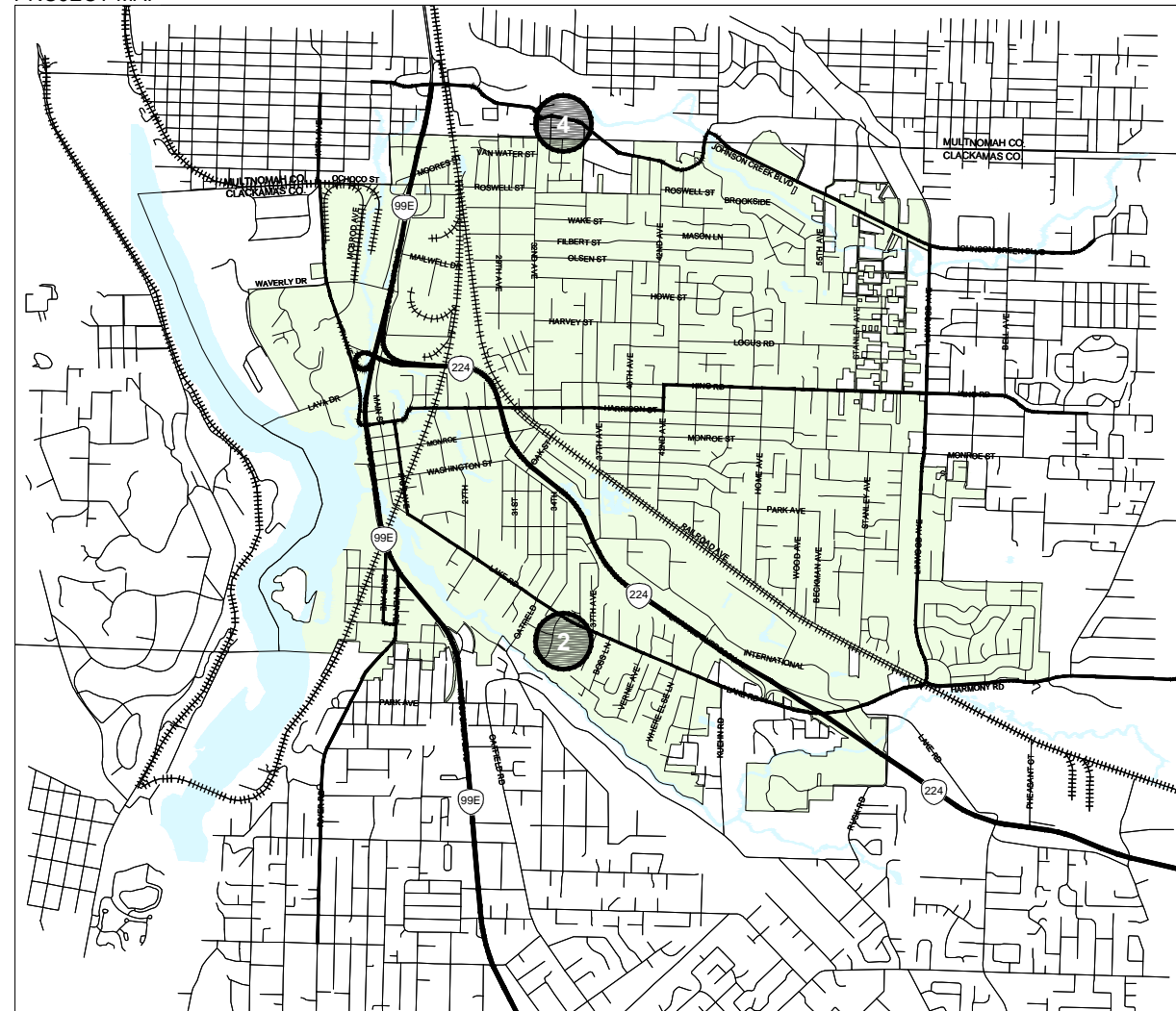


CITY OF MILWAUKIE, OREGON

2016 Sidewalk and ADA Ramp Enhancement

CIP2016-S15

PROJECT MAP



RAMP COUNT
 GENERAL PROJECT AREA

PROJECT MAP
 Scale: N.T.S.

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 952-001-0090. You may obtain copies of the rules by calling the Oregon Utility Notification Center at 503-232-1987.



PROJECT DESCRIPTION

The 2016 Pedestrian Improvements Project generally consists of upgrading existing curb ramps and sidewalks along SE Van Water Street from SE 30th Avenue to SE 32nd Avenue as well as adding curb ramps and sidewalks to provide connectivity at the intersection of SE Lake Road and SE 38th Avenue in the City of Milwaukie. Upgrading the curb ramps will include concrete curb removal and replacement, concrete sidewalk removal and replacement, installation of ADA-compliant tactile warning pad, and other incidental work required to complete the work.

PROJECT MANAGER

Name: Rick Buen
 Title: Civil Engineer
 Phone Number: (503) 786-7602
 Cell Number: (503) 734-4060
 Email Address: buenr@milwaukieoregon.gov

PROJECT INSPECTOR

Name: Alex Roller
 Title: Engineering Technician II
 Phone Number: (503) 786-7695
 Cell Number: (503) 502-6570
 Email Address: rollera@milwaukieoregon.gov

MILWAUKIE OPERATIONS

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

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 Sculli
 Phone Number: (503) 242-0304

COMCAST

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



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

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2016 Sidewalk and ADA Ramp Enhancement
 SIDEWALK AND RAMP INSTALLATION
 COVER SHEET

6101 SE JOHNSON CREEK BLVD.
 MILWAUKIE, OR 97206

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

PROJECT NO.: CIP2016-S15

CONTRACT NO.:

DATE: 9/19/16

SHEET NO.: CV1

NO.	DATE	BY	REVISIONS

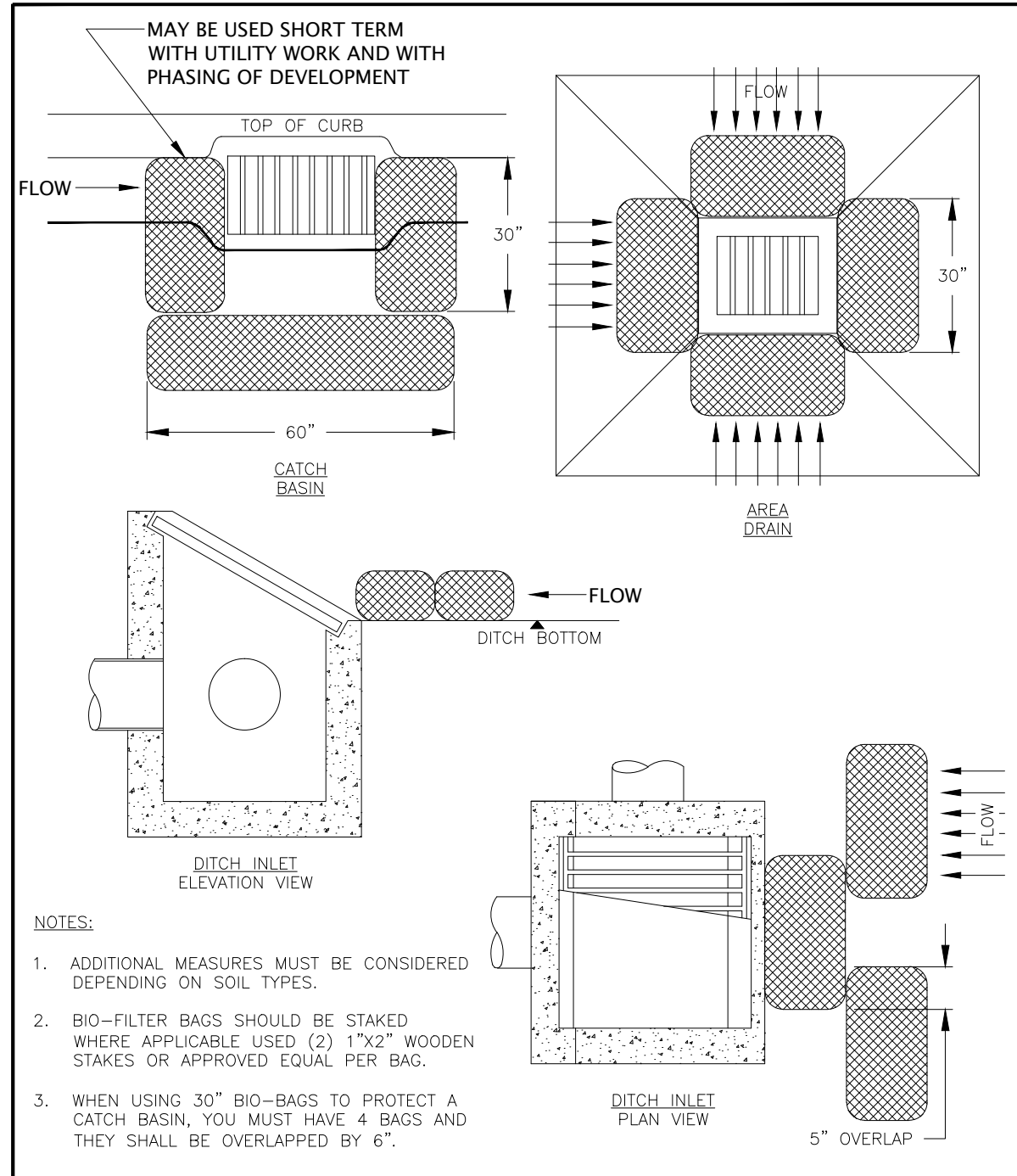
RBB DESIGNED	6/16/2016
RBB DRAFTED	6/16/2016
CLE CHECKED	6/20/2016
GBN APPROVED	6/20/2016

GENERAL REQUIREMENTS NOTES

1. THE LOCATION AND DESCRIPTION OF UTILITIES 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. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THESE REQUIREMENTS ARE SET FORTH IN OAR 952-001-0010 THROUGH 952-001-0100.
3. 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.
4. CONTRACTOR SHALL COMPLY WITH CITY OF MILWAUKIE PUBLIC WORKS STANDARDS REVISED FEBRUARY 4, 2014 IN ITS ENTIRETY.
5. 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.
6. FOR ANY EXISTING UNDERGROUND UTILITY CONFLICTING WITH THE PROPOSED WORK DESCRIBED HEREIN, CONTRACTOR SHALL NOTIFY WITH PROJECT MANAGER OF THE CONFLICTS.
7. 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.
8. CONTRACTOR SHALL INSTALL, UTILIZE, AND MAINTAIN EROSION PREVENTION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION PREVENTION & SEDIMENT CONTROL NOTES AND DETAILS ON SHEETS ER1 AND ER2.
9. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE REQUIREMENTS ON SHEET TR1 PRIOR TO START OF WORK. CONTRACTOR TO INSTALL, MAINTAIN, AND REMOVE TRAFFIC CONTROL DEVICES AS NEEDED OR DIRECTED. ADDITIONS AND/OR DEVIATIONS FROM THE TCP SHALL BE APPROVED BY THE PROJECT MANAGER.
10. ALL SALVAGED TRAFFIC SIGNS SHALL BE STORED SAFELY TO PREVENT DAMAGES. DAMAGED STREET SIGNAGE SHALL BE REPLACED AT CONTRACTORS EXPENSE.
11. ALL EXCAVATIONS WITHIN THE PAVED STREET 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.
12. CONTRACTOR SHALL NOT REMOVE ANY STREET SIGNAGE WITHOUT PRIOR CITY APPROVAL.
13. CONTRACTOR SHALL REPLACE DAMAGED OR REMOVED PAVEMENT MARKINGS UPON COMPLETION OF FINAL PAVING.
14. PRIOR TO FINAL PAYMENT, CONTRACTOR SHALL SUBMIT COMPLETE "AS BUILT" PLANS TO THE CITY SHOWING ANY CHANGES FROM THE ORIGINAL PLAN. THE CONTRACTOR SHALL KEEP A COMPLETE SET OF "AS BUILTS" ON SITE THAT MUST BE KEPT UP TO DATE AT ALL TIMES AND AVAILABLE FOR CITY INSPECTION.
15. 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 UPON COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL PROVIDE A COPY OF ALL AGREEMENTS SIGNED WITH PRIVATE PROPERTY OWNERS.

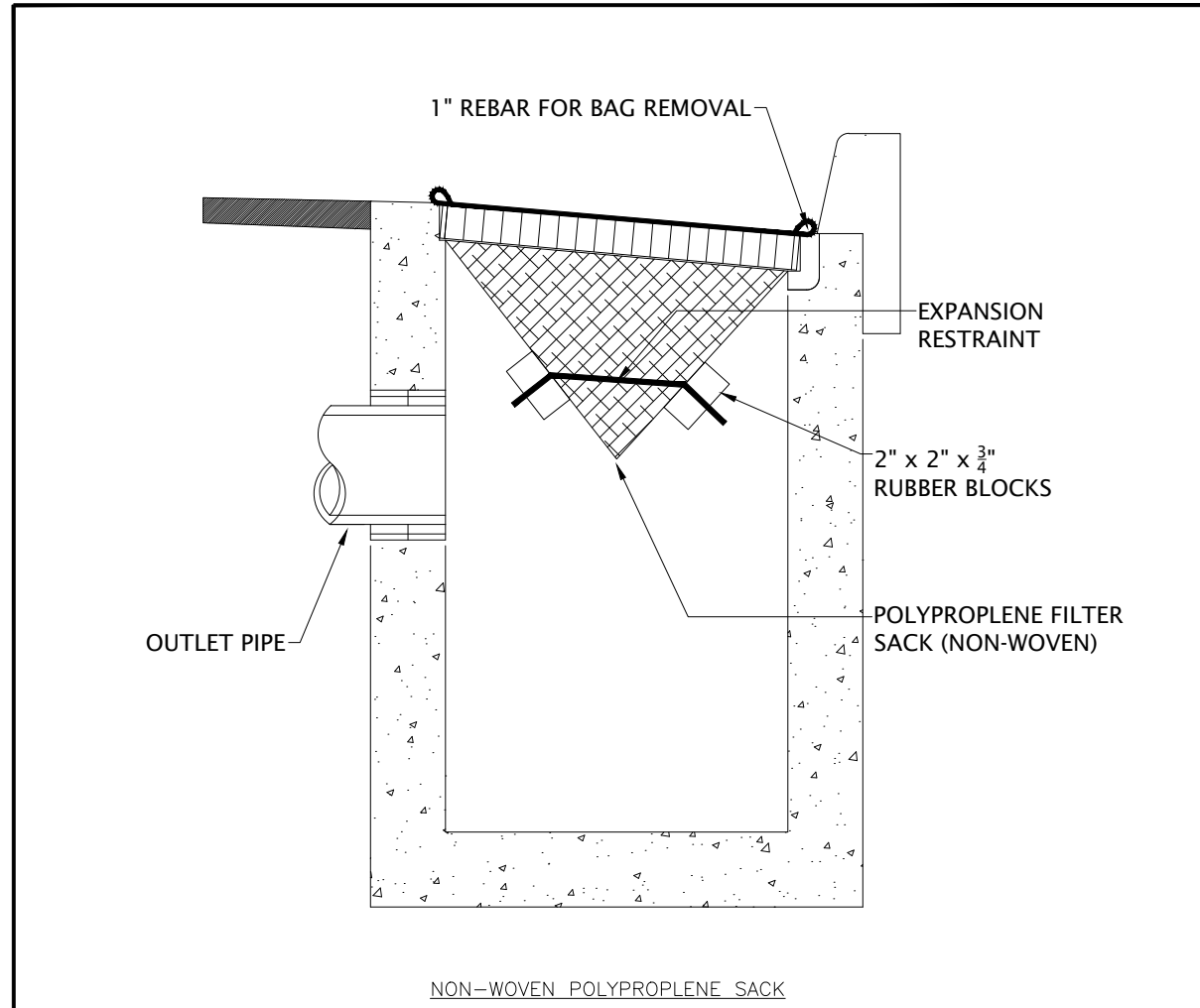
TABLE OF CONTENTS	
SHEET NUMBER	SHEET TITLE
CV1	COVER SHEET
CV2	NOTES SHEET
ER1	EROSION PREVENTION AND SEDIMENTATION CONTROL PLAN
ER2	EROSION PREVENTION AND SEDIMENTATION CONTROL PLAN
TR1	TRAFFIC CONTROL PLAN
CI1	SE LAKE ROAD AND SE 38TH AVENUE
CI2	SE VAN WATER ROAD AND SE 30TH AVENUE
CI3	SE VAN WATER ROAD AND SE 31ST AVENUE
DT1	CONSTRUCTION DETAILS
DT2	CONSTRUCTION DETAILS
DT3	CONSTRUCTION DETAILS
DT4	CONSTRUCTION DETAILS
DT5	CONSTRUCTION DETAILS
DT6	CONSTRUCTION DETAILS

				RBB DESIGNED 6/16/2016 RBB DRAFTED 6/16/2016 CLE CHECKED 6/20/2016 GBN APPROVED 6/20/2016	S: \City Logos\Horizontal-Logo-Black-&-Whi.jpg		2016 Sidewalk and ADA Ramp Enhancement SIDEWALK AND RAMP INSTALLATION NOTES SHEET			
NO.	DATE	BY	REVISIONS	6101 SE JOHNSON CREEK BLVD. MILWAUKIE, OR 97206		PHONE: 503-786-7600 FAX: 503-774-8236	PROJECT NO.: CIP2016-S15	CONTRACT NO.:	DATE: 9/19/16	SHEET NO.: CV2



- NOTES:**
1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPES.
 2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USED (2) 1"x2" WOODEN STAKES OR APPROVED EQUAL PER BAG.
 3. WHEN USING 30" BIO-BAGS TO PROTECT A CATCH BASIN, YOU MUST HAVE 4 BAGS AND THEY SHALL BE OVERLAPPED BY 6".

CITY OF MILWAUKIE, OREGON – PUBLIC WORKS DEPT.			
Inlet Protection – Type 4			DRAWING NO.
			4-18
APPROVED	NO.	REVISIONS	DATE BY
CITY ENGINEER	DATE		
			DEC 2011



- NOTES:**
1. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS. SIZE OF FILTER FABRIC INLET SACKS TO BE DETERMINED BY MANUFACTURER.

CITY OF MILWAUKIE, OREGON – PUBLIC WORKS DEPT.			
Inlet Protection – Type 5			DRAWING NO.
			4-19
APPROVED	NO.	REVISIONS	DATE BY
CITY ENGINEER	DATE		
			DEC 2011

NO.	DATE	BY	REVISIONS

RBB DESIGNED	6/16/2016
RBB DRAFTED	6/16/2016
CLE CHECKED	6/20/2016
GBN APPROVED	6/20/2016

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MILWAUKIE, OR 97206

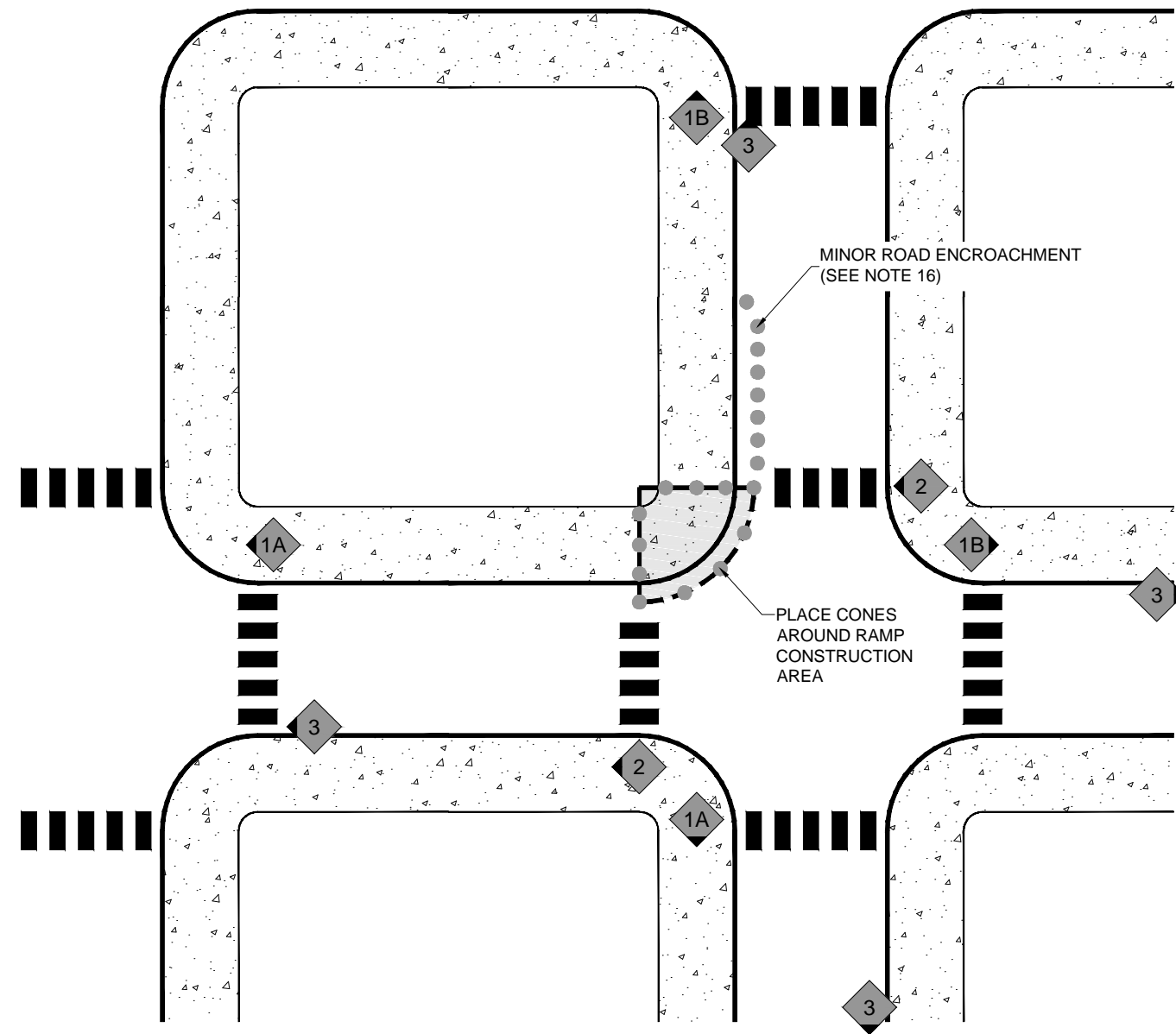
PHONE: 503-786-7600
FAX: 503-774-8236

2016 Sidewalk and ADA Ramp Enhancement			
SIDEWALK AND RAMP INSTALLATION			
EROSION PREVENTION AND SEDIMENTATION CONTROL PLAN			
PROJECT NO.:	CIP2016-S15	CONTRACT NO.:	
DATE:	9/19/16	SHEET NO.:	ER2

TRAFFIC CONTROL REQUIREMENTS NOTES

1. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLAN. ALL TRAFFIC CONTROL MEASURES AND DEVICES SHALL CONFORM WITH THE 2009 EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. THESE TRAFFIC CONTROL PLANS ARE SCHEMATIC IN NATURE AND ARE CONSIDERED THE MINIMUM NECESSARY TO ADEQUATELY MANAGE TRAFFIC DURING CONSTRUCTION.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THIS PLAN THROUGHOUT THE DURATION OF CONSTRUCTION.
4. TRAVEL LANES, STREETS, SIDEWALKS, DRIVEWAYS, AND POINTS OF ACCESS SHALL BE OPENED TO VEHICULAR AND PEDESTRIAN TRAFFIC AT THE END OF EACH WORK DAY, UNLESS OTHERWISE SPECIFIED IN THE PROJECT PLANS OR AS DIRECTED BY THE PROJECT MANAGER.
5. ALL AREAS OF EXCAVATION WITHIN VEHICULAR AND PEDESTRIAN TRAVEL WAYS SHALL BE TEMPORARILY COVERED WITH STEEL PLATES OR BACKFILLED AND TEMPORARILY SURFACED WITH ASPHALT CONCRETE PATCHING UNTIL FINAL PAVING. IF STEEL PLATES ARE USED, CONTRACTOR SHALL PLACE "STEEL PLATE AHEAD" SIGNS (MUTCD SIGN W8-24) ON ALL TRAVEL WAY APPROACHES.
6. 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, 24 HOURS IN ADVANCE OF THE CLOSURE.
7. TRAFFIC CONTROL DEVICE LOCATIONS ARE APPROXIMATE. FINAL TRAFFIC CONTROL DEVICE LOCATIONS SHALL BE DETERMINED BY THE PROJECT MANAGER OR PROJECT INSPECTOR IN THE FIELD.
8. TRAFFIC CONTROL SIGNS SHALL BE PROPORTIONED IN ACCORDANCE WITH CONVENTIONAL ROADWAY STANDARDS OF THE MUTCD.
9. TRAFFIC CONTROL SIGNS SHALL BE SPACED A MINIMUM 100 FEET FROM CONSTRUCTION ZONE LIMITS AND OTHER SIGNS.
10. LANE SHIFTING AND MERGER TAPERS SHALL HAVE A LENGTH NECESSARY TO ACCOMMODATE 25 MPH VEHICULAR SPEEDS, UNLESS OTHERWISE SPECIFIED IN THE PROJECT PLANS OR AS DIRECTED BY THE PROJECT MANAGER.
11. 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 PER THE MUTCD.
12. THE MINIMUM VEHICLE TRAVEL LANE WIDTH SHALL BE A 10-FOOT CLEAR DISTANCE PERPENDICULAR TO THE DIRECTION OF TRAVEL.
13. CONTRACTOR TO PROVIDE TRAFFIC CONTROL PLAN FOR ASPHALT CONCRETE PAVING AT THE PRE-PAVING MEETING.
14. 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.
15. CONTRACTOR TO PROVIDE THE CITY WITH THE DURATION OF EXISTING PEDESTRIAN CLOSURE BEFORE CONSTRUCTION OF AFFECTED PEDESTRIAN ROUTE COMMENCE.
16. IF TEMPORARY RAMP IS LOCATED IN A VEHICULAR TRAVEL LANE, CONTRACTOR SHALL INSTALL TRAFFIC CONTROL DEVICES IN CONFORMANCE WITH DIAGRAM 300 ("SHOULDER WORK WITH MINOR ROAD ENCROACHMENT") OF THE OREGON TEMPORARY TRAFFIC CONTROL HANDBOOK (DECEMBER 2011). CONTRACTOR SHALL ALSO UTILIZE A PEDESTRIAN CROSSING SIGN (MUTCD W11-2) IF DIRECTED BY THE PROJECT MANAGER.

PEDESTRIAN TRAFFIC CONTROL PLAN, TYP.
NOT TO SCALE



1A	"SIDEWALK CLOSED AHEAD - CROSS HERE" WITH RIGHT ARROW MUTCD SIGN R9-11	3	"ROAD WORK AHEAD" MUTCD SIGN W20-1
1B	"SIDEWALK CLOSED AHEAD - CROSS HERE" WITH LEFT ARROW MUTCD SIGN R9-11		
2	"SIDEWALK CLOSED - USE OTHER SIDE" MUTCD SIGN R9-10		

NO.	DATE	BY	REVISIONS

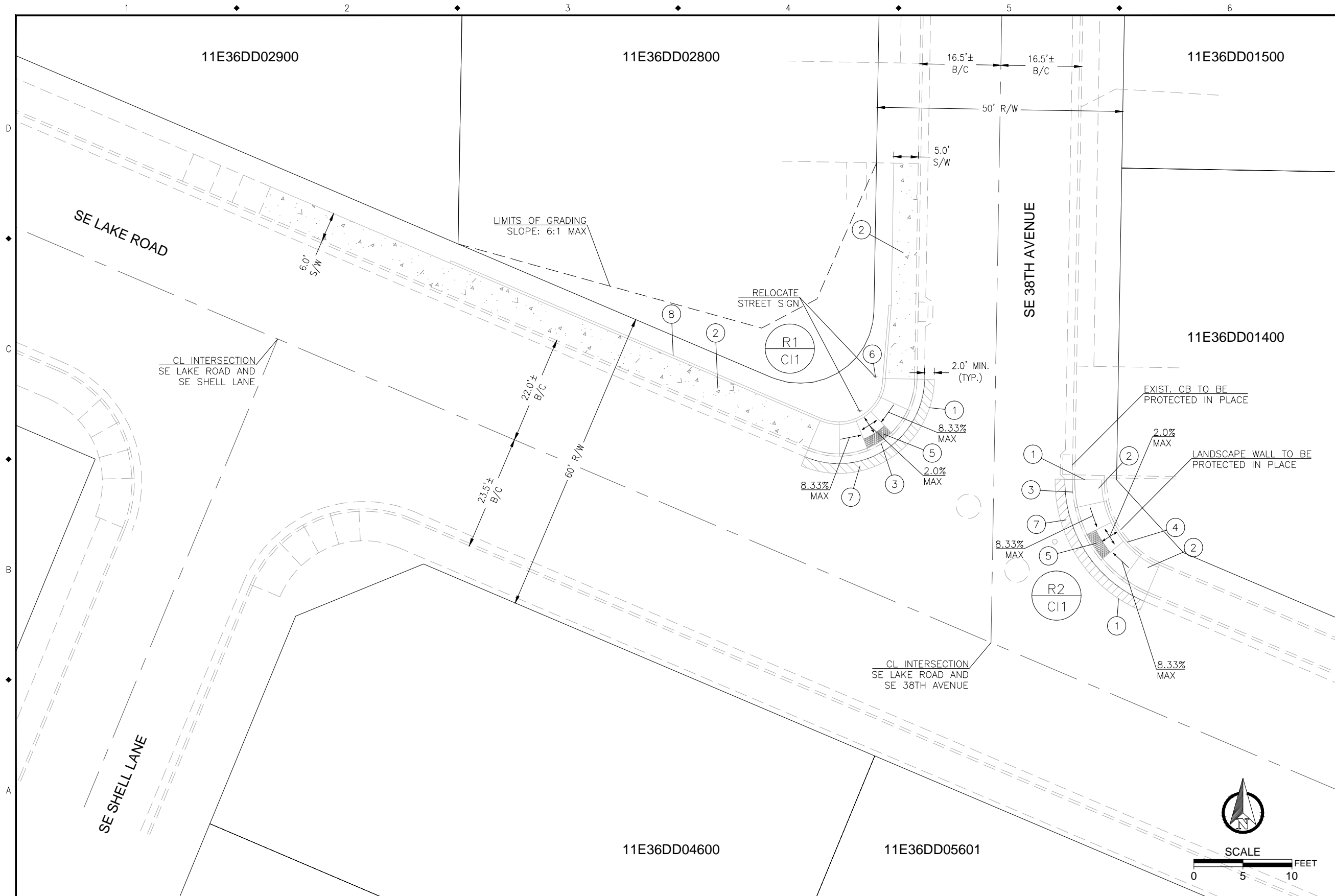
RBB DESIGNED	6/16/2016 DATE
RBB DRAFTED	6/16/2016 DATE
CLE CHECKED	6/20/2016 DATE
GBN APPROVED	6/20/2016 DATE

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6101 SE JOHNSON CREEK BLVD.
MILWAUKIE, OR 97206

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

2016 Sidewalk and ADA Ramp Enhancement			
SIDEWALK AND RAMP INSTALLATION			
TRAFFIC CONTROL PLAN			
PROJECT NO.: CIP2016-S15	CONTRACT NO.:	DATE: 9/19/16	SHEET NO.: TR1



- CONSTRUCTION NOTES:**
- SAWCUT EXISTING CONCRETE OR ASPHALT STRUCTURE.
 - CONSTRUCT CONCRETE SIDEWALK (4" DEPTH) PER CITY OF MILWAUKIE STANDARD DETAIL 504, AND APPLICABLE PORTIONS OF MILWAUKIE STANDARD DETAILS 505, 506, 507, 508 AND 509, OR AS DIRECTED BY THE PROJECT MANAGER.
 - INSTALL STANDARD CURB AND GUTTER PER CITY OF MILWAUKIE STANDARD DETAIL 500. CURB EXPOSURE TRANSITIONS SHALL BE INSTALLED AS DIRECTED BY PROJECT MANAGER. TIE NEW CURB TO ADJACENT EXISTING CURB PER DETAIL 1 ON SHEET D3.
 - INSTALL STANDARD TYPE C CURB PER CITY OF MILWAUKIE STANDARD DETAIL 501. CURB EXPOSURE TRANSITIONS SHALL BE INSTALLED AS DIRECTED BY PROJECT MANAGER. TIE NEW CURB TO ADJACENT EXISTING CURB PER DETAIL 1 ON SHEET D3.
 - INSTALL MASCO CAST-IN-TACT ("BLACK") TRUNCATED DOME. MEASUREMENT BETWEEN BACK OF CURB AND FACE OF TRUNCATED DOME PANELS FOR RADIUS SECTIONS SHALL NOT EXCEED 3 INCHES UNLESS OTHERWISE ALLOWED BY PROJECT MANAGER.
 - RELOCATE SIGN AND INSTALL SURFACE MOUNT SIGN BASE AND BREAKAWAY PER CITY OF MILWAUKIE STANDARD DETAIL 525 WHERE NEEDED.
 - INSTALL ASPHALT CONCRETE. THICKNESS PER THE FOLLOWING:
SE LAKE ROAD: 8" THICK
SE VAN WATER: 4" THICK
 - INSTALL 30" HEIGHT MASONRY WALL PER DETAIL ON SHEET DT5.

NO.	DATE	BY	REVISIONS

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GBN APPROVED	9/19/2016 DATE

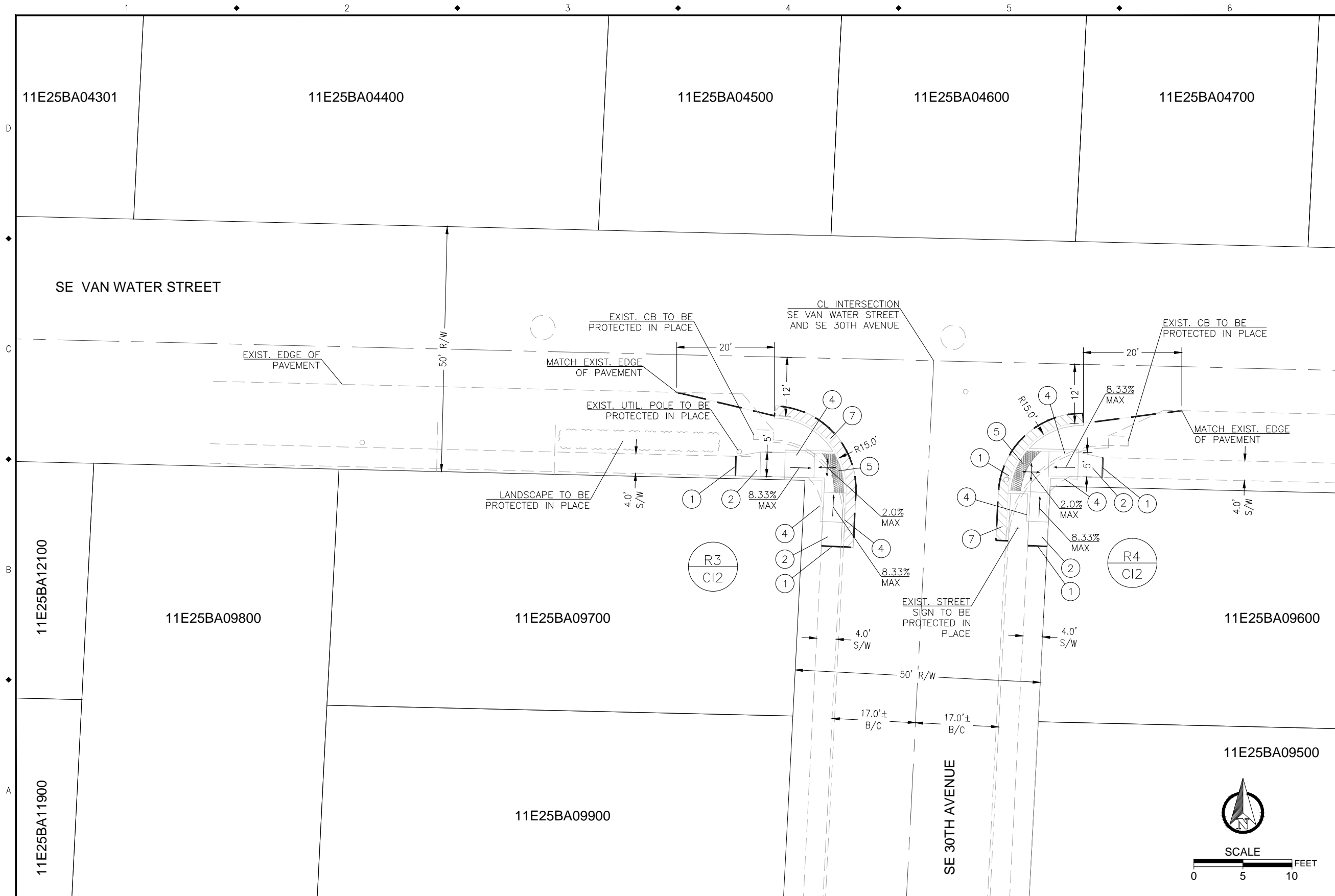
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6101 SE JOHNSON CREEK BLVD.
MILWAUKIE, OR 97206

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

2016 Sidewalk and ADA Ramp Enhancement
SIDEWALK AND RAMP INSTALLATION
SE LAKE ROAD AND SE 38TH AVENUE

PROJECT NO.: CIP2016-S15	CONTRACT NO.:	DATE: 9/19/16	SHEET NO.: C11
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- CONSTRUCTION NOTES:**
1. SAWCUT EXISTING CONCRETE OR ASPHALT STRUCTURE.
 2. CONSTRUCT CONCRETE SIDEWALK (4" DEPTH) PER CITY OF MILWAUKIE STANDARD DETAIL 504, AND APPLICABLE PORTIONS OF MILWAUKIE STANDARD DETAILS 505, 506, 507, 508 AND 509, OR AS DIRECTED BY THE PROJECT MANAGER.
 4. INSTALL STANDARD TYPE C CURB PER CITY OF MILWAUKIE STANDARD DETAIL 501. CURB EXPOSURE TRANSITIONS SHALL BE INSTALLED AS DIRECTED BY PROJECT MANAGER. TIE NEW CURB TO ADJACENT EXISTING CURB PER DETAIL 1 ON SHEET D3.
 5. INSTALL MASCO CAST-IN-TACT ("BLACK") TRUNCATED DOME. MEASUREMENT BETWEEN BACK OF CURB AND FACE OF TRUNCATED DOME PANELS FOR RADIUS SECTIONS SHALL NOT EXCEED 3 INCHES UNLESS OTHERWISE ALLOWED BY PROJECT MANAGER.
 6. RELOCATE SIGN AND INSTALL SURFACE MOUNT SIGN BASE AND BREAKAWAY PER CITY OF MILWAUKIE STANDARD DETAIL 525 WHERE NEEDED.
 7. INSTALL ASPHALT CONCRETE. THICKNESS PER THE FOLLOWING:
SE LAKE ROAD: 8" THICK
SE VAN WATER: 4" THICK

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GBN APPROVED	6/20/2016 DATE

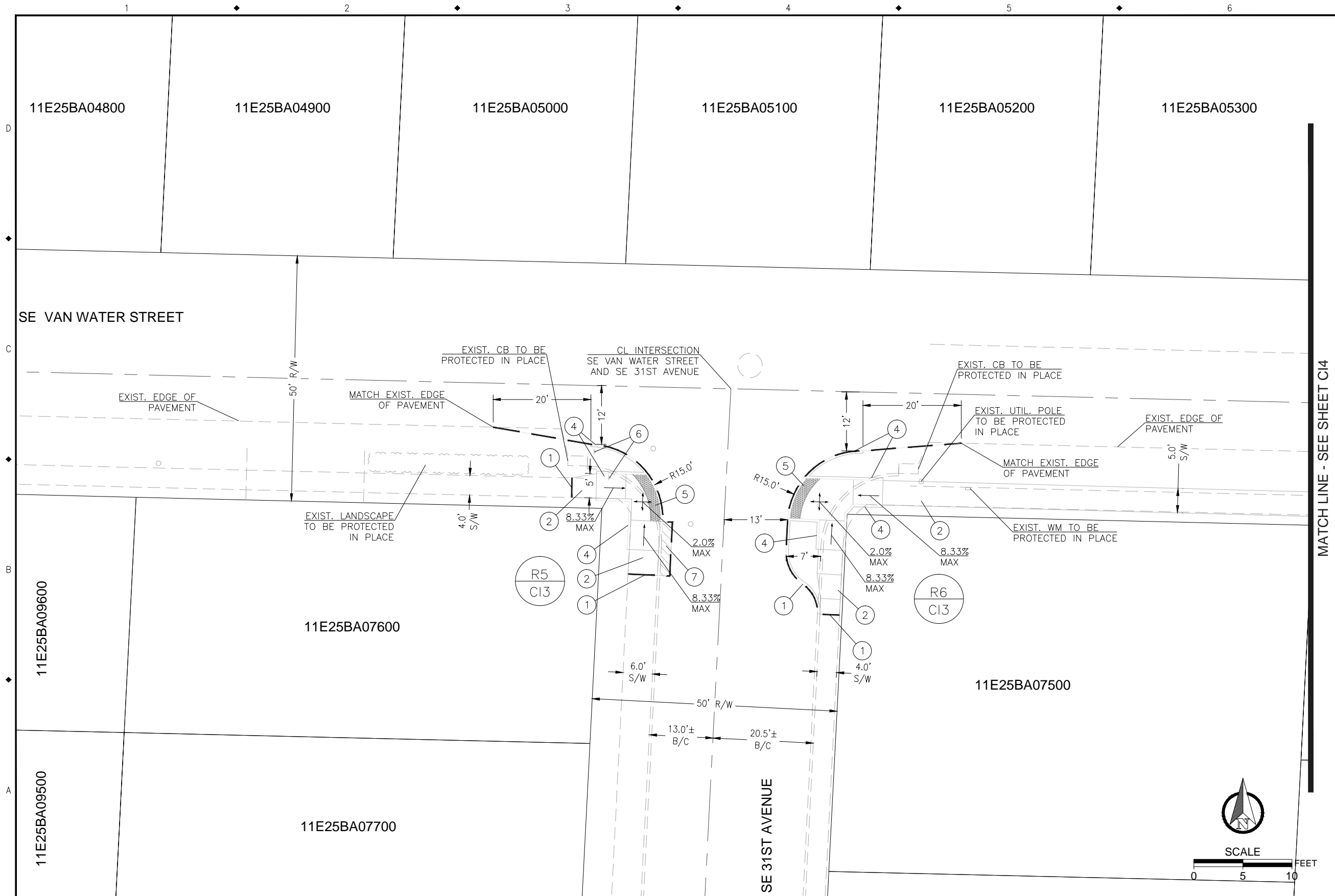
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6101 SE JOHNSON CREEK BLVD.
MILWAUKIE, OR 97206

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

2016 Sidewalk and ADA Ramp Enhancement
SIDEWALK AND RAMP INSTALLATION
SE VAN WATER STREET AND SE 30TH AVENUE

PROJECT NO.: CIP2016-S15	CONTRACT NO.:	DATE: 9/19/16	SHEET NO.: C12
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- CONSTRUCTION NOTES:**
1. SAWCUT EXISTING CONCRETE OR ASPHALT STRUCTURE.
 2. CONSTRUCT CONCRETE SIDEWALK (4" DEPTH) PER CITY OF MILWAUKIE STANDARD DETAIL 504, AND APPLICABLE PORTIONS OF MILWAUKIE STANDARD DETAILS 505, 506, 507, 508 AND 509, OR AS DIRECTED BY THE PROJECT MANAGER.
 4. INSTALL STANDARD TYPE C CURB PER CITY OF MILWAUKIE STANDARD DETAIL 501. CURB EXPOSURE TRANSITIONS SHALL BE INSTALLED AS DIRECTED BY PROJECT MANAGER. TIE NEW CURB TO ADJACENT EXISTING CURB PER DETAIL 1 ON SHEET D3.
 5. INSTALL MASCO CAST-IN-TACT ("BLACK") TRUNCATED DOME. MEASUREMENT BETWEEN BACK OF CURB AND FACE OF TRUNCATED DOME PANELS FOR RADIUS SECTIONS SHALL NOT EXCEED 3 INCHES UNLESS OTHERWISE ALLOWED BY PROJECT MANAGER.
 6. RELOCATE SIGN AND INSTALL SURFACE MOUNT SIGN BASE AND BREAKAWAY PER CITY OF MILWAUKIE STANDARD DETAIL 525 WHERE NEEDED.
 7. INSTALL ASPHALT CONCRETE. THICKNESS PER THE FOLLOWING:
 SE LAKE ROAD: 8" THICK
 SE VAN WATER: 4" THICK

MATCH LINE - SEE SHEET C14

NO.	DATE	BY	REVISIONS

RBB DESIGNED	6/16/2016
RBB DRAFTED	6/16/2016
CLE CHECKED	6/20/2016
GBN APPROVED	6/20/2016

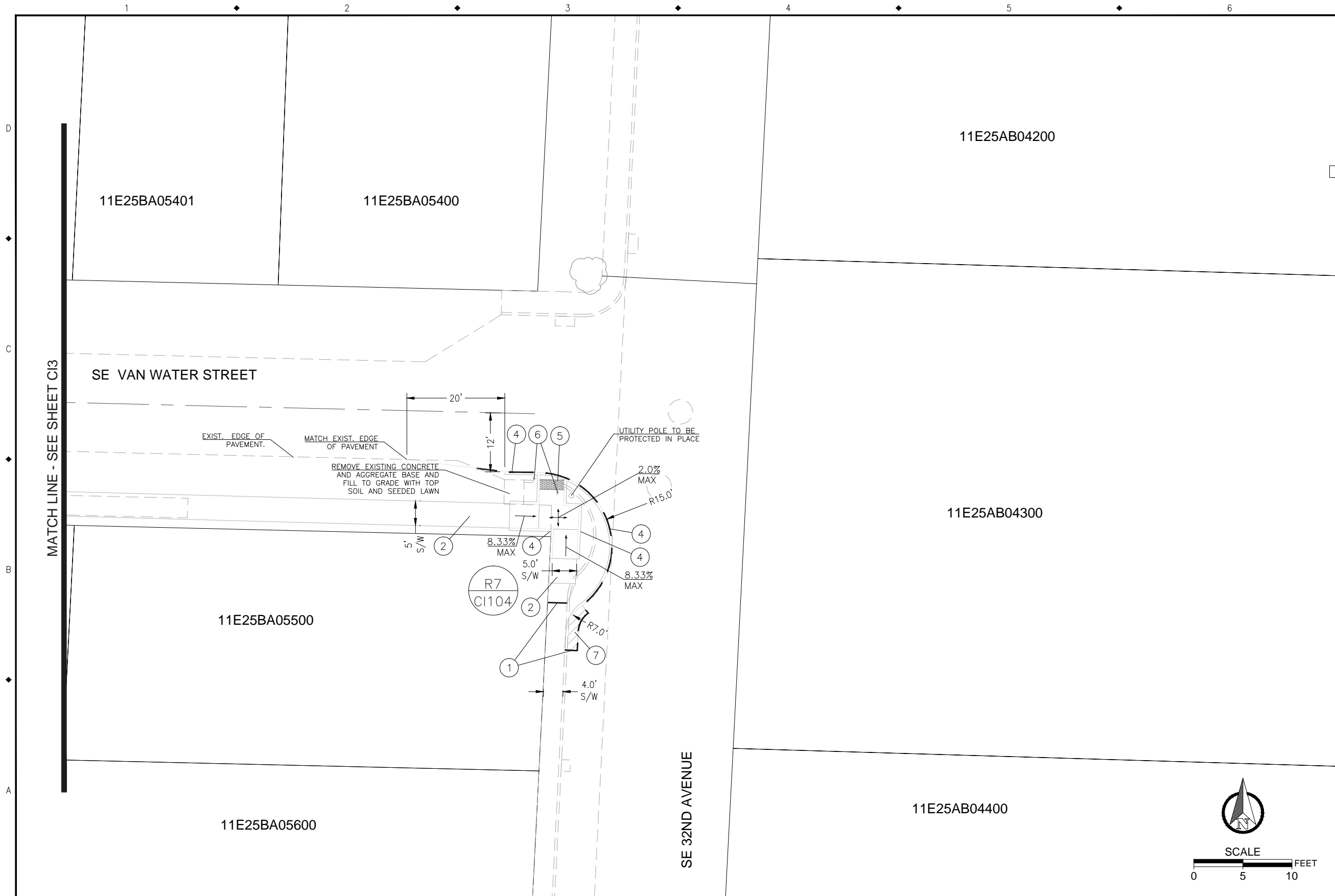
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6101 SE JOHNSON CREEK BLVD.
MILWAUKIE, OR 97206

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

2016 Sidewalk and ADA Ramp Enhancement
 SIDEWALK AND RAMP INSTALLATION
 SE VAN WATER STREET AND SE 31ST AVENUE

PROJECT NO.: CIP2016-S15	CONTRACT NO.:	DATE: 9/19/16	SHEET NO.: C13
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- CONSTRUCTION NOTES:**
1. SAWCUT EXISTING CONCRETE OR ASPHALT STRUCTURE.
 2. CONSTRUCT CONCRETE SIDEWALK (4" DEPTH) PER CITY OF MILWAUKIE STANDARD DETAIL 504, AND APPLICABLE PORTIONS OF MILWAUKIE STANDARD DETAILS 505, 506, 507, 508 AND 509, OR AS DIRECTED BY THE PROJECT MANAGER.
 4. INSTALL STANDARD TYPE C CURB PER CITY OF MILWAUKIE STANDARD DETAIL 501. CURB EXPOSURE TRANSITIONS SHALL BE INSTALLED AS DIRECTED BY PROJECT MANAGER. TIE NEW CURB TO ADJACENT EXISTING CURB PER DETAIL 1 ON SHEET D3.
 5. INSTALL MASCO CAST-IN-TACT ("BLACK") TRUNCATED DOME. MEASUREMENT BETWEEN BACK OF CURB AND FACE OF TRUNCATED DOME PANELS FOR RADIUS SECTIONS SHALL NOT EXCEED 3 INCHES UNLESS OTHERWISE ALLOWED BY PROJECT MANAGER.
 6. RELOCATE SIGN AND INSTALL SURFACE MOUNT SIGN BASE AND BREAKAWAY PER CITY OF MILWAUKIE STANDARD DETAIL 525 WHERE NEEDED.
 7. INSTALL ASPHALT CONCRETE. THICKNESS PER THE FOLLOWING:
 SE LAKE ROAD: 8" THICK
 SE VAN WATER: 4" THICK

NO.	DATE	BY	REVISIONS

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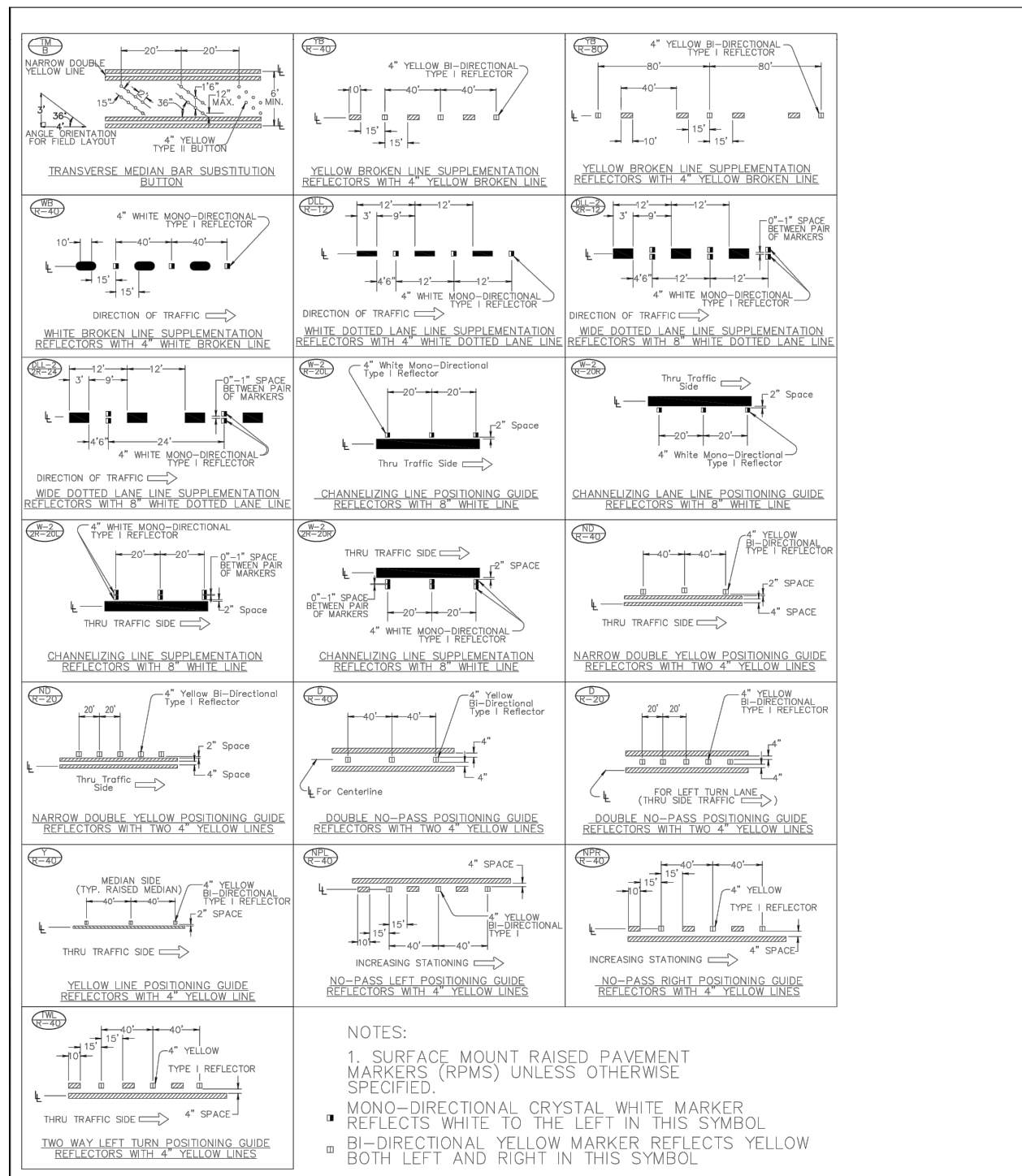
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6101 SE JOHNSON CREEK BLVD.
MILWAUKIE, OR 97206

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

2016 Sidewalk and ADA Ramp Enhancement
 SIDEWALK AND RAMP INSTALLATION
 SE VAN WATER STREET AND SE 32ND AVENUE

PROJECT NO.: CIP2016-S15	CONTRACT NO.:	DATE: 9/19/16	SHEET NO.: C14
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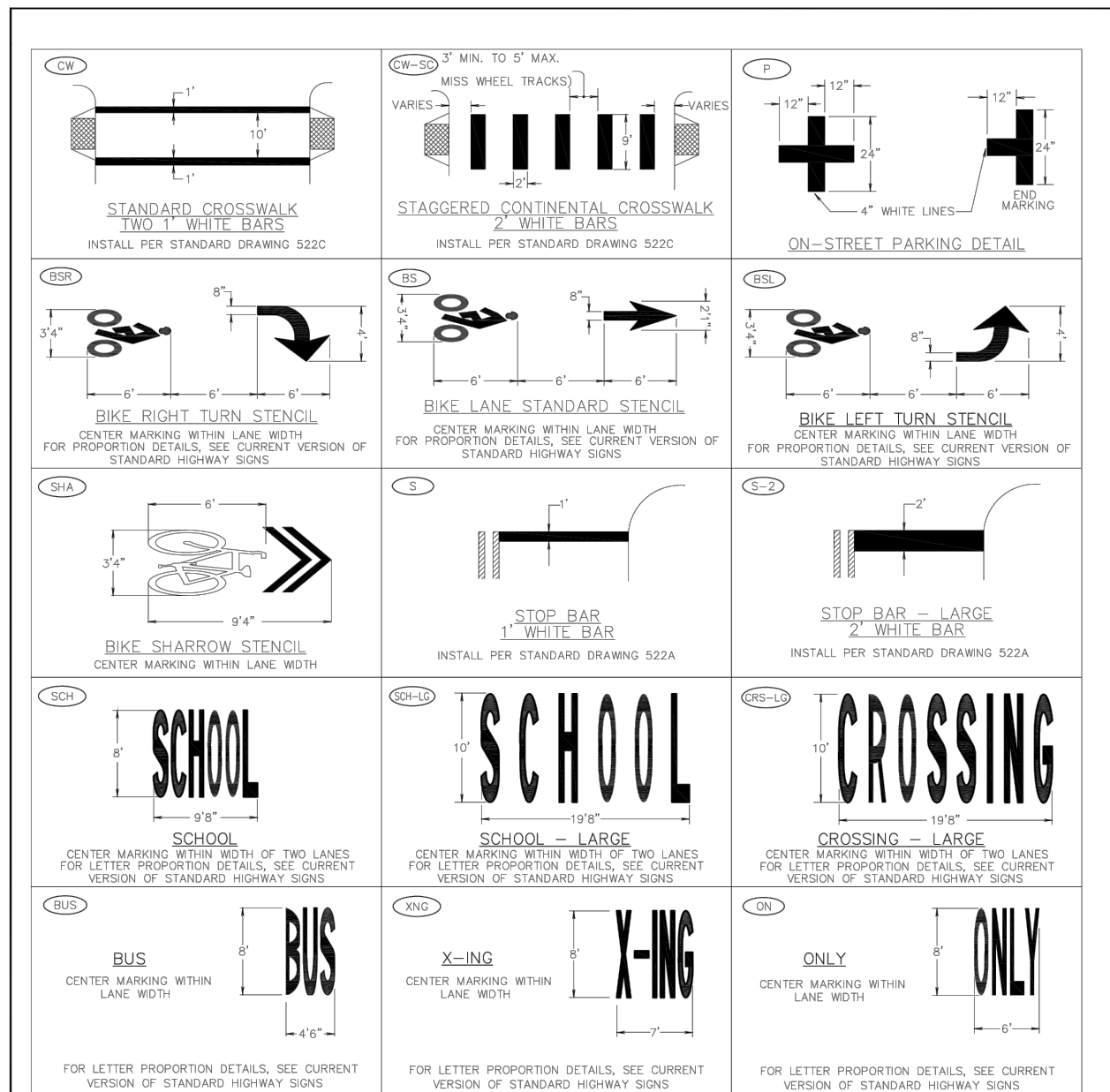
NOTES:
 1. SURFACE MOUNT RAISED PAVEMENT MARKERS (RPMs) UNLESS OTHERWISE SPECIFIED.
 ■ MONO-DIRECTIONAL CRYSTAL WHITE MARKER REFLECTS WHITE TO THE LEFT IN THIS SYMBOL
 □ BI-DIRECTIONAL YELLOW MARKER REFLECTS YELLOW BOTH LEFT AND RIGHT IN THIS SYMBOL

MILWAUKIE, OREGON
 CITY OF MILWAUKIE, OREGON – PUBLIC WORKS DEPT.
Pavement Marking Standard Detail Blocks

DRAWING NO. **519**
 DEC 2013

APPROVED *Gay Paulson* 12/13
 CITY ENGINEER DATE

NO.	REVISIONS	DATE	BY
1	DRAWING CREATED	10/12	MTC



NOTES:
 1. ARROW, LETTER, AND BIKE SYMBOL DIMENSIONS NOMINAL.

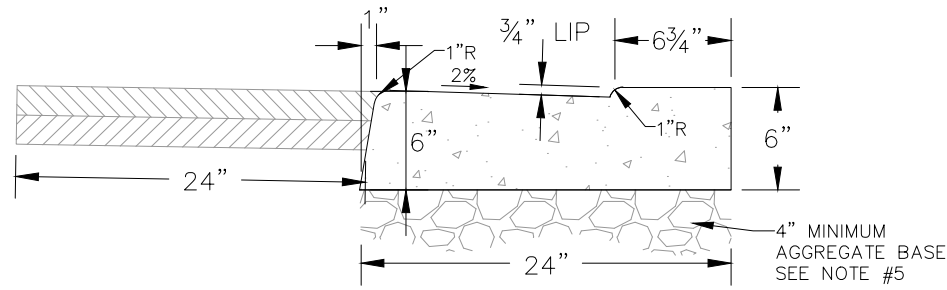
MILWAUKIE, OREGON
 CITY OF MILWAUKIE, OREGON – PUBLIC WORKS DEPT.
Pavement Marking Standard Detail Blocks

DRAWING NO. **520**
 DEC 2013

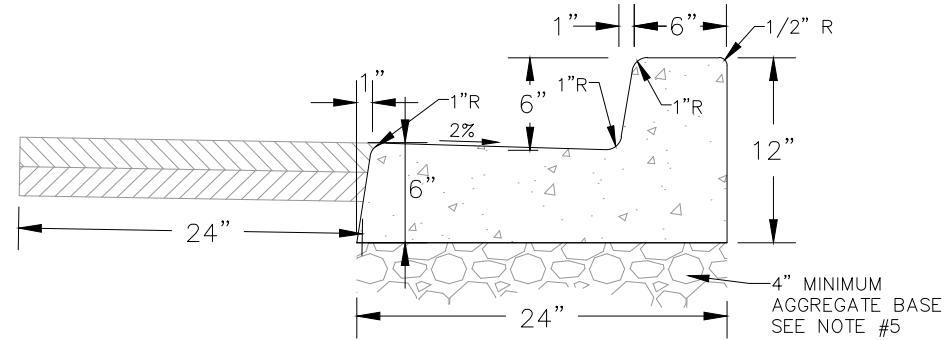
APPROVED *Gay Paulson* 12/13
 CITY ENGINEER DATE

NO.	REVISIONS	DATE	BY
1	DRAWING CREATED	10/12	MTC

NO.	DATE	BY	REVISIONS	RBB DESIGNED 6/16/2016 DATE	RBB DRAFTED 6/16/2016 DATE	CLE CHECKED 6/20/2016 DATE	GBN APPROVED 6/20/2016 DATE	S: \City Logos\Horizontal-Logo-Black-&-Whi.jpg	2016 Sidewalk and ADA Ramp Enhancement SIDEWALK AND RAMP INSTALLATION CONSTRUCTION DETAILS	PHONE: 503-786-7600 FAX: 503-774-8236	PROJECT NO.: CIP2016-S15	CONTRACT NO.:	DATE: 9/19/16	SHEET NO.: DT1
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CURB AND GUTTER AT DRIVEWAY



CURB AND GUTTER

NOTES:

1. CONCRETE SHALL HAVE BREAKING STRENGTH OF 3300 PSI AFTER 28 DAYS.
2. NO EXPANSION MATERIAL SHALL BE USED.
3. TRANSVERSE CONTRACTION JOINTS REQUIRED AT EACH POINT OF TANGENCY AND EVERY 15 FEET. THE DEPTH OF JOINT SHALL BE MIN. OF 1/3 CONCRETE THICKNESS.
4. DRAINAGE BLOCK - 3" DIA. ABS PIPE. TROWEL JOINT OVER PIPE AREA IN DIRECTION OF PIPE.
5. BASE ROCK - 3/4" MINUS OR 1" MINUS COMPACTED TO 95%. MIN. DEPTH OF 4" OR TO STREET SUBGRADE, WHICHEVER IS GREATER.
6. EXISTING ASPHALT CONCRETE IN FRONT OF GUTTER INSTALLATION 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.

ATTENTION: ALL CONCRETE WORK WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRES A RIGHT-OF-WAY PERMIT IN ADDITION TO SUB-GRADE, BASE ROCK, AND CONCRETE FORM INSPECTION AND APPROVAL BY THE CITY INSPECTOR PRIOR TO POURING CONCRETE. CALL 503-786-7575, 24 HOURS IN ADVANCE OF WORK TO SCHEDULE AN INSPECTION.

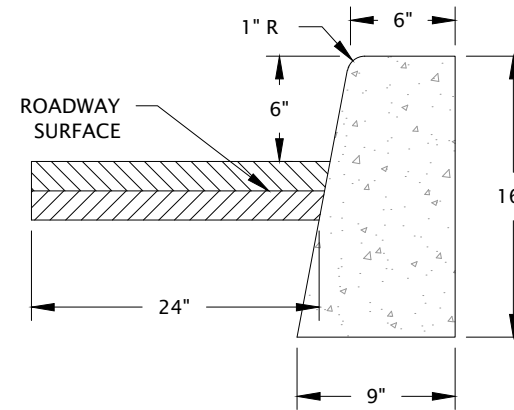
CITY OF MILWAUKIE, OREGON - PUBLIC WORKS DEPT.

Standard Curb and Gutter

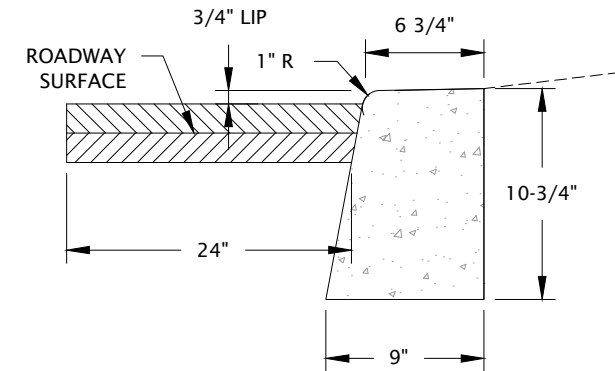
DRAWING NO.

500

APPROVED	NO.	REVISIONS	DATE	BY
<i>JASON RICE</i> 12/14	3	ADDED CURB AND GUTTER AT DRIVEWAY	12/11	MCP
	4	REVISED DIMENSIONS	12/12	MTC
	5	ADDED ASPHALT NOTE	1/15	AJR
CITY ENGINEER	DATE			



TYPE C CURB



CURB AT DRIVEWAY

NOTES:

1. CONCRETE SHALL HAVE BREAKING STRENGTH OF 3300 PSI AFTER 28 DAYS.
2. NO EXPANSION MATERIAL SHALL BE USED.
3. TRANSVERSE CONTRACTION JOINTS REQUIRED AT EACH POINT OF TANGENCY AND EVERY 15 FEET. THE DEPTH OF JOINT SHALL BE MIN. OF 1/3 CONCRETE THICKNESS.
4. DRAINAGE BLOCK - 3" DIA. ABS PIPE. TROWEL JOINT OVER PIPE AREA IN DIRECTION OF PIPE.
5. BASE ROCK - 3/4" MINUS OR 1" MINUS COMPACTED TO 95%. MIN. DEPTH OF 4" OR TO STREET SUBGRADE, WHICHEVER IS GREATER.
6. COMMERCIAL AND HEAVY RESIDENTIAL DRIVEWAY CURB MAY REQUIRE 2-#4 REBARS.
7. EXISTING ASPHALT CONCRETE IN FRONT OF CURB INSTALLATION 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.

ATTENTION: ALL CONCRETE WORK WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRES A RIGHT-OF-WAY PERMIT IN ADDITION TO SUB-GRADE, BASE ROCK, AND CONCRETE FORM INSPECTION AND APPROVAL BY THE CITY INSPECTOR PRIOR TO POURING CONCRETE. CALL 503-786-7575, 24 HOURS IN ADVANCE OF WORK TO SCHEDULE AN INSPECTION.

CITY OF MILWAUKIE, OREGON - PUBLIC WORKS DEPT.

Standard Type C Curb

DRAWING NO.

501

APPROVED	NO.	REVISIONS	DATE	BY
<i>JASON RICE</i> 12/14	1	SCALED DRAWING AND TEXT	12/10	MCP
	2	CHANGED CURB HEIGHT AT DRIVEWAY	12/12	MTC
	3	ADDED ASPHALT CUT NOTE	1/15	AJR
CITY ENGINEER	DATE			

NO.	DATE	BY	REVISIONS

RBB	DESIGNED	6/16/2016	DATE
RBB	DRAFTED	6/16/2016	DATE
CLE	CHECKED	6/20/2016	DATE
GBN	APPROVED	6/20/2016	DATE

S: \City Logos\Horizontal-Logo-Black-&-Whi.jpg

6101 SE JOHNSON CREEK BLVD.
MILWAUKIE, OR 97206

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

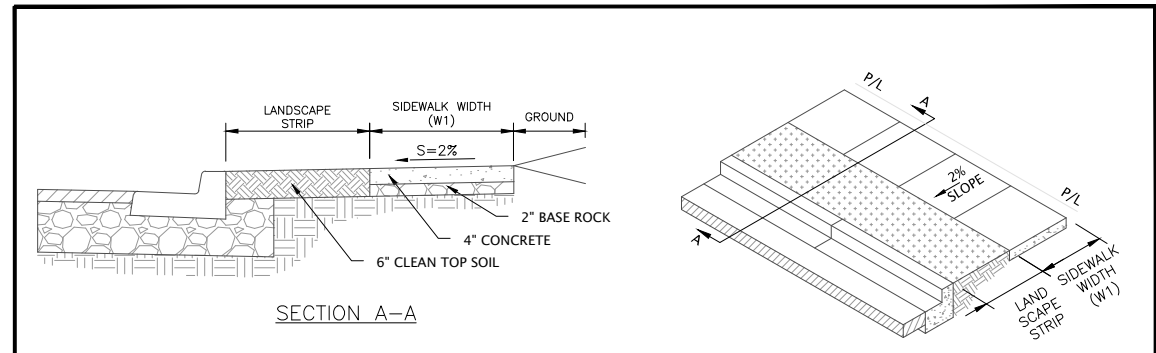
2016 Sidewalk and ADA Ramp Enhancement
SIDEWALK AND RAMP INSTALLATION
CONSTRUCTION DETAILS

PROJECT NO.: CIP2016-S15

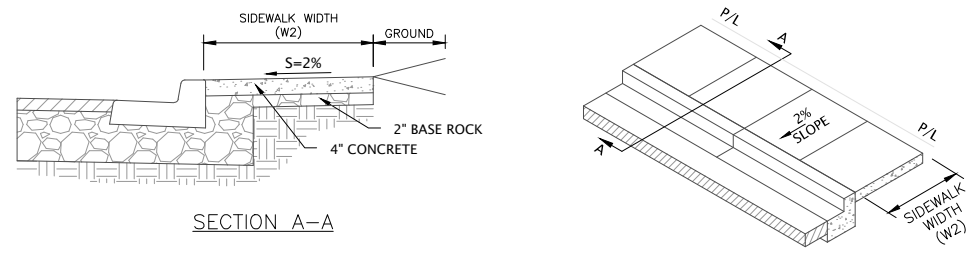
CONTRACT NO.:

DATE: 9/19/16

SHEET NO.: DT2



SECTION A-A
SET BACK SIDEWALK



SECTION A-A
CURB TIGHT SIDEWALK

NOTES:

- CONTRACTION JOINTS SHALL BE 1/8" TO 1/4" WIDE WITH A MAXIMUM SPACING OF EVERY 15 FEET. DEPTH OF THE JOINT SHALL BE A MINIMUM OF 1/3 THE THICKNESS OF THE CONCRETE.
- ALL SURFACES SHALL BE LIGHTLY BROOMED. ALL EDGES SHALL BE TOOL ROUNDED AND SHINED 3" AFTER BROOMING.
- SAW CUT EXISTING SIDEWALK THAT IS TO BE REMOVED TO THE NEAREST JOINT.
- CONCRETE SHALL BE 3300 PSI AT 28 DAYS WITH A SLUMP RANGE OF 2" TO 4".
- PERVIOUS CONCRETE SIDEWALK MAY BE USED AS SPECIFIED IN SPECIAL PROVISIONS OR AS APPROVED BY THE CITY ENGINEER.
- SIDEWALK PANELS SHOULD BE SQUARE (4'X4', 5'X5', ETC.). IN NO CASE SHALL THE LENGTH OF A SIDEWALK PANEL BE GREATER THAN 1.5 TIMES THE WIDTH AND VICE VERSA.
- BASE ROCK SHALL BE 3/4"-0 OR 1"-0 CRUSHED AGGREGATE ROCK COMPACTED TO 95% MAXIMUM DENSITY OF AASHTO T-180.
- CURB JOINT FOR CURB TIGHT SIDEWALK SHALL BE A TROWLED JOINT WITH A 1/2" RADIUS ALONG THE BACK OF CURB.

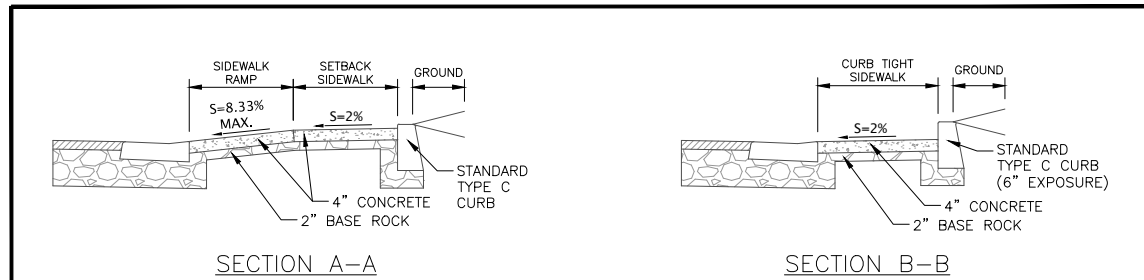
CLASSIFICATION	W1	W2
LOCAL STREET	5.0'	6.0'
NEIGHBORHOOD ROUTE	5.0'	6.0'
COLLECTOR ROAD	6.0'	8.0'
ARTERIAL ROUTE	6.0'	10.0'

CITY OF MILWAUKIE, OREGON - PUBLIC WORKS DEPT.

Sidewalk

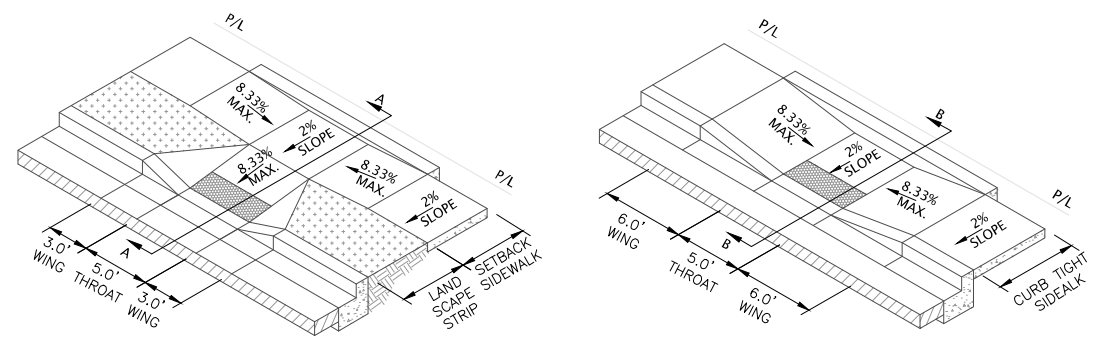
DRAWING NO. 504

APPROVED	12/14	NO.	REVISIONS	DATE	BY
CITY ENGINEER	DATE	1	DRAWING REVISED	10/09	ZJW
		2	DRAWING NUMBER CHANGED	12/10	MCP
		3	ADDED PERVIOUS CONCRETE NOTE	12/11	MCP



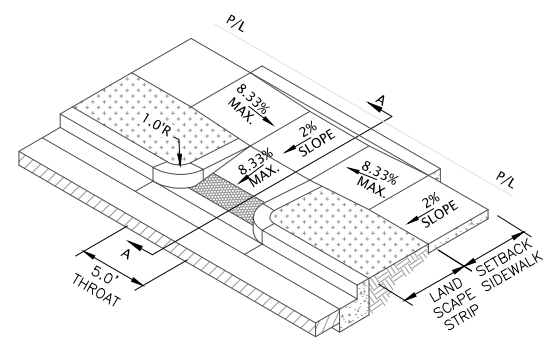
SECTION A-A
SETBACK SIDEWALK RAMP W/WINGS

SECTION B-B
CURB TIGHT SIDEWALK RAMP



SETBACK SIDEWALK RAMP W/WINGS

CURB TIGHT SIDEWALK RAMP



SETBACK SIDEWALK RAMP W/O WINGS

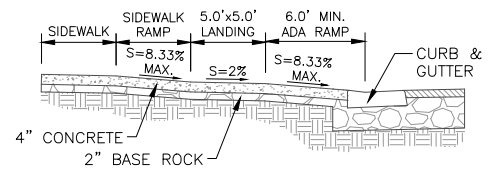
- SIDEWALK RAMPS SHALL MEET ADA STANDARDS.
- ALL SURFACES SHALL BE LIGHTLY BROOMED. ALL EDGES SHALL BE TOOL ROUNDED AND SHINED 3" AFTER BROOMING.
- SAW CUT EXISTING RAMP, CURB, AND SIDEWALK THAT ARE TO BE REMOVED TO THE NEAREST JOINT.
- CONCRETE SHALL BE 3300 PSI AT 28 DAYS WITH A SLUMP RANGE OF 2" TO 4".
- SIDEWALK PANELS SHOULD BE SQUARE (4'X4', 5'X5', ETC.). IN NO CASE SHALL THE LENGTH OF A SIDEWALK PANEL BE GREATER THAN 1.5 TIMES THE WIDTH AND VICE VERSA.
- BASE ROCK SHALL BE 3/4"-0 OR 1"-0 CRUSHED AGGREGATE ROCK COMPACTED TO 95% MAXIMUM DENSITY OF AASHTO T-180.
- CURB JOINT FOR CURB TIGHT SIDEWALK SHALL BE A TROWLED JOINT WITH A 1/2" RADIUS ALONG THE BACK OF CURB.
- LANDINGS SHALL BE PLACED AT THE TOP OF EACH RAMP. LANDING SLOPES SHALL NOT EXCEED 20:1 IN ANY DIRECTION AND HAVE MINIMUM DIMENSIONS OF 5' X 5'.
- DETECTABLE WARNING PAD SHALL BE 24" LONG IN THE DIRECTION OF TRAVEL AND INSTALLED ALONG THE FULL WIDTH OF THE BOTTOM OF THE SIDEWALK RAMP. MASCO CAST-IN-TACT (BLACK) OR APPROVED EQUAL.
- SETBACK SIDEWALK RAMPS: THE MAXIMUM SLOPE SHALL FIRST BE PROVIDED IN THE RAMP ADJACENT TO THE STREET. ANY ADDITIONAL ELEVATION GAIN SHALL BE PROVIDED IN THE SIDEWALK RAMP SLOPES.

CITY OF MILWAUKIE, OREGON - PUBLIC WORKS DEPT.

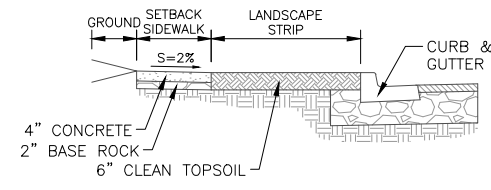
Mid-Block Sidewalk Ramps

DRAWING NO. 505

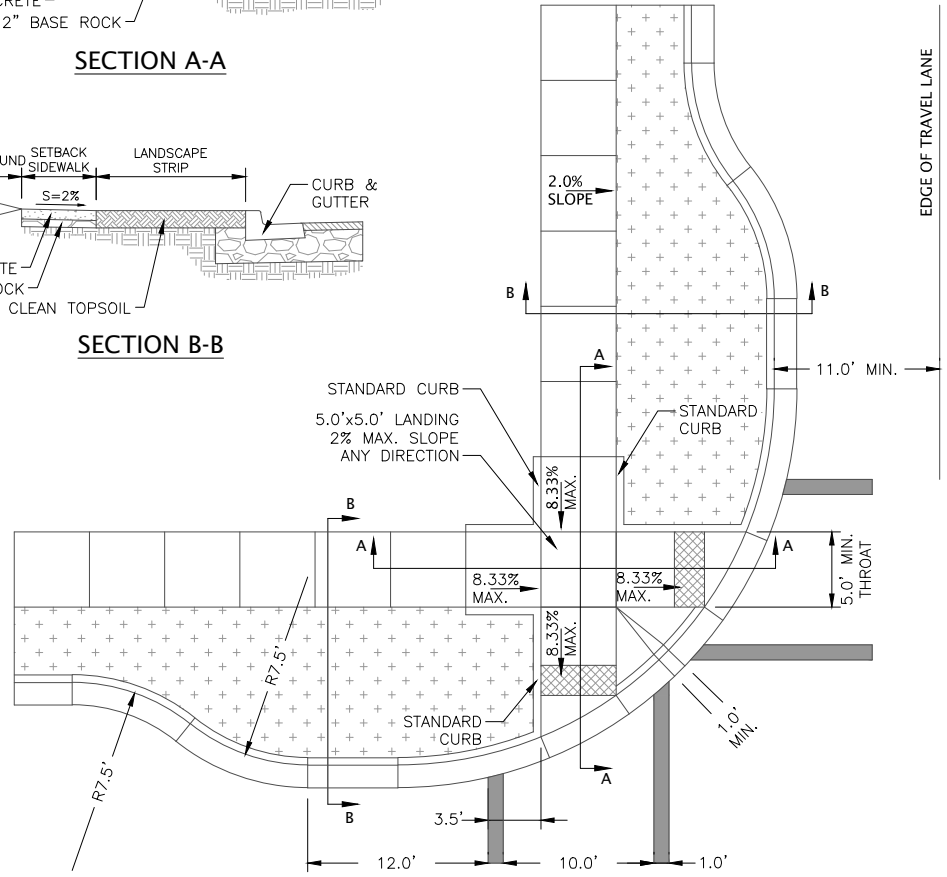
APPROVED	12/14	NO.	REVISIONS	DATE	BY
CITY ENGINEER	DATE	1	NEW DRAWING	10/09	ZJW
		2	DRAWING NUMBER CHANGED	12/10	MCP



SECTION A-A



SECTION B-B



NOTES

- SIDEWALK RAMPS SHALL MEET ADA STANDARDS.
- ALL SURFACES SHALL BE LIGHTLY BROOMED. ALL EDGES SHALL BE TOOL ROUNDED AND SHINED 3" AFTER BROOMING.
- SAW CUT EXISTING RAMP, CURB, AND SIDEWALK THAT ARE TO BE REMOVED TO THE NEAREST JOINT.
- CONCRETE SHALL BE 3300 PSI AT 28 DAYS WITH A SLUMP RANGE OF 2" TO 4".
- SIDEWALK PANELS SHOULD BE SQUARE (4'x4', 5'x5', ETC.). IN NO CASE SHALL THE LENGTH OF A SIDEWALK PANEL BE GREATER THAN 1.5 TIMES THE WIDTH AND VICE VERSA.
- BASE ROCK SHALL BE 3/4"-0 OR 1"-0 CRUSHED AGGREGATE ROCK COMPACTED TO 95% MAXIMUM DENSITY OF AASHTO T-180.
- CURB JOINT FOR CURB TIGHT SIDEWALK SHALL BE A TROWLED JOINT WITH A 1/2" RADIUS ALONG THE BACK OF CURB.
- LANDINGS SHALL BE PLACED AT THE TOP OF EACH RAMP. LANDING SLOPES SHALL NOT EXCEED 20:1 IN ANY DIRECTION AND HAVE MINIMUM DIMENSIONS OF 5' X 5'.
- DETECTABLE WARNING PAD SHALL BE 24" LONG IN THE DIRECTION OF TRAVEL AND INSTALLED ALONG THE FULL WIDTH OF THE BOTTOM OF THE SIDEWALK RAMP. MASCO CAST-IN-TACT (BLACK) OR APPROVED EQUAL.
- SETBACK SIDEWALK RAMPS: THE MAXIMUM SLOPE SHALL FIRST BE PROVIDED IN THE RAMP ADJACENT TO THE STREET. ANY ADDITIONAL ELEVATION GAIN SHALL BE PROVIDED IN THE SIDEWALK RAMP SLOPES.

CITY OF MILWAUKIE, OREGON – PUBLIC WORKS DEPT.

Intersection Curb Extension

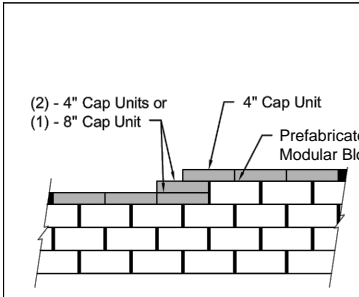
DRAWING NO.

509

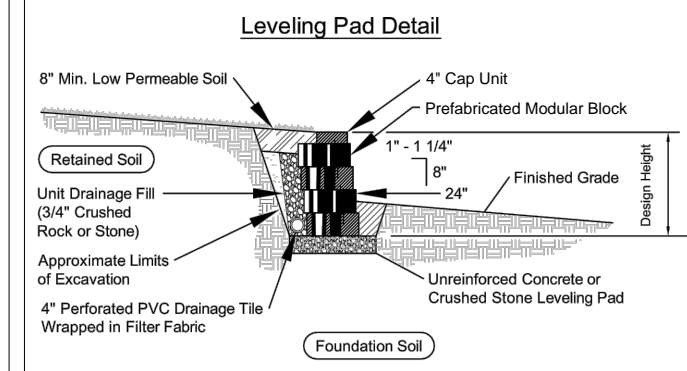
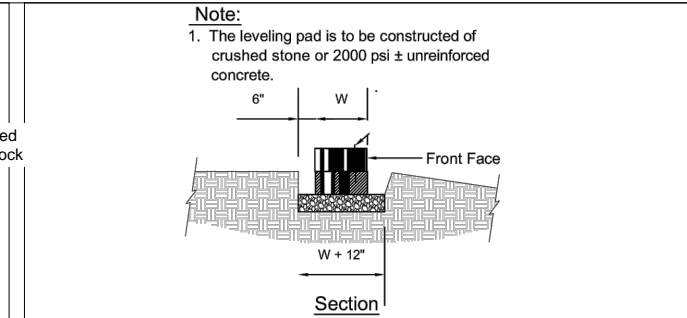
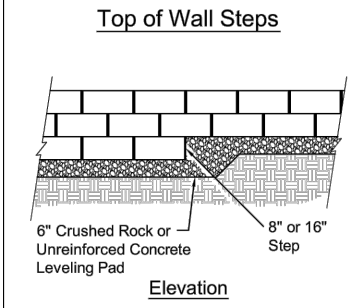
APPROVED

 CITY ENGINEER DATE

NO.	REVISIONS	DATE	BY
1	NEW DRAWING	10/09	ZJW
2	DRAWING NUMBER CHANGED	12/10	MCP



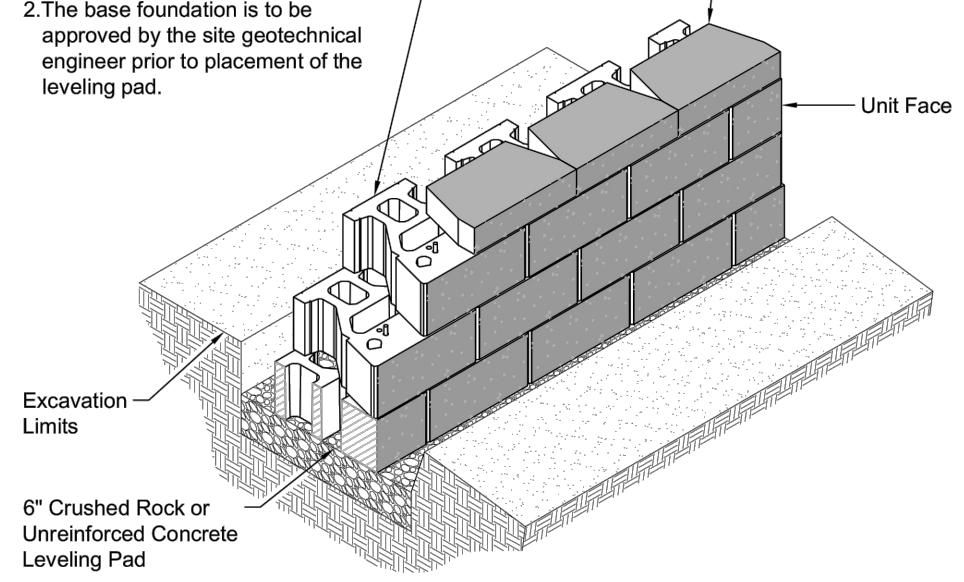
Note:
 Prefabricated Modular Block to be constructed per manufactures' specification.



Base Leveling Pad Notes:

- The leveling pad is to be constructed of crushed stone or 2,000 psi± unreinforced concrete
- The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

Standard Unit		Cap Unit	
Width:	18"	Width:	18"
*Depth:	18"	*Depth:	10 1/2"
Height:	8"	Height:	4"
*Weight:	108 lbs	*Weight:	50 lbs



Standard Unit/Base Pad Isometric Section View

* Dimensions & Weight May Vary by Region

NO.	DATE	BY	REVISIONS

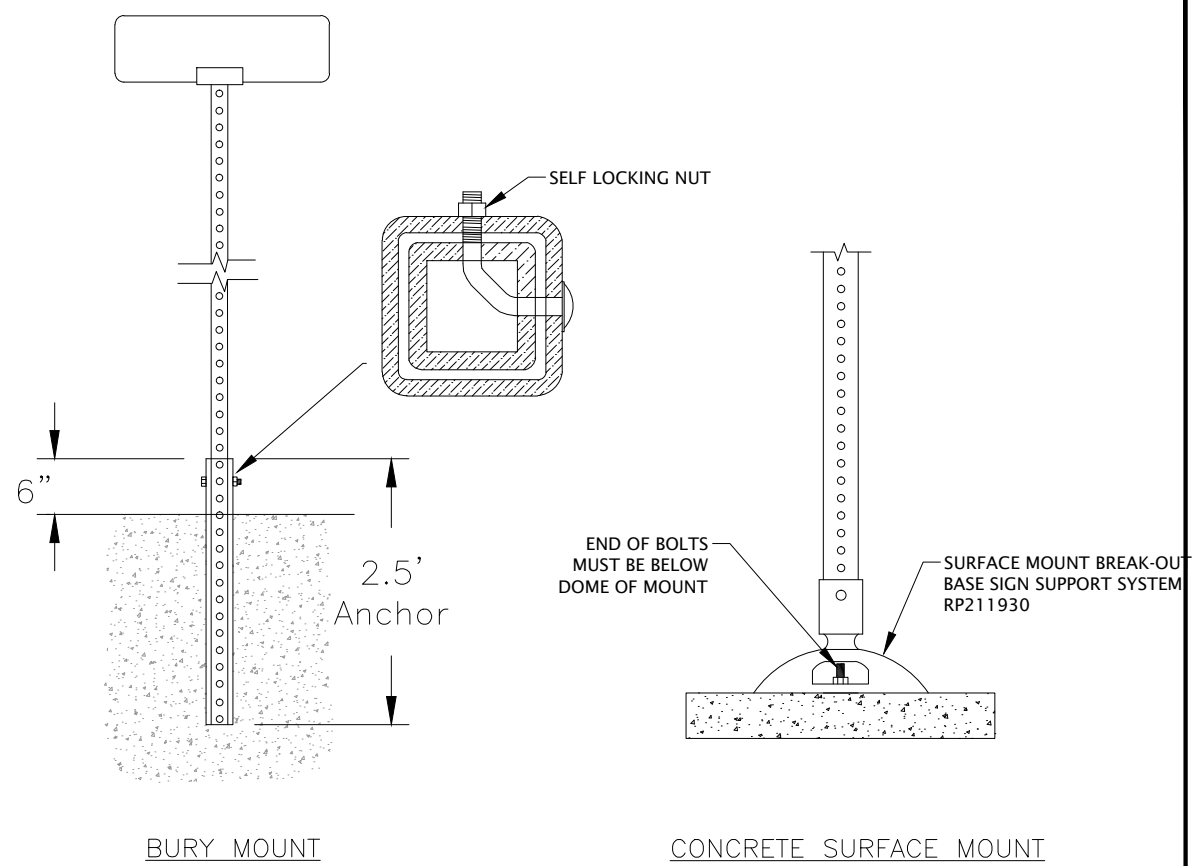
RBB	DESIGNED	6/16/2016	DATE
RBB	DRAFTED	6/16/2016	DATE
CLE	CHECKED	6/20/2016	DATE
GBN	APPROVED	6/20/2016	DATE

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

2016 Sidewalk and ADA Ramp Enhancement
 SIDEWALK AND RAMP INSTALLATION
 CONSTRUCTION DETAILS

PROJECT NO.:	CIP2016-S15	CONTRACT NO.:		DATE:	9/19/16	SHEET NO.:	DT5
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NOTES:


1. SIGN COMBINATION AND MINIMUM SIGN MOUNTING HEIGHT SHALL DETERMINE POST LENGTH. A 10' (MIN.) POST SHALL BE USED. A COMBINATION OF SIGNS GREATER THAN 36" IN HEIGHT SHALL REQUIRE A 12' (MIN.) POST.
2. SIGN POST SIZING SHALL BE BASED ON OREGON STANDARD DRAWING TM682 (85 MPH SQUARE TUBE SIGN SUPPORT SIZING CHART). THE MINIMUM POST SIZE SHALL BE 2" X 2" 12 GA. SQUARE TUBE. IF THE SIGN PANEL AREA IS GREATER THAN THAT ALLOWED BY A 2" X 2" POST, THEN A 2 1/2" X 2 1/2" 12 GA. POST SHALL BE USED. IF A LARGER SUPPORT IS REQUIRED, THEN WOOD SIGN SUPPORTS SHALL BE USED AS PER OREGON STANDARD DRAWING TM670.
3. NYLON SPACERS SHALL BE USED TO PREVENT CONTACT BETWEEN GLAVANIZED STEEL AND ALUMINUM MATERIAL SURFACES.

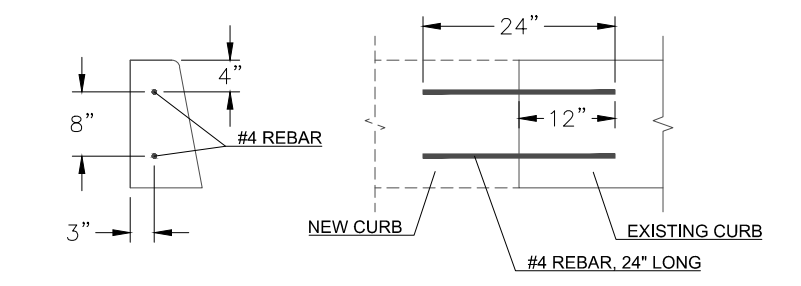
CITY OF MILWAUKIE, OREGON – PUBLIC WORKS DEPT.

Steel Street Sign Mounting

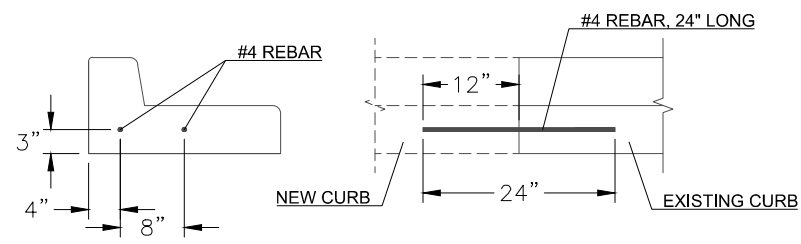
DRAWING NO.

525

APPROVED	NO.	REVISIONS	DATE	BY
	1	NEW DRAWING	12/14	AJR
CITY ENGINEER				



STANDARD TYPE C CURB



CURB AND GUTTER

**DETAIL 1
CURB TIE BAR DETAIL
SCALE: N.T.S.**

NO.	DATE	BY	REVISIONS

RBB	6/16/2016
DESIGNED	DATE
RBB	6/16/2016
DRAFTED	DATE
CLE	6/20/2016
CHECKED	DATE
GBN	6/20/2016
APPROVED	DATE

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MILWAUKIE, OR 97206

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

2016 Sidewalk and ADA Ramp Enhancement
SIDEWALK AND RAMP INSTALLATION
CONSTRUCTION DETAILS

PROJECT NO.: CIP2016-S15	CONTRACT NO.:	DATE: 9/19/16	SHEET NO.: DT6
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