

OVERHEAD GENERAL NOTES

- NOT ALL OVERHEAD GENERAL NOTES AND OVERHEAD NOTES SHOWN ON THIS SHEET ARE APPLICABLE TO THIS PROJECT.
- PULL-OFFS WITHOUT TENSIONS INDICATED ARE FOR ALIGNMENT PURPOSES ONLY. THE MINIMUM TENSION SHALL BE 100 LBS.
- ALL GUY WIRE MORE THAN 12 in ABOVE TROLLEY WIRE SHALL BE PROVIDED WITH A "TREE GUARD" PER DETAIL 4, SEE STANDARD DRAWING CL-12945. "TREE GUARD" SHALL EXTEND 12 in BEYOND TROLLEY WIRES.
- ALL GUY WIRE 12 in OR LESS ABOVE TROLLEY WIRE SHALL BE PROVIDED WITH AN ADJUSTABLE HANGER, ITEM 75, PER DETAIL 6, SEE STANDARD DRAWING CL-12945.
- WHERE THERE IS INSUFFICIENT INSTALLATION SPACE FOR A GUY WIRE DEAD END WITH A PREFORM, ITEM 7, A STRANDWISE, ITEM 8, SHALL BE USED. PREFORM SHALL NOT BE CUT IN ORDER TO FIT INTO SMALLER SPACE.
- INSTALL ALL GUY WIRES TO PROVIDE SUFFICIENT TAIL AT ANY JUNCTION FOR FINAL ADJUSTMENT. THE CONTRACTOR SHALL CUT THIS TAIL TO A MINIMUM OF 2 in AFTER PERFORMING THE FINAL ADJUSTMENT OF THE OVERHEAD CONTACT SYSTEM.
- WHERE INSULATION IS REQUIRED AT GUY WIRES, PORCELAIN INSULATOR, ITEM 94, SHALL BE USED, UNLESS OTHERWISE NOTED.
- GUY WIRE TENSIONS AND POLE BAND HEIGHTS INDICATED ON THE DRAWINGS SHALL BE USED AS A GUIDE ONLY. THE CONTRACTOR SHALL FIELD ADJUST GUY WIRE TENSIONS AND POLE BAND HEIGHTS TO ACHIEVE THE REQUIRED TROLLEY WIRE TENSION, HEIGHT, AND ALIGNMENT.
- NEW TROLLEY WIRES AND GUY WIRES SHALL BE PULLED TO THE SPECIFIC TENSIONS SHOWN ON THE DRAWINGS FOR INSTALLATION AT 60 °F. DIFFERENTIAL DEAD END TENSIONS SHALL BE ADJUSTED IN THE FIELD TO ACHIEVE THE INDICATED TROLLEY WIRE TENSIONS.
- ALL NEW TROLLEY WIRES SHALL BE TENSIONED AS FOLLOWS, UNLESS OTHERWISE NOTED:
 4/0 TROLLEY WIRES FOR HISTORIC CAR OPERATIONS: 3750 LBS PER WIRE
 4/0 TROLLEY WIRES FOR TROLLEY COACH OPERATIONS: 3000 LBS PER WIRE
 2/0 TROLLEY WIRES FOR TROLLEY COACH OPERATIONS: 2000 LBS PER WIRE
- ALL NEW TROLLEY WIRES SHALL BE INSTALLED AT HEIGHT AS FOLLOWS, UNLESS OTHERWISE NOTED:
 FOR HISTORIC CAR OPERATIONS: 18 ft-6 in ± 3 in
 FOR TROLLEY COACH OPERATIONS: 19 ft-6 in ± 3 in
- ADJUST THE HEIGHT OF EXISTING TROLLEY WIRES/ SPECIAL WORK WHERE EXISTING PULL-OFFS/ SPANS ARE REPLACED BY NEW PULL-OFFS/ SPANS TO HEIGHT AS FOLLOWS, UNLESS OTHERWISE NOTED:
 FOR HISTORIC CAR OPERATIONS: 18 ft-6 in ± 3 in
 FOR TROLLEY COACH OPERATIONS: 19 ft-6 in ± 3 in
- BEFORE COMMENCING WORK, THE CONTRACTOR SHALL MEASURE THE TENSIONS OF ALL EXISTING TROLLEY WIRES TO BE SPLICED TO NEW TROLLEY WIRES OR TO BE ATTACHED TO NEW SPECIAL WORK. IF THE TENSION OF EXISTING TROLLEY WIRES IS LESS OR MORE THAN THE NEW TROLLEY WIRES, THE CONTRACTOR SHALL PROVIDE APPROPRIATE DIFFERENTIAL TENSION DEAD END AS PER DETAIL 50, SEE STANDARD DRAWING CL-12953. PLANS FOR THE INSTALLATION OF DIFFERENTIAL TENSION DEAD END SHALL BE SUBMITTED TO THE ENGINEER.
- AT LOCATIONS WHERE THE 24 in SEPARATION BETWEEN TROLLEY WIRES CANNOT BE MAINTAINED, A SPREADER STICK SHALL BE INSTALLED PER DETAIL 49, SEE STANDARD DRAWING CL-12953.
- THE CONTRACTOR SHALL PROVIDE APPROPRIATE TIPS, ITEMS 21 TO 30, AND SPLICERS, ITEMS 31, 32, 33, TO CONNECT TROLLEY WIRES TO SPECIAL WORK ASSEMBLIES AND FOR SPLICING TROLLEY WIRES.
- THE CONTRACTOR SHALL PROVIDE APPROPRIATE JUMPERS, ITEM 13, AND INSULATORS, ITEM 112, WHERE INDICATED ON THE SECTIONALIZATION PLAN. A PERMANENT MAGNETIC ARC BLOWOUT ASSEMBLY, ITEM 119, SHALL BE PROVIDED ON THE FIRST INSULATED RUNNER SECTION OF ALL EXISTING OR NEW CROSSOVERS, SECTION INSULATORS, AND FROGS AND CROSSOVER ASSEMBLIES. SEE STANDARD DRAWING K-101.
- NEW POLE BAND, ITEM 261, SHALL BE PROVIDED FOR ALL NEW AND RELOCATED PULL-OFFS, TANGENT SPANS, INVERTED SPANS, BRAIL SPANS, EQUALIZER SPANS, FEED SPANS, DIFFERENTIAL TENSION DEAD END ASSEMBLIES.
- FOR CLARITY, NOT ALL EXISTING TROLLEY WIRES, SPANS AND OCS HARDWARE TO BE REMOVED ARE SHOWN.
- ALL EYEBOLTS, EXCEPT EXISTING EYEBOLTS TO BE ABANDONED AND THOSE ATTACHED TO JOINT WOOD POLE, SHALL BE TESTED IN ACCORDANCE WITH THE SPECIFICATIONS.

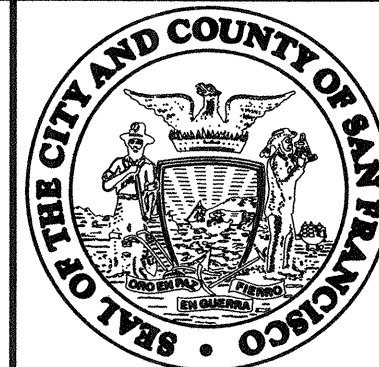
OVERHEAD NOTES

- EXISTING POLE/ EYEBOLT TO REMAIN.
- PROVIDE STEEL TROLLEY POLE WITH FOUNDATION AS SPECIFIED ON THE OCS SCHEDULE. SEE ST-SERIES DRAWINGS FOR FOUNDATION.
- FOR COMBINED TROLLEY POLE WITH STREETLIGHTING AND/OR FEEDER RISER, PROVIDE RISER SPOUT, CONDUITS, ELBOWS, COUPLINGS, AND ALL HARDWARE AND ACCESSORIES AS SHOWN ON STANDARD DRAWING B1646, REV 6. PROVIDE CONDUIT STUB-UP(S) TO WITHIN 1" OF THE BOTTOM OF HANDHOLE. PROVIDE CONDUIT STUB-OUT(S) FROM POLE FOUNDATION A MINIMUM OF 3' FROM EDGE OF POLE FOUNDATION TOWARDS STREETLIGHT PULL BOX AND/OR 180 DEGREES FROM CURB FOR TRACTION POWER RISER CONDUIT. FOR PULLBOX AND RELATED WORK, SEE TP AND SL-SERIES DRAWINGS.
- FOR COMBINED TROLLEY POLE WITH STREETLIGHTING AND/OR TRAFFIC SIGNAL, PROVIDE PULL BOX, CONDUITS, ELBOWS, COUPLINGS AND ALL HARDWARE AND ACCESSORIES AS SHOWN ON STANDARD DRAWING B-1645, REV 4. PROVIDE RISER CONDUIT TO WITHIN 1" OF THE BOTTOM OF HAND HOLE. FOR PULL BOX AND REVISED WORK, SEE ET AND SL-SERIES DRAWINGS.
- CLEAN AND PAINT EXISTING STEEL POLE.
- PROVIDE SIGNAL MAST ARM CONNECTION ON POLE, TYPE AS INDICATED. SEE ST-SERIES DRAWINGS FOR DETAILS.
- REMOVE AND DISPOSE OF EXISTING POLE FOUNDATION BY CUTTING 3 FT BELOW FINISHED GRADE.
- REMOVE AND DISPOSE OF EXISTING POLE FOUNDATION ENTIRELY.
- REMOVE AND DISPOSE OF EXISTING TROLLEY POLE.
- REMOVE AND SALVAGE EXISTING TROLLEY POLE.
- POLE PROVIDED BY OTHERS.
- RELOCATE EXISTING SPANS TO NEW POLE AND ADJUST TENSION AND/OR CLAMP HEIGHT TO ACHIEVE THE REQUIRED TROLLEY WIRE HEIGHT.
- FOR EXTERNAL RISER CONDUIT ARRANGEMENT AT POLE, SEE STANDARD DRAWING A-1456.
- LOCATE EXISTING 2 in RISER AND INTERCEPT WITH NEW CONDUIT OF SAME SIZE. CONTRACTOR SHALL LIMIT THE EXCAVATION WORK WITHIN THE SIDEWALK LIMIT UNLESS THE STREET PAVEMENT IS NOT UNDER EXCAVATION MORATORIUM.
- CONTACT UTILITY AGENCIES TO TRANSFER ATTACHMENTS BEFORE REMOVING EXISTING POLE.
- FOR STREET LIGHTING WORK, REFER TO SL-SERIES DRAWING.
- FOR TRAFFIC SIGNAL WORK, REFER TO ET-SERIES DRAWING.
- FOR TRACTION POWER WORK, REFER TO TP-SERIES DRAWING.
- PROVIDE 45 DEGREE WIRE INLETS WITH INSULATING BUSHINGS AS SHOWN IN STANDARD DRAWING B-1646, REV 6. FOR OVERHEAD FED SERVICE CONNECTIONS.
- ABANDON EXISTING EYEBOLT IN PLACE.
- PROVIDE EYEBOLT AS SPECIFIED ON THE OCS SCHEDULE.
- PROVIDE STEEL TROLLEY POLE AS SPECIFIED ON THE OCS SCHEDULE. FOR SPECIAL POLE FOUNDATION WORK, SEE ST-SERIES DRAWING.
- COORDINATE WITH ATTACHMENT OWNER TO TRANSFER EXISTING POLE ATTACHMENTS TO NEW POLE.

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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

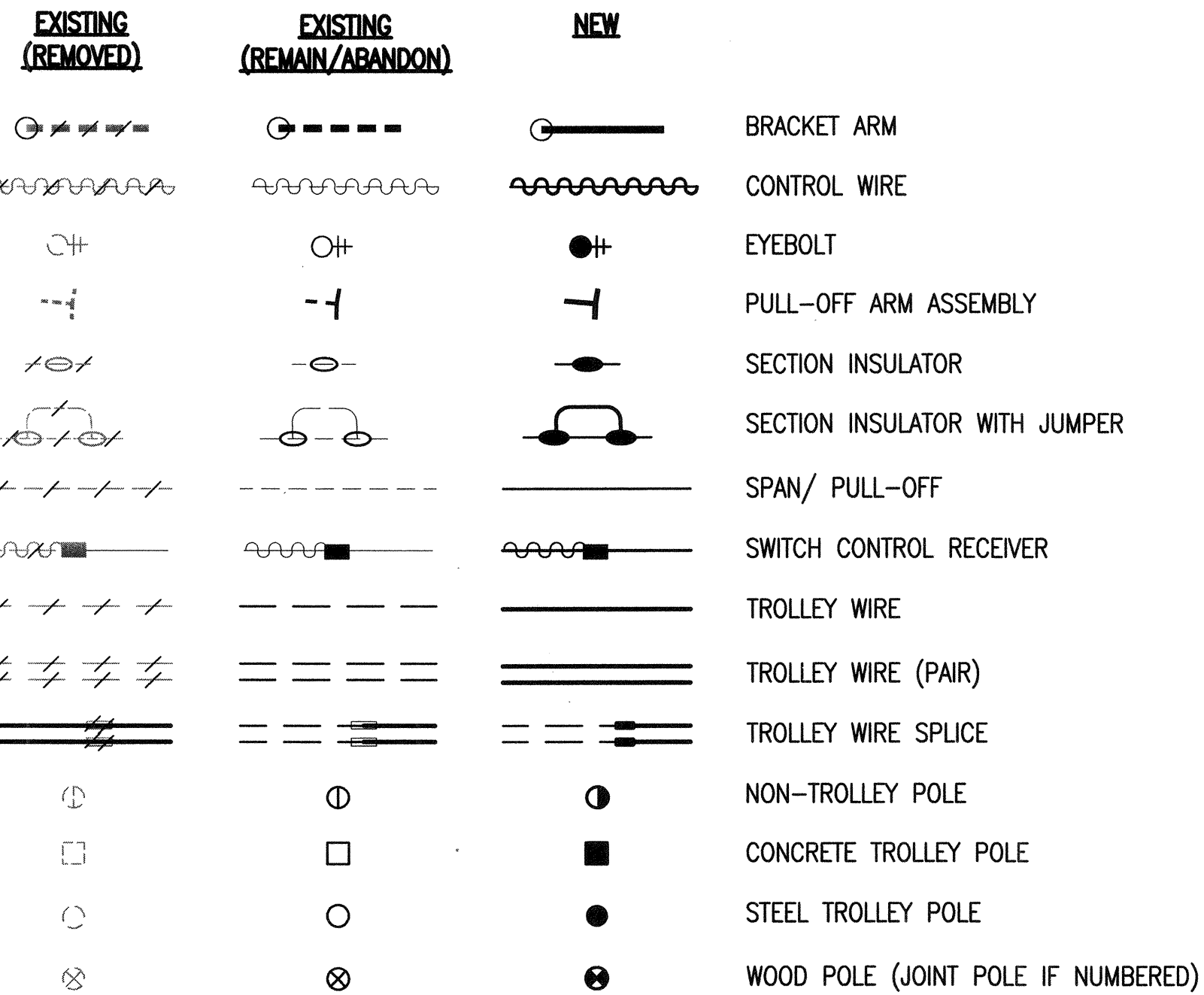
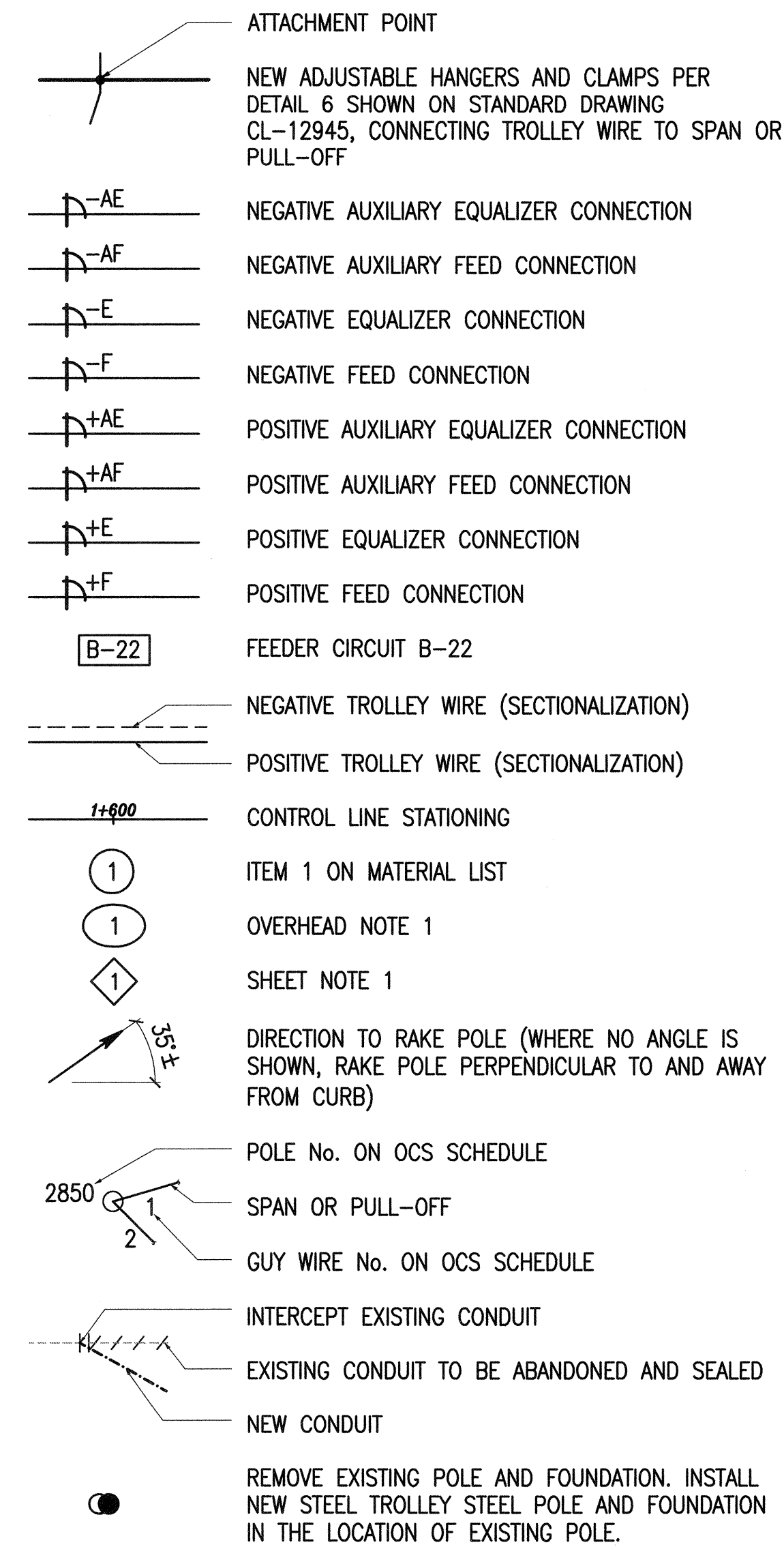
DESIGNED: *[Signature]*
 DRAWN: *[Signature]*
 CHECKED: *[Signature]*
 REVIEWED: *[Signature]*
 RECOMMENDED: *[Signature]*
 APPROVED: *[Signature]*
 DATE: MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM		1289
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT		CL-29098
OVERHEAD CONTACT SYSTEM GENERAL NOTES AND NOTES		REVISION
OV-G1	0	0
OV-G2	0	0

OVERHEAD LEGEND



OVERHEAD ABBREVIATIONS

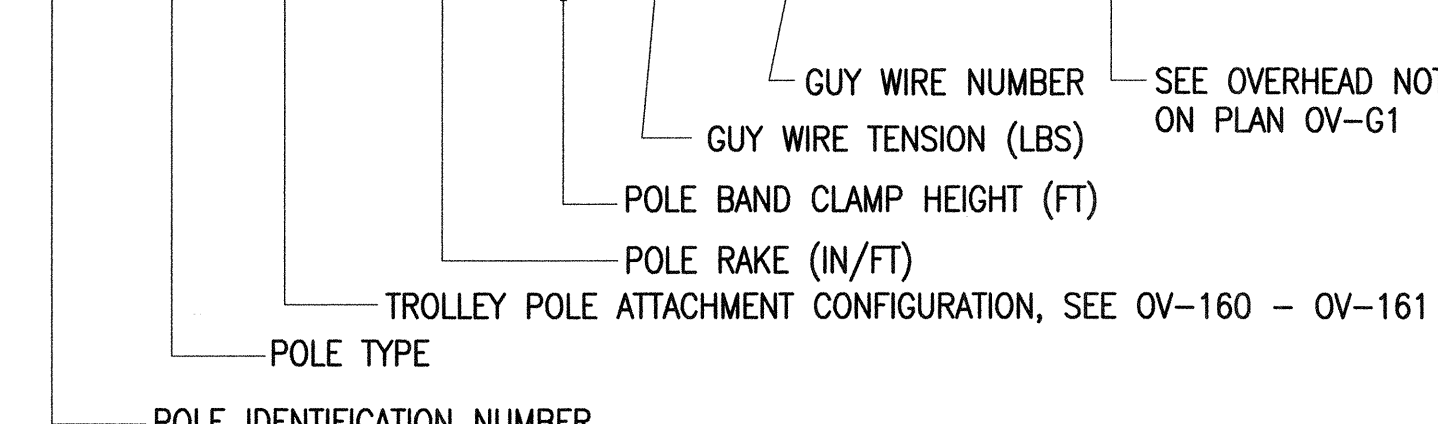
G.O.95 CPUC GENERAL ORDER No 95
 IMPULSE IMPULSE NC, INC
 LH LEFT HAND
 LRV LIGHT RAIL VEHICLE
 PCC PRESIDENT'S CONFERENCE CAR
 RGS RIGID GALVANIZED STEEL
 RH RIGHT HAND
 V VOLT

NOTES:

1. NOT ALL SYMBOLS OR ABBREVIATIONS SHOWN ON THIS SHEET ARE APPLICABLE TO THIS PROJECT.
2. FOR PROJECT GENERAL LEGEND AND ABBREVIATIONS, SEE G-SERIES DRAWINGS.
3. REFER TO OTHER DISCIPLINES FOR APPLICABLE SYMBOLS NOT PROVIDED HERE.

OCS SCHEDULE

POLE No	POLE			GUY WIRE No				OVERHEAD NOTES
	TYPE	TYPE	RAKE	1	2	3	4	
2400	765N	V	1/8	500	2200	-	-	⑦ ⑧ ⑪
				22.50	21.75	-	-	
2401	767	VM	3/8	800	-	-	-	⑦ ⑧ ⑪
				24.25	-	-	-	



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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>Daniel Z.</i>
DRAWN	<i>Daniel Z.</i>
CHECKED	<i>C. Daniel</i>
REVIEWED	<i>J. Manly</i>
RECOMMENDED	<i>F. Mohamoud</i>
APPROVED	<i>F. Mohamoud</i>
DATE	MAY 13 2016

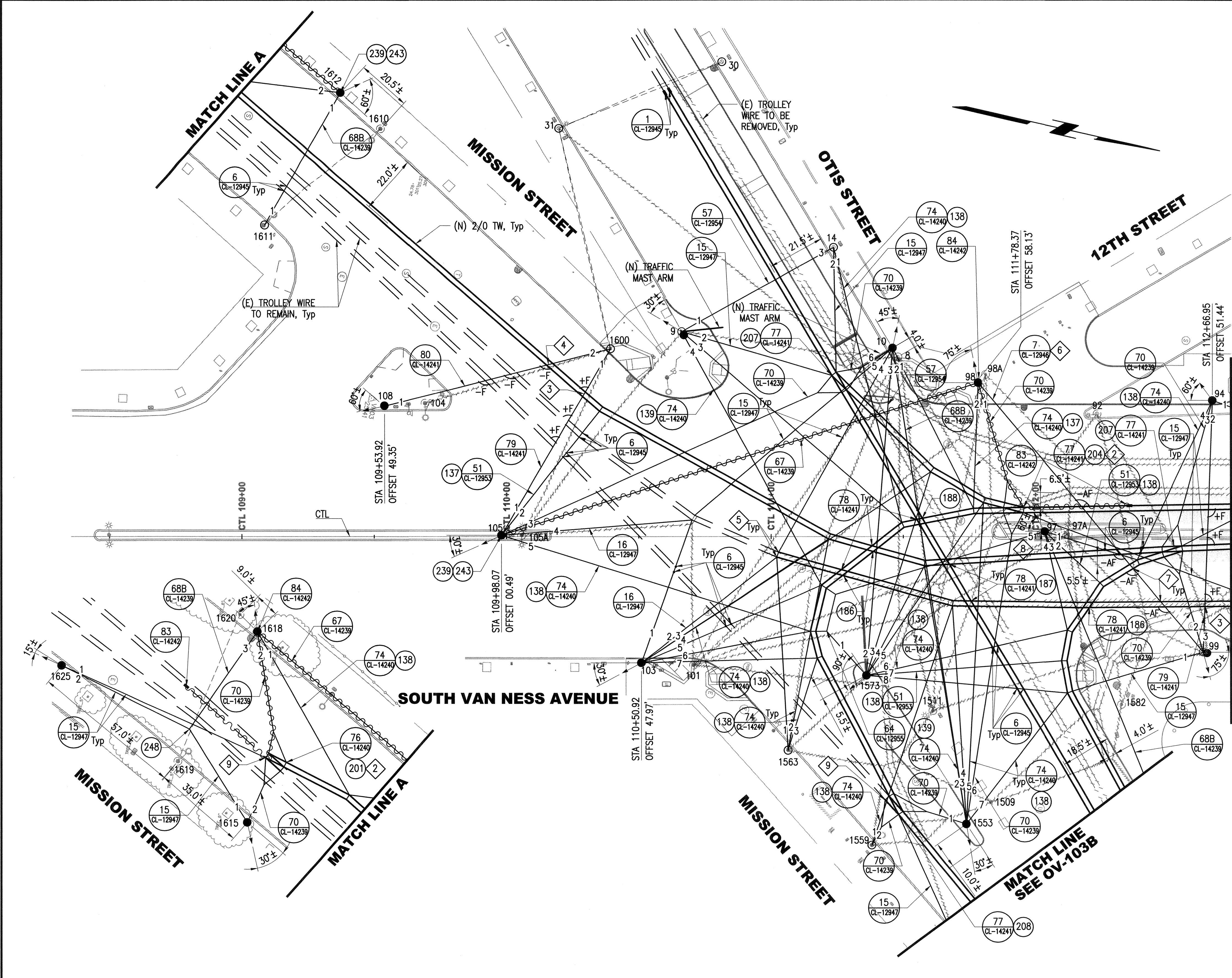
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Sincerely, Ha
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM		1289
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT		CL-29099
OVERHEAD CONTACT SYSTEM LEGEND AND ABBREVIATIONS		REVISION 0

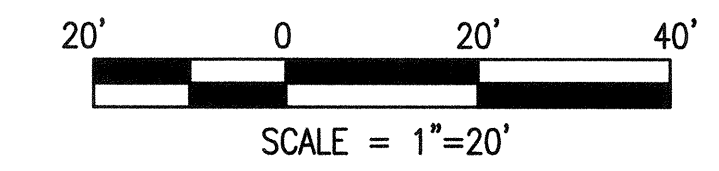
NOTES:

1. SEE OV-103A FOR OCS SCHEDULE AND TROLLEY WIRE SECTIONALIZATION PLAN.
2. RESET FLIPPER TO STRAIGHT.
3. PROVIDE ADDITIONAL ITEMS 49, 51, AND 69.
4. PROVIDE ADDITIONAL ITEMS 49, 51, AND 70.
5. SPLICE (N) TROLLEY WIRE AT THE CARRIED THROUGH PORTION OF (E) CURVE SEGMENT.
6. AUXILIARY FEED SPAN TENSION AND CLAMP HEIGHTS SHALL BE FIELD ADJUSTED TO MAINTAIN A MINIMUM OF 18" ABOVE TROLLEY WIRE.
7. PROVIDE ONE EACH OF FEEDER TAP ITEMS 11, 51, 57, AND 263. STRIP CABLE TO ATTACH CLAMP, WRAP EXPOSED CABLE WITH TWO LAYERS OF ELECTRICAL TAPE AND TWO COATS OF INSULATING VARNISH.
8. SEE OCS SCHEDULE (OV-103A) FOR POLE STATION POINT.
9. SPLICE (N) SWITCH TO (E) TROLLEY WIRE.



MATCH LINE
SEE OV-104

MATCH LINE
SEE OV-103B



NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED *C. David*
 DRAWN *C. David*
 CHECKED *R. Man*
 REVIEWED *J. Man*
 RECOMMENDED *J. Man*
 APPROVED *F. Mohammedi*
 DATE **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

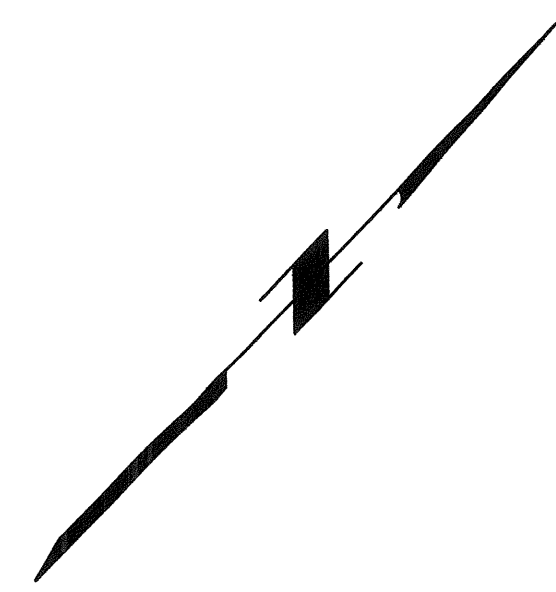
APPROVED
Vincent Han
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

**OVERHEAD CONTACT SYSTEM
 SPECIAL WORK
 CTL STA 108+25 TO 112+75**

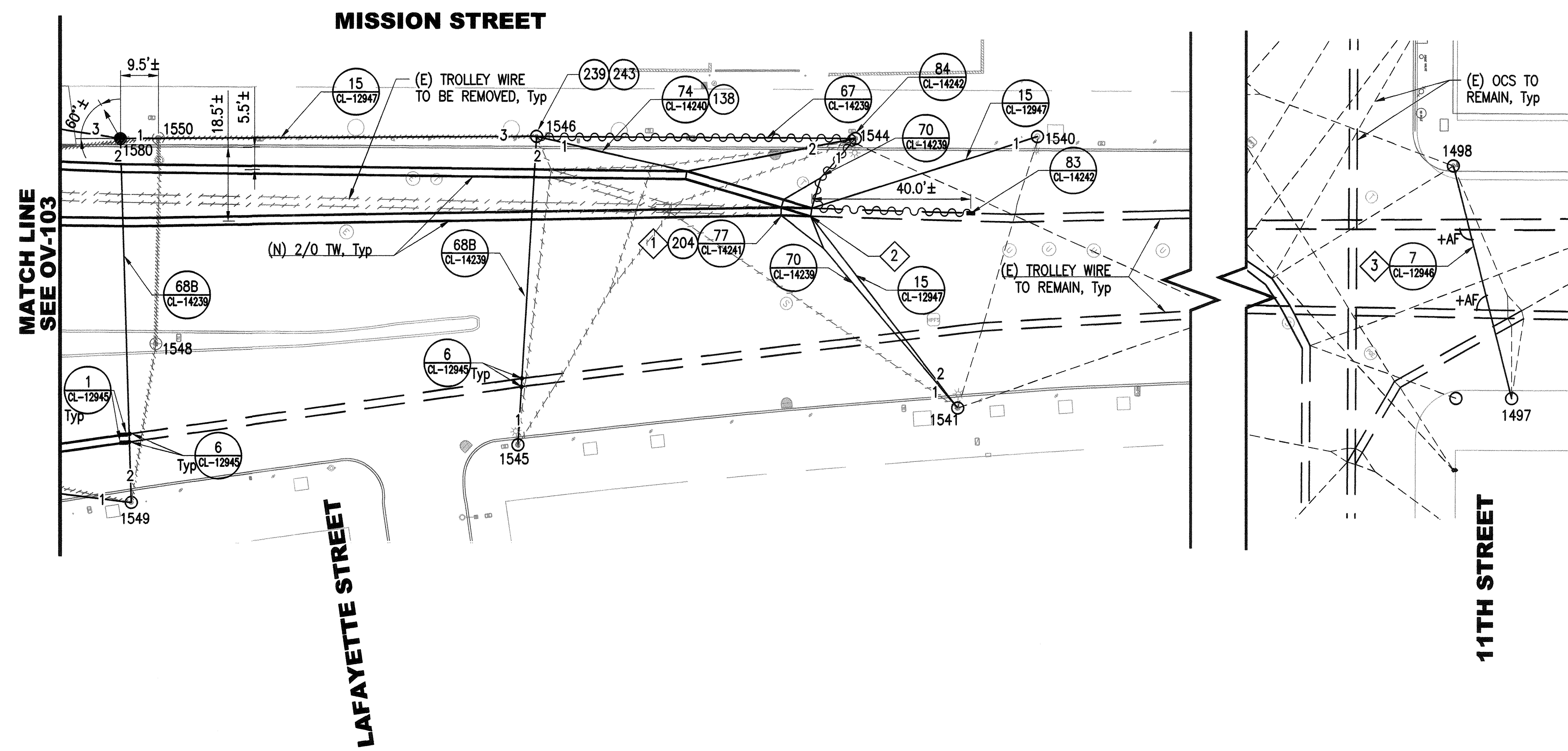
1289
CL-29100
 REVISION
OV-103
OV-161
0

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OCS SCHEDULE							
POLE No.	POLE			GUYWIRE NO.			OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	
1497	-	-	-	-	-	-	(1) (18)
1498	-	-	-	-	-	-	(1)
1540	-	-	-	1900	-	-	(1)
				23.00	-	-	
1541	-	-	-	800	1900	-	(1)
				22.75	23.00	-	
1544	-	-	-	500	2700	-	(1)
				22.25	20.25	-	
1545	-	-	-	750	-	-	(1)
				23.00	-	-	
1546	-	-	-	2550	750	1500	(1)
				20.50	22.25	18.50	
1548	-	-	-	-	-	-	(7) (9) (23)
1549	-	-	-	2750	1000	-	(1)
				22.50	22.00	-	
1550	-	-	-	-	-	-	(7) (9) (23)
1580	770	C	1/32	1500	1000	1000	(2) (4) (16)
				18.50	21.00	23.00	

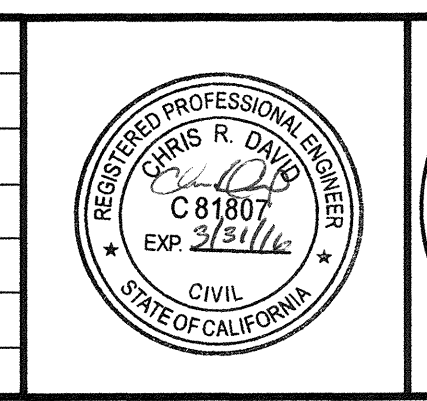
- NOTES:**
1. RESET FLIPPER TO STRAIGHT.
 2. SPLICE (N) SWITCH TO (E) TROLLEY WIRE.
 3. AUXILIARY FEED SPAN TENSION AND CLAMP HEIGHTS SHALL BE FIELD ADJUSTED TO MAINTAIN A MINIMUM OF 18" ABOVE TROLLEY WIRE.



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 NO. DATE DESCRIPTION REVISED CHECKED APPROVED
 REVISIONS
 BORDER REVISED 11/17/05

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

DESIGNED *C. David*
 DRAWN *C. David*
 CHECKED *R. Man*
 REVIEWED *J. Man*
 RECOMMENDED *F. Man*
 APPROVED *F. Man*
 DATE **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED *Vincent Han*
 for the DIRECTOR OF TRANSPORTATION

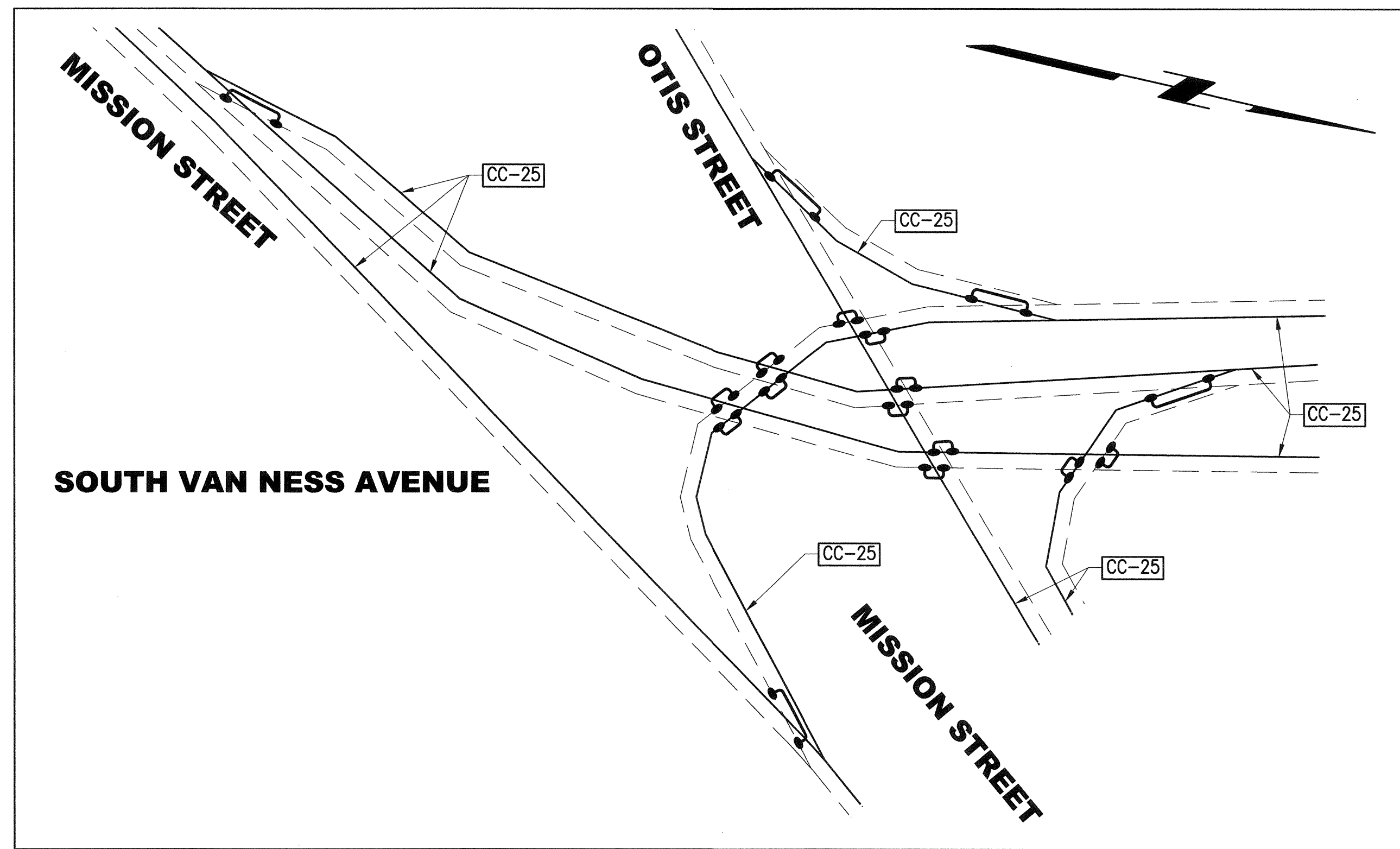
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SPECIAL WORK AND LAYOUT PLAN
 AT MISSION ST AND LAFAYETTE ST

1289	REVISION
CL-29102	0
OV-103B	
OV-161	

OCS SCHEDULE												
POLE No.	POLE			GUYWIRE NO.								OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	8	
8	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
9	770	SVM	6/32	800 22.00	2900 21.50	600 27.75	2550 26.00	-	-	-	-	(2) (4) (6) (8) (9) (17) (23)
10	770	SVM	6/32	200 26.00	2000 26.75	1500 29.00	500 25.25	500 28.50	800 25.00	-	-	(2) (4) (6) (17)
14	-	-	-	1350 25.00	1900 20.25	800 20.50	-	-	-	-	-	(1)
30	-	-	-	-	-	-	-	-	-	-	-	(1)
31	-	-	-	-	-	-	-	-	-	-	-	(1)
92	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
94	770	F	5/32	4000 24.75	1500 23.75	800 21.75	800 24.00	-	-	-	-	(2) (3) (18)
97A	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
97	770	VT	4/32	700 23.50	1700 21.00	1000 23.75	1050 27.50	450 27.50	-	-	-	(2) (4) (16) (17) (2)
98	770	F	2/32	1500 24.50	500 25.75	-	-	-	-	-	-	(2) (3) (18)
98A	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
99	770	VT	2/32	400 25.25	1250 21.50	1500 21.50	-	-	-	-	-	(2) (4) (8) (9) (16) (17) (23)
101	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
103	770	C	6/32	1100 23.25	600 26.00	200 26.50	550 27.00	1450 23.25	1500 25.75	750 26.50	-	(2) (4) (16)
104	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
105	770	C	4/32	600 23.75	850 25.75	800 26.75	450 27.75	900 28.00	-	-	-	(2) (4) (16)
105A	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
108	770	C	1/32	1000 25.25	-	-	-	-	-	-	-	(2) (4) (16)
1509	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1511	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1553	770	S	6/32	1150 22.25	800 28.75	2000 27.75	500 28.50	450 24.50	800 25.00	850 23.00	-	(2)
1559	-	-	-	550 27.50	800 20.50	-	-	-	-	-	-	(1)
1563	-	-	-	600 25.00	800 23.50	350 25.00	-	-	-	-	-	(1)
1573	770	VM	6/32	450 21.00	1500 24.00	550 28.50	600 26.00	700 23.00	1300 27.25	1450 21.50	1100 26.25	(2) (4) (6) (16) (17)

OCS SCHEDULE												
POLE No.	POLE			GUYWIRE NO.								OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	8	
1582	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1600	-	-	-	600 23.50	1000 22.75	-	-	-	-	-	-	(1) (18)
1610	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1611	-	-	-	1000 21.75	-	-	-	-	-	-	-	(1)
1612	765N	S	4/32	1000 23.75	1100 22.75	-	-	-	-	-	-	(2)
1615	765N	S	4/32	1400 21.50	800 22.25	-	-	-	-	-	-	(2)
1618	765N	S	6/32	1100 22.75	1200 22.00	750 23.25	-	-	-	-	-	(2)
1619	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1620	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1625	770	S	4/32	3350 23.25	1300 22.50	-	-	-	-	-	-	(2)

- NOTES:**
- SEE OV-103 FOR SPECIAL WORK AND LAYOUT PLAN.
 - POLE 97 LOCATED AT STA 112+03.53 W/ OFFSET OF 2.00'.

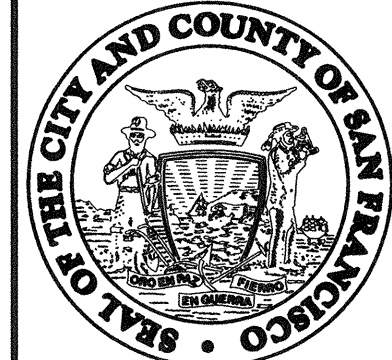


TROLLEY WIRE SECTIONALIZATION PLAN
NTS

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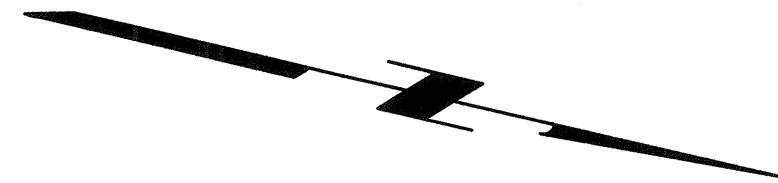
DESIGNED: *D.L.*
 DRAWN: *D.L.*
 CHECKED: *C. Dail*
 REVIEWED: *Jimmy*
 RECOMMENDED: *F. Madhankar*
 APPROVED: *F. Madhankar*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *Vincent...*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 108+25 TO 112+75

1289
 CL-29101
 OVERHEAD CONTACT SYSTEM SCHEDULE
 OV-103A
 OV-161
 REVISION 0

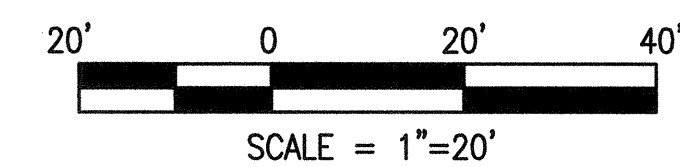
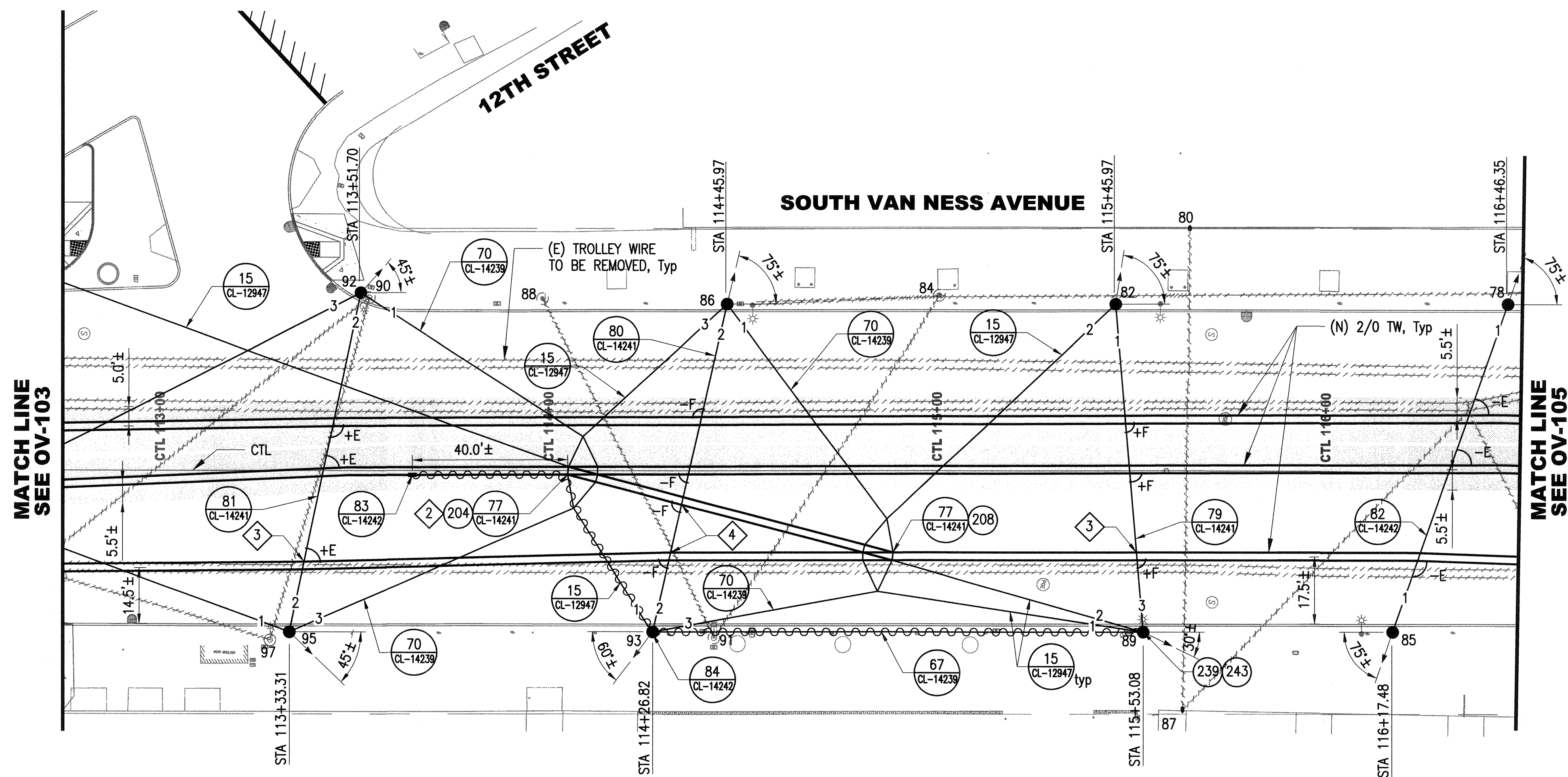


OCS SCHEDULE							
POLE No.	POLE			GUYWIRE NO.			OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	
78	765N	V	5/32	1500 23.50	-	-	(2) (4) (16)
80	-	-	-	-	-	-	(20)
82	765N	VF	5/32	1500 24.25	600 23.50	-	(2) (3) (16) (18)
84	-	-	-	-	-	-	(7) (9) (23)
85	765N	V	5/32	1500 21.75	-	-	(2) (4) (16) (22) (1)
86	765N	VF	5/32	450 24.75	1500 22.75	650 24.25	(2) (3) (16) (18)
87	-	-	-	-	-	-	(20)
88	-	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE							
POLE No.	POLE			GUYWIRE NO.			OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	
89	770	V	5/32	2200 20.75	3850 21.00	1500 22.00	(2) (4) (16)
90	-	-	-	-	-	-	(7) (9) (23)
91	-	-	-	-	-	-	(7) (9) (23)
92	770	V	5/32	550 24.50	1500 23.50	3650 25.00	(2) (4) (16)
93	770	V	3/32	950 23.75	1500 22.50	2200 23.50	(2) (4) (16)
95	770	V	5/32	4700 26.00	1500 21.00	700 24.25	(2) (4) (16)
97	-	-	-	-	-	-	(7) (9) (23)

NOTES:

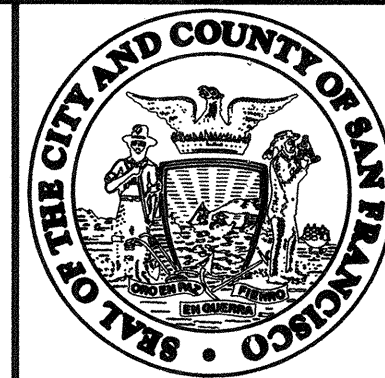
1. CONTRACTOR TO COORDINATE WITH PROPERTY MANAGER PRIOR TO INSTALLATION OF SPECIAL POLE FOUNDATION.
2. RESET FLIPPER TO STRAIGHT.
3. PROVIDE ADDITIONAL ITEMS 49, 51, AND 69.
4. PROVIDE ADDITIONAL ITEMS 49, 51, AND 70



I:\CPTE40.1_Van_Ness_BRTA_2_CFEV\500_Design_Components\501_Drawings\12_Overhead\Sheet_Files\CPTE401OV104.dwg krmundopp Wed Dec 23 2015 - 2:03 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *C. Davis*
 DRAWN: *C. Davis*
 CHECKED: *R. Man*
 REVIEWED: *T. Man*
 RECOMMENDED: *F. Man*
 APPROVED: *F. Man*
 DATE: MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

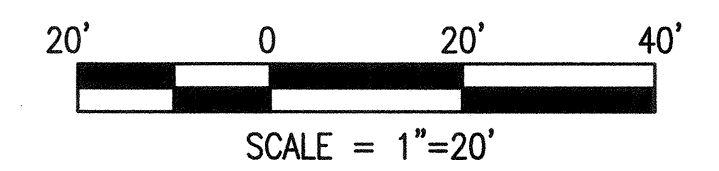
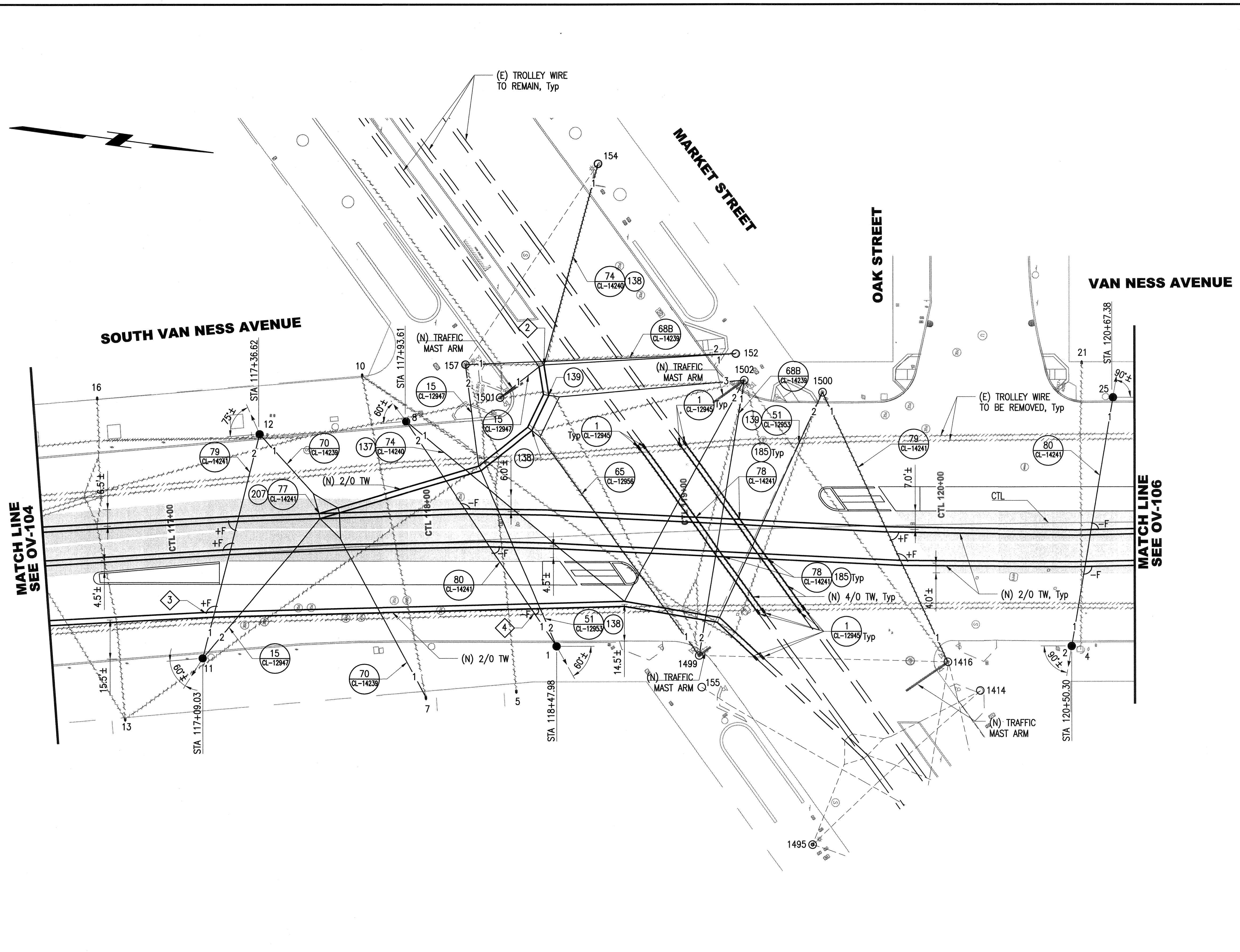
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

**OVERHEAD CONTACT SYSTEM
 LAYOUT PLAN
 CTL STA 112+75 TO 116+50**

1289
CL-29103
OV-104
OV-161
REVISION 0

NOTES:

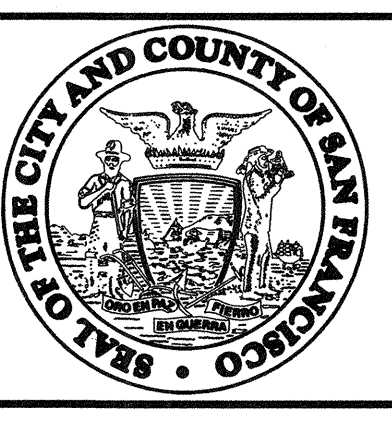
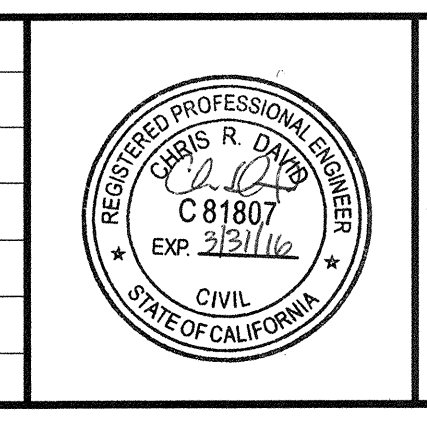
1. SEE OV-105A FOR OCS SCHEDULE AND TROLLEY WIRE SECTIONALIZATION PLAN.
2. SPLICE (E) TROLLEY WIRE AT CARRIED THROUGH PORTION OF (N) CURVE SEGMENT.
3. PROVIDE ADDITIONAL ITEMS 49, 51, AND 69.
4. PROVIDE ADDITIONAL ITEMS 49, 51, AND 70.



I:\CPT640.1 Van Ness BRT\2_CER\500_Design_Components\501_Drawings\12_Overhead\Sheet Files\CPT6401OV105.dwg kmondapa Wed Feb 03 2016 - 4:37 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>C. D. D.</i>
DRAWN	<i>C. D. D.</i>
CHECKED	<i>R. Man</i>
REVIEWED	<i>Mark A. Rubin</i> for PAMG
RECOMMENDED	<i>Mark A. Rubin</i>
APPROVED	<i>Mark A. Rubin</i> for F.M.
DATE	2 - APR 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Vincent Han
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

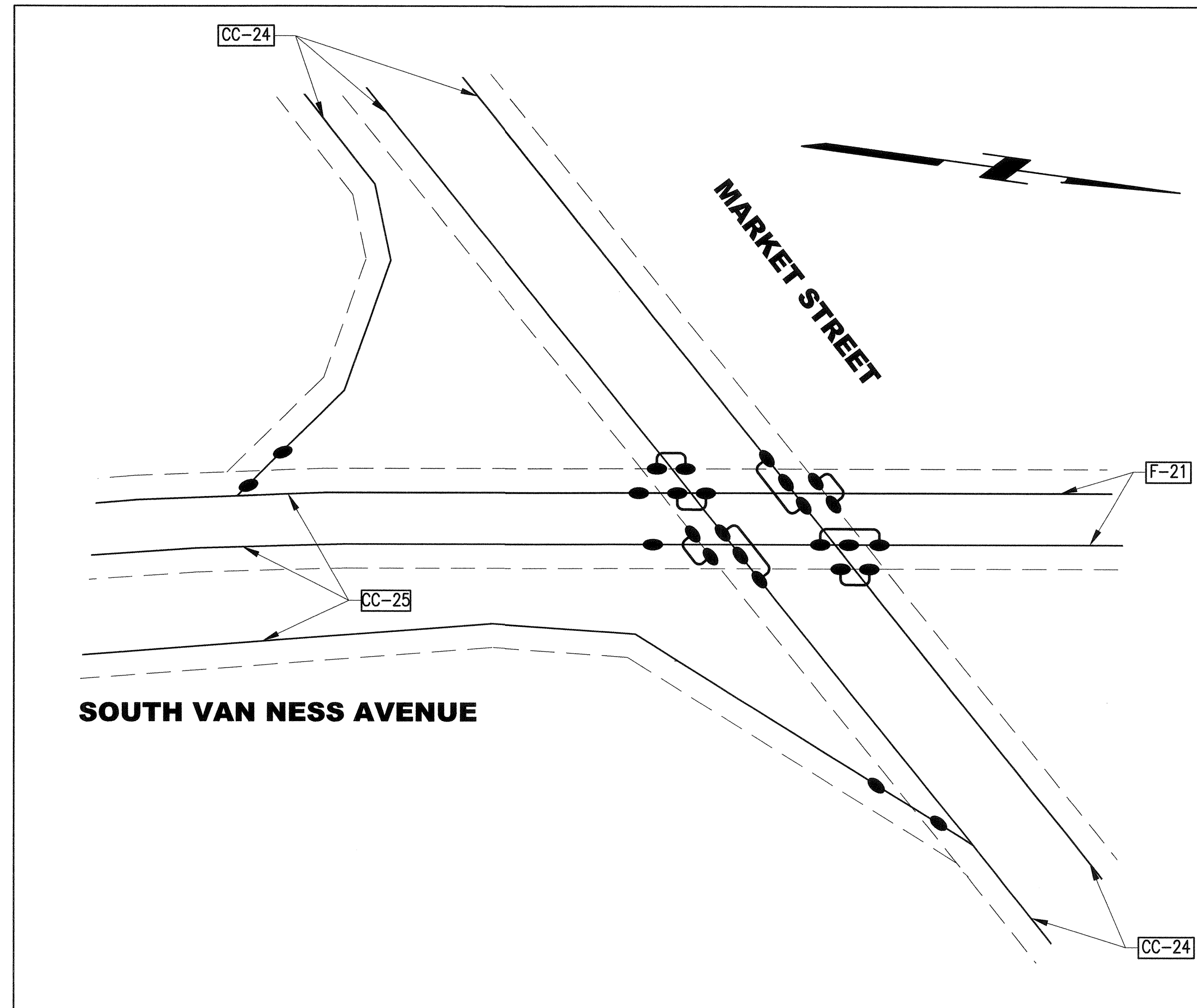
OVERHEAD CONTACT SYSTEM
 SPECIAL WORK
 CTL STA 116+50 TO 120+75

1289	CL-29104
OV-105	REVISION
OV-161	0

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
1	770	V	3/32	2000	1900	-	-	-	-	-	(2) (4) (16) (22)
				21.25	23.75	-	-	-	-	-	
2	765N	VM	5/32	1500	-	-	-	-	-	-	(2) (4) (6) (16) (17)
				21.50	-	-	-	-	-	-	
4	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
5	-	-	-	-	-	-	-	-	-	-	(20)
7	-	-	-	800	-	-	-	-	-	-	(1)
				25.00	-	-	-	-	-	-	
8	770	VF	3/32	350	2000	-	-	-	-	-	(2) (3) (6) (16) (18) (22)
				28.00	25.25	-	-	-	-	-	
10	-	-	-	-	-	-	-	-	-	-	(20)
11	770	V	4/32	1500	3450	-	-	-	-	-	(2) (4) (16) (22) (2)
				21.50	21.25	-	-	-	-	-	
12	767	VF	5/32	3000	1500	-	-	-	-	-	(2) (3) (16) (18)
				21.25	23.25	-	-	-	-	-	
13	-	-	-	-	-	-	-	-	-	-	(20)
16	-	-	-	-	-	-	-	-	-	-	(20)
21	-	-	-	-	-	-	-	-	-	-	(20)
25	765N	VF	5/32	1500	-	-	-	-	-	-	(2) (3) (16) (18) (22)
				23.50	-	-	-	-	-	-	
152	-	-	-	1850	1500	-	-	-	-	-	(1)
				22.25	21.75	-	-	-	-	-	
154	-	-	-	750	-	-	-	-	-	-	(1)
				22.00	-	-	-	-	-	-	
155	-	-	-	-	-	-	-	-	-	-	(1)
157	-	-	-	1500	400	-	-	-	-	-	(1) (3)
				23.00	23.25	-	-	-	-	-	
1414	-	-	-	-	-	-	-	-	-	-	(1)
1416	-	-	-	1500	-	-	-	-	-	-	(1) (5) (17) (3)
				25.00	-	-	-	-	-	-	
1495	-	-	-	-	-	-	-	-	-	-	(1)
1499	-	-	-	1950	2500	-	-	-	-	-	(1) (5) (17) (3)
				25.50	25.75	-	-	-	-	-	
1500	-	-	-	1500	2300	-	-	-	-	-	(1) (5) (18)
				24.50	24.75	-	-	-	-	-	
1501	-	-	-	400	-	-	-	-	-	-	(1) (5) (6)
				19.50	-	-	-	-	-	-	
1502	-	-	-	2500	650	2550	-	-	-	-	(1) (5) (17) (3)
				24.50	25.00	22.50	-	-	-	-	

NOTES:

- SEE OV-105 FOR SPECIAL WORK.
- CONTRACTOR TO COORDINATE WITH PROPERTY MANAGER TO AVOID UTILITIES IN THE SUBSIDEWALK BASEMENT.
- FOR NEW SIGNAL MAST ARM CONNECTION TO EXISTING POLE, SEE ST-SERIES DRAWINGS FOR DETAIL.

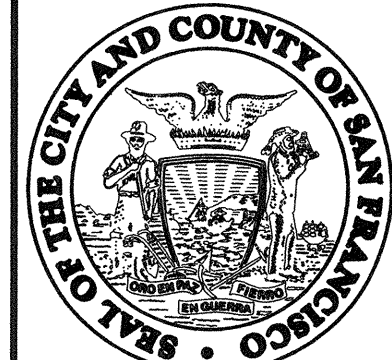


TROLLEY WIRE SECTIONALIZATION PLAN
NTS

I:\CP16401_Van Ness BRT_V2_CER\500_Design Components\501_Drawings\12_Overhead\Sheet_Files\CP16401OV105A.dwg d12 Mon Jul 06 2015 4:43 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

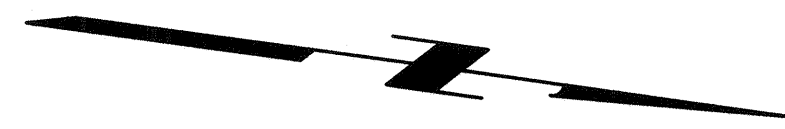
DESIGNED: *C. Omb*
 DRAWN: *C. Omb*
 CHECKED: *P. Man*
 REVIEWED: *J. Man*
 RECOMMENDED: *F. Mohr*
 APPROVED: *F. Mohr*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *Vincent*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 116+50 TO 120+75

1289
 CL-29105
 OVERHEAD CONTACT SYSTEM SCHEDULE
 OV-105A
 OV-161
 REVISION
 0

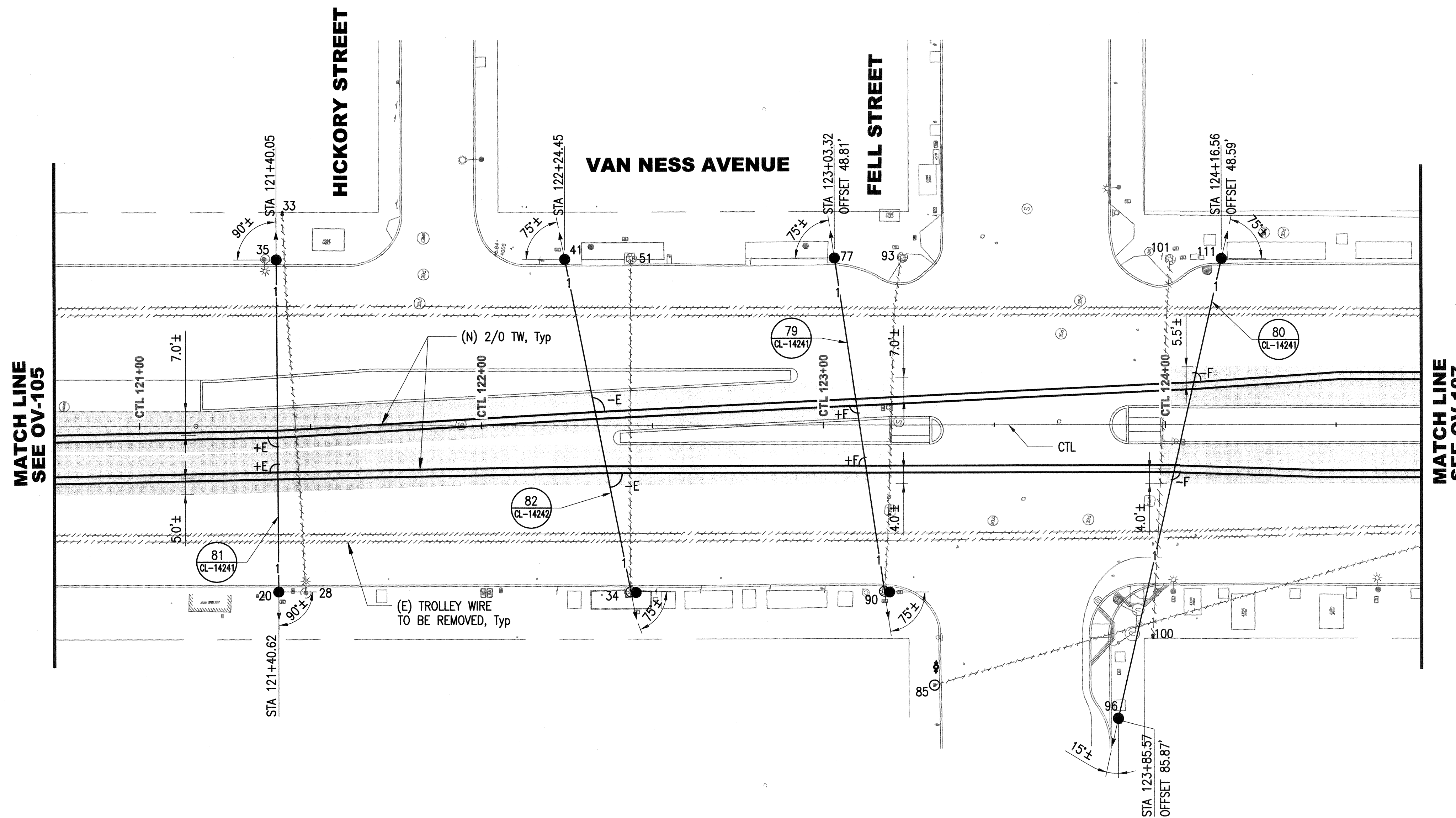


OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
20	765N	V	5/32	1400 22.00	-	(2) (4) (16)
28	-	-	-	-	-	(7) (9) (23)
33	-	-	-	-	-	(20)
34	765N	V	4/32	1200 22.50	-	(2) (4) (8) (9) (16) (23)
35	765N	V	5/32	1400 23.50	-	(2) (4) (16) (22)
41	765N	V	5/32	1200 23.25	-	(2) (4) (16)
51	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
77	770	VF	3/32	1400 24.00	-	(2) (3) (16) (18)
85	-	-	-	-	-	(1)
90	770	VT	3/32	1400 23.00	-	(2) (4) (8) (9) (16) (17) (23)
93	-	-	-	-	-	(7) (9) (23)
96	770	S	3/32	1400 24.50	-	(2) (4) (17) (22) (1)
100	-	-	-	-	-	(20)
101	-	-	-	-	-	(7) (9) (23)
111	770	VF	3/32	1400 22.00	-	(2) (3) (16) (18)

NOTE:

- CONTRACTOR TO COORDINATE WITH PROPERTY MANAGER TO AVOID UTILITIES IN THE SUBSIDEWALK BASEMENT.

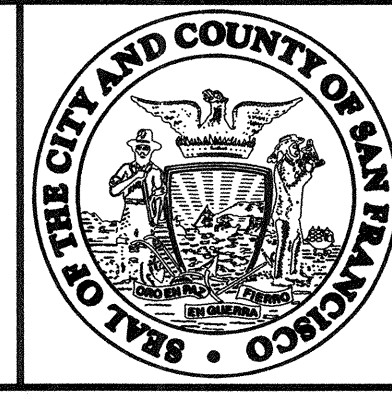
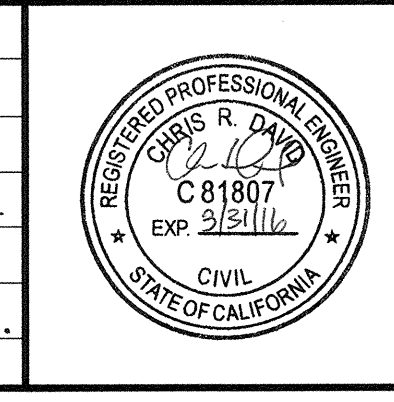


I:\CP1640.1_Van_Ness_BRT\2_CER\500_Design_Components\501_Drawings\12_Overhead\Sheet_Files\CP16401OV106.dwg kmandapa Wed Feb 03,2016 - 4:44 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

DESIGNED	DRAWN	CHECKED	REVIEWED	RECOMMENDED	APPROVED	DATE
<i>R. Mandapat</i>	<i>R. Mandapat</i>	<i>C. D. Duff</i>	<i>Mohd. Rudnick</i>	<i>Mohd. Rudnick</i>	<i>Mohd. Rudnick</i>	2-4-16

APPROVED
Mohd. Rudnick
for F.M.



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Vincent...
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

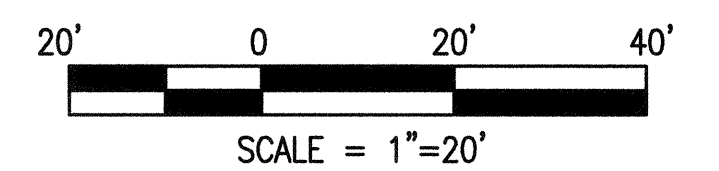
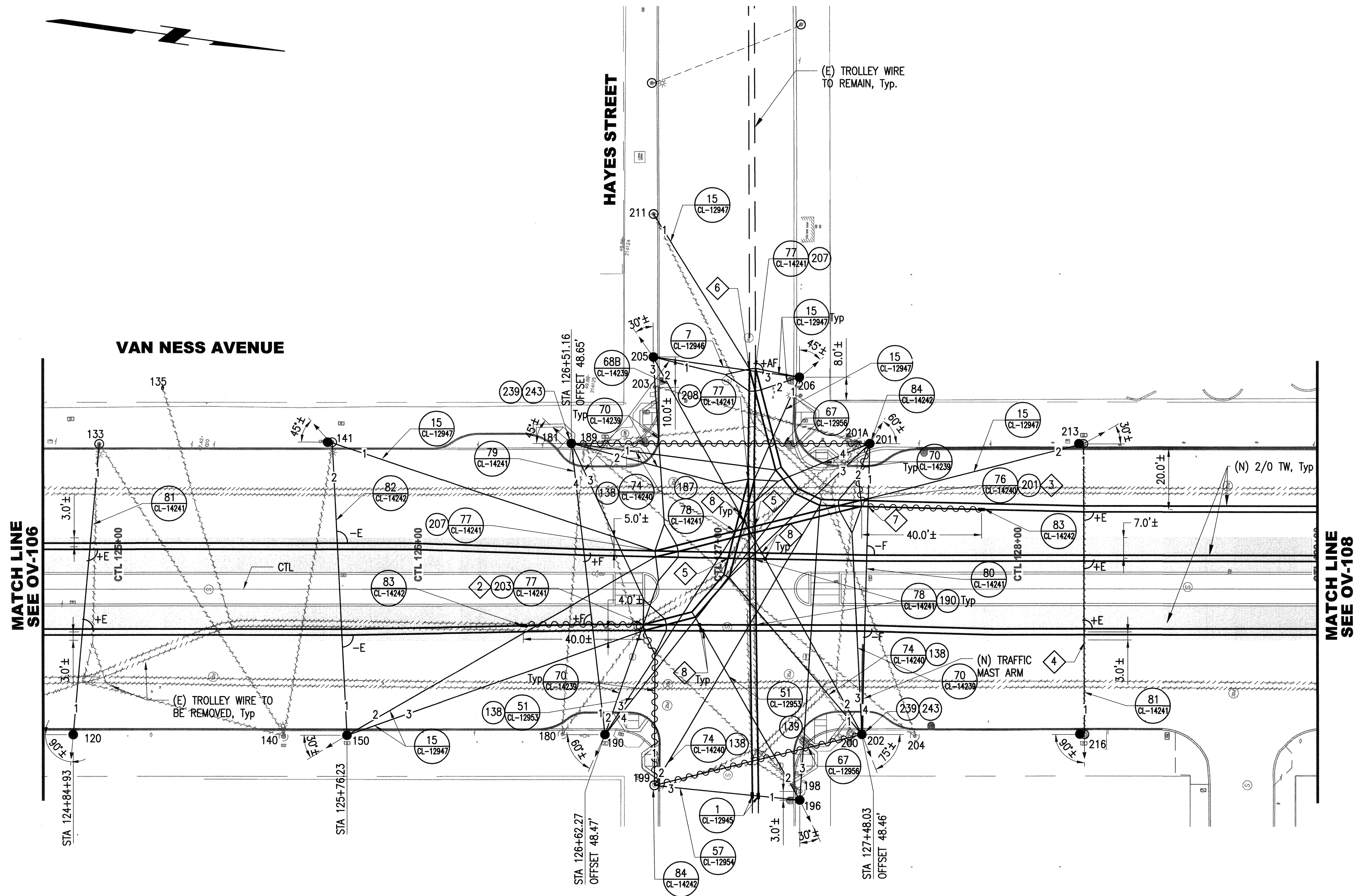
OVERHEAD CONTACT SYSTEM
LAYOUT PLAN
CTL STA 120+75 TO 124+75

1289	CL-29106
OV-106	REVISION
OV-161	0



NOTES:

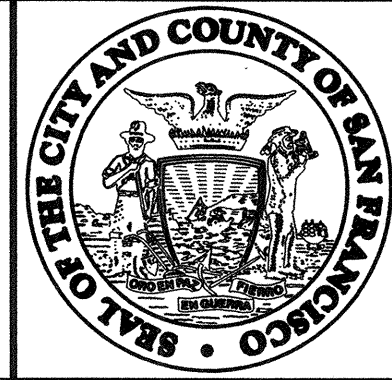
1. SEE OV-107A FOR OCS SCHEDULE AND TROLLEY WIRE SECTIONALIZATION PLAN.
2. RESET FLIPPER TO STRAIGHT.
3. RESET FLIPPER TO CURVE.
4. PROVIDE ADDITIONAL ITEMS 49, 51, AND 69.
5. PROVIDE CROSSOVER, DETAIL 78, WITH ITEM 189 (75') AS SHOWN ON CL-14241.
6. SPLICE (N) SWITCH TO (E) TROLLEY WIRE.
7. PROVIDE ADDITIONAL ITEMS 49, 51, AND 70.
8. PROVIDE HANGER, DETAIL 6, AS SHOWN ON CL-12945



I:\CP1640.1_Van_Ness_BRT_V2_CER\500_Design_Components\501_Drawings\12_Overhead\Sheet Files\CP16401OV107.dwg H:\Thal Mon Dec 28 2015 1:23 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>D. H.</i>
DRAWN	<i>D. H.</i>
CHECKED	<i>C. Daniel</i>
REVIEWED	<i>Thomas</i>
RECOMMENDED	<i>Proctor</i>
APPROVED	<i>F. McManus</i>
DATE	MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

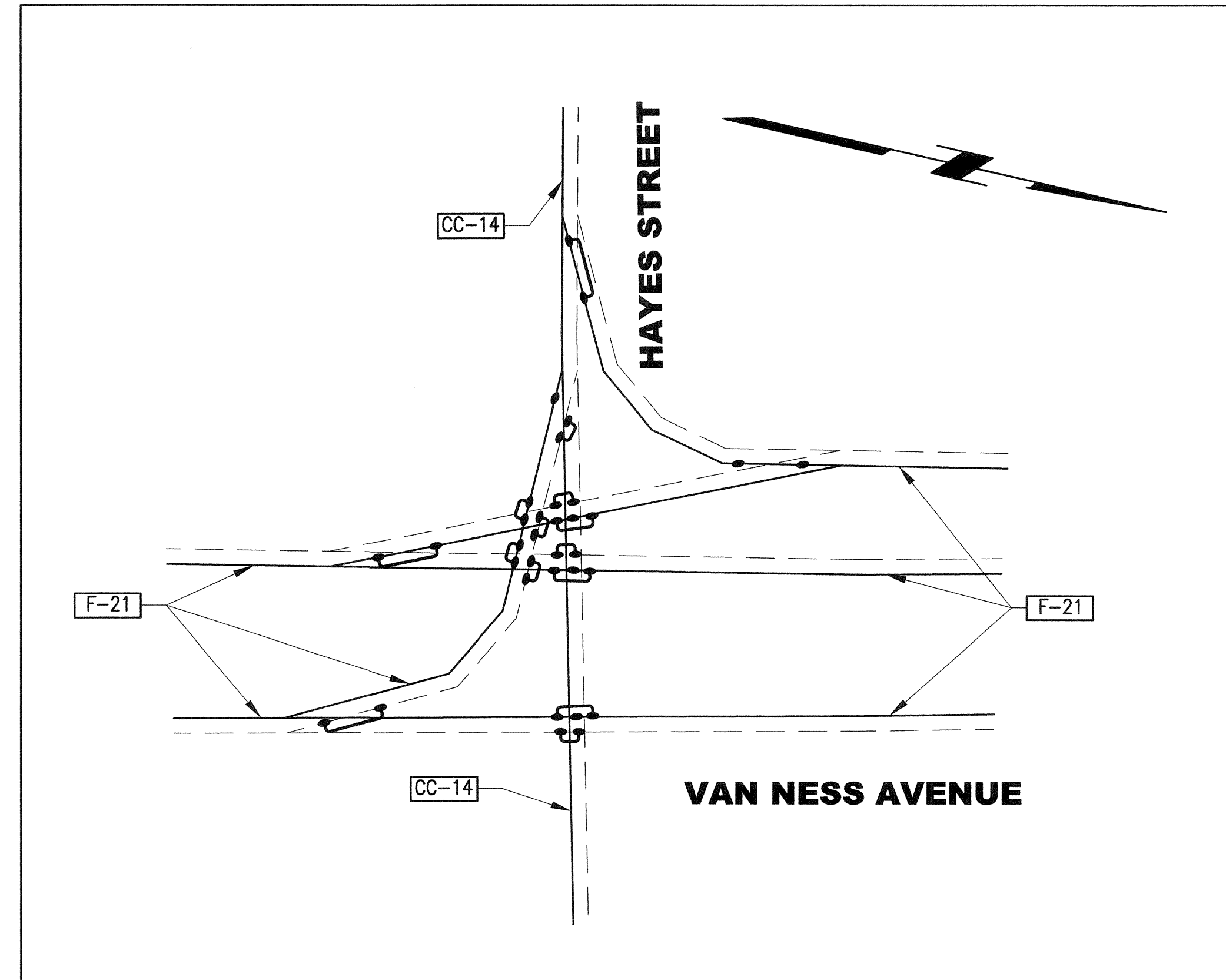
**OVERHEAD CONTACT SYSTEM
 SPECIAL WORK AND LAYOUT PLAN
 CTL STA 124+75 TO 129+00**

1289
CL-29107
REVISION
0

NOTE:

1. SEE OV-107 FOR SPECIAL WORK AND LAYOUT PLAN.

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
120	765N	V	4/32	1000 23.25	-	-	-	-	-	-	(2) (4) (16) (22)
133	-	-	-	1000 23.25	-	-	-	-	-	-	(1) (5)
135	-	-	-	-	-	-	-	-	-	-	(20)
140	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
141	770	V	2/32	1250 26.00	1000 23.25	-	-	-	-	-	(2) (4) (8) (9) (16) (23)
150	770	V	6/32	1000 23.25	2800 24.00	3600 21.75	-	-	-	-	(2) (4) (16)
180	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
181	770	VF	4/32	950 24.75	1200 25.75	1100 26.00	1000 23.25	-	-	-	(2) (3) (16) (18)
189	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
190	770	VT	5/32	1000 23.50	800 26.50	1050 24.25	1700 25.50	-	-	-	(2) (4) (16) (17)
196	770	T	4/32	500 21.50	2350 26.50	1100 23.50	-	-	-	-	(2) (4) (17)
198	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
199	-	-	-	800 24.75	650 21.75	500 22.25	-	-	-	-	(1)
200	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
201	770	VF	3/32	1200 23.50	800 22.00	800 27.75	800 23.75	-	-	-	(2) (3) (16) (18)
201A	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
202	770	VM	5/32	1750 27.75	1000 24.50	700 23.00	1200 23.50	-	-	-	(2) (4) (6) (16) (17)
203	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
204	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
205	770	F	2/32	800 21.50	1000 23.00	800 26.25	-	-	-	-	(2) (3) (14) (18)
206	770	C	4/32	3550 22.25	400 20.25	1900 20.00	-	-	-	-	(2) (4) (16)
211	-	-	-	4650 20.75	-	-	-	-	-	-	(1)
213	770	V	4/32	1200 22.25	3700 23.50	-	-	-	-	-	(2) (4) (8) (9) (16) (23)
216	767	V	3/32	1200 23.75	-	-	-	-	-	-	(2) (4) (8) (9) (16) (23)

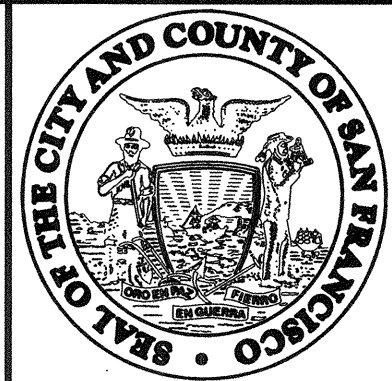


TROLLEY WIRE SECTIONALIZATION PLAN
NTS

I:\CPT6401_Van Ness BRT\2_CER\500_Design Components\501_Drawings\2_Overhead\Sheet Files\CPT6401OV107A.dwg kmandapa Wed Jul 01 2015 3:58 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

DESIGNED: *Paul Z.*
 DRAWN: *Paul Z.*
 CHECKED: *C. O'Neil*
 REVIEWED: *J. Wang*
 RECOMMENDED: *W. B. ...*
 APPROVED: *F. Mohamud*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

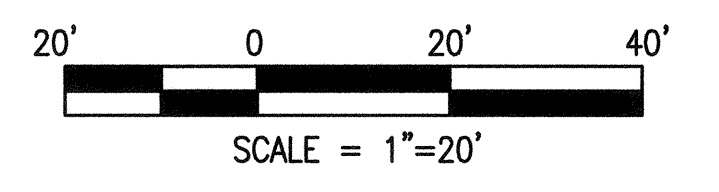
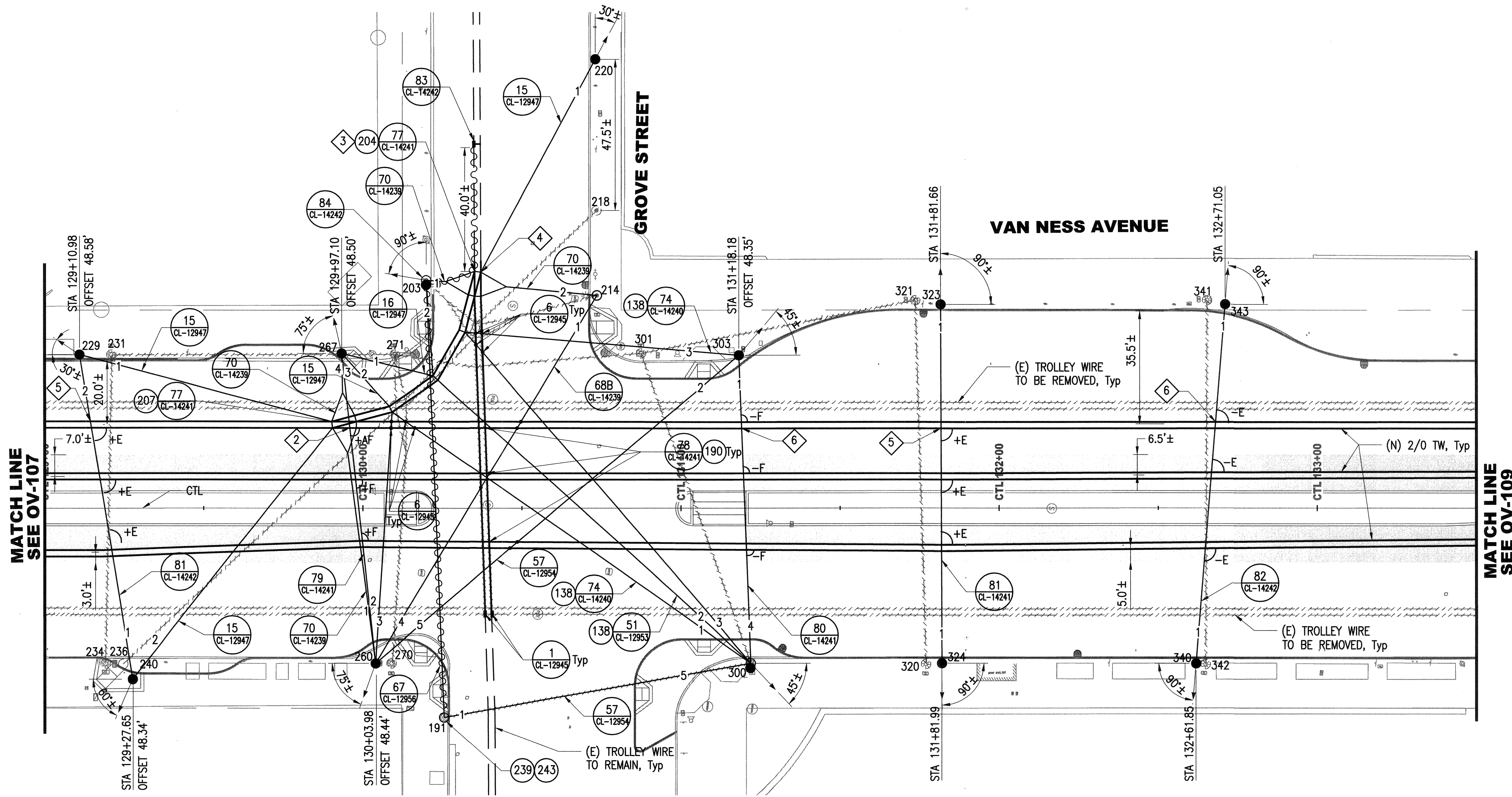
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 124+75 TO 129+00

1289
 CL-29108
 REVISION
 0

NOTES:

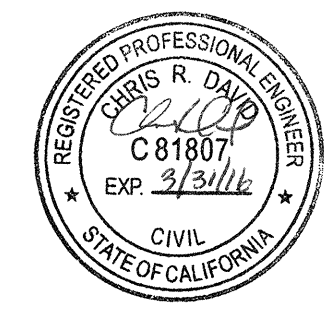
1. SEE OV-108A FOR OCS SCHEDULE AND TROLLEY WIRE SECTIONALIZATION PLAN.
2. PROVIDE ONE EACH OF FEEDER TAP ITEMS 11, 51, 57, AND 263. STRIP CABLE TO ATTACH CLAMP, WRAP EXPOSED CABLE WITH TWO LAYERS OF ELECTRICAL TAPE AND TWO COATS OF INSULATING VARNISH.
3. RESET FLIPPER TO STRAIGHT.
4. SPLICE (N) SWITCH TO (E) TROLLEY WIRE.
5. PROVIDE ADDITIONAL ITEMS 49, 51, AND 69.
6. PROVIDE ADDITIONAL ITEMS 49, 51, AND 70.



I:\PT640\1_Van Ness BRT\2_CER\500_Design Components\501_Drawings\12_Overhead\Sheet Files\CPT64010V108.dwg H:\Thal Mon Dec 28 2015 3:21 pm
 BORDER REVISED 11/17/05

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *V.Li*
 DRAWN: *D.Li*
 CHECKED: *C.Daniel*
 REVIEWED: *J.May*
 RECOMMENDED: *F.Mohamoud*
 APPROVED: *F.Mohamoud*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

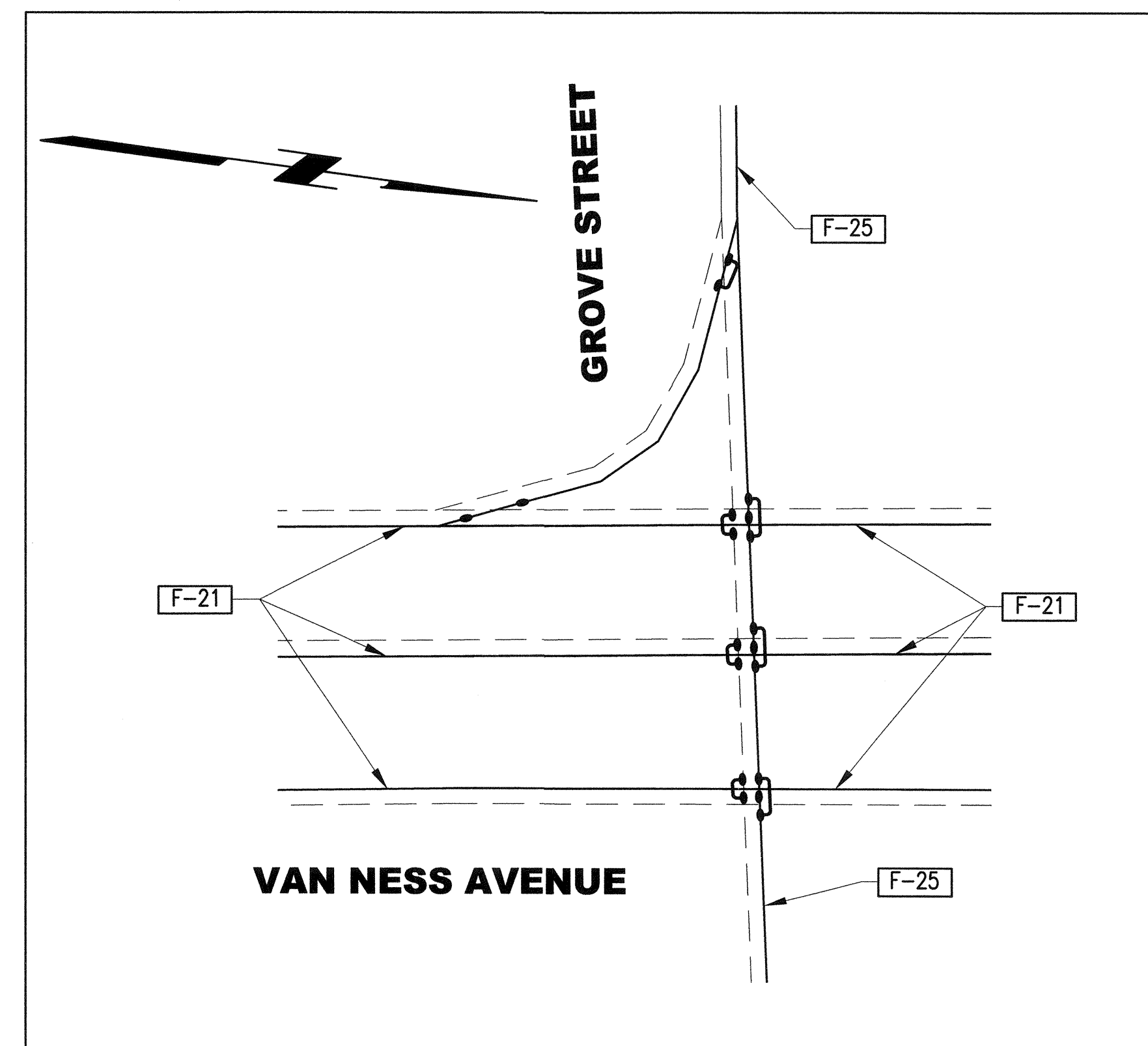
**OVERHEAD CONTACT SYSTEM
 SPECIAL WORK AND LAYOUT PLAN
 CTL STA 129+00 TO 133+50**

1289	
CL-29109	
OV-108	REVISION
OV-161	0

NOTE:

- SEE OV-108 FOR SPECIAL WORK AND LAYOUT PLAN.

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
191	-	-	-	500	-	-	-	-	-	-	(1)
				21.75	-	-	-	-	-	-	
203	770	S	1/32	1850	200	-	-	-	-	-	(2) (8) (9) (23)
				20.50	22.25	-	-	-	-	-	
214	-	-	-	1850	800	-	-	-	-	-	(1)
				25.25	22.00	-	-	-	-	-	
218	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
220	770	S	4/32	4350	-	-	-	-	-	-	(2)
				22.50	-	-	-	-	-	-	
229	767	V	5/32	2700	1200	-	-	-	-	-	(2) (4) (16)
				23.50	23.00	-	-	-	-	-	
231	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
234	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
236	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
240	770	V	3/32	1200	2250	-	-	-	-	-	(2) (4) (16)
				24.75	23.75	-	-	-	-	-	
260	770	VT	6/32	800	800	950	1850	1200	-	-	(2) (4) (16) (17)
				24.00	25.00	24.00	27.75	27.00	-	-	
267	770	VF	2/32	300	400	800	800	-	-	-	(2) (3) (16) (18)
				21.75	23.00	25.25	20.75	-	-	-	
270	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
271	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
300	770	VM	5/32	1050	2150	450	1200	500	-	-	(2) (4) (6) (8) (9) (16) (17) (23)
				26.75	25.00	25.75	20.75	24.00	-	-	
301	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
303	770	VTF	2/32	1200	1200	650	-	-	-	-	(2) (3) (13) (17) (16) (18)
				20.25	26.25	27.25	-	-	-	-	
320	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
321	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
323	765N	V	5/32	1500	-	-	-	-	-	-	(2) (4) (16)
				23.75	-	-	-	-	-	-	
324	765N	V	5/32	1500	-	-	-	-	-	-	(2) (4) (16)
				23.00	-	-	-	-	-	-	
340	765N	V	5/32	1300	-	-	-	-	-	-	(2) (4) (16)
				23.50	-	-	-	-	-	-	
341	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
342	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
343	765N	V	5/32	1300	-	-	-	-	-	-	(2) (4) (16)
				25.00	-	-	-	-	-	-	

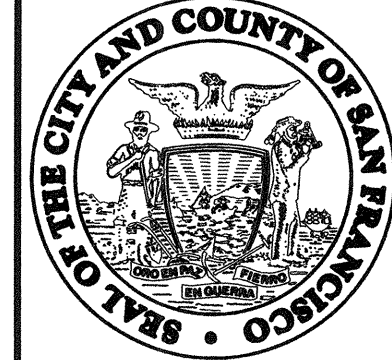


TROLLEY WIRE SECTIONALIZATION PLAN
NTS

I:\CPT6401_Van_Ness_BRT\2_CER\500_Design_Components\501_Drawings\12_Overhead\Sheet_Files\CPT6401OV108A.dwg.dif2 Thu Aug 13 2015 10:41 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

DESIGNED: *[Signature]*
 DRAWN: *[Signature]*
 CHECKED: *[Signature]*
 REVIEWED: *[Signature]*
 RECOMMENDED: *[Signature]*
 APPROVED: *[Signature]*
 DATE: MAY 13 2016

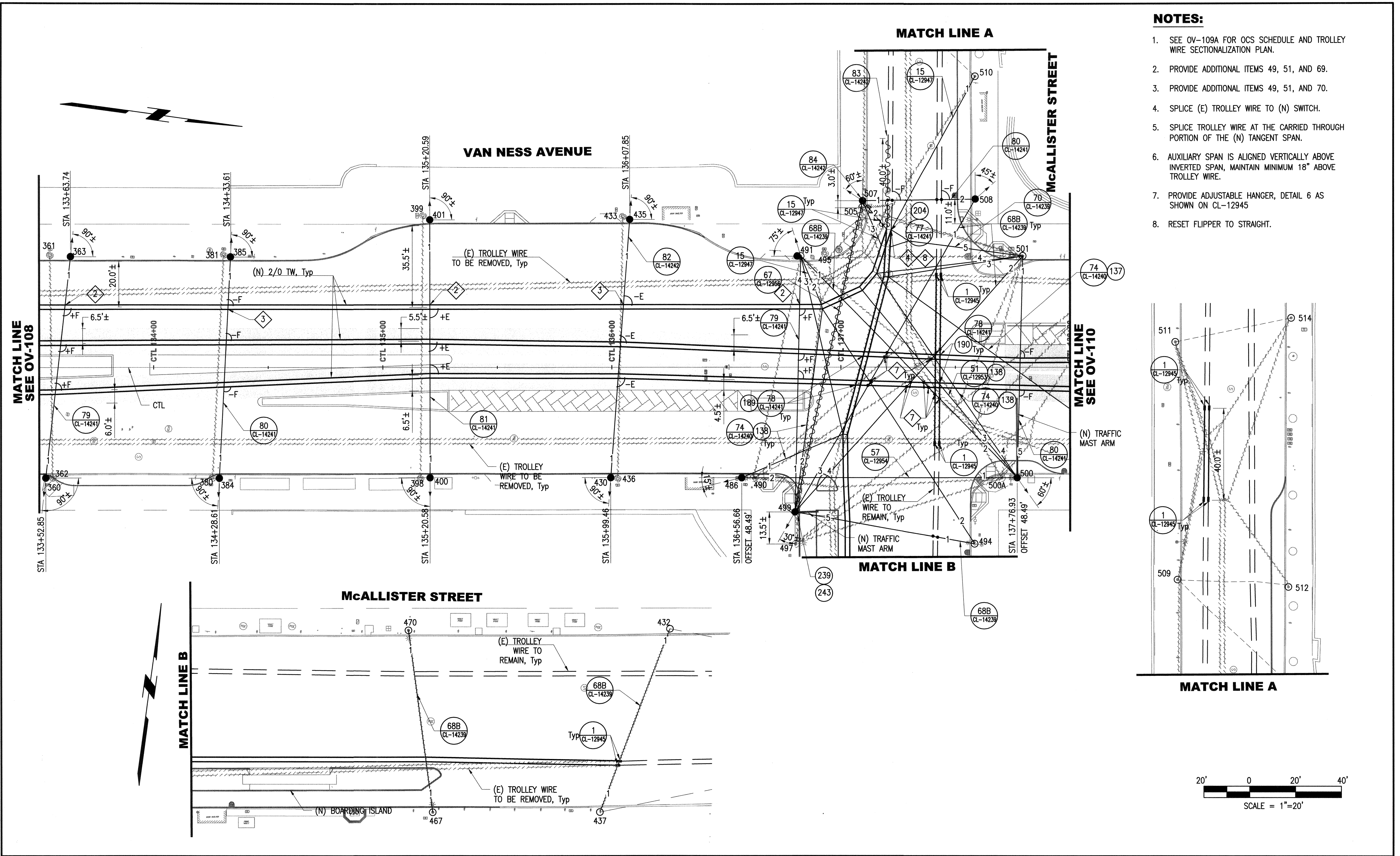


CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 129+00 TO 133+50

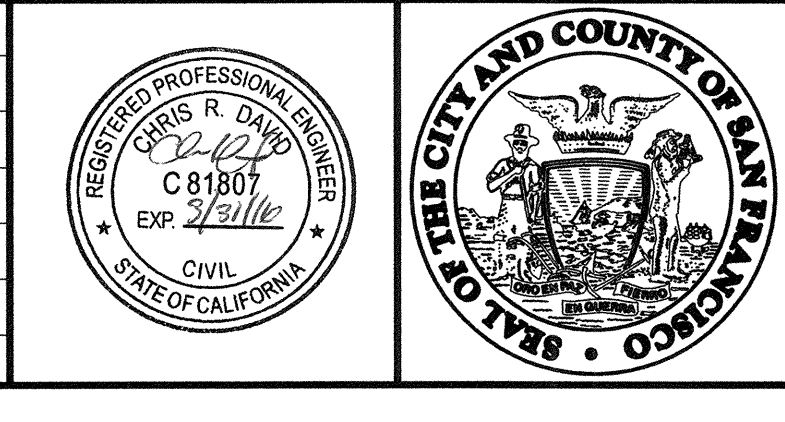
1289
 CL-29110
 REVISION
 0

- NOTES:**
- SEE OV-109A FOR OCS SCHEDULE AND TROLLEY WIRE SECTIONALIZATION PLAN.
 - PROVIDE ADDITIONAL ITEMS 49, 51, AND 69.
 - PROVIDE ADDITIONAL ITEMS 49, 51, AND 70.
 - SPLICE (E) TROLLEY WIRE TO (N) SWITCH.
 - SPLICE TROLLEY WIRE AT THE CARRIED THROUGH PORTION OF THE (N) TANGENT SPAN.
 - AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MINIMUM 18" ABOVE TROLLEY WIRE.
 - PROVIDE ADJUSTABLE HANGER, DETAIL 6 AS SHOWN ON CL-12945
 - RESET FLIPPER TO STRAIGHT.



NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *[Signature]*
 DRAWN: *[Signature]*
 CHECKED: *[Signature]*
 REVIEWED: *[Signature]*
 RECOMMENDED: *[Signature]*
 APPROVED: *[Signature]*
 DATE: MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM		1289
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT		CL-29111
OVERHEAD CONTACT SYSTEM SPECIAL WORK AND LAYOUT PLAN CTL STA 133+50 TO 138+00		OV-109
		OV-161
REVISION		0

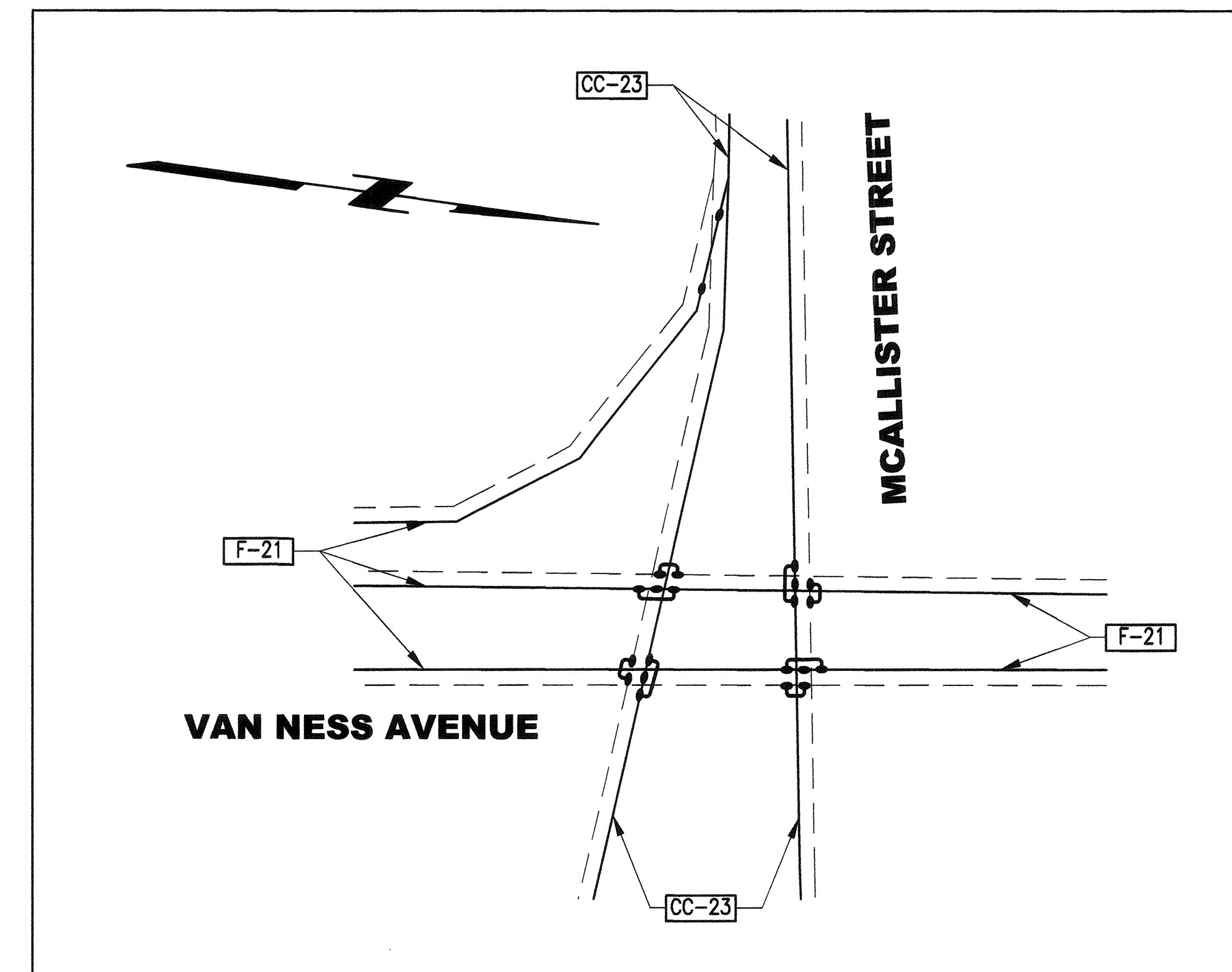
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 BORDER REVISED 11/17/05

NOTE:

1. SEE OV-109 FOR SPECIAL WORK AND LAYOUT PLAN

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
360	765N	V	5/32	1300 24.25	-	-	-	-	-	-	(2) (4) (16)
361	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
362	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
363	765N	VF	5/32	1300 22.50	-	-	-	-	-	-	(2) (3) (16) (18)
380	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
381	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
384	765N	V	5/32	1500 23.75	-	-	-	-	-	-	(2) (4) (16)
385	765N	VF	5/32	1500 21.75	-	-	-	-	-	-	(2) (3) (16) (18)
398	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
399	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
400	765N	V	6/32	1500 25.00	-	-	-	-	-	-	(2) (4) (16)
401	765N	V	5/32	1500 23.75	-	-	-	-	-	-	(2) (4) (16)
430	765N	V	6/32	1500 24.50	-	-	-	-	-	-	(2) (4) (16)
432	-	-	-	750 22.00	-	-	-	-	-	-	(1)
433	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
435	765N	V	5/32	1500 23.50	-	-	-	-	-	-	(2) (4) (16)
436	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
437	-	-	-	750 22.50	-	-	-	-	-	-	(1)
467	-	-	-	750 22.00	-	-	-	-	-	-	(1)
470	-	-	-	750 22.25	-	-	-	-	-	-	(1)
486	770	VT	2/32	1000 23.75	800 22.00	-	-	-	-	-	(2) (4) (16) (17)
490	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
491	770	VF	3/32	1000 26.75	400 22.50	550 24.00	1500 21.75	-	-	-	(2) (3) (8) (9) (16) (18) (23)
494	-	-	-	800 22.25	1000 23.00	-	-	-	-	-	(1)
495	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
497	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
499	770	VM	6/32	1500 26.00	1250 23.50	2000 26.00	1000 25.50	800 23.00	-	-	(2) (4) (6) (16) (17)
500	770	VM	5/32	800 20.50	1000 22.50	1750 25.75	1000 24.50	1000 20.25	-	-	(2) (4) (6) (16) (17)
500A	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
501	-	-	-	1000 20.25	1000 27.50	500 25.00	750 25.25	800 23.25	-	-	(1) (5) (18)
505	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
507	770	T	2/32	1000 19.75	1250 20.25	400 22.00	-	-	-	-	(2) (4) (17)
508	770	SF	3/32	2000 26.25	1000 20.25	-	-	-	-	-	(2) (4) (16) (18)
509	-	-	-	-	-	-	-	-	-	-	(1)
510	-	-	-	2950 23.50	-	-	-	-	-	-	(1)
511	-	-	-	-	-	-	-	-	-	-	(1)
512	-	-	-	-	-	-	-	-	-	-	(1)
514	-	-	-	-	-	-	-	-	-	-	(1)

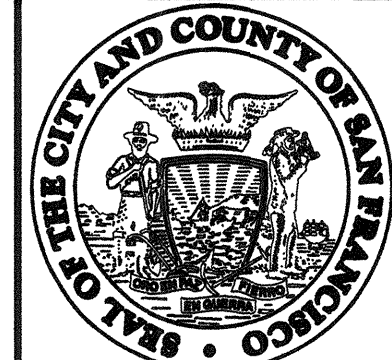


TROLLEY WIRE SECTIONALIZATION PLAN
NTS

I:\CP1640.1 Van Ness BRT_V_CER\500_Design Components\501_Drawings\12_Overhead\Sheet Files\CP16401OV109A.dwg d12 Tue Dec 01 2015 11:08 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *D.R.*
 DRAWN: *D.Z.*
 CHECKED: *C. Daniel*
 REVIEWED: *J. Manly*
 RECOMMENDED: *F. Madigan*
 APPROVED: *F. Madigan*
 DATE: **MAY 13 2016**



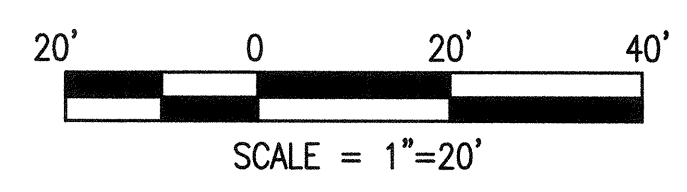
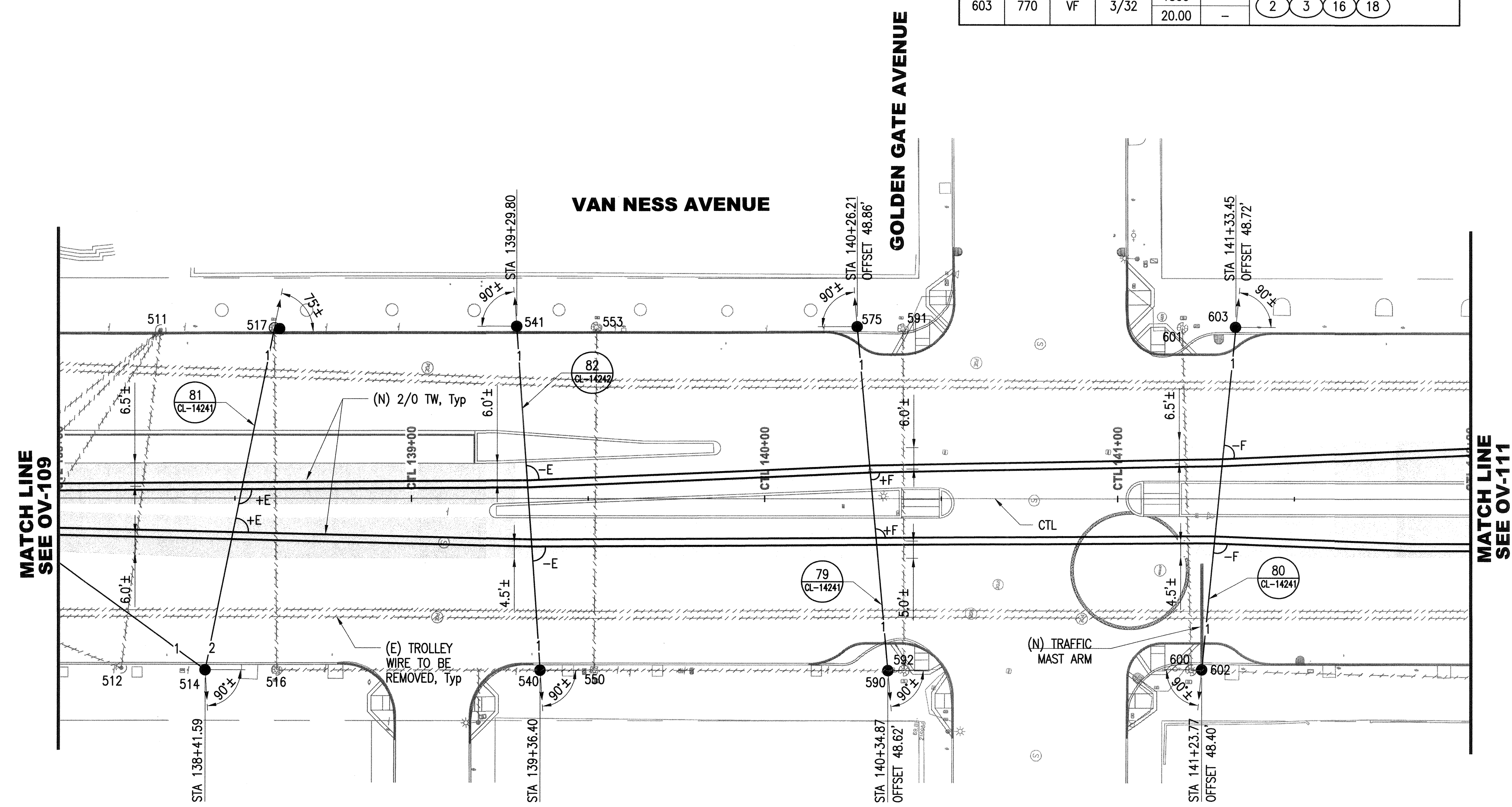
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM		1289
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT		CL-29112
OVERHEAD CONTACT SYSTEM SCHEDULE	OV-109A	REVISION
CTL STA 133+50 TO 138+00	OV-161	0



OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
511	-	-	-	-	-	(7) (9) (23)
512	-	-	-	-	-	(7) (9) (23)
514	765N	V	4/32	350 24.75	1000 24.00	(2) (4) (16)
516	-	-	-	-	-	(7) (9) (23)
517	765N	V	4/32	1000 23.75	-	(2) (4) (8) (9) (16) (23)
540	765N	V	5/32	1200 22.75	-	(2) (4) (16)
541	765N	V	5/32	1200 23.50	-	(2) (4) (16)
550	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
553	-	-	-	-	-	(7) (9) (23)
575	770	VF	4/32	1500 26.75	-	(2) (3) (16) (18)
590	770	VT	4/32	1500 25.75	-	(2) (4) (16) (17)
591	-	-	-	-	-	(7) (9) (23)
592	-	-	-	-	-	(7) (9) (23)
600	-	-	-	-	-	(7) (9) (23)
601	-	-	-	-	-	(7) (9) (23)
602	770	VM	3/32	1300 19.75	-	(2) (4) (6) (16) (17)
603	770	VF	3/32	1300 20.00	-	(2) (3) (16) (18)



I:\projects\401_van_ess_brt\2_CEP\300_design_components\301_drawings\12_overhead\sheet_files_CPTB401D\110.dwg kmanadapa Thu Nov 19 2015 - 4:09 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *M. Mandapat*
 DRAWN: *M. Mandapat*
 CHECKED: *C. David*
 REVIEWED: *J. Wang*
 RECOMMENDED: *Prothman*
 APPROVED: *F. M. ...*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *Vincent ...*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 LAYOUT PLAN
 CTL STA 138+00 TO 142+00

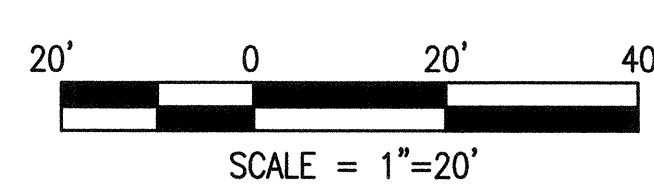
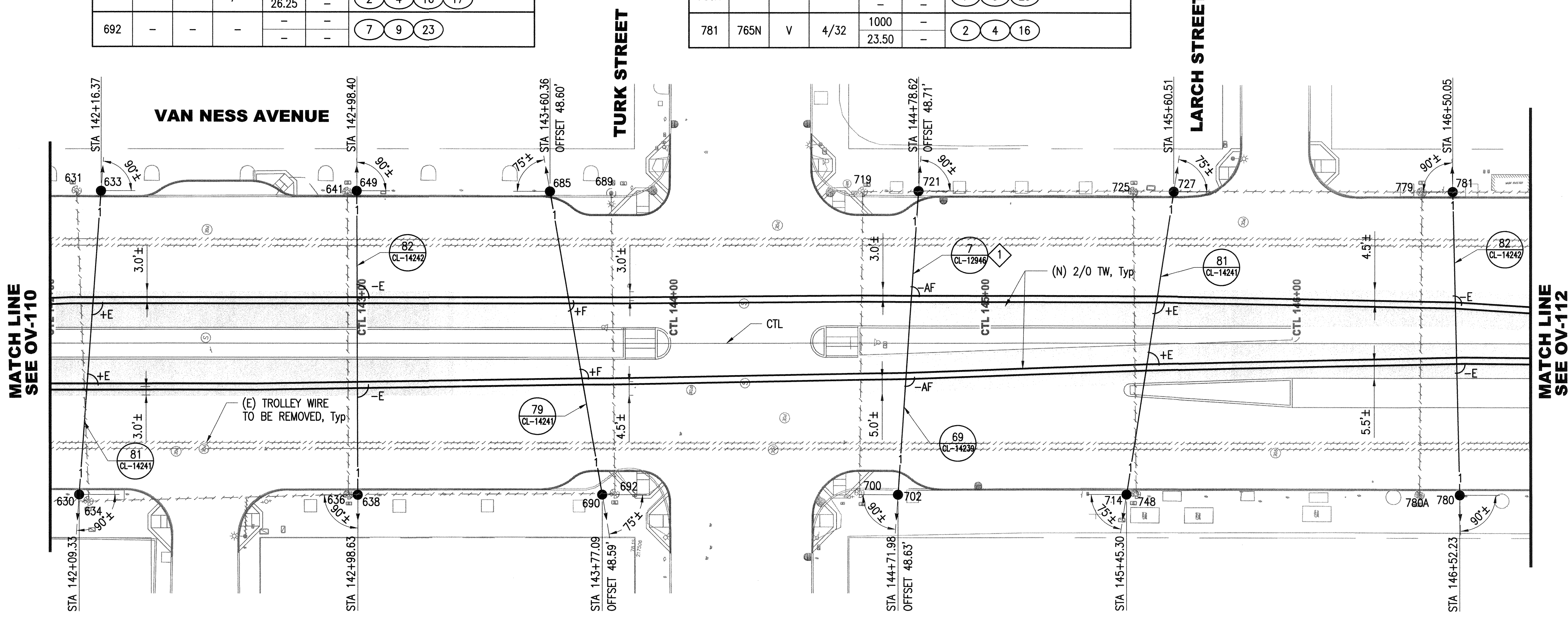
1289	
CL-29113	
OV-110	REVISION
OV-161	0

NOTE:

- AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.

OCS SCHEDULE						
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
630	765N	V	4/32	1000 23.25	-	(2) (4) (16)
631	-	-	-	-	-	(7) (9) (23)
633	765N	V	4/32	1000 23.50	-	(2) (4) (16)
634	-	-	-	-	-	(7) (9) (23)
636	-	-	-	-	-	(7) (9) (23)
638	765N	V	4/32	1000 23.00	-	(2) (4) (16)
641	-	-	-	-	-	(7) (9) (23)
649	765N	V	4/32	1000 23.25	-	(2) (4) (16)
685	770	VF	3/32	1000 26.75	-	(2) (3) (16) (18)
689	-	-	-	-	-	(7) (9) (23)
690	770	VT	3/32	1000 26.25	-	(2) (4) (16) (17)
692	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE						
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
700	-	-	-	-	-	(7) (9) (23)
702	770	V	3/32	2200 17.50	-	(2) (4) (16)
714	765N	V	4/32	1000 20.50	-	(2) (4) (16)
719	-	-	-	-	-	(7) (9) (23)
721	770	VF	3/32	2200 17.50	-	(2) (3) (16) (18)
725	-	-	-	-	-	(7) (9) (23)
727	765N	V	4/32	1000 20.50	-	(2) (4) (16)
748	-	-	-	-	-	(7) (9) (23)
779	-	-	-	-	-	(7) (9) (23)
780	765N	V	4/32	1000 24.00	-	(2) (4) (16)
780A	-	-	-	-	-	(7) (9) (23)
781	765N	V	4/32	1000 23.50	-	(2) (4) (16)



I:\projects\12_0111\12_0111.dwg kmanitapa Thu Nov 19 2015 4:12 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED BY *Mandapat*
 DRAWN BY *Mandapat*
 CHECKED BY *C. David*
 REVIEWED BY *J. M...*
 RECOMMENDED BY *F. Mohamud*
 APPROVED BY *F. Mohamud*
 DATE: MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM		1289
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT		CL-29114
OVERHEAD CONTACT SYSTEM LAYOUT PLAN CTL STA 142+00 TO 146+75		OV-111
		0

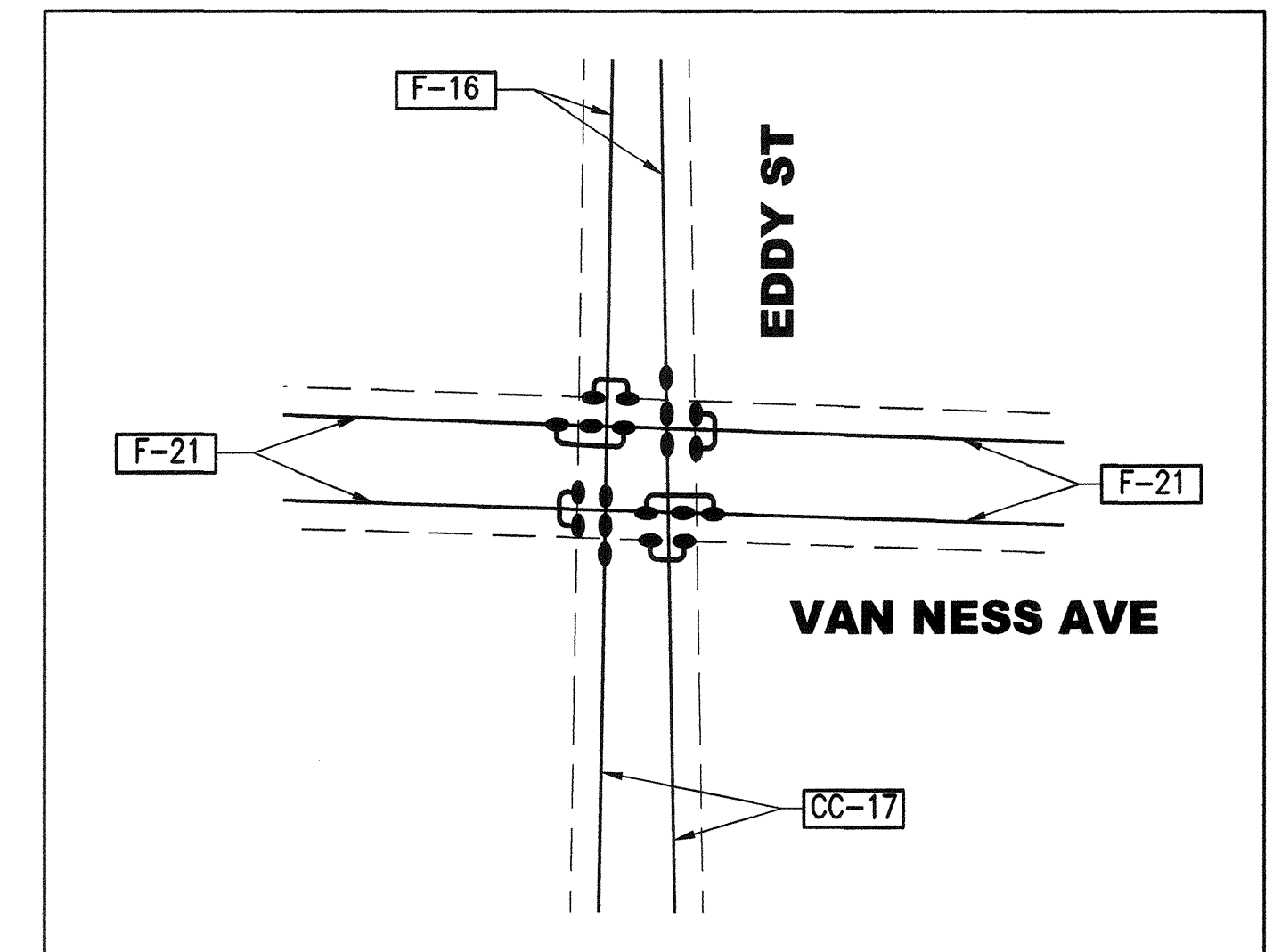
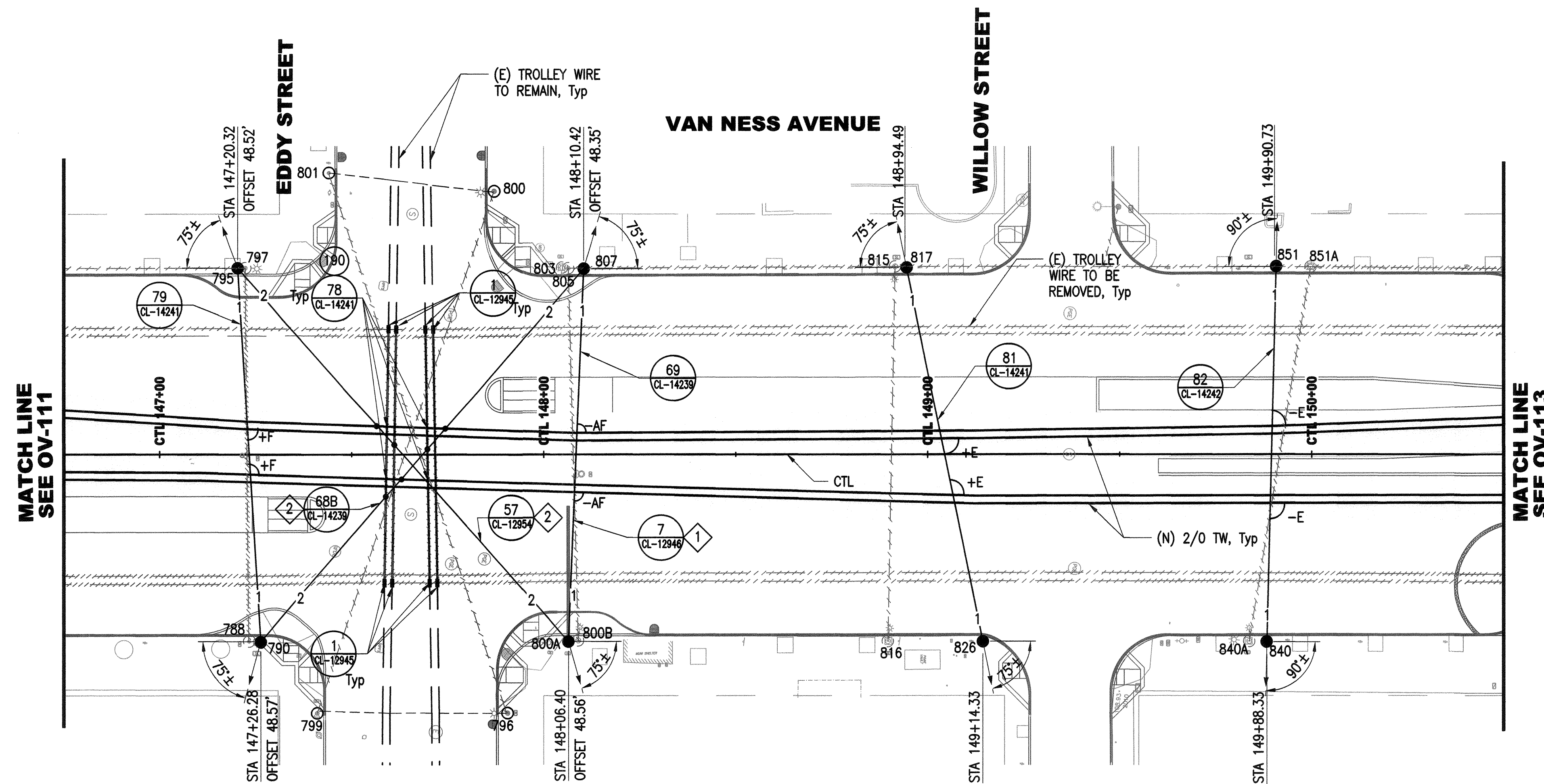


OCS SCHEDULE						
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
788	-	-	-	-	-	(7) (9) (23)
790	770	VT	4/32	2000 28.00	1500 26.50	(2) (4) (16) (17)
795	770	VF	4/32	2000 27.25	1500 27.50	(2) (3) (16) (18)
796	-	-	-	-	-	(1)
797	-	-	-	-	-	(7) (9) (23)
799	-	-	-	-	-	(1)
800	-	-	-	-	-	(1)
800A	770	VM	3/32	2300 17.75	1500 27.00	(2) (4) (6) (16) (17)
800B	-	-	-	-	-	(7) (9) (23)
801	-	-	-	-	-	(1)
803	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE						
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
805	-	-	-	-	-	(7) (9) (23)
807	770	VF	3/32	2300 17.75	1500 28.00	(2) (3) (16) (18)
815	-	-	-	-	-	(7) (9) (23)
816	-	-	-	-	-	(7) (9) (23)
817	765N	V	5/32	1100 23.75	-	(2) (4) (16)
826	765N	V	4/32	1100 23.00	-	(2) (4) (16)
840	765N	V	4/32	1000 23.00	-	(2) (4) (16)
840A	-	-	-	-	-	(7) (9) (23)
851	765N	V	4/32	1000 23.75	-	(2) (4) (16)
851A	-	-	-	-	-	(7) (9) (23)

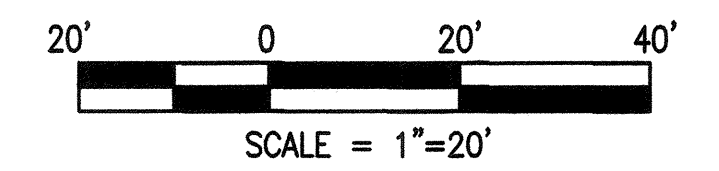
NOTE:

- AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.
- REPLACE ITEM 74 WITH ITEM 75.



TROLLEY WIRE SECTIONALIZATION PLAN

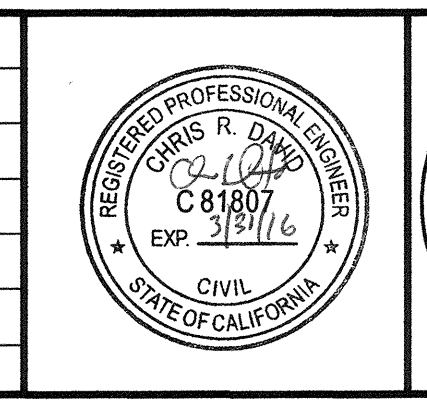
NTS



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 BORDER REVISED 11/17/05

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>De Li</i>
DRAWN	<i>S. Li</i>
CHECKED	<i>C. D. ...</i>
REVIEWED	<i>J. May</i>
RECOMMENDED	<i>F. ...</i>
APPROVED	<i>F. ...</i>
DATE	MAY 13 2016



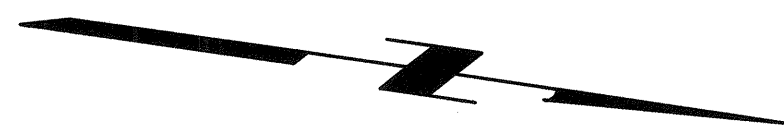
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

OVERHEAD CONTACT SYSTEM
 SPECIAL WORK AND LAYOUT PLAN
 CTL STA 146+75 TO 150+50

1289	REVISION
CL-29115	0
OV-112	
OV-161	

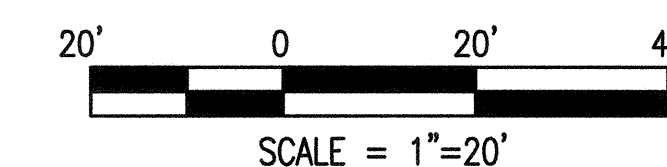
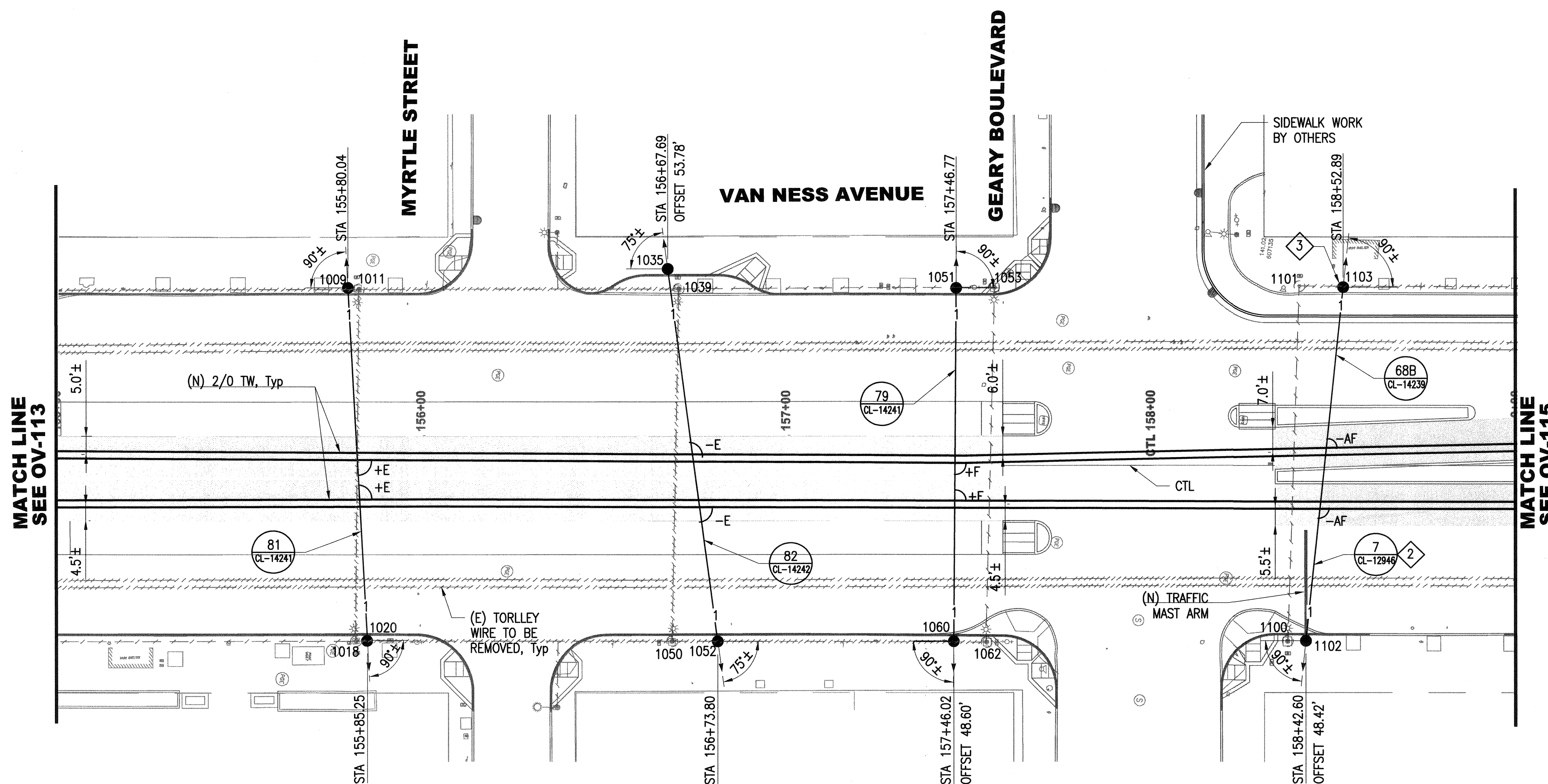


OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
1009	765N	V	5/32	1200 23.50	-	(2) (4) (16)
1011	-	-	-	-	-	(7) (9) (23)
1018	-	-	-	-	-	(7) (9) (23)
1020	765N	V	5/32	1200 22.75	-	(2) (4) (16)
1035	765N	V	5/32	1200 23.75	-	(2) (4) (16) (1)
1039	-	-	-	-	-	(7) (9) (23)
1050	-	-	-	-	-	(7) (9) (23)
1051	770	VF	4/32	1500 25.75	-	(2) (3) (16) (18)

OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
1052	765N	V	4/32	1200 22.50	-	(2) (4) (16) (22)
1053	-	-	-	-	-	(7) (9) (23)
1060	770	VT	4/32	1500 24.75	-	(2) (4) (16) (17) (22)
1062	-	-	-	-	-	(7) (9) (23)
1100	-	-	-	-	-	(7) (9) (23)
1101	-	-	-	-	-	(7) (9) (23)
1102	770	VM	3/32	2000 19.50	-	(2) (4) (6) (16) (17)
1103	770	VF	3/32	2000 19.75	-	(2) (3) (16) (18)

NOTES:

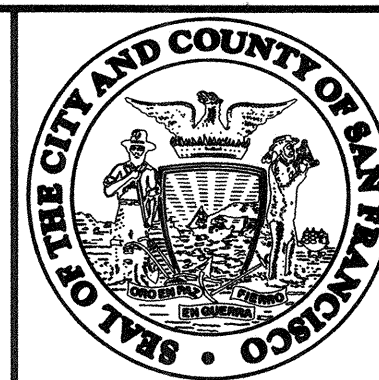
1. PRIOR TO EXCAVATION FOR (N) POLE FOUNDATION, POT HOLE TO LOCATE (E) MUNI TRACTION POWER DUCT BANK, SEE DB AND UT-SERIES DRAWINGS.
2. AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.
3. COORDINATE POLE INSTALLATION WITH CPMC.



I:\CP16401\Van Ness BRT\2_CER\500_Design Components\501_Drawings\12_Overhead\Sheet Files\CP16401OV114.dwg kmaridapa Wed Dec 23:2015 2:07 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED *K. Mandapat*
 DRAWN *K. Mandapat*
 CHECKED *C. D. [Signature]*
 REVIEWED *[Signature]*
 RECOMMENDED *[Signature]*
 APPROVED *F. [Signature]*
 DATE **MAY 13 2016**



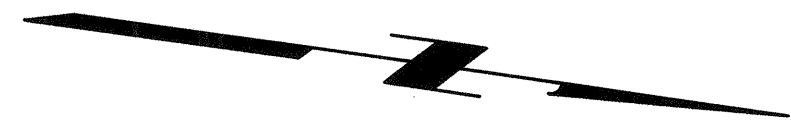
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

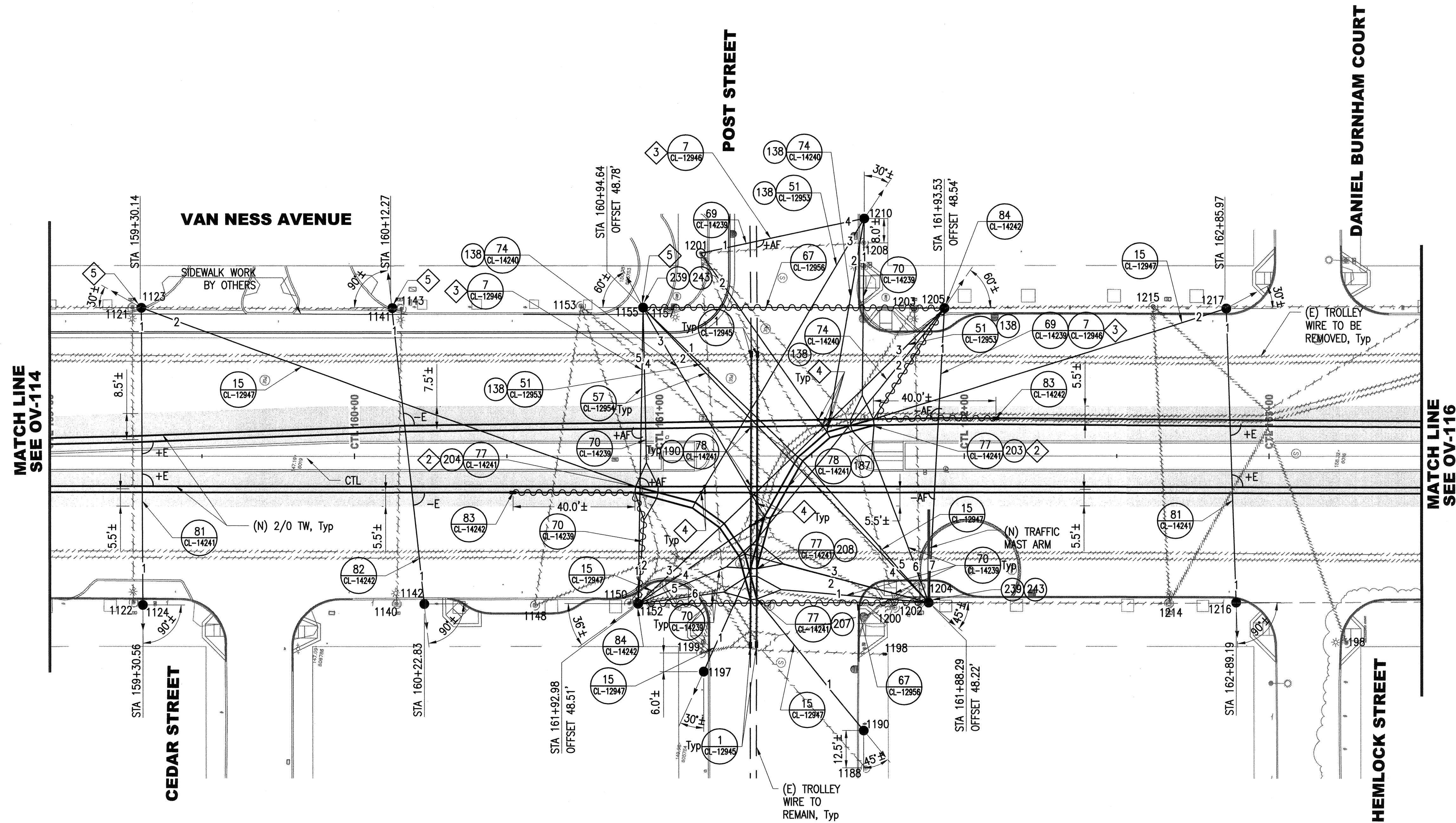
**OVERHEAD CONTACT SYSTEM
 LAYOUT PLAN
 CTL STA 155+00 TO 159+00**

1289
CL-29117
 REVISION
OV-114
OV-161 **0**



NOTES:

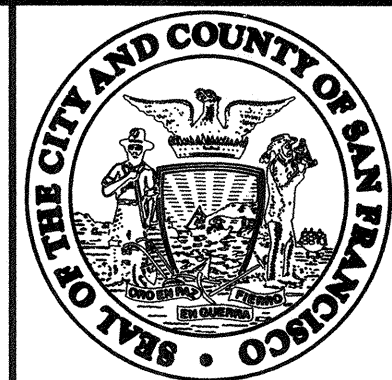
1. SEE OV-115A FOR OCS SCHEDULE AND TROLLEY WIRE SECTIONALIZATION PLAN.
2. RESET FLIPPER TO STRAIGHT.
3. AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE TANGENT SPAN, MAINTAIN MINIMUM 18" ABOVE TROLLEY WIRE.
4. PROVIDE ADJUSTABLE HANGER, DETAIL 6 AS SHOWN ON CL-12945.
5. COORDINATE POLE INSTALLATION WITH CPMC.



I:\PT16401_Van Ness BRT V2_CER_V500_Design_Components\301_Drawings\12_Overhead\Sheet_Files\PT16401OV115.dwg H:\Thoi Mon Dec 28 2015 - 2:31 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *D. Li*
 DRAWN: *D. Li*
 CHECKED: *C. Davis*
 REVIEWED: *J. Han*
 RECOMMENDED: *F. McPherson*
 APPROVED: *F. McPherson*
 DATE: MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

**OVERHEAD CONTACT SYSTEM
 SPECIAL WORK AND LAYOUT PLAN
 CTL STA 159+00 TO 163+50**

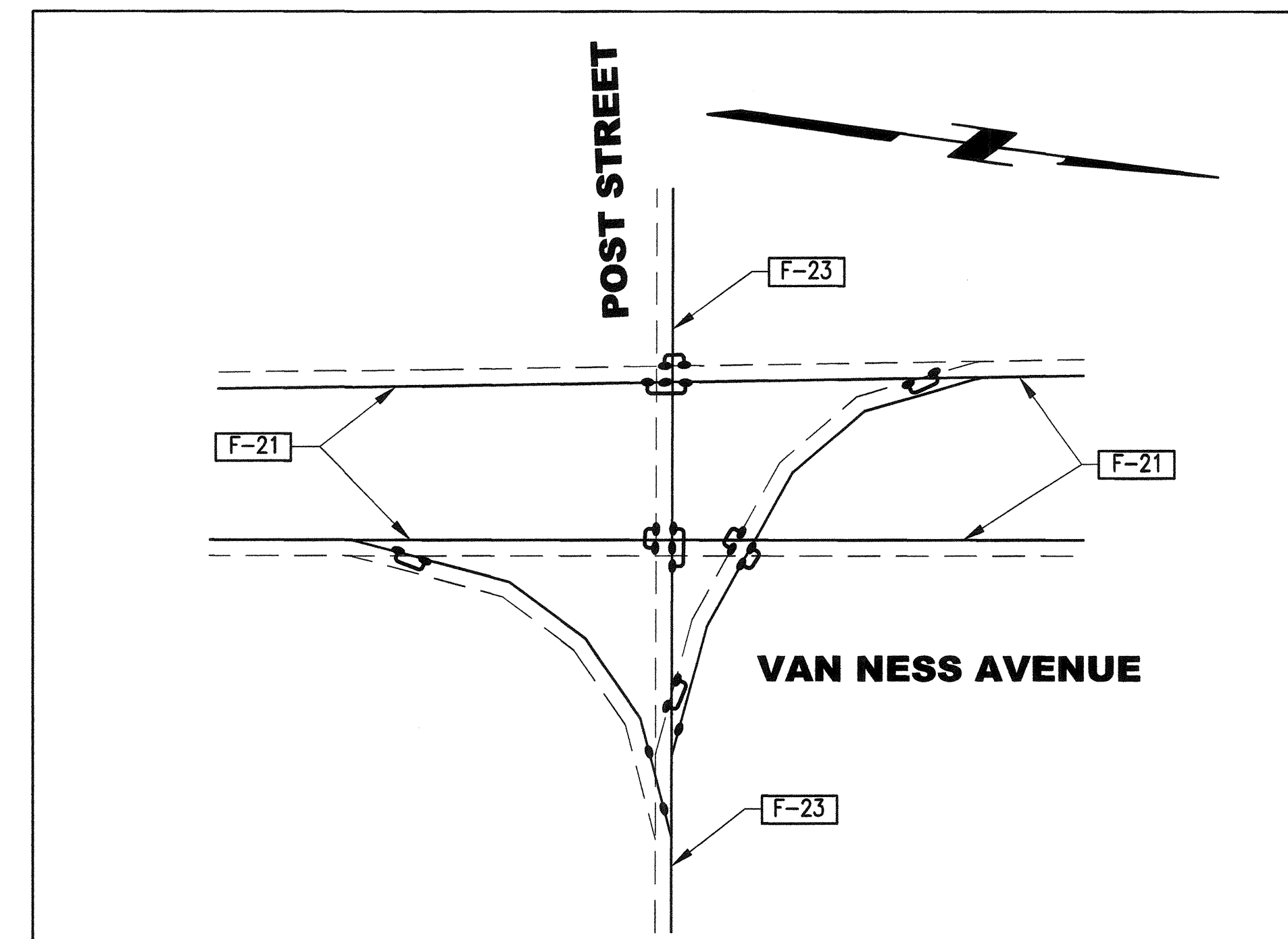
1289	
CL-29118	
OV-115	REVISION
OV-161	0

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
198	-	-	-	-	-	-	-	-	-	-	(1)
1121	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1122	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1123	770	V	5/32	800 24.75	4200 26.00	-	-	-	-	-	(2) (4) (16)
1124	765N	V	2/32	800 24.25	-	-	-	-	-	-	(2) (4) (16)
1140	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1141	770	V	4/32	1000 23.50	-	-	-	-	-	-	(2) (4) (16)
1142	770	V	4/32	1000 23.25	-	-	-	-	-	-	(2) (4) (16)
1143	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1148	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1150	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1152	770	VT	4/32	800 23.75	800 27.25	400 26.50	600 24.25	200 26.50	2600 20.75	-	(2) (4) (16) (17)
1153	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1155	770	VF	5/32	1800 25.25	1500 24.00	800 25.00	450 27.25	800 24.75	-	-	(2) (3) (16) (18)
1157	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1188	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1190	770	S	4/32	4450 23.75	-	-	-	-	-	-	(2)
1197	770	T	3/32	3950 22.75	-	-	-	-	-	-	(2) (4) (17)
1198	-	-	-	-	-	-	-	-	-	-	(20)
1199	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1200	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
1201	-	-	-	1000 17.25	1600 23.25	-	-	-	-	-	(1)
1202	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1203	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1204	770	VM	5/32	800 21.50	700 25.25	800 25.00	1500 23.50	400 23.75	800 25.75	800 18.50	(2) (4) (6) (16) (17)
1205	770	VF	3/32	800 17.25	900 25.50	1750 26.00	-	-	-	-	(2) (3) (16) (18)
1208	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1210	770	F	3/32	750 25.50	200 21.50	1550 24.25	1000 17.25	-	-	-	(2) (3) (14) (18)
1214	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1215	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1216	765N	V	2/32	800 24.25	-	-	-	-	-	-	(2) (4) (16)
1217	770	V	4/32	800 24.25	3750 25.25	-	-	-	-	-	(2) (4) (16)

NOTE:

1. SEE OV-115 FOR SPECIAL WORK AND LAYOUT PLAN.

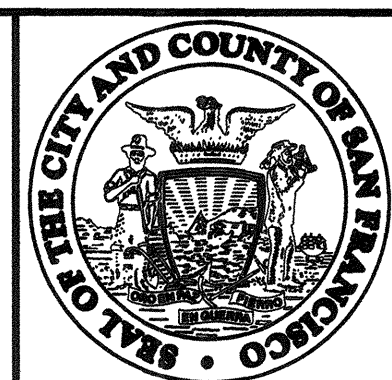


TROLLEY WIRE SECTIONALIZATION PLAN
NTS

I:\CP16401_Van Ness BRTV2_GER\500_Design Components\501_Drawings\12_Overhead\Sheet Files\CP16401OV115A.dwg d12 Tue Dec 01 2015 - 11:15 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

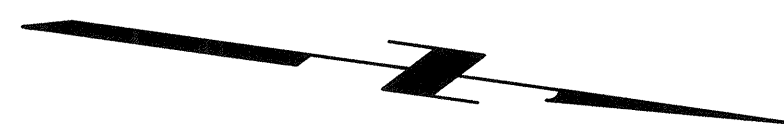
DESIGNED: *D. Li*
 DRAWN: *D. Li*
 CHECKED: *C. David*
 REVIEWED: *J. May*
 RECOMMENDED: *F. Mohamoud*
 APPROVED: *F. Mohamoud*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

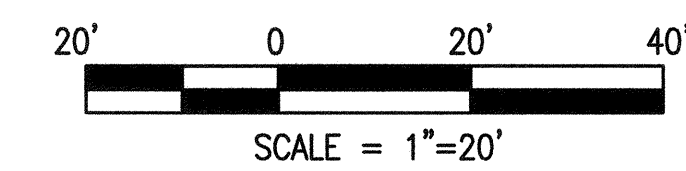
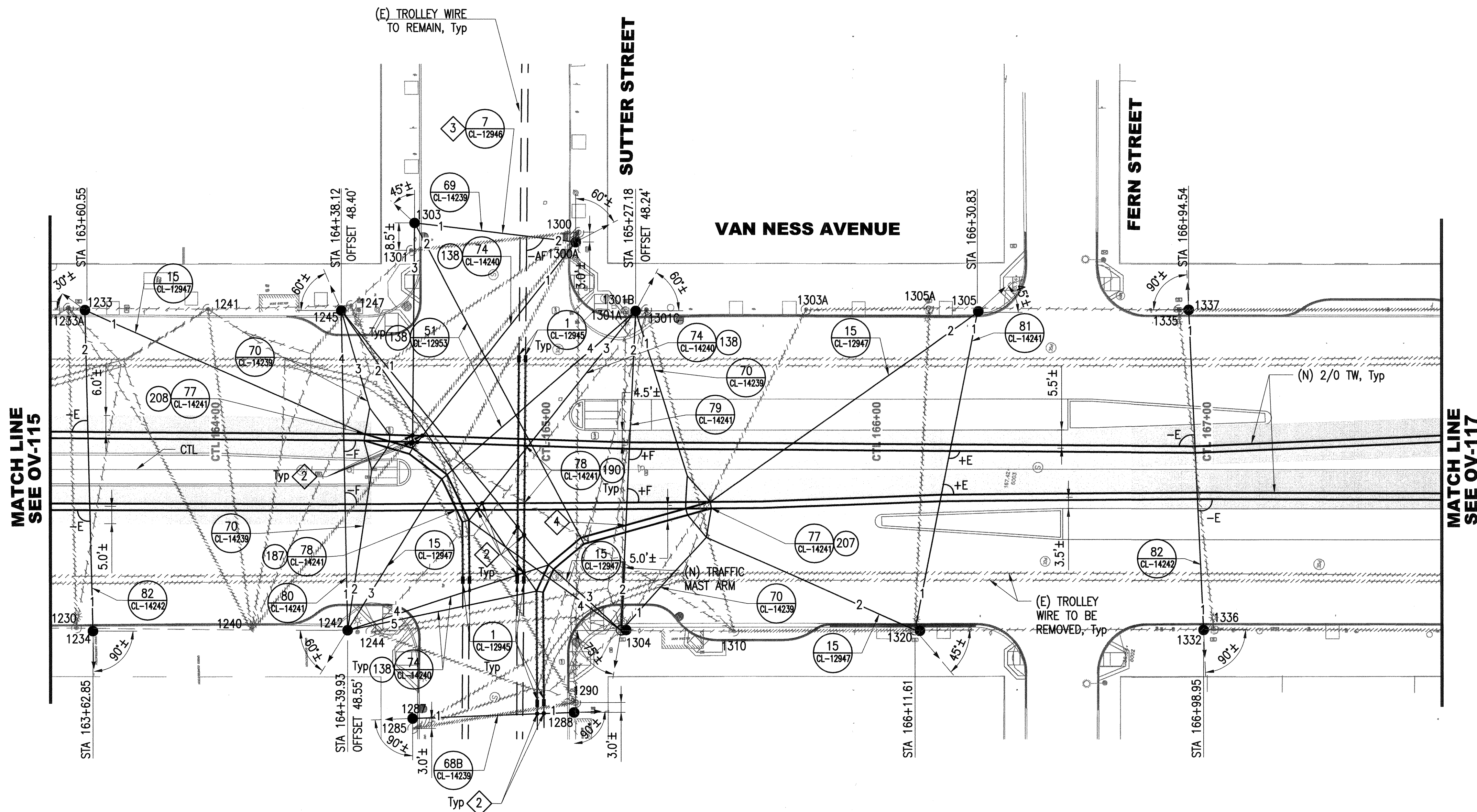
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 159+00 TO 163+50

1289
 CL-29119
 REVISION
 OV-115A
 OV-161
 0



NOTES:

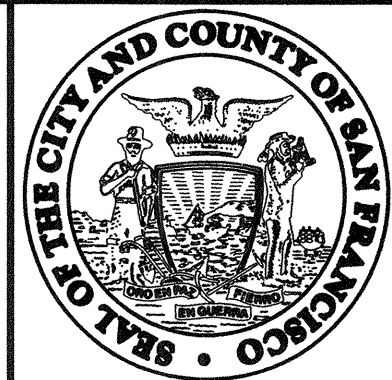
1. SEE OV-116A FOR OCS SCHEDULE AND TROLLEY WIRE SECTIONALIZATION PLAN.
2. PROVIDE ADJUSTABLE HANGER, DETAIL 6 AS SHOWN ON CL-12945.
3. AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.
4. PROVIDE ADDITIONAL ITEMS 49, 51, 69.



I:\PTG\401_Van Ness BRT V2_CER\500_Design\Components\300_Drawings\12_Overhead\Sheet Files\0PT16401OV116.dwg H:\Thal Mon Dec 28 2015 - 2:39 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *D. Li*
 DRAWN: *D. Li*
 CHECKED: *C. D. ...*
 REVIEWED: *J. ...*
 RECOMMENDED: *F. ...*
 APPROVED: *F. ...*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

OVERHEAD CONTACT SYSTEM
 SPECIAL WORK AND LAYOUT PLAN
 CTL STA 163+50 TO 167+75

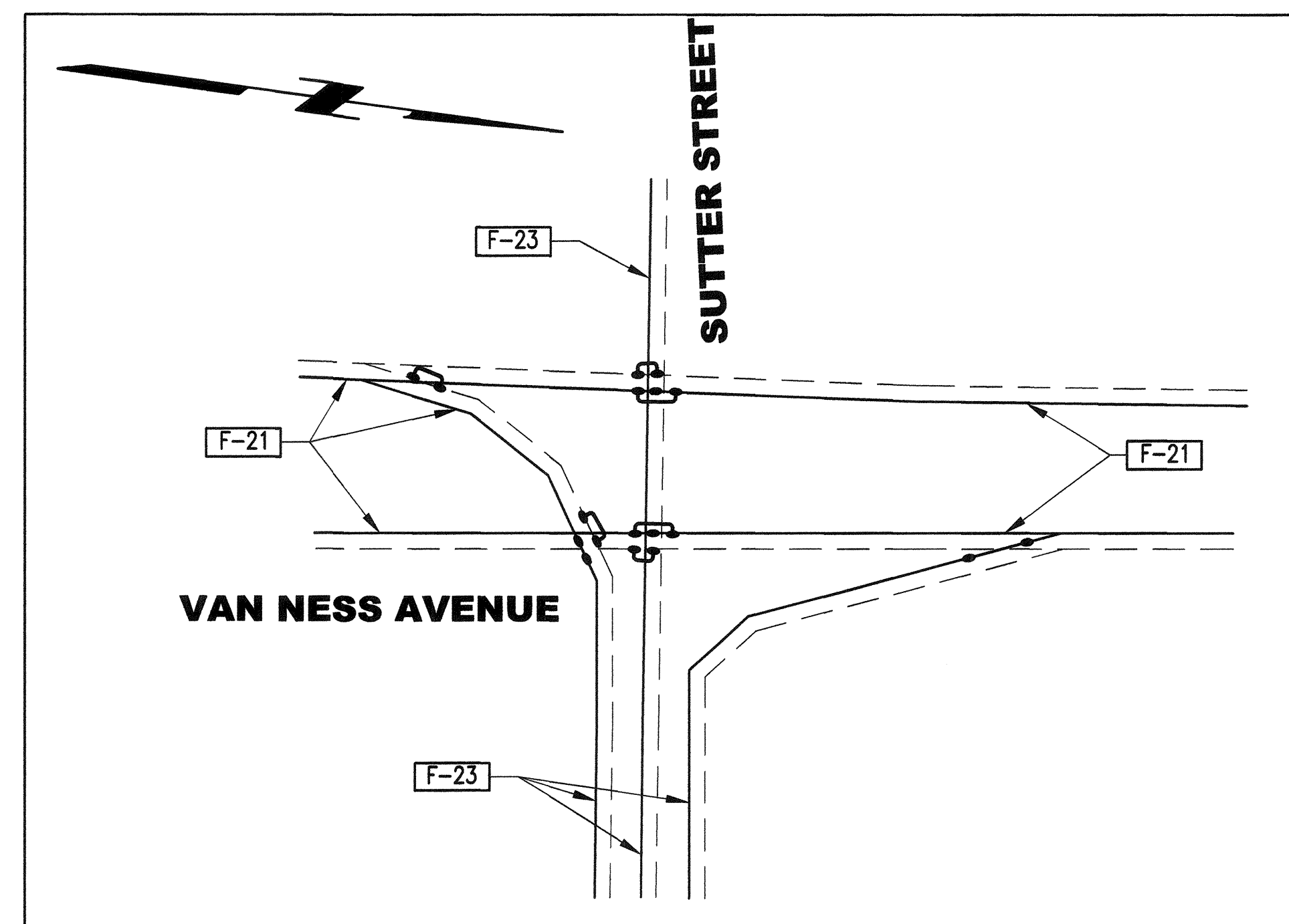
1289	
CL-29120	
OV-116	REVISION
OV-161	0

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (in/ft)	1	2	3	4	5	6	7	
1230	-	-	-	-	-	-	-	-	-	-	7 9 23
1233	770	V	4/32	3750 24.25	1000 23.25	-	-	-	-	-	2 4 16
1233A	-	-	-	-	-	-	-	-	-	-	7 9 23
1234	767	V	2/32	1000 23.25	-	-	-	-	-	-	2 4 16
1240	-	-	-	-	-	-	-	-	-	-	7 9 23
1241	-	-	-	-	-	-	-	-	-	-	7 9 23
1242	770	VT	4/32	1500 25.50	1150 24.25	400 26.75	550 25.25	1300 22.50	-	-	2 4 16 17
1244	-	-	-	-	-	-	-	-	-	-	7 9 23
1245	770	VF	5/32	1900 25.50	750 23.00	800 22.75	1500 25.25	-	-	-	2 3 16 18
1247	-	-	-	-	-	-	-	-	-	-	7 9 23
1285	-	-	-	-	-	-	-	-	-	-	7 9 23
1287	770	C	4/32	2500 22.25	-	-	-	-	-	-	2 4 16 2
1288	770	CT	4/32	2500 21.50	-	-	-	-	-	-	2 4 16 17 2
1290	-	-	-	-	-	-	-	-	-	-	7 9 23
1300	-	-	-	-	-	-	-	-	-	-	7 9 23
1300A	770	CT	2/32	1100 27.25	1000 18.00	-	-	-	-	-	2 4 16 17
1301	-	-	-	-	-	-	-	-	-	-	7 9 23
1301A	-	-	-	-	-	-	-	-	-	-	7 9 23
1301B	770	VIF	5/32	800 21.75	1000 23.50	1200 26.50	2250 26.75	-	-	-	2 3 13 16 17 18
1301C	-	-	-	-	-	-	-	-	-	-	7 9 23

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (in/ft)	1	2	3	4	5	6	7	
1303	770	F	3/32	1000 18.00	1750 26.00	450 26.25	-	-	-	-	2 3 14 18
1303A	-	-	-	-	-	-	-	-	-	-	7 9 23
1304	770	VM	3/32	2700 21.00	1000 21.00	400 23.25	1100 27.50	-	-	-	2 4 6 8 9 16 17 23
1305A	-	-	-	-	-	-	-	-	-	-	7 9 23
1305	770	V	5/32	1000 23.75	5250 22.25	-	-	-	-	-	2 4 16
1310	-	-	-	-	-	-	-	-	-	-	7 9 23
1320	765N	V	4/32	1000 23.25	1850 20.75	-	-	-	-	-	2 4 8 9 16 23
1332	765N	V	4/32	1000 23.50	-	-	-	-	-	-	2 4 16
1335	-	-	-	-	-	-	-	-	-	-	7 9 23
1336	-	-	-	-	-	-	-	-	-	-	7 9 23
1337	765N	V	4/32	1000 23.50	-	-	-	-	-	-	2 4 16

NOTE:

1. SEE OV-116 FOR SPECIAL WORK AND LAYOUT PLAN.
2. PROVIDE COVER PLATE AND GASKET INSTEAD OF STREETLIGHT LUMINARE AND BRACKET ARM ON 2-BOLT SIMPLEX BRACKET ARM CONNECTION. SEE SL-SERIES PLANS FOR STREETLIGHT WORK.

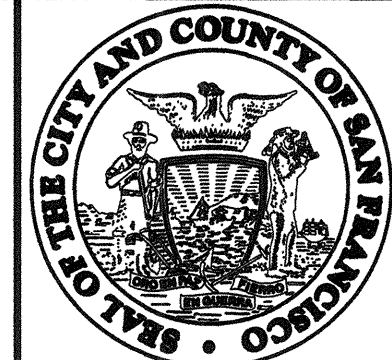


TROLLEY WIRE SECTIONALIZATION PLAN
NTS

I:\CP16\01_Van Ness\2_CER\500_Design_Components\501_Drawings\12_Overhead\Sheet_Files\CP16-01OV16A.dwg d12 Tue Dec 01 2015 - 11:13 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *D. Li*
 DRAWN: *D. Li*
 CHECKED: *C. David*
 REVIEWED: *J. May*
 RECOMMENDED: *[Signature]*
 APPROVED: *[Signature]*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 163+50 TO 167+75

1289	CL-29121
OV-116A	REVISION
OV-161	0

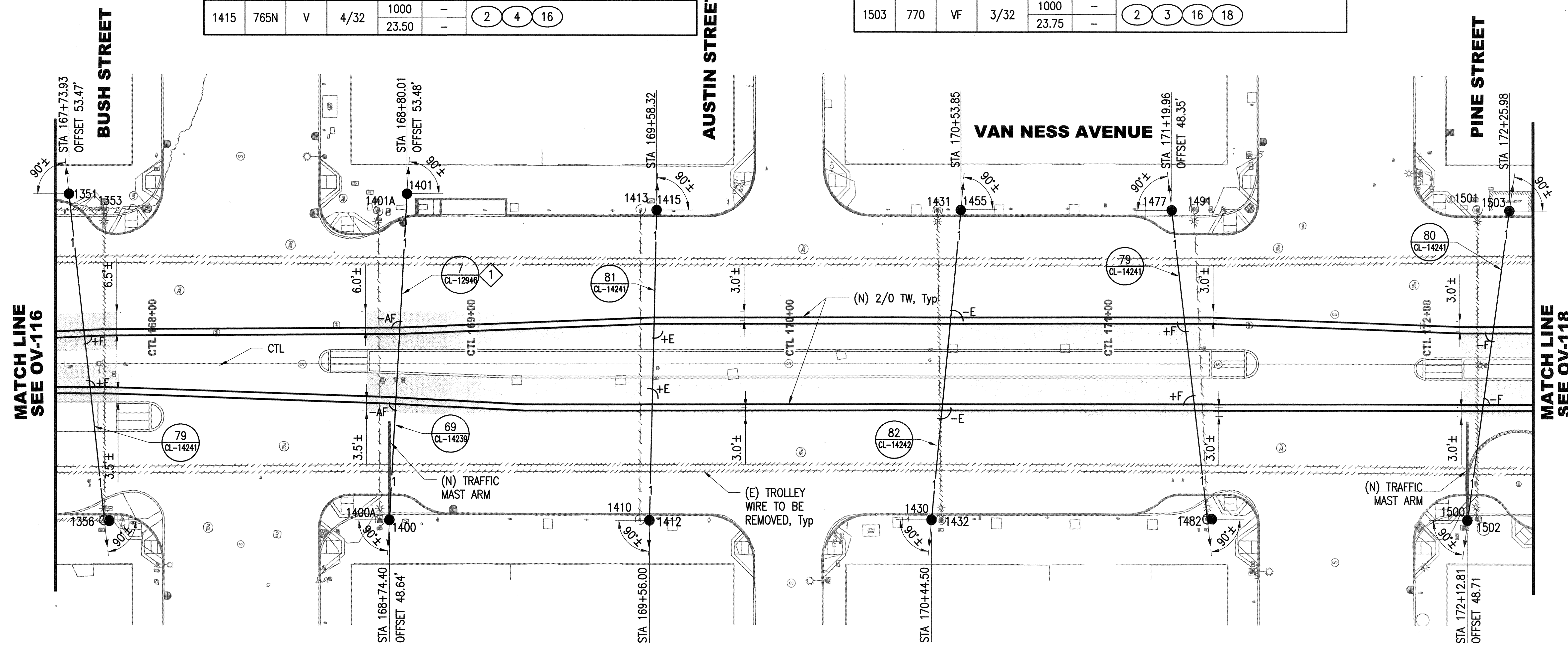


OCS SCHEDULE						
POLE No.	POLE		RAKE (in/ft)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
1351	770	VF	4/32	1500	-	(2) (3) (16) (18)
				26.00	-	
1353	-	-	-	-	-	(7) (9) (23)
1356	770	VT	4/32	1500	-	(2) (4) (8) (9) (16) (17) (23)
				25.00	-	
1400	770	VM	3/32	1500	-	(2) (4) (6) (16) (17)
				19.00	-	
1400A	-	-	-	-	-	(7) (9) (23)
1401	770	VF	3/32	1500	-	(2) (3) (16) (18)
				18.75	-	
1401A	-	-	-	-	-	(7) (9) (23)
1410	-	-	-	-	-	(7) (9) (23)
1412	765N	V	4/32	1000	-	(2) (4) (16)
				23.25	-	
1413	-	-	-	-	-	(7) (9) (23)
1415	765N	V	4/32	1000	-	(2) (4) (16)
				23.50	-	

OCS SCHEDULE						
POLE No.	POLE		RAKE (in/ft)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
1430	765N	V	4/32	1000	-	(2) (4) (16)
				23.25	-	
1431	-	-	-	-	-	(7) (9) (23)
1432	-	-	-	-	-	(7) (9) (23)
1455	765N	V	4/32	1000	-	(2) (4) (16)
				23.25	-	
1477	770	VF	3/32	1000	-	(2) (3) (16) (18)
				27.25	-	
1482	770	VT	3/32	1000	-	(2) (4) (8) (9) (16) (17) (23)
				26.50	-	
1491	-	-	-	-	-	(7) (9) (23)
1500	770	VM	3/32	1000	-	(2) (4) (6) (16) (17)
				23.50	-	
1501	-	-	-	-	-	(7) (9) (23)
1502	-	-	-	-	-	(7) (9) (23)
1503	770	VF	3/32	1000	-	(2) (3) (16) (18)
				23.75	-	

NOTE:

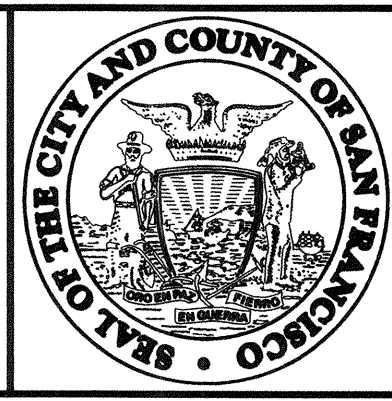
- AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.



I:\vcp1640.1.van ness brt\2_cfr_500_design_components\501_overhead\sheet_files\CP164010V17.dwg kmandapa Fir Nov 20 2015 - 9:15 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED *A. Mandapat*
 DRAWN *A. Mandapat*
 CHECKED *C. Paul*
 REVIEWED *M. J. ...*
 RECOMMENDED *F. ...*
 APPROVED *F. ...*
 DATE **MAY 19 2016**

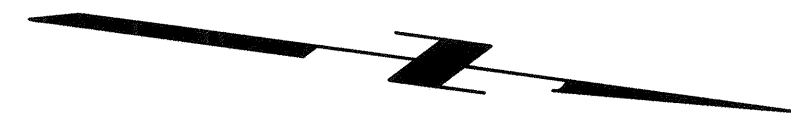


CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Vincent Han
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 LAYOUT PLAN
 CTL STA 167+75 TO 172+25

1289	
CL-29122	
OV-117	REVISION
OV-161	0

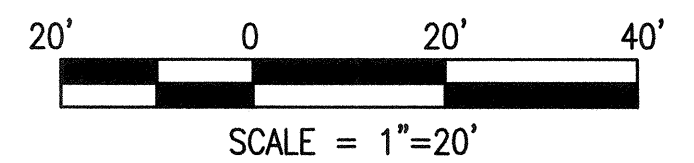
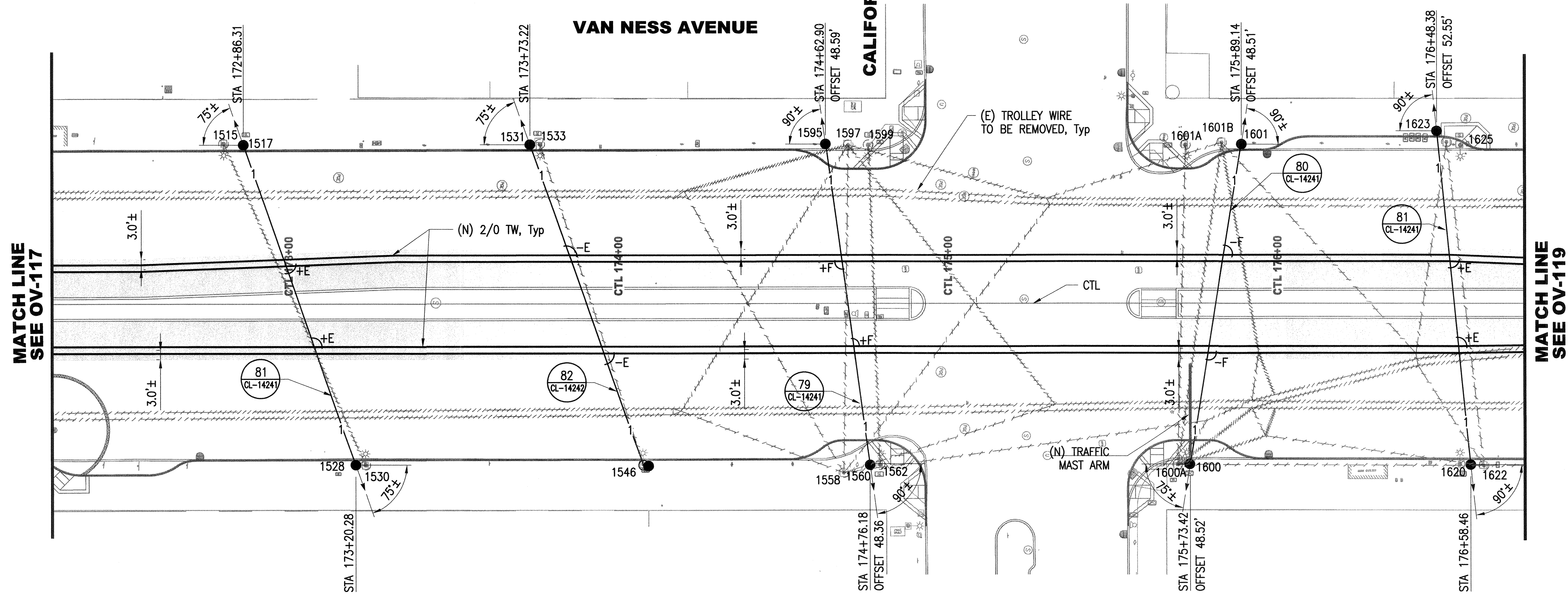


OCS SCHEDULE						
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
1515	-	-	-	-	-	(7) (9) (23)
1517	765N	V	6/32	1600	-	(2) (4) (16)
				23.75	-	
1528	765N	V	6/32	1600	-	(2) (4) (16)
				23.75	-	
1530	-	-	-	-	-	(7) (9) (23)
1531	765N	V	5/32	1200	-	(2) (4) (16)
				23.00	-	
1533	-	-	-	-	-	(7) (9) (23)
1546	765N	V	5/32	1200	-	(2) (4) (8) (9) (16) (22) (23)
				22.75	-	
1558	-	-	-	-	-	(7) (9) (23)
1560	770	VT	3/32	1000	-	(2) (4) (16) (17)
				21.50	-	
1562	-	-	-	-	-	(7) (9) (23)
1595	770	VF	3/32	1000	-	(2) (3) (16) (18)
				22.50	-	

OCS SCHEDULE						
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
1597	-	-	-	-	-	(7) (9) (23)
1599	-	-	-	-	-	(7) (9) (23)
1600	770	VM	3/32	1000	-	(2) (4) (6) (16) (17)
				23.50	-	
1600A	-	-	-	-	-	(7) (9) (23)
1601	770	VF	3/32	1000	-	(2) (3) (16) (18)
				23.75	-	
1601A	-	-	-	-	-	(7) (9) (23)
1601B	-	-	-	-	-	(7) (9) (23)
1620	765N	V	5/32	1400	-	(2) (4) (16)
				23.75	-	
1622	-	-	-	-	-	(7) (9) (23)
1623	765N	V	5/32	1400	-	(2) (4) (16) (1)
				24.00	-	
1625	-	-	-	-	-	(7) (9) (23)

NOTE:

- PRIOR TO EXCAVATION FOR (N) POLE FOUNDATION, POT HOLE TO LOCATE (E) MUNI TRACTION POWER DUCT BANK, SEE DB AND UT-SERIES DRAWINGS.



I:\CP1640.1 van_ness_brl\2_CDR_500_design_components\501_drawings\12_overhead\sheet_files\CP16401OV118.dwg kmanodapa Fri Nov 20 2015 9:20 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED BY *Mandapat*
 DRAWN BY *Mandapat*
 CHECKED *C. David*
 REVIEWED *Tommy*
 RECOMMENDED *[Signature]*
 APPROVED *F. Mohrhardt*
 DATE **MAY 13 2016**



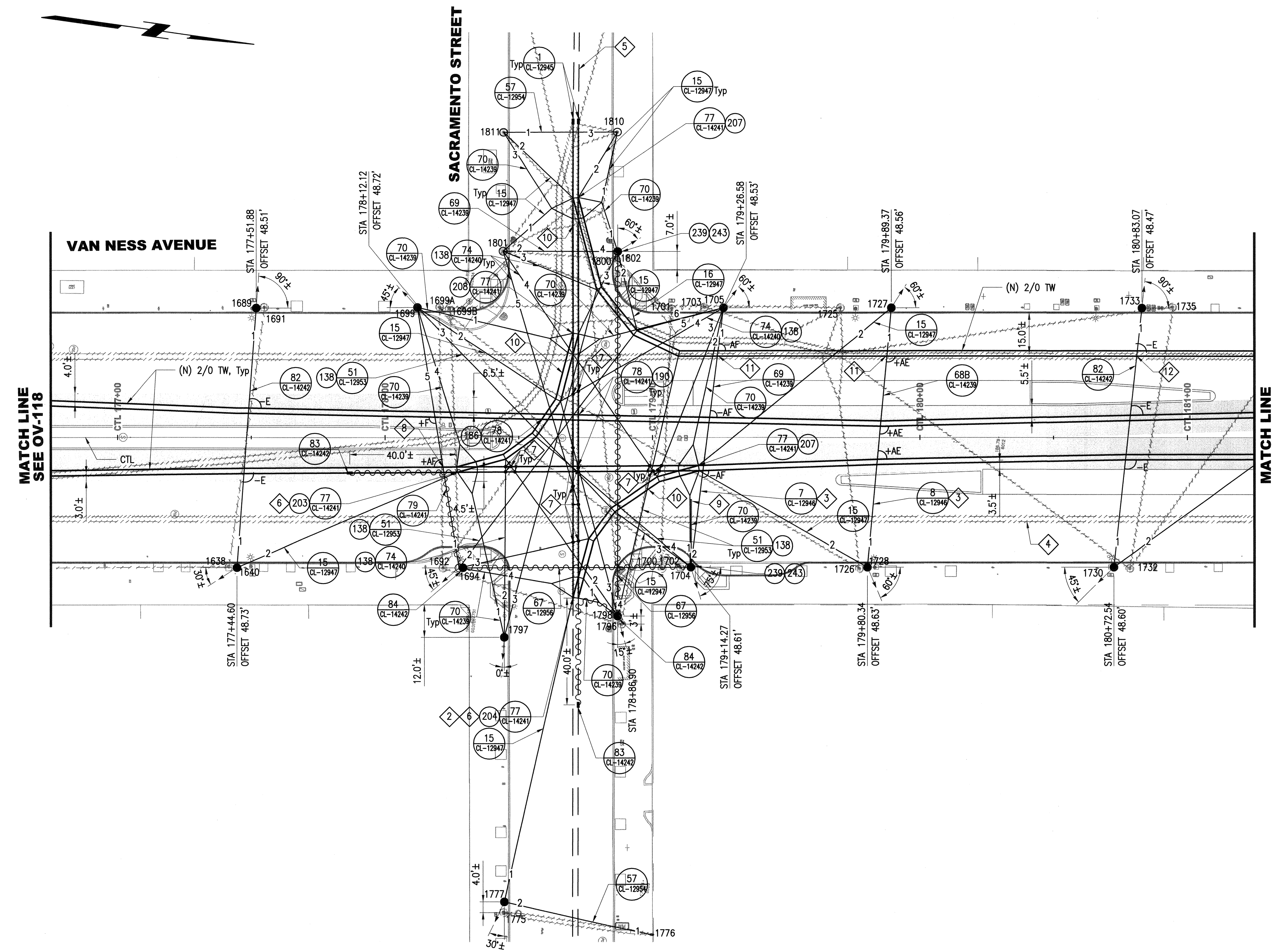
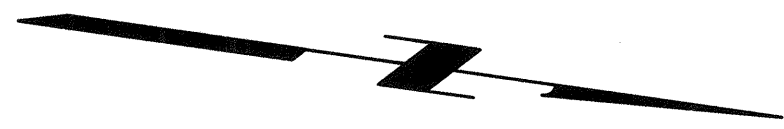
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

**OVERHEAD CONTACT SYSTEM
 LAYOUT PLAN
 CTL STA 172+25 TO 176+75**

1289	REVISION
CL-29123	
OV-118	0
OV-161	

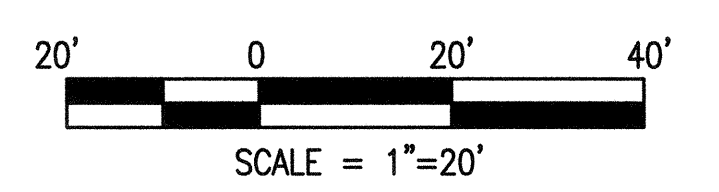


MATCH LINE
SEE OV-118

MATCH LINE
SEE OV-120

NOTES:

1. SEE OV-119A FOR OCS SCHEDULE AND TROLLEY WIRE SECTIONALIZATION PLAN.
2. SPLICE (N) SWITCH TO (E) TROLLEY WIRE.
3. AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.
4. (E) TROLLEY WIRE TO BE REMOVED, Typ.
5. (E) TROLLEY WIRE TO REMAIN, Typ.
6. RESET FLIPPER TO STRAIGHT.
7. PROVIDE HANGER, DETAIL 6 AS SHOWN ON CL-12945.
8. REMOVE ONE FEED SPAN HANGER ASSEMBLY, ONE EACH OF ITEMS 49, 51, AND 69. PROVIDE AUXILIARY FEED TAP, ONE EACH OF ITEMS 57, 11, 51, AND 263. STRIP CABLE TO ATTACH CLAMP, WRAP EXPOSED CABLE WITH TWO LAYERS OF ELECTRICAL TAPE AND TWO COATS OF INSULATING VARNISH.
9. (N) TRAFFIC MAST ARM.
10. (N) 4/0 TW, Typ.
11. PROVIDE ADDITIONAL ITEMS 11, 51, 57, 263
12. PROVIDE ADDITIONAL ITEMS 49, 51, AND 71



I:\CP16401_Van Ness BRT\2_CER\500_Design Components\501_Drawings\12_Overhead\Sheet Files\CP16401OV119.dwg, J:\Thal Mon, Dec 28, 2015 - 2:37 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *[Signature]*
 DRAWN: *[Signature]*
 CHECKED: *[Signature]*
 REVIEWED: *[Signature]*
 RECOMMENDED: *[Signature]*
 APPROVED: *[Signature]*
 DATE: MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

**OVERHEAD CONTACT SYSTEM
 SPECIAL WORK AND LAYOUT PLAN
 CTL STA 176+75 TO 181+25**

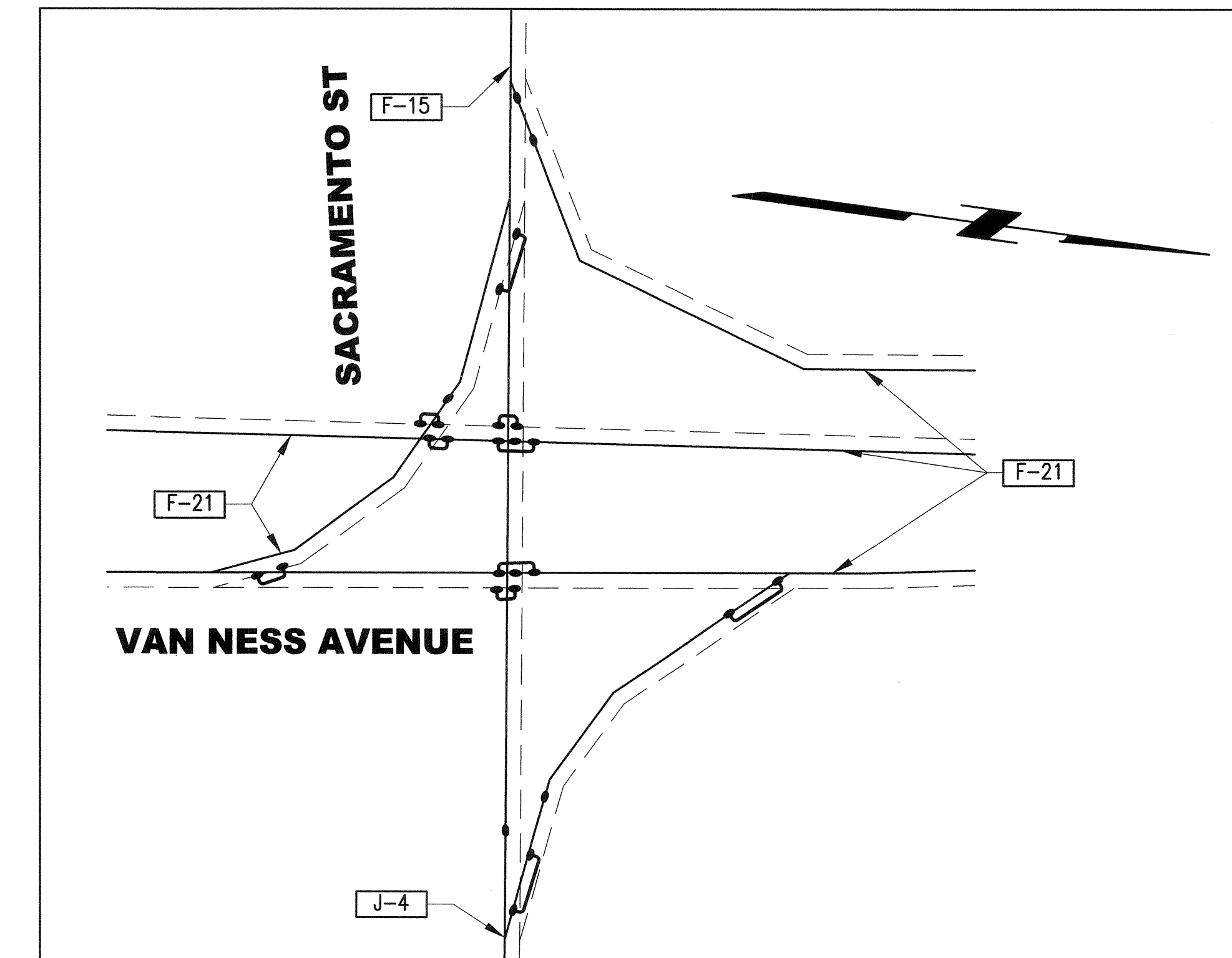
1289	
CL-29124	
OV-119	REVISION
OV-161	0

NOTE:

1. SEE OV-119 FOR SPECIAL WORK AND LAYOUT PLAN.

POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES	
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7		
1638	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1640	770	V	4/32	800 24.25	4000 23.00	-	-	-	-	-	-	(2) (4) (16)
1689	765N	V	2/32	800 24.50	-	-	-	-	-	-	-	(2) (4) (16)
1691	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1692	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1694	770	VT	4/32	800 22.00	2100 23.00	1100 26.25	850 23.50	-	-	-	-	(2) (4) (8) (9) (16) (17) (23)
1699	770	VF	6/32	1400 22.50	800 27.25	2000 24.25	1350 23.25	800 22.00	-	-	-	(2) (3) (16) (18)
1699A	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1699B	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1700	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1701	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1702	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1703	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1704	770	VM	3/32	800 21.50	2000 17.00	600 25.00	1350 25.25	-	-	-	-	(2) (4) (6) (16) (17)
1705	770	VF	4/32	2000 17.50	800 22.00	250 25.50	1650 28.00	300 23.00	800 22.50	-	-	(2) (3) (16) (18)
1725	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1726	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1727	770	V	4/32	2000 21.75	3000 24.50	-	-	-	-	-	-	(2) (4) (16)
1728	770	V	3/32	2000 24.75	1600 23.75	-	-	-	-	-	-	(2) (4) (16)
1730	770	V	6/32	1500 23.50	3650 26.75	-	-	-	-	-	-	(2) (4) (16)
1732	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1733	765N	V	3/32	1500 21.25	-	-	-	-	-	-	-	(2) (4) (16)

POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES	
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7		
1735	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1775	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1776	-	-	-	800 21.50	-	-	-	-	-	-	-	(1)
1777	770	S	4/32	3650 25.50	800 21.25	-	-	-	-	-	-	(2)
1796	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1797	770	CT	2/32	800 22.75	400 27.75	1300 23.25	-	-	-	-	-	(2) (4) (16) (17)
1798	770	T	6/32	800 22.50	1100 28.00	1850 28.50	1750 25.50	-	-	-	-	(2) (4) (17)
1800	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1801	-	-	-	650 20.75	2000 18.00	1250 22.00	1150 25.75	900 27.25	-	-	-	(1)
1802	770	CT	3/32	1300 20.25	250 23.50	3750 21.00	2000 18.25	-	-	-	-	(2) (4) (16) (17)
1810	-	-	-	1450 20.50	2000 20.50	800 20.25	-	-	-	-	-	(1)
1811	-	-	-	800 20.25	2800 20.25	500 21.75	-	-	-	-	-	(1)

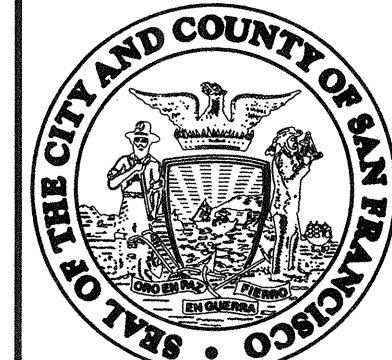


TROLLEY WIRE SECTIONALIZATION PLAN
NTS

I:\PT1640.1_Van_Ness_BRT_V2_CER\500_Design_Components\501_Drawings\12_Overhead\Sheet_Files\PT16401OV119A.dwg, d12, Tue Jul 07, 2015 - 11:20 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

DESIGNED: *[Signature]*
 DRAWN: *[Signature]*
 CHECKED: *[Signature]*
 REVIEWED: *[Signature]*
 RECOMMENDED: *[Signature]*
 APPROVED: *[Signature]*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

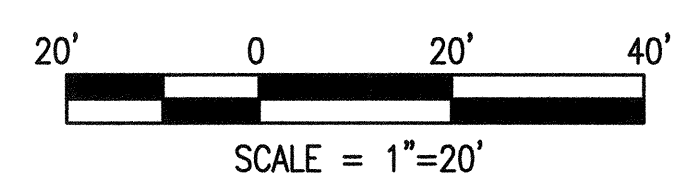
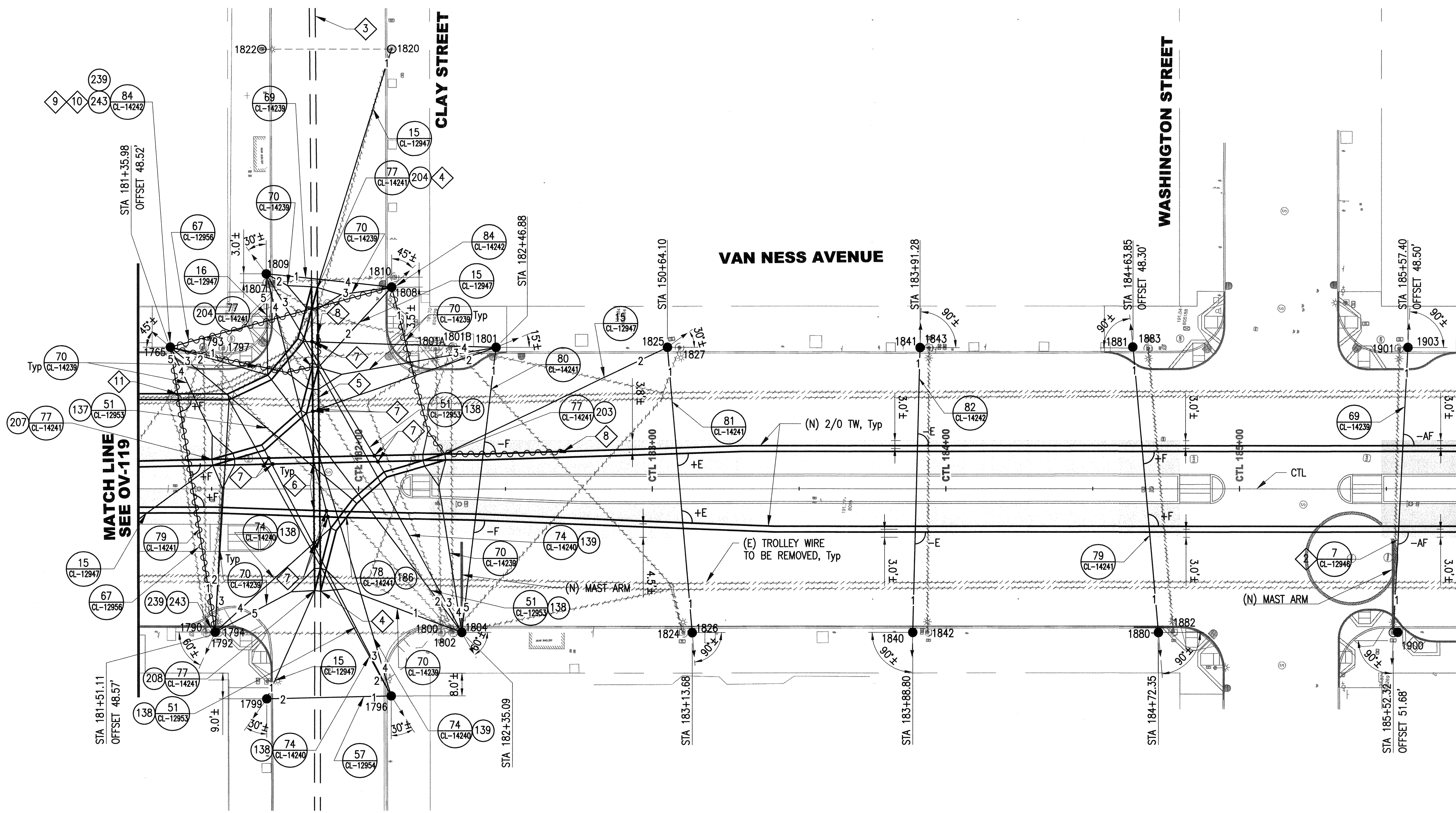
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 176+75 TO 181+25

1289
CL-29125
 REVISION
 OV-119A
 OV-161 0



NOTES:

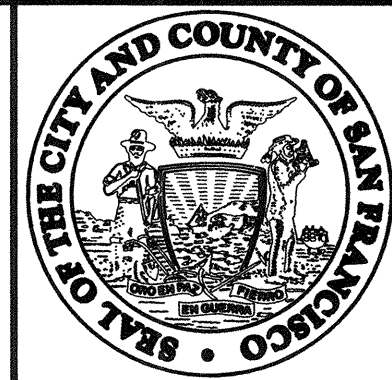
1. SEE OV-120A FOR OCS SCHEDULE AND TROLLEY WIRE SECTIONALIZATION PLAN.
2. AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.
3. (E) TROLLEY WIRE TO REMAIN, Typ.
4. SPLICE (N) SWITCH TO (E) TROLLEY WIRE.
5. (N) 4/0 TW, Typ.
6. PROVIDE CROSSOVER DETAIL 78 WITH ITEM #190 (90°) AS SHOWN ON CL-14241.
7. PROVIDE ADJUSTABLE HANGER, DETAIL 6 AS SHOWN ON CL-12945.
8. PROVIDE ANTENNA MOUNTING AND CONNECTING WIRE, DETAIL 83 AS SHOWN ON CL-14242.
9. INSTALL CONTROL BOX ASSEMBLY FOR RIGHT HAND SWITCH ON CLAY STREET ONTO POLE #1765.
10. INSTALL SWITCH INDICATOR LAMP ASSEMBLY AND SIGN FOR LEFT HAND SWITCH ON VAN NESS AVENUE ONTO POLE #1765.
11. PROVIDE ADDITIONAL ITEMS 49, 51, AND 69.



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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>D. Li</i>
DRAWN	<i>D. Li</i>
CHECKED	<i>C. Paul</i>
REVIEWED	<i>J. May</i>
RECOMMENDED	<i>F. Mohamoud</i>
APPROVED	<i>F. Mohamoud</i>
DATE	MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

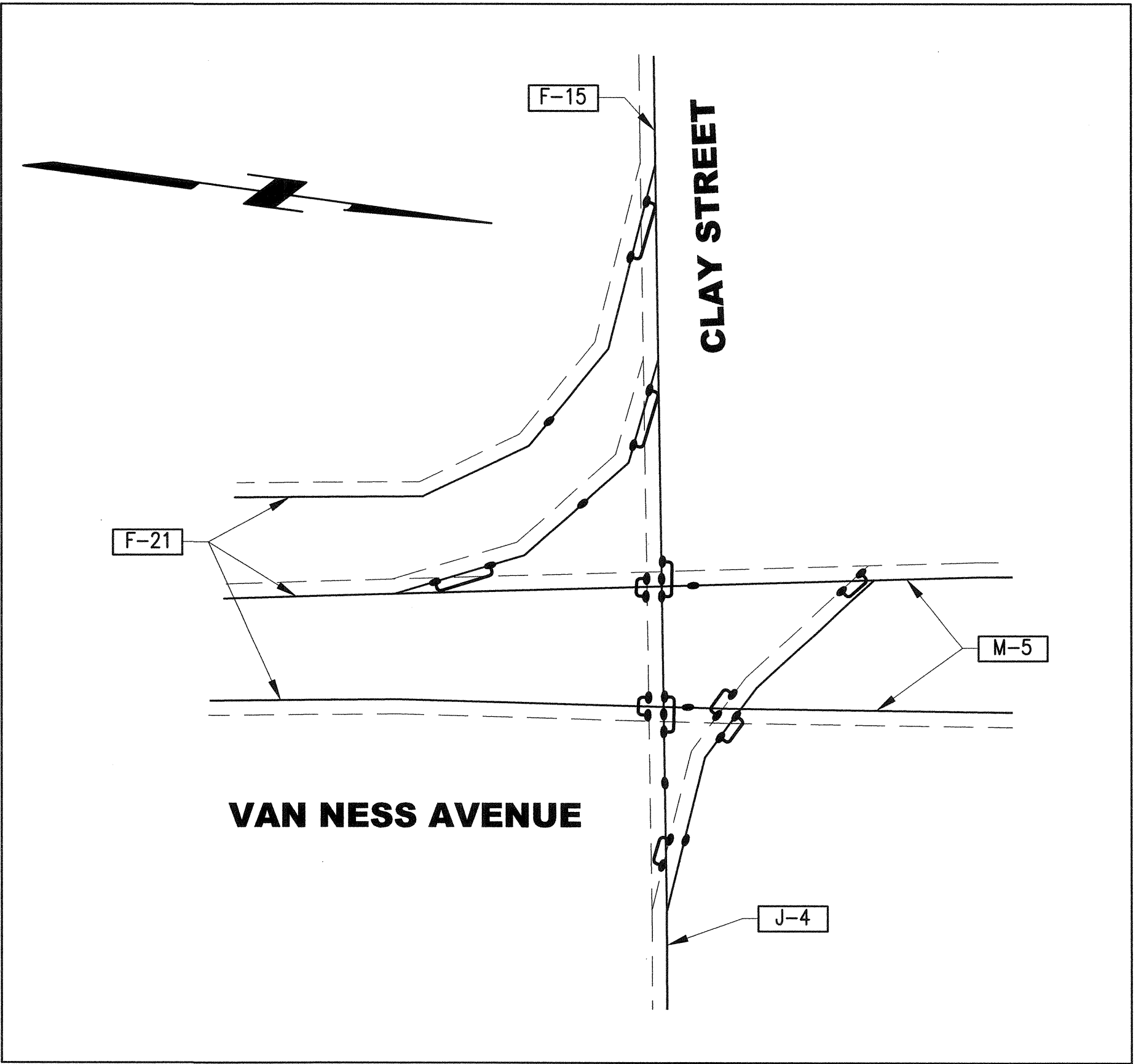
**OVERHEAD CONTACT SYSTEM
SPECIAL WORK AND LAYOUT PLAN
CTL STA 181+25 TO 185+75**

1289	
CL-29126	
OV-120	REVISION
OV-161	0

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
1765	770	VF	5/32	2750 20.00	250 27.00	800 26.25	2000 22.25	800 21.00	-	-	(2) (3) (16) (18)
1790	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1792	770	VT	4/32	800 27.25	800 22.00	850 26.00	1300 26.75	800 22.25	-	-	(2) (4) (16) (17)
1793	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1794	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1796	770	T	6/32	800 22.25	1000 26.00	1750 26.25	1800 27.50	-	-	-	(2) (4) (17)
1797	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1799	770	CT	3/32	3400 21.75	800 22.25	-	-	-	-	-	(2) (4) (16) (17)
1800	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1801	770	VF	4/32	800 22.25	1550 27.00	800 21.50	1150 21.25	-	-	-	(2) (3) (16) (18)
1801A	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1801B	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1802	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1804	770	VM	6/32	1150 23.50	2100 26.75	850 21.50	1500 24.50	800 21.75	-	-	(2) (4) (6) (16) (17)
1807	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1808	770	CT	4/32	800 26.25	4250 21.25	800 21.75	800 17.25	-	-	-	(2) (4) (16) (17) (2)
1809	770	T	5/32	800 18.25	950 21.00	1700 25.25	1650 26.00	250 27.25	-	-	(2) (4) (17)
1810	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1820	-	-	-	3500 21.75	-	-	-	-	-	-	(1)
1822	-	-	-	-	-	-	-	-	-	-	(1)
1824	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1825	770	V	5/32	800 24.00	4200 25.25	-	-	-	-	-	(2) (4) (16)
1826	765N	V	2/32	800 23.75	-	-	-	-	-	-	(2) (4) (16)
1827	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1840	765N	V	4/32	1000 23.00	-	-	-	-	-	-	(2) (4) (16)
1841	765N	V	4/32	1000 23.25	-	-	-	-	-	-	(2) (4) (16)
1842	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
1843	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1880	770	VT	3/32	1000 23.25	-	-	-	-	-	-	(2) (4) (16) (17)
1881	770	VF	3/32	1000 23.50	-	-	-	-	-	-	(2) (3) (16) (18)
1882	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1883	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1900	770	VM	4/32	2000 24.00	-	-	-	-	-	-	(2) (4) (6) (8) (9) (16) (17)
1901	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1903	770	VF	4/32	2000 24.00	-	-	-	-	-	-	(2) (3) (16) (18)

- NOTES:**
- SEE OV-120 FOR SPECIAL WORK AND LAYOUT PLAN.
 - SEE SL-SERIES PLANS FOR STREETLIGHT POLE REMOVAL WORK.



TROLLEY WIRE SECTIONALIZATION PLAN
NTS

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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *Paul G.*
 DRAWN: *Paul G.*
 CHECKED: *C. Davis*
 REVIEWED: *J. H.*
 RECOMMENDED: *F. M.*
 APPROVED: *F. M.*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *Vincent...*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 181+25 TO 185+75

1289
 CL-29127
 OVER-120A
 OVER-161
 REVISION
 0

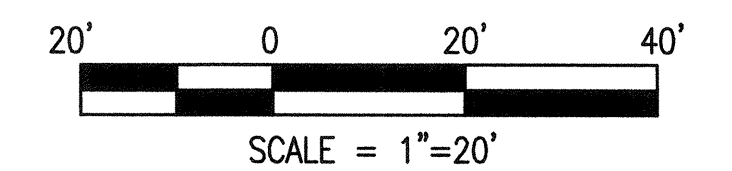
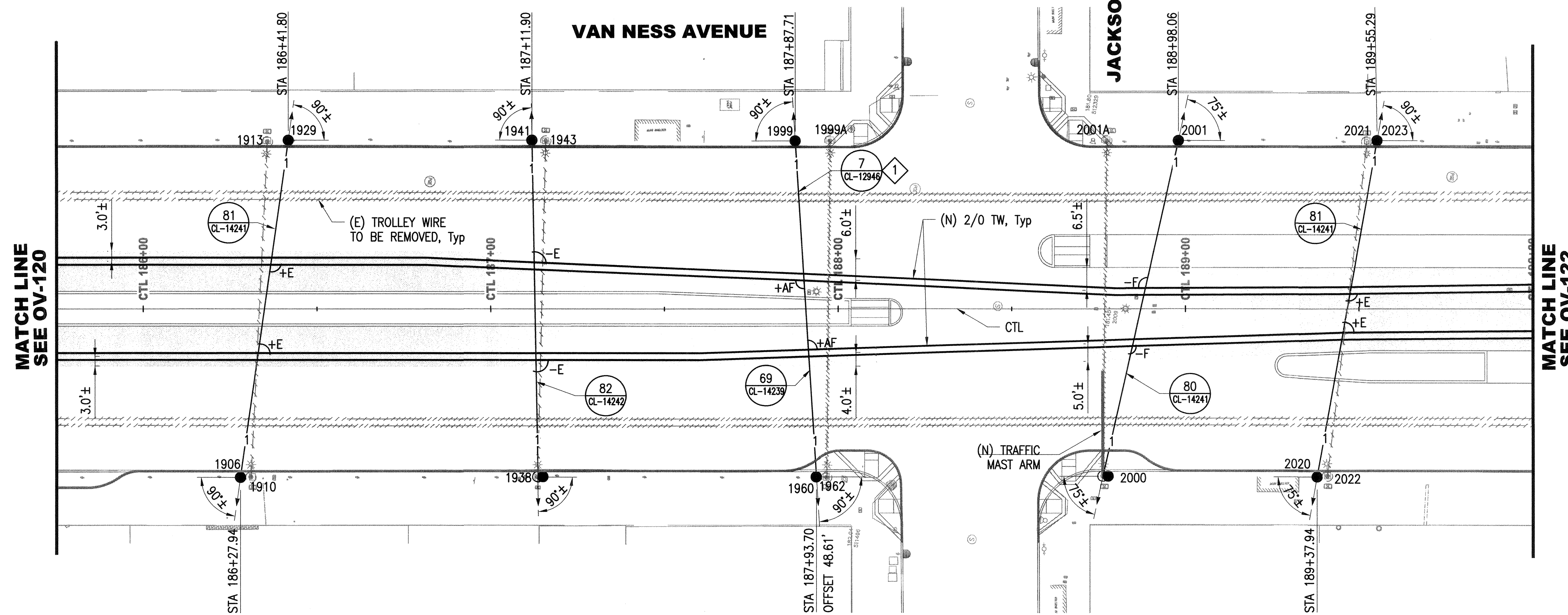


OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
1906	765N	V	4/32	1000 23.25	-	(2) (4) (16)
1910	-	-	-	-	-	(7) (9) (23)
1913	-	-	-	-	-	(7) (9) (23)
1929	765N	V	4/32	1000 23.25	-	(2) (4) (16)
1938	765N	V	4/32	1000 23.00	-	(2) (4) (8) (9) (16) (23)
1941	765N	V	4/32	1000 23.00	-	(2) (4) (16)
1943	-	-	-	-	-	(7) (9) (23)
1960	770	VT	2/32	500 18.75	-	(2) (4) (16) (17)
1962	-	-	-	-	-	(7) (9) (23)
1999	770	VF	2/32	500 19.50	-	(2) (3) (16) (18)

OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
1999A	-	-	-	-	-	(7) (9) (23)
2000	770	VM	4/32	1600 26.25	-	(2) (4) (6) (8) (9) (16) (17) (23)
2001	770	VP	4/32	1600 27.50	-	(2) (3) (18)
2001A	-	-	-	-	-	(7) (9) (23)
2020	765N	V	4/32	1000 23.50	-	(2) (4) (16)
2021	-	-	-	-	-	(7) (9) (23)
2022	-	-	-	-	-	(7) (9) (23)
2023	765N	V	4/32	1000 23.75	-	(2) (4) (16)

NOTE:

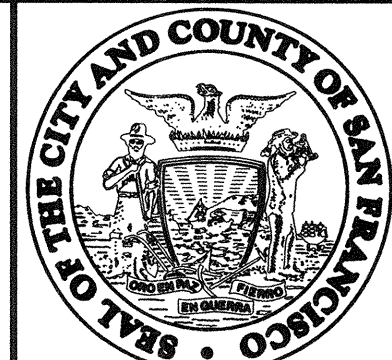
- AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.



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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *Manda Pat*
 DRAWN: *Manda Pat*
 CHECKED: *C. David*
 REVIEWED: *Thomas*
 RECOMMENDED: *Prothman*
 APPROVED: *F. Mohamoud*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *Vincent...*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 LAYOUT PLAN
 CTL STA 185+75 TO 190+00

1289	
CL-29128	
OV-121	REVISION
OV-161	0

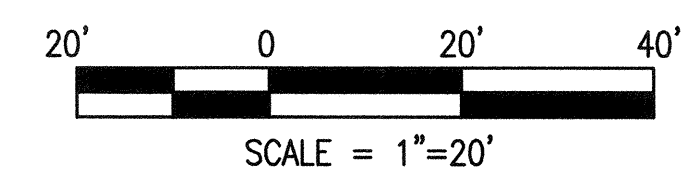
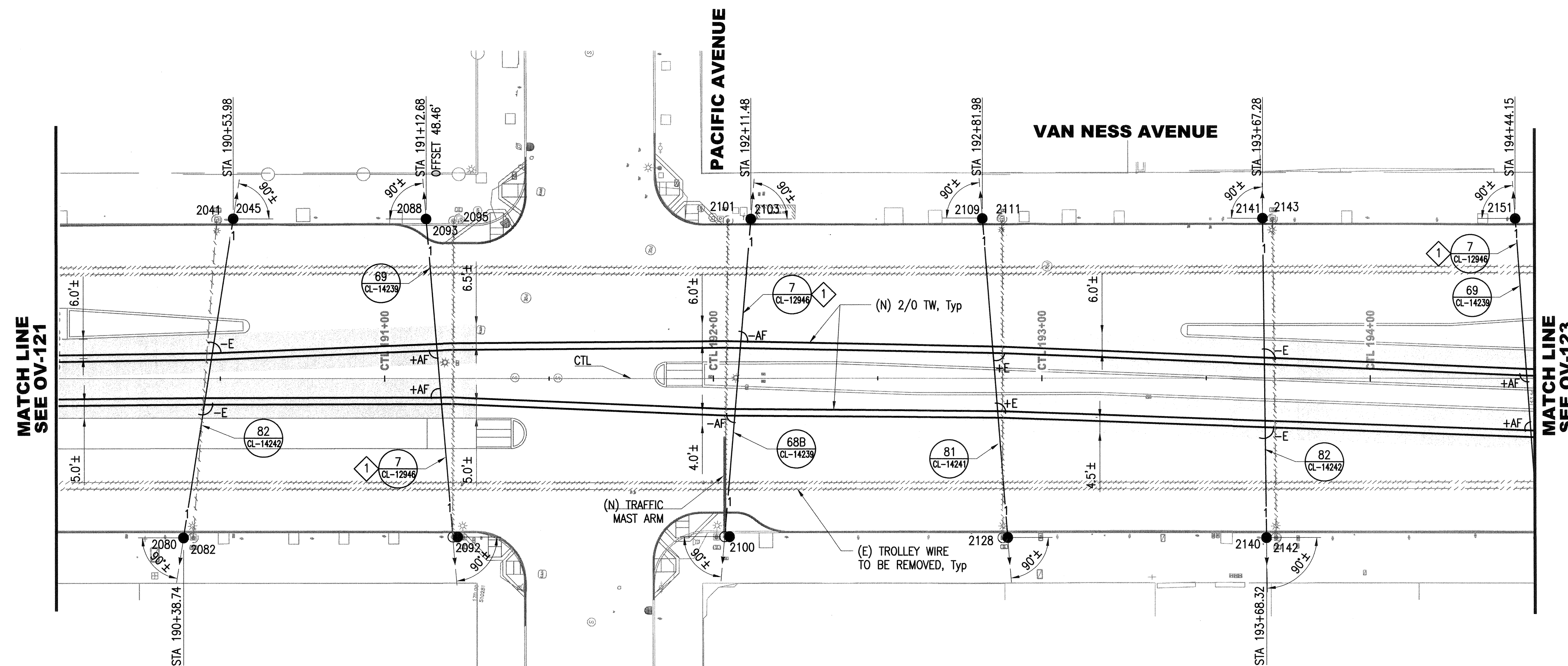


OCS SCHEDULE						
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
2041	-	-	-	-	-	(7) (9) (23)
2045	765N	V	4/32	1000 23.75	-	(2) (4) (16)
2080	765N	V	4/32	1000 23.75	-	(2) (4) (16)
2082	-	-	-	-	-	(7) (9) (23)
2088	770	VF	3/32	1650 17.00	-	(2) (3) (16) (18)
2092	770	VT	3/32	1650 18.00	-	(2) (4) (8) (9) (16) (17) (23)
2093	-	-	-	-	-	(7) (9) (23)
2095	-	-	-	-	-	(7) (9) (23)
2100	770	VM	5/32	3000 25.00	-	(2) (4) (6) (8) (9) (16) (17) (23)
2101	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE						
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
2103	770	VF	5/32	3000 25.25	-	(2) (3) (16) (18)
2109	765N	V	5/32	1500 22.25	-	(2) (4) (16)
2111	-	-	-	-	-	(7) (9) (23)
2128	765N	V	5/32	1500 22.00	-	(2) (4) (8) (9) (16) (23)
2140	765N	V	4/32	1000 23.00	-	(2) (4) (16)
2141	765N	V	4/32	1000 23.75	-	(2) (4) (16)
2142	-	-	-	-	-	(7) (9) (23)
2143	-	-	-	-	-	(7) (9) (23)
2151	770	VF	3/32	3000 17.00	-	(2) (3) (16) (18)

NOTE:

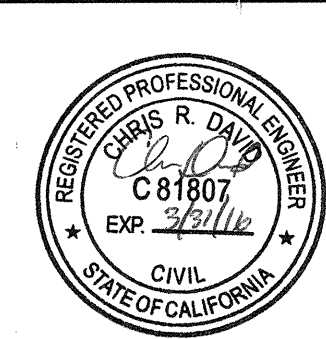
- AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.



I:\projects\01_van ness brt\2_CER\300_design_components\301_drawings\12_overhead\sheet_files\CPTB401OV122.dwg kmanidapa Fri Nov 20 2015 9:34 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *R. Mandapat*
 DRAWN: *R. Mandapat*
 CHECKED: *C. David*
 REVIEWED: *J. Wang*
 RECOMMENDED: *F. M...*
 APPROVED: *F. M...*
 DATE: MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *Vincent...*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM		1289
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT		CL-29129
OVERHEAD CONTACT SYSTEM LAYOUT PLAN		OV-122
CTL STA 190+00 TO 194+50		OV-161
		REVISION
		0

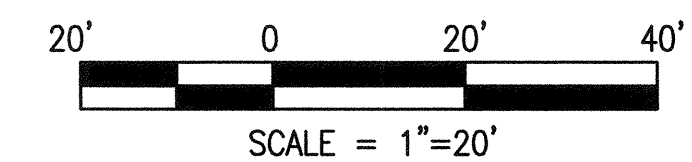
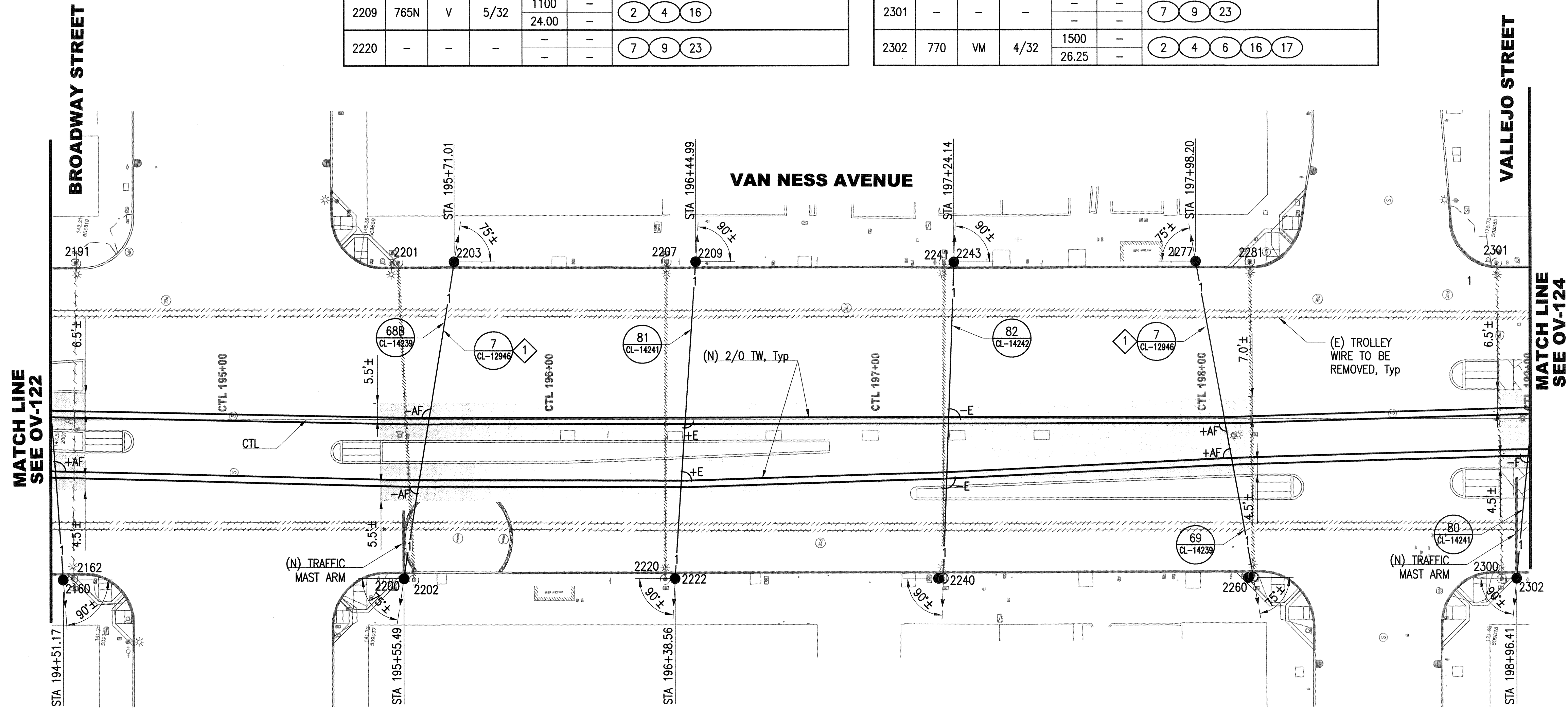


OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
2160	770	VT	3/32	3000 17.50	-	(2) (4) (16) (17)
2162	-	-	-	-	-	(7) (9) (23)
2191	-	-	-	-	-	(7) (9) (23)
2200	770	VM	4/32	2800 23.00	-	(2) (4) (6) (16) (17)
2201	-	-	-	-	-	(7) (9) (23)
2202	-	-	-	-	-	(7) (9) (23)
2203	770	VF	5/32	2800 25.00	-	(2) (3) (16) (18)
2207	-	-	-	-	-	(7) (9) (23)
2209	765N	V	5/32	1100 24.00	-	(2) (4) (16)
2220	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
2222	765N	V	4/32	1100 22.00	-	(2) (4) (16)
2240	765N	V	4/32	1200 22.00	-	(2) (4) (8) (9) (16) (23)
2241	-	-	-	-	-	(7) (9) (23)
2243	765N	V	5/32	1200 23.75	-	(2) (4) (16)
2260	770	VT	3/32	2400 17.75	-	(2) (4) (8) (9) (16) (17) (23)
2277	770	VF	3/32	2400 17.00	-	(2) (3) (16) (18)
2281	-	-	-	-	-	(7) (9) (23)
2300	-	-	-	-	-	(7) (9) (23)
2301	-	-	-	-	-	(7) (9) (23)
2302	770	VM	4/32	1500 26.25	-	(2) (4) (6) (16) (17)

NOTE:

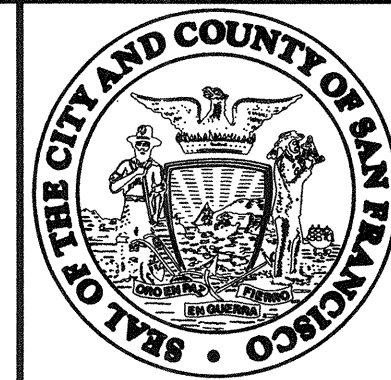
- AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.



I:\proj6401_van_ness_brt\2_CER\300_design_components\301_drawings\12_overhead\sheet_files\CP76401\0123.dwg kmanadapa Fri Nov 20 2015 - 9:37 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *R. Mandapat*
 DRAWN: *R. Mandapat*
 CHECKED: *C. D. D.*
 REVIEWED: *J. M.*
 RECOMMENDED: *[Signature]*
 APPROVED: *F. Mohan*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 LAYOUT PLAN
 CTL STA 194+50 TO 199+00

1289	
CL-29130	
OV-123	REVISION
OV-161	0

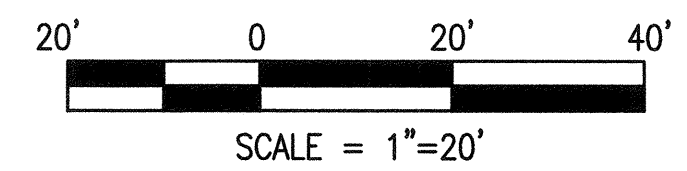
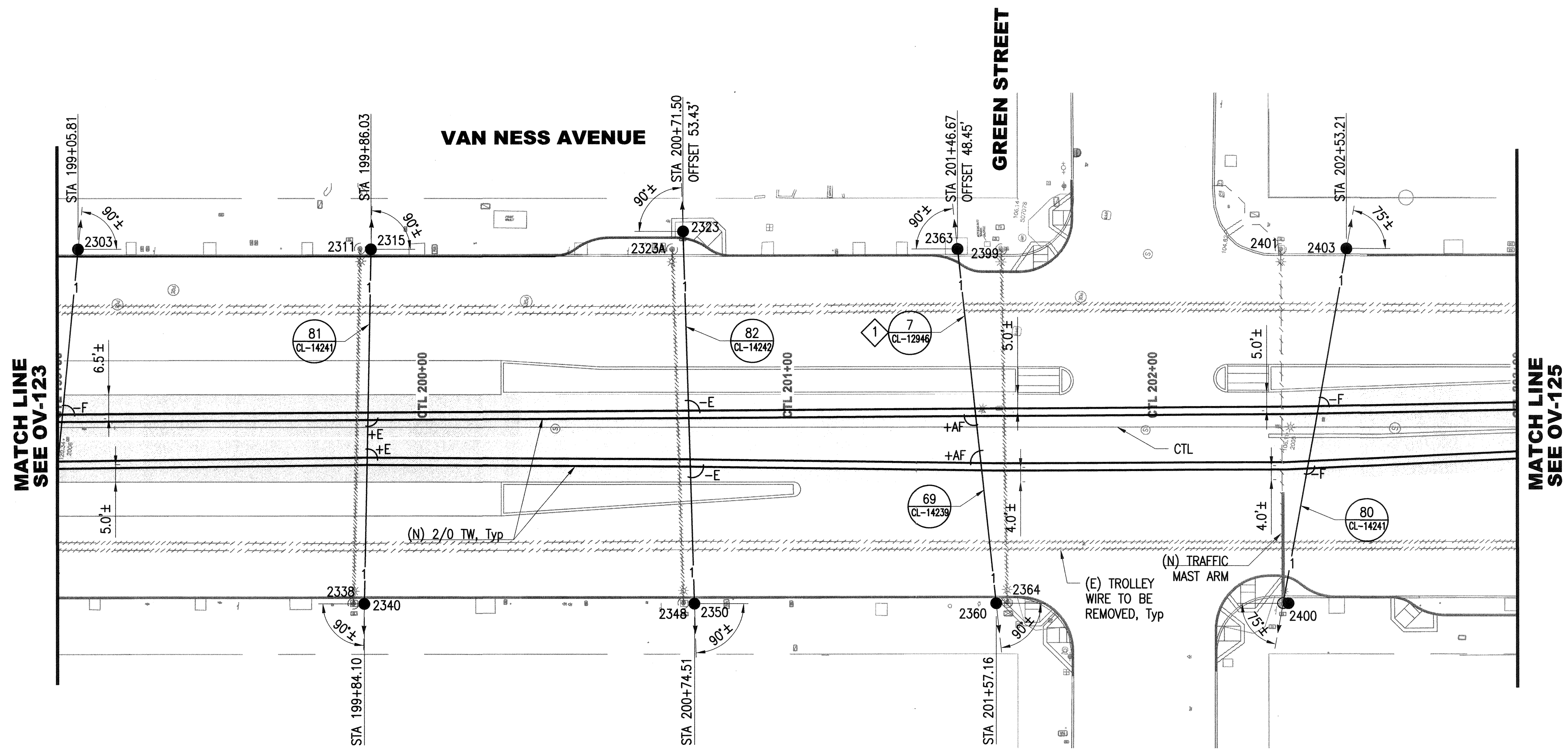


OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
2303	770	F	4/32	1500 28.00	-	(2) (3) (18)
2311	-	-	-	-	-	(7) (9) (23)
2315	765N	V	5/32	1100 23.75	-	(2) (4) (16)
2323	765N	V	5/32	1100 24.25	-	(2) (4) (16) (2)
2323A	-	-	-	-	-	(7) (9) (23)
2338	-	-	-	-	-	(7) (9) (23)
2340	765N	V	4/32	1100 23.00	-	(2) (4) (16)
2348	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
2350	765N	V	4/32	1100 23.00	-	(2) (4) (16)
2360	770	VT	3/32	1300 17.50	-	(2) (4) (16) (17)
2363	770	VF	3/32	1300 17.00	-	(2) (3) (16) (18)
2364	-	-	-	-	-	(7) (9) (23)
2399	-	-	-	-	-	(7) (9) (23)
2400	770	VM	4/32	1600 26.25	-	(2) (4) (6) (8) (9) (16) (17) (23)
2401	-	-	-	-	-	(7) (9) (23)
2403	770	VF	4/32	1600 27.75	-	(2) (3) (16) (18)

NOTES:

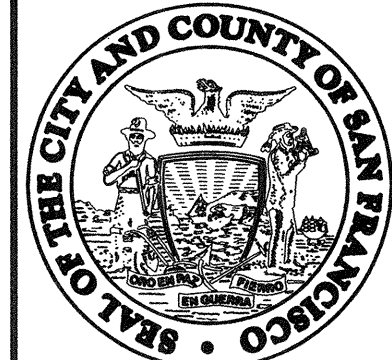
- AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.
- PRIOR TO EXCAVATION FOR (N) POLE FOUNDATION, POT HOLE TO LOCATE (E) MUNI TRACTION POWER DUCT BANK, SEE DB AND UT-SERIES DRAWINGS.



I:\p16401\van_ness_brt\2_CER\300_design_components\301_drawings\12_overhead\sheet_files\CP16401OV124.dwg kmandapa Fri Nov 20 2015 9:51 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

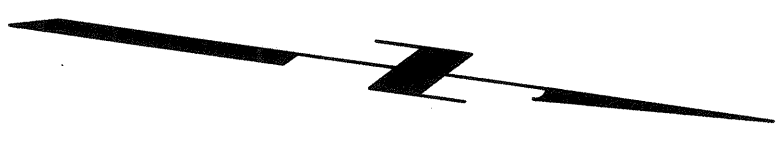
DESIGNED: *X. Mandapat*
 DRAWN: *X. Mandapat*
 CHECKED: *C. David*
 REVIEWED: *mm*
 RECOMMENDED: *Prohaska*
 APPROVED: *[Signature]*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

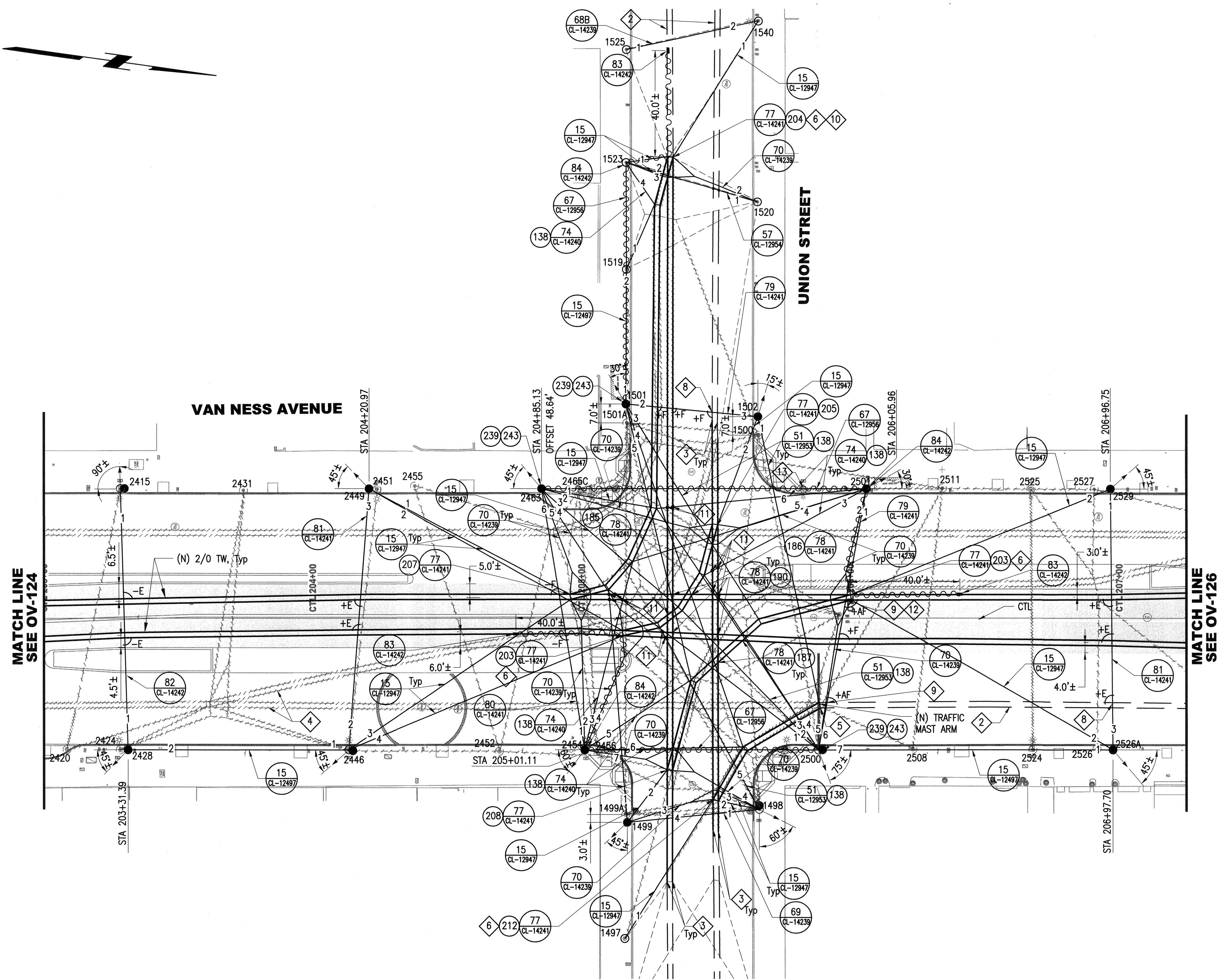
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 LAYOUT PLAN
 CTL STA 199+00 TO 203+00

1289	
CL-29131	
OV-124	REVISION
OV-161	0



NOTES:

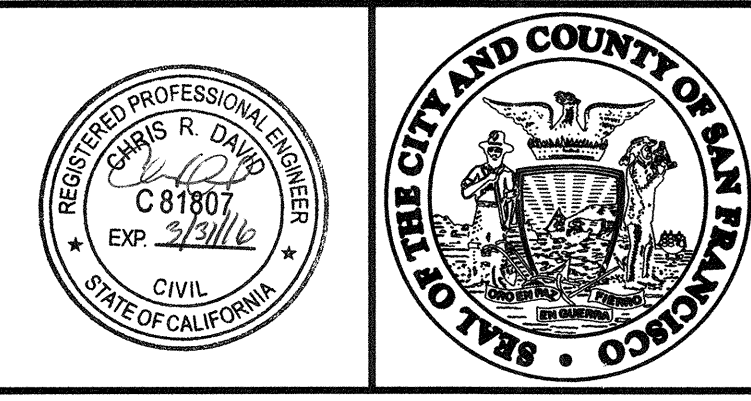
1. SEE OV-125A FOR OCS SCHEDULE AND TROLLEY WIRE SECTIONALIZATION PLAN.
2. EXISTING TROLLEY WIRE TO REMAIN, Typ.
3. SPLICE EXISTING TROLLEY WIRE TO NEW TROLLEY WIRE, Typ. PROVIDE DETAIL 1, AS SHOWN ON CL-12945.
4. EXISTING TROLLEY WIRE TO BE REMOVED, Typ.
5. SPLICE (N) TROLLEY WIRE TO (E) TROLLEY WIRE AT CARRIED THROUGH PORTION OF (N) CURVE SEGMENT.
6. RESET FLIPPER TO STRAIGHT.
7. AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.
8. PROVIDE ADDITIONAL ITEMS 49, 51, AND 69.
9. PROVIDE ADDITIONAL AUXILIARY FEED TAP ITEMS 51, 11, 57, AND 263. STRIP CABLE TO ATTACH CLAMP, WRAP EXPOSED CABLE WITH TWO LAYERS OF ELECTRICAL TAPE AND TWO COATS OF INSULATING VARNISH.
10. SPLICE (N) SWITCH TO (E) TROLLEY WIRE.
11. PROVIDE ADJUSTABLE HANGER, DETAIL 6, AS SHOWN ON CL-12945
12. REMOVE ONE FEED SPAN HANGER ASSEMBLY, ONE EACH OF ITEMS 49, 51, AND 69.
13. REMOVE AND SALVAGE ALL HARDWARE ASSOCIATED WITH (E) SWITCH ASSEMBLY. SEE SL-SERIES DRAWINGS FOR STREETLIGHT POLE REMOVAL.



I:\PT640.1_Van Ness BRT V2_CER\500_Design Components\500_Drawings\12_Overhead\Sheet_Files\CP1640\OV125.dwg H:Thal Mon Dec 28 2015 - 2:44 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *D. Li*
 DRAWN: *D. Li*
 CHECKED: *C. Paul*
 REVIEWED: *Manly*
 RECOMMENDED: *Proton*
 APPROVED: *F. Mohr*
 DATE: **MAY 18 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

OVERHEAD CONTACT SYSTEM
 SPECIAL WORK AND LAYOUT PLAN
 CTL STA 203+00 TO 207+25

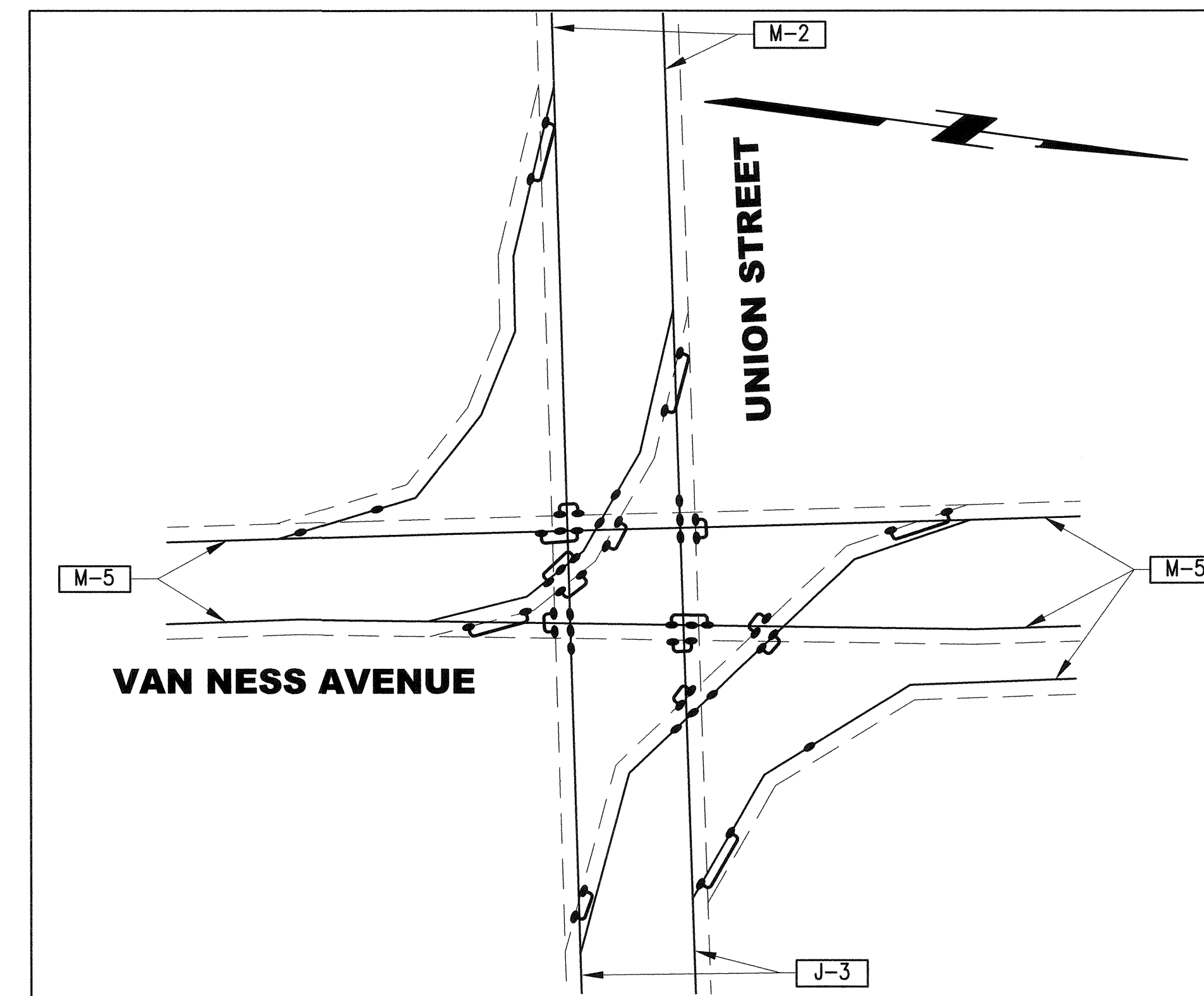
1289	
CL-29132	
OV-125	REVISION
OV-161	0

NOTE:

1. SEE OV-125 FOR SPECIAL WORK AND LAYOUT PLAN.

OCS SCHEDULE												
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES	
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7		
1497	-	-	-	3550 20.75	-	-	-	-	-	-	-	(1)
1498	770	CT	5/32	1800 18.25	300 20.75	400 20.50	2200 21.00	1700 26.75	-	-	-	(2) (4) (8) (9) (16) (17) (23)
1499	770	T	5/32	1050 27.00	3600 20.50	800 21.00	1800 17.75	-	-	-	-	(2) (4) (17)
1499A	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1500	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1501	770	SF	6/32	500 18.75	800 23.25	1900 27.75	1550 21.00	2200 26.25	-	-	-	(2) (3) (14) (16) (18)
1501A	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
1502	770	T	6/32	2050 27.50	3600 24.75	800 24.50	-	-	-	-	-	(2) (4) (17)
1519	-	-	-	900 21.00	500 18.75	-	-	-	-	-	-	(1)
1520	-	-	-	500 21.25	800 21.25	-	-	-	-	-	-	(1)
1523	-	-	-	2050 20.25	500 21.25	400 21.00	1150 20.75	-	-	-	-	(1)
1525	-	-	-	500 22.25	-	-	-	-	-	-	-	(1)
1540	-	-	-	5100 20.75	500 22.25	-	-	-	-	-	-	(1)
2415	765N	V	2/32	1000 23.75	-	-	-	-	-	-	-	(2) (4) (8) (9) (16) (23)
2420	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2424	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2428	765N	V	3/32	1000 23.75	1000 18.75	-	-	-	-	-	-	(2) (4) (16)
2431	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2446	770	V	5/32	1000 18.75	800 23.25	3000 21.50	2850 26.00	-	-	-	-	(2) (4) (8) (9) (16) (23)
2449	767	V	4/32	1500 21.25	600 23.75	800 24.50	-	-	-	-	-	(2) (4) (16)
2451	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2452	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2454	770	VT	5/32	1000 21.00	800 21.50	1650 22.00	800 26.75	1700 24.00	950 22.25	800 22.25	-	(2) (4) (16) (17)
2455	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2456	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2463	770	VF	4/32	400 25.00	1050 24.25	600 25.50	800 27.75	800 21.00	1000 20.00	-	-	(2) (3) (16) (18)
2465C	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2500	770	VM	6/32	900 26.25	2050 27.25	700 25.50	900 27.50	800 27.00	800 20.75	1000 18.75	-	(2) (4) (6) (8) (9) (16) (17) (23)

OCS SCHEDULE												
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES	
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7		
2501	770	VF	6/32	800 25.25	800 26.25	650 26.50	1900 22.25	800 24.75	1600 24.50	-	-	(2) (3) (16) (18)
2508	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2511	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2524	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2525	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2526	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2526A	767	V	3/32	1000 18.75	600 26.50	1500 21.00	-	-	-	-	-	(2) (4) (16)
2527	-	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
2529	770	V	5/32	1500 24.00	3550 27.25	-	-	-	-	-	-	(2) (4) (16)



TROLLEY WIRE SECTIONALIZATION PLAN
NTS

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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *Paul D.*
 DRAWN: *Paul D.*
 CHECKED: *C. Dault*
 REVIEWED: *Jimmy*
 RECOMMENDED: *Antonia*
 APPROVED: _____
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: _____
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 203+00 TO 207+25

1289
CL-29133
 REVISION
OV-125A
OV-161 **0**

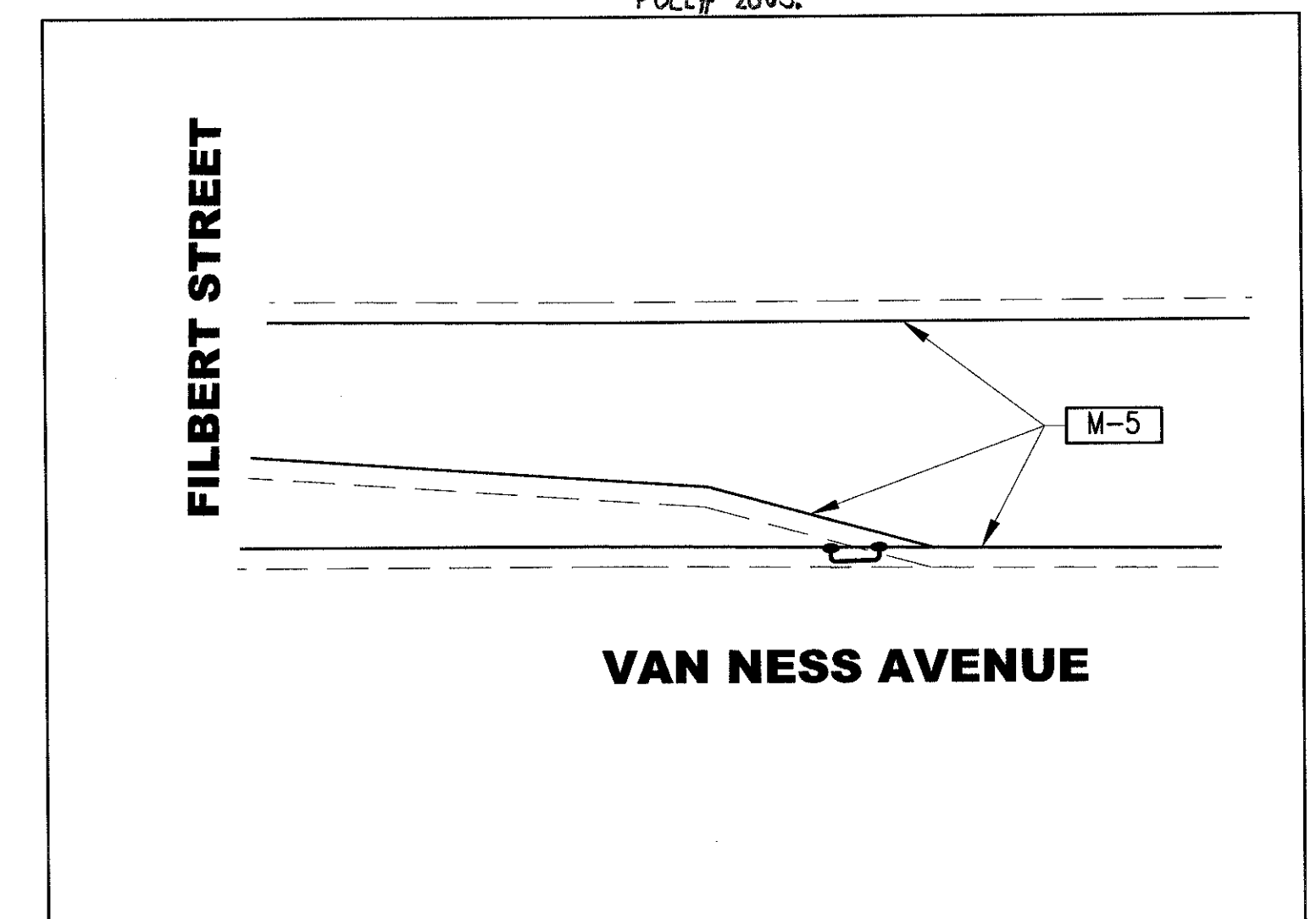


OCS SCHEDULE							
POLE No.	POLE		RAKE (in/ft)	GUYWIRE NO.			OVERHEAD NOTES
	TYPE	STYLE		1	2	3	
2546	765N	V	4/32	1300	-	-	(2) (4) (16)
				21.75	-	-	
2548	-	-	-	-	-	-	(7) (9)
				-	-	-	
2550	770	VT	2/32	500	-	-	(2) (4) (8) (9) (16) (17)
				19.50	-	-	
2553	-	-	-	-	-	-	(7) (9)
				-	-	-	
2555	765N	V	5/32	1300	-	-	(2) (4) (16)
				24.50	-	-	
2557	770	VF	2/32	500	-	-	(2) (3) (16) (18)
				20.00	-	-	
2559	-	-	-	-	-	-	(7) (9) (3)
				-	-	-	
2600	-	-	-	-	-	-	(7) (9)
				-	-	-	
2601	-	-	-	-	-	-	(7) (9)
				-	-	-	

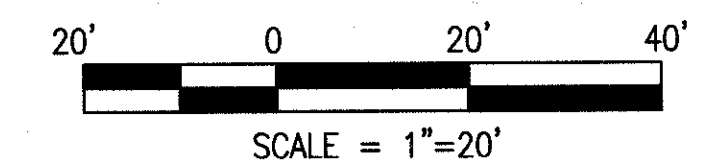
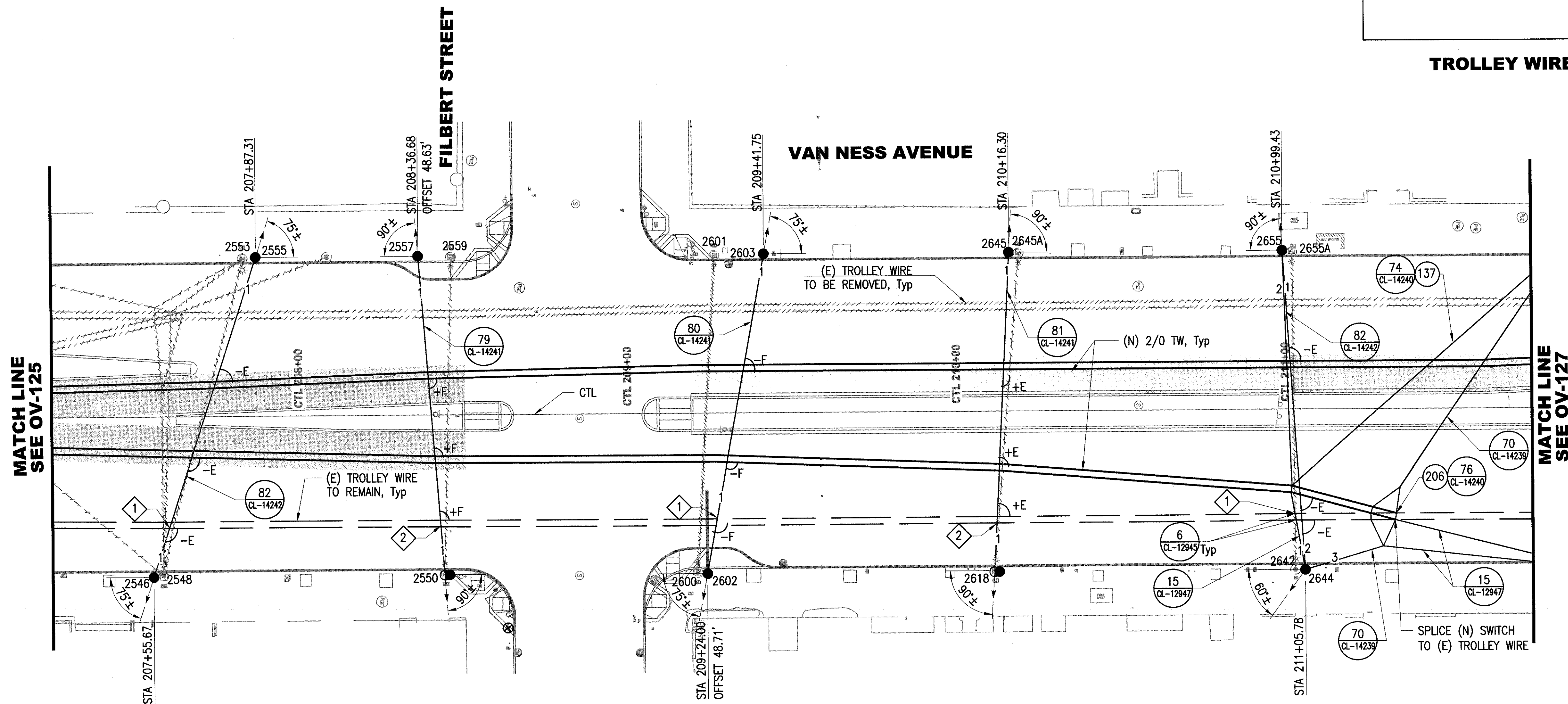
OCS SCHEDULE							
POLE No.	POLE		RAKE (in/ft)	GUYWIRE NO.			OVERHEAD NOTES
	TYPE	STYLE		1	2	3	
2602	770	VM	3/32	1000	-	-	(2) (4) (6) (16) (17)
				19.50	-	-	
2603	770	VF	3/32	1000	-	-	(2) (3) (16) (18)
				20.00	-	-	
2618	765N	V	4/32	1200	-	-	(2) (4) (8) (9) (16)
				21.75	-	-	
2642	-	-	-	-	-	-	(7) (9)
				-	-	-	
2644	767	V	4/32	400	1500	2050	(2) (4) (16)
				21.75	21.75	21.00	
2645	765N	V	5/32	1200	-	-	(2) (4) (16)
				23.50	-	-	
2645A	-	-	-	-	-	-	(7) (9) (4)
				-	-	-	
2655	767	V	4/32	1500	1050	-	(2) (4) (16)
				23.25	25.00	-	
2655A	-	-	-	-	-	-	(7) (9)
				-	-	-	

NOTES:

1. PROVIDE ADDITIONAL ITEMS 49, 51, AND 70.
2. PROVIDE ADDITIONAL ITEMS 49, 51, AND 69.
3. COORDINATE WITH PG&E TO RELOCATE (E) UTILITY TO POLE# 2557.
4. COORDINATE WITH PG&E TO RELOCATE (E) UTILITY TO POLE# 2603.



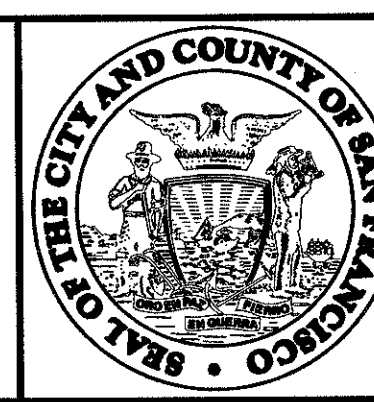
TROLLEY WIRE SECTIONALIZATION PLAN
NTS



I:\CPT\0401_Van Ness BRTV2_CER\500_Design Components\500_Drawings\12_Overhead\Sheet Files\CPT\0401\0126.dwg d12 Fir Nov 20 2015 12:04 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *C. David*
 DRAWN: *C. David*
 CHECKED: *R. Man*
 REVIEWED: *Jimmy*
 RECOMMENDED: *Providence*
 APPROVED: *P. Robinson*
 DATE: **MAY 13 2016**



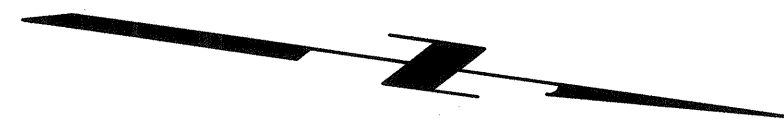
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

OVERHEAD CONTACT SYSTEM
 SPECIAL WORK AND LAYOUT PLAN
 CTL STA 207+25 TO 211+75

1289	
CL-29134	
OV-126	REVISION
OV-161	0

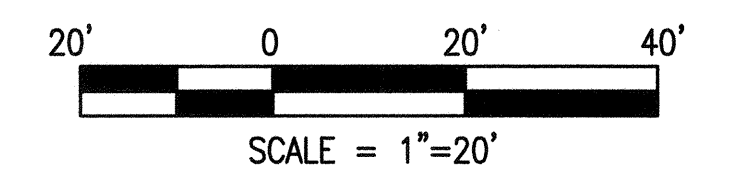
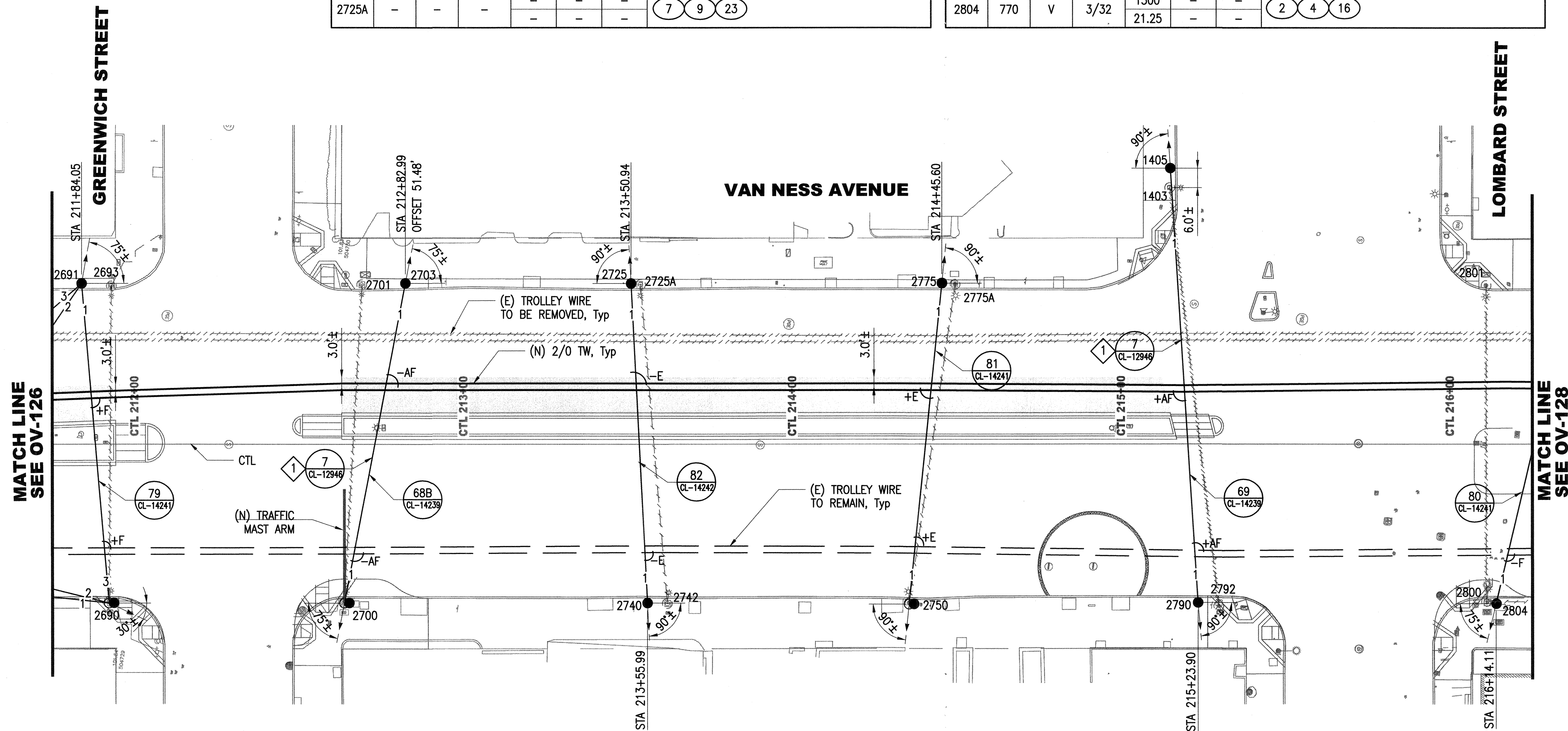


OCS SCHEDULE							
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.			OVERHEAD NOTES
	TYPE	STYLE		1	2	3	
1403	-	-	-	-	-	-	(7) (9) (23)
1405	770	SF	2/32	1000 17.50	-	-	(2) (3) (16) (18)
2690	770	VT	4/32	1950 20.25	3550 21.25	1500 20.25	(2) (4) (8) (9) (16) (17) (23)
2691	770	VF	2/32	1500 22.00	750 24.00	100 25.00	(2) (3) (16) (18)
2693	-	-	-	-	-	-	(7) (9) (23)
2700	770	VM	4/32	2200 22.50	-	-	(2) (4) (6) (8) (9) (16) (17) (23)
2701	-	-	-	-	-	-	(7) (9) (23)
2703	770	VF	5/32	2200 26.50	-	-	(2) (3) (16) (18)
2725	765N	V	4/32	1000 23.25	-	-	(2) (4) (16)
2725A	-	-	-	-	-	-	(7) (9) (23)

OCS SCHEDULE							
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.			OVERHEAD NOTES
	TYPE	STYLE		1	2	3	
2740	765N	V	4/32	1000 21.25	-	-	(2) (4) (16)
2742	-	-	-	-	-	-	(7) (9) (23)
2750	765N	V	4/32	1000 21.25	-	-	(2) (4) (8) (9) (16) (23)
2775	765N	V	4/32	1000 23.25	-	-	(2) (4) (16)
2775A	-	-	-	-	-	-	(7) (9) (23)
2790	770	VT	3/32	1000 19.00	-	-	(2) (4) (16) (17)
2792	-	-	-	-	-	-	(7) (9) (23)
2800	-	-	-	-	-	-	(7) (9) (23)
2801	-	-	-	-	-	-	(7) (9) (23)
2804	770	V	3/32	1500 21.25	-	-	(2) (4) (16)

NOTE:

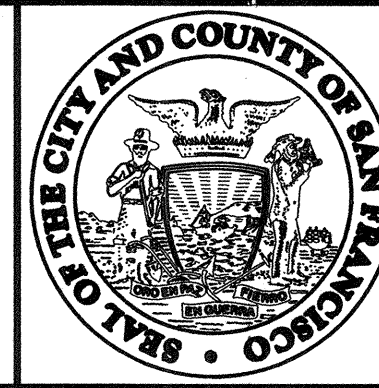
- AUXILIARY SPAN IS ALIGNED VERTICALLY ABOVE INVERTED SPAN, MAINTAIN MIN. 18" ABOVE TROLLEY WIRE.



I:\CP16401_Van Ness BRT V2_CER\500_Design Components\500_Drawings\12_Overhead\Sheet Files\CP16401OV127.dwg H:\Thal Mon Dec 28, 2015 - 2:47 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>D. Li</i>
DRAWN	<i>D. Li</i>
CHECKED	<i>C. Paul</i>
REVIEWED	<i>J. Wang</i>
RECOMMENDED	<i>F. [Signature]</i>
APPROVED	<i>F. [Signature]</i>
DATE	MAY 18 2016



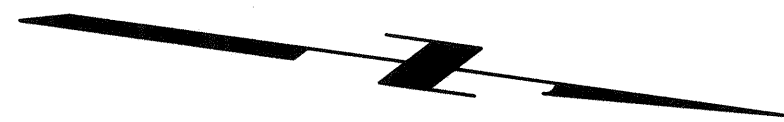
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

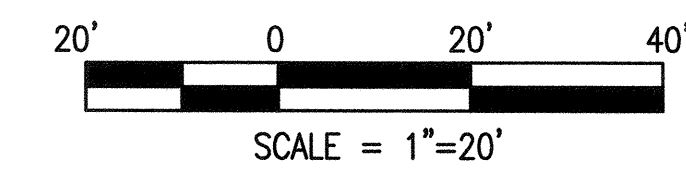
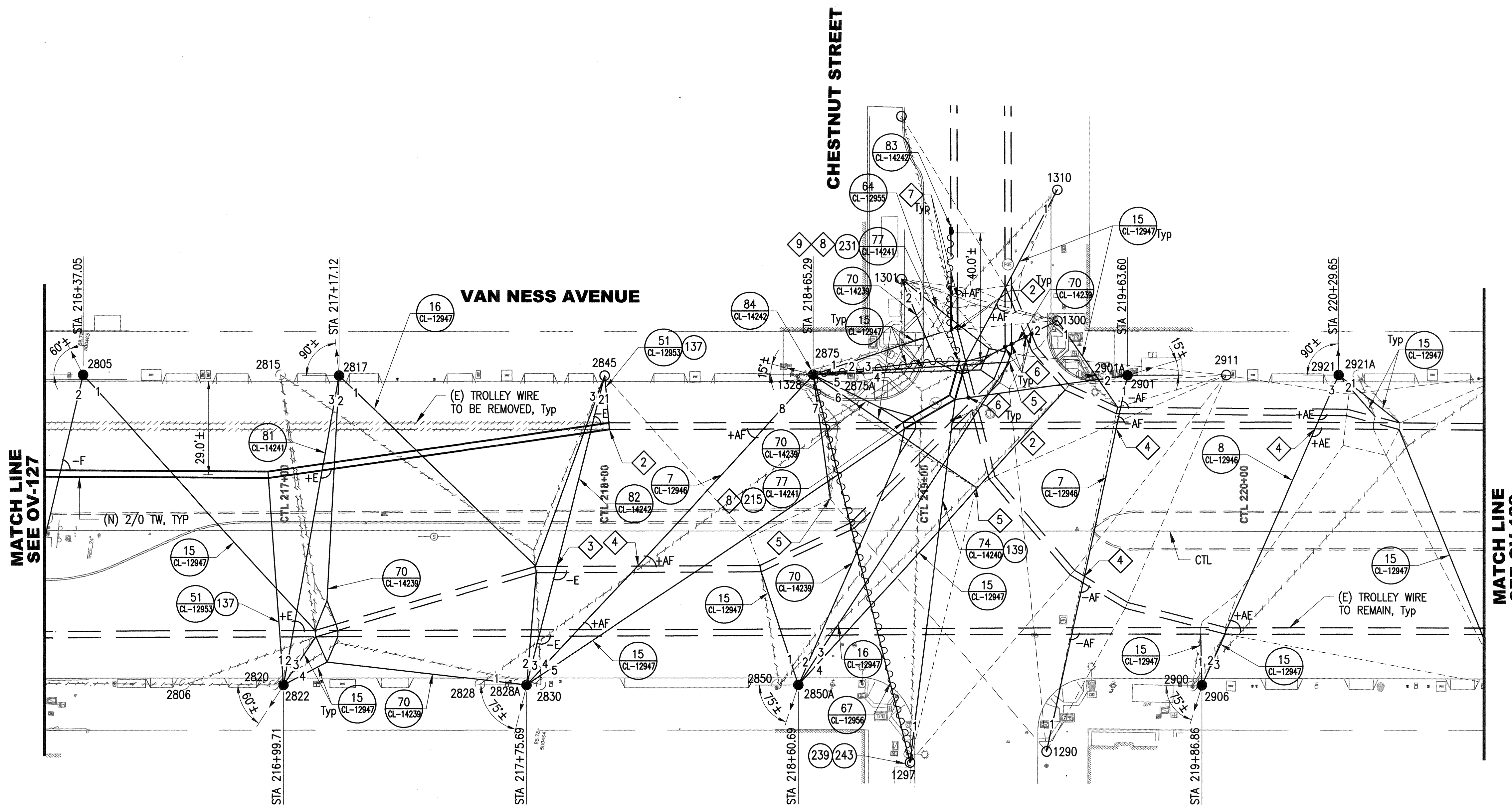
**OVERHEAD CONTACT SYSTEM
LAYOUT PLAN
CTL STA 211+75 TO 216+25**

1289	REVISION
CL-29135	
OV-127	0
OV-161	



NOTES:

1. SEE OV-128A FOR OCS SCHEDULE AND SECTIONALIZATION PLAN.
2. SPLICE (N) TROLLEY WIRE TO (E) TROLLEY WIRE AT CARRIED THROUGH PORTION OF CURVE SEGMENT.
3. PROVIDE ADDITIONAL ITEMS 49, 51, AND 70.
4. PROVIDE ONE EACH OF FEEDER TAP ITEMS 11, 51, 57, AND 263. STRIP CABLE TO ATTACH CLAMP, WRAP EXPOSED CABLE WITH TWO LAYERS OF ELECTRICAL TAPE AND TWO COATS OF INSULATING VARNISH.
5. ATTACH (N) PULL OFF TO (E) BULL RING.
6. PROVIDE HANGER, DETAIL 6 AS SHOWN ON CL-12945.
7. SPLICE (N) TROLLEY WIRE AT REMOVED PORTION OF THE SWITCH. REATTACH (E) AUXILIARY SPAN TO (N) TROLLEY WIRE.
8. SPLICE (N) SWITCH TO (E) TROLLEY WIRE.
9. RESET FLIPPER TO STRAIGHT.



I:\CP1640.1_Van Ness BRT\2_CSEA\500_Design Components\501_Drawings\2_Overhead\Sheet Files\CP16401\28.dwg kmaradpa Mon Jun 11 2016 4:21 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>C. D. Dail</i>
DRAWN	<i>C. D. Dail</i>
CHECKED	<i>R. Man</i>
REVIEWED	<i>Man</i>
RECOMMENDED	<i>Man</i>
APPROVED	<i>F. Mah...</i>
DATE	MAY 13 2016

REGISTERED PROFESSIONAL ENGINEER
CHRIS R. DAIL
C 81807
EXP 3/31/16
CIVIL
STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Vince...
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

OVERHEAD CONTACT SYSTEM
SPECIAL WORK AND LAYOUT PLAN
CTL STA 216+25 TO 220+75

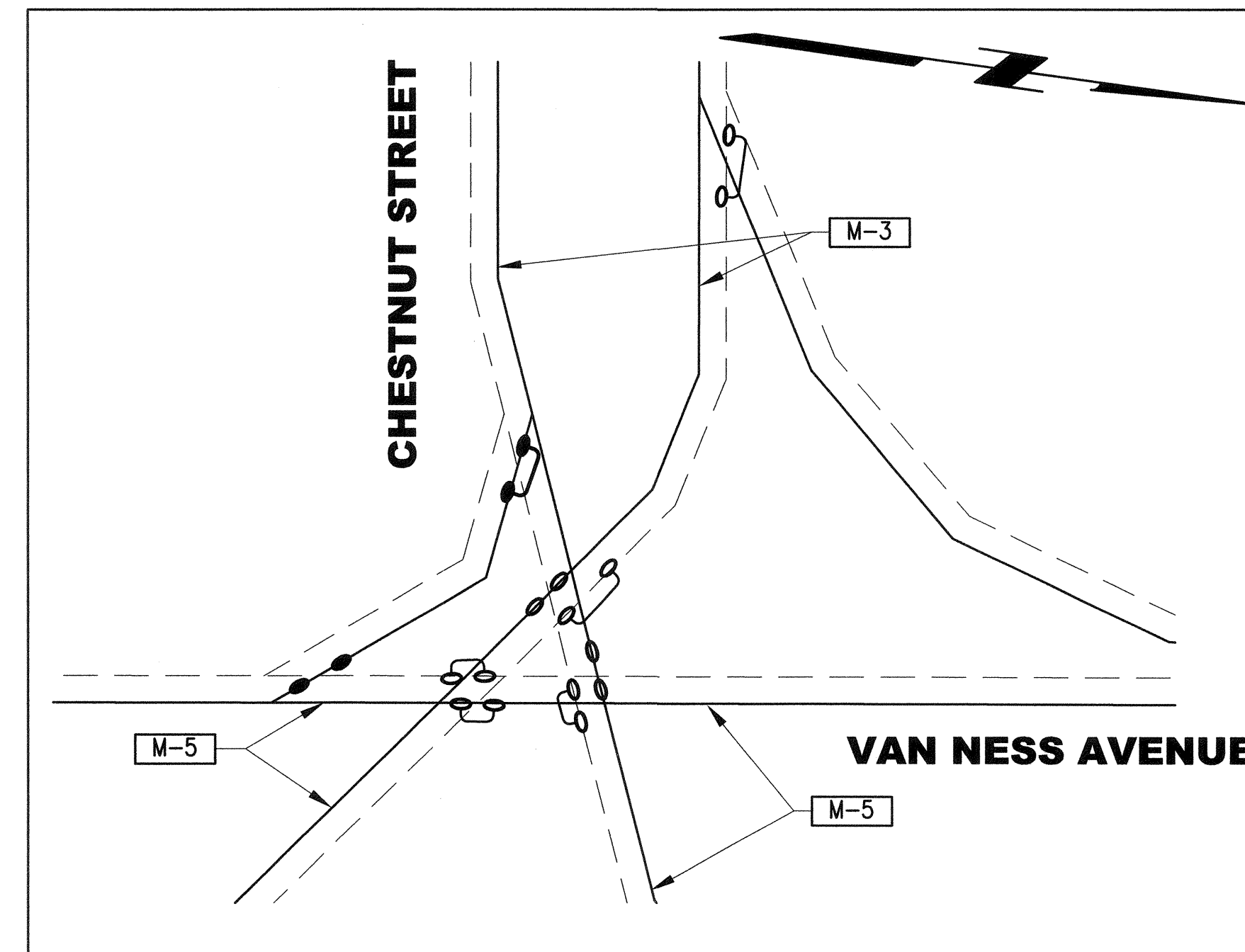
1289	REVISION
CL-29136	0
OV-128	
OV-161	

OCS SCHEDULE												
POLE No.	POLE			GUYWIRE NO.								OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	8	
1290	-	-	-	500	-	-	-	-	-	-	-	①
				22.00	-	-	-	-	-	-	-	
1297	-	-	-	2250	-	-	-	-	-	-	-	①
				22.25	-	-	-	-	-	-	-	
1300	-	-	-	200	2700	-	-	-	-	-	-	①
				29.00	20.00	-	-	-	-	-	-	
1301	-	-	-	400	1000	-	-	-	-	-	-	①
				22.00	21.25	-	-	-	-	-	-	
1310	-	-	-	2200	-	-	-	-	-	-	-	①
				21.50	-	-	-	-	-	-	-	
1328	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	
2805	770	VF	4/32	1000	1500	-	-	-	-	-	-	② ③ ⑯ ⑱
				23.25	23.50	-	-	-	-	-	-	
2806	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	
2815	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	
2817	767	V	4/32	700	1100	1000	-	-	-	-	-	② ④ ⑯
				23.50	21.00	24.50	-	-	-	-	-	
2820	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	
2822	770	V	5/32	600	1000	4000	1400	-	-	-	-	② ④ ⑯
				22.25	20.75	20.25	20.00	-	-	-	-	
2828	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	
2828A	770	V	2/32	1250	400	1000	500	1650	-	-	-	② ④ ⑯
				20.75	22.50	22.75	22.00	23.75	-	-	-	
2830	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	
2845	-	-	-	550	1000	1100	-	-	-	-	-	① ⑤
				22.25	21.00	23.75	-	-	-	-	-	
2850	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	

OCS SCHEDULE												
POLE No.	POLE			GUYWIRE NO.								OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	8	
2850A	770	V	5/32	2000	1900	1450	1900	-	-	-	-	② ④ ⑯
				22.25	20.00	23.50	23.00	-	-	-	-	
2875	770	VF	5/32	1400	2000	800	350	1500	1700	300	500	② ③ ⑯ ⑱
				26.25	21.00	23.75	24.25	24.25	23.75	26.25	22.00	
2875A	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	
2900	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	
2901	767	VF	4/32	500	2700	-	-	-	-	-	-	② ③ ⑯ ⑱
				22.00	21.25	-	-	-	-	-	-	
2901A	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	
2906	767	V	1/32	300	500	300	-	-	-	-	-	② ④ ⑯
				21.00	22.00	21.00	-	-	-	-	-	
2911	-	-	-	-	-	-	-	-	-	-	-	① ⑤
				-	-	-	-	-	-	-	-	
2921	767	V	1/32	150	150	500	-	-	-	-	-	② ④ ⑯
				23.50	23.50	22.00	-	-	-	-	-	
2921A	-	-	-	-	-	-	-	-	-	-	-	⑦ ⑨ ⑳
				-	-	-	-	-	-	-	-	

NOTE:

1. SEE OV-128 FOR SPECIAL WORK AND LAYOUT PLAN.

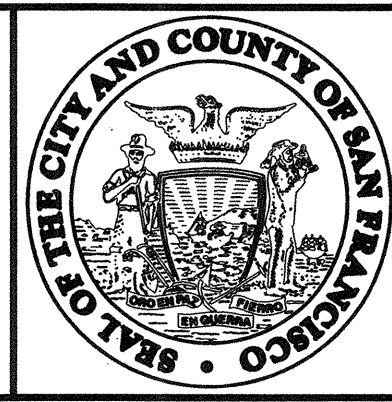


TROLLEY WIRE SECTIONALIZATION PLAN
NTS

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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

DESIGNED: *C. David*
 DRAWN: *C. David*
 CHECKED: *R. Mull*
 REVIEWED: *J. Mary*
 RECOMMENDED: *J. Mary*
 APPROVED: *F. Johnson*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

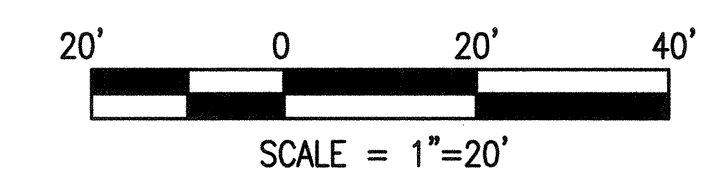
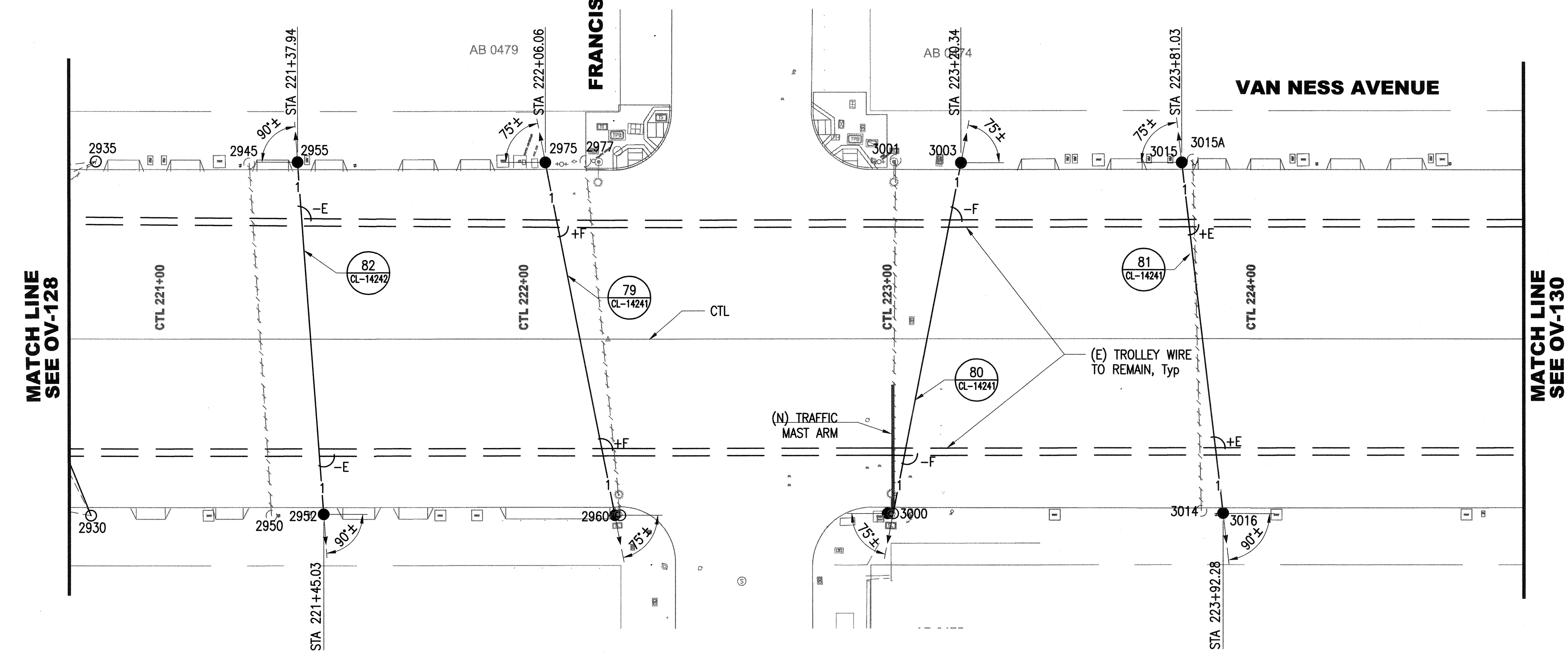
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 216+25 TO 220+75

1289
 CL-29137
 REVISION
 OV-128A
 OV-161 0



OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
2930	-	-	-	-	-	(1) (5)
2935	-	-	-	-	-	(1) (5)
2945	-	-	-	-	-	(7) (9) (23)
2950	-	-	-	-	-	(7) (9) (23)
2952	765N	V	4/32	1000 21.25	-	(2) (4) (16)
2955	765N	V	4/32	1000 21.25	-	(2) (4) (16)
2960	770	VT	3/32	1000 20.50	-	(2) (4) (8) (9) (16) (17) (23)
2975	770	VF	3/32	1000 20.50	-	(2) (3) (16) (18)

OCS SCHEDULE						
POLE No.	POLE			GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	
2977	-	-	-	-	-	(7) (9) (23)
3000	770	VM	3/32	1000 22.25	-	(2) (4) (6) (8) (9) (16) (17) (23)
3001	-	-	-	-	-	(7) (9) (23)
3003	770	VF	3/32	1000 22.25	-	(2) (3) (16) (18)
3014	-	-	-	-	-	(7) (9) (23)
3015	765N	V	4/32	1000 21.25	-	(2) (4) (16)
3015A	-	-	-	-	-	(7) (9) (23)
3016	765N	V	4/32	1000 21.50	-	(2) (4) (16)



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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *K. Mandapat*
 DRAWN: *K. Mandapat*
 CHECKED: *C. Colap*
 REVIEWED: *T. [Signature]*
 RECOMMENDED: *[Signature]*
 APPROVED: *F. [Signature]*
 DATE: **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Vincent [Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

OVERHEAD CONTACT SYSTEM
 POLE REPLACEMENT PLAN
 CTL STA 220+75 TO 224+75

1289
 CL-29138
 REVISION
 OV-129
 OV-161
 0

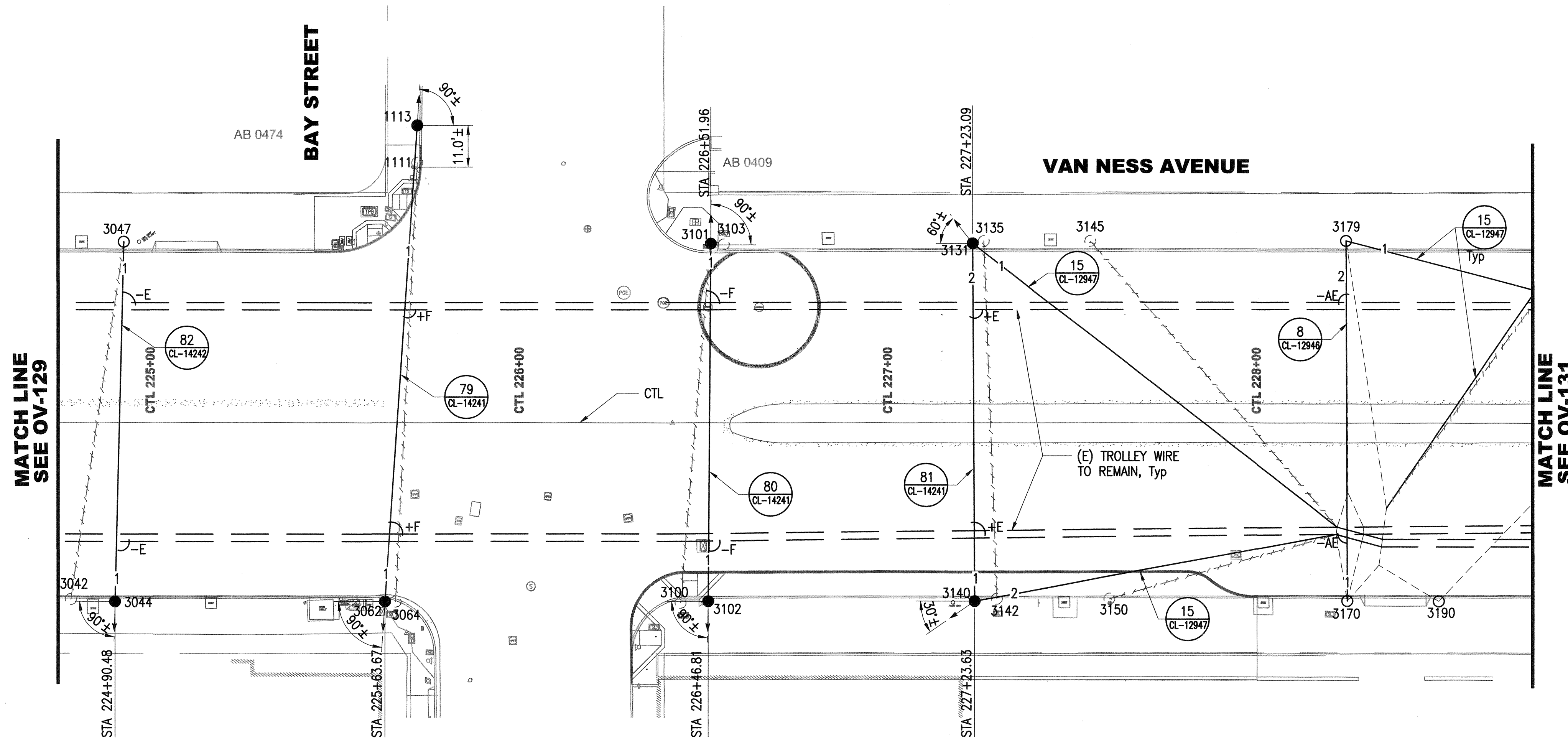


OCS SCHEDULE						
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
1111	-	-	-	-	-	(7) (9) (23)
1113	770	F	3/32	1000 22.75	-	(2) (3) (18)
3042	-	-	-	-	-	(7) (9) (23)
3044	765N	V	4/32	1000 21.25	-	(2) (4) (16)
3047	-	-	-	1000 21.50	-	(1) (5)
3062	770	VT	3/32	1000 20.50	-	(2) (4) (16) (17)
3064	-	-	-	-	-	(7) (9) (23)
3100	-	-	-	-	-	(7) (9) (23)
3101	770	VTF	3/32	1650 23.00	-	(2) (3) (4) (16) (17) (18) (1)
3102	770	VM	3/32	1650 23.00	-	(2) (4) (6) (16) (17)

OCS SCHEDULE						
POLE No.	POLE		RAKE (IN/FT)	GUYWIRE NO.		OVERHEAD NOTES
	TYPE	STYLE		1	2	
3103	-	-	-	-	-	(7) (9) (23)
3131	770	V	3/32	2400 24.25	1000 21.50	(2) (4) (16)
3135	-	-	-	-	-	(7) (9) (23)
3140	770	V	2/32	1000 21.50	2000 23.50	(2) (4) (16)
3142	-	-	-	-	-	(7) (9) (23)
3145	-	-	-	-	-	(7) (9) (23)
3150	-	-	-	-	-	(7) (9) (23)
3170	-	-	-	500 21.50	-	(1) (5)
3179	-	-	-	4000 19.00	500 21.50	(1) (5)
3190	-	-	-	-	-	(1) (5)

NOTE:

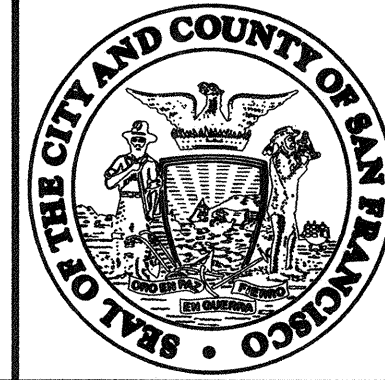
- FOR (N) POLE WITH COMBINED TRAFFIC SIGNAL AND FEEDER RISER, TRAFFIC SIGNAL CONDUIT SHALL BE INSTALLED EXTERNALLY.



I:\CPT640.1\Van Ness BRT\2_CER\500_Design_Components\501_Overhead\Sheet_Files\CPT640\OV130.dwg H:\Thoi Mon Dec 28, 2015 - 2:56 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *C. David*
 DRAWN: *C. David*
 CHECKED: *R. Man*
 REVIEWED: *J. Man*
 RECOMMENDED: *F. Mohamud*
 APPROVED: *F. Mohamud*
 DATE: MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

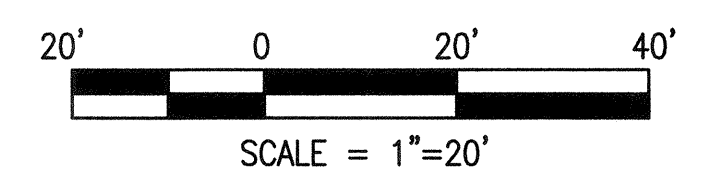
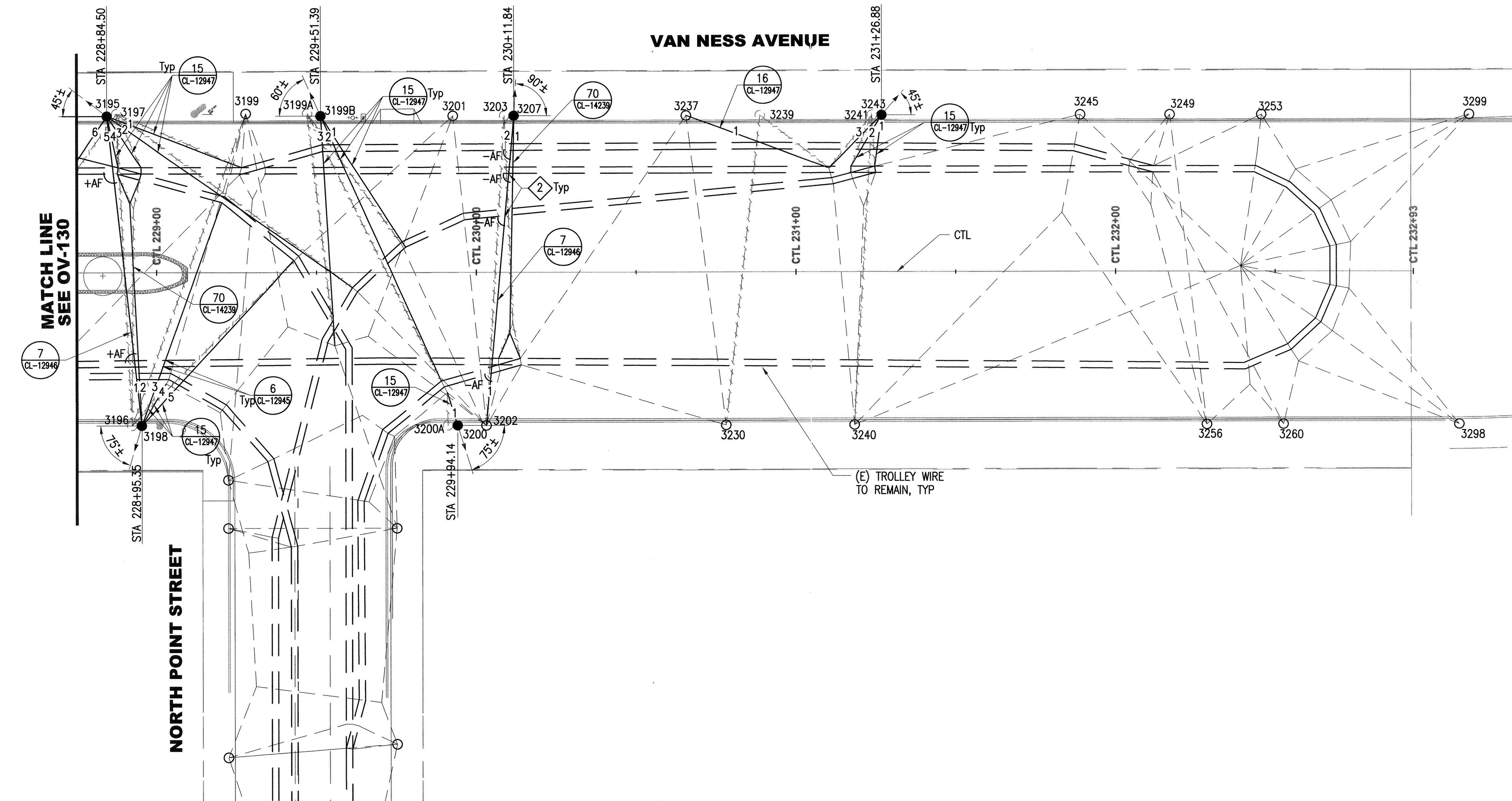
OVERHEAD CONTACT SYSTEM
 POLE REPLACEMENT PLAN
 CTL STA 224+75 TO 228+75

1289
 CL-29139
 REVISION
 0



NOTES:

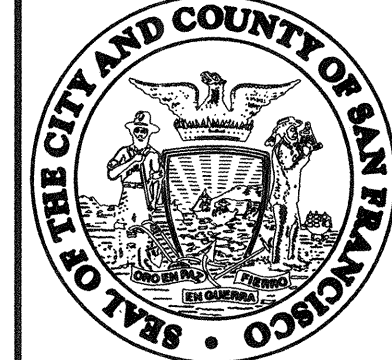
1. SEE OV-131A FOR OCS SCHEDULE.
2. PROVIDE ADDITIONAL AUXILIARY FEED TAP ITEMS 11, 51, 57, AND 263. STRIP CABLE TO ATTACH CLAMP. WRAP EXPOSED CABLE WITH TWO LAYERS OF ELECTRICAL TAPE AND TWO COATS OF INSULATING VARNISH.



I:\CPT640.1 Van Ness BRT V2 CER 5000 Design Components\501_Drawings\12_Overhead\Sheet Files\CPT6401OV131.dwg krmcdapa Wed Jul 01 2015 4:18 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED *C. David*
 DRAWN *C. David*
 CHECKED *R. Man*
 REVIEWED *Tommy*
 RECOMMENDED *F. Montenegro*
 APPROVED *F. Montenegro*
 DATE **MAY 13 2016**



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED *Vincent*
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 POLE REPLACEMENT PLAN
 CTL STA 228+75 TO END

1289	
CL-29140	
OV-131	REVISION
OV-161	0

OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
3195	770	VF	4/32	2000 19.50	1750 24.00	250 20.50	250 20.50	500 24.00	100 24.00	-	(2) (3) (16) (18)
3196	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
3197	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
3198	770	V	2/32	500 24.00	500 21.25	400 21.25	300 19.50	600 23.75	-	-	(2) (4) (16)
3199	-	-	-	-	-	-	-	-	-	-	(1) (5)
3199A	-	-	-	-	-	-	-	-	-	-	(7) (9) (18) (23) (2) (3)
3199B	770	S	5/32	2250 24.00	2150 24.00	1100 23.25	-	-	-	-	(2) (18)
3200	767	V	1/32	500 24.00	-	-	-	-	-	-	(2) (4) (16)
3200A	-	-	-	-	-	-	-	-	-	-	(7) (9) (23) (2)
3201	-	-	-	-	-	-	-	-	-	-	(1) (5)
3202	-	-	-	-	-	-	-	-	-	-	(1) (5)
3203	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
3207	770	V	1/32	500 21.25	500 24.00	-	-	-	-	-	(2) (4) (16)
3230	-	-	-	-	-	-	-	-	-	-	(1) (5)
3237	-	-	-	650 21.50	-	-	-	-	-	-	(1) (5)
3239	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)
3240	-	-	-	-	-	-	-	-	-	-	(1) (5)
3241	-	-	-	-	-	-	-	-	-	-	(7) (9) (23)

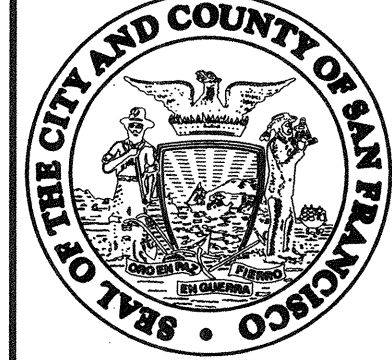
OCS SCHEDULE											
POLE No.	POLE			GUYWIRE NO.							OVERHEAD NOTES
	TYPE	STYLE	RAKE (IN/FT)	1	2	3	4	5	6	7	
3243	770	V	1/32	100 23.50	100 23.50	850 22.00	-	-	-	-	(2) (4) (16)
3245	-	-	-	-	-	-	-	-	-	-	(1) (5)
3249	-	-	-	-	-	-	-	-	-	-	(1) (5)
3253	-	-	-	-	-	-	-	-	-	-	(1) (5)
3256	-	-	-	-	-	-	-	-	-	-	(1) (5)
3260	-	-	-	-	-	-	-	-	-	-	(1) (5)
3298	-	-	-	-	-	-	-	-	-	-	(1) (5)
3299	-	-	-	-	-	-	-	-	-	-	(1) (5)

- NOTES:**
- SEE OV-131 FOR OCS POLE REPLACEMENT PLAN.
 - TRANSFER (E) MUNI SIGNS AND SWITCH SIGNALS TO (N) POLE.
 - FOR REMOVAL OF POLE-MOUNTED MANUAL SWITCH AND OTHER RELATED HARDWARE REFER TO TP SERIES PLANS.

I:\CPT6401_Van Ness BRT\2_CER\500_Design_Components\501_Drawings\12_Overhead\Sheet_Files\CPT6401DV131A.dwg, kmandapa Wed Jul 01 2015 - 4:19 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *C. David*
 DRAWN: *C. David*
 CHECKED: *D. Moore*
 REVIEWED: *T. May*
 RECOMMENDED: *John Wilson*
 APPROVED: *F. Mohan*
 DATE: **MAY 13 2016**

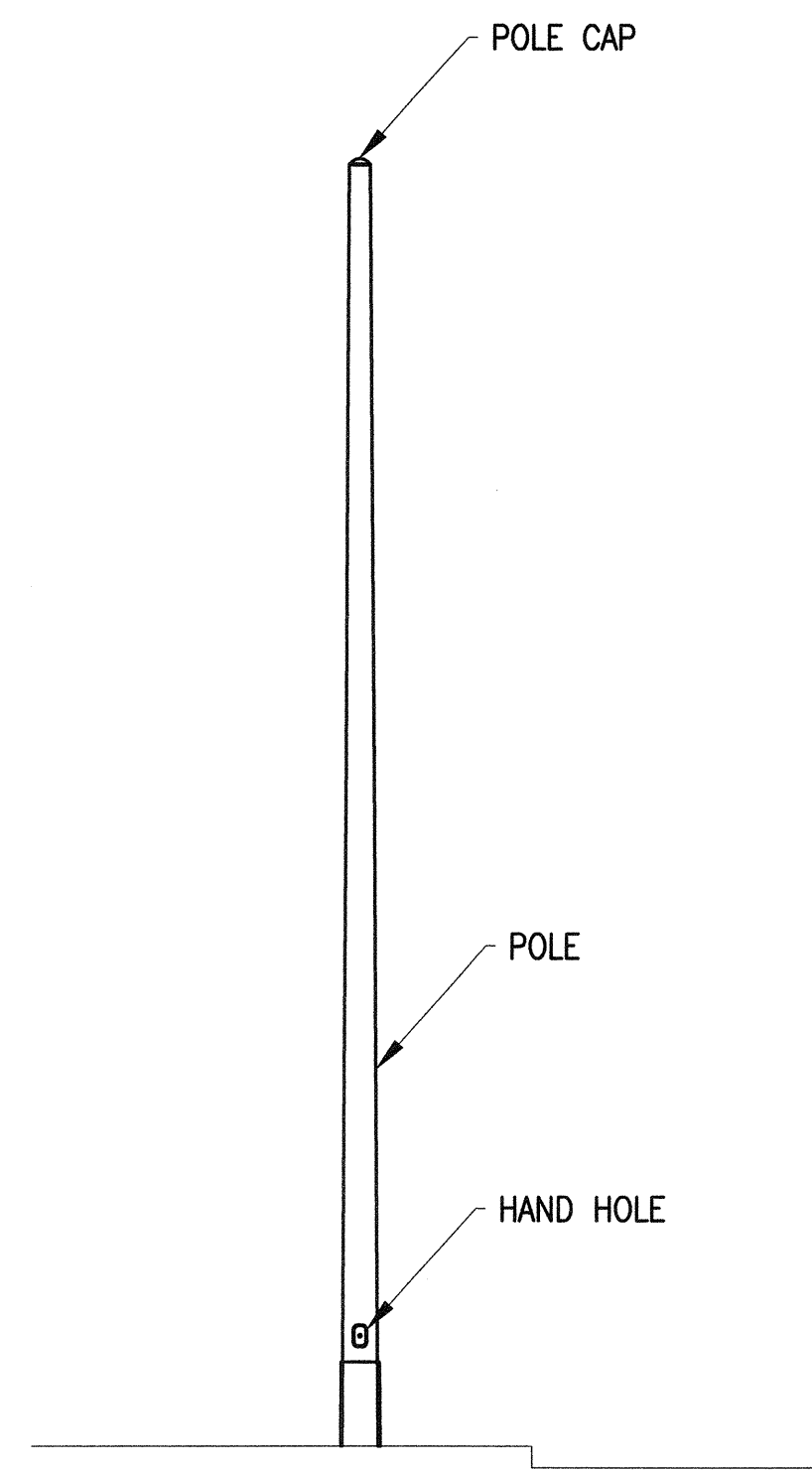


CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

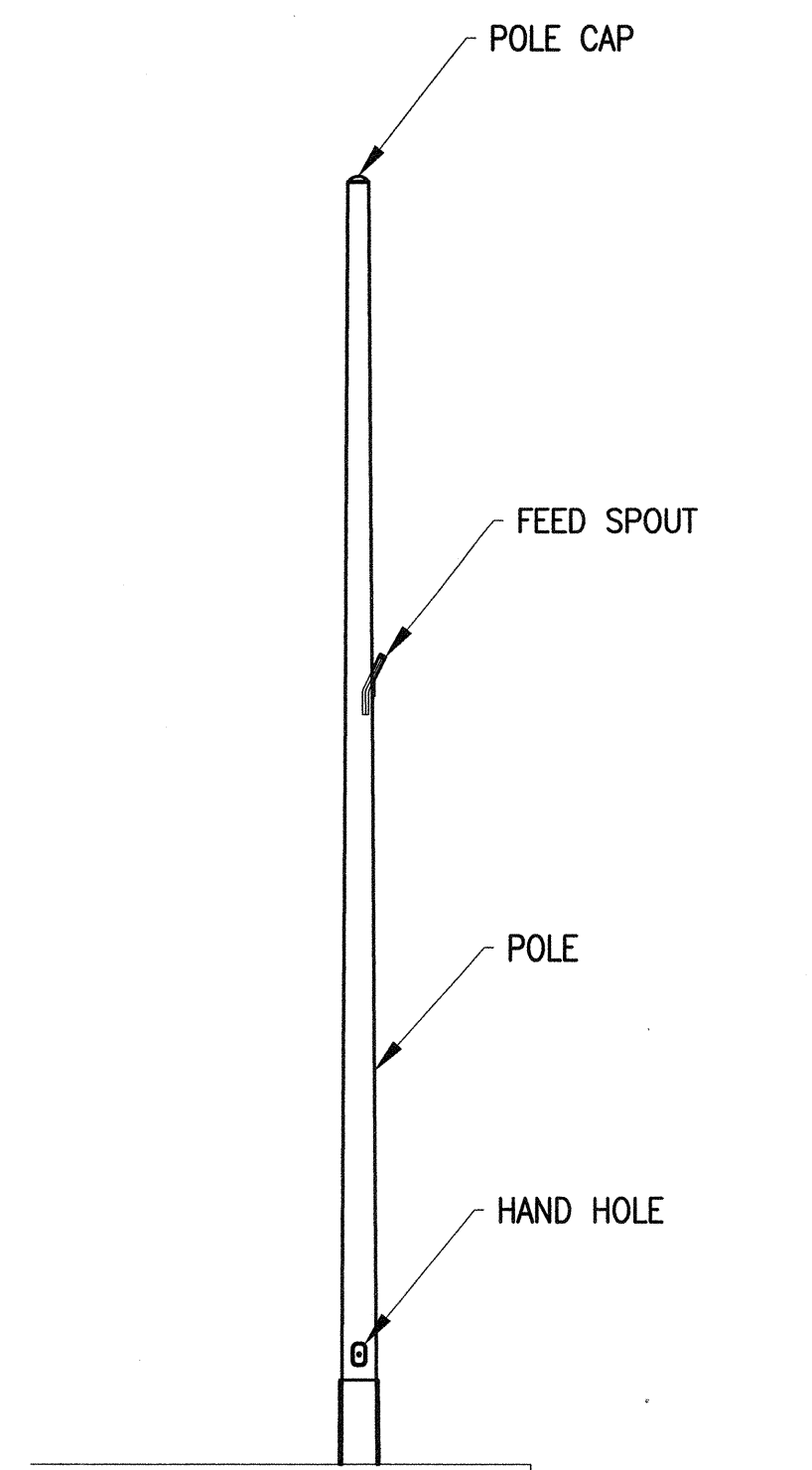
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 SCHEDULE
 CTL STA 228+75 TO END

1289
 CL-29141
 OVERHEAD CONTACT SYSTEM SCHEDULE
 OV-131A
 OV-161
 REVISION 0

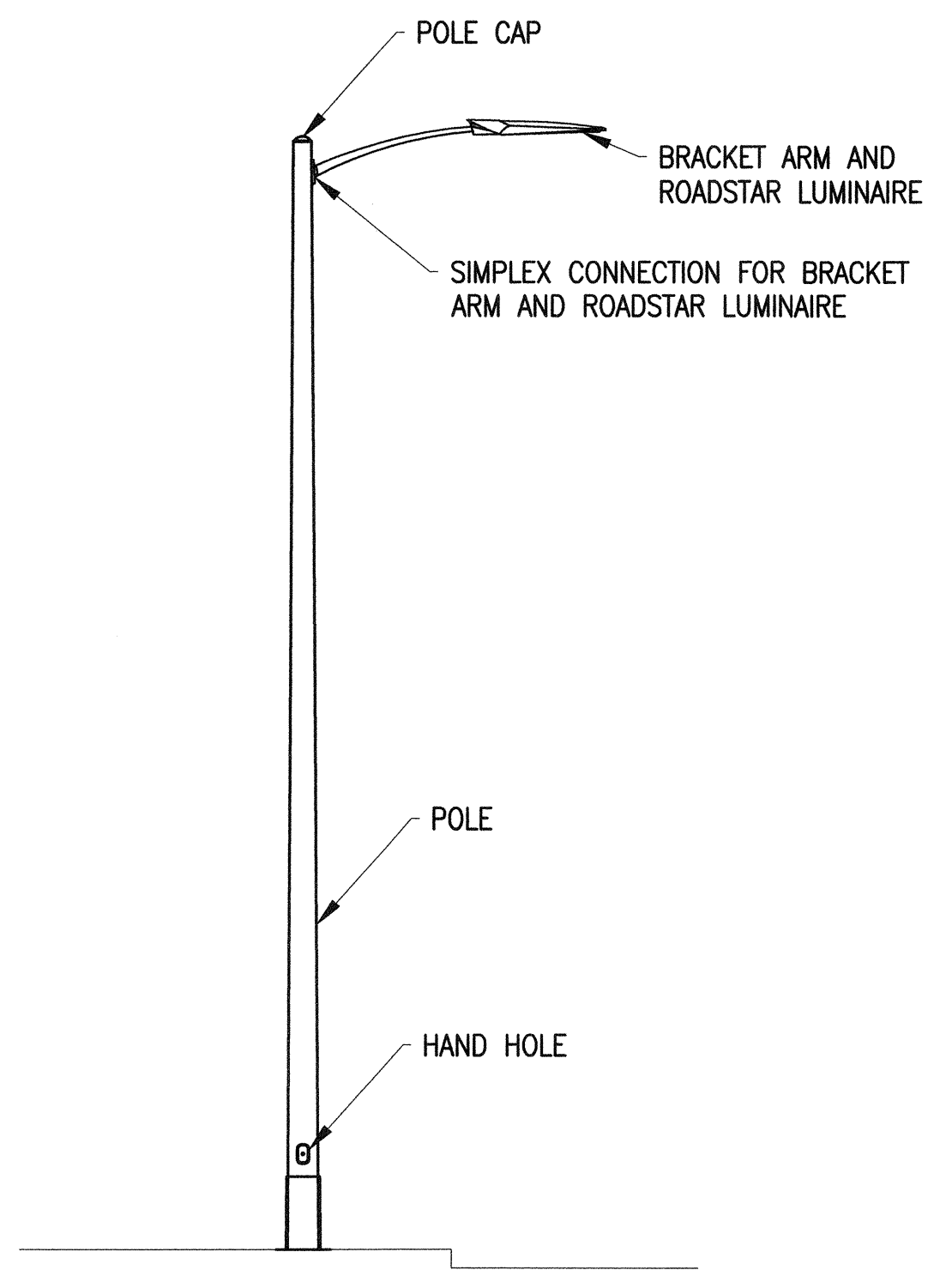
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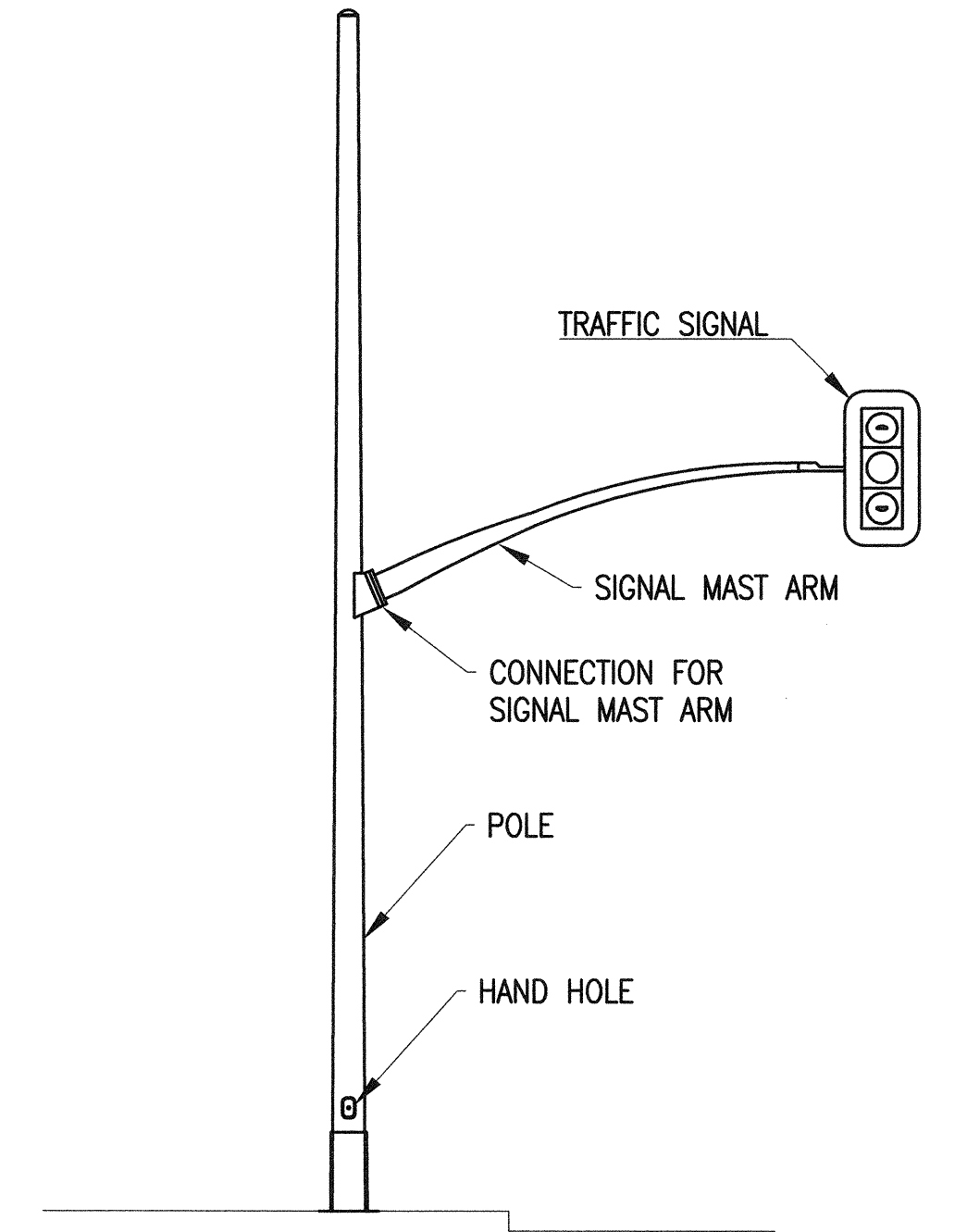
POLE WITH NO LIGHTING
STYLE S



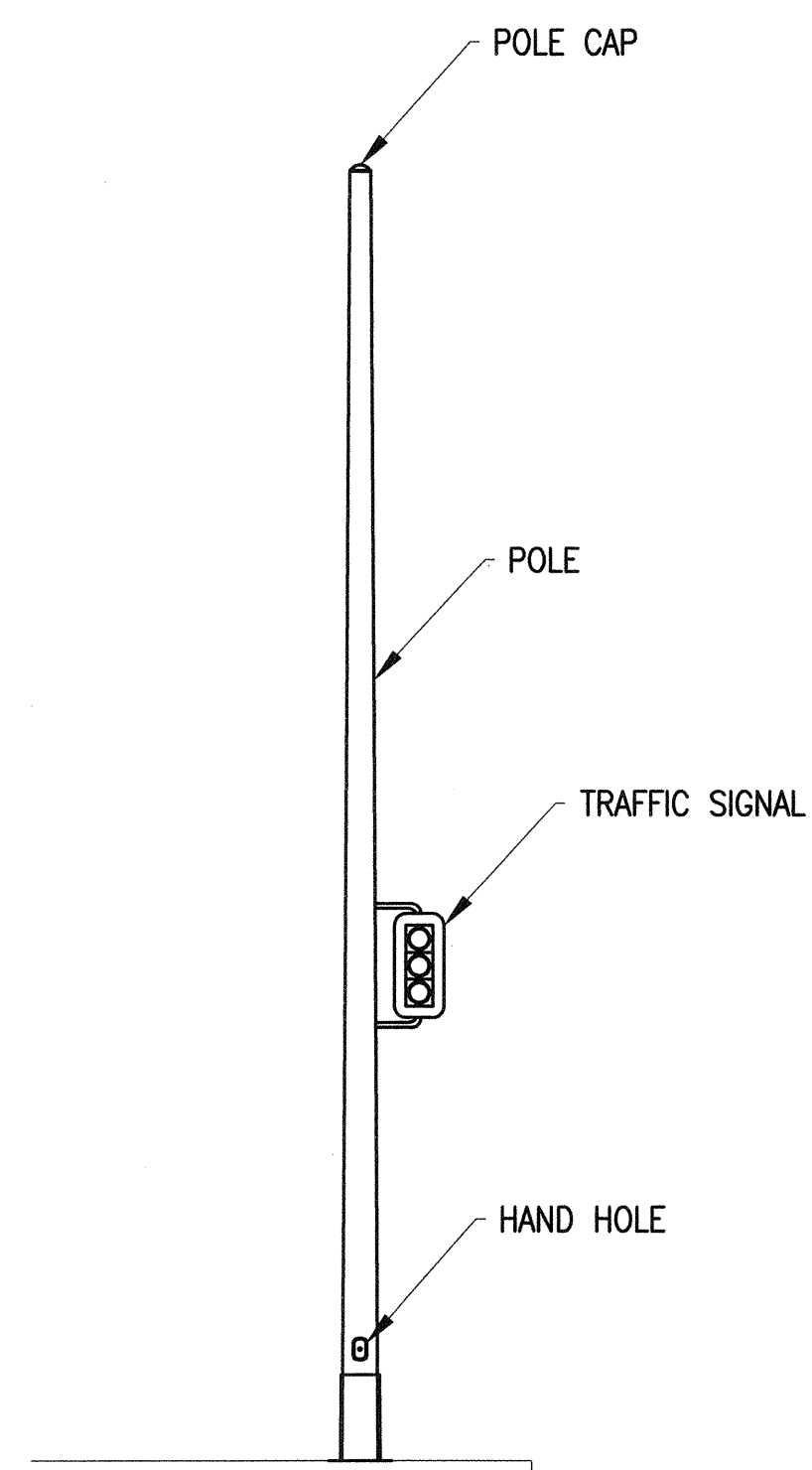
POLE WITH FEED SPOUT AND NO LIGHTING
STYLE F



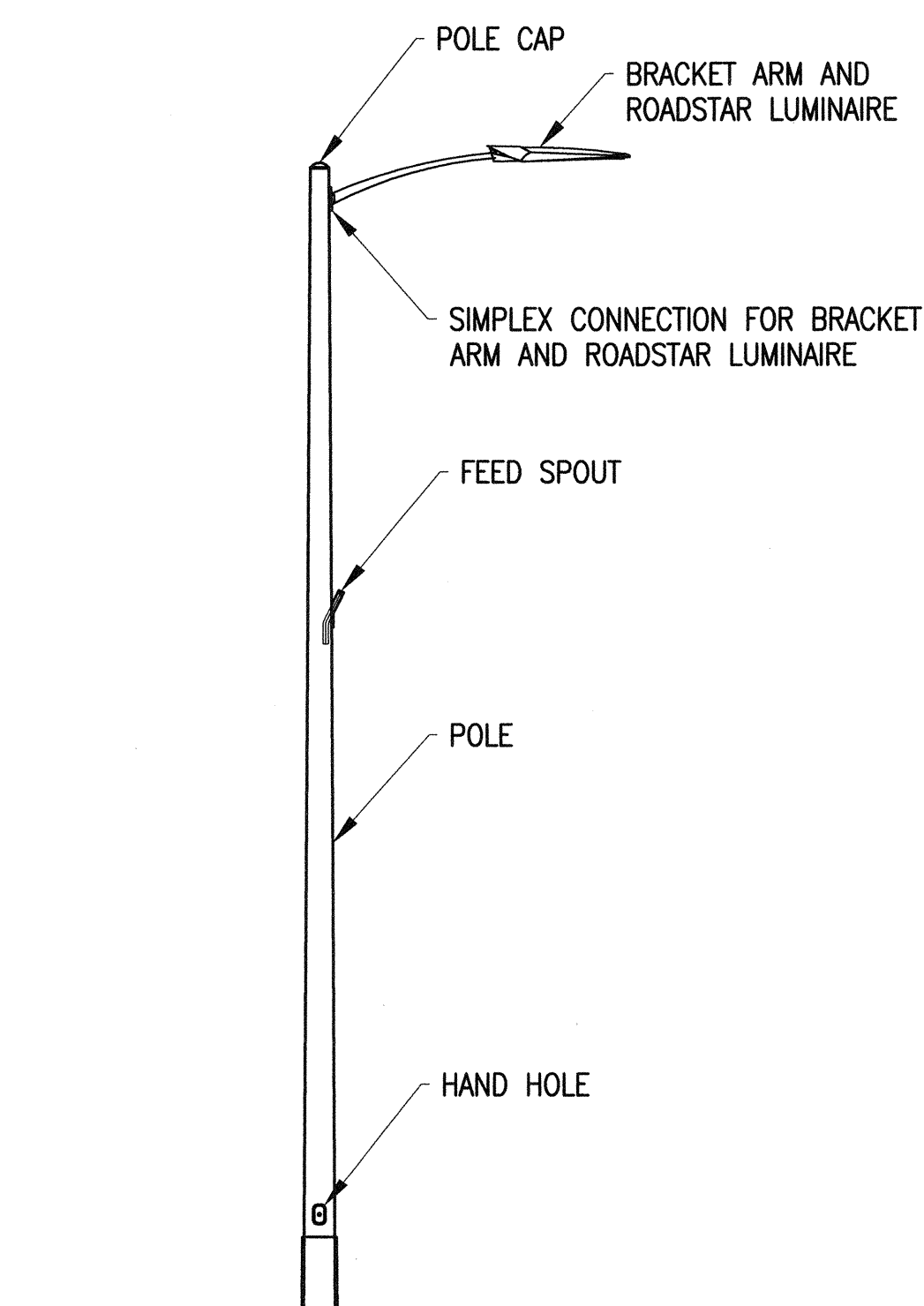
POLE WITH SIMPLEX CONNECTION FOR COBRA LIGHTING
STYLE C



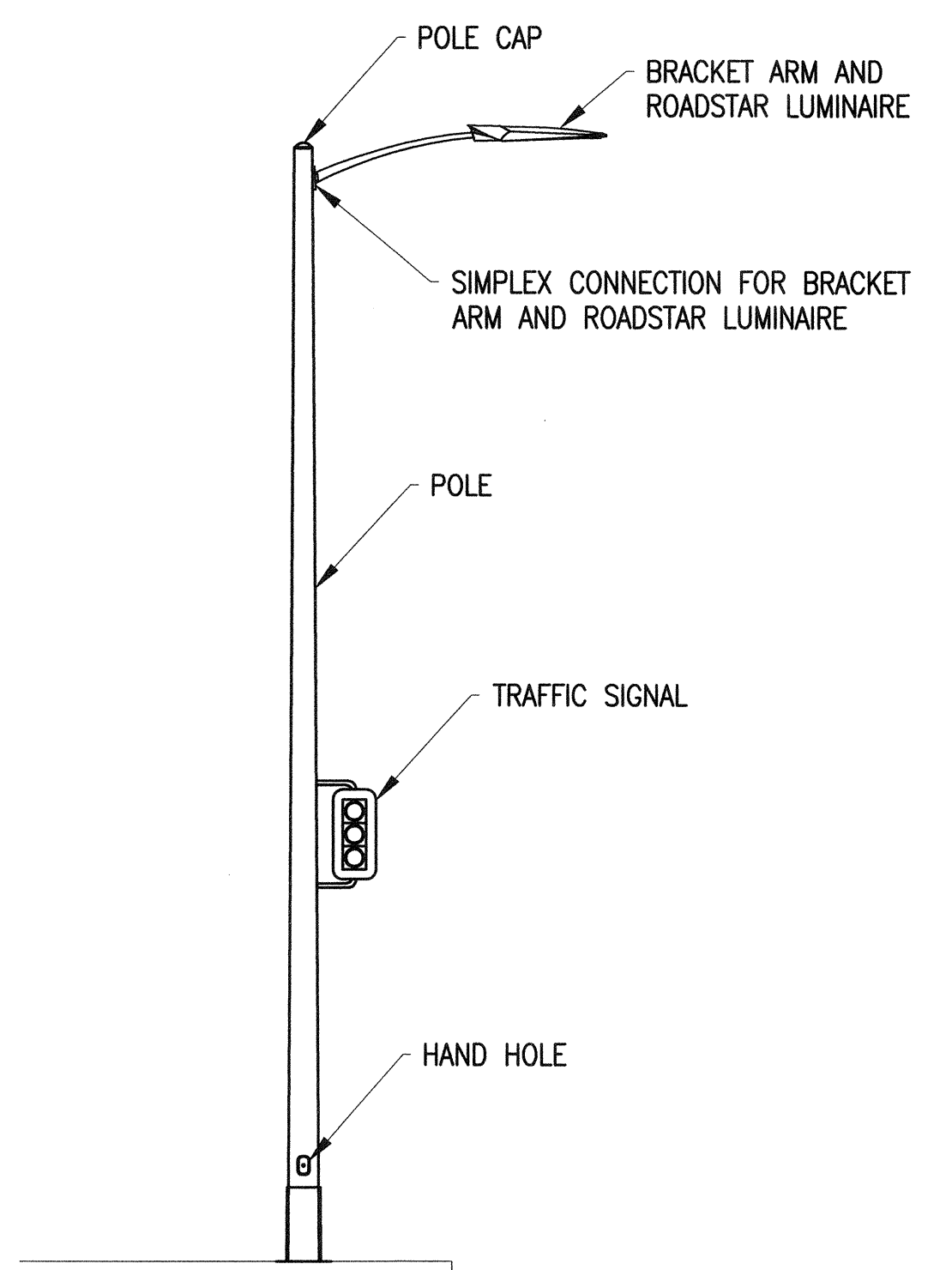
POLE WITH CONNECTIONS FOR SIGNAL MAST ARM
STYLE TM



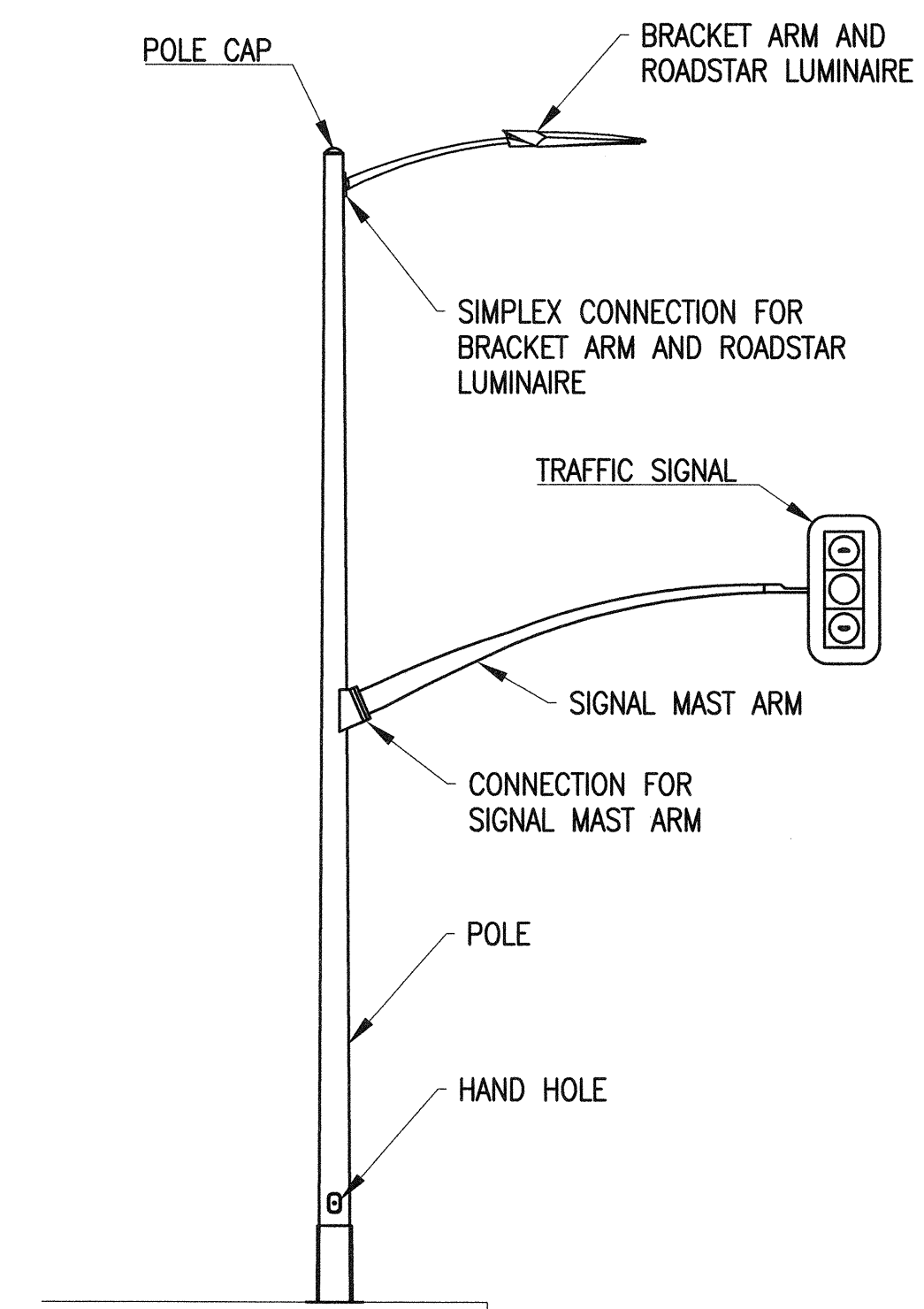
POLE WITH TRAFFIC SIGNAL
STYLE T



POLE WITH SIMPLEX CONNECTION FOR COBRA LIGHTING AND FEED SPOUT
STYLE SF



POLE WITH SIMPLEX CONNECTION FOR COBRA LIGHTING AND TRAFFIC SIGNAL
STYLE CT

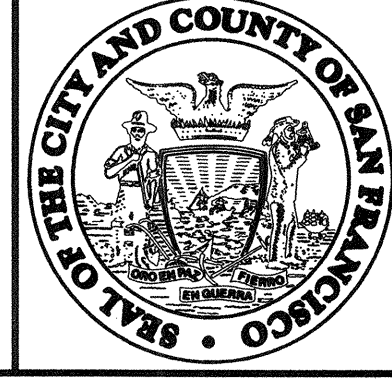


POLE WITH CONNECTIONS FOR COBRA LIGHTING AND SIGNAL MAST ARM
STYLE CM

- NOTES:**
1. FOR TAPERED STEEL POLE DETAILS, REFER TO STANDARD DRAWING CL-7971, REV 2.
 2. FOR STREET LIGHT INSTALLATION, REFER TO SL-SERIES DRAWINGS.
 3. FOR TRAFFIC SIGNAL TYPE AND INSTALLATION, REFER TO ET-SERIES DRAWINGS.

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

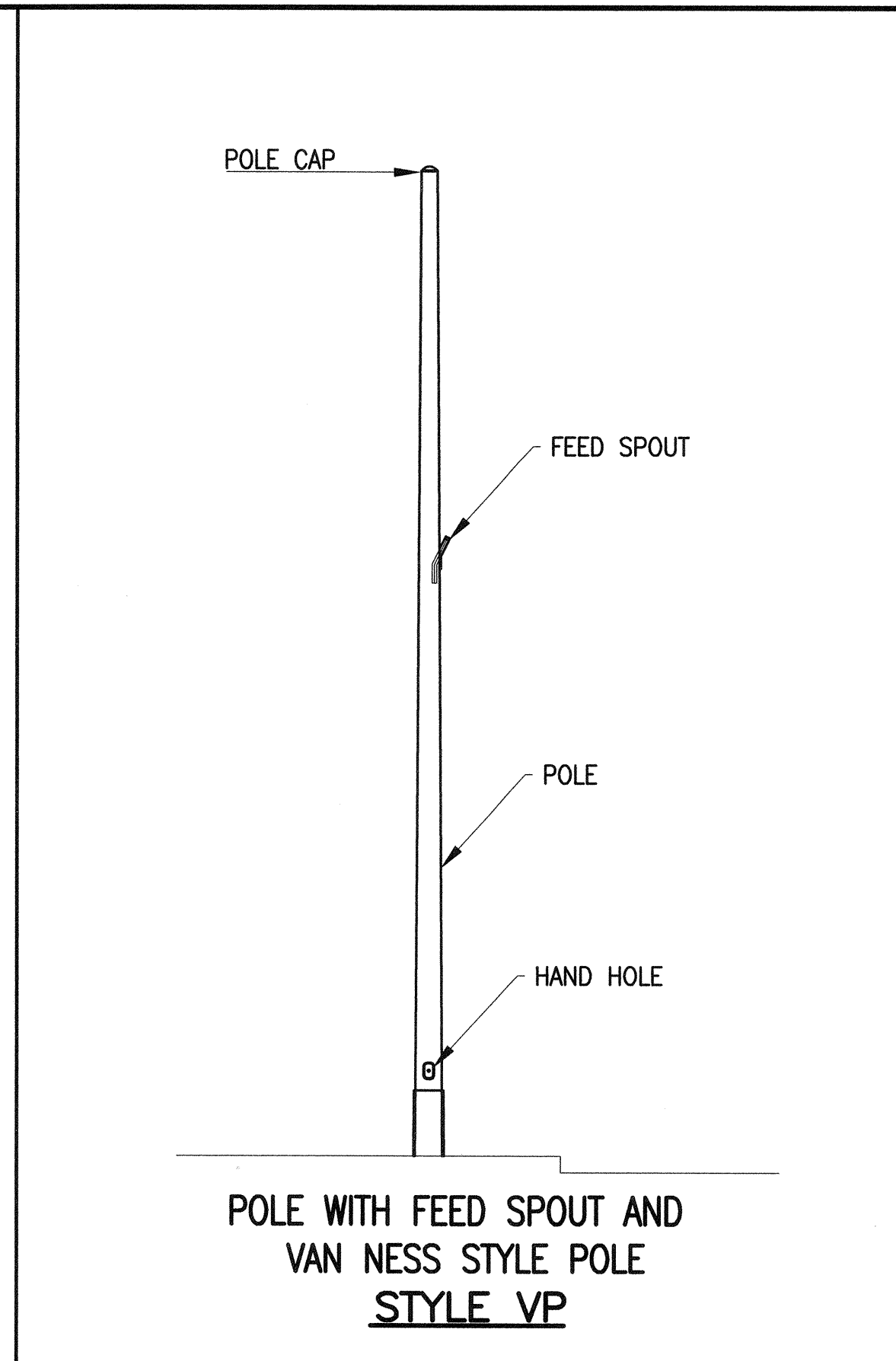
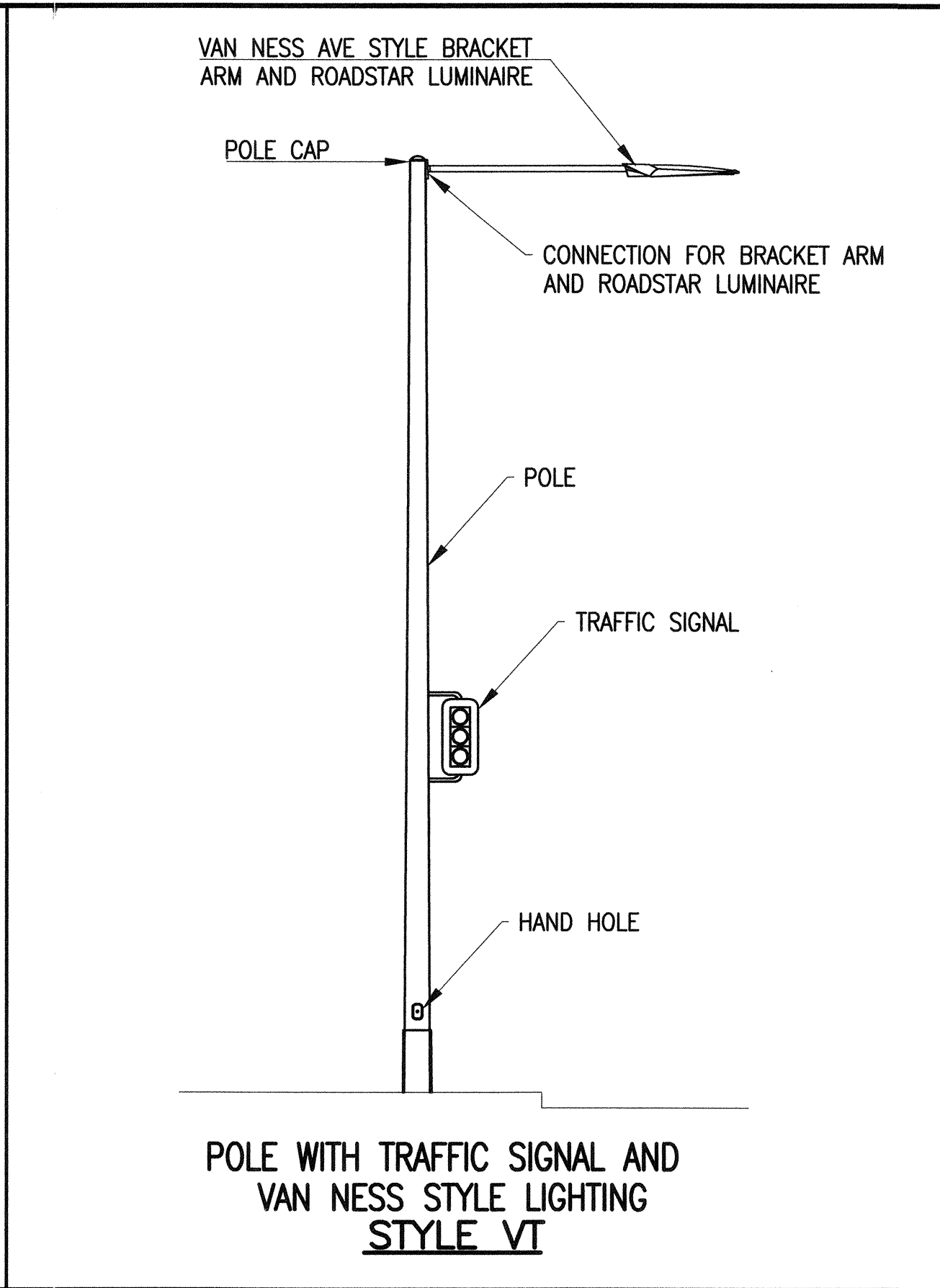
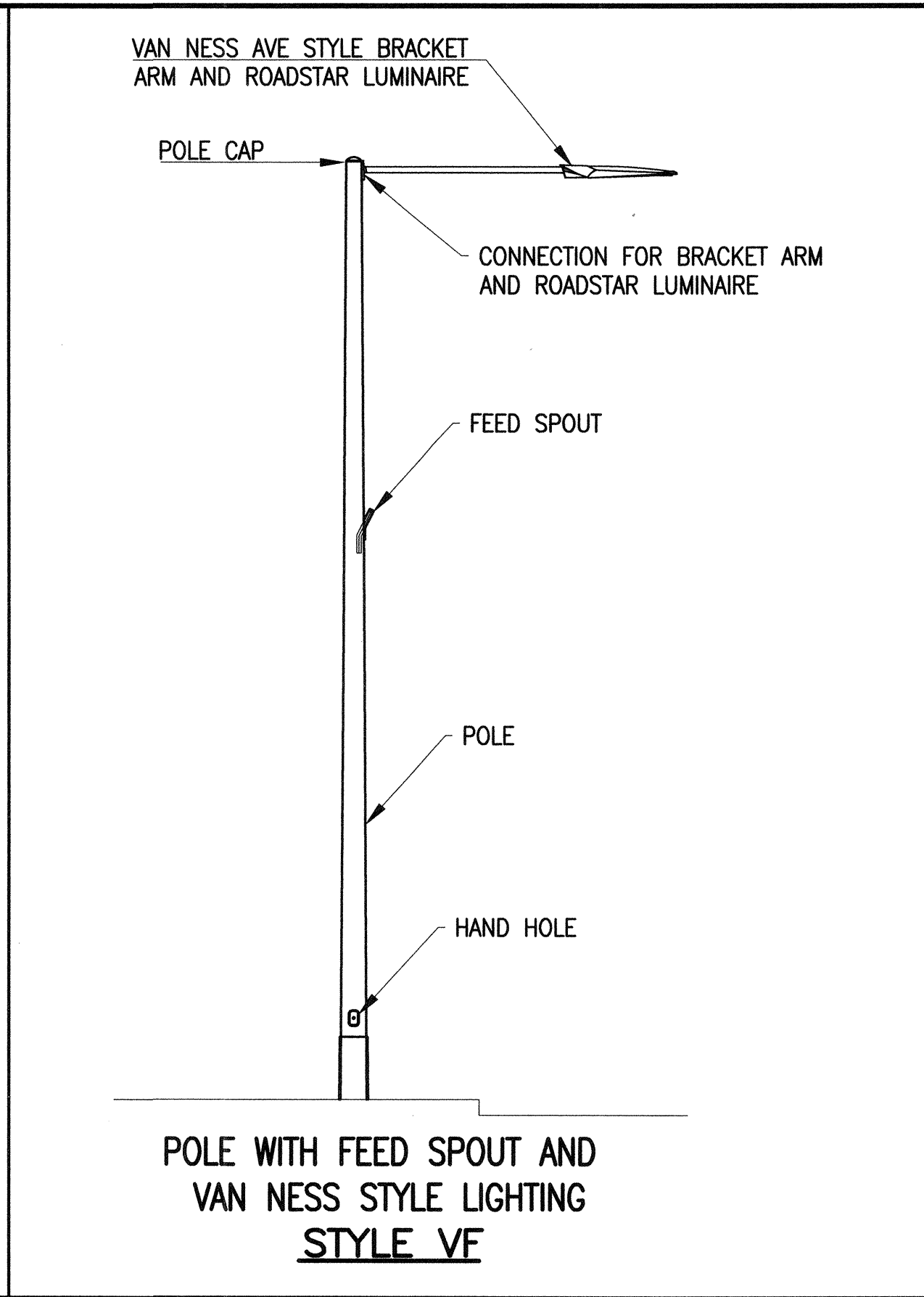
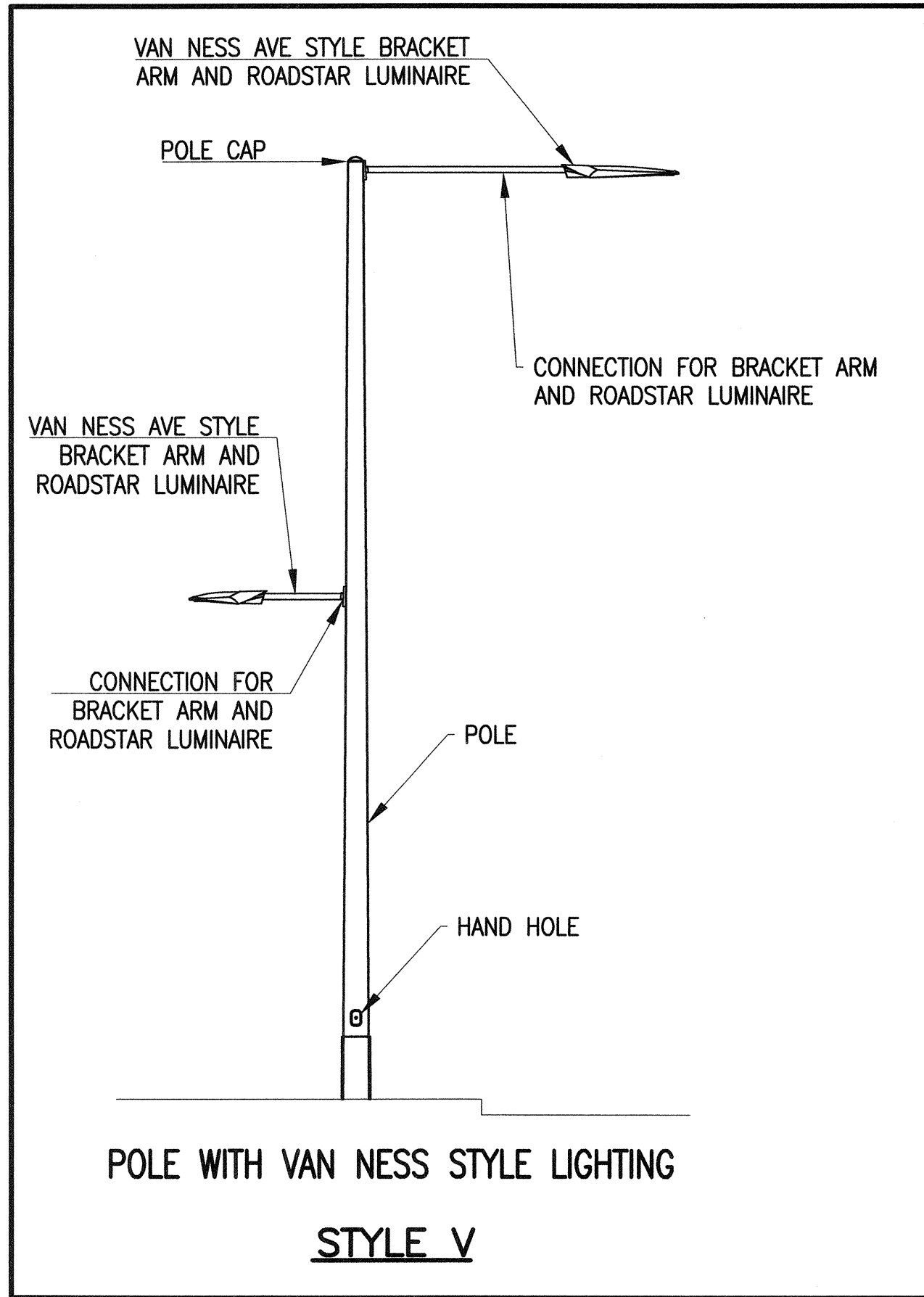
DESIGNED: *[Signature]*
 DRAWN: *[Signature]*
 CHECKED: *[Signature]*
 REVIEWED: *[Signature]*
 RECOMMENDED: *[Signature]*
 APPROVED: *[Signature]*
 DATE: MAY 13 2016



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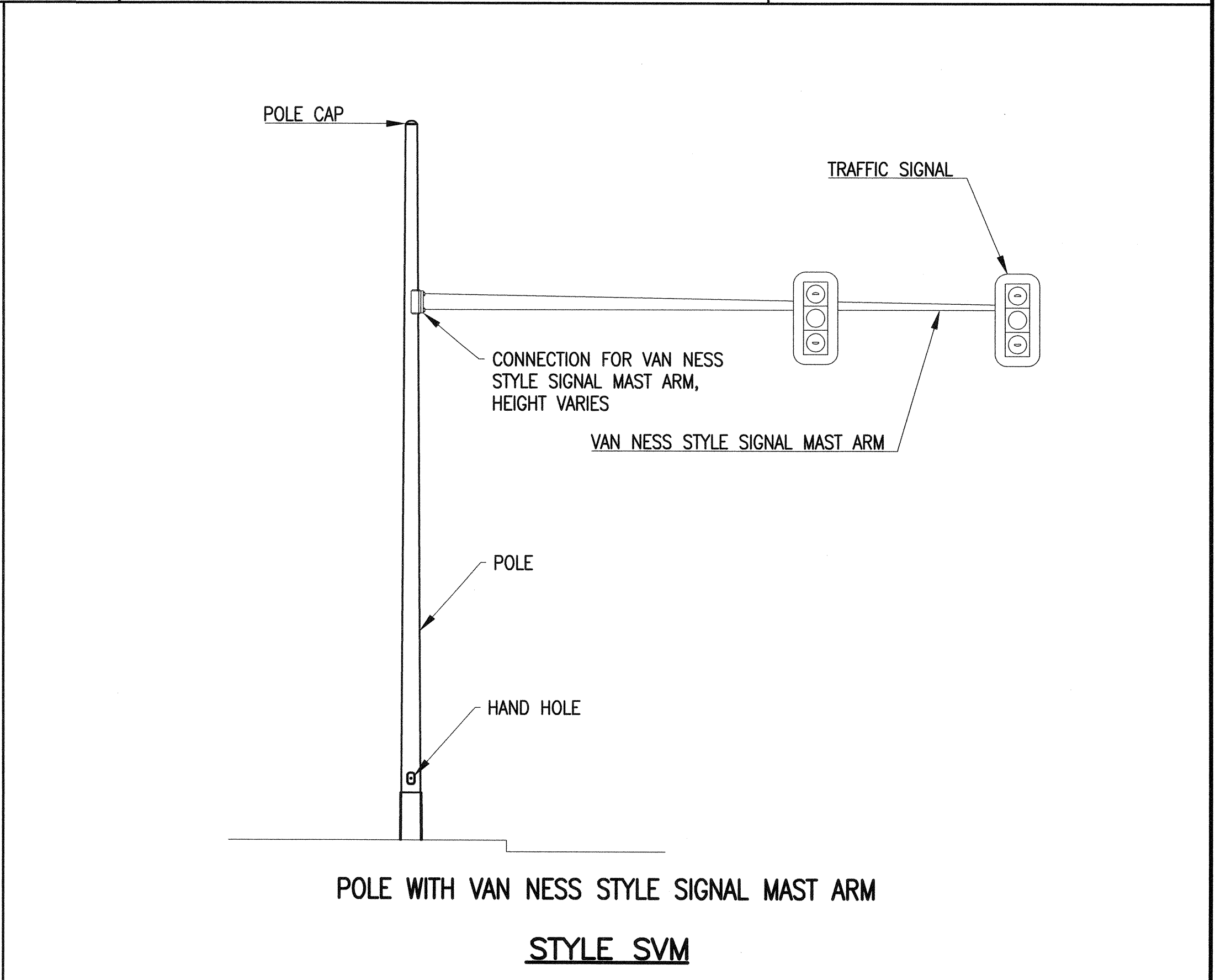
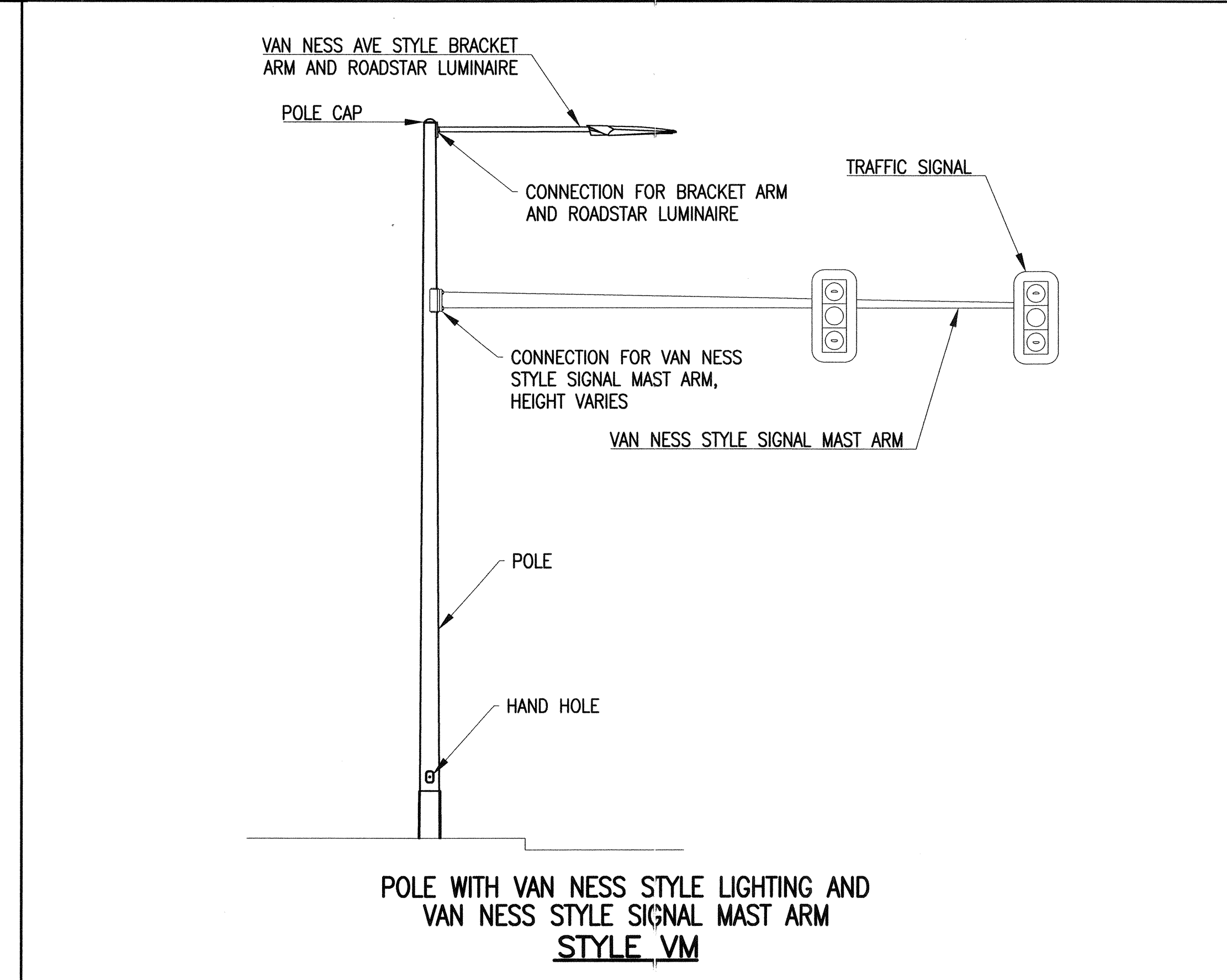
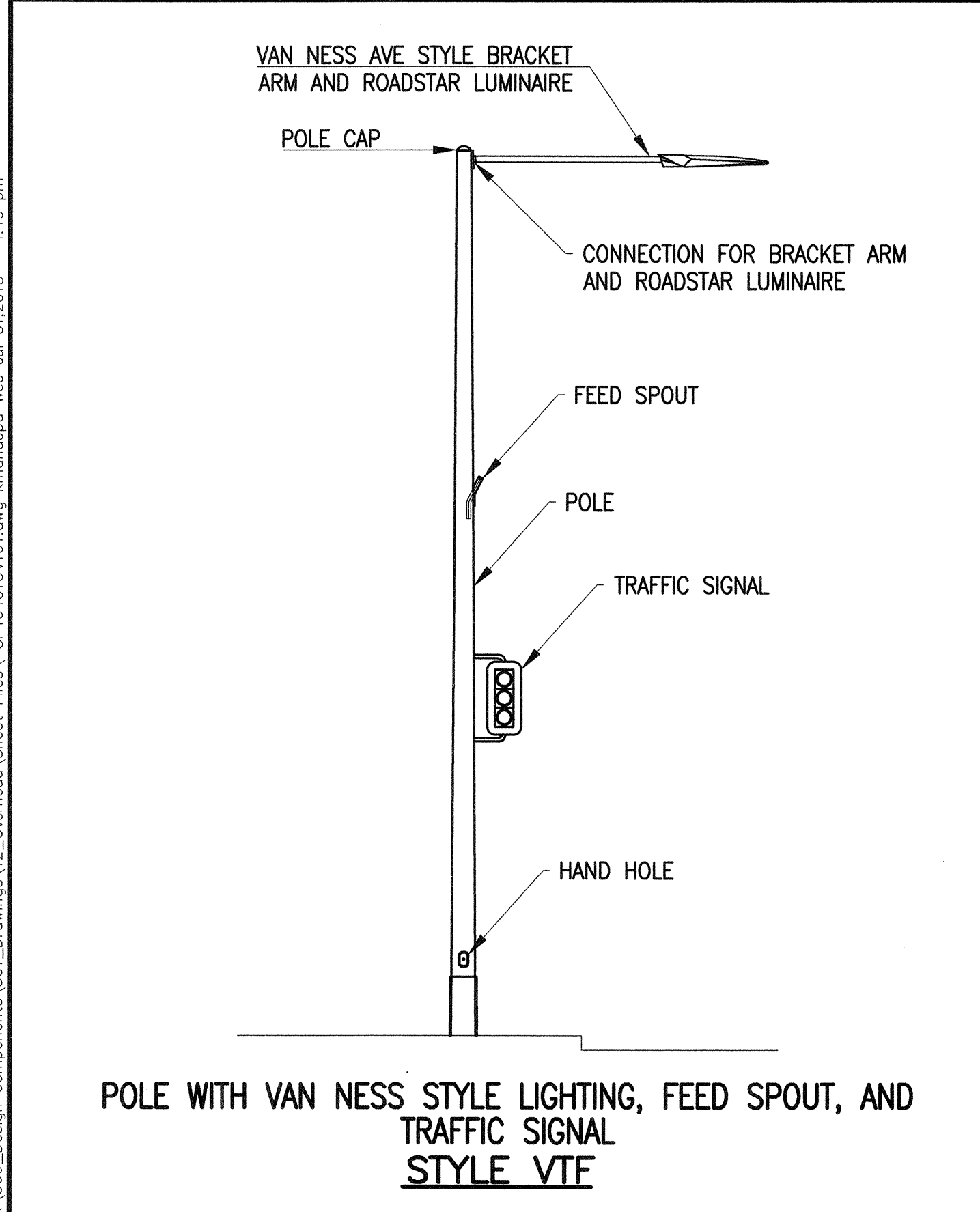
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 OVERHEAD CONTACT SYSTEM
 TROLLEY POLE ATTACHMENT CONFIGURATIONS I

1289	REVISION
CL-29142	
OV-160	0
OV-161	



NOTES:

1. FOR TAPERED STEEL POLE DETAILS, REFER TO STANDARD DRAWING CL-7971, REV 2.
2. FOR STREET LIGHT INSTALLATION, REFER TO SL-SERIES DRAWINGS.
3. FOR TRAFFIC SIGNAL TYPE AND INSTALLATION, REFER TO ET-SERIES DRAWINGS.
4. FOR BRACKET ARM AND SIGNAL MAST ARM CONNECTIONS, SEE ST-SERIES DRAWINGS.



NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *[Signature]*

DRAWN: *[Signature]*

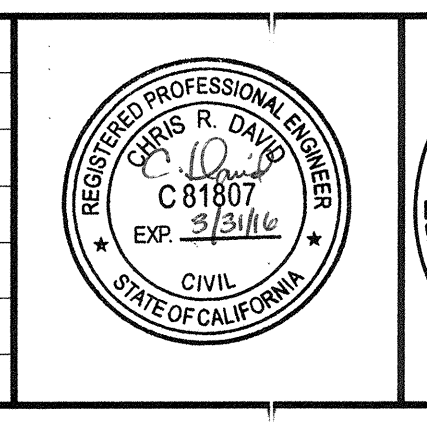
CHECKED: *[Signature]*

REVIEWED: *[Signature]*

RECOMMENDED: *[Signature]*

APPROVED: *[Signature]*

DATE: MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED: *[Signature]*
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT		1289
OVERHEAD CONTACT SYSTEM TROLLEY POLE ATTACHMENT CONFIGURATIONS II		CL-29143
OV-161	REVISION	0
OV-161		

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