DOCUMENT CONTROL PROCESSING FORM

File Number:	DESN0079 Item No. 02		
Document Date:	08/12/25		
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DCPF Author:	Kevin W.		
Subject:	Preliminary: MOT SR167 Stage 1 Temp ITS		
To (Company):	WSDOT	To (Individual):	B Morris, D Russu, J Tran
From (Company):	Jacobs	From (Individual):	Eric Crowe
Additional Subject Information and/or Keywords		Schedule Activity:	N/A
RFP - 2.18, 2.22			
			Yes No

Distribution:	Attachments
XE3476 - SR167 MOT Distribution	
XE3476 - SR167 WSDOT Design Review	Notes:
XE3476 - Gatekeeper	
0	
0	

LEGEND

EXISTING	NEW	
		WAVETRONIX SENSOR
		TIMBER POLE
		INDUCTION LOOP VEHICLE DETECTOR
		INDUCTION WR LOOP VEHICLE DETECTOR
		WAVETRONIX DETECTION ZONE
		CONDUIT
		TEMPORARY CONCRETE BARRIER
		TYPE 1 JUNCTION BOX
		TYPE 2 JUNCTION BOX
		TYPE 8 JUNCTION BOX
PB		PULL BOX
CV		CABLE VAULT
SCV		SMALL CABLE VAULT
		ELECTRICAL SERVICE CABINET
		CCTV CAMERA CABINET
		CCTV CAMERA
		DATA STATION/ RAMP METER CABINET
T		TRANSFORMER CABINET
	ANT	RADIO ANTENNA
	#	CONSTRUCTION NOTE
	#	WIRE NOTE
	#	TIMBER POLE NUMBER
		WORK ZONE
		TRUCK ACCELERATION LANE

RA-P-Clarity how the existing fiber will be protected,going north back to hub. Suggest pulling existing fiber back to next PB north. Than do the conduit work to tie into new location of existing SCV.

TEMPORARY ITS CONSTRUCTION NOTES

1. RELOCATE EXISTING SMALL CABLE VAULT.
2. DISCONNECT AND RELOCATE EXISTING CABINET TO TEMPORARY FOUNDATION. REMOVE FOUNDATION COMPLETELY. REMOVE CONDUIT SWEEPS AND ABANADON EXISTING CONDUIT. KEEP ADJACENT JUNCTION BOXES IN PLACE.
4. INSTALL EXISTING CABINETS ON TEMPORARY FOUNDATION. SPACING BETWEEN CABINETS SHALL BE MINIMUM 6". THERE SHALL BE MINIMUM 3' CLEAR SPACE IN FRONT OF EACH CABINET DOOR. ECO BLOCKS MAY BE USED TO SUPPORT TEMPORARY FOUNDATION AND THE TO MAINTAIN 3' LEVELED CLEAR SPACE. CABINETS SHALL BE PLACED SUCH THAT THERE ARE NO OBSTRUCTIONS (INCLUDING OTHER CABINET DOORS) TO STOP THE DOORS FROM SWINGING OPEN 90 DEGREES. PULL CONDUCTORS INTO CABINETS AND RETERMINATE AS ORIGINALLY TERMINATED.
5. INSTALL CLASS 3 TIMBER POLE PER DETAILS ON SHEET SC20-TSD01. INSTALL TEMPORARY CONDUIT FROM JUNCTION BOX TO TIMBER POLE. ATTACH CONDUIT TO POLE AND INSTALL 2" WEATHERHEAD IN ACCORDANCE WITH STANDARD PLAN J-15.10-01, DETAIL "TIMBER LUMINAIRE SUPPORT".
6. INSTALL ONE CLICK 112 CARD IN INPUT FILES. INSTALL ONE CLICK 200 UNIT AND ONE CLICK 201 UNIT ON THE DIN RAIL BRACKET. WIRE THEM PER WAVETRONIX MANUFACTURER RECOMMENDATIONS.
7. THE RADIO ANTENNA COMES WITH POE INJECTOR AND SURGE PROTECTOR UNITS. INSTALL ONE POE INJECTOR AND ONE SURGE PROTECTOR ON THE DIN RAIL BRACKET IN THE CABINET. CONNECT THE ANTENNA CABLE TO THE SURGE PROTECTOR. CONNECT A CAT 5E PATCH CORD FROM THE SURGE PROTECTOR TO THE POE INJECTOR. CONNECT A CAT 5E PATCH CORD FROM THE POE INJECTOR TO AN OPEN PORT IN THE EXISTING RS900G SWITCH. PLUG THE POE INJECTOR INTO THE POWER STRIP.
8. BEFORE LANE SHIFT IS IMPLEMENTED, INSTALL TEMPORARY WAVETRONIX RADAR DETECTOR ON TIMBER POLE PER MANUFACTURER RECOMMENDATIONS.
9. INSTALL EXISTING SMALL CABLE VAULT SOUTH OF ITS EXISTING LOCATION SO THAT THE CENTER OF THE VAULT IS AT APROXIMATE SB167-1 LINE STA 236+43, OFFSET 58.69' RT. DO THIS AFTER THE 12 SMFO SR 167 DISTRIBUTION CABLE GOING WEST OUT OF THE VAULT HAS BEEN REMOVED. TAKE CARE TO PROTECT THE ACTIVE FIBER OPTIC CABLES INSIDE. REMOVE A PORTION OF THE EXISTING CONDUIT ON THE SOUTH SIDE OF THE VAULT AND TERMINATE THE NEW ENDPOINT OF THE CONDUIT IN THE VAULT. ON THE EAST SIDE OF THE VAULT, DIG UP AND EXPOSE A PORTION OF THE EXISTING CONDUIT SO THAT THE EXISTING CONDUIT CAN BEND TO THE NEW VAULT LOCATION. PATCH ALL HOLES IN THE VAULT WITH WATERTIGHT SEAL.
10. FURNISH AND INSTALL ONE RADIO ANTENNA AND ANTENNA MOUNT ON EXISTING CAMERA POLE PER MANUFACTURER INSTRUCTIONS. INSTALL A CAT 5E CABLE FROM THE ANTENNA TO THE CAMERA CABINET. TO ROUTE THE ANTENNA CABLE DOWN THE POLE, REPLACE THE COVER OF THE HANDHOLE AT THE TOP OF THE POLE WITH A TEMPORARY COVER, DRILL A HOLE IN THE TEMP COVER AND INSTALL A CGB BUSHING THAT IS SIZED FOR THE ANTENNA CABLE. INSTALL THE CABLE THRU THE CGB FITTING TO THE INSIDE OF THE POLE, SUPPORT IT WITH A GRIP, AND ROUTE IT DOWN THE INSIDE OF THE POLE AND THRU THE EXISTING CONDUIT TO THE CABINET. ORIENT THE ANTENNA TO MAXIMIZE THE SIGNAL STRENGTH.
11. ABANDON LOOPS AND PIEZO SENSORS.
12. PRIOR TO INSTALLING THE TWO RADIO ANTENNAS, CONFIGURE THEM FOR THE 5 GHZ BANDWIDTH AND CONFIGURE OTHER SETTINGS NECESSARY TO MAKE THE WIRELESS SYSTEM FULLY FUNCTIONAL.

TEMPORARY ITS CONSTRUCTION NOTES

13. COIL PTR SENSOR CABLES IN THE BOTTOM OF THE CABINET.
14. REMOVE EXISTING CONDUCTORS AND ABANDON UNDERGROUND CONDUIT.
15. REMOVE EXISTING CONDUCTORS AND PULLBOX. BACKFILL VOID.
16. CUT AND REMOVE 1-12 SMFO CABLE THAT GOES WEST TO 005-VC-00554.
17. THE PTR CABINET MAY BE OFFLINE FOR A MAXIMUM OF 12 MONTHS.

TEMPORARY ITS WIRING SCHEDULE

NO.	CONDUIT SIZE	INNERDUCTS	CONDUCTORS EXISTING	CONDUCTORS NEW	COMMENTS
1	2"			1-WAVETRONIX	TEMP CABLE
2	EX 2"		6-2C(SH)	1-WAVETRONIX	TEMP CABLE
3	EX 2"		1-CAT6		
	EX 2"		7-2C(SH)		
	EX 3'		EMPTY		
	EX 3'		EMPTY	1-WAVETRONIX, 1-CAT5E	TEMP CABLE, ANTENNA CABLE
4	EX 4'	A	1-12 SMFO		DIST FIBER (SR512)
		B	1-12 SMFO		DIST FIBER (SR167 SB TO EAST)
		C	1-12 SMFO (R)	EMPTY	REMOVE DIST FIBER (SR 167 SB TO WEST)
		D	EMPTY		
5	EX 2"		2-12 SMFO		PRE-TERM FIBER
	EX 3"		EMPTY		
6	EX 2"		1-12 SMFO (R)	EMPTY	REMOVE DIST FIBER (SR167 SB)
7	EX 4'	A	1-12 SMFO		DIST FIBER (SR512)
		B, C, D	EMPTY		
8	EX 4'	A, B, C, D	EMPTY		SPARE
9	2"			EMPTY	SPARE
10	EX 2"		1-CAT6	1-CAT 5E	EX CCTV CABLE, ANTENNA CABLE
11	2"		1-CAT6	1-CAT 5E	EX CCTV CABLE, ANTENNA CABLE
12	EX 2"		1-2C(SH)		EX LOOP CABLE
13	2"			EX 6-2CS	RELOCATED EX DETECTION AND PIEZO CABLES
14	2"			EX 3-#2	RELOCATED EX POWER FROM METER TO SERVICE CABINET
15	2"			EX 3-#8	RELOCATED EX 240V POWER TO VMS
16	2"			EX 2-#8	RELOCATED EX POWER FROM XF TO CABINET
17	EX 4"	A	1-12 SMFO		DIST FIBER (SR512)
		B	1-12 SMFO		DIST FIBER (SR167 SB)
		C	EMPTY		
		D	EMPTY		

RA-R-This is the existing electrical service SCA 3273, not a existing transformer.

WIRELESS EQUIPMENT

ITEM	DESCRIPTION	WESTERN SYSTEMS PART NO.
RADIO ANTENNA	AXIOM SINGLE RADIO AX5-1	6280017000
ANTENNA MOUNT	ASTRO-BRAC GALAXY HINGED CAMERA BRACKET	6280030012

FILE NAME	c:\users\wegenemf\appdata\local\bentley\projectwise\jacobs-americas-01\d0263463\XL3476_PS_SC20-TN01.dgn
TIME	3:10:29 PM
DATE	8/8/2025
PLOTTED BY	WEGENEMF
DESIGNED BY	I. AGRON
ENTERED BY	I. AGRON
CHECKED BY	M. WEGENER
PROJ. ENGR.	T. SLIMAK
REGIONAL ADM.	S. ROARK

REVISION: REV A - PRELIMINARY REVIEW — DATE: 08/10/25 — BY

REGION NO. 10 — STATE WASH — FED.AID PROJ.NO. 0167(059)

JOB NUMBER

CONTRACT NO. XE3476 — LOCATION NO.

PRELIMINARY NOT FOR CONSTRUCTION

Washington State Department of Transportation

ATKINSON / Jacobs CONSTRUCTION

SR 167
SR 161 TO SR 410
REBUILD INTERCHANGE

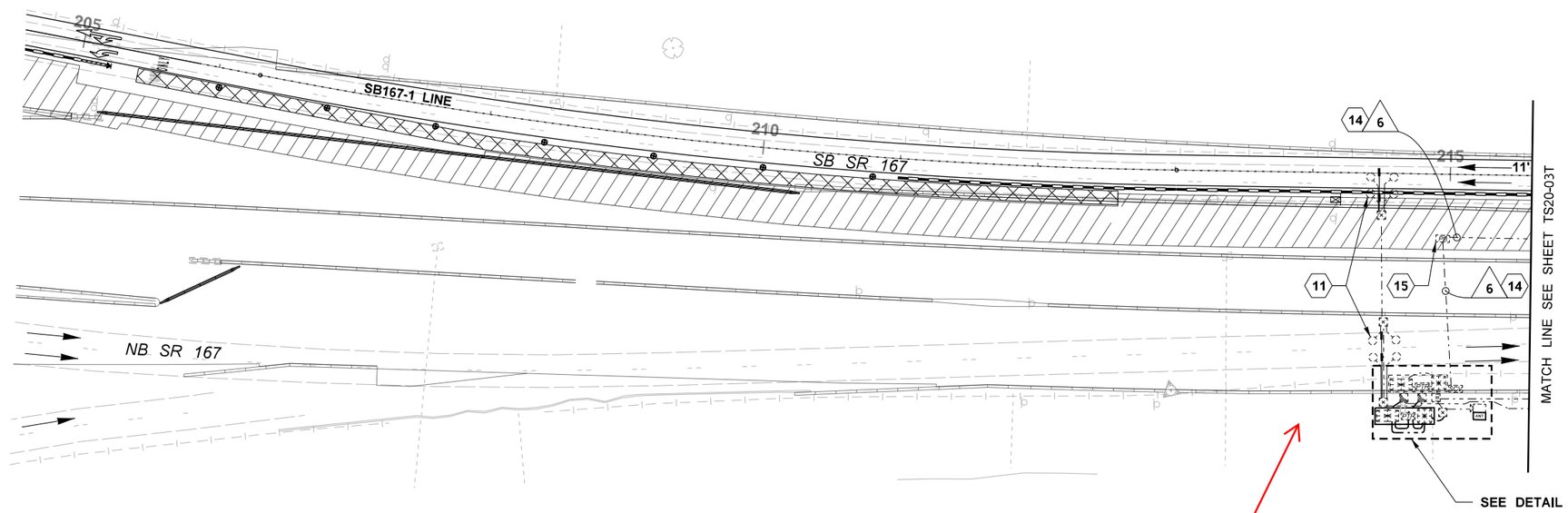
SR167 STAGE 1
TEMPORARY ITS PLANS

PLAN REF NO SC20 -TN01

SHEET OF SHEETS

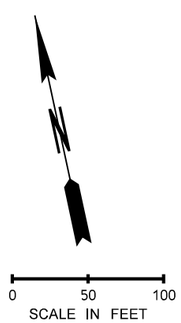
NOTE:

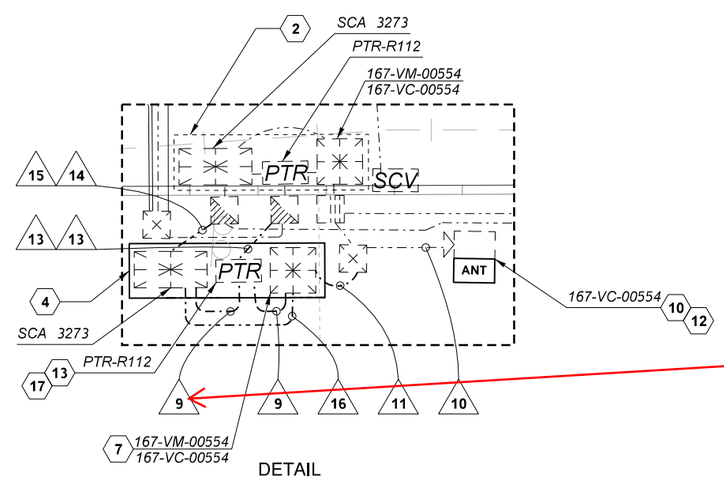
1. SEE SC20 PLAN SERIES FOR ASSOCIATED MOT PLANS.



RA-P-Clarify. Per construction note 11, it says to abandon Loops and Piezo sensors. Wn #13 says, Relocate Detection and Piezo cables.

RA-R-Install a temporary Wavetronix system for PTR Data. Per RFP 2.18.4.6.2





DETAIL

RA-R-WN #9 show no conductors in that conduit system. To accomplish RFP 2.18.4.17.1 (Design-Builder shall ensure moisture is prevented from entering ITS components and enclosures) the PTR will need to be powered up. To accomplish this, conductors will need to be added to WN #9.

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DATE	8/7/2025				JOB NUMBER		
PLOTTED BY	agronmi						
DESIGNED BY	I. AGRON						
ENTERED BY	I. AGRON						
CHECKED BY	M. WEGENER				CONTRACT NO. XE3476		LOCATION NO.
PROJ. ENGR.	T. SLIMAK	REV A - PRELIMINARY REVIEW	08/10/25				
REGIONAL ADM.	S. ROARK	REVISION	DATE	BY			

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REBUILD INTERCHANGE

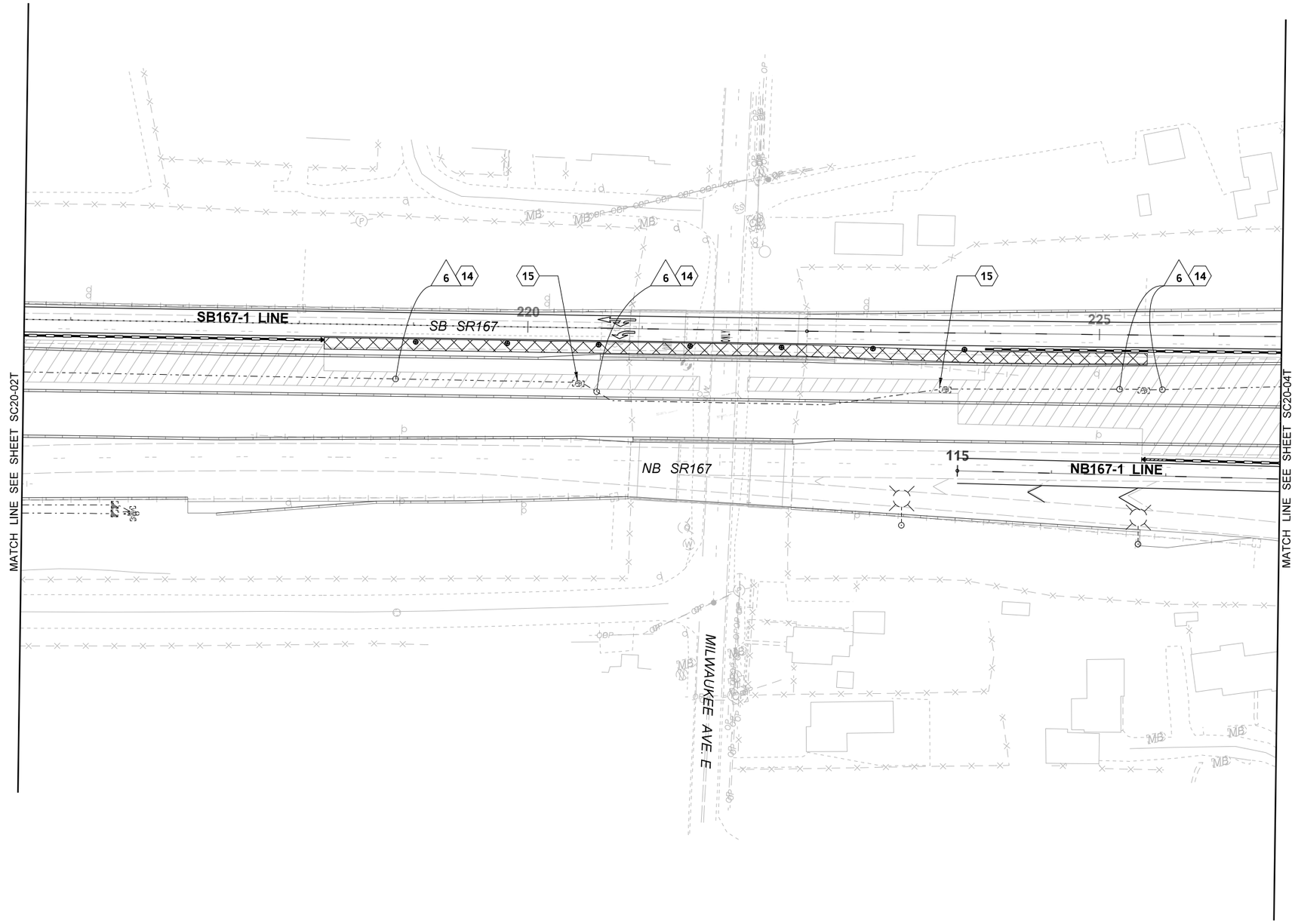
SR167 STAGE 1
TEMPORARY ITS PLANS

PLAN REF NO SC20 -02T

SHEET OF SHEETS

NOTE:

1. SEE SC20 PLAN SERIES FOR ASSOCIATED MOT PLANS.



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DATE	8/7/2025						
PLOTTED BY	agronmi						
DESIGNED BY	I. AGRON				JOB NUMBER		
ENTERED BY	I. AGRON						
CHECKED BY	M. WEGENER				CONTRACT NO. XE3476		LOCATION NO.
PROJ. ENGR.	T. SLIMAK	REV A - PRELIMINARY REVIEW	08/10/25				
REGIONAL ADM.	S. ROARK	REVISION	DATE	BY			

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REBUILD INTERCHANGE

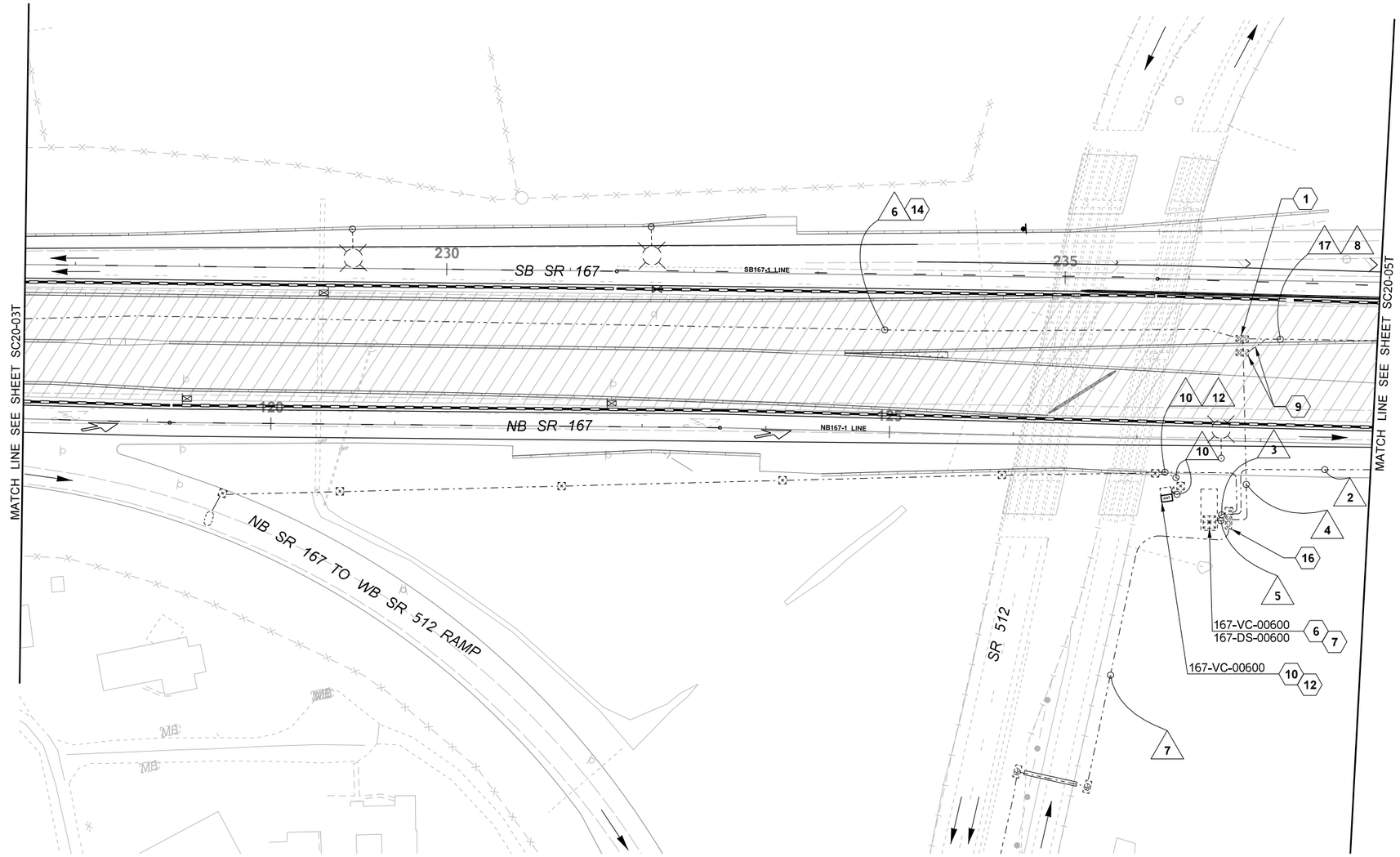
SR167 STAGE 1
TEMPORARY ITS PLANS

PLAN REF NO SC20 -03T

SHEET OF SHEETS

NOTES:

1. SEE SC20 PLAN SERIES FOR ASSOCIATED MOT PLANS.



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SCALE IN FEET

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DATE	8/8/2025						
PLOTTED BY	WEGENEMF				JOB NUMBER		
DESIGNED BY	I. AGRON						
ENTERED BY	I. AGRON						
CHECKED BY	M. WEGENER				CONTRACT NO. XE3476		LOCATION NO.
PROJ. ENGR.	T. SLIMAK	REV A - PRELIMINARY REVIEW	08/10/25				
REGIONAL ADM.	S. ROARK	REVISION	DATE	BY			

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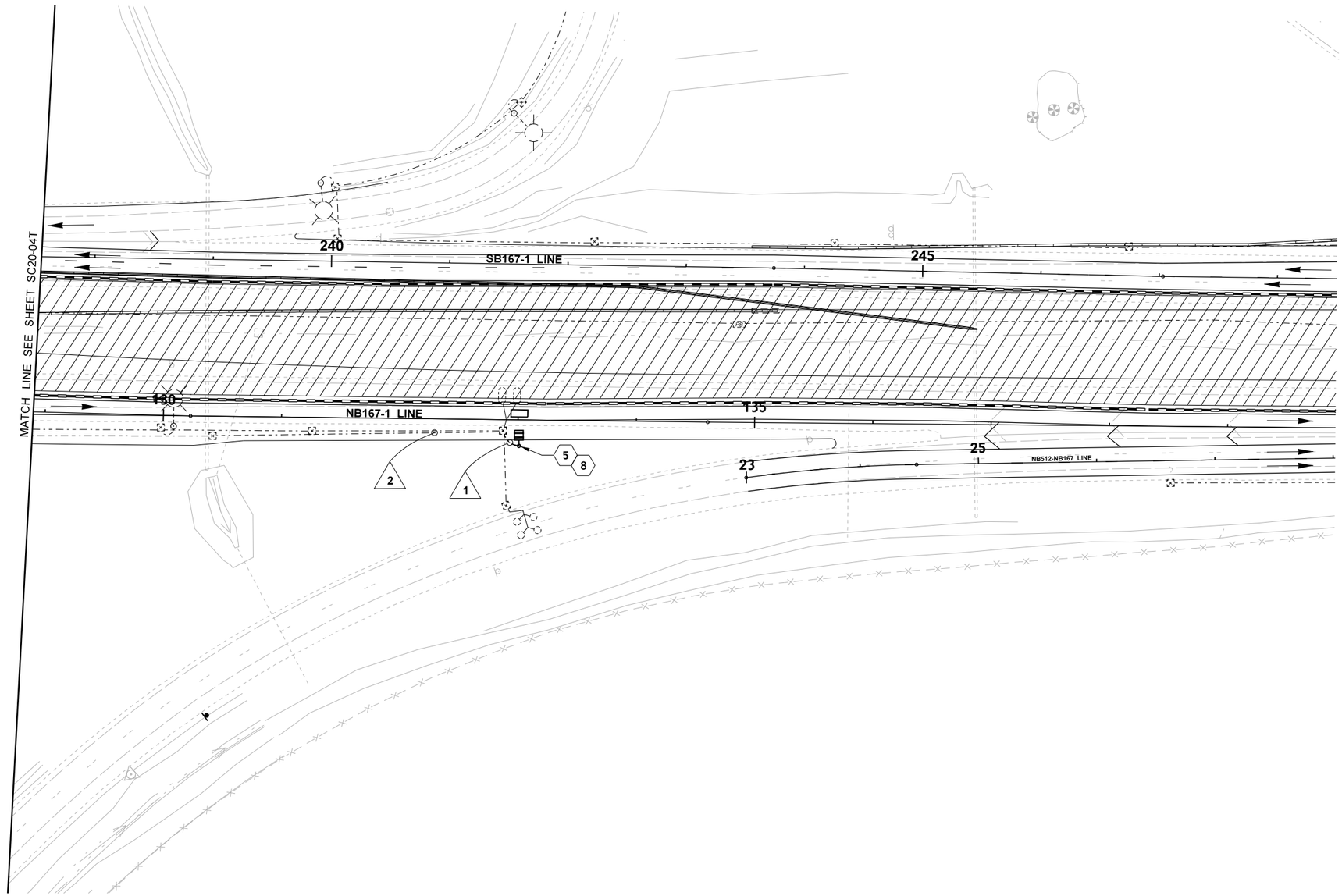
SR167 STAGE 1
TEMPORARY ITS PLANS

PLAN REF NO SC20 -04T

SHEET OF SHEETS



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0 50 100
SCALE IN FEET

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DATE	8/8/2025				JOB NUMBER		
PLOTTED BY	WEGENEMF						
DESIGNED BY	I. AGRON						
ENTERED BY	I. AGRON						
CHECKED BY	M. WEGENER				CONTRACT NO. XE3476		LOCATION NO.
PROJ. ENGR.	T. SLIMAK	REV A - PRELIMINARY REVIEW	08/10/25				
REGIONAL ADM.	S. ROARK	REVISION	DATE	BY			

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SR 167
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SR167 STAGE 1
TEMPORARY ITS PLANS

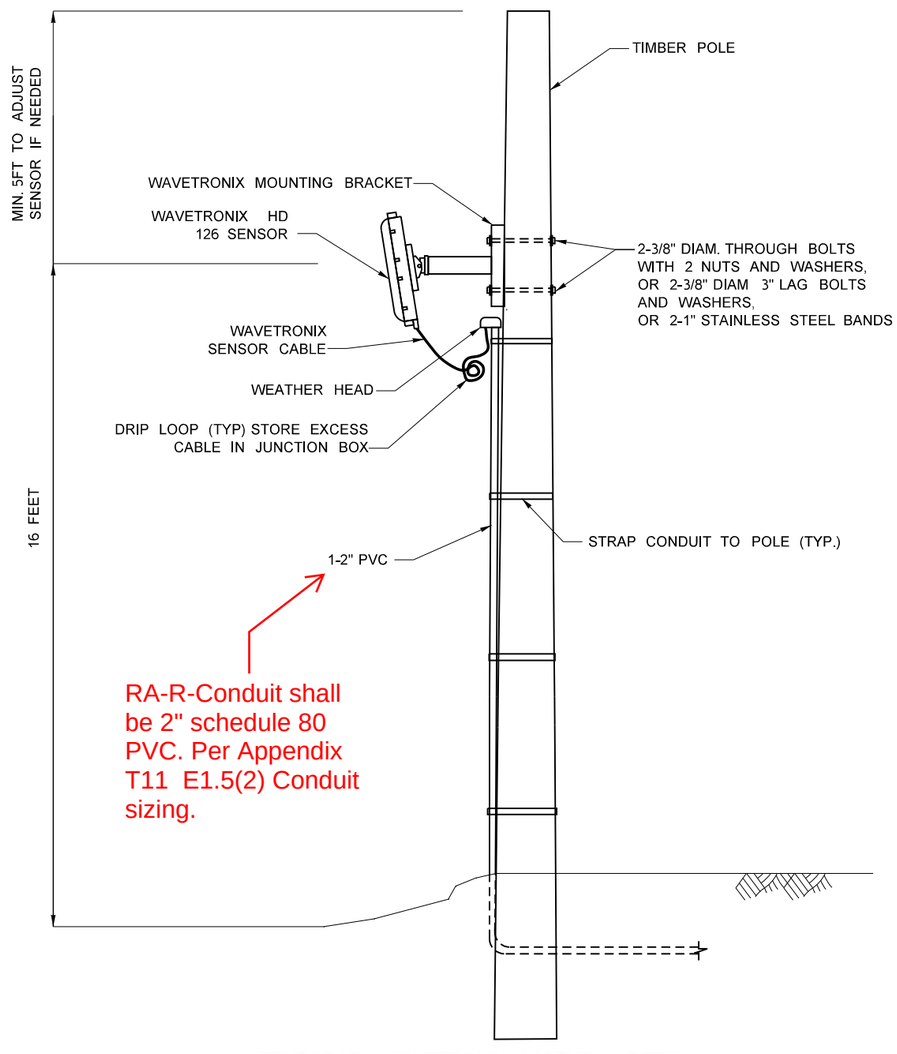
PLAN REF NO SC20 -05T
SHEET
OF
SHEETS

NOTES

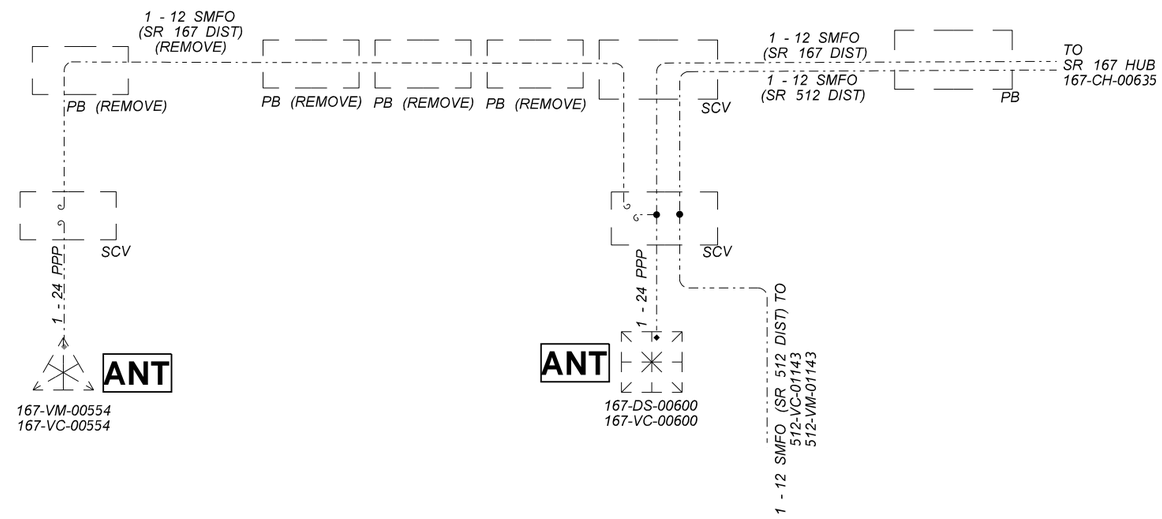
1. TIMBER POLE SHALL BE SET IN ACCORDANCE WITH STANDARD SPEC 9-29.6(3).
2. ALL HARDWARE SHALL BE STAINLESS STEEL OR GALVANIZED.
3. WAVETRONIX MOUNTING HEIGHT MAY BE ADJUSTED DURING INSTALLATION, BASED ON FIELD CONDITIONS AND MANUFACTURER RECOMMENDATIONS.

TEMPORARY POLE SCHEDULE

POLE #	POLE LOCATION			CABINET	SHEET NO.
	LINE	STATION	OFFSET		
1	NB167-1	241+61	153.70' RT	167-DS-00600	SC20-05T



TEMPORARY WAVETRONIX ASSEMBLY DETAIL



TEMPORARY DISTRIBUTION DIAGRAM

FILE NAME	c:\users\wegenemf\appdata\local\bentley\projectwise\jacobs-americas-01\d0263463\XL3476_PS_SC20-TSD01.dgn					
TIME	3:52:50 PM				REGION NO. 10	STATE WASH
DATE	8/8/2025				JOB NUMBER	FED.AID PROJ.NO. 0167(059)
PLOTTED BY	WEGENEMF					
DESIGNED BY	I. AGRON					
ENTERED BY	I. AGRON					
CHECKED BY	M. WEGENER				CONTRACT NO. XE3476	LOCATION NO.
PROJ. ENGR.	T. SLIMAK	REV A - PRELIMINARY REVIEW	08/10/25			
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SR167 STAGE 1
TEMPORARY ITS PLANS

PLAN REF NO SC20 -TSD01

SHEET OF SHEETS