

ES563 West Side Non-Motorized Improvements
CITY OF BELLINGHAM, WASHINGTON

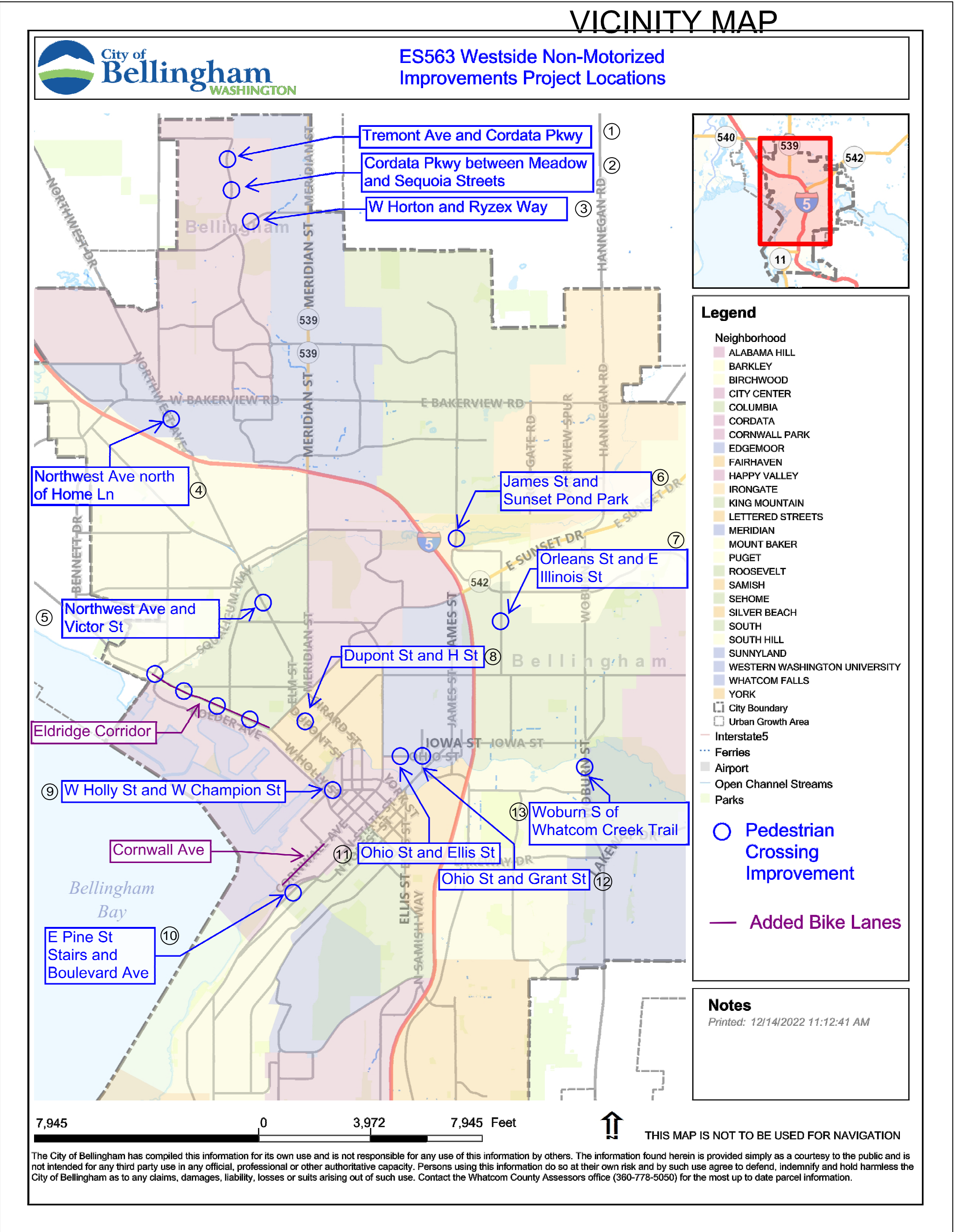
1. COVER SHEET
2. GENERAL NOTES AND LEGEND
3. SURVEY CONTROL SHEET(to be shown at 60%)
4. SHEET MAP (to be shown at 60%)
5. SWPPP NOTES
6. DEMO & TESC PLAN - ELDRIDGE STA: 1+00 to 11+50(to be shown at 60%)
7. DEMO & TESC PLAN - ELDRIDGE STA: 11+50 to 23+00(to be shown at 60%)
8. DEMO & TESC PLAN - ELDRIDGE STA: 23+00 to 34+50(to be shown at 60%)
9. DEMO & TESC PLAN - ELDRIDGE STA: 34+50 to 46+50(to be shown at 60%)
10. DEMO & TESC PLAN - ELDRIDGE STA: 46+50 to 50+00(to be shown at 60%)
11. DEMO & TESC PLAN - CORNWALL STA: 100+00 to 112+00(to be shown at 60%)
12. DEMO & TESC PLAN - CORNWALL STA: 112+00 to 122+50(to be shown at 60%)
13. DEMO & TESC PLAN- INTERSECTIONS 6,7,8,10,11,12 (to be shown at 60%)
14. DEMO & TESC PLAN - INTERSECTIONS 1,2,3(to be shown at 60%)
15. DEMO & TESC PLAN - INTERSECTIONS 4,5,9,13(to be shown at 60%)
16. DEMO & TESC PLAN - DETAILS (to be shown at 60%)
17. TYPICAL ROAD SECTIONS EXISTING AND PROPOSED
18. PAVING & STORM ELDRIDGE STA: 1+00 to 11+50
19. PAVING & STORM ELDRIDGE STA: 11+50 to 23+00
20. PAVING & STORM ELDRIDGE STA: 23+00 to 34+50
21. PAVING & STORM ELDRIDGE STA: 34+50 to 46+50
22. PAVING & STORM ELDRIDGE STA: 46+50 to 50+00
23. PAVING & STORM CORNWALL STA: 100+00 to 112+00
24. PAVING & STORM CORNWALL STA: 112+00 to 122+50
25. CHANNELIZATION ELDRIDGE STA: 1+00 to 11+50
26. CHANNELIZATION ELDRIDGE STA: 11+50 to 23+00
27. CHANNELIZATION ELDRIDGE STA: 23+00 to 34+50
28. CHANNELIZATION ELDRIDGE STA: 34+50 to 46+50
29. CHANNELIZATION ELDRIDGE STA: 46+50 to 50+50
30. CHANNELIZATION CORNWALL STA: 100+00 to 112+00
31. CHANNELIZATION CORNWALL STA: 112+00 to 122+00
32. CHANNELIZATION WHARF STREET
33. CHANNELIZATION CORNWALL STA: 100+00 to 112+00
34. CHANNELIZATION CORNWALL STA: 112+00 TO 122+00
35. CHANNELIZATION & RRFB INTERSECTIONS 6,7,8,10,11,12
36. CHANNELIZATION & RRFB INTERSECTIONS 4,5,9,13
37. CHANNELIZATION & RRFB INTERSECTIONS 1,2,3
38. PAVING DETAILS
39. CHANNELIZATION DETAILS
40. RRFB DETAILS
41. CITY OF BELLINGHAM STANDARD DETAILS (to be shown at 60%)
42. WSDOT STANDARD DETAIL (to be shown at 60%)



Reviewers Note: Two Options are shown on Cornwall for discussion.

Option 1: Bike lane each side, 4' buffers w/ vertical element.

Option 2: Bicycle track layout with both lanes on one side separated by 2' curb w/ vertical element. This allows for an 8' parking lane on the opposite side.



30% DESIGN

PRELIMINARY

SURVEY NOTES
JEPSON AND ASSOCIATES
222 GRAND AVENUE
(360)0733-5760
PERFORMED THE FIELD SURVEY FOR
PORTIONS OF ELDRIDGE AVE.
AND INTERSECTIONS 1,2,3,5,9 & 13

GENERAL NOTES

ALL WORK SHALL CONFORM TO THE LATEST EDITION OF "STANDARD SPECIFICATIONS FOR ROAD BRIDGE AND MUNICIPAL CONSTRUCTION" CURRENT EDITION (WSDOT) AND THE "CITY OF BELLINGHAM DEVELOPMENT GUIDELINES AND IMPROVEMENT STANDARDS" UNLESS INDICATED OTHERWISE BY THE CONTRACT DOCUMENTS.

IN CASE OF A CONFLICT BETWEEN THE REGULATORY SPECIFICATIONS OR STANDARDS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL. ALL REFERENCES TO "SPECIFICATION SECTIONS" REFER TO THE "STANDARD SPECIFICATIONS FOR ROAD BRIDGE AND MUNICIPAL CONSTRUCTION" UNLESS OTHERWISE NOTED.

THE BEDDING FOR PVC PIPE SHALL BE PEA GRAVEL, ACCORDING TO CITY OF BELLINGHAM STANDARD PLAN No. SS-750

ALL TRENCH BACKFILL UNDER EXISTING OR FUTURE PAVING SHALL BE BANK RUN GRAVEL FOR TRENCH BACKFILL AND SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY (MODIFIED PROCTOR).

PLUG ALL CULVERTS, SEWERS, AND CONDUITS PRIOR TO ABANDONMENT. AS PER STANDARD SPECIFICATIONS SECTION 7-08.3(4)

ALL LAWN AND VEGETATED AREAS OUTSIDE THE PROJECT LIMITS DISTURBED BY CONSTRUCTION EQUIPMENT, VEHICLES OR PERSONNEL SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER, AT THE CONTRACTORS EXPENSE.

THIS PROJECT MAY REQUIRE VARIOUS PERMITS AS OUTLINED IN THE PROJECT SPECIFICATION'S GENERAL PROVISIONS. ALL WORK SHALL BE PERFORMED IN A MANNER WHICH ENSURES CONFORMANCE WITH ANY PERMIT REQUIREMENTS.

THE CONTRACTOR SHALL ATTEND PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF BELLINGHAM ENGINEERING DIVISION PRIOR TO BEGINNING CONSTRUCTION.

UNDERGROUND UTILITIES ARE KNOWN TO EXIST IN THE AREA OF CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE UTILITY OWNERS FOR LOCATIONS AND TO NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT. THE ONE-CALL NUMBER FOR UNDERGROUND UTILITIES IS: 1-800-424-5555.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ADJACENT UTILITIES WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, WATER, SEWER, STORM SEWER, POWER, TELEPHONE, CABLE TV, GAS, IRRIGATION, AND STREET LIGHTING.

THE CONTRACTOR SHALL NOTIFY RESIDENTS AND BUSINESSES 48 HOURS IN ADVANCE OF ANY WORK AFFECTING ACCESS OR SERVICE AND SHALL MINIMIZE INTERRUPTIONS TO DRIVEWAYS FOR RESIDENTS AND BUSINESSES ADJACENT TO THE PROJECT.

PUBLIC RIGHTS-OF-WAY SHALL BE KEPT IN A CLEAN AND SERVICEABLE CONDITION AT ALL TIMES. IN THE EVENT MATERIALS ARE INADVERTENTLY DEPOSITED ON ROADWAYS, THE MATERIAL SHALL BE PROMPTLY REMOVED. MATERIALS ARE TO BE SWEEPED AND REMOVED WITH A VACUUM SWEEPER.

PUBLIC AND PRIVATE DRAINAGE WAYS SHALL BE PROTECTED FROM POLLUTION. NO MATERIAL IS TO BE DISCHARGED TO, OR DEPOSITED IN STORMWATER SYSTEMS THAT MAY RESULT IN VIOLATION OF STATE OR FEDERAL WATER QUALITY STANDARDS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING, MAINTAINING, & REMOVING EROSION CONTROL MEASURES (SILT FENCE, ROCK CHECK DAMS, SILT PONDS, CATCH BASIN FILTERS, ETC...) THROUGHOUT THE DURATION OF THE PROJECT. ALL EROSION CONTROL WORK IS CONSIDERED INCIDENTAL TO THE ITEMS OF WORK IN THE CONTRACT FOR THIS PROJECT.

REFER TO THE 'STORM WATER POLLUTION PREVENTION PLAN' SHEETS AND BID ITEMS NOTED IN THE CONTRACT PORTION OF THE PROJECT SPECIFICATIONS FOR SPECIFIC EROSION CONTROL NOTES.

STORM NOTES

BEDDING AND BACKFILL FOR PVC STORM MAIN PIPE SHALL CONFORM TO CITY OF BELLINGHAM STANDARD PLAN No. DR-538.

STORM MAIN CLEANOUTS SHALL CONFORM TO CITY OF BELLINGHAM STANDARD NO. SS-720

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES (SILT FENCE, ROCK CHECK DAMS, SILT PONDS, ETC..., AS DIRECTED BY THE ENGINEER) THROUGHOUT THE DURATION OF THE PROJECT.

DURING CONSTRUCTION, CATCH BASIN INSERTS OR ACCEPTABLE ALTERNATIVES MUST BE PLACED UNDER ALL EXISTING AND NEWLY CONSTRUCTED CATCH BASIN GRATES WITHIN THE PROJECT SITE.

ALL CATCH BASINS WITHIN THE PROJECT LIMITS SHALL BE CLEANED OUT AT THE COMPLETION OF THE PROJECT AND ANY MATERIAL REMOVED SHALL BE PROPERLY DISPOSED OF.

DURING ANY DITCH, CREEK & DRAINAGE WORK, WATER SHALL BE DIVERTED AROUND THE PROJECT WITH A CITY ENGINEER APPROVED METHOD.

ANY MISCELLANEOUS DRAINAGE FOUND WILL BE REQUIRED TO BE REMOVED OR CONNECTED TO THE NEW DRAINAGE SYSTEM UNDER THE DIRECTION OF THE ENGINEER.

STORM WATER POLLUTION PREVENTION PLAN AND STORM WATER PERMIT APPLICATION (SWPPP) SHALL BE SUBMITTED BY THE CONTRACTOR. CONTRACTOR SHALL SUBMIT DETAILS ON CONSTRUCTION TIMING, HAUL ROUTES, CONSTRUCTION ENTRANCES AND GROUND STABILIZATION. THE SWPPP AND PERMIT SHALL BE REVIEWED AND APPROVED BY THE CITY PRIOR TO COMMENCEMENT OF WORK.

EROSION CONTROL NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE AND REMOVAL OF ALL EROSION CONTROL MEASURES (SILT FENCE, STRAW BALE DAMS, SILT PONDS, ETC., AS DIRECTED BY THE ENGINEER) THROUGHOUT THE DURATION OF THE PROJECT.

IN THE EVENT MATERIALS ARE INADVERTENTLY DEPOSITED ON ROADWAYS, THE MATERIAL SHALL BE PROMPTLY REMOVED. MATERIALS ARE TO BE SWEEPED AND REMOVED PRIOR TO ANY STREET FLUSHING. PUBLIC AND PRIVATE DRAINAGE WAYS SHALL BE PROTECTED FROM POLLUTION. NO MATERIAL IS TO BE DISCHARGED OR DEPOSITED IN STORMWATER SYSTEMS THAT MAY RESULT IN VIOLATION OF STATE OR FEDERAL WATER QUALITY STANDARDS.

THE CONTRACTOR IS REQUIRED TO PREPARE AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP). A COPY OF THE SWPPP SHALL BE ON SITE THROUGHOUT THE DURATION OF CONSTRUCTION.

STABILIZE SOILS- ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY APPLICATION OF EFFECTIVE BEST MANAGEMENT PRACTICES, THAT PROTECT THE SOIL FROM THE EROSION FORCES OF WATER AND WIND. NO UNWORKED SOILS SHALL REMAIN EXPOSED FOR MORE THAN SEVEN (7) DAYS.

SAWCUTTING SLURRY AND CUTTINGS SHALL BE VACUUMED DURING CUTTING AND SURFACING OPERATIONS. SLURRY AND CUTTINGS SHALL NOT REMAIN ON PAVEMENT OVERNIGHT.

A STORM WATER POLLUTION PREVENTION PLAN SHALL BE PROVIDED BY THE CONTRACTOR. THE PLAN WILL BE REVIEWED, APPROVED AND A PERMIT ISSUED BY THE CITY PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR THE PERMIT.

INLET PROTECTION MUST BE PROVIDED FOR ALL EXISTING CATCH BASINS DURING CONSTRUCTION. ALL CATCH BASINS WITHIN THE PROJECT LIMITS SHALL BE CLEANED OUT AT THE COMPLETION OF THE PROJECT AND ANY MATERIAL REMOVED SHALL BE PROPERLY DISPOSED OF.

DURING ANY DITCH, CREEK & DRAINAGE WORK WATER SHALL BE DIVERTED AROUND THE PROJECT WITH A PUMP OR OTHER ADEQUATE METHOD APPROVED BY THE ENGINEER.

ANY MISCELLANEOUS DRAINAGE FOUND WILL BE REQUIRED TO BE REMOVED OR CONNECTED TO THE NEW DRAINAGE SYSTEM WITH THE DIRECTION OF THE ENGINEER. DISTURBED SOILS ARE TO BE MULCHED.

LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED
RIGHT OF WAY LINE	----	=====	UNDERGROUND POWER	-----P-----	
PROPERTY LINE	-----	-----	UTILITY POLE	○	◆
CENTER LINE	-----	-----	SIDEWALK	=====	=====
WATER MAIN	-----W-----	=====W=====	CURB & GUTTER	=====	=====
WATER SERVICE	-----WS-----	-----WS-----	EDGE OF PAVEMENT	-----	-----
WATER VALVE	●	●	EDGE OF GRAVEL/DIRT	-----	-----
FIRE HYDRANT	⬮	⬮			
SANITARY SEWER MAIN	-----S-----	=====S=====	BUILDING LINE	-----	-----
SANITARY SEWER SERVICE	-----SS-----	=====SS=====	TREE LINE	~~~~~	~~~~~
STORM SEWER MAIN	-----D-----	=====D=====	FENCE LINE	-----X-----	=====
STORM SEWER SERVICE	-----DS-----	=====DS=====	WALL LINE (ROCK)	-----OR-----	=====
SEWER MANHOLE	○	●	WALL LINE	=====	=====
STORM MANHOLE	⊙	⊙	SHRUBS	⊙	⊙
CATCH BASIN	□	■	TREES	⊙	⊙
CULVERT	=====	=====	RIP RAP	⊙	⊙
DRAINAGE DITCH	-----	-----			
CREEK	-----	-----	JUNCTION BOX TYPE I	⊙	⊙
GAS MAIN	-----G-----	=====	LUMINAIRE	⊙	⊙
GAS SERVICE	-----GS-----	=====	SIGNAL POLE	⊙	⊙
UNDERGROUND TELEPHONE	-----T-----	=====			
FIBER OPTIC LINE	-----FO-----	=====			
MONUMENT	●	●			

	4		
	3		
	2		
	1		
Date	No.	Revision	By

30% DESIGN

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.M.A.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"= 20'
Vert. 1"= NA

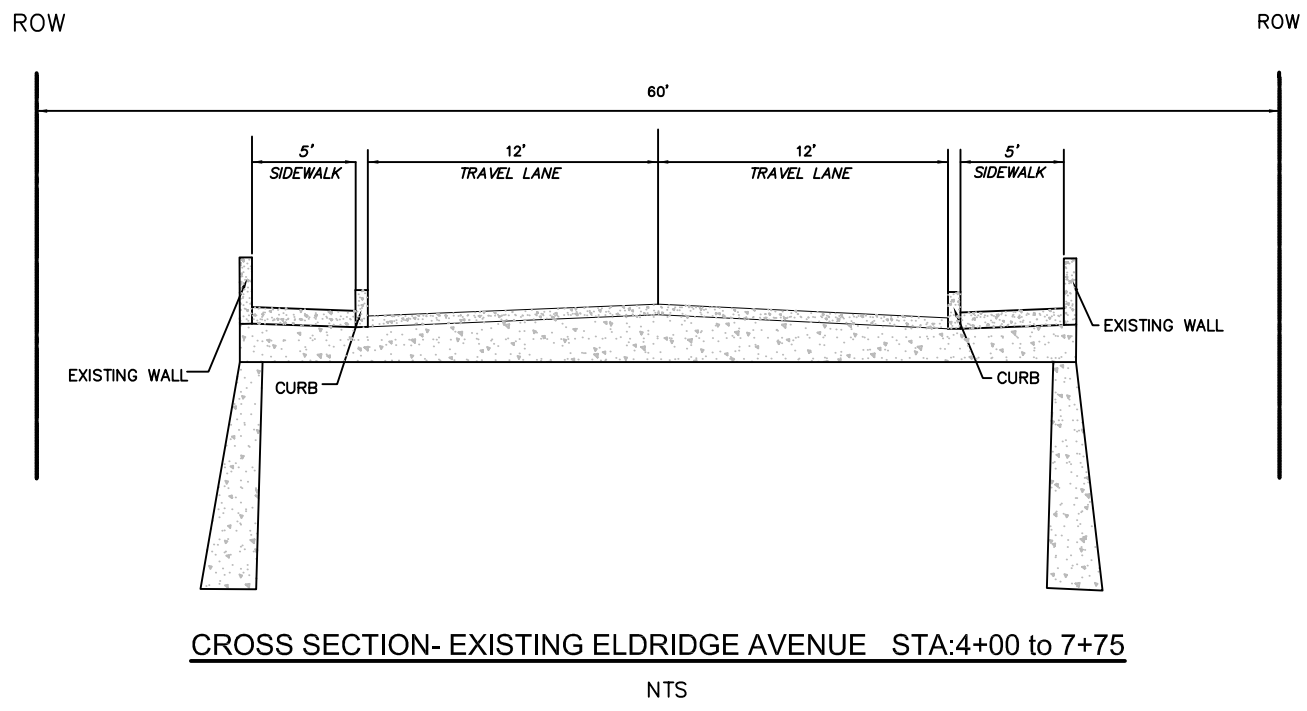
DATUM

Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

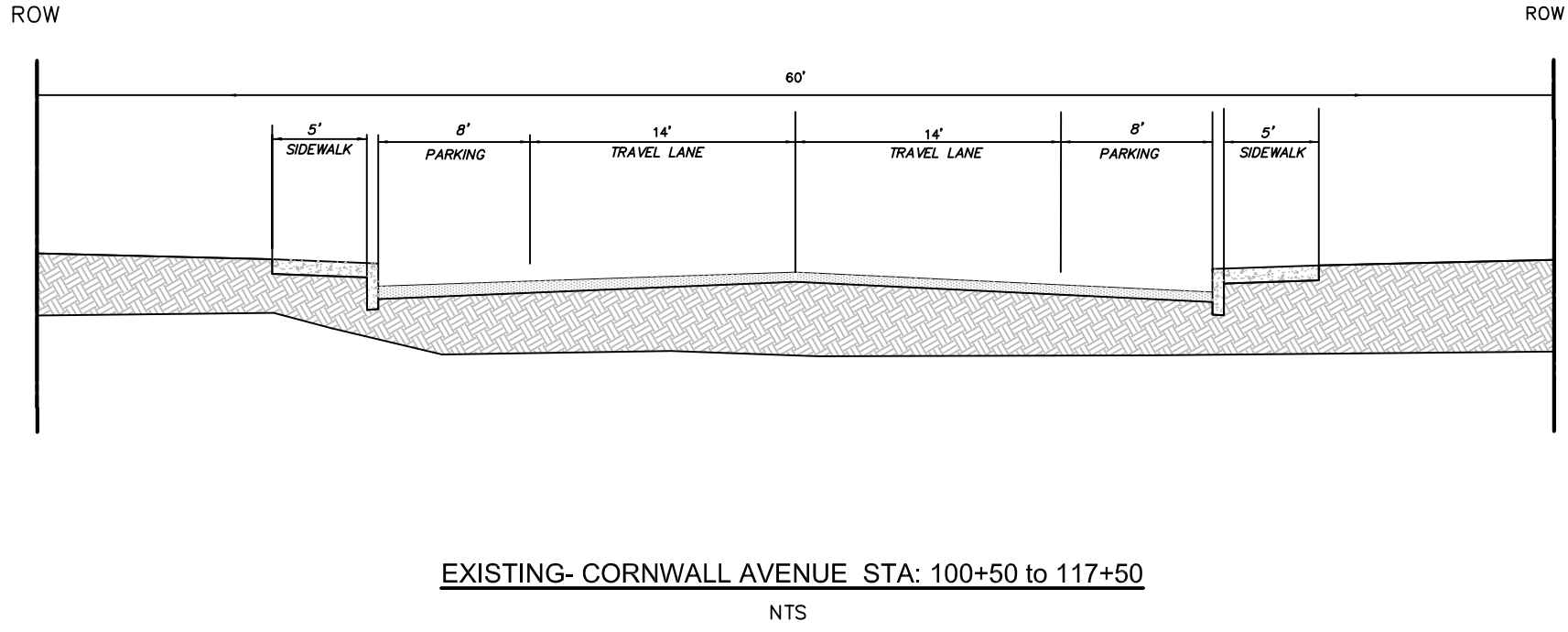
WESTSIDE NON MOTORIZED IMPROVEMENTS
GENERAL NOTES AND LEGEND

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2	xx

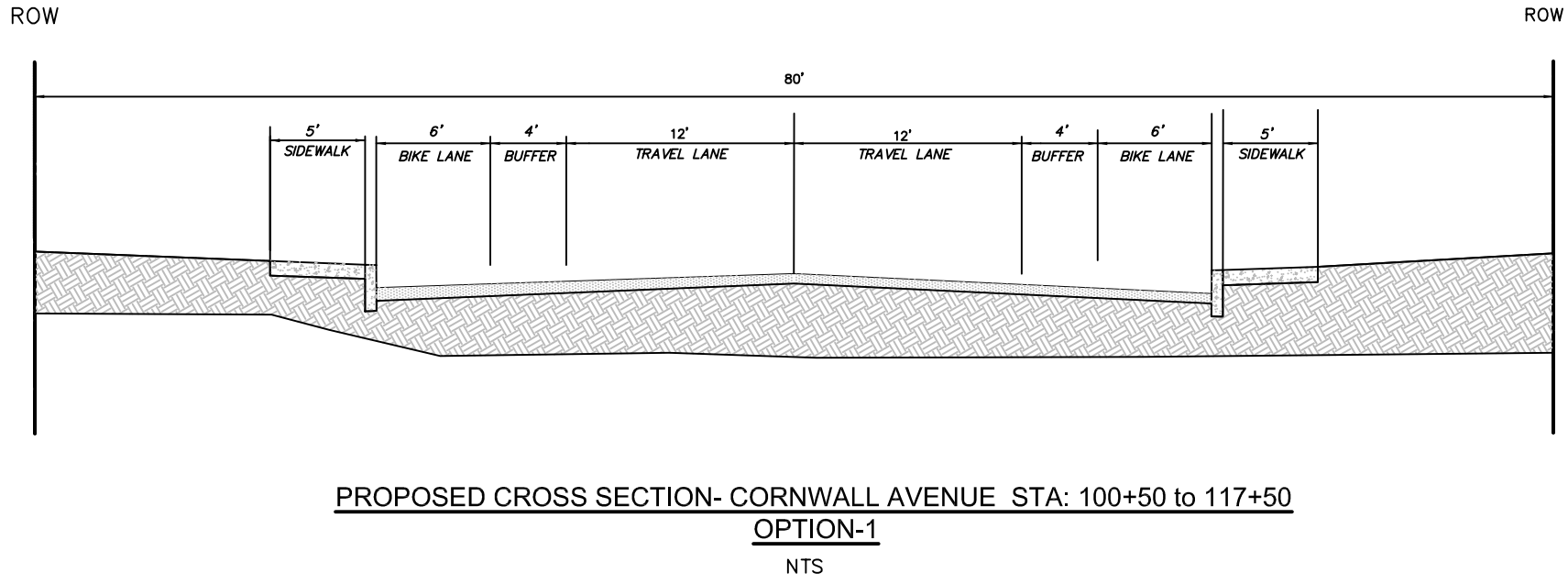
CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



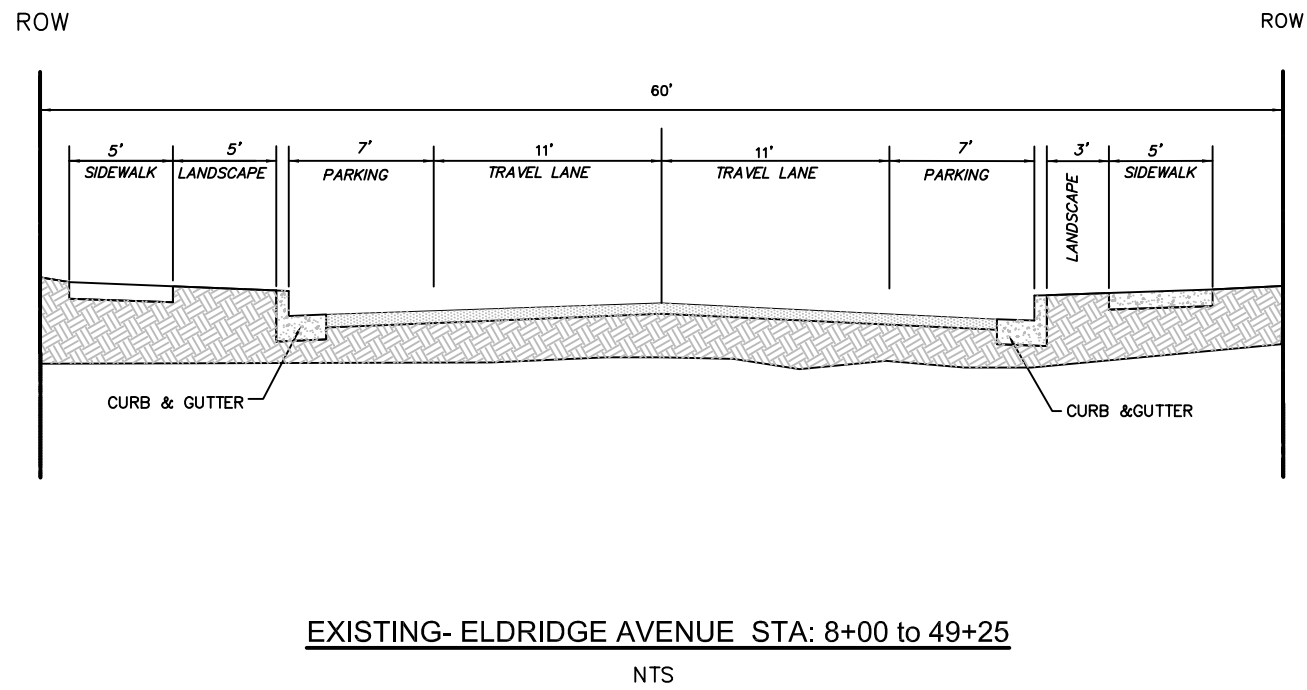
CROSS SECTION- EXISTING ELDRIDGE AVENUE STA:4+00 to 7+75
NTS



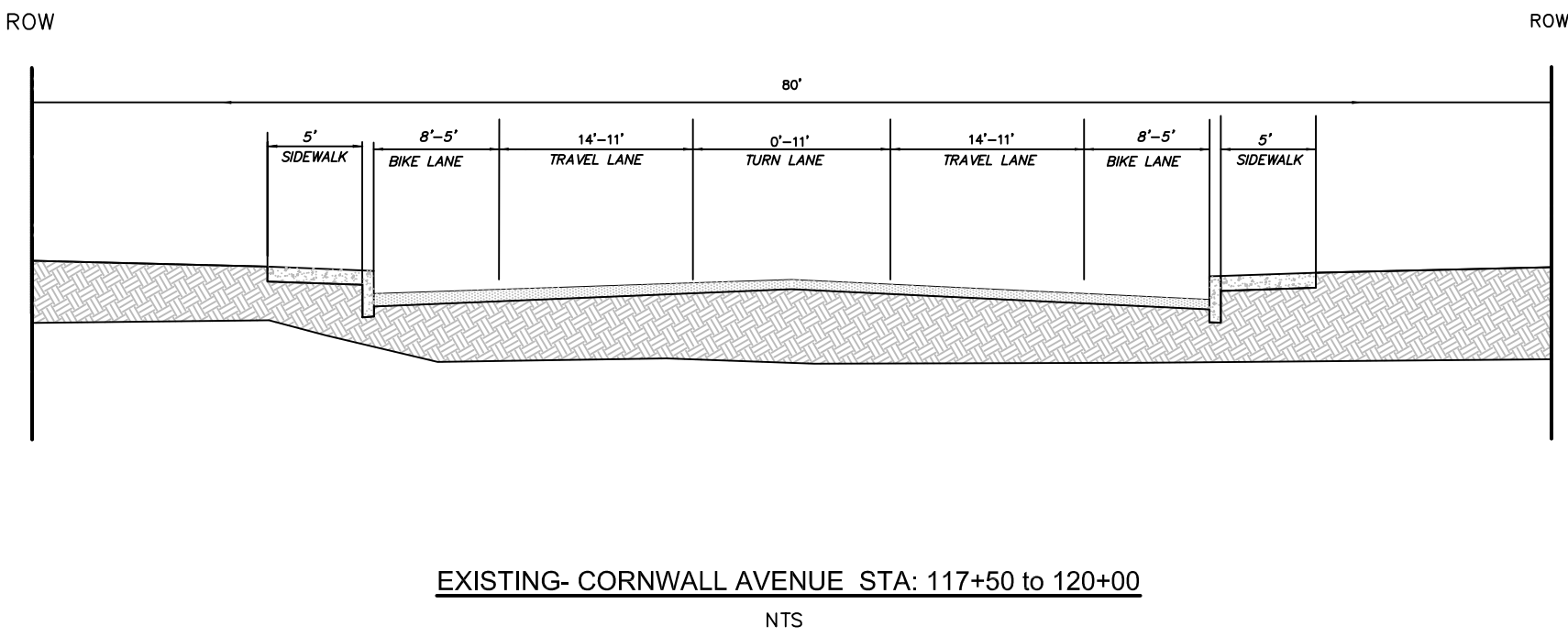
EXISTING- CORNWALL AVENUE STA: 100+50 to 117+50
NTS



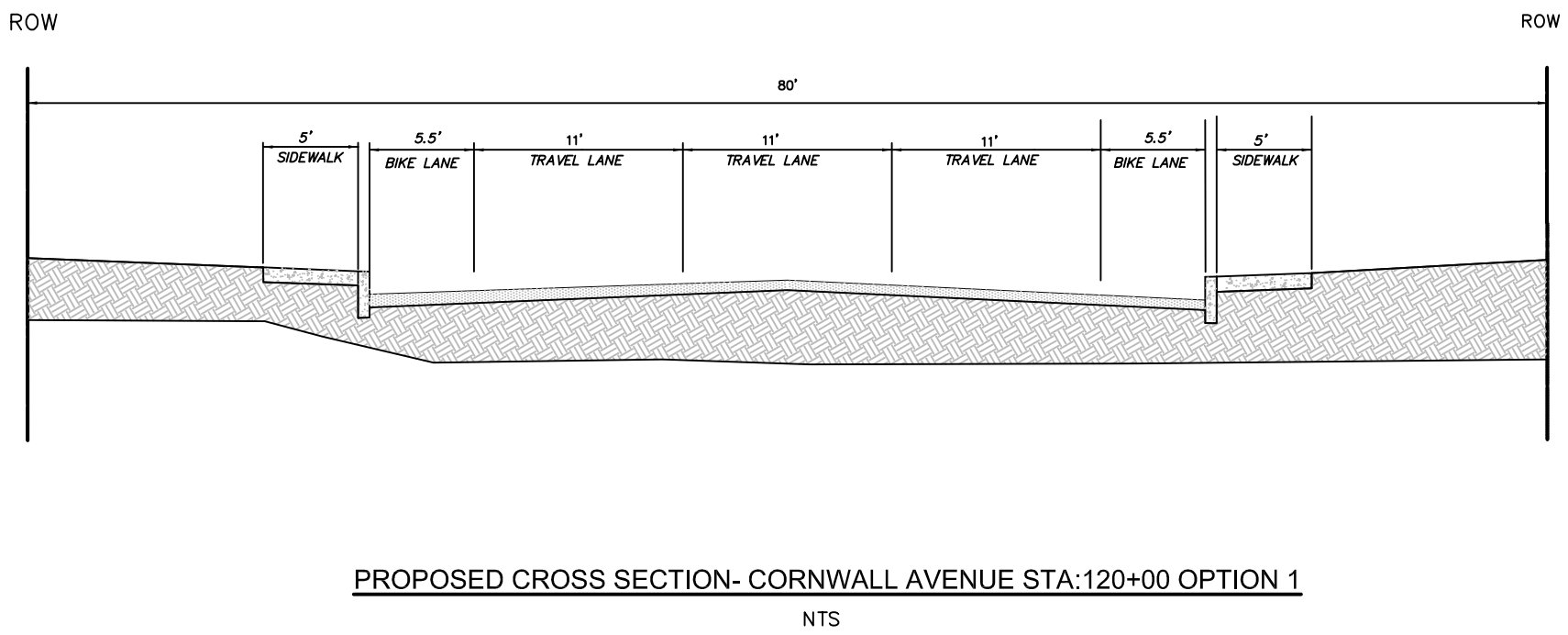
PROPOSED CROSS SECTION- CORNWALL AVENUE STA: 100+50 to 117+50
OPTION-1
NTS



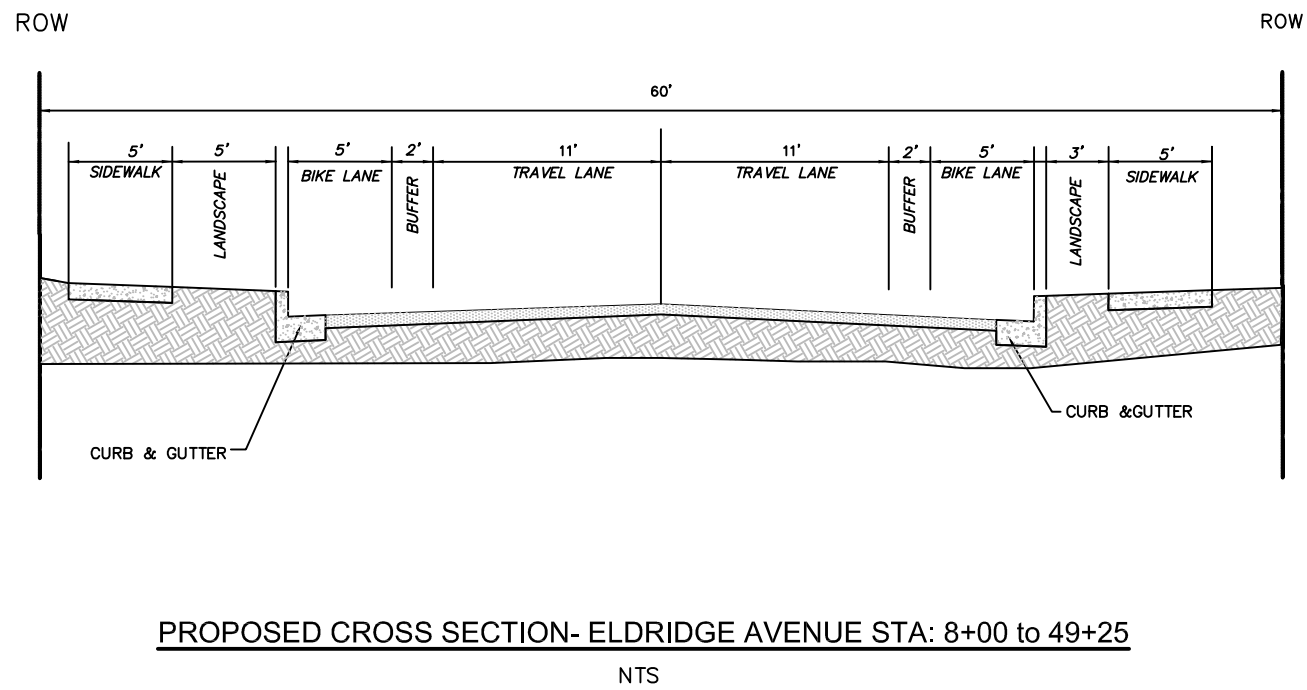
EXISTING- ELDRIDGE AVENUE STA: 8+00 to 49+25
NTS



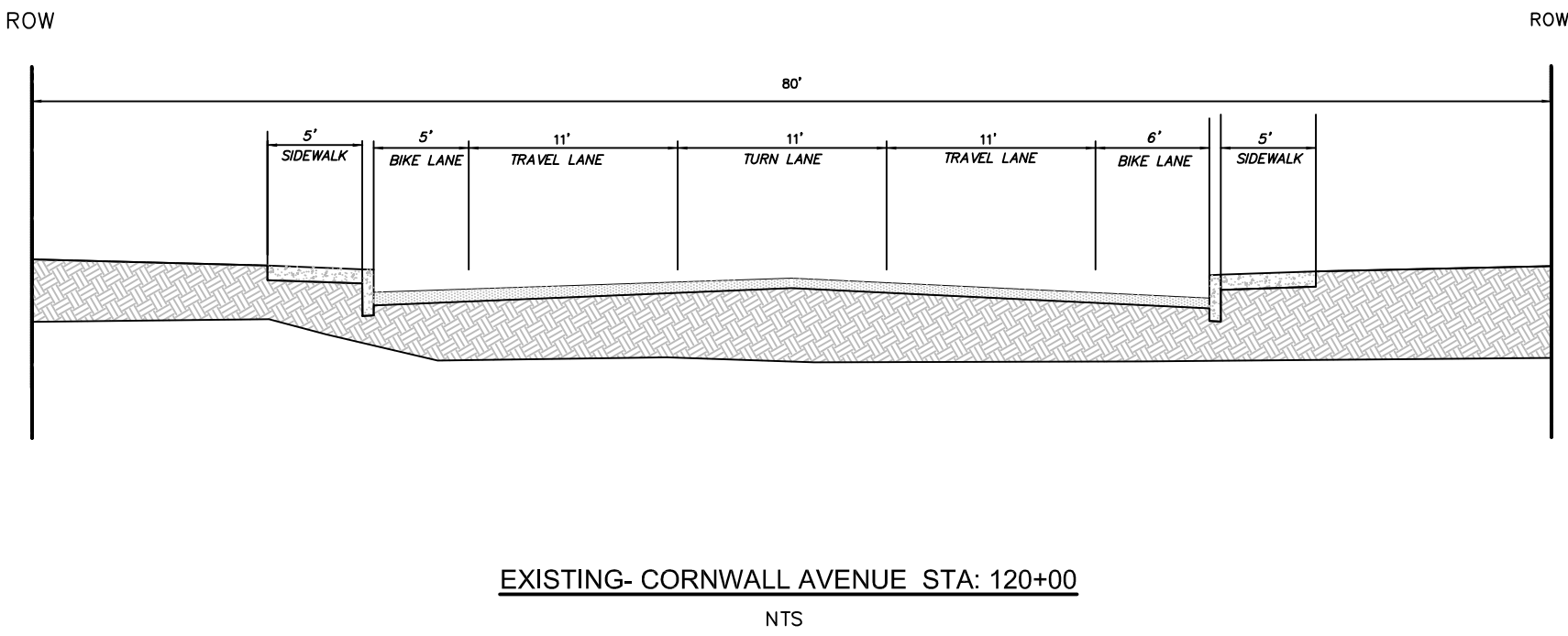
EXISTING- CORNWALL AVENUE STA: 117+50 to 120+00
NTS



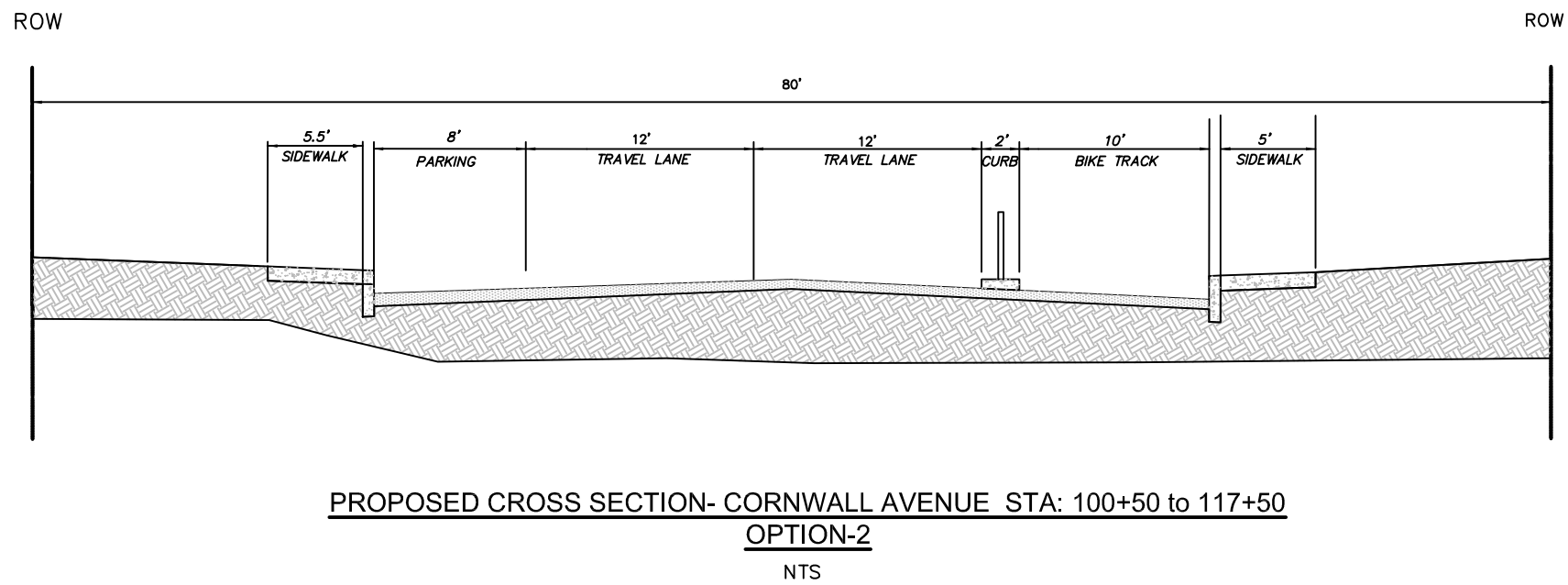
PROPOSED CROSS SECTION- CORNWALL AVENUE STA:120+00 OPTION 1
NTS



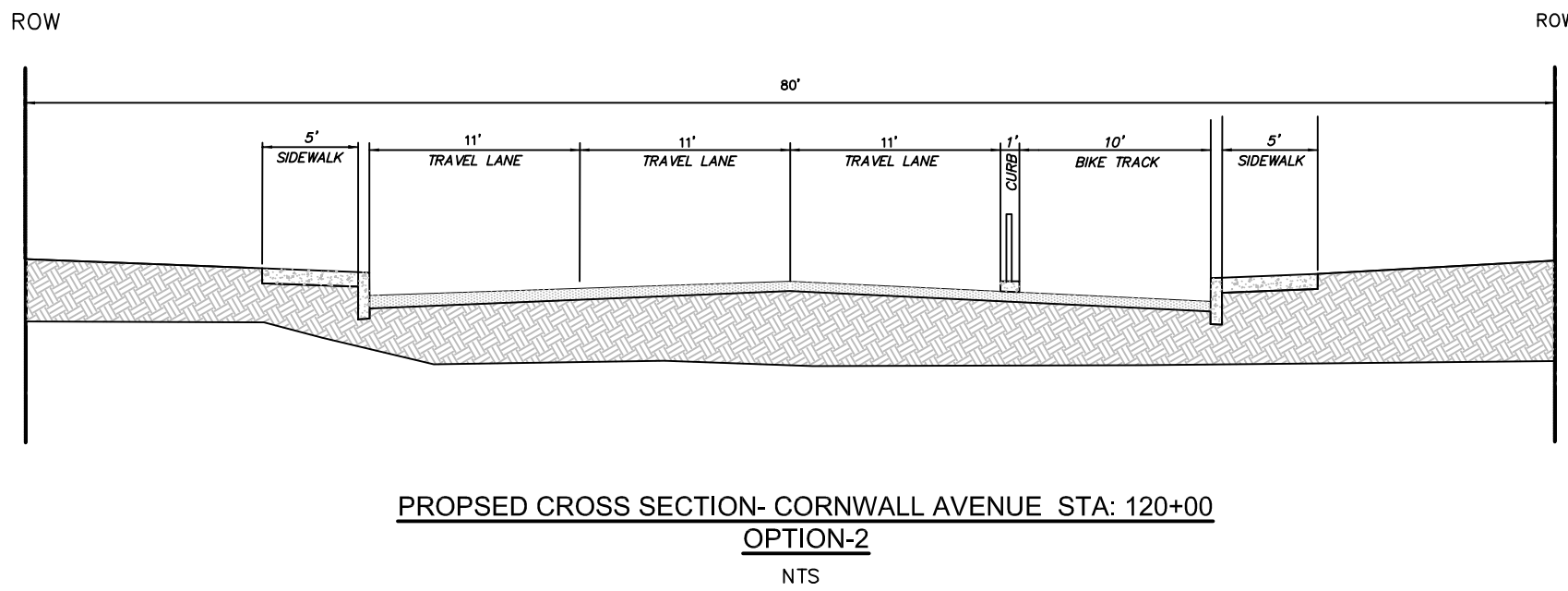
PROPOSED CROSS SECTION- ELDRIDGE AVENUE STA: 8+00 to 49+25
NTS



EXISTING- CORNWALL AVENUE STA: 120+00
NTS



PROPOSED CROSS SECTION- CORNWALL AVENUE STA: 100+50 to 117+50
OPTION-2
NTS



PROPOSED CROSS SECTION- CORNWALL AVENUE STA: 120+00
OPTION-2
NTS

	4		
	3		
	2		
	1		
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER JJB
DESIGNED/DRAWN ELH
INSPECTOR ?

DIRECTOR OF PUBLIC WORKS E.C.J.
CITY ENGINEER C.M.A.S.
OPERATIONS ENGINEER M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"= 20'
Vert. 1"= NA

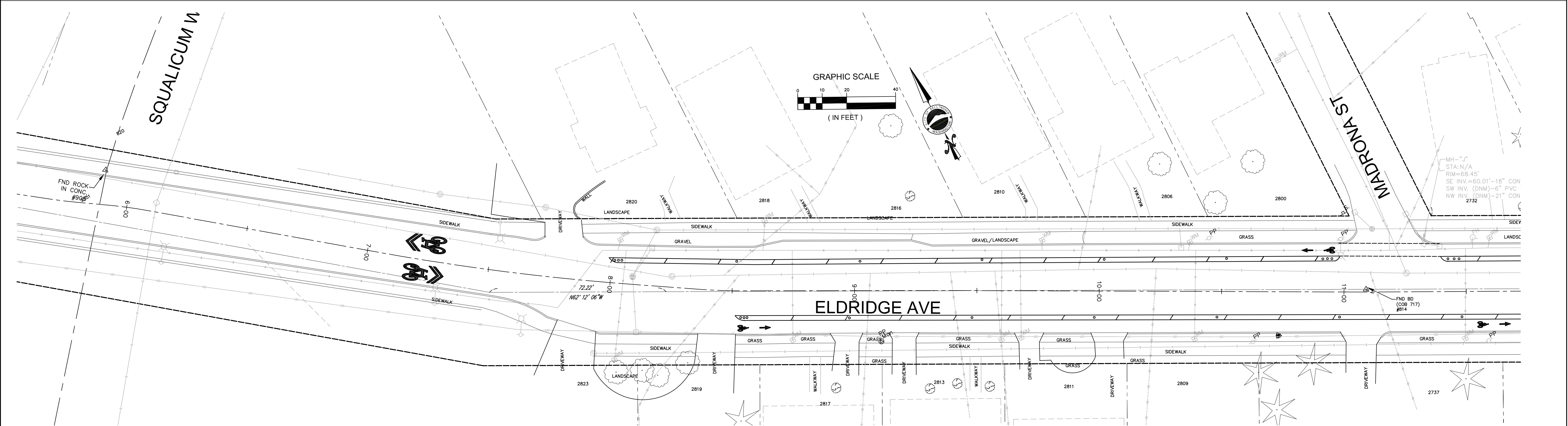
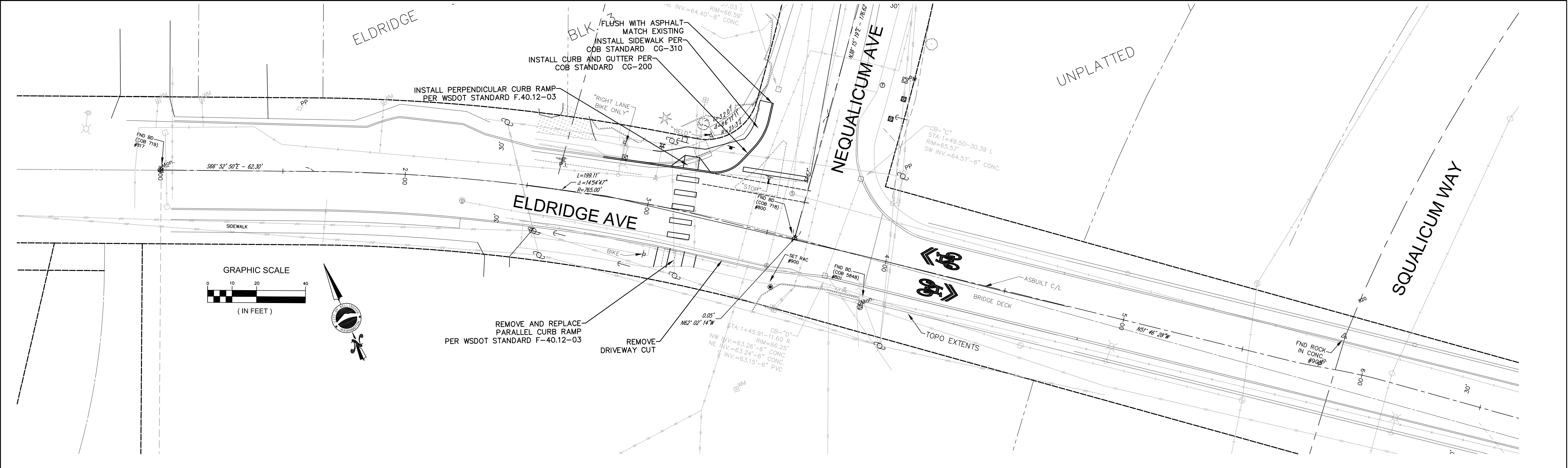
DATUM

Job. No. ES-0563
Date 02/2023
Field Bk. FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
TYPICAL SECTIONS EXISTING AND PROPOSED

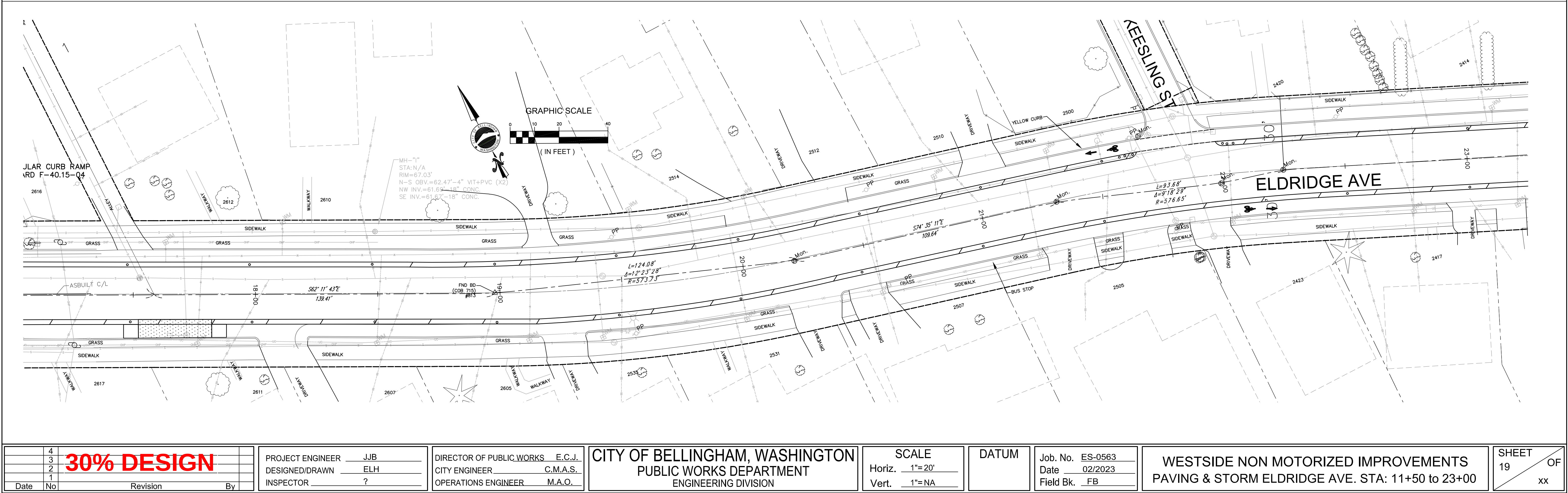
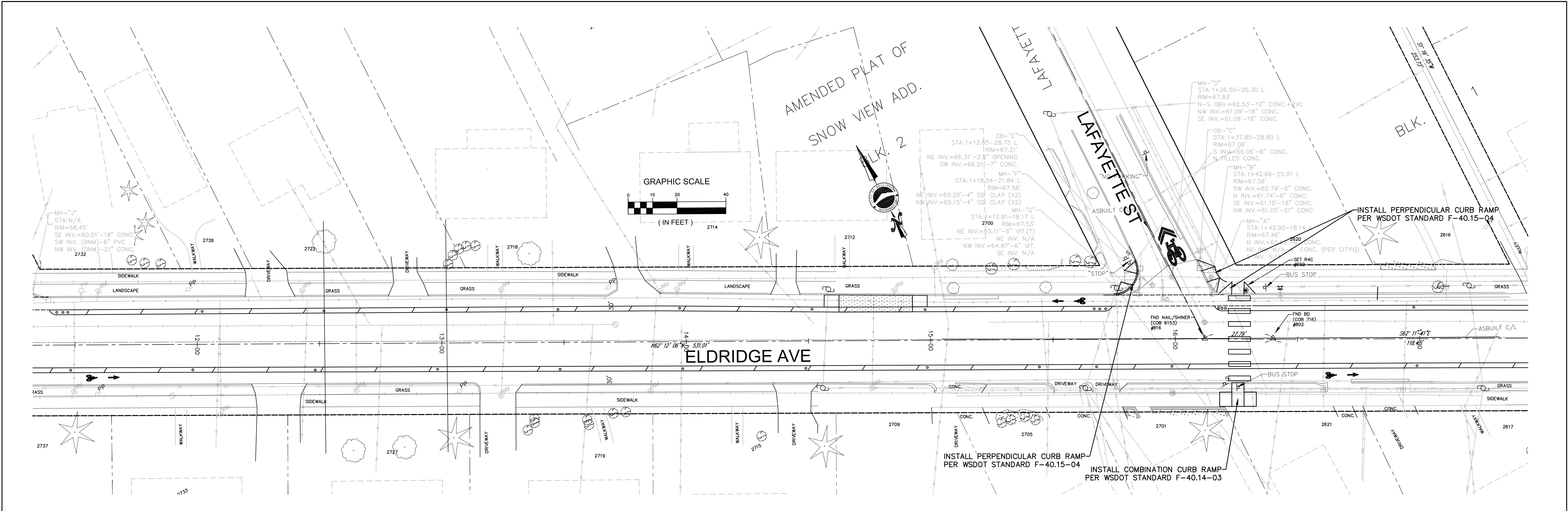
SHEET 17 OF xx

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



30% DESIGN				PROJECT ENGINEER JJB		DIRECTOR OF PUBLIC WORKS E.C.J.		CITY OF BELLINGHAM, WASHINGTON		SCALE		DATUM		Job. No. ES-0563		WESTSIDE NON MOTORIZED IMPROVEMENTS		SHEET 18 OF xx	
				DESIGNED/DRAWN ELH		CITY ENGINEER C.M.A.S.		PUBLIC WORKS DEPARTMENT		Horiz. 1"=20'				Date 02/2023		PAVING & STORM ELDRIDGE AVE. STA: 1+00 to 11+50			
				INSPECTOR ?		OPERATIONS ENGINEER M.A.O.		ENGINEERING DIVISION		Vert. 1"=NA				Field Bk. FB					

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



4	3	2	1
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.M.A.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"=20'
Vert. 1"=NA

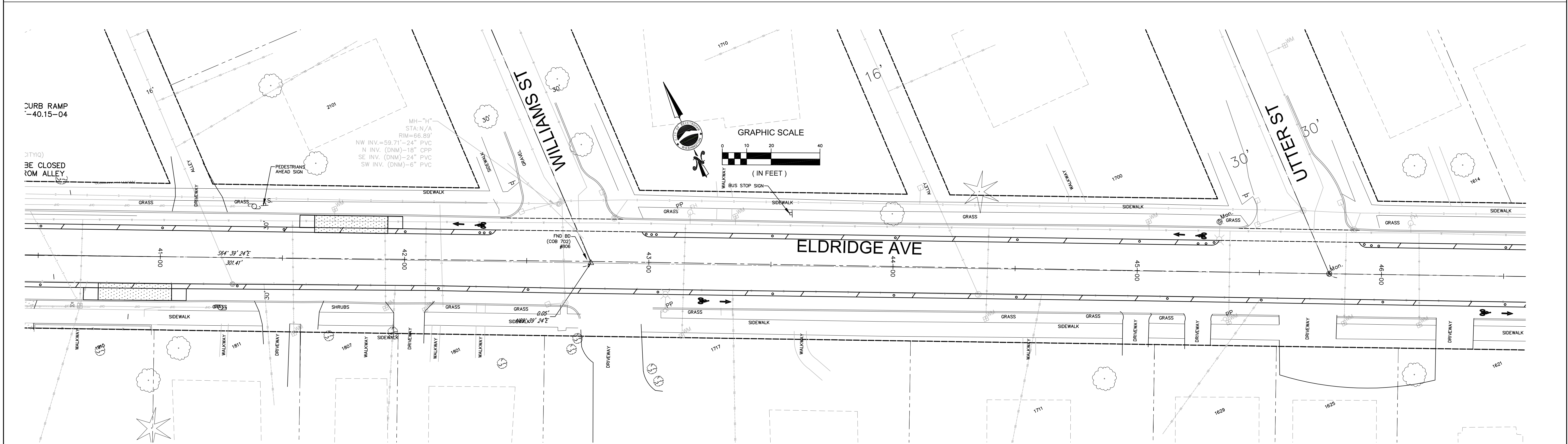
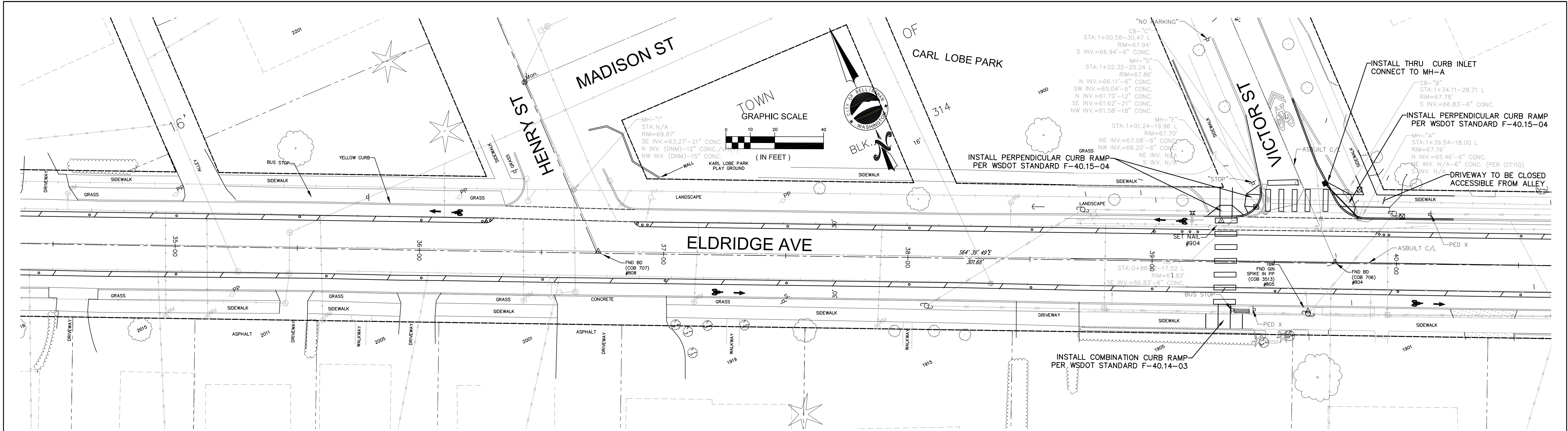
DATUM

Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
PAVING & STORM ELDRIDGE AVE. STA: 11+50 to 23+00

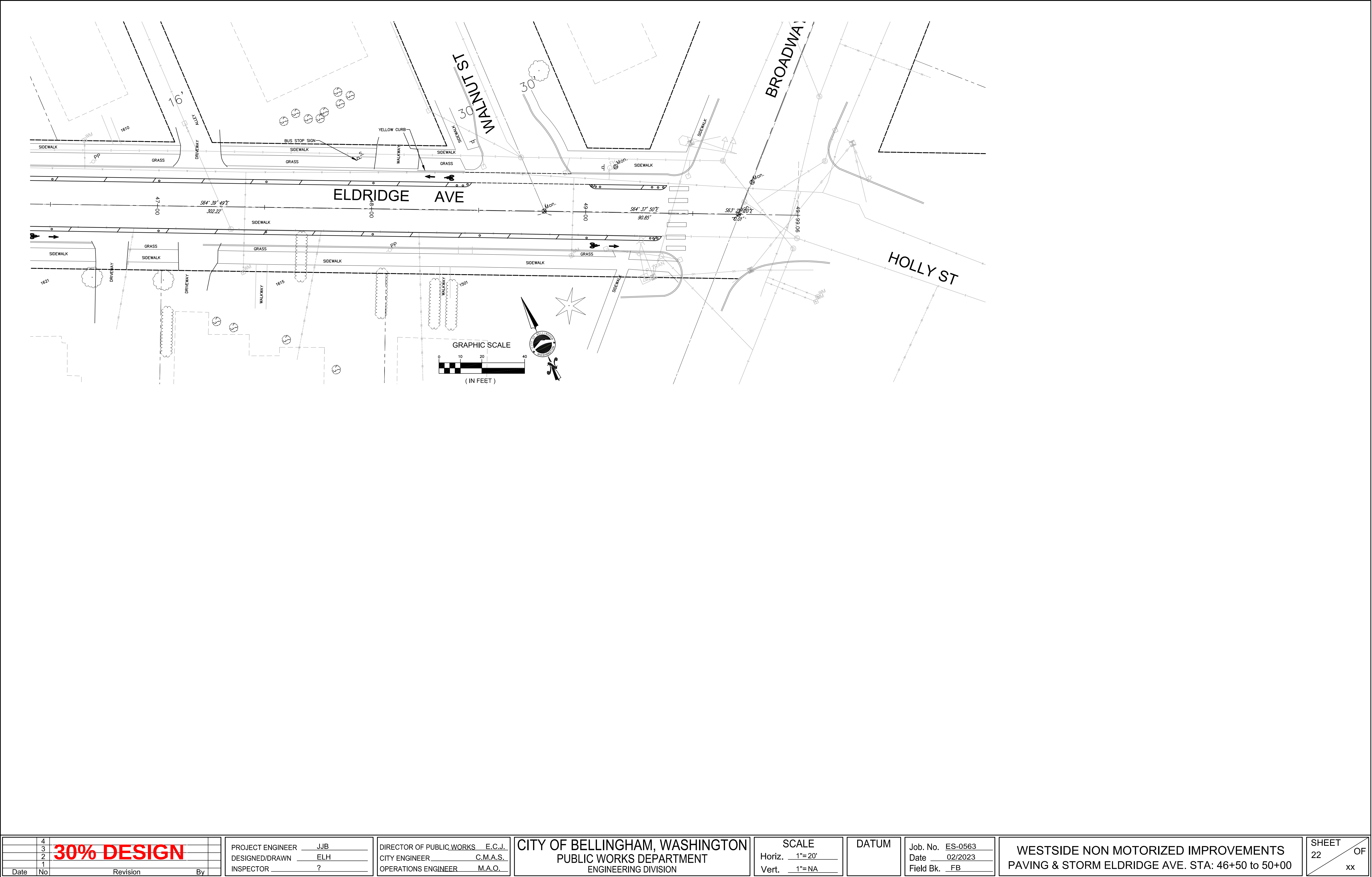
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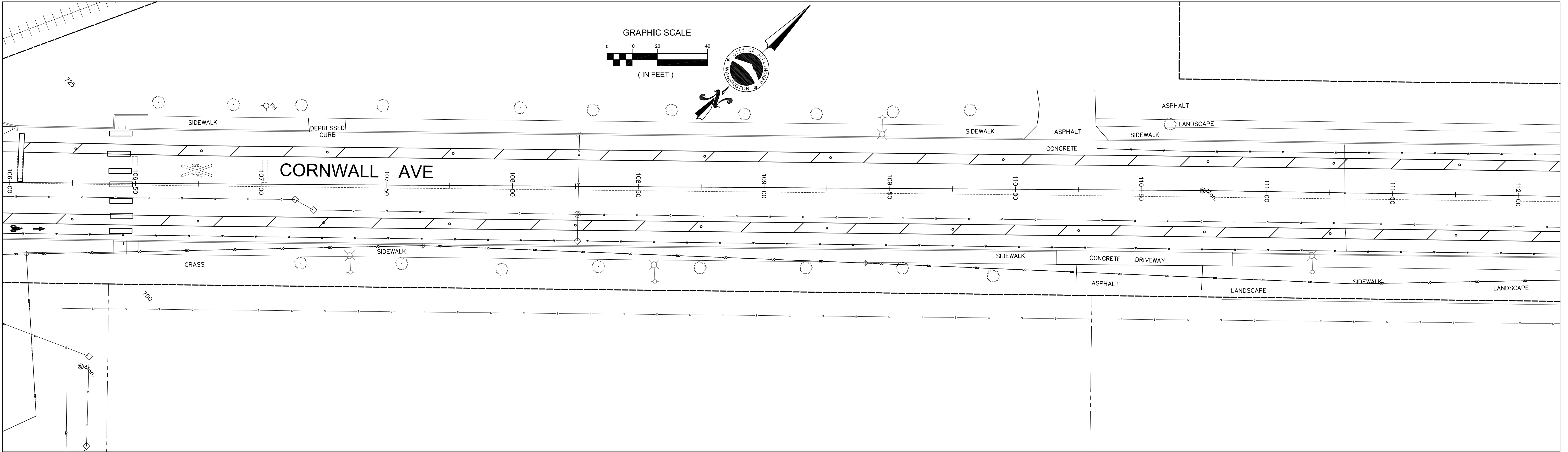
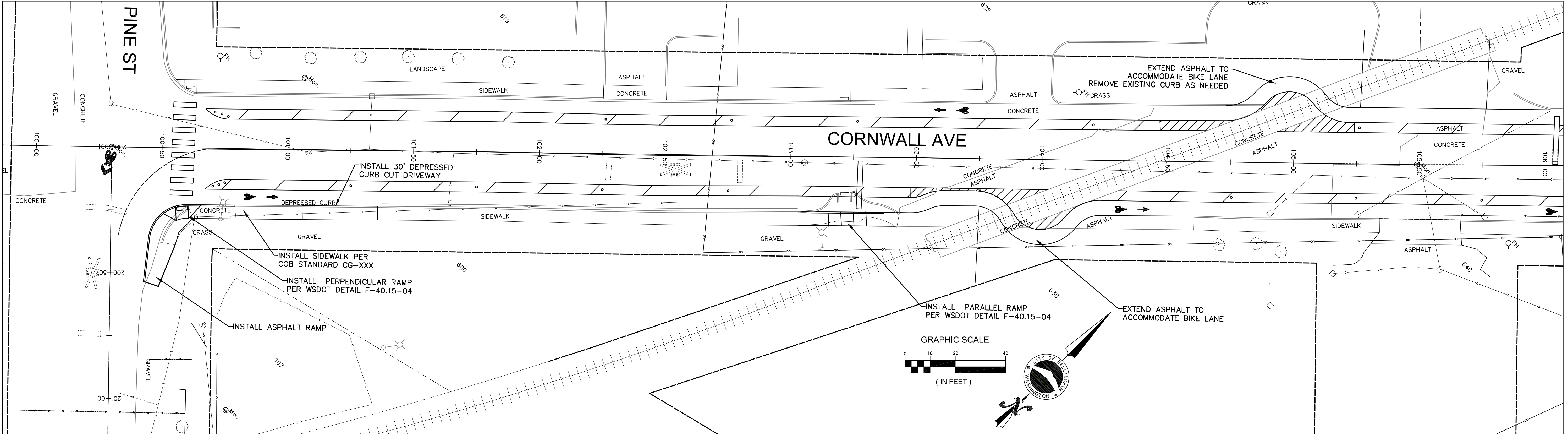
CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



30% DESIGN				PROJECT ENGINEER JJB		DIRECTOR OF PUBLIC WORKS E.C.J.		CITY OF BELLINGHAM, WASHINGTON		SCALE		DATUM		Job. No. ES-0563		WESTSIDE NON MOTORIZED IMPROVEMENTS		SHEET 21 OF 4x	
				DESIGNED/DRAWN ELH		CITY ENGINEER C.M.A.S.		PUBLIC WORKS DEPARTMENT		Horiz. 1"=20'				Date 02/2023		PAVING & STORM ELDRIDGE AVE. STA: 34+50 TO 46+50			
				INSPECTOR ?		OPERATIONS ENGINEER M.A.O.		ENGINEERING DIVISION		Vert. 1"=NA				Field Bk. FB					

CONTACT PERSON: _____, PROJECT ENGINEER AT 778-7900





OPTION 1

	4	
	3	
	2	
	1	
Date	No	Revision

30% DESIGN

PROJECT ENGINEER JJB
DESIGNED/DRAWN ELH
INSPECTOR ?

DIRECTOR OF PUBLIC WORKS E.C.J.
CITY ENGINEER C.A.M.S.
OPERATIONS ENGINEER M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"=20'
Vert. 1"=NA

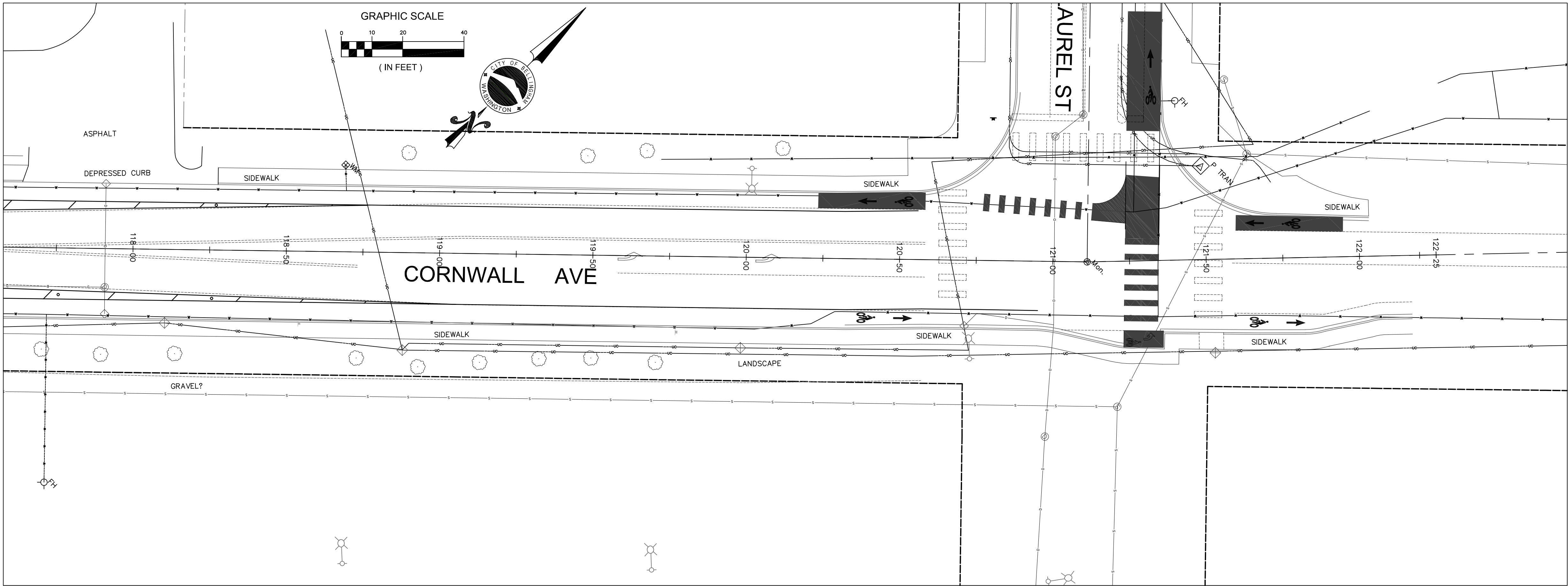
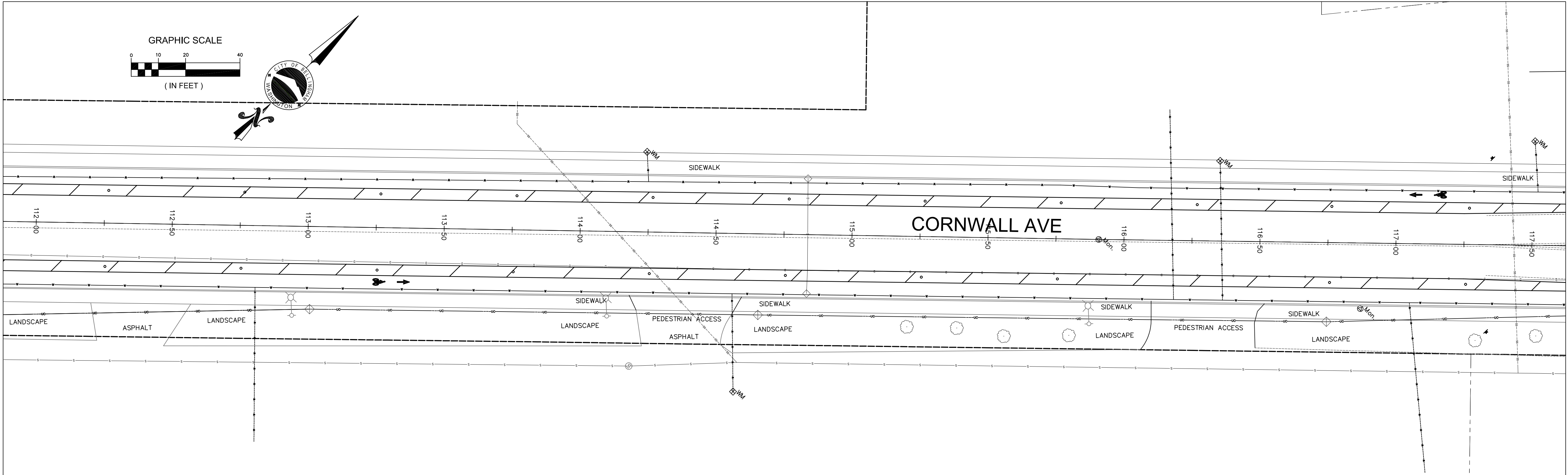
DATUM

Job. No. ES-0563
Date 02/2023
Field Bk. FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CORNWALL AVE. STA: 100+00 to 112+00

SHEET 23 OF xx

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



OPTION 1

	4	
	3	
	2	
	1	
Date	No	Revision

30% DESIGN

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.A.M.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"=20'
Vert. 1"=NA

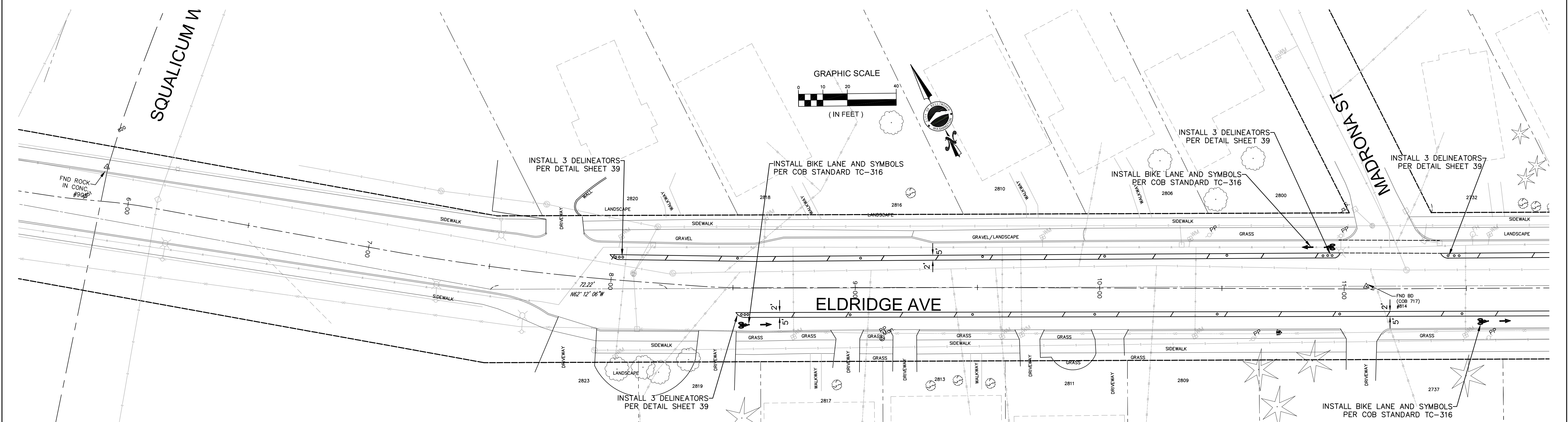
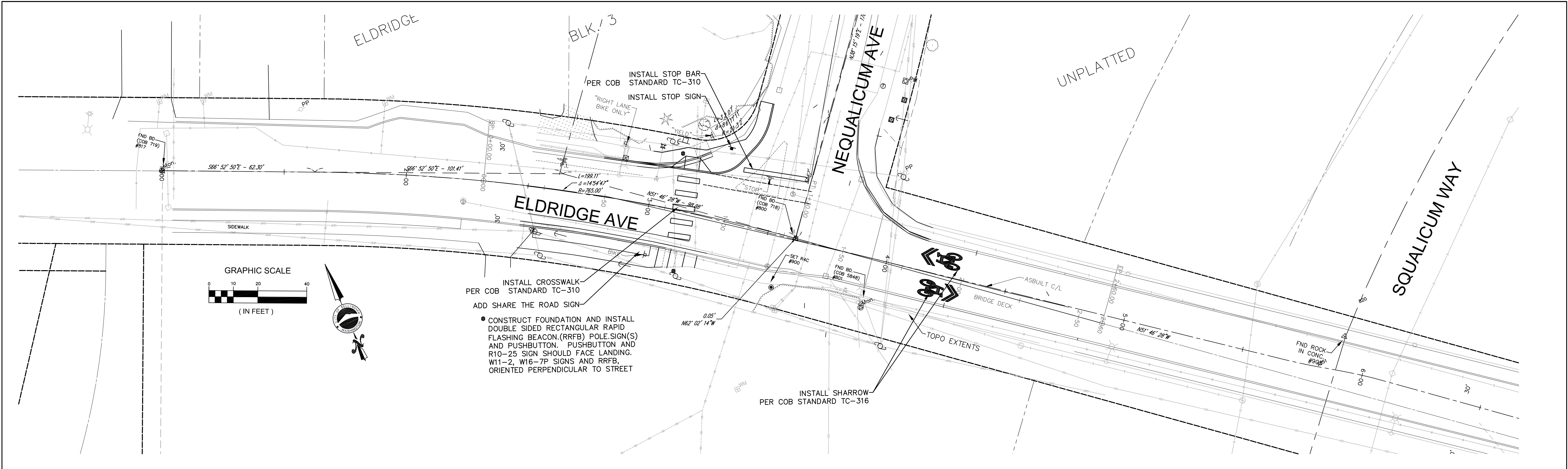
DATUM

Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CORNWALL AVE. STA: 112+00 to 122+25

SHEET	OF
24	xx

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



4	3	2	1
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER JJB
DESIGNED/DRAWN ELH
INSPECTOR ?

DIRECTOR OF PUBLIC WORKS E.C.J.
CITY ENGINEER C.M.A.S.
OPERATIONS ENGINEER M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"=20'
Vert. 1"=NA

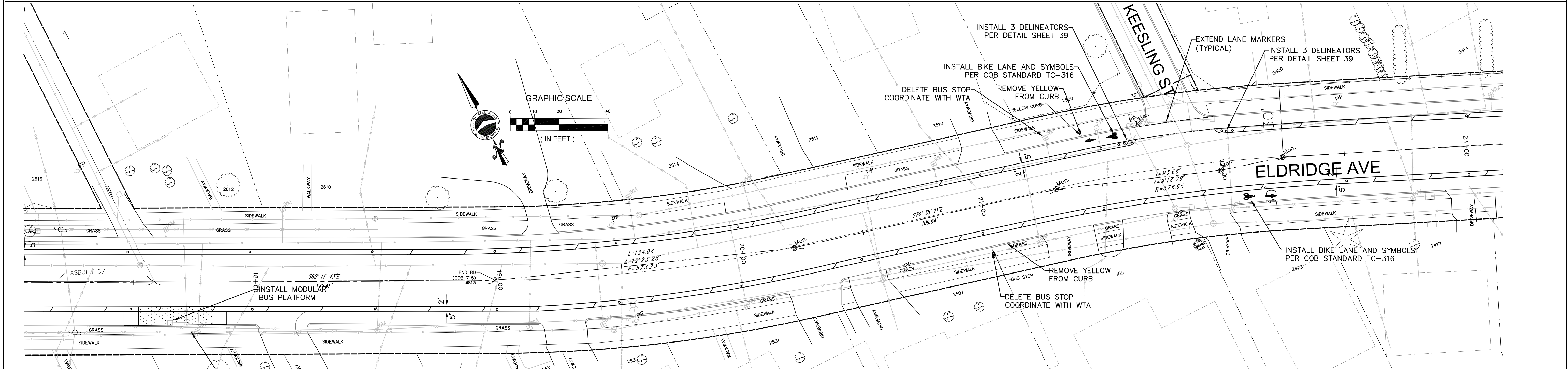
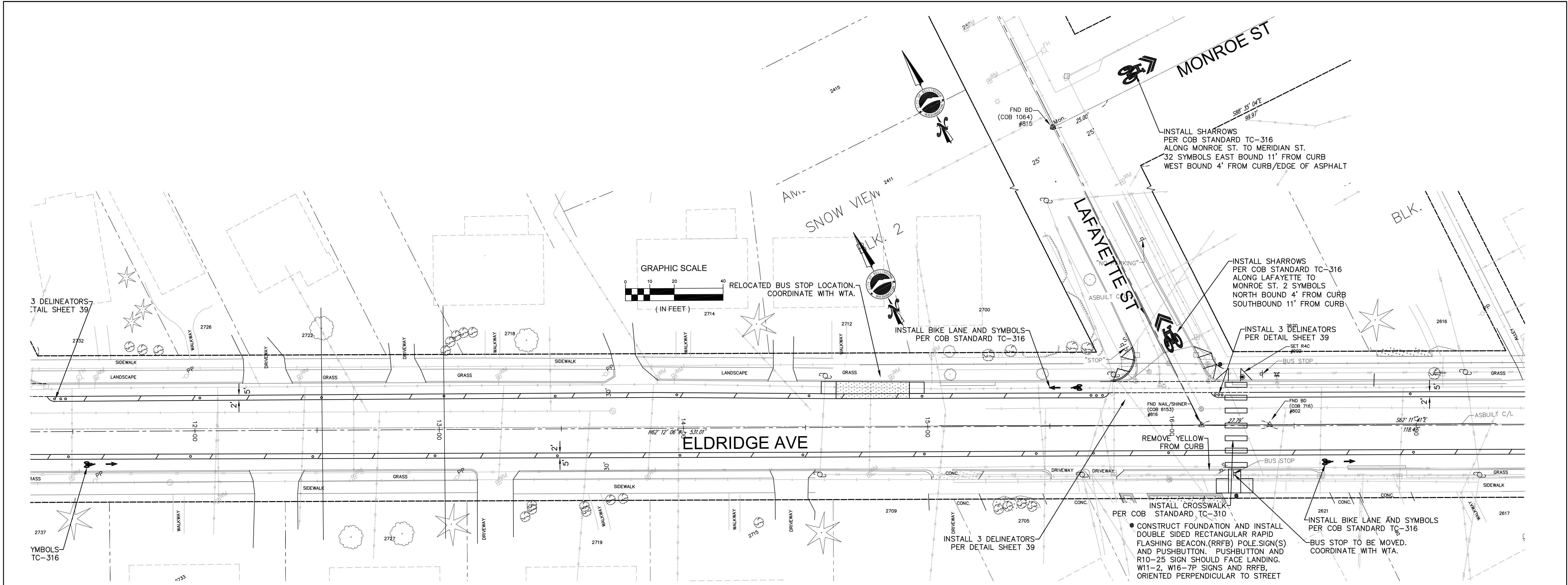
DATUM

Job. No. ES-0563
Date 02/2023
Field Bk. FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CHANNELIZATION ELDRIDGE AVE. STA: 1+00 to 11+50

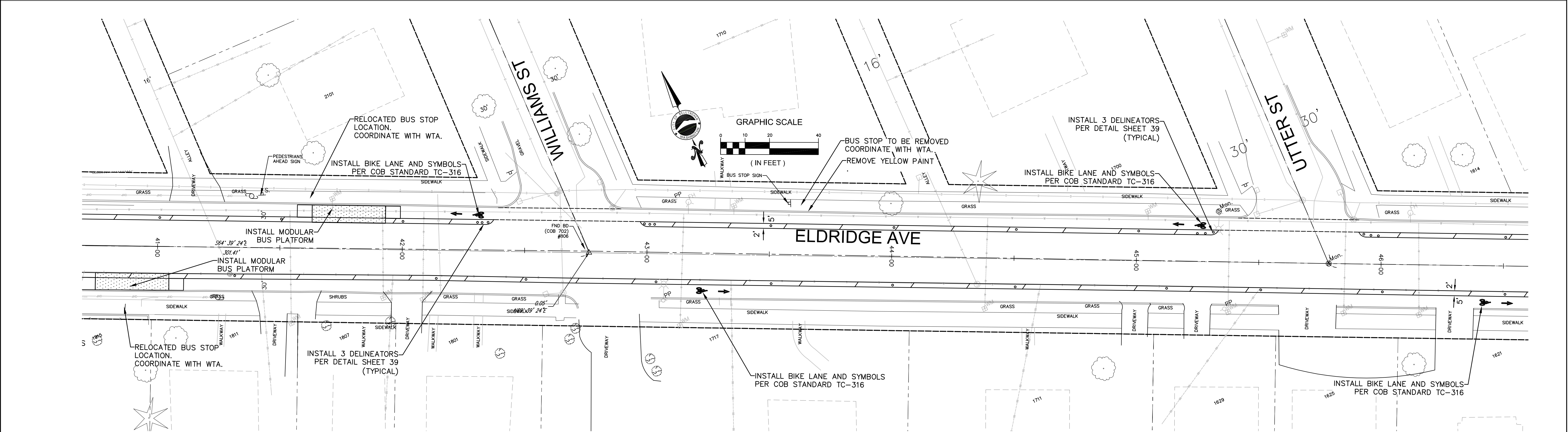
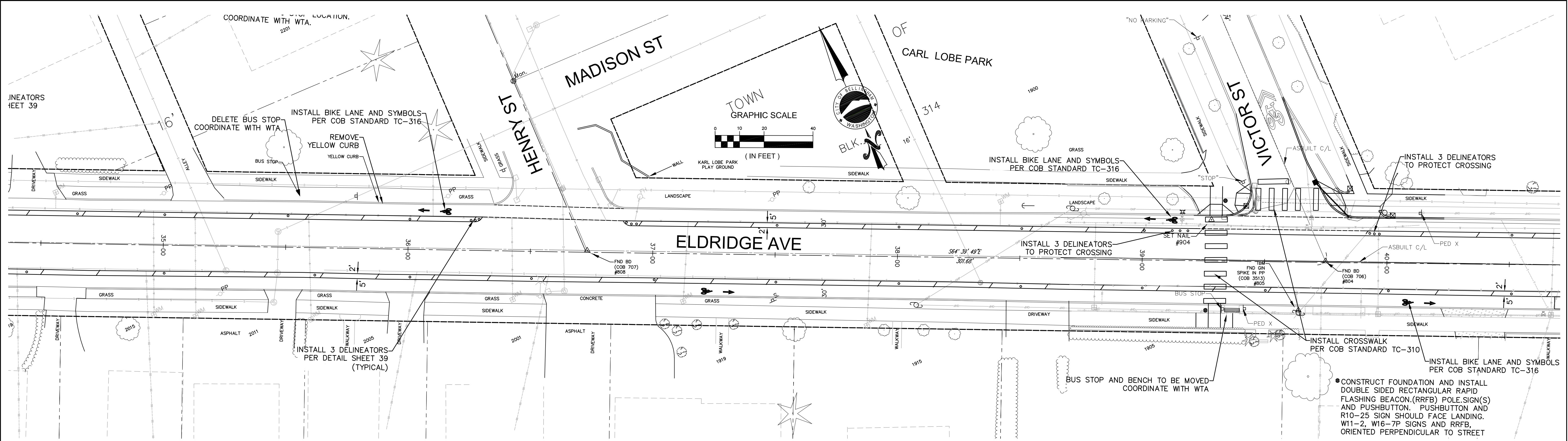
SHEET 25 OF xx

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



4 3 2 1		30% DESIGN		PROJECT ENGINEER JJB DESIGNED/DRAWN ELH INSPECTOR ?		DIRECTOR OF PUBLIC WORKS E.C.J. CITY ENGINEER C.M.A.S. OPERATIONS ENGINEER M.A.O.		CITY OF BELLINGHAM, WASHINGTON PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION		SCALE Horiz. 1"=20' Vert. 1"=NA		DATUM		Job. No. ES-0563 Date 02/2023 Field Bk. FB		WESTSIDE NON MOTORIZED IMPROVEMENTS CHANNELIZATION ELDRIDGE AVE. STA: 11+50 to 23+00		SHEET 26 OF xx	
Date	No	Revision		By															

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



	4		
	3		
	2		
	1		
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER JJB
DESIGNED/DRAWN ELH
INSPECTOR ?

DIRECTOR OF PUBLIC WORKS E.C.J.
CITY ENGINEER C.M.A.S.
OPERATIONS ENGINEER M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"=20'
Vert. 1"=NA

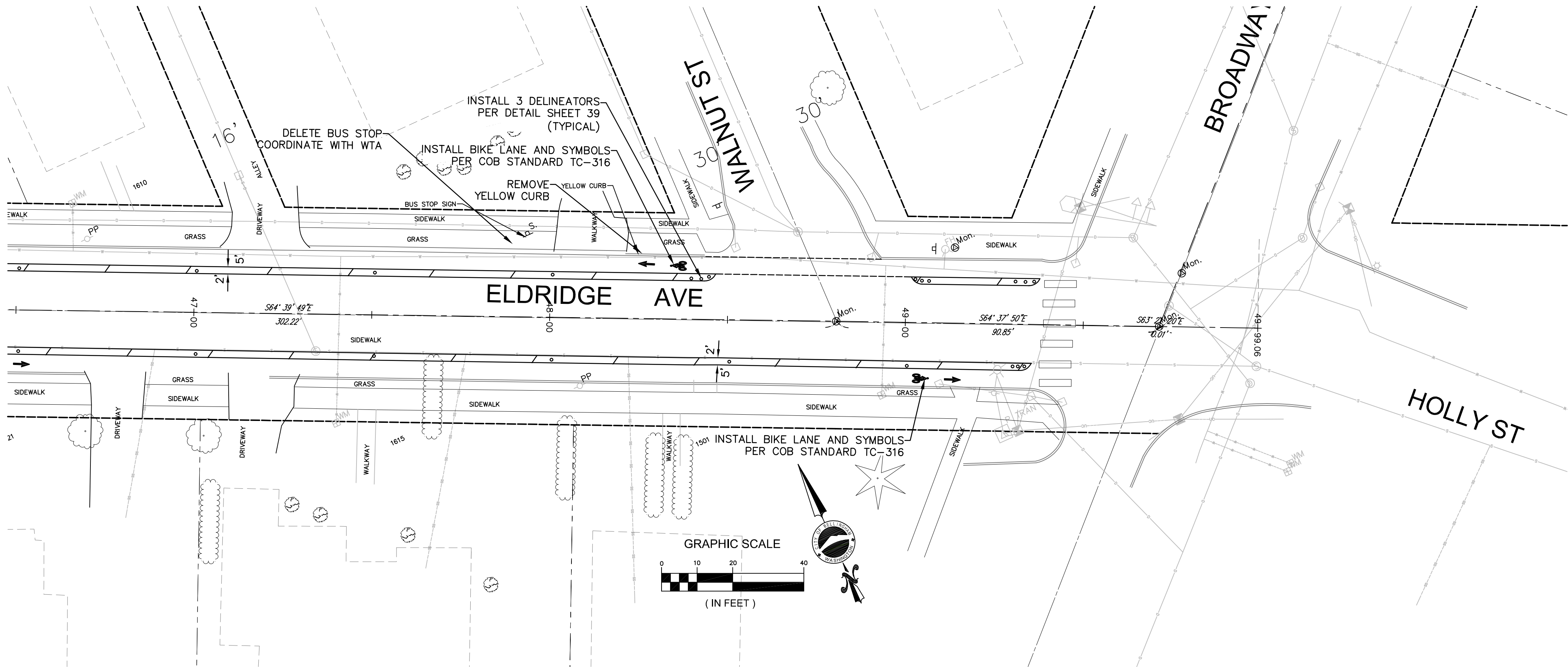
DATUM

Job. No. ES-0563
Date 02/2023
Field Bk. FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CHANNELIZATION ELDRIDGE AVE. STA: 34+50 to 46+50

SHEET 28 OF 4x

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



	4		
	3		
	2		
	1		
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.M.A.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"=20'
Vert. 1"=NA

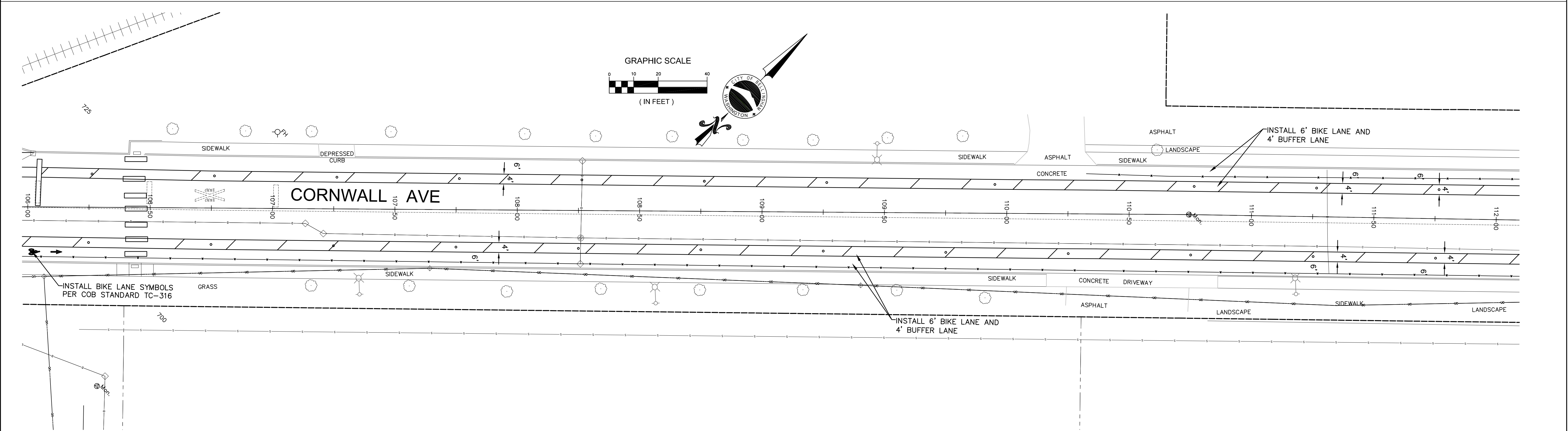
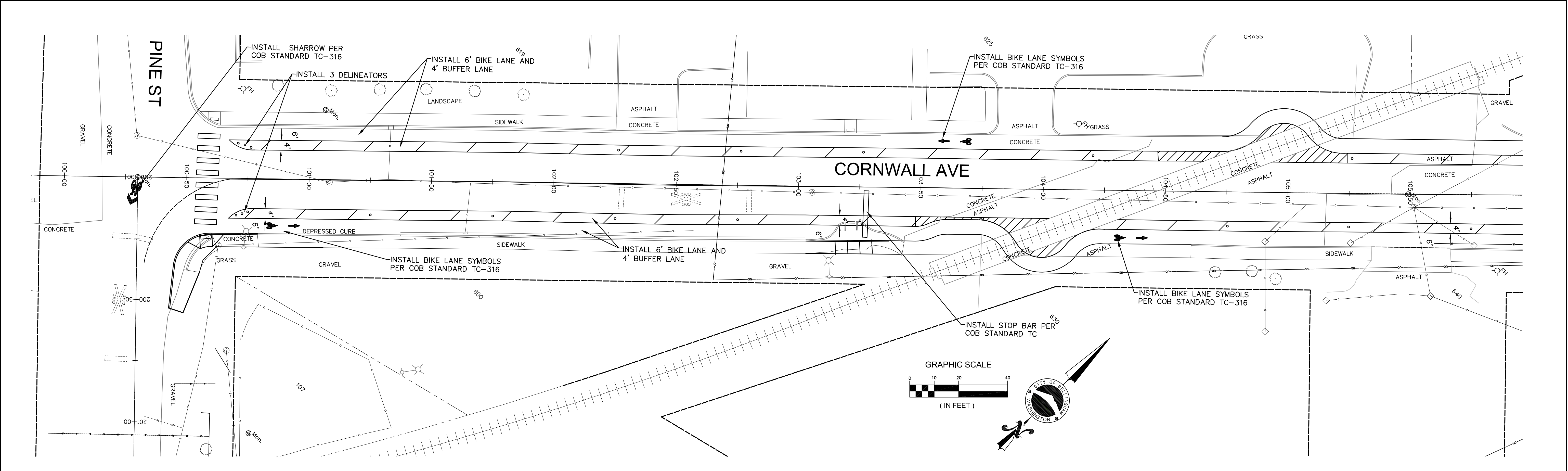
DATUM

Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CHANNELIZATION ELDRIDGE AVE. STA: 46+50 to 50+00

SHEET	OF
29	xx

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



OPTION 1

	4	
	3	
	2	
	1	
Date	No	Revision

30% DESIGN

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.A.M.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"= 20'
Vert. 1"= NA

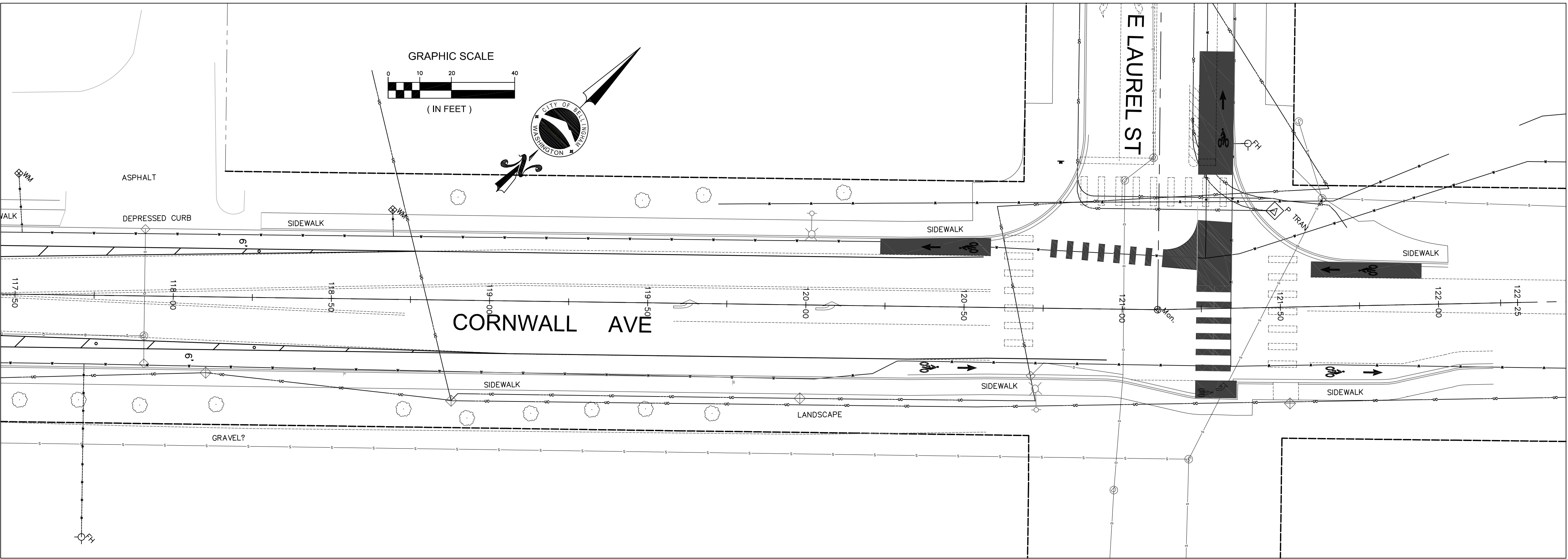
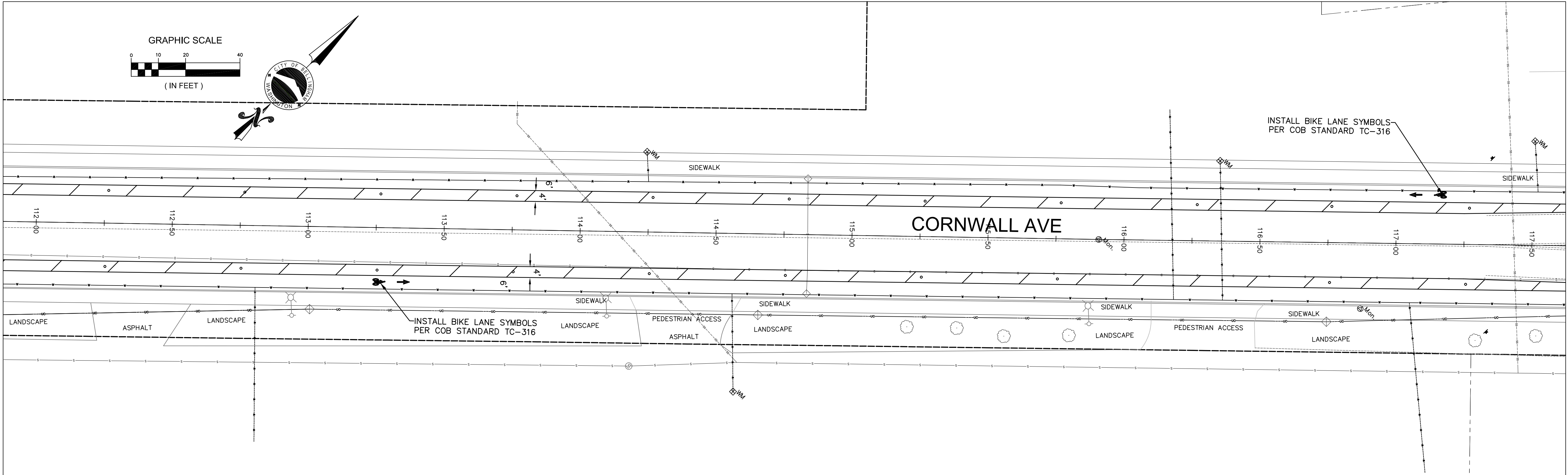
DATUM

Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CORNWALL AVE. STA: 100+00 TO 112+00 CHANNELIZATION

SHEET	OF
30	xx

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



OPTION 1

4	3	2	1
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.A.M.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"=20'
Vert. 1"=NA

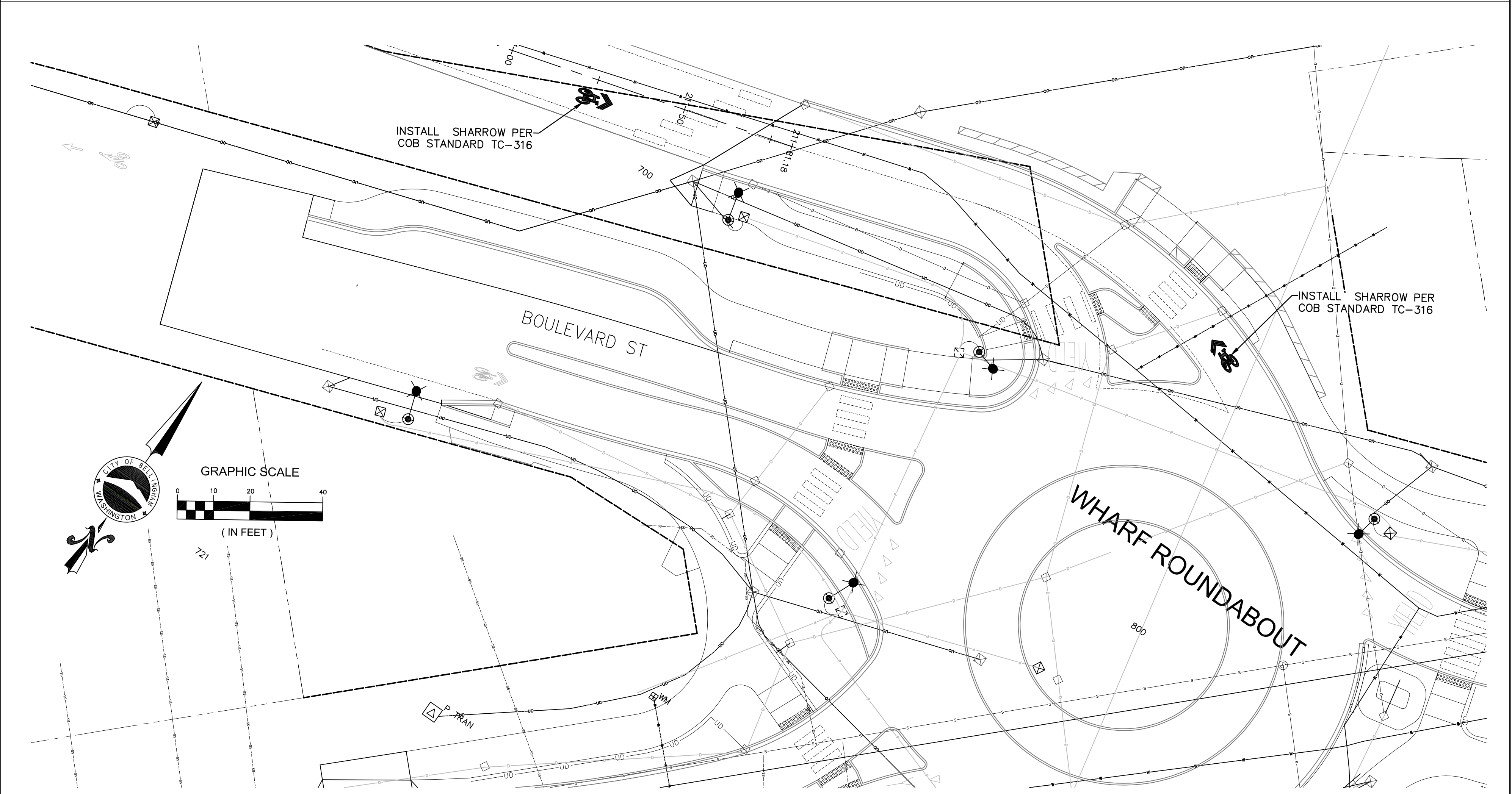
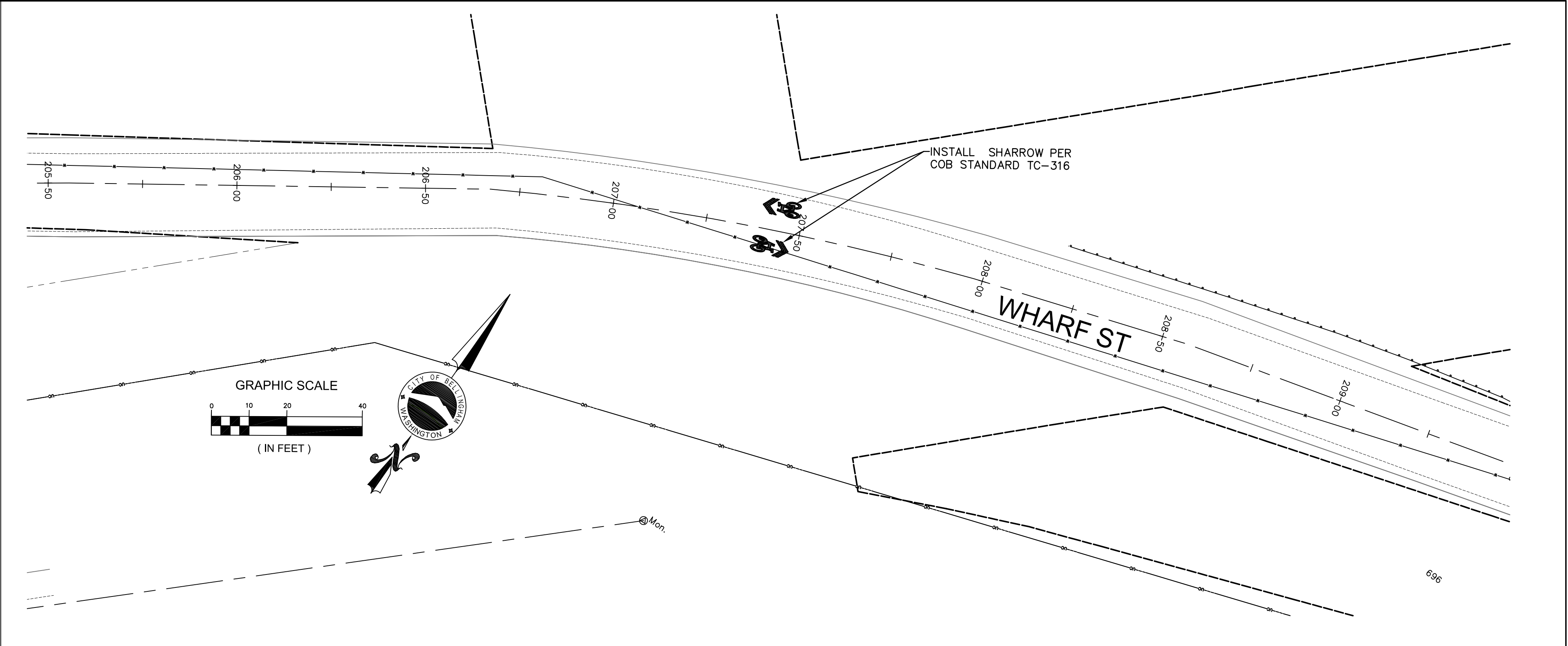
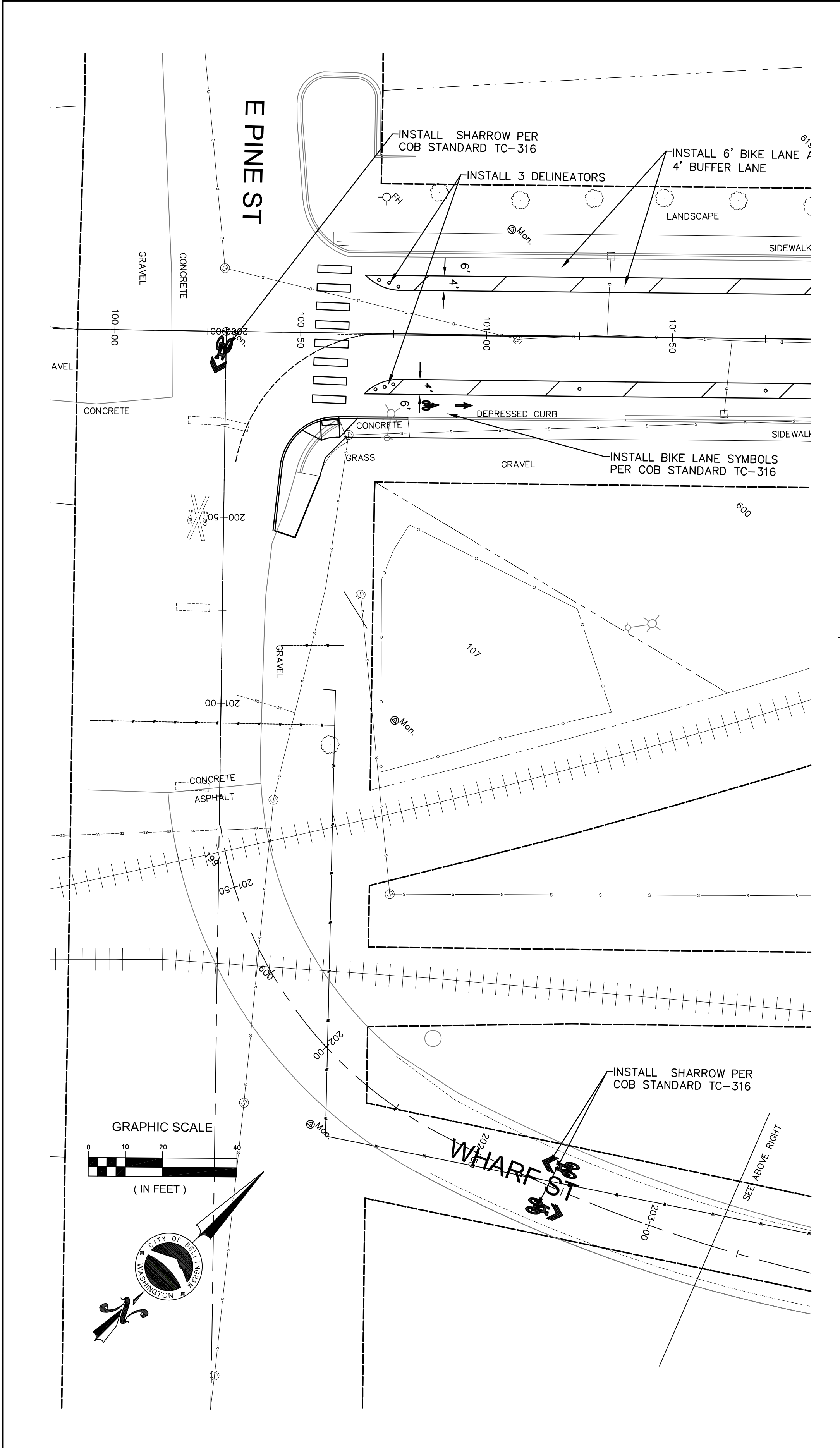
DATUM

Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CORNWALL AVE. STA: 112+00 TO 122+25 CHANNELIZATION

SHEET	OF
31	xx

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



4	3	2	1
30% DESIGN			
Date	No	Revision	By

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.A.M.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"=20'
Vert. 1"=NA

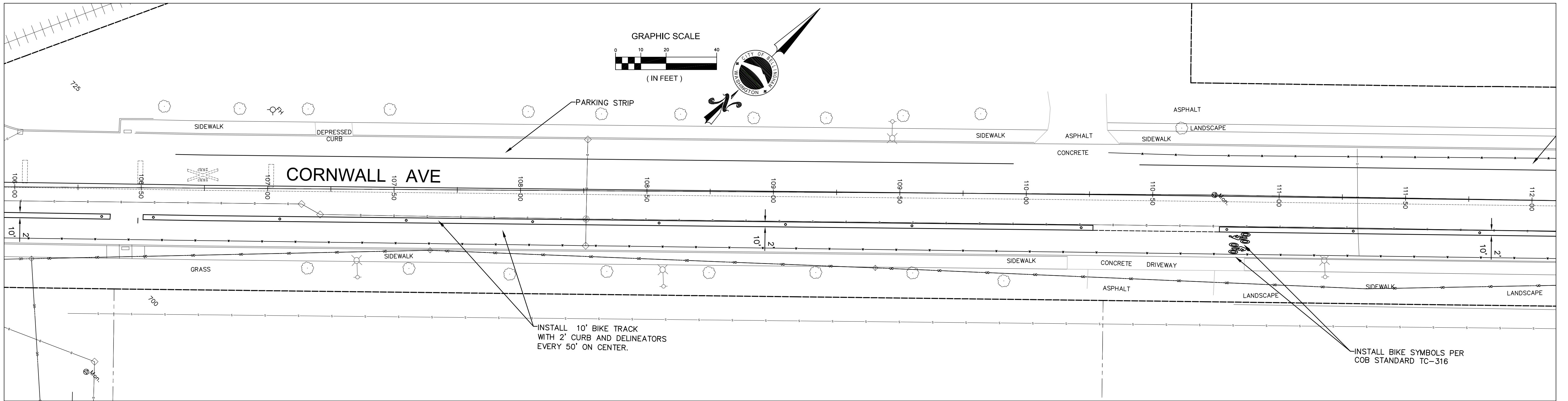
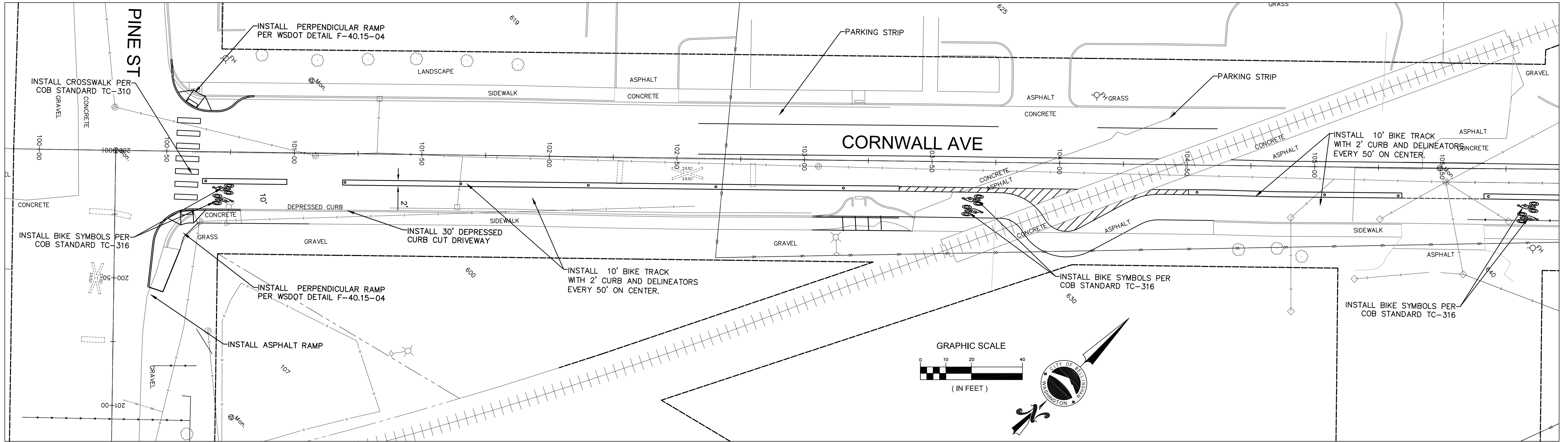
DATUM

Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CHANNELIZATION WHARF ST.

SHEET	OF
32	xx

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



OPTION 2

4			
3			
2			
1			
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.A.M.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"=20'
Vert. 1"=NA

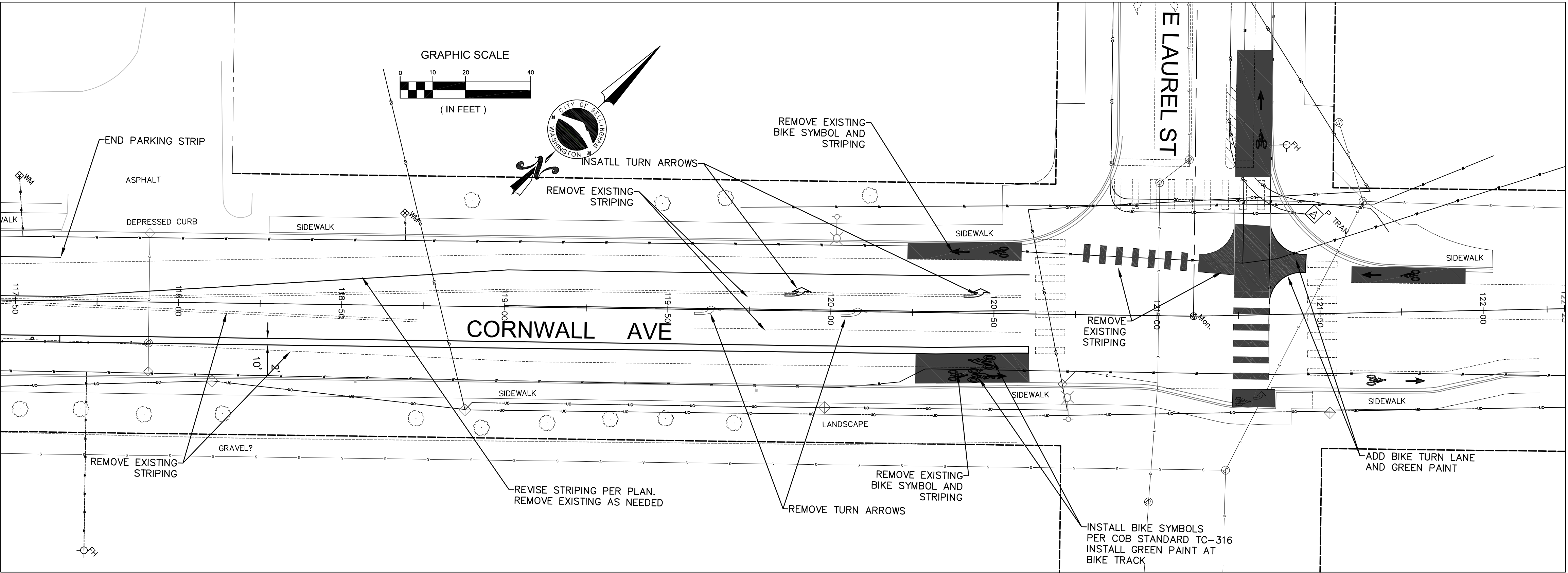
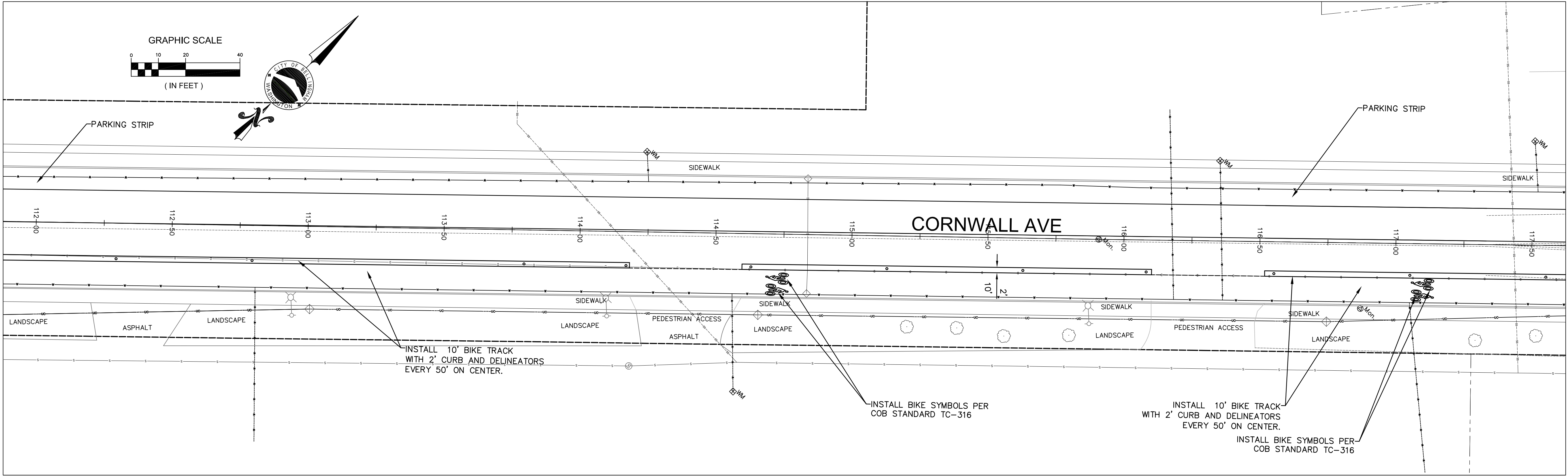
DATUM

Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CORNWALL AVE. STA: 100+00 TO 112+00 CHANNELIZATION

SHEET	OF
33	xx

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



OPTION 2

4	30% DESIGN	
3		
2		
1		
Date	No	Revision

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.A.M.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

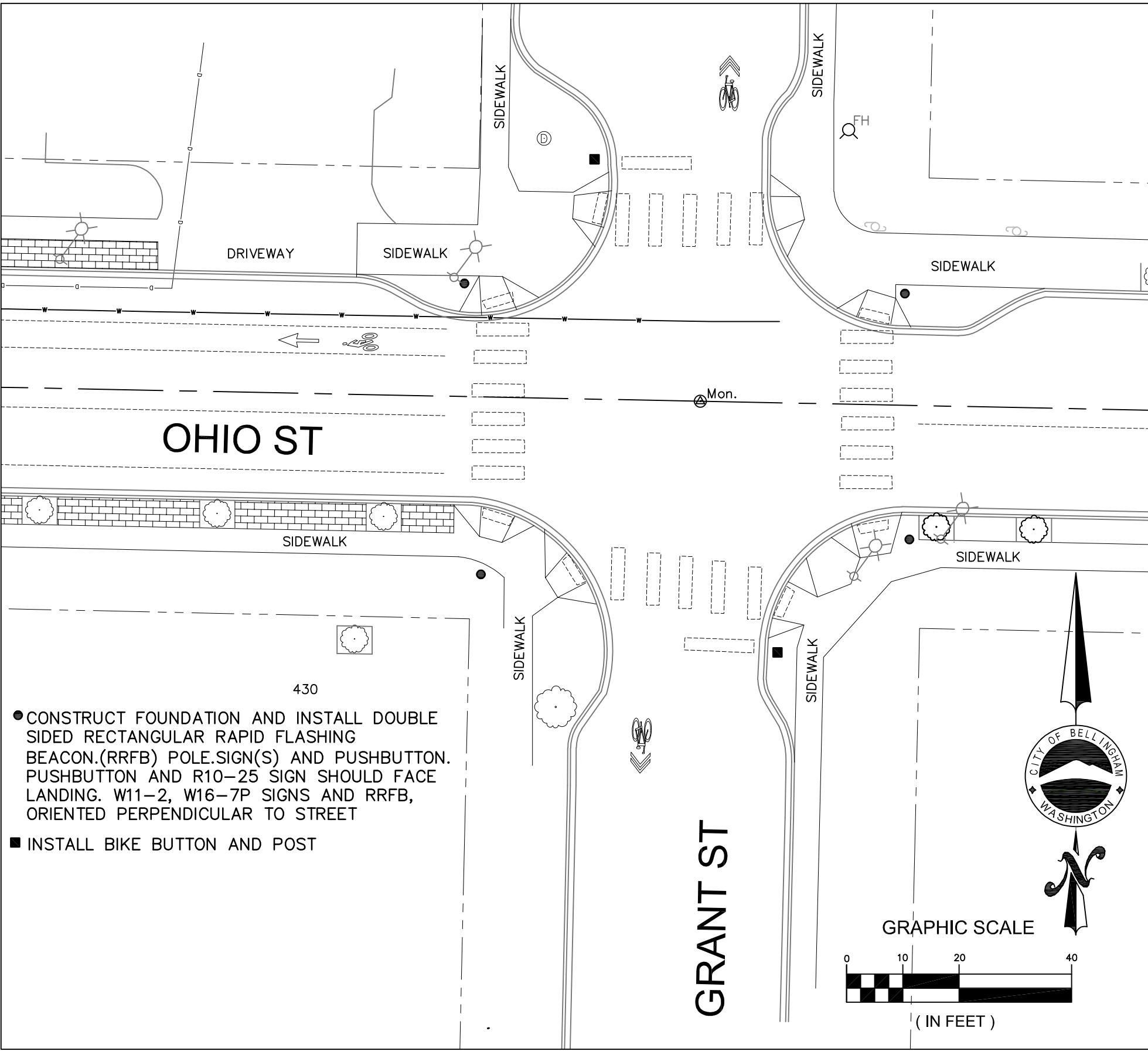
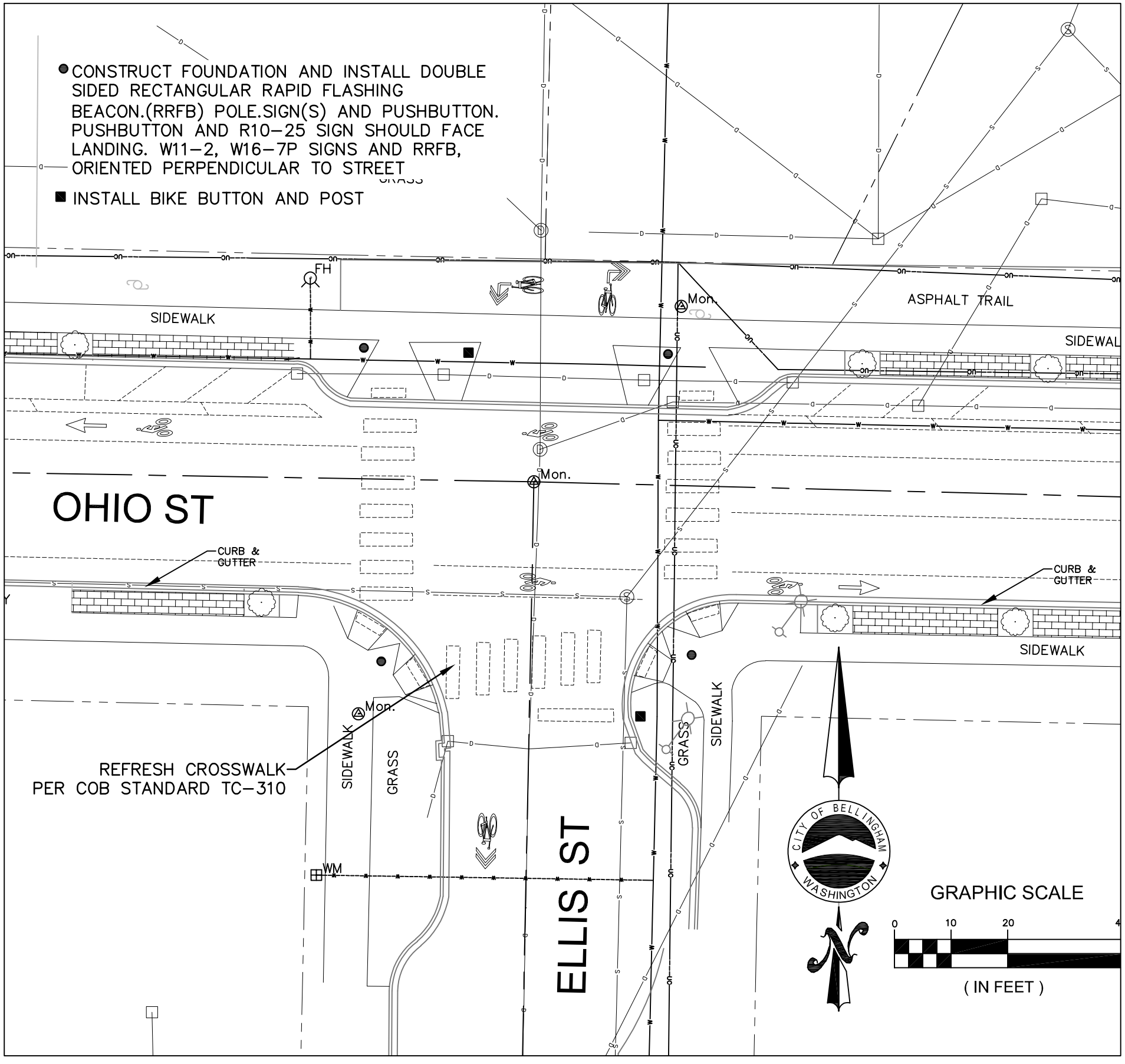
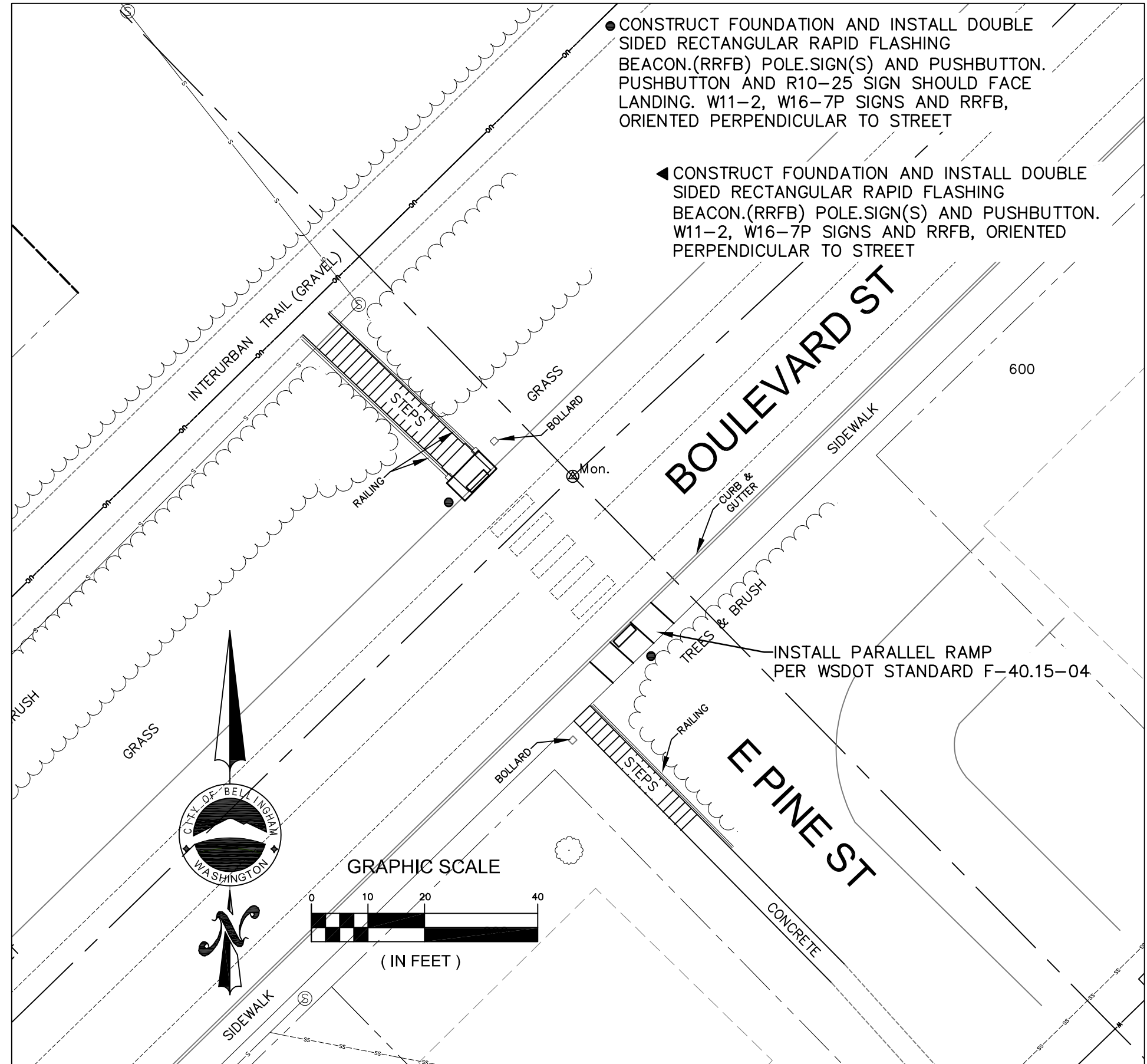
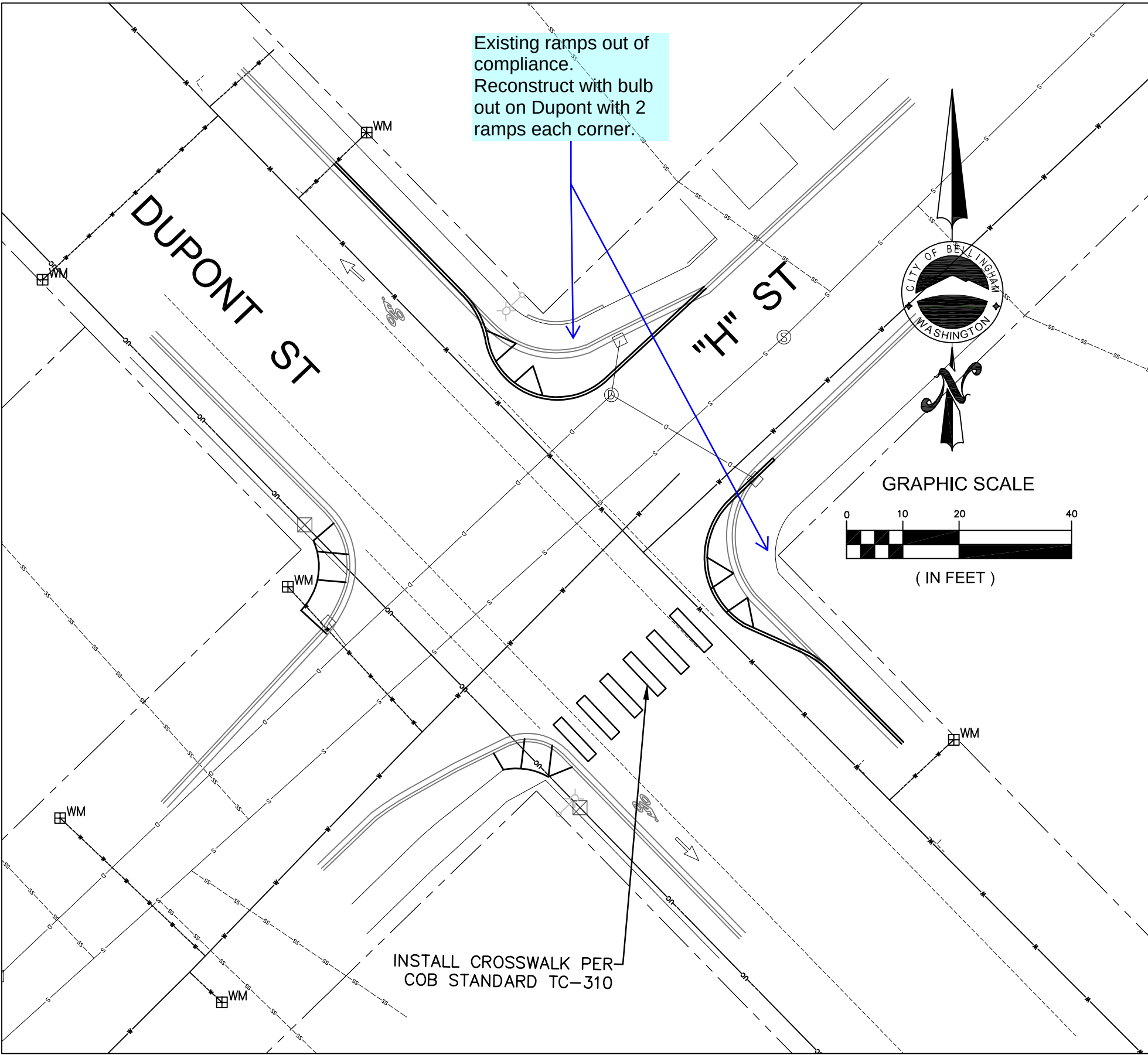
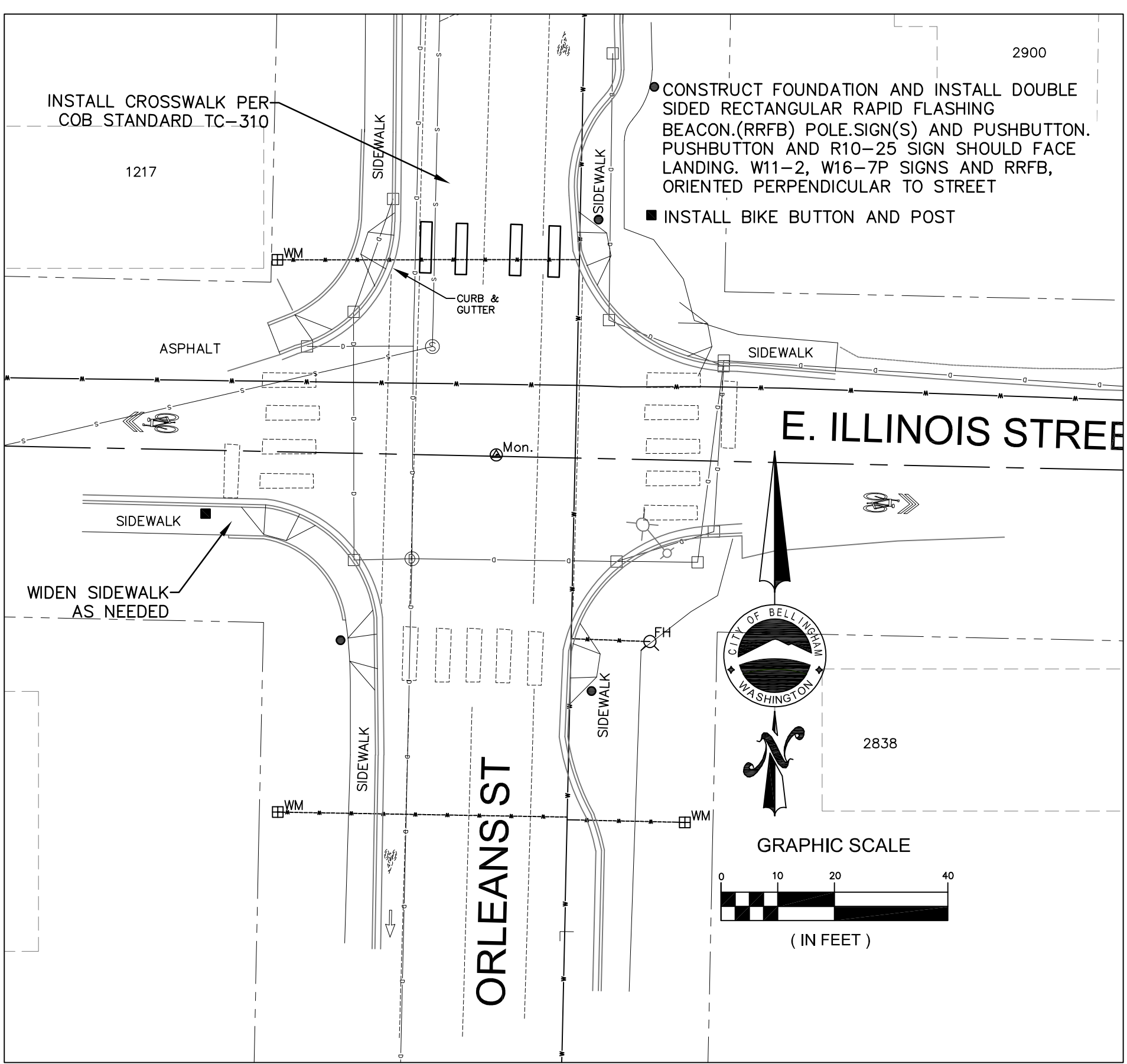
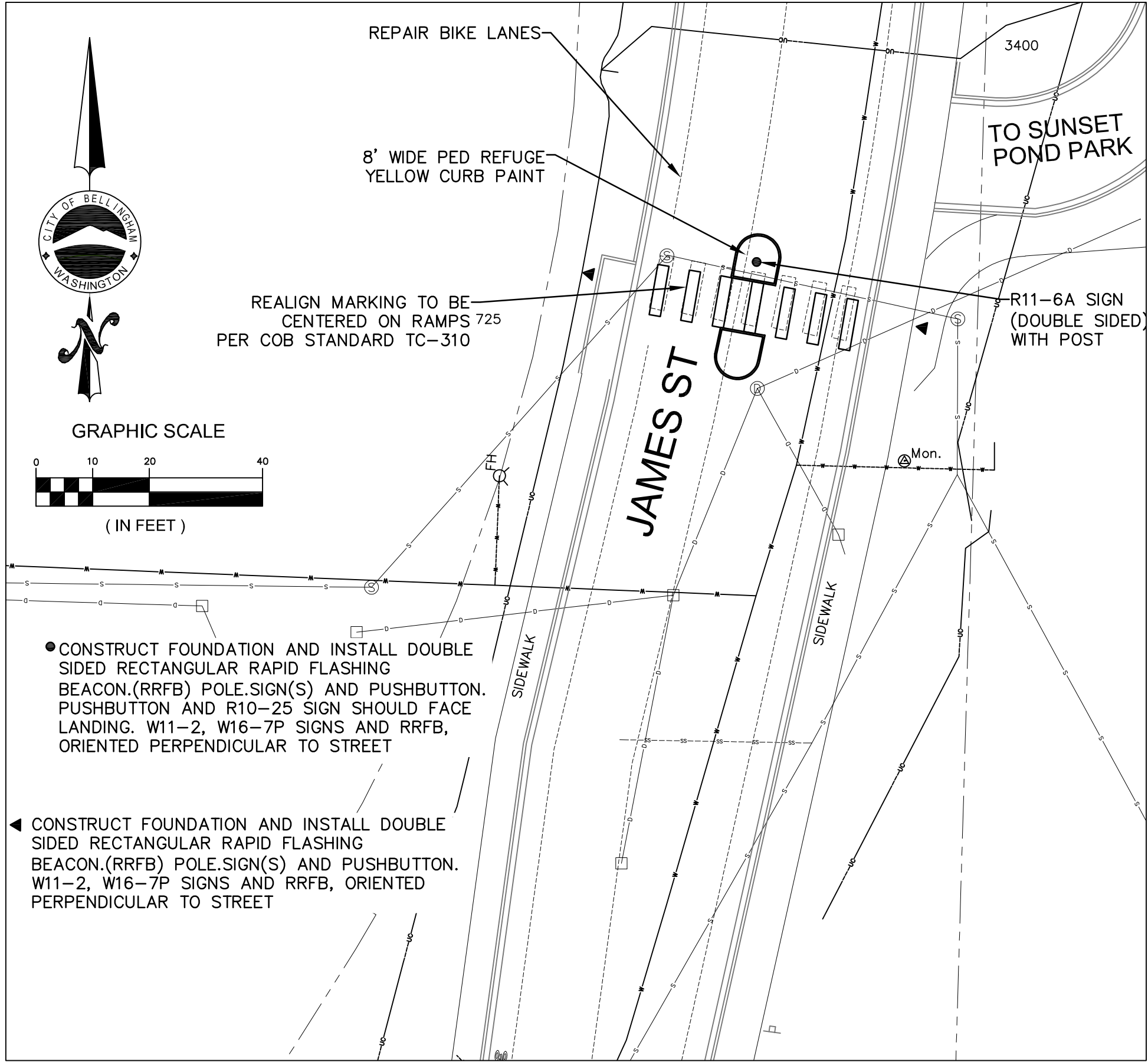
SCALE
Horiz. 1"=20'
Vert. 1"=NA

DATUM

Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CORNWALL AVE. STA: 112+00 TO 122+25 CHANNELIZATION

SHEET	OF
34	xx



	4	
	3	
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	1	
Date	No	Revision
		By

30% DESIGN

PROJECT ENGINEER JJB
DESIGNED/DRAWN ELH
INSPECTOR ?

DIRECTOR OF PUBLIC WORKS E.C.J.
CITY ENGINEER C.A.M.S.
OPERATIONS ENGINEER M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"=20'
Vert. 1"=NA

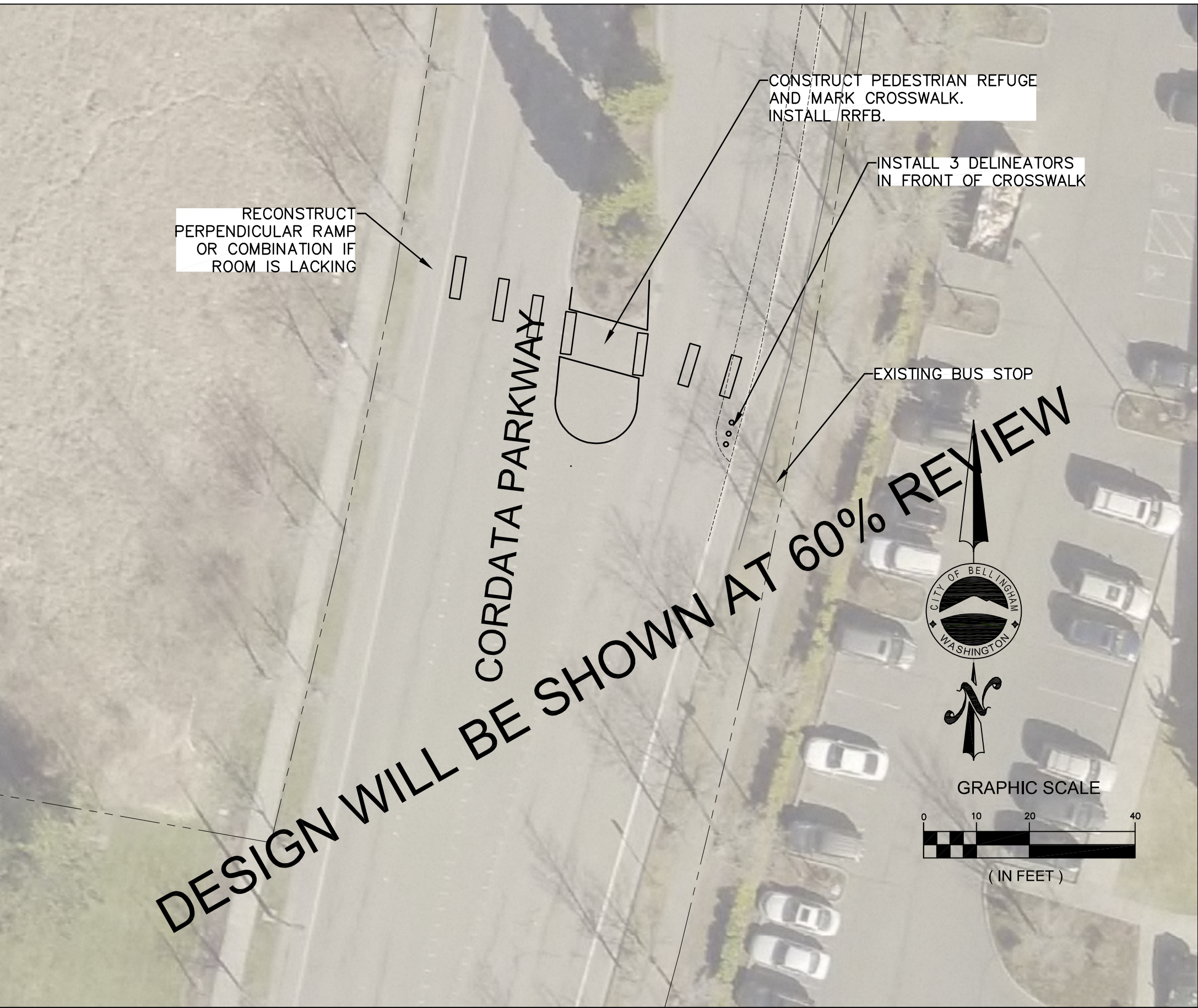
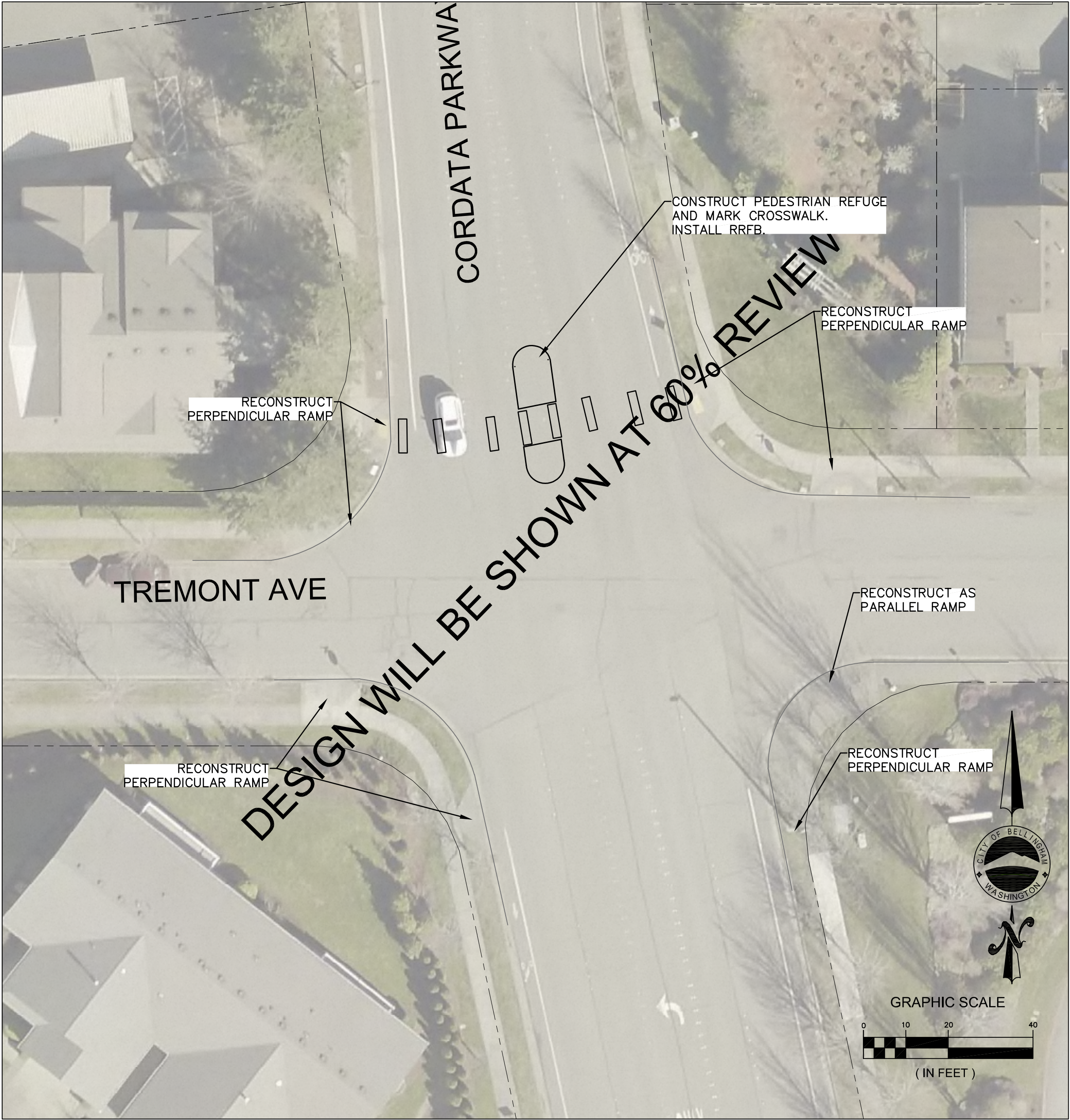
DATUM

Job. No. ES-0563
Date 02/2023
Field Bk. FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CHANELIZATION & RRFB 6, 7, 8, 10, 11, 12

SHEET 35 OF xx

CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



Reviewer Note: Waiting for Survey...

	4		
	3		
	2		
	1		
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER JJB
DESIGNED/DRAWN ELH
INSPECTOR ?

DIRECTOR OF PUBLIC WORKS E.C.J.
CITY ENGINEER C.A.M.S.
OPERATIONS ENGINEER M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

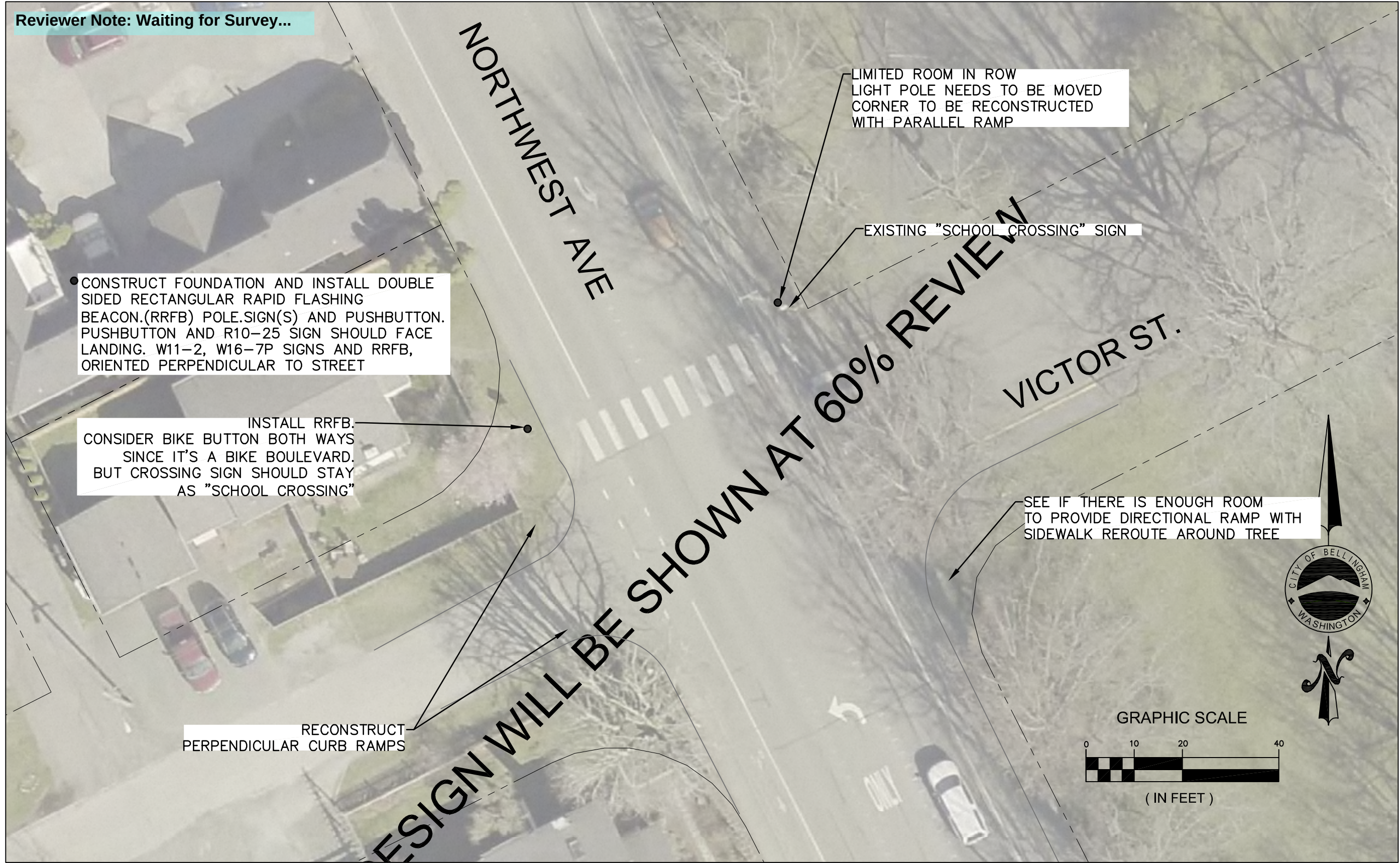
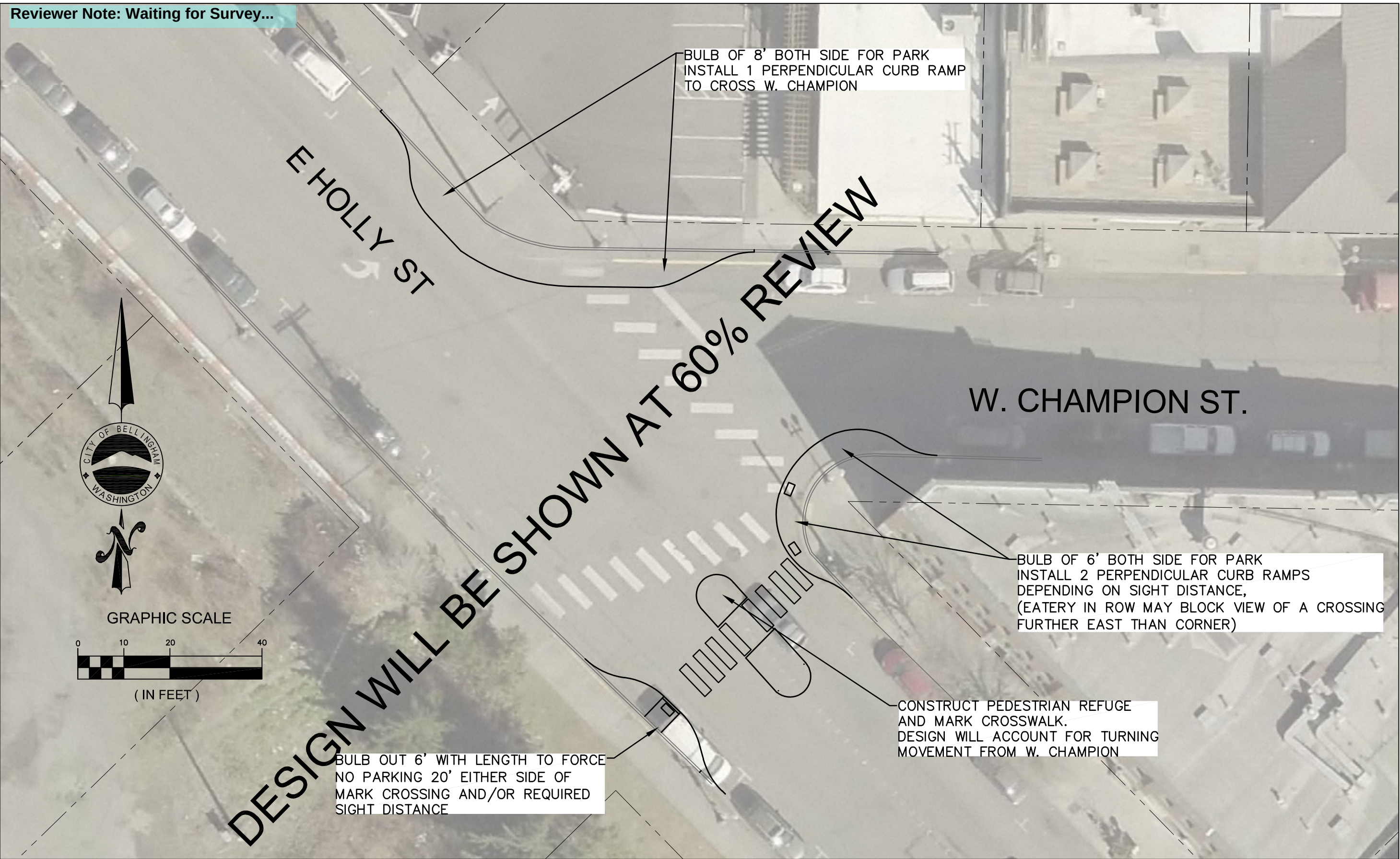
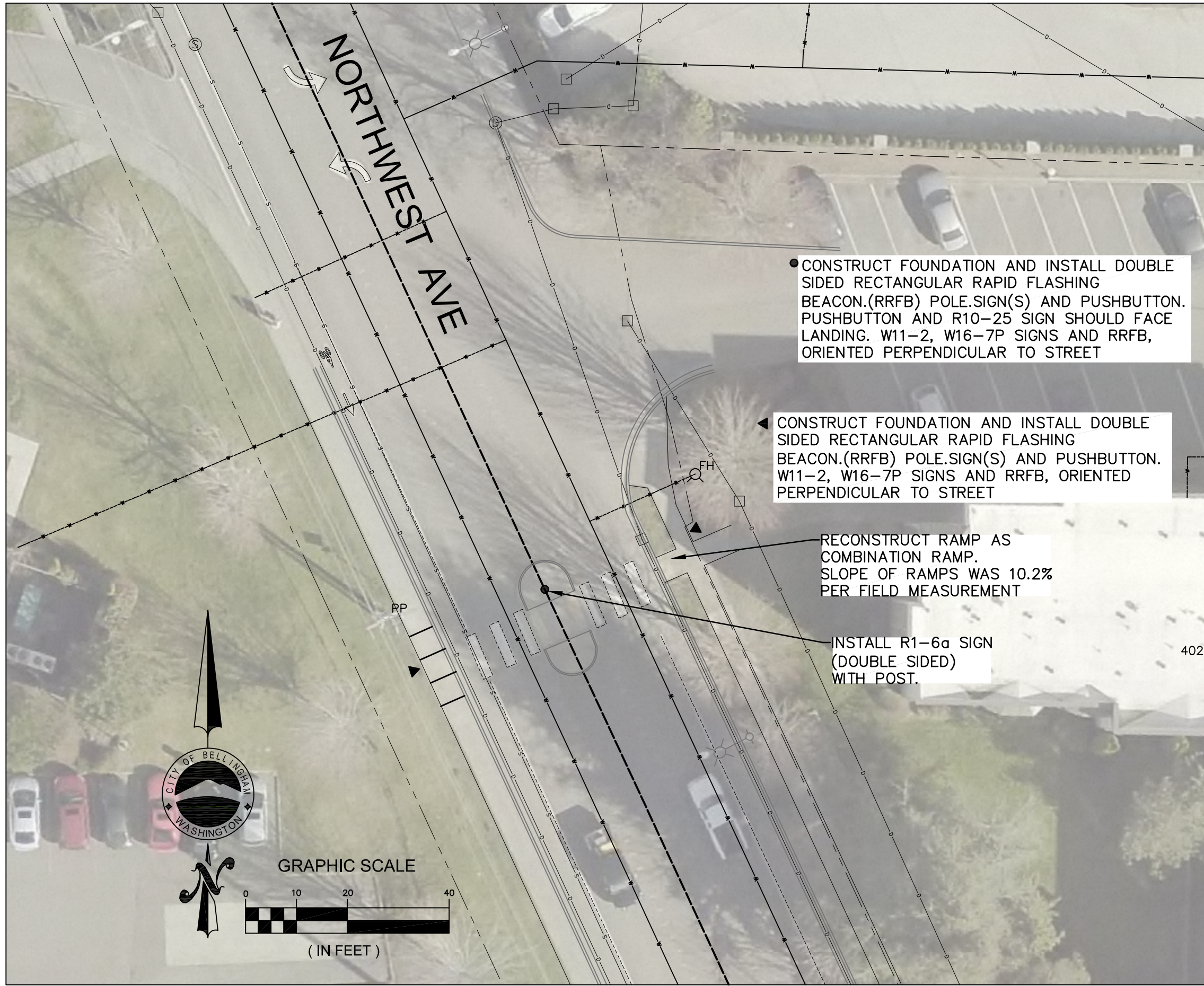
SCALE
Horiz. 1"=20'
Vert. 1"=NA

DATUM

Job. No. ES-0563
Date 02/2023
Field Bk. FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
CHANNELIZATION & RRFB INTERSECTIONS 1, 2, 3

SHEET 36 OF xx



	4		
	3		
	2		
	1		
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER JJB
DESIGNED/DRAWN ELH
INSPECTOR ?

DIRECTOR OF PUBLIC WORKS E.C.J.
CITY ENGINEER C.A.M.S.
OPERATIONS ENGINEER M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

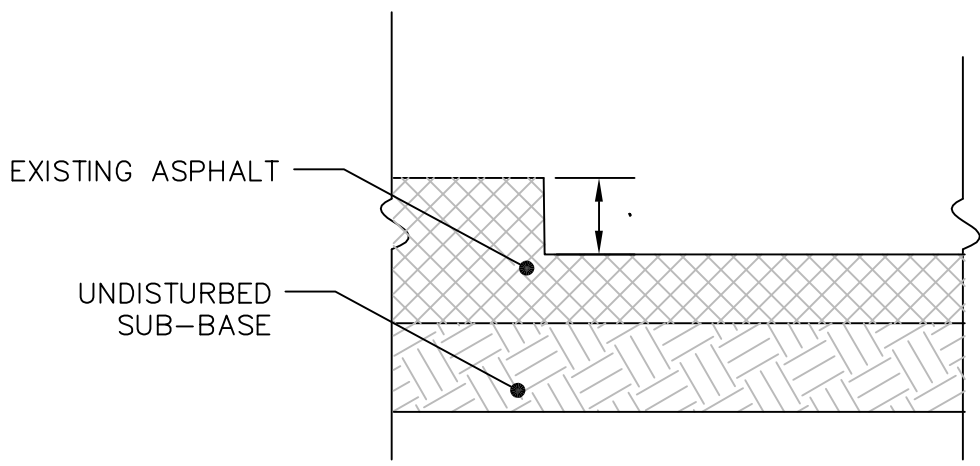
SCALE
Horiz. 1"=20'
Vert. 1"=NA

DATUM

Job. No. ES-0563
Date 02/2023
Field Bk. FB

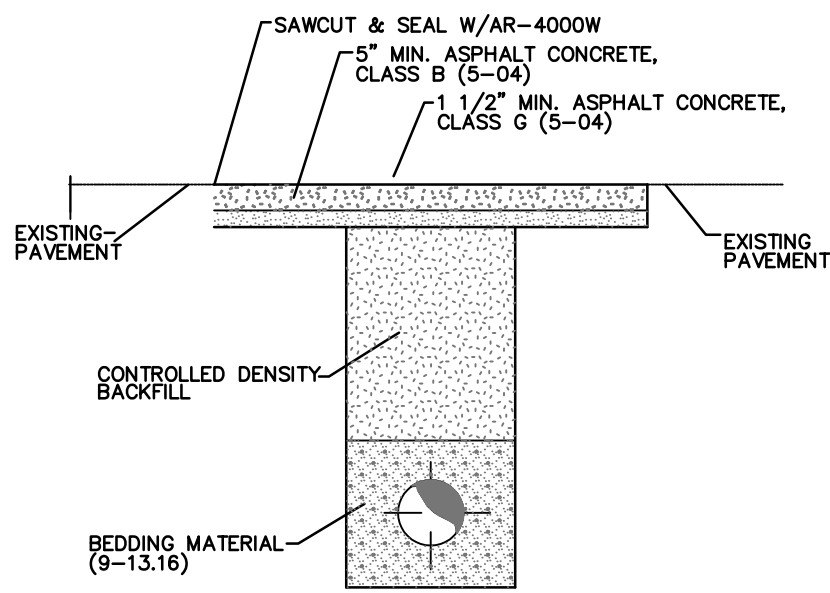
WESTSIDE NON MOTORIZED IMPROVEMENTS
CHANNELIZATION & RRFB INTERSECTIONS 4, 5 ,9, 13

SHEET 37 OF
xx

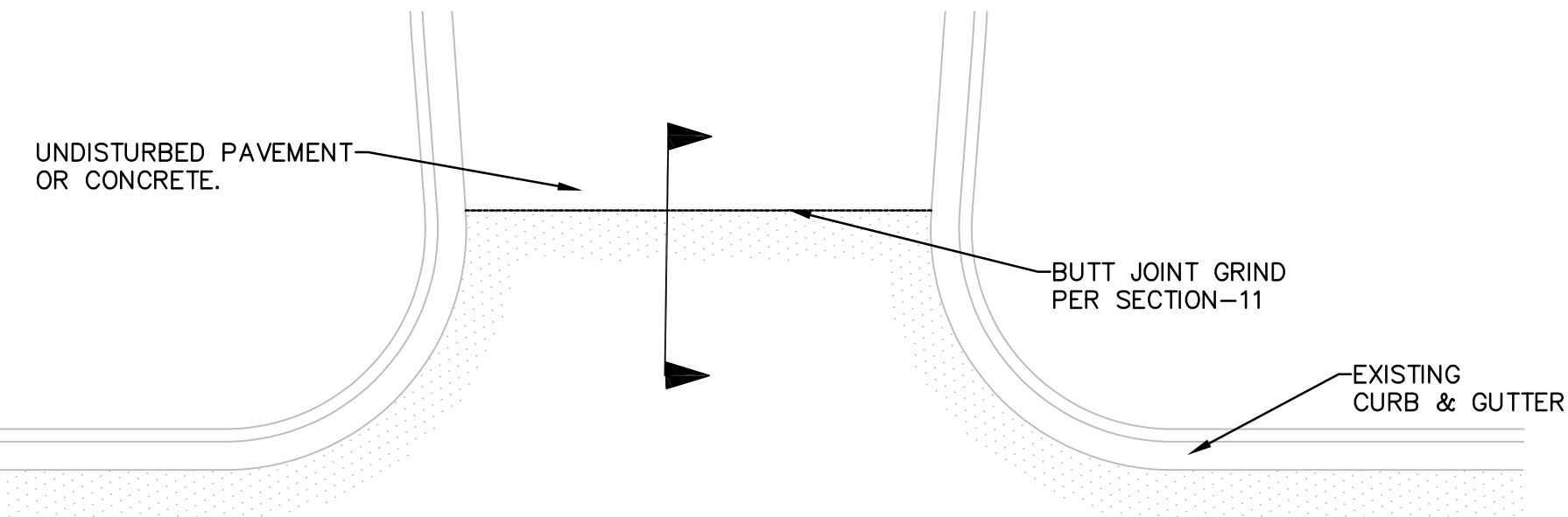


BUTT JOINT FOR OVERLAY GRINDING

NTS



to be completed at 60%



TYPICAL BUTT JOINT GRIND AT INTERSECTION

NTS

	4		
	3		
	2		
	1		
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.M.A.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"= 20'
Vert. 1"= NA

DATUM

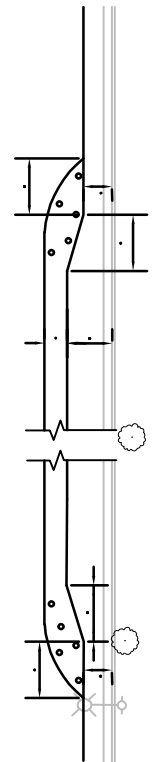
Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

WESTSIDE NON MOTORIZED IMPROVEMENTS
PAVING DETAILS

SHEET	OF
38	xx

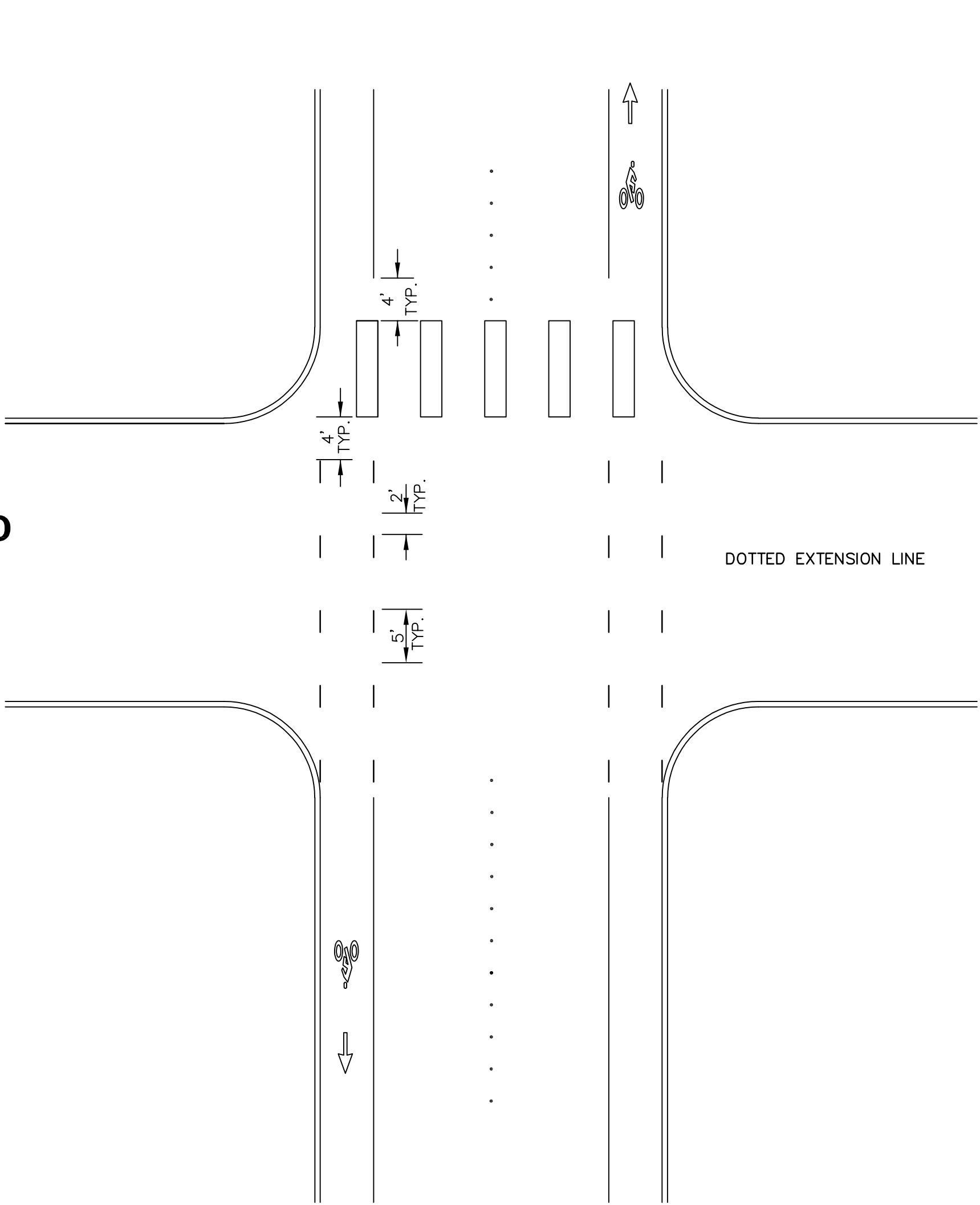
CONTACT PERSON: , PROJECT ENGINEER AT 778-7900

to be completed at 60%

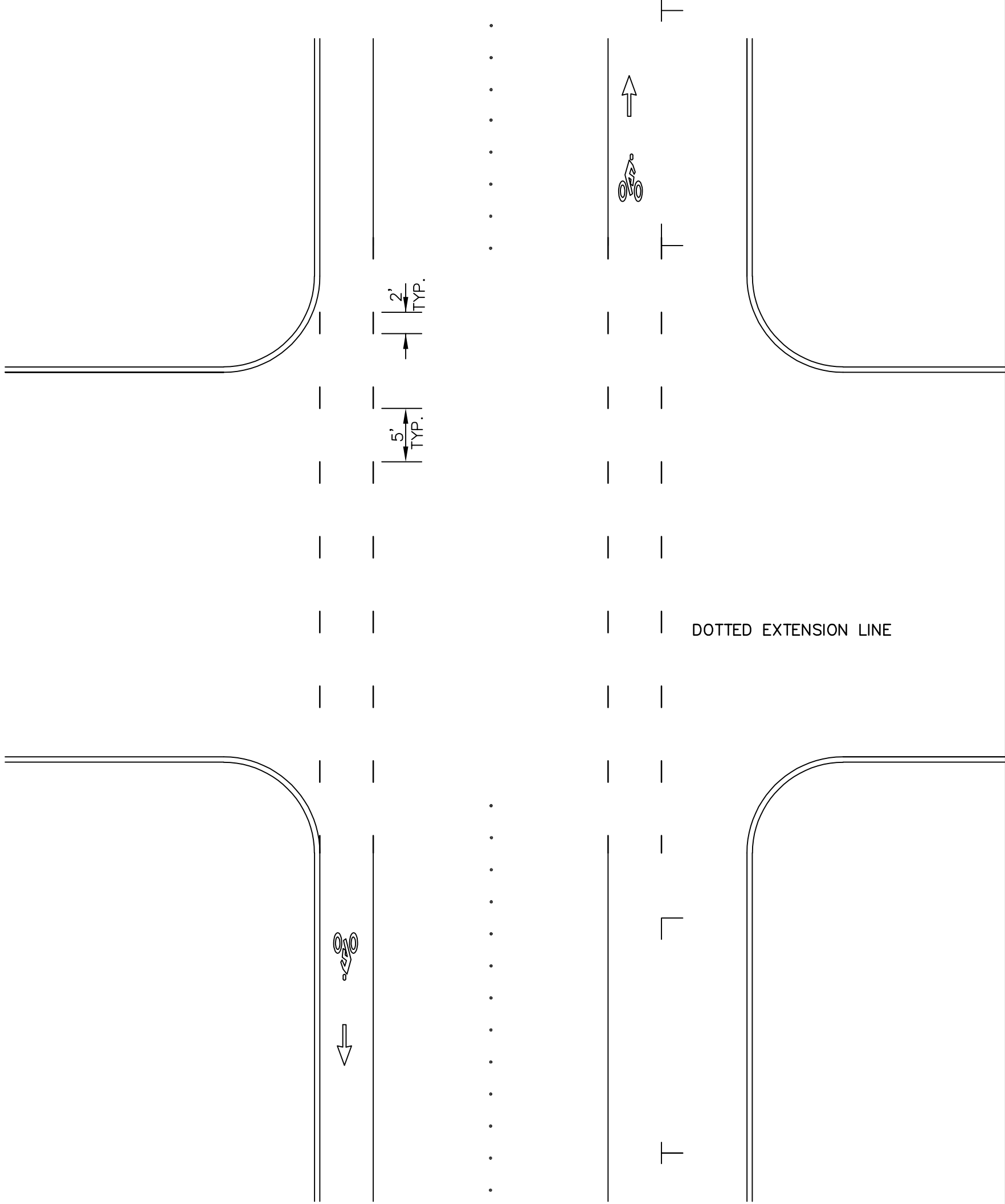


BIKE LANE TRANSITION
NTS

- 1.) DELINEATORS TO BE WHITE, ROUND, WITH TWO WHITE REFLECTIVE STRIPES
2.) DELINEATORS TO BE ATTACHED WITH EPOXY PER MANUFACTURERS RECOMMENDATION.



TYPICAL BIKE LANE EXTENSIONS DETAIL - AT CROSSWALK
NTS



TYPICAL BIKE LANE EXTENSIONS DETAIL
NTS

	4		
	3		
	2		
	1		
Date	No	Revision	By

30% DESIGN

PROJECT ENGINEER	JJB
DESIGNED/DRAWN	ELH
INSPECTOR	?

DIRECTOR OF PUBLIC WORKS	E.C.J.
CITY ENGINEER	C.M.A.S.
OPERATIONS ENGINEER	M.A.O.

CITY OF BELLINGHAM, WASHINGTON
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

SCALE
Horiz. 1"= 20'
Vert. 1"= NA

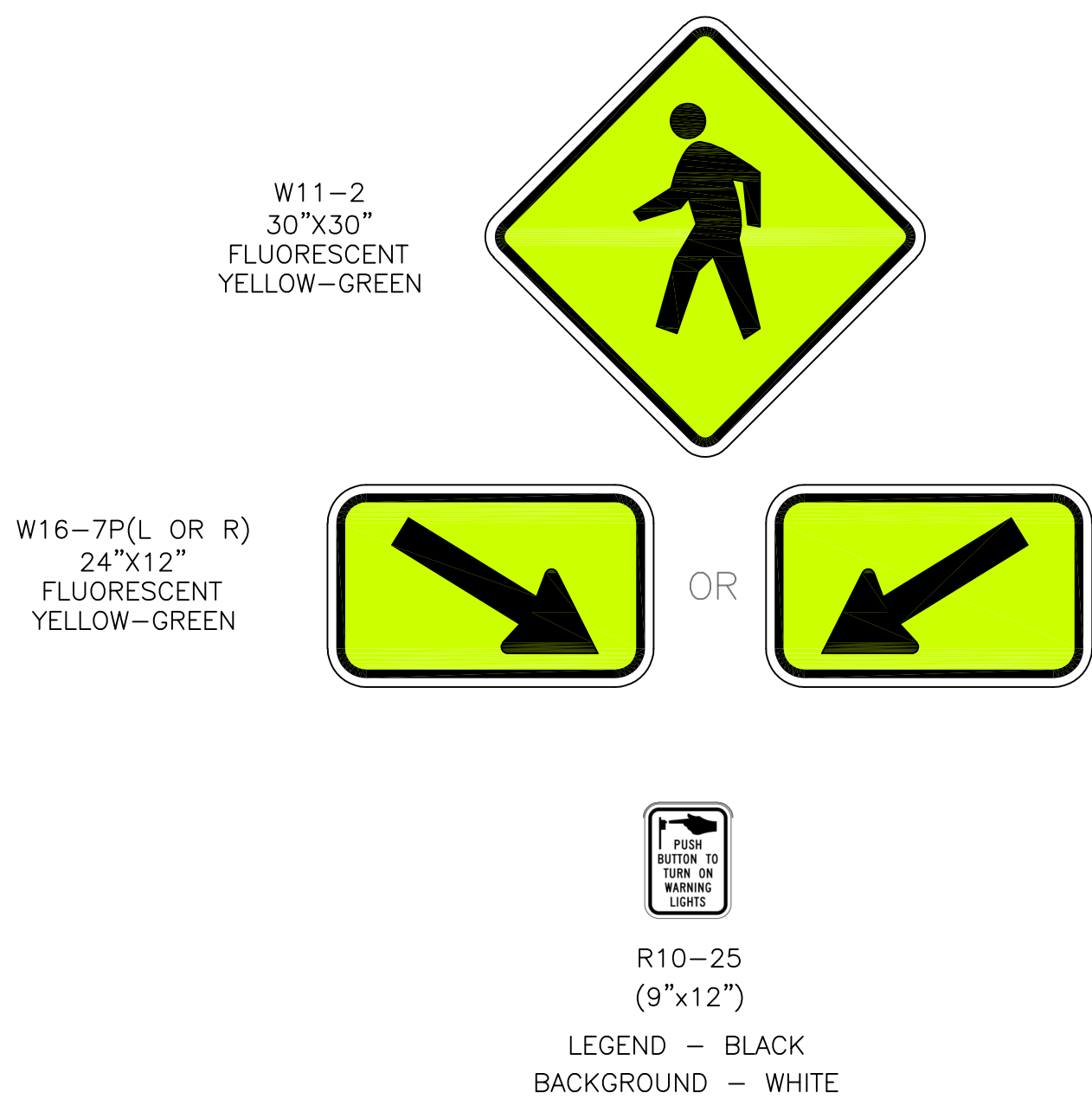
DATUM

Job. No.	ES-0563
Date	02/2023
Field Bk.	FB

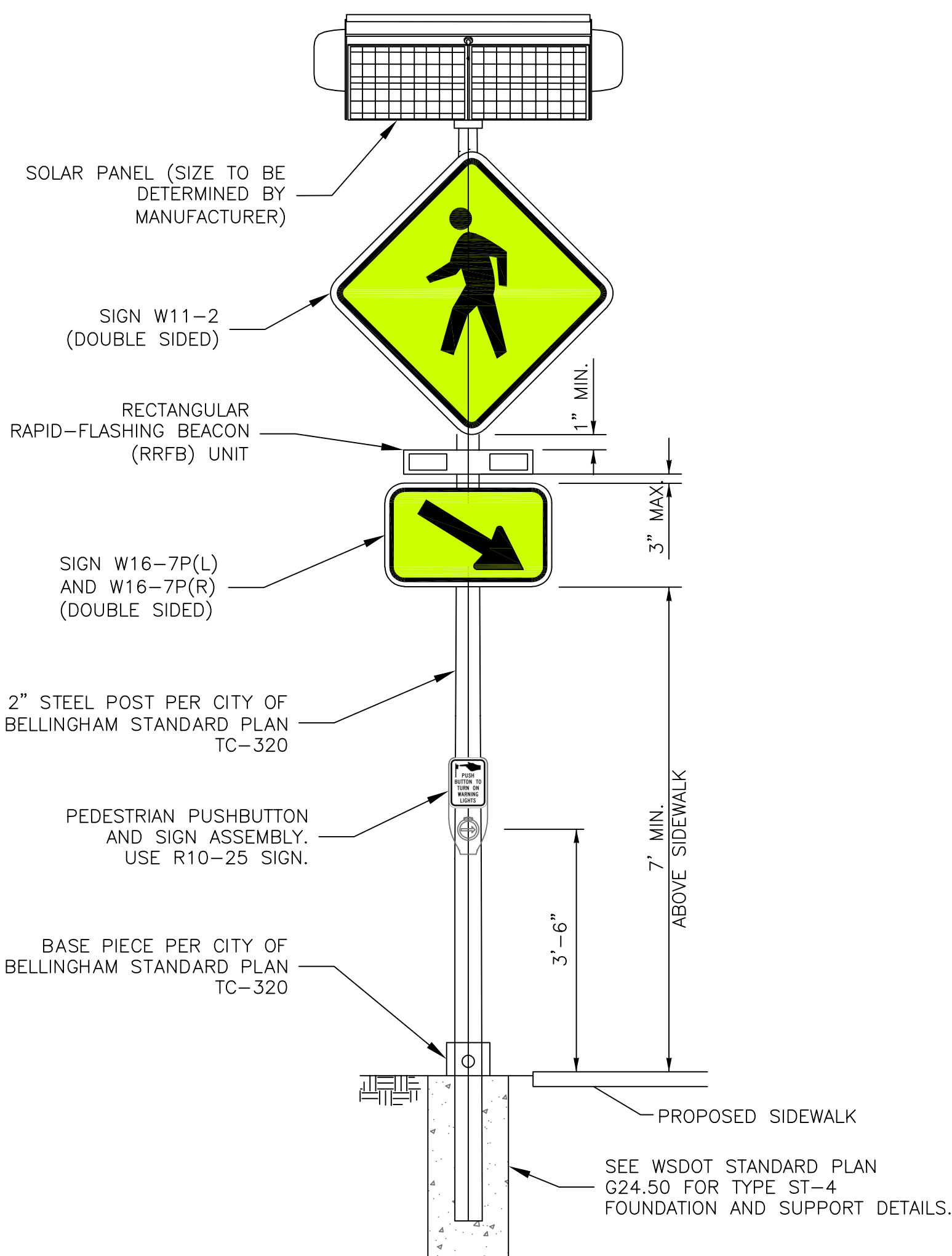
WESTSIDE NON MOTORIZED IMPROVEMENTS
CHANNELIZATION DETAILS

SHEET	OF
39	xx

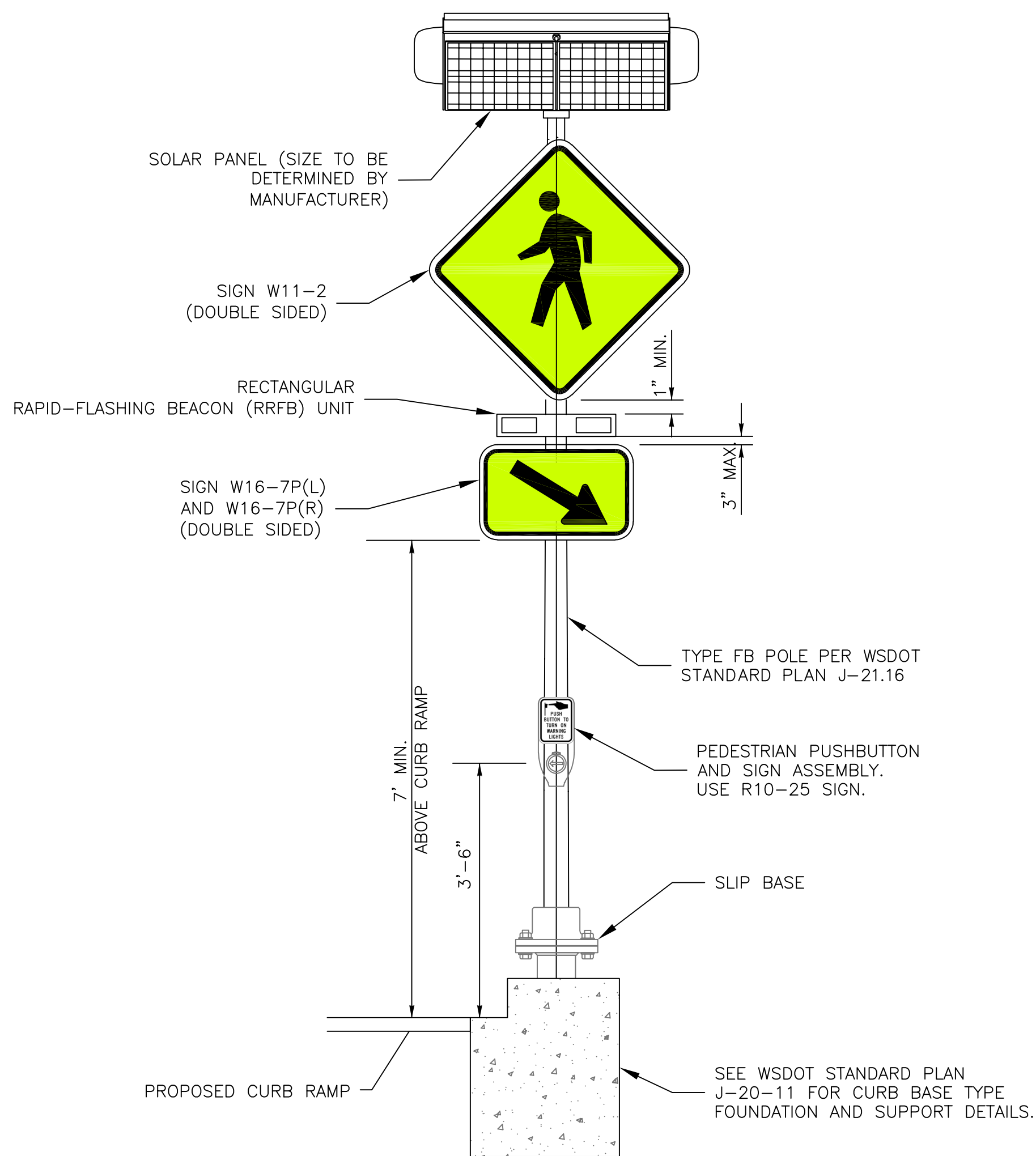
CONTACT PERSON: , PROJECT ENGINEER AT 778-7900



- SIGN DETAIL NOTES:**
- RRFB SIGNS, AS SHOWN ON THIS DETAIL AND THE PLANS, SHALL BE PROVIDED BY THE CONTRACTOR.
 - ALL OTHER GROUND-MOUNTED SMALL SIGNS SHALL BE PROVIDED BY THE CITY OF BELLINGHAM.
 - ORIENT SOLAR PANEL PER MANUFACTURER'S RECOMMENDATION.



TYPICAL INSTALLATION



CURB BASE TYPE INSTALLATION

to be completed at 60%

RECTANGULAR RAPID FLASHING BEACON (RRFB) AND SIGN DETAIL

N.T.S.