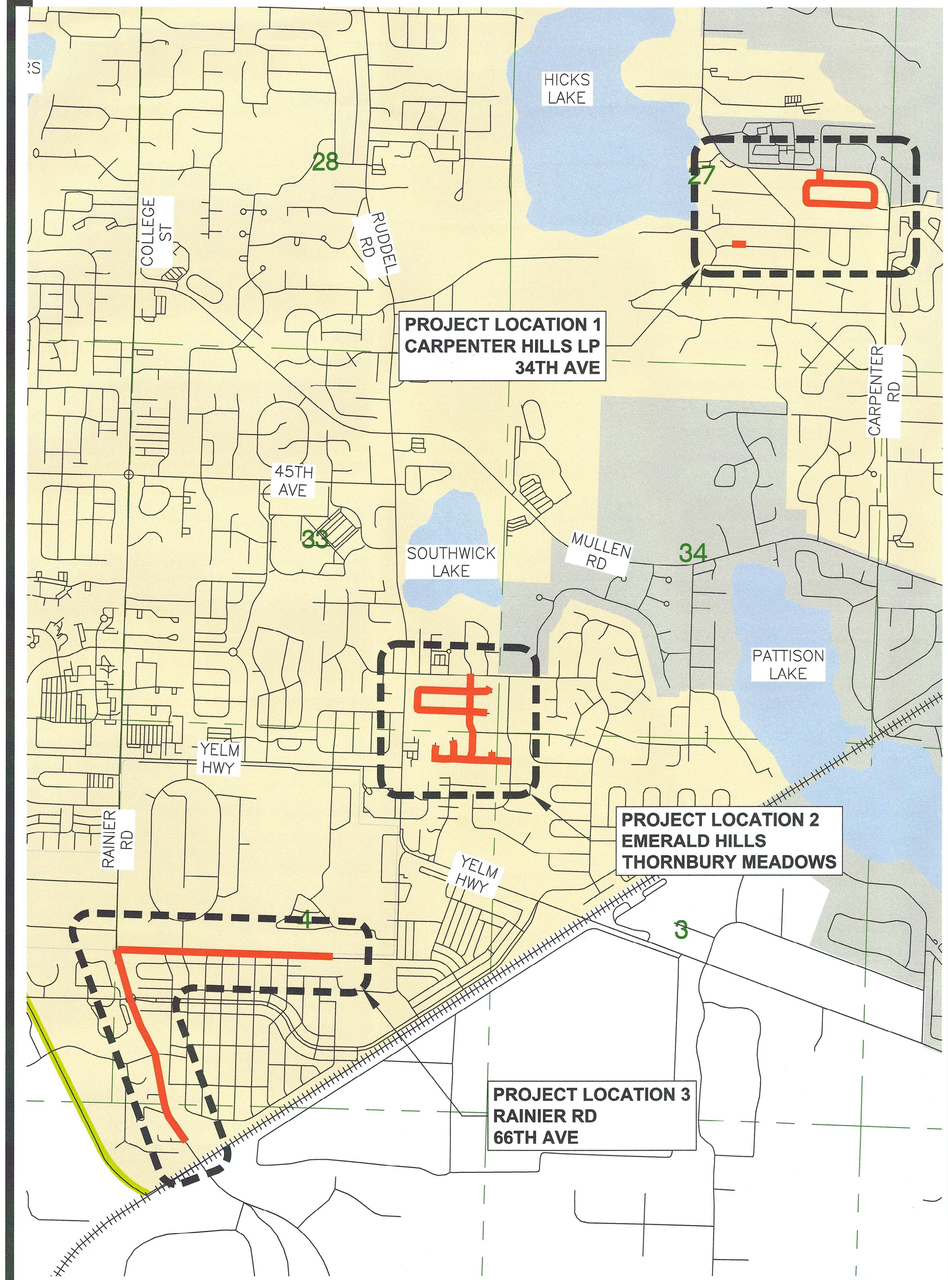


VICINITY MAP
CITY OF LACEY, WASHINGTON
SCALE : 1" = 1000'

2023 OVERLAY PHASE 1

LACEY CONTRACT # PW 2023-28
SECTION 27, T18N, R1W, W.M. SECTION 33, T18N, R1W, W.M.
SECTION 34, T18N, R1W, W.M. SECTION 03, T17N, R1W, W.M.
SECTION 04, T17N, R1W, W.M.

LACEY CITY OFFICIALS

MAYOR:	Andy Ryder
DEPUTY MAYOR:	Malcolm Miller
CITY COUNCIL:	Lenny Greenstein Michael Steadman Carolyn Cox Ed Kunkel Robin Vazquez
CITY MANAGER:	Rick Walk (Interim)
CITY ATTORNEY:	David S. Schneider
CITY ENGINEER:	Aubrey Collier, P.E., S.E.
DIRECTOR OF PUBLIC WORKS:	Scott Egger, P.E.

Andy S Collier City Eng. 5/15/23
for Public Works Director DATE

SHEET INDEX

LACEY

JUSTIN KNAPP 44688 REGISTERED PROFESSIONAL ENGINEER 5/15/23

Lacey Dwg. Number : D-23-02

BLOCK LEGEND:

SURVEY MONUMENT	
CATCH BASIN TYPE 1	
STORM MANHOLE & CB TYPE 2	D
FIRE HYDRANT	
AIR & VACUUM RELEASE VALVE	
WATER METER	W
WATER VALVE	W
REDUCER	
SPRINKLER HEAD	SP
SEWER MANHOLE	S
SANITARY SEWER CLEAN OUT	CO
GAS VALVE	G
SIGN	
POLE ANCHOR	
POWER TRANSFORMER	
POWER POLE	P
POWER VAULT	P
TRAFFIC LOOP	
TRAFFIC SIGNAL	
STANDARD TRAFFIC SIGNAL CONTROLLER	SIG
STREET LIGHT	
JUNCTION BOX	J
ELECTRICAL SERVICE	
CABLE TV PEDESTAL	TV
TELEPHONE MANHOLE	T
TELEPHONE PEDESTAL	T
TREE GRATE	
CONIFER TREE	
DECIDUOUS TREE	4" DEC
COMMERCIAL SIGN	

LINETYPE LEGEND:

8+00	CONSTRUCTION BASELINE
SS SS	EASEMENT
	ROAD CENTERLINE
X X	BARB WIRE FENCE
	CHAIN LINK FENCE
	CONCRETE FENCE
	ROCK FENCE
XXX XXX XXX XXX XXX XXX	WIRE FENCE
	WOOD FENCE
	GRAVEL
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE
DIT DIT	DITCH
SD SD	STORM (PAINTED)
SS SS	SEWER (PAINTED)
SS SS	NEW SEWER
	RIGHT OF WAY
OTV OTV	OVERHEAD CABLE
UTV UTV	UNDERGROUND CABLE (PAINTED)
G G	GAS (PAINTED)
OPH OPH	OVERHEAD PHONE
OFO OFO	OVERHEAD FIBER OPTIC
UPH UPH	UNDERGROUND PHONE (PAINTED)
UFO UFO	UNDERGROUND FIBER OPTIC (PAINTED)
OHE OHE	OVERHEAD ELECTRIC
UGE UGE	UNDERGROUND ELECTRIC (PAINTED)
W W	WATER (PAINTED)
W W	NEW WATER
RW RW	RECLAIMED WATER (PAINTED)
	ABANDON EXISTING UTILITY (SEE PLAN)

CONSTRUCTION HATCH TYPES:

- TRENCH RESTORATION HMA FOR PAVEMENT REPAIR CL. ½" PG 58H-22 (TYP)
- 8" ROADWAY EX. W/ 6" FIBER REINFORCED HMA 2" CSTC
- 6" ROADWAY EX. W/ 4" FIBER REINFORCED HMA 2" CSTC
- 5" ROADWAY EX. W/ 3" FIBER REINFORCED HMA 2" CSTC
- ASPHALT WEDGE CURB
- COMMERCIAL HMA FOR DRIVEWAYS AND PATHS
- AREA OF ROADWAY WIDENING
- 7" ROADWAY EX. W/ 3" FIBER REINFORCED HMA 2" CSTC & 2" CSBC

ABBREVIATIONS:

Δ	DEFLECTION ANGLE
EP	EDGE OF PAVEMENT
RT	RIGHT
LT	LEFT
I.E.	INVERT ELEVATION
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
R.	RADIUS
R.P.	RADIUS POINT
R/W	RIGHT-OF-WAY
ROW	RIGHT-OF-WAY
EX.	EXISTING
EXIST.	EXISTING
STA	STATION
S/W	SIDEWALK
C.S.B.C.	CRUSHED SURFACING BASE COURSE
C.S.T.C.	CRUSHED SURFACING TOP COURSE
CL, ℄	CENTERLINE
CB	CATCH BASIN
N/A	NOT APPLICABLE
A/C	ASPHALT CONCRETE
ACP	ASPHALT CONCRETE PAVEMENT
D.I.	DUCTILE IRON
SD	STORM DRAIN
SS	SANITARY SEWER
RPBA	REDUCED PRESSURE BACKFLOW ASSEMBLY
DIA, ø	DIAMETER
A.P.	ANGLE POINT
V.P.I.	VERTICAL POINT OF INTERSECTION
V.P.C.	VERTICAL POINT OF CURVATURE
V.P.T.	VERTICAL POINT OF TANGENCY
EL.	ELEVATION
S.Y.	SQUARE YARD
C.Y.	CUBIC YARD
TYP.	TYPICAL
LUM.	LUMINAIRE
L.F.	LINEAR FEET
RD.	ROAD
DR.	DRIVE
PKWY.	PARKWAY
CONST.	CONSTRUCTION
FT.	FOOT
D/W	DRIVEWAY
APPROX.	APPROXIMATELY
U.O.N.	UNLESS OTHERWISE NOTED

CONSTRUCTION NOTES:

1. CALL 48 HOURS BEFORE YOU DIG 1-800-424-5555 OR 811.
2. THE CONTRACTOR SHALL FIELD VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL NOT REMOVE ANY TREES UNLESS INDICATED ON PLANS OR DIRECTED BY ENGINEER.
4. THE CONTRACTOR SHALL MATCH OVERLAY TO EXISTING PAVEMENT AND DRIVEWAYS AS DIRECTED BY THE ENGINEER.
5. GRINDING LIMITS AND PAVEMENT REPAIR LIMITS SHALL BE IDENTIFIED BY THE ENGINEER IN THE FIELD AND MAY VARY FROM THOSE SHOWN ON THE PLANS.
6. THE CONTRACTOR SHALL RESTORE ALL LANDSCAPING TO EQUAL OR BETTER THAN ORIGINAL CONDITIONS AS DIRECTED BY THE ENGINEER.
7. THE CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTS AND PROPERTY CORNERS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH RESTORING MONUMENTS OR PROPERTY CORNERS OUTSIDE OF THE CONSTRUCTION LIMITS.

BASIS OF BEARING

MERIDIAN IS WASHINGTON COORDINATE SYSTEM OF 1983/91 – SOUTH ZONE DERIVED FROM TIES TO HPGN STATIONS SANDERSON, MCKENNA AND CBL1110 AND TO WSDOT GPS STATIONS G259R, GP34005-2, GP34005-4, GP34101-32, GP34101-39, HC34-2, LUHR RM2, TS34-33, TS34-59 AND TO THURSTON COUNTY GPS STATIONS U-531, AT-194, AT-352, AT-355, AT-447, AT449 AND AT-478.
DISTANCES SHOWN ARE GROUND SCALE U.S. SURVEY
FEET. COMBINED SCALE FACTOR (GROUND TO GRID) IS 0.999935701. SURVEY AF# 3111152 DATED 09-24-1997.

METHOD OF SURVEY

SURVEY PERFORMED BY CONVENTIONAL FIELD TRAVERSE USING A
LEICA TS-16 (THREE SECOND TOTAL STATION), LINEAR AND ANGULAR CLOSURE OF THE TRAVERSE MEET THE STANDARDS OF WAC 332-130-090.

BOUNDARY

THE BOUNDARY WAS COMPILED USING PHYSICAL FEATURES TIED IN THE FIELD AND DOCUMENTS OF RECORD AS SHOWN BELOW.

SURVEYS REFERENCED
AF# 3111152

BLA REFERENCED
AF# 3151269

PLATS REFERENCED
AF# 8504260014, 8712300163, 9009140243, 735307,_669686, 871080, 3703250, 3705770, 3776150, 3871449

DEEDS REFERENCED
AF# 3769304

CONDO REFERENCED
AF# 3029574

LARGE LOT SUB REFERENCED
AF#8706290210

SOURCE OF UTILITY MARKINGS

SURFACE MARKINGS PROVIDED BY UTILITY NOTIFICATION CENTER (callbeforeyoudig.org)
NO LOCATES PROVIDED FOR THIS PROJECT

VERTICAL

THE CITY OF LACEY BENCHMARKS ARE BASED ON NGVD 29 DATUM FROM PRIMARY CONTROL ESTABLISHED BY FEDERAL AND STATE AGENCIES TO FIRST OR SECOND ORDER ACCURACY. THE CITY OF LACEY'S BENCHMARKS ARE GENERALLY TO THIRD ORDER ACCURACY.

BENCHMARK

CITY OF LACEY BM#796
NORTH BASE BOLT ON LUMINAIRE IN THE SW CORNER OF INTERSECTION OF CARPENTER RD SE & CARPENTER HILLS LOOP SE
ELEV.=204.12

CITY OF LACEY BM#832
2-1/2" DISK IN WALK @ NW CORNER OF INTERSECTION RUDDEL RD SE & 56TH AVE SE
ELEV.=202.77

CITY OF LACEY BM#1445
3-1/2" THCO SURF MON IN SPLITTER ISLAND ON WEST SIDE OF RAINIER RD SE & 67TH AVE SE
ELEV.=205.27

CITY OF LACEY BM#1491
3" COL SURF MON @ INTERSECTION OF 34TH AVE SE & IDA JANE WAY SE
ELEV.=182.13

CITY OF LACEY, WASHINGTON
DEPARTMENT OF PUBLIC WORKS
420 COLLEGE STREET SE
LACEY, WA 98503-1238 (360) 491-5600
LACEY

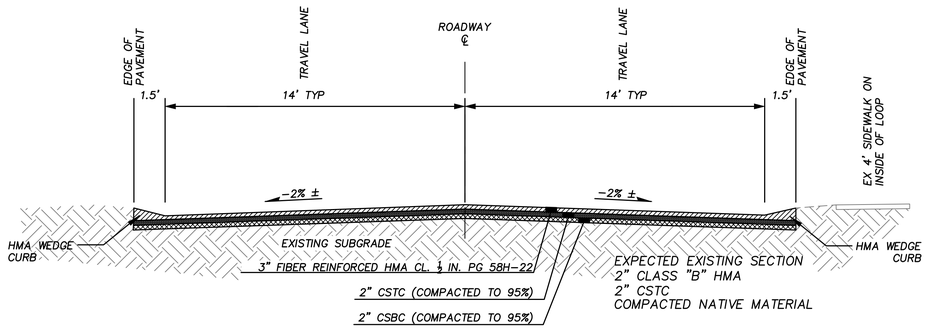
JUSTIN KNOX STATE OF WASHINGTON 44698 REGISTERED PROFESSIONAL ENGINEER 5/15/23

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	N/A
VERT. SCALE:	N/A
FILE:	CSGN01.DWG

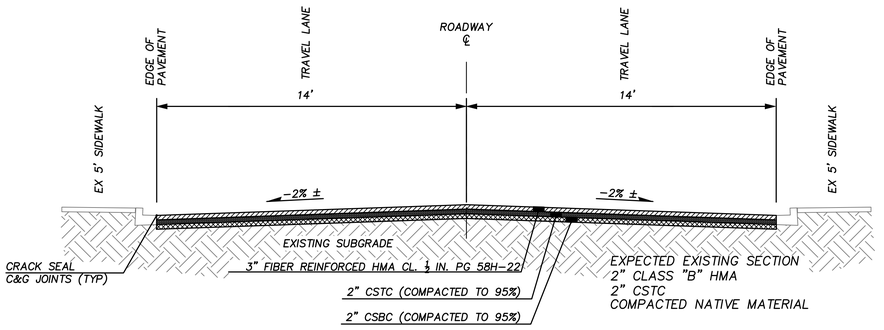
2023 OVERLAY PHASE 1
GENERAL NOTES, LEGENDS & ABBREVIATIONS

REVISION BLOCK

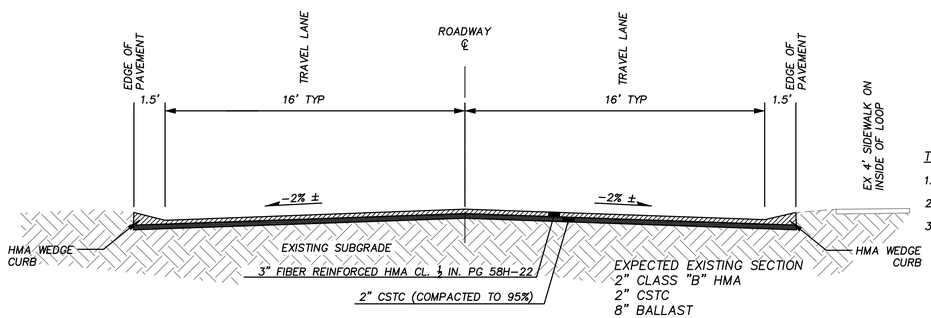
NO.	DATE	DESCRIPTION



CARPENTER HILLS LOOP
AROUND LOOP

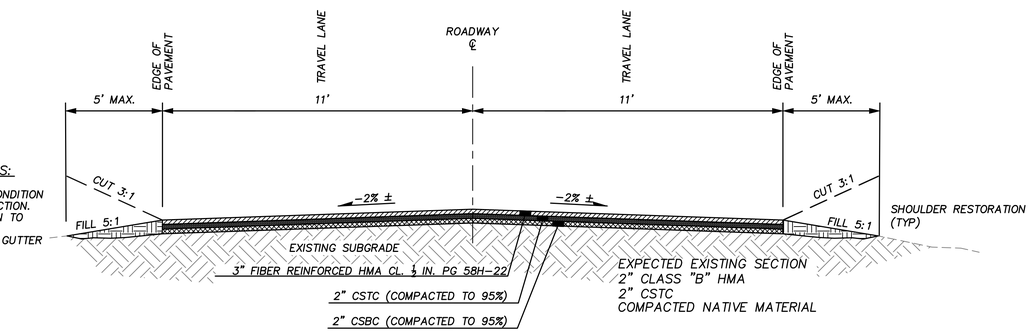


CARPENTER HILLS LP
ENTRANCE

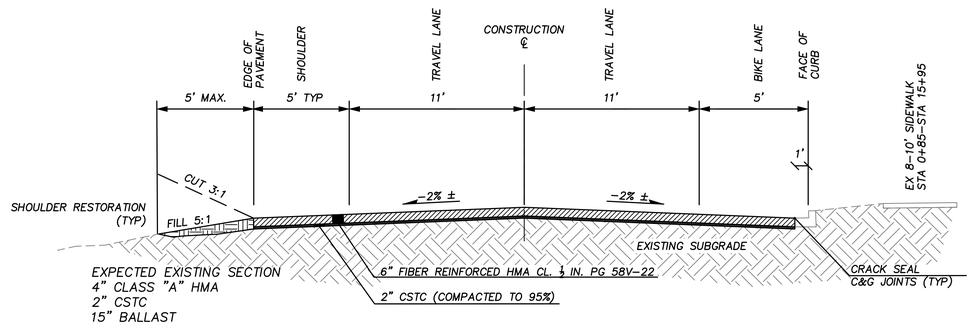


TYPICAL CROSS-SECTION NOTES:

1. EDGE CONDITIONS WILL VARY. CONDITION SHOWN IS TYPICAL FOR EACH SECTION.
2. CROSS SECTIONS ARE NOT SHOWN TO SCALE
3. NEW HMA ADJACENT TO CURB & GUTTER SHALL BE CRACK SEALED

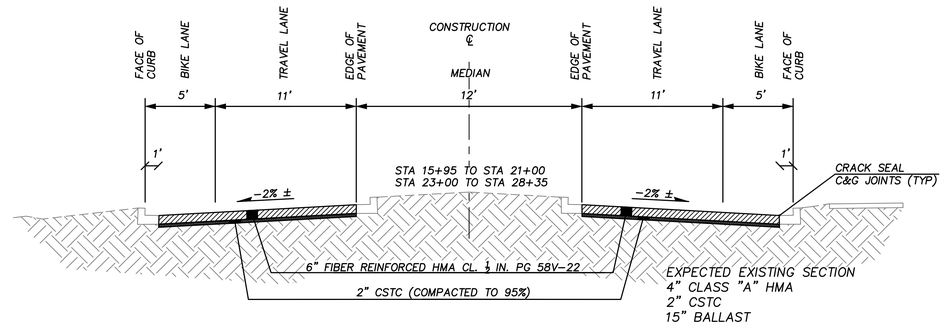


EMERALD ST, TOPAZ ST, OPAL CT, GEM CT, CRYSTAL CT, 54TH WAY, 54TH CT,
55TH WAY, 55TH CT, 57TH AVE, 58TH AVE



RAINIER RD
STA 0+85 TO STA 15+95

34TH AVE



RAINIER RD
STA 15+95 TO STA 21+00
STA 23+00 TO STA 29+50

CITY OF LACEY, WASHINGTON
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LACEY

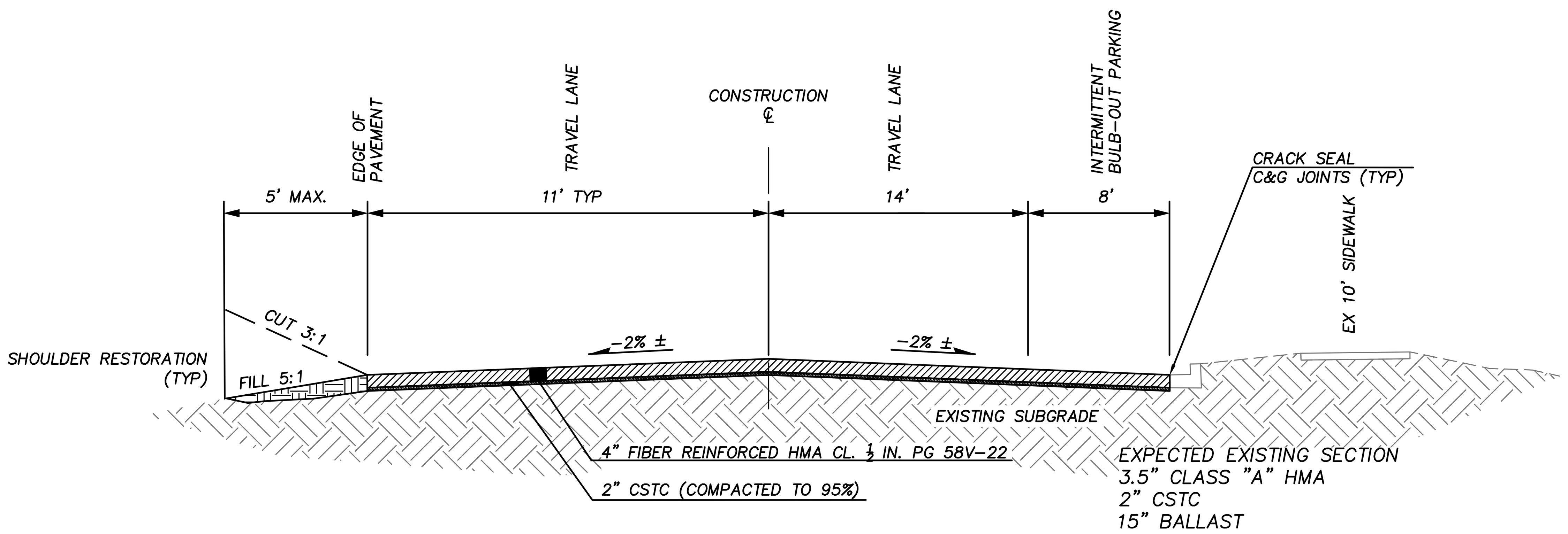
JUSTIN KEK 14498 REGISTERED PROFESSIONAL ENGINEER 5/15/23

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	NTS
VERT. SCALE:	N/A
FILE:	ES

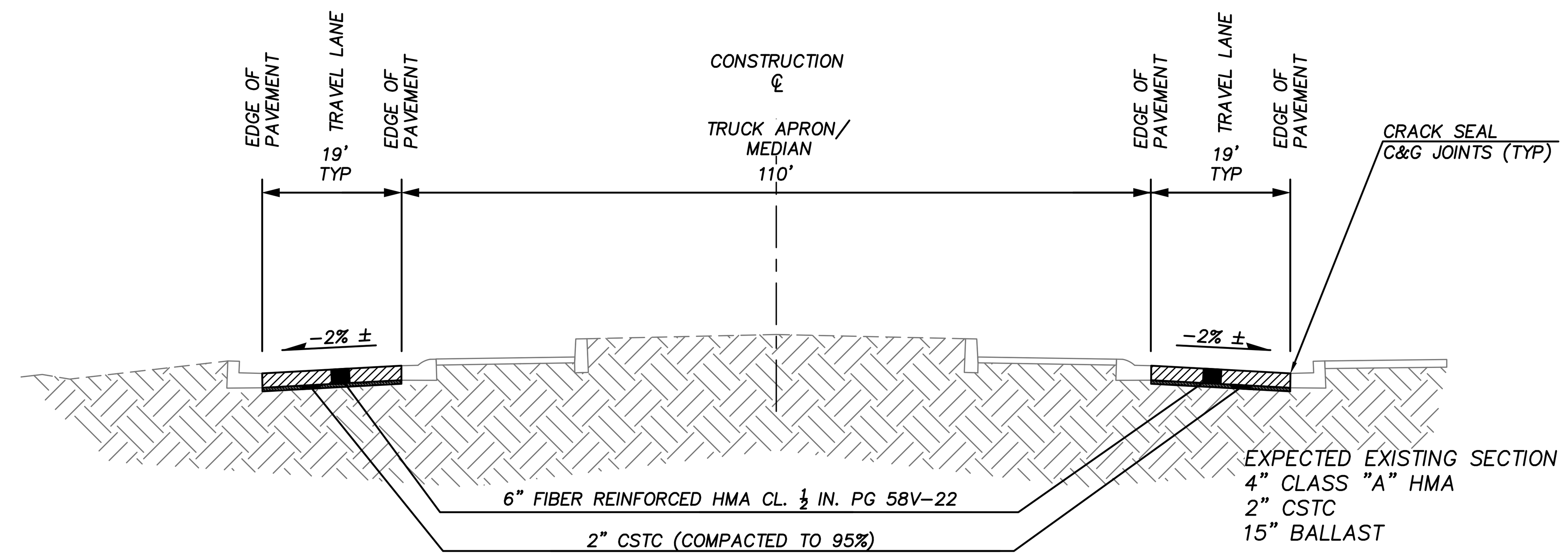
2023 OVERLAY PHASE 1
TYPICAL CROSS SECTIONS 1

REVISION BLOCK		
NO.	DATE	DESCRIPTION

PAGE NO. XS1
DWG NO. D-23-02
SHEET NO. 3 OF 25



66TH AVE



RAINIER RD/BALUSTRADE BLVD/66TH AVE RAB

CITY OF LACEY, WASHINGTON
DEPARTMENT OF PUBLIC WORKS
420 COLLEGE STREET SE
LACEY, WA 98503-1238 (360) 491-5600
LACEY

JUSTIN KNOX, STATE OF WASHINGTON, 44698, REGISTERED PROFESSIONAL ENGINEER, 5/15/23

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	NTS
VERT. SCALE:	N/A
FILE:	XS

2023 OVERLAY PHASE 1
TYPICAL CROSS SECTIONS 2

REVISION BLOCK

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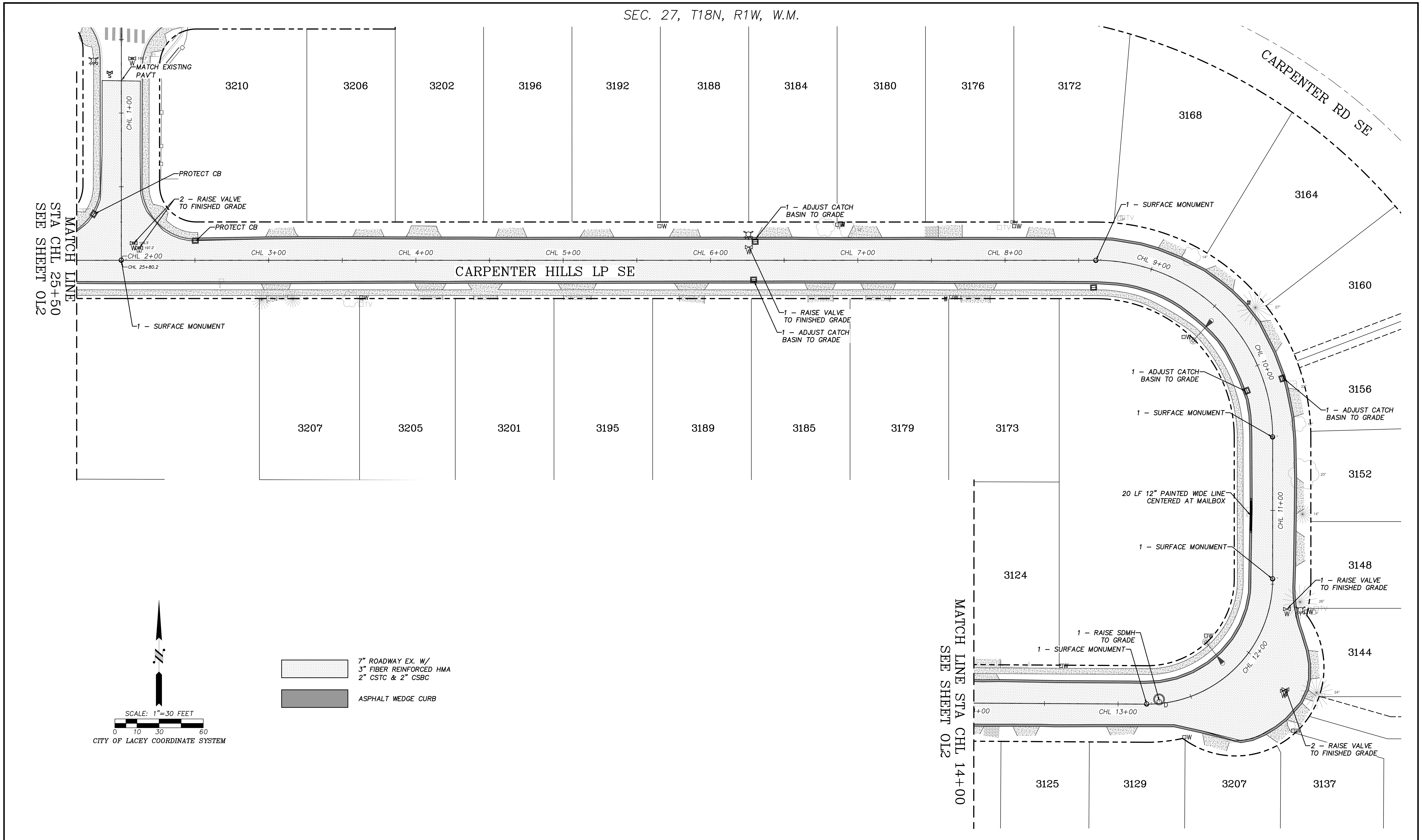
DWG NO. D-23-02


SEC. 27, T18N, R1W, W.M.
CARPENTER HILLS LP SE
CARPENTER RD SE
3210
3206
3202
3196
3192
3188
3184
3180
3176
3172
3168
3164
3160
3156
3152
3148
3144
3137
3207
3129
3125
3124
3173
3179
3185
3189
3195
3201
3205
3207
MATCH EXISTING PAV'T
CHL 1+00
PROTECT CB
2 – RAISE VALVE TO FINISHED GRADE
PROTECT CB
CHL 2+00
CHL 25+80.2
1 – SURFACE MONUMENT
MATCH LINE STA CHL 25+50 SEE SHEET OL2
CHL 3+00
CHL 4+00
CHL 5+00
CHL 6+00
CHL 7+00
CHL 8+00
CHL 9+00
CHL 10+00
CHL 11+00
CHL 12+00
CHL 13+00
1 – ADJUST CATCH BASIN TO GRADE
1 – RAISE VALVE TO FINISHED GRADE
1 – ADJUST CATCH BASIN TO GRADE
1 – SURFACE MONUMENT
1 – ADJUST CATCH BASIN TO GRADE
1 – ADJUST CATCH BASIN TO GRADE
1 – SURFACE MONUMENT
20 LF 12" PAINTED WIDE LINE CENTERED AT MAILBOX
1 – SURFACE MONUMENT
1 – RAISE VALVE TO FINISHED GRADE
1 – RAISE SDMH TO GRADE
1 – SURFACE MONUMENT
2 – RAISE VALVE TO FINISHED GRADE
MATCH LINE STA CHL 14+00 SEE SHEET OL2
7" ROADWAY EX. W/ 3" FIBER REINFORCED HMA 2" CSTC & 2" CSBC
ASPHALT WEDGE CURB
N
SCALE: 1"=30 FEET
0 10 30 60
CITY OF LACEY COORDINATE SYSTEM

CITY OF LACEY, WASHINGTON
DEPARTMENT OF PUBLIC WORKS
420 COLLEGE STREET SE
LACEY, WA 98503-1238 (360) 491-5600

LACEY

JUSTIN KNOX STATE OF WASHINGTON 44698 REGISTERED PROFESSIONAL ENGINEER 5/15/23

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	1"=30'
VERT. SCALE:	N/A
FILE:	PBASEOL1.DWG

2023 OVERLAY PHASE 1
OVERLAY PLANS
CARPENTER HILLS LP 1

REVISION BLOCK

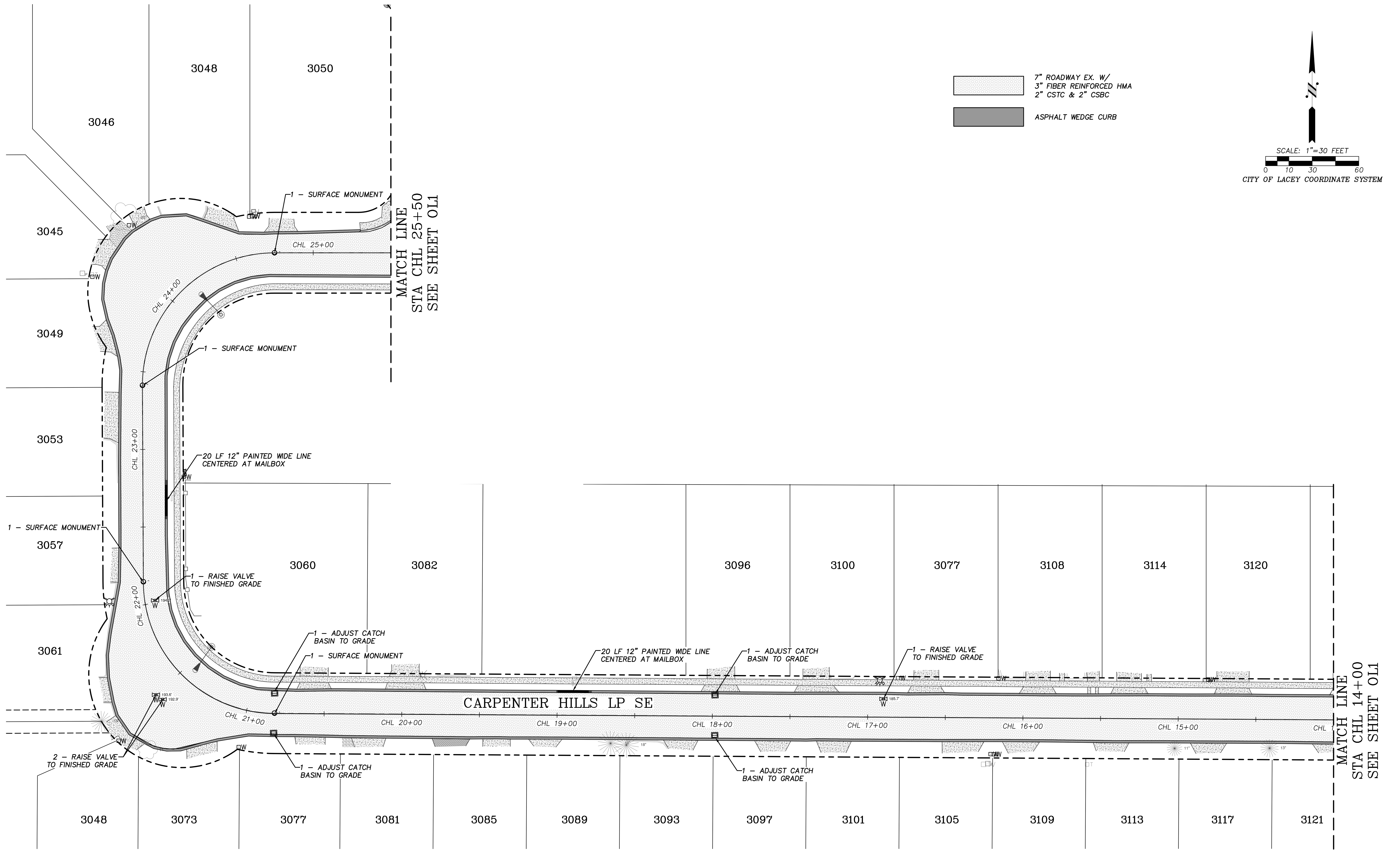
NO.	DATE	DESCRIPTION

PAGE NO. OL1

DWG NO. D-23-02

SHEET NO. 5 OF 25

SEC. 27, T18N, R1W, W.M.



CITY OF LACEY, WASHINGTON
DEPARTMENT OF PUBLIC WORKS
420 COLLEGE STREET SE
LACEY, WA 98503-1238 (360) 491-5600
LACEY

JUSTIN KNOX, STATE OF WASHINGTON, 44698, REGISTERED PROFESSIONAL ENGINEER, 5/15/23

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	1"=30'
VERT. SCALE:	N/A
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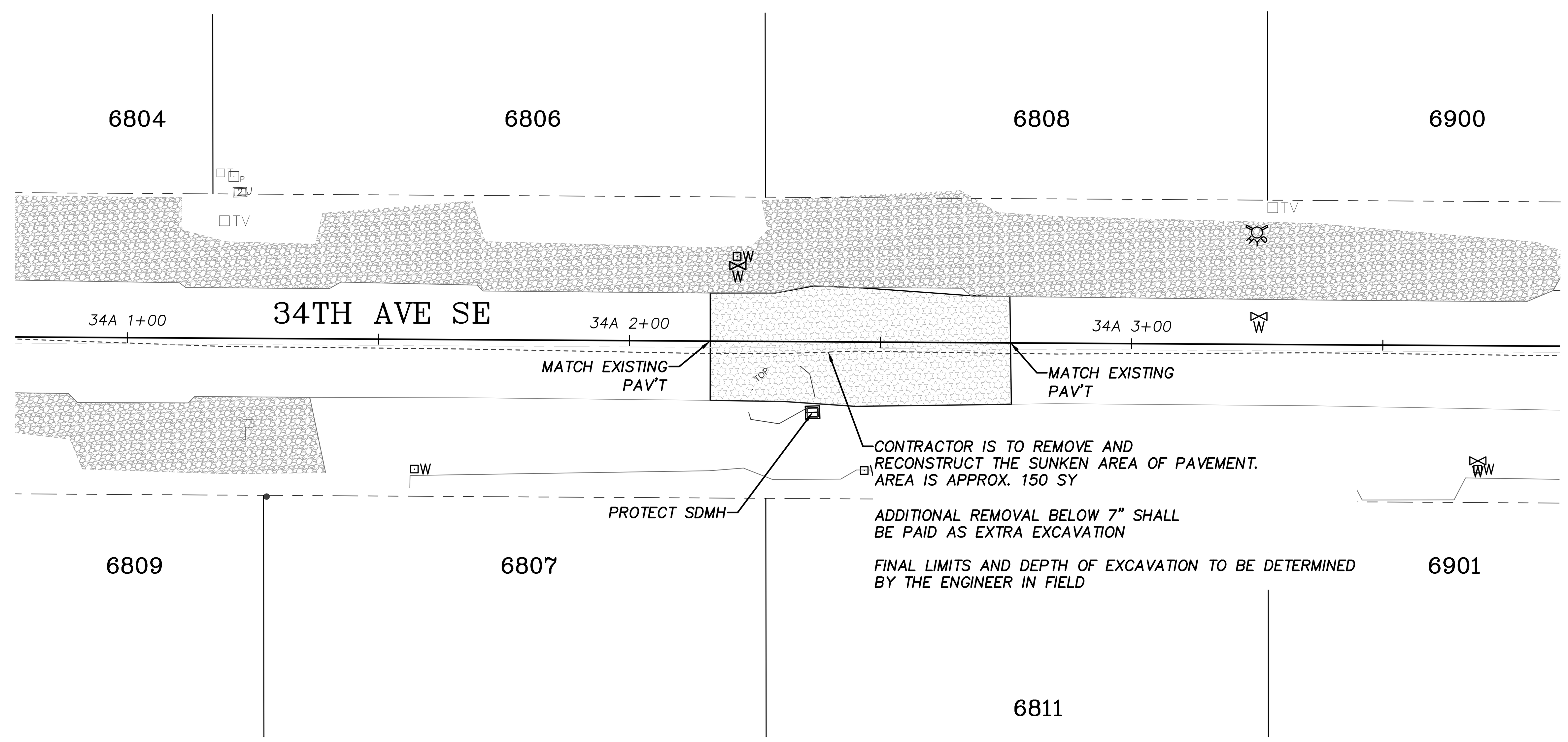
2023 OVERLAY PHASE 1
OVERLAY PLANS
CARPENTER HILLS LP 2

REVISION BLOCK

NO.	DATE	DESCRIPTION

PAGE NO. OL2
DWG NO. D-23-02
SHEET NO. 6 OF 25

SEC. 27, T18N, R1W, W.M.
SEC. 33, T18N, R1W, W.M.

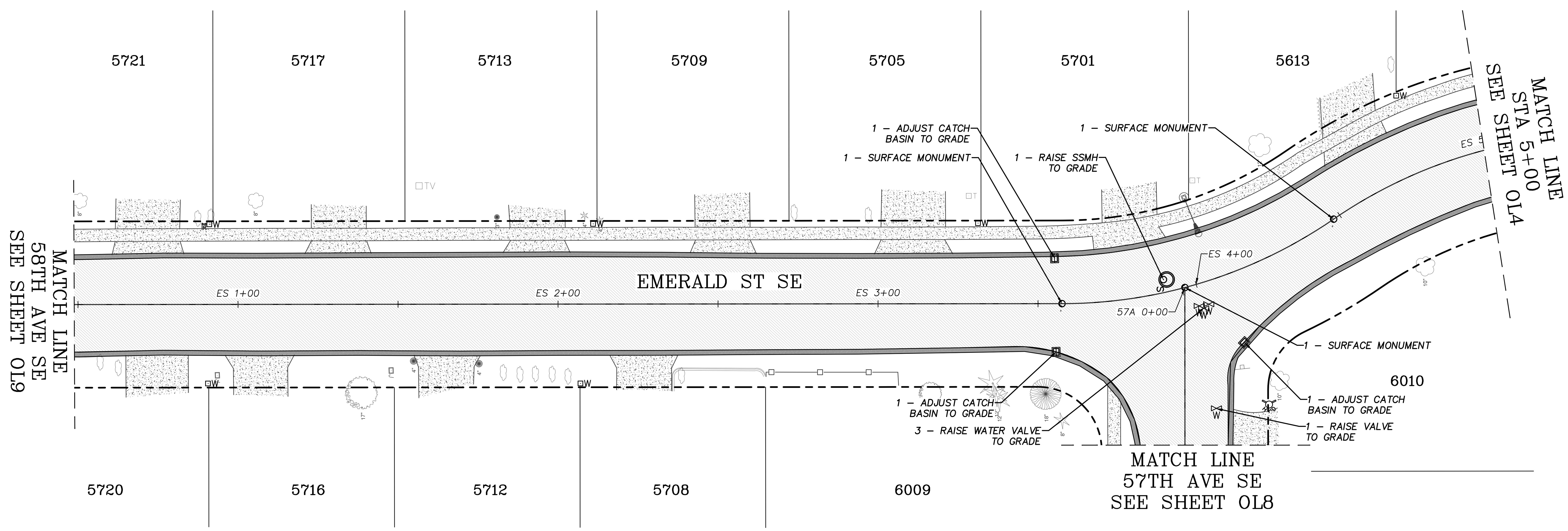


SCALE: 1"=20 FEET
0 10 20 40
CITY OF LACEY COORDINATE SYSTEM

7" ROADWAY EX. W/
3" FIBER REINFORCED HMA
2" CSTC & 2" CSBC

5" ROADWAY EX. W/
3" FIBER REINFORCED HMA
2" CSTC

ASPHALT WEDGE CURB



SCALE: 1"=20 FEET
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CITY OF LACEY COORDINATE SYSTEM

CITY OF LACEY, WASHINGTON
DEPARTMENT OF PUBLIC WORKS
420 COLLEGE STREET SE
LACEY, WA 98503-1238 (360) 491-5600
LACEY

JUSTIN KNOX, STATE OF WASHINGTON, 44698, REGISTERED PROFESSIONAL ENGINEER, 5/15/23

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	1"=20'
VERT. SCALE:	N/A
FILE:	PBASEOL1.DWG

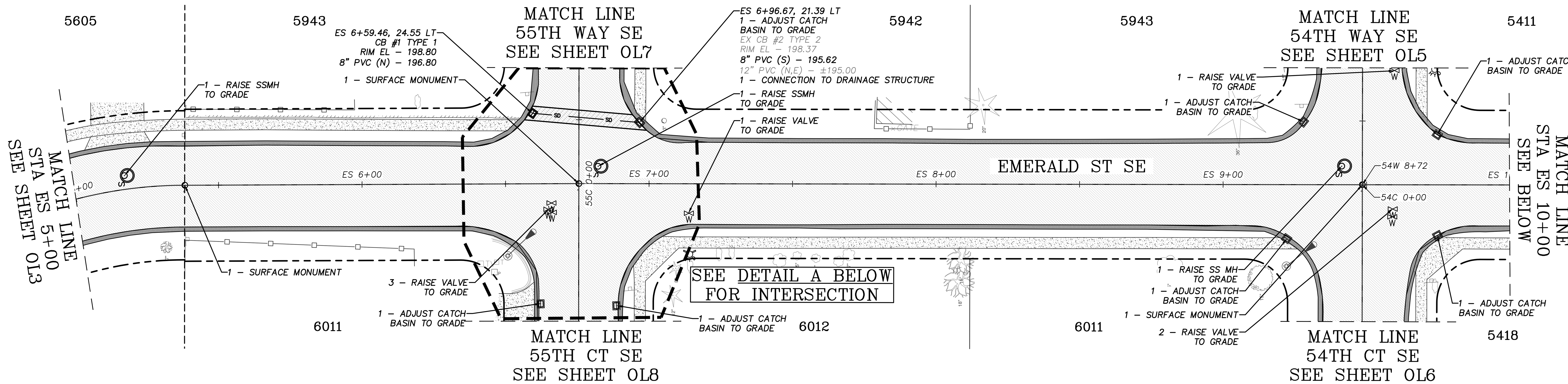
2023 OVERLAY PHASE 1
OVERLAY PLANS
34TH AVE & EMERALD ST

REVISION BLOCK

NO.	DATE	DESCRIPTION

PAGE NO. OL3
DWG NO. D-23-02

SEC. 33, T18N, R1W, W.M.



SCALE: 1"=20 FEET

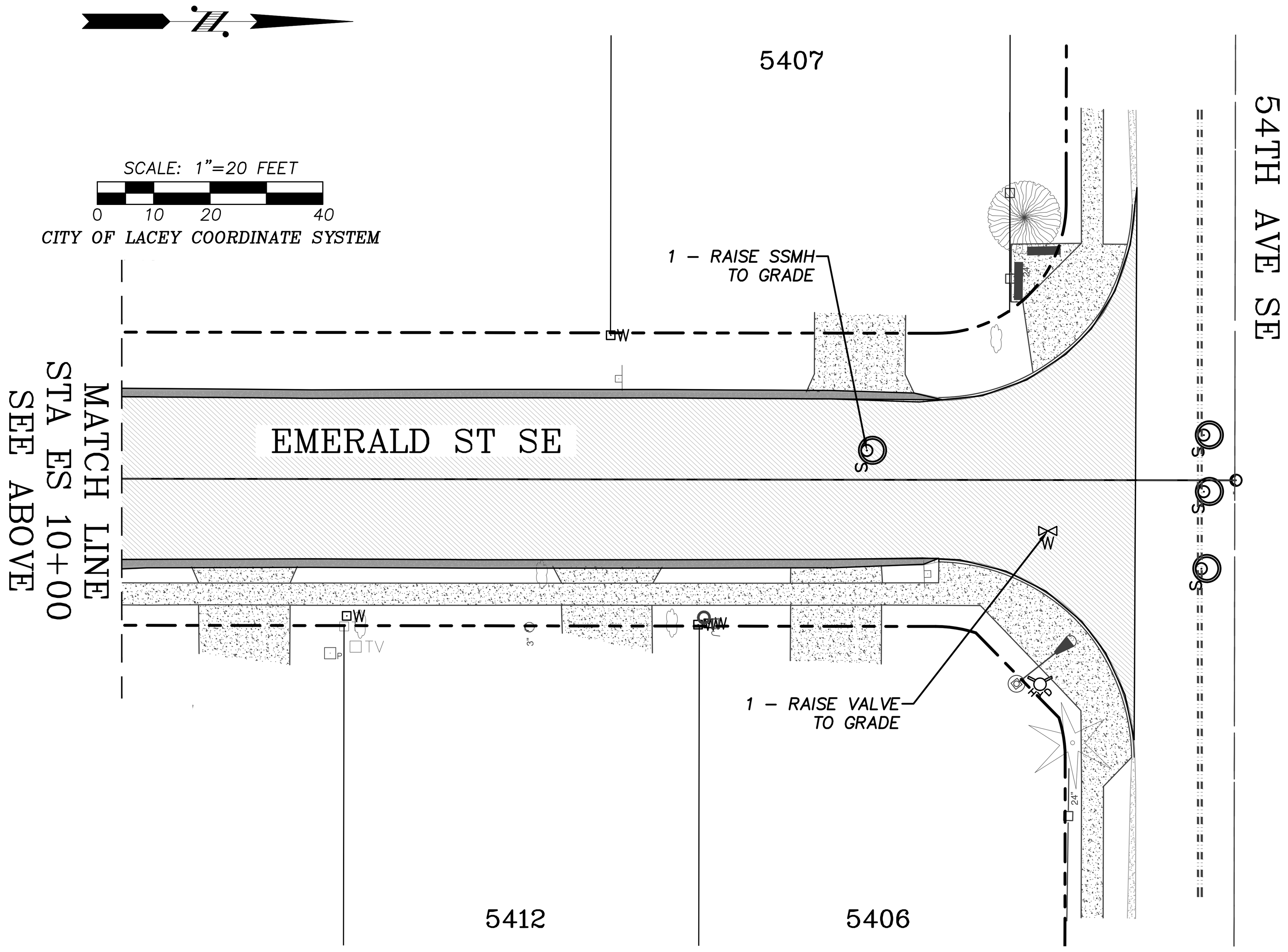
0 10 20 40

CITY OF LACEY COORDINATE SYSTEM

TRENCH RESTORATION HMA FOR PAVEMENT REPAIR CL. ½" PG 58H–22 (TYP)

5" ROADWAY EX. W/ 3" FIBER REINFORCED HMA 2" CSTC

ASPHALT WEDGE CURB



SCALE: 1"=20 FEET

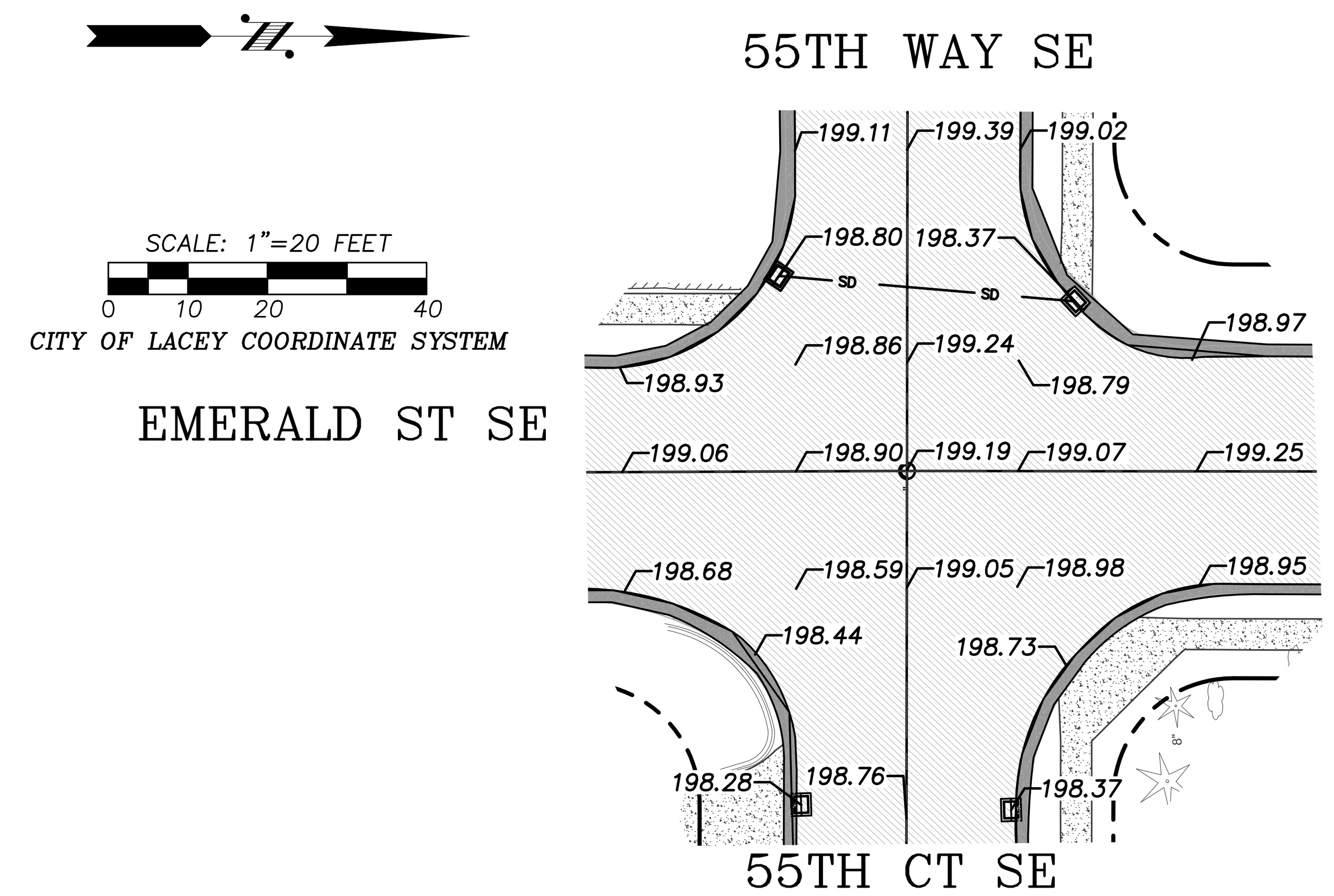
0 10 20 40

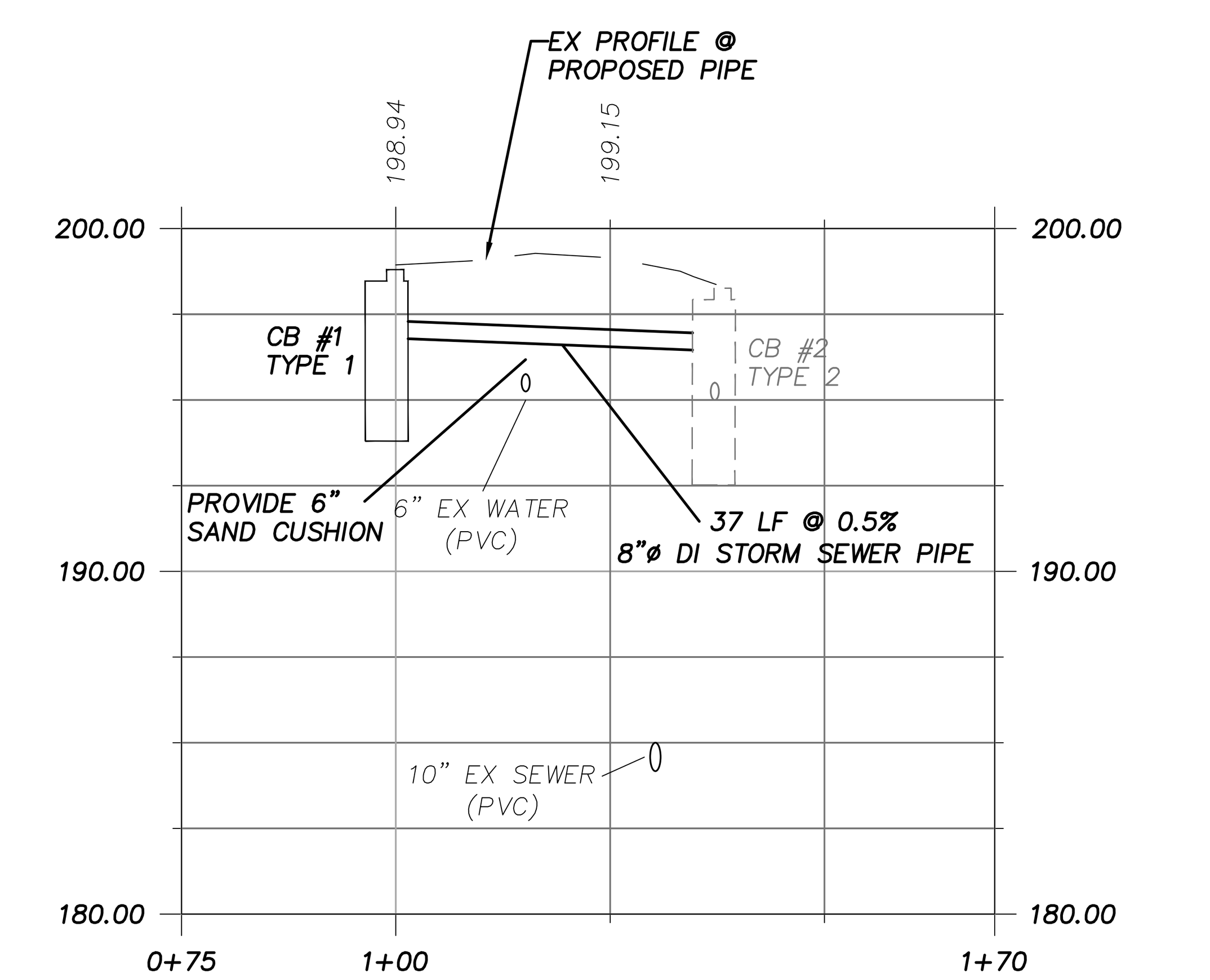
CITY OF LACEY COORDINATE SYSTEM

SCALE: 1"=20 FEET

0 10 20 40

CITY OF LACEY COORDINATE SYSTEM





DETAIL A

NOTES:

1. CONTRACTOR SHALL ELIMINATE PRIMARY CROWN ALONG 55TH WAY/55TH CT
2. CONTRACTOR SHALL HOLD ELEVATION AT INTERSECTION ℄ AND SLOPE THE INTERSECTION TOWARDS THE CATCH BASINS AT THE APPROXIMATE ELEVATIONS SHOWN

CITY OF LACEY, WASHINGTON
DEPARTMENT OF PUBLIC WORKS
420 COLLEGE STREET SE
LACEY, WA 98503–1238 (360) 491–5600

LACEY

JUSTIN KNOX STATE OF WASHINGTON 44698 REGISTERED PROFESSIONAL ENGINEER 5/15/23

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	1"=20'
VERT. SCALE:	1"=5'
FILE:	PBASEOL1.DWG

2023 OVERLAY PHASE 1
OVERLAY PLANS
EMERALD ST

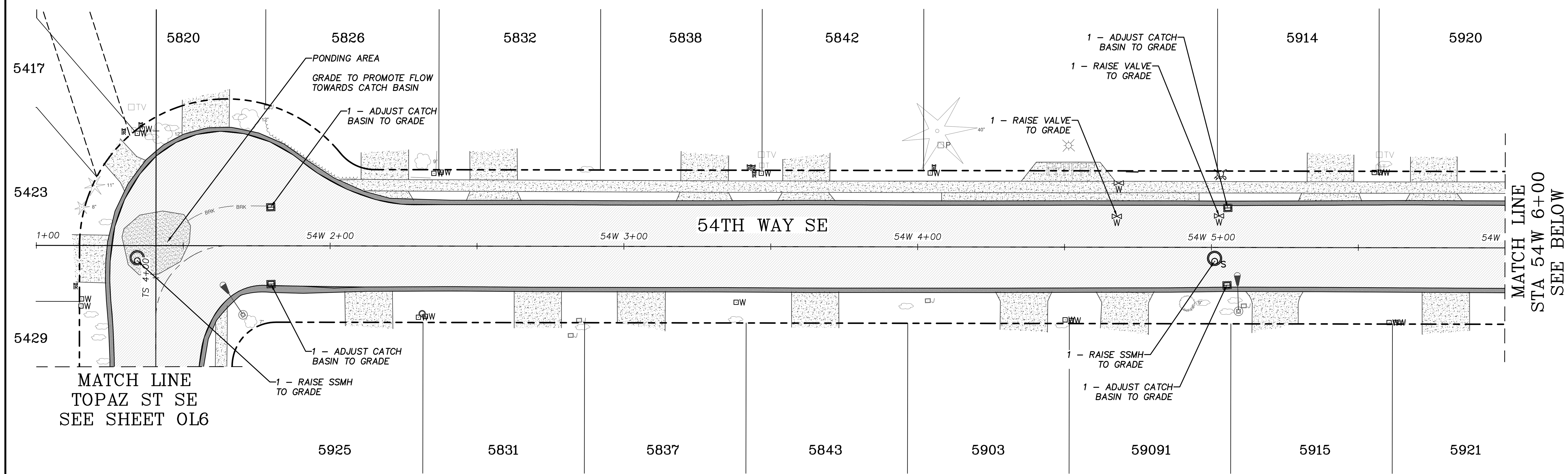
REVISION BLOCK

NO.	DATE	DESCRIPTION

PAGE NO. OL4

DWG NO. D-23-02

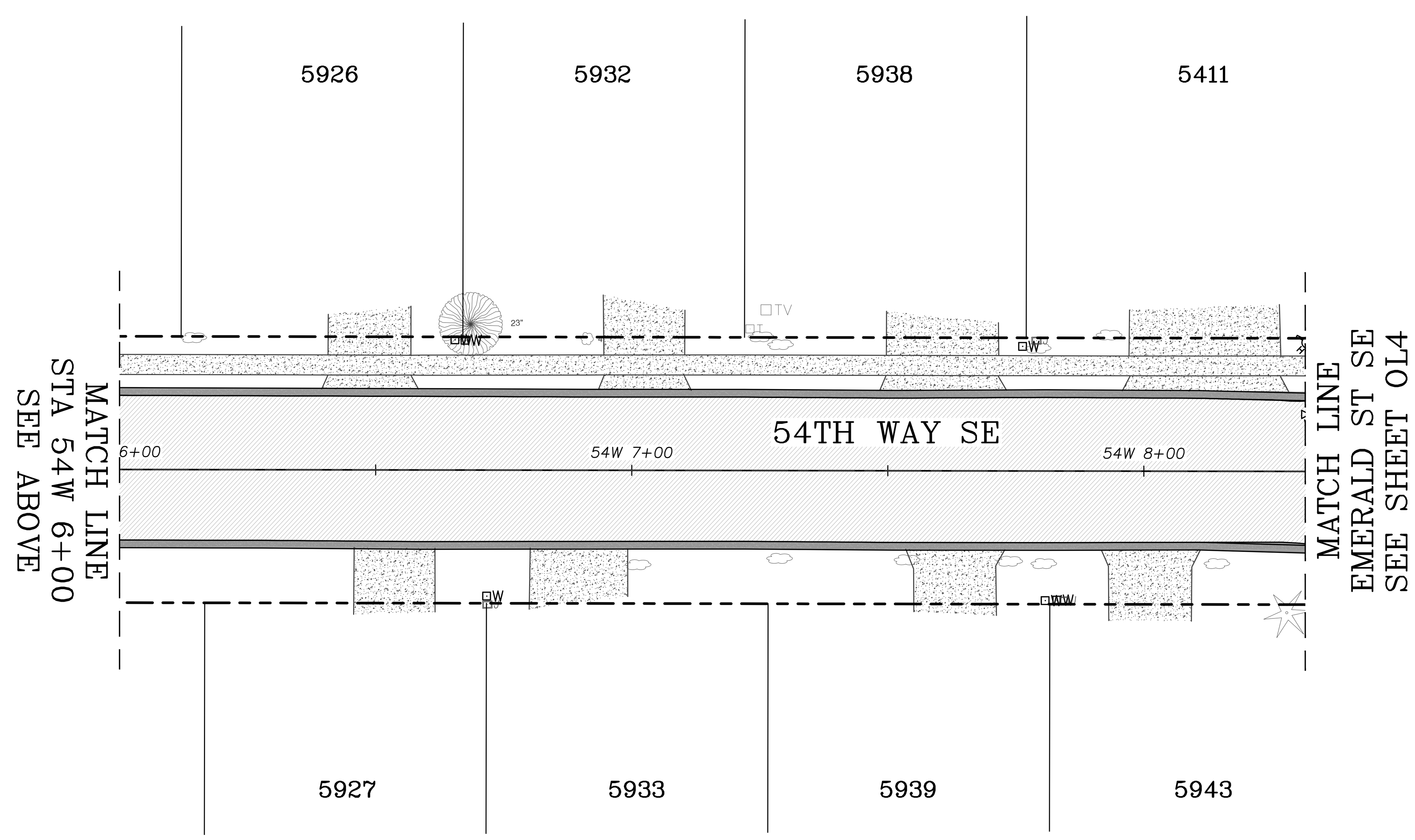
SEC. 33, T18N, R1W, W.M.



SCALE: 1"=20 FEET
0 10 20 40
CITY OF LACEY COORDINATE SYSTEM

5" ROADWAY EX. W/
3" FIBER REINFORCED HMA
2" CSTC

ASPHALT WEDGE CURB



SCALE: 1"=20 FEET
0 10 20 40
CITY OF LACEY COORDINATE SYSTEM

CITY OF LACEY, WASHINGTON
DEPARTMENT OF PUBLIC WORKS
420 COLLEGE STREET SE
LACEY, WA 98503-1238 (360) 491-5600
LACEY

JUSTIN KNOX
STATE OF WASHINGTON
44698
REGISTERED PROFESSIONAL ENGINEER
5/15/23

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	1"=20'
VERT. SCALE:	N/A
FILE:	PBASEOL1.DWG

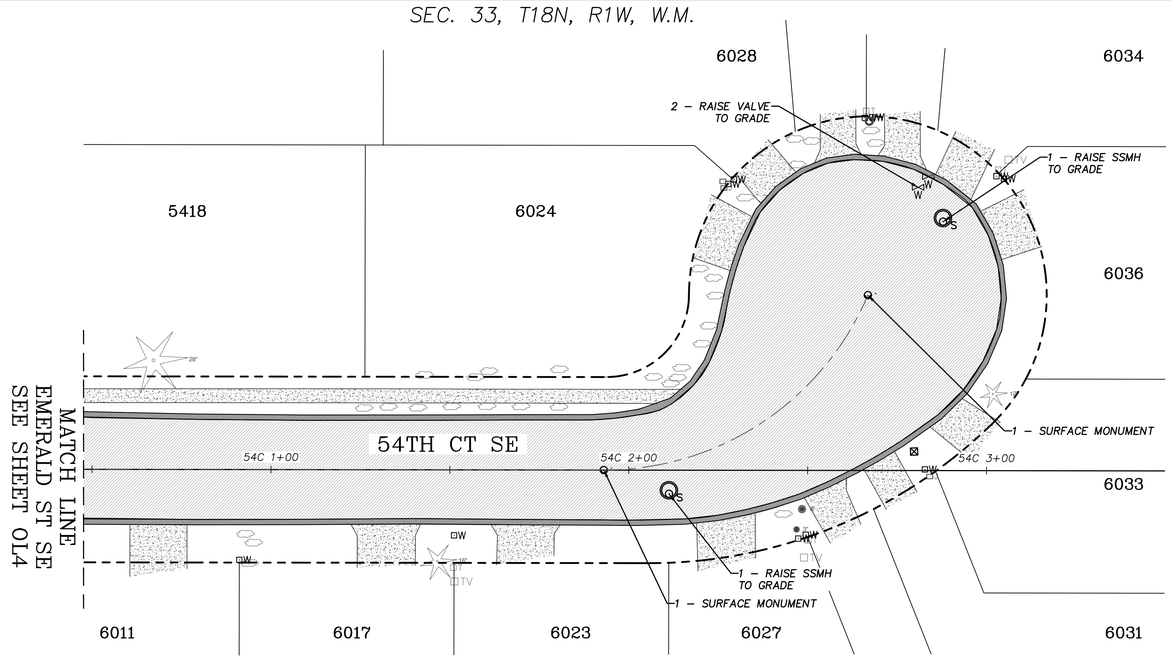
2023 OVERLAY PHASE 1
OVERLAY PLANS
54TH WAY

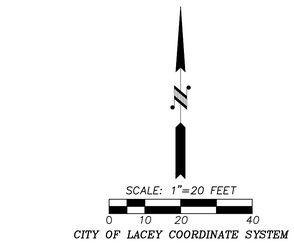
REVISION BLOCK

NO.	DATE	DESCRIPTION

PAGE NO.
OL5

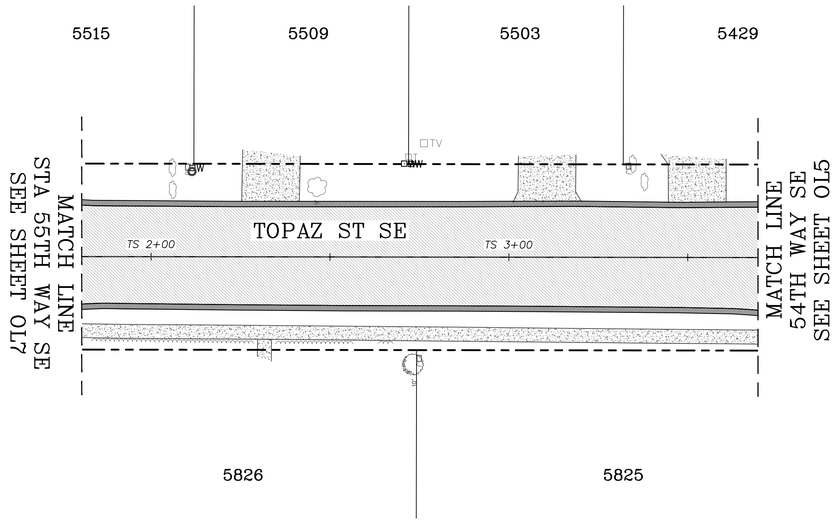
DWG NO.
D-23-02

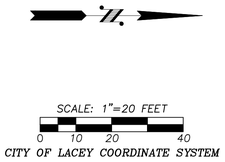




5" ROADWAY EX. W/ 3" FIBER REINFORCED HMA 2" CSTC

ASPHALT WEDGE CURB





CITY OF LACEY, WASHINGTON
DEPARTMENT OF PUBLIC WORKS
420 COLLEGE STREET SE
LACEY, WA 98503–1238 (360) 491–5600

LACEY

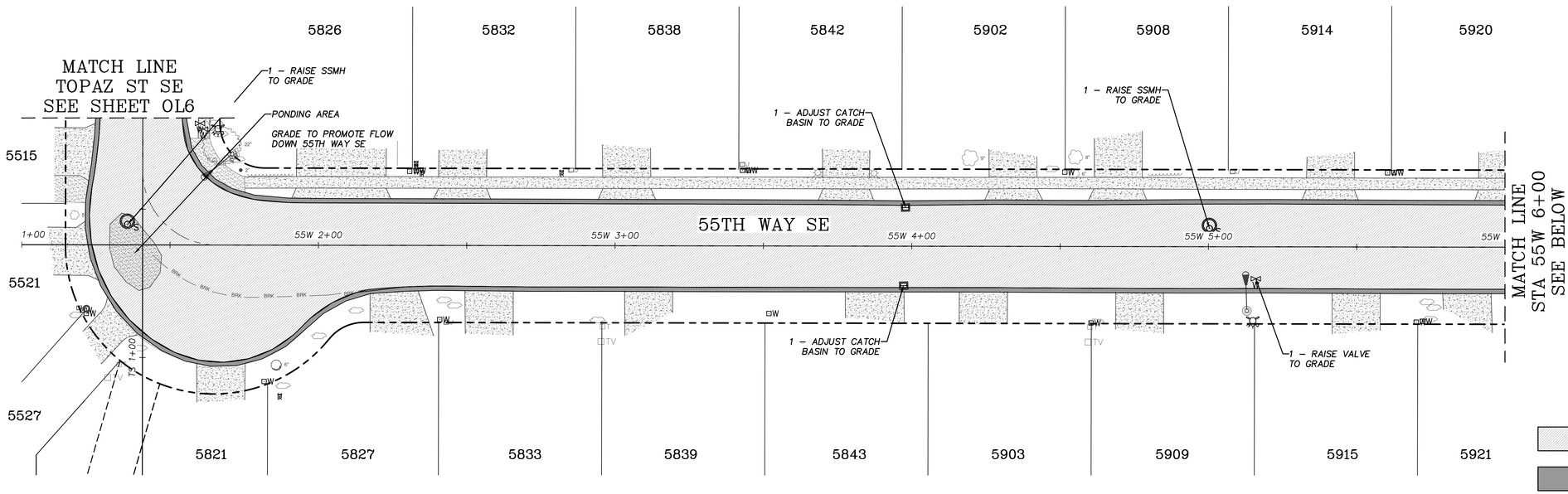
DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	1"=20'
VERT. SCALE:	N/A
FILE:	PBASHOLL.DWG

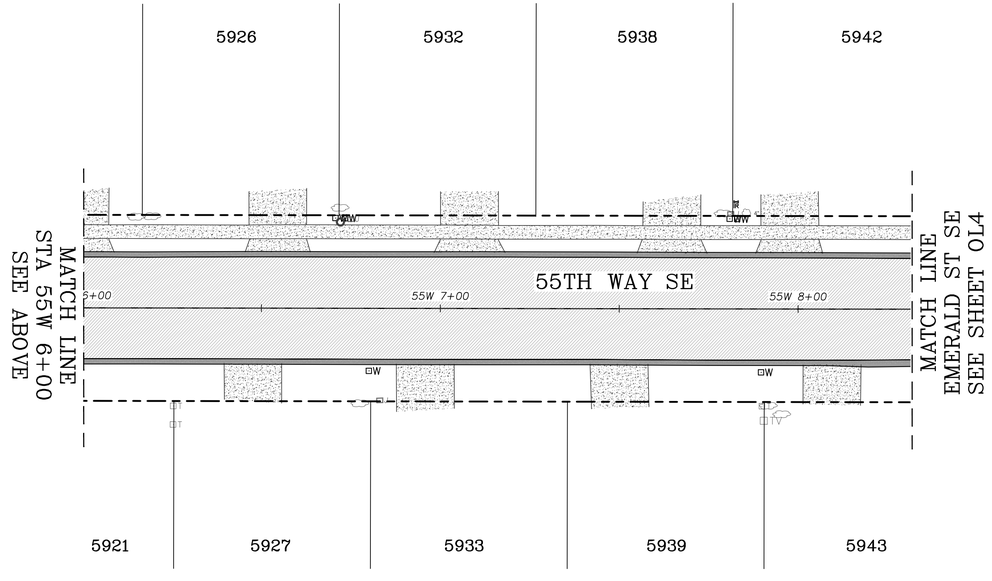
2023 OVERLAY PHASE 1
OVERLAY PLANS
54TH CT & TOPAZ ST

REVISION BLOCK		
NO.	DATE	DESCRIPTION

PAGE NO.	OL6
DWG NO.	D–23–02
SHEET NO.	10
OF	25

SEC. 33, T18N, R1W, W.M.





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LACEY, WA 98503–1238 (360) 491–5600

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VERT. SCALE:	N/A
FILE:	PBASE0L.DWG

2023 OVERLAY PHASE 1

OVERLAY PLANS
55TH WAY

REVISION BLOCK

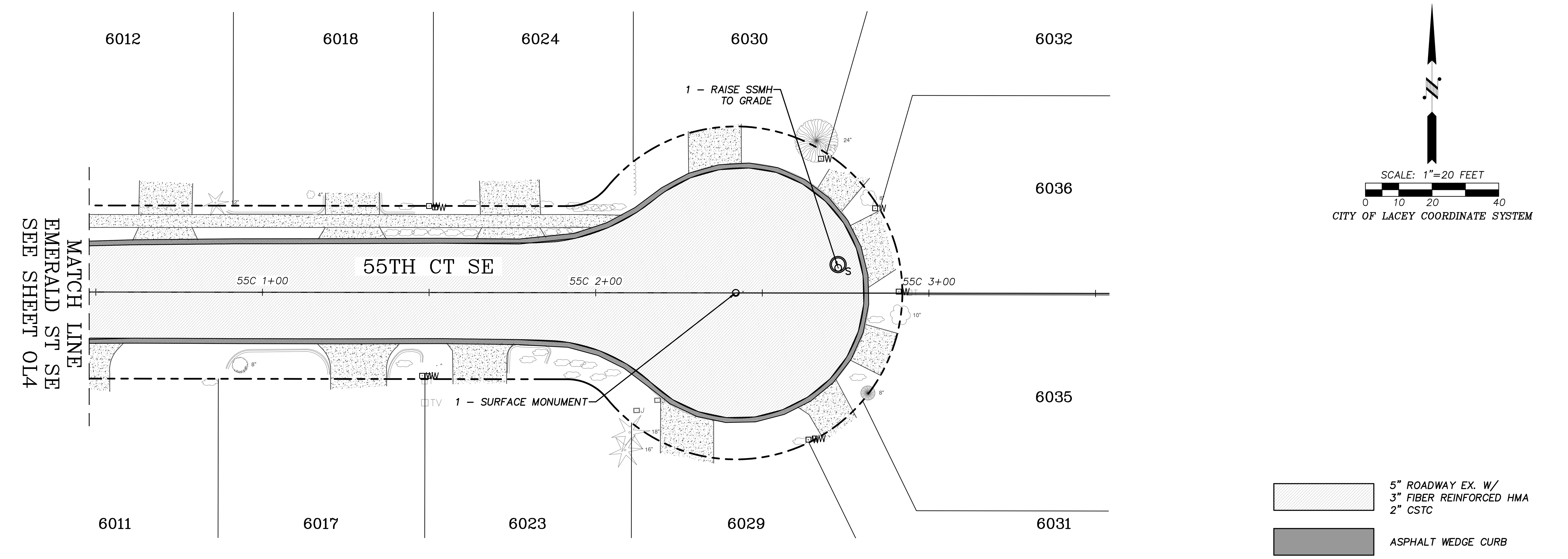
NO.	DATE	DESCRIPTION

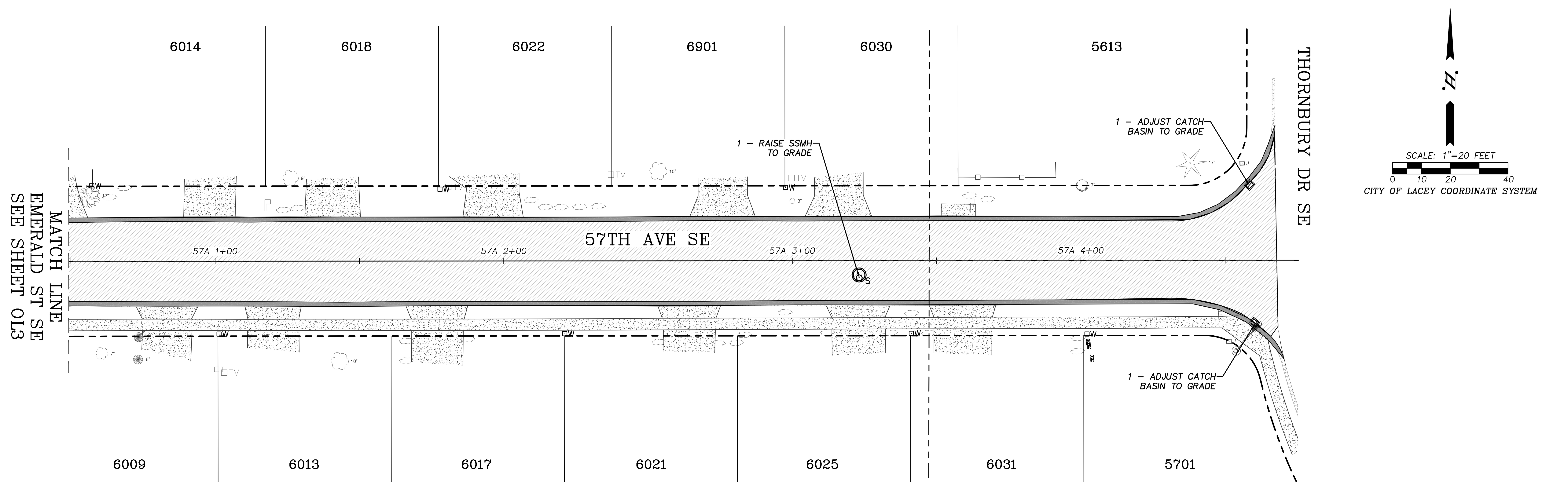
PAGE NO. 0L7

DWG NO. D-23-02

SHEET NO. 11 OF 25

SEC. 33, T18N, R1W, W.M.





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LACEY

JUSTIN KNOX
STATE OF WASHINGTON
44698
REGISTERED PROFESSIONAL ENGINEER
5/15/23

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VERT. SCALE:	N/A
FILE:	PBASEOL1.DWG

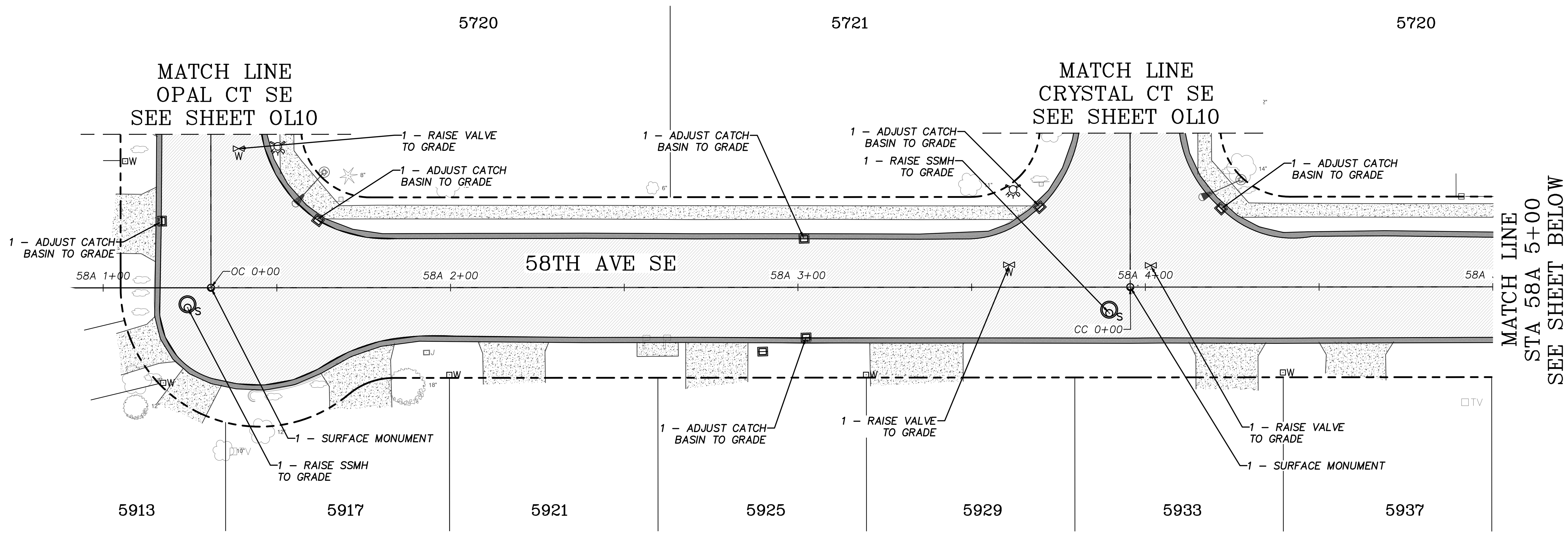
2023 OVERLAY PHASE 1
OVERLAY PLANS
55TH CT & 57TH ST

REVISION BLOCK		
NO.	DATE	DESCRIPTION

PAGE NO.
OL8

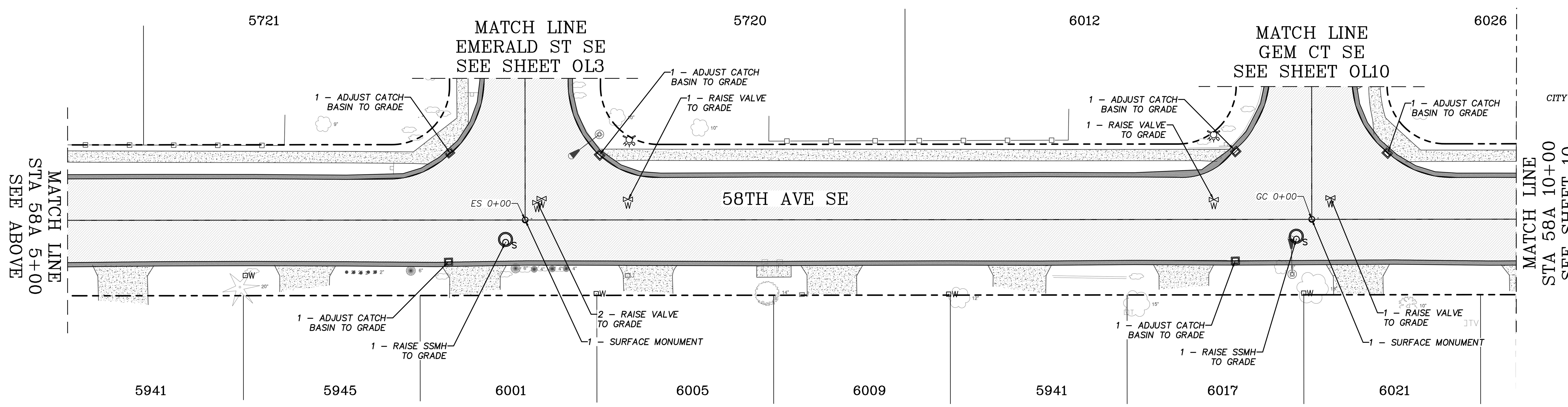
DWG NO.
D-23-02

SEC. 26, T18N, R1W, W.M.
SEC. 27, T18N, R1W, W.M.



SCALE: 1"=20 FEET
0 10 20 40
CITY OF LACEY COORDINATE SYSTEM

(hatched)	5" ROADWAY EX. W/ 3" FIBER REINFORCED HMA 2" CSTC
(gray)	ASPHALT WEDGE CURB



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CITY OF LACEY COORDINATE SYSTEM

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JUSTIN KNOX, STATE OF WASHINGTON, 44698, REGISTERED PROFESSIONAL ENGINEER, 5/15/23

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VERT. SCALE:	N/A
FILE:	PHASEOL1.DWG

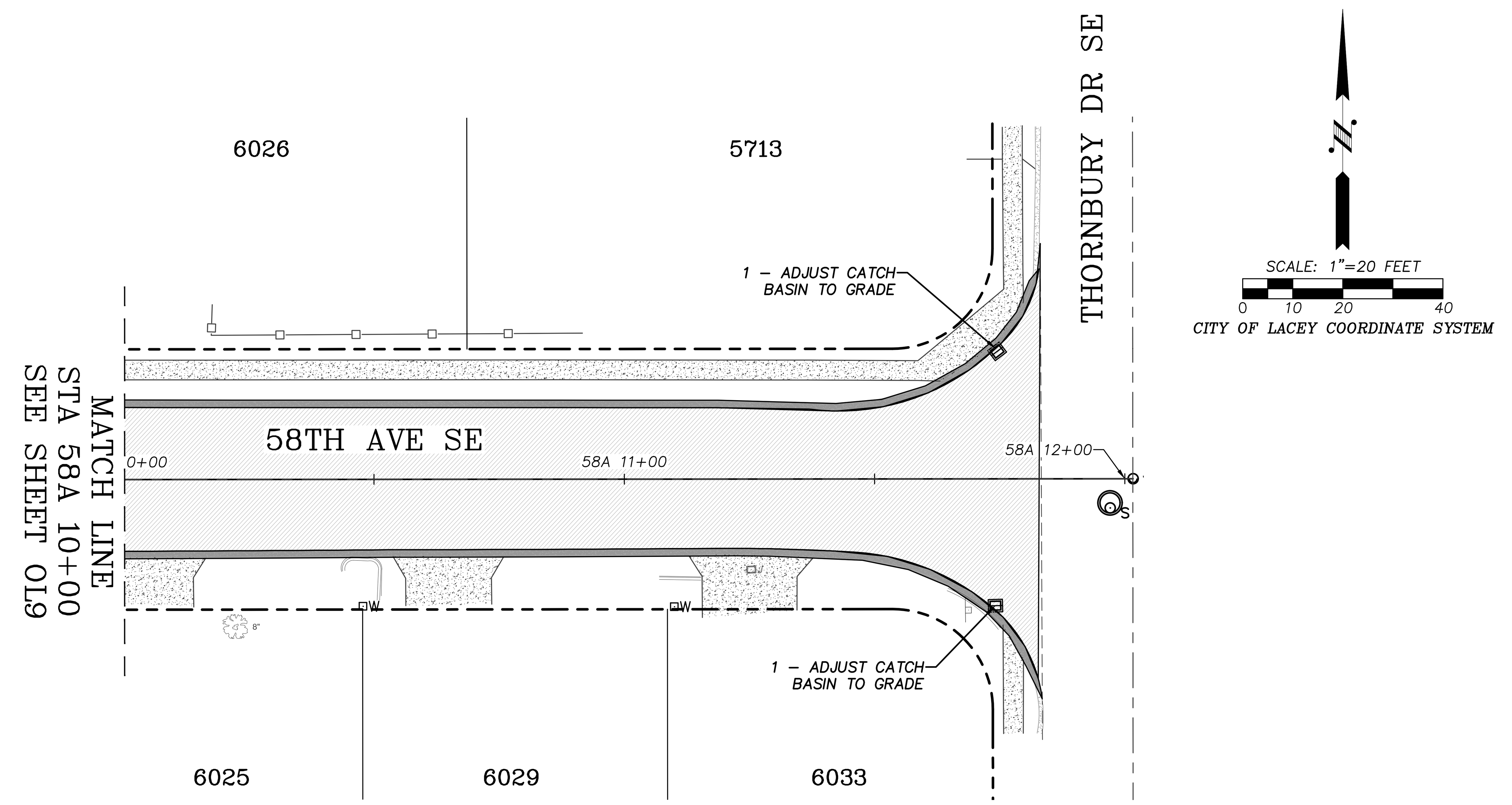
2023 OVERLAY PHASE 1
OVERLAY PLANS
58TH AVE

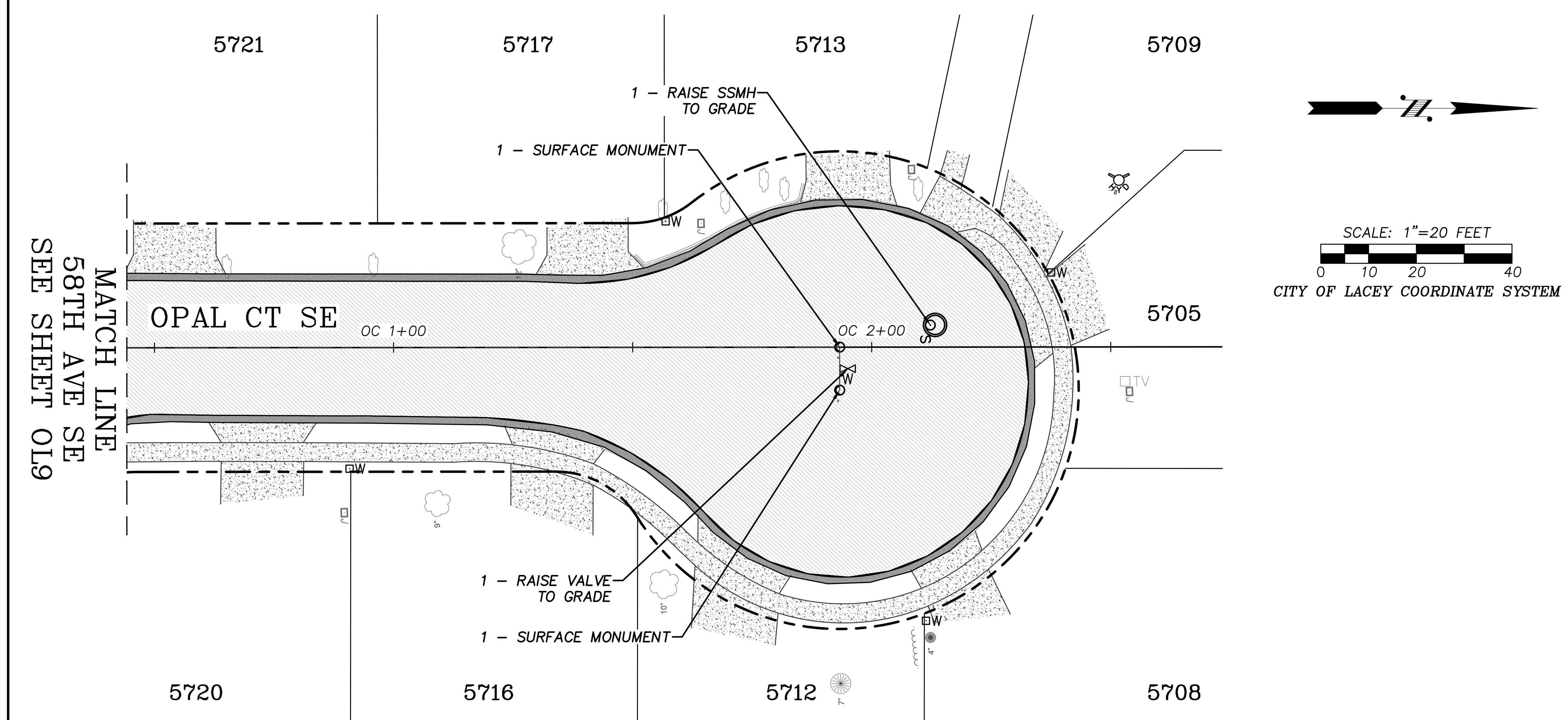
REVISION BLOCK

NO.	DATE	DESCRIPTION

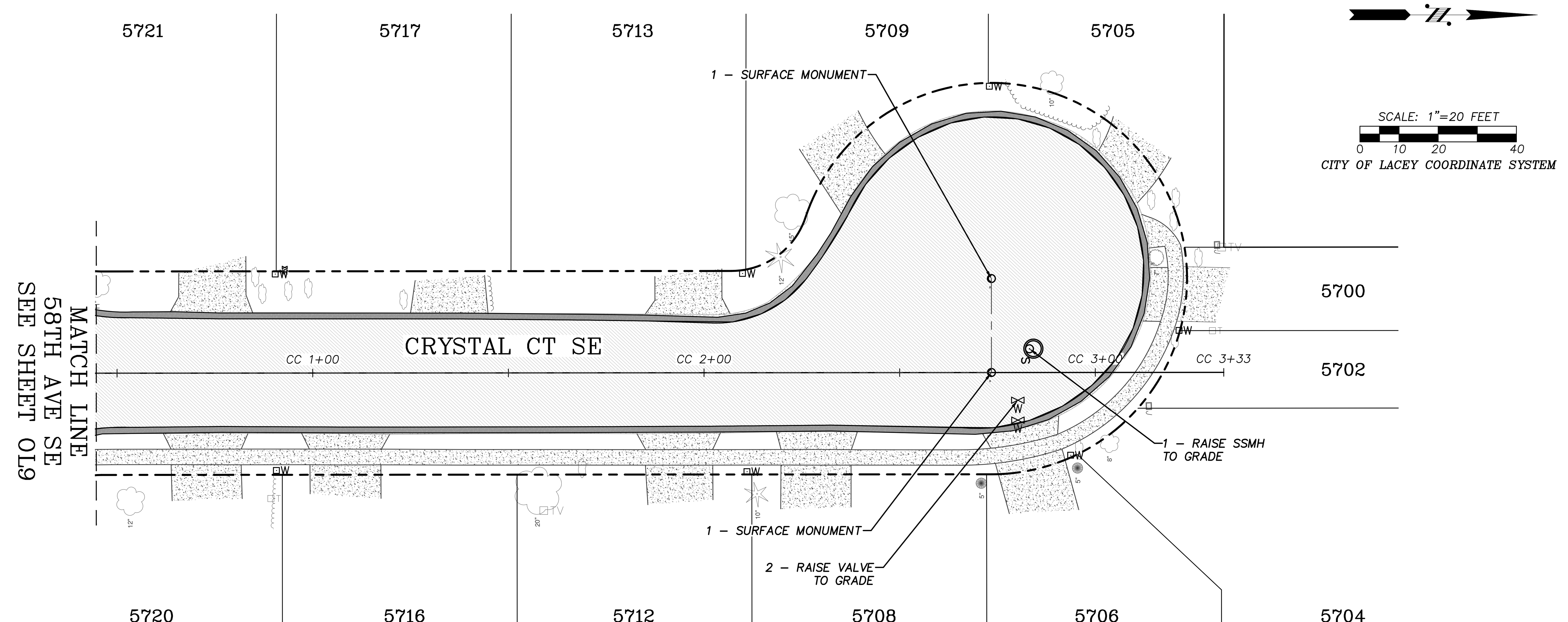
PAGE NO. OL9
DWG NO. D–23–02
SHEET NO. 13 OF 25

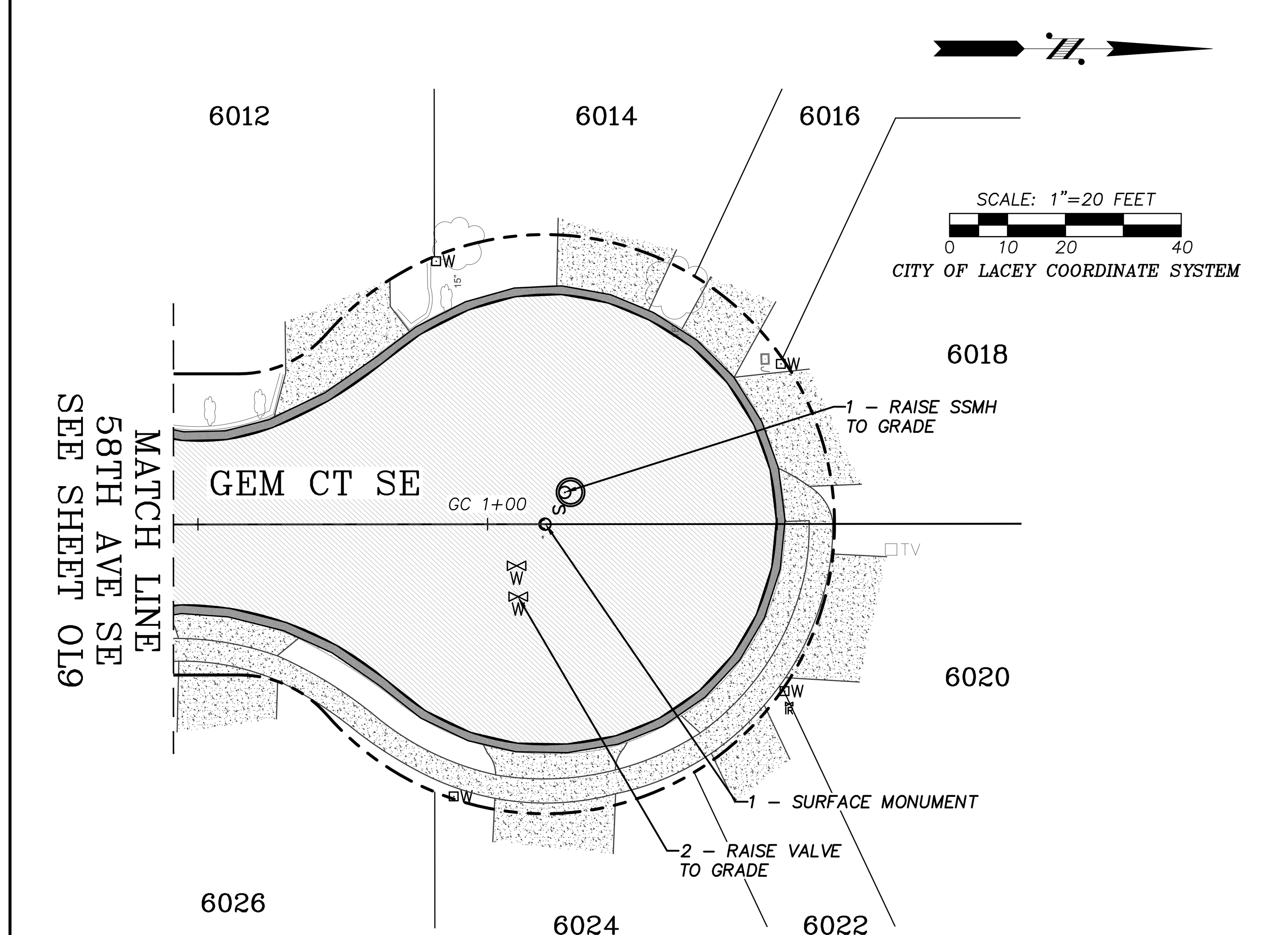
SEC. 33, T18N, R1W, W.M.





	5" ROADWAY EX. W/ 3" FIBER REINFORCED HMA 2" CSTC
	ASPHALT WEDGE CURB





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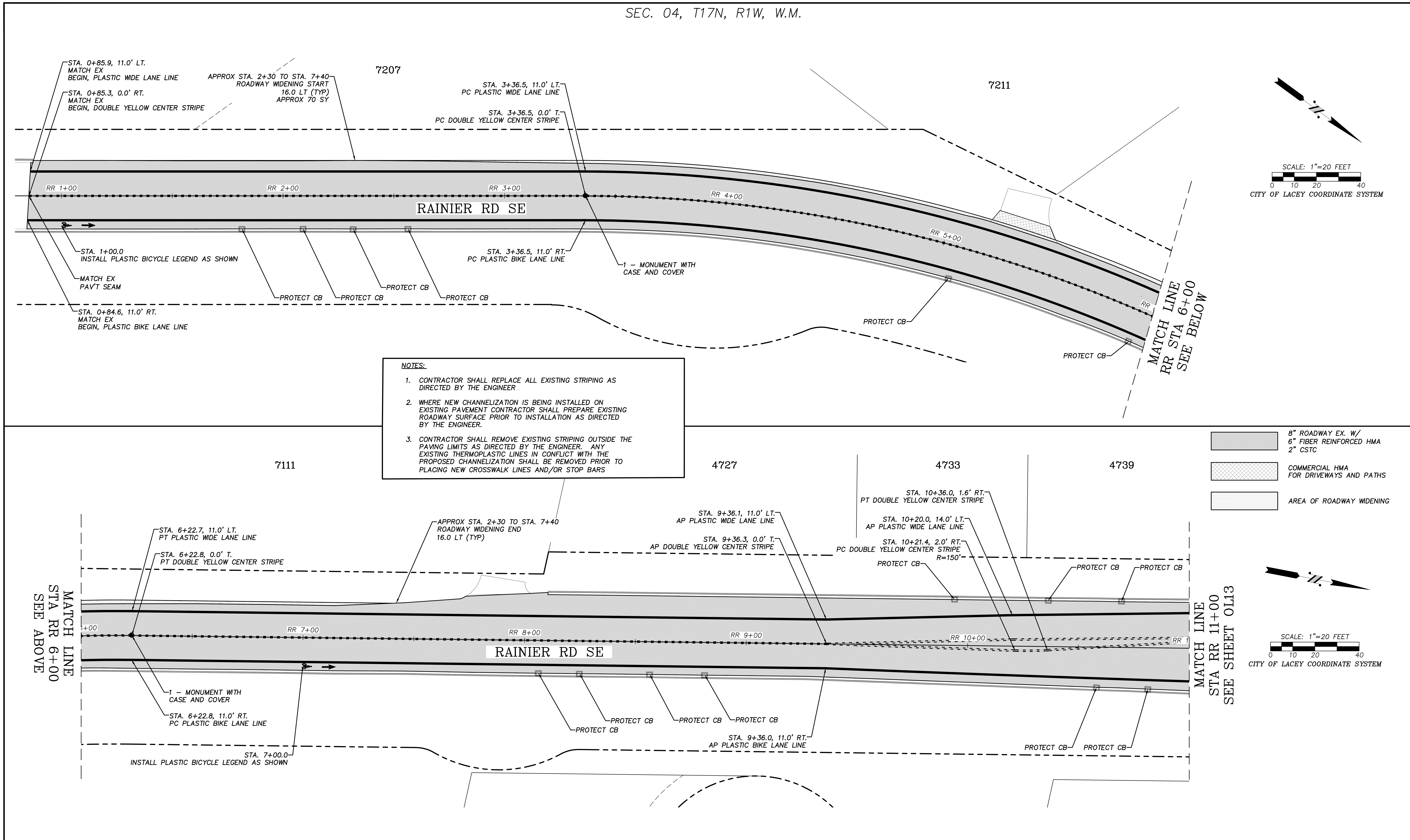
VERT. SCALE:	N/A
FILE:	PBASEOL1.DWG

2023 OVERLAY PHASE 1
OVERLAY PLANS
58TH AVE, OPAL CT, CRYSTAL CT & GEM CT

REVISION BLOCK

NO.	DATE	DESCRIPTION

PAGE NO.	SHEET NO.
OL10	14
DWG NO.	OF
D–23–02	25



NOTES:

1. CONTRACTOR SHALL REPLACE ALL EXISTING STRIPING AS DIRECTED BY THE ENGINEER
2. WHERE NEW CHANNELIZATION IS BEING INSTALLED ON EXISTING PAVEMENT CONTRACTOR SHALL PREPARE EXISTING ROADWAY SURFACE PRIOR TO INSTALLATION AS DIRECTED BY THE ENGINEER.
3. CONTRACTOR SHALL REMOVE EXISTING STRIPING OUTSIDE THE PAVING LIMITS AS DIRECTED BY THE ENGINEER. ANY EXISTING THERMOPLASTIC LINES IN CONFLICT WITH THE PROPOSED CHANNELIZATION SHALL BE REMOVED PRIOR TO PLACING NEW CROSSWALK LINES AND/OR STOP BARS

8" ROADWAY EX. W/ 6" FIBER REINFORCED HMA 2" CSTC

COMMERCIAL HMA FOR DRIVEWAYS AND PATHS

AREA OF ROADWAY WIDENING

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VERT. SCALE:	N/A
FILE:	PHASEOL11.DWG

2023 OVERLAY PHASE 1
OVERLAY PLANS
RAINIER RD 1

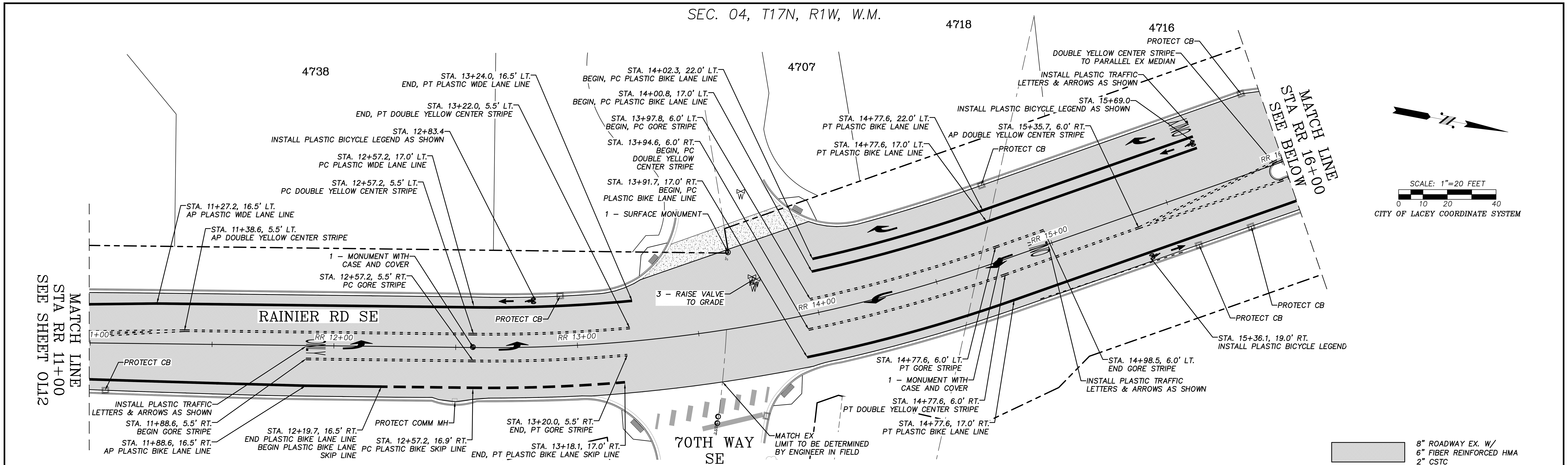
REVISION BLOCK

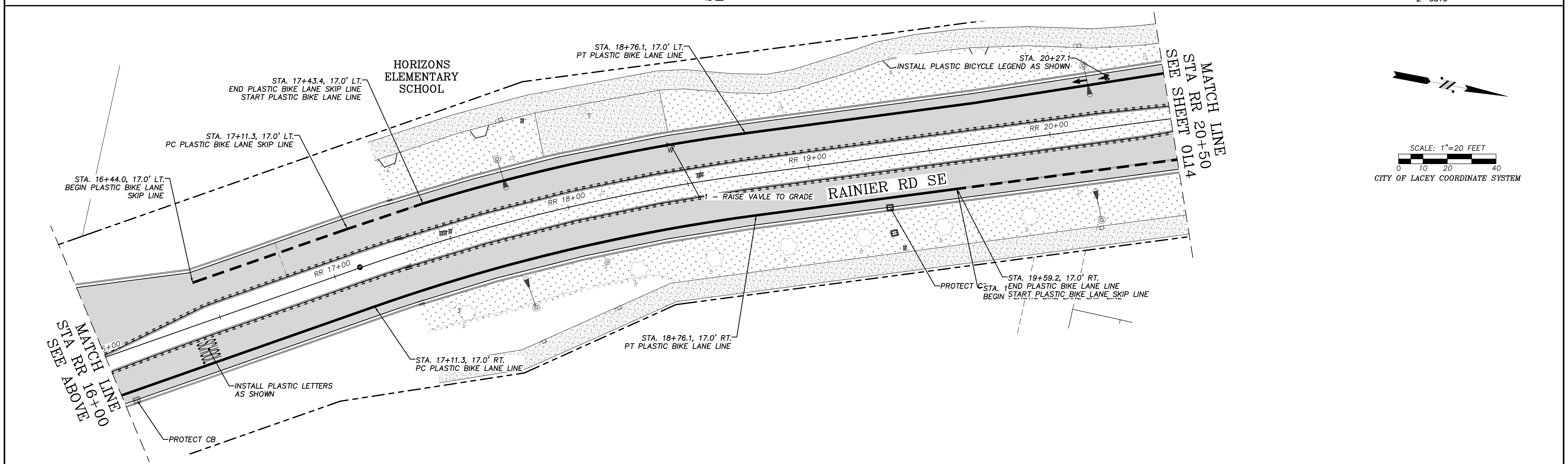
NO.	DATE	DESCRIPTION

PAGE NO. OL11

DWG NO. D-23-02

SHEET NO. 15 OF 25





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VERT. SCALE:	N/A
FILE:	PBASEOL1.DWG

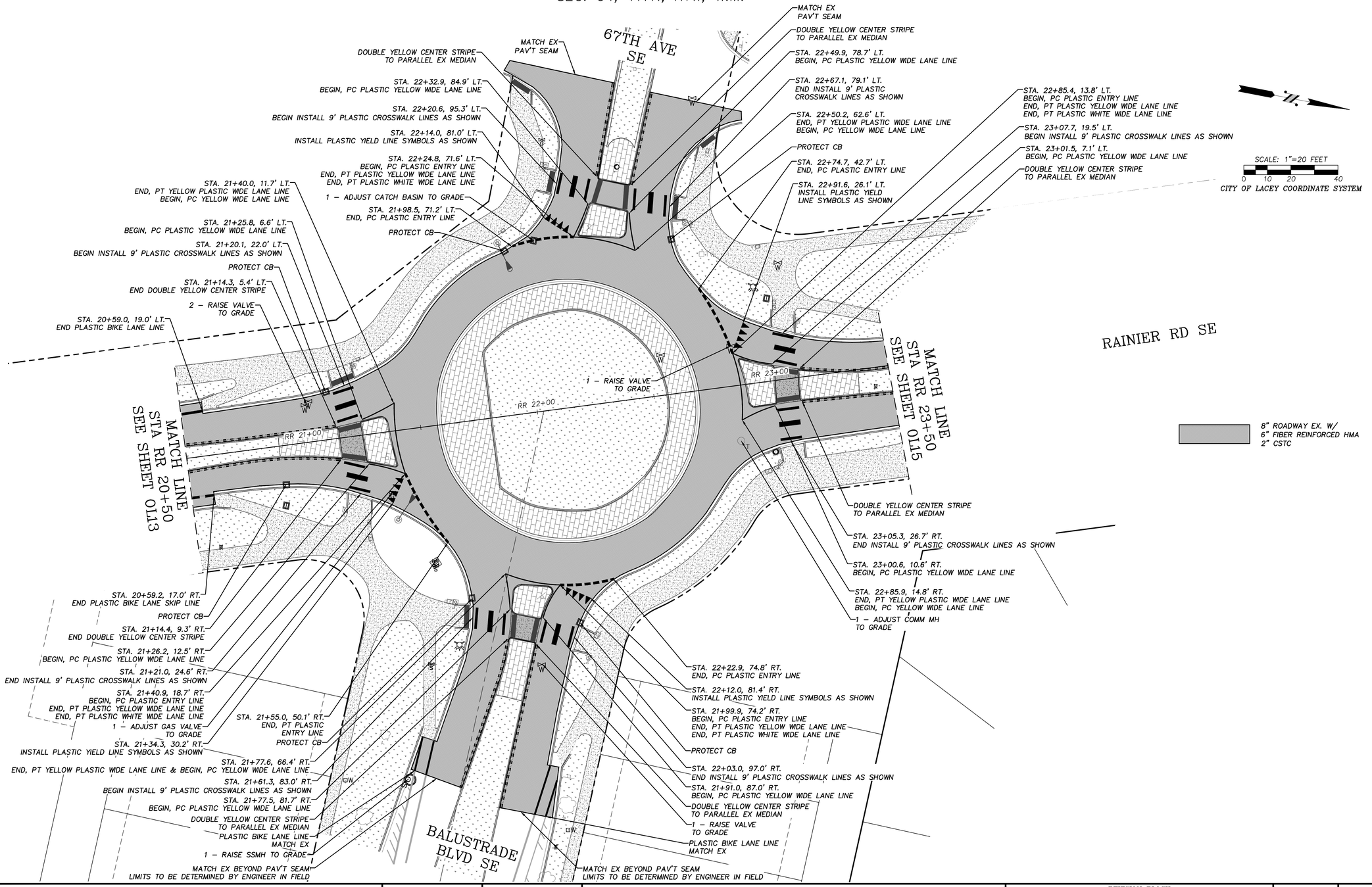
2023 OVERLAY PHASE 1
OVERLAY PLANS
RAINIER RD 2

REVISION BLOCK

NO.	DATE	DESCRIPTION

PAGE NO. OL12
DWG NO. D-23-02

SEC. 04, T17N, R1W, W.M.



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JUSTIN KEK 14998 REGISTERED PROFESSIONAL ENGINEER 5/15/23

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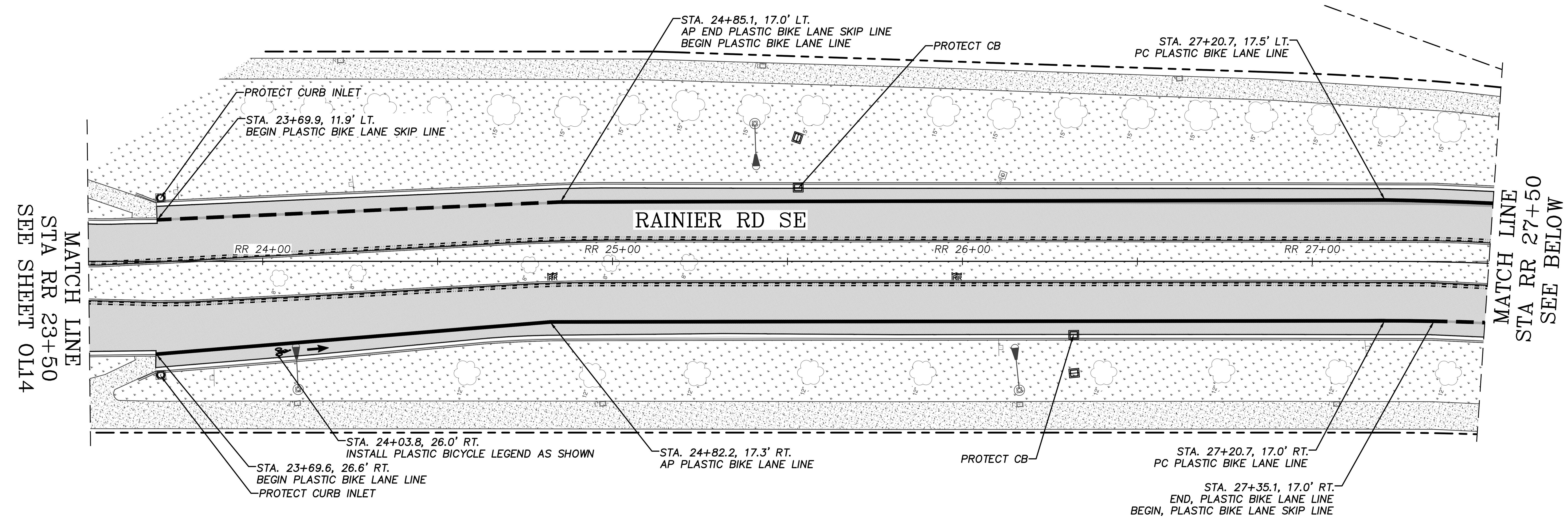
VERT. SCALE:	N/A
FILE:	PRSHEET.DWG

2023 OVERLAY PHASE 1
OVERLAY PLANS
RAINIER & BALUSTRADE RAB

REVISION BLOCK		
NO.	DATE	DESCRIPTION

PAGE NO. 0L13
DWG NO. D-23-02
SHEET NO. 17 OF 25

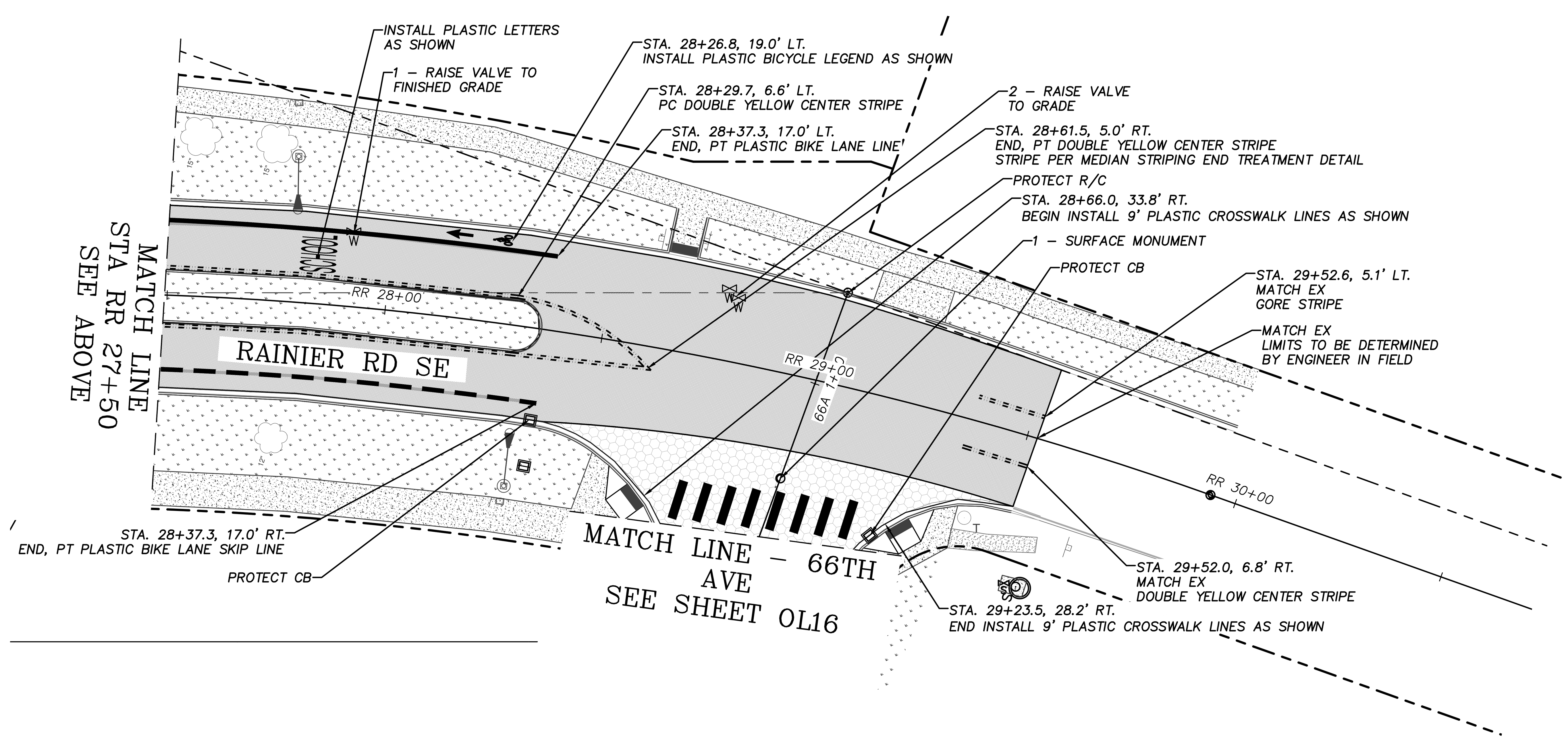
SEC. 04, T17N, R1W, W.M.



SCALE: 1"=20 FEET
0 10 20 40
CITY OF LACEY COORDINATE SYSTEM

8" ROADWAY EX. W/
6" FIBER REINFORCED HMA
2" CSTC

6" PAVEMENT REMOVAL W/
4" FIBER REINFORCED HMA
2" CSTC



SCALE: 1"=20 FEET
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CITY OF LACEY COORDINATE SYSTEM

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44698
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HORZ. SCALE:	1"=20'
VERT. SCALE:	N/A
FILE:	PBASEOL1.DWG

2023 OVERLAY PHASE 1
OVERLAY PLANS
RAINIER RD 3

REVISION BLOCK

NO.	DATE	DESCRIPTION

PAGE NO. OL14
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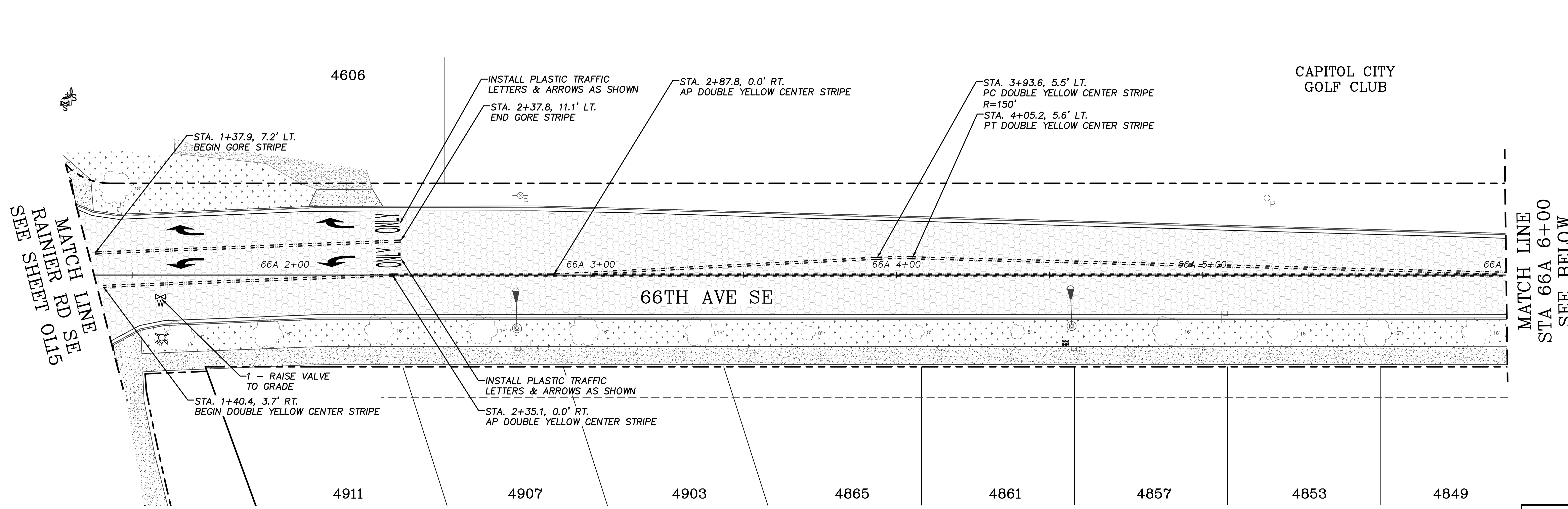
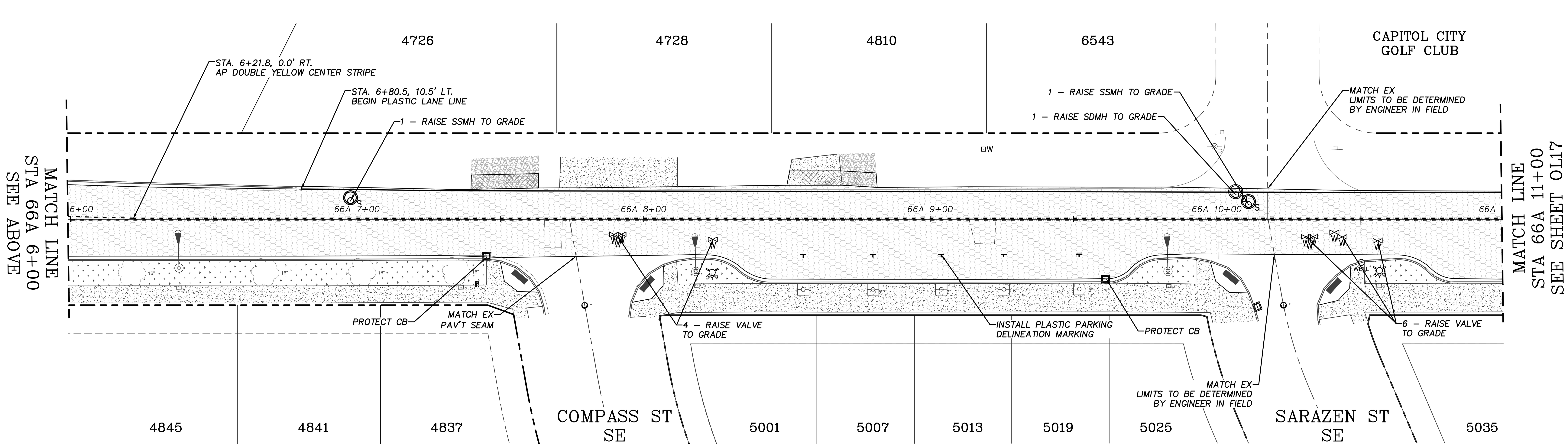
SEC. 04, T17N, R1W, W.M.



SCALE: 1"=20 FEET
0 10 20 40
CITY OF LACEY COORDINATE SYSTEM

6" PAVEMENT REMOVAL W/ 4" FIBER REINFORCED HMA 2" CSTC

COMMERCIAL HMA FOR DRIVEWAYS AND PATHS



SCALE: 1"=20 FEET
0 10 20 40
CITY OF LACEY COORDINATE SYSTEM

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VERT. SCALE:	N/A
FILE:	PBASEOL1.DWG

2023 OVERLAY PHASE 1
OVERLAY PLANS
66TH AVE 1

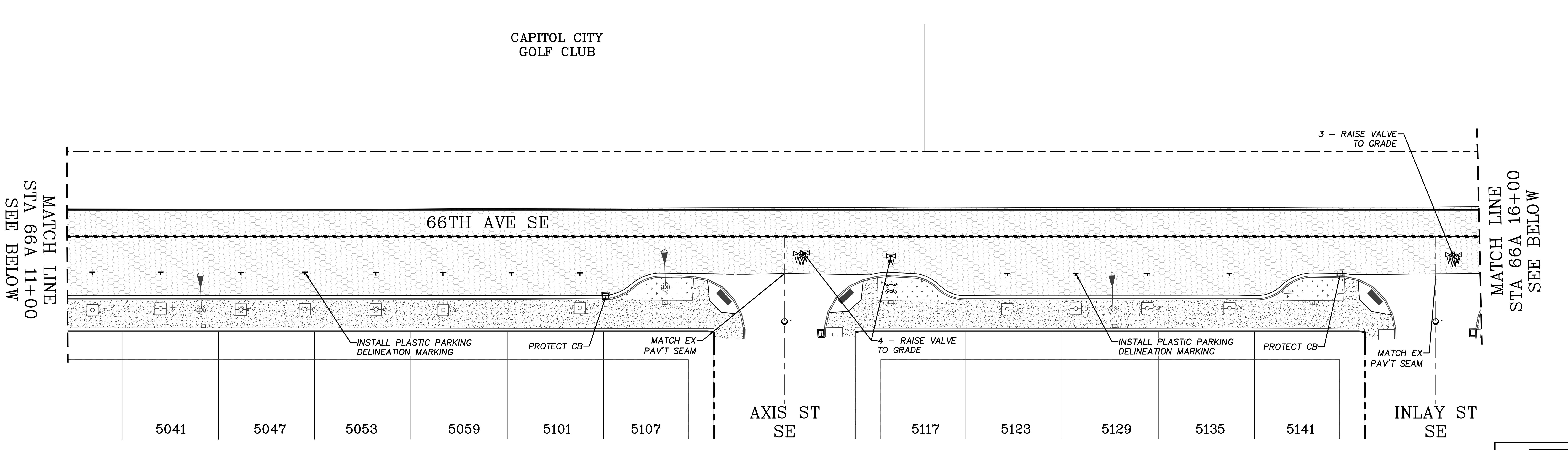
REVISION BLOCK

NO.	DATE	DESCRIPTION

PAGE NO. OL15

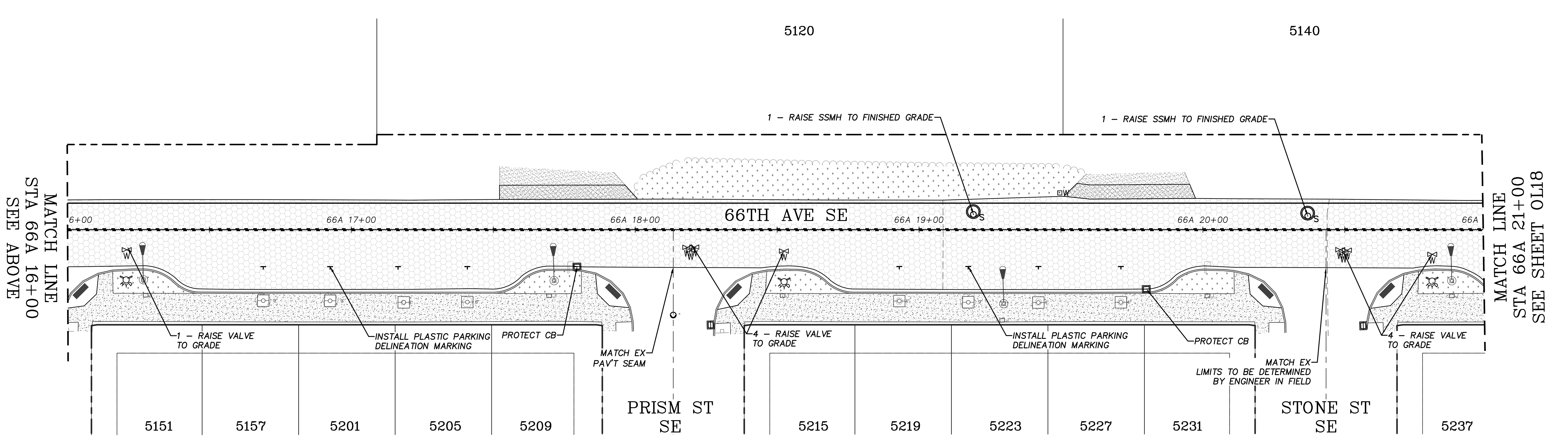
DWG NO. D-23-02

SEC. 04, T17N, R1W, W.M.



6" PAVEMENT REMOVAL W/
4" FIBER REINFORCED HMA
2" CSTC

COMMERCIAL HMA
FOR DRIVEWAYS AND PATHS



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VERT. SCALE:	N/A
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2023 OVERLAY PHASE 1
OVERLAY PLANS
66TH AVE 2

REVISION BLOCK

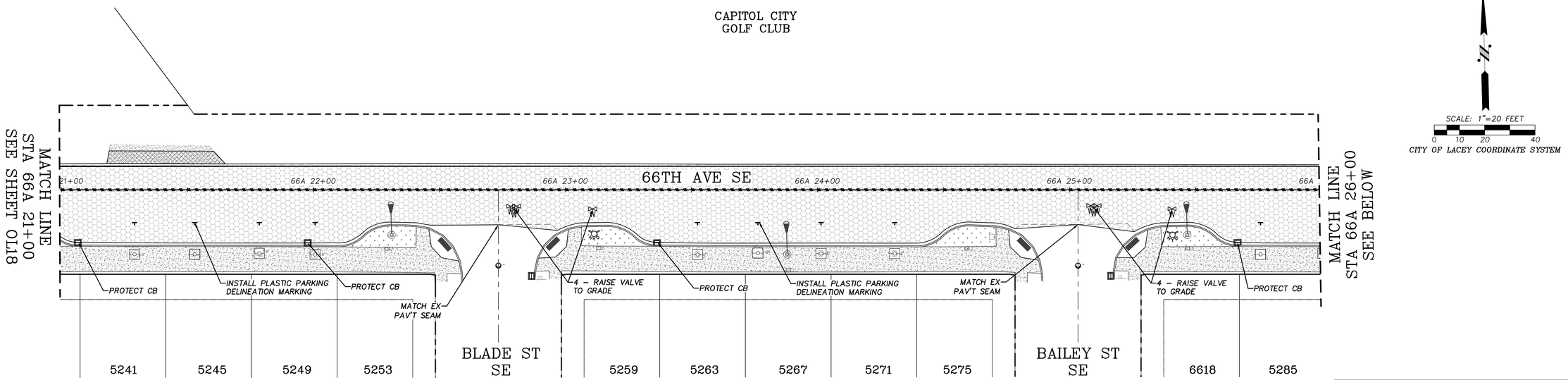
NO.	DATE	DESCRIPTION

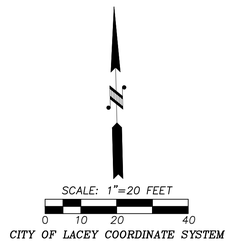
PAGE NO. OL16

DWG NO. D–23–02

SHEET NO. 20 OF 25

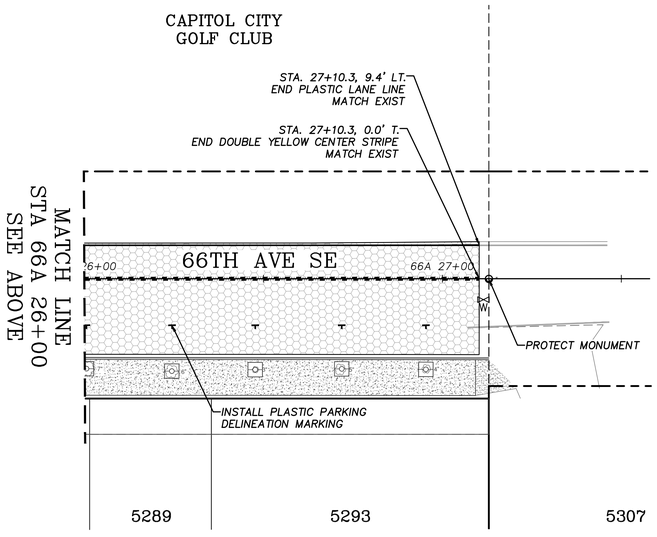
SEC. 04, T17N, R1W, W.M.

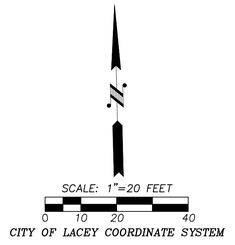




6" PAVEMENT REMOVAL W/ 4" FIBER REINFORCED HMA 2" CSTC

COMMERCIAL HMA FOR DRIVEWAYS AND PATHS





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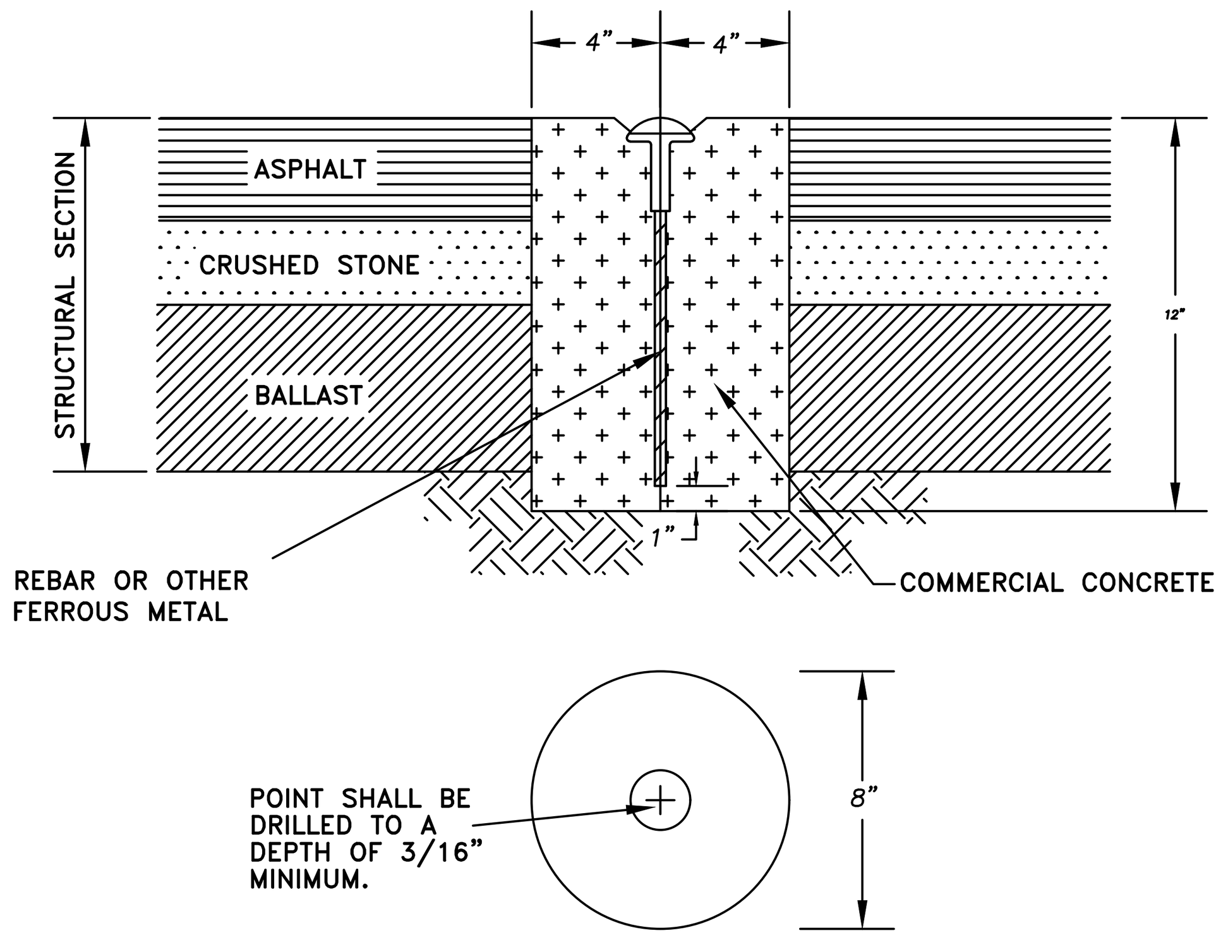
VERT. SCALE:	N/A
FILE:	PBASHOLL.DWG

2023 OVERLAY PHASE 1
OVERLAY PLANS
66TH AVE 3

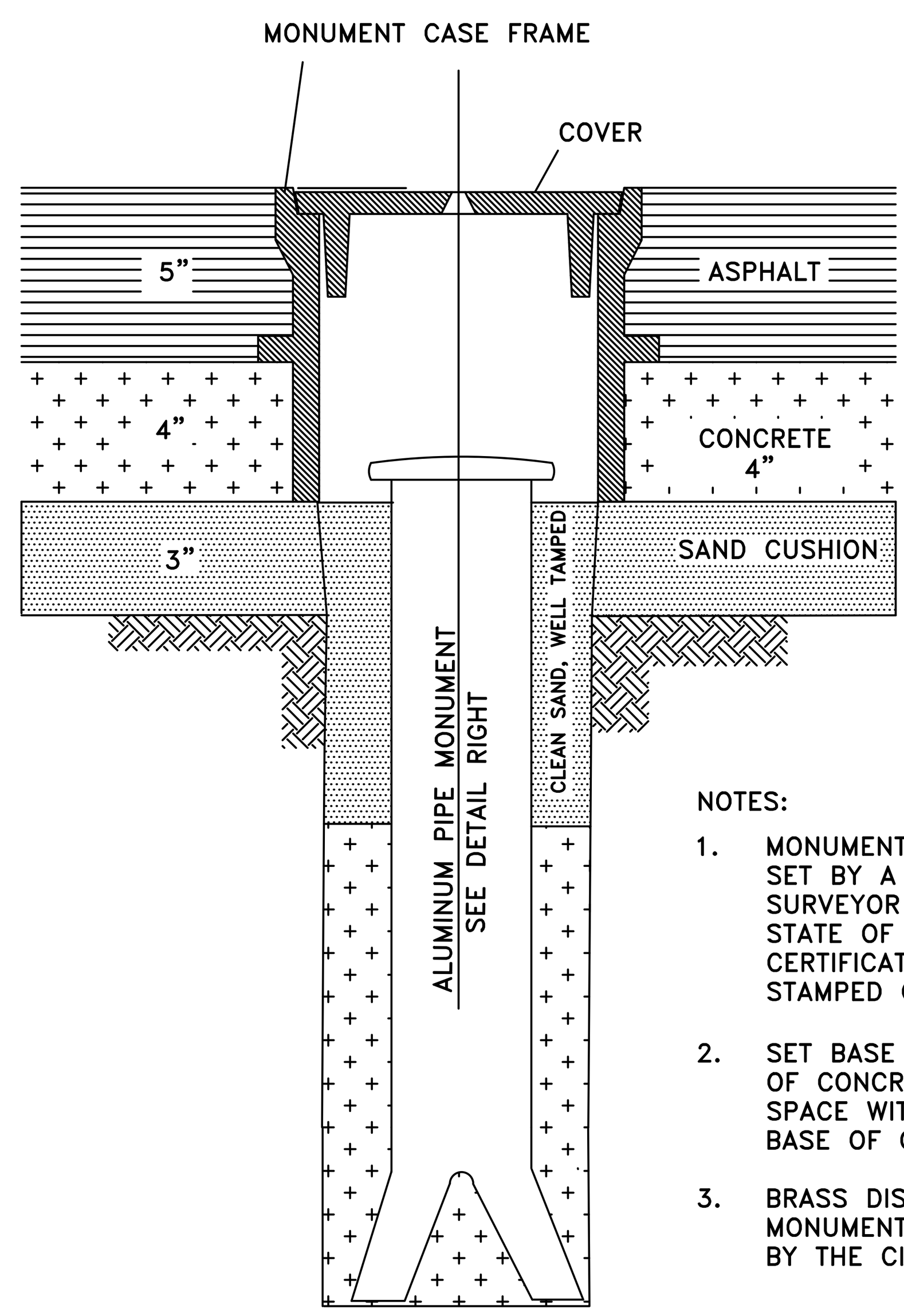
REVISION BLOCK		
NO.	DATE	DESCRIPTION

PAGE NO.	0L17
DWG NO.	D-23-02
SHEET NO.	21
OF	25



GENERAL NOTES:
1. THIS MONUMENT TO BE USED PRIMARILY ON BITUMINOUS OR ASPHALT CONCRETE PAVEMENT FOR USE PRIMARILY IN SUBDIVISIONS AND MINOR ARTERIALS.
2. CONCRETE BASE SHALL BE 8" IN DIAMETER AND CORE DRILLED. CONCRETE BASE NEED NOT BE FORMED.
3. CAP SHALL BE BRASS, ALUMINUM OR OTHER NON-FERROUS METAL, MINIMUM 2-1/2" DIAMETER
4. CONCRETE TO BE PLACED ON A FIRM AND UNYIELDING FOUNDATION.
5. MONUMENT POSITION SHALL BE SET BY A PROFESSIONAL LAND SURVEYOR LICENSED BY THE STATE OF WASHINGTON WHOSE CERTIFICATE NUMBER SHALL BE STAMPED ON CAP.
6. SUFFICIENT FERROUS METAL SHALL BE PLACED IN CONCRETE TO ALLOW DETECTION BY A METAL DETECTOR.
7. BRASS DISCS TO BE SUPPLIED BY CITY.

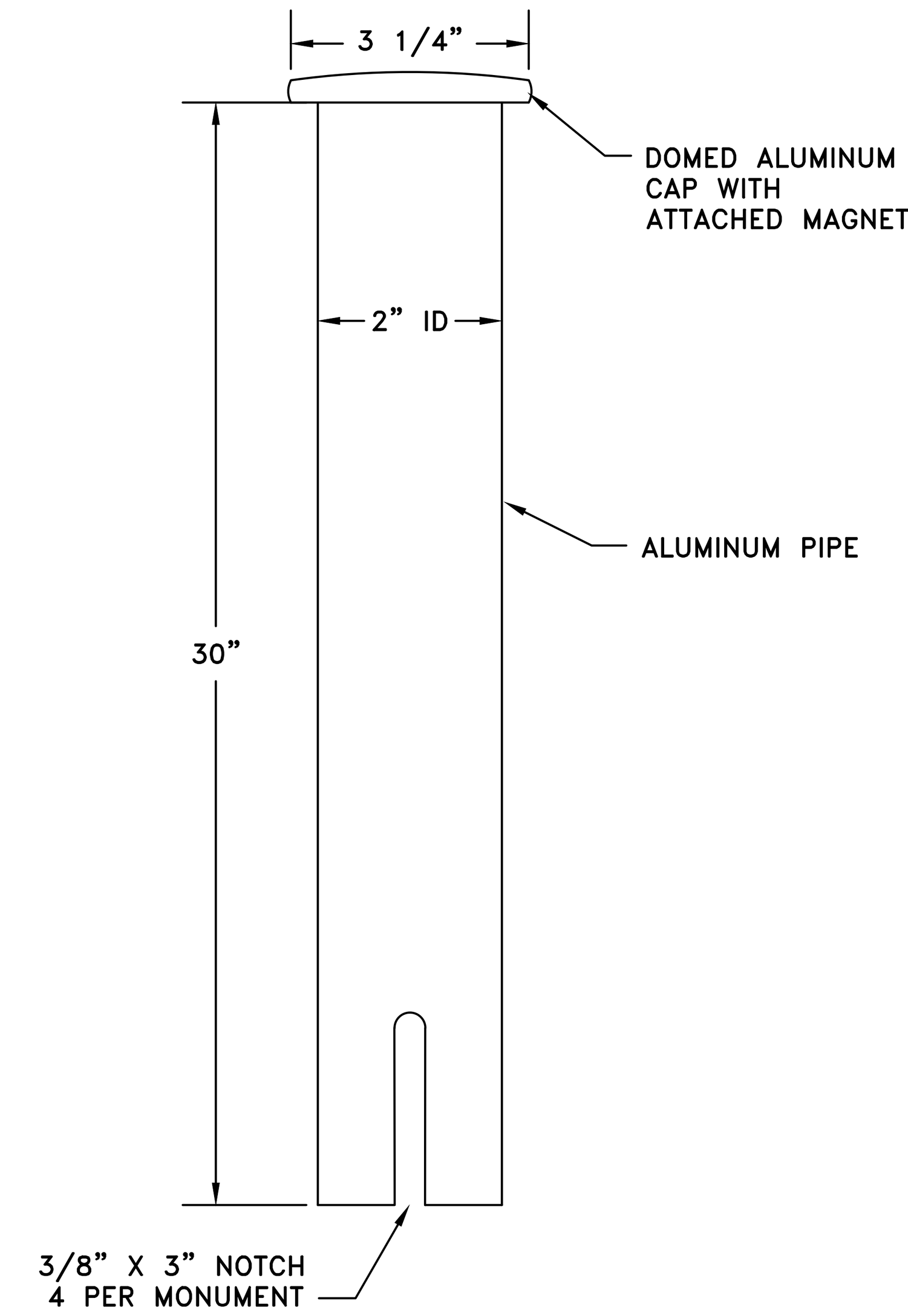
SURFACE MONUMENT
N.T.S.



FLARE BOTTOM 3" OF PIPE PRIOR TO INSTALLATION

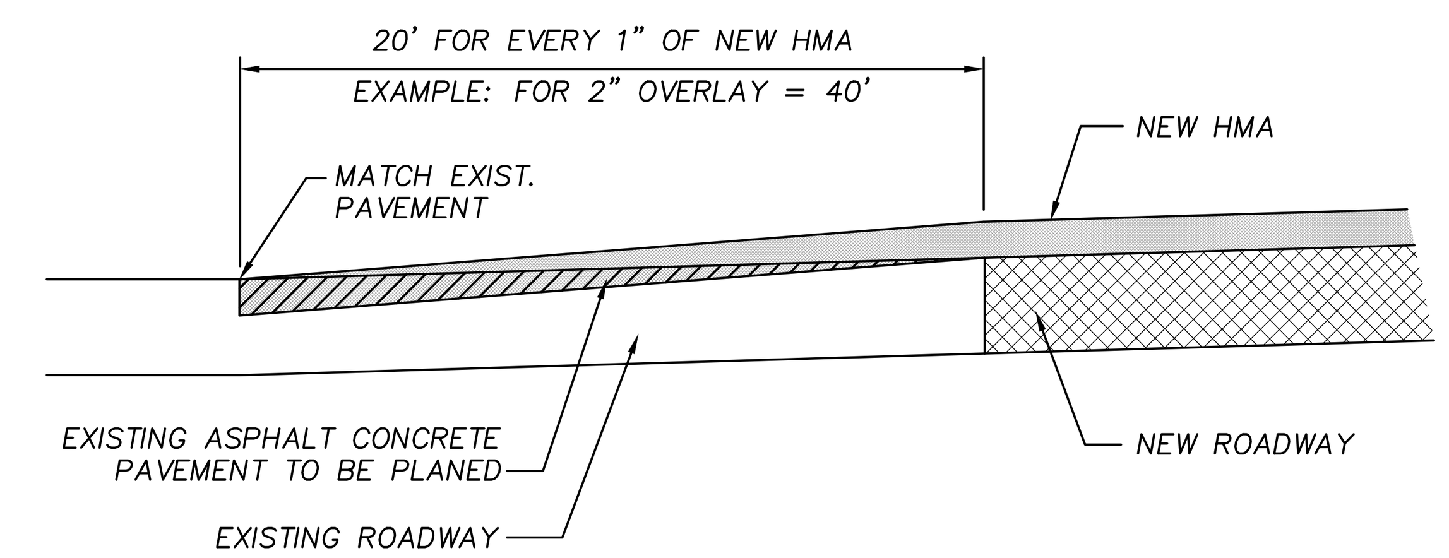
NOTES:
1. MONUMENT POSITION SHALL BE SET BY A PROFESSIONAL LAND SURVEYOR LICENSED BY THE STATE OF WASHINGTON WHOSE CERTIFICATE NUMBER SHALL BE STAMPED ON THE CAP.
2. SET BASE OF MONUMENT IN 18" OF CONCRETE, FILL REMAINING SPACE WITH TAMPED SAND TO BASE OF CASE FRAME.
3. BRASS DISCS AND PIPE MONUMENTS TO BE SUPPLIED BY THE CITY.

MONUMENT WITH CASE AND COVER
N.T.S.



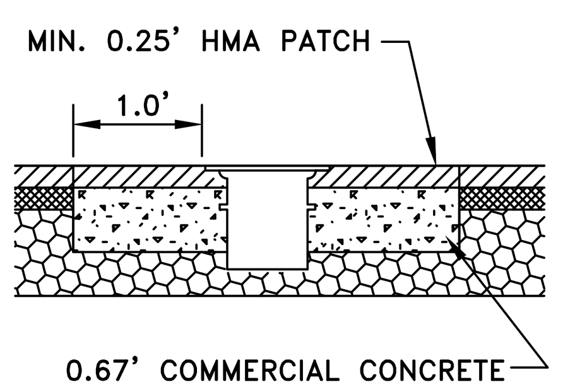
GENERAL NOTES:
1. PIPE MONUMENTS SHALL BE BERNSTEN A1NBF OR EQUIVALENT.
2. BOTTOM OF MONUMENT SHALL BE FLARED PRIOR TO INSTALLATION.

ALUMINUM PIPE MONUMENT
N.T.S.



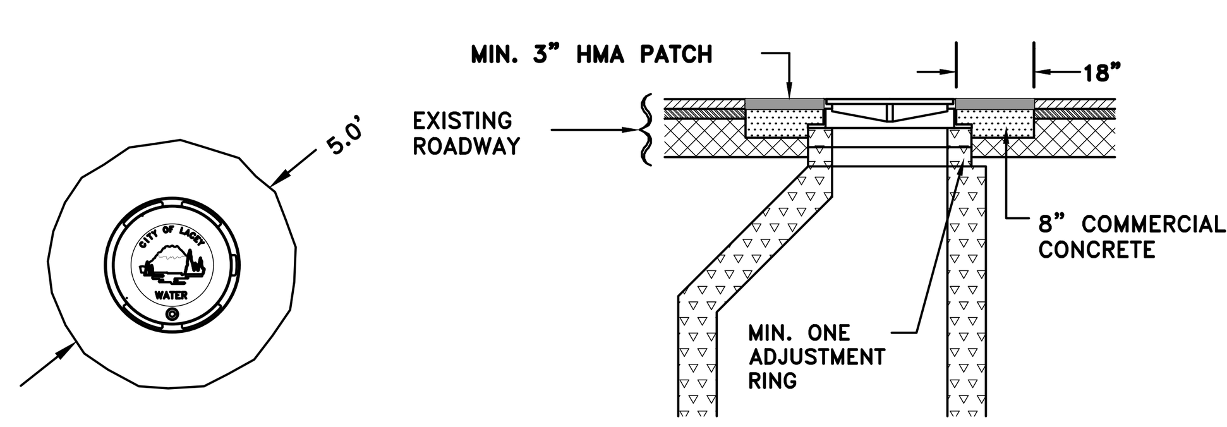
BUTT JOINT @ EXISTING PAVEMENT
N.T.S.

RAISE VALVE BOX TO GRADE



RAISE MANHOLE TO GRADE

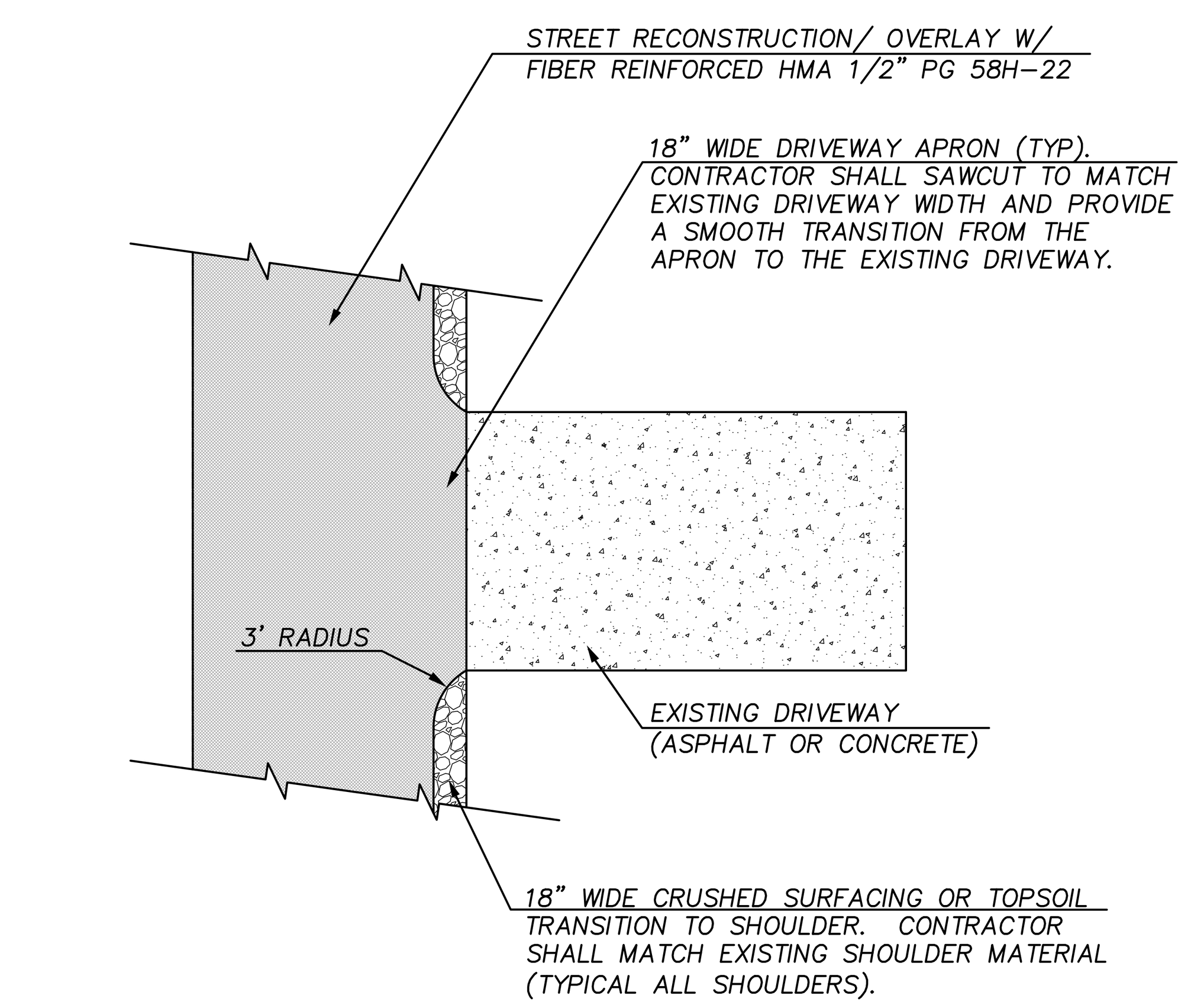
IN ASPHALT



GENERAL NOTES:
1. ON MANHOLES OUTSIDE OF THE ASPHALT ADD REINFORCING STEEL AS SHOWN ABOVE, DEFORMED BAR TO MEET ASTM A615 GRADE 60 FY=60,000 P.S.I.
2. ALL WATER MANHOLE LIDS SHALL BE EAST JORDAN IRON WORKS OR OLYMPIC FOUNDARY WSDOT STYLE #MH-41 CITY OF LACEY LOGO LIDS.
3. ALL LIDS SHALL BE DUCTILE IRON AND MANUFACTURED IN THE USA.

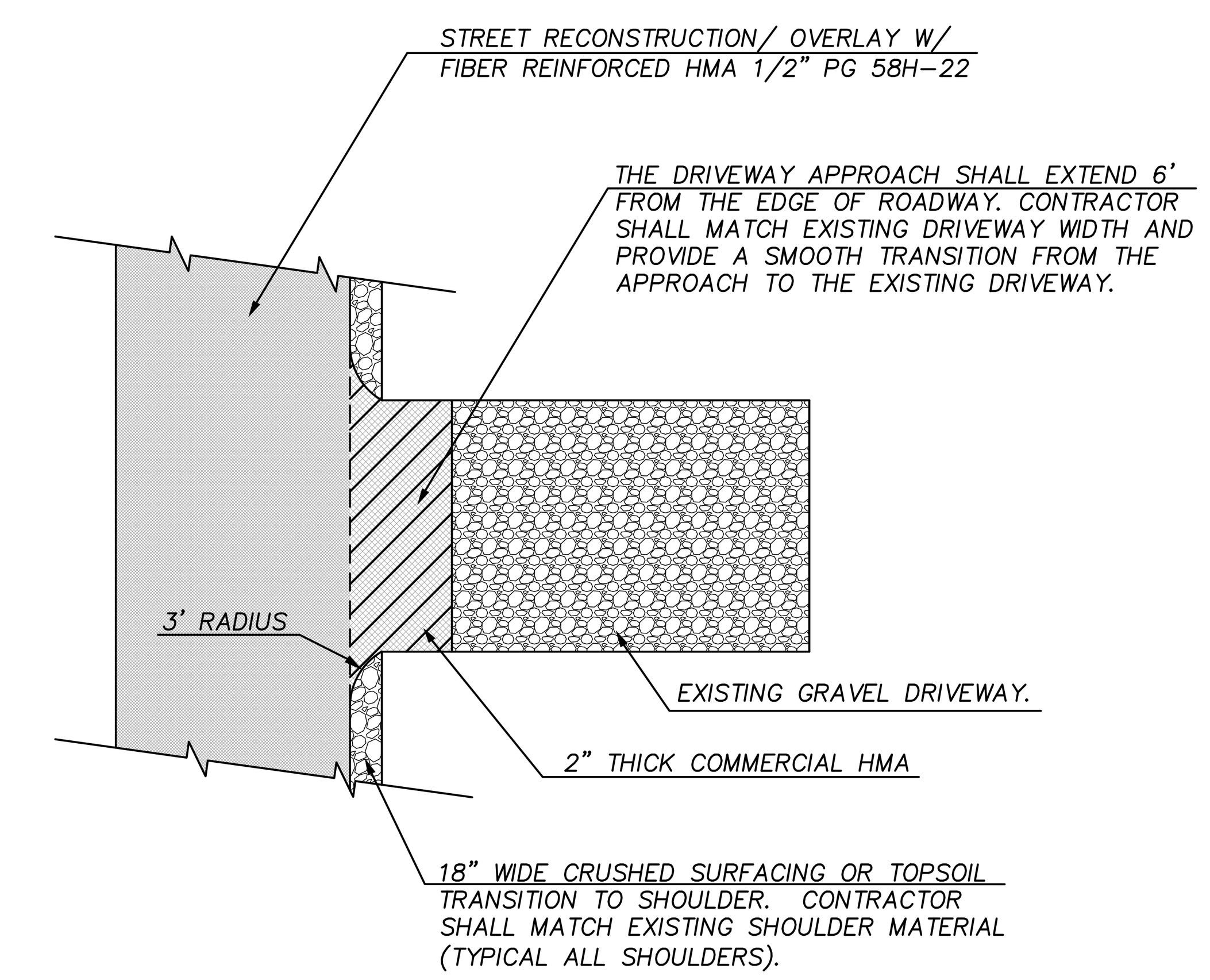
IRON ADJUSTMENTS AND MANHOLE LOGO LIDS
N.T.S.

NOTE: THE CONTRACTOR SHALL PREPARE DRIVEWAY TRANSITIONS FOR HMA PRIOR TO PLACEMENT.
** DRIVEWAY APRONS WILL NOT BE REQUIRED IN AREAS WHERE WEDGE CURB PREVIOUSLY EXISTS, AND IS TO REMAIN IN PLACE.*



DRIVEWAY APRON & SHOULDER DETAIL FOR PAVED DRIVEWAYS
N.T.S.

NOTE: THE CONTRACTOR SHALL PREPARE DRIVEWAY TRANSITIONS FOR HMA PRIOR TO PLACEMENT.
** DRIVEWAY APRONS WILL NOT BE REQUIRED IN AREAS WHERE WEDGE CURB PREVIOUSLY EXISTS, AND IS TO REMAIN IN PLACE.*



DRIVEWAY APPROACH & SHOULDER DETAIL FOR GRAVEL DRIVEWAYS
N.T.S.

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JUSTIN KNOX
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44698
REGISTERED PROFESSIONAL ENGINEER
5/15/23

DESIGNED:	BP
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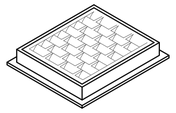
CHECKED:	JK
HORZ. SCALE:	N.T.S.
VERT. SCALE:	N/A
FILE:	DTCON

2023 OVERLAY PHASE 1
CONSTRUCTION DETAILS 1

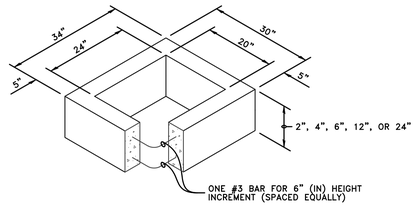
REVISION BLOCK

NO.	DATE	DESCRIPTION

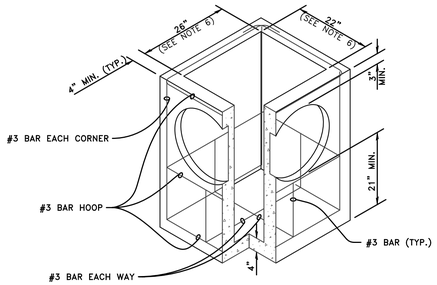
PAGE NO. DT1
DWG NO. D-23-02



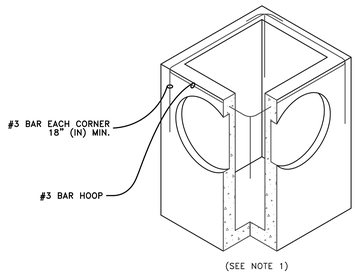
FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION



(SEE NOTE 1)

ALTERNATIVE PRECAST BASE SECTION

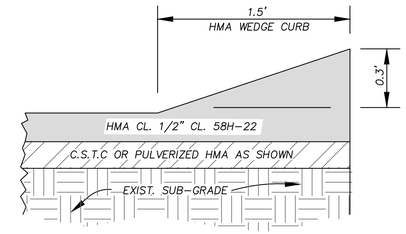
NOTES

1. As acceptable alternatives to the rebar shown in the **PRECAST BASE SECTION**, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the **ALTERNATIVE PRECAST BASE SECTION**. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 20" (in). Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
6. The opening shall be measured at the top of the **Precast Base Section**.
7. All pickup holes shall be grouted full after the basin has been placed.

PIPE ALLOWANCES	
PIPE MATERIAL	**MAXIMUM INSIDE DIAMETER (INCHES)**
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP ✳ (STD. SPEC. SECT. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. SECT. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. SECT. 9-05.12(2))	15"

✳CORRUGATED POLYETHYLENE STORM SEWER PIPE

CATCH BASIN TYPE 1
N.T.S.



HMA WEDGE CURB DETAIL
N.T.S.

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LACEY

JUSTIN KAMP — WASHINGTON — 44698 — REGISTERED PROFESSIONAL ENGINEER — 5/15/23

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	N.T.S.
VERT. SCALE:	N/A
FILE:	DTCON

2023 OVERLAY PHASE 1
CONSTRUCTION DETAILS 2

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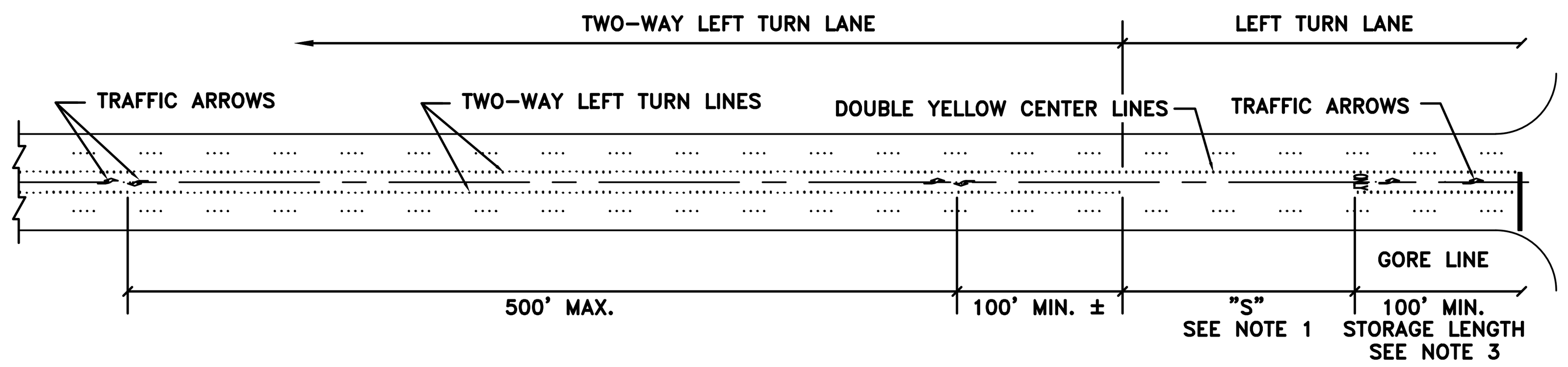
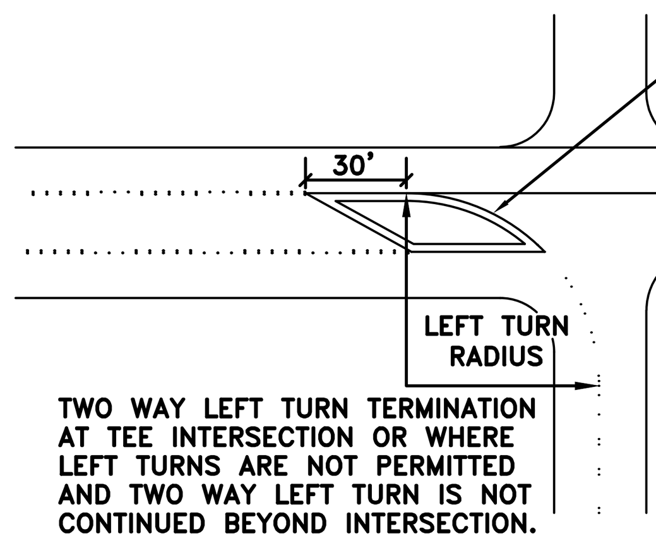


TWO-WAY LEFT TURN LANE



END TWO-WAY LEFT TURN LANE

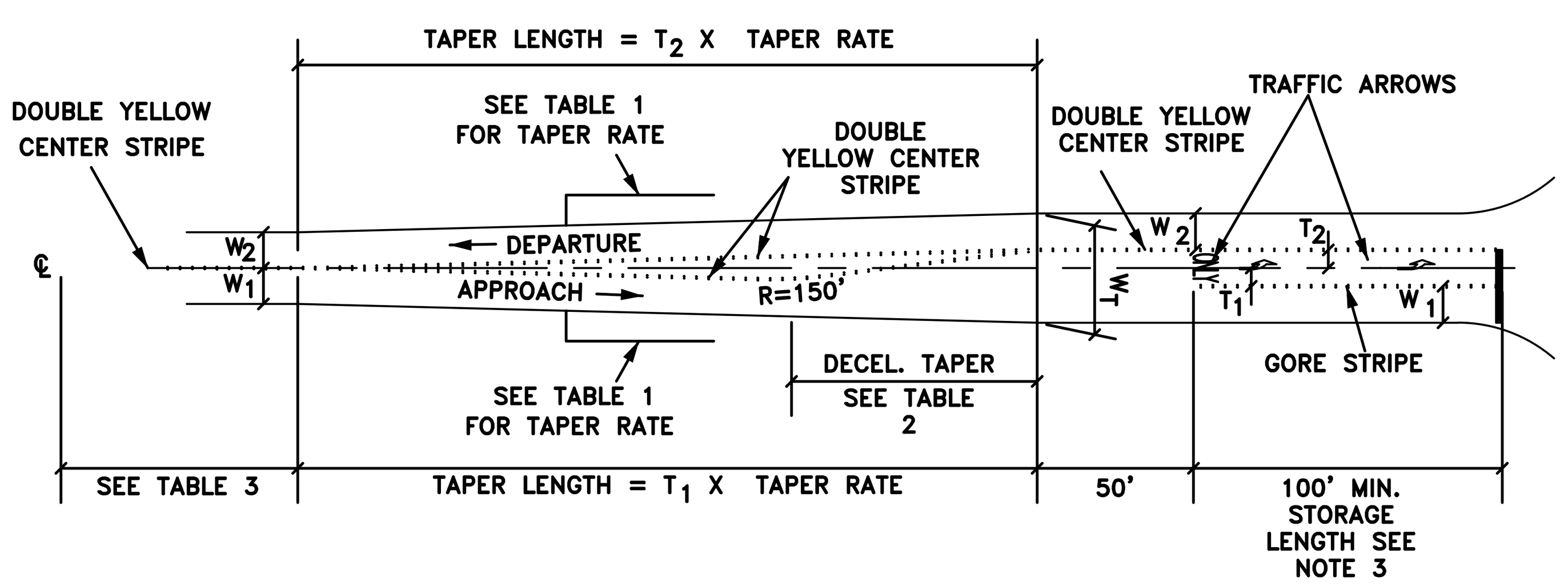
W_1 = APPROACHING THROUGH LANE
W_2 = DEPARTING LANE
T_1 = WIDTH OF LEFT TURN LANE ON APPROACH SIDE OF ℄
T_2 = WIDTH OF LEFT TURN LANE ON DEPARTURE SIDE OF ℄
W_T = TOTAL WIDTH OF CHANNELIZATION ($W_1 + W_2 + T_1 + T_2$)

TABLE 1

POSTED SPEED	TAPER RATE
55 MPH	55:1
50 MPH	50:1
45 MPH	45:1
40 MPH	40:1
35 MPH	35:1
30 MPH	30:1
25 MPH	25:1

TABLE 2

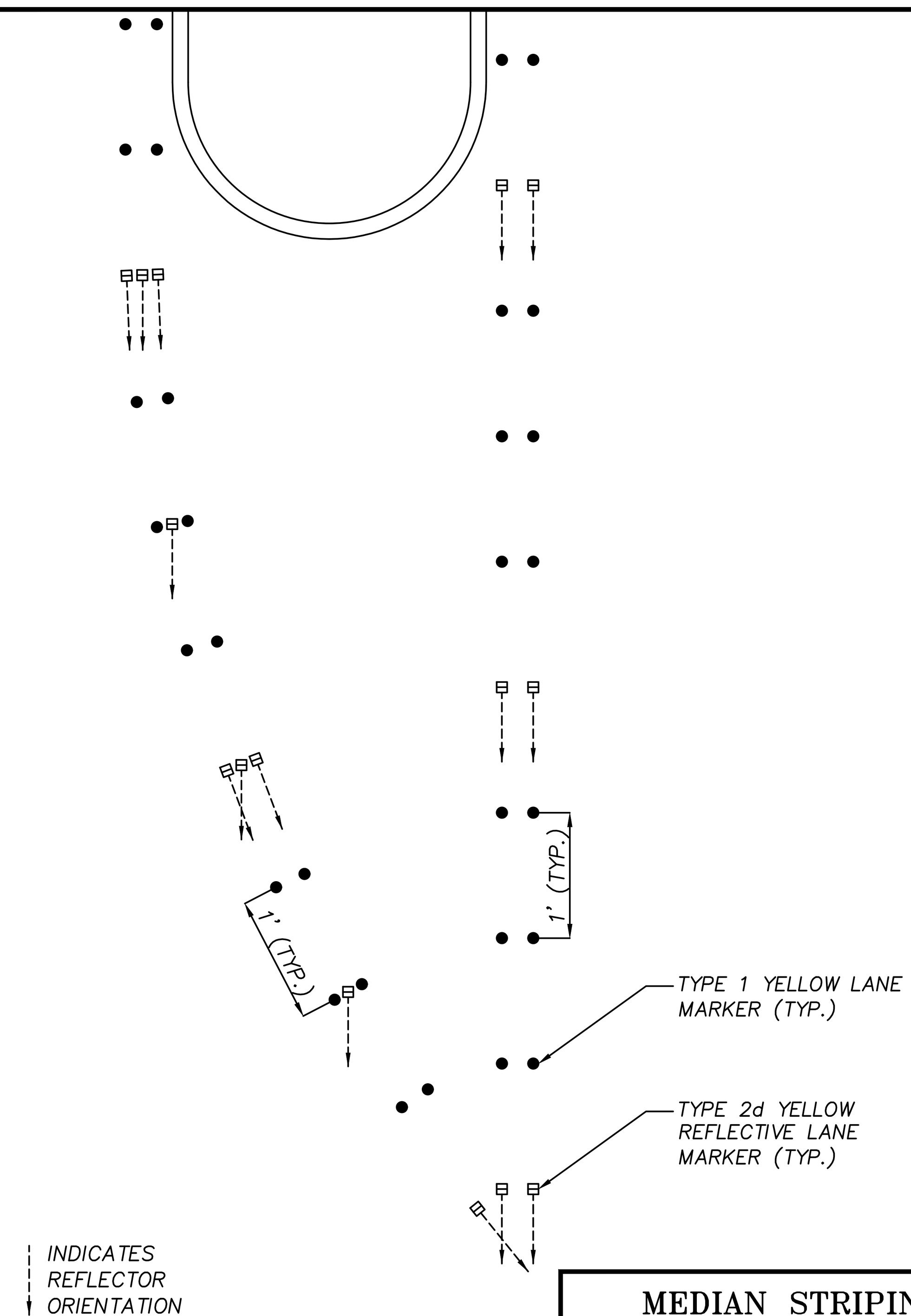
POSTED SPEED	DECEL. TAPER LENGTH
55 MPH	165'
50 MPH	150'
45 MPH	135'
40 MPH	120'
35 MPH	105'
30 MPH	90'
25 MPH	75'



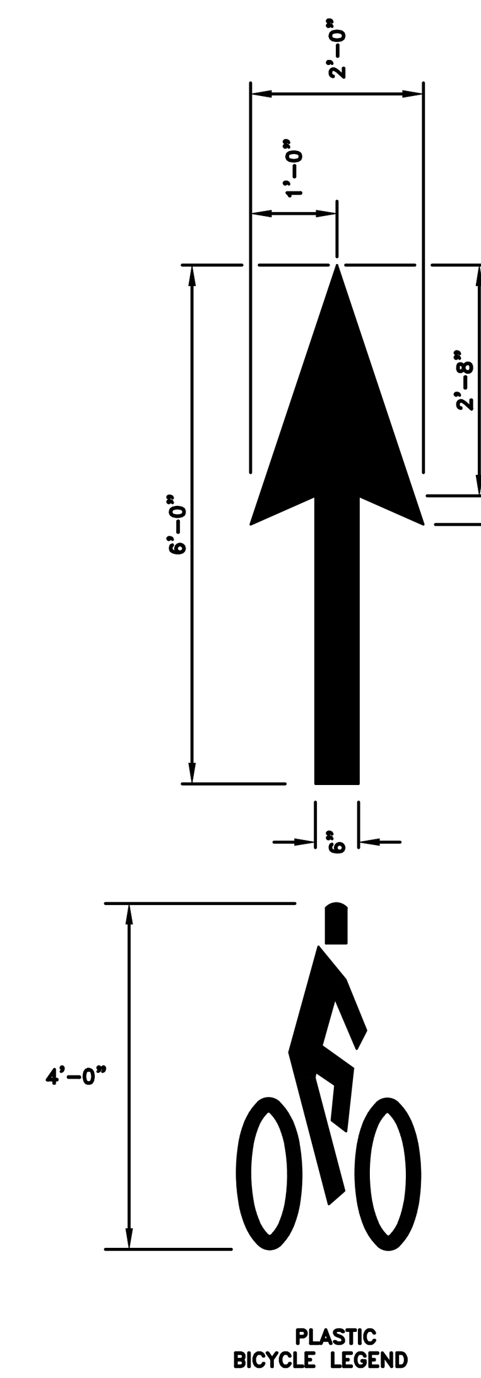
LEFT TURN LANE

NOTES:
1. "S" = 80' FOR POSTED SPEED ≤ 30 M.P.H.
   "S" = 120' FOR POSTED SPEED 35–50 M.P.H.
   "S" = 170' FOR POSTED SPEED › 50 M.P.H.
2. SEE DETAIL 4-28.1 FOR STRIPING SPECIFICATIONS.
3. USE DESIGN LENGTH DETERMINED BY THE T.I.A.

LEFT TURN LANE PAVEMENT MARKINGS

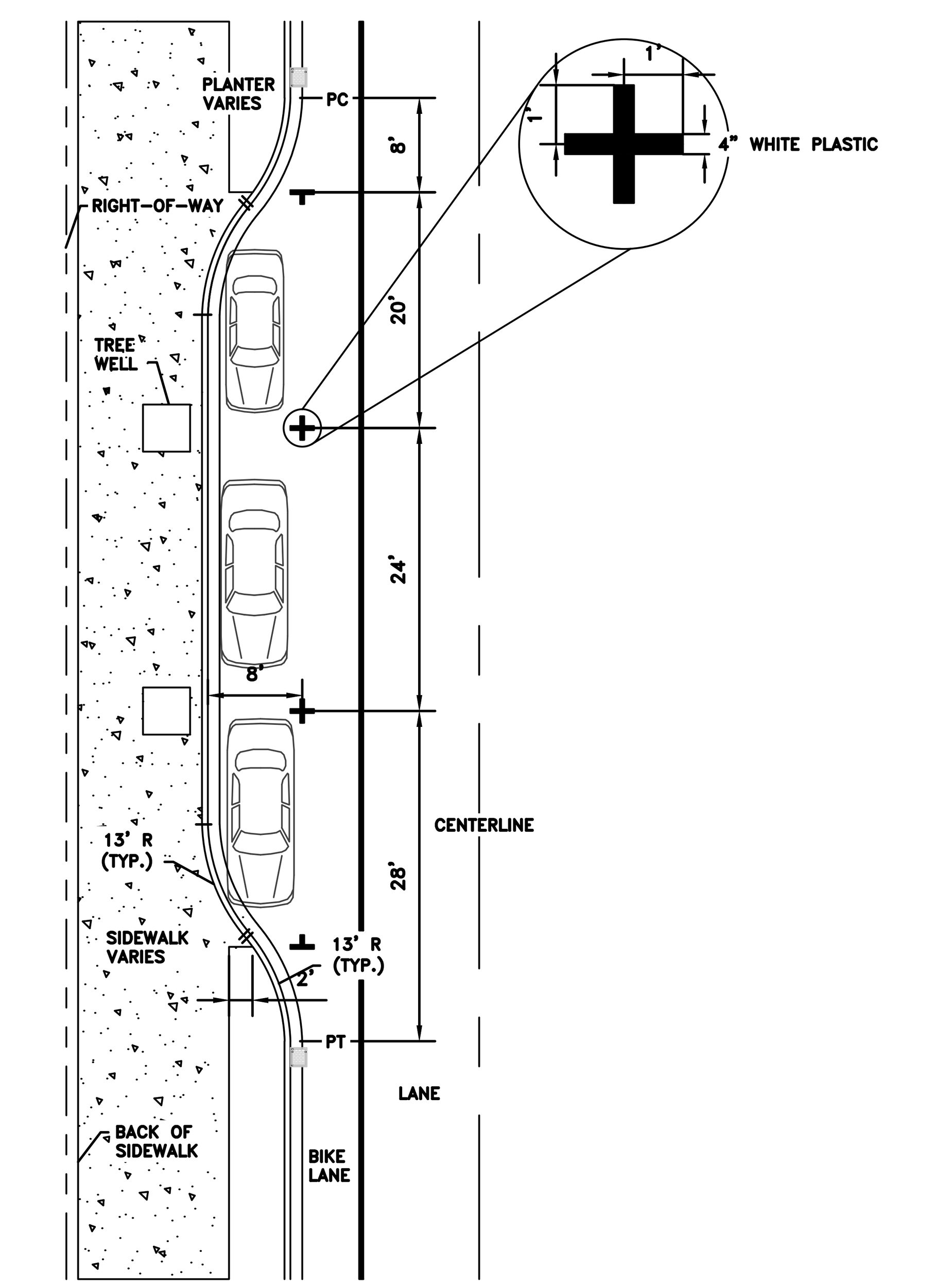


MEDIAN STRIPING END TREATMENT



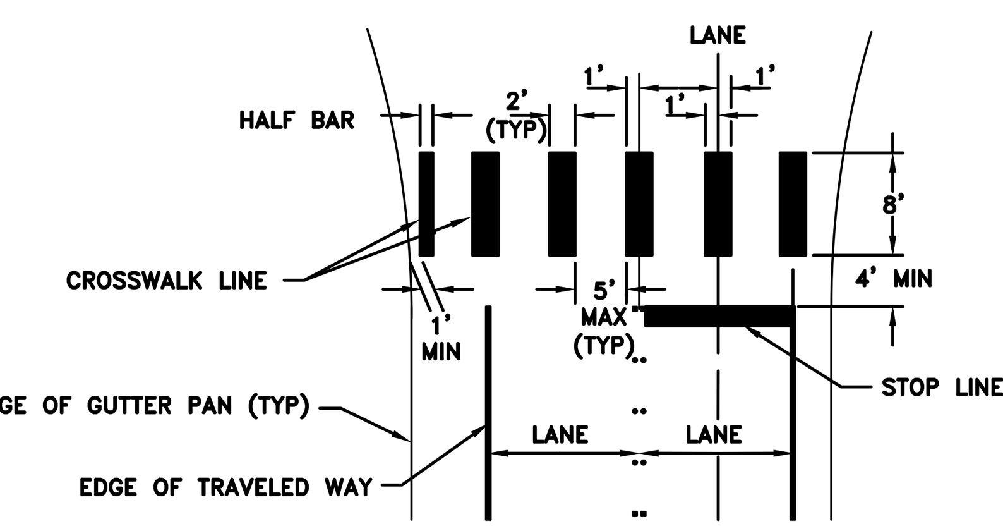
GENERAL NOTES:
1. THE MATERIALS USED FOR ALL STOP LINES, CROSSWALKS, ARROWS, PARKING DELINEATION LINES, LETTERS, LEGENDS, AND SYMBOLS SHALL BE PREMARK OR HOT TAPE PREFORMED THERMOPLASTIC 125 MIL THICKNESS.
2. THE PLASTIC MATERIAL USED TO FORM ALL LONG LINE PAVEMENT MARKINGS SHALL BE PAVE-MARK OR NORLINE THERMOPLASTIC.
3. ALL MARKINGS SHALL MEET FEDERAL METRIC STANDARDS.

BICYCLE LANE PAVEMENT MARKINGS

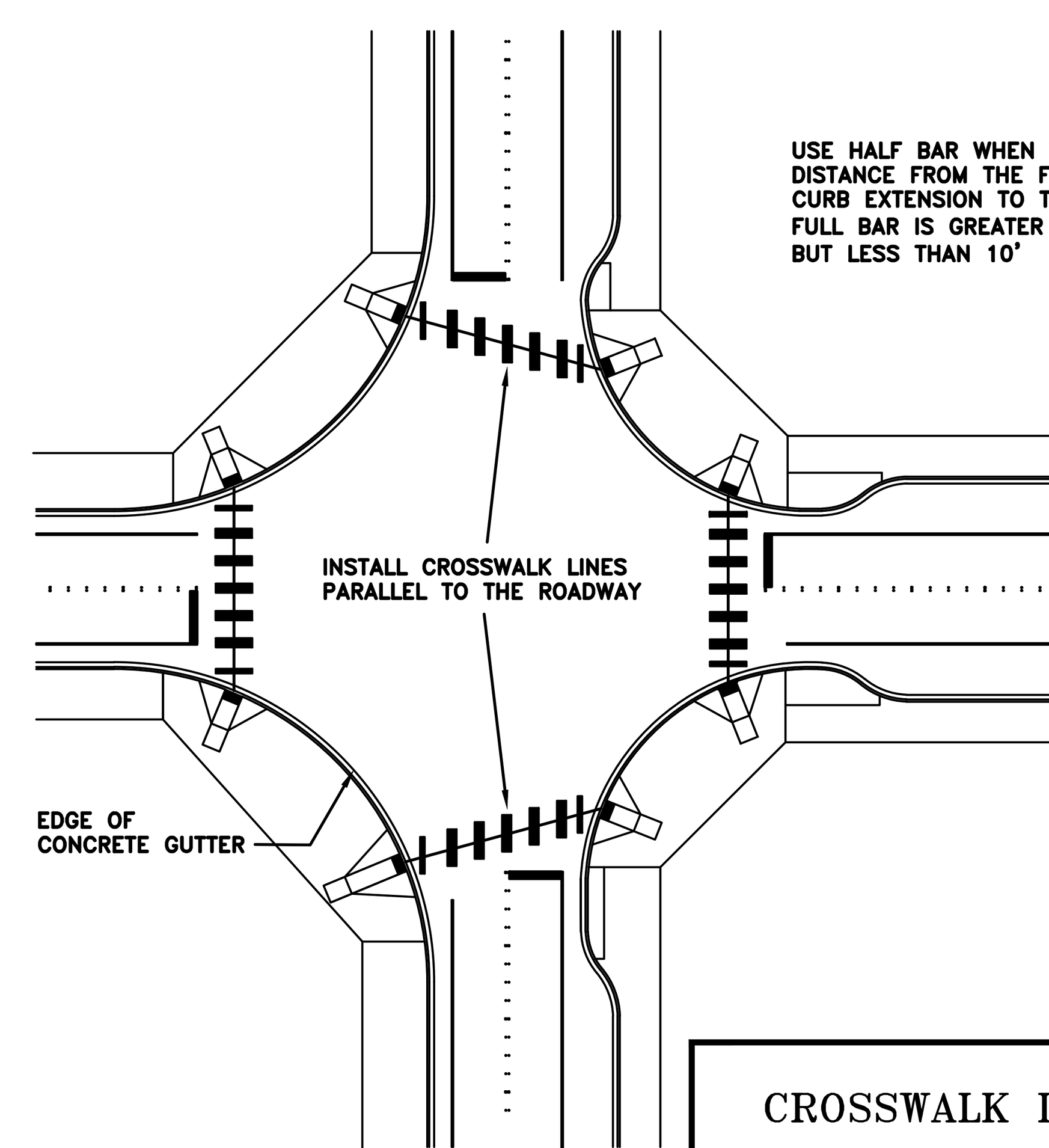


GENERAL NOTES:
1. CATCH BASINS ARE NOT PERMITTED IN PARKING AREAS. BULB-OUT AS SHOWN IN DETAIL 4-4.5.
2. BULB-OUT PARKING SHALL BE DELINEATED BY STRIPING AS SHOWN.
3. PARKING AREAS SHALL BE DESIGNED TO MEET THE REQUIREMENTS OF RCW 46.61.570.

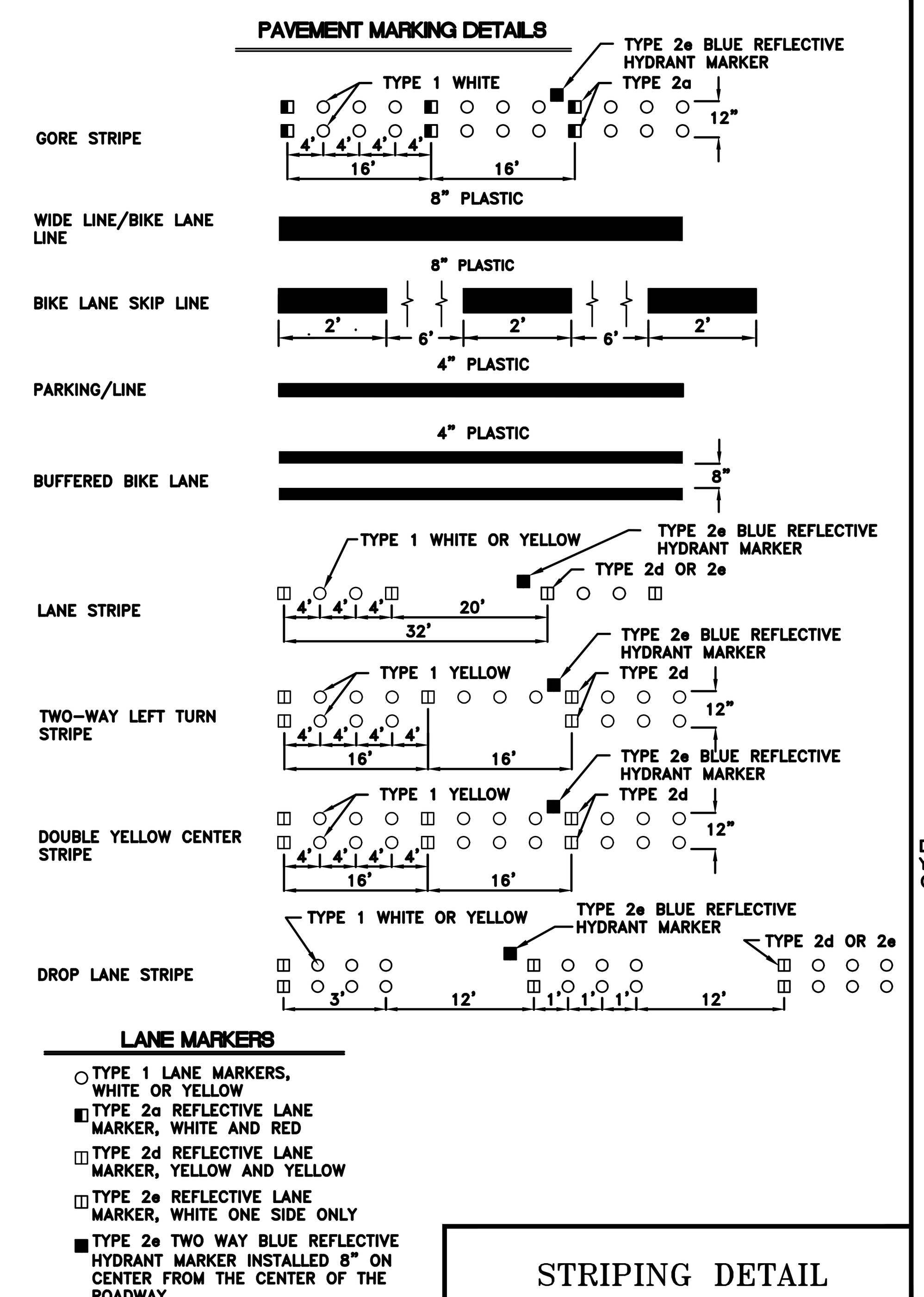
BULB-OUT PARKING FOR COLLECTOR



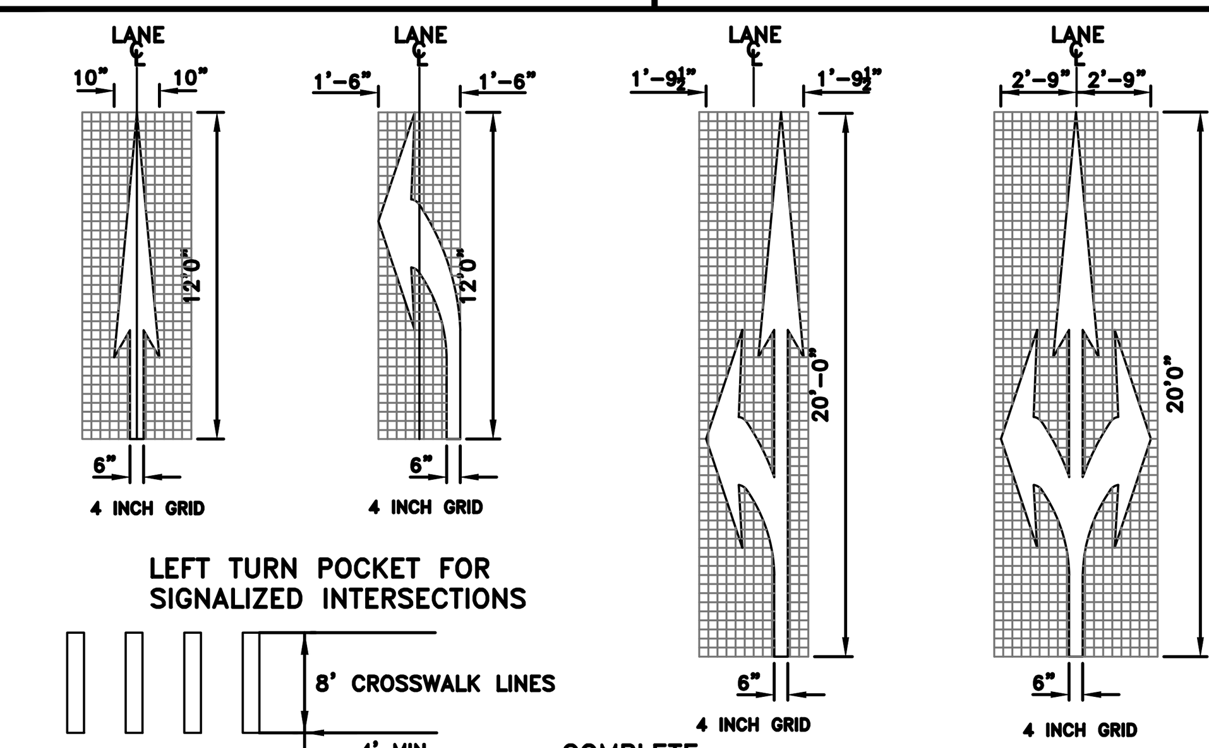
USE HALF BAR WHEN THE DISTANCE FROM THE FACE OF CURB EXTENSION TO THE FIRST FULL BAR IS GREATER THAN 5' BUT LESS THAN 10'



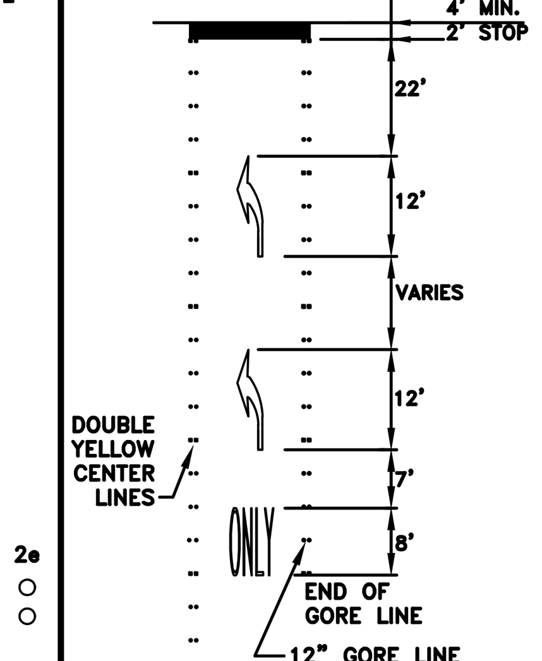
CROSSWALK DETAIL



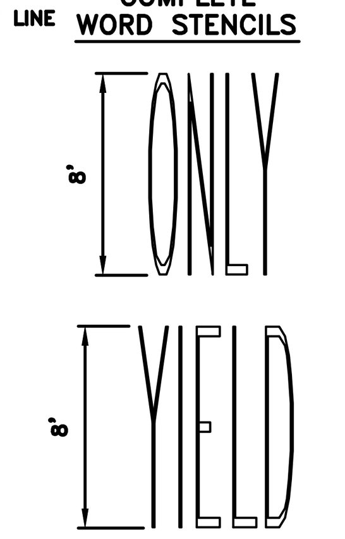
STRIPING DETAIL



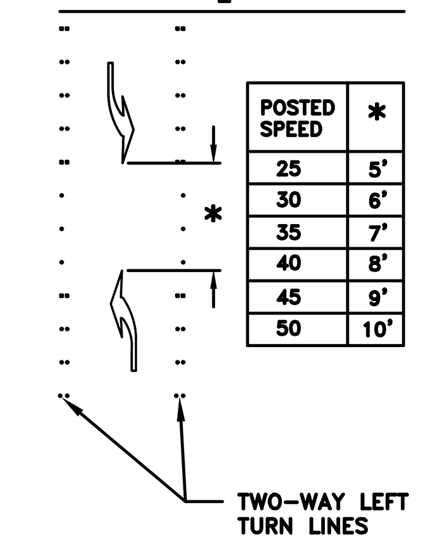
LEFT TURN POCKET FOR SIGNALIZED INTERSECTIONS



COMPLETE WORD STENCILS



TWO-WAY ℄ TURN LANE



POSTED SPEED	*
25	5'
30	6'
35	7'
40	8'
45	9'
50	10'

GENERAL NOTES:
1. THE MATERIALS USED FOR ALL STOP LINES, CROSSWALKS, ARROWS, PARKING DELINEATION LINES, LETTERS, LEGENDS, AND SYMBOLS SHALL BE PREMARK OR HOT TAPE PREFORMED THERMOPLASTIC 125 MIL THICKNESS.
2. THE PLASTIC MATERIAL USED TO FORM ALL LONG LINE PAVEMENT MARKINGS SHALL BE PAVE-MARK OR NORLINE THERMOPLASTIC, HYDROCARBON FORMULATION 125 MIL THICKNESS MARKING MATERIAL.
3. ALL MARKINGS SHALL MEET FEDERAL METRIC STANDARDS.

PAVEMENT MARKINGS

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LACEY

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	N/A
VERT. SCALE:	N/A
FILE:	DTCHAN

2023 OVERLAY PHASE 1
CHANNELIZATION DETAILS 1

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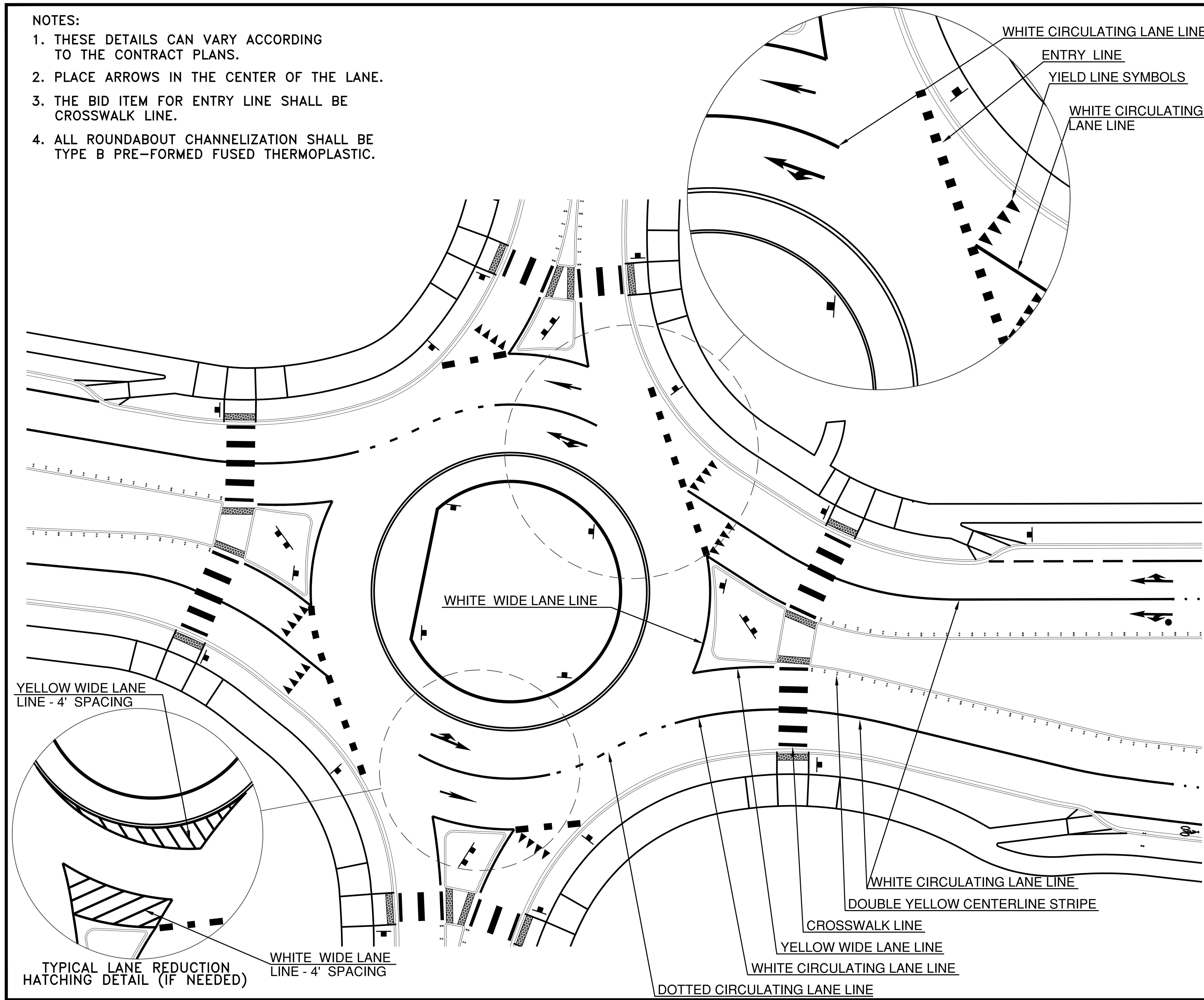
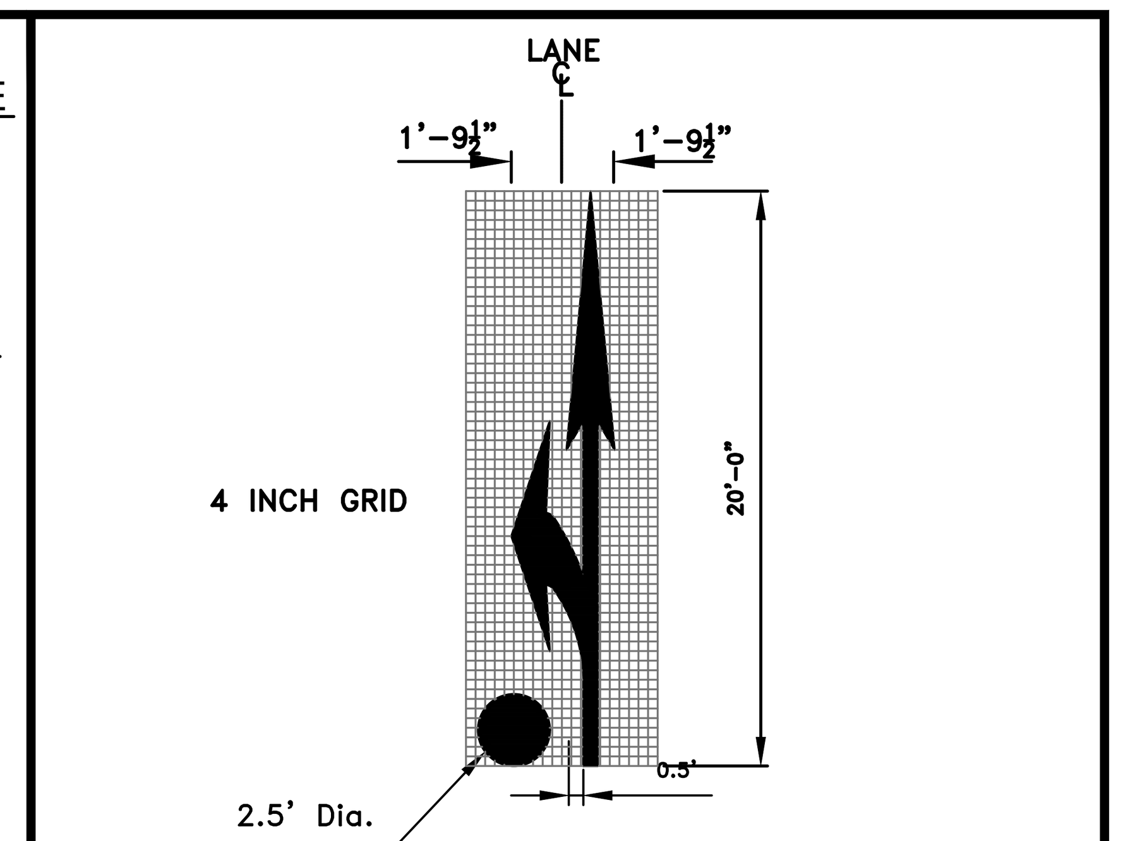
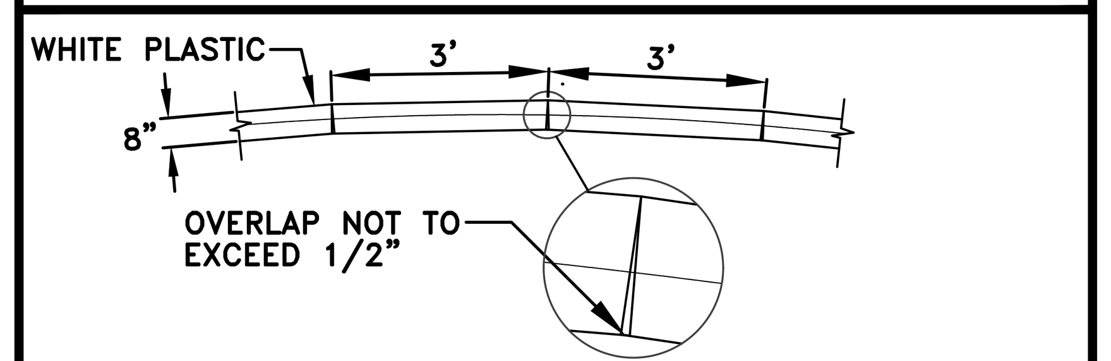
NOTES:
1. THESE DETAILS CAN VARY ACCORDING TO THE CONTRACT PLANS.
2. PLACE ARROWS IN THE CENTER OF THE LANE.
3. THE BID ITEM FOR ENTRY LINE SHALL BE CROSSWALK LINE.
4. ALL ROUNDABOUT CHANNELIZATION SHALL BE TYPE B PRE–FORMED FUSED THERMOPLASTIC.

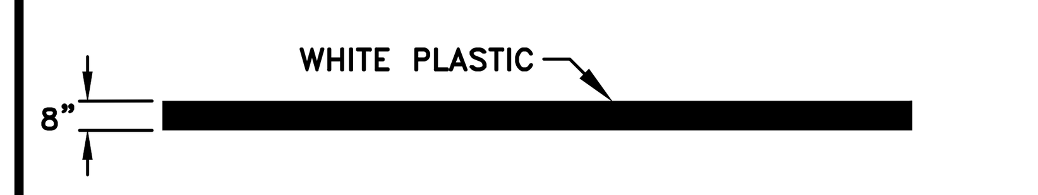




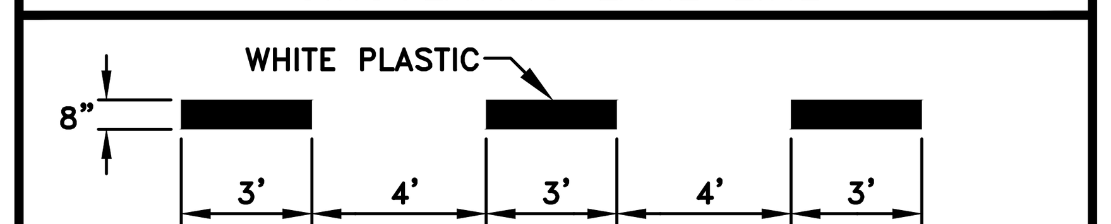
TRAFFIC ARROW WITH CIRCLE



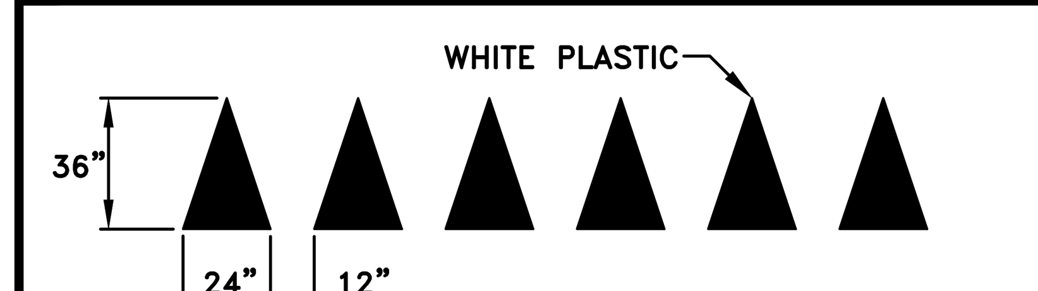
CURVED CIRCULATING LANE LINE



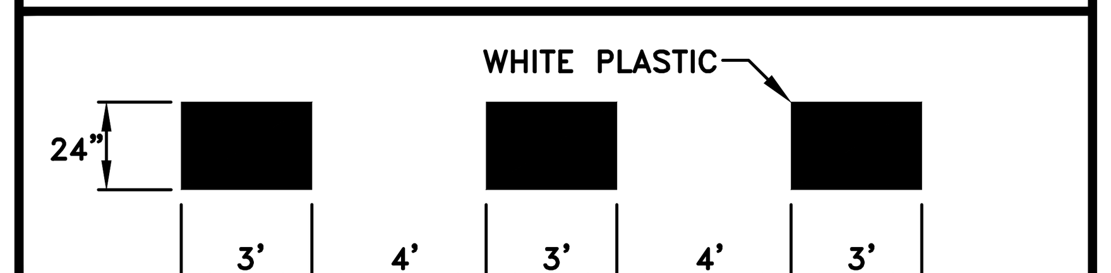
CIRCULATING LANE LINE



DOTTED CIRCULATING LANE LINE



YIELD LINE SYMBOLS



ENTRY LINE

ROUNDABOUT CHANNELIZATION DETAILS

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JUSTIN KNOX, STATE OF WASHINGTON, 44698, REGISTERED PROFESSIONAL ENGINEER, 5/15/23

DESIGNED:	BP
DRAFTED:	BP
CHECKED:	JK
HORZ. SCALE:	N/A
VERT. SCALE:	N/A
FILE:	DTCHAN

2023 OVERLAY PHASE 1
CHANNELIZATION DETAILS 2

REVISION BLOCK

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