ST-20-03 ARTS TRAFFIC SIGNAL ENHANCEMENT PROJECT

PREPARED FOR:

City of Albany

January 2022

SCHEDULE A SHEET INDEX: TRAFFIC SIGNAL IMPROVEMENTS

1	T1	COVER SHEET
2	T2	TRAFFIC LEGEND

QUEEN AVENUE AT HILL STREET

3	C101	CURB RETURN
4	C102	CURB RETURN
5	T3	SIGNAL PLAN
6	T4	DETECTOR PLAN

QUEEN AVENUE AT GEARY STREET

7	C103	CURB RETURN
8	C104	CURB RETURN
9	T5	SIGNAL PLAN

DETECTOR REMOVAL PLAN DETECTOR INSTALL PLAN STRIPING PLAN

WAVERLY STREET AT 21ST AVENUE

13	C105	CURB RETURN
14	C106	CURB RETURN
15	T9	SIGNAL PLAN
16	T10	DETECTOR PLAN

WAVERLY STREET AT GRAND PRAIRIE ROAD

17	C107	CURB RETURN
18	C108	CURB RETURN
19	T11	SIGNAL PLAN
20	T12	DETECTOR PLAN

SCHEDULE B SHEET INDEX: PERIWINKLE PATH IMPROVEMENTS

B-1	EXISTING	CONDITIONS	AND	DEMOLITION

MULTI-USE PATH CONSTRUCTION

THURSTON STREET RECTANGULAR RAPID FLASHING BEACON

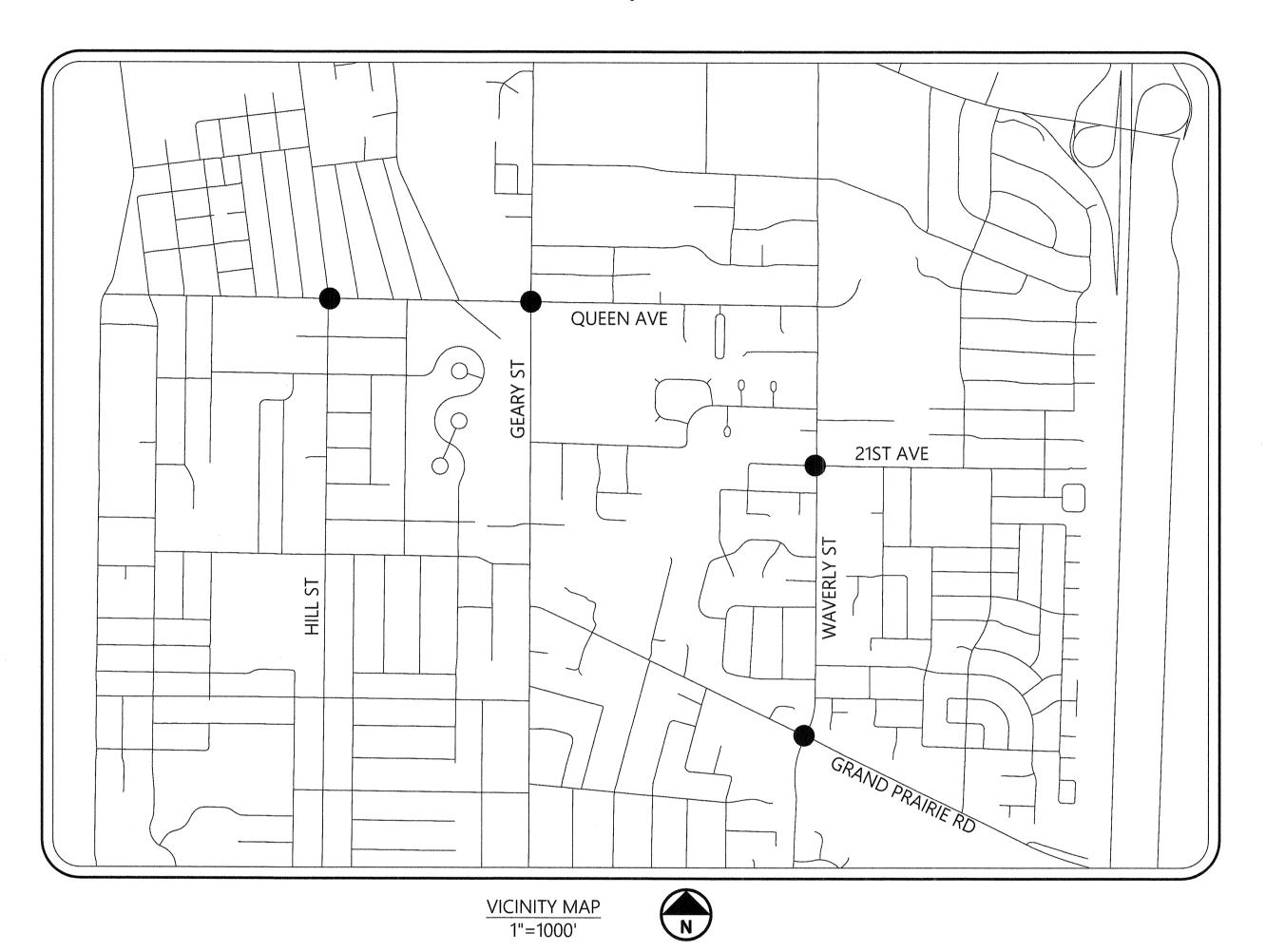
MAIN STREET RECTANGULAR RAPID FLASHING BEACON

BICYCLE RAMP DETAIL

CULVERT CROSSING DETAIL

RECTANGULAR RAPID FLASHING BEACON DETAIL

GENERAL DETAILS



SITE INFORMATION:

- QUEEN AVENUE AT HILL STREET
- QUEEN AVENUE AT GEARY STREET
- WAVERLY STREET AT 21ST AVENUE
- WAVERLY STREET AT GRAND PRAIRIE ROAD

STANDARDS:

ALL PLANS FOLLOW THE CITY OF ALBANY STANDARD CONSTRUCTION SPECIFICATIONS.

ALL PLANS SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL **EROSION PREVENTION AND SEDIMENT CONTROL** REGULATIONS.

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER AT (503-232-1987).

PROJECT CONTACTS:

TRAFFIC ENGINEER

LANCASTER MOBLEY

PHONE:

CONTACT: Todd Mobley, PE

321 SW 4th Avenue, Suite 400 ADDRESS:

Portland, Oregon 97204 503.248.0313

EMAIL:

todd@lancastermobley.com

CIVIL ENGINEER

AKS ENGINEERING & FORESTRY, LLC CONTACT:

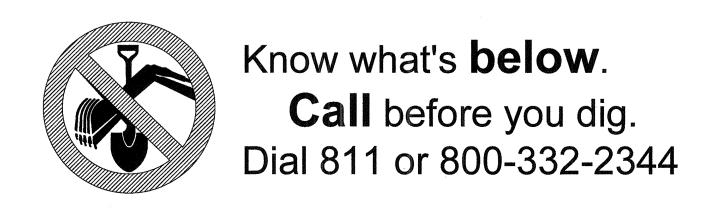
Richard Walker, PE

ADDRESS: 3700 River Road N, Suite 1

Keizer, Oregon 97303

PHONE: 503.400.6028

richardw@aks-eng.com **EMAIL:**





Job No. 20100 Designed By: JLH Drawn By: JLH Drawn By: JLH Checked By: TEM

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By:

PAGE 1 OF 20

CONTROLLERS

RETAIN AND PROTECT EXISTING TRAFFIC SIGNAL CONTROLLER CABINET

CONTROLLER CABINET (SEE SIGNAL PLAN)

RETAIN AND PROTECT EXISTING TERMINAL CABINET

POLES

RETAIN AND PROTECT EXISTING TRAFFIC SIGNAL MAST ARM

RETAIN AND PROTECT EXISTING MAST ARM POLE

RETAIN AND PROTECT EXISTING TRAFFIC SIGNAL MAST ARM POLE WITH LUMINAIRE EXTENSION

RETAIN AND PROTECT EXISTING PEDESTRIAN SIGNAL PEDESTAL

REMOVE EXISTING PEDESTRIAN SIGNAL PEDESTAL

INSTALL PEDESTRIAN SIGNAL PEDESTAL WITH FRANGIBLE BASE

SIGNALS

RETAIN AND PROTECT EXISTING (Ph=PHASE) VEHICLE SIGNAL

REMOVE EXISTING FIVE SECTION VEHICLE SIGNAL (DOGHOUSE TYPE)

INSTALL FOUR SECTION VEHICLE SIGNAL WITH FLASHING YELLOW ARROW FOR PHASE (*) AND PHASE (*) WITH ADJUSTABLE BRACKET

INSTALL THREE SECTION (Ph=PHASE) VEHICLE SIGNAL WITH ADJUSTABLE BRACKET

REINSTALL EXISTING (Ph=PHASE) VEHICLE SIGNAL

REMOVE EXISTING PEDESTRIAN SIGNAL, PUSHBUTTON, AND INSTRUCTION

INSTALL PHASE (Ph=phase) COUNTDOWN PEDESTRIAN SIGNAL WITH AUDIBLE PEDESTRIAN SIGNAL PUSHBUTTON

JUNCTION BOXES

RETAIN AND PROTECT EXISTING JUNCTION BOX

RETAIN AND PROTECT EXISTING SAND POCKET

RETAIN AND PROTECT EXISTING CAST IRON STREET BOX

REMOVE EXISTING JUNCTION BOX

REMOVE EXISTING STREET BOX

JUNCTION BOX (SEE SIGNAL PLAN)

INSTALL (T=TYPE) JUNCTION BOX. SEE ODOT STANDARD DRAWING TM472 FOR TYPÈS AND DIMENSIONS

INSTALL 6" MAX. SAND POCKET BLOCK-OUT WITH (S=SIZE) INCH CONDUIT TO JUNCTION BOX

FIRE PREEMPTION

RETAIN AND PROTECT EXISTING FIRE PREEMPTION DETECTOR UNIT

CONDUITS

RETAIN AND PROTECT EXISTING (S=SIZE WHEN SHOWN) INCH ELECTRICAL CONDUIT

RETAIN AND PROTECT EXISTING (S=SIZE WHEN SHOWN) INCH DETECTOR

DETECTOR CONDUIT (SEE DETECTOR PLAN)

ELECTRICAL CONDUIT (SEE SIGNAL PLAN)

INSTALL SIZE (S=size) INCH CONDUIT

SIGNS

REMOVE EXISTING INTERIOR ILLUMINATED SIGN

RETAIN AND PROTECT EXISTING INTERIOR ILLUMINATED SIGN

DETECTION

RETAIN AND PROTECT EXISTING VEHICLE DETECTOR LOOP

RETAIN AND PROTECT EXISTING BICYCLE DETECTOR LOOP

ABANDON EXISTING VEHICLE DETECTOR LOOP

REMOVE EXISTING BICYCLE DETECTOR LOOP

INSTALL VEHICLE DETECTION LOOP (Ph=PHASE)

INSTALL BICYCLE DETECTION LOOP (Ph=PHASE)

INSTALL (N=NUMBER) LOOP WIRES

WIRES & CABLES

RETAIN AND PROTECT EXISTING WIRING

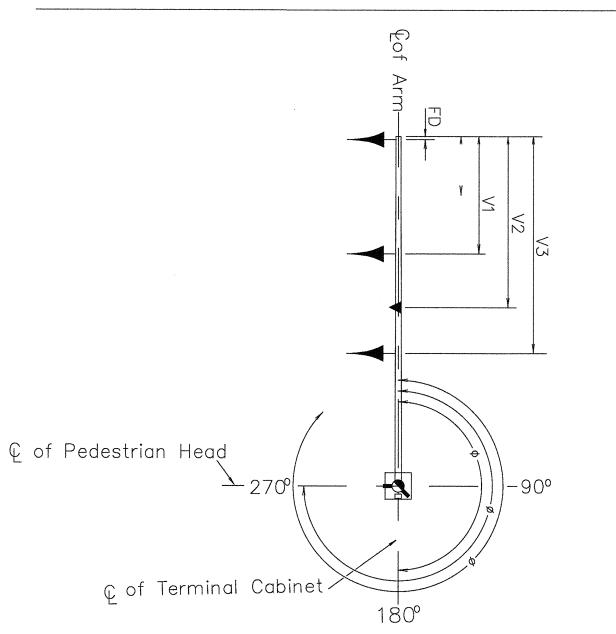
REEMOVE EXISTING WIRING

REINSTALL EXISTING WIRING

INSTALL (N) NO. 8 TYPE THWN (SIGNAL SYSTEM COMMON)

INSTALL (N) NO. (G) TYPE THWN WIRES

ORIENTATION DIAGRAM



STRIPING SYMBOLS

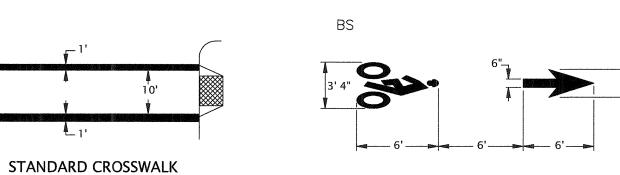
REMOVE EXISTING (V=STRIPING NOTATION)

EXIV EXISTING (V=STRIPING NOTATION)

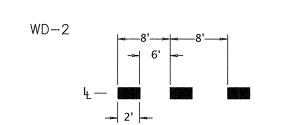
V INSTALL (V=STRIPING NOTATION)

CW

STRIPING NOTATIONS



TWO 1' WHITE BARS Install per Standard Drawing TM530

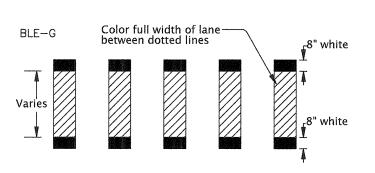


BIKE LANE STANDARD STENCIL (white)

Center marking within lane width

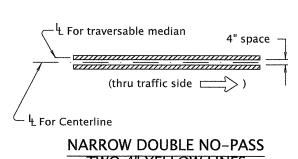
For proportion details, see current version of Standard Highway Signs

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

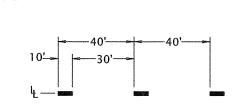


4" WHITE LINE

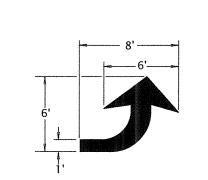
GREEN SUPPLEMENTAL BICYCLE LANE DOTTED LINE EXTENSION (green)



TWO 4" YELLOW LINES

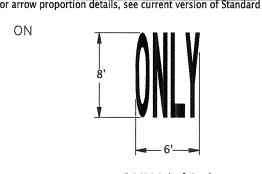


4" WHITE BROKEN LINE



LA

LEFT TURN ARROW (white) For arrow proportion details, see current version of Standard Highway Signs



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

Designed By: JLH

Checked By: TEM

PAGE 2 OF 20

Drawn By:

Date:

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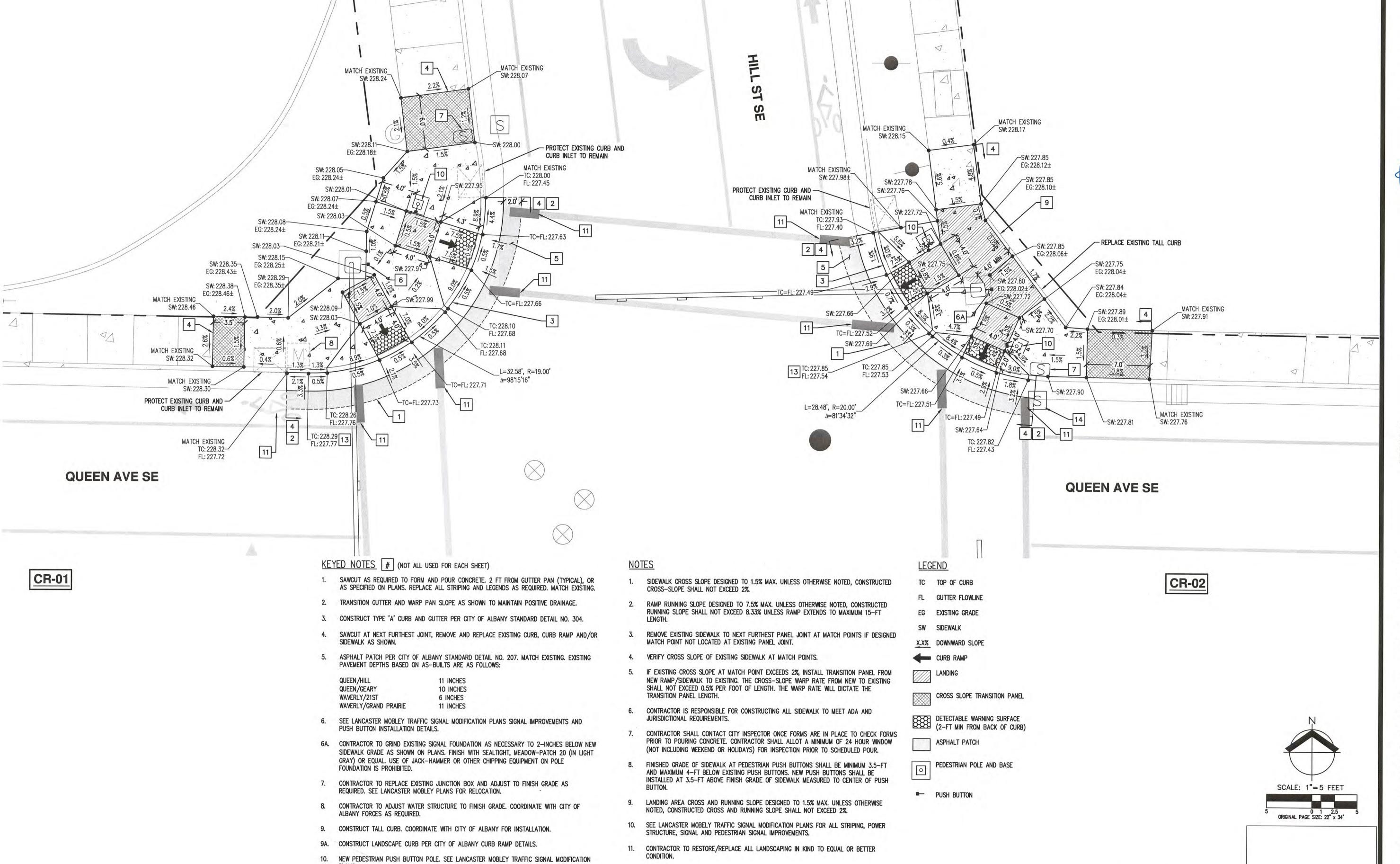
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11. REPLACE STRIPING LEGEND

13. HIGH POINT

RELOCATED CROSSWALK.

12. NEW CROSSWALK LEGEND STRIPING. REMOVE EXISTING CROSSWALK AND ROAD STRIPING FOR

CONTRACTOR TO ADJUST SAWCUT LOCATION AND PROTECT EXISTING LOOP DETECTION

15. NEW SHARED USE STRIPING. SEE LANCASTER MOBELY TRAFFIC SIGNAL MODIFICATION PLANS

EQUIPTMENT. COORDINATE WITH CITY INSPECTOR AS NECESSARY.

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ALBANY A.R.T.S. UPGRADES CURB RETURN

Job No.
Designed By:
Drawn By:
Checked By:
Date:

AKS ENGINEERING & FORESTRY, LLC

ENGINEERING · SURVEYING · NATURAL RESOURCES

FORESTRY · PLANNING · LANDSCAPE ARCHITECTURE

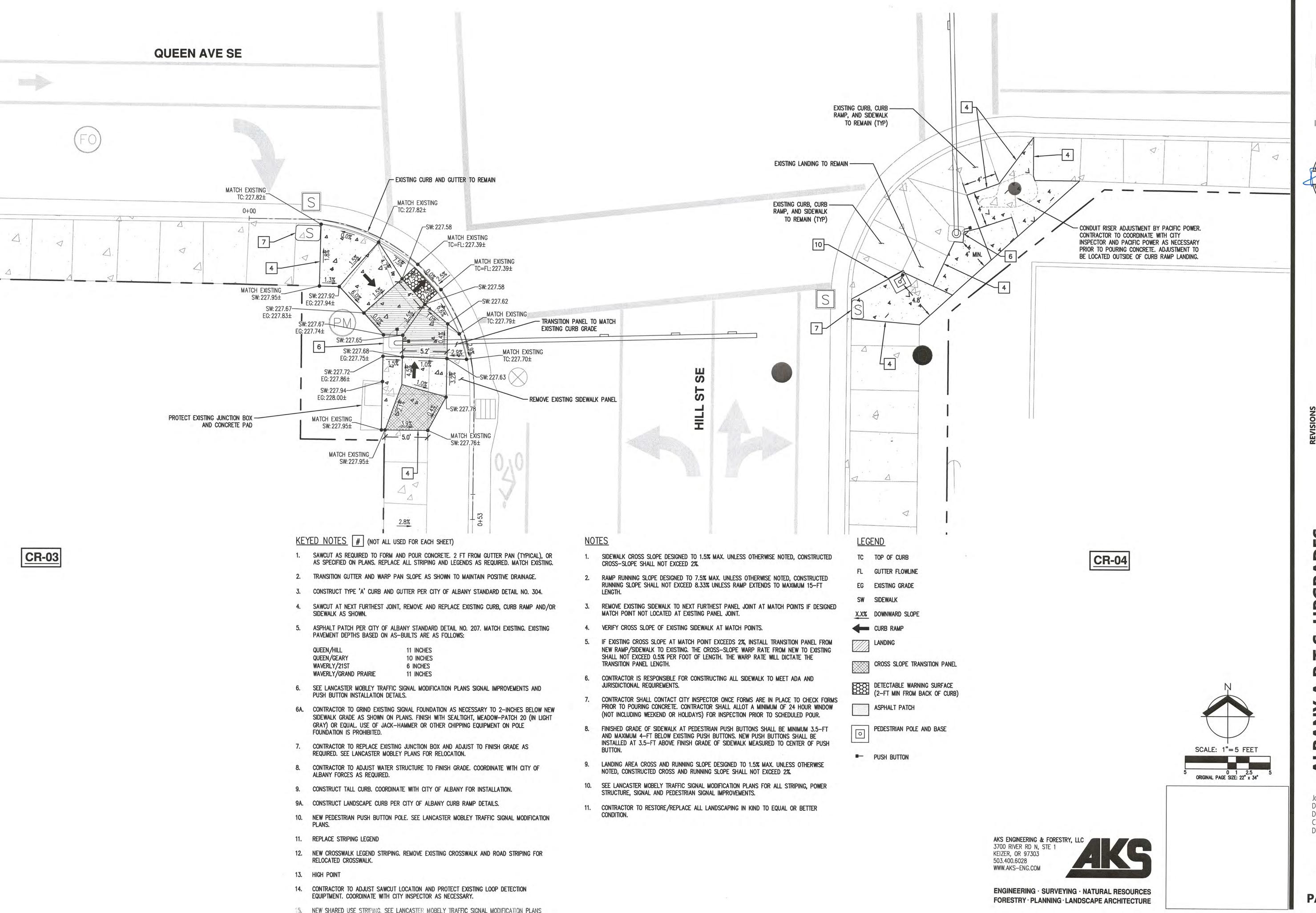
3700 RIVER RD N, STE 1

KEIZER, OR 97303

503.400.6028 WWW.AKS-ENG.COM AKS JOB #8232 RCW GHB RCW 1/27/22

C101

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ALBANY A.R.T.S. UPGRADES CURB RETURN

Job No.
Designed By:
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Checked By:
Date:

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C102

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POLE ENTRANCE CHART

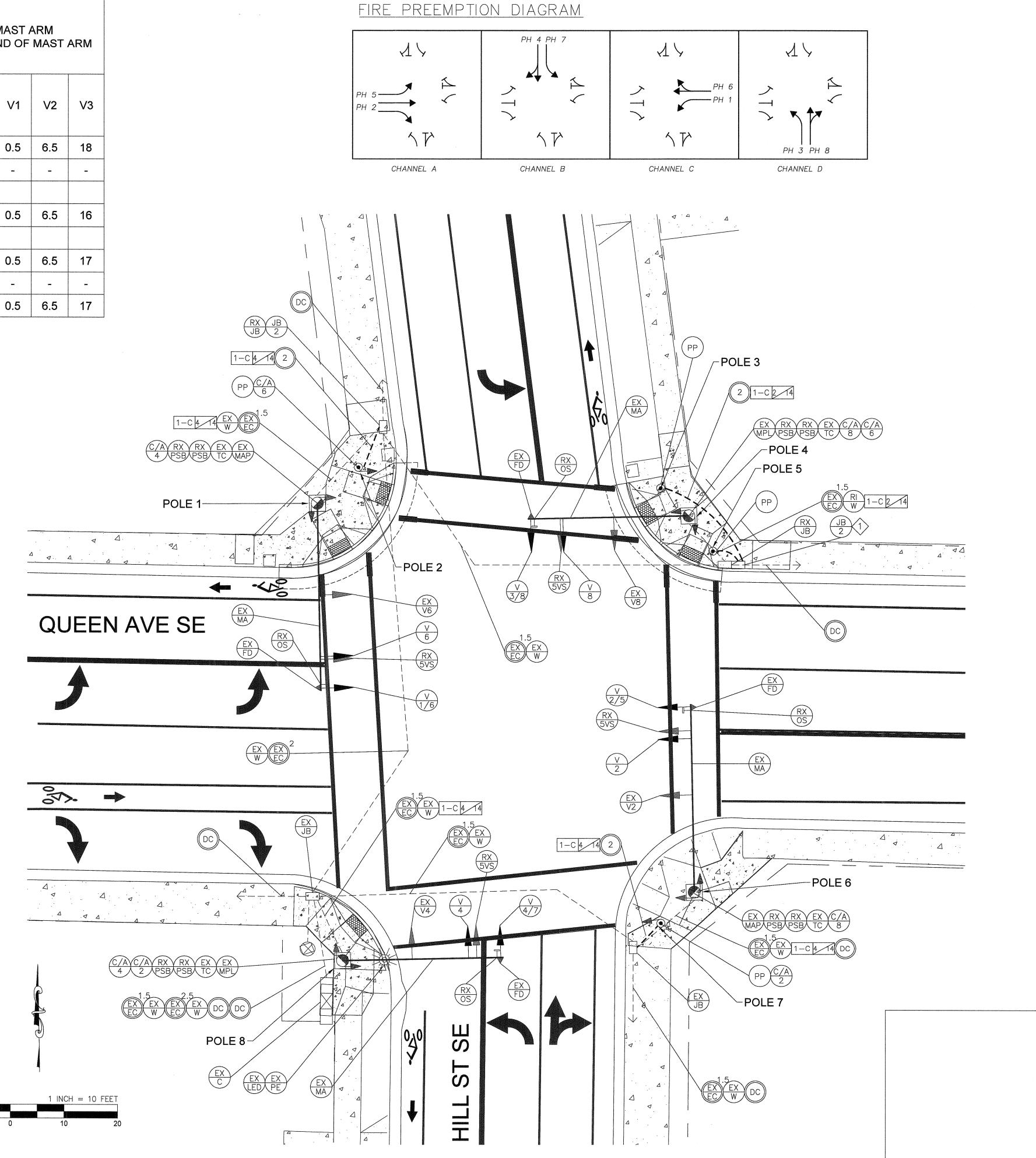
SEE T	M457 TM650	EQUIPMENT ON POLE ORIENTATION ANGLE					1	QUIPMENT ON I			ARM
POLE NO.	TYPE	MAST ARM ORIENTATION	LUMINAIRE ORIENTATION	TERM CABINET DEGREE	PED PUSHBUTTON DEGREE	PED SIGNAL DEGREE	ARM LENGTH	FIRE PREEMPTION	V1	V2	V3
1	MAP	EX	-	EX	270	90	35	0	0.5	6.5	18
2	PP	-	was .	_	0	180	_	_		_	_
3	PP				270						
4	MAP	EX	-	EX		90, 180	30	0	0.5	6.5	16
5	PP				0						
6	MAP	EX	-	EX	270	90	35	0	0.5	6.5	17
7	PP	-		-	0	180	_	-		_	_
8	MPL	EX	-	EX	0, 270	90, 180	30	0	0.5	6.5	17

NORMAL PHASE ROTATION DIAGRAM

PH 1	PH 2 Ped 2	PH 3	Ped 4 PH 4
PH 5	Ped 6 PH 6	PH 7	PH 8

CONSTRUCTION NOTES

1) INTERCEPT AND SPLICE INTO EXISTING CONDUIT





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By:

REVISIC Rev: Des: Des:

> ALBANY A.R.T.S. UPGRADES QUEEN AVE AT HILL ST Signal Modification Plan Albany, Oregon

Job No. 20100
Designed By: JLH
Drawn By: JLH
Checked By: TEM
Date: 1/28/22

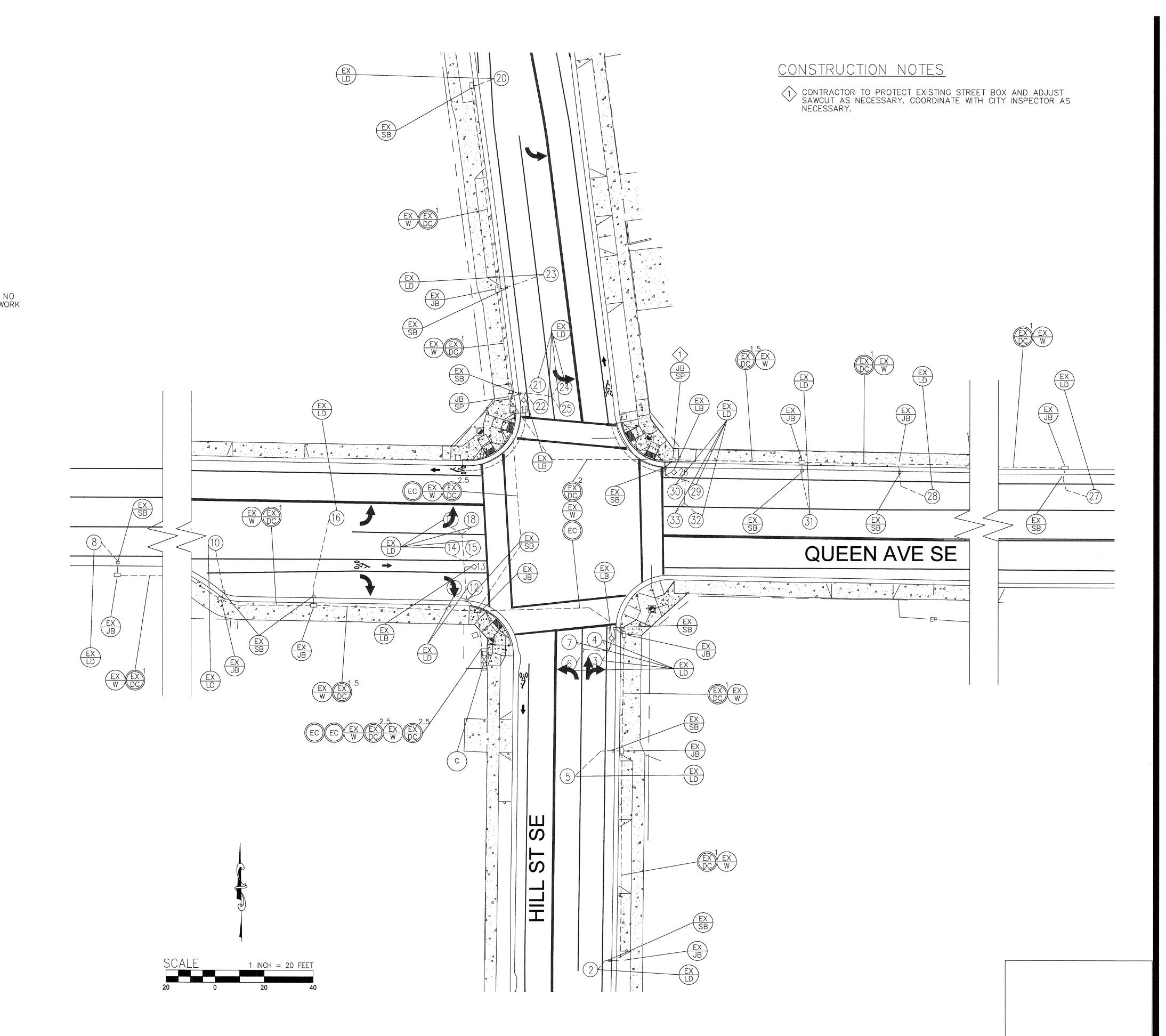
T3PAGE 5 OF 20

LOOP/RADAR WIRING DIAGRAM

LOOP #	DISTANCE (FEET)	PHASE	FUNCTION	SLOT	
1	 4 	 8 	— E, C, CO —	J6U \	
2	- 140	8	— E, C, CO —	J6L \	
3	— 16 ———	0	Ε Ο	1711	
4	— 5 ——— [—]	8 <u></u>	— E, C —	J7U \	1
5 ——		3	— E, C, CO —	I5U	
6 —	. •	3	— Е, С —	19L	
7	5		— E, C —	19L	
8 ——	220	2	— E, C, CO —	I2U	
9 ——	- NOT INSTALLED				
10 ——	— 110 ———	2	— E, C, CO —	I2L	
11	— 16 ——	2	— E, C —	13L	
12 ——	5	2	L., O	102	
13	4	2	— E, C, CO —	——— I3U	\ N
14	— 16 ——	2	— E, C —	4	/ WC
15 ——	_ 5	<u>د</u>	<u>.</u> , 0	110	
16 ——		5	— E, C, CO —	J1U	
17	— 16 ——	5	— F.C. —	J9U	
18 ——	_ 5	O	-, •	000	
19 ——			— E, C, CO —		
20 —		 4 	— E, C, CO —	16L	
21 ——	— 16 ———	4	— E, C —	17U	
22	5		_, _	,, •	
23 ——	 76	7	— E, C, CO —	J5U	
24	· · · · · · · · · · · · · · · · · · ·	7 	— E. C —	——— J9L	
25 ——					
26 ——			— E, C, CO —		
	— 220 ———		— E, C, CO —		
	— 110 ———	 6 	— E, C, CO —	J3U /	
29	<u> </u>	 6 	— Е, С —	J3L /	
30					
31		1	— E, C, CO —	—— I1U /	
32	 	 1 	— Е, С <i>—</i>	/ I9U /	
33	5				

GENERAL NOTES:

DETECTION NOT IMPACTED BY SIGNAL AND INTERSECTION MODIFICATIONS. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGES TO SYSTEM



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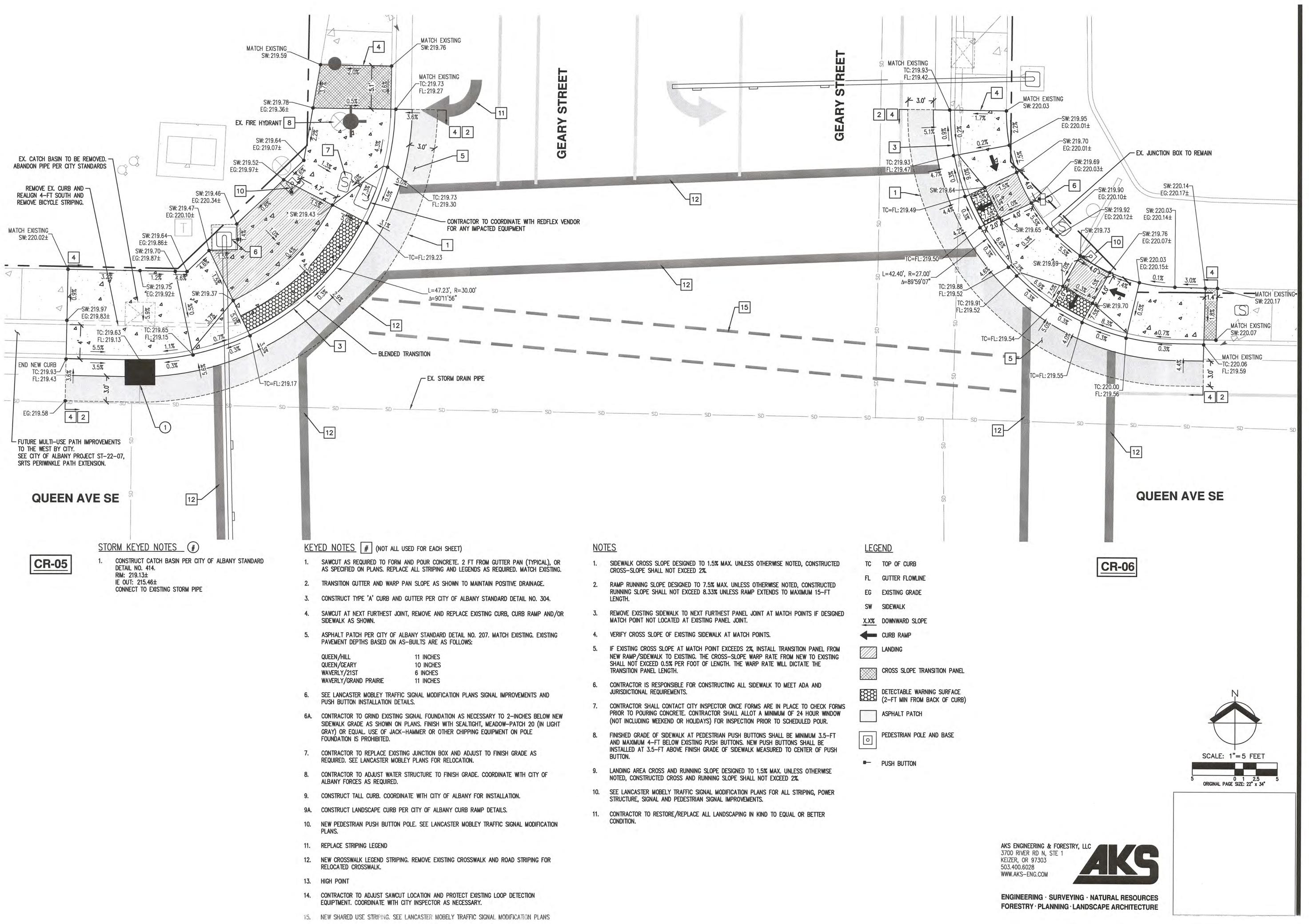


EXPIRES 12 31 WW

AVE AT HILL ST Modification Plan ALBANY / QUEEN A Detection Nalbany, Oregon

Job No. 20100
Designed By: JLH
Drawn By: JLH
Checked By: TEM
Date: 1/28/22

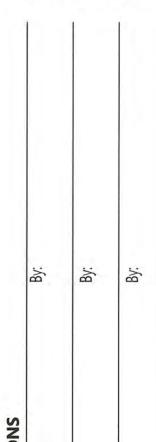
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ALBANY A.R.T.S. UPGRADE CURB RETURN

Job No.
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Drawn By:
Checked By:
Date:

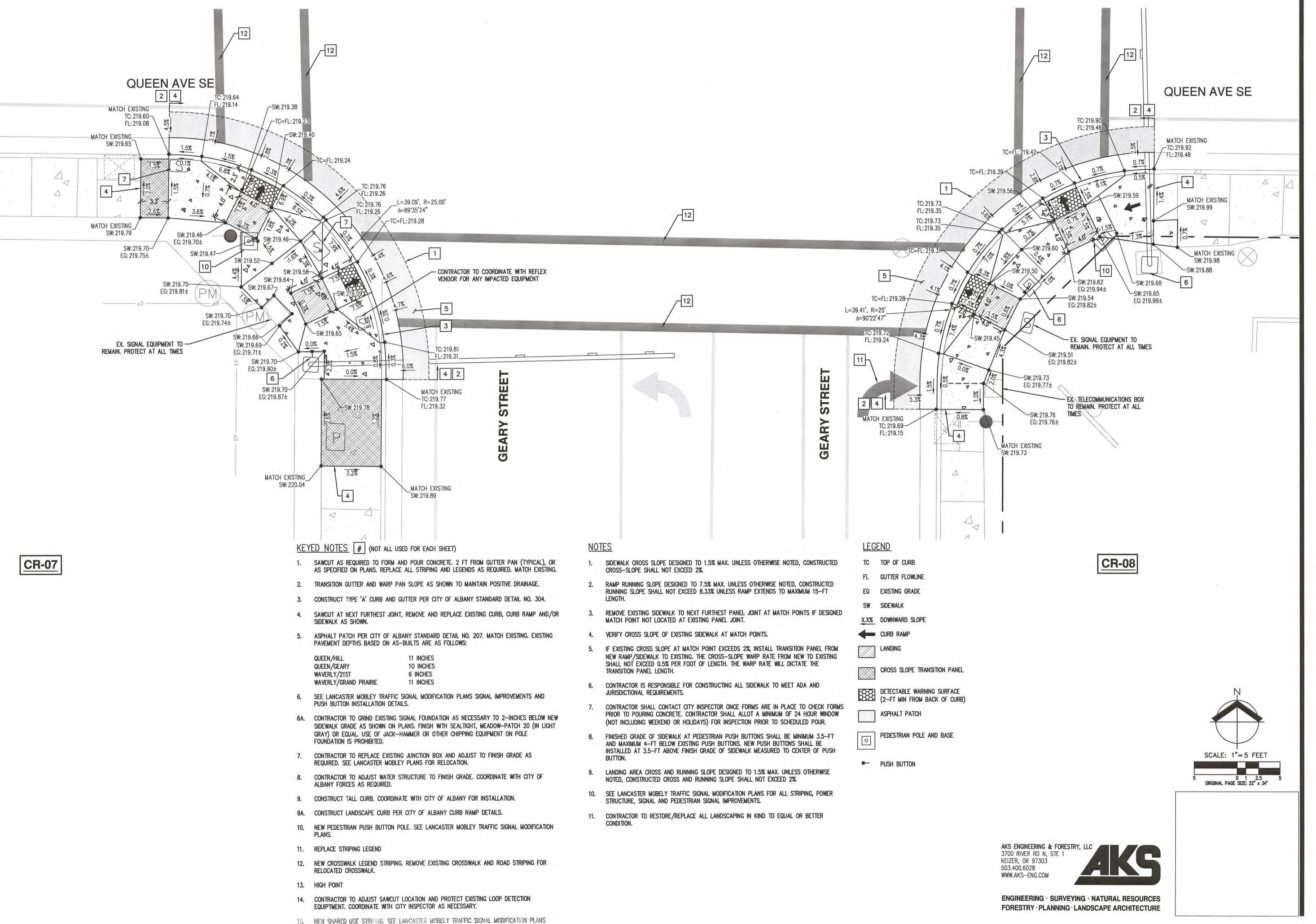
RCW 1/27/22

RCW

GHB

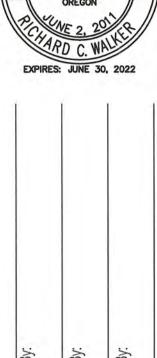
AKS JOB #8232

PAGE 7 OF



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ALBANY A.R.T.S. UPGRADES CURB RETURN

Job No.
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Drawn By:
Checked By:
Date:

: RCW GHB RCW 1/27/22

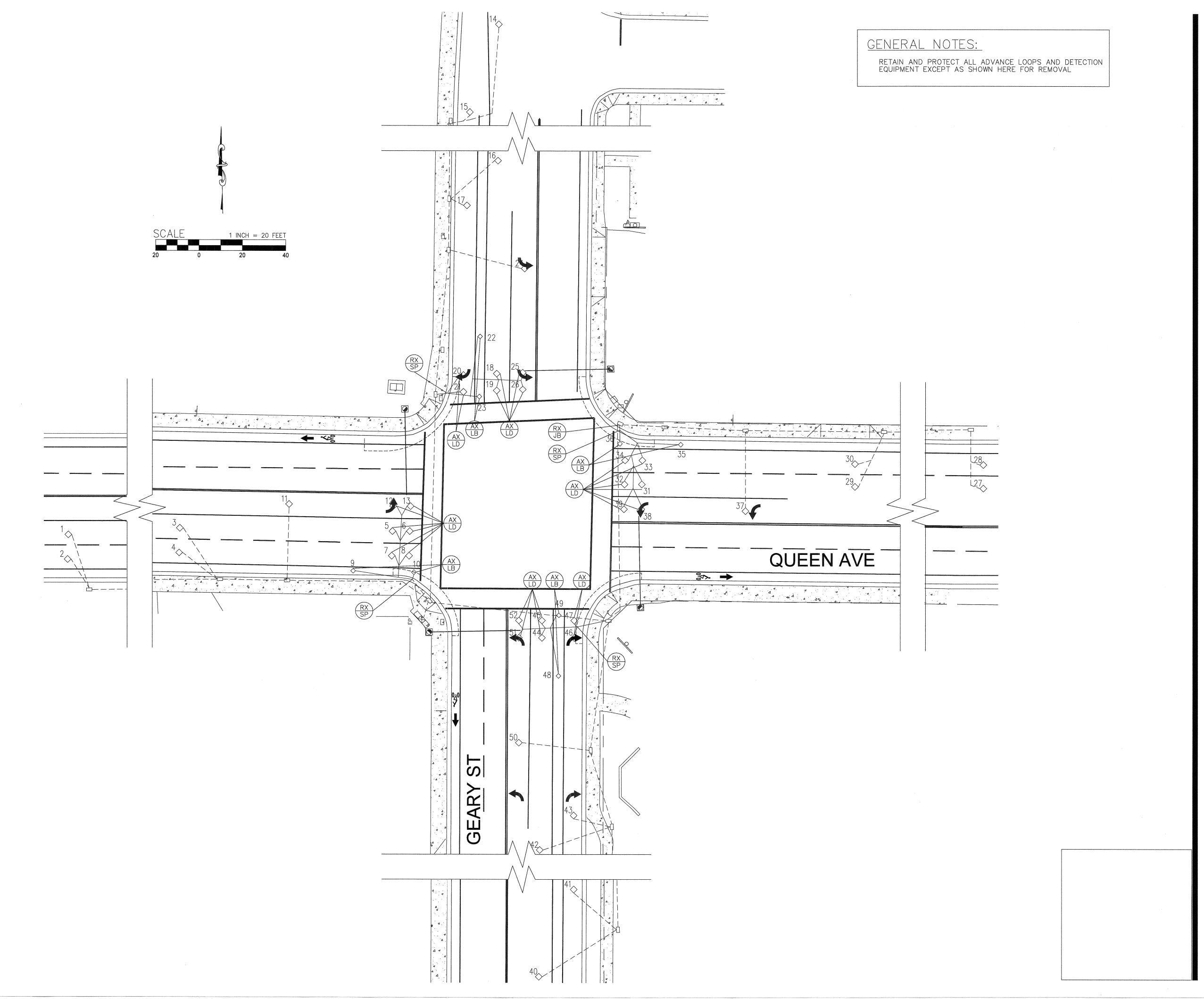
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C104

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PUSHBUTTON SIGN EXTENDER NEEDED WITH SIDE-MOUNTED BUTTONS







OREGON
OD E. MOBILE

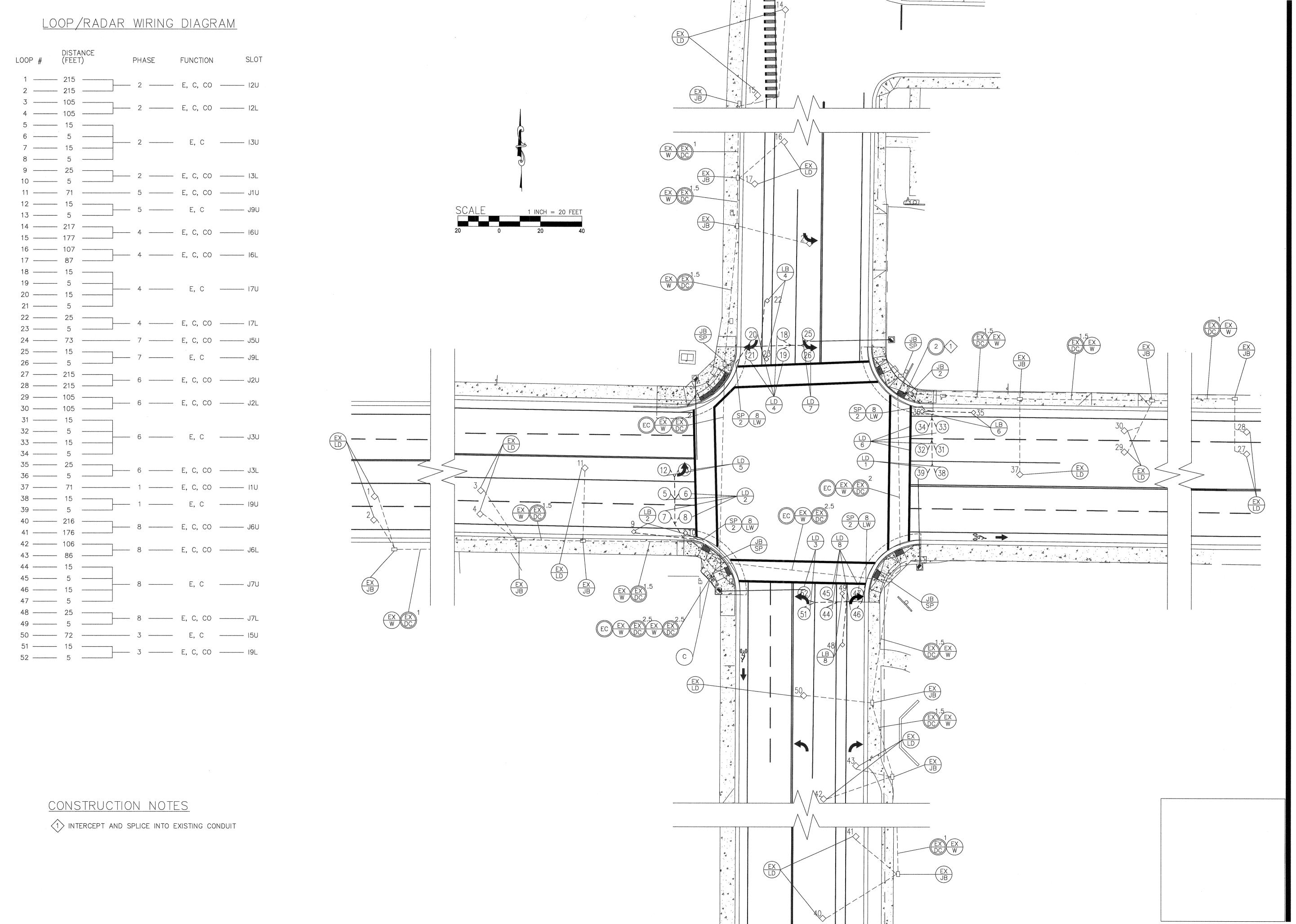
EXPIRES (2/3, 202)

REVISIONS	
Rev: Des:	Ву:
Rev: Des:	By:
Rev: Des:	By:

ALBANY A.R.T.S. UPGRADES QUEEN AVE AT GEARY ST Detection Removal Plan Albany, Oregon

Job No. 20100
Designed By: JLH
Drawn By: JLH
Checked By: TEM
Date: 1/28/22

T6PAGE 10 OF 20

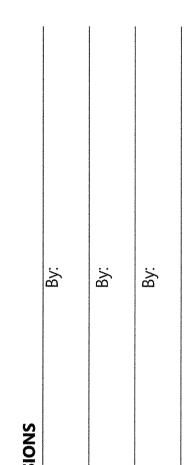




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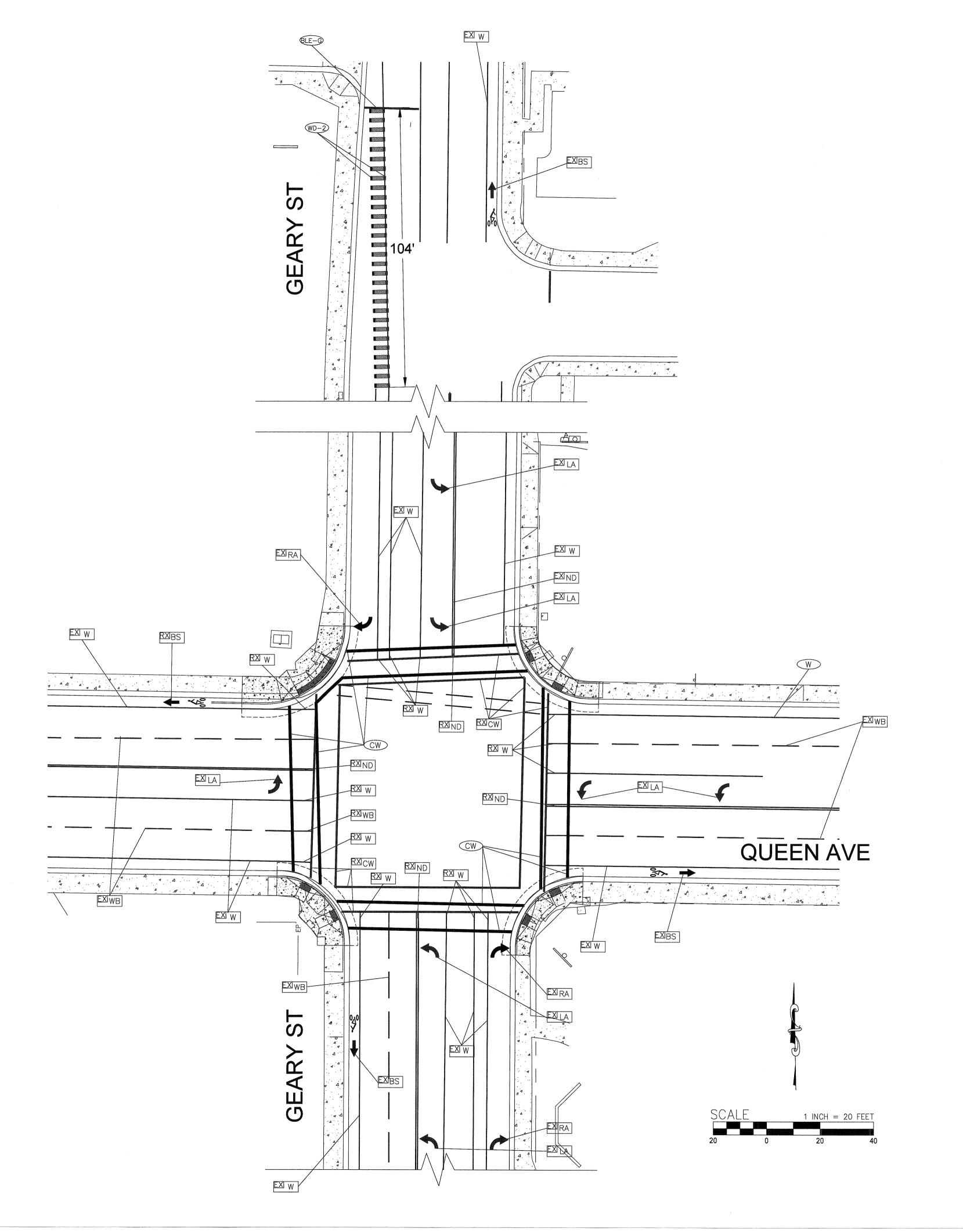


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ALBANY A.R.T.S. UPGRADES QUEEN AVE AT GEARY ST Detection Install Plan

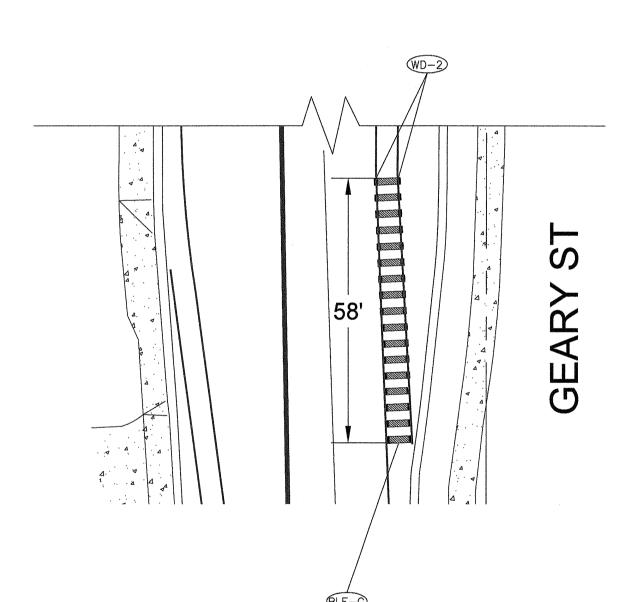
Job No. 20100
Designed By: JLH
Drawn By: JLH
Checked By: TEM
Date: 1/28/22

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GENERAL NOTES:

SEE PLAN SHEETS XX-XX BY OTHERS FOR BICYCLE-RELATED SIGNING AND STRIPING FOR WESTBOUND BIKE LANE. COORDINATE WITH CITY INSPECTOR AS NEEDED.





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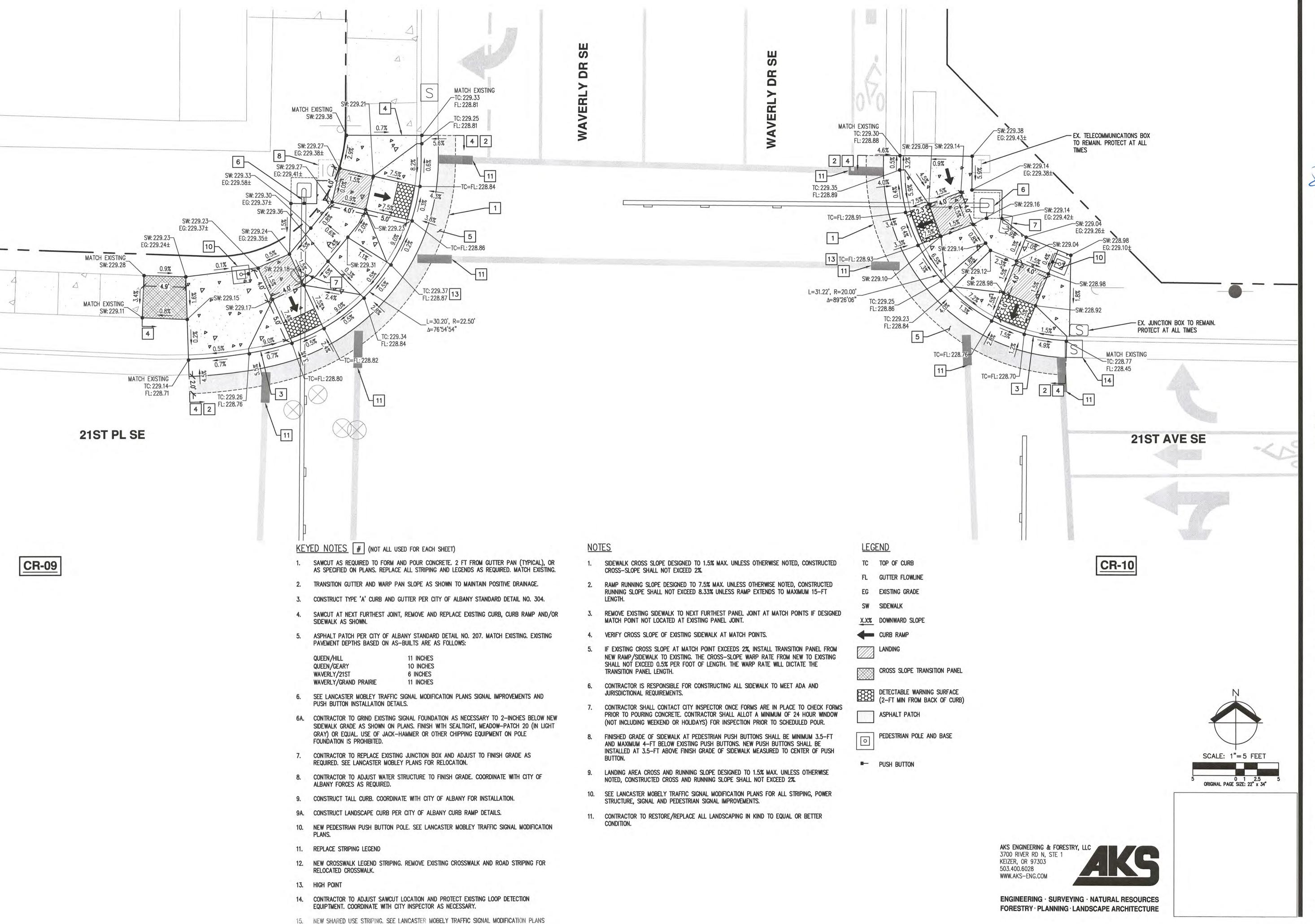


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Rev: Des:	Ву:
Rev: Des:	By:
Rev: Des:	By:

ALBANY A.R.T.S. UPGRADES QUEEN AVE AT GEARY ST Striping Plan Albany, Oregon

Job No. 20100
Designed By: JLH
Drawn By: JLH
Checked By: TEM
Date: 1/28/22

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EXPIRES: JUNE 30, 2022

ALBANY A.R.T.S. UPGRADE CURB RETURN

Job No.
Designed By:
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Checked By:
Date:

105

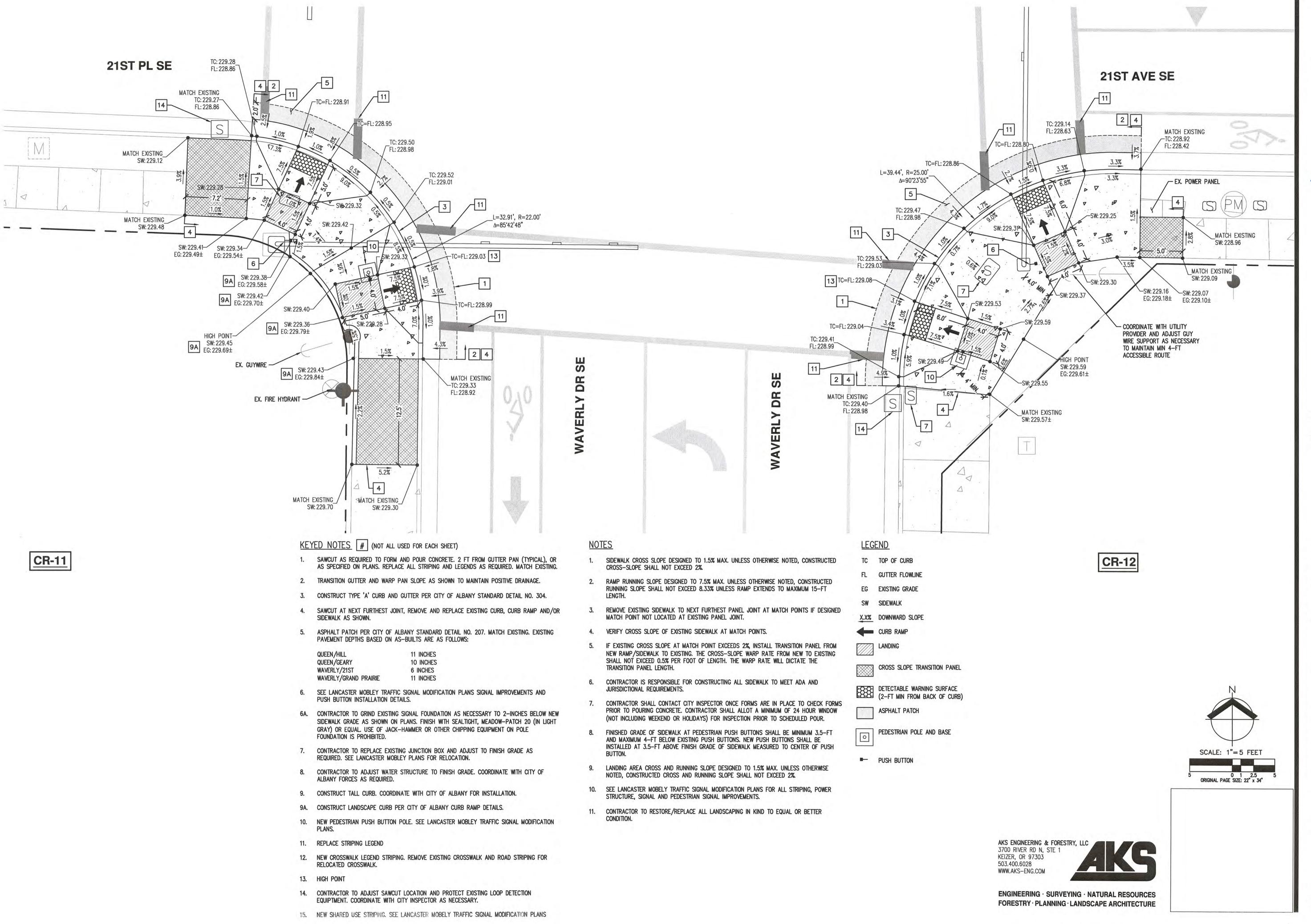
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RCW

GHB

RCW

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Checked By:
Date:

GHB RCW 1/27/22

RCW

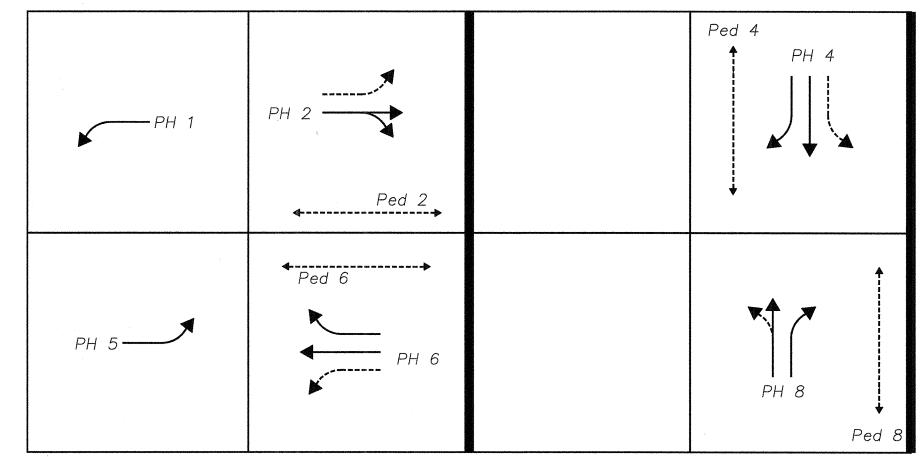
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C106
PAGE 14 OF 20

POLE ENTRANCE CHART

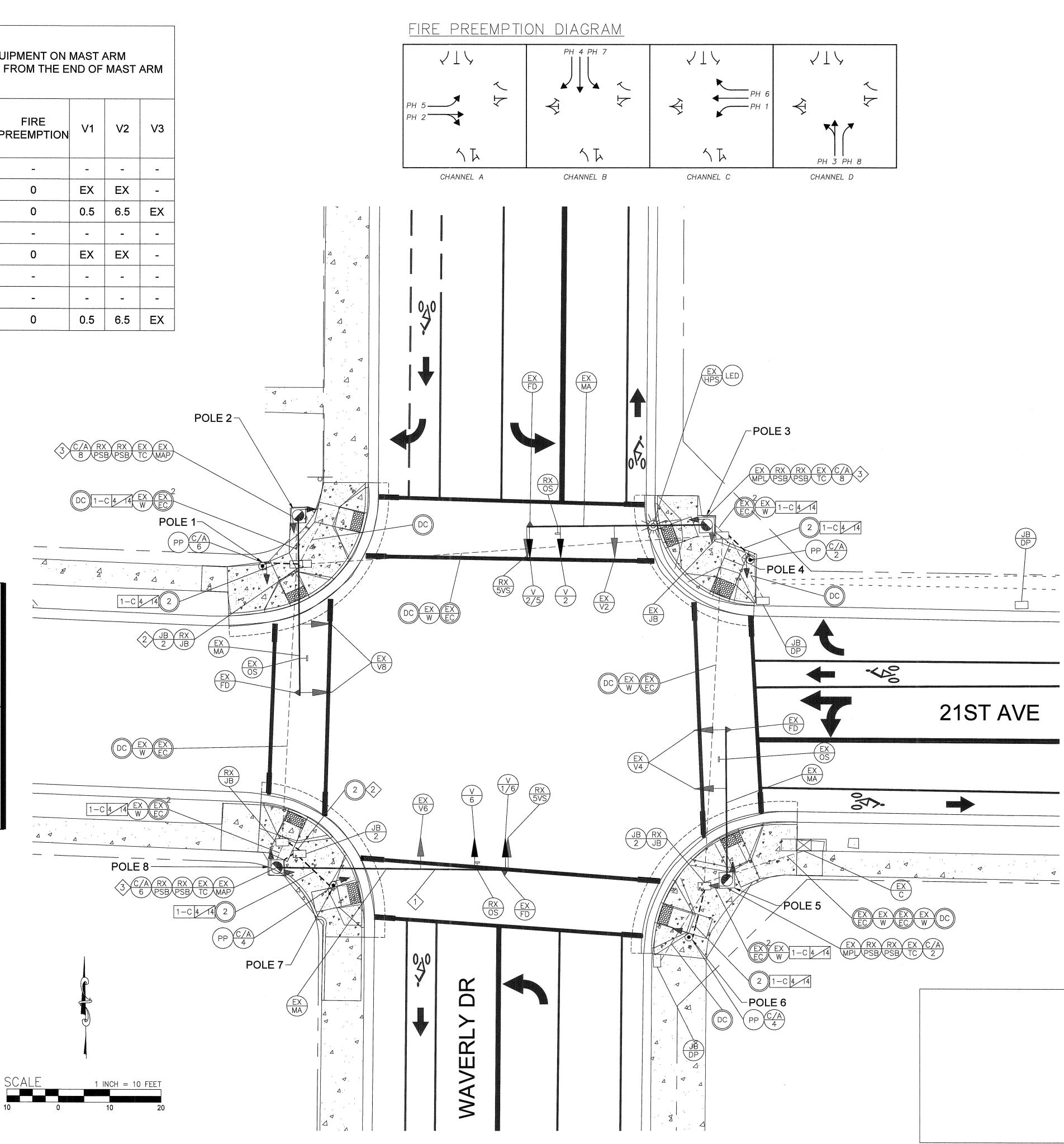
	ГМ457 ТМ650	EQL	JIPMENT ON PO	DLE OR	RIENTATION AN	GLE		QUIPMENT ON I E FROM THE E			ARM
POLE NO.	TYPE	MAST ARM ORIENTATION	LUMINAIRE ORIENTATION	TERM CABINET DEGREE	PED PUSHBUTTON DEGREE	PED SIGNAL DEGREE	ARM LENGTH	FIRE PREEMPTION	V1	V2	V3
1	PP	-	-	-	270	270			_	_	_
2	MAP	EX	-	EX	0	180	35	0	EX	EX	-
3	MPL	EX	EX	EX	0	90	35	0	0.5	6.5	EX
4	PP	_	-	***	0	0	_	_	***************************************	-	-
5	MAP	EX	***	EX	90	90	30	0	EX	EX	-
6	PP	_	-	**	0	0	_	-		-	-
7	PP	-	-	_	270	90	***	-	***	-	_
8	MAP	EX		EX	0	180	45	0	0.5	6.5	EX

NORMAL PHASE ROTATION DIAGRAM



CONSTRUCTION NOTES

- RETAIN AND PROTECT EXISTING BLANK SIGN ON TOP OF MAST ARM WHICH REDUCES WIND VIBRATION
- (2) INTERCEPT AND SPLICE INTO EXISTING CONDUIT
- PUSHBUTTON SIGN EXTENDERS NEEDED WITH SIDE-MOUNTED BUTTONS



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Checked By: TEM
Date: 1/28/22

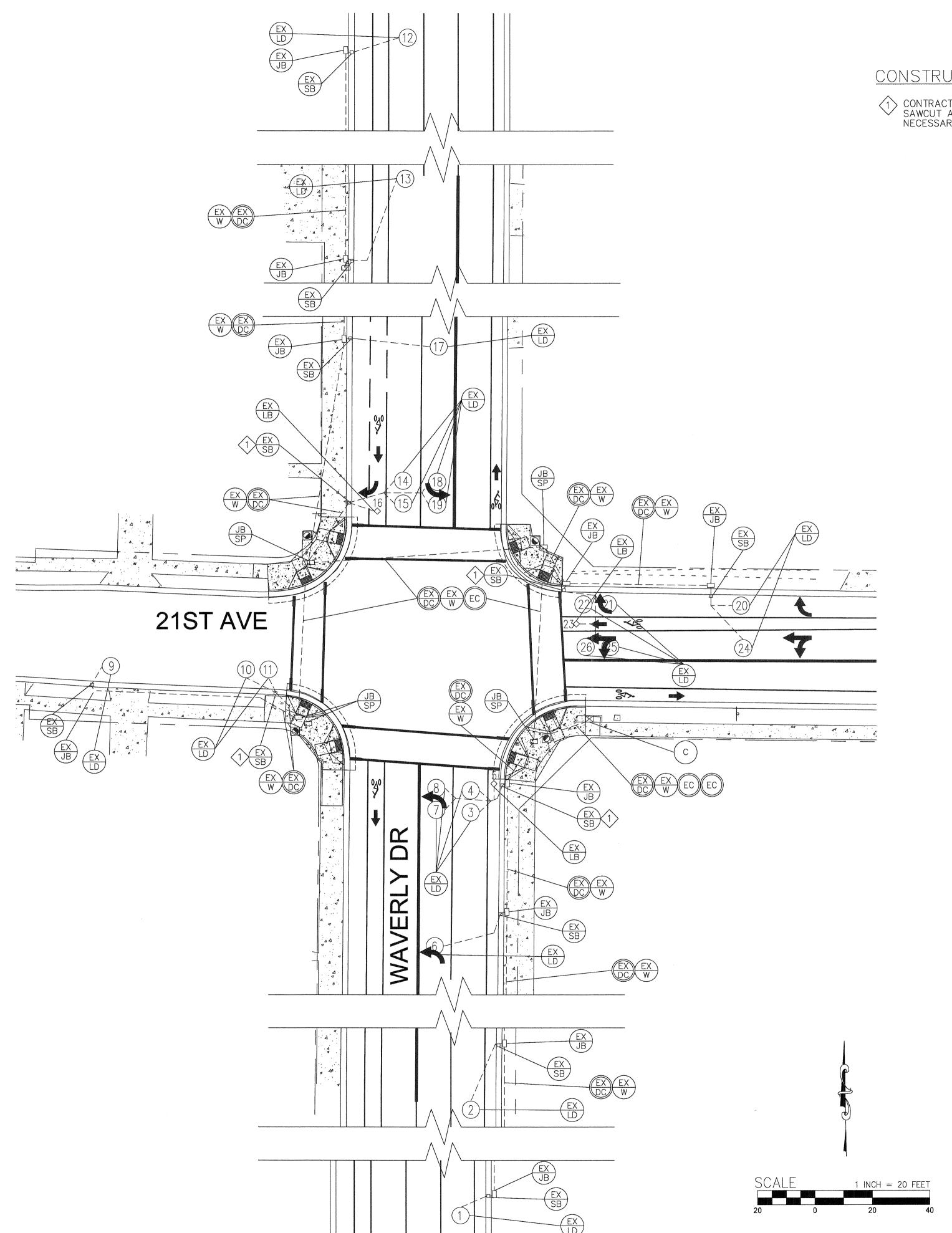
PAGE 15 OF 20

LOOP/RADAR WIRING DIAGRAM

	LOOP	#	DISTAN (FEET)		PHAS	SE.	FUNCTION		SLO
	/ 1		320		- 2		E, C, CO	***************************************	- I2U
NO WORK	$\frac{1}{2}$		160		- 2		E, C, CO		- 12L
	3 4		- 16 - 5		- 2		E, C		- 13L
	5	***************************************	- 4	***************************************	- 2	***************************************	E, C		- I3U
	6		- 76	***************************************	- 5	No. Contraction of the Contracti	E, C, CO	Marine Committee	- J1U
	/ 7	•	- 16			***************************************	E, C		— J9U
	8	************************	- 5		- 5				
	9	***************************************	76	***************************************	- 4		E, C, CO		- I6U
	10		- 16		 4		E, C		— 16L
	11	***************************************	- 5		- 4				
	12	***************************************	320		- 6		E, C, CO	**************************************	– J2U
	13	***************************************	160		- 6	egylpandad samo quan conplus y and del annicha dereila aguar ar	E, C, CO	***************************************	- J2L
	14		- 16		0	WatersAmerican contents of the design of the	E, C		171
	15	www.common.pow.com	- 5		- 6				– J3L
	16		. 4		- 6	***************************************	E, C, CO	jihoologiyaan koosyysiin iyyoo qoorig sahaaliidiska oo	- J3U
	17		- 76		- 1	sphalmalsychosodhum rhalman samul-sauthan annahabasoda	E, C, CO		- I1U
	18		- 16		1		E, C		1011
	19		- 5		1				- 19U
	20		- 76		- 8		E, C, CO, D		- J6U
	21	www.commission.com	- 16		0		E, C, D		1-71
	22		- 5		- 8				– J7L
	23		- 4	graphs painting of place for the control of the con	- 8	Valent and a second a second and a second and a second and a second and a second an	E, C, CO	***************************************	- J7U
							E, C, CO		
	100		_		- 8	***************************************	E, C	***************************************	– 18U

GENERAL NOTES:

DETECTION NOT IMPACTED BY SIGNAL AND INTERSECTION MODIFICATIONS



CONSTRUCTION NOTES

CONTRACTOR TO PROTECT EXISTING STREET BOX AND ADJUST SAWCUT AS NECESSARY. COORDINATE WITH CITY INSPECTOR AS NECESSARY.

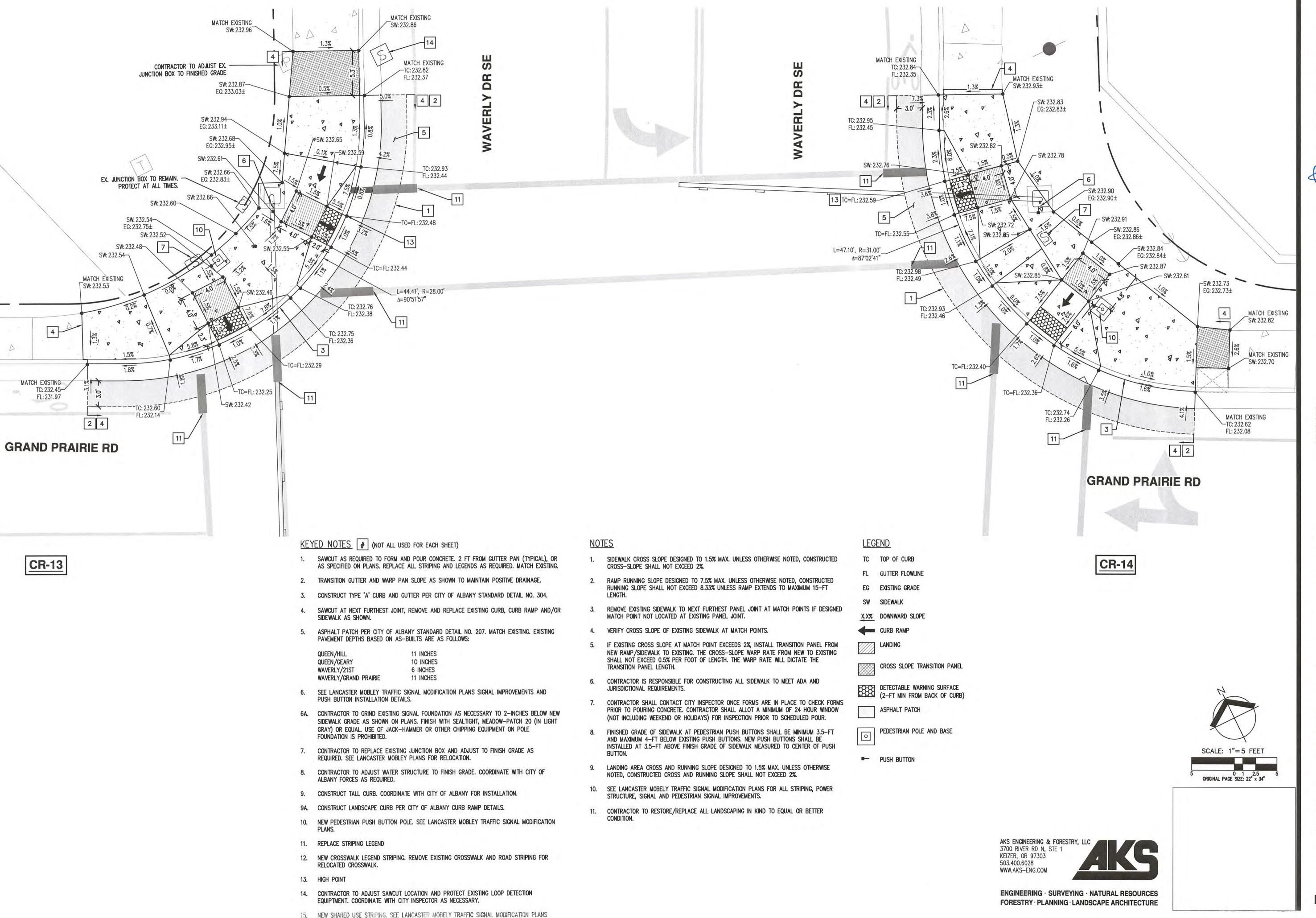


ALBANY A.R.T.S. UPGRADE WAVERLY DR AT 21ST AVE Detection Modification Plan Albany, Oregon

Job No. 20100
Designed By: JLH
Drawn By: JLH
Checked By: TEM
Date: 1/28/22

T10

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By:

Rev:
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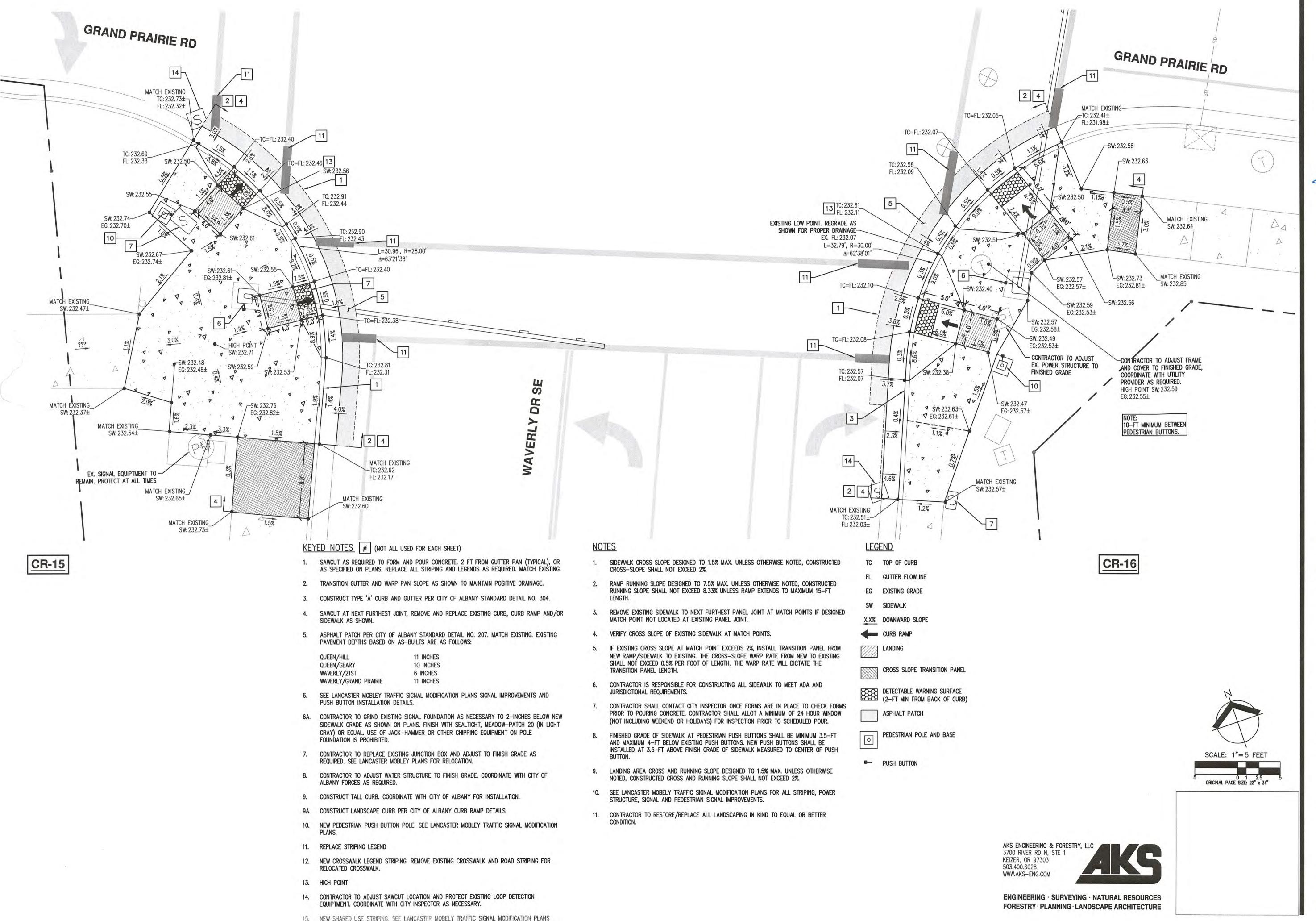
ALBANY A.R.T.S. UPGRAD CURB RETURN

Job No.
Designed By:
Drawn By:
Checked By:
Date:

AKS JOB #8232
By: RCW
: GHB
By: RCW
1/27/22

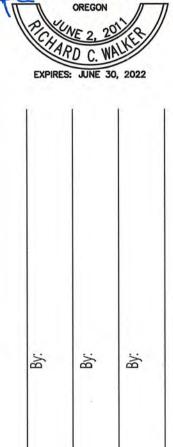
C107

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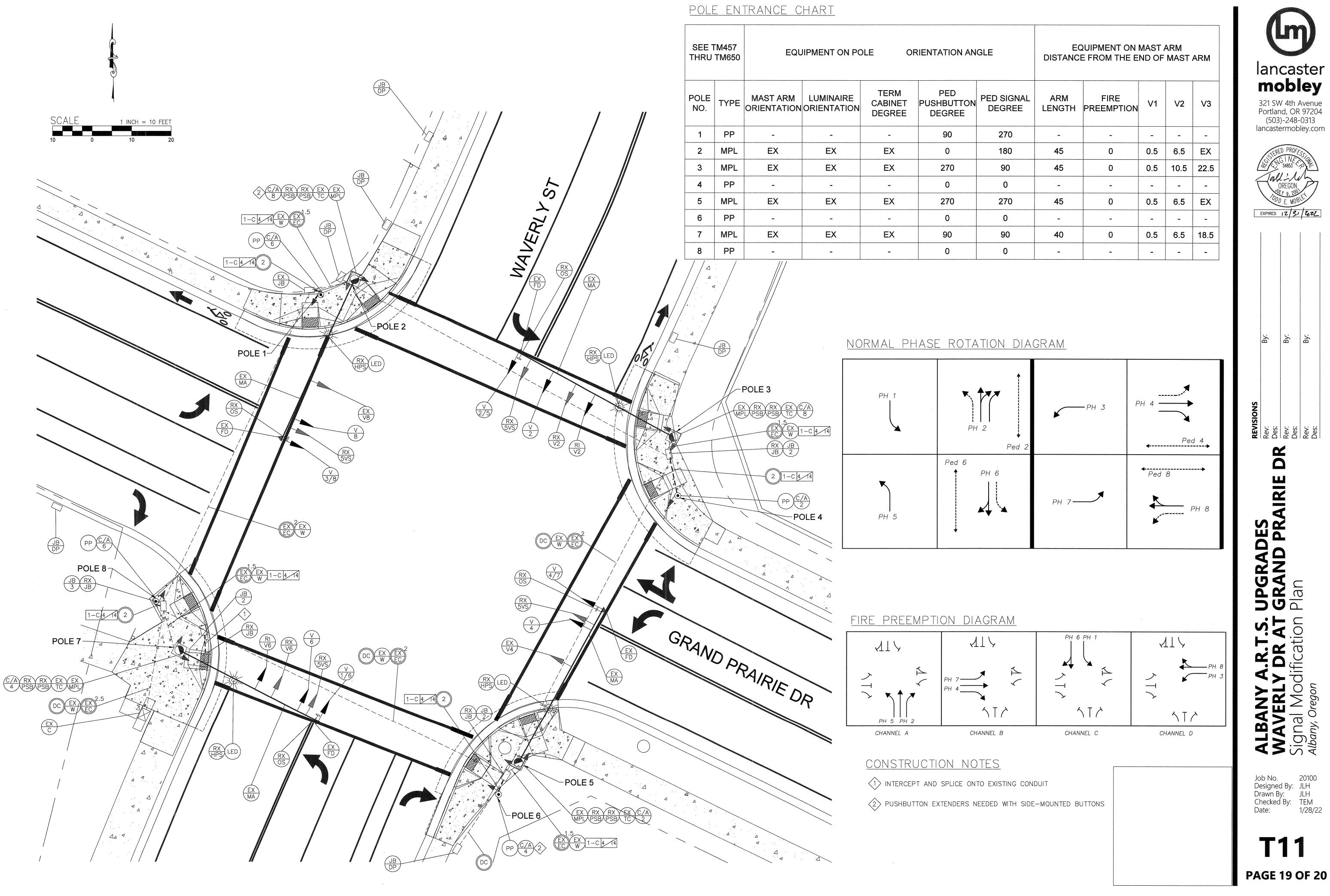


LBANY A.R.T.S. UPGRADES URB RETURN

Job No. AKS JOB #8232
Designed By: RCW
Drawn By: GHB
Checked By: RCW
Date: 1/27/22

: RCW 1/27/22

C108

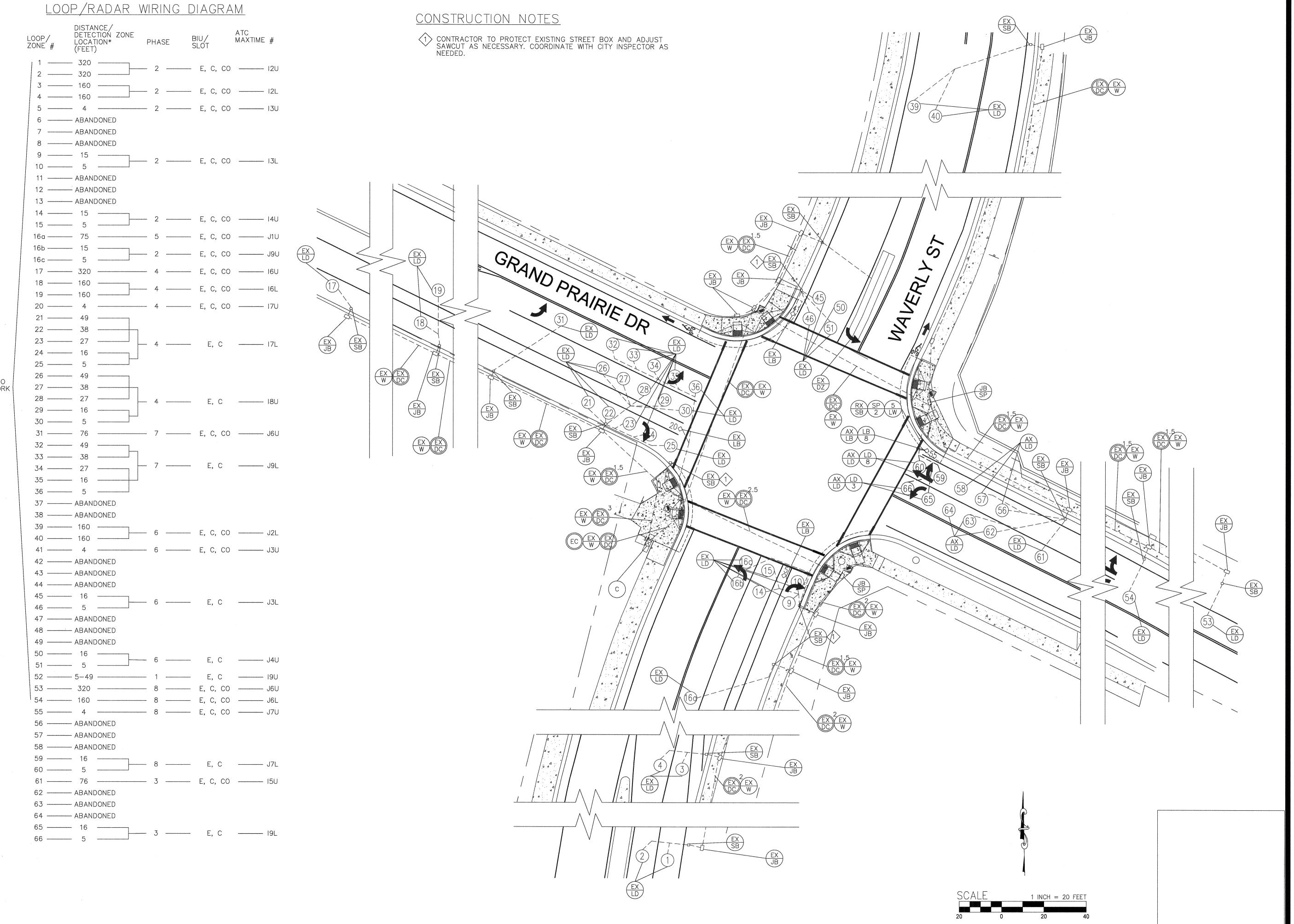


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EXPIRES 12/31/62L

Designed By: JLH
Drawn By: JLH
Checked By: TEM
Date: 1/28/22





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EXPIRES 12/31/2012

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Job No. 20100 Designed By: JLH Drawn By: JLH Checked By: TEM Date: 1/28/22

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