CITY OF West Linn

22500 Salamo Road
West Linn, Oregon 97068
http://westlinnoregon.gov

CITY COUNCIL AGENDA

Monday, April 1, 2024

1:00 p.m. – Work Session – Council Chambers & Virtual*

---

1. Call to Order [1:00 pm/5 min]
2. Approval of Agenda [1:05 pm/5 min]
3. Public Comments [1:10 pm/10 min]

> The purpose of Public Comment is to allow the community to present information or raise an issue regarding items that do not include a public hearing. All remarks should be addressed to the Council as a body. This is a time for Council to listen, they will not typically engage in discussion on topics not on the agenda. Time limit for each participant is three minutes, unless the Mayor decides to allocate more or less time. Designated representatives of Neighborhood Associations and Community Advisory Groups are granted five minutes.

4. Mayor and Council Reports [1:20 pm/10 min]
    a. Reports from Community Advisory Groups
5. Proclamations and Recognitions [1:30 pm/20 min]
    a. Child Abuse Prevention Month
    b. Parkinson's Awareness
    c. Arbor Month
6. Cedaroak Safe Routes Design Update [1:50 pm/30 min]
7. City Manager Report [2:20 pm/5 min]
8. Adjourn [2:25 pm]

**City Council meetings will be conducted in a hybrid format with some Councilors, staff, presenters, and members of the public attending virtually and others attending in person. The public can watch all meetings online via https://westlinnoregon.gov/meetings or on Cable Channel 30.*

Submit written comments by email to City Council at citycouncil@westlinnoregon.gov. We ask that written comments be provided before noon on the day of the meeting to allow City Council members time to review your comments.

If you cannot attend the meeting in person and would like to speak live at a public meeting by videoconferencing software or by phone, please complete the form located at: https://westlinnoregon.gov/citycouncil/meeting-request-speak-signup by 4:00 pm the day of the meeting to be input into our system. Instructions on how to access the virtual meeting will then be provided to you by email prior to the meeting. If you miss the deadline and would like to speak at the meeting, please fill out the form and staff will send you a link as time allows.

If you require special assistance under the Americans with Disabilities Act, please call City Hall 48 hours before the meeting date, 503-657-0331.

When needed, the Council will meet in Executive Session pursuant to ORS 192.660(2).

PROCLAMATION

West Linn, Oregon

WHEREAS, children are vital to our city future success, prosperity and quality of life as well as being our most vulnerable assets; and

WHEREAS, all children deserve to have the safe, stable, nurturing homes and communities they need to foster their healthy growth and development; and

WHEREAS, child abuse and neglect is a community responsibility affecting both the current and future quality of life of a community; and

WHEREAS, exposure to childhood trauma has a powerful adverse effect on life-long physical and mental health and is recognized nationally as a major public health issue; and

WHEREAS, communities that provide parents with the social support, knowledge of parenting and child development and concrete resources they need to cope with stress and nurture their children and ensure all children grow to their full potential; and

WHEREAS, effective child abuse prevention strategies succeed because of partnerships created among citizens, human service agencies, schools, faith communities, health care providers, civic organizations, law enforcement agencies, and the business community; and

NOW, THEREFORE, BE IT PROCLAIMED BY THE CITY COUNCIL OF THE CITY OF WEST LINN, that April is:

CHILD ABUSE PREVENTION MONTH

And we call upon the community, community agencies, faith groups, medical facilities, elected leaders and businesses to increase their participation in our efforts to support families, thereby preventing child abuse and strengthening the communities in which we live.

DATED THIS 1ST DAY OF APRIL, 2024

_____

RORY BIALOSTOSKY, MAYOR

ATTEST:

_____

KATHY MOLLUSKY, CITY RECORDER

PROCLAMATION

West Linn, Oregon

WHEREAS, Parkinson's disease is a chronic, progressive neurological disease and is the second most common neurodegenerative disease in the United States; and

WHEREAS, The Michael J. Fox Foundation for Parkinson's Research is dedicated to finding a cure for Parkinson's disease through an aggressively funded research agenda and to ensuring the development of improved therapies for those living with Parkinson's today; and

WHEREAS, an estimated more than one million people in the United States are currently living with Parkinson's disease, with an additional 90,000 individuals diagnosed annually; and

WHEREAS, it is estimated that Parkinson's disease has a national economic burden of approximately $52 billion per year, with that cost estimated to rise to over $80 billion by 2037; and

WHEREAS, there is no known cure for Parkinson's disease and available treatments are limited in their ability to address patients' medical needs and remain effective over time; and

WHEREAS, the City of West Linn recognizes the efforts of The Michael J. Fox Foundation for Parkinson's Research as it leverages its core values of optimism, urgency, resourcefulness, collaboration, accountability and persistence in problem-solving to work on behalf of the more than six million people worldwide living with Parkinson's; and

WHEREAS, increased research, education and community support services are needed to find more effective treatments and to provide access to quality care to those living with the disease today.

NOW, THEREFORE, BE IT PROCLAIMED BY THE CITY COUNCIL OF THE CITY OF WEST LINN, that April is

PARKINSON'S AWARENESS MONTH

DATED THIS 1ST DAY OF APRIL, 2024

_____

RORY BIALOSTOSKY, MAYOR

ATTEST:

_____

KATHY MOLLUSKY, CITY RECORDER

PROCLAMATION

West Linn, Oregon

WHEREAS, in 1872, J. Sterling Morton proposed to the Nebraska Board of Agriculture that a special day be set aside for the planting of trees; and

WHEREAS, this holiday now called Arbor Month, was first observed with the planting of more than a million trees in Nebraska, is now observed throughout the nation and the world; and

WHEREAS, trees reduce the erosion of our precious topsoil by wind and water, cut heating and cooling costs, moderate the temperature, clean the air, produce oxygen and provide habitat for wildlife; and

WHEREAS, by planting trees we emphasize views, direct pedestrian traffic and complement or enhance architecture; and

WHEREAS, trees in our City increase property values, enhance the economic vitality of business areas, and beautify our community; and

WHEREAS, trees, wherever they are planted, are a source of joy, peace, and spiritual renewal; and

WHEREAS, the City of West Linn is recognized as a Tree City USA by the National Arbor Day Foundation and desires to expand its tree-planting and stewardship practices.

NOW, THEREFORE, BE IT PROCLAIMED BY THE CITY COUNCIL OF THE CITY OF WEST LINN that April 2024 is

Arbor Month

In West Linn, Oregon, and we call upon all community members and civic organizations to celebrate trees by planting, maintaining, studying, and enjoying trees in our community. The City will celebrate Arbor Month by offering many community events focused towards the maintenance of existing trees and the planting of new trees.

DATED THIS 1ST DAY OF APRIL, 2024

_____

RORY BIALOSTOSKY, MAYOR

ATTEST:

_____

KATHY MOLLUSKY, CITY RECORDER

Agenda Bill 2024-04-01-01

Date Prepared: 3/20/2024

For Meeting Date: 4/1/2024

To: Rory Bialostosky, Mayor
West Linn City Council

Through: John Williams, City Manager *JW*

From: Erich Lais, PE – City Engineer/Public Works Director *EL*

Subject: Safe Routes to School Sidewalk on Cedaroak Drive

Purpose:
To provide a project status and public engagement update for the Safe Routes to Schools sidewalk on Cedaroak Drive

Question(s) for Council:
None. Presentation only.

Public Hearing Required:
None Required.

Background & Discussion:
In 2018 citizens of West Linn approved Ballot Measure 3-527 authorizing issuance of funds to improve transportation, parks, and city facilities. Included in the transportation category is the Safe Routes to School projects.

To date, components of the bond project which are substantially completed include installation of signage at Buck St. and Holmes, curb ramps, rectangular rapid-flashing beacons (RRFBs), and pedestrian crossings at Suncrest and Hidden Springs.

Components of the bond project still fully underway include design of a sidewalk along Cedaroak Drive. Plans are at 90% and general components include a sidewalk along the north side of Cedaroak drive from Trillium to Old River, stormwater planters with trees, and centering the Trillium intersection within the right-of-way. There is also sidewalk to connect the crosswalk at Cedaroak and Trillium to the bike path and bridge to Kenthorpe Way.

Significant outreach and public engagement have taken place throughout the duration of the project to educate residents on the planned improvements in advance of construction. The attached presentation provides detailed information on all Public Works outreach efforts conducted by Public Works staff.

Budget Impact:
Project status and engagement presentation only.

Sustainability Impact:
Project goals include enhancing non-vehicular transportation opportunities throughout the corridors for pedestrians and cyclists to access schools.

Council Options:
None. Presentation only.

Staff Recommendation:
None. Presentation only.

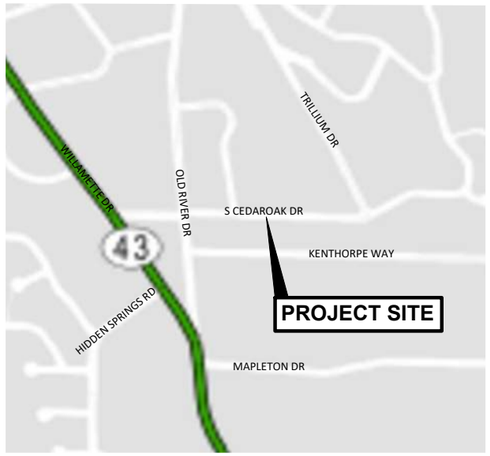
Potential Motion:
None. Presentation only.

Attachments:
1. Safe Routes to School Cedaroak Sidewalk Project Public Engagement Presentation
2. Cedaroak Sidewalk 90% Plans

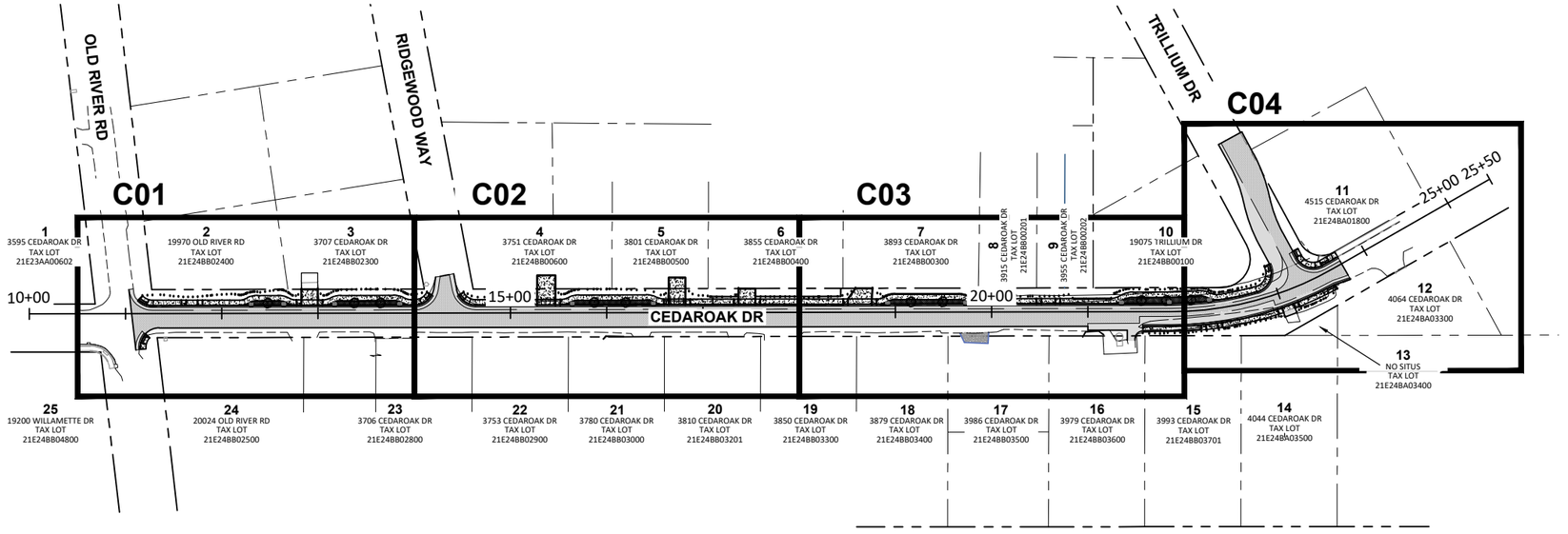
2024 SAFE ROUTES PROGRAM DESIGN

CEDAROAK DRIVE

WEST LINN, OREGON



VICINITY MAP
NTS



SITE MAP
SCALE: 1" = 150'

OWNER/DEVELOPER

CITY OF WEST LINN
DEPARTMENT OF PUBLIC WORKS
22500 SALAMO RD
WEST LINN, OR 97068
CONTACTS:
CLARK IDE, PE
PHONE:(503) 722-3437
JAMESON LUMPKIN
PHONE:(503) 722-4739

ENGINEER

HARPER HOUF PETERSON RIGHELLIS INC.
205 SE SPOKANE STREET, SUITE 200
PORTLAND, OREGON 97202
PHONE: (503) 221-1131
CONTACTS: JIMMY HOUF, PE

SITE INFORMATION

WILLAMETTE MERIDAN
CLACKAMAS COUNTY, OREGON
TOWNSHIP 2S, RANGE 1E, SECTION 24BB

SHEET INDEX

90% PLANS

COVER SHEET
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

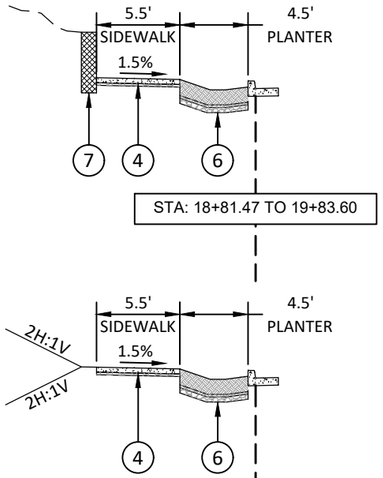
Harper Houf Peterson Righellis Inc.
ENGINEERS♦PLANNERS
LANDSCAPE ARCHITECTS♦SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

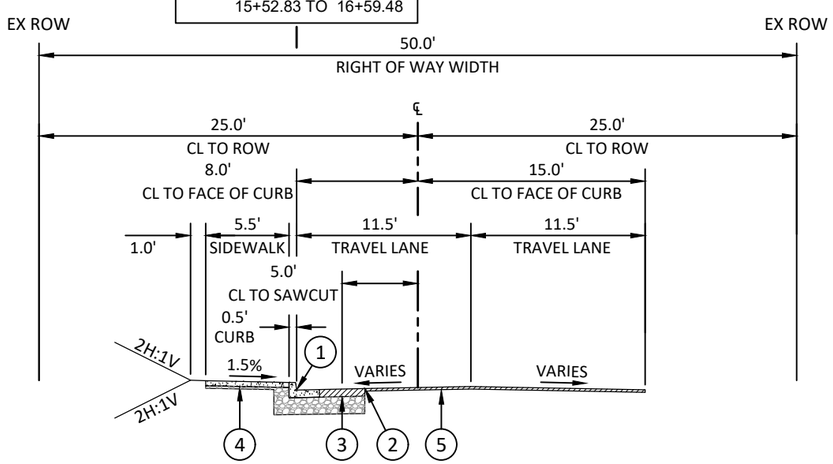
DESIGNED: HHPR TEAM	SHEET NO. A01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-A01 COVER SHEET.DWG



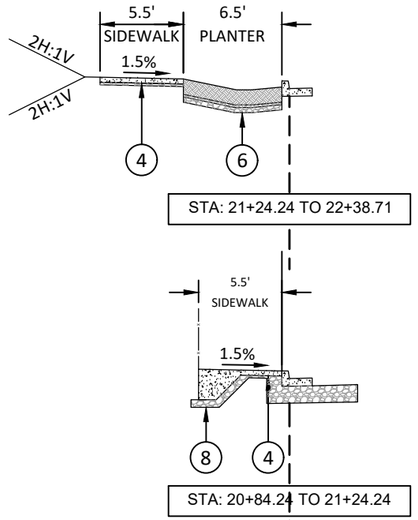
STA: 18+81.47 TO 19+83.60

STA: 12+18.62 TO 12+77.20
13+05.68 TO 13+96.85
15+52.83 TO 16+59.48



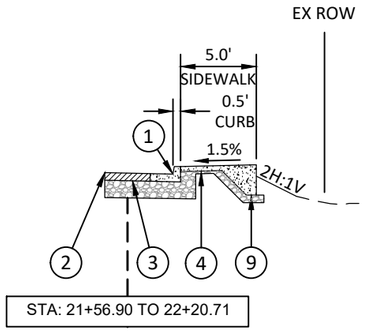
CEDAROAK DR

STA: 11+28.88 TO 20+84.24

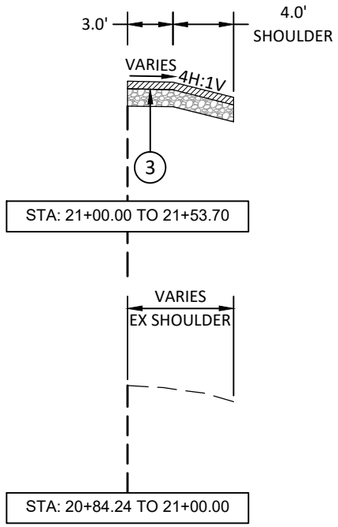


STA: 21+24.24 TO 22+38.71

STA: 20+84.24 TO 21+24.24



STA: 21+56.90 TO 22+20.71

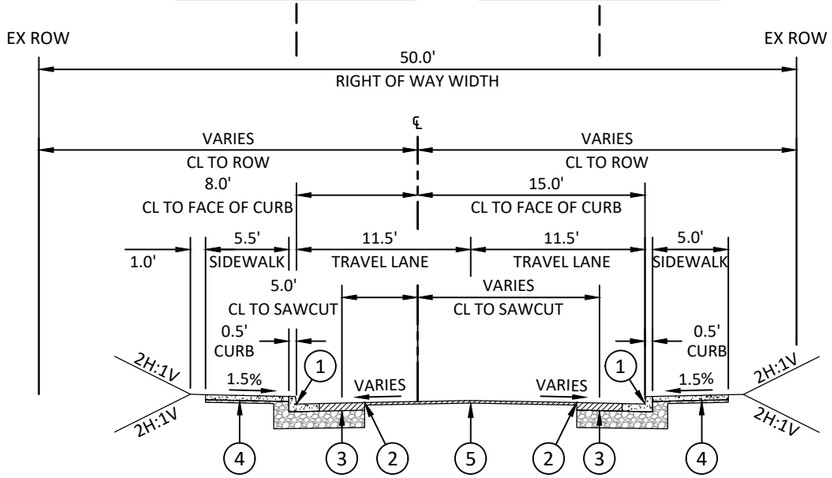


STA: 21+00.00 TO 21+53.70

STA: 20+84.24 TO 21+00.00

CONSTRUCTION NOTES:

1. CONSTRUCT CURB AND GUTTER (E=6"; GUTTER PAN=18") PER CITY DWG WL-RD700 ON SHEET DC03.
2. SAWCUT EXISTING ASPHALT.
3. CONSTRUCT ROADWAY PAVEMENT SECTION.
   2" OF LEVEL 2, 1/2 INCH ACP (TOP LIFT)
   2" OF LEVEL 2, 1/2 INCH ACP (BASE LIFT)
   2" OF 3/4"-0 AGGREGATE BASE
   10" OF 1 1/2"-0 AGGREGATE BASE
4. CONSTRUCT CONCRETE SIDEWALK.
   4" OF PCC
   2" OF 3/4"-0 AGGREGATE BASE
5. CONSTRUCT 2" GRIND AND INLAY.
   2" OF LEVEL 2, 1/2 INCH ACP.
   SEE PAVING AND GEOMETRY SHEET SERIES "B02-B03" FOR LIMITS.
6. CONSTRUCT STORMWATER PLANTER PER DETAIL ON SHEETS DC15 & DC16.
7. CONSTRUCT SEGMENTAL BLOCK WALL. SEE "WA" SHEET SERIES FOR DETAILS.
8. CONSTRUCT THICKENED EDGE SIDEWALK WITH 4' BLACK VINYL CHAIN LINK FENCE. SEE "WA" SHEET SERIES FOR DETAILS.
9. CONSTRUCT THICKENED EDGE SIDEWALK. SEE "WA" SHEET SERIES FOR DETAILS.



CEDAROAK DR

STA: 20+84.24 TO 22+80.20

TYPICAL SECTIONS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

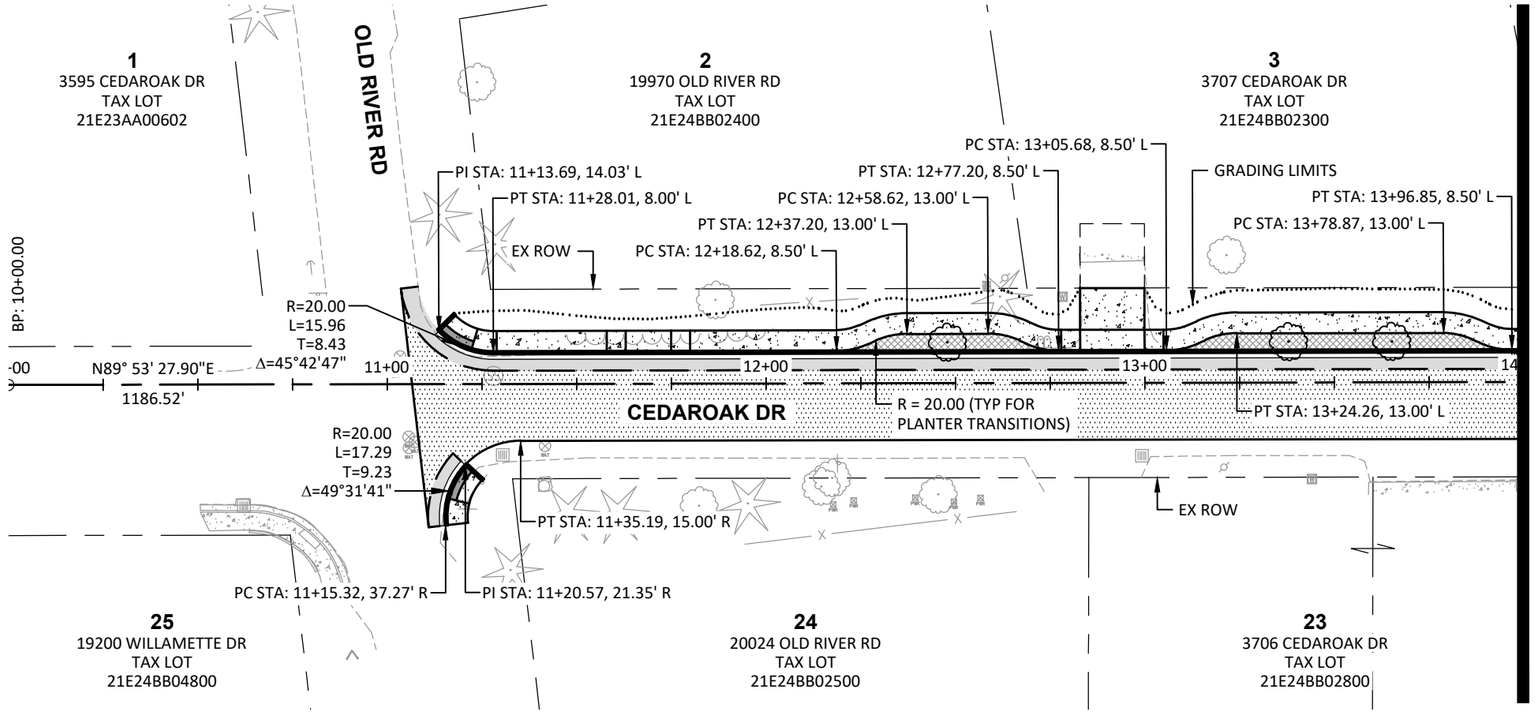
City of West Linn

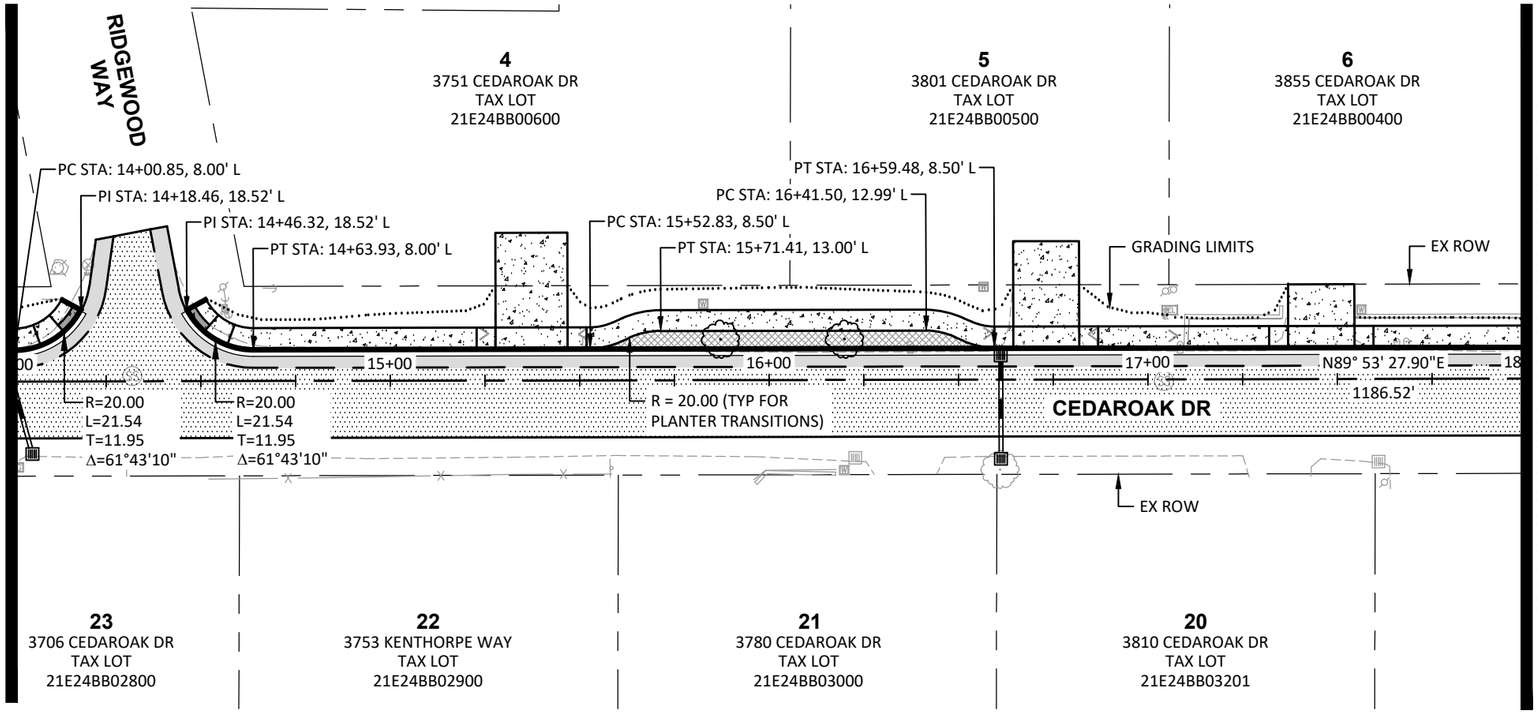
REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. B01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-B01 TYPICAL SECTIONS.DWG





LEGEND

- FULL DEPTH STRUCTURAL SECTION
- GRIND AND INLAY SECTION
- CONCRETE SIDEWALK
- TRUNCATED DOMES
- DRIVEWAY/DRIVEWAY APPROACH
- STORMWATER PLANTER

0 10 20 40
SCALE: 1" = 40'

GEOMETRY & PAVING PLAN
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

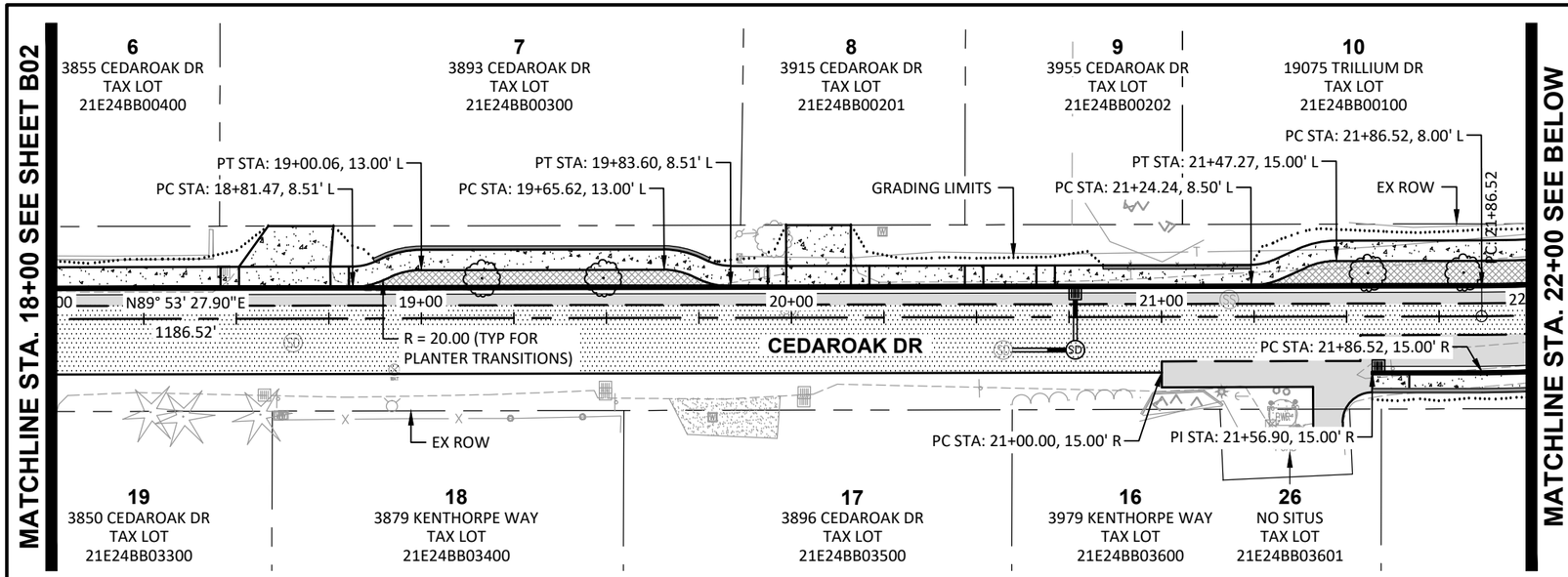
City of West Linn

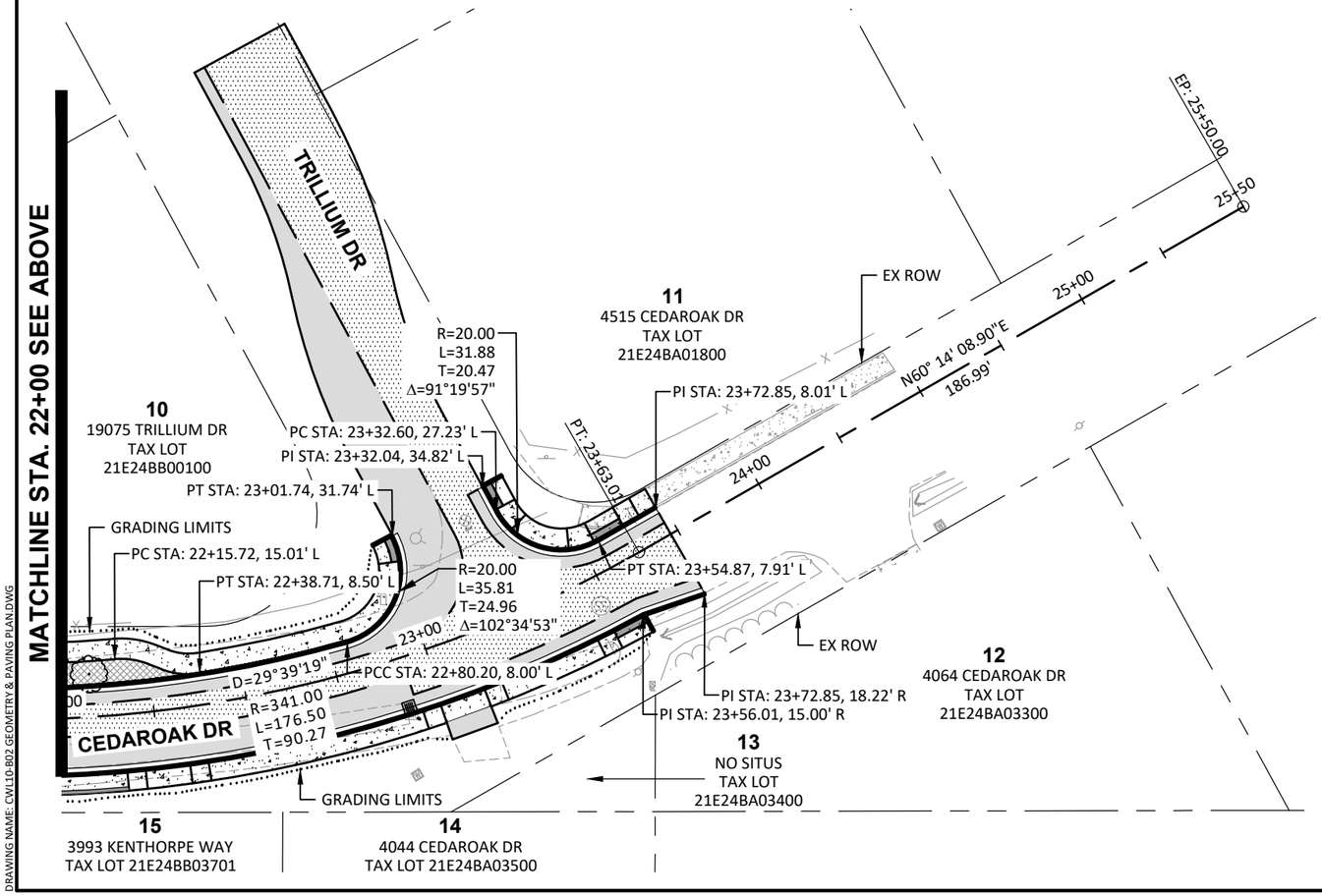
REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. B02
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-B02 GEOMETRY & PAVING PLAN.DWG





LEGEND

- FULL DEPTH STRUCTURAL SECTION
- GRIND AND INLAY SECTION
- CONCRETE SIDEWALK
- TRUNCATED DOMES
- DRIVEWAY/DRIVEWAY APPROACH
- STORMWATER PLANTER

0 10 20 40
SCALE: 1" = 40'

GEOMETRY & PAVING PLAN
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

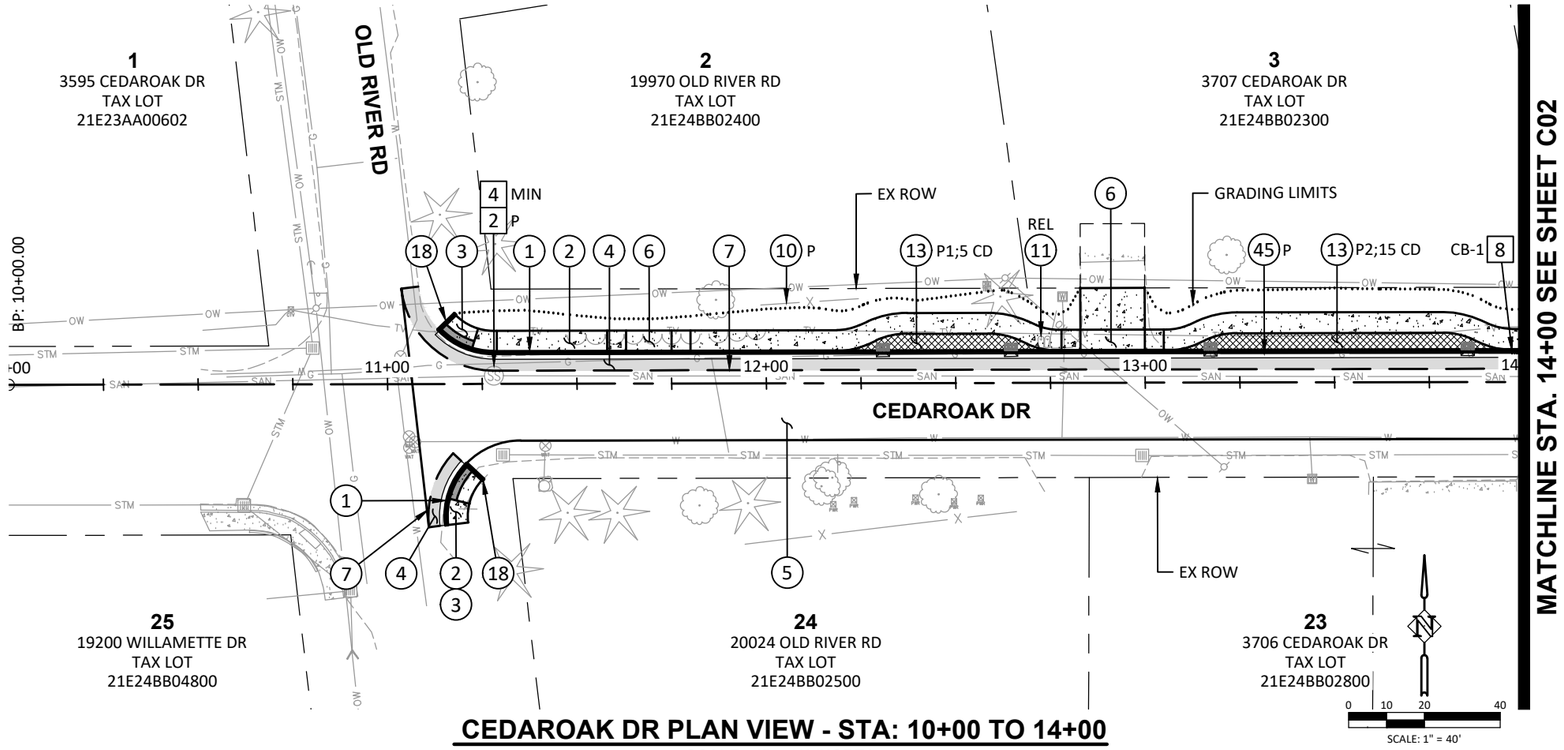
Harper Houf Peterson Righellis Inc.
ENGINEERS◆PLANNERS
LANDSCAPE ARCHITECTS◆SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

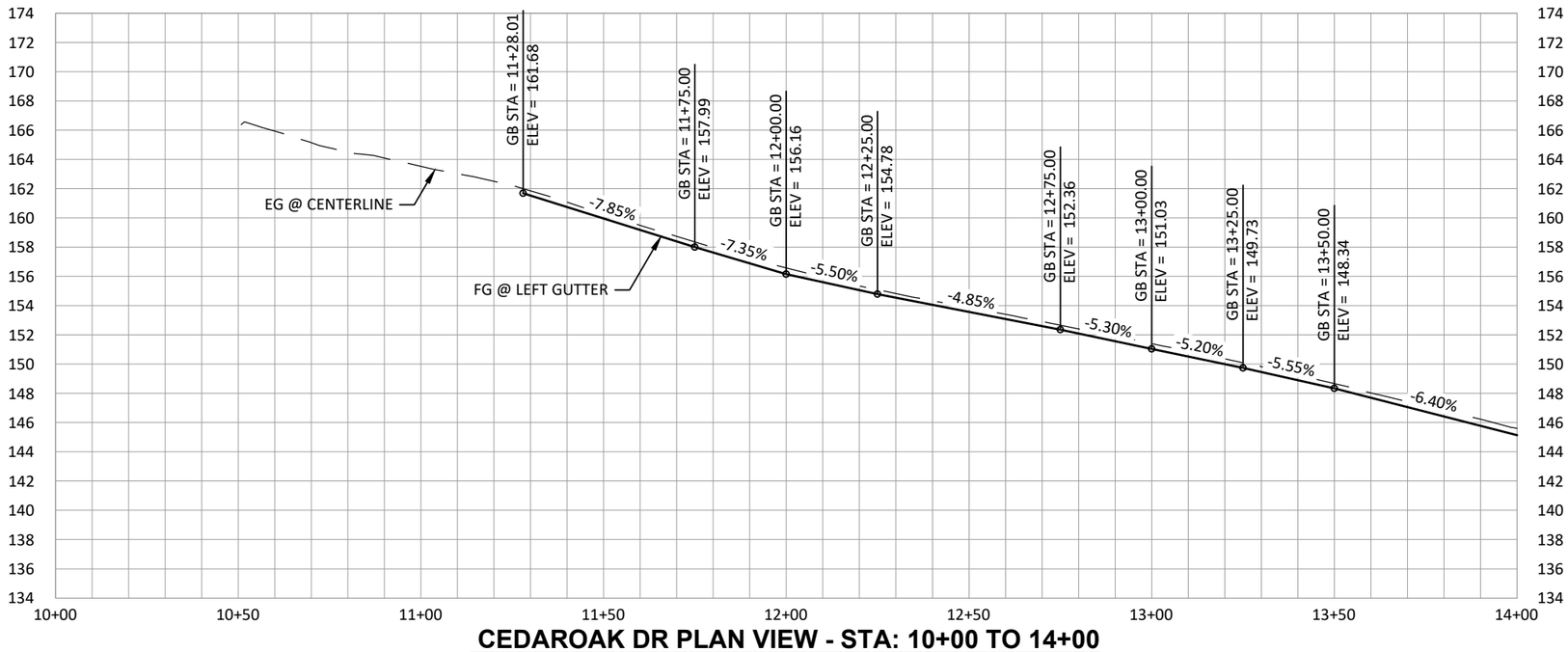
DESIGNED: HHPR TEAM	SHEET NO. B03
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-B02 GEOMETRY & PAVING PLAN.DWG



CEDAROAK DR PLAN VIEW - STA: 10+00 TO 14+00

SCALE: 1" = 40' (HORZ.)



CEDAROAK DR PLAN VIEW - STA: 10+00 TO 14+00

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

CONSTRUCTION NOTES:

1. CONSTRUCT CURB AND GUTTER (E=6"; GUTTER PAN=18") PER CITY DWG WL-RD700 ON SHEET DC03.
2. CONSTRUCT CONCRETE SIDEWALK PER TYPICAL SECTION ON SHEET B01. FOR DETAILS, SEE ODOT STANDARD DWG RD735 ON SHEET DC01.
3. CONSTRUCT SIDEWALK RAMP PER ODOT STANDARD DWGS RD904 AND RD960 ON SHEET DC02 AND SHEET DC05. SEE CURB RETURN GRADE ELEVATIONS ON "DB" SHEETS.
4. CONSTRUCT FULL DEPTH PAVEMENT SECTION PER TYPICAL SECTION ON SHEET B01.
5. CONSTRUCT 2 INCH GRIND AND INLAY PER TYPICAL SECTION ON SHEET B01. FOR LIMITS, SEE PAVING AND GEOMETREY PLANS ON "D" SHEETS.
6. CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD735 ON SHEET DC01. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE. SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 4" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 6" AGGREGATE BASE. SEE DRIVEWAY GRADE ELEVATIONS ON SHEET SERIES "DA".
7. SAWCUT EXISTING ASPHALT OR CONCRETE AND REMOVE AS REQUIRED AND DIRECTED.
10. REMOVE (R), ADJUST (A), OR PROTECT (P) EXISTING FENCE & GATES.
11. RELOCATE (REL), REMOVE (R), ADJUST (A) OR PROTECT (P) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET DC17 & DC18. COORDINATE LOCATION WITH ENGINEER.
13. CONSTRUCT STORMWATER PLANTER PER DETAIL ON SHEETS DC15 & DC16. STORMWATER PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE PLAN FOR QUANTITY OF EVENLY SPACED CHECK DAMS (CD) TO INSTALL.
18. CONSTRUCT STANDARD CURB (E=6"; H=16") PER CITY DWG WL-RD700 ON SHEET DC03.
45. RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING GAS LINE. RELOCATION OR ADJUSTMENT BY UTILITY. CONTRACTOR TO COORDINATE.

STORM SEWER CONSTRUCTION NOTES:

2. PROTECT (P), REMOVE (R), OR PLUG AND ABANDON (A) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
4. ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER PER ODOT STANDARD DWGS RD360 ON SHEET DC10. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
8. CONSTRUCT CG-2 INLET CATCH BASIN AND LATERALS PER ODOT STANDARD DWG RD366 ON SHEET DC13. SEE PLAN FOR INVERTS AND DATA.

INLET DRAINAGE DATA:

CB-1 (CG-2)
STA 13+98.60, 8.0' L
GUT = 145.23
12" IE OUT (S) = 143.60
29.4 LF DI, S=0.0050
SUMP = 142.10

ROADWAY PLAN & PROFILE
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

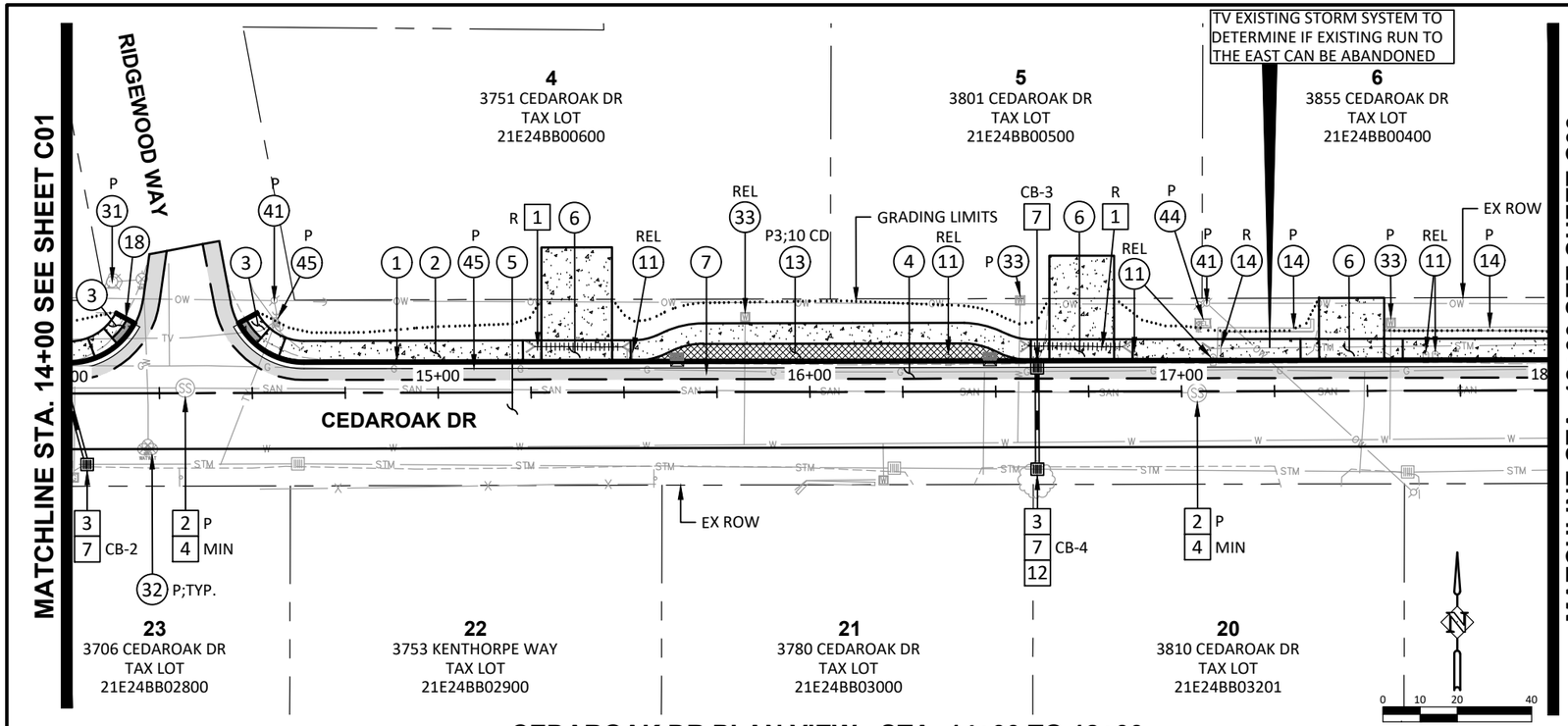
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF
EXPIRES: 6/30/25

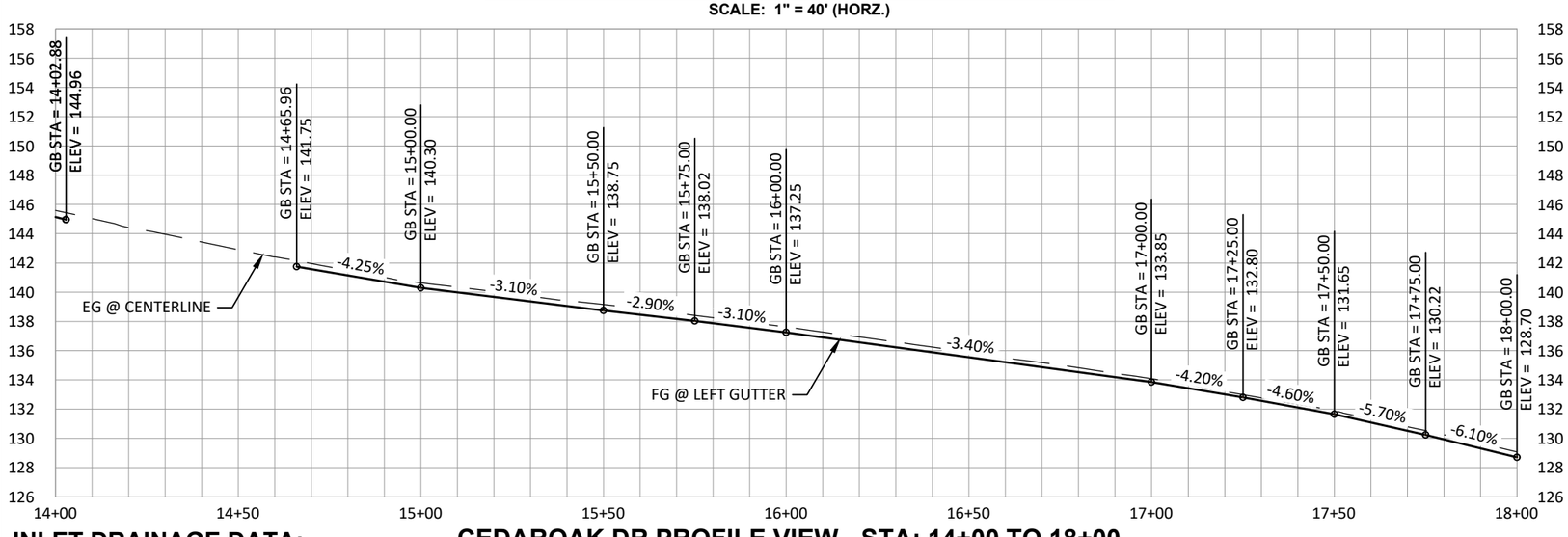
DESIGNED: HHPR TEAM	SHEET NO. C01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-C01 ROADWAY PLAN AND PROFILES.DWG



CEDAROAK DR PLAN VIEW - STA: 14+00 TO 18+00

SCALE: 1" = 40' (HORZ.)



CEDAROAK DR PROFILE VIEW - STA: 14+00 TO 18+00

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

INLET DRAINAGE DATA:

CB-2 (G-2)
STA 14+05.53, 19.1' R
RIM = 145.63
12" IE IN (N) = 143.45
EX 12" IE IN (W) = 143.25
EX 12" IE OUT (E) = 143.25
SUMP = 141.75

CB-3 (G-2)
STA 16+61.16, 8.0' L
GUT = 135.17
12" IE OUT (S) = 133.66
27.2 LF DI, S=0.0042
SUMP = 132.39

CB-4 (G-2)
STA 16+61.16, 20.9' R
RIM = 135.40
12" IE IN (N) = 133.55
EX 12" IE IN (W) = 133.55
EX 12" IE OUT (E) = 133.55
SUMP = 132.05

CONSTRUCTION NOTES:

1. CONSTRUCT CURB AND GUTTER (E=6"; GUTTER PAN=18") PER CITY DWG WL-RD700 ON SHEET DC03.
2. CONSTRUCT CONCRETE SIDEWALK PER TYPICAL SECTION ON SHEET B01. FOR DETAILS, SEE ODOT STANDARD DWG RD735 ON SHEET DC01.
3. CONSTRUCT SIDEWALK RAMP PER ODOT STANDARD DWGS RD904 AND RD960 ON SHEET DC02 AND SHEET DC05. SEE CURB RETURN GRADE ELEVATIONS ON "DB" SHEETS.
4. CONSTRUCT FULL DEPTH PAVEMENT SECTION PER TYPICAL SECTION ON SHEET B01.
5. CONSTRUCT 2 INCH GRIND AND INLAY PER TYPICAL SECTION ON SHEET B01. FOR LIMITS, SEE PAVING AND GEOMETREY PLANS ON "D" SHEETS.
6. CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD735 ON SHEET DC01. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE. SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 4" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 6" AGGREGATE BASE. SEE DRIVEWAY GRADE ELEVATIONS ON SHEET SERIES "DA".
7. SAWCUT EXISTING ASPHALT OR CONCRETE AND REMOVE AS REQUIRED AND DIRECTED.
11. RELOCATE (REL), REMOVE (R), ADJUST (A) OR PROTECT (P) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET DC17 & DC18. COORDINATE LOCATION WITH ENGINEER.
13. CONSTRUCT STORMWATER PLANTER PER DETAIL ON SHEETS DC15 & DC16. STORMWATER PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE PLAN FOR QUANTITY OF EVENLY SPACED CHECK DAMS (CD) TO INSTALL.
14. REMOVE (R), ADJUST (A), OR PROTECT (P) EXISTING WALL.
18. CONSTRUCT STANDARD CURB (E=6"; H=16") PER CITY DWG WL-RD700 ON SHEET DC03.
31. RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING FIRE HYDRANT. RELOCATIONS AND ADJUSTMENTS BY OTHERS. CONTRACTOR TO COORDINATE.
32. RELOCATE (REL), ADJUST (A) OR PROTECT (P) EXISTING WATER VALVE. RELOCATIONS AND ADJUSTMENTS BY OTHERS. CONTRACTOR TO COORDINATE.
33. RELOCATE (REL), ADJUST (A) OR PROTECT (P) EXISTING WATER METER, BOX, AND SERVICE. RELOCATIONS AND ADJUSTMENTS BY OTHERS. CONTRACTOR TO COORDINATE.
41. REMOVE (R), RELOCATE (REL), OR PROTECT (P) EXISTING UTILITY POLE. REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
44. RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING UTILITY PEDESTAL. RELOCATION OR ADJUSTMENT BY UTILITY. CONTRACTOR TO COORDINATE.
45. RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING GAS LINE. RELOCATION OR ADJUSTMENT BY UTILITY. CONTRACTOR TO COORDINATE.

STORM SEWER CONSTRUCTION NOTES:

1. PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (A) EXISTING STORM PIPE IN-PLACE AS REQUIRED AND DIRECTED. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF).
2. PROTECT (P), REMOVE (R), OR PLUG AND ABANDON (A) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
3. CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET DC06.
4. ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER PER ODOT STANDARD DWGS RD360 ON SHEET DC10. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
7. CONSTRUCT G-2 INLET CATCH BASIN AND LATERALS PER ODOT STANDARD DWG RD364 ON SHEET DC11. SEE PLAN FOR INVERTS AND DATA.
12. FIELD VERIFY ELEVATION PRIOR TO INSTALLATION. NOTIFY ENGINEER OF ANY DISCREPENCIES.

ROADWAY PLAN & PROFILE
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

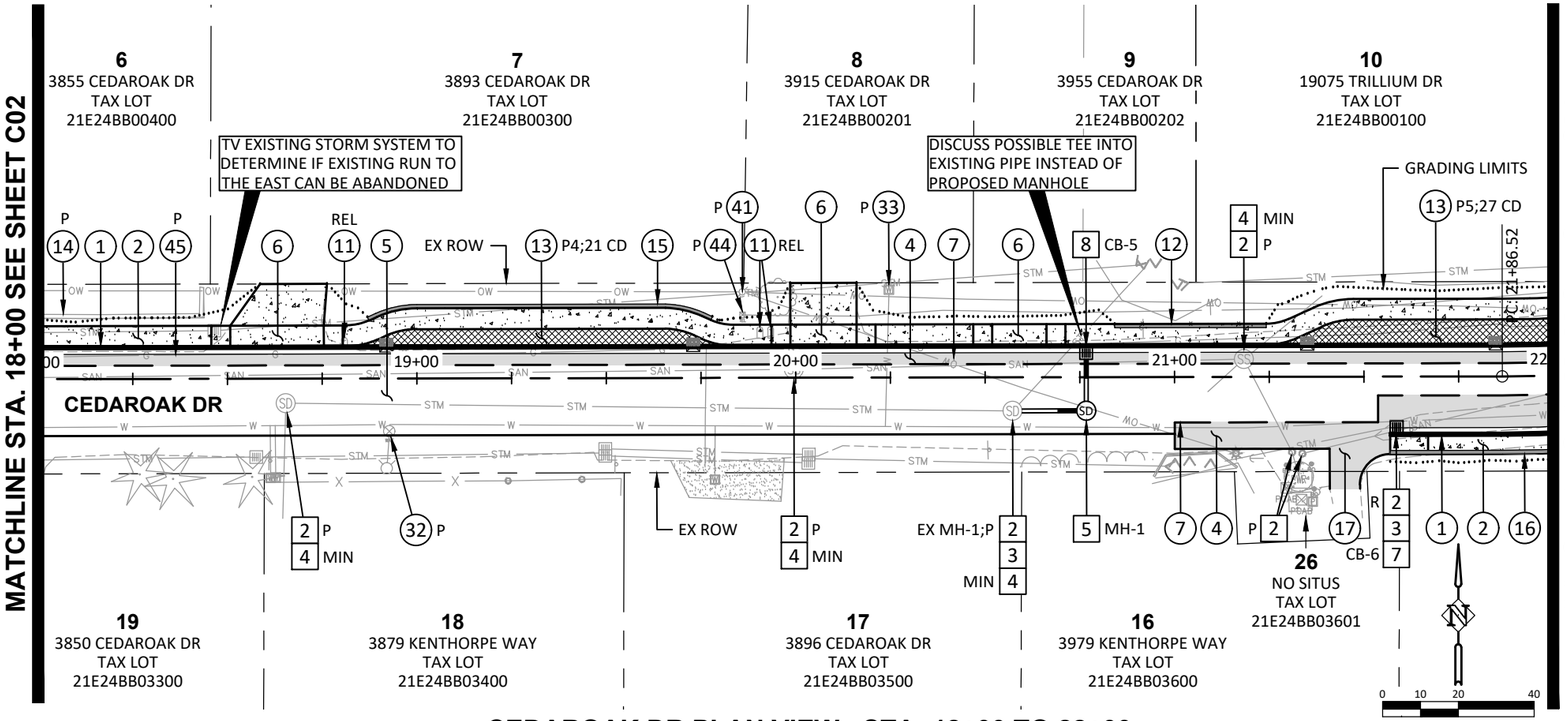
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

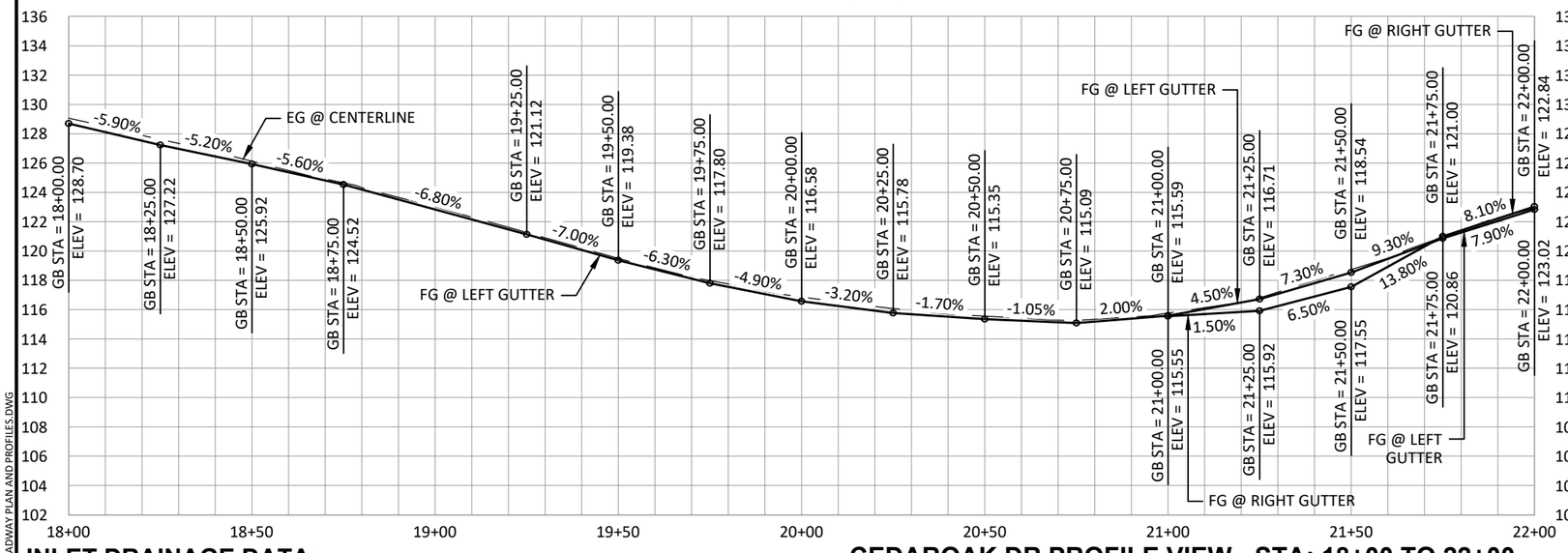
DESIGNED: HHPR TEAM	SHEET NO. C02
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-C01 ROADWAY PLAN AND PROFILES.DWG



CEDAROAK DR PLAN VIEW - STA: 18+00 TO 22+00

SCALE: 1" = 40' (HORZ.)



CEDAROAK DR PROFILE VIEW - STA: 18+00 TO 22+00

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

INLET DRAINAGE DATA:

CB-5 (CG-2)	MH-1 (STANDARD MH)	EX MH-1 (EX MH)	CB-6 (G-2)
STA 20+76.67, 8.0' L	STA 20+76.67, 8.9' R	STA 20+57.25, 8.9' R	STA 21+58.43, 15.0' R
GUT = 115.13	RIM = 115.16	RIM = 115.30	GUT = 118.71
12" IE OUT (S) = 111.13	12" IE IN (N) = 110.83	12" IE IN (E) = 110.30	EX 12" IE OUT (SW) = 116.00
15.2 LF DI, S=0.0200	12" IE OUT (W) = 110.63	EX 36" IE IN (W) = 106.80	SUMP = 116.00
SUMP = 109.63	19.4 LF PVC, S=0.0170	EX 36" IE OUT (NE) = 106.60	

CONSTRUCTION NOTES:

1. CONSTRUCT CURB AND GUTTER (E=6"; GUTTER PAN=18") PER CITY DWG WL-RD700 ON SHEET DC03.
2. CONSTRUCT CONCRETE SIDEWALK PER TYPICAL SECTION ON SHEET B01. FOR DETAILS, SEE ODOT STANDARD DWG RD735 ON SHEET DC01.
4. CONSTRUCT FULL DEPTH PAVEMENT SECTION PER TYPICAL SECTION ON SHEET B01.
5. CONSTRUCT 2 INCH GRIND AND INLAY PER TYPICAL SECTION ON SHEET B01. FOR LIMITS, SEE PAVING AND GEOMETREY PLANS ON "D" SHEETS.
6. CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD735 ON SHEET DC01. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE. SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 4" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 6" AGGREGATE BASE. SEE DRIVEWAY GRADE ELEVATIONS ON SHEET SERIES "DA".
7. SAWCUT EXISTING ASPHALT OR CONCRETE AND REMOVE AS REQUIRED AND DIRECTED.
11. RELOCATE (REL), REMOVE (R), ADJUST (A) OR PROTECT (P) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET DC17 & DC18. COORDINATE LOCATION WITH ENGINEER.
12. CONSTRUCT THICKENED EDGE SIDEWALK WITH 4' BLACK VINYL CHAIN LINK FENCE. SEE "WA" SHEET SERIES FOR DETAILS.
13. CONSTRUCT STORMWATER PLANTER PER DETAIL ON SHEETS DC15 & DC16. STORMWATER PLANTER TO INCLUDE BEEHIVE INLET, PERFORATED PIPE, AND CLEANOUT, PER PLAN. SEE PLAN FOR QUANTITY OF EVENLY SPACED CHECK DAMS (CD) TO INSTALL.
14. REMOVE (R), ADJUST (A), OR PROTECT (P) EXISTING WALL.
15. CONSTRUCT SEGMENTAL BLOCK WALL. SEE "WA" SHEET SERIES FOR DETAILS.
16. CONSTRUCT THICKENED EDGE SIDEWALK. SEE "WA" SHEET SERIES FOR DETAILS.
17. CONSTRUCT IMPERVIOUS ASPHALT CONNECTION WITH 4" AC PAVEMENT OVER 8" AGGREGATE BASE.
32. RELOCATE (REL), ADJUST (A) OR PROTECT (P) EXISTING WATER VALVE. RELOCATIONS AND ADJUSTMENTS BY OTHERS. CONTRACTOR TO COORDINATE.
33. RELOCATE (REL), ADJUST (A) OR PROTECT (P) EXISTING WATER METER, BOX, AND SERVICE. RELOCATIONS AND ADJUSTMENTS BY OTHERS. CONTRACTOR TO COORDINATE.
41. REMOVE (R), RELOCATE (REL), OR PROTECT (P) EXISTING UTILITY POLE. REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
44. RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING UTILITY PEDESTAL. RELOCATION OR ADJUSTMENT BY UTILITY. CONTRACTOR TO COORDINATE.
45. RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING GAS LINE. RELOCATION OR ADJUSTMENT BY UTILITY. CONTRACTOR TO COORDINATE.

STORM SEWER CONSTRUCTION NOTES:

2. PROTECT (P), REMOVE (R), OR PLUG AND ABANDON (A) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
3. CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET DC06.
4. ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER PER ODOT STANDARD DWGS RD360 ON SHEET DC10. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
5. CONSTRUCT STORM SEWER MANHOLE PER ODOT STANDARD DWG RD335 ON SHEET DC08. SEE PROFILES AND DRAINAGE DATA FOR INVERTS AND LOCATION.
7. CONSTRUCT G-2 INLET CATCH BASIN AND LATERALS PER ODOT STANDARD DWG RD364 ON SHEET DC11. SEE PLAN FOR INVERTS AND DATA.
8. CONSTRUCT CG-2 INLET CATCH BASIN AND LATERALS PER ODOT STANDARD DWG RD366 ON SHEET DC13. SEE PLAN FOR INVERTS AND DATA.

ROADWAY PLAN & PROFILE
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

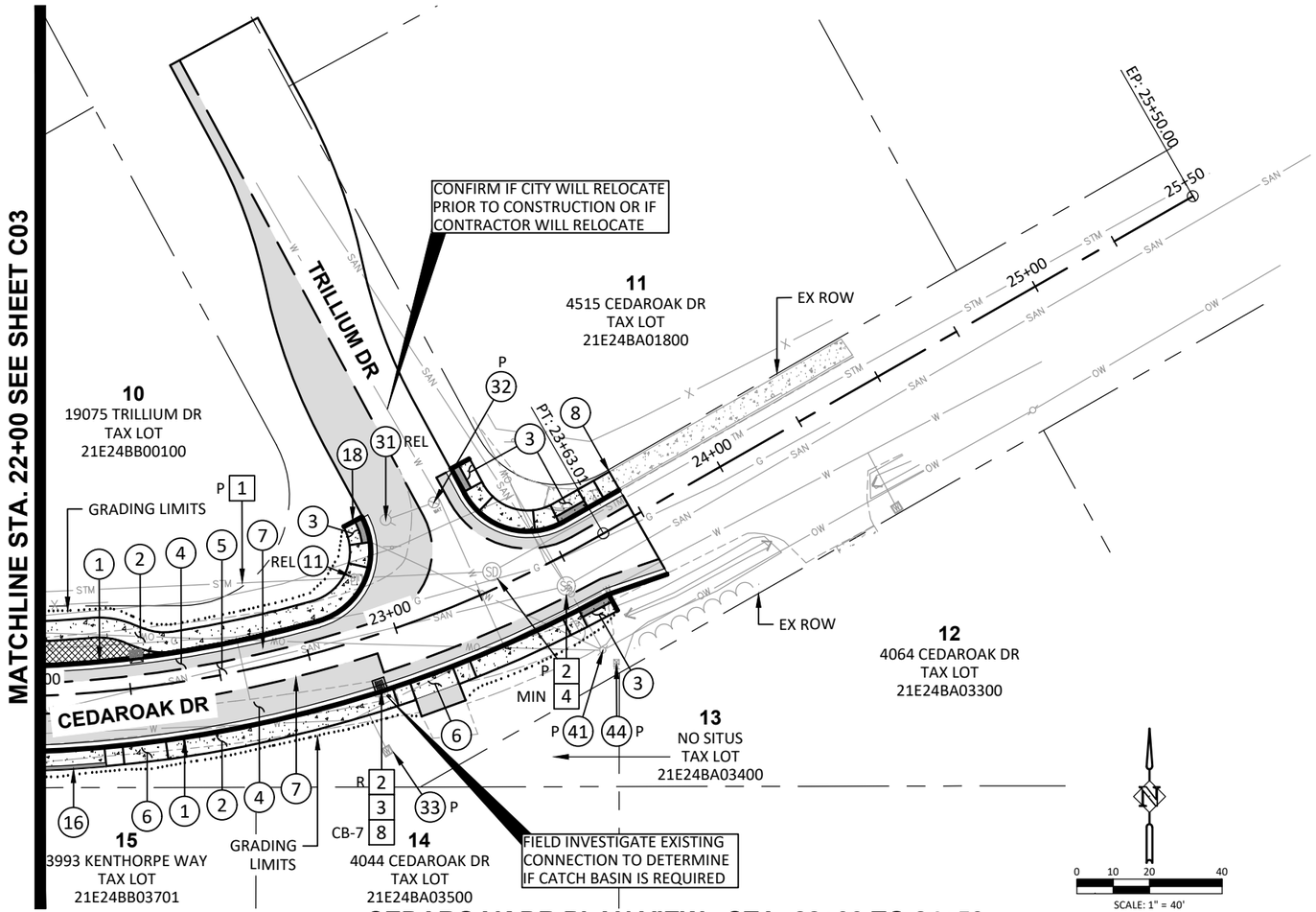
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF
EXPIRES: 6/30/25

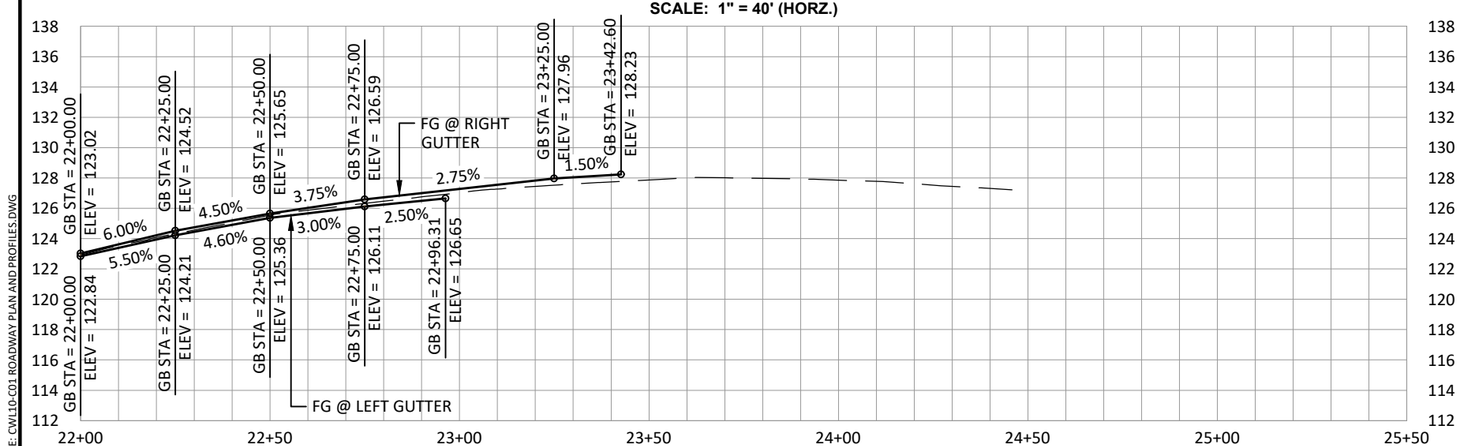
DESIGNED: HHPR TEAM	SHEET NO. C03
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-C01 ROADWAY PLAN AND PROFILES.DWG



CEDAROAK DR PLAN VIEW - STA: 22+00 TO 24+50

SCALE: 1" = 40' (HORZ.)



CEDAROAK DR PROFILE VIEW - STA: 22+00 TO 24+50

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

CONSTRUCTION NOTES:

1. CONSTRUCT CURB AND GUTTER (E=6"; GUTTER PAN=18") PER CITY DWG WL-RD700 ON SHEET DC03.
2. CONSTRUCT CONCRETE SIDEWALK PER TYPICAL SECTION ON SHEET B01. FOR DETAILS, SEE ODOT STANDARD DWG RD735 ON SHEET DC01.
3. CONSTRUCT SIDEWALK RAMP PER ODOT STANDARD DWGS RD904 AND RD960 ON SHEET DC02 AND SHEET DC05. SEE CURB RETURN GRADE ELEVATIONS ON "DB" SHEETS.
4. CONSTRUCT FULL DEPTH PAVEMENT SECTION PER TYPICAL SECTION ON SHEET B01.
5. CONSTRUCT 2 INCH GRIND AND INLAY PER TYPICAL SECTION ON SHEET B01. FOR LIMITS, SEE PAVING AND GEOMETREY PLANS ON "D" SHEETS.
6. CONSTRUCT CONCRETE DRIVEWAY APPROACH PER ODOT STANDARD DWG RD735 ON SHEET DC01. MATCH EXISTING WIDTH AND MATERIAL BEHIND APPROACH UNLESS NOTED OTHERWISE. SAWCUT AND REMOVE EXISTING SURFACE AS REQUIRED. MINIMUM STRUCTURAL SECTION BEHIND APPROACH: 4" AC PAVEMENT OVER 8" AGGREGATE BASE OR 6" P.C.C. OVER 6" AGGREGATE BASE. SEE DRIVEWAY GRADE ELEVATIONS ON SHEET SERIES "DA".
7. SAWCUT EXISTING ASPHALT OR CONCRETE AND REMOVE AS REQUIRED AND DIRECTED.
8. MATCH NEW CURB TO EXISTING CURB AND/OR MATCH NEW SIDEWALK TO EXISTING SIDEWALK, AS REQUIRED AND DIRECTED. FIELD COORIDNATE SAWCUT LIMITS, AS REQUIRED AND DIRECTED. PROTECT EXISTING CURB AND/OR CONCRETE SIDEWALK.
11. RELOCATE (REL), REMOVE (R), ADJUST (A) OR PROTECT (P) EXISTING MAILBOX(ES). FOR ANY RELOCATION OR ADJUSTMENT, SEE ODOT STANDARD DRAWING RD100 AND RD101 ON SHEET DC17 & DC18. COORDINATE LOCATION WITH ENGINEER.
16. CONSTRUCT THICKENED EDGE SIDEWALK. SEE "WA" SHEET SERIES FOR DETAILS.
18. CONSTRUCT STANDARD CURB (E=6"; H=16") PER CITY DWG WL-RD700 ON SHEET DC03.
31. RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING FIRE HYDRANT. RELOCATIONS AND ADJUSTMENTS BY OTHERS. CONTRACTOR TO COORDINATE.
32. RELOCATE (REL), ADJUST (A) OR PROTECT (P) EXISTING WATER VALVE. RELOCATIONS AND ADJUSTMENTS BY OTHERS. CONTRACTOR TO COORDINATE.
33. RELOCATE (REL), ADJUST (A) OR PROTECT (P) EXISTING WATER METER, BOX, AND SERVICE. RELOCATIONS AND ADJUSTMENTS BY OTHERS. CONTRACTOR TO COORDINATE.
41. REMOVE (R), RELOCATE (REL), OR PROTECT (P) EXISTING UTILITY POLE. REMOVAL OR RELOCATION BY UTILITY. CONTRACTOR TO COORDINATE POLE AND WIRE RELOCATIONS WITH APPROPRIATE UTILITIES.
44. RELOCATE (REL), ADJUST (A), OR PROTECT (P) EXISTING UTILITY PEDESTAL. RELOCATION OR ADJUSTMENT BY UTILITY. CONTRACTOR TO COORDINATE.

STORM SEWER CONSTRUCTION NOTES:

1. PROTECT (P), REMOVE (R), OR PLUG AND ABANDON IN-PLACE (A) EXISTING STORM PIPE IN-PLACE AS REQUIRED AND DIRECTED. UPON ABANDON IN-PLACE, FILL PIPE WITH CONTROLLED DENSITY FILL (CDF).
2. PROTECT (P), REMOVE (R), OR PLUG AND ABANDON (A) EXISTING STORM STRUCTURE. UPON REMOVAL, FILL ANY VOID WITH GRANULAR BACKFILL.
3. CONNECT TO EXISTING PIPE OR STRUCTURE PER DETAIL ON SHEET DC06.
4. ADJUST STRUCTURE RIM, COVER, OR FRAME TO FINISH GRADE PER PER ODOT STANDARD DWGS RD360 ON SHEET DC10. MAJ = MAJOR ADJUSTMENT, MIN = MINOR ADJUSTMENT.
8. CONSTRUCT CG-2 INLET CATCH BASIN AND LATERALS PER ODOT STANDARD DWG RD366 ON SHEET DC13. SEE PLAN FOR INVERTS AND DATA.

INLET DRAINAGE DATA:

CB-7 (CG-2)
STA 22+91.11, 15.0' R
GUT = 127.03
EX 12" IE IN (E) = CONFIRM IN FIELD
EX 12" IE OUT (S) = CONFIRM IN FIELD
SUMP = CONFIRM IN FIELD

ROADWAY PLAN & PROFILE
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

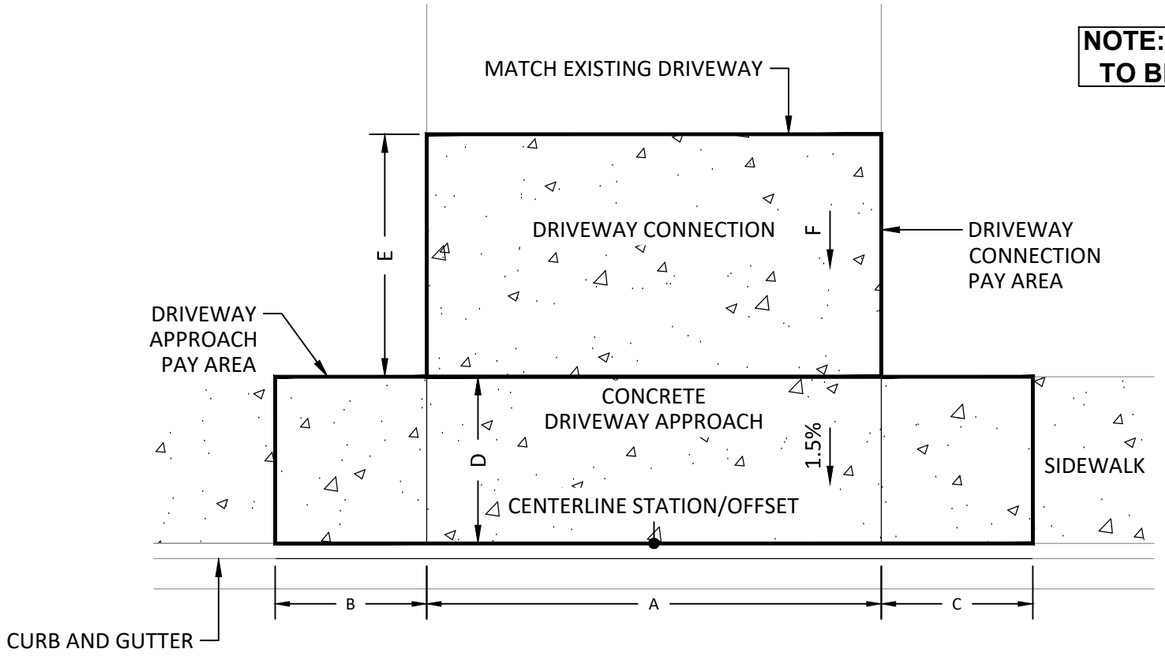
DESIGNED: HHPR TEAM	SHEET NO. C04
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-C01 ROADWAY PLAN AND PROFILES.DWG

DRIVEWAY CONSTRUCTION TABLE

LOCATION			CONCRETE DRIVEWAY APPROACH					DRIVEWAY CONNECTION			
STATION "L"	ADDRESS	PROPERTY NUMBER	"A" APPROACH WIDTH	APPROACH AREA (SF)	"B" WING WIDTH	"C" WING WIDTH	"D" PATHWAY LENGTH	FINISH SURFACE	"E" ESTIMATED LENGTH	ESTIMATED AREA (SF)	"F" APPROX. SLOPE
11+68.98, 8.5' LT	19970 OLD RIVER RD	2	12.0	121	5.0	5.0	5.5	N/A	N/A	N/A	N/A
12+91.41, 8.5' LT	3707 CEDAROAK DR	3	17.0	149	5.0	5.0	5.5	CONCRETE	11.0	187	19.2%
15+37.33, 8.5' LT	3751 CEDAROAK DR	4	19.0	159	5.0	5.0	5.5	CONCRETE	25.0	475	13.8%
16+73.18, 8.5' LT	3801 CEDAROAK DR	5	17.4	150	5.0	5.0	5.5	CONCRETE	22.5	392	7.4%
17+45.77, 8.5' LT	3855 CEDAROAK DR	6	17.5	151	5.0	5.0	5.5	CONCRETE	11.0	193	10.5%
18+63.12, 8.5' LT	3893 CEDAROAK DR	7	24.7	191	5.0	5.0	5.5	CONCRETE	11.0	233	18.2%
20+07.35, 8.5' LT	3915 CEDAROAK DR	8	17.5	151	5.0	5.0	5.5	CONCRETE	11.0	193	6.4%
20+59.04, 8.5' LT	3955 CEDAROAK DR	9	14.3	133.8	5.0	5.0	5.5	N/A	N/A	N/A	N/A
23+04.93, 15.5' LT	444 CEDAROAK DR	14	12.5	113	5.0	5.0	5.0	AC PAVEMENT	4.78	61	7.5%
22+26.93, 15.5' LT	3993 CEDAROAK DR	15	12.0	111	5.0	5.0	5.0	N/A	N/A	N/A	N/A

NOTE: VERTICAL CURVE INFORMATION TO BE PROVIDED WITH FINAL PLANS



TYPICAL DRIVEWAY

DRIVEWAY DETAIL GRADING
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

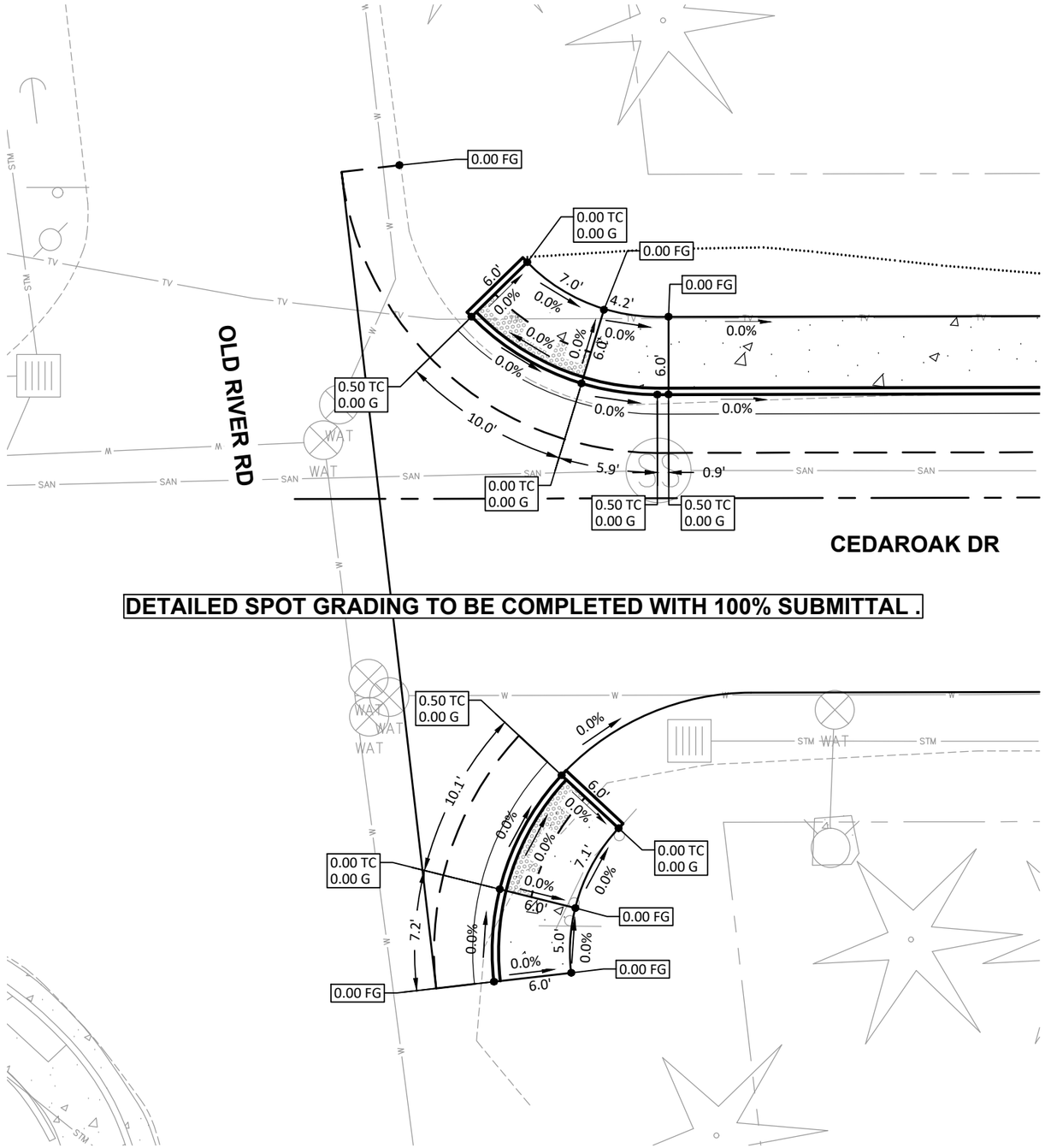
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DA01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-DA01 DRIVEWAY DETAIL GRADING.DWG



DETAILED SPOT GRADING TO BE COMPLETED WITH 100% SUBMITTAL .

OLD RIVER RD AND CEDAROAK DR NE AND SE RAMP - PLAN VIEW

SCALE: 1" = 10'

CURB RETURNS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

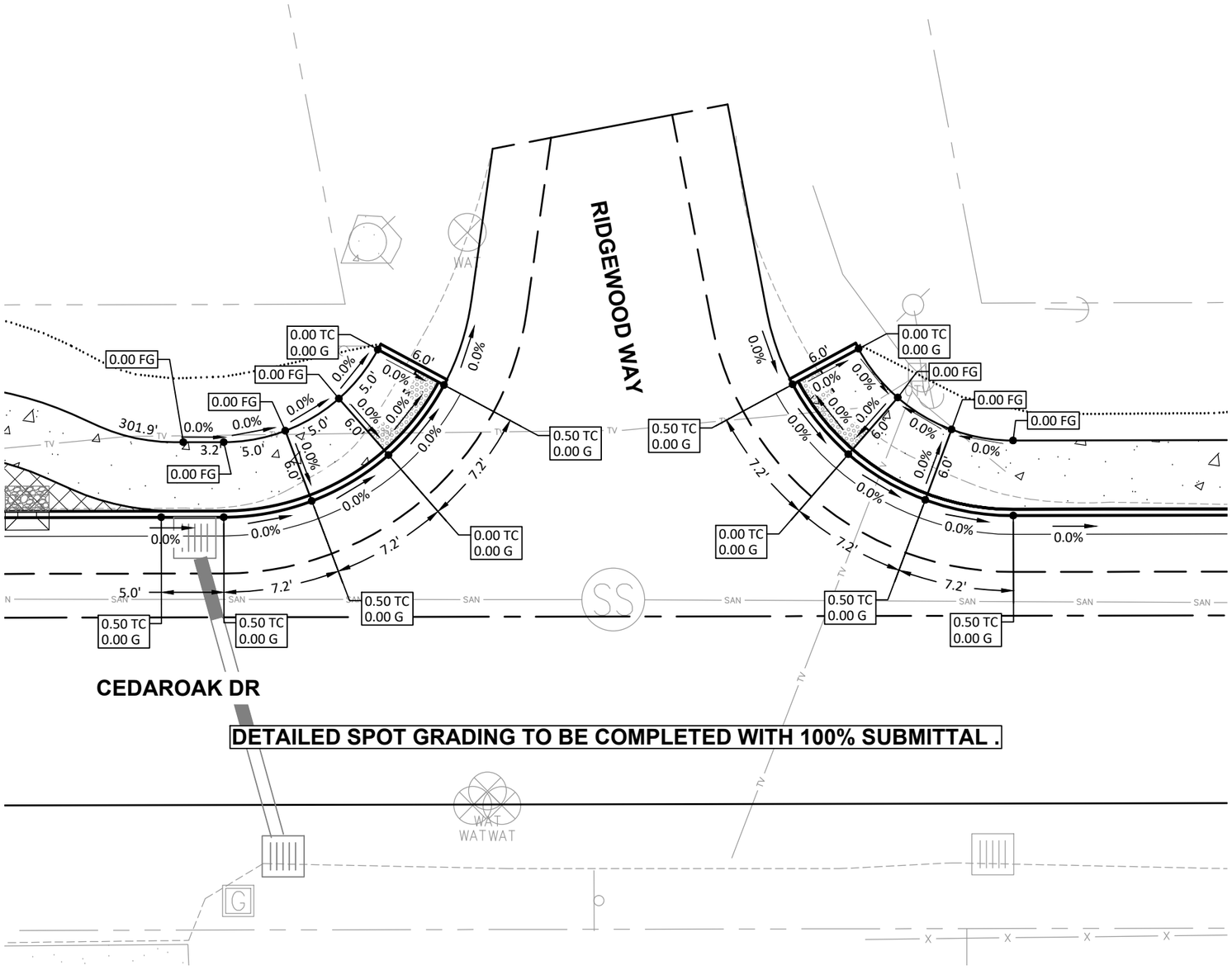
Harper Houf Peterson Righellis Inc.
ENGINEERS ◆ PLANNERS
LANDSCAPE ARCHITECTS ◆ SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAMES S. HOUF
JAN. 10, 2017
PRELIMINARY

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DB01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-DB01 CURB RETURNS.DWG



DETAILED SPOT GRADING TO BE COMPLETED WITH 100% SUBMITTAL .

CEDAROAK DR AND RIDGEWOOD WAY NW AND NE RAMP - PLAN VIEW

0 2.5 5 10
SCALE: 1" = 10'

CURB RETURNS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

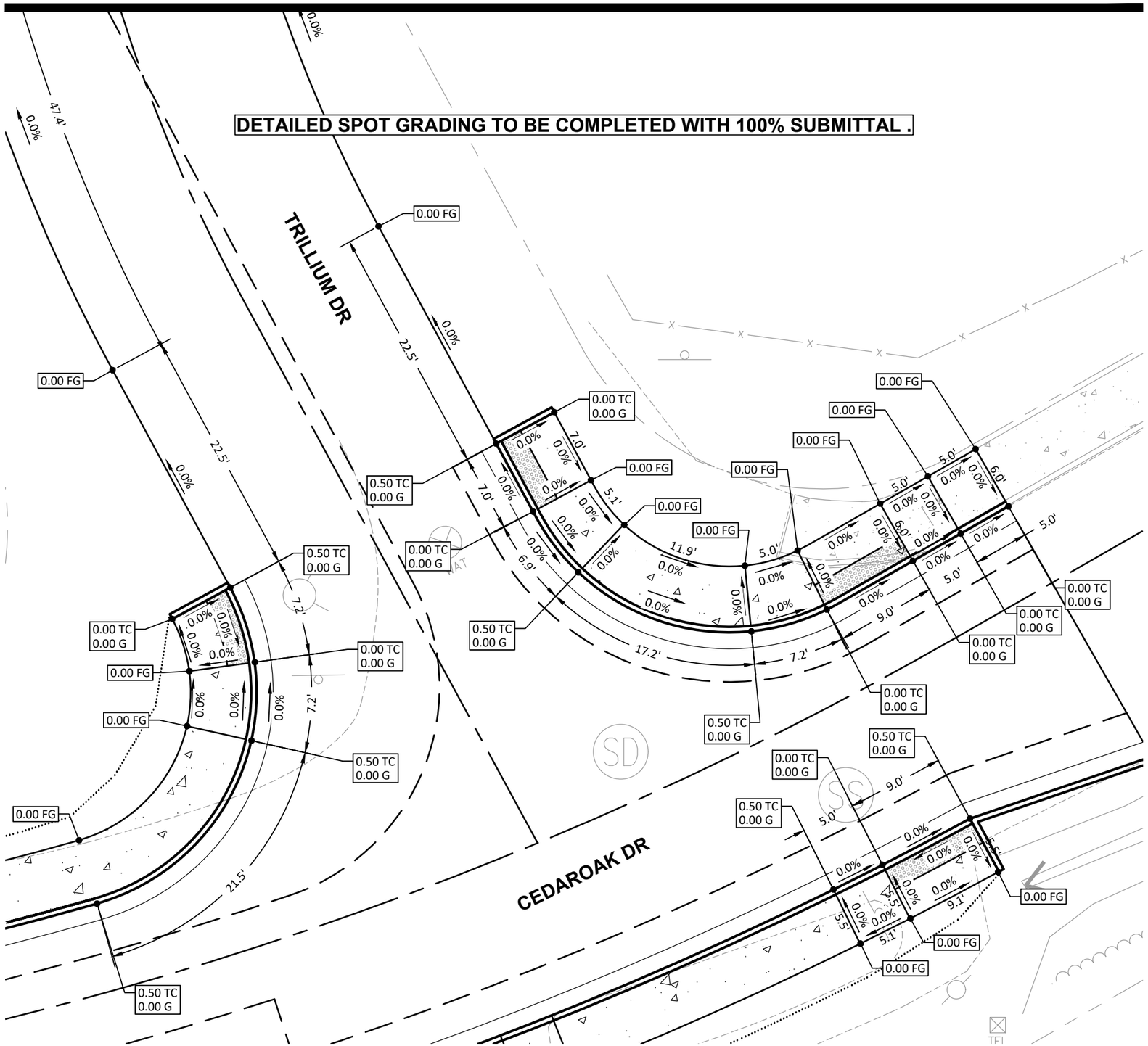
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DB02
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-DB01 CURB RETURNS.DWG

SEE SHEET DB04



CEDAROAK DR AND TRILLIUM DR NW AND NE RAMP - PLAN VIEW

0 2.5 5 10
SCALE: 1" = 10'

CURB RETURNS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS♦PLANNERS
LANDSCAPE ARCHITECTS♦SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

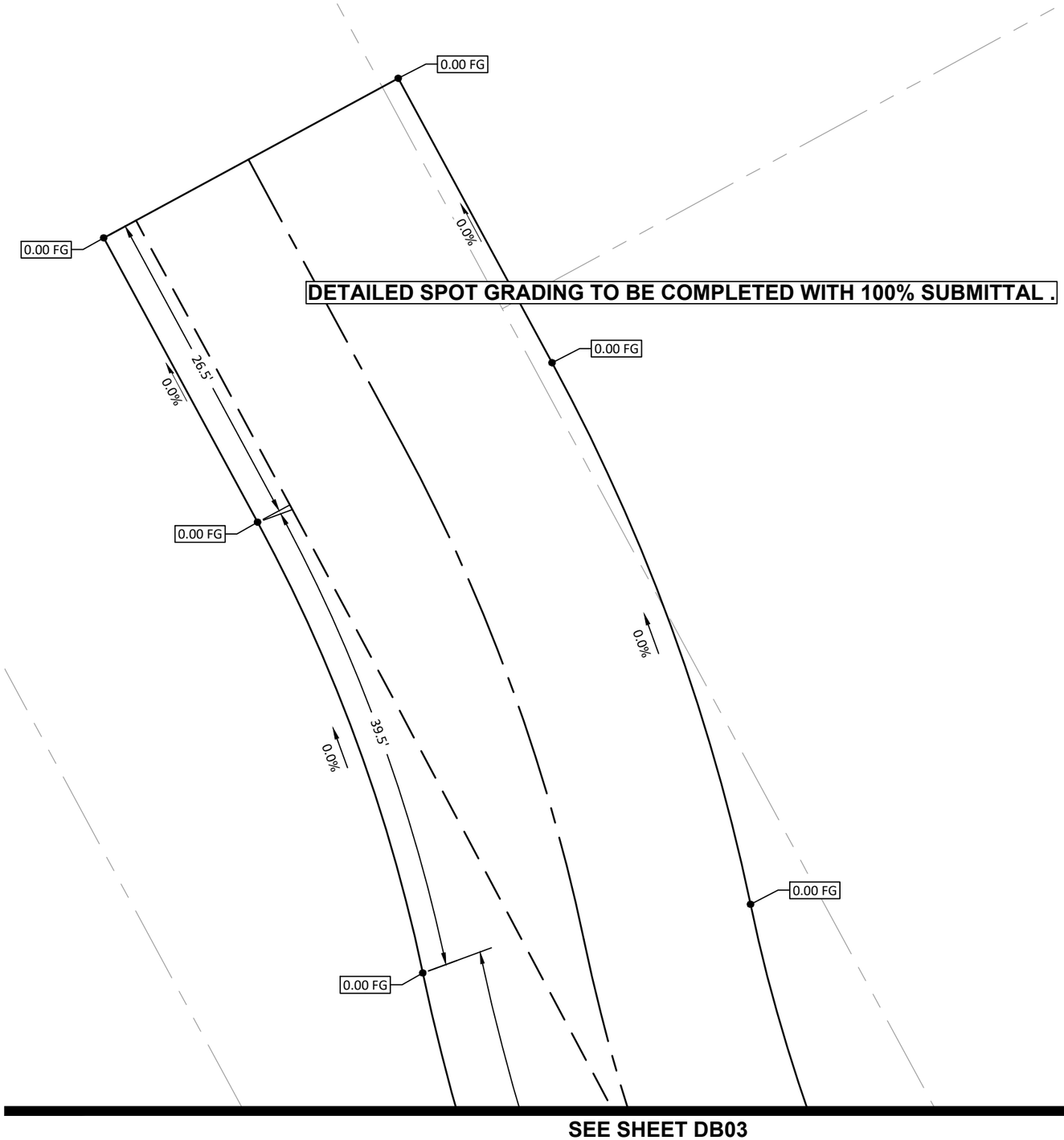
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DB03
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-DB01 CURB RETURNS.DWG



SEE SHEET DB03

TRILLIUM DR TRANSITION - PLAN VIEW

0 2.5 5 10

SCALE: 1" = 10'

CURB RETURNS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS◆PLANNERS
LANDSCAPE ARCHITECTS◆SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

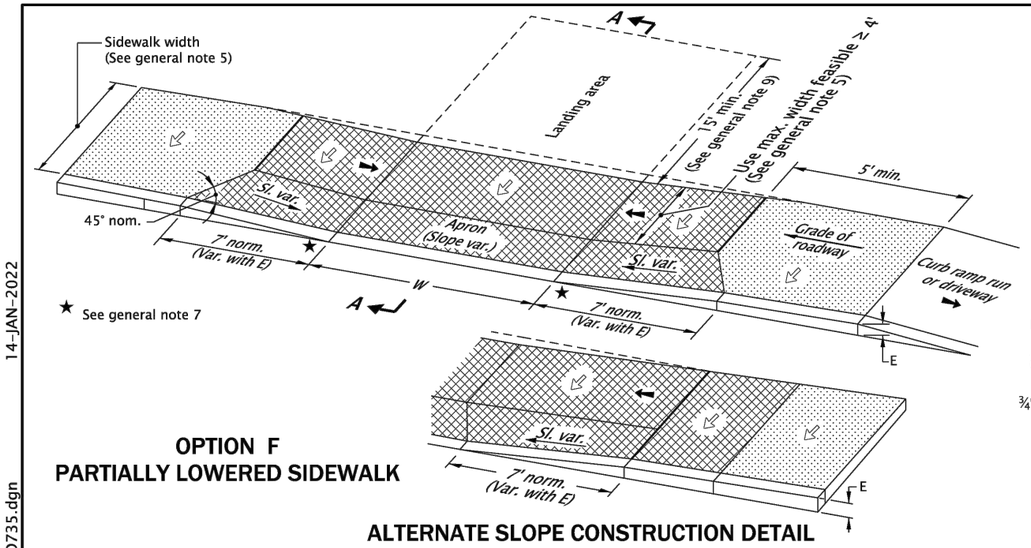
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

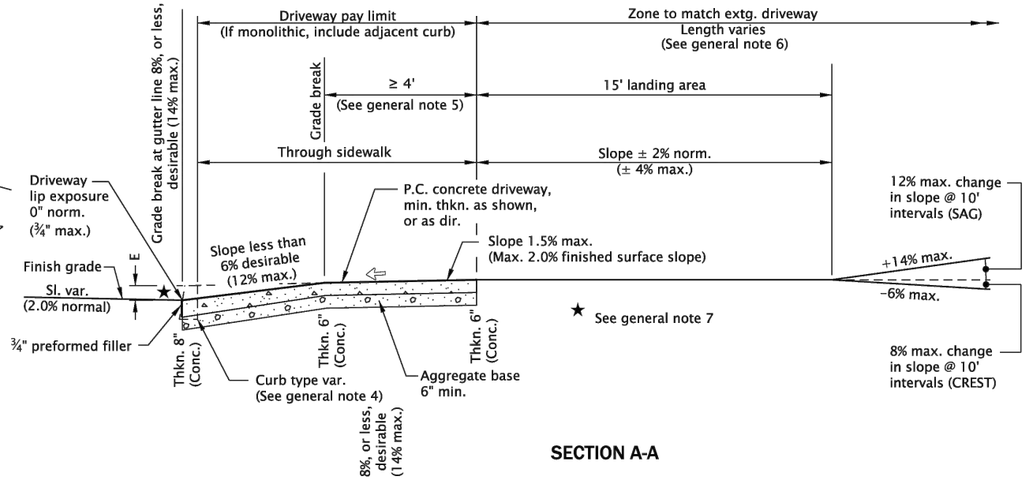
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DB04
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-DB01 CURB RETURNS.DWG

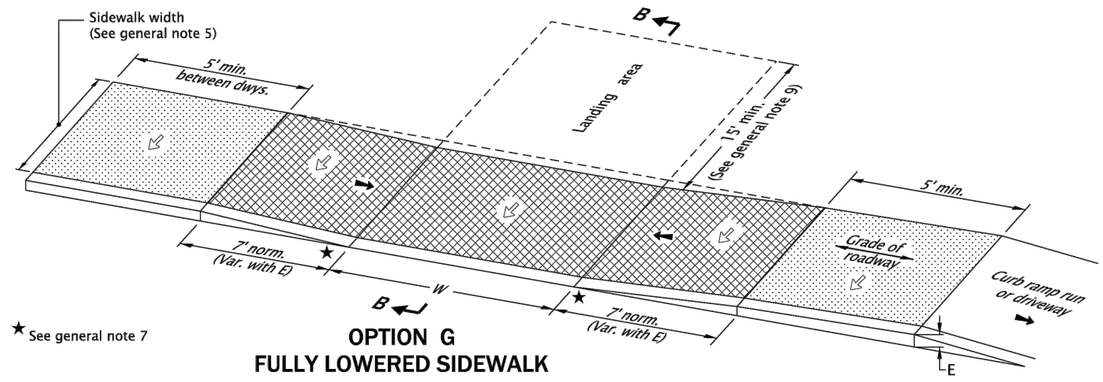


OPTION F
PARTIALLY LOWERED SIDEWALK

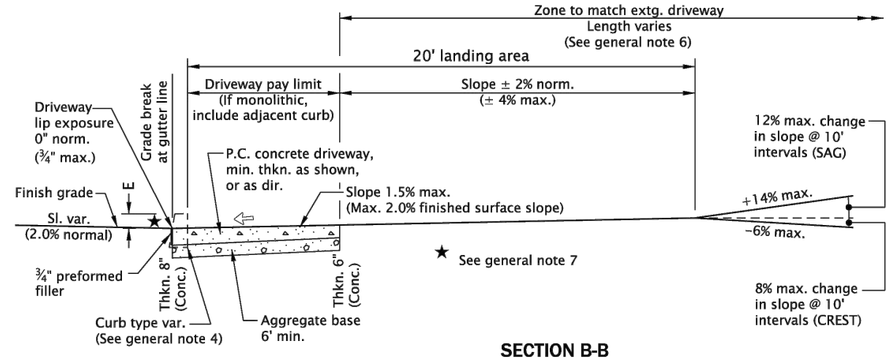


SECTION A-A

ALTERNATE SLOPE CONSTRUCTION DETAIL



OPTION G
FULLY LOWERED SIDEWALK



SECTION B-B

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Details are based on applicable ODOT Standards.
2. Only use details allowed by jurisdiction.
3. The following dimensions are as shown on plans, or as directed: driveway width, driveway slope, sidewalk width, curb exposure, driveway lip exposure, landing area length and width. See project plans for details not shown.
4. Curb, gutter, and sidewalk types varies, see plans.
   See Std. Dwgs. RD700 & RD701 for curb details.
   See Std. Dwg. RD720 for sidewalk details.
   See Std. Dwg. RD722 for joint details.
5. A greater than or equal 4' unobstructed clear passage with cross slope 1.5% max. (Max. 2.0% finished surface slope) is required behind driveway apron.
6. Where existing driveway is in good condition, and meets slope requirements, construct only as much landing area as required for satisfactory connection with new work.
7. Check the gutter flow depth at driveway locations to assure that the design flood does not overtop the back of sidewalk at driveway. If overtopping occurs place an inlet at upstream side of driveway or perform other approved design mitigation.
8. Construct a full deph expansion joints with 1#2" (In) preformed joint filler at ends of each driveway. Tooled joints are required at all driveway slope break lines.
9. 15' min. of the driveway behind the sidewalk should be surfaced to prevent tracking of gravel onto the sidewalk.
10. Monolithic curb & sidewalk shall retain thickened edge through lowered profile, to accommodate driveway use. See Std. Dwg. RD720 for details.

LEGEND:

	Sidewalk
	Driveway pay limit (If monolithic, include adjacent curb) (See project plans for details not shown)
⇦	Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
⬅	Running slope 7.5% max. (Max. 8.3% finished surface slope)
W	Width of driveway
E	Curb exposure

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CURB LINE SIDEWALK DRIVEWAYS OR ALLEYS (OPTIONS F & G) ODOT HIGHWAYS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 20-JUL-2020 | **RD735**

Effective Date: December 1, 2023 – May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

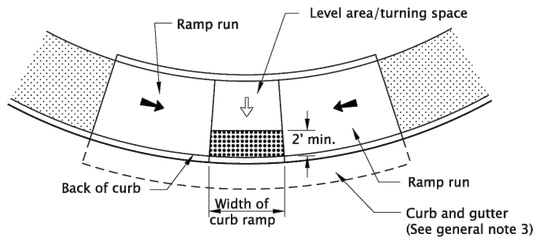
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

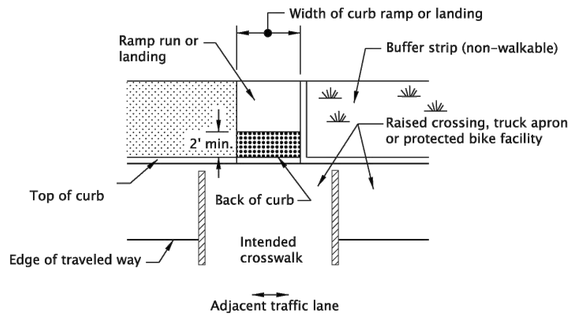
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

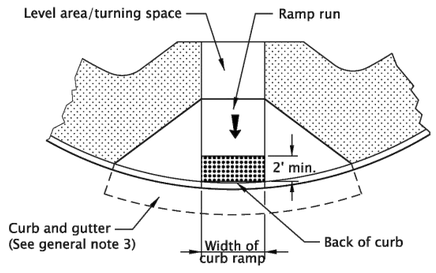
14-JAN-2022
RD735.dgn
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



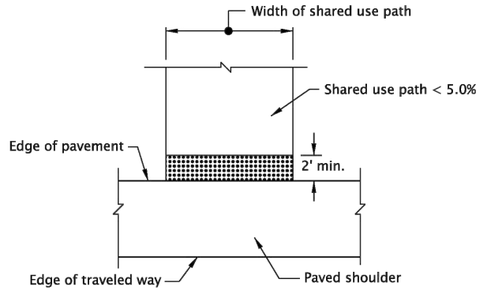
PARALLEL CURB RAMP



RAISED CROSSING, TRUCK APRON OR PROTECTED BIKE FACILITY



PERPENDICULAR CURB RAMP
GRADE BREAK IN FRONT OF CURB



SHARED-USE PATH CONNECTION

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Detectable warning surface details & locations are based on applicable ODOT Standards.
2. See project plans for details not shown.
   See Std. Dwgs. RD700 & RD701 for curbs.
   See Std. Dwg. RD902 for detectable warning surface installation details.
3. On or along state highways, curb and gutter is required at curb ramps.
4. Detectable warning surface placement for perpendicular ramps vary as shown.

LEGEND:

- Marked or intended crossing location
- Sidewalk
- Detectable warning surface
- Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Running slope 7.5% max. (Max. 8.3% finished surface slope)

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

DETECTABLE WARNING SURFACE PLACEMENT FOR CURB RAMPS

2024

DATE	REVISION DESCRIPTION
07-2020	NEW DRAWING CREATED

CALC. BOOK NO. N/A | SDR DATE 20-JUL-2020 | **RD904**

Effective Date: December 1, 2023 - May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

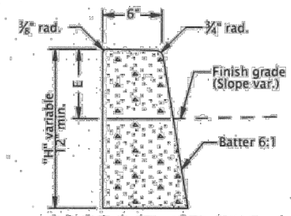
Harper Houf Peterson Righellis Inc.
ENGINEERS◆PLANNERS
LANDSCAPE ARCHITECTS◆SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC02
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

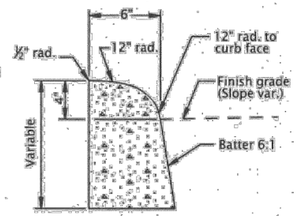
20-JUL-2020
RD904.dgn
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



O.D.O.T. & City of Portland Standard "H"=16"

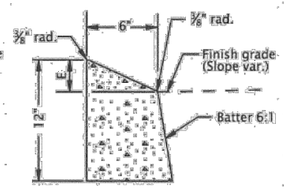
STANDARD CURB

(See general note 11)

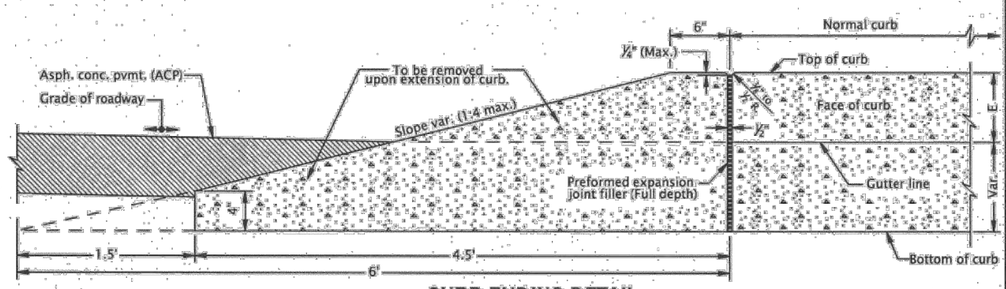


MOUNTABLE CURB

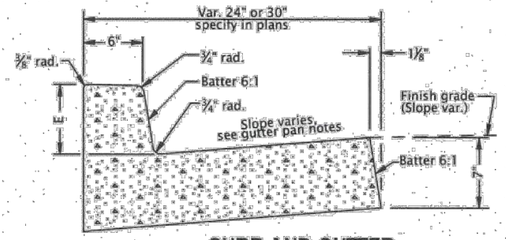
(See general note 11)



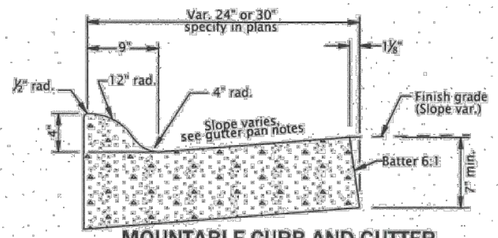
SLOPED CURB



CURB ENDING DETAIL



CURB AND GUTTER



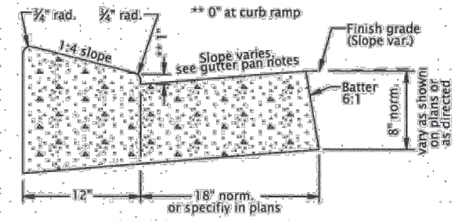
MOUNTABLE CURB AND GUTTER

GUTTER PAN NOTES:

Slope 5.0% normal.

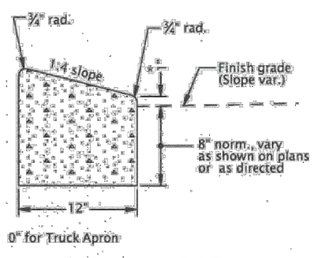
Slope 4.0% max. at curb ramps.

Vary slope as reqd. for drainage, vary where shown on plans, and allowed by jurisdiction.



LOW PROFILE MOUNTABLE CURB AND GUTTER

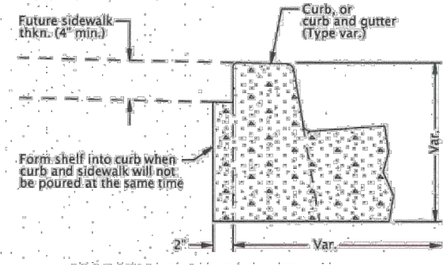
(Where shown on plans)



* 0" for Truck Apron

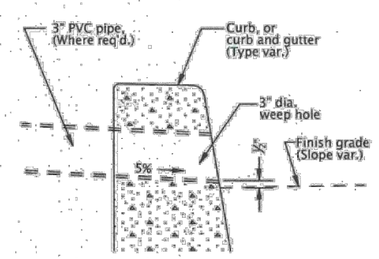
LOW PROFILE MOUNTABLE CURB

(See general note 11)



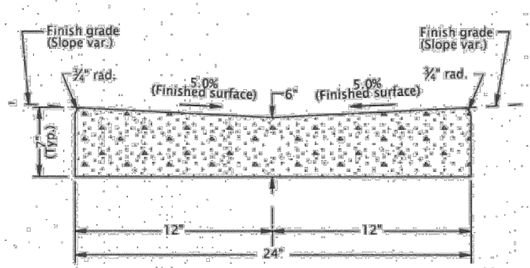
MODIFICATION FOR KEYWAY

(Where shown on plans)



WEEP HOLE DETAIL

(Where shown on plans, and allowed by jurisdiction)



WEST LINN VALLEY GUTTER

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb exposure "E" = 6" to 9", as measured vertically from flowline to highest point on curb. Vary as shown on plans or as directed. O.D.O.T standard "E"=7".
2. Const. curb expansion joints at 200' maximum spacing, and at points of tangency, and at ends of each driveways.
3. Const. curb contraction joints at 15' maximum spacing, and at ends of each inlet and curb ramp.
4. Transitions shall be used to connect curbs of different exposures "E". ("E" is the total vertical dimension of those curb surfaces having a slope of 1:1 or steeper). Minimum desirable transition length shall be 20' for each 1" difference in "E".
5. Tops of all curbs shall slope toward the roadway at 1.5% max. (Max. 2.0% finished surface slope), unless otherwise shown, or as directed.
6. Dimensions are nominal, vary to conform with curb machine approved by the engineer.
7. Dimensions adjacent to radii are measured to the point of intersection of curb surfaces.
8. For sidewalk details, and monolithic curb & sidewalk, see Std. Dwgs. RD720 & RD721.
9. For drainage curbs, see Std. Dwg. RD701.
10. For curb ramp details, see Std. Dwgs. RD900 series.
11. On or along state highways, curb and gutter is required at curb ramp.

Standard Drawing No. WL-RD700

Effective Date: 02/22/22

Title: CURBS

Approved: City Engineer

City of West Linn

PUBLIC WORKS DEPARTMENT – STANDARD DRAWINGS
22500 Salmo Road, West Linn OR 97068
Phone:503-722-5500 www.westlinnoregon.gov

NOTE: All material and workmanship shall conform to and comply with the City of West Linn Standard Construction Specifications.

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

File: WL-RD700.dwg

STANDARD DETAILS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

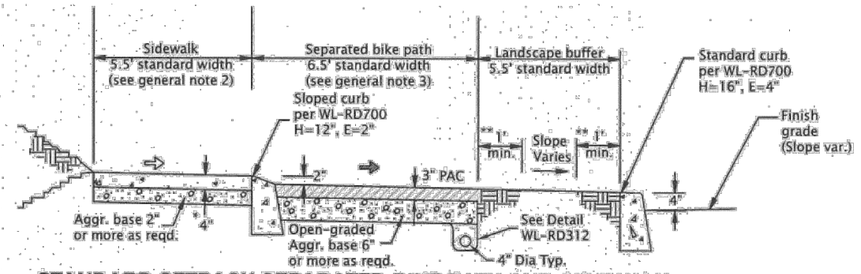
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY

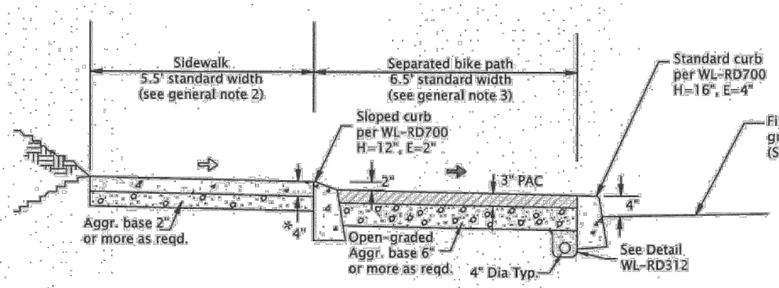
EXPIRES: 6/30/25

DESIGNED:	SHEET NO.
HHPR TEAM	DC03
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

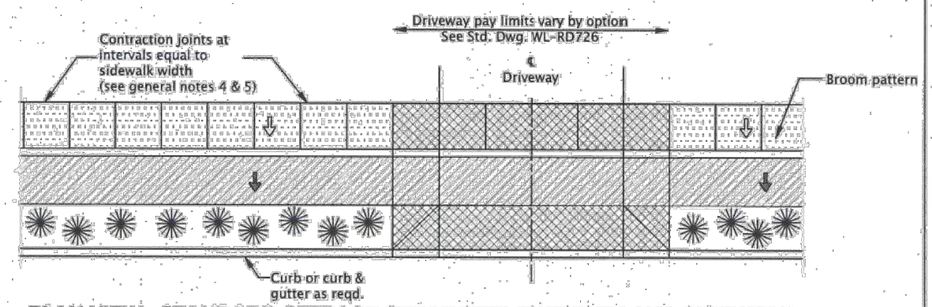
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



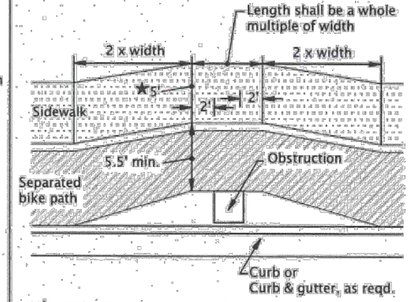
STANDARD SETBACK SEPARATED BIKE PATH AND SIDEWALK



ALTERNATE CURB LINE SEPARATED BIKE PATH AND SIDEWALK

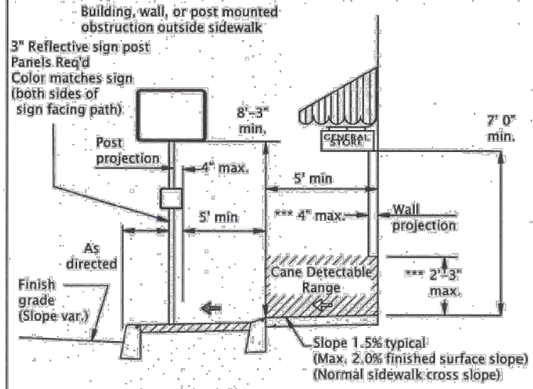


PLAN VIEW - STANDARD SETBACK SEPARATED BIKE PATH AND SIDEWALK



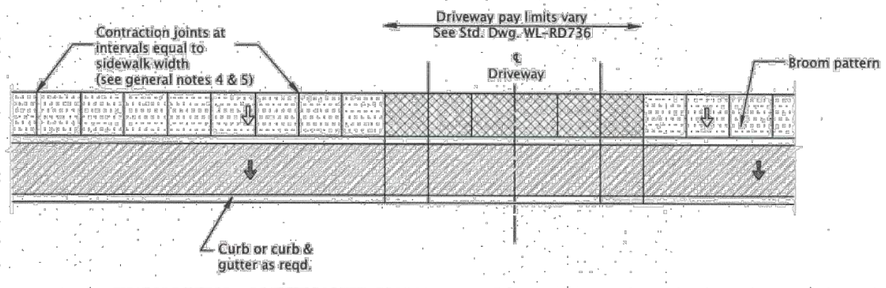
★ When site constraints prohibit a 5' passage, the Engineer may direct this to be reduced, but no less than 4' (as shown on plans).

REQUIRED ALTERNATE CURB LINE SEPARATED BIKE PATH AND SIDEWALK WIDENING AROUND OBSTRUCTIONS



CLEAR CIRCULATION PATH FOR ALTERNATE CURB LINE SEPARATED BIKE PATH AND SIDEWALK

(Only when path widening around an obstruction is not feasible)



PLAN VIEW - ALTERNATE CURB LINE SEPARATED BIKE PATH AND SIDEWALK

- Sidewalk (PCC)
- Separated bike path (½" PAC)
- Driveway (PCC) (See general note 8) (See project plans for details not shown)
- ⇦ Slope sidewalk 1.5% typical (Max. 2.0% finished surface slope)
- ⇦ Slope separated bike lane 1.5% typical (Max. 8.0% finished cross slope)

* As specified in plans, min. 4". If sidewalk is intended as portion of a driveway or mountable curb is used min. thickness 6".

** Provide compacted backfill adjacent to curb and separated bike path

*** Objects with base below 2'-3" may protrude any distance as long as the 5' circulation path is maintained. When an object with a base higher than 2'-3" protrudes further than 4" provide a detection below protrusion to delineate edge.

GENERAL NOTES FOR ALL DETAILS:

1. Include additional paved or unpaved 2' clearance to vertical faces higher than 5' such as retaining walls, sound walls, fences and buildings.
2. Curb type and sidewalk width as shown on plans or as directed. On sidewalks 8' and wider, provide a longitudinal joint at the midpoint.
3. Storm drain weep hole pipes are not permitted in sidewalks with separated bike paths.
4. Const. expansion joints at 200' maximum spacing, and at points of tangency, and at ends of each driveway.
5. Const. contraction joints at 15' maximum spacing, and at ends of each driveway and curb ramp.
6. For curb details, see Std. Dwg. WL-RD700 and ODOT Std. Dwg. RD701.
7. Sidewalk details are based on ODOT applicable standards.
8. For driveway details not shown, see Std. Dwgs. WL-RD726 and WL-RD736.
9. See project plans for details not shown.
10. The standard layout for separated bike path and sidewalk shall be used unless site conditions require the reverse slope separated bike path and sidewalk layout. See Std. Dwg. WL-RD722.

Standard Drawing No. WL-RD721

Effective Date: 02/22/22

Title: STANDARD SEPARATED BIKE PATH AND SIDEWALK

Approved: City Engineer

CITY OF West Linn
PUBLIC WORKS DEPARTMENT – STANDARD DRAWINGS
22500 Salamo Road, West Linn OR 97068
Phone:503-722-5500
www.westlinnoregon.gov

NOTE: All material and workmanship shall be in accordance with the City of West Linn Standard Construction Specifications.

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

File WL-RD721.dwg

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

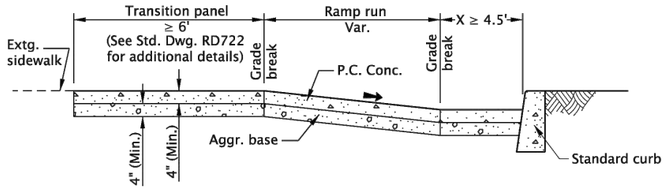
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

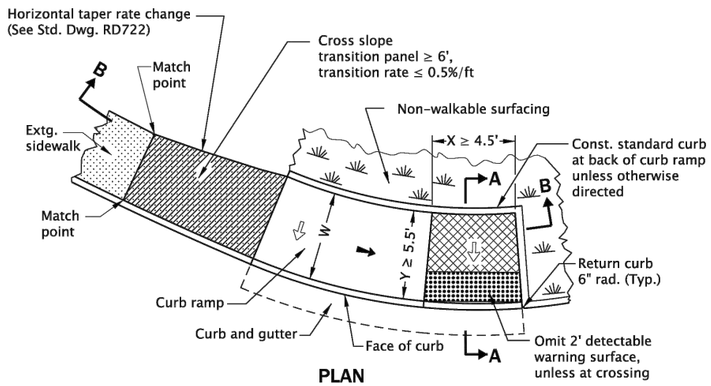
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC04
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

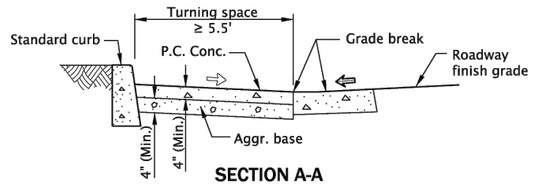
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



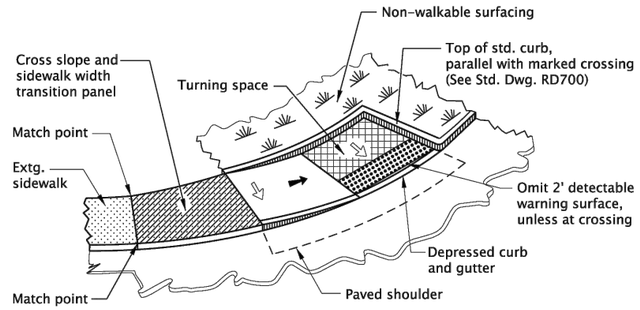
SECTION B-B



PLAN



SECTION A-A



ISOMETRIC VIEW

CURBED OPTION

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Curb ramp details are based on applicable ODOT applicable Standards.
2. See project plans for details not shown.
   See Std. Dwgs. RD700 & RD701 for curbs.
   See Std. Dwgs. RD720 & RD721 for sidewalks.
   See Std. Dwg. RD722 for transition panel details.
   See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details.
   See Std. Dwg. RD920 for parallel curb ramp details.
3. Site conditions normally require a project special design. See project plans for details not shown.
4. Tooled dummy joints are required at all curb ramp grade break lines, (see Std. Dwg. RD722).
5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
6. Place detectable warning surface at the back of curb for a minimum depth of 2' in the direction of pedestrian travel full width of curb ramp opening that is adjacent to traffic.
7. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
8. When a shared use path terminates, the curb ramp shall be the full width of the path, the turning space Y-dimension should be minimum 8' wide to enable bicycles to ride from ramp to shoulder.
9. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
10. On or along state highways, curb and gutter is required at curb ramps.
11. Unique curb ramp option can be used for curved or tangent roadway sections. Superelevated roadways require a site specific detail.

LEGEND:

- Sidewalk
- Transition panel
- Detectable warning surface
- Level area (Turning space/landing)
  Unobstructed 4.5' x 4.5'
  With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing).
  For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.
- ⇦ Cross slope 1.5% max.
  (Max. 2.0% finished surface slope)
  (Normal sidewalk cross slope)
- ⬅ Running slope 7.5% max.
  (Max. 8.3% finished surface slope)
- ⇦ Counter slope 4.0% max. ascending or descending,
  (Max. 5.0% finished surface slope)
  Slope as required for drainage
- W New construction sidewalk width. See contract plans for dimension

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

UNIQUE CURB RAMP

2024

DATE	REVISION DESCRIPTION
07-2020	NEW DRAWING CREATED
07-2021	REVISED DETAILS AND NOTES

CALC. BOOK NO. N/A | SDR DATE 19-JUL-2021 | **RD960**

Effective Date: December 1, 2023 – May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

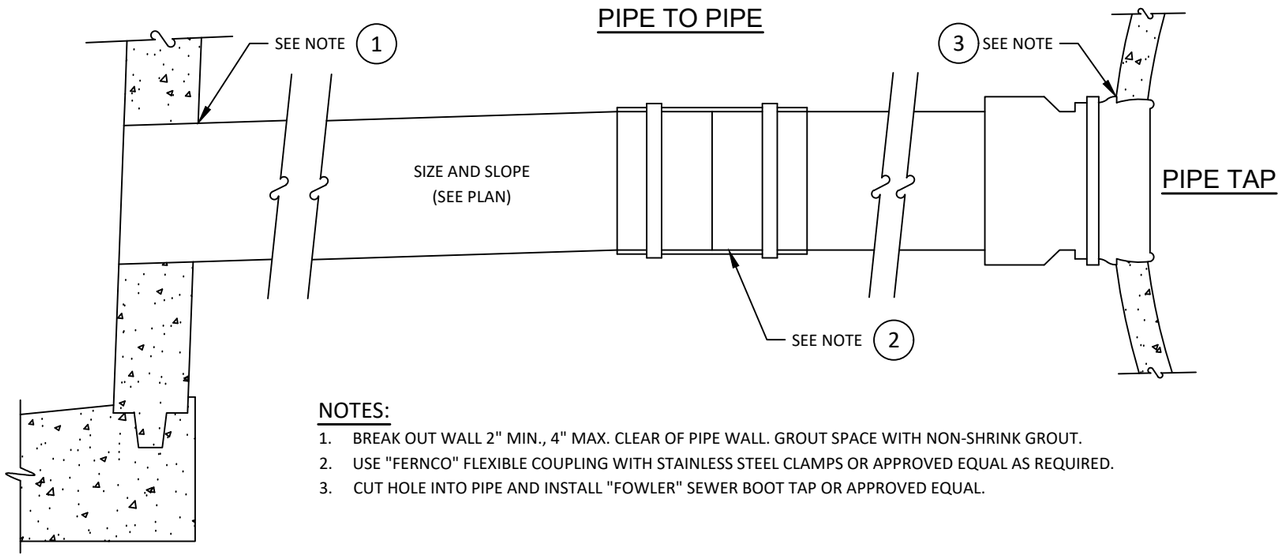
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC05
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

19-JUL-2021
RD960.dgn
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



PIPE TO PIPE

MANHOLE OR CATCH BASIN

NOTES:

1. BREAK OUT WALL 2" MIN., 4" MAX. CLEAR OF PIPE WALL. GROUT SPACE WITH NON-SHRINK GROUT.
2. USE "FERNCO" FLEXIBLE COUPLING WITH STAINLESS STEEL CLAMPS OR APPROVED EQUAL AS REQUIRED.
3. CUT HOLE INTO PIPE AND INSTALL "FOWLER" SEWER BOOT TAP OR APPROVED EQUAL.

PIPE CONNECTION

NTS

STANDARD DETAILS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS◆PLANNERS
LANDSCAPE ARCHITECTS◆SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC06
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

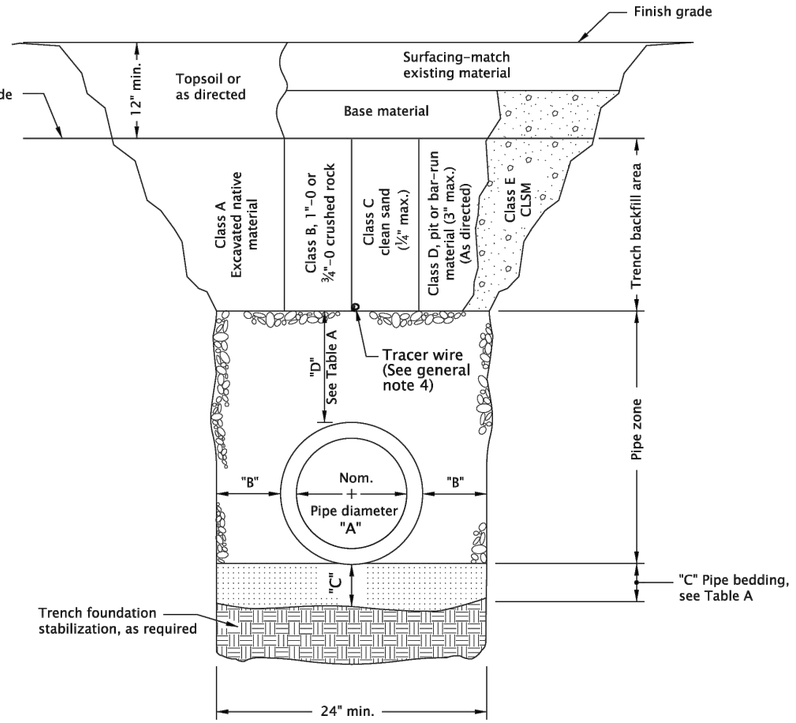
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG

RD300.dgn 20-JUL-2020

TABLE A

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

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



MULTIPLE INSTALLATIONS

DIAMETER	MIN. SPACE BETWEEN PIPES
Up to 48"	24"
48" to 72"	One half (½) dia. of pipe

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

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

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

TRENCH BACKFILL, BEDDING, PIPE ZONE AND MULTIPLE INSTALLATIONS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A SDR DATE 14-JUL-2014 **RD300**

Effective Date: December 1, 2023 – May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

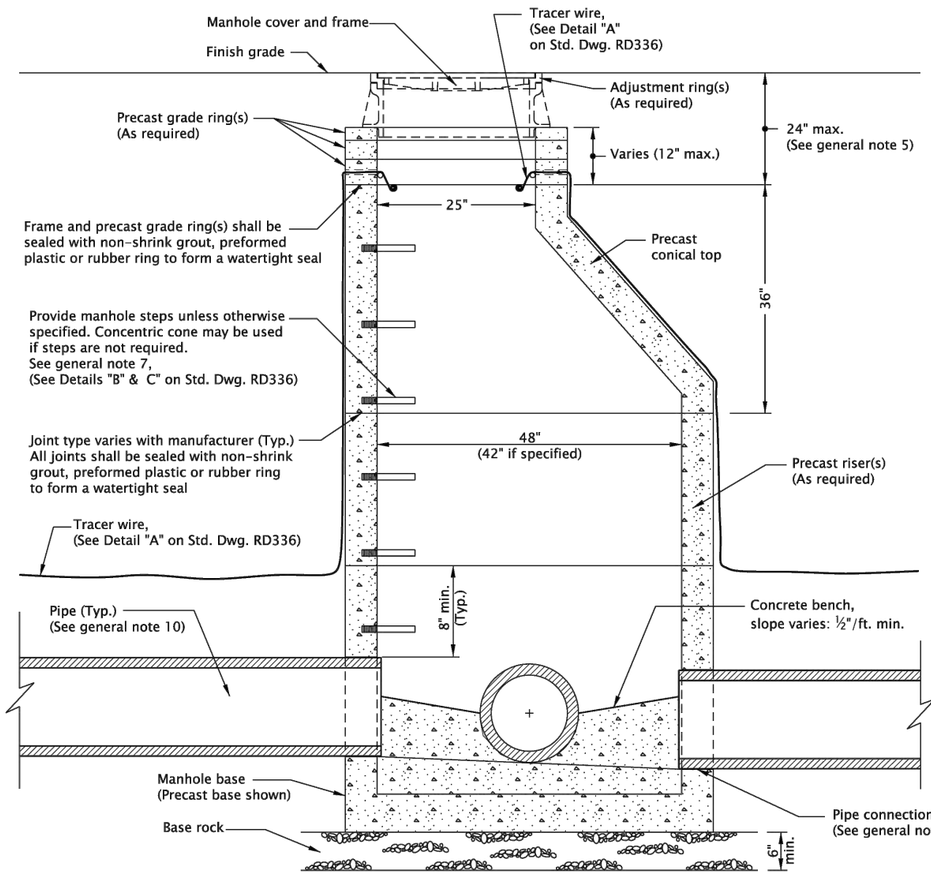
REGISTERED PROFESSIONAL ENGINEER 86,200 OREGON JAN. 10, 2017 JAMES S. HOUF

PRELIMINARY

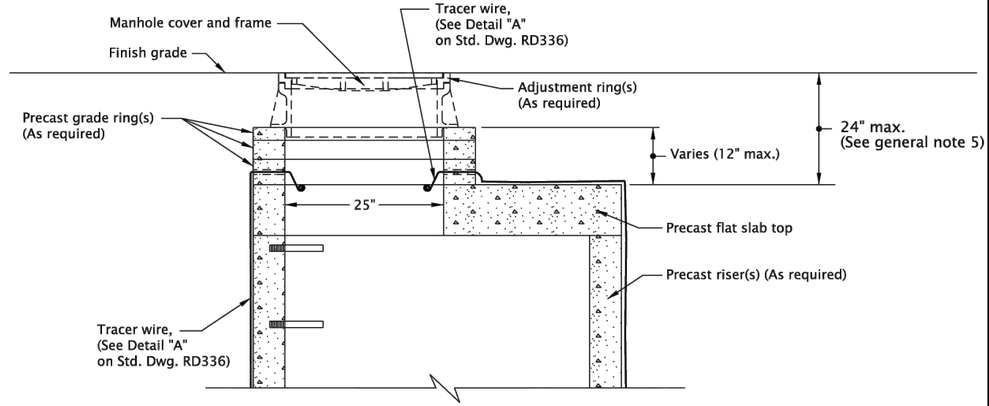
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC07
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



MANHOLE WITH PRECAST CONICAL TOP



MANHOLE WITH PRECAST FLAT SLAB TOP

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

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

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

STANDARD STORM SEWER MANHOLE

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 21-JUN-2019 | **RD335**

Effective Date: December 1, 2023 - May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

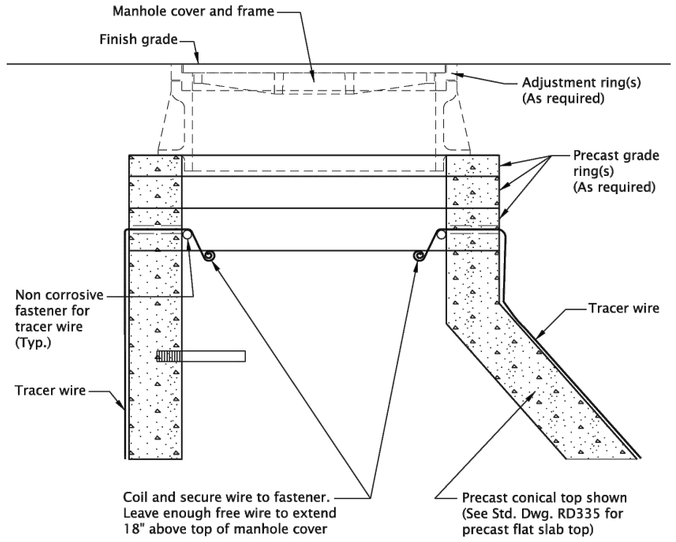
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

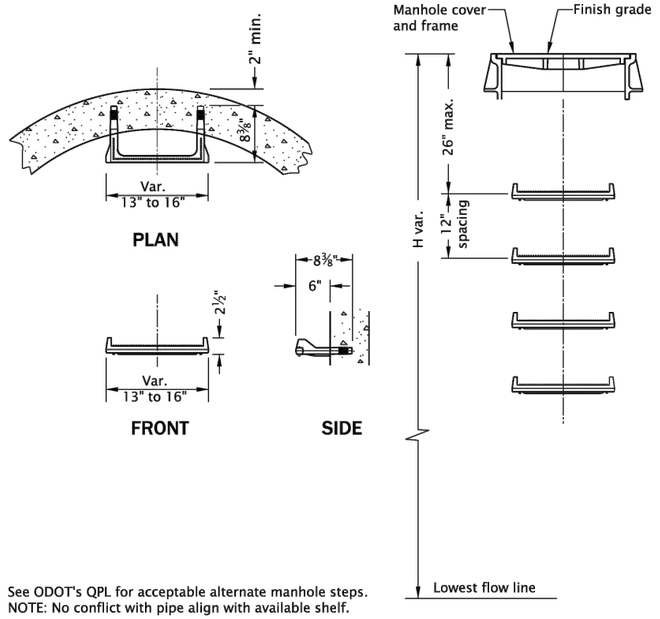
DESIGNED: HHPR TEAM	SHEET NO. DC08
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

RD335.dgn 20-JUL-2020

DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG

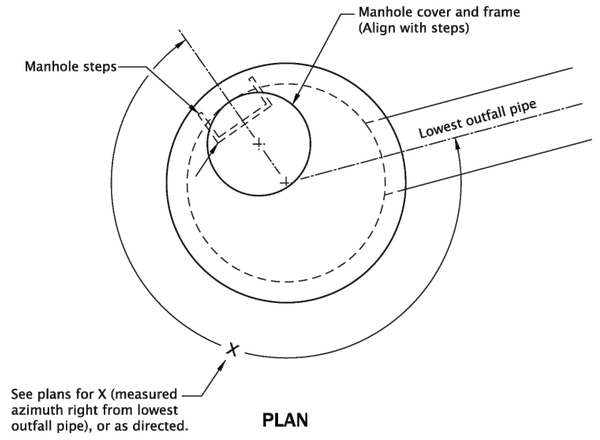


DETAIL "A"
TRACER WIRE
(See general note 6)



See ODOT's QPL for acceptable alternate manhole steps.
NOTE: No conflict with pipe align with available shelf.

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



PLAN

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

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. All precast products shall conform to requirements of ASTM C478.
2. Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
3. See Std. Dwg. RD345 for pipe to manhole connections.
4. See Std. Dwg. RD344 for manhole base section.
5. Adjust 24" maximum.
6. All connecting pipes shall have a tracer wire, or approved alternate. Place tracer wire directly over pipe centerline and on top of the pipe zone material.
7. Steps shall conform to requirements of ASTM C478. When H=42" or less omit steps. See Detail "C" for alignment of steps, and manhole cover and frame.
8. See Std. Dwg. RD335 for details not shown.
9. See Std. Dwg. RD356 for manhole covers and frames, manhole adjustment rings, etc.
10. Max. pipe diameter varies with pipe material.
11. See Std. Dwg. RD342 for shallow manholes.
12. See project plans for details not shown.

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

STANDARD MANHOLE DETAILS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 16-JAN-2019 | **RD336**

Effective Date: December 1, 2023 – May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

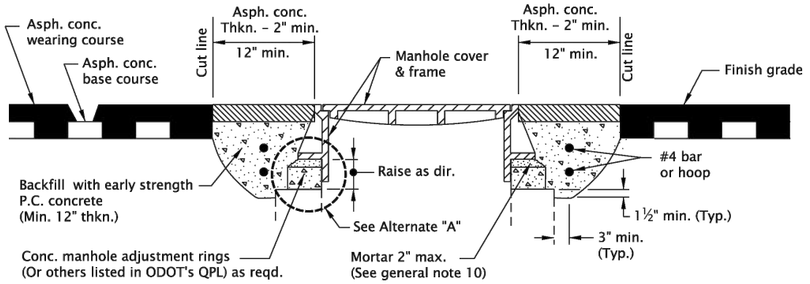
REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

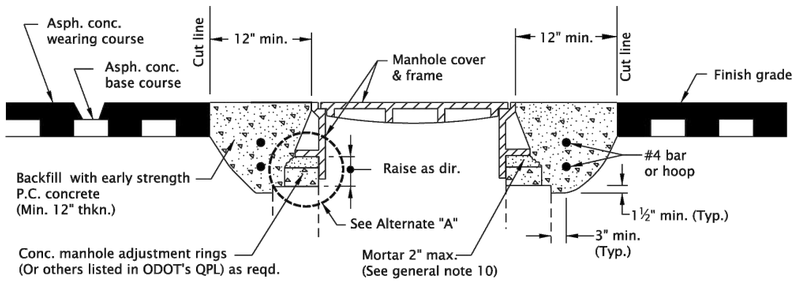
DESIGNED: HHPR TEAM	SHEET NO. DC09
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

RD336.dgn 20-JUL-2020

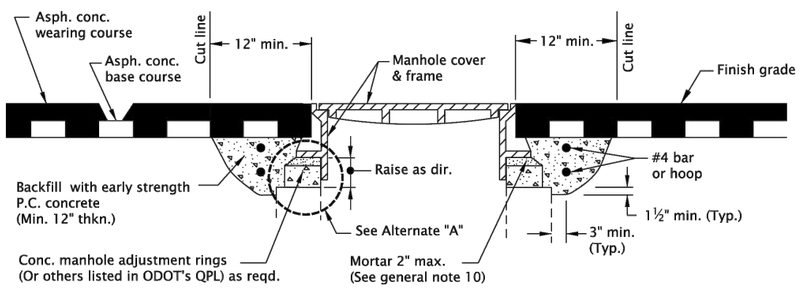
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



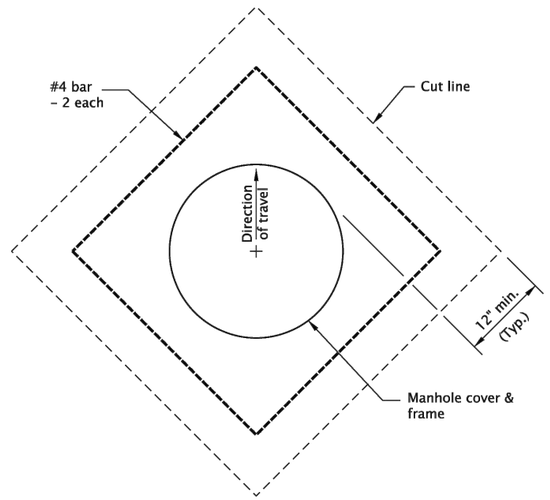
METHOD "A"



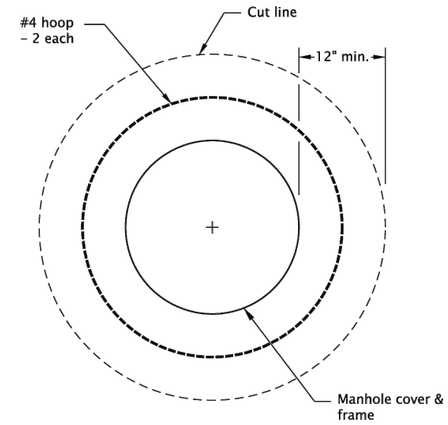
METHOD "B"



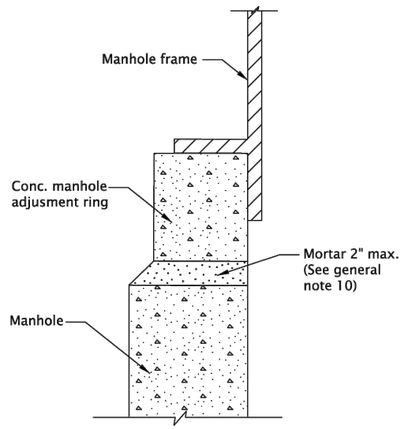
METHOD "C"



PLAN
SQUARE CUT



PLAN
CIRCULAR CUT



ALTERNATE "A"

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Cover manhole with building paper and const. asph. conc. base course and wearing courses.
2. Saw cut square or circular excavation around manhole 12" min. from manhole frame.
3. Raise manhole cover and frame to finish grade by installing conc. manhole adjustment rings and leveling mortar, as shown.
4. Backfill with early strength Portland Cement Concrete. All concrete shall be commercial grade concrete.
5. Protect from traffic loading until conc. has cured to 3000 psi.
6. Apply tack coat to edges of existing pavement before installing patch.
7. Finish joint with asphalt seal and sand.
8. See Std. Dwg. RD336 for manhole steps details.
9. See appropriate manhole standard drawings for details not shown.
10. Use epoxy for synthetic grade rings.
11. See Std. Dwg. RD336 for tracer wire details.
12. See Std. Dwg. RD356 for manhole covers and frames.

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MANHOLE FRAME ADJUSTMENT

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 21-JUL-2015 | **RD360**

Effective Date: December 1, 2023 - May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS♦PLANNERS
LANDSCAPE ARCHITECTS♦SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

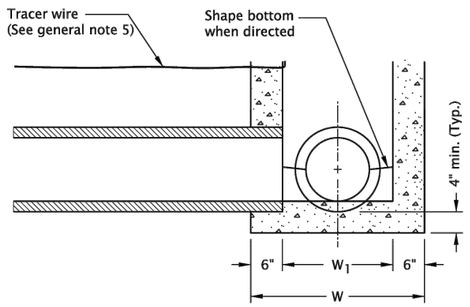
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

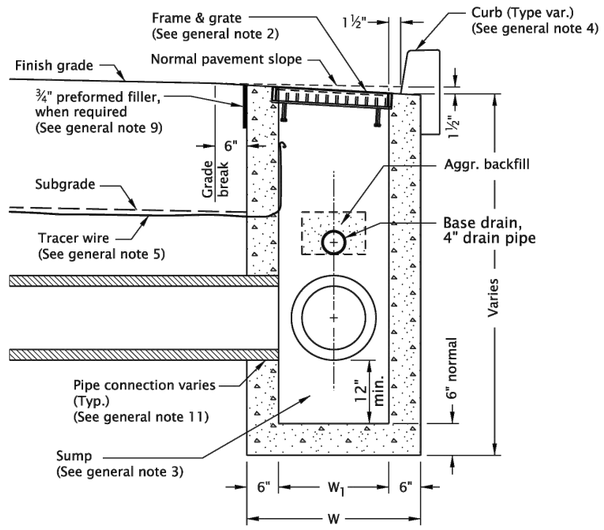
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC10
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

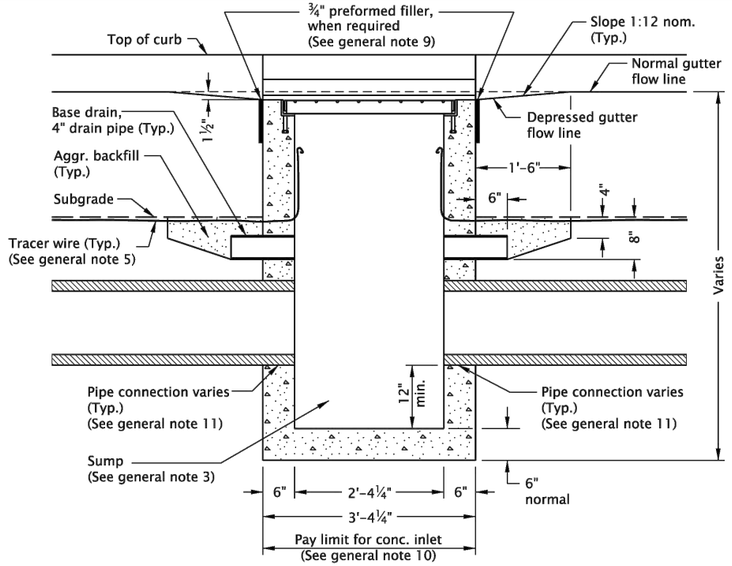
20-JUL-2020
RD360.dgn
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



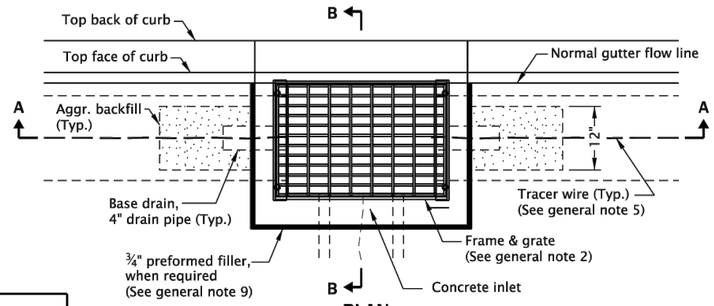
DETAIL A
WITHOUT SUMP



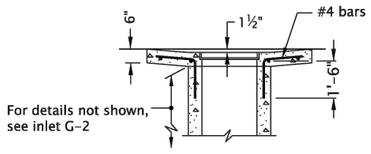
SECTION B - B



SECTION A - A



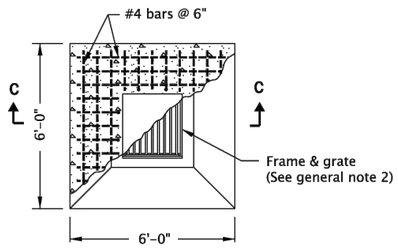
PLAN
TYPE G-1, G-2, G-2M



SECTION C-C

NOTE:

All reinforcement to be placed 2" clear of nearest face of concrete unless shown or noted otherwise



PLAN
TYPE G-2MA

TABLE A		
INLET TYPE	W	W_1
G-1	2'-8⅞"	1'-8⅞"
G-2, G-2M, G-2MA	3'-3⅜"	2'-3⅜"

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Where precast inlets are used as an alternate to cast-in-place inlets, a 4" compacted leveling bed of sand or ¼"-0 crushed aggregate shall be provided. All precast inlets shall conform to requirements of ASTM C913.
2. Graphics show G-1 inlet with Type 2 grate. See Table A for inlet dimensions.
   Type 1 grate allowed only in locations not subject to bicycle or pedestrian use.
   For frame and grade details, see Std. Dwg. RD365.
3. Provide sump only where shown on plans, and allowed by jurisdiction. See Detail A for inlet without sump.
4. For curb details, see Std. Dwgs. RD700 & RD701.
5. See Std. Dwg. RD336 for tracer wire details, or approved alternate.
6. Max. pipe diameter varies with pipe material.
7. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
8. All concrete shall be commercial grade concrete.
9. ¾" preformed filler (in concrete pavement or gutter only) to extend through thickness of concrete.
10. See Std. Dwg. RD363 for gutter transition section, when curb and gutter are required.
11. See Std. Dwg. RD339 for pipe to structure connections.

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CONCRETE INLETS
TYPE G-1, G-2, G-2M, & G-2MA

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 21-JUL-2015 | **RD364**

Effective Date: December 1, 2023 - May 31, 2024

20-JUL-2020

RD364.dgn

DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

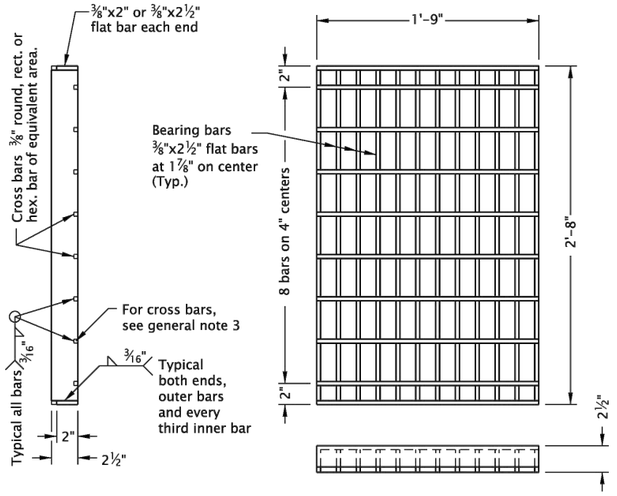
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

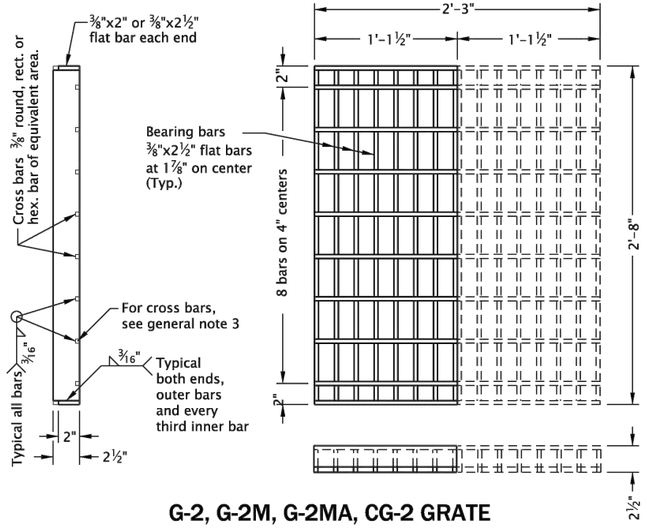
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC11
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10



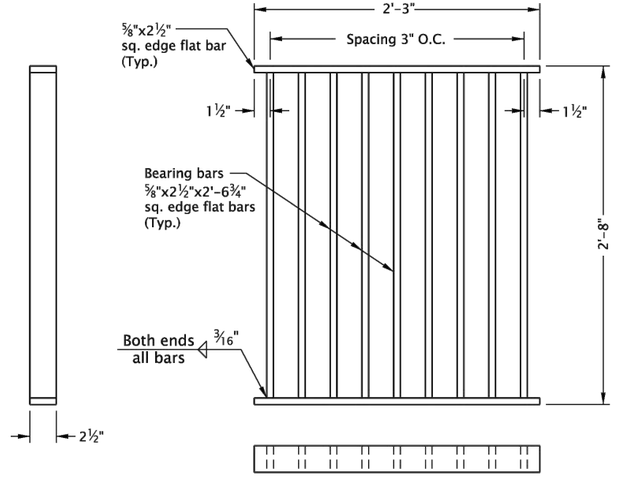
G-1, CG-1 GRATE (TYPE 2)

(Bicycle-safe)



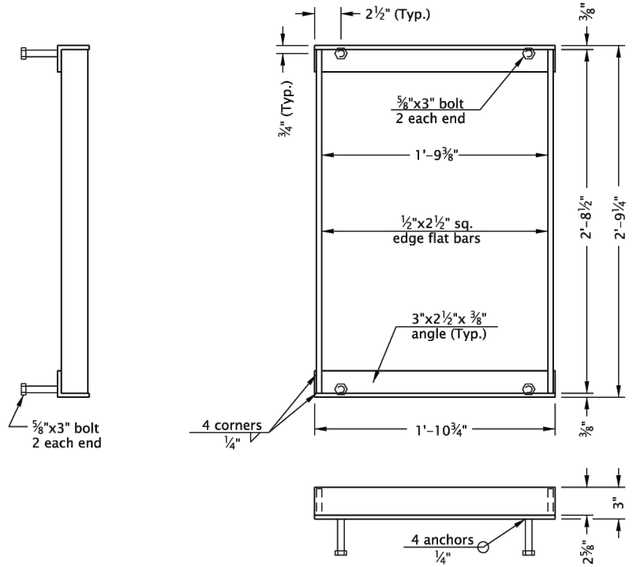
G-2, G-2M, G-2MA, CG-2 GRATE (TYPE 2)

(Bicycle-safe)
(2 grates required per inlet, as shown)

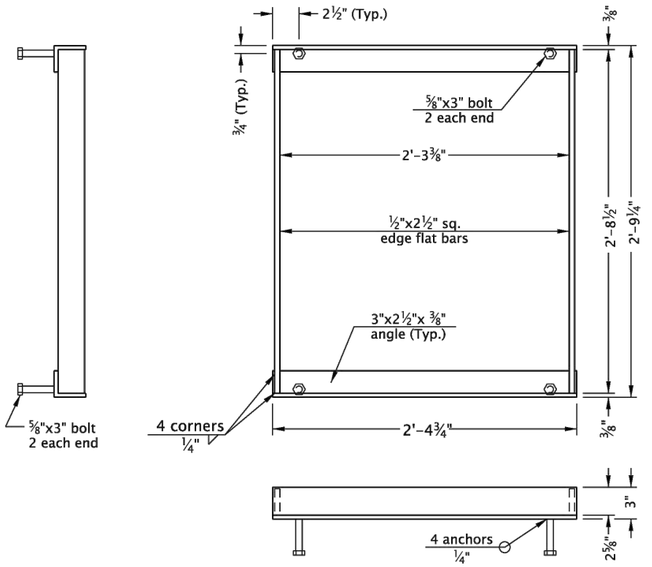


G-2, G-2M, G-2MA, CG-2 GRATE (TYPE 1)

(See general note 2)



G-1, CG-1 FRAME



G-2, G-2M, G-2MA, CG-2 FRAME

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. For inlet details, see appropriate inlet standard drawing(s).
2. Type 1 grate allowed only in locations not subject to bicycle or pedestrian use.
3. ⅜" cross bars shall be flush with the top of grate surface and may be fillet welded, resistance welded or electroforged to bearing bars.
4. Hot dip galvanize after fabrication.
5. Cast iron grate and frame are acceptable alternates. See ODOT's QPL.

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

FRAMES & GRATES FOR CONCRETE INLETS

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 14-JUL-2014 | **RD365**

Effective Date: December 1, 2023 - May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

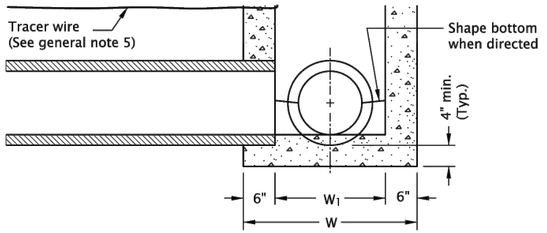
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC12
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

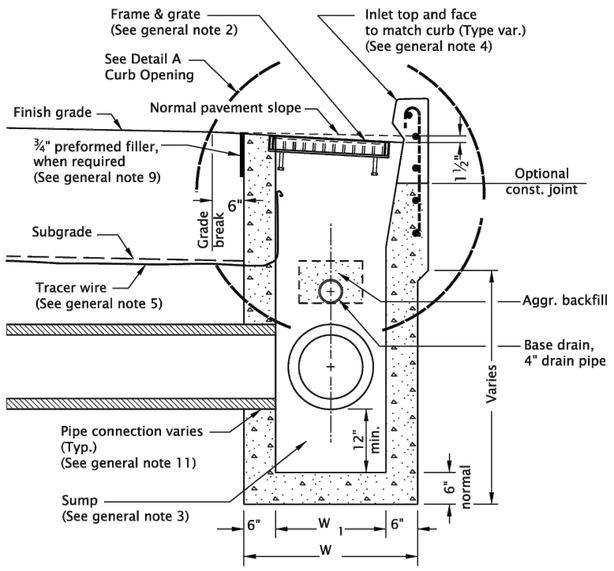
RD365.dgn
20-JUL-2020
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

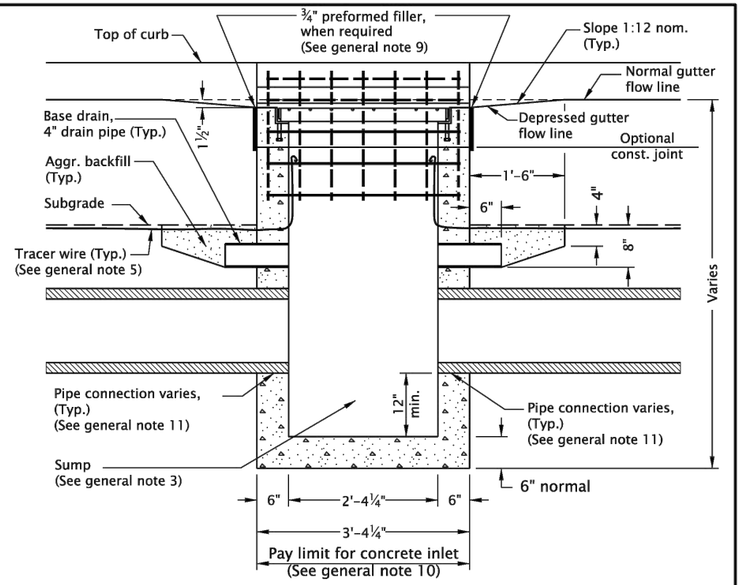
1. Where precast inlets are used as an alternate to cast-in-place inlets, a 4" compacted leveling bed of sand or ¼"-0 crushed aggregate shall be provided. All precast inlets shall conform to requirements of ASTM C913.
2. Graphics show CG-1 inlet with Type 2 grate. See Table A for inlet dimensions. Type 1 grate allowed only in locations not subject to bicycle or pedestrian use. For frame and grate details, see Std. Dwg. RD365.
3. Provide sump only where shown on plans, and allowed by jurisdiction. See Detail B for inlet without sump.
4. For curb details, see Std. Dwgs. RD700 & RD701.
5. See Std. Dwg. RD336 for tracer wire details, or approved alternate.
6. Max. pipe diameter varies with pipe material.
7. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
8. All concrete shall be commercial grade concrete.
9. ¾" preformed filler (in concrete pavement or gutter only) to extend through thickness of concrete.
10. See Std. Dwg. RD363 for gutter transition section, when curb and gutter are required. (Pay limit for inlet is expanded when curb and gutter are monolithic)
11. See Std. Dwg. RD339 for pipe to structure connections.



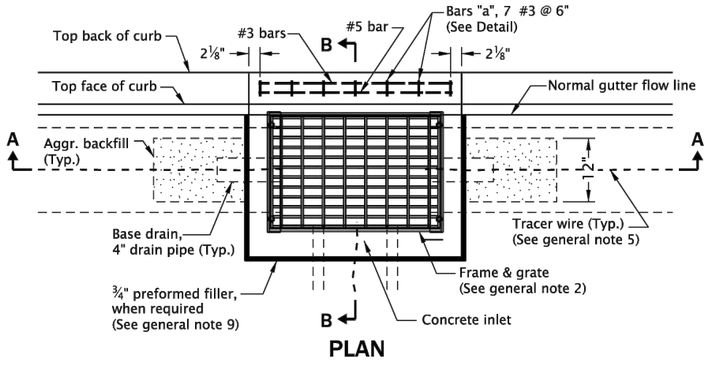
DETAIL B WITH-OUT SUMP



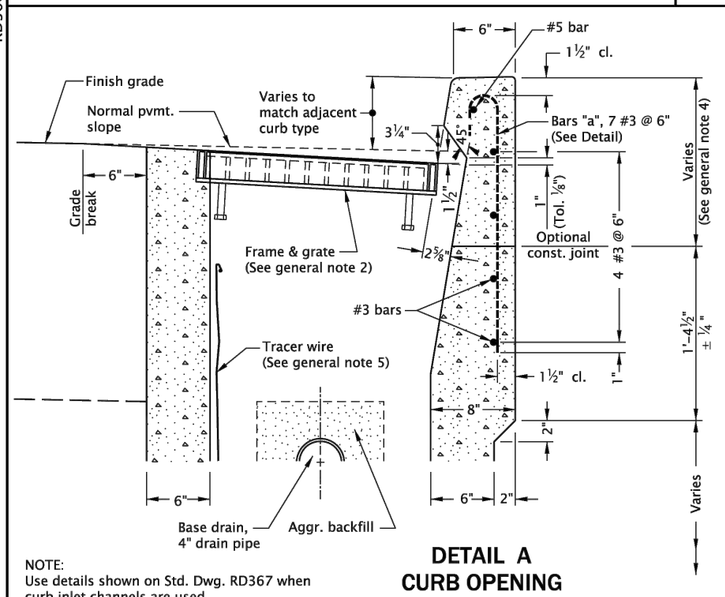
SECTION B - B



SECTION A - A

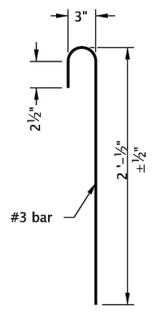


PLAN



NOTE:
Use details shown on Std. Dwg. RD367 when curb inlet channels are used.

DETAIL A
CURB OPENING



BAR "a" DETAILS

TABLE A		
INLET TYPE	W	W_1
CG-1	2'-8⅞"	1'-8⅞"
CG-2	3'-3⅜"	2'-3⅜"

NOTES:

1. #3 "a" bars to be placed during curb construction.
2. All bars to be placed 1½" clear of nearest face of concrete unless shown or noted otherwise.
3. All bars shall be full length.

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CONCRETE INLETS
TYPE CG-1, CG-2

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 20-JUL-2020 | **RD366**

Effective Date: December 1, 2023 - May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

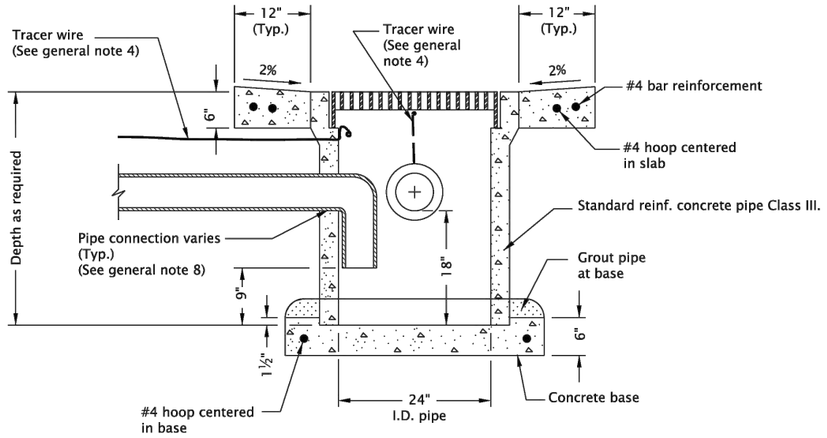
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

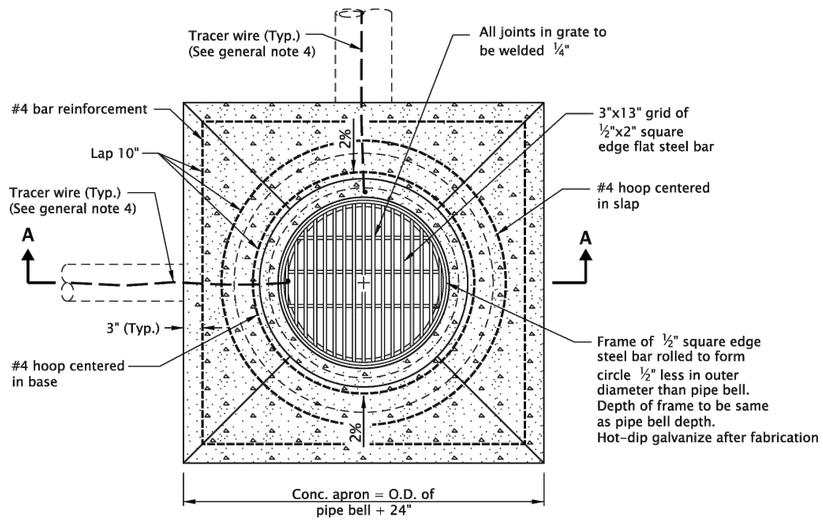
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC13
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

20-JUL-2020
RD366.dgn
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



SECTION A-A



PLAN

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Grates shall be bicycle-safe.
2. Precast concrete inlets may be used when specified or approved. All precast inlets shall conform to requirements of ASTM C913.
3. Anchor vertical leg of inlet pipe if not a glued joint.
4. See Std. Dwg. RD336 for tracer wire details.
5. All reinforcement shall be 2" clear of nearest face of conc., unless otherwise shown.
6. Max. connecting pipe diameter varies with pipe material.
7. All concrete shall be commercial grade concrete.
8. See Std. Dwg. RD339 for pipe to structure connections.
9. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

AREA DRAINAGE BASIN OR FIELD INLET

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 14-JUL-2014 | **RD374**

Effective Date: December 1, 2023 - May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS◆PLANNERS
LANDSCAPE ARCHITECTS◆SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

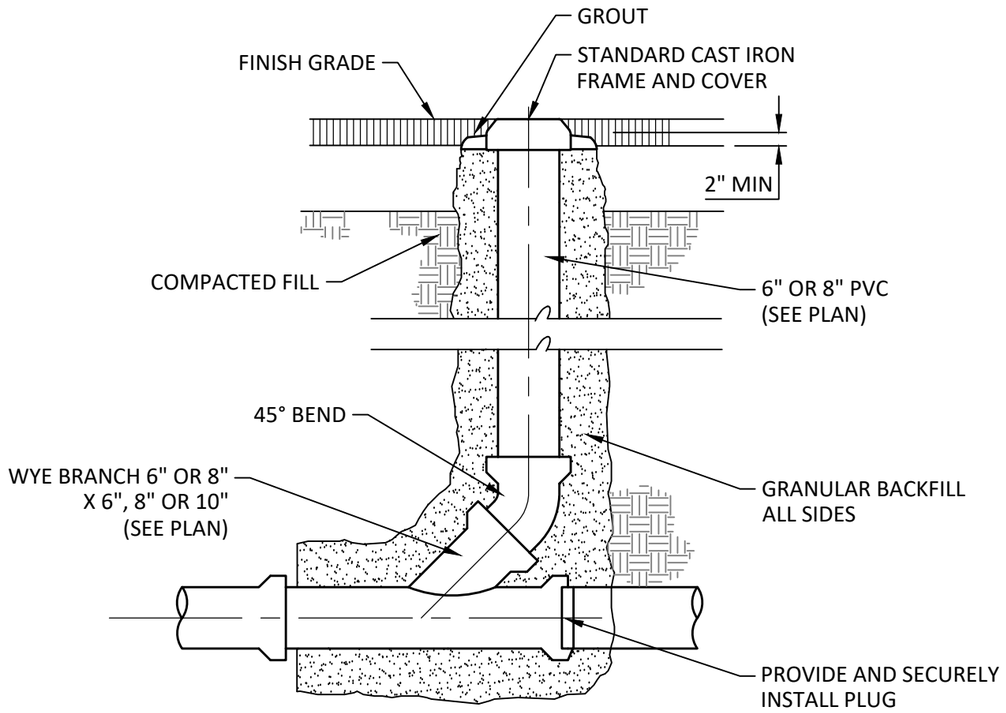
REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC14
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

RD374.dgn 20-JUL-2020

DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG

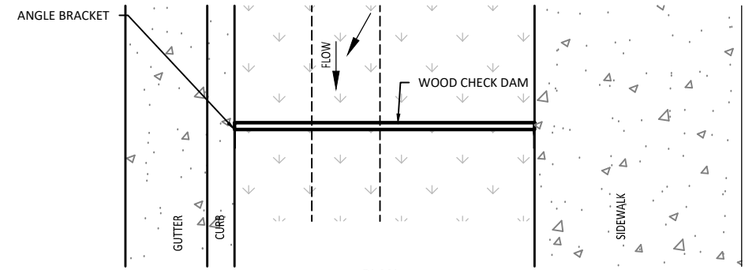


NOTE:

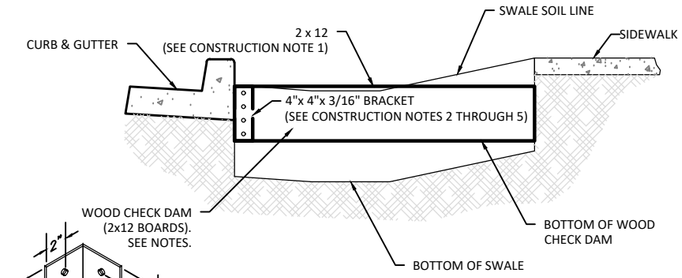
NOTE: CAST IRON FRAME AND COVER SHALL BE VALLEY IRON & STEEL CO. NO.'S 202 (6") OR 203 (8") OR APPROVED EQUAL.

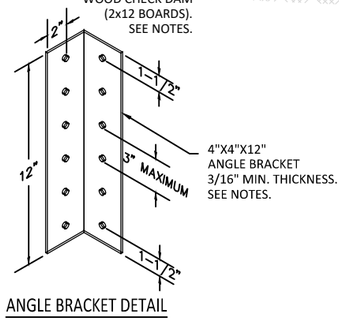
STANDARD CLEANOUT

NTS



PLAN





ANGLE BRACKET DETAIL

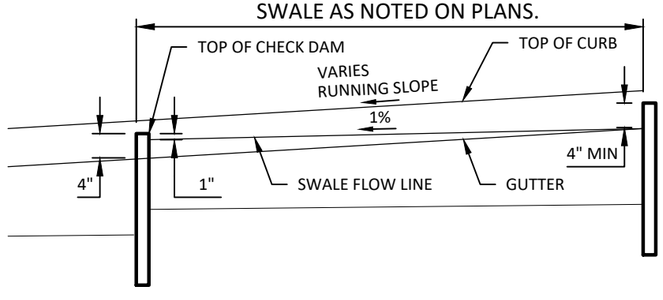
CONSTRUCTION NOTES

1. Lumber to be a naturally rot-resistant wood (e.g. cedar). Manufactured products can be used with approval. No chemically treated wood will be allowed.
2. All fasteners to be stainless steel or aluminum.
3. 4"x 4"x 12" angle bracket, minimum 3/16"thick, stainless steel, or aluminum.
4. Top of bracket to be no higher than top of check dam.
5. Minimum 5/16" dia. bolts, 3 bolts into concrete, 2 bolts into each board

WOOD CHECK DAM DETAIL

NTS

SPACE CHECK DAMS EVENLY ALONG SWALE AS NOTED ON PLANS.



CHECK DAM PROFILE

NTS

STANDARD DETAILS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS♦PLANNERS
LANDSCAPE ARCHITECTS♦SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

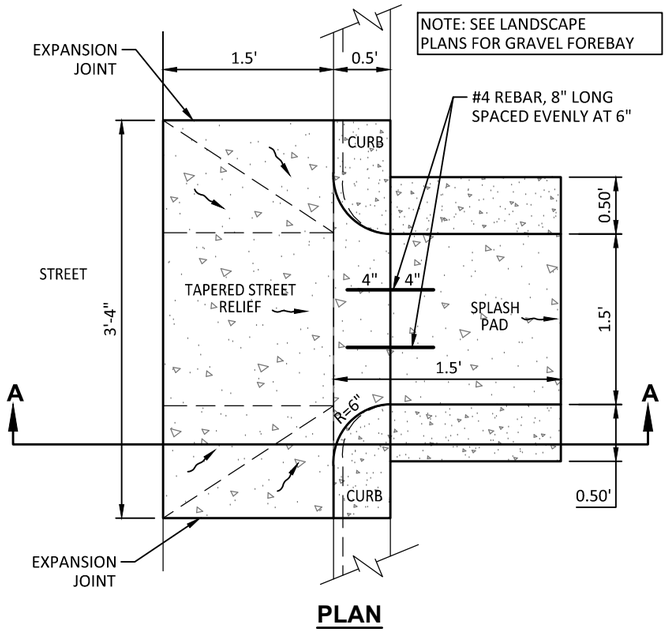
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

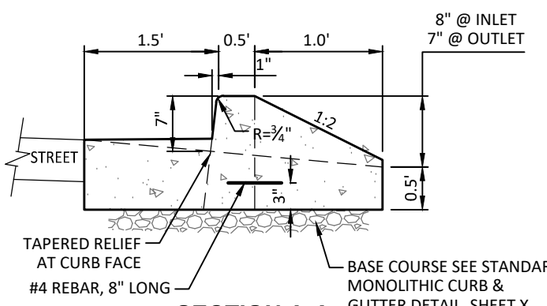
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC15
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

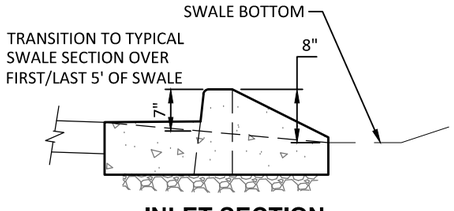
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



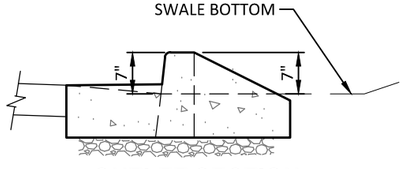
PLAN



SECTION A-A



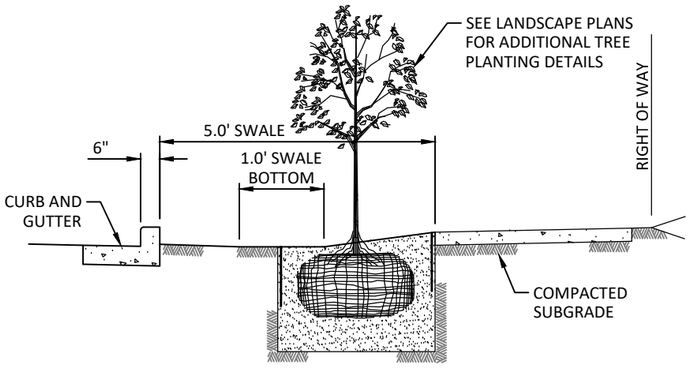
INLET SECTION



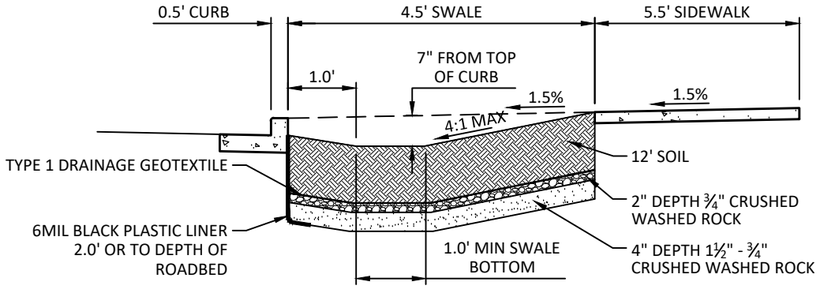
OUTLET SECTION

NOTE: OUTLET ON PLANTER SWALES MAY REQUIRE ADJUSTMENT TO ACCOMMODATE THE CATCH BASIN.

SWALE INLET/OUTLET
NTS



TREE PLANTING SECTION
NTS



TYPICAL SWALE SECTION
NTS

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

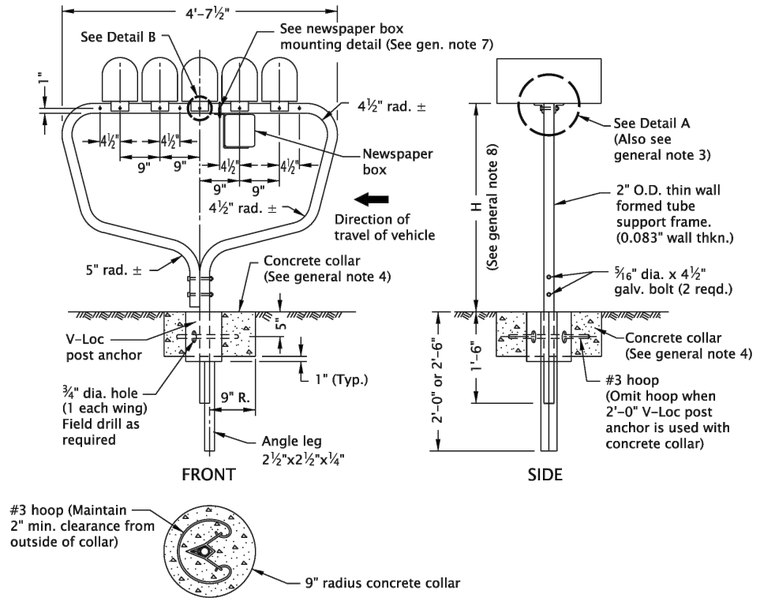
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC16
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

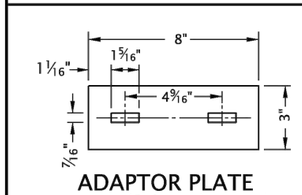
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



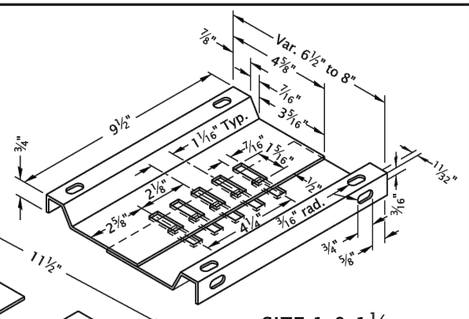
CONCRETE COLLAR
(See general note 4)

MULTIPLE SUPPORT

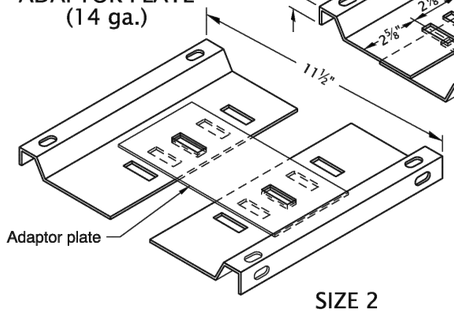
(Supports 5 standard (Sizes 1 & 1½) mailboxes or 4 large (Size 2) mailboxes)



ADAPTOR PLATE
(14 ga.)



SIZE 1 & 1½
MOUNTING BRACKET
(16 ga.)



SIZE 2
MOUNTING BRACKET (16 ga.)
WITH ADAPTOR PLATE (14 ga.)

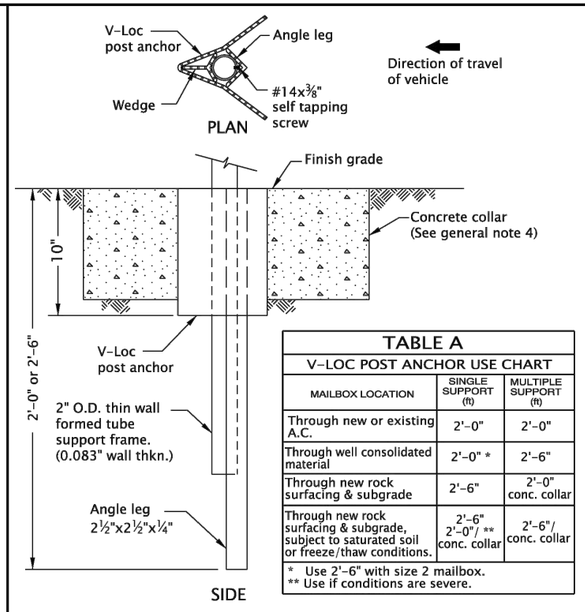
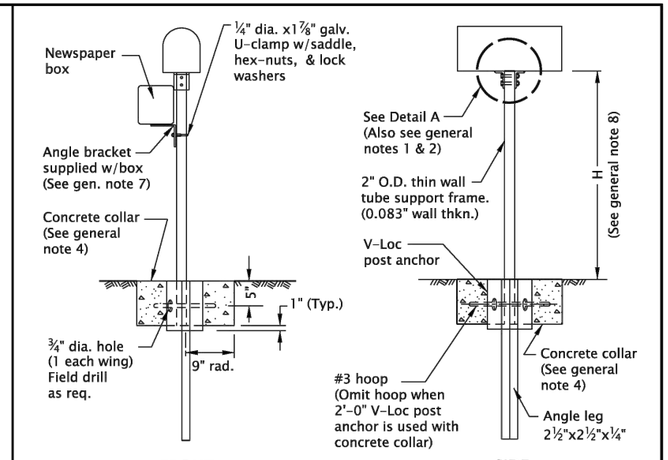


TABLE A V-LOC POST ANCHOR USE CHART		
MAILBOX LOCATION	SINGLE SUPPORT (ft)	MULTIPLE SUPPORT (ft)
Through new or existing A.C.	2'-0"	2'-0"
Through well consolidated material	2'-0" *	2'-6"
Through new rock surfacing & subgrade	2'-6"	2'-0" conc. collar
Through new rock surfacing & subgrade, subject to saturated soil or freeze/thaw conditions.	2'-6" 2'-0"/ ** conc. collar	2'-6"/ conc. collar
* Use 2'-6" with size 2 mailbox. ** Use if conditions are severe.		

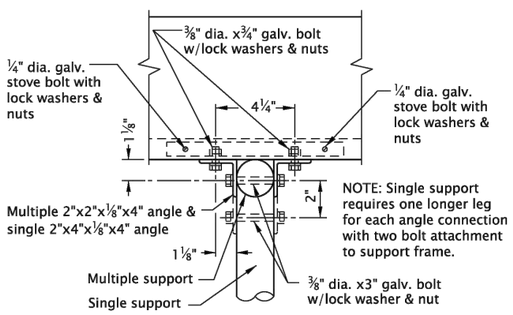
POST MOUNTING SOCKET



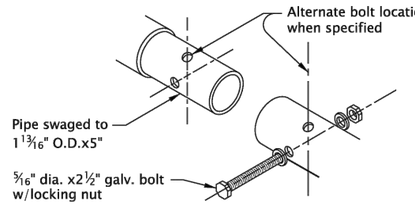
SINGLE SUPPORT

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Angle connections to be parallel to traffic flow for Size 2 mailbox mounted on single post.
2. All holes in the tube support frame are to be predrilled by the manufacturer.
3. Size 2 mailbox mounted on a multiple support requires 2 each ⅜" dia. x⅝" galv. bolts with lock washers and nuts to attach the adaptor plate to the mounting bracket. The unit will then require 4 angle connections to attach to the formed tube support frame. See Detail A.
4. Provide concrete collar when any of the following conditions exist:
   a) when required in Table A
   b) when required by project plans
   c) as directed by the Engineer
   Concrete collar, when required, to be poured in place after V-Loc post anchor has been installed, level and plumb. Do not excavate below bottom of V-Loc post anchor. Care shall be taken that no concrete is placed within anchor.
5. Other proprietary products available as listed in ODOT's QPL.
6. For mailbox installation locations, see Std. Dwg. RD101 and project plans.
7. For Newspaper Box Mounting Detail, see Std. Dwg. RD101.
8. Mounting height (H) shall be 42" nominal, measured from vehicle driving surface.
9. See project plans for detail not shown.



DETAIL A



DETAIL B

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MAILBOX SUPPORT

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 25-JUL-2017 | **RD100**

Effective Date: December 1, 2023 - May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

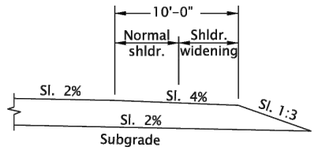
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

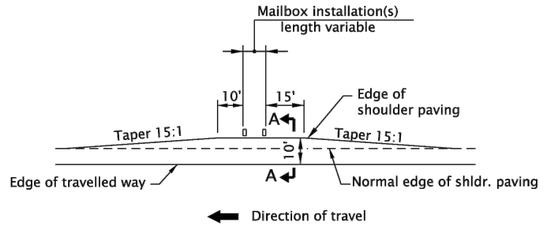
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC17
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

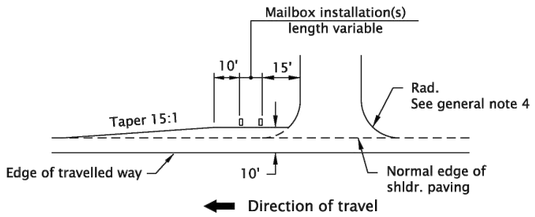
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG



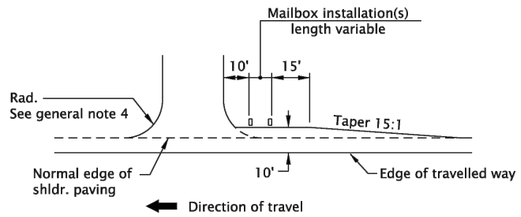
SECTION A-A



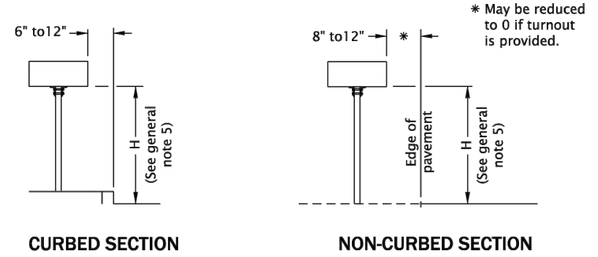
MAILBOX SERVICE TURNOUT



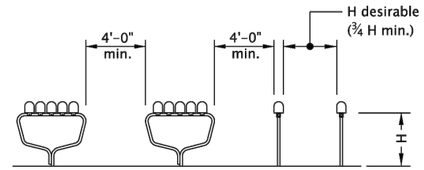
MAILBOX SERVICE TURNOUT AFTER APPROACH



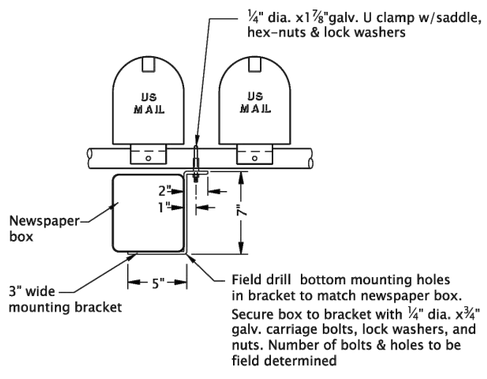
MAILBOX SERVICE TURNOUT BEFORE APPROACH



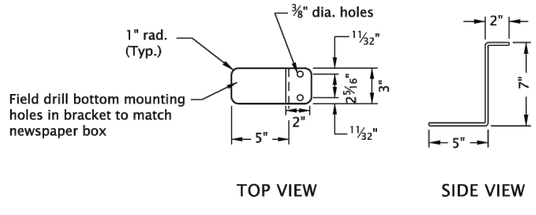
PLACEMENT



SUPPORT SPACING



NEWSPAPER BOX MOUNTING DETAIL



NEWSPAPER BOX MOUNTING BRACKET DETAIL (14 ga.)

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. All holes in the tube support frame are to be predrilled by the manufacturer.
2. Other proprietary products available as listed in ODOT's QPL.
3. For mailbox support details, see Std. Dwg. RD100.
4. For approach details, see Std. Dwg. RD715.
5. Mounting height (H) shall be 42" nominal, measured from vehicle driving surface.
6. See project plans for details not shown.

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

MAILBOX INSTALLATION

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 25-JUL-2017 | **RD101**

Effective Date: December 1, 2023 - May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

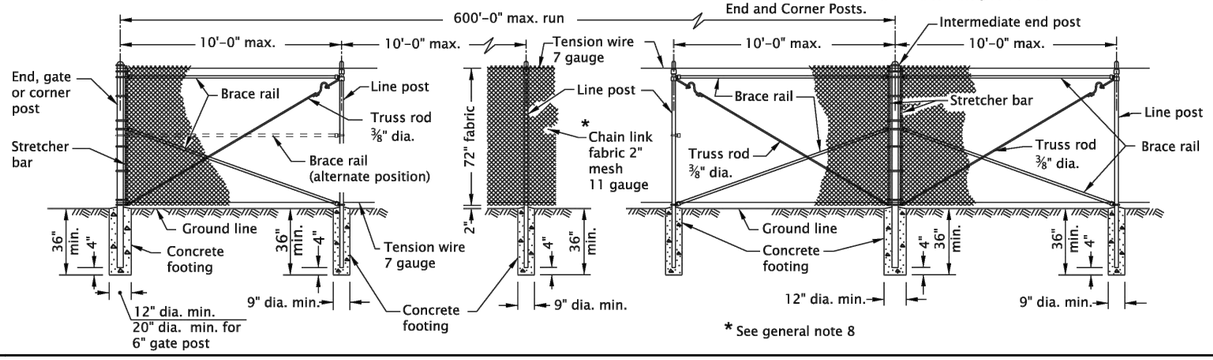
REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. DC18
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

20-JUL-2020
RD101.dgn
DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG

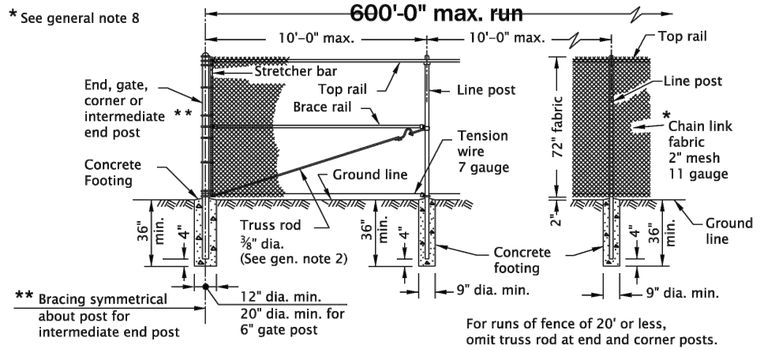
TYPE CL-6



For runs of fence of 20' or less, omit truss rod and install lower brace rail in alternate position at End and Corner Posts.

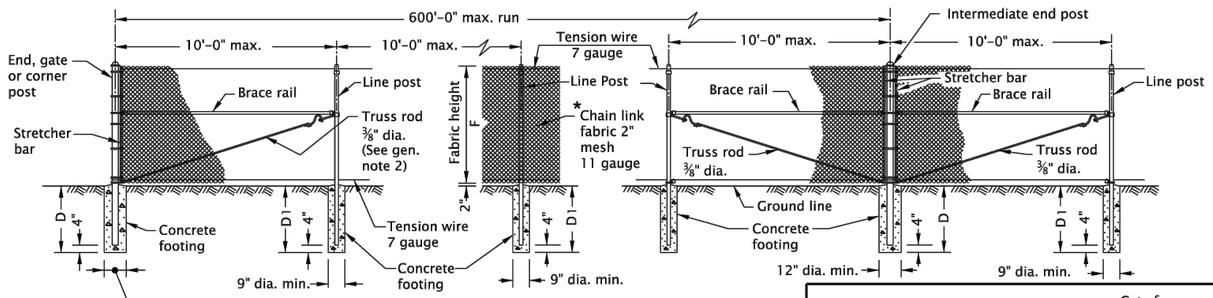
* See general note 8

TYPE CL-6R



For runs of fence of 20' or less, omit truss rod at end and corner posts.

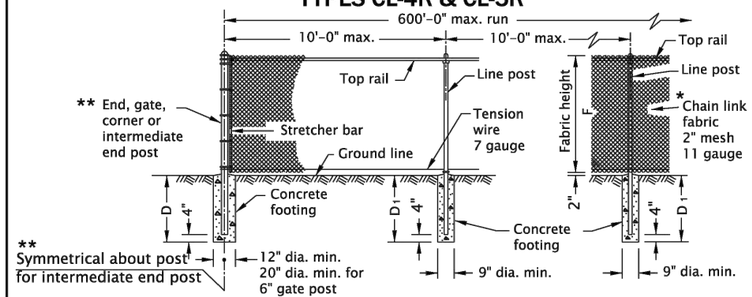
TYPES CL-4 & CL-5



* See general note 8

TYPE	D min. (in)	D1 min. (in)	F nom. (in)
CL-4	30	24	48
CL-5	36	36	60

TYPES CL-4R & CL-5R

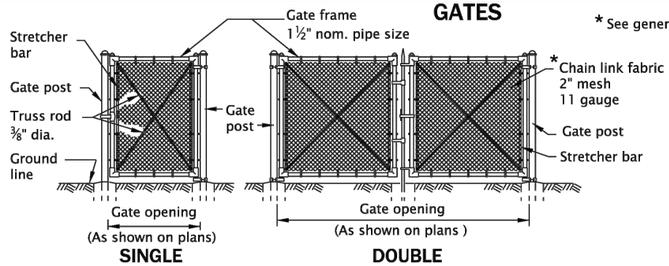


* See general note 8

TYPE	D min. (in)	D1 min. (in)	F nom. (in)
CL-4R	30	24	48
CL-5R	36	36	60

For runs of fence of 20' or less, omit truss rod at end and corner posts.

GATES



* See general note 8

TABLE 1

TYPE		MEMBER										
		BRACE AND TOP RAILS		LINE POSTS				END, CORNER & INTERMEDIATE END POST		GATE OPENING (ft)		GATE POSTS
		TUBULAR		TUBULAR		H-SECTION		TUBULAR				TUBULAR
		Fence Industry (in)	Nom. Dia. (in)	Fence Industry (in)	Nom. Dia. (in)	Size (in)	Wt. lb/ft	Fence Industry (in)	Nom. Dia. (in)	SINGLE GATE	DOUBLE GATE	Fence Industry (in)	Nom. Dia. (in)
STEEL	CL-4 & CL-4R CL-5 & CL-5R	1⅝	1¼	1⅞	1½	1⅞ x 1⅝	2.72	2⅜	2	Up thru 6	Up thru 12	2⅞	2½
										7 thru 13	13 thru 26	4	3½
	CL-6 & CL-6R	1⅝	1¼	2⅜	2	2¼ x 2	4.10	2⅞	2½	14 thru 18	27 thru 36	6⅝	6

NOTE: For CL-6, CL-6R, CL-8, CL-8R, CL-10 & CL-10R, the hardware is minimum and does not include slat wind loading.

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. Do not use top rail where fence can be struck by an errant vehicle.
2. Fittings shown are illustrative of use and not specific as to design.
3. Gate posts on each side of a gate opening to be the same size. At a double gate installation with unequal width gates, size of both posts to be as indicated for a single gate installation of the wider gate width.
4. For cross sectional dimensions of members, see Table 1.
5. Posts and rails with sections not shown that meet the requirements of AASHTO M181 are acceptable alternates. See ODOT's QPL for acceptable alternates.
6. All concrete shall be commercial grade concrete.
7. All chain link fabric top and bottom selvage shall be knuckled finish.
8. Chain link fabric for the fence to be installed with pickets shall be 9 gauge wire woven in 3½" by 5½" diamond mesh.
9. See project plans for details not shown.
10. Add fence grounding as required.

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

CHAIN LINK FENCE

2024

DATE	REVISION DESCRIPTION

CALC. BOOK NO. N/A | SDR DATE 13-JAN-2020 | **RD815**

Effective Date: December 1, 2023 – May 31, 2024

STANDARD DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

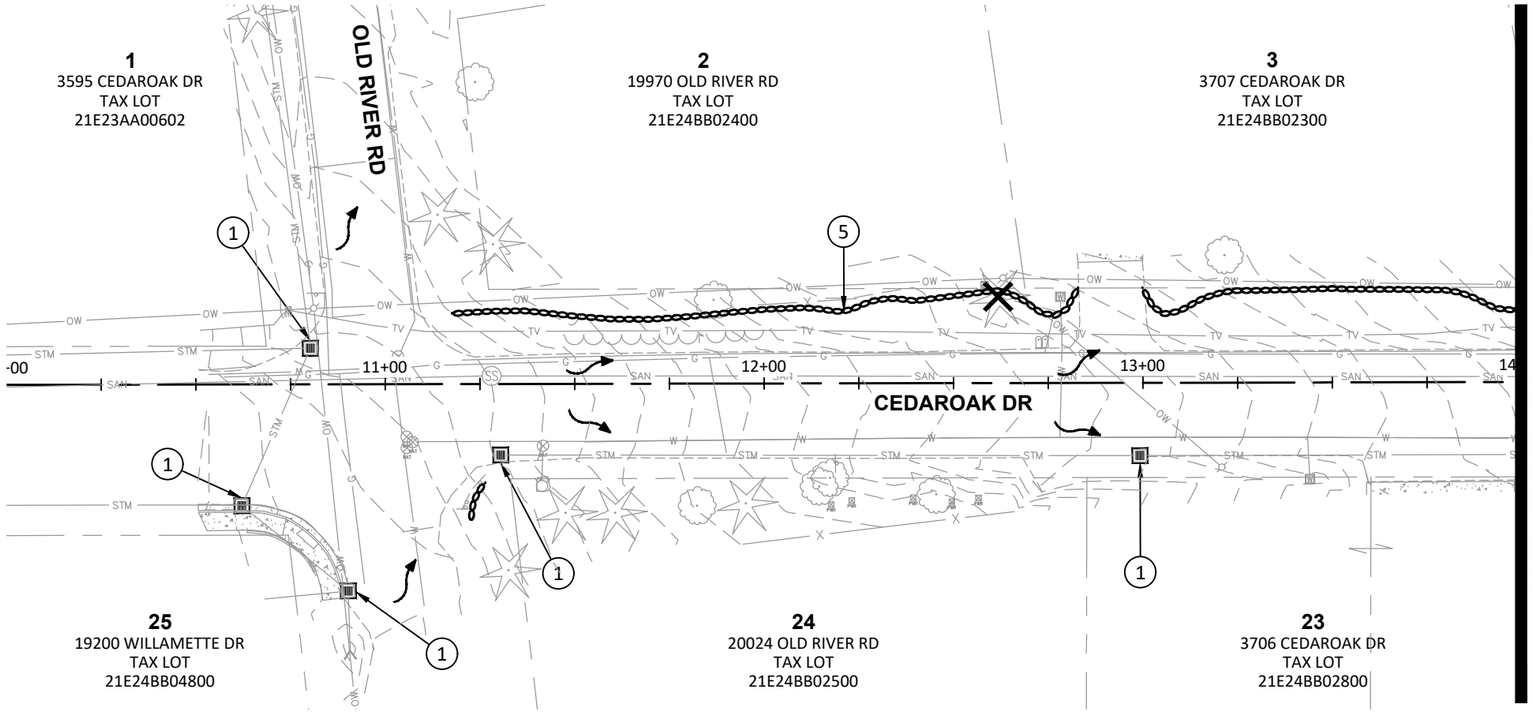
EXPIRES: 6/30/25

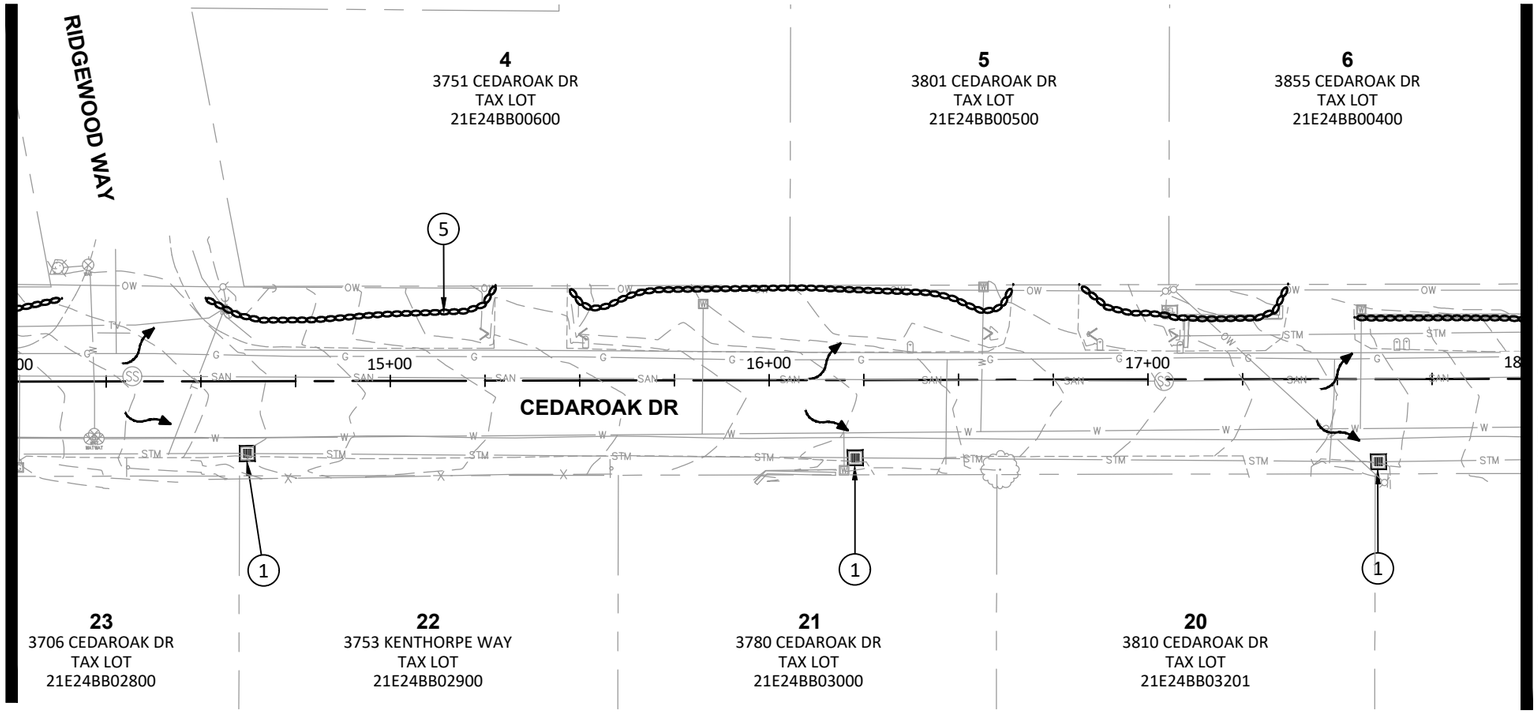
DESIGNED: HHPR TEAM	SHEET NO. DC19
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

20-JUL-2020

RD815.dgn

DRAWING NAME: CWL10-DC01 STANDARD DETAILS.DWG





CONSTRUCTION NOTES:

1. INSTALL INLET PROTECTION, TYPE 3 PER DETAIL ON SHEET EC05.
5. INSTALL SEDIMENT BARRIER TYPE 8 PER ODOT STANDARD DWG RD1032 ON SHEET EC07.

ESC LEGEND

- INLET PROTECTION - TYPE 3
- INLET PROTECTION - TYPE 4
- SEDIMENT FENCE
- FLOW DIRECTION
- EXISTING INLET TO BE REMOVED/ABANDONED
- 215 EXISTING CONTOURS
- TREE REMOVAL

0 10 20 40
SCALE: 1" = 40'

ESCP - EXISTING CONDITIONS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS • LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

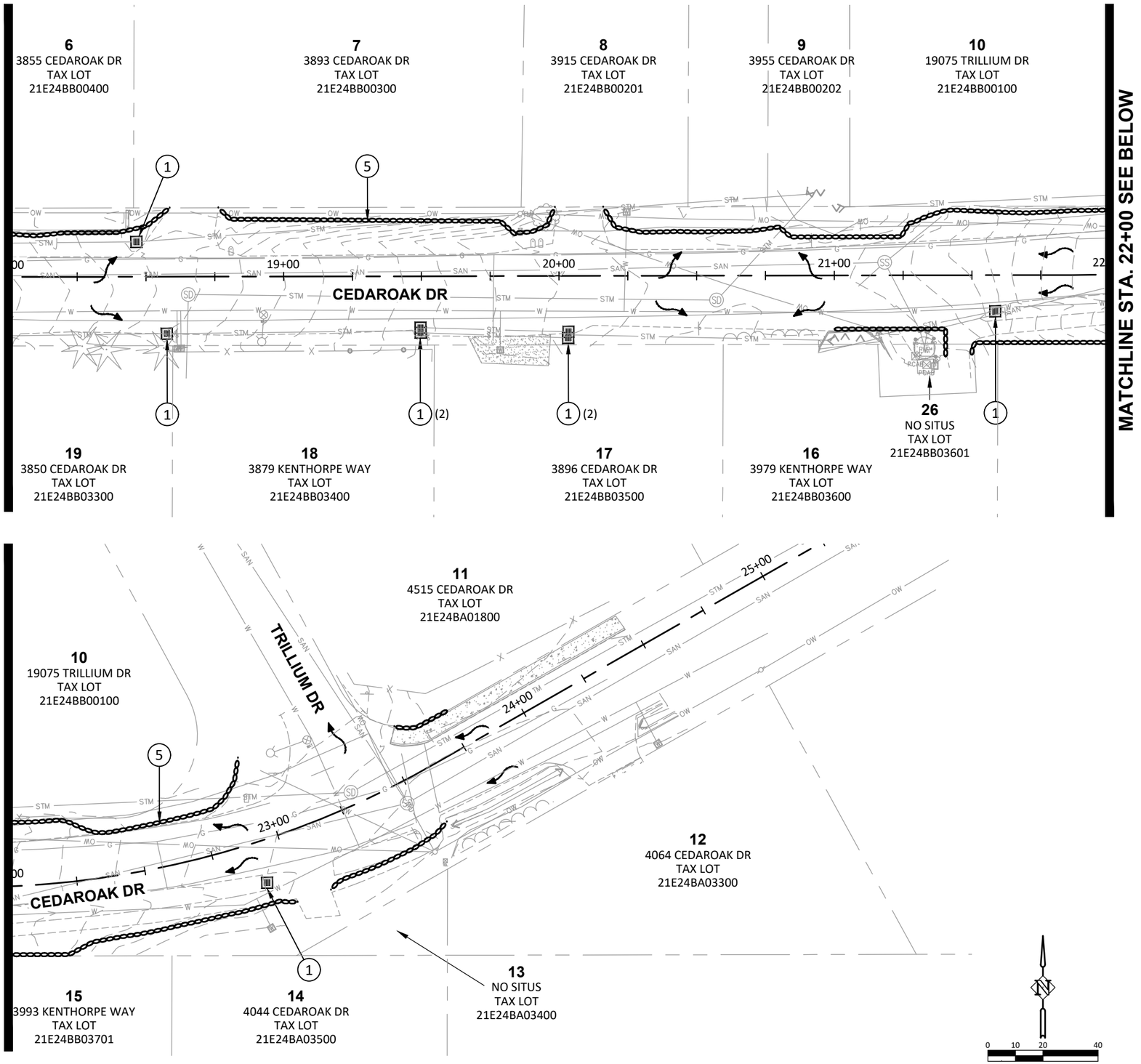
REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

PRELIMINARY

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. EC01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-EC04 ESC EX COND PLAN.DWG



CONSTRUCTION NOTES:

1. INSTALL INLET PROTECTION, TYPE 3 PER DETAIL ON SHEET EC05.
5. INSTALL SEDIMENT BARRIER TYPE 8 PER ODOT STANDARD DWG RD1032 ON SHEET EC07.

ESC LEGEND

- INLET PROTECTION - TYPE 3
- INLET PROTECTION - TYPE 4
- SEDIMENT FENCE
- FLOW DIRECTION
- EXISTING INLET TO BE REMOVED/ABANDONED
- 215 EXISTING CONTOURS
- TREE REMOVAL

0 10 20 40
SCALE: 1" = 40'

ESCP - EXISTING CONDITIONS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

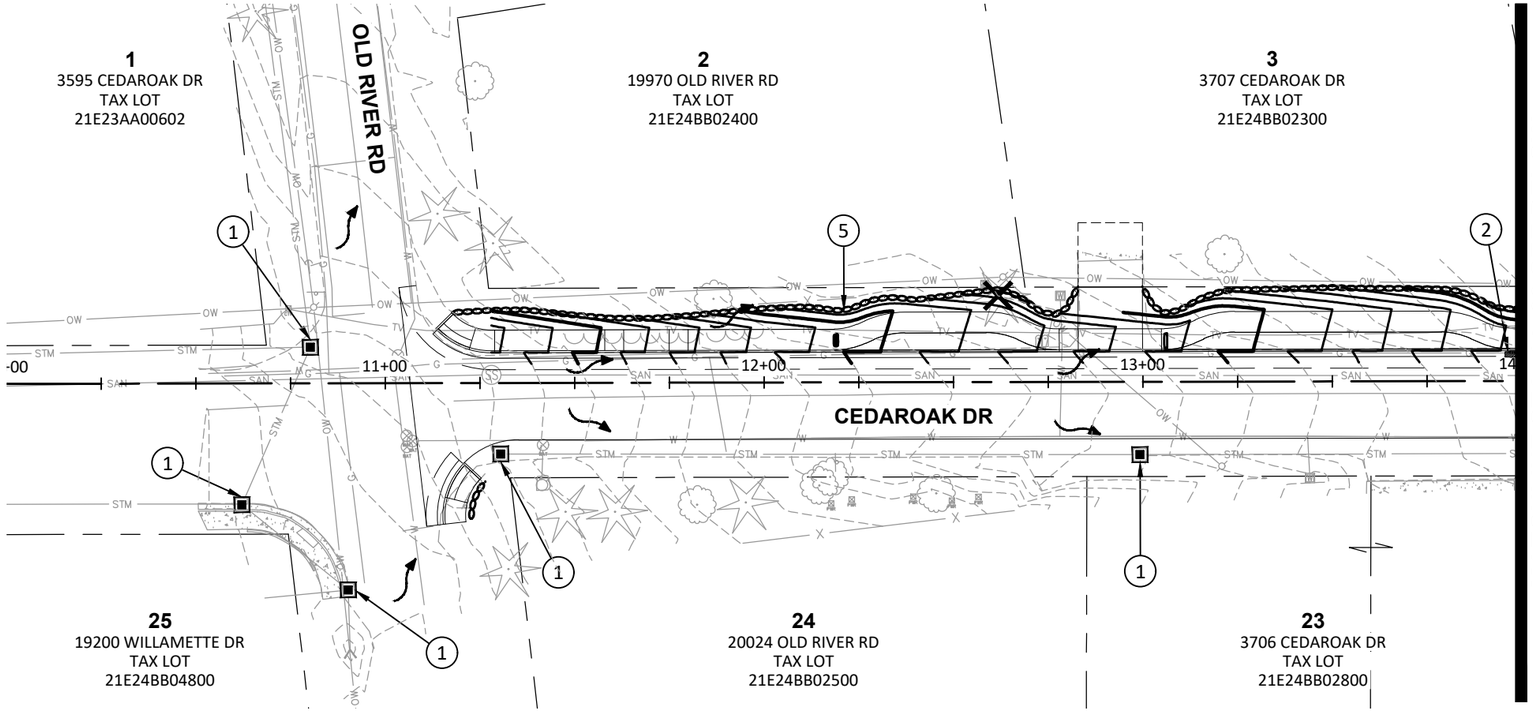
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

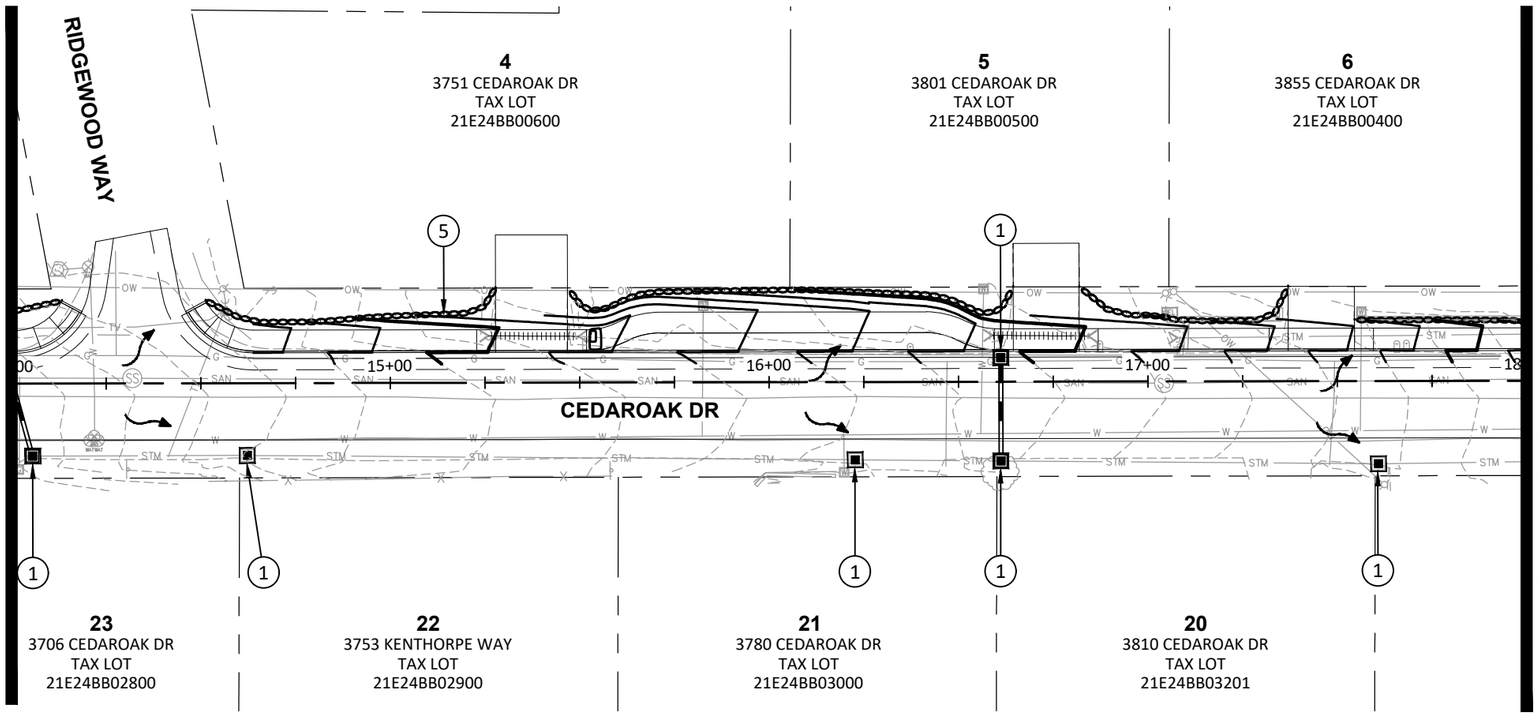
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. EC02
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-EC04 ESC EX COND PLAN.DWG





CONSTRUCTION NOTES:

1. INSTALL INLET PROTECTION, TYPE 3 PER DETAIL ON SHEET EC05.
2. INSTALL INLET PROTECTION, TYPE 4 PER DETAIL ON SHEET EC06.
5. INSTALL SEDIMENT BARRIER TYPE 8 PER ODOT STANDARD DWG RD1032 ON SHEET EC07.

ESC LEGEND

- INLET PROTECTION - TYPE 3
- INLET PROTECTION - TYPE 4
- CONCRETE WASHOUT (AS REQUIRED)
- SEDIMENT FENCE
- FLOW DIRECTION
- EXISTING INLET TO BE REMOVED/ABANDONED
- 215 EXISTING CONTOURS
- 215 PROPOSED MAJOR CONTOURS
- TREE REMOVAL

0 10 20 40
SCALE: 1" = 40'

ESCP - PROPOSED CONDITIONS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

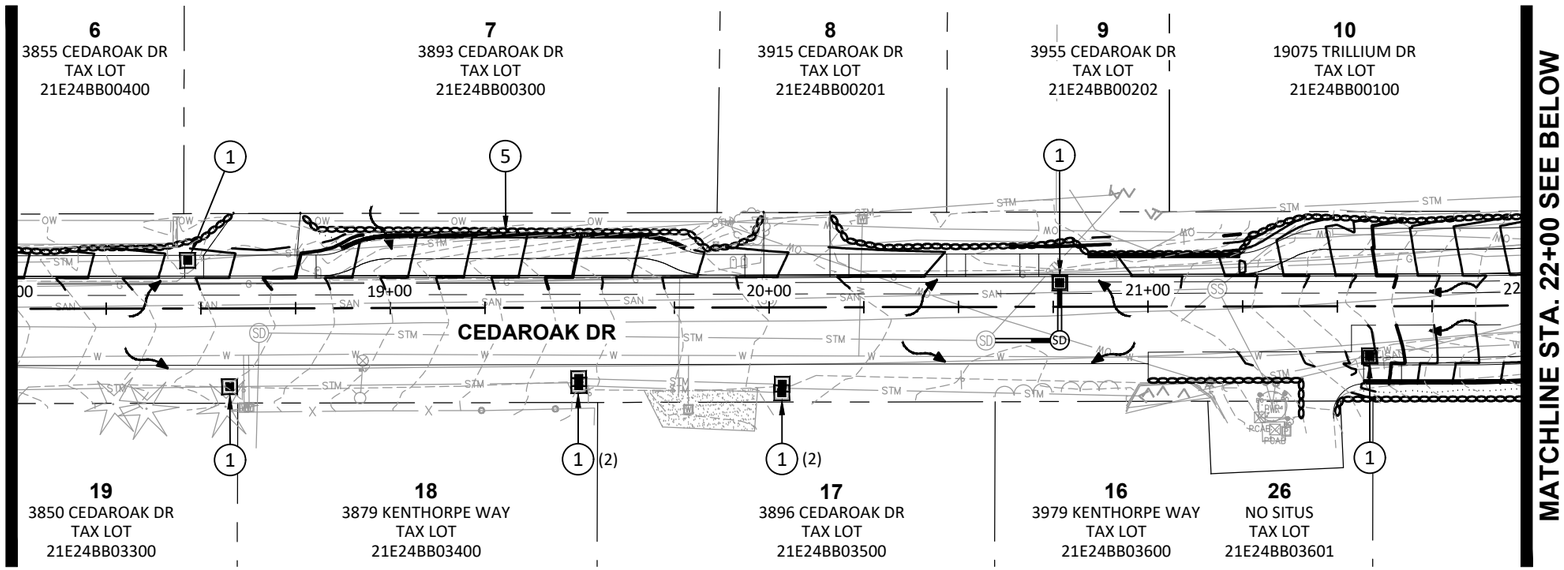
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

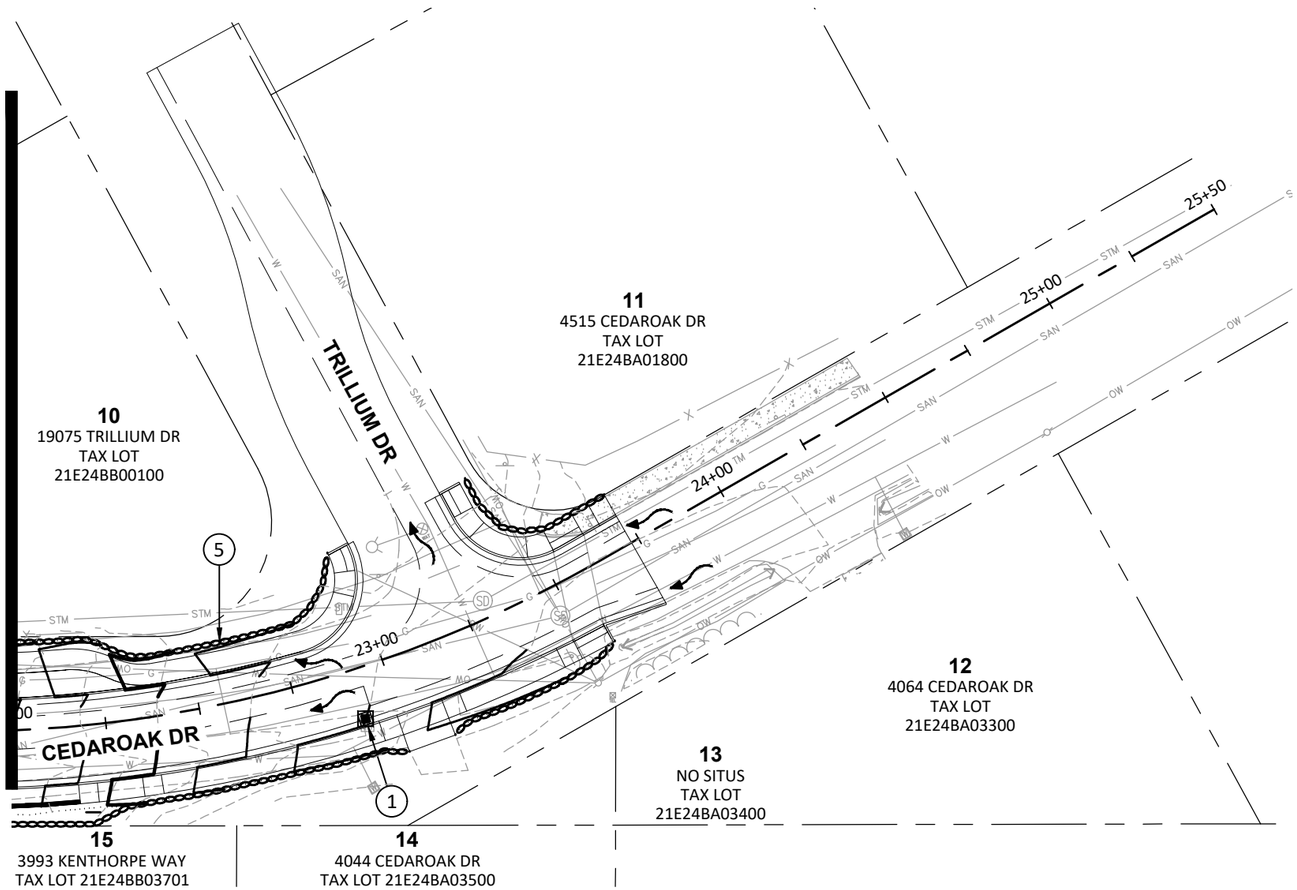
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. EC03
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-EC06 ESC PR COND PLAN.DWG





CONSTRUCTION NOTES:

1. INSTALL INLET PROTECTION, TYPE 3 PER DETAIL ON SHEET EC08.
5. INSTALL SEDIMENT BARRIER TYPE 8 PER ODOT STANDARD DWG RD1032 ON SHEET EC010.

ESC LEGEND

- INLET PROTECTION - TYPE 3
- INLET PROTECTION - TYPE 4
- CONCRETE WASHOUT (AS REQUIRED)
- SEDIMENT FENCE
- FLOW DIRECTION
- EXISTING INLET TO BE REMOVED/ABANDONED
- 215 EXISTING CONTOURS
- 215 PROPOSED MAJOR CONTOURS
- TREE REMOVAL

0 10 20 40
SCALE: 1" = 40'

ESCP - PROPOSED CONDITIONS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

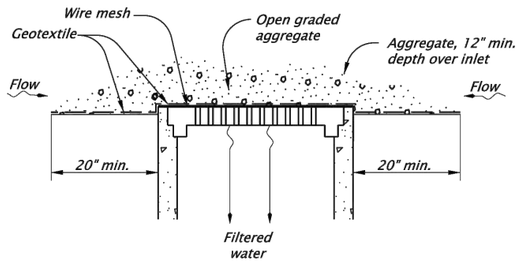
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

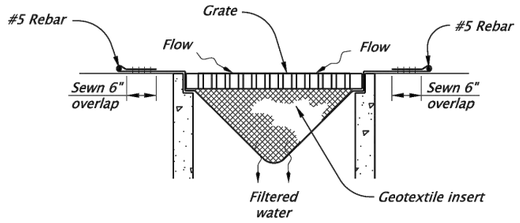
REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAMES S. HOUF
JAN. 10, 2017
PRELIMINARY
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. EC04
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

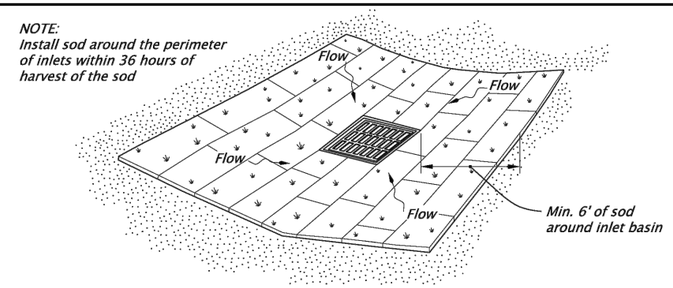
DRAWING NAME: CWL10-EC06 ESC PR COND PLAN.DWG



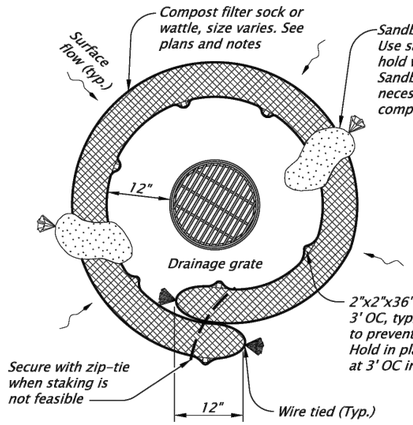
GEOTEXTILE/WIRE MESH/AGGREGATE - TYPE 2
NOT TO SCALE



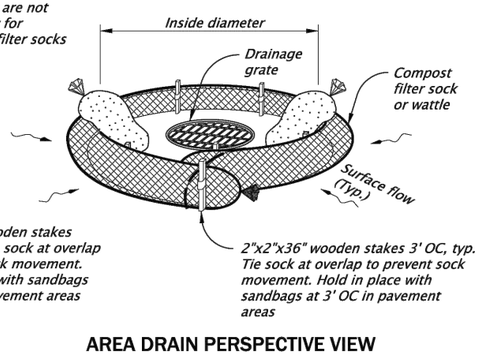
PREFABRICATED FILTER INSERT - TYPE 3
NOT TO SCALE



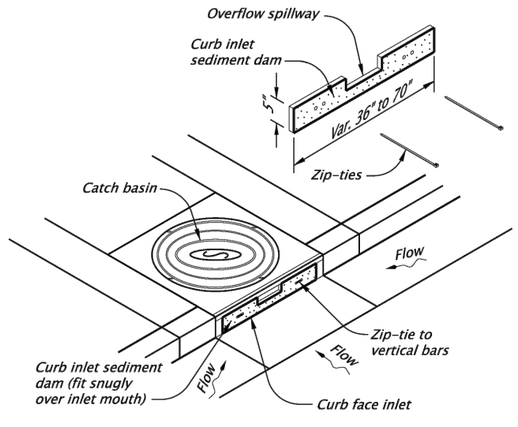
SOD PROTECTION - TYPE 6
NOT TO SCALE



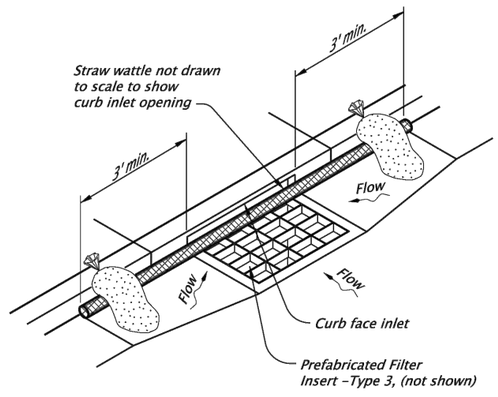
AREA DRAIN PLAN



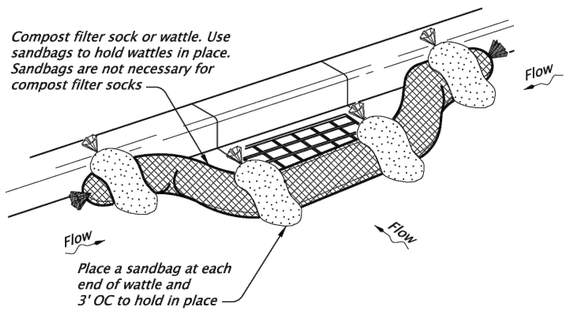
AREA DRAIN PERSPECTIVE VIEW



CURB INLET SEDIMENT DAM - TYPE 10
NOT TO SCALE



WATTLE BARRIER WITH FILTER INSERT - TYPE 11
NOT TO SCALE



CURB INLET PERSPECTIVE VIEW

COMPOST FILTER SOCK OR WATTLE - TYPE 7
NOT TO SCALE

NOTES:
Type 2 – Geotextile/wire mesh/aggregate
Place the wire mesh over the grate.
Place sediment fence geotextile over the wire mesh and perimeter area around structure.
Install aggregate over the geotextile fabric.

Type 3 – Prefabricated filter inserts
Install prefabricated filter inserts according to the plans, special provisions, and manufacturer recommendations.
Prefabricated inserts with provisions for overflow are allowed only when accompanied by additional BMP's to prevent the potential of sediments entering project storm systems.
Field fabricated inserts are not allowed.

Type 7 – Compost filter sock
Drive 2"x2" wood stakes a minimum of 6" into ground and flush with the top of the sock.
Overlap ends of sock per manufacturers recommendations (12"min., 36" max.).
Use 8" to 12" dia sock on curbside in traffic areas.
(Type 7 cont.)
Use 12" to 18" dia sock in non-traffic areas or areas where the larger socks can be used safely.
use synthetic mesh socks for temporary installations.

Type 10 – Curb inlet sediment dam
Fit curb inlet sediment dam snugly into inlet mouth. Curb inlet sediment dam is required for use with inlet filter insert where at-grade inlet grate and curb inlet are combined at a catch basin.

Type 11 – Wattle barrier with filter insert
Install prefabricated filter insert per Type 3 detail.
Install wattles over opening and 36" to each side of opening tight against curb. Adjust wattle to force storm water to flow through filter insert or wattle prior to leaving the site.
Adjust, replace or modify the inlet protection as needed to prevent sediment laden water from entering the catch basin.

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

INLET PROTECTION TYPE 2, 3, 6, 7, 10 AND 11

2024

DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS
01-2021	MOVED NOTES UP FROM OVERLAPPING THE SHEET BORDER

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2021 | **RD1010**

Effective Date: December 1, 2023 - May 31, 2024

ESCP - EROSION CONTROL DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

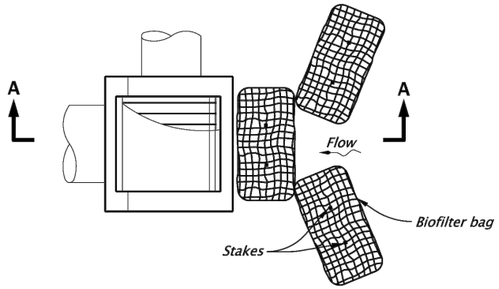
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

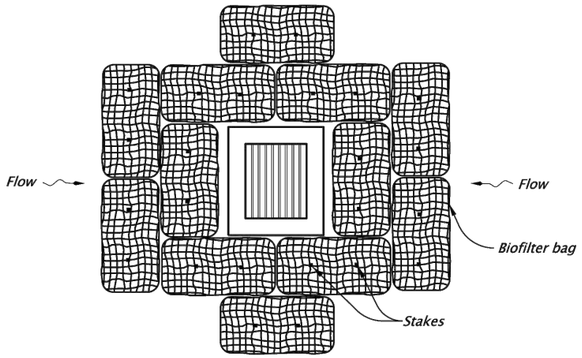
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. EC05
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

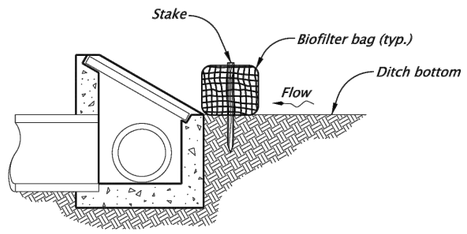
20-JAN-2021
RD1010.dgn
DRAWING NAME: CWL10-EC08 ESC DETAILS.DWG



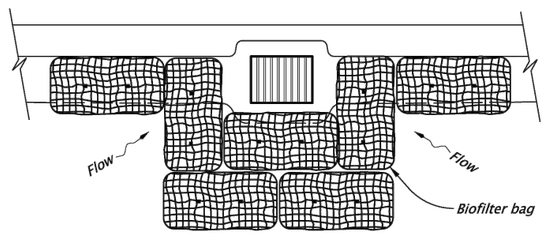
PLAN
DITCH INLET



PLAN
AREA DRAIN



SECTION A-A
DITCH INLET



PLAN
CATCH BASIN

BIOFILTER BAGS - TYPE 4

NOT TO SCALE

NOTES:

1. *Stake biofilter bags with 2"x2"x36" wood stakes, and use a minimum 2 stakes per bag. Drive stakes a minimum of 6" into the ground and flush with the top of the bags.*
2. *Omit stakes when bags are placed on pavement surface.*
3. *Overlap all bag joints 6".*
4. *Biofilter bags used on active roadways are easily displaced and made ineffective if struck by vehicles. If struck by a cyclist, falls with injury could result. On active roadways alternative inlet protection should be considered.*

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

INLET PROTECTION TYPE 4

2024

DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2021 | **RD1015**

Effective Date: December 1, 2023 – May 31, 2024

ESCP - EROSION CONTROL DETAILS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS◆PLANNERS
LANDSCAPE ARCHITECTS◆SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

CITY OF West Linn

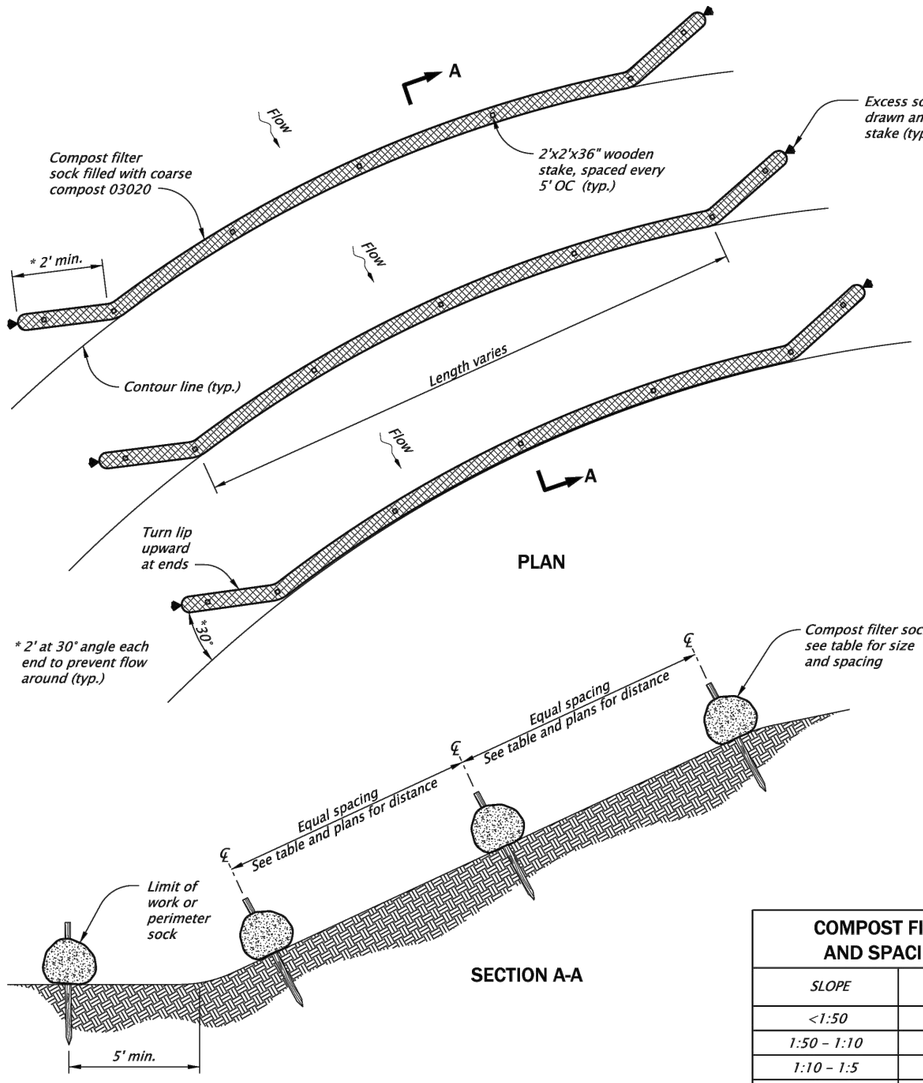
REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. EC06
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

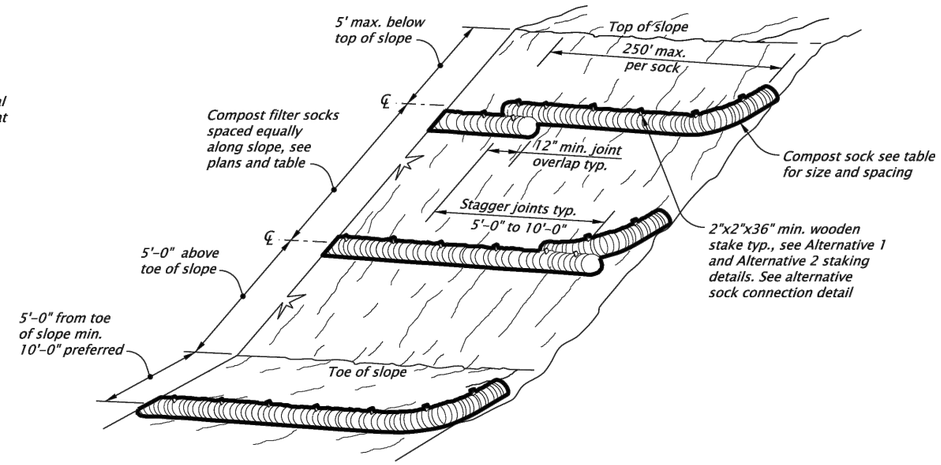
RD1015.dgn 20-JAN-2021

DRAWING NAME: CWL10-EC08 ESC DETAILS.DWG

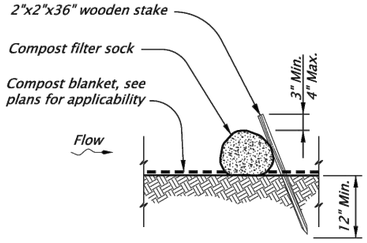


PLAN

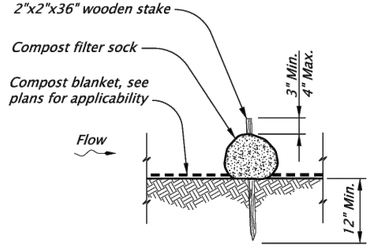
SECTION A-A



SLOPE APPLICATION - PERSPECTIVE VIEW



ALTERNATIVE 1 (Staking)



ALTERNATIVE 2 (Staking)

COMPOST FILTER SOCK DIAMETER AND SPACING BASED ON SLOPE		
SLOPE	*SPACING (ft)*	*DIAMETER (in)*
<1:50	250	8
1:50 – 1:10	125	12
1:10 – 1:5	100	12
1:5 – 1:2	50	18
>1:2	25	18

NOTE:
Fully biodegradable compost sock mesh is recommended for permanent installations. Where compost socks must be moved or removed, synthetic sock mesh should be used.

COMPOST FILTER SOCK
NOT TO SCALE

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

SEDIMENT BARRIER TYPE 8

2024

DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS

CALC. BOOK NO. N/A | SDR DATE 20-JAN-2021 | **RD1032**

Effective Date: December 1, 2023 – May 31, 2024

ESCP - EROSION CONTROL DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

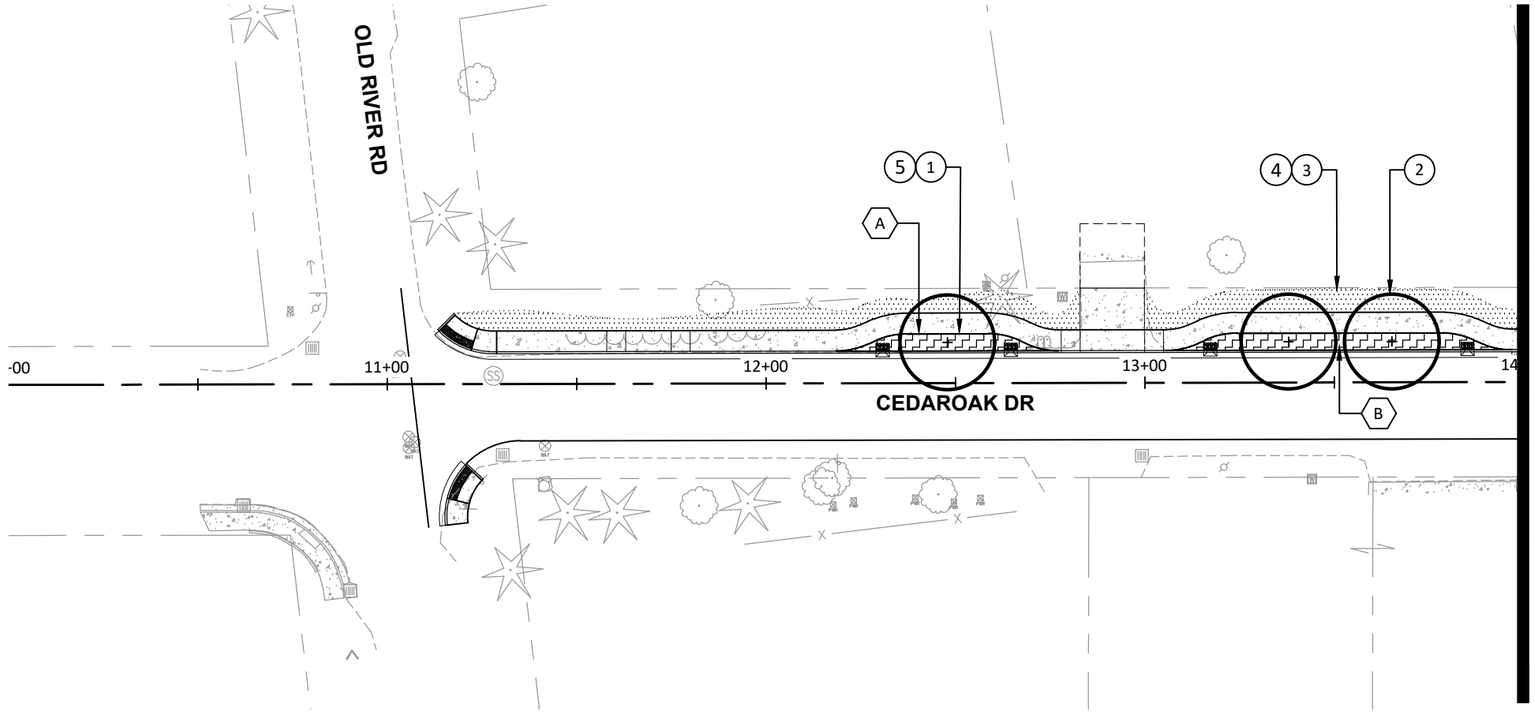
CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. EC07
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

20-JAN-2021
RD1032.dgn
DRAWING NAME: CWL10-EC08 ESC DETAILS.DWG



CONSTRUCTION NOTES:

1	PLACE 12" STORMWATER FACILITY TOP SOIL IN PLANTINERS, TYP.	32	CY
2	INSTALL NYSSA SYLVATICA 'WILDFIRE' AS SHOWN - 2" CAL.	5	EA
3	PLACE 4" TOP SOIL IN SEEDED AREAS, TYP.	33	CY
4	INSTALL SEEDING IN DISTURBED AREAS AS SHOWN	0.06	AC
5	INSTALL WETLAND PLANTS AT 80 PLANT / 100 SF (SEE TABLE) - 1 GAL	689	EA

WATER QUALITY PLANTERS		
BASIN NO.	BASIN ZONE A SIZE (SF)	HERBACEOUS PLANTS (80/100SF)
A	166	133
B	312	250
C	382	306
D	362	290
E	563	450
TOTAL	1785	1429

0 10 20 40

SCALE: 1" = 40'

LANDSCAPE PLAN

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

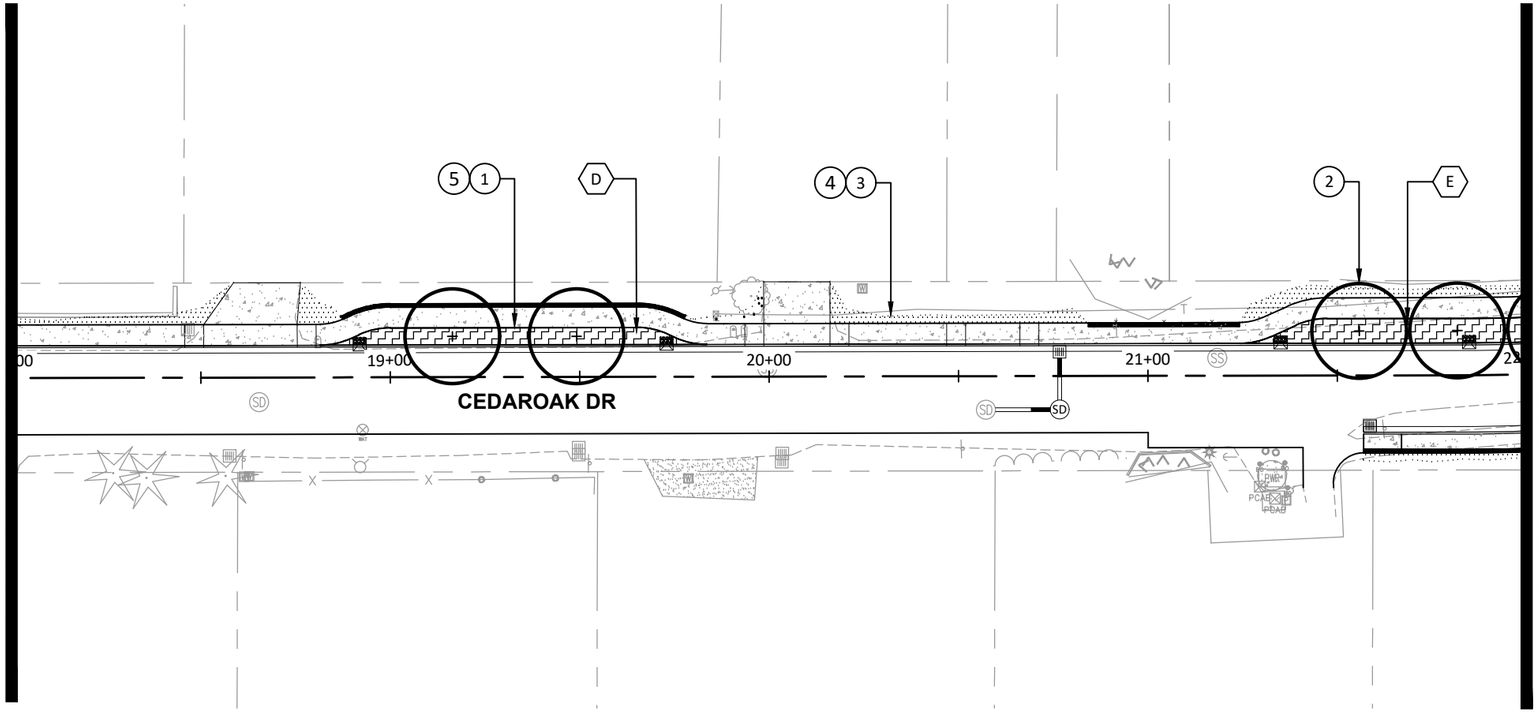
City of West Linn

REGISTERED
747
PRELIMINARY
JEFFERY P. CREEL
OREGON
05/13/11
LANDSCAPE ARCHITECT
EXPIRES: 05/31/24

DESIGNED: HHPR TEAM	SHEET NO. LA01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

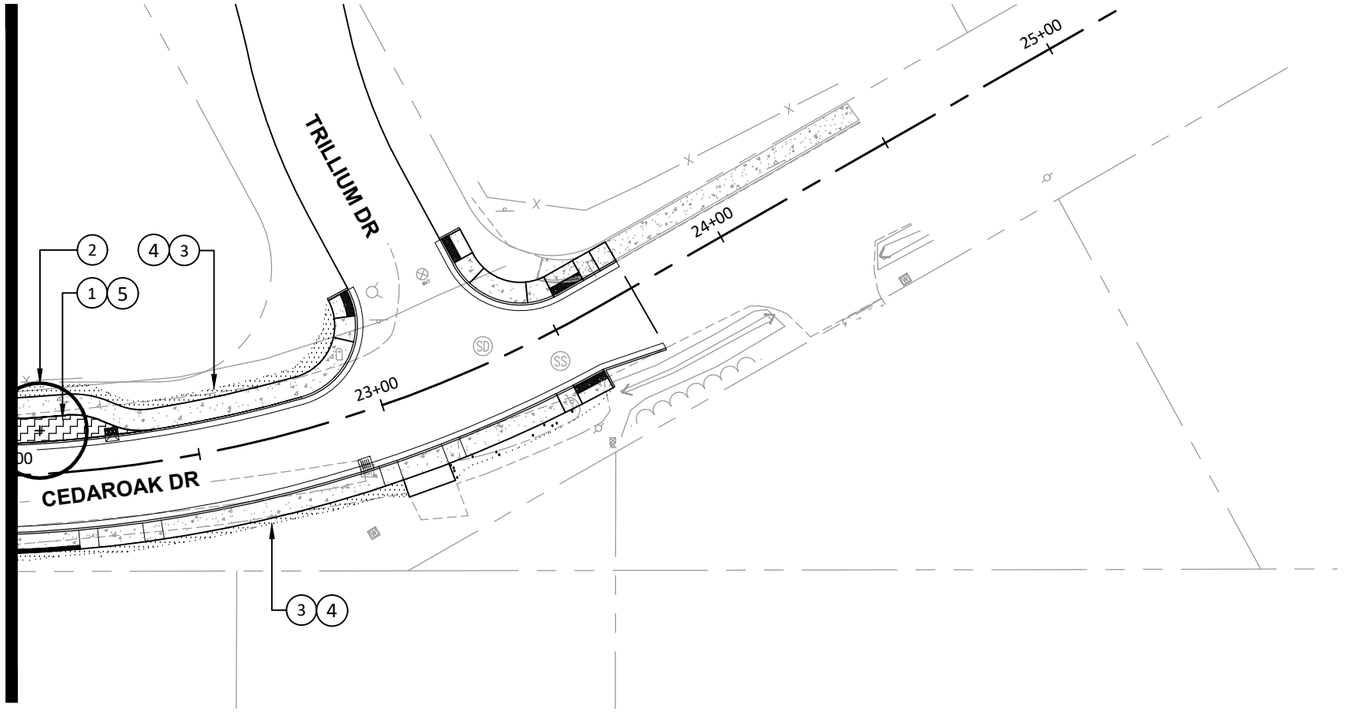
DRAWING NAME: CWL10-LA01 LANDSCAPE.DWG

MATCHLINE STA. 18+00 SEE SHEET LA01



MATCHLINE STA. 22+00 SEE BELOW

MATCHLINE STA. 22+00 SEE ABOVE



CONSTRUCTION NOTES:

1	PLACE 12" STORMWATER FACILITY TOP SOIL IN PLANTINERS, TYP.	35	CY
2	INSTALL NYSSA SYLVATICA 'WILDFIRE' AS SHOWN - 2" CAL.	5	EA
3	PLACE 4" TOP SOIL IN SEEDED AREAS, TYP.	17	CY
4	INSTALL SEEDING IN DISTURBED AREAS AS SHOWN	0.03	AC
5	INSTALL WETLAND PLANTS AT 80 PLANT / 100 SF (SEE TABLE) - 1 GAL	740	EA

N

0 10 20 40

SCALE: 1" = 40'

LANDSCAPE PLAN

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED
747
PRELIMINARY
JEFFERY P. CREEL
OREGON
05/13/11
LANDSCAPE ARCHITECT

EXPIRES: 05/31/24

DESIGNED: HHPR TEAM	SHEET NO. LA02
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-LA01 LANDSCAPE.DWG

PLANTING NOTES

STORMWATER FACILITY TOPSOIL

1. FURNISH TOPSOIL CONTAINING NO SUBSTANCE DETRIMENTAL TO THE GROWTH OF PLANTS AND THAT IS FREE OF PLANTS DESIGNATED BY THE OREGON DEPARTMENT OF AGRICULTURE AS TYPE "A" OR TYPE "B" WEEDS. UNSUITABLE TOPSOIL, OR TOPSOIL PLACED BY THE CONTRACTOR WITHOUT APPROVAL IN AREAS TO BE PLANTED, MAY BE REQUIRED TO BE REPLACED AT NO ADDITIONAL COST TO THE OWNER.

2. FURNISH IMPORTED TOPSOIL FOR VEGETATED STORM WATER FACILITIES CONFORMING TO THE FOLLOWING:

   A. GENERAL COMPOSITION - THE MATERIAL SHALL BE ANY BLEND OF LOAMY SOIL, SAND, AND COMPOST THAT IS 30-40% COMPOST (BY VOLUME) AND MEETS THE OTHER CRITERIA IN THIS SPECIFICATION.

   B. ANALYSIS REQUIREMENTS FOR THE BLENDED MATERIAL:
      a. PARTICLE GRADATION - A SIEVE ANALYSIS OF THE BLENDED MATERIAL, INCLUDING COMPOST, SHALL BE CONDUCTED IN CONFORMANCE WITH ASTM C117/C136, AASHTO T11/T27 OR ASTM D422/D1140.THE ANALYSIS SHALL INCLUDE THE FOLLOWING SIEVE SIZES: 1 INCH, 3/8 INCH, #4, #10, #20, #40, #60, #100, #200. THE GRADATION OF THE BLEND SHALL MEET THE FOLLOWING GRADATION CRITERIA.

SIEVE SIZE	PERCENT PASSING
1 INCH	100
# 4	75 -100
# 10	40-100
# 40	15-50
# 100	5-25
# 200	5-15

      THE BLEND SHALL HAVE A COEFFICIENT OF UNIFORMITY (D60/D10) EQUAL TO OR GREATER THAN 6 TO ENSURE IT IS WELL GRADED (HAS A BROAD RANGE OF PARTICLE SIZES). THE COEFFICIENT IS THE RATIO OF TWO PARTICLE DIAMETERS ON A GRAIN-SIZE DISTRIBUTION CURVE; IT IS THE PARTICLE DIAMETER AT 60% PASSING DIVIDED BY THE PARTICLE DIAMETER AT 10% PASSING.

      b. ACIDITY - THE PH (POWER OF HYDROGEN) OF THE BLENDED MATERIAL SHALL BE TESTED AND BE BETWEEN 6 TO 8.

   C. GENERAL REQUIREMENTS FOR THE BLENDED MATERIAL:
      a. THE MATERIAL SHALL BE LOOSE AND FRIABLE.
      b. IT SHALL BE WELL MIXED AND HOMOGENOUS.
      c. IT SHALL BE FREE OF WOOD PIECES, PLASTIC, AND OTHER FOREIGN MATTER.
      d. IT SHALL HAVE NO VISIBLE FREE WATER.

3. COMPOST - THE COMPOST SHALL BE DERIVED FROM PLANT MATERIAL AND PROVIDED BY A MEMBER OF THE US COMPOSTING COUNCIL SEAL OF TESTING ASSURANCE (STA) PROGRAM. SEE WWW.COMPOSTINGCOUNCIL.ORG FOR A LIST OF LOCAL PROVIDERS.

   THE COMPOST SHALL BE THE RESULT OF THE BIOLOGICAL DEGRADATION AND TRANSFORMATION OF PLANT-DERIVED MATERIALS UNDER CONDITIONS DESIGNED TO PROMOTE AEROBIC DECOMPOSITION. THE MATERIAL SHALL BE WELL COMPOSTED, FREE OF VIABLE WEED SEEDS, AND STABLE WITH REGARD TO OXYGEN CONSUMPTION AND CARBON DIOXIDE GENERATION. THE COMPOST SHALL HAVE NO VISIBLE FREE WATER AND PRODUCE NO DUST WHEN HANDLED. IT SHALL MEET THE FOLLOWING CRITERIA, AS REPORTED BY THE US COMPOSTING COUNCIL STA COMPOST TECHNICAL DATA SHEET PROVIDED BY THE VENDOR.

   A. 100% OF THE MATERIAL MUST PASS THROUGH A 1/2-INCH SCREEN.
   B. THE PH OF THE MATERIAL SHALL BE BETWEEN 6 AND 8.
   C. MANUFACTURED INERT MATERIAL (PLASTIC, CONCRETE, CERAMICS, METAL, ETC.) SHALL BE LESS THAN 1.0% BY WEIGHT.
   D. THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 30 AND 70% (DRY WEIGHT BASIS).
   E. SOLUBLE SALT CONTENT SHALL BE LESS THAN 6.0 MMHOS/CM.
   F. MATURITY INDICATOR SHALL BE GREATER THAN 80% FOR GERMINATION AND VIGOR.
   G. STABILITY SHALL BE 'STABLE' TO 'VERY STABLE'.
   H. CARBON/NITROGEN (C/N) RATIO SHALL BE LESS THAN 25:1
   I. TRACE METALS TEST RESULT = "PASS."

4. SUBMITTALS - AT LEAST 14 WORKING DAYS IN ADVANCE OF CONSTRUCTION, SUBMIT THE FOLLOWING:

   A. DOCUMENTATION FOR THE TWO ANALYSES DESCRIBED IN SECTION 01040.14(D)(1)(B) OF THIS SPECIFICATION (PARTICLE GRADATION WITH CALCULATED COEFFICIENT OF UNIFORMITY; AND PH) SHALL BE PERFORMED BY AN ACCREDITED LABORATORY WITH CERTIFICATION MAINTAINED CURRENT. THE DATE OF THE ANALYSES SHALL BE NO MORE THAN 90 CALENDAR DAYS PRIOR TO THE DATE OF THE SUBMITTAL. THE REPORT SHALL INCLUDE THE FOLLOWING INFORMATION:
      - NAME AND ADDRESS OF THE LABORATORY.
      - PHONE CONTACT AND E-MAIL ADDRESS FOR THE LABORATORY.
      - TEST DATA, INCLUDING THE DATE AND NAME OF THE TEST PROCEDURE.

   B. A COMPOST TECHNICAL DATA SHEET FROM THE COMPOST VENDOR. THE ANALYSIS AND REPORT MUST CONFORM TO THE SAMPLING AND REPORTING REQUIREMENTS OF THE US COMPOSTING COUNCIL SEAL OF TESTING ASSURANCE (STA) PROGRAM. THE ANALYSIS SHALL BE PERFORMED AND REPORTED BY AN APPROVED INDEPENDENT STA PROGRAM LABORATORY AND BE NO MORE THAN 90 CALENDAR DAYS PRIOR TO THE DATE OF THE SUBMITTAL.

   C. TWO PINT SIZED SAMPLES OF THE BLENDED MATERIAL.
   D. A DESCRIPTION OF THE LOCATION, EQUIPMENT, AND METHOD PROPOSED TO MIX THE MATERIAL.

5. STORMWATER FACILITY TOPSOIL INSTALLATION:

   A. PROTECTION OF THE TOPSOIL - THE MATERIAL SHALL BE PROTECTED FROM ALL SOURCES OF CONTAMINATION, INCLUDING WEED SEEDS, WHILE AT THE SUPPLIER, IN CONVEYANCE, AND AT THE PROJECT SITE.
   B. PLACEMENT OF THE TOPSOIL - THE MATERIAL SHALL BE PLACED IN LOOSE LIFTS, NOT TO EXCEED 8 INCHES EACH AND EACH LIFT SHALL BE COMPACTED WITH A WATER-FILLED LANDSCAPE ROLLER. THE MATERIAL SHALL NOT OTHERWISE BE MECHANICALLY COMPACTED.
   C. TIMING OF PLANT INSTALLATION - WEATHER PERMITTING AND AS APPROVED, PLANTS SHALL BE INSTALLED AS SOON AS POSSIBLE AFTER PLACING AND GRADING THE TOPSOIL IN ORDER TO MINIMIZE EROSION AND FURTHER COMPACTION.
   D. EROSION CONTROL - TEMPORARY EROSION CONTROL MEASURES ARE REQUIRED UNTIL PERMANENT STABILIZATION MEASURES ARE FUNCTIONAL.
   E. PROTECTION OF THE INSTALLED TOPSOIL - IN ALL CASES, THE INSTALLED MATERIAL MUST BE PROTECTED FROM FOOT OR EQUIPMENT TRAFFIC AND SURFACE WATER RUNOFF. TEMPORARY FENCING OR WALKWAYS SHOULD BE INSTALLED AS NEEDED TO KEEP WORKERS, PEDESTRIANS, AND EQUIPMENT OUT OF THE AREA. UNDER NO CIRCUMSTANCES SHOULD MATERIALS AND EQUIPMENT BE STORED ON TOP OF THE INSTALLATION AREA.
   F. WET AND WINTER CONDITIONS - PLACEMENT OF THE TOPSOIL WILL NOT BE ALLOWED WHEN THE GROUND IS FROZEN OR SATURATED OR WHEN THE WEATHER IS TOO WET AS DETERMINED BY THE OWNERS REPRESENTATIVE.

GENERAL PLANTING NOTES

1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT CITY OF WEST LINN STANDARDS AND OREGON BUILDING AND SPECIALITY CODES.

2. INSTALL EROSION CONTROL SYSTEMS IN ACCORDANCE WITH CITY OF WEST LINN STANDARDS PRIOR TO SITE WORK AND LANDSCAPE INSTALLATION.

3. CONTRACTOR SHALL MARK AND PROTECT ALL UTILITIES, SITE FEATURES, AND VEGETATION TO REMAIN IN PLACE.

4. CONTRACTOR SHALL REMOVE ALL WEEDS AND INVASIVE SPECIES PRIOR TO PLANTING OR SEEDING.

5. ALL AREAS DISTURBED BY STAGING AND CONSTRUCTION ACTIVITIES SHALL BE SEEDED AT NO ADDITIONAL COST TO THE OWNER.

6. ALL SEEDED AREAS SHALL BE STRIPPED OF VEGETATION, SCARIFIED AND RECEIVE 4" OF TOPSOIL PRIOR TO APPLICATION OF SEED.

7. LANDSCAPE INSTALLATION SHALL INCLUDE PROVISION FOR TEMPORARY IRRIGATION OF PLANT MATERAILS DURIGN THE ESTABLISHMENT PERIOD

8. PLANT MATERIAL INSTALLED SHALL CONFORM IN SIZE AND GRADE TO THE "AMERICAN STANDARD FOR NURSERY STOCK" CURRENT EDITION.

9. LANDSCAPE CONTRACTOR SHALL WATER PLANTINGS FOR DURATION OF 1 YEAR WARRANTY PERIOD AFTER INSTALLATION AND GUARANTEE ALL PLANTINGS TO BE IN SATISFACTORY HEALTH. LANDSCAPE CONTRACTOR SHALL REPLACE ALL DAMAGED, DEAD, OR DYING PLANTS COVERED BY WARRANTY WITHIN 30 DAYS OF INITIAL IDENTIFICATION OF CONDITION.

PLANT SCHEDULE

TREES

10	Nyssa sylvatica 'Wildfire' - Wildfire Tupelo	
2" CAL.	B&B, WELL BRANCHED, LIMBED TO 6'	

WETLAND PLANTS

562	Juncus patens - Spreading Rush	
562	Carex obnupta - Slough Sedge	
1 GAL.	CONT., FULL PLANTS, 80 PLANTS / 100 SF	

SEED MIXES

			%	LBS OF PLA/
.09 AC	SEED MIX 1 (ROUGH SEED)		PLS	1000 SF
		Festuca rubra ssp fallax	20	8.00
		Festuca rubra	20	8.00
		Lolium perenee	30	12.00
		Agrostis calillaris var highland	20	8.00
		Trifolium repens	10	4.00
			TOTAL	40.00

LANDSCAPE LEGEND & NOTES
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

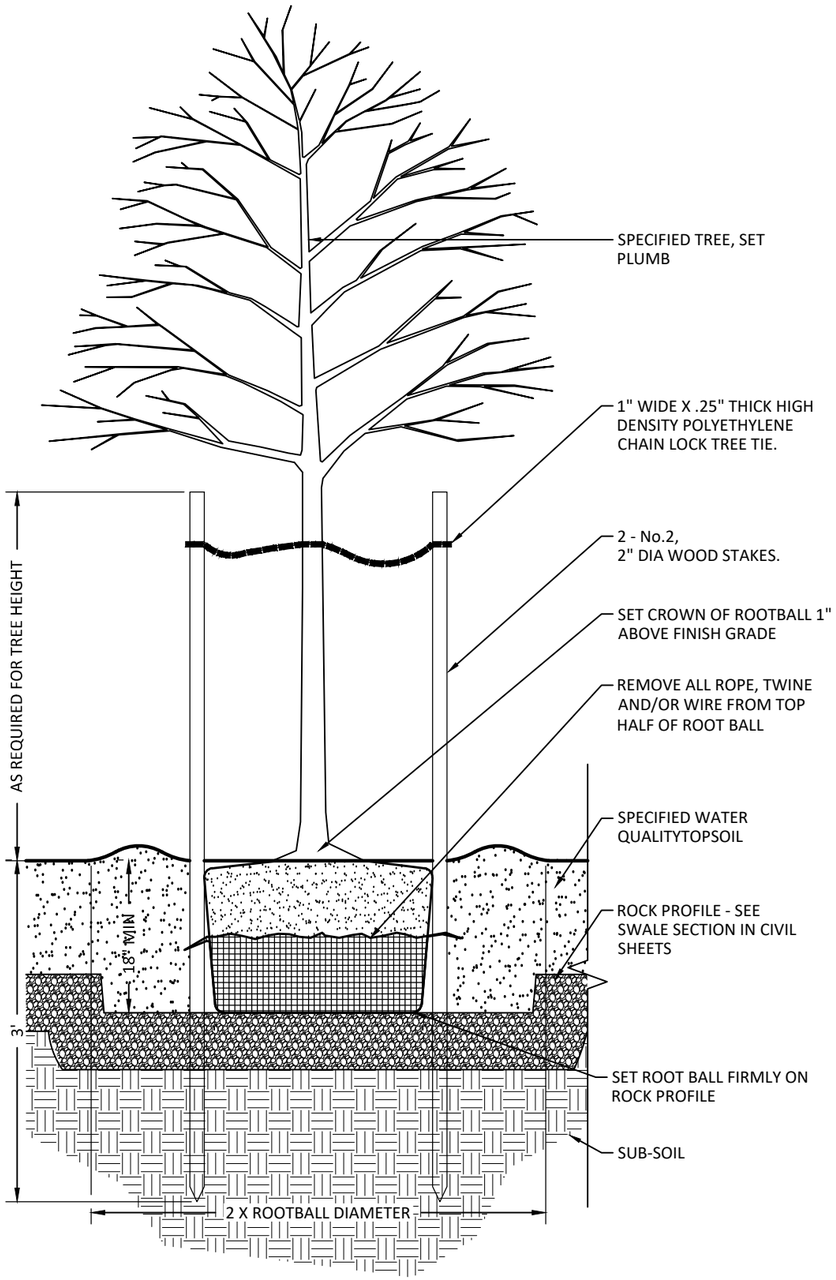
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

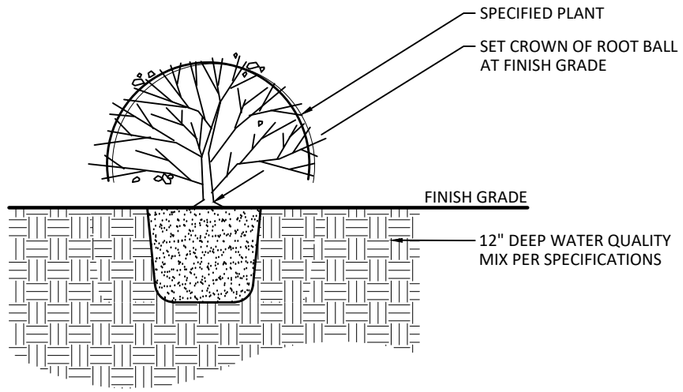
REGISTERED
747
PRELIMINARY
JEFFERY P. CREEL
OREGON
05/13/11
LANDSCAPE ARCHITECT
EXPIRES: 05/31/24

DESIGNED: HHPR TEAM	SHEET NO. LA03
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-LA01 LANDSCAPE.DWG

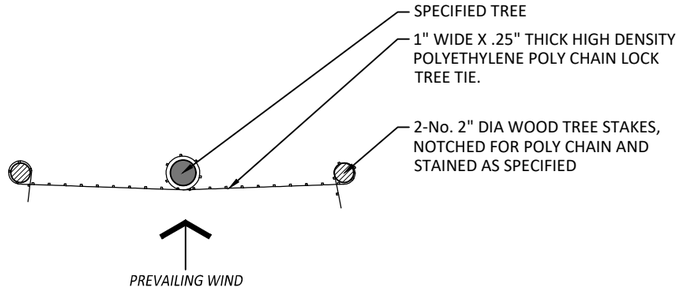


3 DECIDUOUS TREE PLANTING IN SW PLANTER
Section
NOT TO SCALE



1 SHRUB PLANTING IN SWALE (ZONE A)
Section
NOT TO SCALE

NOTE:
WRAP POLY CHAIN AROUND NOTCHED STAKE AND LOCK TO SECURE. WRAP CENTER OF POLY CHAIN AROUND TREE TRUNK TO MOVE 3" IN ALL DIRECTIONS.



2 TREE STAKING
Plan
NOT TO SCALE

LANDSCAPE DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

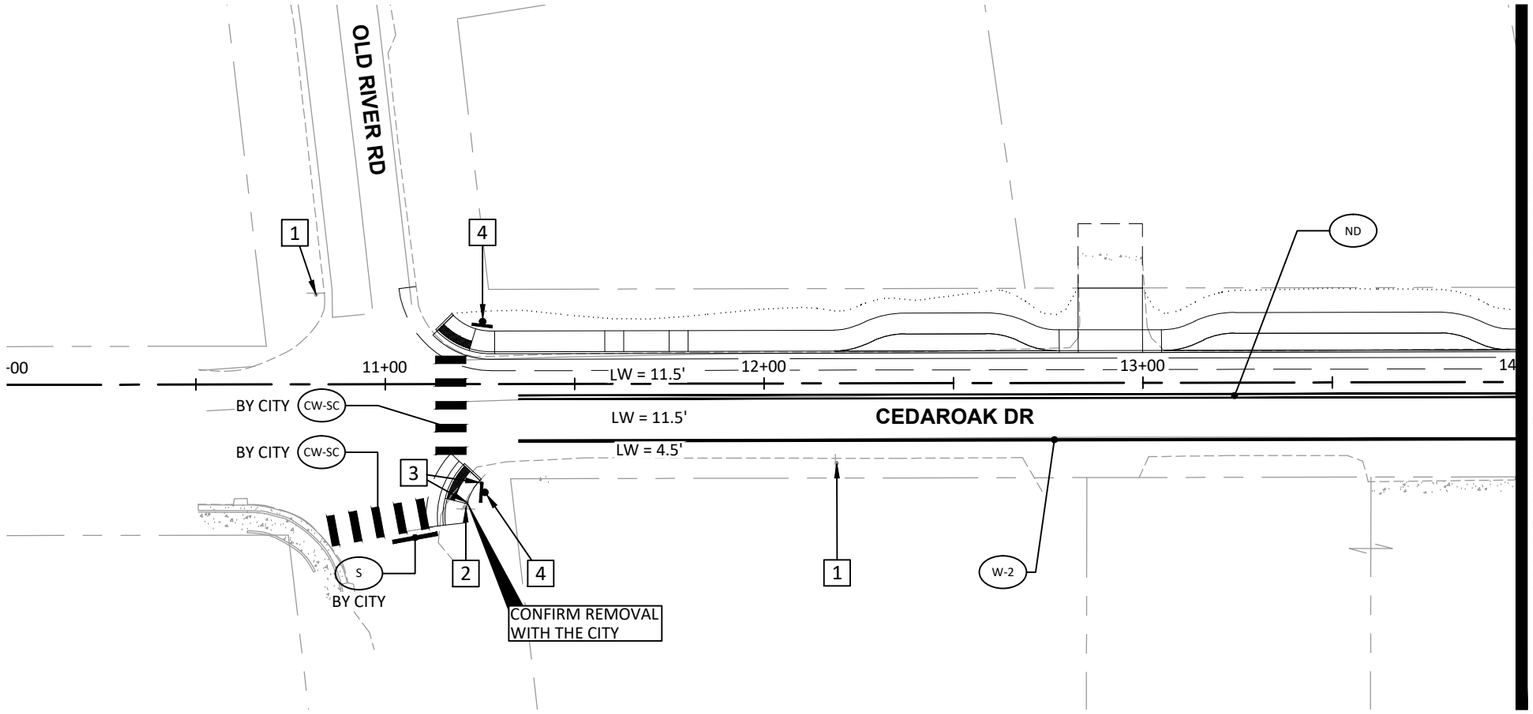
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED
747
PRELIMINARY
JEFFERY P. CREEL
OREGON
05/13/11
LANDSCAPE ARCHITECT
EXPIRES: 05/31/24

DESIGNED: HHPR TEAM	SHEET NO. LA04
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-LA01 LANDSCAPE.DWG



SIGNING NOTES:

1. PROTECT EXISTING SIGN.
2. REMOVE EXISTING SIGN AND REINSTALL PER T250 ON SHEET SS03.
3. REMOVE EXISTING SIGN.
4. INSTALL W11-2 AND W16-7P SIGNS PER DETAIL T150 AND T250 ON SHEET SS03.

STRIPING NOTES:

SEE ODOT STANDARD DRAWINGS FOR STRIPING REFERENCE DETAILS.

GENERAL NOTES:

1. MATCH POINTS TO EXISTING PAVEMENT MARKINGS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
2. REMOVE ALL PAVEMENT MARKINGS THAT CONFLICT WITH THESE PLANS. REMOVAL OF EXISTING PAVEMENT MARKINGS IS TO BE DETERMINED IN THE FIELD. STRIPING SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
3. UNLESS OTHERWISE SPECIFIED, ALL TRANSVERSE PAVEMENT MARKINGS INCLUDING LEGENDS AND BARS SHALL BE TYPE B-HS, PREFORMED FUSED THERMOPLASTIC FILM HIGH SKID. TO BE INSTALLED BY CITY OF WEST LINN.
4. UNLESS OTHERWISE SPECIFIED, ALL LONGITUDINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED.
5. ALL PAVEMENT LEGENDS TO BE INSTALLED BY CITY. COORDINATE WITH CITY ON INSTALLATION.

0 10 20 40
SCALE: 1" = 40'

SIGNING & STRIPING PLAN
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

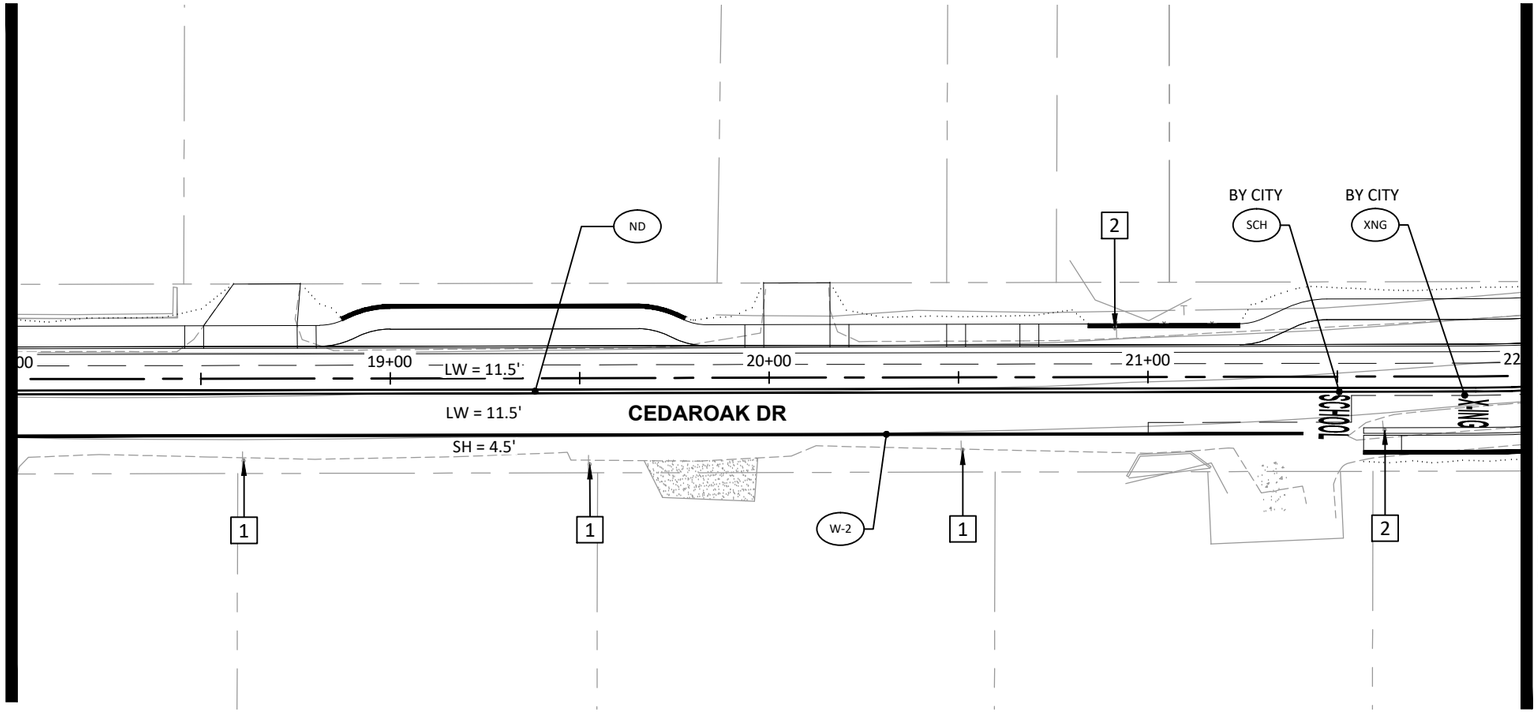
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

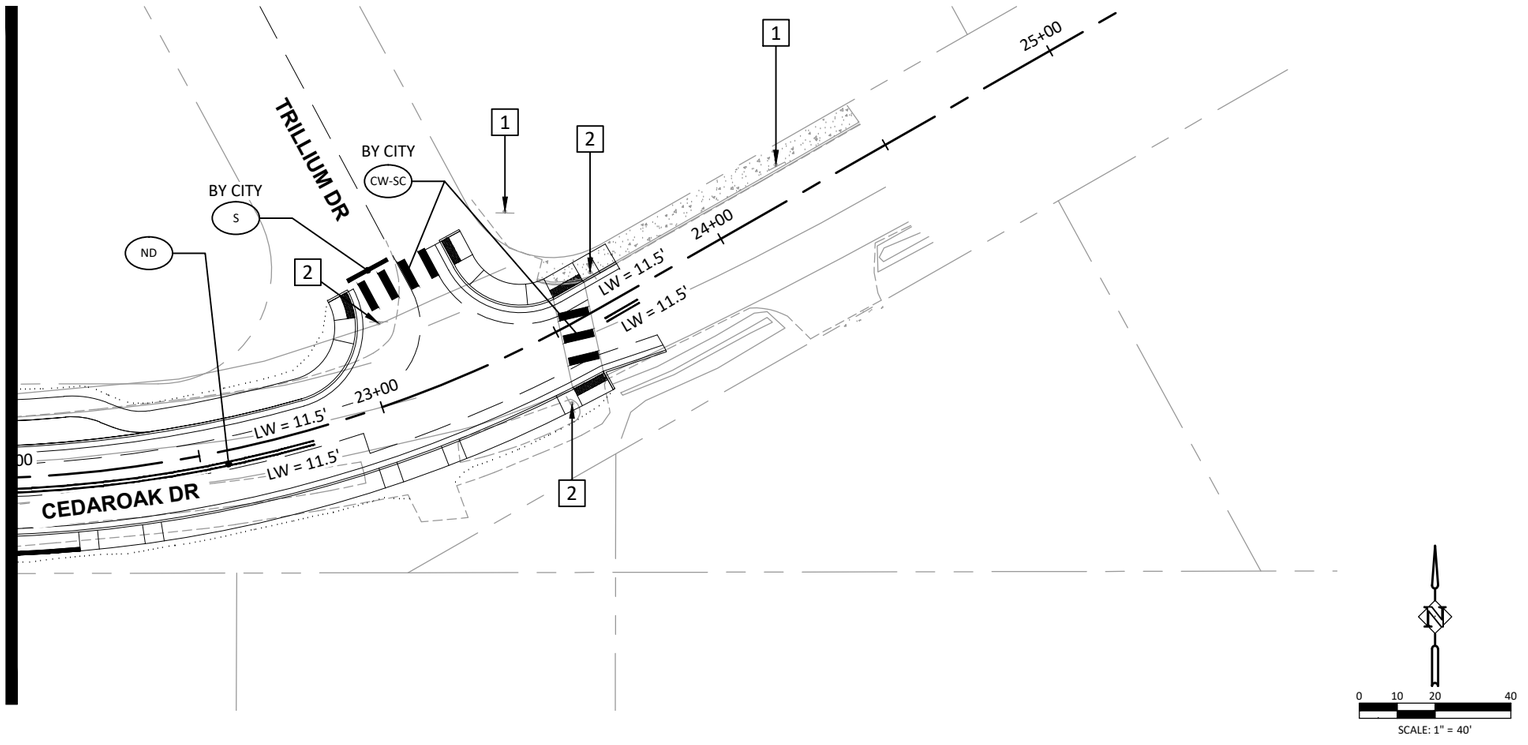
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. SS01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-SS01 SIGN & STRIPE.DWG





SIGNING NOTES:

1. PROTECT EXISTING SIGN.
2. REMOVE EXISTING SIGN AND REINSTALL PER T250 ON SHEET SS03.

STRIPING NOTES:

SEE ODOT STANDARD DRAWINGS FOR STRIPING REFERENCE DETAILS.

GENERAL NOTES:

1. MATCH POINTS TO EXISTING PAVEMENT MARKINGS ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
2. REMOVE ALL PAVEMENT MARKINGS THAT CONFLICT WITH THESE PLANS. REMOVAL OF EXISTING PAVEMENT MARKINGS IS TO BE DETERMINED IN THE FIELD. STRIPING SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.
3. UNLESS OTHERWISE SPECIFIED, ALL TRANSVERSE PAVEMENT MARKINGS INCLUDING LEGENDS AND BARS SHALL BE TYPE B-HS, PREFORMED FUSED THERMOPLASTIC FILM HIGH SKID. TO BE INSTALLED BY CITY OF WEST LINN.
4. UNLESS OTHERWISE SPECIFIED, ALL LONGITUDINAL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED.
5. ALL PAVEMENT LEGENDS TO BE INSTALLED BY CITY. COORDINATE WITH CITY ON INSTALLATION.

SIGNING & STRIPING PLAN

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS◆PLANNERS
LANDSCAPE ARCHITECTS◆SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

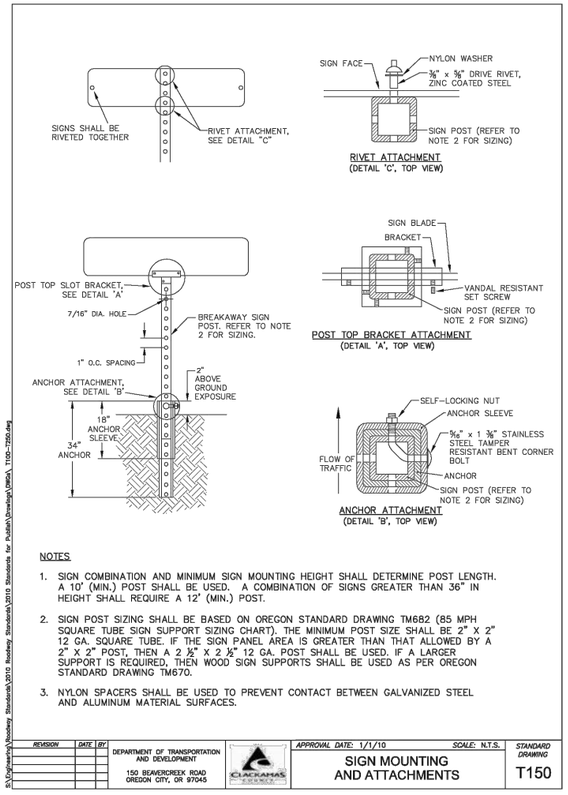
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. SS02
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-SS01 SIGN & STRIPE.DWG

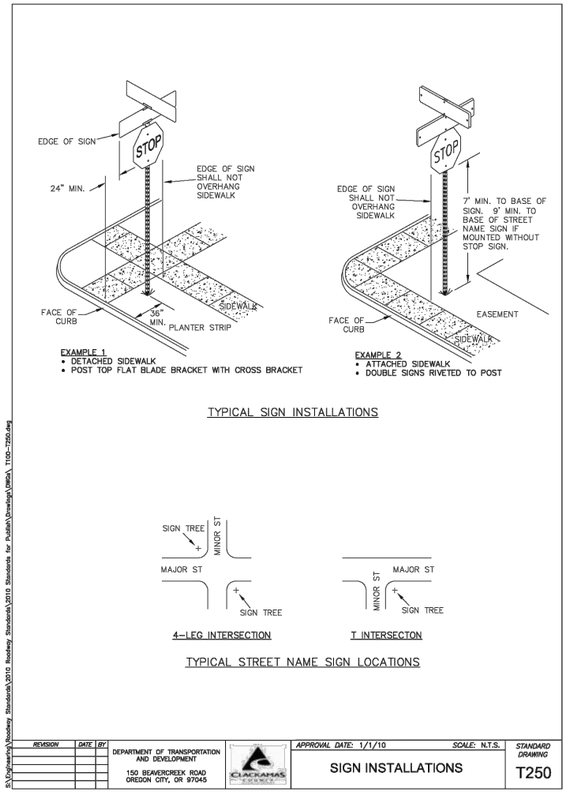


NOTES

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 ½" X 2 ½" 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 GALVANIZED STEEL AND ALUMINUM MATERIAL SURFACES.

REVISION	DATE	BY	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT	APPROVAL DATE: 1/1/10	SCALE: N.T.S.	STANDARD DRAWING
			150 BEAVERCREEK ROAD OREGON CITY, OR 97045	SIGN MOUNTING AND ATTACHMENTS		T150

S:\Engineering\Woodway Standards\2015 Standards for Publish\Drawings\DWGs_T150-T250.dwg



REVISION	DATE	BY	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT	APPROVAL DATE: 1/1/10	SCALE: N.T.S.	STANDARD DRAWING
			150 BEAVERCREEK ROAD OREGON CITY, OR 97045	SIGN INSTALLATIONS		T250

S:\Engineering\Woodway Standards\2015 Standards for Publish\Drawings\DWGs_T150-T250.dwg

SIGNING & STRIPING DETAILS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS◆PLANNERS
LANDSCAPE ARCHITECTS◆SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. SS03
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-SS01 SIGN & STRIPE.DWG

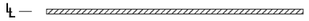
W

4" WHITE LINE

W-2

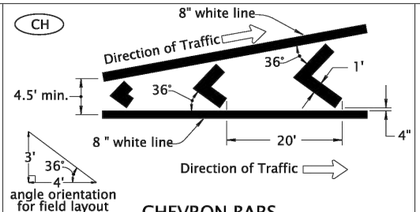
8" WHITE LINE

Y



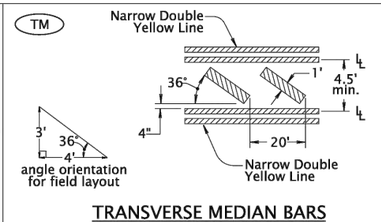
4" YELLOW LINE

CH



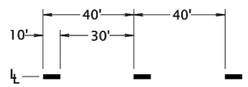
CHEVRON BARS
1' WHITE BARS AT 20' SPACING

TM



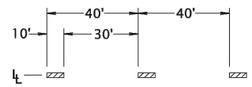
TRANSVERSE MEDIAN BARS
1' YELLOW BARS AT 20' SPACING

WB



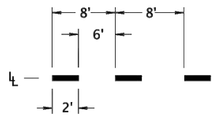
4" WHITE BROKEN LINE

YB



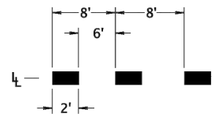
4" YELLOW BROKEN LINE

WD



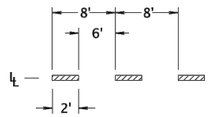
4" WHITE DOTTED LINE
For lane extensions

WD-2



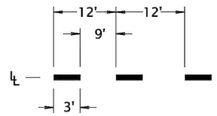
8" WHITE DOTTED LINE
For lane extensions and bike lane extensions

YD



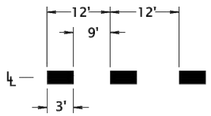
4" YELLOW DOTTED LINE
For lane extensions

DLL



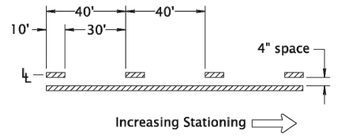
4" WHITE DOTTED LANE LINE
For lane lines in acceleration/deceleration lanes

DLL-2



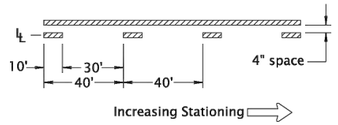
8" WHITE DOTTED LANE LINE
For lane lines in drop lanes

NPR



NO-PASS RIGHT
4" YELLOW LINES

NPL

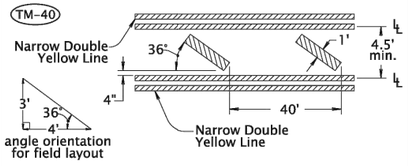


NO-PASS LEFT
4" YELLOW LINES

TWL

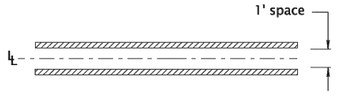
TWO-WAY LEFT TURN
4" YELLOW LINES

TM-40



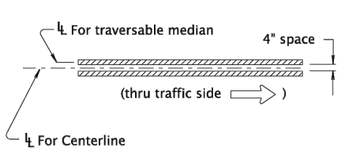
TRANSVERSE MEDIAN BARS
1' YELLOW BARS AT 40' SPACING
For use at painted medians where distance between left turn refuges exceeds 200'

D



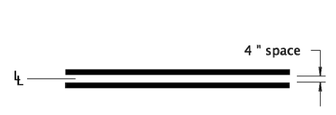
DOUBLE NO-PASS
TWO 4" YELLOW LINES

ND



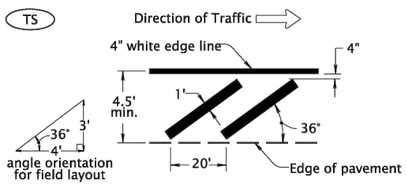
NARROW DOUBLE NO-PASS
TWO 4" YELLOW LINES

NDW



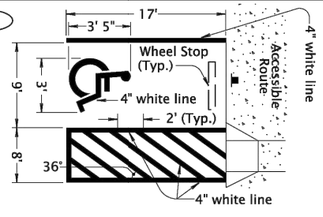
NARROW DOUBLE NO-LANE CHANGE
TWO 4" WHITE LINES

TS



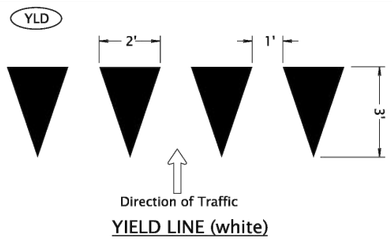
TRANSVERSE SHOULDER BARS
1' WHITE BARS AT 20' SPACING

HC



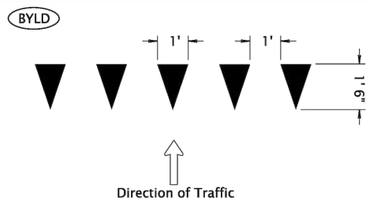
DISABLED PARKING DETAIL (white)

YLD



YIELD LINE (white)

BYLD



BICYCLE YIELD LINE (white)

LEGEND

Direction Of Traffic, Increasing Stationing Or Thru Traffic Side

℄ — Lane line dimensions are shown on the striping plans

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

DATE	REVISION DESCRIPTION
07-2020	Changed Min. widths for CH, TM, TM-40, and TS

CALC. BOOK NO. N/A | SDR DATE 07-01-2020 | **TM500**

Effective Date: December 1, 2023 - May 31, 2024

SIGNING & STRIPING DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

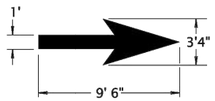
DESIGNED: HHPR TEAM	SHEET NO. SS04
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

07-01-2020

1M500.dgn

DRAWING NAME: CWL10-SS01 SIGN & STRIPE.DWG

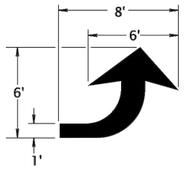
SA



STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

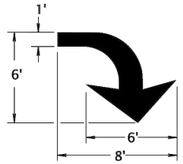
LA



LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

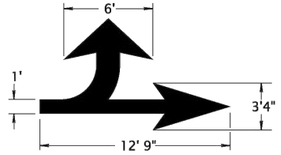
RA



RIGHT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

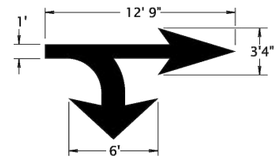
LSA



LEFT TURN STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

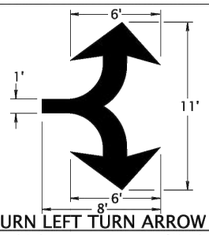
RSA



RIGHT TURN STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

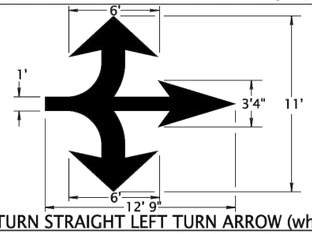
RALA



RIGHT TURN LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

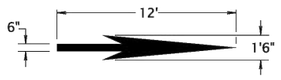
RSLA



RIGHT TURN STRAIGHT LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

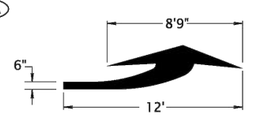
E-SA



ELONGATED STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

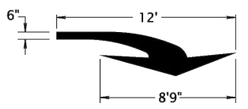
E-LA



ELONGATED LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

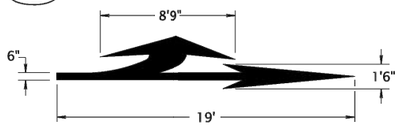
E-RA



ELONGATED RIGHT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

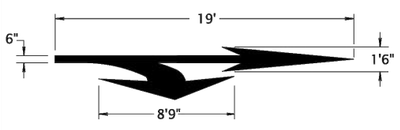
E-LSA



ELONGATED LEFT TURN STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

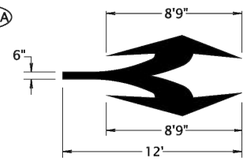
E-RSA



ELONGATED RIGHT TURN STRAIGHT ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

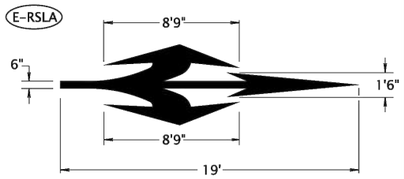
E-RALA



ELONGATED RIGHT TURN LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

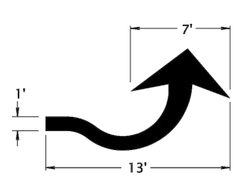
E-RSLA



ELONGATED RIGHT TURN STRAIGHT LEFT TURN ARROW (white)

For arrow proportion details, see current version of Standard Highway Signs

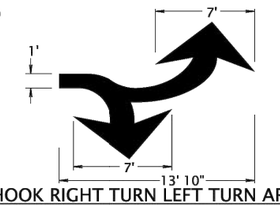
F-LA



FISH-HOOK LEFT TURN ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

F-RALA



FISH-HOOK RIGHT TURN LEFT TURN ARROW (white)

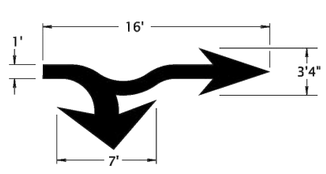
For arrow proportion details, see the current ODOT Traffic Line Manual

F-SA

FISH-HOOK STRAIGHT ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

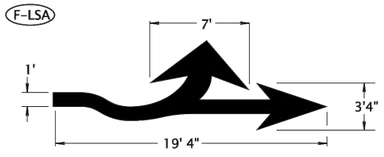
F-RSA



FISH-HOOK RIGHT TURN SRAIGHT ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

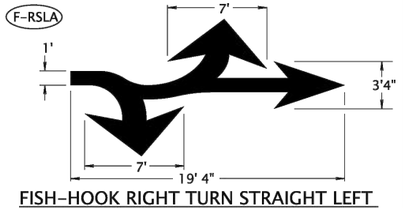
F-LSA



FISH-HOOK LEFT TURN STRAIGHT ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

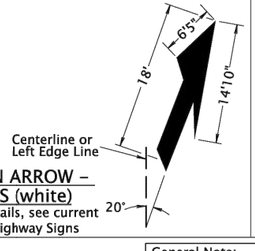
F-RSLA



FISH-HOOK RIGHT TURN STRAIGHT LEFT TURN ARROW (white)

For arrow proportion details, see the current ODOT Traffic Line Manual

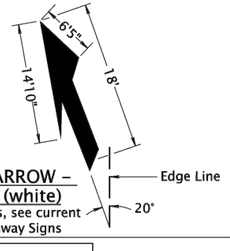
LRA-L



LANE REDUCTION ARROW - LEFT LANE ENDS (white)

For arrow proportion details, see current version of Standard Highway Signs

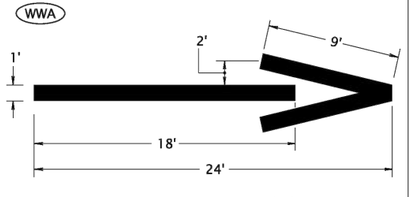
LRA-R



LANE REDUCTION ARROW - RIGHT LANE ENDS (white)

For arrow proportion details, see current version of Standard Highway Signs

WWA



WRONG-WAY ARROW (white)

General Note:

1. Center pavement markings within the lane width.
2. Arrow and letter dimensions nominal, excluding WWA.

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

DATE	REVISION DESCRIPTION
07-2020	Some Detail Blocks moved to new Std. Drawing TM504
	Fish-hook Arrows added, LRA split into LRA-L and LRA-R
01-2022	Corrected bubble callout of LRA-L and typo in LRA-R

CALC. BOOK NO. N/A | SDR DATE 01-03-2022 | **TM501**

Effective Date: December 1, 2023 - May 31, 2024

SIGNING & STRIPING DETAILS

CEDAROAK DRIVE SAFE ROUTES

WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

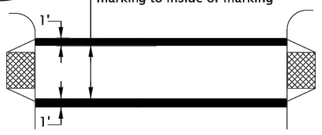
DESIGNED: HHPR TEAM	SHEET NO. SS05
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

01-03-2022

1M501.dgn

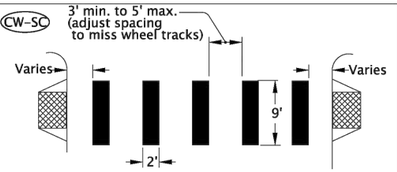
DRAWING NAME: CWL10-SS01 SIGN & STRIPE.DWG

CW



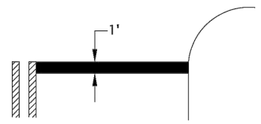
STANDARD CROSSWALK
TWO 1' WHITE BARS
Install per Standard Drawing TM530

CW-SC



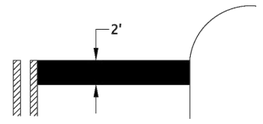
STAGGERED CONTINENTAL CROSSWALK
2' WHITE BARS
Install per Standard Drawing TM530

S



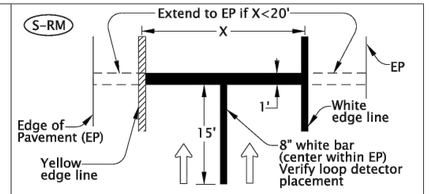
STOP BAR
1' WHITE BAR
Install per Standard Drawing TM530

S-2



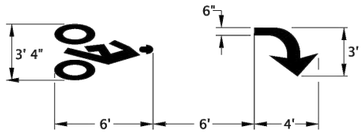
STOP BAR – LARGE
2' WHITE BAR
Install per Standard Drawing TM530

S-RM



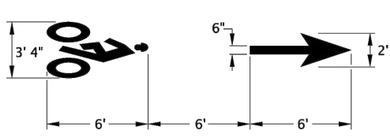
RAMP METER STOP BAR
1' & 8" WHITE BARS
For multi-lane ramp meter applications

BR



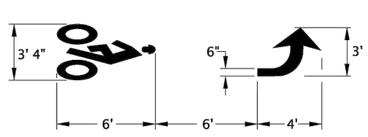
BIKE RIGHT TURN STENCIL (white)
Center marking within lane width
For proportion details, see current version of Standard Highway Signs

BS



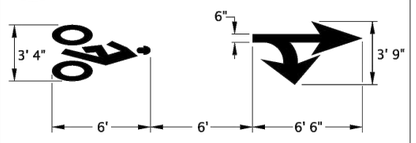
BIKE LANE STANDARD STENCIL (white)
Center marking within lane width
For proportion details, see current version of Standard Highway Signs

BL



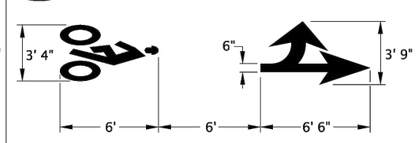
BIKE LEFT TURN STENCIL (white)
Center marking within lane width
For proportion details, see current version of Standard Highway Signs

BRS



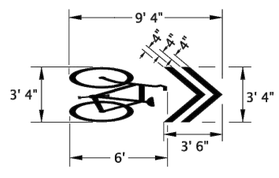
BIKE RIGHT TURN STRAIGHT STENCIL (white)
Center marking within lane width
For proportion details, see current version of Standard Highway Signs

BLS



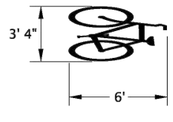
BIKE LEFT TURN STRAIGHT STENCIL (white)
Center marking within lane width
For proportion details, see current version of Standard Highway Signs

SLM



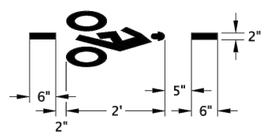
SHARED LANE MARKING (white)
Center marking within lane width or as shown
For proportion details, see current version of Standard Highway Signs

B



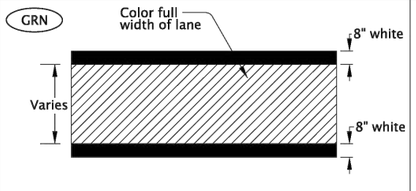
BIKE STENCIL (white)
Used for Intersection Bicycle Box applications
Place marking within bicycle box, ceneterd with motor vehicle lane width

BD



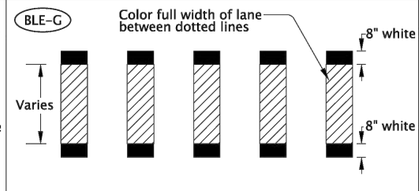
BICYCLE DETECTOR MARKING (white)
PLace Bicycle Detector Pavement Marking in optimum loction where bicycle acuates the traffic signal

GRN



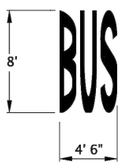
GREEN SUPPLEMENTAL BICYCLE LANE
SOLID LINE (green)

BLE-G



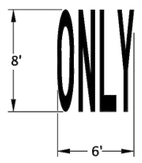
GREEN SUPPLEMENTAL BICYCLE LANE
DOTTED LINE EXTENSION (green)

BUS



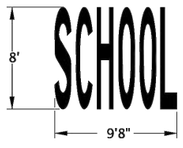
BUS (white)
Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

ON



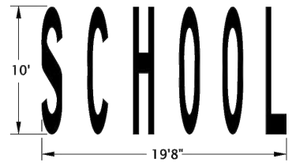
ONLY (white)
Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

SCH



SCHOOL (white)
Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

SCH-LG



SCHOOL – LARGE (white)
Center marking within width of two lanes
For letter proportion details, see current version of Standard Highway Signs

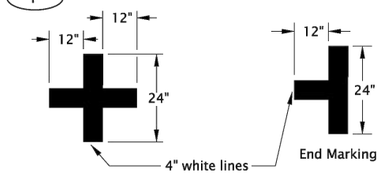
CRS-LG

CROSSING – LARGE (white)
Center marking within width of two lanes
For letter proportion details, see current version of Standard Highway Signs

XNG

X-ING (white)
Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs

P



ON-STREET PARKING DETAIL (white)

General Note:
1. Arrow, letter, and bike symbol dimensions nominal.

LEGEND

Direction of Trave

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

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

PAVEMENT MARKING STANDARD DETAIL BLOCKS

2024

DATE	REVISION DESCRIPTION
07-2022	Added note for measurement of Standard Crosswalk

CALC. BOOK NO. N/A | SDR DATE 07-08-2022 | TM503

Effective Date: December 1, 2023 - May 31, 2024

SIGNING & STRIPING DETAILS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

CITY OF West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

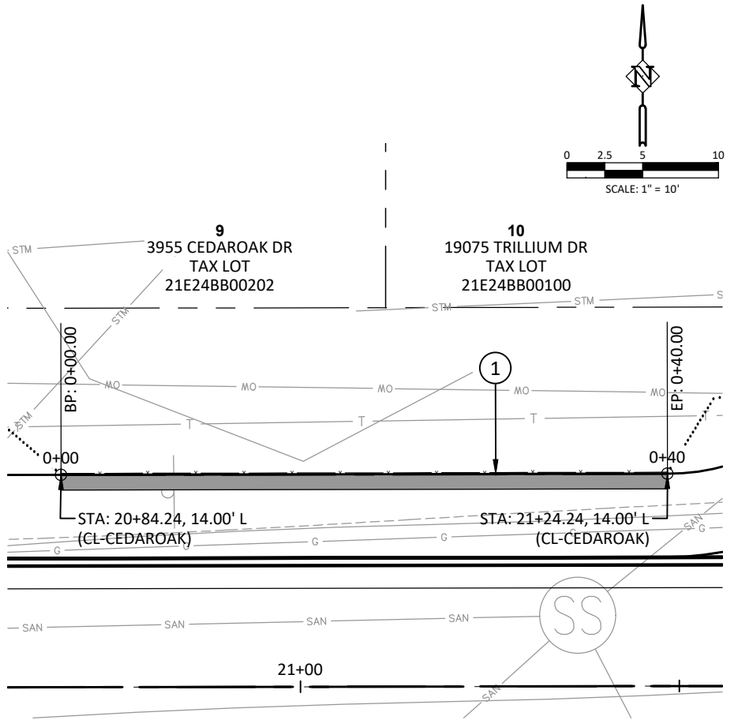
EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. SS06
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

07-08-2022

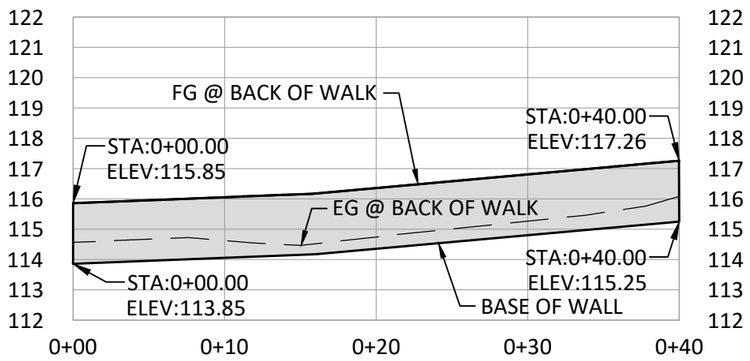
TM503.dgn

DRAWING NAME: CWL10-SS01 SIGN & STRIPE.DWG



WALL 2 @ PROPERTY 9/10 - PLAN VIEW

SCALE: 1" = 10' (HORZ.)



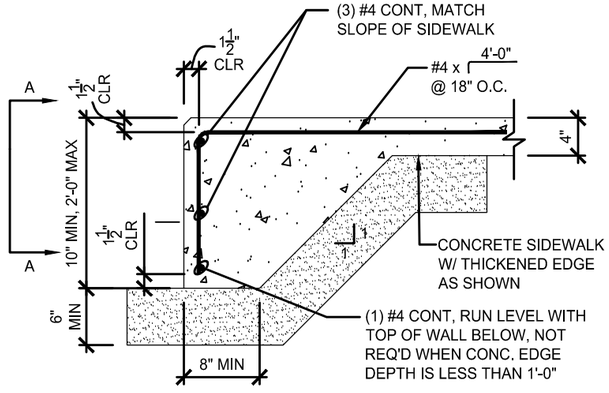
WALL 2 @ PROPERTY 9/10 - PROFILE VIEW

SCALE: 1" = 10' (HORZ.)
1" = 5' (VERT.)

NOTE: WALL DETAILS TO BE FINALIZED WITH FINAL PLANS

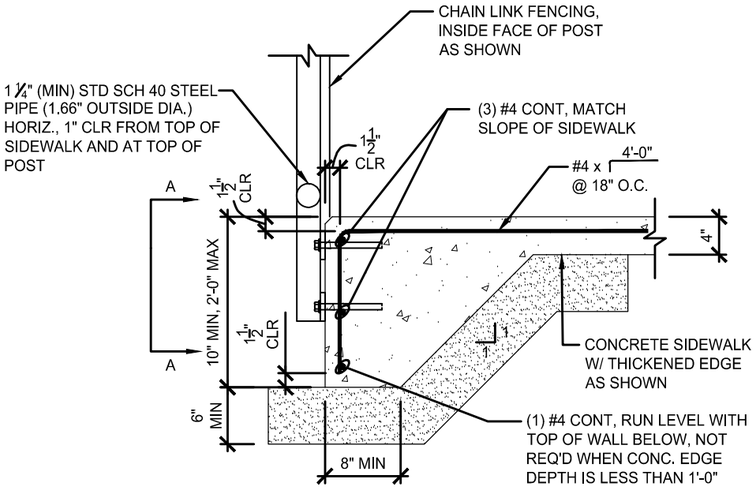
CONSTRUCTION NOTES:

1. CONSTRUCT THICKENED EDGE SIDEWALK WITH FACE MOUNTED 4' BLACK VINYL COATED CHAIN-LINK FENCE CL-4R PER DETAIL BELOW AND ODOT STANDARD DRAWING RD815 ON SHEET DC19.



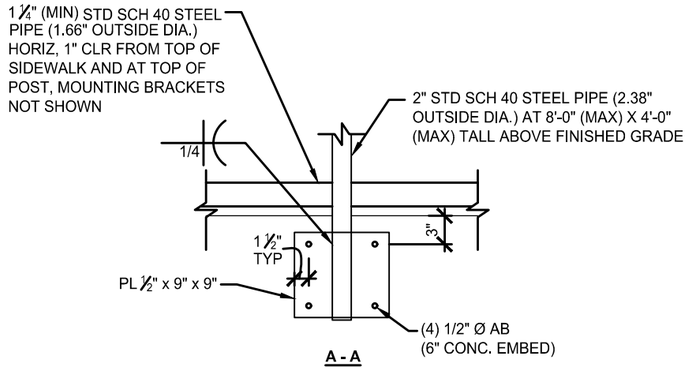
THICKENED EDGE SIDEWALK DETAIL

NTS



THICKENED EDGE SIDEWALK WITH FENCE DETAIL

NTS



A - A

NOTES:
1. ANCHOR BOLTS (AB) SHALL CONSIST OF SIMPSON STRONG-BOLT , STAINLESS STEEL, PERIODIC SPECIAL INSPECTION REQUIRED.
2. ALL MEMBERS & HARDWARE SHALL BE HOT-DIP GALVANIZED.
3. ANCHOR BOLTS SHALL BE OFFSET FROM COPING REBAR, DO NOT DRILL THROUGH AT AB INSTALLATION.

WALL FACE MOUNTED FENCE DETAIL

NTS

WALL PLAN & PROFILE
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

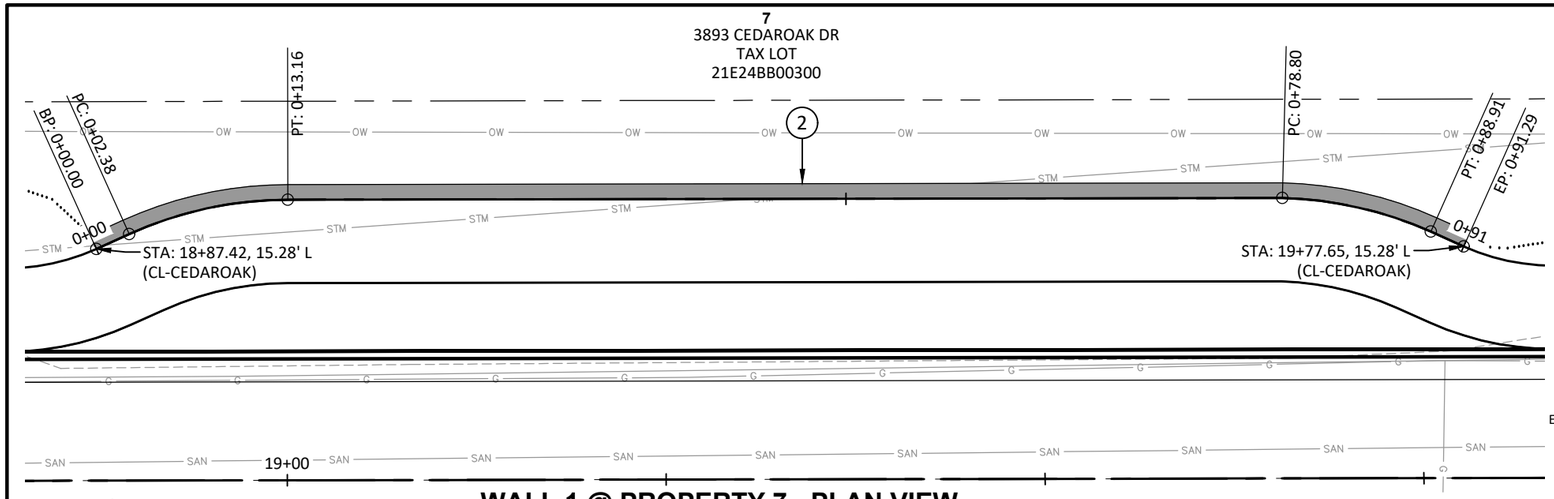
City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
PRELIMINARY
OREGON
JAN. 10, 2017
JAMES S. HOUF

EXPIRES: 6/30/25

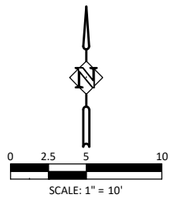
DESIGNED: HHPR TEAM	SHEET NO. WA02
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

DRAWING NAME: CWL10-WA01 WALLS.DWG



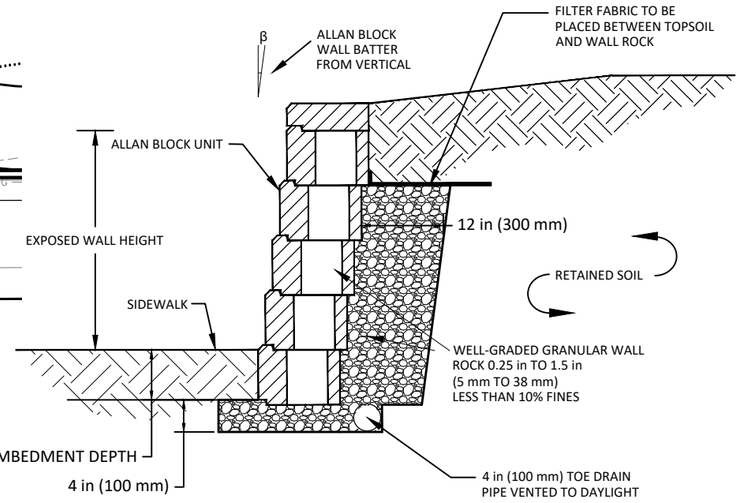
WALL 1 @ PROPERTY 7 - PLAN VIEW

SCALE: 1" = 10' (HORZ.)



CONSTRUCTION NOTES:

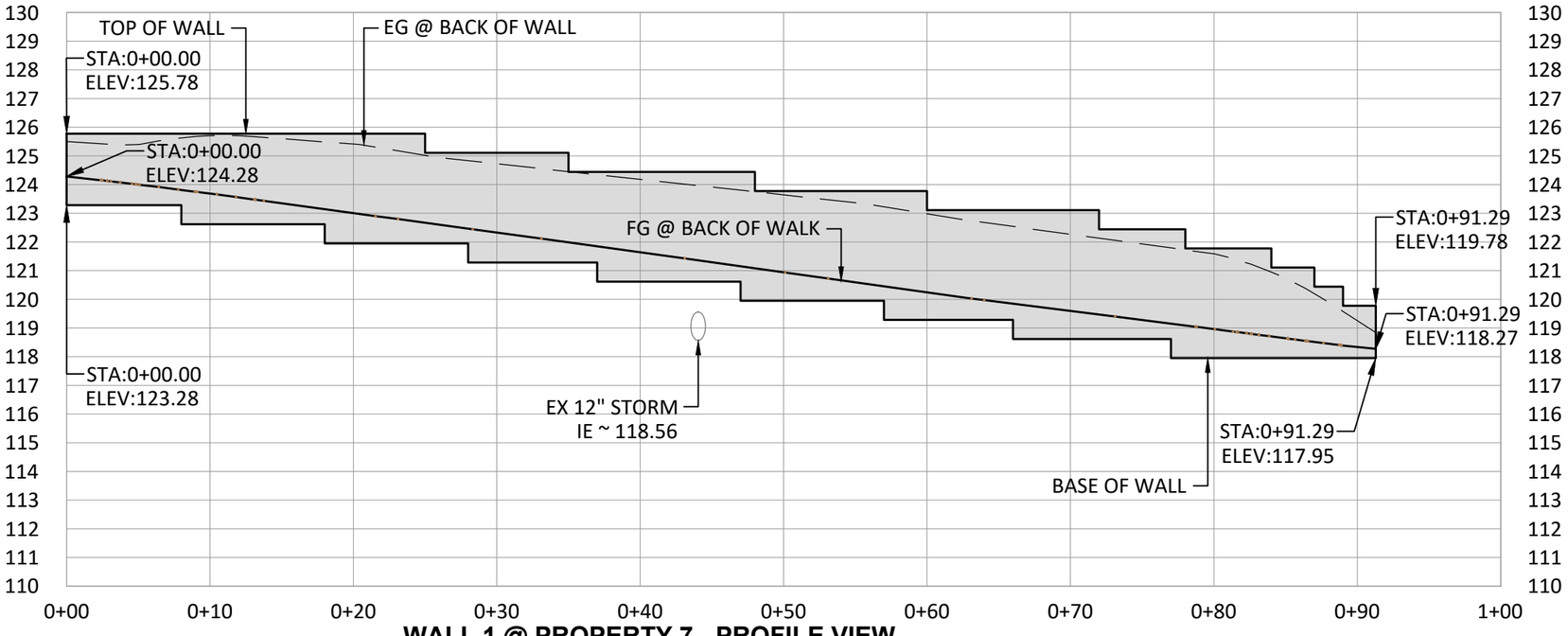
(2) CONSTRUCT SEGMENTAL BLOCK WALL. SEE WALL DETAIL BELOW.



SEGMENTAL BLOCK WALL

NTS

NOTE: WALL DETAILS TO BE FINALIZED WITH FINAL PLANS



WALL 1 @ PROPERTY 7 - PROFILE VIEW

SCALE: 1" = 10' (HORZ.)
1" = 5' (VERT.)

WALL PLAN & PROFILE
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

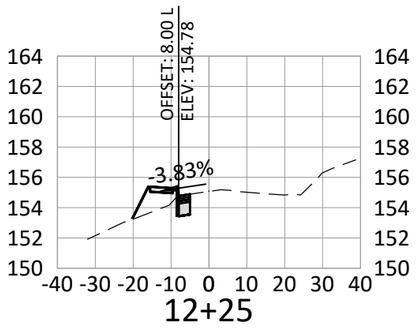
REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF

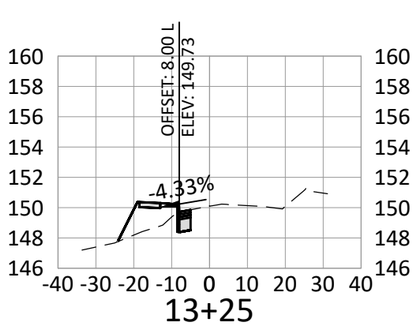
PRELIMINARY

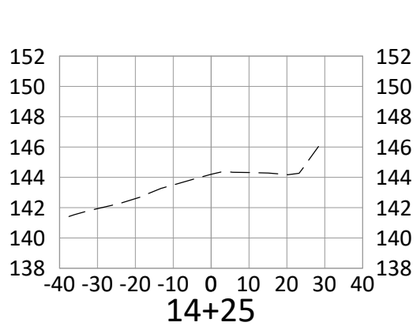
EXPIRES: 6/30/25

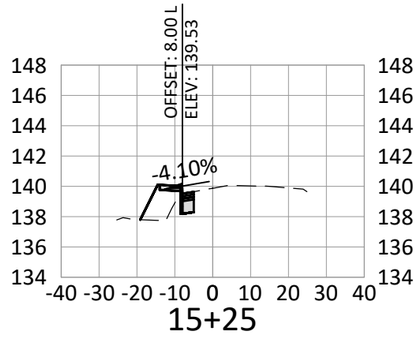
DESIGNED: HHPR TEAM	SHEET NO. WA01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

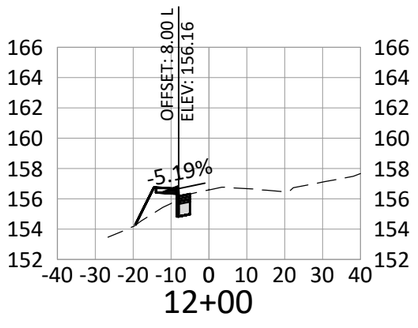
DRAWING NAME: CWL10-WA01 WALLS.DWG

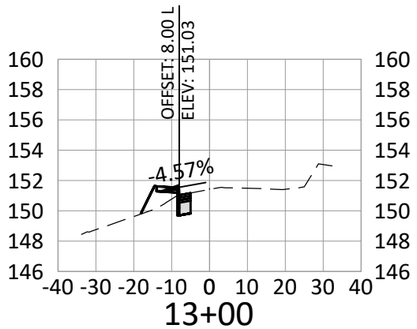


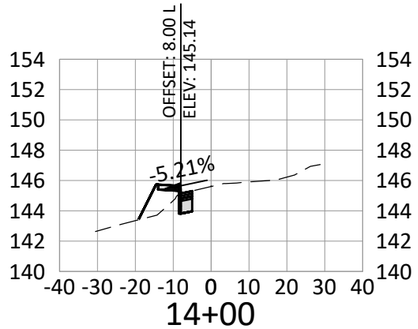


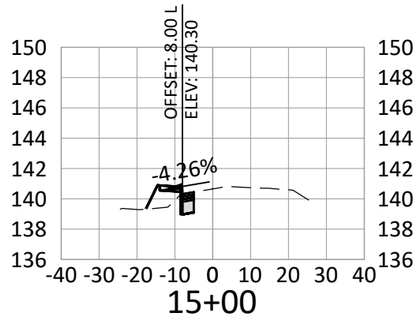


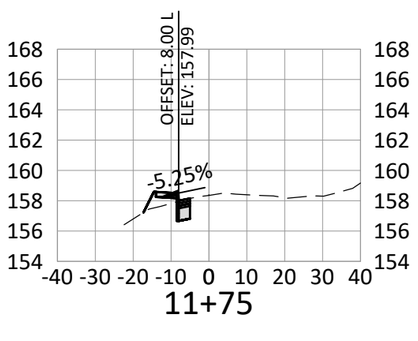


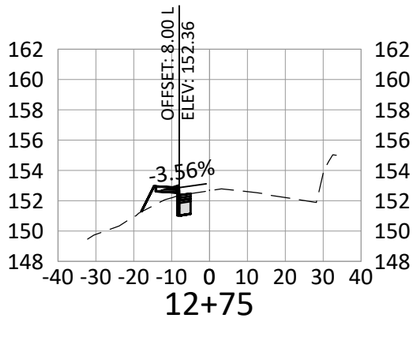


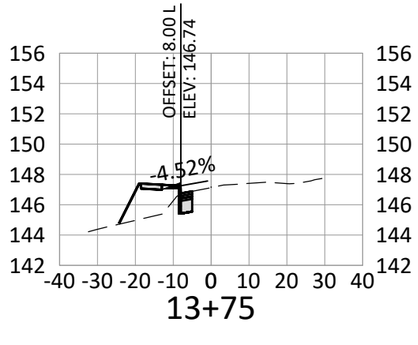


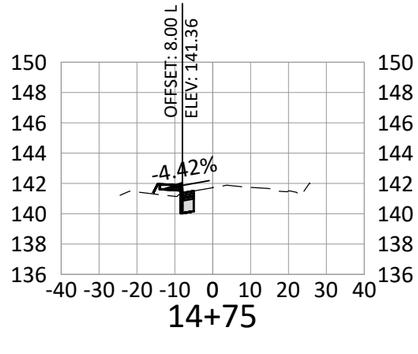


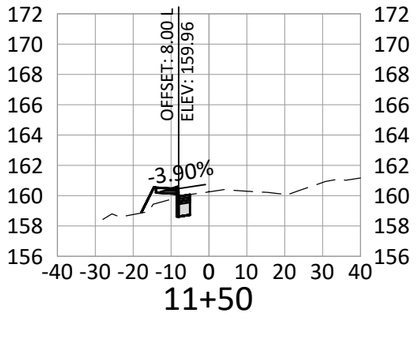


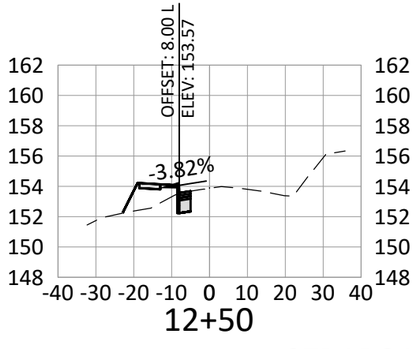


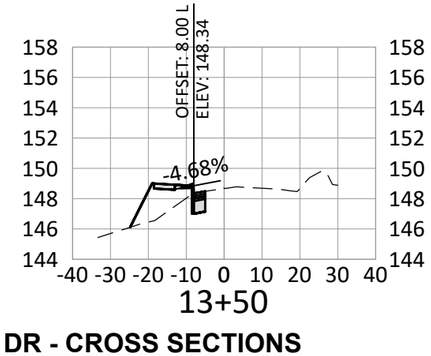


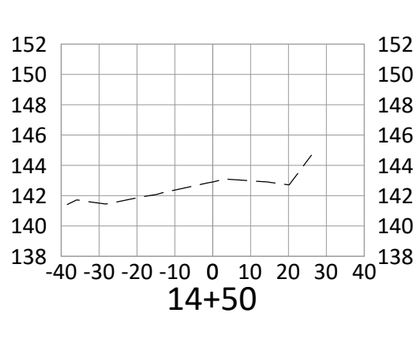












CEDAROAK DR - CROSS SECTIONS

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

DRAWING NAME: CWL10-XS01 CROSS SECT.DWG

CROSS SECTIONS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

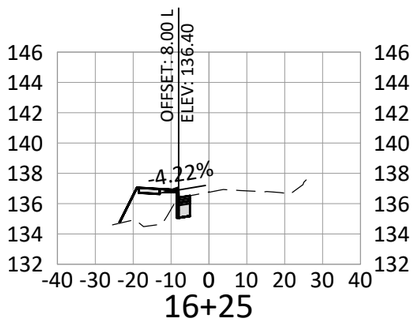
Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

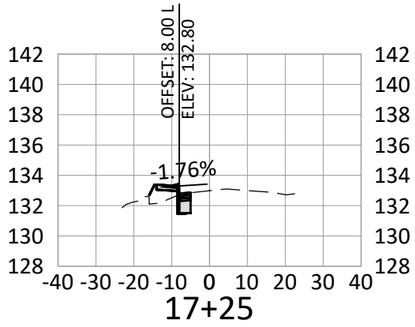
City of West Linn

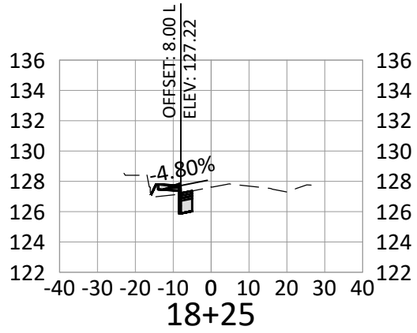
REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY

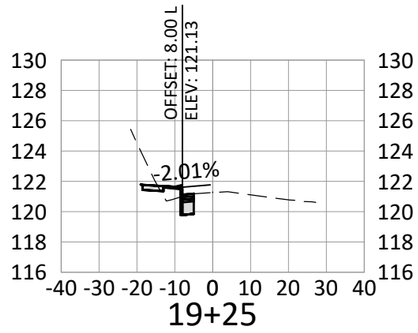
EXPIRES: 6/30/25

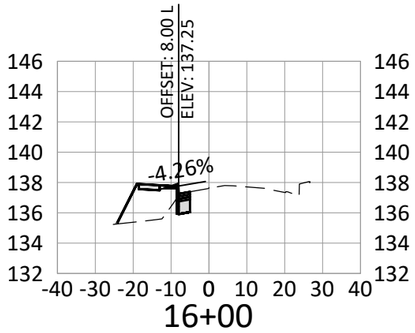
DESIGNED: HHPR TEAM	SHEET NO. XS01
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

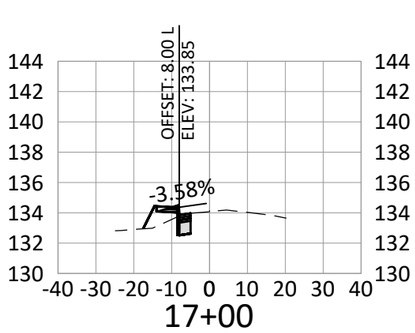


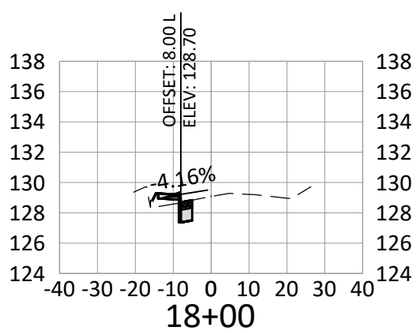


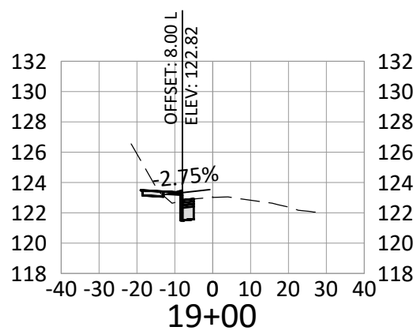


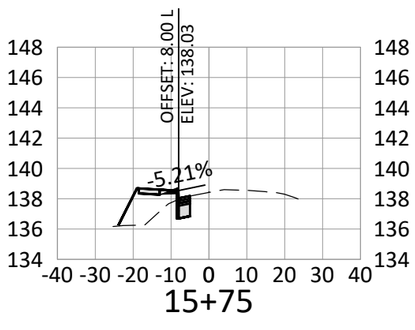


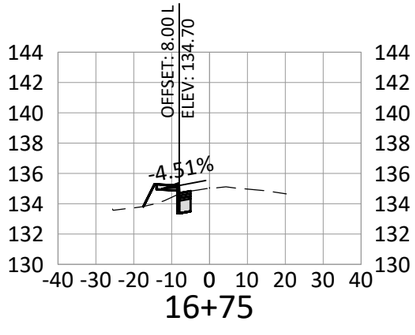


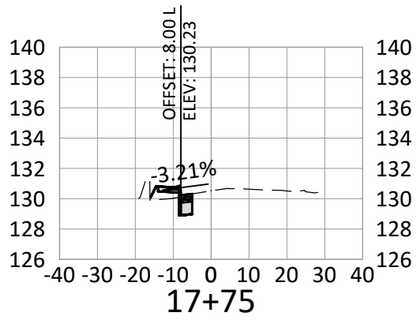


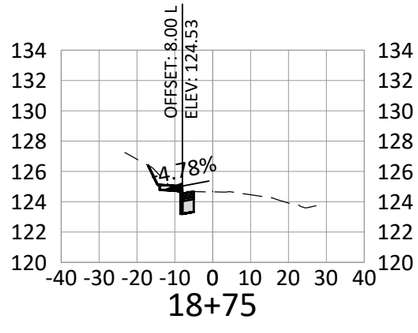


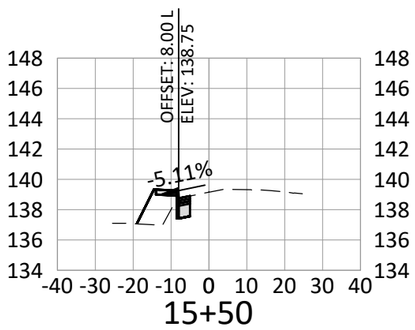


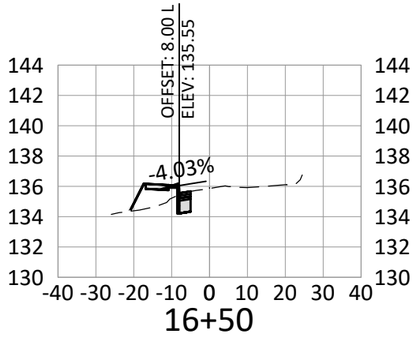


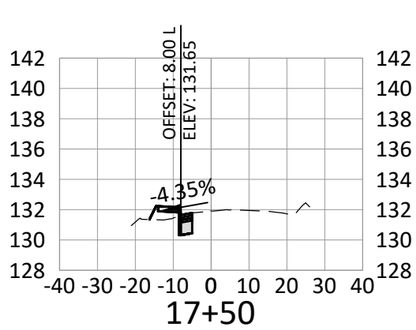


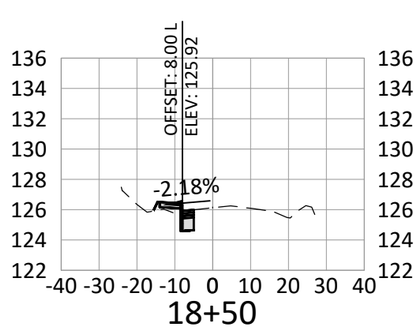












CEDAROAK DR - CROSS SECTIONS

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

CROSS SECTIONS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

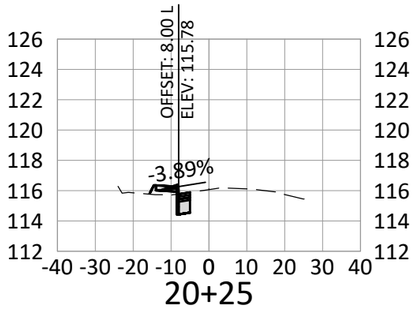
City of West Linn

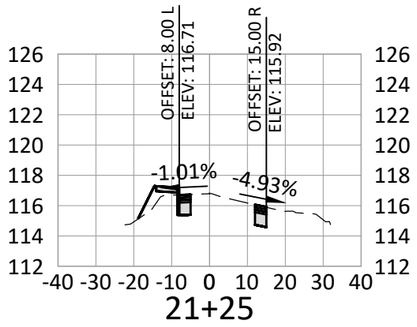
REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAMES S. HOUF
JAN. 10, 2017
PRELIMINARY

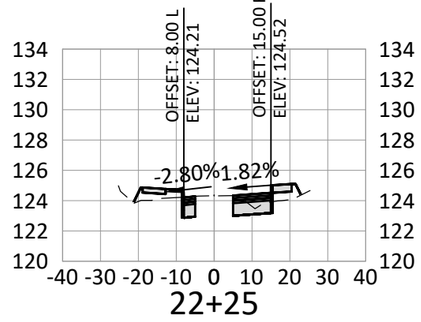
EXPIRES: 6/30/25

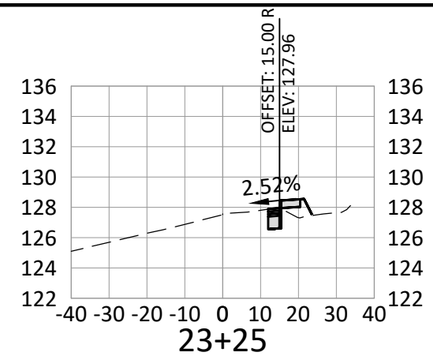
DESIGNED: HHPR TEAM	SHEET NO. XS02
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

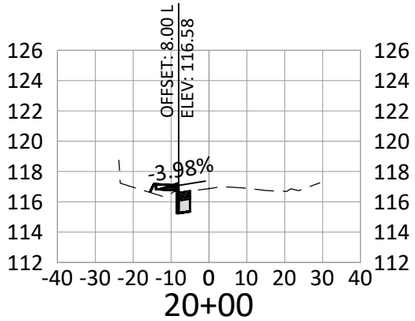
DRAWING NAME: CWL10-XS01 CROSS SECT.DWG

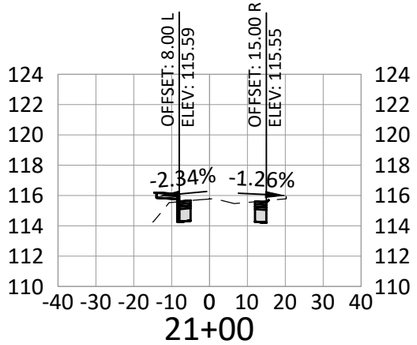


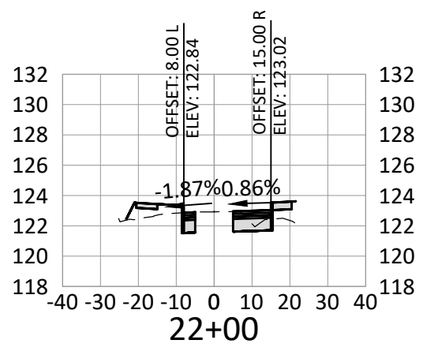


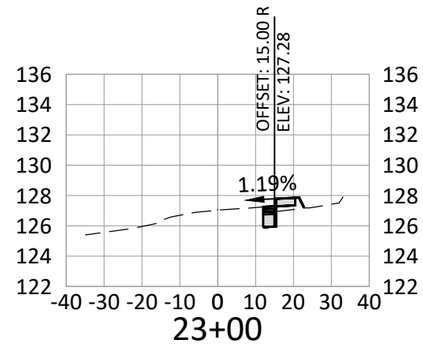


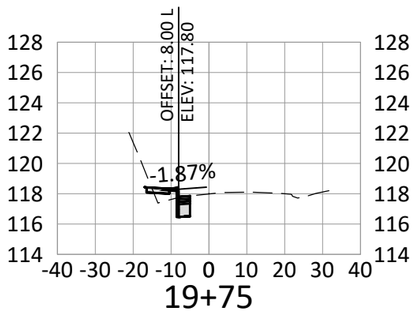


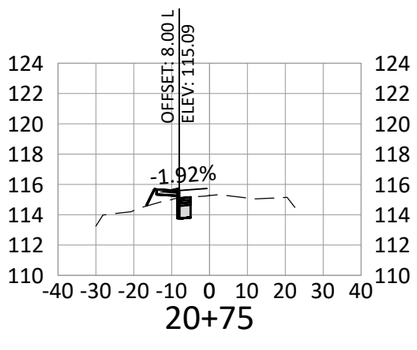


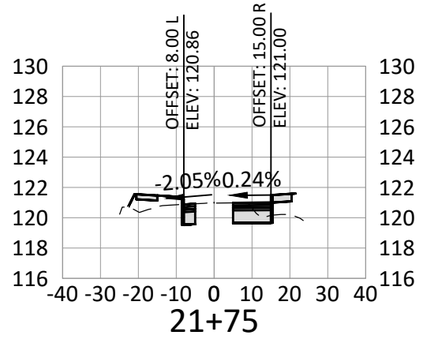


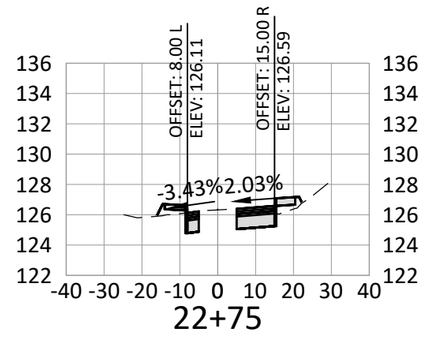


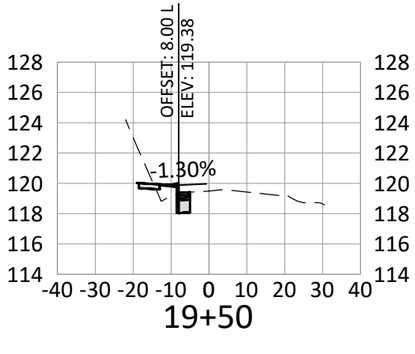


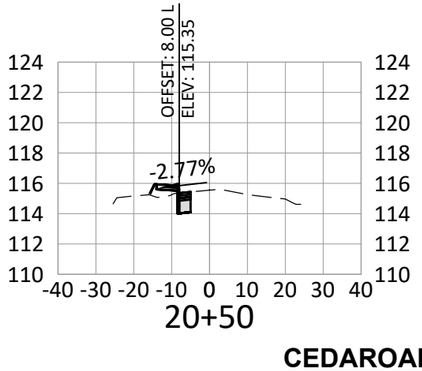


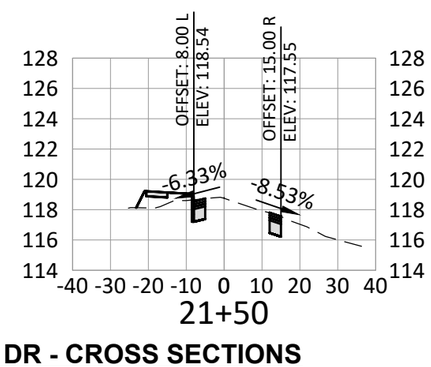


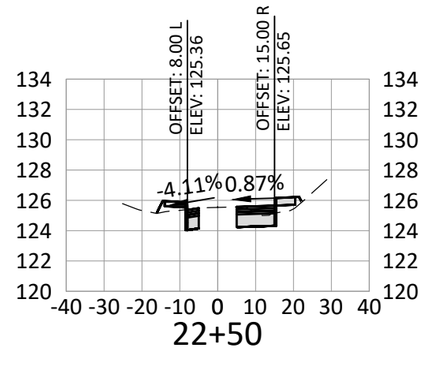












CEDAROAK DR - CROSS SECTIONS

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

DRAWING NAME: CWL10-XS01 CROSS SECT.DWG

CROSS SECTIONS
CEDAROAK DRIVE SAFE ROUTES
WEST LINN, OREGON

Harper Houf Peterson Righellis Inc.
ENGINEERS • PLANNERS
LANDSCAPE ARCHITECTS • SURVEYORS
205 SE Spokane Street, Suite 200, Portland, OR 97202
phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

City of West Linn

REGISTERED PROFESSIONAL ENGINEER
86,200
OREGON
JAN. 10, 2017
JAMES S. HOUF
PRELIMINARY

EXPIRES: 6/30/25

DESIGNED: HHPR TEAM	SHEET NO. XS03
DRAWN: HHPR TEAM	
CHECKED: JSH	
DATE: 2-12-2024	JOB NO. CWL-10

Safe Routes to School- Cedaroak Drive

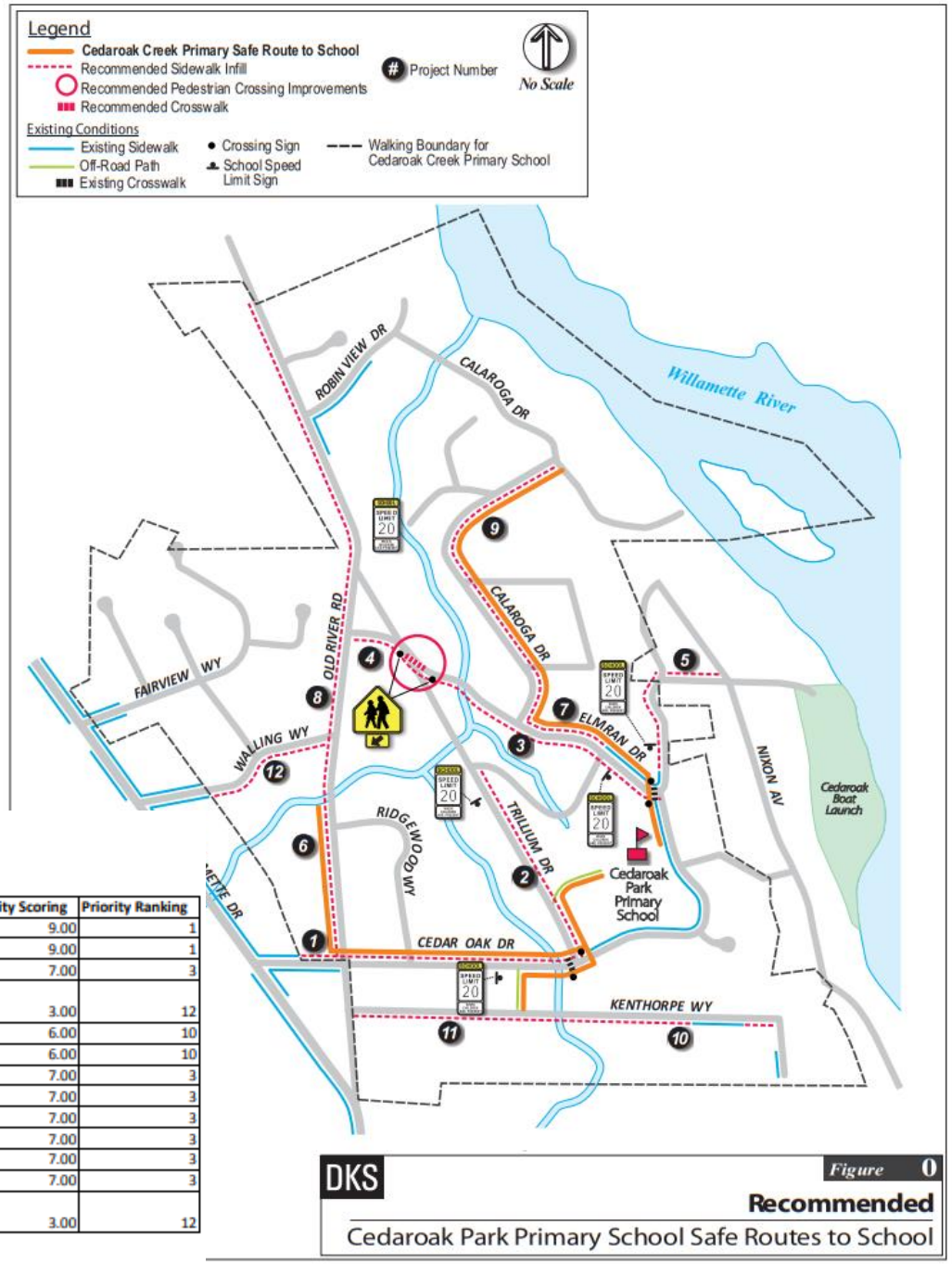
Update to Council 4/1/24

Safe Routes to School Program Overview

- Safe Routes to School (SRTS) is an approach that promotes walking and bicycling to school through infrastructure improvements, enforcement tools, and safety education.
- Nationally, 10-14% of morning car trips are for school travel.
- SRTS programs can be implemented by a department of transportation, metropolitan planning organization, local government, school district, or even a school.

Cedaroak

Project #	Project Type	Roadway	From	To	Project Description	On Safe Route?	TSP?	Cost Estimate	Priority Scoring	Priority Ranking
C1	Sidewalk Installation	Cedar Oak Drive	Trillium Drive	Highway 43	install sidewalk on north side	Y	P12	$ 880,000	9.00	1
C2	Sidewalk Installation	Trillum Drive	Glen Terrace	Cedar Oak Drive	install sidewalk on east side	Y	P53	$ 470,000	9.00	1
C3	Sidewalk Installation	Elmran Drive	Old River Road	Cedar Oak Drive	install sidewalk on south side	N	N	$ 1,610,000	7.00	3
C4	Signing and Striping	Elmran Drive			add school crossing signs and crosswalk striping on south leg	N	N	$ 10,000	3.00	12
C5	Sidewalk Installation	Elmran Drive	Cedar Oak Drive	Nixon Ave	install sidewalk on east/north side	N	N	$ 510,000	6.00	10
C6	Sidewalk Installation	Old River Road	Cedar Oak Drive	creek	install sidewalk on west side	Y	N	$ 350,000	6.00	10
C7	Sidewalk Installation	Elmran Drive	Glen Terrace	Calaroaga Court	install sidewalk on north side	Y	N	$ 160,000	7.00	3
C8	Sidewalk Installation	Old River Road	creek	Riverside Court	install sidewalk on west side	N	N	$ 930,000	7.00	3
C9	Sidewalk Installation	Calaroga Drive	Elmran Drive	Calaroaga Court	install sidewalk on east side	Y	N	$ 640,000	7.00	3
C10	Sidewalk Installation	Kenthorpe Way	trail entrance	end	install sidewalk on south side where missing	N	N	$ 450,000	7.00	3
C11	Sidewalk Installation	Kenthorpe Way	Old River Road	trail entrance	install sidewalk on south side	N	N	$ 370,000	7.00	3
C12	Sidewalk Installation	Wailing Way	Old River Road	sidewalk	install sidewalk on south side	N	N	$ 320,000	7.00	3
C13	Signing and Striping	Various			replace existing school speed limit signs with flashers	Y	N	$ 30,000	3.00	12
					TOTAL COST			$ 6,730,000		

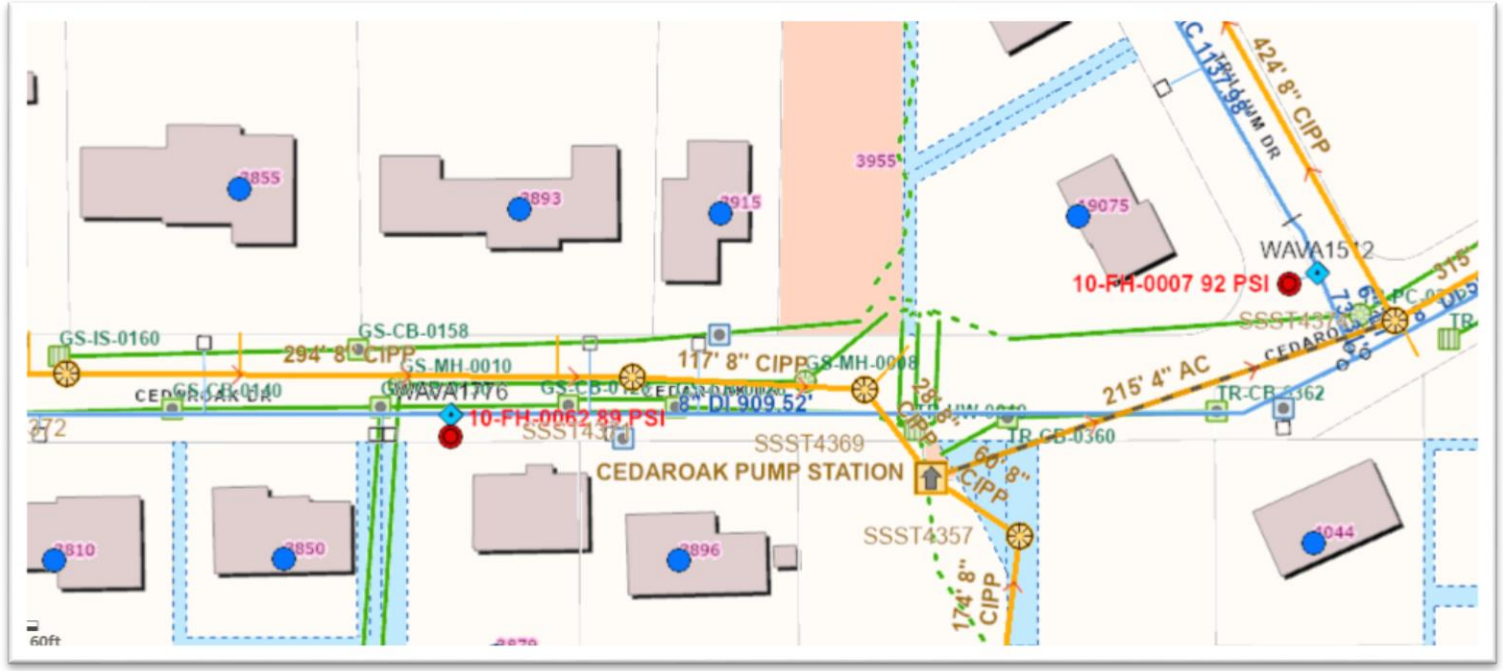


Funding

- GO-Bond- On May 15, 2018, the voters of West Linn approved Ballot Measure 3-527 authorizing the issuance of up to $20 million in general obligation bonds to improve roads, parks, and city facilities
- SRTS Grants
  - ODOT has funding in the 2023-26 budg

Existing Conditions

- Right of Way (ROW)
- Utilities
  - City Storm, Sewer, and Water
  - Overhead Utilities (Power, communications)
  - Natural Gas
- Intersections
  - Old River Drive
  - Ridgewood Way
  - Trillium Drive



Existing Corridor

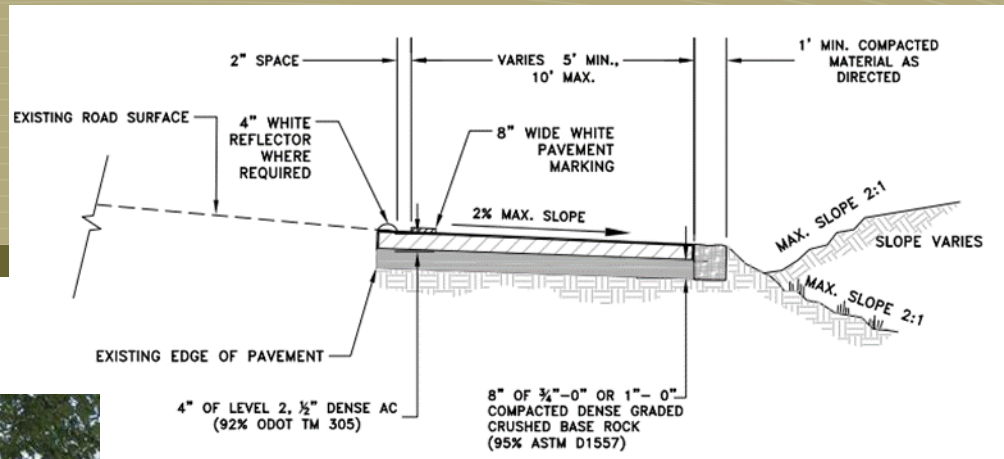
Existing Corridor Continued

Existing Utilities

Public Outreach

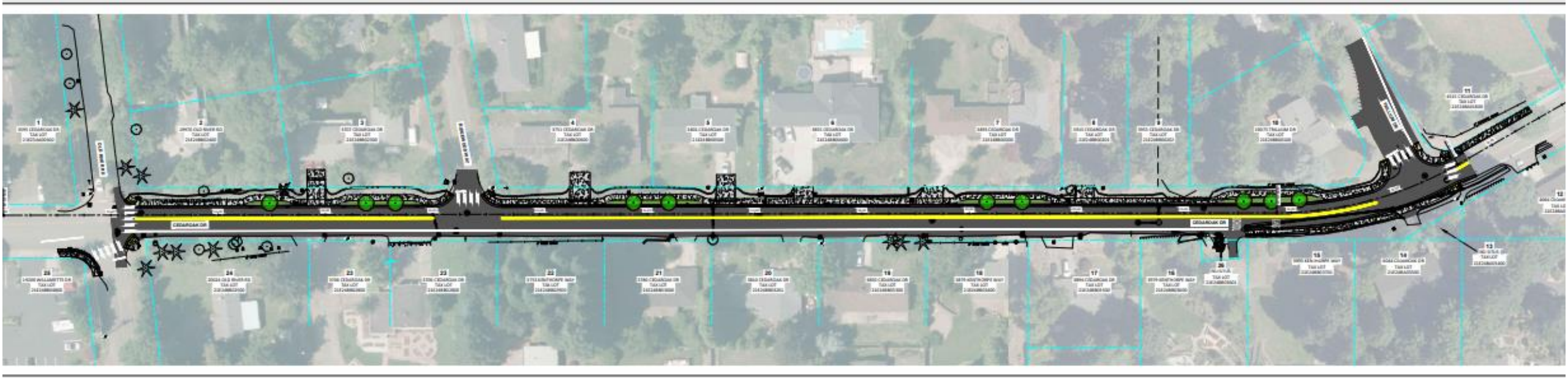
- 7/9/2019 City Staff met with RNA to discuss Safe Routes project priorities.
- 9/5/2019 Transportation Advisory Board unanimously recommended highest prioritization for Cedaroak sidewalk (sidewalk on north side).
- 6/20/2020 Surveying and design started
- 10/19/2022 Cedaroak walk with follow up re
- 12/13/2022 Update at RNA meeting
- 4/11/2023 Update to RNA on design
- 5/9/2023 RNA Prioritized Safe Routes
- 6/13/2023 Sidewalk concept plan presented
- 2/1/2024 Neighborhood walk to discuss plans
- 2/13/2024 90% plans presented to RNA
- 3/12/2024 Discussion of plans with RNA

Design Considerations/ Constraints

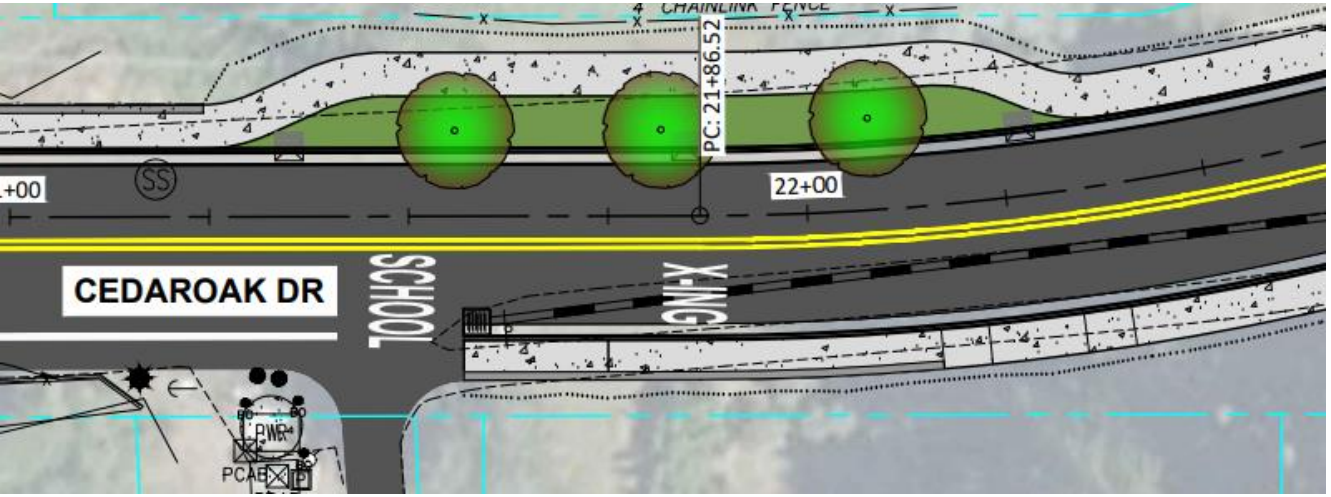


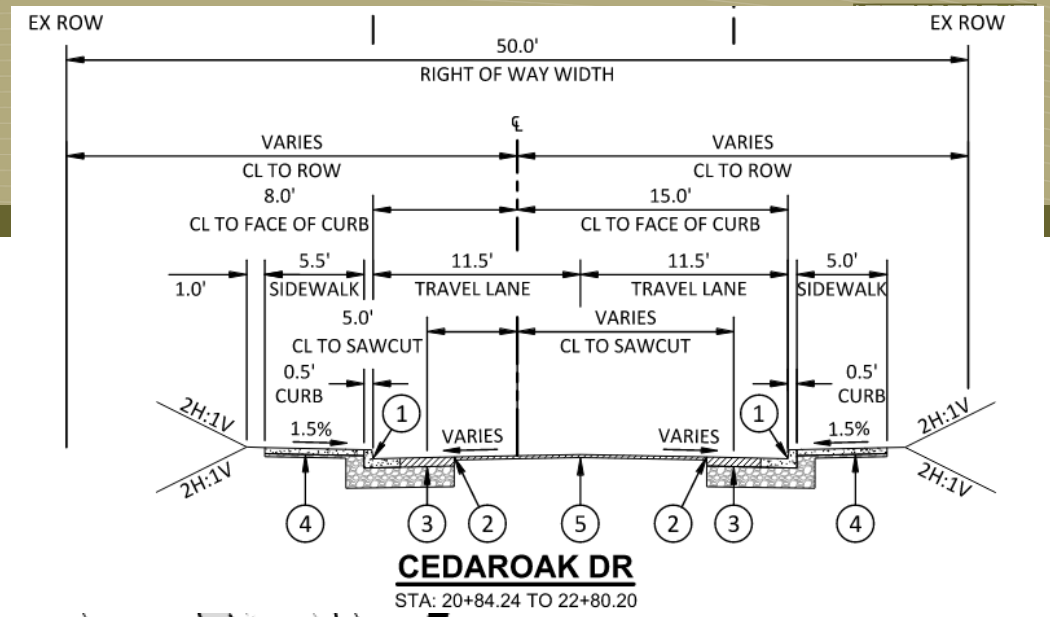
- The American with Disabilities Act (ADA)
  - Public Right of Way Accessibility Guidelines (PROWAG)
  - PROWAG Final Rule in effect 09/07/2023 (www.federalregister.gov)
- Public Works Standards
  - Transportation System Plan (TSP)
  - Curb, stormwater facilities, and driveway approaches
- Construction/Maintenance Cost
- Exiting topography
- Feedback from Public Outreach

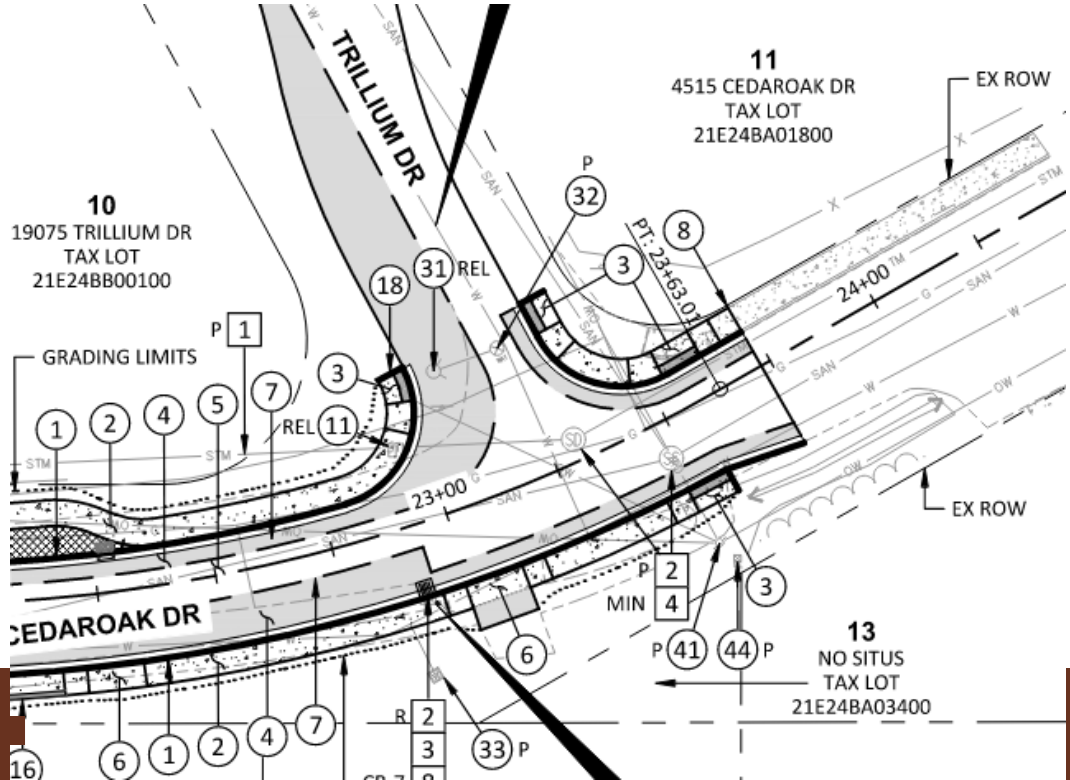
90% Plan Strip Map



90% Plans: Details 1

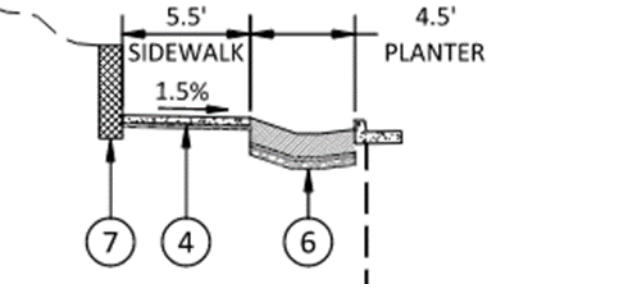




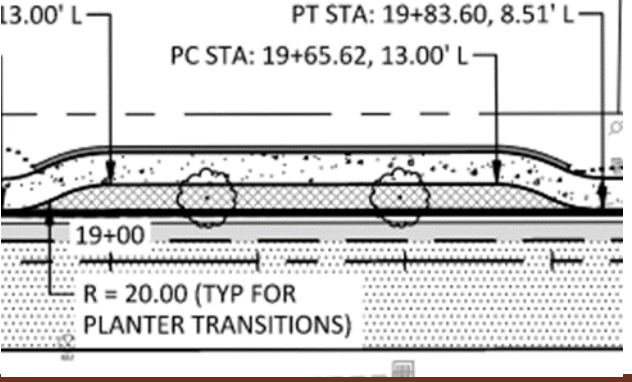


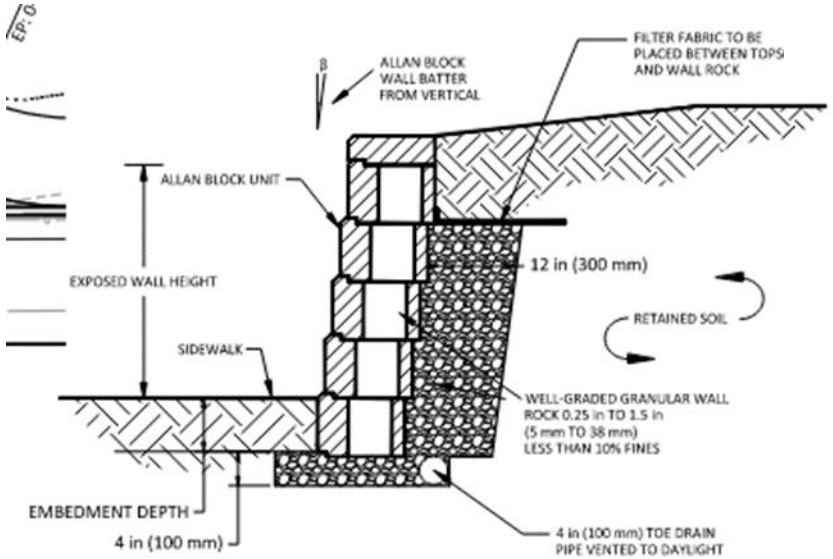
-Trillium intersection
-Grading details of intersections to be completed with 100% plans

90% Plans: Details 2

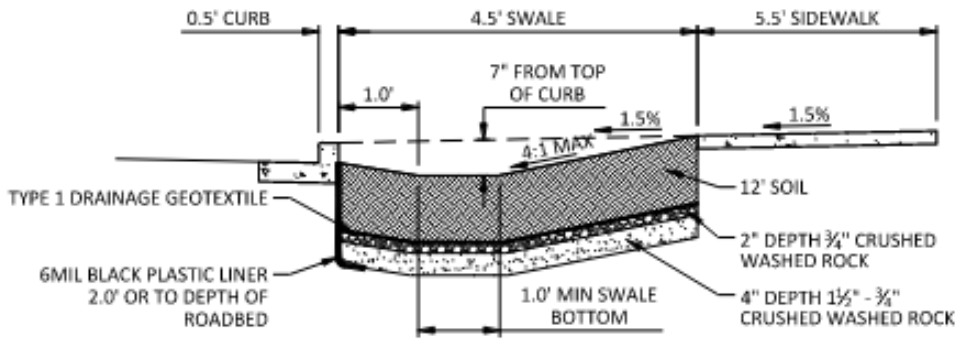


7
3893 CEDAROAK DR
TAX LOT
21E24BB00300

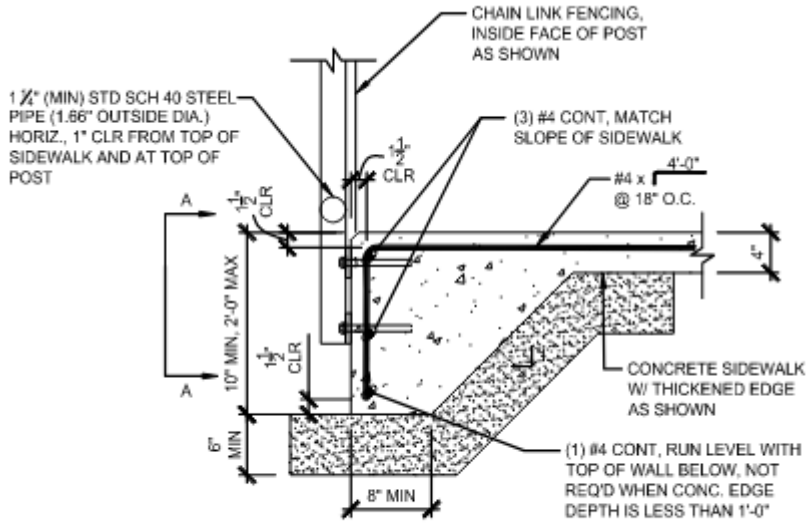




SEGMENTAL BLOCK WALL
NTS



TYPICAL SWALE SECTION
NTS



THICKENED EDGE SIDEWALK WITH FENCE DETAIL
NTS

Construction/Maintenance Cost

- Estimated Construction Cost

  $1,069,077.95

- Future Maintenance Needs:
  - Storm Facilities
  - Sidewalk
  - Roadway

ESTIMATED HARD CONSTRUCTION COSTS — OVERALL PROJECT

ITEM	SPEC	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
Part 00200 - Temporary Features and Appurtenances						
1	00210	Mobilization	LS	1	10.0%	$ 80,000.00
2	00221	Temporary Work Zone Traffic Control, Complete	LS	1	8.0%	$ 70,000.00
3	00280	Erosion Control	LS	1	1.0%	$ 10,000.00
4	00280	Inlet Protection, Type 3	Each	18	$ 120.00	$ 2,160.00
5	00280	Inlet Protection, Type 4	Each	4	$ 110.00	$ 440.00
6	00280	Sediment Barrier, Type 8	Ft	1,400	$ 7.00	$ 9,800.00
7	00290	Pollution Control Plan	LS	1	$ 2,500.00	$ 2,500.00
		Temporary Features and Appurtenances Subtotal				**$ 174,900.00**
Part 00300 - Roadwork						
8	00305	Construction Survey Work	LS	1	3.5%	$ 30,000.00
9	00310	Removal of Structures and Obstructions	LS	1	$ 25,000.00	$ 25,000.00
10	00320	Clearing and Grubbing	LS	1	$ 25,000.00	$ 25,000.00
11	00330	Earthwork, Excavation and Embankment	LS	1	$ 85,000.00	$ 85,000.00
12	00331	12 Inch Subgrade Stabilization	SY	170	$ 40.00	$ 6,800.00
13	00350	Subgrade Geotextile	SY	1,400	$ 1.50	$ 2,100.00
		Roadwork Subtotal				**$ 173,900.00**
Part 00400 - Drainage and Sewers						
14	00445	12 Inch Storm Sewer Pipe, Class "B" Backfill	Ft	88	$ 180.00	$ 15,840.00
15	00445	Roof or Field Drain Connections - Budget Item	Each	4	$ 1,500.00	$ 6,000.00
16	00470	Concrete Manholes, Storm Sewer Standard Manholes	Each	1	$ 9,500.00	$ 9,500.00
17	00470	Concrete Inlets, Type G-2	Each	4	$ 3,500.00	$ 14,000.00
18	00470	Concrete Inlets, Type CG-2	Each	3	$ 3,500.00	$ 10,500.00
19	00490	Connection to Existing Structures	Each	1	$ 2,500.00	$ 2,500.00
20	00490	Minor Adjustment of Manholes	Each	9	$ 1,200.00	$ 10,800.00
21	00495	Trench Resurfacing	SY	40	$ 100.00	$ 4,000.00
		Drainage and Sewers Subtotal				**$ 73,140.00**
Part 00500 - Bridges and Walls						
22	00596B	Retaining Wall, Segmental Block (Height 2-4 Foot)	SF	330	$ 75.00	$ 24,750.00
		Bridges and Walls Subtotal				**$ 24,750.00**
Part 00600 - Bases						
23	00620	Cold Plain Pavement Removal, 0 to 2 Inches Deep	SY	2,850	$ 10.00	$ 28,500.00
24	00641	Aggregate Base	CY	520	$ 75.00	$ 39,000.00
		Bases Subtotal				**$ 67,500.00**
Part 00700 - Wearing Surfaces						
25	00744	Level 2, 1/2" Dense ACP Mixture	Ton	550	$ 180.00	$ 99,000.00
26	00749	Extra for Asphalt Approaches	Each	1	$ 500.00	$ 500.00
27	00759	Concrete Curbs, Curb and Gutter	Ft	1,623	$ 36.00	$ 58,428.00
28	00759	Concrete Curbs, Standard Curb	Ft	42	$ 40.00	$ 1,680.00
29	00759	Concrete Walks	SF	6,435	$ 12.00	$ 77,220.00
30	00759	Extra for Thickened Edge Walks	Ft	100	$ 250.00	$ 25,000.00
31	00759	Concrete Driveways	SF	1,145	$ 18.00	$ 20,610.00
32	00759	Concrete Driveway Connection	SF	1,675	$ 18.00	$ 30,150.00
33	00759	Extra For New Curb Ramps	Each	8	$ 2,000.00	$ 16,000.00
34	00759	Truncated Domes on New Surfaces	SF	130	$ 30.00	$ 3,900.00
		Wearing Surfaces Subtotal				**$ 332,488.00**
Part 00800 - Permanent Traffic Safety and Guidance Devices						
35	00865	Thermoplasitc, Extruded, Surface, Non-Profiled	LF	4,260	$ 2.25	$ 9,585.00
36	00867	Pavement Legend, Type B-HS: "SCHOOL"	Each	1	$ 500.00	$ 500.00
37	00867	Pavement Legend, Type B-HS: "X-ING"	Each	1	$ 500.00	$ 500.00
38	00867	Pavement Bar, Type B-HS	SF	400	$ 15.00	$ 6,000.00
		Permanent Traffic Safety and Guidance Devices Subtotal				**$ 16,585.00**
Part 00900 - Permanent Traffic Control and Illumination Systems						
39	00905	Remove and Reinstall Existing Signs	LS	1	$ 5,000.00	$ 5,000.00
		Permanent Traffic Control and Illumination Systems Subtotal				**$ 5,000.00**
Part 01000 - Right of Way Development and Control						
40	01015	Washed Crushed Drain Rock for Stormwater Planters	Ton	80	$ 100.00	$ 8,000.00
41	01015	Wood Check Dams	Each	63	$ 120.00	$ 7,560.00
42	01030	Permanent Seeding	Acre	0.2	$ 10,000.00	$ 2,000.00
43	01040	Deciduous Trees, 2 Inch Caliper	Each	10	$ 500.00	$ 5,000.00
44	01040	Wetland Plants	Each	1,430	$ 12.00	$ 17,160.00
45	01040	Topsoil	CY	50	$ 65.00	$ 3,250.00
46	01040	Water Quality Mixture	CY	70	$ 70.00	$ 4,900.00
47	01040	Bark Mulch	SY	20	$ 65.00	$ 1,300.00
48	01040	Root Barrier	Ft	160	$ 10.00	$ 1,600.00
49	01050	4' Black Vinyl Coated Chain Link Fence with Top Rail and Face Mounted	Ft	40	$ 100.00	$ 4,000.00
50	01070	Single Mailbox Supports	Each	11	$ 600.00	$ 6,600.00
		Right of Way Development and Control Subtotal				**$ 61,370.00**
					Construction Subtotal	**$ 929,633.00**
					15% Contingency	**$ 139,444.95**
					Construction Total	**$ 1,069,077.95**

Next Steps

- 100% Plans
- Contract Bid for Construction
- Council Approval
- Construction
  - Summer of 2024
  - Completion prior to start of 2024/2025 School Year

THE MICHAEL J. FOX FOUNDATION
FOR PARKINSON'S RESEARCH

State Government Relations

2024 Policy Priorities

At The Michael J. Fox Foundation (MJFF), we advocate because the government plays a pivotal role in accelerating research toward prevention and a cure, and ensuring quality of life for those already living with Parkinson's disease and their families.

Why We Advocate

Parkinson's disease occurs when brain cells that make dopamine, a chemical that coordinates movement, stop working or die. The experience of living with Parkinson's disease over the course of a lifetime is unique to each person. As symptoms and progression vary from person to person, neither a patient nor their doctor can predict which symptoms they will experience, when they may get them, or how severe they will be.

Currently, there is no cure for Parkinson's disease. There is no one exact cause of Parkinson's, and researchers believe it is likely caused by a combination of genetic and environmental factors. Known primarily as a "movement disorder," the most known traits of Parkinson's are tremor, slowness, walking and balance problems, as well as depression, memory problems, constipation, dementia and more. Parkinson's disease is a lifelong and progressive disease, which means that symptoms slowly worsen over time.

Funding Parkinson's Research

State governments must find new and innovative research to assist in finding treatments and cures for Parkinson's disease. Establishing or increasing state funding for Parkinson's research will lead discoveries that will improve the lives of people living with Parkinson's disease today in partnership with the many clinical studies being done around the world in partnership with MJFF.

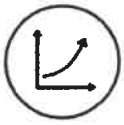
Since 2010, MJFF has been dedicated to building, strengthening and expanding the infrastructure for a longitudinal study known as Parkinson's Progression Markers Initiative (PPMI). With nearly $450 million invested, PPMI has 50 clinical sites in 12 countries and over 2,000 participants. Public sector partnership and investment in PPMI is needed to accelerate research for earlier diagnosis, better treatments and, ultimately, a cure for Parkinson's disease.

An estimated more than *one million people* in the U.S. live with Parkinson's disease.

The annual economic burden of Parkinson's in the U.S. is an estimated *$52 billion.*

Parkinson's is the *second-most common* and *fastest-growing* neurological disease.

MJFF has funded nearly *$2 billion* in research programs to date.



Stay in touch with us by visiting the **State Action Center** or emailing **policy@michaeljfox.org.**

Creating Parkinson's Research Registries

A disease registry is a special database that contains information about people diagnosed with a specific type of disease. Registries can be used to closely monitor the health care process to detect potential problems and to ultimately achieve better results for patients.

Through state-level registries, designated agencies collect de-identified patient information with the goal of sharing the database with the CDC for use in research, planning for health care requirements and education of health care providers.

Passing legislation to create a statewide, population-based registry will be used to measure the incidence and prevalence of Parkinson's disease. The data collected will fuel further research that will discover improved treatments and therapeutics for Parkinson's disease.

Surprisingly, little is known about how Parkinson's disease is distributed among different population groups and whether the patterns of the disease are changing over time.

This legislation will:

+ Identify high-risk groups, support patient contact studies and serve as a valuable data resource to bolster continued research of Parkinson's disease.
+ Determine an accurate rate of incidence and prevalence of Parkinson's disease by state.
+ Help researchers study patterns of Parkinson's disease over time.
+ Improve our understanding of potential links, such as pesticide usage and military service, and the development of Parkinson's disease.

Status of State Legislation

+ To date, there are registries and/or recently enacted legislation to establish a registry in California, Maryland, Missouri, Nebraska, Nevada, Ohio, South Carolina, Utah, Washington and West Virginia.
+ In 2024, legislation has been introduced in Hawaii, Massachusetts, New Jersey and New York.

Increasing Access to Biomarker Testing

Biomarker testing is the analysis of a person's tissue, blood, and other substances, known as biomarkers, that can provide information about cancer. Biomarker testing is a crucial step for accessing precision medicine, including targeted therapies that can lead to improved survivorship and better quality of life for cancer patients. While most current applications of biomarker testing are in oncology and autoimmune diseases, there is research underway to benefit patients in other areas, including neurological conditions such as Parkinson's disease.

Currently, insurance coverage for biomarker testing is failing to keep pace with innovation and advancement in treatment. We urge states to take legislative action to require health plans, including Medicaid, to cover biomarker testing so that more individuals have access to this important health care tool.

Legislative action on biomarker testing access coincided with **the Foundation's groundbreaking news, announced in April 2023, that researchers have discovered a new biomarker tool that can reveal a key pathology of the Parkinson's: abnormal alpha-synuclein — known as the "Parkinson's protein" — in brain and body cells.**

Steady and critical advances in the pursuit of a reliable and accurate biomarker test have been the hallmark of PPMI, which was built for this purpose. The discovery enabled by the new test is the latest, and most significant, finding to date from the study.

You can read more about this extraordinary scientific breakthrough, and the accompanying study posted in *The Lancet Neurology*, **here.**

Status of State Legislation

+ In 2023, legislation to expand access to biomarker testing, or to study the benefits of doing so, was enacted in Arizona, California, Georgia, Kentucky, Louisiana, Maryland, Nevada, New Hampshire, New Mexico, New York, Oklahoma and Texas.
+ In 2024, legislation has been introduced, or is expected to be introduced imminently, in Connecticut, Florida, Hawaii, Indiana, Iowa, Maine, Massachusetts, Ohio, Pennsylvania, Vermont and West Virginia.

Expanding Genetic Testing Protections

The Genetic Information Nondiscrimination Act (GINA) is a federal law that prohibits health insurers from using information learned through genetic testing, such as a gene mutation linked to neurological disorders, to deny coverage or engage in price discrimination. These protections, however, do not extend to life insurance, long-term care insurance and disability insurance coverage. This needs to change.

No one should have to fear that accessing genetic testing may be weaponized against them in the future. We believe that more people should have access to genetic testing and that no one should face discrimination in pursuit of their health care needs. State legislatures should pass legislation that prohibits discrimination based on genetic predisposition for life insurance, long-term care insurance, and disability insurance coverage. These laws should address the refusal to issue or renew a policy, charging any increased rate, or restricting any length of coverage, and requiring genetic testing before approving coverage.

Environmental Transparency

A small minority of Parkinson's disease can be predominantly linked to genetics, leaving the etiology of the majority of cases including an environmental risk component. A large body of literature suggests that environmental risks (including, but not limited to pollutants, pathogens and diet) could play a role in the development of Parkinson's disease. There is still more research required to understand the magnitude and mechanisms of environmental risks and the development of Parkinson's disease.

To contribute to this work, our state team is focused on increasing environmental transparency, such as requiring states to develop and publicly share on a state website where toxic chemicals have been approved for use. We believe that state governments have a duty to provide public health information and we will continue to push for further transparency on behalf of our patient community.

Access to Care

Prescription Drug Affordability

+ **People with Parkinson's disease need to be able to afford their medications, and they need quick access to those treatments to manage Parkinson's symptoms.** As health care costs increase, we know people with Parkinson's disease feel the financial strain when costs of prescriptions also go up.
+ We urge states to pass legislation that allows people with Parkinson's disease to evenly spread out their medication costs over a whole year, instead of being hit with one big payment.

Social Determinants of Health

+ **Economic and social conditions have a powerful impact on our health and wellness.** Stable housing, reliable transportation and access to healthy foods are all factors that can make a difference in the prevention and management of many health conditions like diabetes, asthma and heart disease. Known as social determinants of health, a focus on these non-medical factors can improve health outcomes and wellbeing.

Mental Health

+ **Access to behavioral health care is essential for people with Parkinson's disease because the disease makes them prone to adverse mental health conditions.** We urge states to pass legislation to expand the behavioral health workforce and remove barriers to accessing behavioral health services via telehealth so that people with Parkinson's disease can access behavioral health care when and where they need it.

THE MICHAEL J. FOX FOUNDATION
FOR PARKINSON'S RESEARCH

The Michael J. Fox Foundation for Parkinson's Research has a single, urgent goal: Eliminate Parkinson's in our lifetime. We have funded nearly $2 billion in research since our founding over 20 years ago. MJFF advocates at the federal and state level for funding and policies that accelerate the search for a cure and improve quality of life for people with Parkinson's as well as their families and caregivers. MJFF is here until Parkinson's isn't.

Stay in touch with us by visiting the **State Action Center** or emailing **policy@michaeljfox.org**.

The Economic Burden of Parkinson's Disease: Study Finds Annual Cost to Federal Government is $25 Billion, Double Previous Estimates

National Economic Burden of Parkinson's

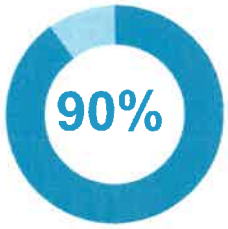
$52 Billion

Approximately 1 million people in the U.S. have Parkinson's, which costs the nation **$52 billion each year**. This includes a **direct medical cost of $25.4 billion**, with additional indirect and non-medical costs of **$26.5 billion.** It is estimated that more than **1.6 million** people in the United States will be impacted by Parkinson's disease by 2037, at an estimated economic burden of **$79 billion**.

The Direct Cost of PD to the Federal Government

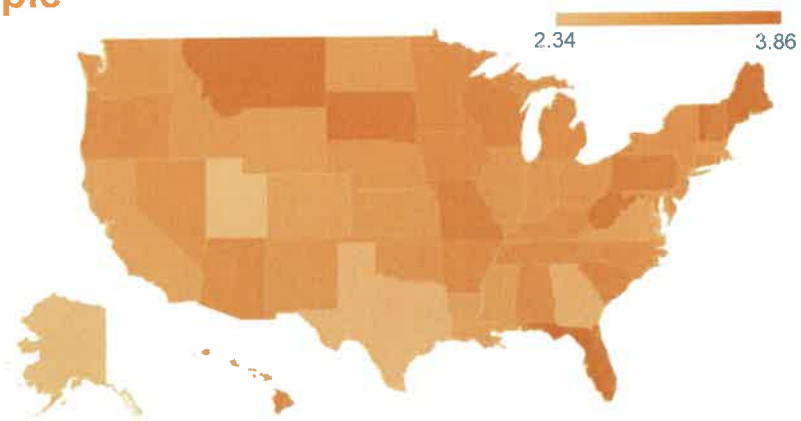
$25 Billion

$23 billion of the direct cost to the federal government is shouldered by Medicare, with an additional $2 billion attributable to SSI/SSDI.



Medicare insures 90% of people with Parkinson's. In 2017, only 7% of direct medical care costs were attributable to private insurance. The excess medical cost of PD for patients on Medicare is **$24,811 every year.**

Parkinson's Prevalence by State, per 1,000 People



For more information, contact policy@michaeljfox.org

Cost and Prevalence in Oregon

Oregon's population is
4,189,659 people
13,926 have Parkinson's

The direct and indirect costs to care for people with Parkinson's in Oregon is
$696 million

PD prevalence in Oregon:

3.32
Per 1,000 people

The federal government spends **$25 billion** every year to care for people with Parkinson's disease, and only **$234 million** researching the disease. It's time for the government to invest more to find a cure for Parkinson's.

THE MICHAEL J FOX FOUNDATION
FOR PARKINSON'S RESEARCH

CITY OF West Linn

Public Comment Form

I wish to speak during **Public Comments** (comments are limited to three minutes). Topic listed will be reflected in the meeting minutes.

Please specify topic (*required*): Boat Parking

I wish to wait and speak on the agenda item listed below (comments are limited to three minutes).

Please specify agenda item (*required*):

Please print:

Name: John Rodenburg

Phonetic spelling, if difficult to pronounce:

Address (Optional): 2499 Donegal Ct.

City: WL State: OR Zip: 97068

Email (Optional): Phone (Optional):

Please submit this form to the City Recorder along with copies of any material to be handed out to the Council.

This form is subject to public records laws. If requested, it may be disclosed to another party unless exempt from disclosure under Oregon Public Records Law.

CITY OF West Linn

Public Comment Form

I wish to speak during **Public Comments** (comments are limited to three minutes). Topic listed will be reflected in the meeting minutes.

Please specify topic (*required*): PARKING GW'S

I wish to wait and speak on the agenda item listed below (comments are limited to three minutes).

Please specify agenda item (*required*):

PROCLAMATION

Please print:

Name: Kevin Mansfield

Phonetic spelling, if difficult to pronounce:

Address (Optional): 1643 NE Russell Street

City: Portland State: OR Zip: 97212

Email (Optional): GRANDPAKEVIN@MSN.COM Phone (Optional): 503-776-0516

Please submit this form to the City Recorder along with copies of any material to be handed out to the Council.

This form is subject to public records laws. If requested, it may be disclosed to another party unless exempt from disclosure under Oregon Public Records Law.

CITY OF West Linn

Public Comment Form

I wish to speak during **Public Comments** (comments are limited to three minutes). Topic listed will be reflected in the meeting minutes.

Please specify topic (*required*): Parking Fields Bridge

I wish to wait and speak on the agenda item listed below (comments are limited to three minutes).

Please specify agenda item (*required*):

Please print:

Name: Shauna Schissler

Phonetic spelling, if difficult to pronounce:

Address (Optional): 25550 Cheryl Dr

City: West Linn State: OR Zip: 97068

Email (Optional): Phone (Optional): 503-320-5697

Please submit this form to the City Recorder along with copies of any material to be handed out to the Council.

This form is subject to public records laws. If requested, it may be disclosed to another party unless exempt from disclosure under Oregon Public Records Law.

CITY OF West Linn

Public Comment Form

I wish to speak during **Public Comments** (comments are limited to three minutes). Topic listed will be reflected in the meeting minutes.

Please specify topic (*required*): Safe Routs To Schools Cedaroak

I wish to wait and speak on the agenda item listed below (comments are limited to three minutes).

Please specify agenda item (*required*):

Please print:

Name: Anthony Bracco

Phonetic spelling, if difficult to pronounce:

Address (Optional): 2716 Robinwood Way

City: West linn State: OR Zip: 97068

Email (Optional): anthonymbracco@yahoo.com Phone (Optional): 503-675-1773

Please submit this form to the City Recorder along with copies of any material to be handed out to the Council.

This form is subject to public records laws. If requested, it may be disclosed to another party unless exempt from disclosure under Oregon Public Records Law.