            |               |           |
| STREET DETAILS              |            |               |           |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: | C2018-051 |
| DATE:                       | 08/14/2018 | SHEET NO.:    | DT01      |



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM







| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |





# CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

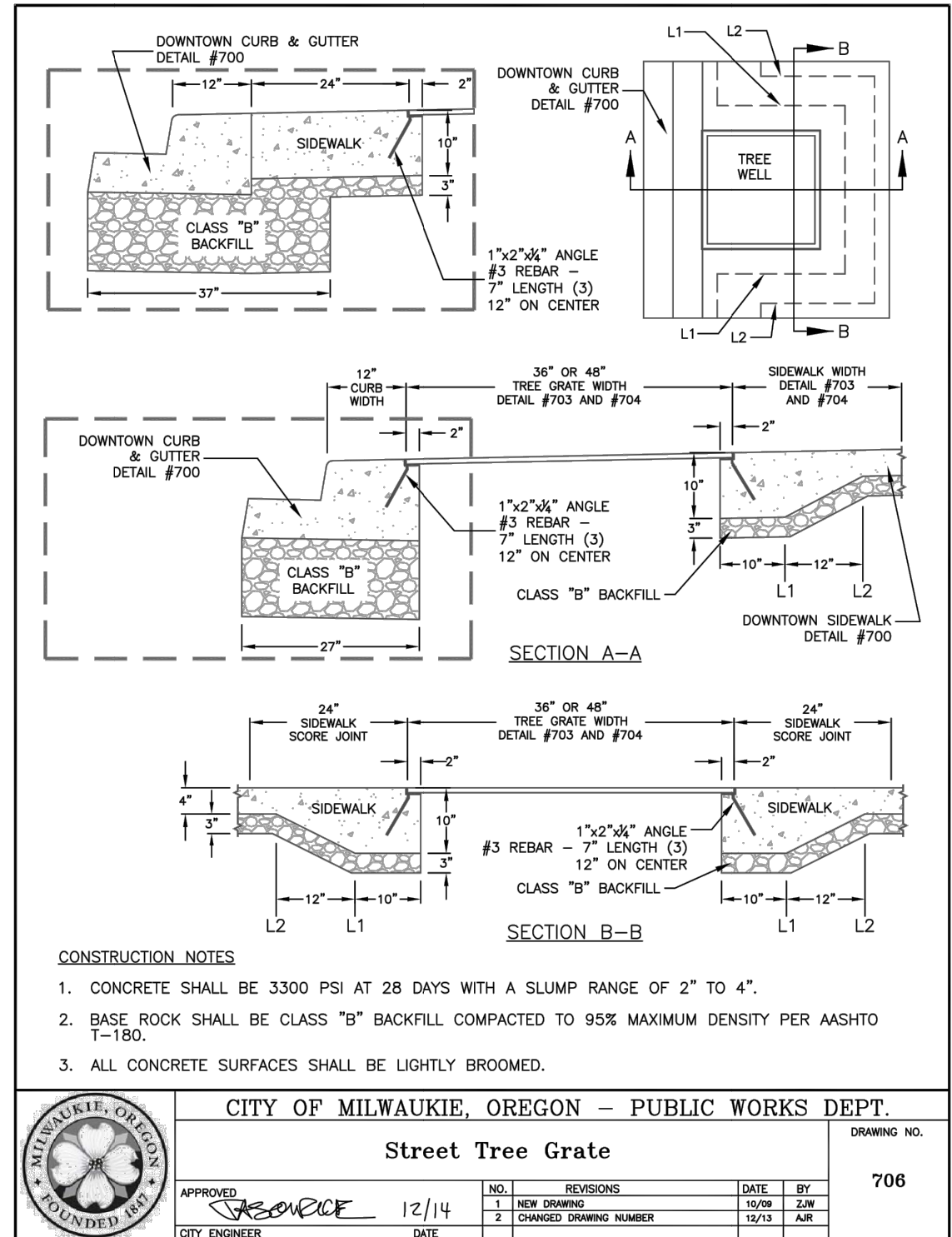
## SOUTH DOWNTOWN IMPROVEMENTS

### STREET DETAILS

|              |         |               |           |       |            |            |      |
|--------------|---------|---------------|-----------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | C2018-051 | DATE: | 08/14/2018 | SHEET NO.: | DT03 |
|--------------|---------|---------------|-----------|-------|------------|------------|------|



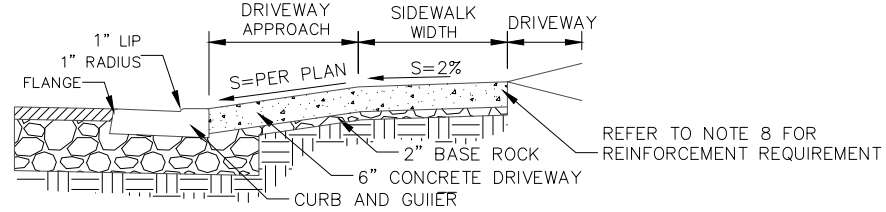
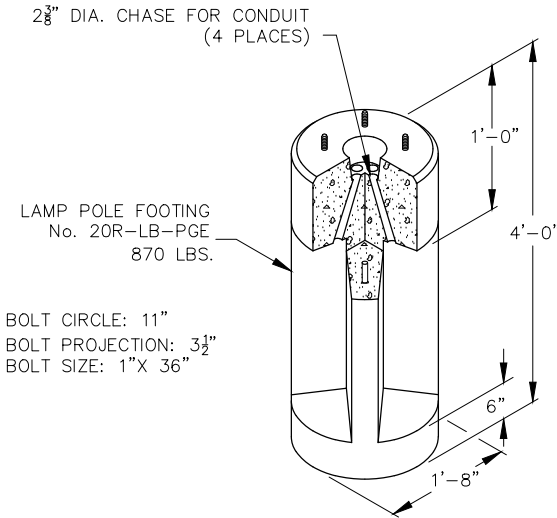
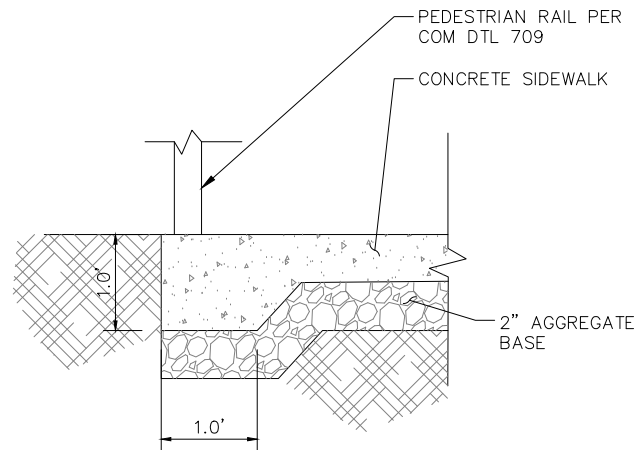
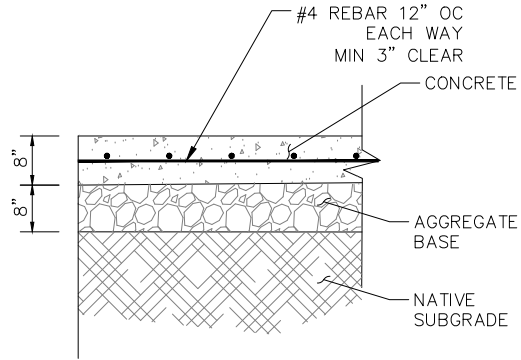
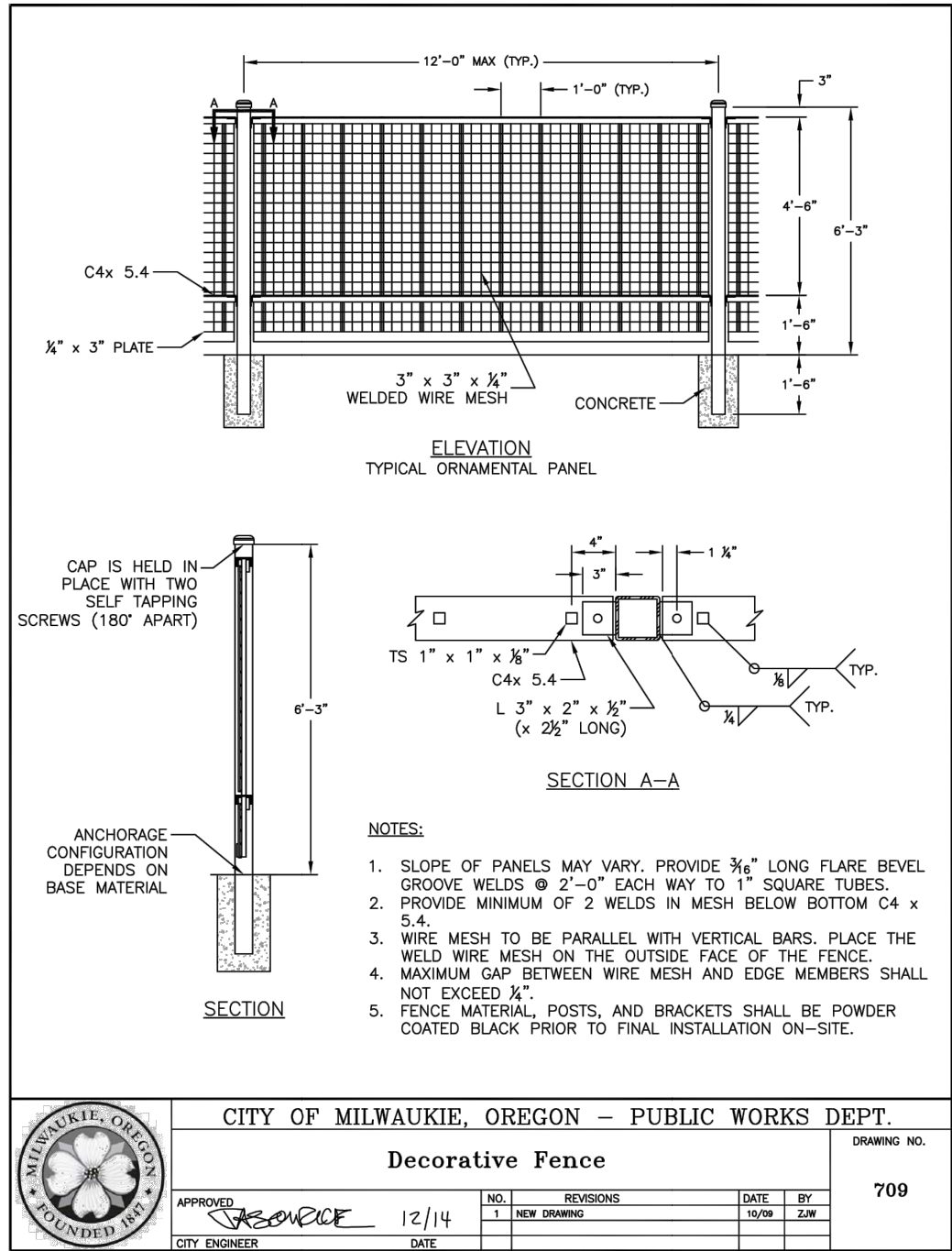
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE: 503.274.2010  
WWW.ESASSOC.COM



|                             |            |               |           |
|-----------------------------|------------|---------------|-----------|
| SOUTH DOWNTOWN IMPROVEMENTS |            |               |           |
| STREET DETAILS              |            |               |           |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: | C2018-051 |
| DATE:                       | 08/14/2018 | SHEET NO.:    | DT04      |

U:\PROJECTS\PD\X\Projects\2017\0170195.00 City of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 DT.dwg Aug. 15, 2018 -- 4:31 PM alaina floor  
Plot Date: 8/15/2018 5:50 PM alaina floor

D  
C  
B  
A



1. CONTRACTION JOINTS SHALL BE 1/8" TO 1/4" WIDE DEPTH OF THE JOINT SHALL BE A MINIMUM OF 1/3 THE THICKNESS OF THE CONCRETE.
2. ALL SURFACES SHALL BE LIGHTLY BROOMED. ALL EDGES SHALL BE TOOL ROUNDED AND SHINED 3" AFTER BROOMING.
3. SAW CUT EXISTING CURBS THAT ARE TO BE REMOVED TO THE NEAREST JOINT.
4. EXISTING ASPHALT CONCRETE IN FRONT OF THE APPROACH SHALL BE SAW CUT ALONG A LINE PARALLEL TO THE CURB AT A MINIMUM DISTANCE OF 24" AWAY FROM THE FACE OF THE CURB AND REPLACED WITH HOT MIX ASPHALT CONCRETE WITH MINIMUM THICKNESS OF 4" OR MATCH EXISTING, WHICHEVER IS GREATER.
5. CONCRETE SHALL BE 3300 PSI AT 28 DAYS WITH A SLUMP RANGE OF 2" TO 4".
6. CURB JOINT SHALL BE A TROWLED JOINT WITH A MINIMUM 1/2" RADIUS ALONG THE BACK OF CURB.
7. CONCRETE PANELS SHOULD BE SQUARE (4'x4', 5'x5', ETC.). IN NO CASE SHALL THE LENGTH OF A CONCRETE PANEL BE GREATER THAN 1.5 TIMES THE WIDTH AND VICE VERSA.
8. COMMERCIAL DRIVEWAY APRONS AND ADJACENT SIDEWALK REQUIRE #4 REBAR, 12" ON-CENTER IN EACH DIRECTION. THE APRON REBAR SHALL BE ADEQUATELY TIED TO THE CURB REBAR.



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|     |            |          |      |
|-----|------------|----------|------|
| NMR | 08/14/2018 | DESIGNED | DATE |
| AMF | 08/14/2018 | DRAFTED  | DATE |
| JGR | 08/14/2018 | CHECKED  | DATE |
| JGR | 08/14/2018 | APPROVED | DATE |



**CITY OF MILWAUKIE**

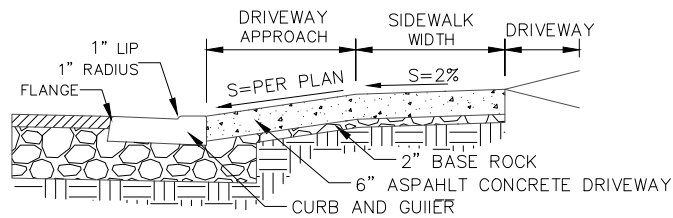
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

| SOUTH DOWNTOWN IMPROVEMENTS |                         |                  |                 |
|-----------------------------|-------------------------|------------------|-----------------|
| STREET DETAILS              |                         |                  |                 |
| PROJECT NO.: CIP2018        | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: DT05 |



U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 DT2.dwg Aug. 15, 2018 - 4:30 PM alaina floor  
Plot Date: 8/15/2018 5:50 PM alaina floor



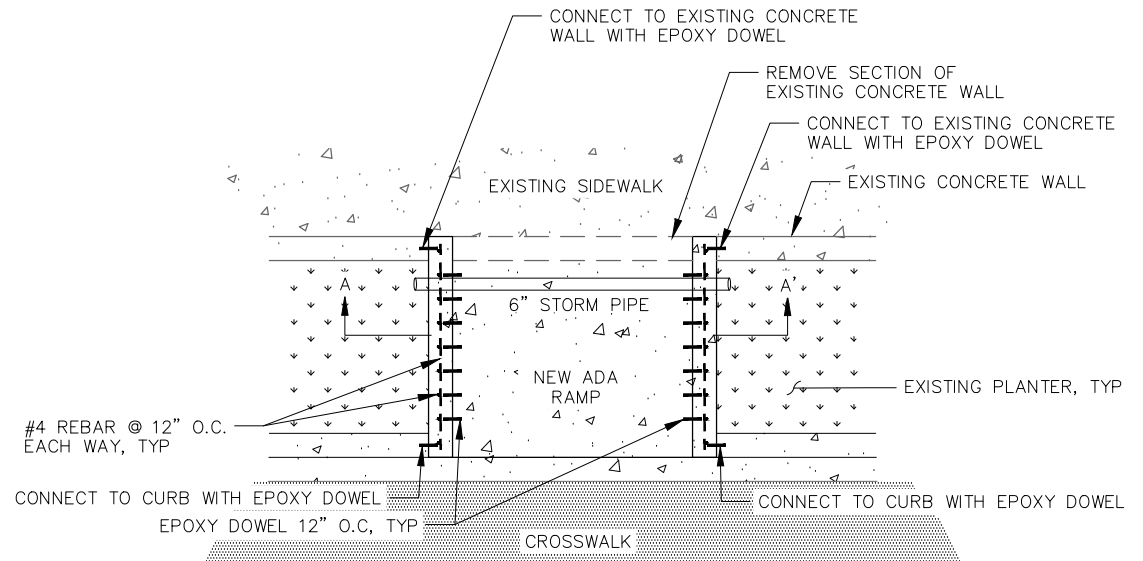
ASPHALT CONCRETE DRIVEWAY  
NTS

2

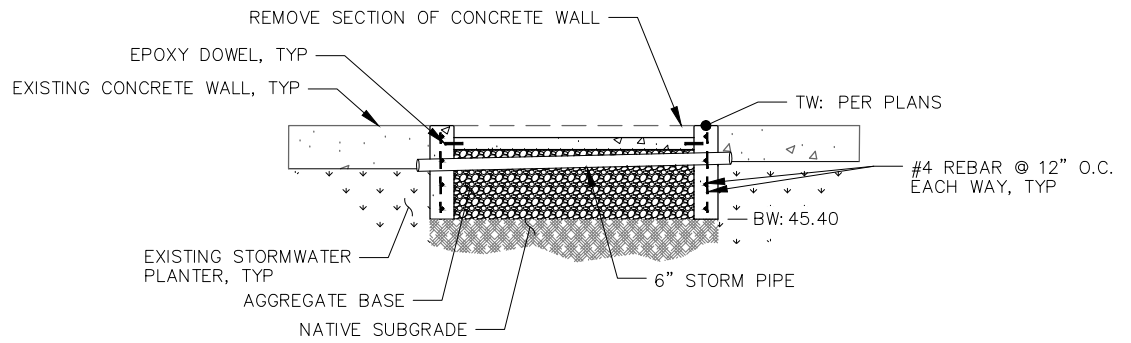
NTS

NOT USED

1



PLAN



ADA RAMP AT PLANTER  
NTS

3

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

## SOUTH DOWNTOWN IMPROVEMENTS

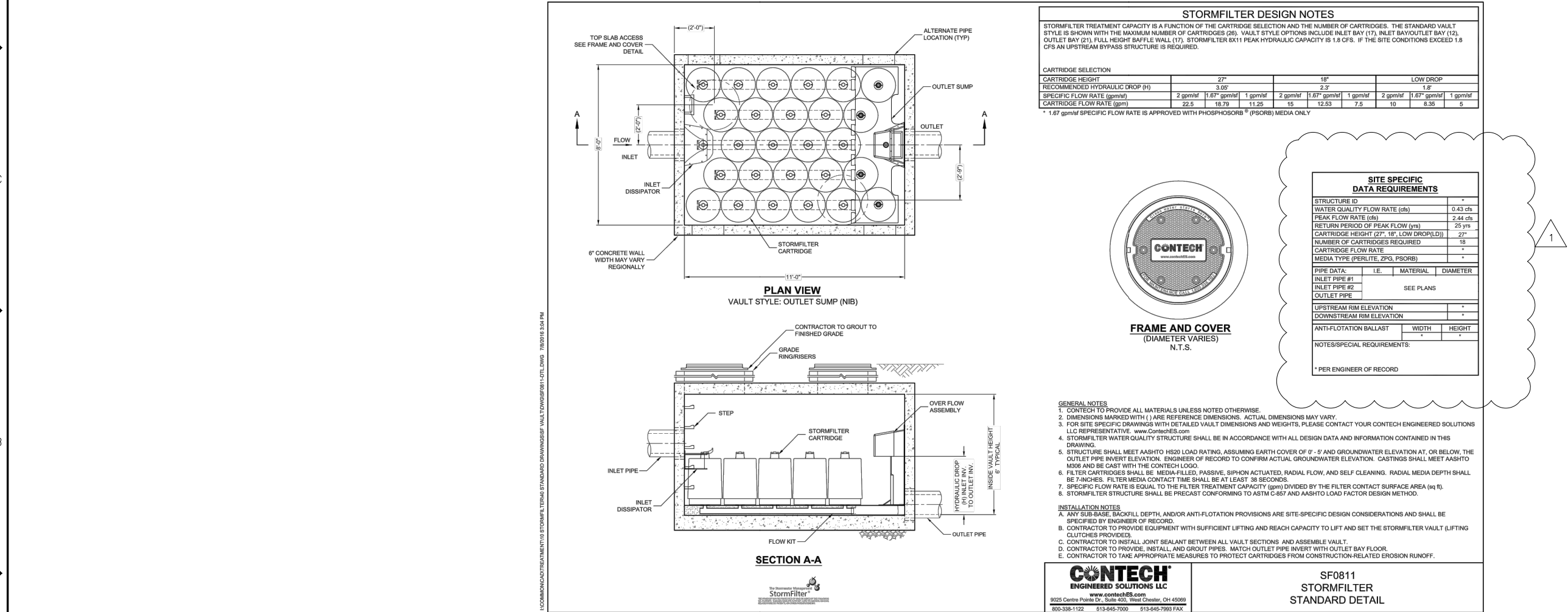
### FENCE DETAILS

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: DT06 |
|----------------------|-------------------------|------------------|-----------------|



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

U:\PROJECTS\PD\Projects\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\20171736 SD2.dwg Sep. 07, 2018 - 10:01 AM christian french  
Plot Date: 9/7/2018 10:03 AM \_christian french



NOTE:

COORDINATE WITH CONTECH (503-258-3162) FOR PROJECT SPECIFIC PRODUCT DETAILS.

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 5   | 09/07/18 |     | ADDENDUM 1  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



 **CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

| SOUTH DOWNTOWN IMPROVEMENTS |            |               |           |
|-----------------------------|------------|---------------|-----------|
| CONTECH STORMWATER VAULT    |            |               |           |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: | C2018-051 |
| DATE:                       | 08/14/2018 | SHEET NO.:    | DT07      |

  
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASOC.COM

U:\PROJECTS\PD\Projects\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017\T36 SD2.dwg Sep. 07, 2018 - 10:01 AM christian french  
Plot Date: 9/7/2018 10:03 AM christian french

NOTE:

COORDINATE WITH CONTECH (503-258-3162) FOR PROJECT SPECIFIC PRODUCT DETAILS.

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 5   | 09/07/18 |     | ADDENDUM 1  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

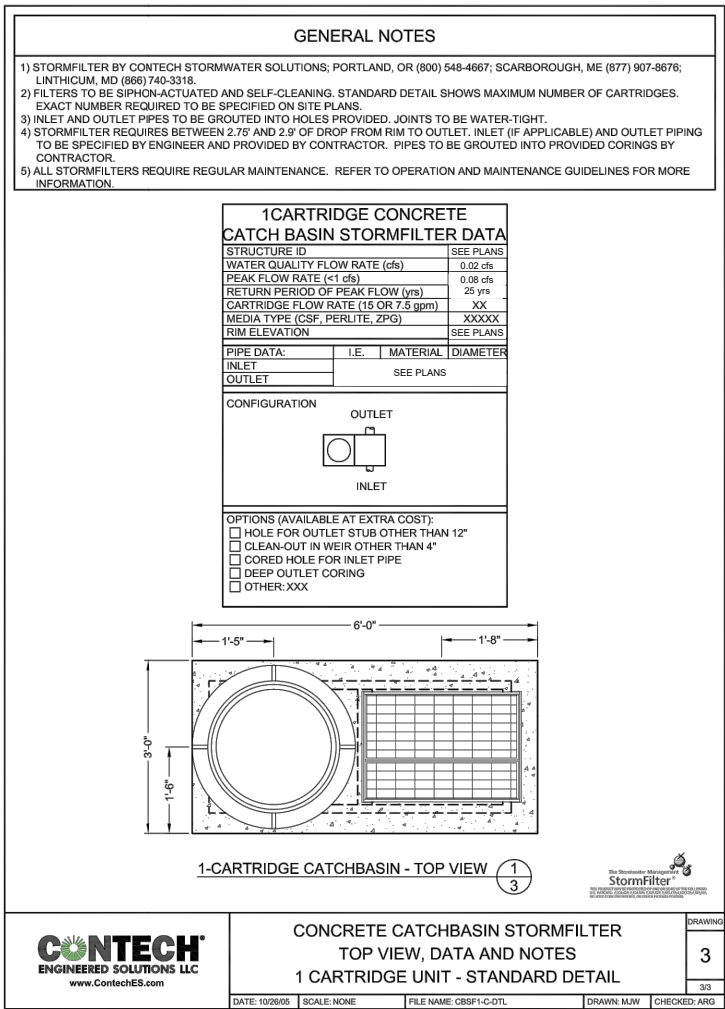
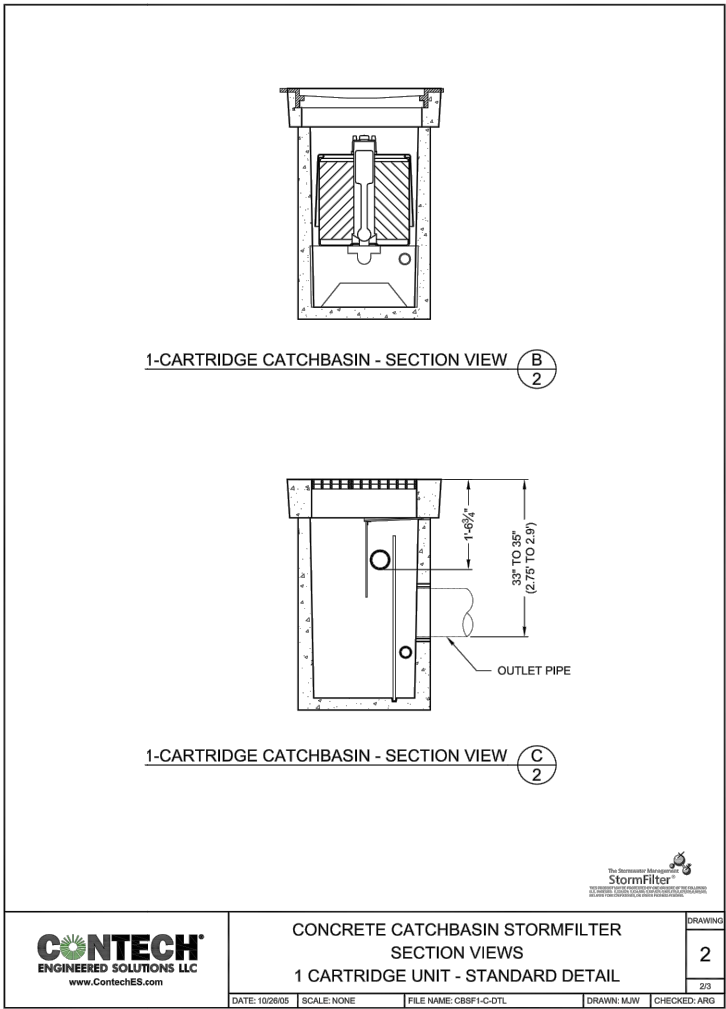
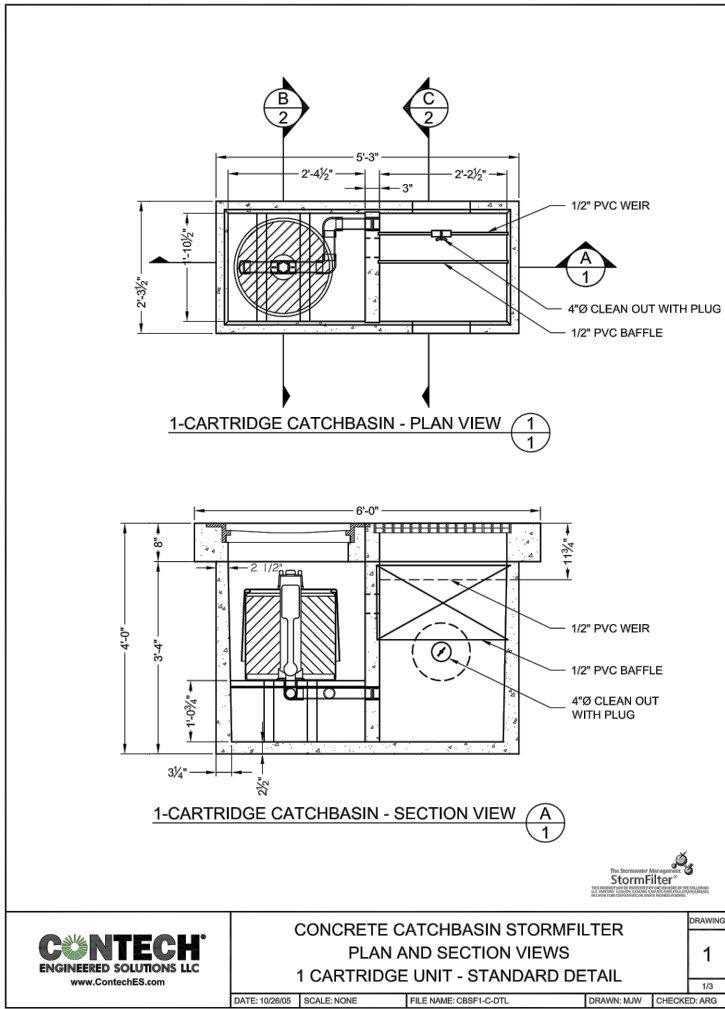
6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

CONTECH STORMWATER CATCH BASIN

|              |         |               |           |       |            |            |      |
|--------------|---------|---------------|-----------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | C2018-051 | DATE: | 08/14/2018 | SHEET NO.: | DT08 |
|--------------|---------|---------------|-----------|-------|------------|------------|------|



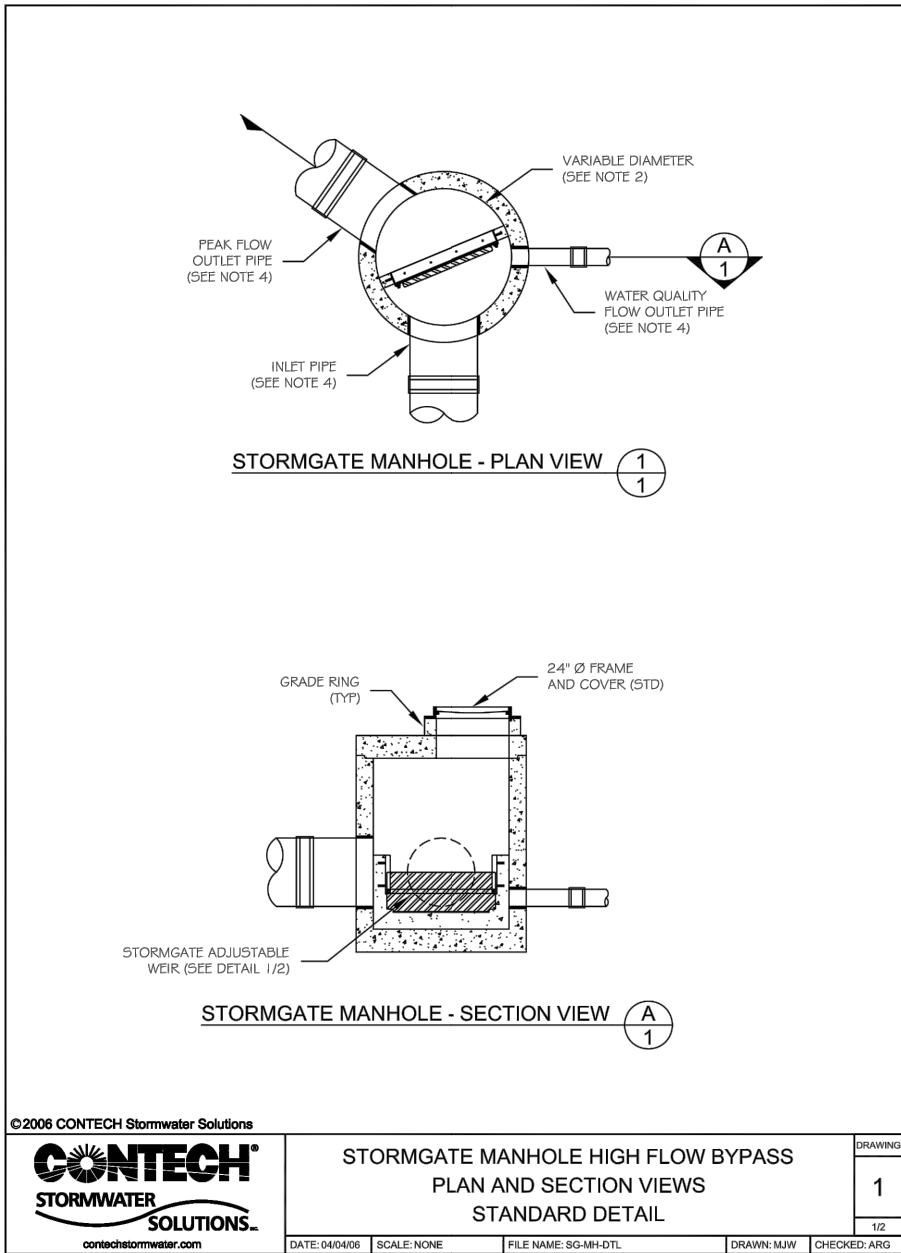
1



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASOC.COM

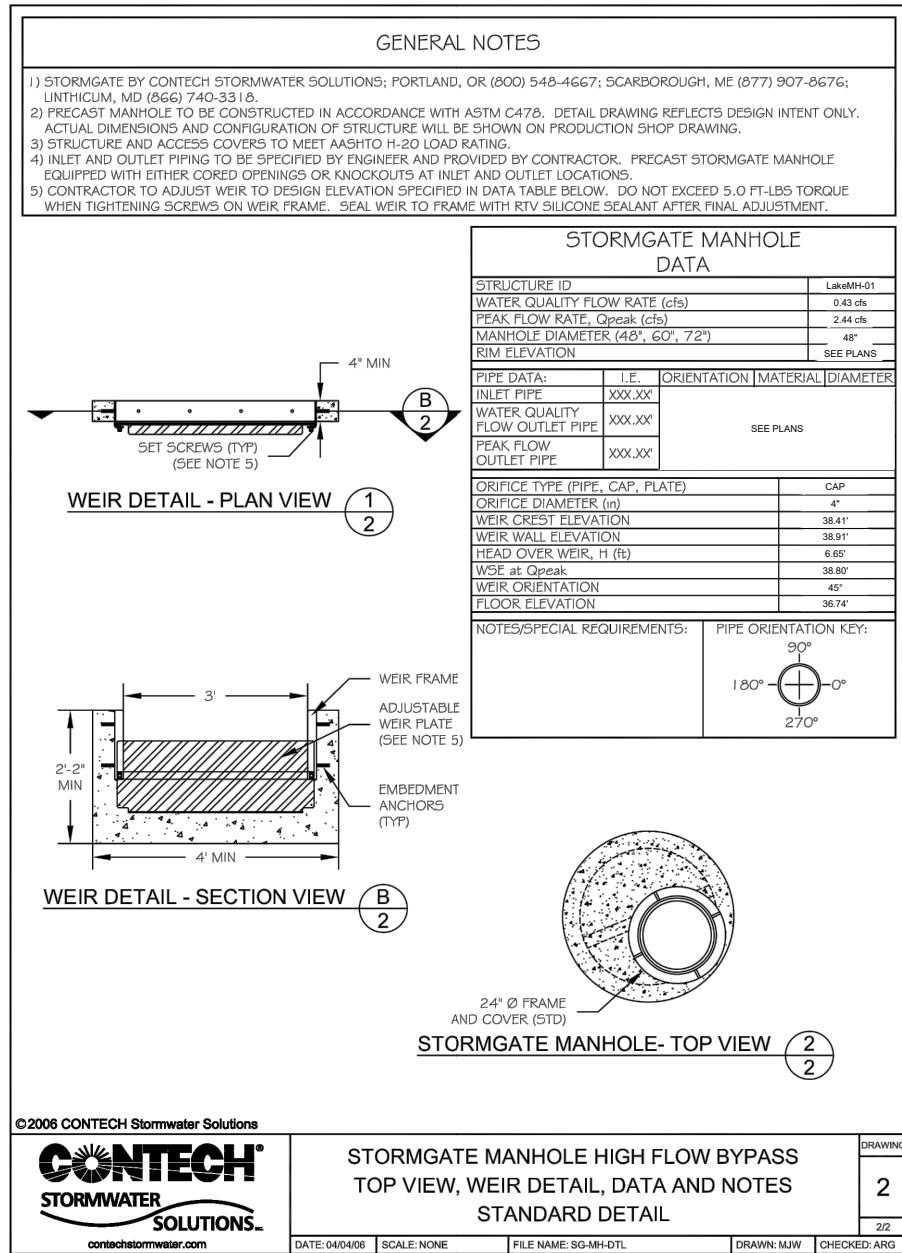


U:\PROJECTS\PD\Projects\2017\170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T36 SD2.dwg Sep. 07, 2018 - 10:01 AM christian french  
Plot Date: 9/7/2018 10:03 AM christian french



NOTE:

COORDINATE WITH CONTECH (503-258-3162) FOR PROJECT SPECIFIC PRODUCT DETAILS.



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 5   | 09/07/18 |     | ADDENDUM 1  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



**CITY OF MILWAUKIE**

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

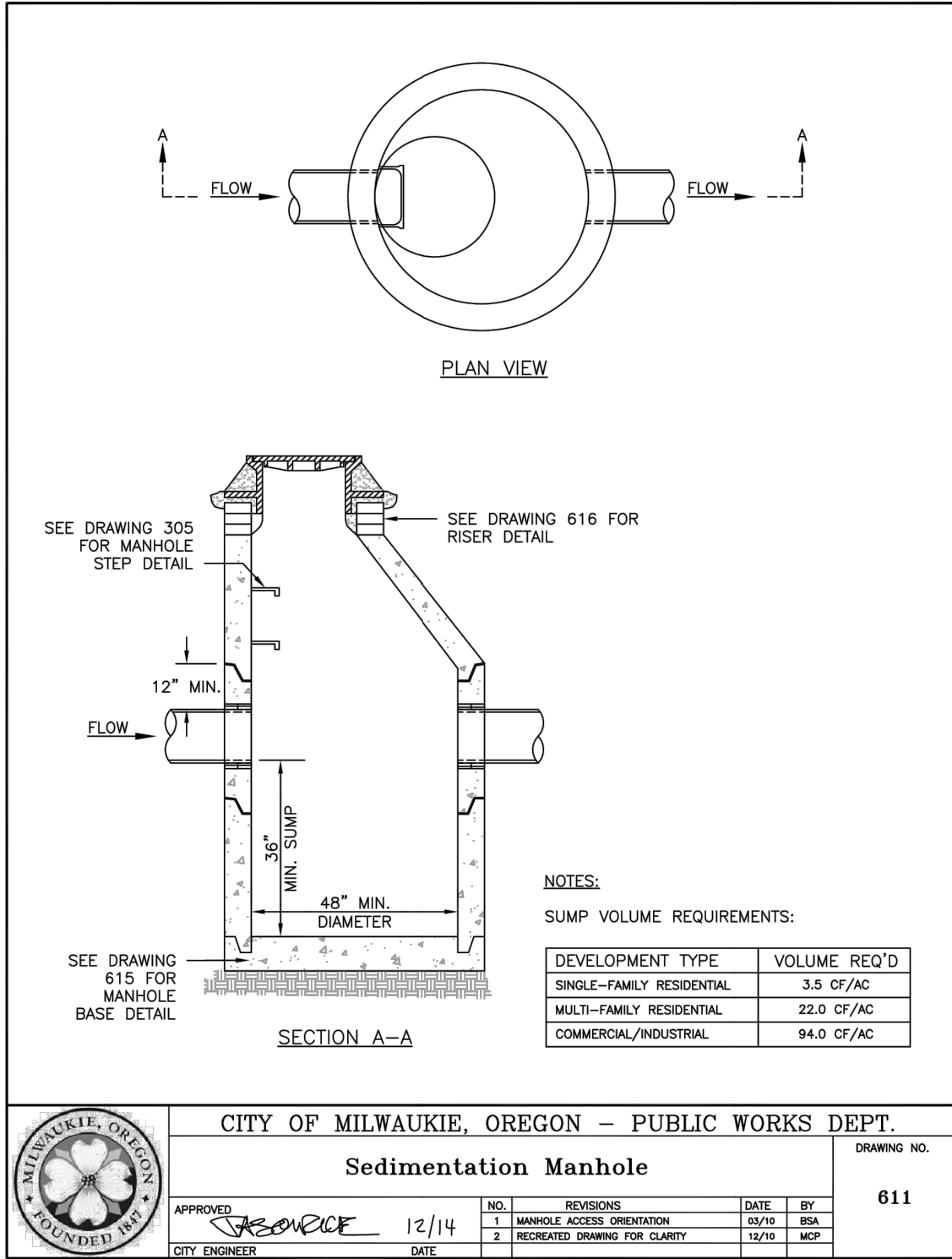
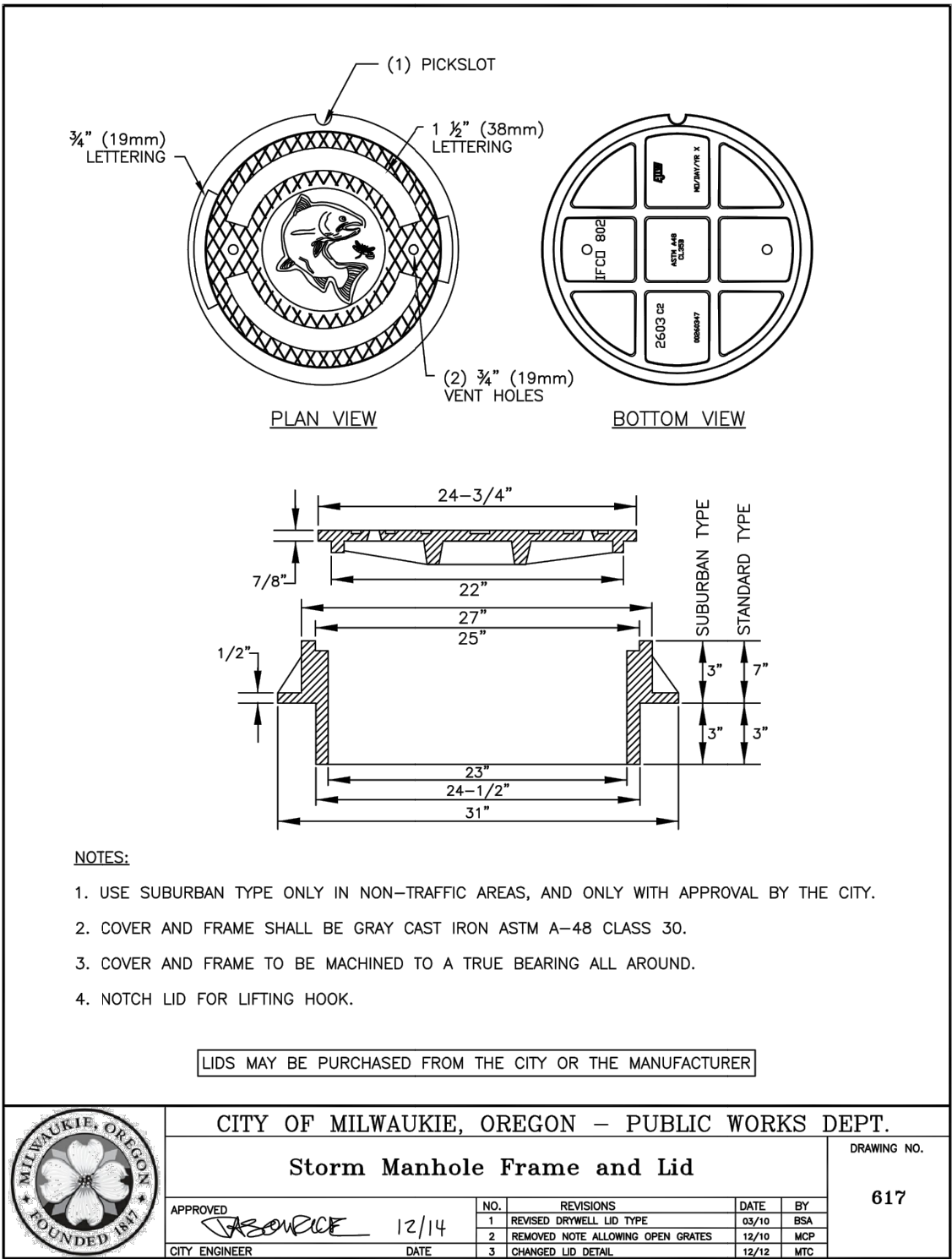
**SOUTH DOWNTOWN IMPROVEMENTS**

**CONTECH STORMGATE MANHOLE**

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: DT09 |
|----------------------|-------------------------|------------------|-----------------|



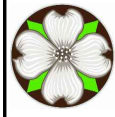
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM



|     |          |     |             |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| NO. | DATE     | BY  | REVISIONS   |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |





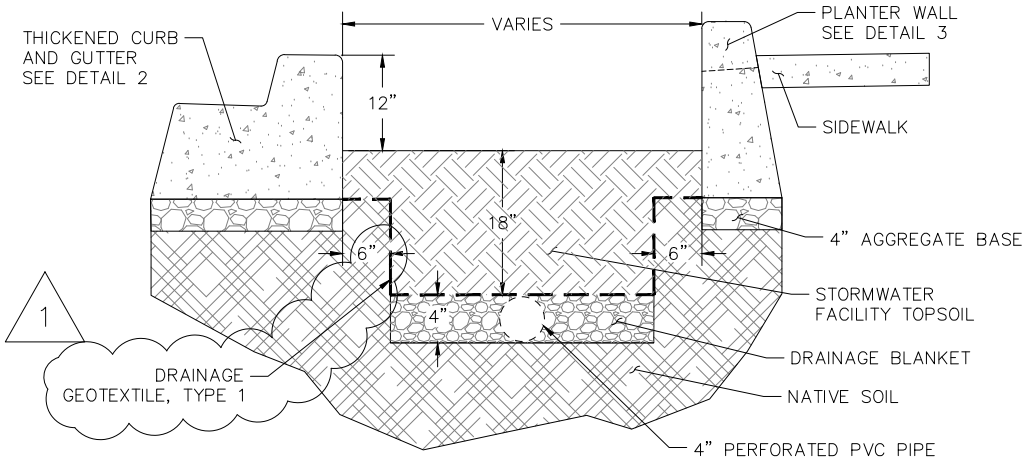
# CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

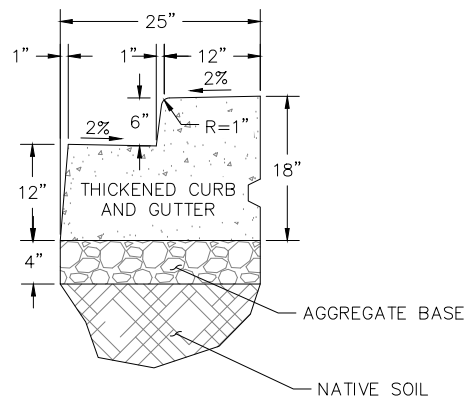
PHONE: 503-786-7600  
FAX: 503-774-8236

|                             |            |               |           |
|-----------------------------|------------|---------------|-----------|
| SOUTH DOWNTOWN IMPROVEMENTS |            |               |           |
| STORM DETAILS               |            |               |           |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: | C2018-051 |
| DATE:                       | 08/14/2018 | SHEET NO.:    | DT10      |

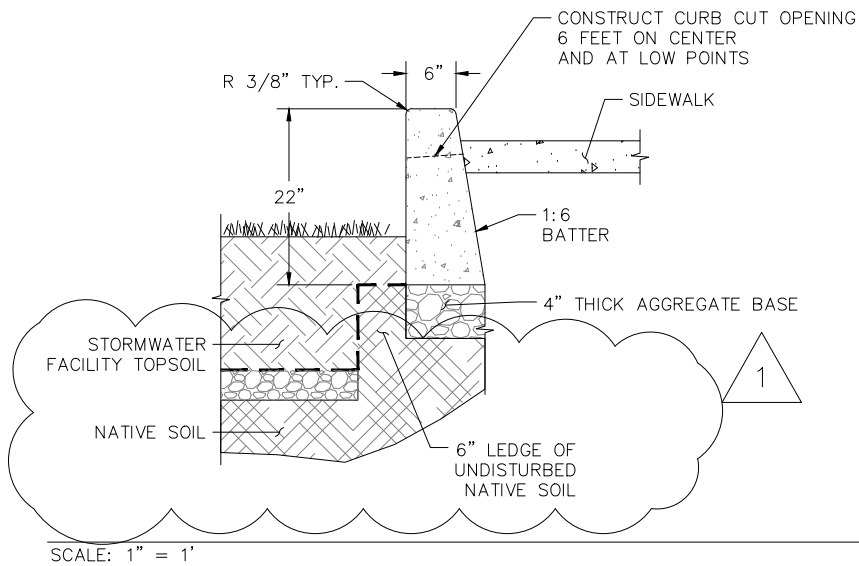
U:\PROJECTS\PD\Projects\2017\01095.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017T36 DT2.dwg Sep. 07, 2018 - 4:04 PM alaina floor  
Plot Date: 9/7/2018 4:34 PM alaina floor



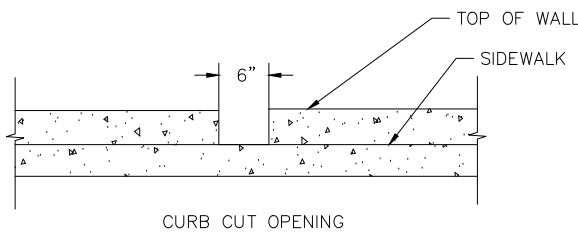
STORMWATER PLANTER SECTION  
SCALE: 1" = 1'



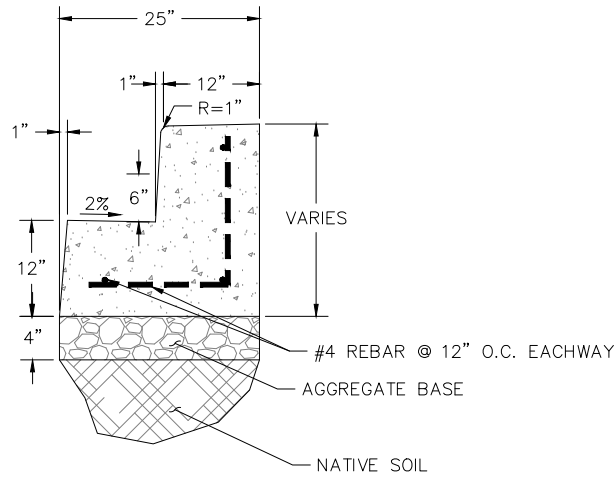
THICKENED CURB AND GUTTER  
SCALE: 1" = 1'



SCALE: 1" = 1'

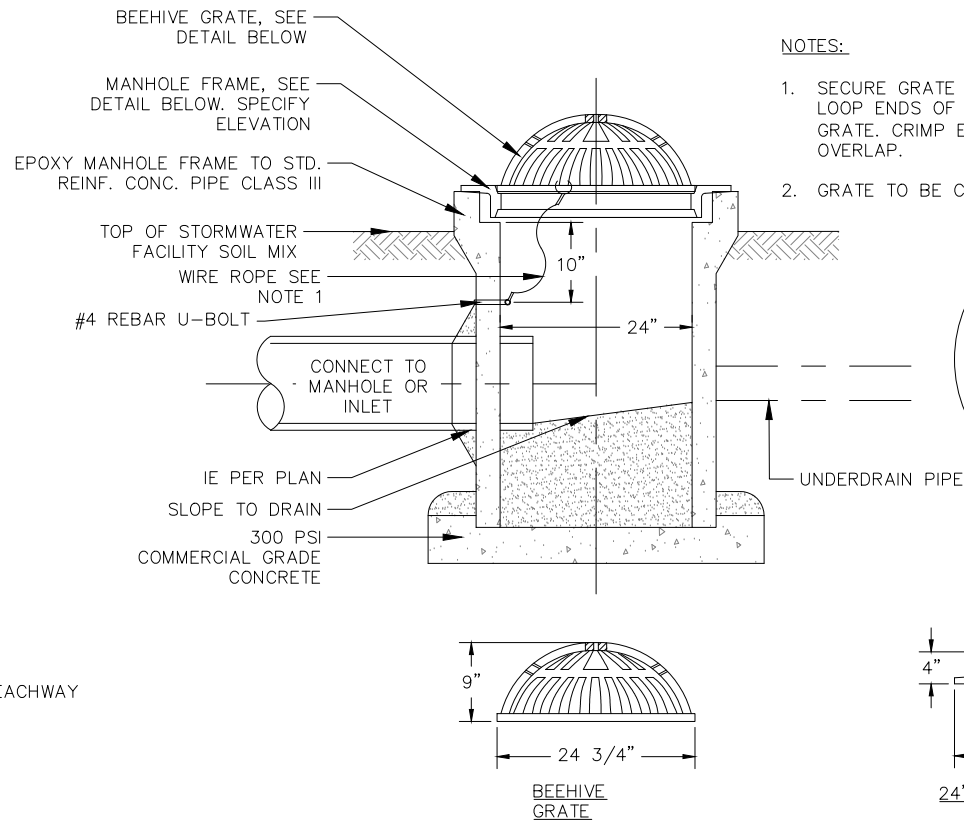


PLANTER WALL DETAIL



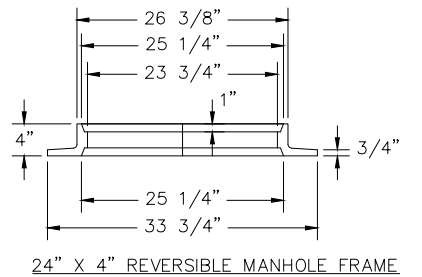
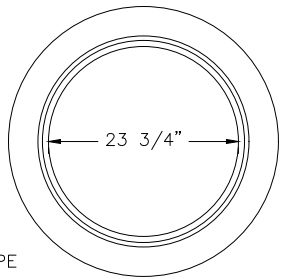
STREET SIDE PLANTER WALL

4



NOTES:

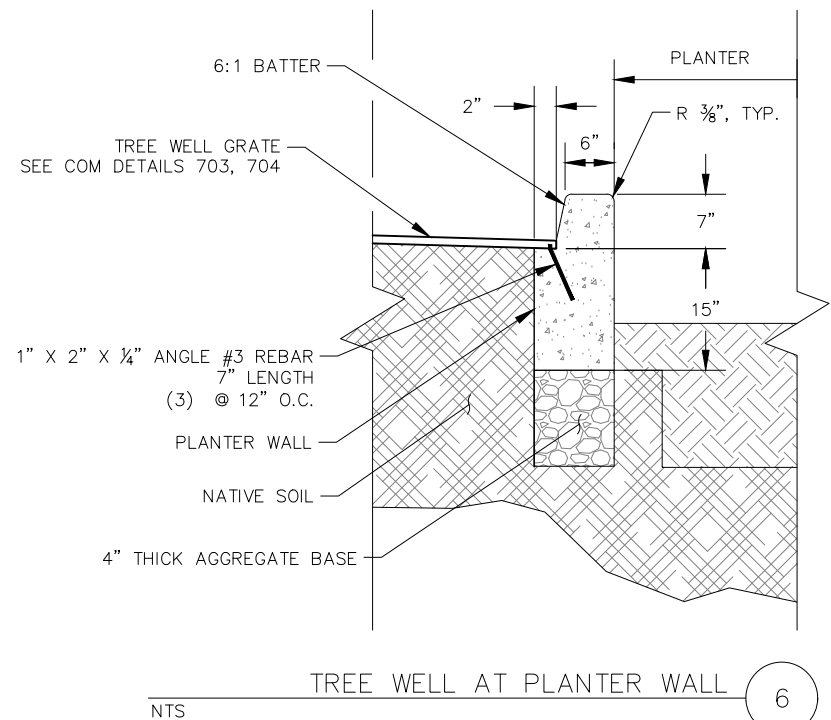
1. SECURE GRATE IN PLACE WITH 54" OF WIRE ROPE. LOOP ENDS OF WIRE ROPE AROUND U-BOLT AND GRATE. CRIMP EACH END OF WIRE ROPE WITH 3" OVERLAP.
2. GRATE TO BE CAST IRON, PER ASTM A48 CL30.



24" X 4" REVERSIBLE MANHOLE FRAME

BEEHIVE INLET

5



TREE WELL AT PLANTER WALL

NTS

6

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 5   | 09/06/18 |     | ADDENDUM 1  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

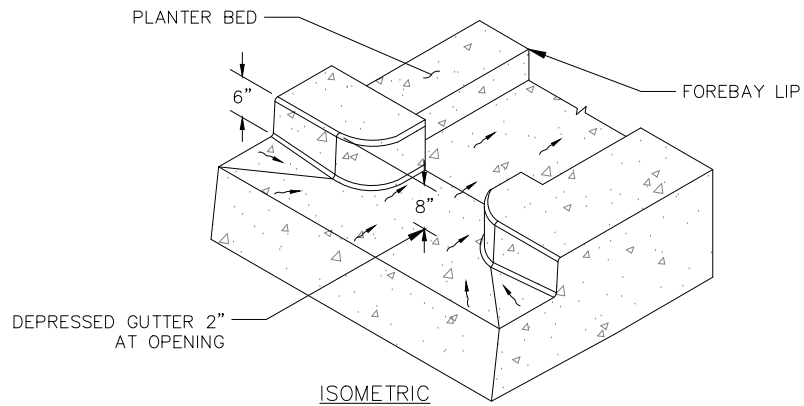
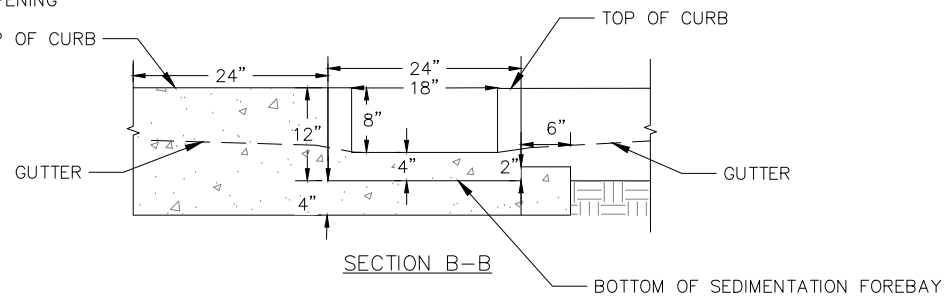
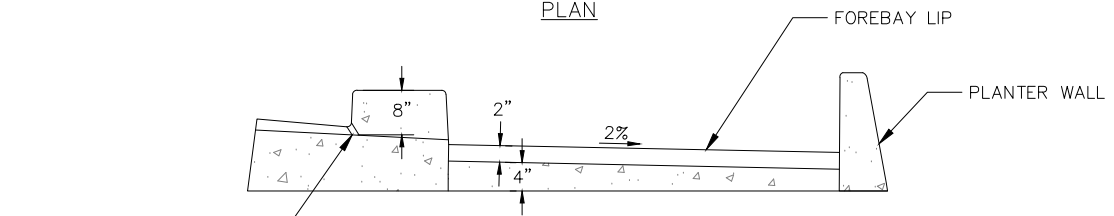
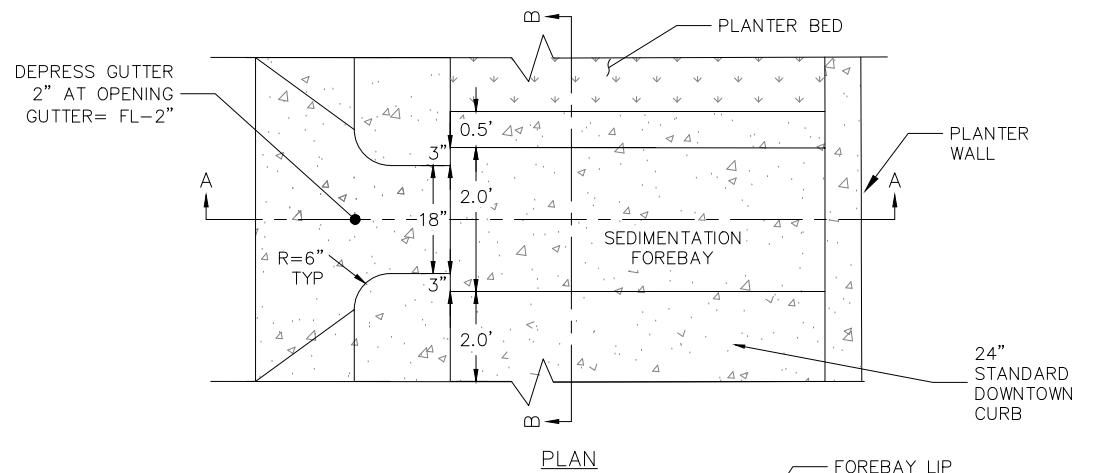
STORM DETAILS

|              |         |               |           |       |            |            |      |
|--------------|---------|---------------|-----------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | C2018-051 | DATE: | 08/14/2018 | SHEET NO.: | DT11 |
|--------------|---------|---------------|-----------|-------|------------|------------|------|

**ESA**  
819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASOC.COM

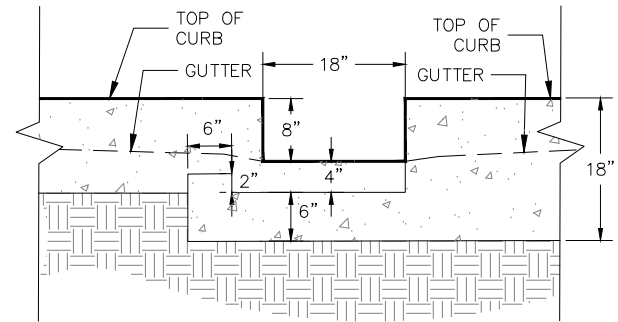
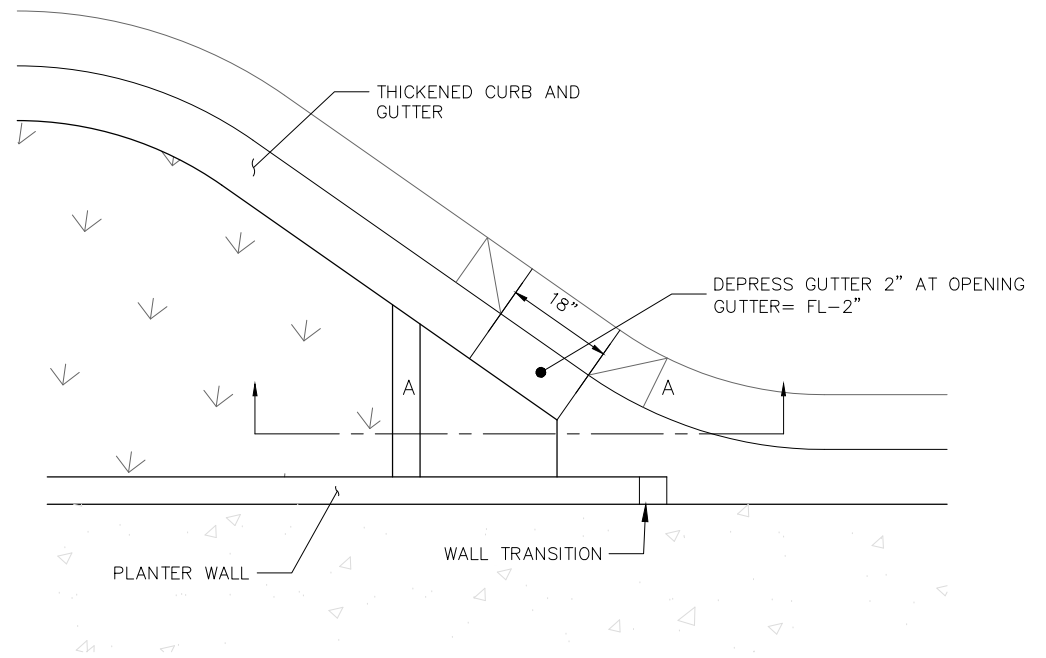


U:\PROJECTS\PD\X\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 DT2.dwg Aug. 15, 2018 - 4:30 PM alaina floor  
Plot Date: 8/15/2018 5:51 PM alaina floor



PERPENDICULAR CURB CUT INLET  
NTS

1



SECTION A-A

DIAGONAL CURB CUT INLET  
NTS

2



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

## SOUTH DOWNTOWN IMPROVEMENTS

### STORM DETAILS

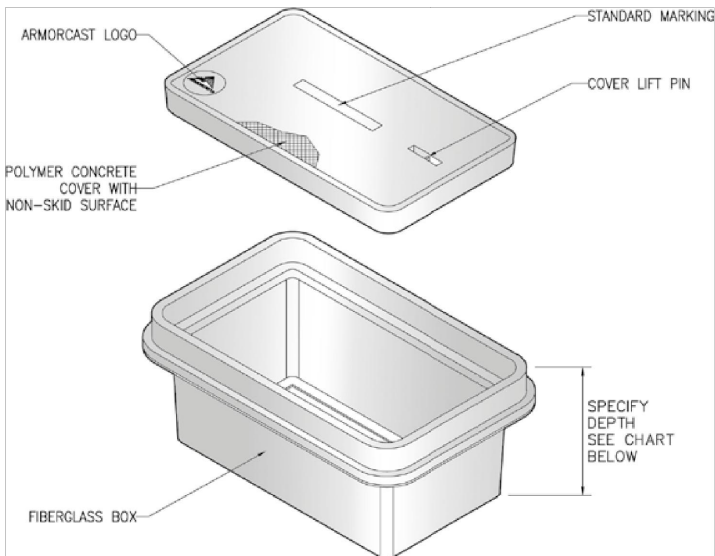
|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: DT12 |
|----------------------|-------------------------|------------------|-----------------|

13" x 24" FRP BOX ASSEMBLY  
15" & 18" DEPTHS

FIBERGLASS

A6001868

ARMORCAST PRODUCTS COMPANY



13"W x 24"L FRP BOX ASSEMBLIES Specify Depth Below

| DESCRIPTION             | NOMINAL SIZE<br>W x L x D | LOAD<br>RATING | ANSI<br>TIER | PART NUMBER   | APPROX.<br>WEIGHT | PALLET<br>QTY. |
|-------------------------|---------------------------|----------------|--------------|---------------|-------------------|----------------|
| Box & Cover<br>Assembly | 13" x 24" x 15"           | 10K            | 8            | A6001868AX15  | 58 lbs.           | 15             |
|                         | 13" x 24" x 18"           | 20K            | 15           | A6001868TAX15 | 66 lbs.           | 15             |
| Box & Cover<br>Assembly | 13" x 24" x 18"           | 10K            | 8            | A6001868AX18  | 66 lbs.           | 10             |
|                         | 13" x 24" x 18"           | 20K            | 15           | A6001868TAX18 | 74 lbs.           | 10             |

COMPONENTS

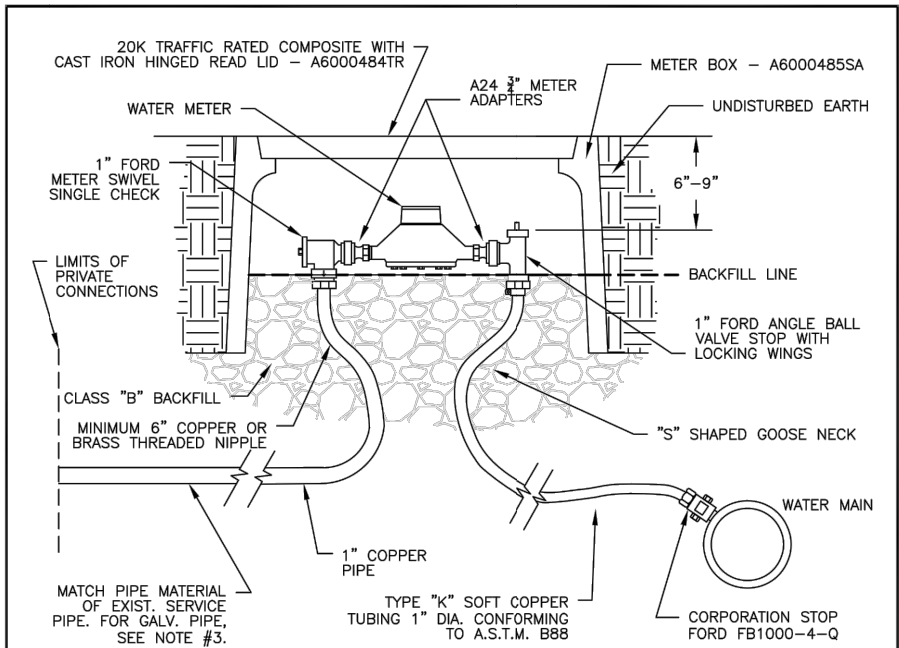
MORE COVER VARIATIONS ARE AVAILABLE IN OUR "COVER SECTION"

| DESCRIPTION           | NOMINAL SIZE<br>W x L x D | LOAD<br>RATING | ANSI<br>TIER | PART NUMBER | APPROX.<br>WEIGHT | PALLET<br>QTY. |
|-----------------------|---------------------------|----------------|--------------|-------------|-------------------|----------------|
| Replacement<br>Covers | 13" x 24"                 | 10K            | 8            | A6001866    | 33 lbs.           | 50             |
|                       | 13" x 24"                 | 20K            | 15           | A6001969    | 41 lbs.           | 50             |
| Replacement<br>Boxes  | 13" x 24" x 15"           | 10K / 20K      | 8 / 15       | A6001868X15 | 25 lbs.           | 15             |
|                       | 13" x 24" x 18"           | 10K / 20K      | 8 / 15       | A6001868X18 | 33 lbs.           | 10             |

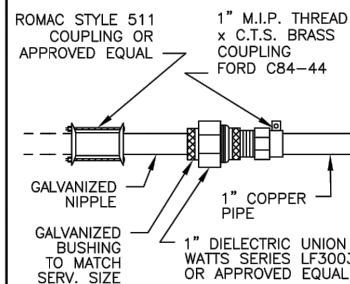
- Boxes are Open Bottom.
- For sizes not shown please contact Armorcast Products for more information

www.armorcastprod.com

Tel: (818) 982-3600 Fax: (818) 982-7742



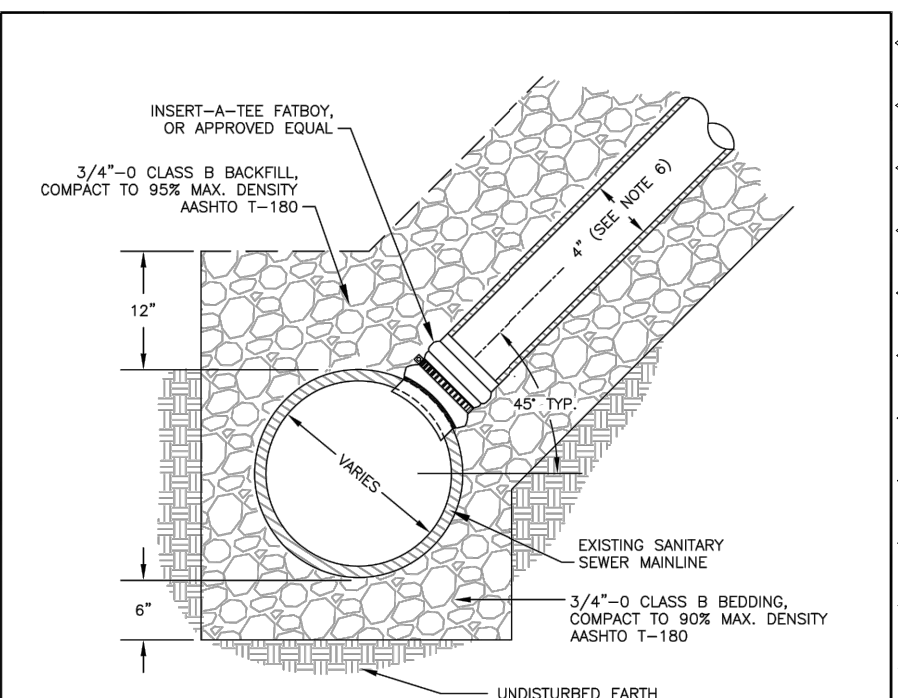
UNTHREADED GALVANIZED PIPE CONNECTION:



NOTES:

- IF COPPER TUBING CROSSES CATHODICALLY PROTECTED LINE, ENCASE COPPER IN POLYETHYLENE TUBING FOR 24" (CENTERED AT THE CROSSING LINE) AND FASTEN WITH 2" WIDE ADHESIVE TAPE THAT IS COMPATIBLE WITH POLYETHYLENE.
- PLACE METER BOXES (1) LOCATED BEHIND THE SIDEWALK WHERE THERE IS SUFFICIENT RIGHT-OF-WAY, (2) WITHIN THE PLANTER STRIP, EXCLUDING WATER QUALITY FACILITIES, (3) WITHIN THE SIDEWALK WITH THE BACK OF THE METER BOX AT THE BACK EDGE OF THE SIDEWALK.
- CONNECT GALVANIZED SERVICE PIPE; (1) AT EXISTING THREADED FITTING WITHIN 5 FEET OF WATER METER; (2) RETHREAD EXISTING GALVANIZED SERVICE PIPE; (3) IF EXISTING PIPE IS IN POOR CONDITION AND CANNOT BE RETHREADED, USE UNTHREADED GALVANIZED PIPE CONNECTION DETAIL.
- IF METER BOX IS LOCATED IN THE SIDEWALK, DIELECTRIC UNION WILL BE INSTALLED (1) 6" FROM BACK OF METER INSIDE OF METER BOX, (2) BEHIND BACK OF SIDEWALK.

|                                                       |  |                             |  |
|-------------------------------------------------------|--|-----------------------------|--|
| CITY OF MILWAUKIE, OREGON - PUBLIC WORKS DEPT.        |  |                             |  |
| Standard 1 Inch Water Service                         |  |                             |  |
| APPROVED<br><i>[Signature]</i> 12/14<br>CITY ENGINEER |  | DRAWING NO.<br><br>401      |  |
| NO. 3                                                 |  | REVISIONS                   |  |
| 4                                                     |  | REMOVED COPPERSETTER        |  |
| 5                                                     |  | ADDED DIELECTRIC UNION NOTE |  |
| DATE                                                  |  | DATE                        |  |



NOTES:

- THE SEWER TAP SHALL NOT BE MADE EXCEPT IN THE PRESENCE OF A CITY INSPECTOR NOR SHALL ANY CONNECTION BE MADE WITHOUT CITY APPROVAL.
- HOLE IN MAIN TO BE MACHINE DRILLED AND CORED.
- AN INSERT-A-TEE FATBOY OR APPROVED EQUAL SHALL BE USED. HDPE ELECTROFUSION TEE OR WYE IS REQUIRED ON HDPE SANITARY SEWER MAINLINES.
- SEWER TAP TO BE ABOVE SPRINGLINE.
- 4" MAXIMUM TAP FOR 8" MAIN WITH APPROVED COUPLERS (CUT-IN TEE TO BE USED FOR 6" HOUSE BRANCH ON 8" MAIN)
- 4" HOUSE BRANCH MAY BE USED FOR SINGLE FAMILY LOTS ONLY.

|                                                       |  |                                      |  |
|-------------------------------------------------------|--|--------------------------------------|--|
| CITY OF MILWAUKIE, OREGON - PUBLIC WORKS DEPT.        |  |                                      |  |
| Standard Sewer Tap                                    |  |                                      |  |
| APPROVED<br><i>[Signature]</i> 12/14<br>CITY ENGINEER |  | DRAWING NO.<br><br>308               |  |
| NO. 2                                                 |  | REVISIONS                            |  |
| 3                                                     |  | ADDED BACKFILL, COMPACTION NOTES     |  |
| 4                                                     |  | ADDED INSERT-A-TEE, ADDED HDPE NOTES |  |
| DATE                                                  |  | DATE                                 |  |

NOTE: COVER MARKING SHALL READ "WATER."

|     |          |     |             |
|-----|----------|-----|-------------|
| NO. | DATE     | BY  | REVISIONS   |
| 1   | 09/07/18 |     | ADDENDUM 1  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|     |            |          |      |
|-----|------------|----------|------|
| NMR | 08/14/2018 | DESIGNED | DATE |
| AMF | 08/14/2018 | DRAFTED  | DATE |
| JGR | 08/14/2018 | CHECKED  | DATE |
| JGR | 08/14/2018 | APPROVED | DATE |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

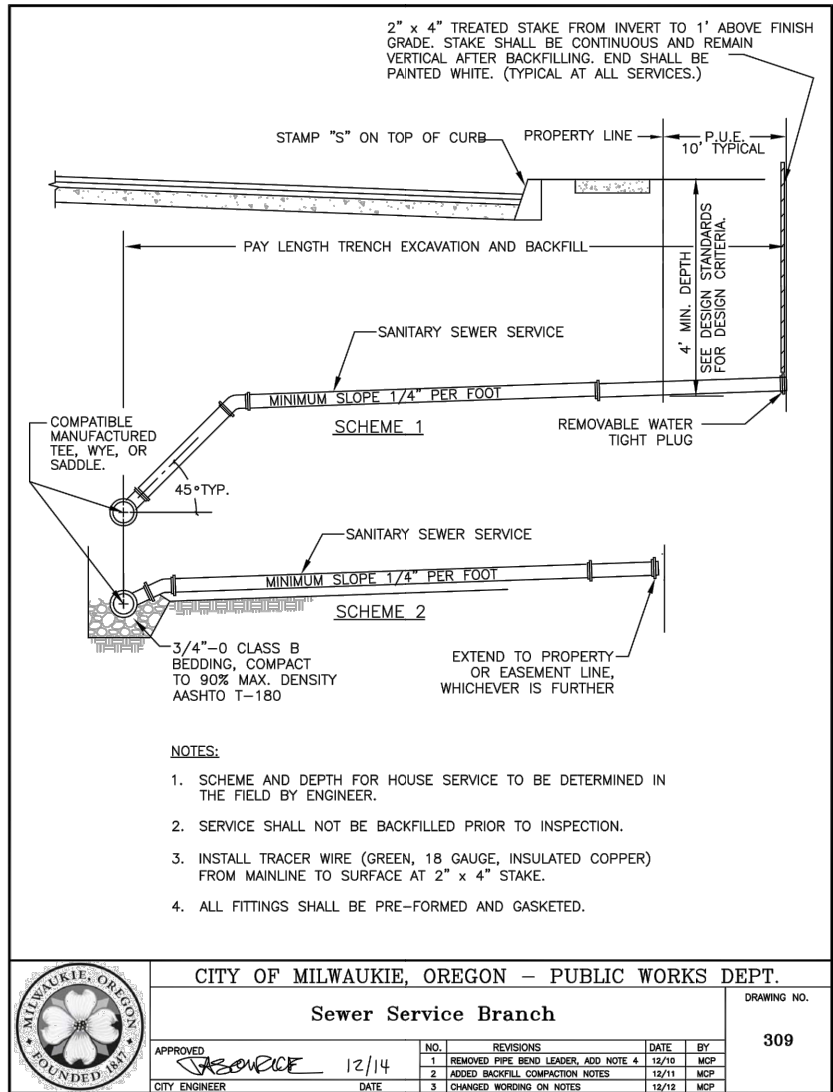
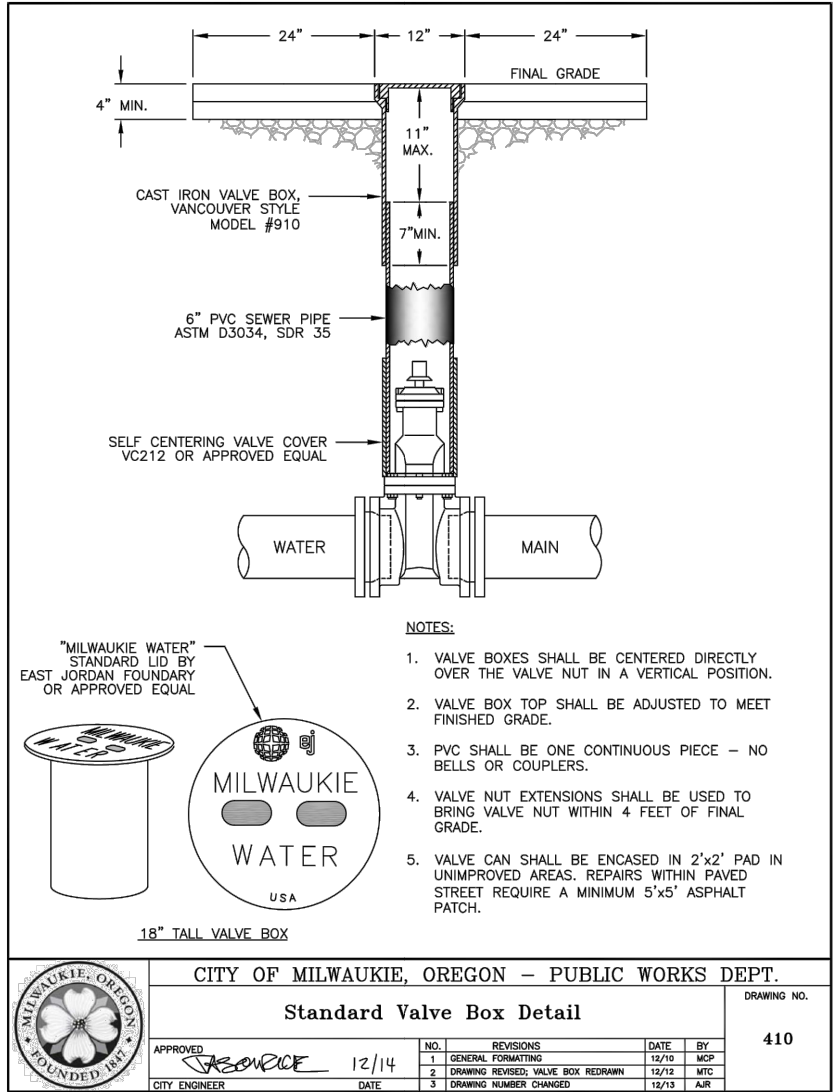
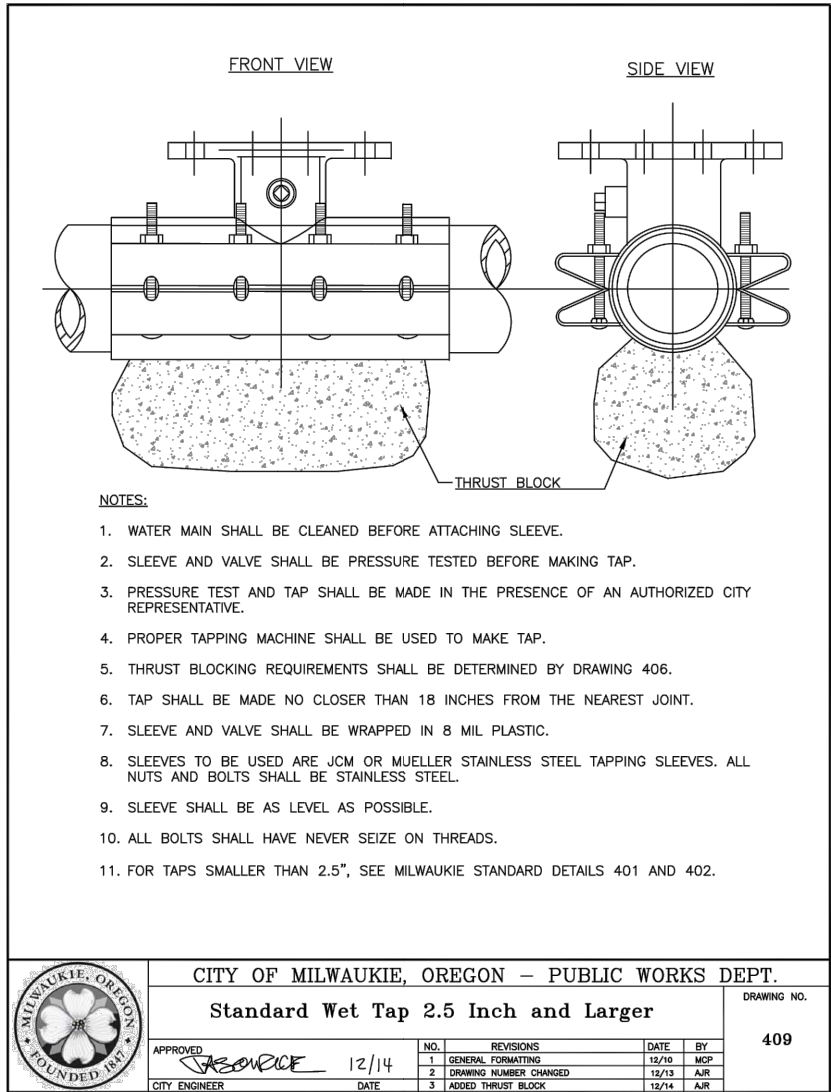
UTILITY DETAILS

|                      |                         |                  |                 |
|----------------------|-------------------------|------------------|-----------------|
| PROJECT NO.: CIP2018 | CONTRACT NO.: C2018-051 | DATE: 08/14/2018 | SHEET NO.: DT13 |
|----------------------|-------------------------|------------------|-----------------|



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASOC.COM

U:\PROJECTS\PD\Projects\2017\0170195.00 City Of Milwaukie, Washington Street\08 CAD\MAIN ST\Plan Sheets\2017136 DT2.dwg Sep. 07, 2018 -- 4:04 PM alaina floor  
Plot Date: 9/7/2018 4:34 PM alaina floor



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 4   | 09/07/18 |     | ADDENDUM 1  |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

NMR 08/14/2018  
DESIGNED DATE

AMF 08/14/2018  
DRAFTED DATE

JGR 08/14/2018  
CHECKED DATE

JGR 08/14/2018  
APPROVED DATE



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

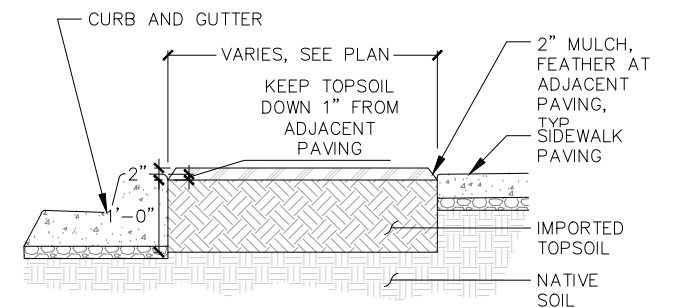
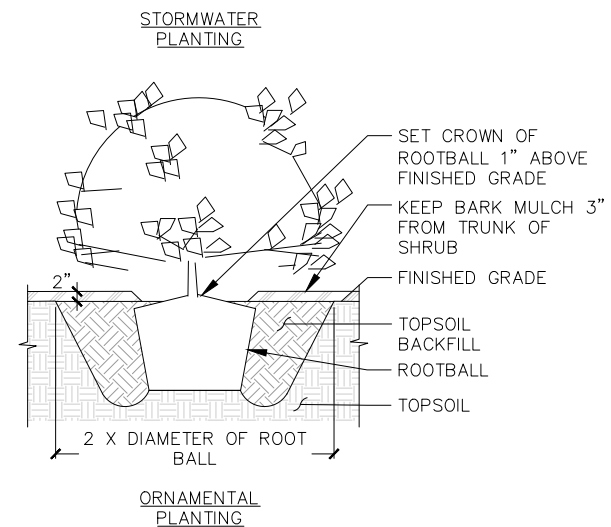
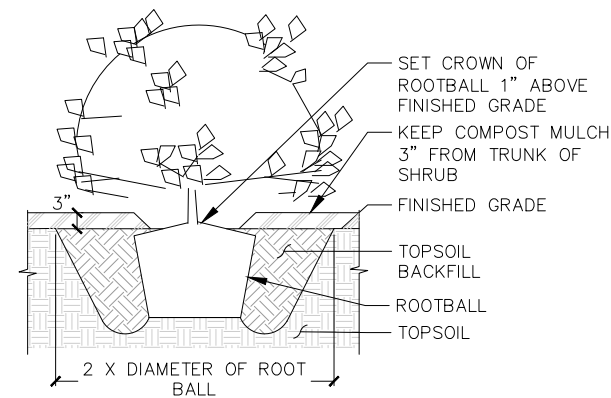
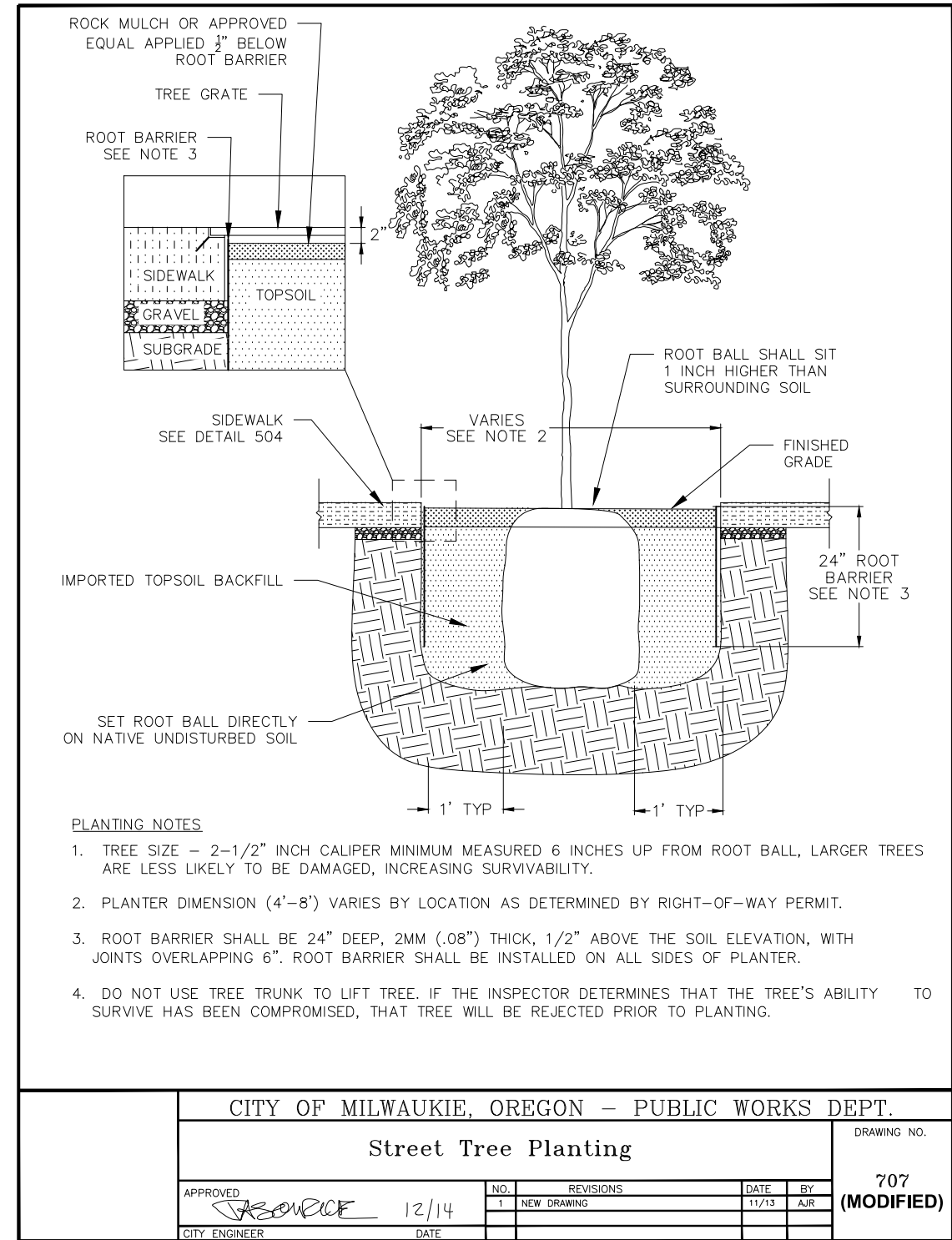
PHONE: 503-786-7600  
FAX: 503-774-8236

## SOUTH DOWNTOWN IMPROVEMENTS

### WATER DETAILS

PROJECT NO.: CIP2018 CONTRACT NO.: C2018-051 DATE: 08/14/2018 SHEET NO.: DT14





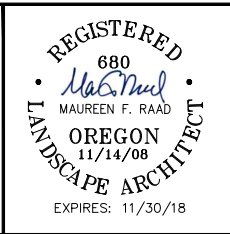
SHRUB AND GROUNDCOVER PLANTING  
NTS

ORNAMENTAL PLANTING BED  
NTS



| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 05/25/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|     |          |            |      |
|-----|----------|------------|------|
| DNR | DESIGNED | 08/14/2018 | DATE |
| DNR | DRAFTED  | 08/14/2018 | DATE |
| MFR | CHECKED  | 08/14/2018 | DATE |
| JGR | APPROVED | 08/14/2018 | DATE |





# CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

| SOUTH DOWNTOWN IMPROVEMENTS |            |               |           |
|-----------------------------|------------|---------------|-----------|
| PLANTING DETAILS            |            |               |           |
| PROJECT NO.:                | CIP2018    | CONTRACT NO.: | C2018-051 |
| DATE:                       | 08/14/2018 | SHEET NO.:    | DT15      |

D

◆

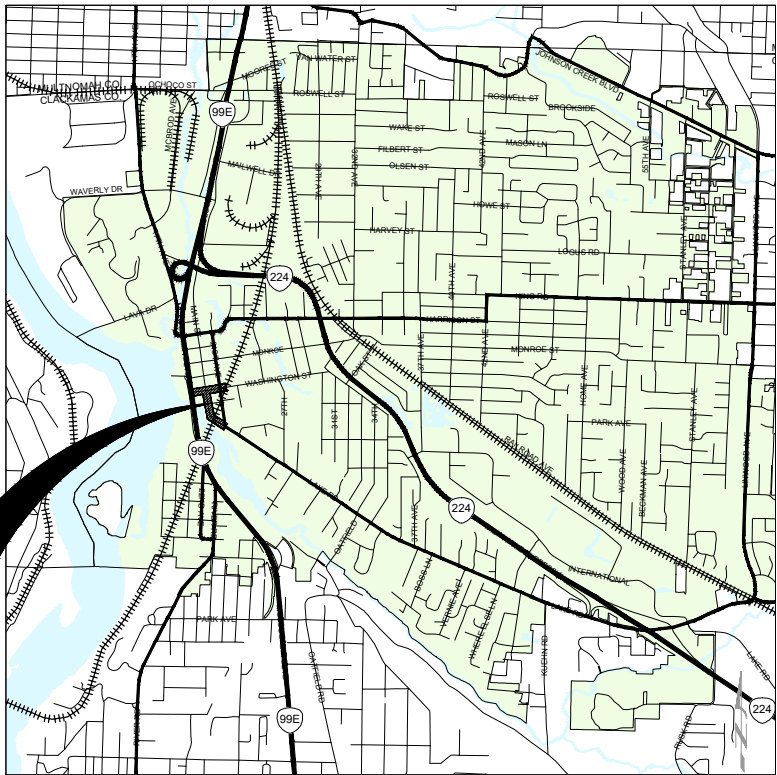
C

◆

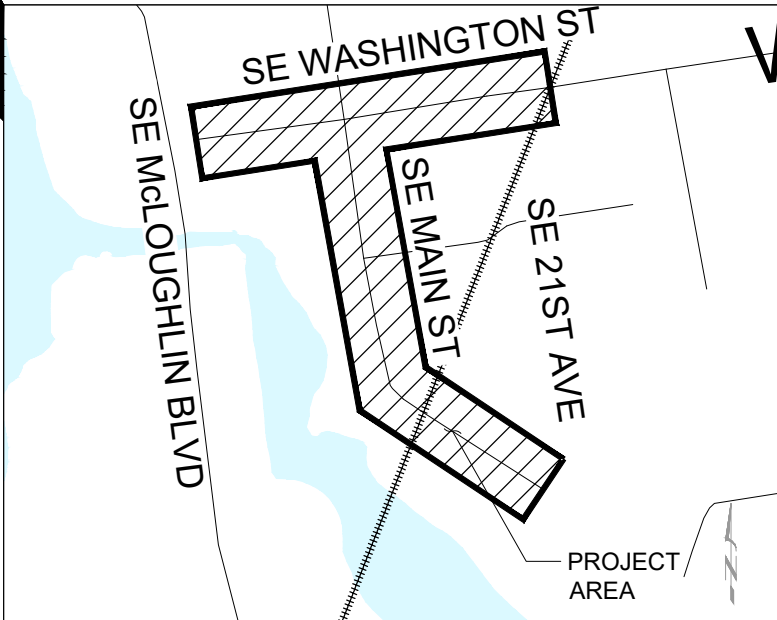
B

◆

A



VICINITY MAP  
NOT TO SCALE



SITE MAP  
NOT TO SCALE

# SOUTH DOWNTOWN IMPROVEMENTS

## CIP2017-T36, CIP2017-Y16, CIP2018-Y18

### EROSION AND SEDIMENT CONTROL PLANS

#### DEVELOPER:

NAME: CITY OF MILWAUKIE  
ADDRESS: 6101 SE JOHNSON CREEK BLVD  
MILWAUKIE, OR 97206

PHONE: (503)–786–7609  
CONTACT: JENNIFER GARBELY

#### PROPERTY LOCATION:

ADDRESS: SE MAIN STREET AND SE WASHINGTON  
MILWAUKIE, OR 97206

LATITUDE: 45.442391  
LONGITUDE: –122.640865

#### NARRATIVE DESCRIPTION:

EXISTING SITE CONDITIONS:  
PAVED PUBLIC RIGHT OF WAY

DEVELOPED CONDITIONS:  
PUBLIC MARKET AND RIGHT OF WAY

SITE SOIL CLASSIFICATION:  
URBAN LAND  
WOODBURN SILT LOAM

RECEIVING WATER BODIES:  
KELLOGG CREEK  
WILLAMETTE RIVER

#### PLANNING / ENGINEERING / SURVEY FIRM:

NAME: ENVIRONMENTAL SCIENCE ASSOCIATES  
ADDRESS: 819 SE MORRISON ST #310, PORTLAND, OR 97214

PHONE: (503)–274–2010  
CONTACT: NATE ROBINSON

#### PROPERTY DESCRIPTION:

PUBLIC RIGHT OF WAY IMPROVEMENTS ON BOTH WASHINGTON  
AND MAIN STREET.

#### NATURE OF CONSTRUCTION ACTIVITY AND ESTIMATED TIME TABLE

\*CLEARING (SEPT 2018 – DEC 2020)  
\*GRADING (SEPT 2018 – DEC 2020)  
\*UTILITY INSTALLATION (SEPT 2018 – DEC 2020)  
\*STREET CONSTRUCTION (SEPT 2018 – DEC 2020)  
\*FINAL STABILIZATION (DEC 2020)

TOTAL SITE AREA: 88,002 SF = 2.02 ACRES

TOTAL DISTURBED AREA: 86,349 SF = 1.98 ACRES



#### INSPECTION FREQUENCY

| SITE CONDITION                                                                     | MINIMUM FREQUENCY                                                                                                                                            |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. ACTIVE PERIOD                                                                   | DAILY WHEN STORMWATER RUNOFF, INCLUDING RUNOFF FROM SNOWMELT, IS OCCURRING.                                                                                  |
| 2. PRIOR TO THE SITE BECOMING INACTIVE OR IN ANTICIPATION OF SITE INACCESSIBILITY. | ONCE TO ENSURE THAT EROSION AND SEDIMENT CONTROL MEASURES ARE IN WORKING ORDER. ANY NECESSARY MAINTENANCE AND REPAIR MUST BE MADE PRIOR TO LEAVING THE SITE. |
| 3. INACTIVE PERIODS GREATER THAN SEVEN (7) CONSECUTIVE CALENDAR DAYS.              | ONCE EVERY TWO (2) WEEKS.                                                                                                                                    |
| 4. PERIODS DURING WHICH THE SITE IS INACCESSIBLE DUE TO INCLEMENT WEATHER.         | IF PRACTICAL, INSPECTIONS MUST OCCUR DAILY AT A RELEVANT AND ACCESSIBLE DISCHARGE POINT OR DOWNSTREAM LOCATION.                                              |

- \* HOLD A PRE–CONSTRUCTION MEETING OF PROJECT CONSTRUCTION PERSONNEL, INCLUDING THE INSPECTOR, TO DISCUSS EROSION AND SEDIMENT CONTROL MEASURES AND CONSTRUCTION LIMITS.
- \* ALL INSPECTIONS MUST BE MADE IN ACCORDANCE WITH 1200–CN PERMIT REQUIREMENTS.
- \* INSPECTION LOGS MUST BE KEPT IN ACCORDANCE WITH 1200–CN PERMIT REQUIREMENTS.
- \* RETAIN A COPY OF THE ESC PLAN 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 ESC PLAN AT THE CONSTRUCTION SITE OR AT ANOTHER LOCATION.
- \* CHANGES TO THE APPROVED ESC PLAN MUST BE SUBMITTED TO DEQ IN THE FORM OF AN ACTION PLAN.

#### SHEET INDEX

| SHEET NO. | DESCRIPTION                                                                 |
|-----------|-----------------------------------------------------------------------------|
| EC01      | EROSION AND SEDIMENT CONTROL COVER SHEET                                    |
| EC02      | EROSION AND SEDIMENT CONTROL PLAN NOTES                                     |
| EC03      | CLEARING AND DEMOLITION EROSION AND SEDIMENT CONTROL PLAN                   |
| EC04      | GRADING, STREET, AND UTILITY CONSTRUCTION EROSION AND SEDIMENT CONTROL PLAN |
| EC05      | EROSION CONTROL DETAILS                                                     |

#### 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 31) |
|------------------------------|----------|--------------|----------------------|---------------------|---------------------|----------------------------|
| EROSION PREVENTION           |          |              |                      |                     |                     |                            |
| PRESERVE NATURAL VEGETATION  |          |              |                      |                     |                     |                            |
| GROUND COVER                 |          |              |                      |                     |                     |                            |
| HYDRAULIC APPLICATIONS       |          |              |                      |                     |                     |                            |
| PLASTIC SHEETING             | X        | X            | X                    | X                   | X                   | X                          |
| MATting                      |          |              |                      |                     |                     |                            |
| DUST CONTROL                 |          |              |                      |                     |                     |                            |
| TEMPORARY/ PERMANENT SEEDING |          |              |                      |                     |                     |                            |
| BUFFER ZONE                  |          |              |                      |                     |                     |                            |
| OTHER:                       |          |              |                      |                     |                     |                            |
| SEDIMENT CONTROL             |          |              |                      |                     |                     |                            |
| SEDIMENT FENCE (PERIMETER)   | X        | X            | X                    | X                   | X                   | X                          |
| SEDIMENT FENCE (INTERIOR)    | X        | X            | X                    | X                   | X                   | X                          |
| STRAW WATTLES                |          |              |                      |                     |                     |                            |
| FILTER BERM                  |          |              |                      |                     |                     |                            |
| INLET PROTECTION             | X        | X            | X                    | X                   | X                   | X                          |
| DEWATERING                   |          |              |                      |                     |                     |                            |
| SEDIMENT TRAP                |          |              |                      |                     |                     |                            |
| OTHER:                       |          |              |                      |                     |                     |                            |
| RUN OFF CONTROL              |          |              |                      |                     |                     |                            |
| CONSTRUCTION ENTRANCE        | X        | X            | X                    | X                   | X                   | X                          |
| PIPE SLOPE DRAIN             |          |              |                      |                     |                     |                            |
| OUTLET PROTECTION            |          |              |                      |                     |                     |                            |
| SURFACE ROUGHENING           |          |              |                      |                     |                     |                            |
| 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 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.

INITIAL \_\_\_\_\_ NMR

#### PERMITTEE'S SITE INSPECTOR:

COMPANY NAME: CITY OF MILWAUKIE  
PHONE: 503–787674  
FAX: 503–786–7676  
CONTACT: JERE SONNE  
E–MAIL: SONNEJ@MILWAUKIEOREGON.GOV

DESCRIPTION OF EXPERIENCE: 2

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

#### ATTENTION EXCAVATORS

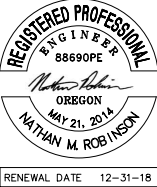
OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952–001–0010 THROUGH OAR 952–001–0090. YOU MAY OBTAIN COPIES OF THESE RULES FROM THE CENTER BY CALLING 503–232–1987. IF YOU HAVE ANY QUESTIONS ABOUT THE RULES, YOU MAY CONTACT THE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



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

|     |          |     |             |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| NO. | DATE     | BY  | REVISIONS   |

NMR 08/14/2018  
DESIGNED DATE  
AMF 08/14/2018  
DRAFTED DATE  
JGR 08/14/2018  
CHECKED DATE  
JGR 08/14/2018  
APPROVED DATE



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503–786–7600  
FAX: 503–774–8236

## SOUTH DOWNTOWN IMPROVEMENTS

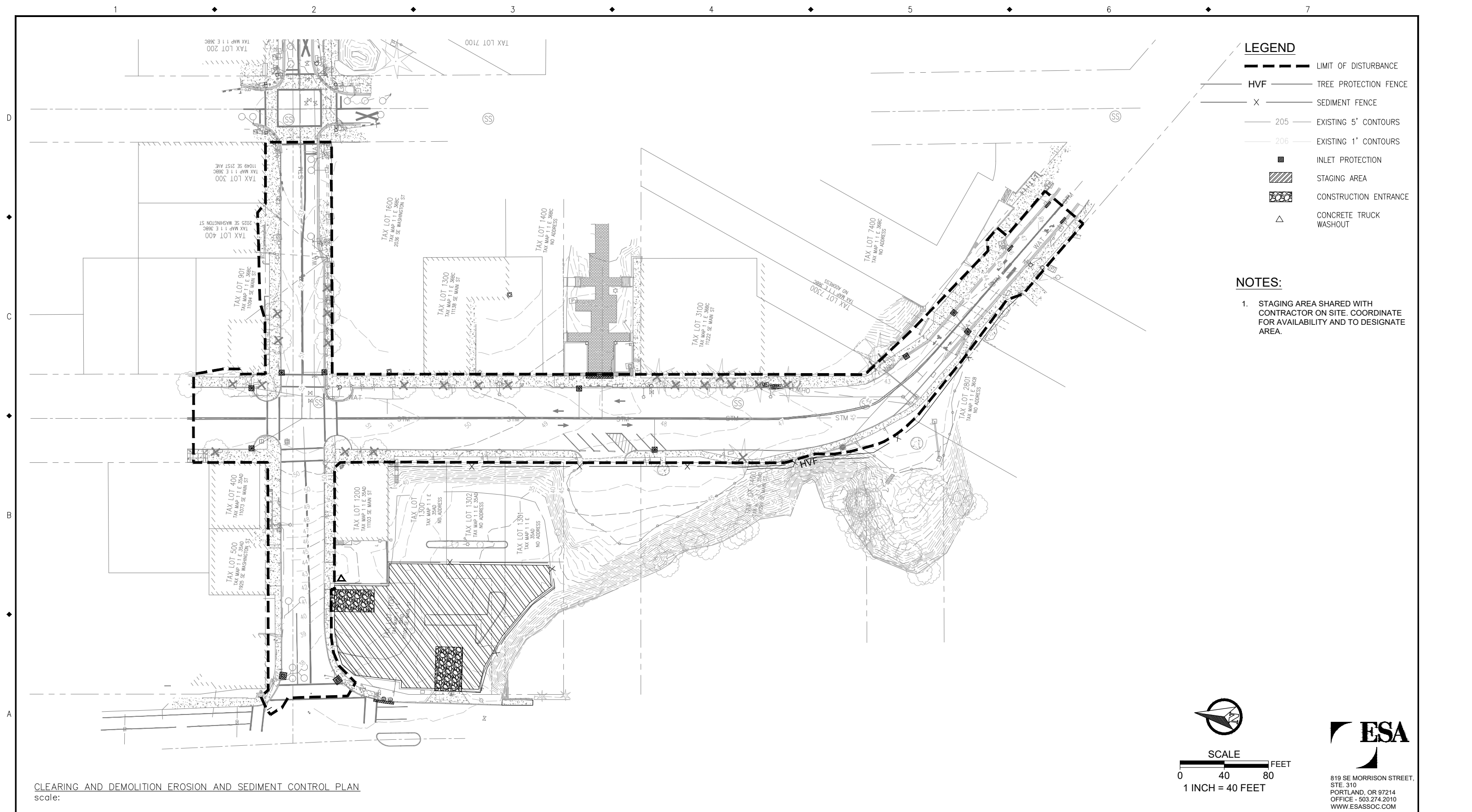
### EROSION CONTROL COVER

PROJECT NO.: CIP2018 CONTRACT NO.: C2018–051 DATE: 08/14/2018 SHEET NO.: EC01









LEGEND

- LIMIT OF DISTURBANCE
- HVF TREE PROTECTION FENCE
- X SEDIMENT FENCE
- 205 EXISTING 5' CONTOURS
- 206 EXISTING 1' CONTOURS
- INLET PROTECTION
- ▨ STAGING AREA
- ▩ CONSTRUCTION ENTRANCE
- △ CONCRETE TRUCK WASHOUT

NOTES:

1. STAGING AREA SHARED WITH CONTRACTOR ON SITE. COORDINATE FOR AVAILABILITY AND TO DESIGNATE AREA.



SCALE  
0 40 80 FEET  
1 INCH = 40 FEET



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

CLEARING AND DEMOLITION EROSION AND SEDIMENT CONTROL PLAN  
scale:

|     |          |     |             |
|-----|----------|-----|-------------|
|     |          |     |             |
|     |          |     |             |
|     |          |     |             |
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |
| NO. | DATE     | BY  | REVISIONS   |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

EROSION CONTROL DEMOLITION PLAN

|              |         |               |           |       |            |            |      |
|--------------|---------|---------------|-----------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | C2018-051 | DATE: | 08/14/2018 | SHEET NO.: | EC03 |
|--------------|---------|---------------|-----------|-------|------------|------------|------|





|     |          |     |             |                 |                    |                                                                                                                                                                                                         |                                                                                                                     |                                                                                                                     |                  |                 |  |  |
|-----|----------|-----|-------------|-----------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------|-----------------|--|--|
|     |          |     |             | NMR<br>DESIGNED | 08/14/2018<br>DATE |   <div>CITY OF MILWAUKIE</div> | SOUTH DOWNTOWN IMPROVEMENTS                                                                                         |                                                                                                                     |                  |                 |  |  |
|     |          |     |             | AMF<br>DRAFTED  | 08/14/2018<br>DATE |                                                                                                                                                                                                         | <div>6101 SE JOHNSON CREEK BLVD.<br/>MILWAUKIE, OR 97206</div> <div>PHONE: 503-786-7600<br/>FAX: 503-774-8236</div> | EROSION CONTROL DETAILS                                                                                             |                  |                 |  |  |
| 4   | 08/14/18 | NMR | 100% DESIGN | JGR<br>CHECKED  | 08/14/2018<br>DATE |                                                                                                                                                                                                         |                                                                                                                     | <div>6101 SE JOHNSON CREEK BLVD.<br/>MILWAUKIE, OR 97206</div> <div>PHONE: 503-786-7600<br/>FAX: 503-774-8236</div> |                  |                 |  |  |
| 3   | 06/27/18 | NMR | 90% DESIGN  | JGR<br>CHECKED  | 08/14/2018<br>DATE |                                                                                                                                                                                                         |                                                                                                                     |                                                                                                                     |                  |                 |  |  |
| 2   | 03/12/18 | SLM | 60% DESIGN  | JGR<br>CHECKED  | 08/14/2018<br>DATE |                                                                                                                                                                                                         |                                                                                                                     |                                                                                                                     |                  |                 |  |  |
| 1   | 11/13/17 | SLM | 30% DESIGN  | JGR<br>CHECKED  | 08/14/2018<br>DATE |                                                                                                                                                                                                         |                                                                                                                     |                                                                                                                     |                  |                 |  |  |
| NO. | DATE     | BY  | REVISIONS   | RENEWAL DATE    | 12-31-18           |                                                                                                                                                                                                         | PROJECT NO.: CIP2018                                                                                                | CONTRACT NO.: C2018-051                                                                                             | DATE: 08/14/2018 | SHEET NO.: EC05 |  |  |



D

◆

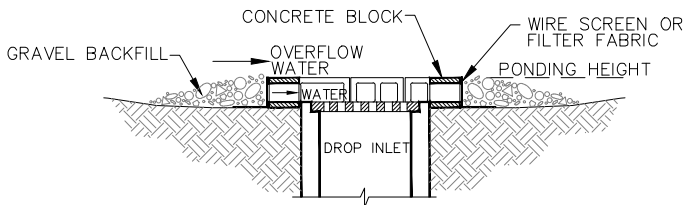
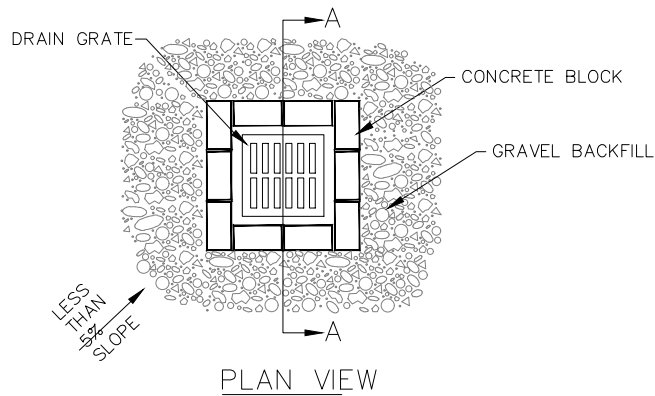
C

◆

B

◆

A

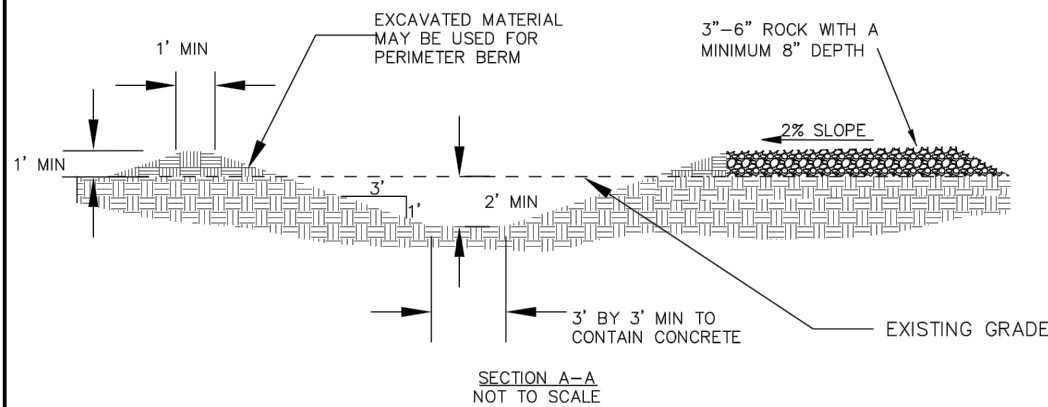
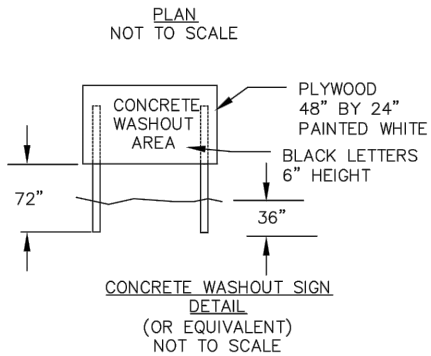
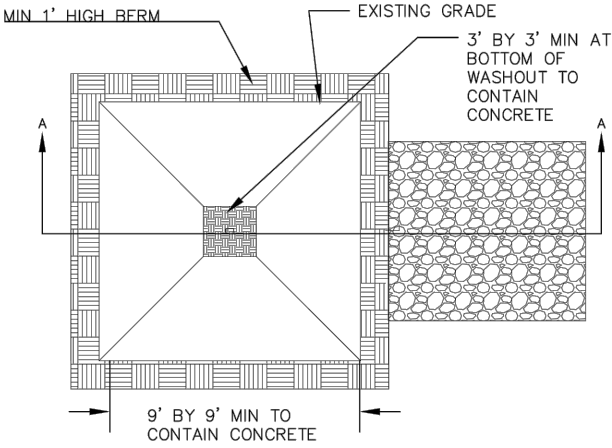


- NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
  2. EXCAVATE A BASIN OF SUFFICIENT SIZE ADJACENT TO THE DROP INLET.
  3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

INLET PROTECTION  
NTS

4

- NOTES:
1. WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES.
  2. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
  3. IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
  4. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT FROM SENSITIVE AREAS INCLUDING OPEN DRAINAGE FACILITIES AND WATERSOURCES.
  5. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
  6. INSTALL CONCRETE WASHOUT SIGN WITHIN 30 FEET OF TEMPORARY CONCRETE WASHOUT FACILITY.
  7. TEMPORARY CONCRETE WASHOUTS MAY BE A PREFABRICATED CONTAINER THAT IS PORTABLE AND REUSABLE.



CONCRETE WASHOUT

DRAWING NO. 900

REVISED 12-16



CONCRETE WASHOUT  
NTS

5



819 SE MORRISON STREET,  
STE. 310  
PORTLAND, OR 97214  
OFFICE - 503.274.2010  
WWW.ESASSOC.COM

| NO. | DATE     | BY  | REVISIONS   |
|-----|----------|-----|-------------|
| 4   | 08/14/18 | NMR | 100% DESIGN |
| 3   | 06/27/18 | NMR | 90% DESIGN  |
| 2   | 03/12/18 | SLM | 60% DESIGN  |
| 1   | 11/13/17 | SLM | 30% DESIGN  |

|          |            |
|----------|------------|
| NMR      | 08/14/2018 |
| DESIGNED | DATE       |
| AMF      | 08/14/2018 |
| DRAFTED  | DATE       |
| JGR      | 08/14/2018 |
| CHECKED  | DATE       |
| JGR      | 08/14/2018 |
| APPROVED | DATE       |



CITY OF MILWAUKIE

6101 SE JOHNSON CREEK BLVD.  
MILWAUKIE, OR 97206

PHONE: 503-786-7600  
FAX: 503-774-8236

SOUTH DOWNTOWN IMPROVEMENTS

EROSION CONTROL DETAILS

|              |         |               |           |       |            |            |      |
|--------------|---------|---------------|-----------|-------|------------|------------|------|
| PROJECT NO.: | CIP2018 | CONTRACT NO.: | C2018-051 | DATE: | 08/14/2018 | SHEET NO.: | EC06 |
|--------------|---------|---------------|-----------|-------|------------|------------|------|