

GENERAL NOTES

COMMUNICATION SYSTEMS

- NOT ALL EXISTING EQUIPMENT IS SHOWN. CONTRACTOR SHALL FIELD VERIFY ACTUAL EXISTING CONDITIONS.
- AT ALL WORK LOCATIONS, THE FOLLOWING EXISTING EQUIPMENT SHALL BE SALVAGED AS DIRECTED BY THE ENGINEER:
 - ALL NEXTBUS LED SHELTER DISPLAYS, MOUNTING BRACKETS, AND POWER SUPPLY.
 - ALL CLEAR CHANNEL SHELTER AD PANEL DISPLAYS
- ALL PROVIDED CABINETS AND RACKS SHALL BE SEISMICALLY BRACED. SEE STRUCTURAL SECTION FOR DETAILS.
- ALL DIMENSIONS SHOWN ARE APPROXIMATE AND DIAGRAMMATIC. DRAWINGS ARE NOT TO SCALE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD VERIFICATION AND SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE ENGINEER TO DE-ENERGIZE THE OVERHEAD CONTACT SYSTEM PRIOR TO PROCEEDING WITH ANY WORK LOCATED RADIALLY WITHIN 6 FEET (RADIALLY 10 FEET FOR VERTICALLY MOVING BOOM TYPE EQUIPMENT) OF THE OVERHEAD CONTACT SYSTEM. REFER TO SPECIFICATIONS SPECIAL PROVISIONS SECTION FOR DETAILS.
- PRIOR TO BEGINNING ANY WORK IN ANY AND ALL EQUIPMENT ROOMS, PROVIDE TEMPORARY PROTECTIVE BARRIERS AROUND TRAIN CONTROL EQUIPMENT AS INDICATED. VERIFY WITH THE ENGINEER THAT ALL TRAIN CONTROL EQUIPMENT IS PROPERLY PROTECTED BEFORE PROCEEDING WITH WORK.
- IN VAN NESS STATION EQUIPMENT ROOM, NETWORK EQUIPMENT CABINET HAS LIVE NETWORK TRAFFIC. CONTRACTOR ONLY PERFORM APPROVED WORK WITH SFMTA REPRESENTATIVE PRESENT.
- NEW COMMUNICATIONS CABLES: REFER TO STATION'S CABLE PLANS AND CABLE SCHEDULES FOR COMPLETE REQUIREMENTS. CAUTION: NOT ALL NEW COMMUNICATION CABLES (AS NOTED IN CABLE SCHEDULE "CONTRACTOR'S DISCRETION") ARE SHOWN ON LAYOUT DRAWINGS.
- CABLE RUNS BETWEEN NETWORK SWITCHES AND CCTV, TVM, PA SPEAKERS SHALL BE CAT-6.
- ALL RJ45 CONNECTORS EXTERNAL TO COMMUNICATIONS CABINET SHALL BE WATERPROOF AND RATED IP67.
- APPROVED INLINE PoE ETHERNET EXTENDER SHALL BE INSTALLED FOR ALL ETHERNET LINKS MORE THAN 300 FEET. ETHERNET EXTENDERS SHALL BE RATED IP66 MINIMUM. EXTENDERS SHALL BE MOUNTED ON GALVANIZED DIN RAIL OR STRUT CHANNEL SECURED TO SIDE OF PULLBOXES.
- CONTRACTOR SHALL TEST CERTIFY ALL FIBER CABLES AND CAT-6 CABLES INSTALLED TO MEET OR EXCEED TIA/EIA-568-C. ALL CABLE PERFORMANCE PARAMETERS DEFINED IN TIA/EIA-568-C SHALL BE MEASURED AND RECORDED FOR EACH CABLE. CONTRACTOR SHALL SUBMIT CABLE CERTIFICATION DATA IN APPROVED ELECTRONIC FORMAT TO ENGINEER.

FIBER NETWORK

- DO NOT DISTURB FIBERS WITH LIVE TRAFFIC, WITHOUT APPROVED MIGRATION STEPS AND BACKUP PLAN.
- COORDINATE WITH SFMTA-IT DEPARTMENT FOR ALL FIBER TERMINATIONS TO EQUIPMENT.

WIRING AND ROUTING

- ALL NEW RACEWAY, I.E. CONDUIT, ETC., ROUTING ARE SCHEMATICALLY AND DIAGRAMMATICALLY SHOWN. PRIOR TO ANY WORK, CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS, ROUTE AND INSTALL NEW RACEWAY AND RELATED MATERIALS I.E. BOXES, ETC., PER NEC AND IN WORKMANLIKE MANNER.
- SHOP DRAWINGS: PRIOR TO ANY WORK, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL. SHOP DRAWINGS SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING:
 - CABINET CONFIGURATION, EQUIPMENT MOUNTING DETAILS, GROUNDING/ BONDING DETAILS, ELECTRICAL SINGLE LINE DIAGRAM.
 - PULLBOX CONFIGURATION DETAILS, CONDUIT/ RACEWAY ROUTING DETAILS, CABLE/ WIRING ROUTING DETAILS.
 - EQUIPMENT SCHEDULE, MATERIAL SCHEDULE, FIBER ASSIGNMENTS, EQUIPMENT PORT ASSIGNMENTS, PATCH PANEL PORT ASSIGNMENTS, AND LABEL SCHEDULE AT EACH STATION LOCATION.
 - PLAN VIEW THAT SHOWS COMMUNICATIONS CABINET, ELECTRICAL PANEL CABINET, AND TRAFFIC COTROLLER CABINET, AND RELATED PULL BOXES AT EACH STATION LOCATION.
 - LOCATIONS OF ALL PoE ETHERNET EXTENDERS AND EXTENDER MOUNTING DETAILS.
 - ALL RACEWAY SYSTEM (INCLUDING ALTERNATE ROUTING AND RACEWAY MATERIALS FINISHES) IN ACCORDANCE WITH SPECIFICATION SECTION 16110 AND 16130.
- REFERENCE DRAWINGS: REFERENCE DRAWINGS ARE PROVIDED TO IDENTIFY ELEVATIONS, LOCATIONS OF CONCEALED SPACES, AND CEILING ASSEMBLIES. CONTRACTOR SHALL PERFORM EXISTING CONDITION SURVEY WHICH INCLUDES FIELD INVESTIGATION OF EXISTING CONCEALED SPACES FOR INSTALLATION OF NEW RACEWAYS, CABLES, SUPPORTS, ETC. IN ADDITION, CONTRACTOR SHALL PREPARE RACEWAY SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
- POWER AND COMMUNICATION WIRING CONNECTIONS TO NEW EQUIPMENT CABINETS AND RACKS SHALL BE WIRED WITH SUFFICIENT LENGTHS SO THAT WHEN EQUIPMENT MOVES FROM TEMPORARY TO PERMANENT LOCATION, THERE WILL BE MINIMUM REWIRING. CONTRACTOR SHALL PROVIDE FLEXIBLE CONDUIT OR CABLE TRAY FOR WIRING CONNECTIONS AT TEMPORARY AND PERMANENT LOCATION. REFER TO SPECIFICATION'S SPECIAL PROVISION FOR RESTRICTION AND OTHER REQUIREMENTS. RACEWAYS SHALL BE PROPERLY SUPPORTED PER NEC.
- ALL RACEWAYS IN PUBLIC AREAS SHALL BE CONCEALED UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER. POWER AND COMMUNICATION EXPOSED RACEWAYS (CONDUITS, WIREWAY, SURFACE METAL RACEWAY, ETC.) IN ANY PUBLIC AREAS CONTRACTOR SHALL PAINT RACEWAYS AND HARDWARE TO MATCH EXISTING PAINTED HARD SURFACES. CONTRACTOR SHALL SUBMIT PROPOSED RACEWAY FINISHES FOR APPROVAL.
- CORE DRILLING: CONTRACTOR SHALL CORE DRILL AS REQUIRED FOR ROUTING OF RACEWAY THROUGH WALLS, FLOORS AND CEILINGS. CAUTION: NOT ALL REQUIRED CORE DRILLINGS ARE NOTED ON LAYOUT DRAWINGS. CORE DRILL LOCATIONS SHOWN ARE SUGGESTED. CONTRACTOR SHALL FIELD VERIFY AND LOCATE HIS PROPOSED CORE DRILL LOCATIONS. PERFORM X-RAY SURVEY AT CONTRACTOR'S PROPOSED CORE DRILL LOCATIONS TO AVOID REBAR DAMAGE.
- EXISTING SPARE CONDUITS: WHERE INDICATED TO INSTALL NEW WIRES, CONTRACTOR SHALL USE MANDREL TO TEST SPARE CONDUITS TO ENSURE THAT NEW WIRES CAN BE INSTALLED. NOTIFY SFMTA IMMEDIATELY IF CONDUIT IS OBSTRUCTED.

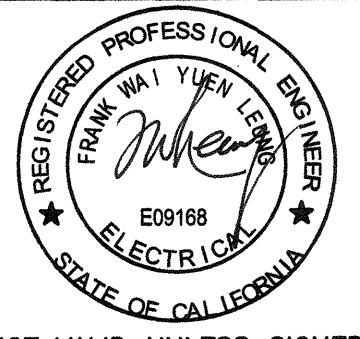


ELECTRICAL

- ELECTRICAL WIRING SHALL BE SOLID COPPER, #10 AWG MINIMUM. WIRES SHALL BE XHHW-2 AND CABLES SHALL BE TYPE UF-B UNLESS INDICATED OTHERWISE.
- CONTRACTOR SHALL PERFORM DC RESISTANCE TEST AND INSULATION RESISTANCE TEST ON ALL ELECTRICAL WIRING INSTALLED. MEASUREMENT RESULTS SHALL MEET OR EXCEED MANUFACTURER SPECIFICATIONS. CONTRACTOR SHALL SUBMIT TEST CERTIFICATION DATA IN APPROVED ELECTRONIC FORMAT TO ENGINEER.
- ALL HDPE DUCT SHALL BE SCHEDULE 40 IN 40 FOOT STICK TYPE LENGTHS. HDPE IN CONTINUOUSLY REELED ARE NOT ACCEPTABLE.
- CONTRACTOR SHALL PROVIDE A CONTINUOUS GROUND WIRE WITH THE PHASE CONDUCTOR IN THE SAME CONDUIT. GROUNDING USING CONDUIT ARE NOT ACCEPTABLE.

GENERAL

- INSTALLATION, WORKMANSHIP, AND PROJECT MATERIALS SHALL COMPLY WITH NATIONAL ELECTRIC CODE, LOCAL, STATE, AND FEDERAL CODES.
- GENERAL WORK PRACTICES FOR ELECTRICAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NECA 1-2010, STANDARD FOR GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION (ANSI).
- WHEN REQUIREMENTS CONFLICT, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- ALL NEW COMMUNICATIONS AND ELECTRICAL EQUIPMENT SHALL BE ANCHORED PER STRUCTURAL DRAWINGS AND AS RECOMMENDED BY MANUFACTURER.
- COORDINATE ALL WORK WITH ALL OTHER DISCIPLINES, INCLUDING PLANS TO BE PROVIDED BY CONTRACTOR. FOR DUCT CONFIGURATION, SEE JT DRAWINGS. FOR TRAFFIC SIGNALS PULL BOXES, POLES, AND WIRING, SEE ET DRAWINGS.
- CONTRACTOR TO COORDINATE WITH PG&E FOR ALL NEW METERED SERVICE. CORE DRILL THE PG&E MANHOLE OR HANDHOLE FOR THE NEW 3" HDPE CONDUIT ENTRANCE.
- FOR GUARD RAIL, SEE ARCHITECTURAL AR SERIES FOR EXACT LOCATIONS AND POWER DISTRIBUTION.
- ALL CAST IRON METALLIC BOXES AT THE BOARDING ISLANDS SHALL HAVE ONE INCH OPENING AT THE BOTTOM OF THE BOXES FOR DRAINAGE.
- THE N36 AND P36 CONCRETE BOXES SHALL INCLUDE EXTENSIONS, R-SERIES COMPOSITE LIDS, STEEL CHECKER PLATE BOLT DOWN COVERS, N90 BOLT DOWN KITS. THE N36 SHALL BE MARKED "MTA POWER", THE P36 SHALL BE MARKED "MTA 311 PHONE" FOR PHONE, AND P36 BE MARKED "MTA NETWORK" FOR COMMUNICATION.
- ALL CONCRETE PULL BOXES ON THE SIDEWALK AND ALL CAST IRON METALLIC PULL BOXES ON THE BOARDING ISLANDS SHALL INCLUDE CRUSHED ROCK SUMP WITH MINIMUM 6" DEPTH AND THE BOTTOM AREA OF 6" BEYOND THE BOX OUTSIDE DIMENSIONS OF PULL BOXES PER THE CALTRANS STANDARD PLAN RSP ES-8A.
- CONTRACTOR TO COORDINATE WITH SFMTA IT DEPARTMENT, SFMTA VIDEO SHOP FOR SETTING UP, CONFIGURATION AND TESTING OF THE DIGITAL VIDEO RECORDERS, SERVERS FOR THE CCTV SYSTEM, PA SYSTEM, AND ALL NETWORK DEVICES.

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 					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		1289 CL-29030	
COMMUNICATIONS AND NETWORKING GENERAL NOTES					CN-G1 CN-G2		REVISION 0					

LEGEND

	FIBER PATCH PANEL/ DISTRIBUTION PANEL		NEW EQUIPMENT - FINAL LOCATION MAY BE CHANGED ONCE SPACE IS VACATED BY DEMOLISHED EQUIPMENT
	EQUIPMENT TO BE DEMOLISHED/ SALVAGED		ARCHITECTURAL FEATURE, SEE ARCHITECTURAL DRAWINGS
	2" HDPE CONDUIT FOR FIBER OPTIC CABLE		WATER PROOF GFCI RECEPTACLE WITH LOCKING COVER
	2" HDPE CONDUIT FOR CAT 6 & TSP PHONE WIRE		PHASE A OR PHASE C OF THE 120/ 240VAC
	2" HDPE CONDUIT FOR ELECTRICAL POWER		CCTV CAMERA
	2" HDPE CONDUIT FOR AT&T PHONE		DETAIL BOUNDARY MARKERS
	STRAIGHT FUSION SPLICE IN FIBER OPTIC PANEL		COMMUNICATIONS AND ELECTRICAL PANEL CABINET AND PULL BOXES
	PATCH CORD/ PIGTAIL TERMINATION IN P/P		COMMUNICATIONS CABINET
	EXISTING/ NIC (NOT IN CONTRACT)		ELECTRICAL CABINET
	PUBLIC ADDRESS SPEAKER		
	JUNCTION BOX		
	COMMUNICATIONS PULL BOX		
	ELECTRICAL PULL BOX		
	TELEPHONE PULL BOX		

ABBREVIATIONS

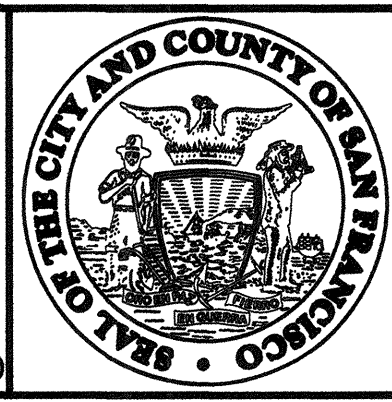
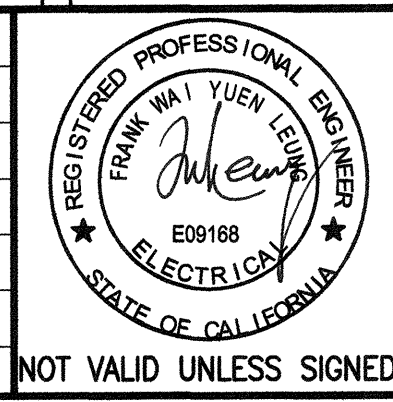
311 & AC	COURTESY PHONE AND ALTERNATING CURRENT	P/P	PATCH PANEL
A, AMP	AVAILABLE INTERRUPTING CAPACITY AMPERES	PA	PUBLIC ADDRESS
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE	PCC	POWER CONTROL CENTER
A/V	AUDIO/VISUAL OR AUDIO/VIDEO	PLC	PROGRAMMABLE LOGIC CONTROLLER
AVE	AVERAGE	PNL	PANEL
AWG	AMERICAN WIRE GAUGE	PoE	POWER OVER ETHERNET
BART	BAY AREA RAPID TRANSIT	R&D	REMOVE AND DISPOSE
BAT, BATT	BATTERY	R&S	REMOVE AND SALVAGE
CAB	CABINET	REL	RELOCATE
CB	CIRCUIT BREAKER	REPL	REPLACEMENT
CC	COMMUNICATIONS CABINET	RSC	RIGID STEEL CONDUIT
CCTV	CLOSED CIRCUIT TELEVISION	RTU	REMOTE TERMINAL UNIT
CKT	CIRCUIT	RX	RECEIVE
COMM, CN	COMMUNICATIONS CABINET	SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEM
COMM CAB	COMMUNICATIONS CABINET	SFMTA	SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY
COMP	COMPUTER	SM	SINGLE MODE FIBER
DC	DIRECT CURRENT	SPKR	SPEAKER
DEST	DESTINATION	SVN	SOUTH VAN NESS
DISTR, DIST	DISTRIBUTION	SW	SWITCH
DT	DEPARTMENT OF TECHNOLOGY	TBD	TO BE DETERMINED
DTS	DATA TRANSMISSION SYSTEM	TEL	TELEPHONE
(E)	EXISTING	TMC	TRANSPORTATION MANAGEMENT CENTER
EC	ELECTRICAL CABINET	TSP	TWISTED PAIR
ECB	ENCLOSED CIRCUIT BREAKER	TV	TELEVISION
ELEC., EL	ELECTRICAL	TVM	TICKET VENDING MACHINE
EMER.	EMERGENCY	UON	UNLESS OTHERWISE NOTED
ENET	ETHERNET	UPS	UNINTERRUPTIBLE POWER SUPPLY
EP	ELECTRICAL PANEL	UTP	UNSHIELDED TWISTED PAIR
EQUIP, EQPT, EQMT	EQUIPMENT	V	VOLT
F/I	FURNISH AND INSTALL	VIF	VERIFY IN FIELD
FLR	FLOOR	VoIP	VOICE OVER IP
FO	FIBER OPTIC	W	WATTS
GFCI	GROUND FAULT CIRCUIT INTERRUPTER		
GND, G	GROUND		
GRS	GALVANIZED RIGID STEEL		
HDPE	HIGH DENSITY POLYETHYLENE		
HZ	HERTZ		
I/O	INPUT/OUTPUT		
IP	INTERNET PROTOCOL		
IT	INFORMATION TECHNOLOGY		
JB	JUNCTION BOX		
KVA	KILO-VOLT-AMPERES		
KW	KILO-WATTS		
LAN	LOCAL AREA NETWORK		
LSZH	LOW SMOKE ZERO HALOGEN		
LTG	LIGHTING		
MCB	MAIN CIRCUIT BREAKER		
MEZZ	MEZZANINE		
MIC	MICROPHONE		
MIN	MINIMUM		
MM	MULTI-MODE FIBER		
MUNI	MUNICIPAL RAILWAY		
(N)	NEW		
NECA	NATIONAL ELECTRICAL CONTRACTOR ASSOCIATION		
NO	NORMALLY OPEN		
NC	NORMALLY CLOSED		
NS	NOISE SENSING		
OCC	OPERATIONS CONTROL CENTER		
OSVN/1SVN	ONE SOUTH VAN NESS		
P	POLE (CIRCUIT BREAKER)		

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DATE	MAY 13 2016

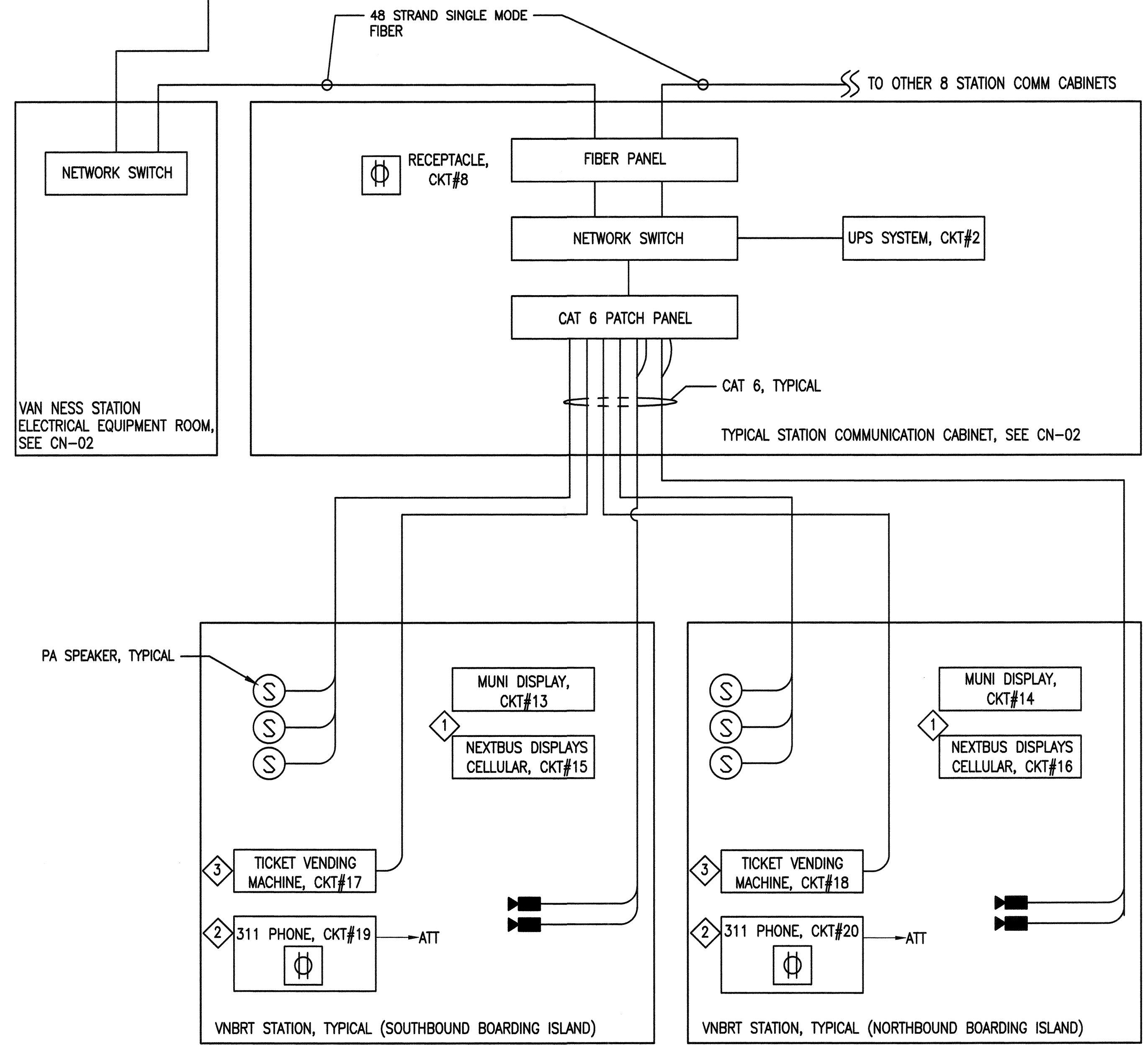
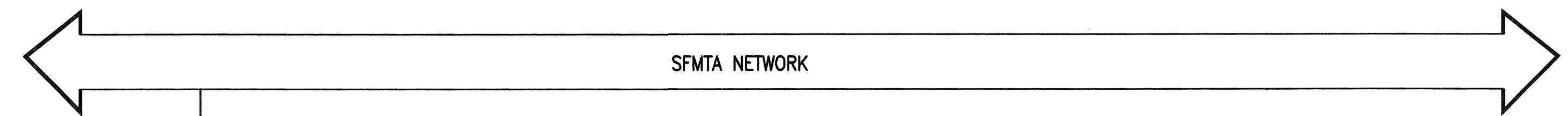
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 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 STATION SYSTEMS ELECTRICAL
 LEGENDS AND ABBREVIATIONS

1289	CL-29031
CN-G2	0
CN-G2	0



Panel Name: VNM		Voltage: 120 / 240 VAC		Mfg / Type: GE or Square D							
Location: Van Ness and Market		Main Breaker: 200A		Enclosure mounting: Pad mounted							
Phase: 1		Main Lug: N/A		NEMA: 4X							
wires: 3		Bus: 200A		AIC: 22,000A							
Description	VA		Bkr	Ckt	φA	φC	Ckt	Brk	VA		Description
	φA	φC							φA	φC	
spare	500		20	1	●		2	20	500	500	Uninterruptable power supply
spare		500	20	3		●	4	20		500	spare
spare	500		20	5	●		6	20	500		spare
spare		500	20	7		●	8	20		500	Comm cabinet, receptacle
spare	500		20	9	●		10	20	500		spare
variable message sign (SN #3)		500	50	11	●		12	20		500	spare
SFMTA display, southbound	500		20	13	●		14	20	500		SFMTA display, northbound
NextBus display, southbound		500	20	15		●	16	20		500	NextBus display, northbound
TVM, southbound	500		20	17	●		18	20	500		TVM, northbound
311 phone, southbound		500	20	19		●	20	20		500	311 phone, northbound
shelter lights, southbound	500		20	21	●		22	20	500		shelter lights, northbound
guard rail lights, southbound		500	20	23		●	24	20		500	guard rail lights, northbound
irrigation southbound (SN#2)	500		20	25	●		26	20	500		irrigation northbound (SN#2)
spare		500	20	27		●	28	20		500	spare
Golden Gate sign, southbound	500		20	29	●		30	20	500		Golden Gate sign, northbound
Art work tower SB (SN#4)		500	30	31		●	32	30		500	Art work tower NB (SN#4)
spare	500		20	33	●		34	20	500		spare
spare		500	20	35		●	36	20		500	spare
subtotal	4500	4500							4500	4500	subtotal
Lighting load VA: 2,000						Total VA per phase: φA = 9,000 φB = 9,000					
Receptacle load VA: 500						Total connected load VA: 18,000					
Other demand load VA: 8000						Amps per phase: 75					

Notes

- The above electrical panel is at Van Ness and Market (VNM), typical for locations at McAllister (VNMa), Eddy (VNE), Geary (VNG), Sutter (VNS), Sacramento (VNSa), Jackson (VNJ), Vallejo (VNV), and Union (VNU). Total of nine locations.
- See Landscape Irrigation power distribution composite, Dwg. CN-28.
- Provide 1P50A circuits to variable message signs from panels VNG (see ET-133) and VNJ (see ET-134).

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REVISIONS					

DESIGNED: *M. Kenny*

DRAWN: *P. Chow*

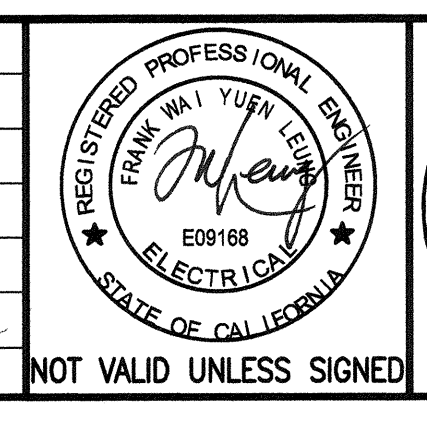
CHECKED: *Y. Lee*

REVIEWED: *J. Es*

RECOMMENDED: *F. Mohamoud*

APPROVED: *F. Mohamoud*

DATE: MAY 18 2016



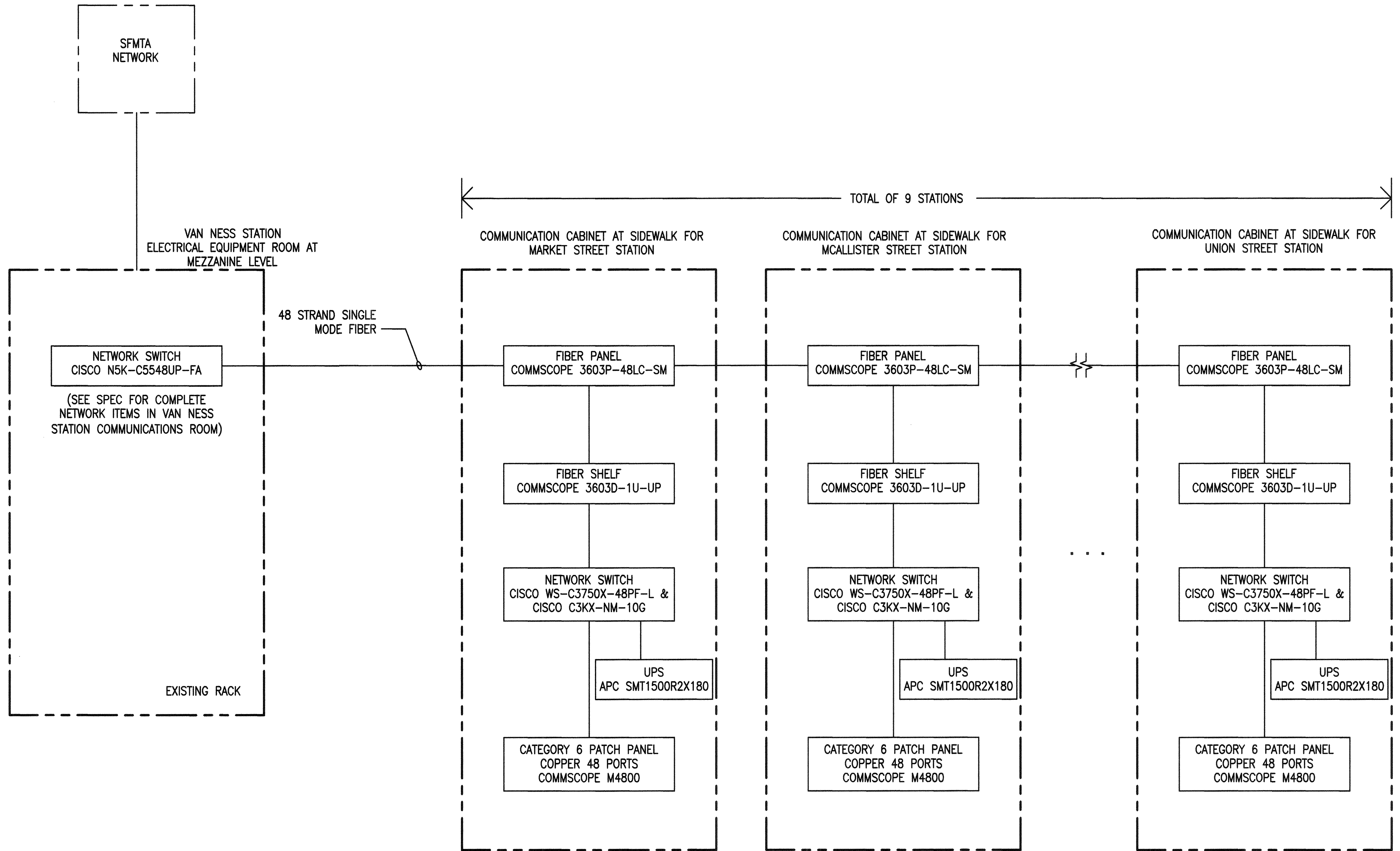
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MUNICIPAL TRANSPORTATION AGENCY

APPROVED: *Vincent Han*
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

COMMUNICATION SYSTEM
BLOCK DIAGRAM AND
TYPICAL ELECTRICAL PANEL SCHEDULE

1289	
CL-29032	
CN-01	REVISION
CN-31	0



SFMTA NETWORK BLOCK DIAGRAM

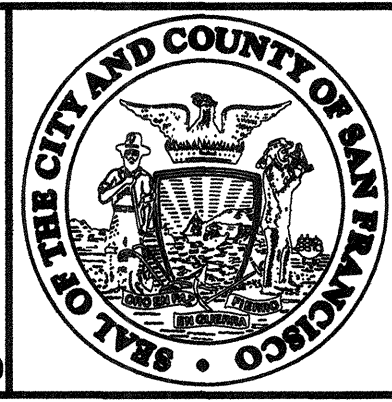
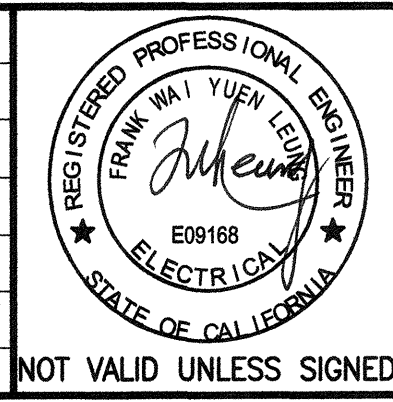
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DATE	MAY 13 2016

REGISTERED PROFESSIONAL ENGINEER
FRANK WAI YUEN LEUNG
E09168
ELECTRICAL
STATE OF CALIFORNIA

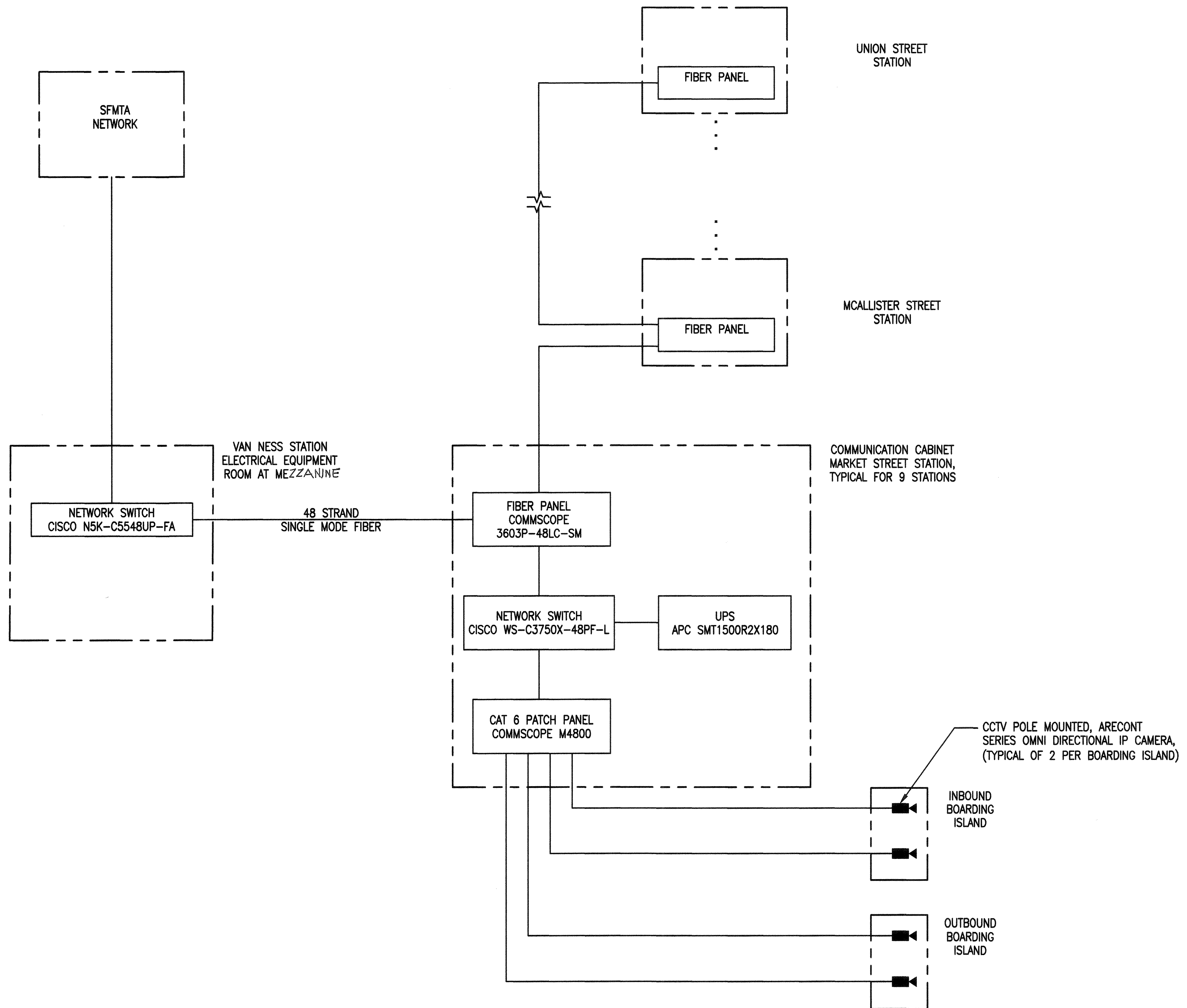


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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
SFMTA NETWORKS BLOCK DIAGRAM

1289	
CL-29055	
CN-02	REVISION
CN-31	0

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CLOSED CIRCUIT TV BLOCK DIAGRAM
NOT TO SCALE

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DATE	MAY 13 2016

REGISTERED PROFESSIONAL ENGINEER
FRANK W. YUEN LEUNG
E09168
ELECTRICAL
STATE OF CALIFORNIA

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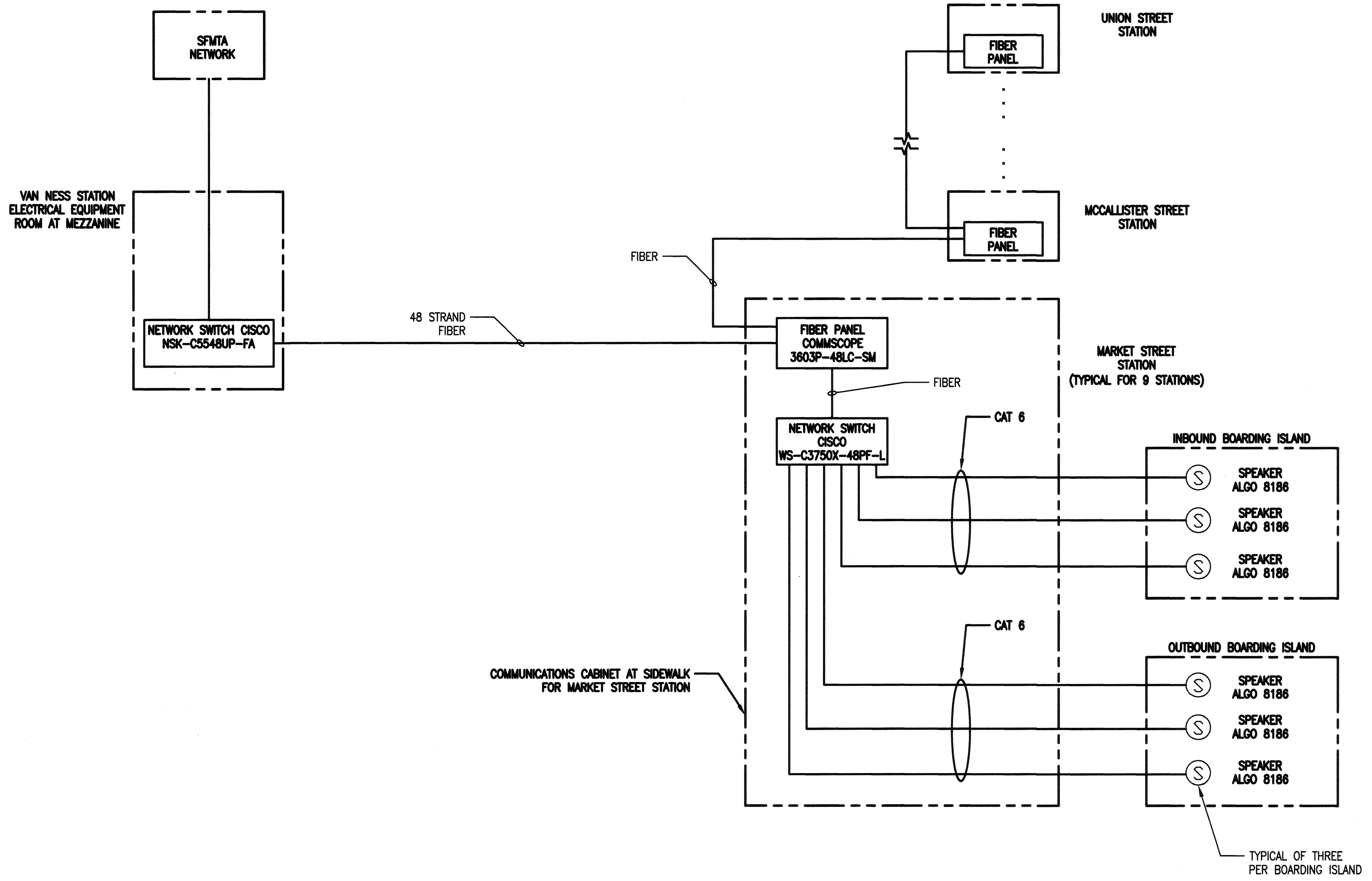
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VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

**CLOSED CIRCUIT TV
BLOCK DIAGRAM**

1289	
CL-29056	
CN-03	REVISION
CN-31	0

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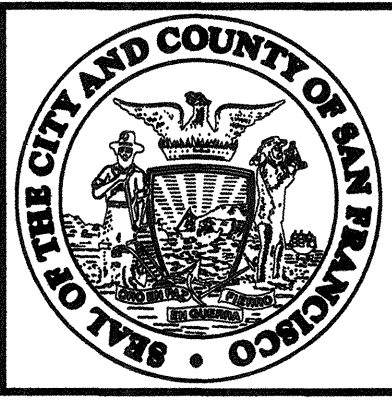
PUBLIC ADDRESS SYSTEM BLOCK DIAGRAM
NOT TO SCALE

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REGISTERED PROFESSIONAL ENGINEER
FRANK WA I YUEN LEUNG
ELECTRICAL
E09168
STATE OF CALIFORNIA

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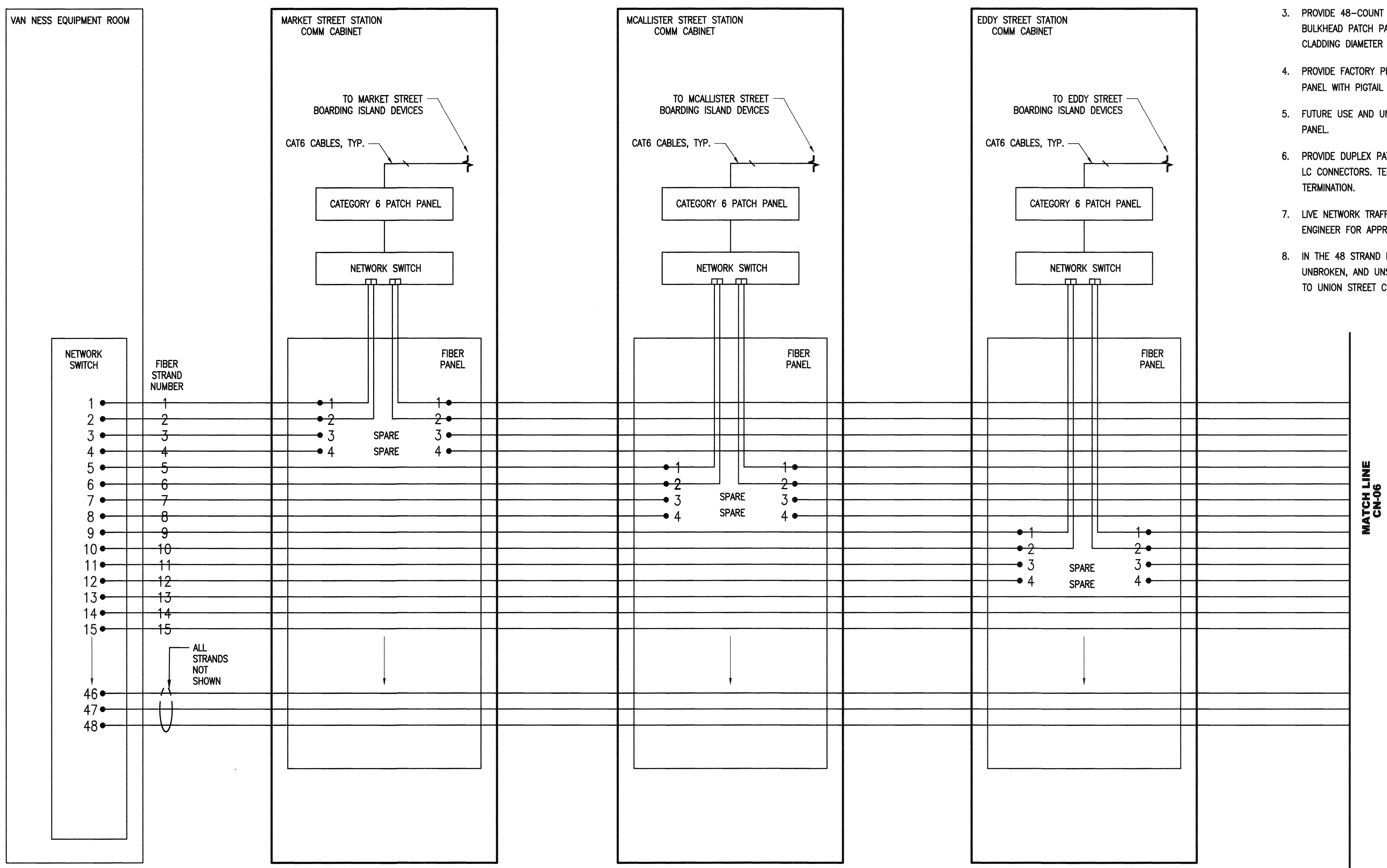
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MUNI BUS RAPID TRANSIT SYSTEM		1289
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT		CL-29057
PUBLIC ADDRESS SYSTEM BLOCK DIAGRAM		CN-04
		REVISION
		CN-31
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NOTES:

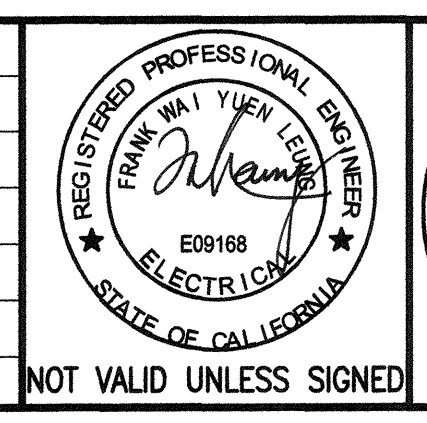
1. ALL FIBER SHALL BE SINGLE MODE FIBER.
2. TERMINATION FROM EQUIPMENT TO SYSTEMS NETWORK SHALL BE COORDINATED WITH THE ENGINEER.
3. PROVIDE 48-COUNT FIBER, FUSION SPLICE INTO PRE-CONNECTORIZED BULKHEAD PATCH PANEL WITH INTERNAL PIGTAILS. PIGTAIL CORE & CLADDING DIAMETER SHALL MATCH FIBER CORE & CLADDING EXACTLY.
4. PROVIDE FACTORY PRE-CONNECTORIZED, PRE TERMINATED PATCH/SPLICE PANEL WITH PIGTAIL AND LC-TYPE CONNECTOR.
5. FUTURE USE AND UNASSIGNED FIBERS SHALL BE COILED WITHIN PATCH PANEL.
6. PROVIDE DUPLEX PATCH CORDS FROM EQUIPMENT TO PATCH PANEL WITH LC CONNECTORS. TERMINATE INTO BULKHEAD FOR PATCH CORD TERMINATION.
7. LIVE NETWORK TRAFFIC. CONTRACTOR TO SUBMIT SPLICE PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO WORK.
8. IN THE 48 STRAND FIBER, LEAVE 12 STRANDS RUNNING UNTOUCHED, UNBROKEN, AND UNSPLICED FROM VAN NESS STATION EQUIPMENT ROOM TO UNION STREET COMMUNICATION CABINET.



I:\CP1640.1 Van Ness BRT V2_CER\300_Design Components\301_Drawings\20_System and Communication\Sheet Files\201505\20150602\CP16401CN-005.dwg dchawk Thu Jul 16, 2015 - 8:49 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *[Signature]*
 DRAWN: *[Signature]*
 CHECKED: *[Signature]*
 REVIEWED: *[Signature]*
 RECOMMENDED: *[Signature]*
 APPROVED: *[Signature]*
 DATE: MAY 18 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

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

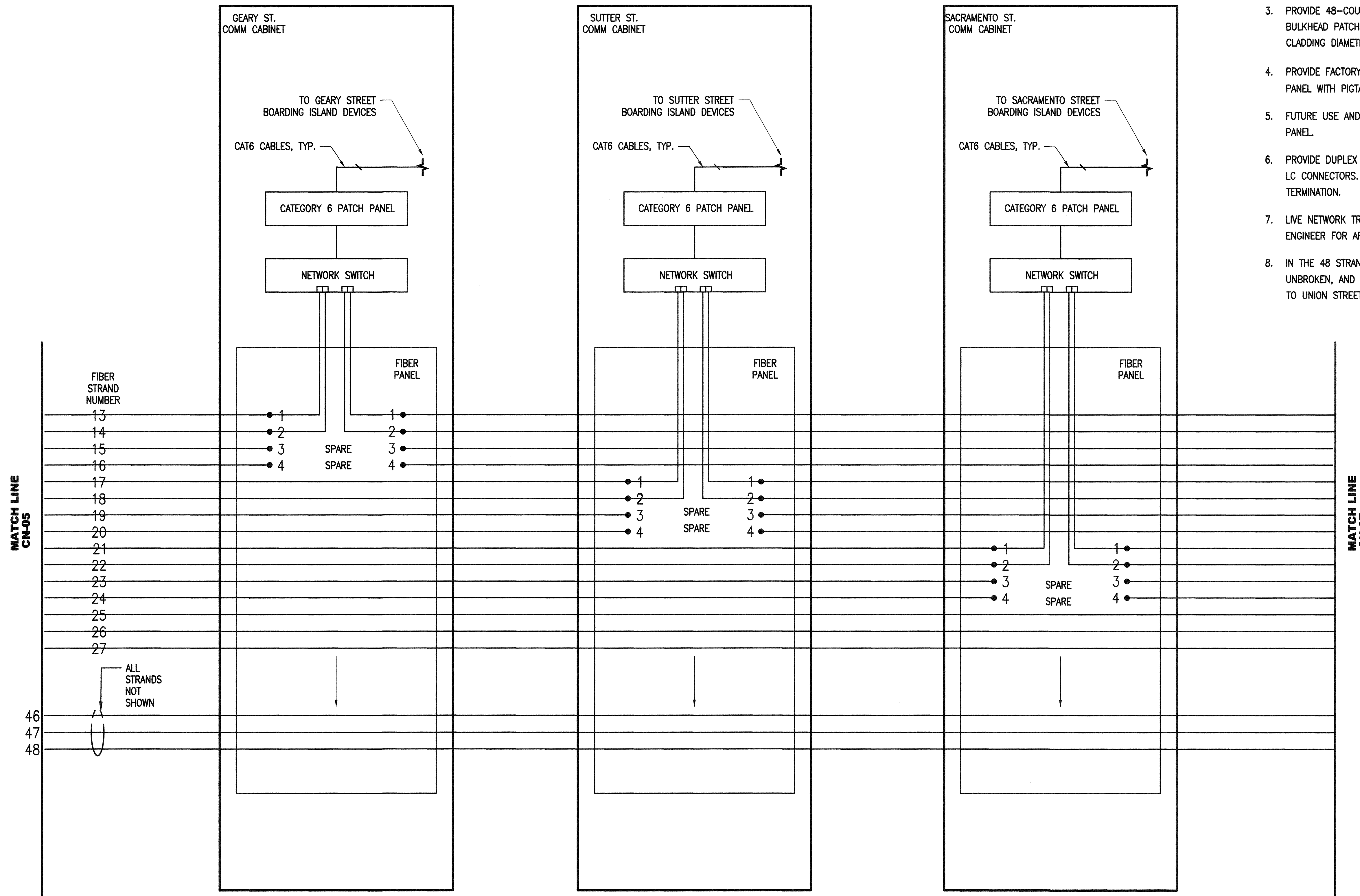
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

FIBER ASSIGNMENT FOR
 MARKET, MCALLISTER, AND EDDY

1289	REVISION
CL-29033	
CN-05	0
CN-31	

NOTES:

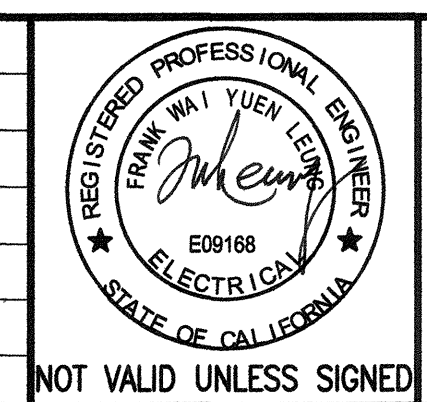
1. ALL FIBER SHALL BE SINGLE MODE FIBER.
2. TERMINATION FROM EQUIPMENT TO SYSTEMS NETWORK SHALL BE COORDINATED WITH THE ENGINEER.
3. PROVIDE 48-COUNT FIBER, FUSION SPLICE INTO PRE-CONNECTORIZED BULKHEAD PATCH PANEL WITH INTERNAL PIGTAILS. PIGTAIL CORE & CLADDING DIAMETER SHALL MATCH FIBER CORE & CLADDING EXACTLY.
4. PROVIDE FACTORY PRE-CONNECTORIZED, PRE TERMINATED PATCH/SPLICE PANEL WITH PIGTAIL AND LC-TYPE CONNECTOR.
5. FUTURE USE AND UNASSIGNED FIBERS SHALL BE COILED WITHIN PATCH PANEL.
6. PROVIDE DUPLEX PATCH CORDS FROM EQUIPMENT TO PATCH PANEL WITH LC CONNECTORS. TERMINATE INTO BULKHEAD FOR PATCH CORD TERMINATION.
7. LIVE NETWORK TRAFFIC. CONTRACTOR TO SUBMIT SPLICE PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO WORK.
8. IN THE 48 STRAND FIBER, LEAVE 12 STRANDS RUNNING UNTOUCHED, UNBROKEN, AND UNSPLICED FROM VAN NESS STATION EQUIPMENT ROOM TO UNION STREET COMMUNICATION CABINET.



I:\CPT6401_Van Ness BRT V2_CER\300_Design Components\301_Drawings\20_System and Communication\Sheet Files\201505\20150602_CPT6401-CN-06.dwg dchawk Thu Jul 16, 2015 - 8:49 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

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



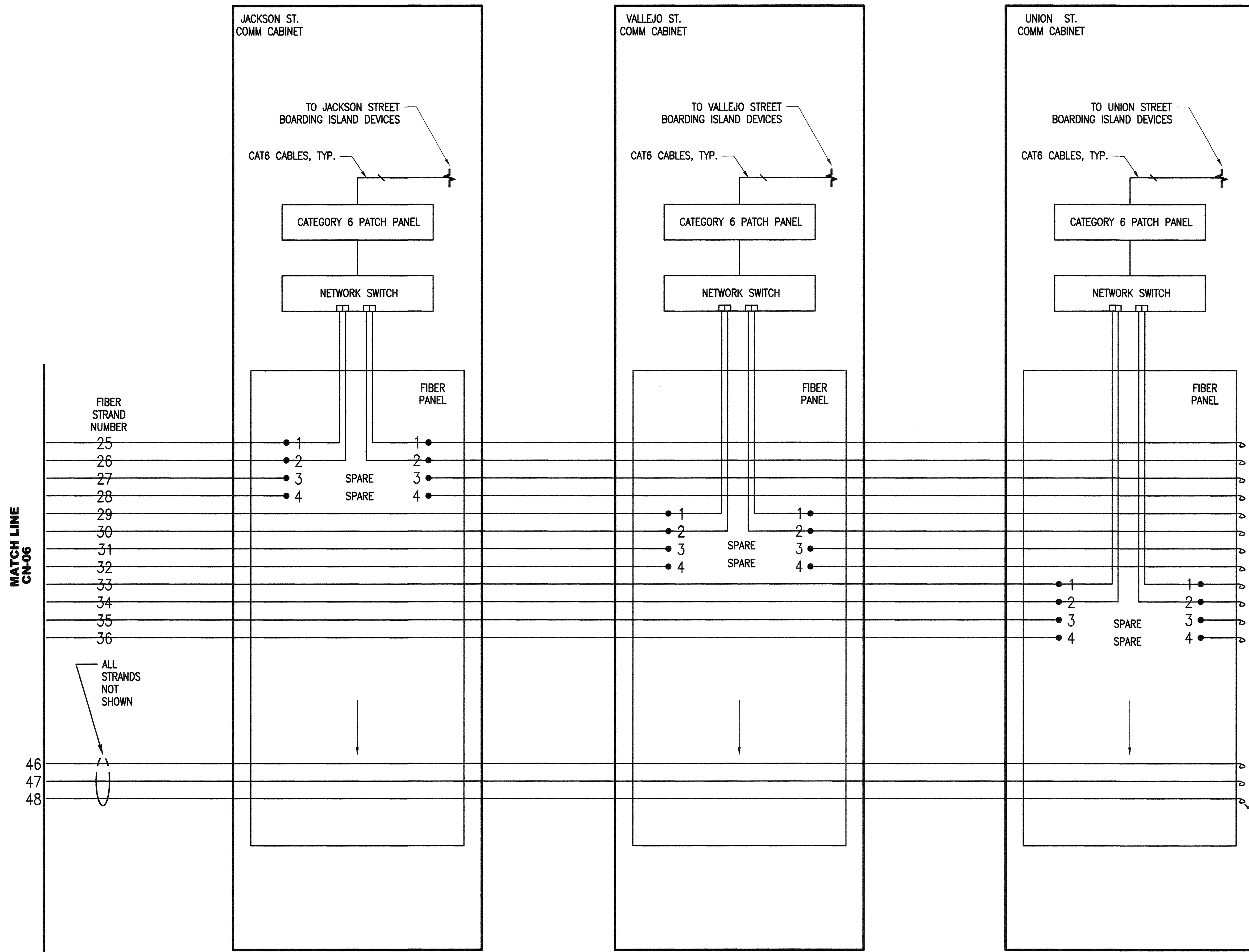
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 FIBER ASSIGNMENT FOR
 GEARY, SUTTER, AND SACRAMENTO

1289
 CL-29034
 CN-06
 CN-31
 REVISION
 0

NOTES:

1. ALL FIBER SHALL BE SINGLE MODE FIBER.
2. TERMINATION FROM EQUIPMENT TO SYSTEMS NETWORK SHALL BE COORDINATED WITH THE ENGINEER.
3. PROVIDE 48-COUNT FIBER, FUSION SPlice INTO PRE-CONNECTORIZED BULKHEAD PATCH PANEL WITH INTERNAL PIGTAILS. PIGTAIL CORE & CLADDING DIAMETER SHALL MATCH FIBER CORE & CLADDING EXACTLY.
4. PROVIDE FACTORY PRE-CONNECTORIZED, PRE TERMINATED PATCH/SPLICE PANEL WITH PIGTAIL AND LC-TYPE CONNECTOR.
5. FUTURE USE AND UNASSIGNED FIBERS SHALL BE COILED WITHIN PATCH PANEL.
6. PROVIDE DUPLEX PATCH CORDS FROM EQUIPMENT TO PATCH PANEL WITH LC CONNECTORS. TERMINATE INTO BULKHEAD FOR PATCH CORD TERMINATION.
7. LIVE NETWORK TRAFFIC. CONTRACTOR TO SUBMIT SPlice PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO WORK.
8. IN THE 48 STRAND FIBER, LEAVE 12 STRANDS RUNNING UNTOUCHED, UNBROKEN, AND UNSPLICED FROM VAN NESS STATION EQUIPMENT ROOM TO UNION STREET COMMUNICATION CABINET.

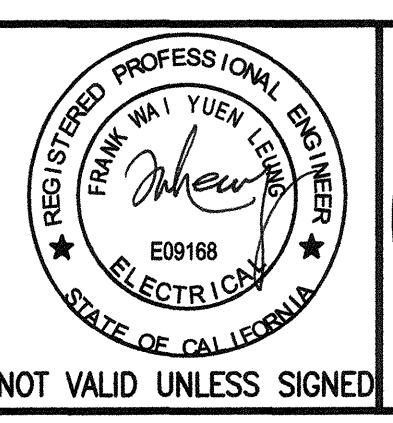


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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

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

REGISTERED PROFESSIONAL ENGINEER
 FRANK WAI YUEN LEUNG
 E09168
 ELECTRICIAN
 STATE OF CALIFORNIA

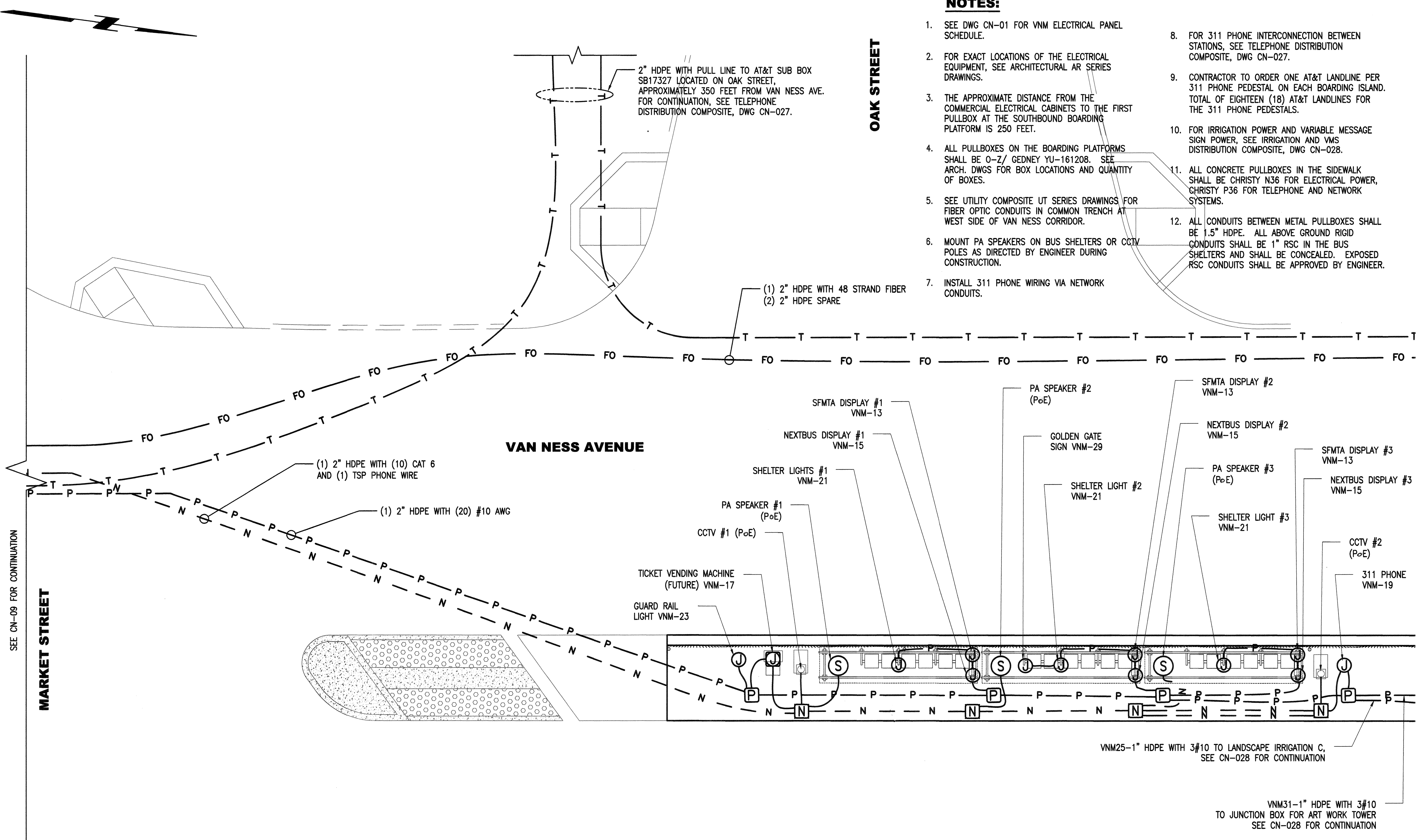


CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 FIBER ASSIGNMENT FOR
 JACKSON, VALLEJO, AND UNION

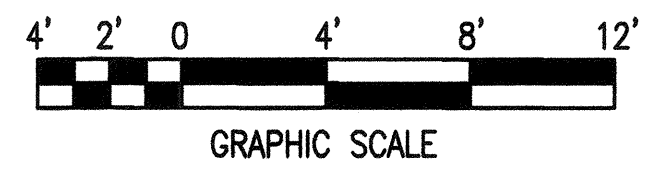
1289	REVISION
CL-29035	
CN-07	0
CN-31	

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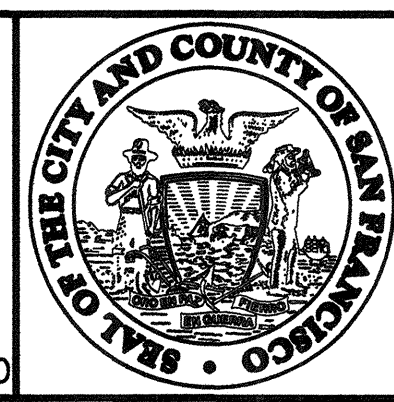
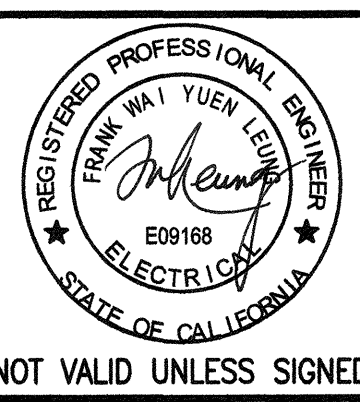
- NOTES:**
- SEE DWG CN-01 FOR VNM ELECTRICAL PANEL SCHEDULE.
 - FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
 - THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE SOUTHBOUND BOARDING PLATFORM IS 250 FEET.
 - ALL PULLBOXES ON THE BOARDING PLATFORMS SHALL BE O-Z/ GEDNEY YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
 - SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
 - MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
 - INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
 - FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
 - CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
 - FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
 - ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
 - ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1.5" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.

PLAN AT MARKET STREET (SOUTHBOUND)
SCALE: 3/16"=1'



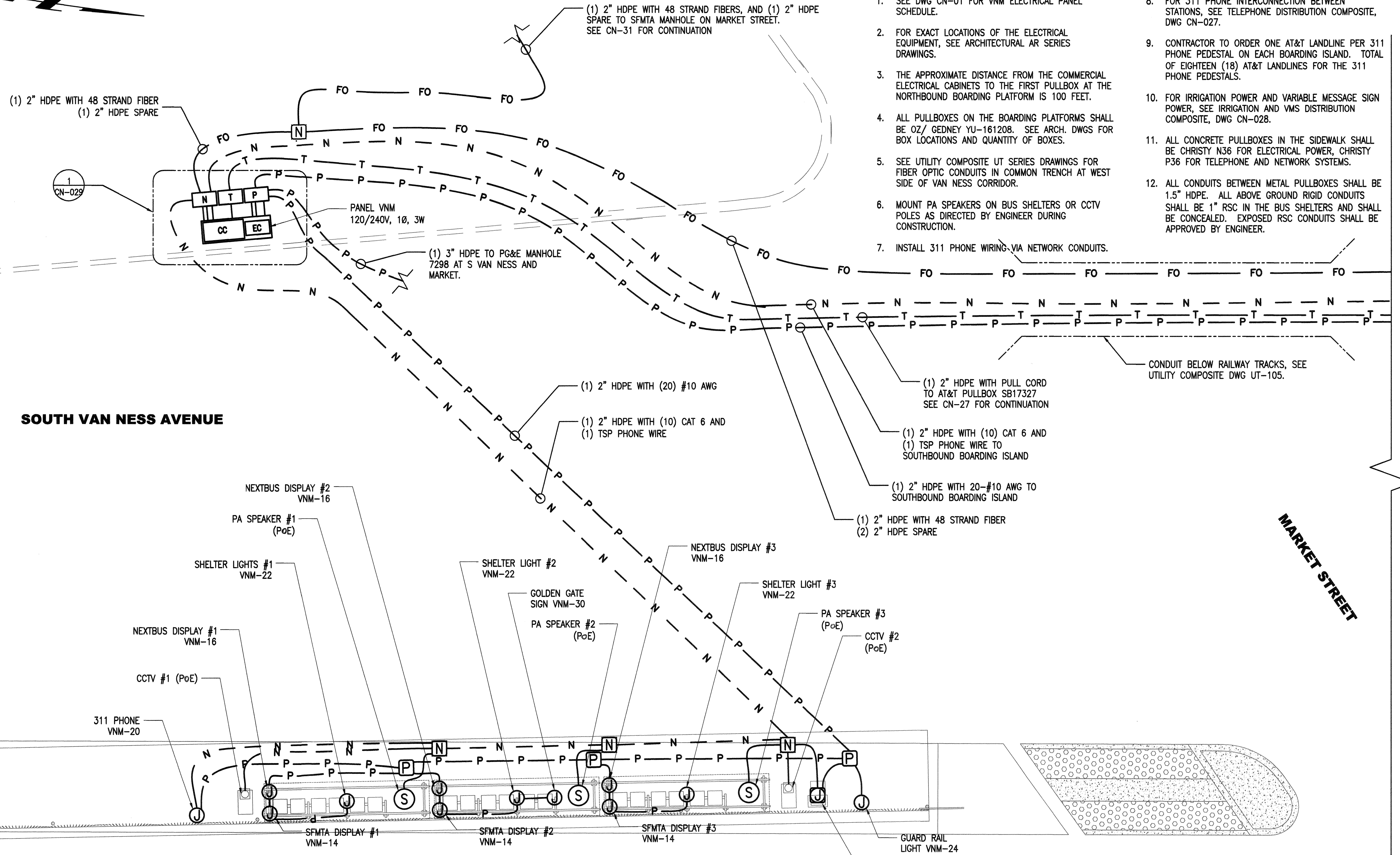
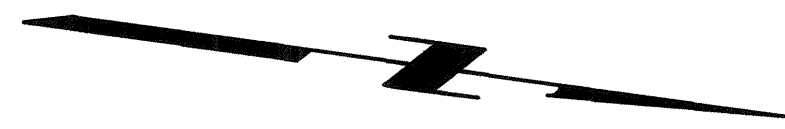
NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

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-29036						
BOARDING ISLAND LAYOUT - MARKET STREET STATION SOUTHBOUND		<table border="1"> <tr> <td>REVISION</td> <td></td> </tr> <tr> <td>CN-08</td> <td></td> </tr> <tr> <td>CN-31</td> <td>0</td> </tr> </table>	REVISION		CN-08		CN-31	0
REVISION								
CN-08								
CN-31	0							



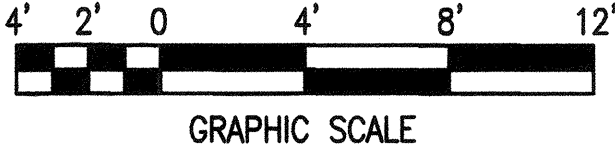
NOTES:

1. SEE DWG CN-01 FOR VNM ELECTRICAL PANEL SCHEDULE.
2. FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
3. THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS 100 FEET.
4. ALL PULLBOXES ON THE BOARDING PLATFORMS SHALL BE OZ/ GEDNEY YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
5. SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
6. MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
7. INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
8. FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
9. CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
10. FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
11. ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
12. ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1.5" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.

SOUTH VAN NESS AVENUE

MARKET STREET

PLAN AT MARKET STREET (NORTHBOUND)
SCALE: 3/16"=1'

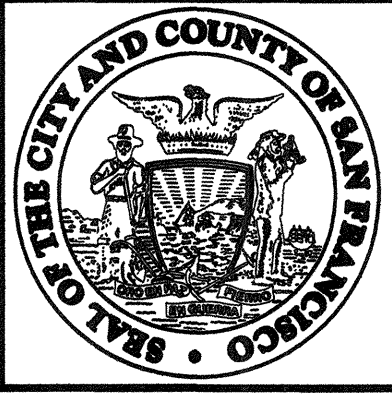
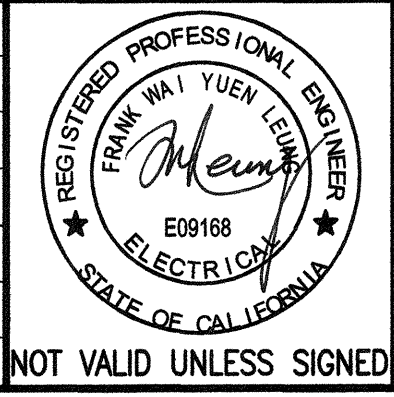


SEE CN-08 FOR CONTINUATION

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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>Meun</i>
DRAWN	<i>D. Cheuk</i>
CHECKED	<i>Frank for 2. Cheuk</i>
REVIEWED	<i>Frank</i>
RECOMMENDED	<i>Frank</i>
APPROVED	<i>F. Meun</i>
DATE	MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Frank Wai Yuen Leung
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

BOARDING ISLAND LAYOUT -
MARKET STREET STATION NORTHBOUND

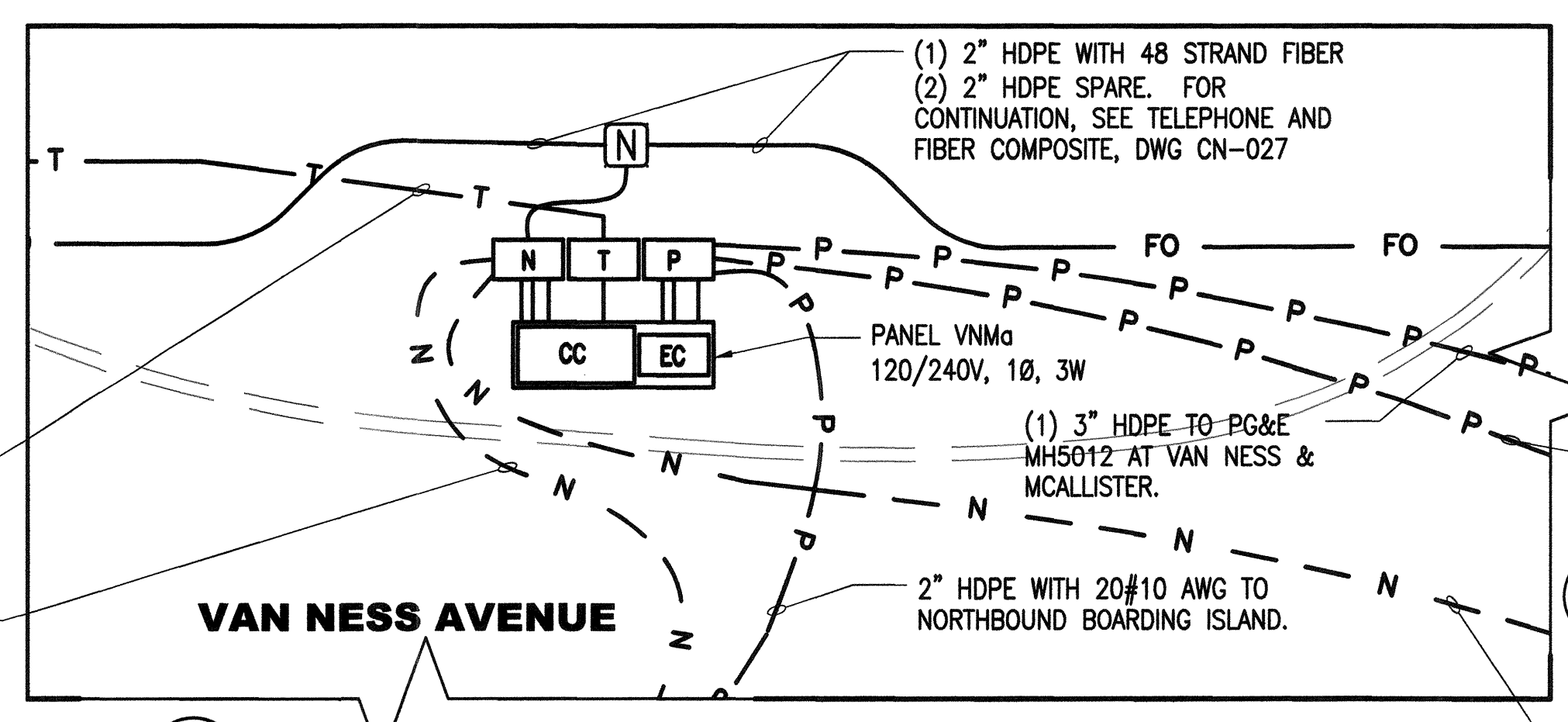
1289	CL-29037
CN-09	REVISION
CN-31	0

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(1) 2" HDPE WITH PULL LINE. FOR CONTINUATION, SEE TELEPHONE AND FIBER COMPOSITE, DWG CN-027

2" HDPE WITH (10) CAT 6 AND (1) TSP PHONE WIRE TO NORTHBOUND BOARDING ISLAND.



SEE **1** CN-11 FOR CONTINUATION

EQUIPMENT CABINETS VAN NESS AVE @ MCALLISTER STREET

2 PLAN

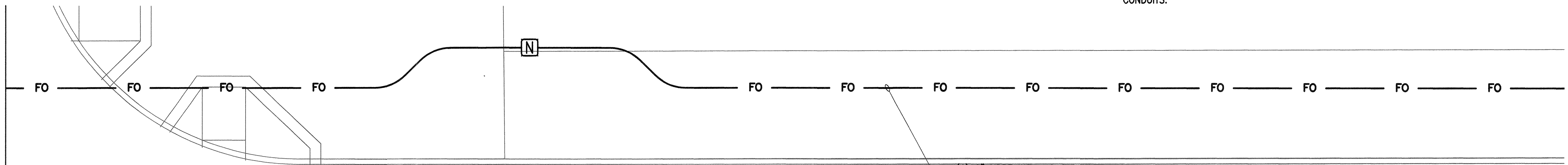
MCALLISTER STREET

2" HDPE WITH 20#10 AWG TO SOUTHBOUND BOARDING ISLAND.

2" HDPE WITH (10) CAT 6 AND (1) TSP PHONE WIRE TO SOUTHBOUND BOARDING ISLAND.

NOTES:

- SEE DWG CN-01 FOR VNMa ELECTRICAL PANEL SCHEDULE.
- FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
- THE APPROXIMATE DISTANCE FROM THE COMMUNICATION/ELECTRICAL CABINETS TO THE FIRST PULL BOX AT THE SOUTHBOUND BOARDING PLATFORM IS 125 FEET.
- ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
- SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
- MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
- INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
- FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
- CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
- FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
- ALL CONCRETE PULL BOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
- ALL CONDUITS BETWEEN METAL PULL BOXES SHALL BE 1 1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.

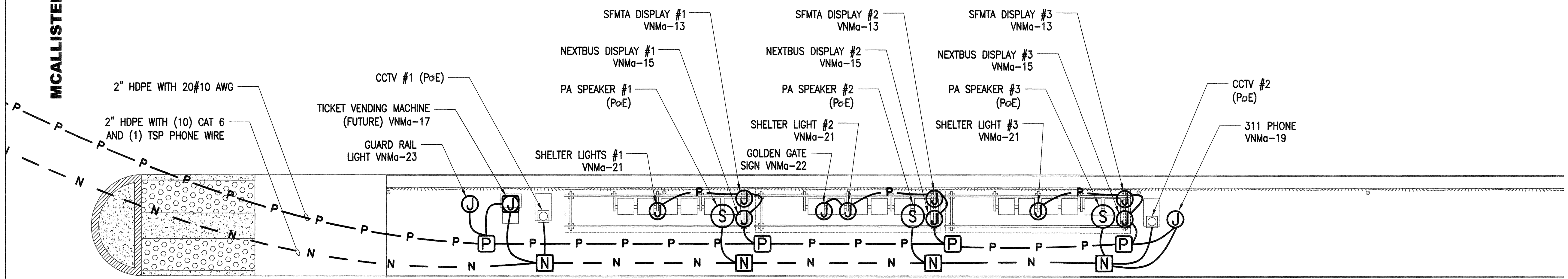


(1) 2" HDPE WITH 48 STRAND FIBER
(2) 2" HDPE SPARE. FOR CONTINUATION, SEE TELEPHONE AND FIBER COMPOSITE, DWG CN-027

VAN NESS AVENUE

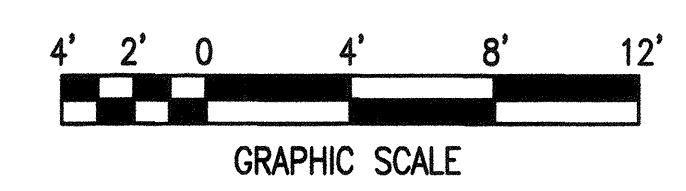
SEE **2** CN-10 FOR CONTINUATION

MCALLISTER STREET



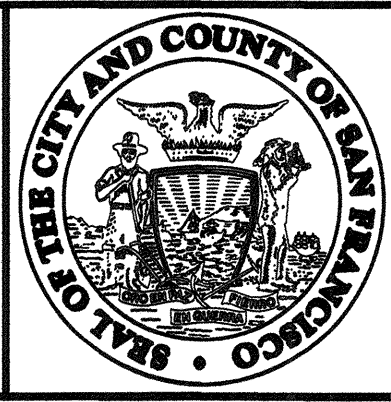
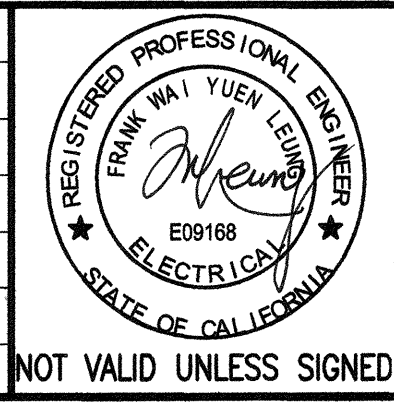
1 PLAN AT MCALLISTER STREET (SOUTHBOUND)

SCALE: 3/16"=1'



NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>Meung</i>
DRAWN	<i>D. Chouk</i>
CHECKED	<i>John for B. Die</i>
REVIEWED	<i>For S</i>
RECOMMENDED	<i>For S</i>
APPROVED	<i>F. Mohrman</i>
DATE	MAY 18 2016



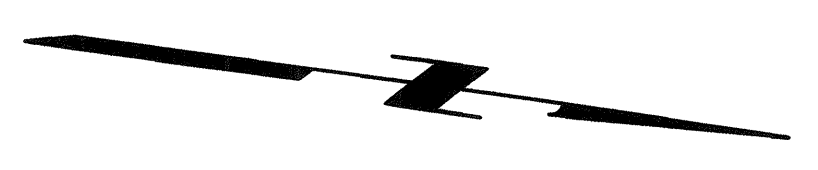
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Vincent Star
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

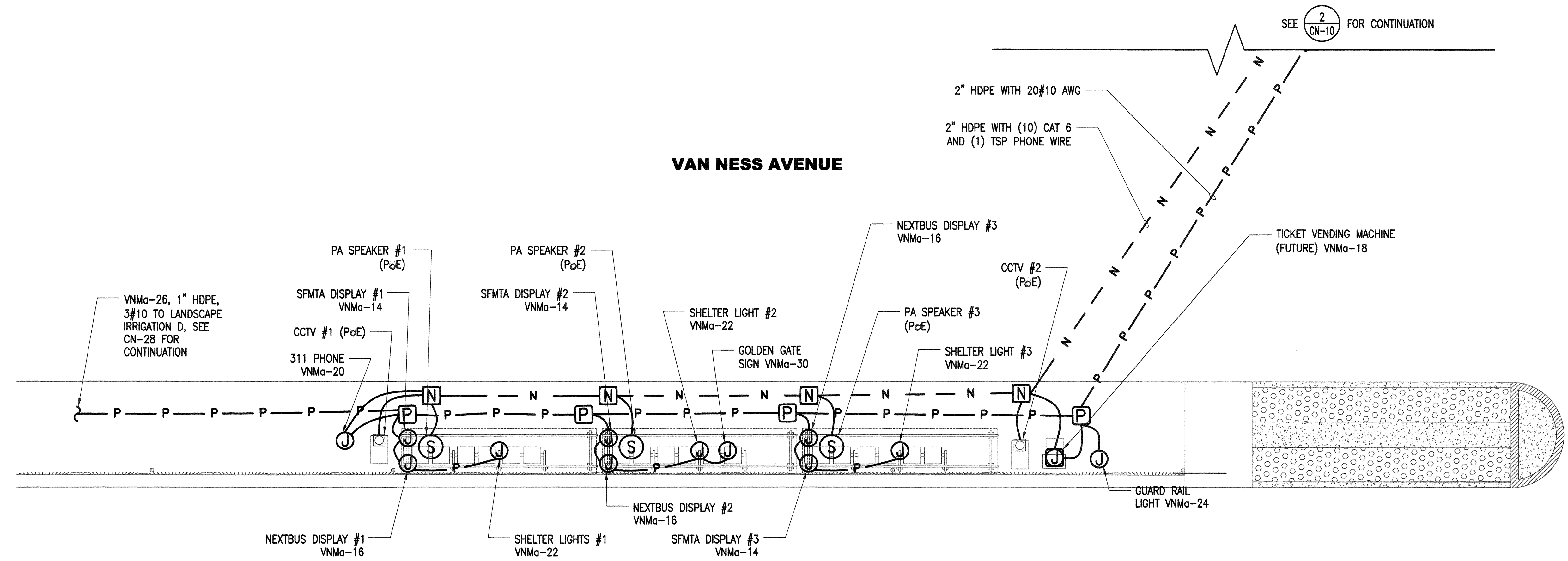
BOARDING ISLAND LAYOUT -
MCALLISTER STREET STATION SOUTHBOUND

1289	REVISION
CL-29038	
CN-10	0
CN-31	



NOTES:

1. SEE DWG CN-01 FOR VNMa ELECTRICAL PANEL SCHEDULE.
2. FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
3. THE APPROXIMATE DISTANCE FROM THE COMMUNICATION/ELECTRICAL CABINETS TO THE FIRST PULL BOX AT THE NORTHBOUND BOARDING PLATFORM IS 70 FEET.
4. ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
5. SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
6. MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
7. INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
8. FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
9. CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
10. FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
11. ALL CONCRETE PULL BOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
12. ALL CONDUITS BETWEEN METAL PULL BOXES SHALL BE 1 1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.

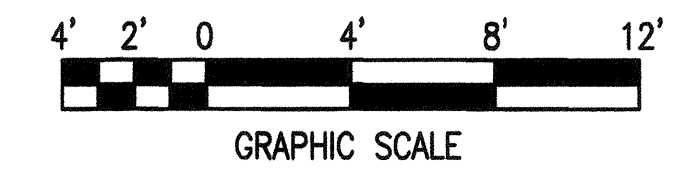


SEE 2 CN-10 FOR CONTINUATION

VAN NESS AVENUE

MCALLISTER STREET

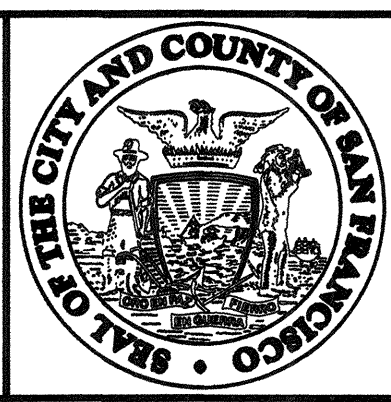
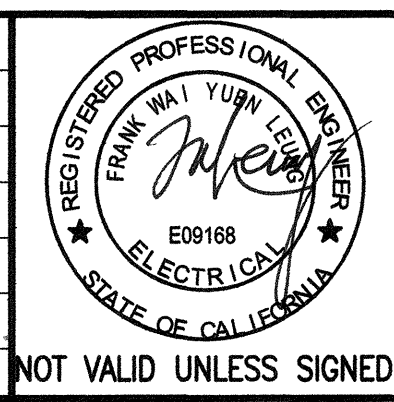
1 PLAN AT MCALLISTER STREET (NORTHBOUND)
1 CN-11 SCALE: 3/16"=1'



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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>M. Heany</i>
DRAWN	<i>D. Cheuk</i>
CHECKED	<i>Frank Yu</i>
REVIEWED	<i>Frank Yu</i>
RECOMMENDED	<i>Frank Yu</i>
APPROVED	<i>Frank Yu</i>
DATE	MAY 19 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

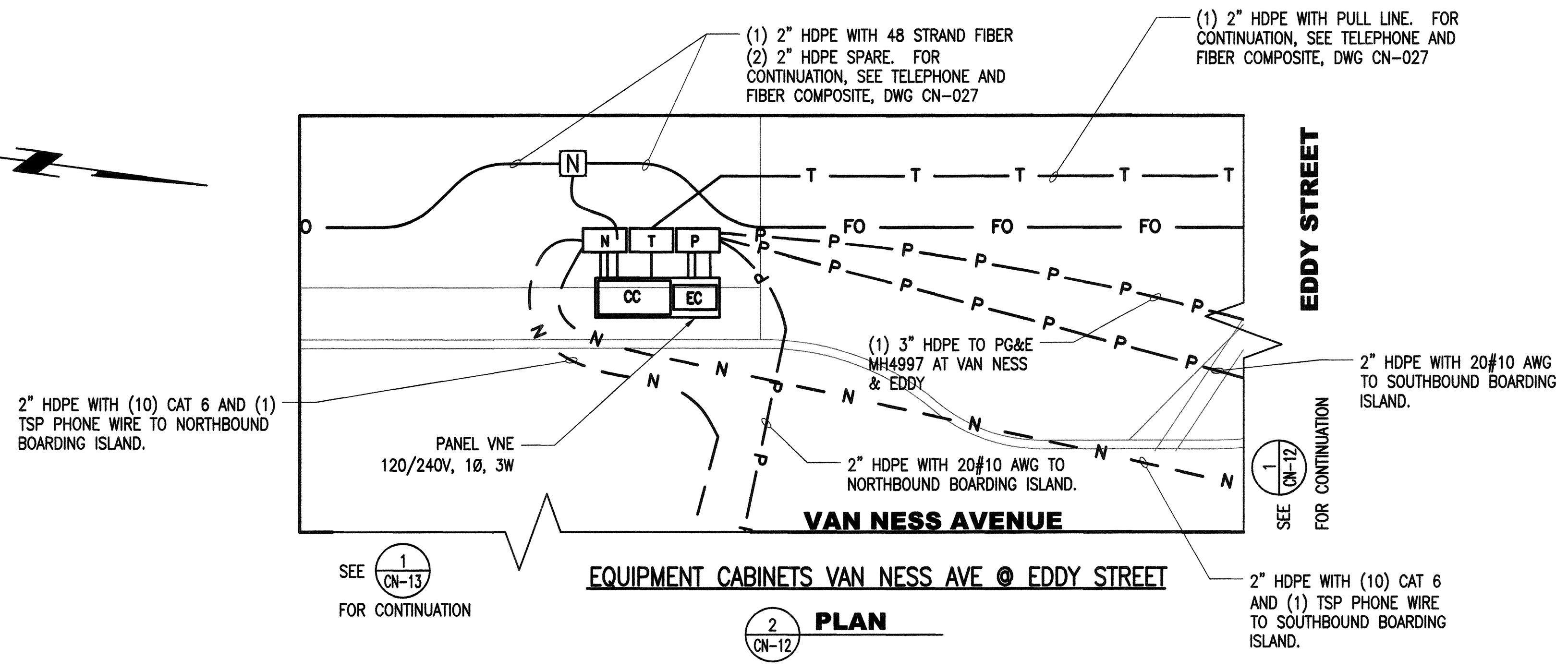
APPROVED
Lucretia Han
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

BOARDING ISLAND LAYOUT -
MCALLISTER STREET STATION NORTHBOUND

1289	
CL-29039	
CN-11	REVISION
CN-31	0

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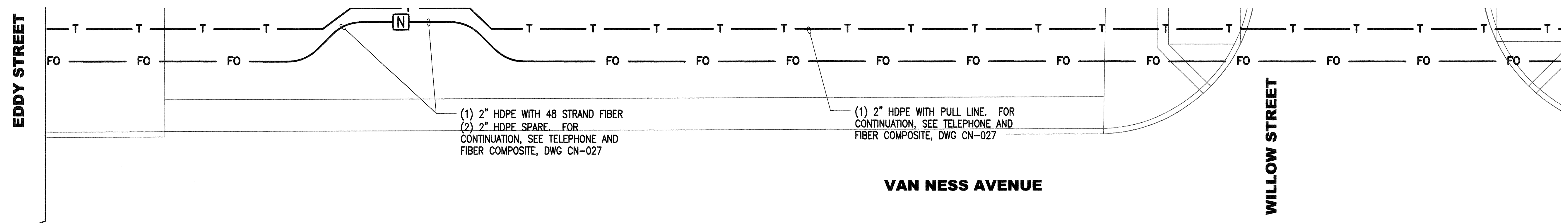


EQUIPMENT CABINETS VAN NESS AVE @ EDDY STREET

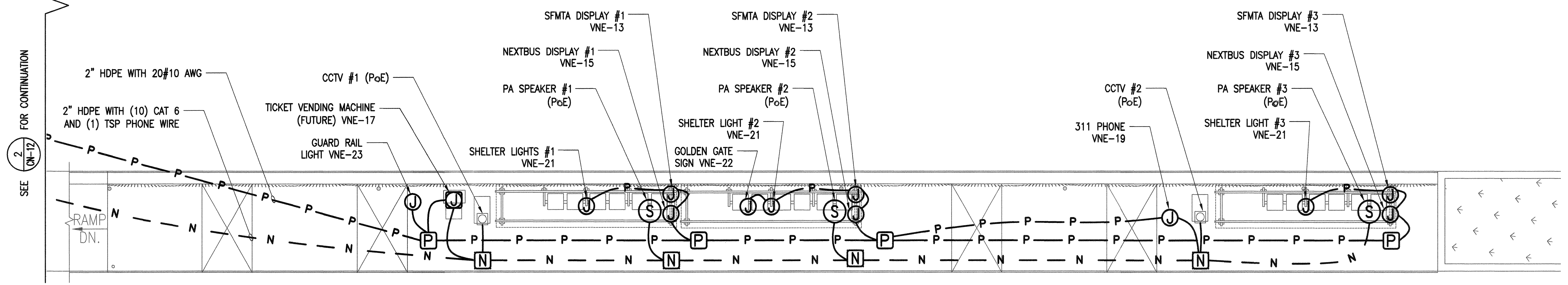
2 PLAN
CN-12

NOTES:

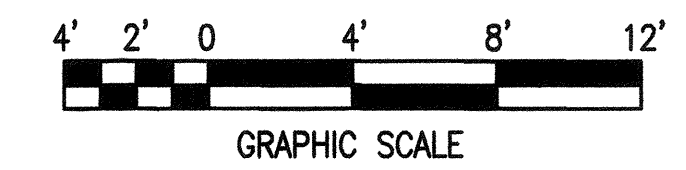
- SEE DWG CN-01 FOR VNE ELECTRICAL PANEL SCHEDULE.
- FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
- THE APPROXIMATE DISTANCE FROM THE COMMUNICATION/ELECTRICAL CABINETS TO THE FIRST PULL BOX AT THE SOUTHBOUND BOARDING PLATFORM IS 155 FEET.
- ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
- SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
- MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
- INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
- FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
- CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
- FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
- ALL CONCRETE PULL BOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
- ALL CONDUITS BETWEEN METAL PULL BOXES SHALL BE 1 1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.



VAN NESS AVENUE

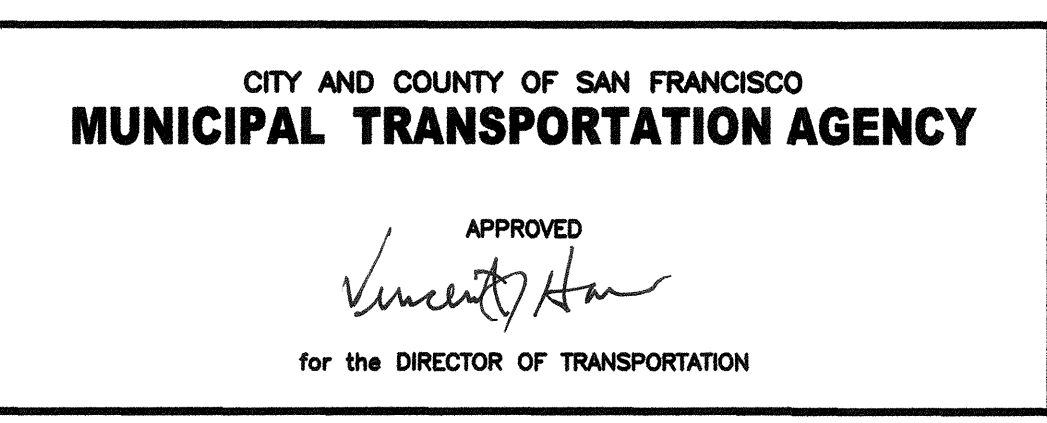
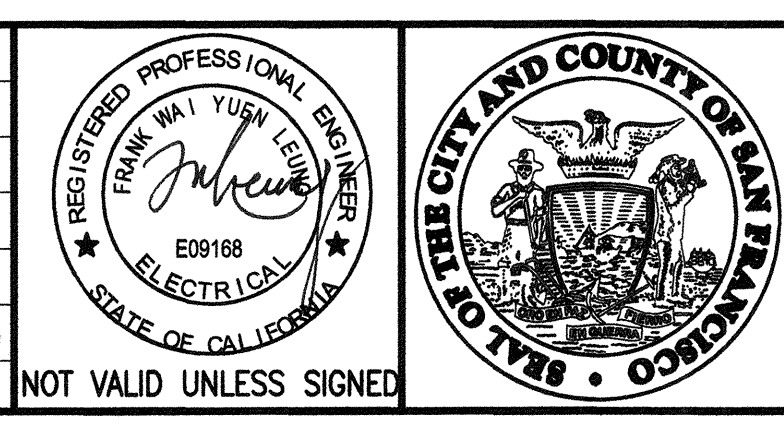


1 PLAN AT EDDY STREET (SOUTHBOUND)
CN-12 SCALE: 3/16"=1'



NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>J. Huang</i>
DRAWN	<i>D. Quereau</i>
CHECKED	<i>John P. B. ...</i>
REVIEWED	<i>...</i>
RECOMMENDED	<i>...</i>
APPROVED	<i>F. ...</i>
DATE	MAY 18 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
...
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM		1289
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT		CL-29040
CN-12	REVISION	0
CN-31		



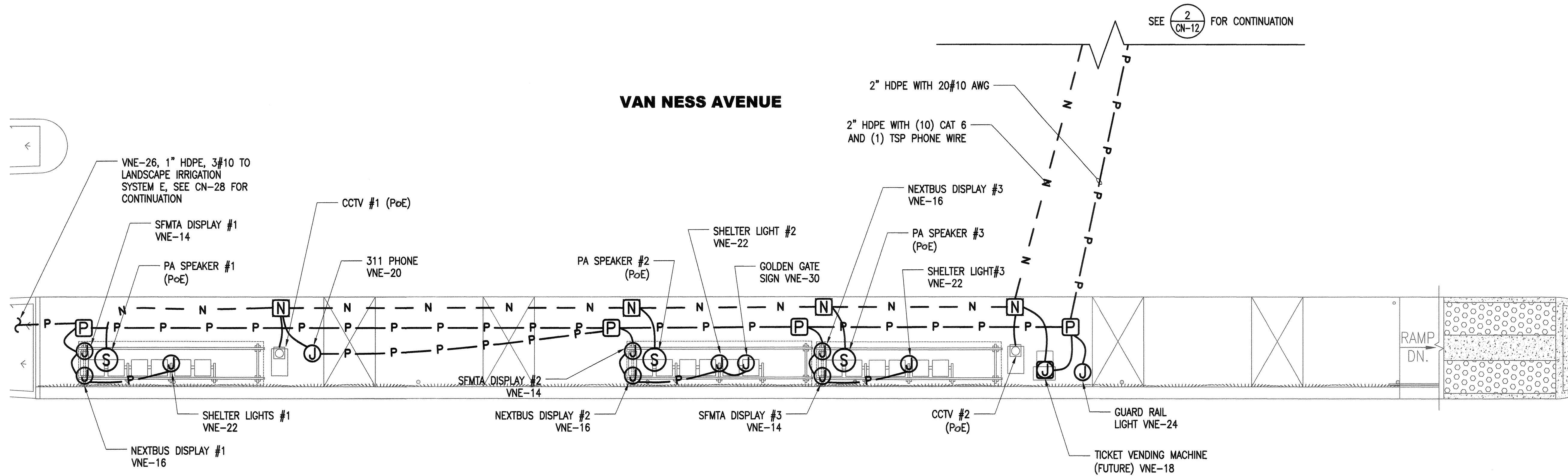
NOTES:

1. SEE DWG CN-01 FOR VNE ELECTRICAL PANEL SCHEDULE.
2. FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
3. THE APPROXIMATE DISTANCE FROM THE COMMUNICATION/ELECTRICAL CABINETS TO THE FIRST PULL BOX AT THE NORTHBOUND BOARDING PLATFORM IS 70 FEET.
4. ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
5. SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
6. MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV CONSTRUCTION.
7. INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
8. FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
9. CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
10. FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
11. ALL CONCRETE PULL BOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
12. ALL CONDUITS BETWEEN METAL PULL BOXES SHALL BE 1 1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.

LARCH STREET

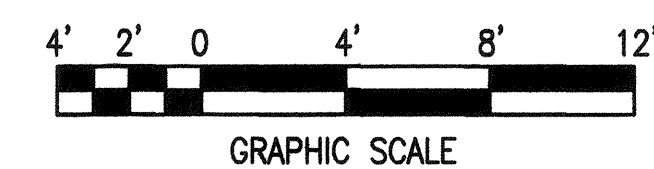
EDDY STREET

VAN NESS AVENUE



SEE 2 CN-12 FOR CONTINUATION

1 PLAN AT EDDY STREET (NORTHBOUND)
CN-13 SCALE: 3/16"=1'

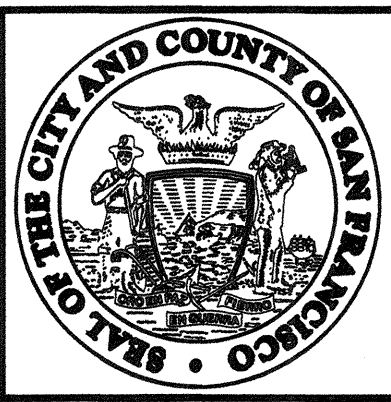
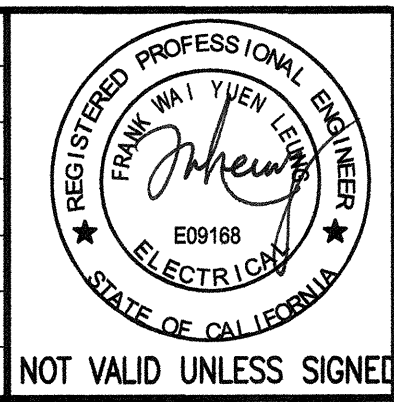


I:\Projects\401_Van Ness BRT\2_CER\300_Design Components\301_Drawings\20_System and Communication\Sheet Files\201505\20150602\CP76401CN-013.dwg dchaik Mon Jun 08 2015 - 10:40 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>M. Chen</i>
DRAWN	<i>D. Chou</i>
CHECKED	<i>Richard J. Z. Liu</i>
REVIEWED	<i>F. Chen</i>
RECOMMENDED	<i>F. Chen</i>
APPROVED	<i>F. Chen</i>
DATE	MAY 1 8 2016

NOT VALID UNLESS SIGNED



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Lucretia Han
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

**BOARDING ISLAND LAYOUT -
EDDY STREET STATION NORTHBOUND**

1289	
CL-29041	
CN-13	REVISION
CN-31	0

(1) 2" HDPE WITH PULL LINE, SEE CN-27 FOR CONTINUATION

(1) 3" HDPE TO PG&E HAND HOLE AT VAN NESS & OLIVE

VAN NESS AVENUE

O'FARRELL STREET

2" HDPE WITH (10) CAT 6 AND (1) TSP PHONE WIRE TO NORTHBOUND BOARDING ISLAND.

2" HDPE WITH (10) CAT 6 AND (1) TSP PHONE WIRE TO SOUTHBOUND BOARDING ISLAND.

(1) 2" HDPE WITH PULL LINE, FOR CONTINUATION, SEE TELEPHONE AND FIBER COMPOSITE, DWG CN-027
(2) 2" HDPE SPARE, FOR CONTINUATION, SEE TELEPHONE AND FIBER COMPOSITE, DWG CN-027

2" HDPE WITH 20#10 AWG TO SOUTHBOUND BOARDING ISLAND.

2" HDPE WITH 20#10 AWG TO NORTHBOUND BOARDING ISLAND.

SEE $\frac{1}{CN-15}$ FOR CONTINUATION

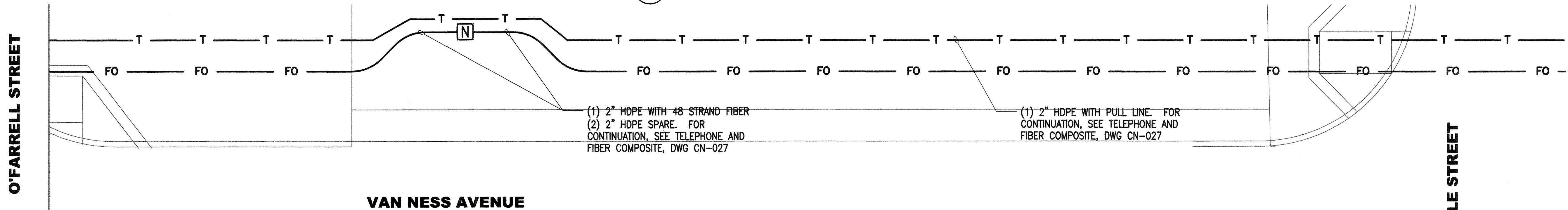
SEE $\frac{1}{CN-14}$ FOR CONTINUATION

EQUIPMENT CABINETS VAN NESS AVE @ O'FARRELL STREET

$\frac{2}{CN-14}$ **PLAN**

NOTES:

- SEE DWG CN-01 FOR VNG ELECTRICAL PANEL SCHEDULE.
- FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
- THE APPROXIMATE DISTANCE FROM THE COMMUNICATION/ELECTRICAL CABINETS TO THE FIRST PULL BOX AT THE SOUTHBOUND BOARDING PLATFORM IS 140 FEET.
- ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
- SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
- MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
- INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
- FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
- CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
- FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
- ALL CONCRETE PULL BOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
- ALL CONDUITS BETWEEN METAL PULL BOXES SHALL BE 1 1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.



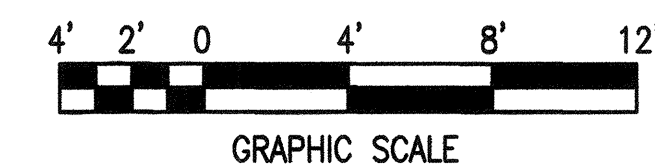
(1) 2" HDPE WITH 48-STRAND FIBER
(2) 2" HDPE SPARE, FOR CONTINUATION, SEE TELEPHONE AND FIBER COMPOSITE, DWG CN-027

(1) 2" HDPE WITH PULL LINE, FOR CONTINUATION, SEE TELEPHONE AND FIBER COMPOSITE, DWG CN-027

VAN NESS AVENUE

MYRTLE STREET

$\frac{1}{CN-14}$ **PLAN AT GEARY STREET (SOUTHBOUND)**
SCALE: 3/16"=1'



2" HDPE WITH 20#10 AWG
2" HDPE WITH (10) CAT 6 AND (1) TSP PHONE WIRE

CCTV #1 (PoE)
TICKET VENDING MACHINE (FUTURE) VNG-17
GUARD RAIL LIGHT VNG-23

SFMTA DISPLAY #1 VNG-13
NEXTBUS DISPLAY #1 VNG-15
PA SPEAKER #1 (PoE)
SHELTER LIGHTS #1 VNG-21

SFMTA DISPLAY #2 VNG-13
NEXTBUS DISPLAY #2 VNG-15
PA SPEAKER #2 (PoE)
SHELTER LIGHT #2 VNG-21
GOLDEN GATE SIGN VNG-22

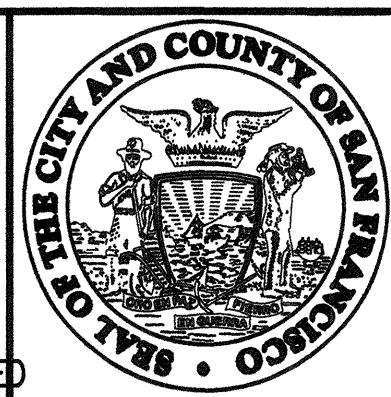
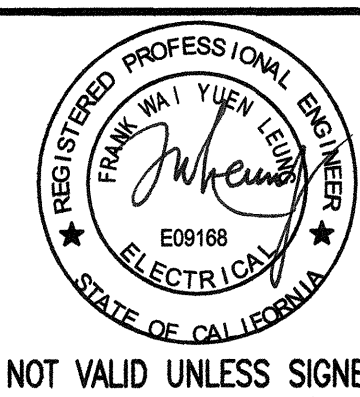
SFMTA DISPLAY #3 VNG-13
NEXTBUS DISPLAY #3 VNG-15
PA SPEAKER #3 (PoE)
SHELTER LIGHT #3 VNG-21
CCTV #2 (PoE)
311 PHONE VNG-19

VNG-25, 1" HDPE, 3#10 TO LANDSCAPE IRRIGATION SYSTEM F, SEE CN-28 FOR CONTINUATION

I:\CPT8401_Van Ness BRT_V2_CEP_900_Design Components\301_Drawings\20_System and Communication\Sheet Files\201505\20150602\CPT8401CN-014.dwg dchouk Mon Jun 08 2015 10:41 am

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>J. Kew</i>
DRAWN	<i>D. Deane</i>
CHECKED	<i>Frank W. Yuen</i>
REVIEWED	<i>Frank W. Yuen</i>
RECOMMENDED	<i>Frank W. Yuen</i>
APPROVED	<i>Frank W. Yuen</i>
DATE	MAY 13 2016



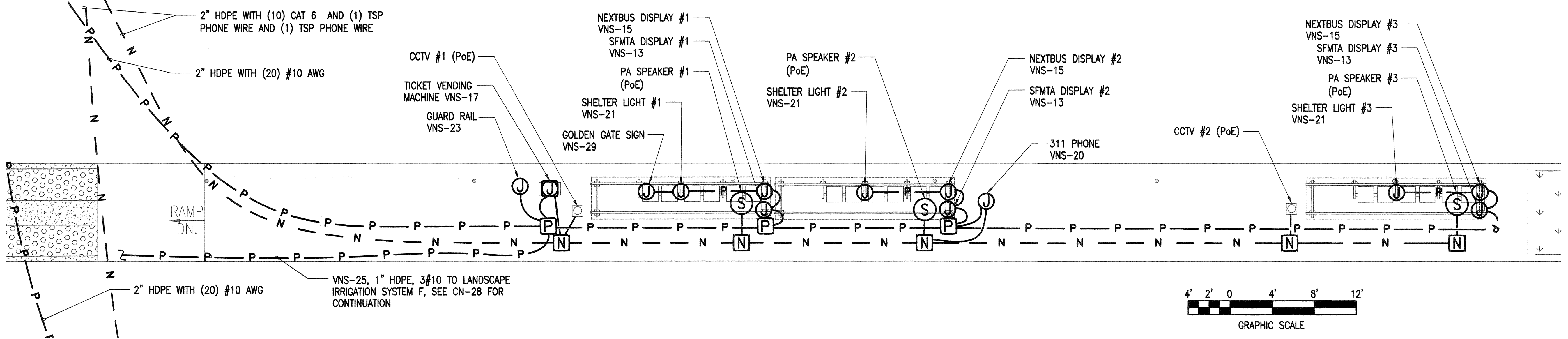
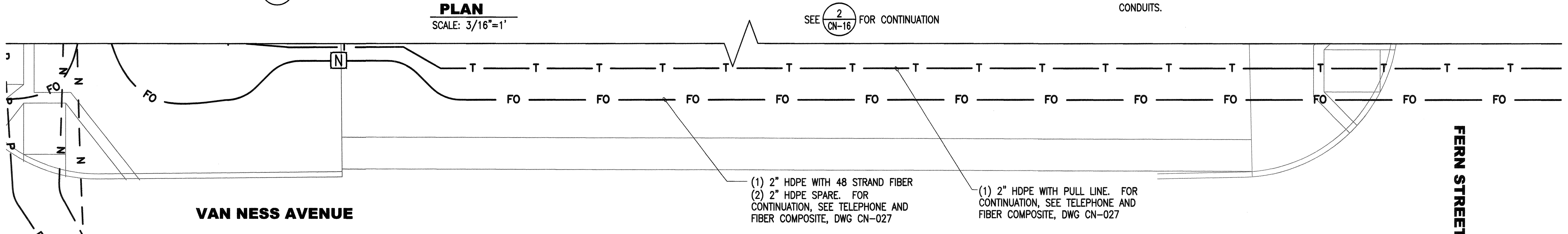
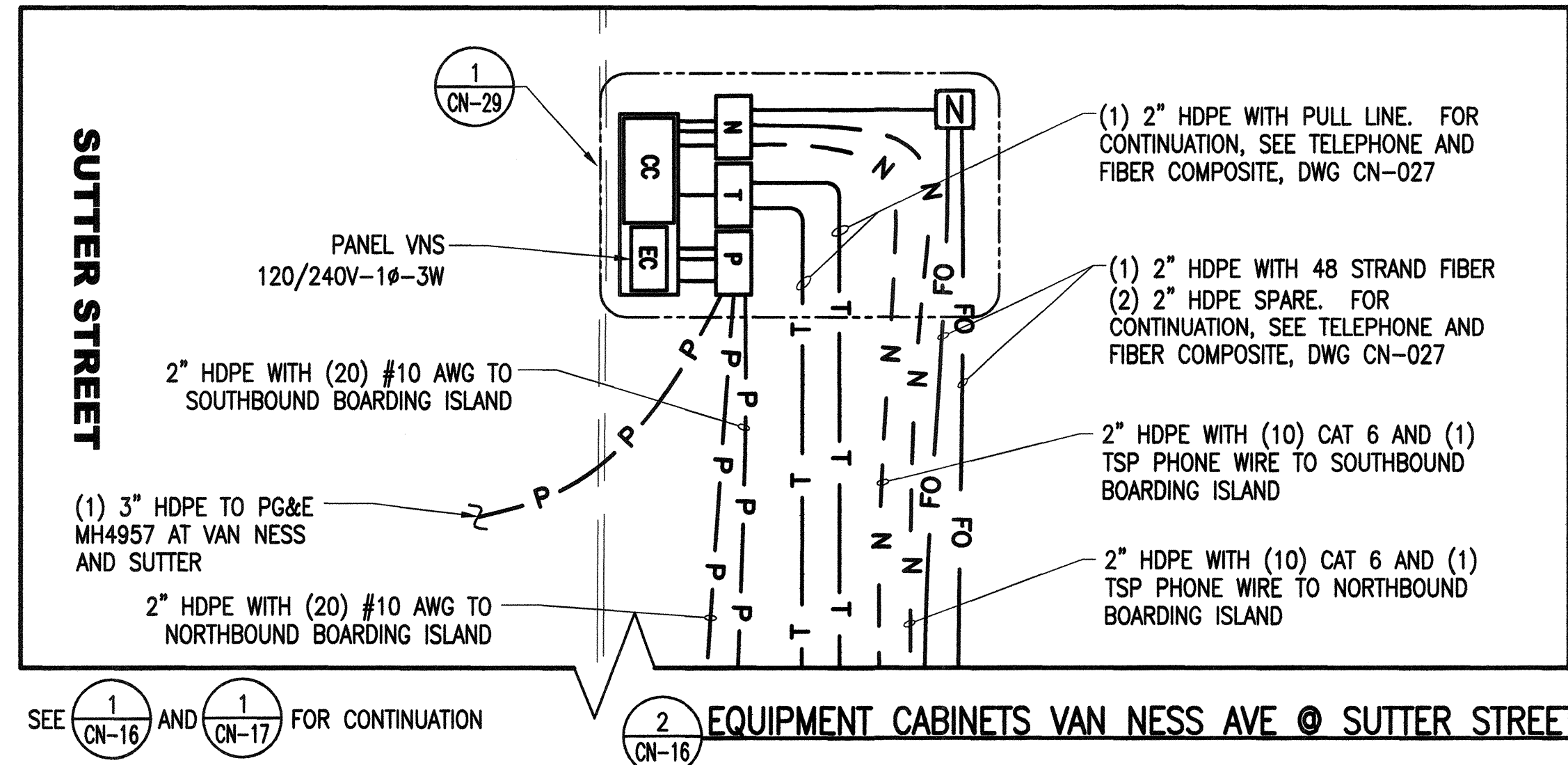
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Vincent Hsu
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

BOARDING ISLAND LAYOUT -
GEARY STREET STATION SOUTHBOUND

1289	
CL-29042	
CN-14	REVISION
CN-31	0



1 PLAN AT SUTTER STREET (SOUTHBOUND)
 CN-016 SCALE: 3/16"=1'

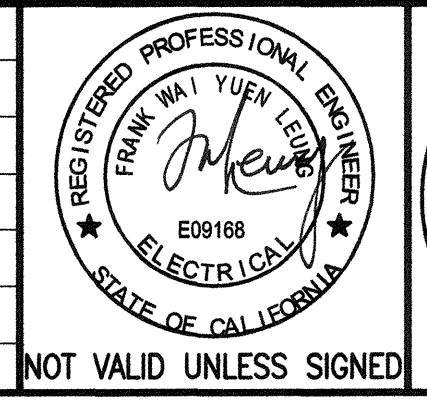
NOTES:

- SEE DWG CN-01 FOR VNS ELECTRICAL PANEL SCHEDULE.
- FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
- THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS 100 FEET.
- ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
- SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
- MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
- INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
- FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-27.
- CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
- FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-28.
- ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
- ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1-1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.

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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>[Signature]</i>
DRAWN	<i>[Signature]</i>
CHECKED	<i>[Signature]</i>
REVIEWED	<i>[Signature]</i>
RECOMMENDED	<i>[Signature]</i>
APPROVED	<i>[Signature]</i>
DATE	MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

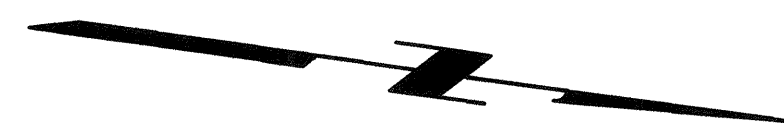
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

BOARDING ISLAND LAYOUT -
SUTTER STREET STATION SOUTHBOUND

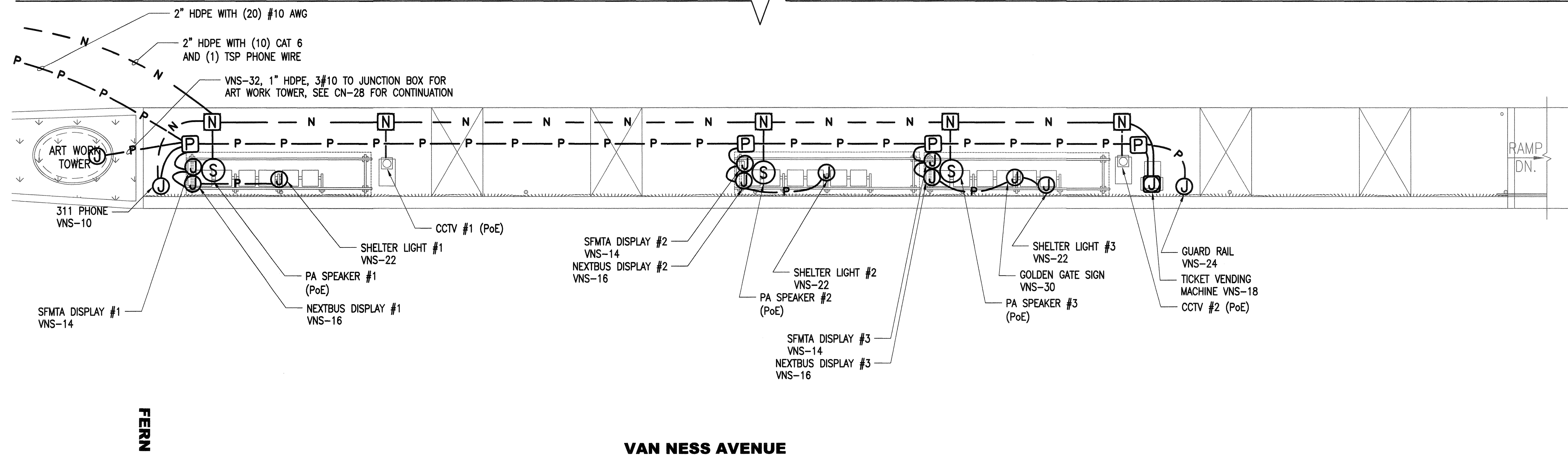
1289	CL-29044
CN-16	REVISION
CN-31	0

NOTES:

- SEE DWG CN-01 FOR VNS ELECTRICAL PANEL SCHEDULE.
- FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR-SERIES DRAWINGS.
- THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS 220 FEET.
- ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
- SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
- MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
- INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
- FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-27.
- CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
- FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-28.
- ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
- ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1-1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.



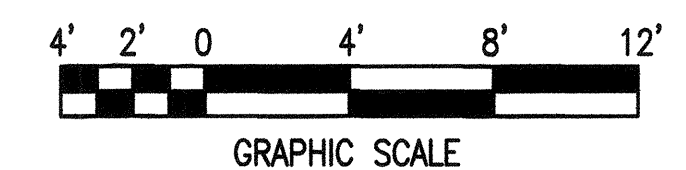
SEE  FOR CONTINUATION



FERN STREET

VAN NESS AVENUE

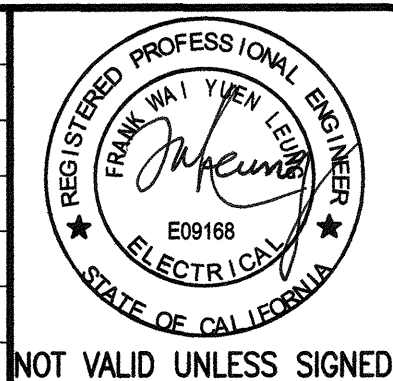
 **PLAN AT SUTTER STREET (NORTHBOUND)**
SCALE: 3/16"=1'



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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



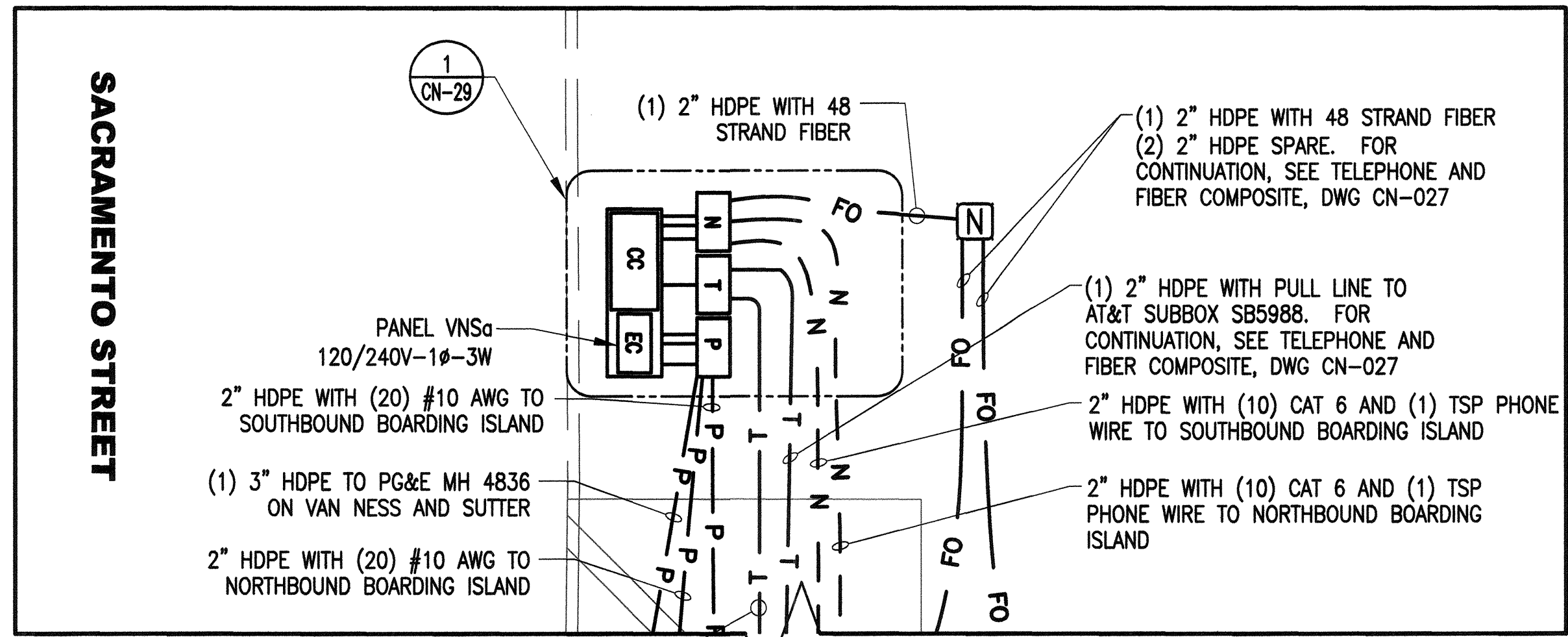
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

**BOARDING ISLAND LAYOUT -
 SUTTER STREET STATION NORTHBOUND**

1289
CL-29045
 CN-17
 CN-31
 REVISION
 0



SEE $\frac{1}{CN-18}$ AND $\frac{1}{CN-19}$ FOR CONTINUATION

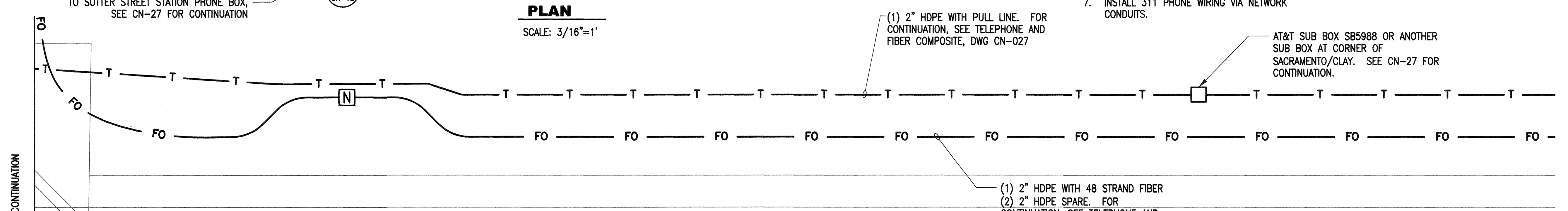
TO SUTTER STREET STATION PHONE BOX, SEE CN-27 FOR CONTINUATION

EQUIPMENT CABINETS VAN NESS AVE @ SACRAMENTO STREET

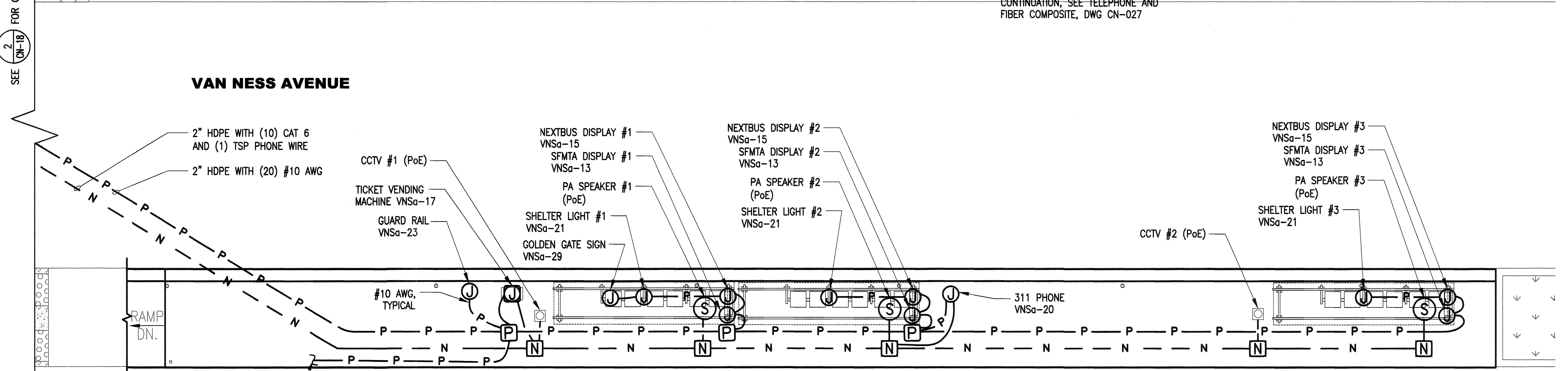
PLAN
SCALE: 3/16"=1'

NOTES:

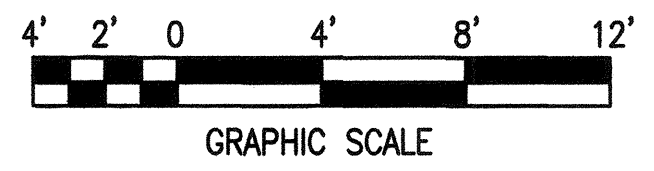
- SEE DWG CN-01 FOR VNSa ELECTRICAL PANEL SCHEDULE.
- FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
- THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS 100 FEET.
- ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
- SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
- MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
- INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
- FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-27.
- CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
- FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-28.
- ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
- ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1-1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.



VAN NESS AVENUE



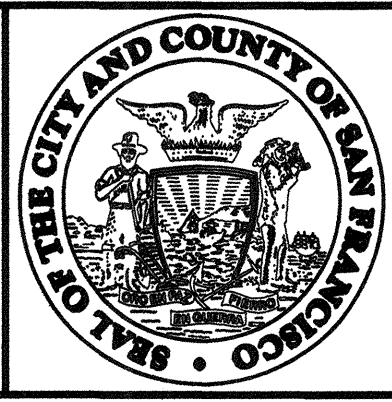
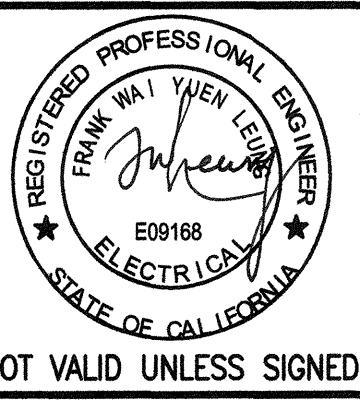
PLAN AT SACRAMENTO STREET (SOUTHBOUND)
SCALE: 3/16"=1'



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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



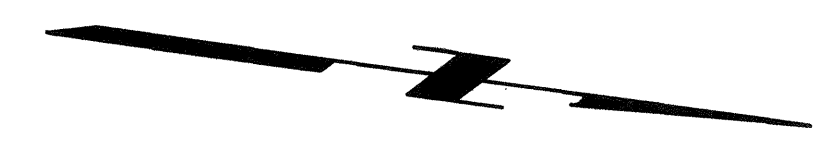
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 BOARDING ISLAND LAYOUT -
 SACRAMENTO STREET STATION SOUTHBOUND

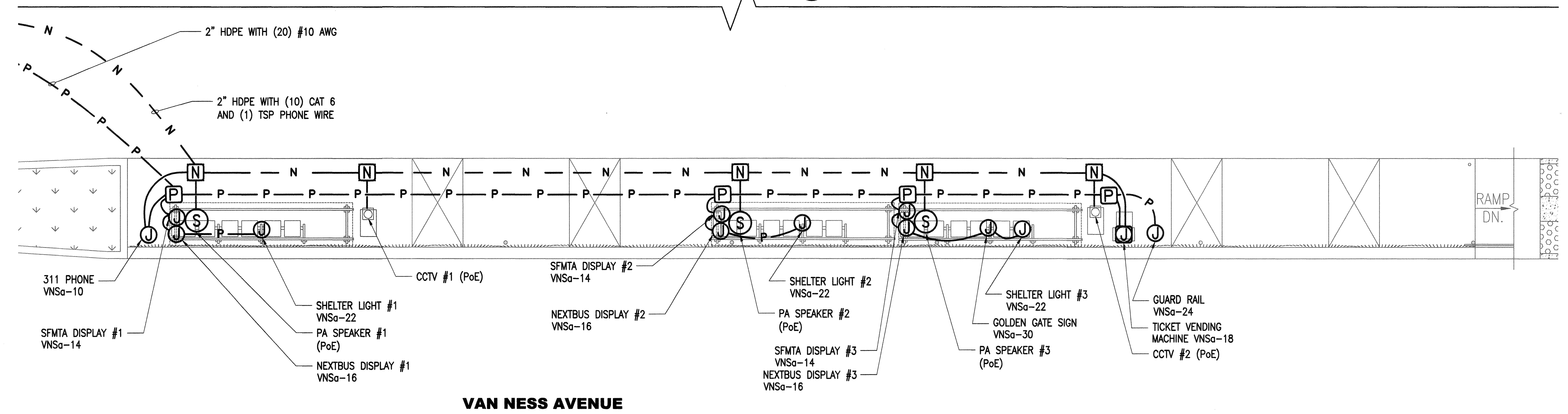
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CN-18	REVISION
CN-31	0

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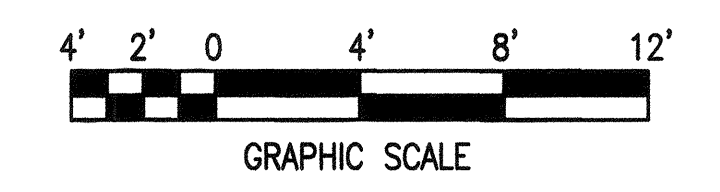
- SEE DWG CN-01 FOR VNSa ELECTRICAL PANEL SCHEDULE.
- FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR-SERIES DRAWINGS.
- THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS 220 FEET.
- ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
- SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
- MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
- INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
- FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-27.
- CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
- FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-28.
- ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
- ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1-1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.



SEE  CN-18 FOR CONTINUATION



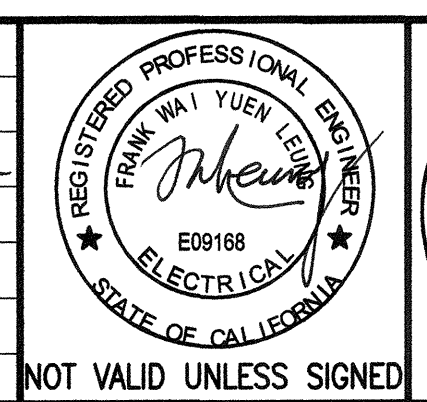
 **PLAN AT SACRAMENTO STREET (NORTHBOUND)**
SCALE: 3/16"=1'



I: CPTB401_Van Ness BRT V2_CEP_V00_Design Components V01_Drawings V02_System and Communication Sheet File: 20150520150602_CPTB401CN-019.dwg, dchamak, Mon Jun 08, 2015 - 2:22 pm

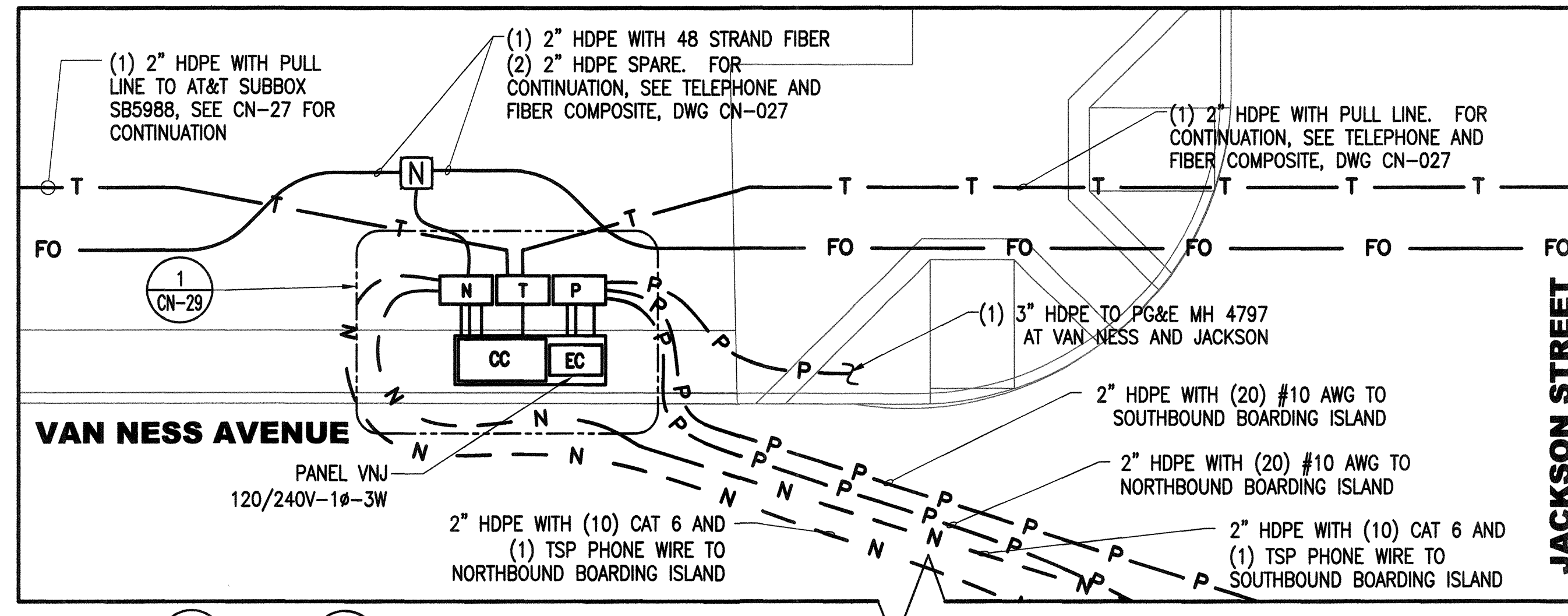
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REVISIONS					

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 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-29047
BOARDING ISLAND LAYOUT - SACRAMENTO STREET STATION NORTHBOUND		CN-19 CN-31 REVISION 0



SEE **1** **CN-20** FOR AND **1** **CN-21** CONTINUATION

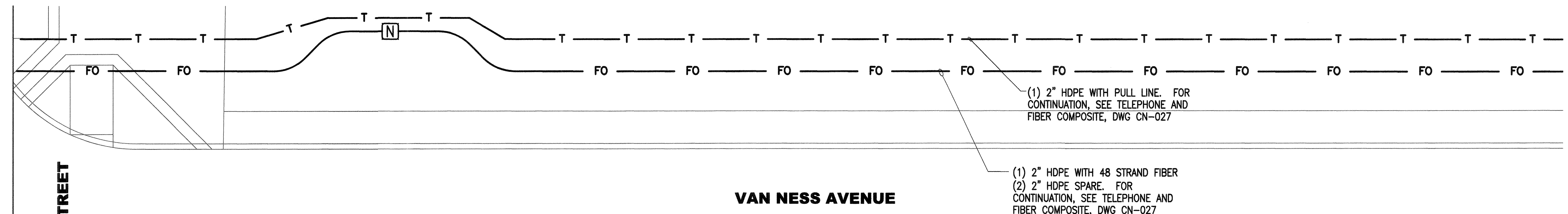
2 **CN-20** EQUIPMENT CABINETS VAN NESS AVE @ JACKSON ST

PLAN

SCALE: 3/16"=1'

NOTES:

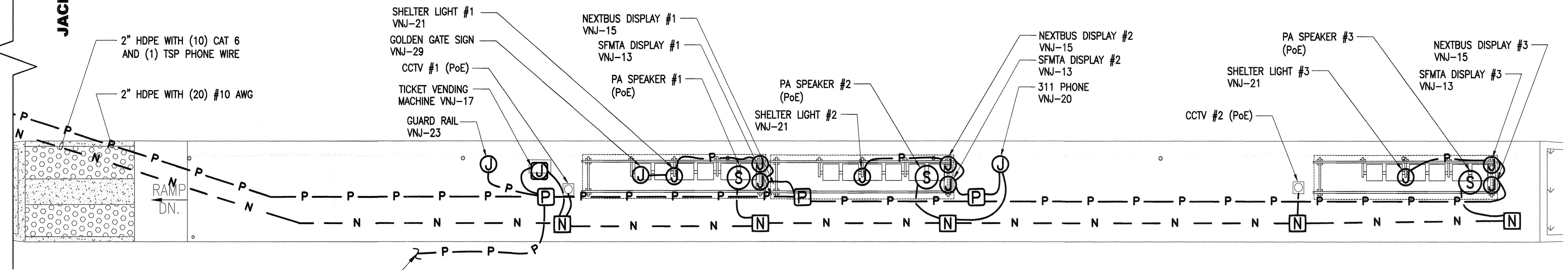
- SEE DWG CN-01 FOR VNJ ELECTRICAL PANEL SCHEDULE.
- FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
- THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS 150 FEET.
- ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
- SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
- MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
- INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
- FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-27.
- CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
- FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-28.
- ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
- ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1-1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.



VAN NESS AVENUE

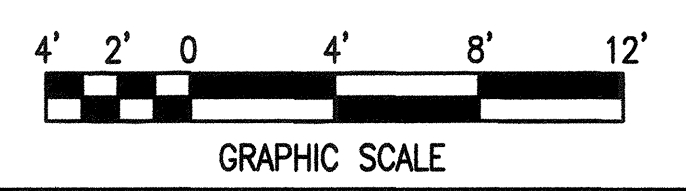
SEE **2** **CN-20** FOR CONTINUATION

JACKSON STREET



1 **CN-20** **PLAN AT JACKSON STREET (SOUTHBOUND)**

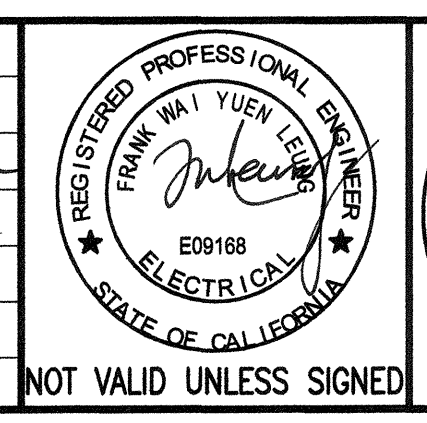
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I:\CPTB40.1 Van Ness BRT V2_CEP_300_Design Components\301_Drawings\20_System and Communication\Sheet Files\201505\20150602\CPTB401CN-020.dwg dchawk Mon Jun 08 2015 - 2:37 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

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 CHECKED: *[Signature]*
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 APPROVED: *[Signature]*
 DATE: MAY 19 2016

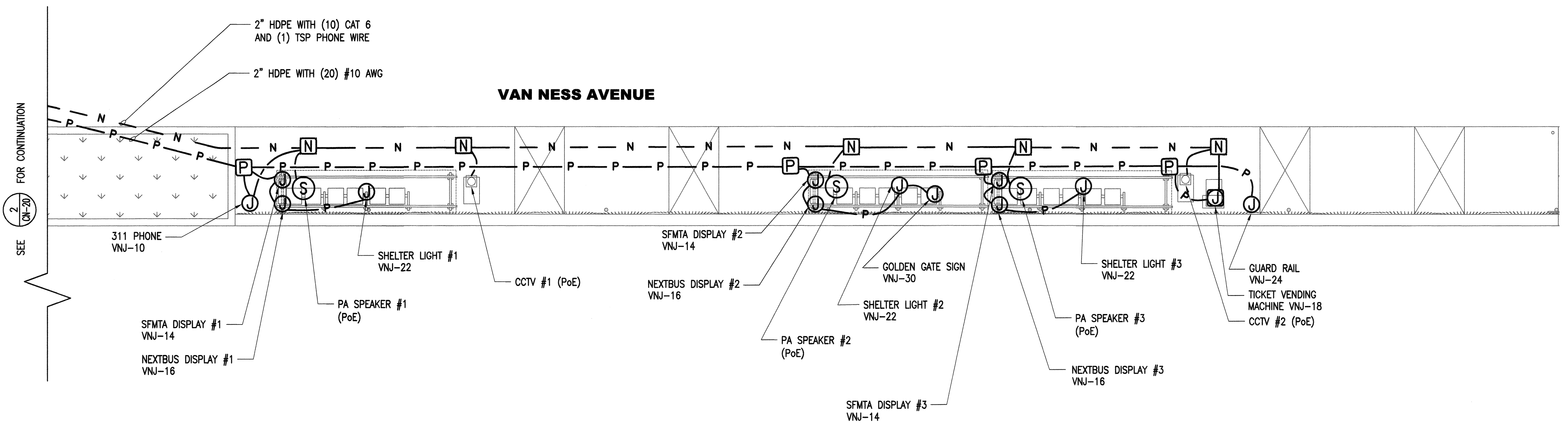


CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

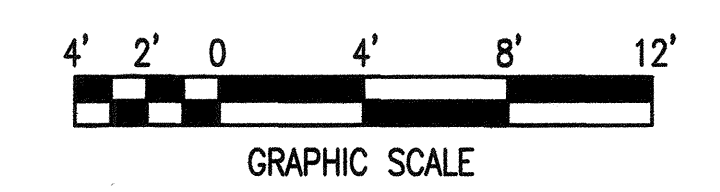
MUNI BUS RAPID TRANSIT SYSTEM		1289				
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT		CL-29048				
BOARDING ISLAND LAYOUT - JACKSON STREET STATION SOUTHBOUND		<table border="1"> <tr> <td>CN-20</td> <td>REVISION</td> </tr> <tr> <td>CN-31</td> <td>0</td> </tr> </table>	CN-20	REVISION	CN-31	0
CN-20	REVISION					
CN-31	0					

NOTES:

- SEE DWG CN-01 FOR VNJ ELECTRICAL PANEL SCHEDULE.
- FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR-SERIES DRAWINGS.
- THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS 260 FEET.
- ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
- SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
- MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
- INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
- FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-27.
- CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
- FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-28.
- ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
- ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1-1/2" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.



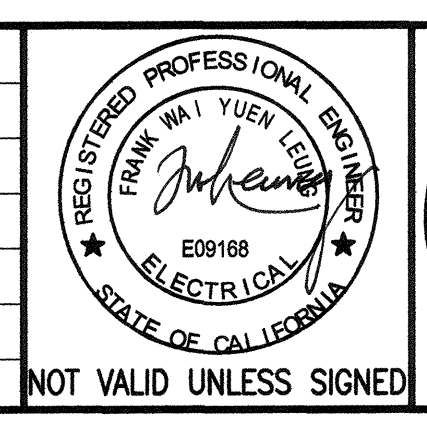
1 PLAN AT JACKSON STREET (NORTHBOUND)
SCALE: 3/16"=1'



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REVISIONS					

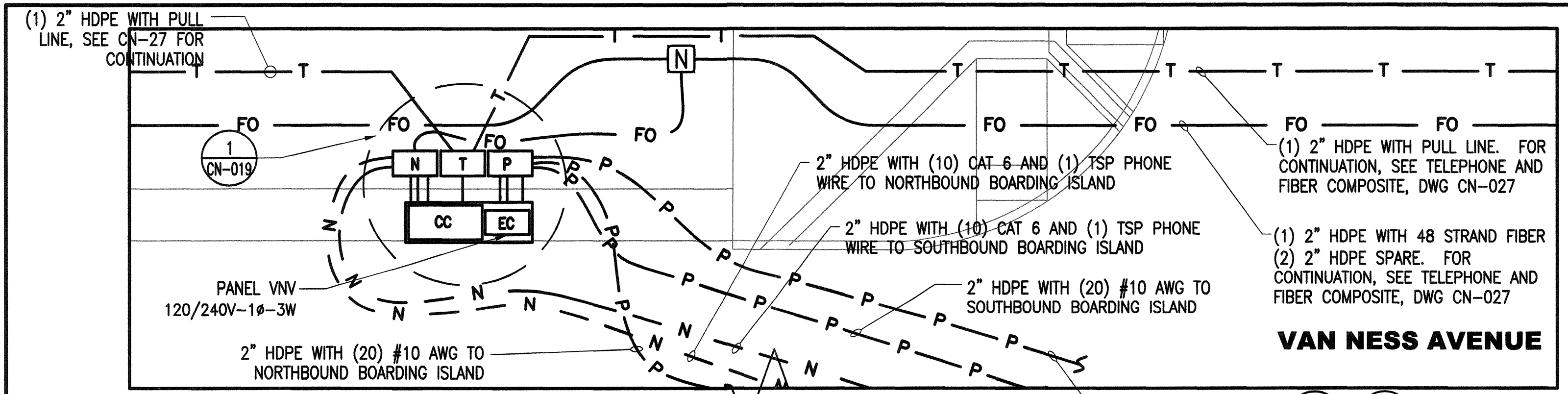
DESIGNED: *M. Kemy*
 DRAWN: *[Signature]*
 CHECKED: *[Signature]*
 REVIEWED: *[Signature]*
 RECOMMENDED: *[Signature]*
 APPROVED: *[Signature]*
 DATE: **MAY 13 2016**



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
 BOARDING STATION LAYOUT -
JACKSON STREET STATION NORTHBOUND

1289	REVISION
CL-29049	
CN-21	0
CN-31	



2 EQUIPMENT CABINETS VAN NESS AVE @ VALLEJO STREET
SCALE: 3/16"=1'

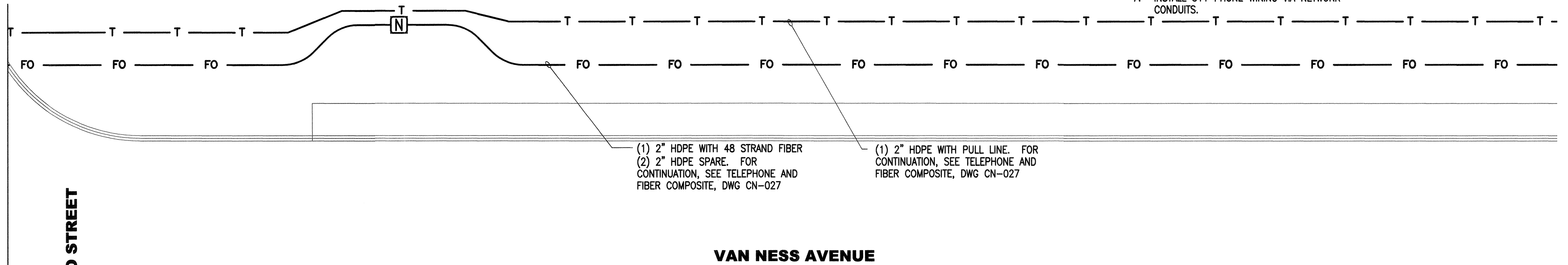
PLAN
SCALE: 3/16"=1'

SEE 1/CN-22, 1/CN-23 FOR CONTINUATION

(1) 3" HDPE TO PG&E MH5593 AT VAN NESS AND VALLEJO

NOTES:

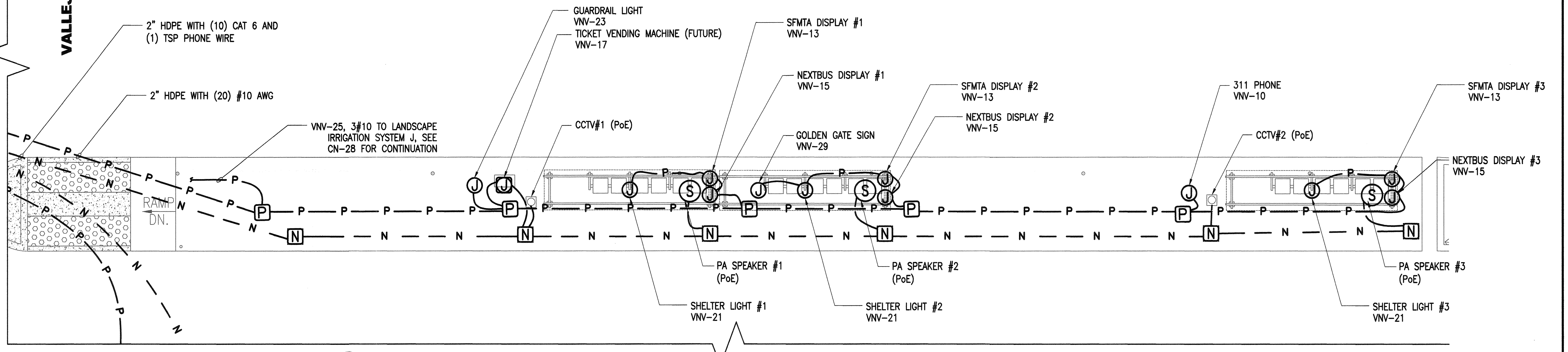
- SEE DWG CN-001 FOR VNV ELECTRICAL PANEL SCHEDULE.
- FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
- THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS APPROXIMATELY 150 FEET.
- ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
- SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
- MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
- INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
- FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
- CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
- FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
- ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
- ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1.5" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.



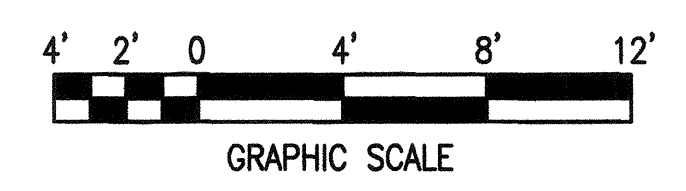
VAN NESS AVENUE

(1) 2" HDPE WITH 48 STRAND FIBER
(2) 2" HDPE SPARE. FOR CONTINUATION, SEE TELEPHONE AND FIBER COMPOSITE, DWG CN-027

(1) 2" HDPE WITH PULL LINE. FOR CONTINUATION, SEE TELEPHONE AND FIBER COMPOSITE, DWG CN-027



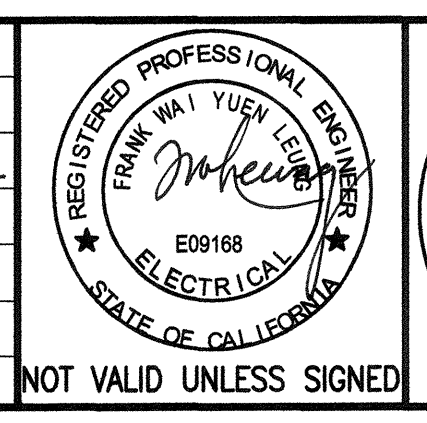
1 PLAN AT VALLEJO STREET (SOUTHBOUND)
SCALE: 3/16"=1'



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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *[Signature]*
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 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
 BOARDING ISLAND LAYOUT
 VALLEJO STREET STATION SOUTHBOUND

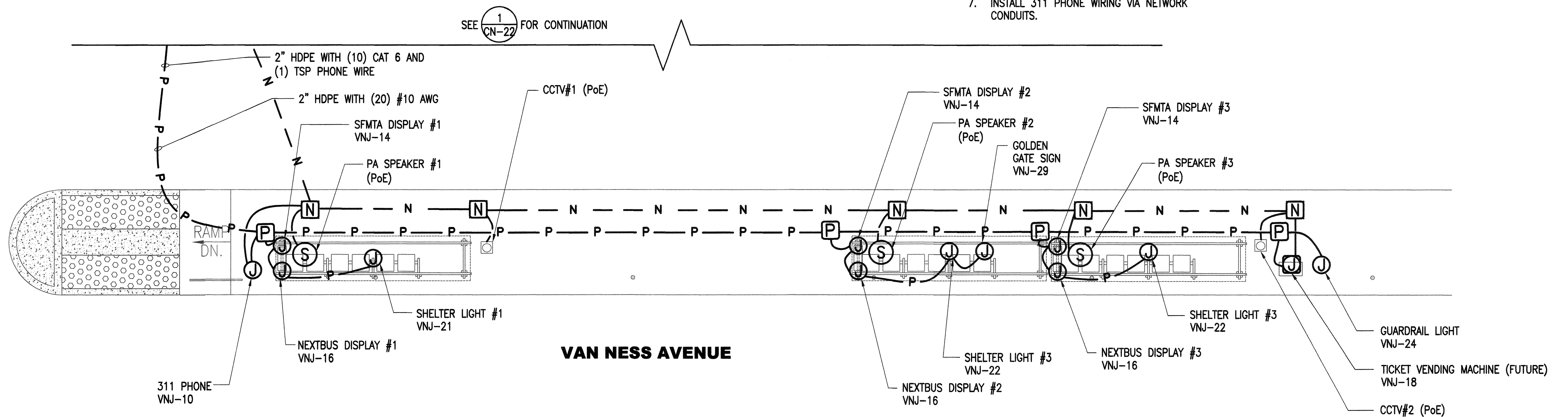
1289	REVISION
CL-29050	
CN-22	0
CN-31	

NOTES:

1. SEE DWG CN-001 FOR VNJ ELECTRICAL PANEL SCHEDULE.
2. FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
3. THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS APPROXIMATELY 150 FEET.
4. ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
5. SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
6. MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
7. INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
8. FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
9. CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
10. FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
11. ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
12. ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1.5" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.

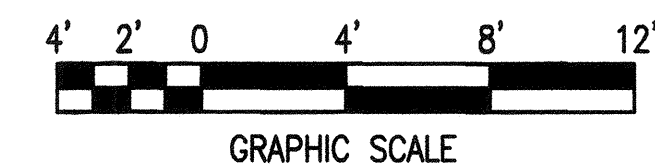


VALLEJO STREET



VAN NESS AVENUE

1 PLAN AT VALLEJO STREET (NORTHBOUND)
CN-023 SCALE: 3/16"=1'

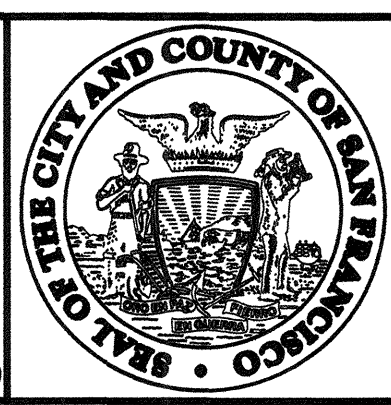
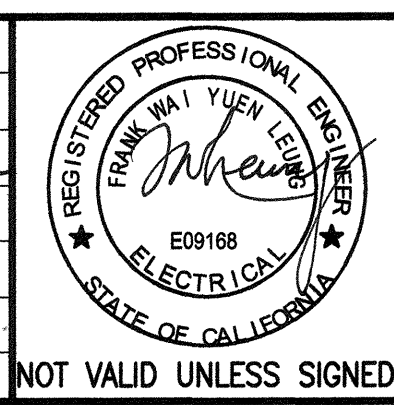


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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>[Signature]</i>
DRAWN	<i>[Signature]</i>
CHECKED	<i>[Signature]</i>
REVIEWED	<i>[Signature]</i>
RECOMMENDED	<i>[Signature]</i>
APPROVED	<i>[Signature]</i>
DATE	MAY 13 2016

NOT VALID UNLESS SIGNED



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

BOARDING ISLAND LAYOUT
VALLEJO STREET STATION NORTHBOUND

1289	REVISION
CL-29051	
CN-23	0
CN-31	

NOTES:

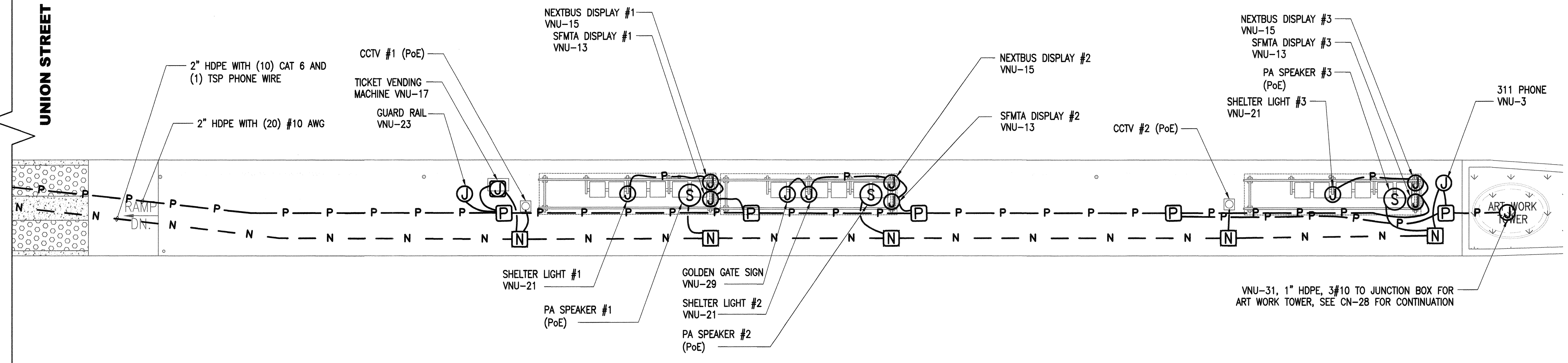
1. SEE DWG CN-001 FOR VNU ELECTRICAL PANEL SCHEDULE.
2. FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
3. THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS APPROXIMATELY 150 FEET.
4. ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
5. SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
6. MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
7. INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
8. FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
9. CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
10. FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
11. ALL CONCRETE PULLBOXES IN THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
12. ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1.5" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.



SEE **CN-25** FOR CONTINUATION

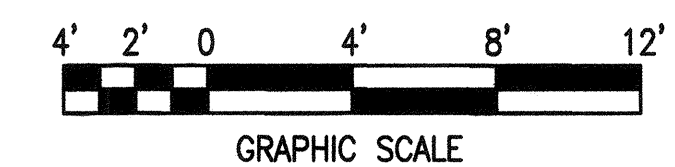
UNION STREET

VAN NESS AVENUE



PLAN AT UNION STREET (SOUTHBOUND)

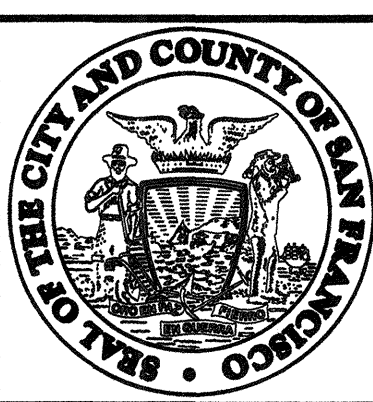
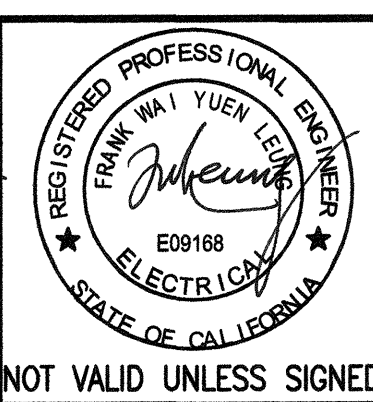
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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

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 APPROVED: *[Signature]*
 DATE: MAY 13 2016



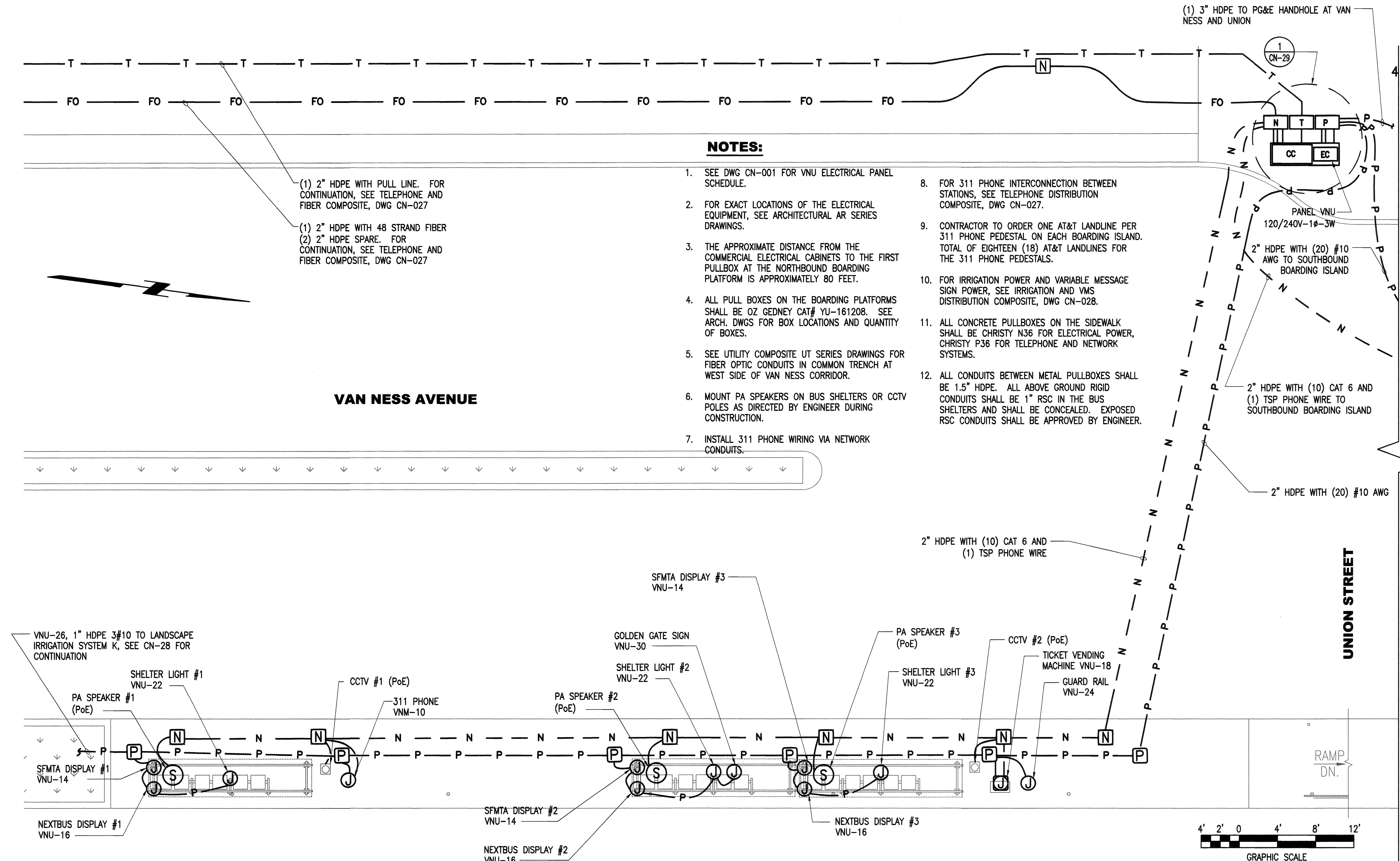
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM	
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT	
BOARDING ISLAND LAYOUT UNION STREET STATION SOUTHBOUND	

1289	
CL-29052	
CN-24	REVISION
CN-31	0

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(1) 2" HDPE WITH PULL LINE. FOR CONTINUATION, SEE TELEPHONE AND FIBER COMPOSITE, DWG CN-027

(1) 2" HDPE WITH 48 STRAND FIBER
(2) 2" HDPE SPARE. FOR CONTINUATION, SEE TELEPHONE AND FIBER COMPOSITE, DWG CN-027

NOTES:

1. SEE DWG CN-001 FOR VNU ELECTRICAL PANEL SCHEDULE.
2. FOR EXACT LOCATIONS OF THE ELECTRICAL EQUIPMENT, SEE ARCHITECTURAL AR SERIES DRAWINGS.
3. THE APPROXIMATE DISTANCE FROM THE COMMERCIAL ELECTRICAL CABINETS TO THE FIRST PULLBOX AT THE NORTHBOUND BOARDING PLATFORM IS APPROXIMATELY 80 FEET.
4. ALL PULL BOXES ON THE BOARDING PLATFORMS SHALL BE OZ GEDNEY CAT# YU-161208. SEE ARCH. DWGS FOR BOX LOCATIONS AND QUANTITY OF BOXES.
5. SEE UTILITY COMPOSITE UT SERIES DRAWINGS FOR FIBER OPTIC CONDUITS IN COMMON TRENCH AT WEST SIDE OF VAN NESS CORRIDOR.
6. MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
7. INSTALL 311 PHONE WIRING VIA NETWORK CONDUITS.
8. FOR 311 PHONE INTERCONNECTION BETWEEN STATIONS, SEE TELEPHONE DISTRIBUTION COMPOSITE, DWG CN-027.
9. CONTRACTOR TO ORDER ONE AT&T LANDLINE PER 311 PHONE PEDESTAL ON EACH BOARDING ISLAND. TOTAL OF EIGHTEEN (18) AT&T LANDLINES FOR THE 311 PHONE PEDESTALS.
10. FOR IRRIGATION POWER AND VARIABLE MESSAGE SIGN POWER, SEE IRRIGATION AND VMS DISTRIBUTION COMPOSITE, DWG CN-028.
11. ALL CONCRETE PULLBOXES ON THE SIDEWALK SHALL BE CHRISTY N36 FOR ELECTRICAL POWER, CHRISTY P36 FOR TELEPHONE AND NETWORK SYSTEMS.
12. ALL CONDUITS BETWEEN METAL PULLBOXES SHALL BE 1.5" HDPE. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.

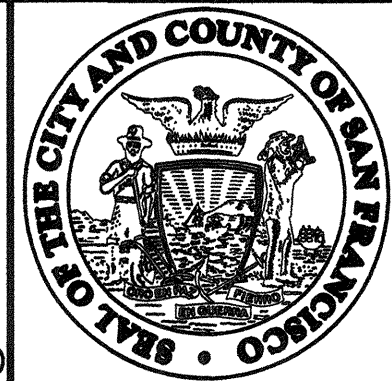
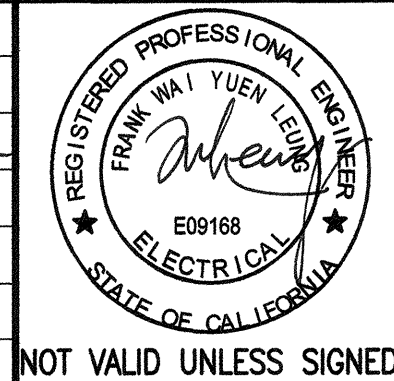
1 PLAN AT UNION STREET (NORTHBOUND)

CN-025 SCALE: 3/16"=1'

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>[Signature]</i>
DRAWN	<i>[Signature]</i>
CHECKED	<i>[Signature]</i>
REVIEWED	<i>[Signature]</i>
RECOMMENDED	<i>[Signature]</i>
APPROVED	<i>[Signature]</i>
DATE	MAY 13 2016

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CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
[Signature]
for the DIRECTOR OF TRANSPORTATION

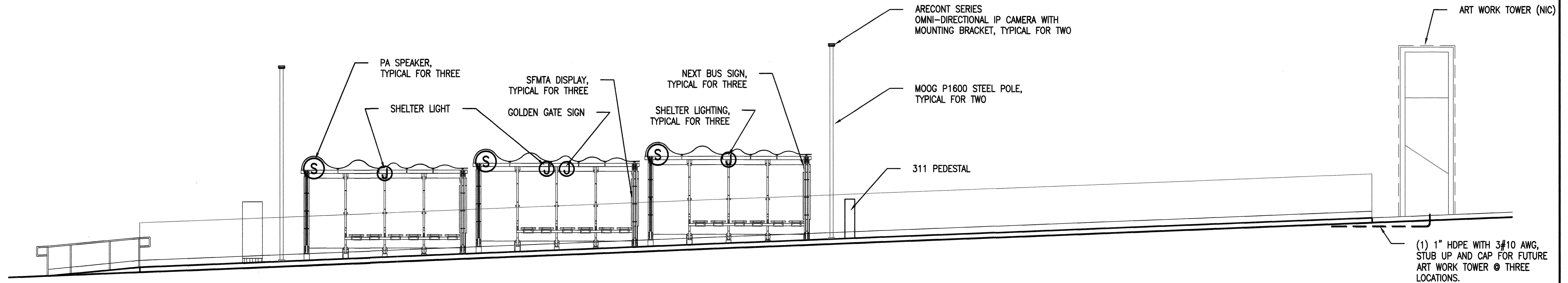
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

BOARDING ISLAND LAYOUT
UNION STREET STATION NORTHBOUND

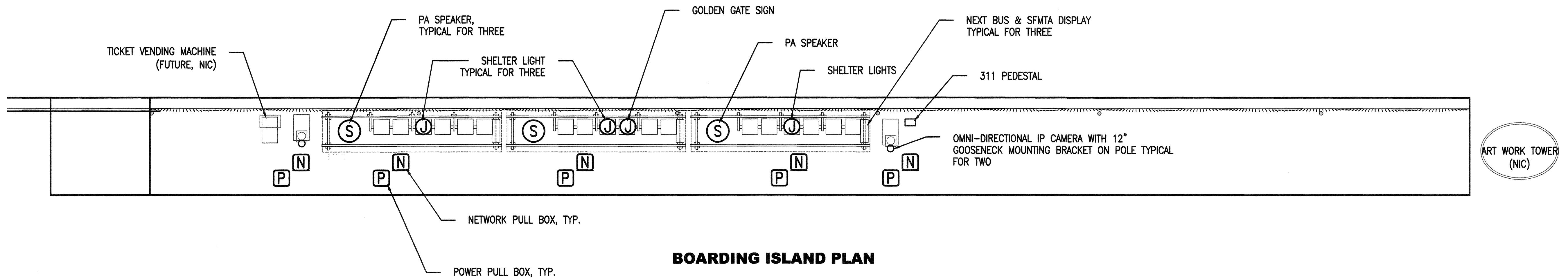
1289	REVISION
CL-29053	
CN-25	0
CN-31	

NOTES:

1. SEE ARCHITECTURAL AR SERIES DRAWINGS FOR EXACT LOCATIONS OF ELECTRICAL EQUIPMENT.
2. MOUNT PA SPEAKERS ON BUS SHELTERS OR CCTV POLES AS DIRECTED BY ENGINEER DURING CONSTRUCTION.
3. ALL ABOVE GROUND RIGID CONDUITS SHALL BE 1" RSC IN THE BUS SHELTERS, AND SHALL BE CONCEALED. EXPOSED RSC CONDUITS SHALL BE APPROVED BY ENGINEER.
4. SEE ARCHITECTURAL AR SERIES DRAWINGS FOR EXACT LOCATIONS OF ALL METALLIC BOXES ON THE BOARDING ISLANDS, AND QUANTITY OF BOXES.



BOARDING ISLAND ELEVATION

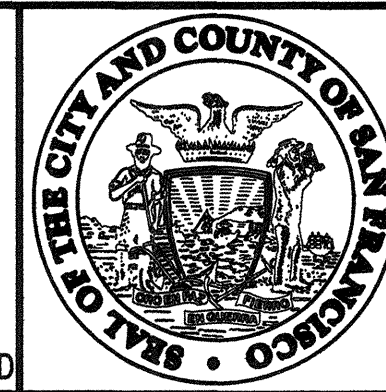
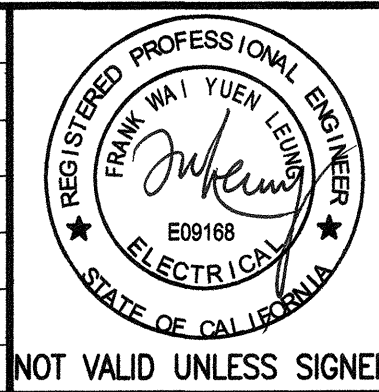


BOARDING ISLAND PLAN

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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED: *M. King*
 DRAWN: *D. Cheek*
 CHECKED: *Frank Joe E. Quinn*
 REVIEWED: *Frank Joe E. Quinn*
 RECOMMENDED: *Frank Joe E. Quinn*
 APPROVED: *Frank Joe E. Quinn*
 DATE: MAY 13 2016



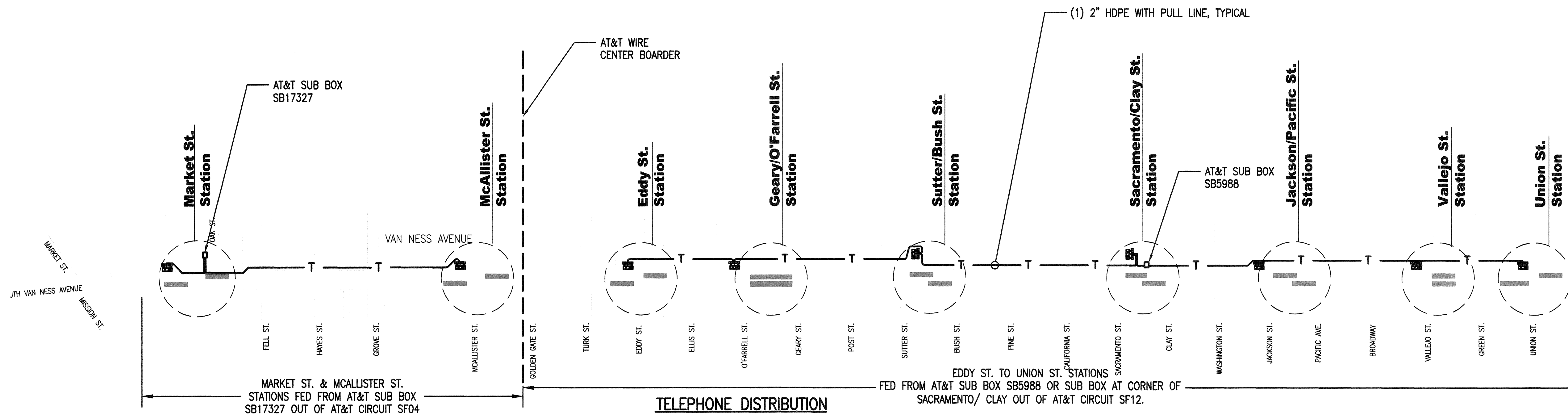
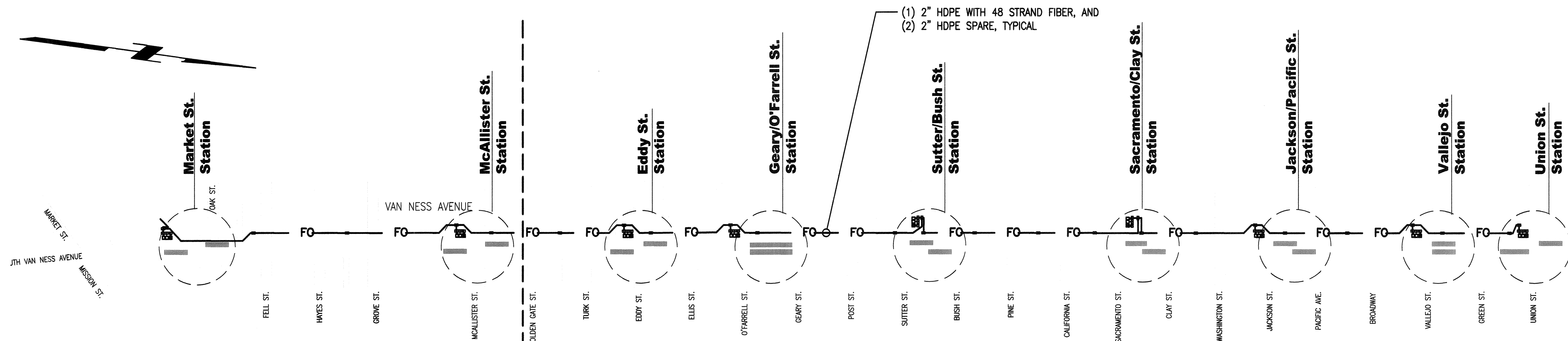
CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
Vincent Am...
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

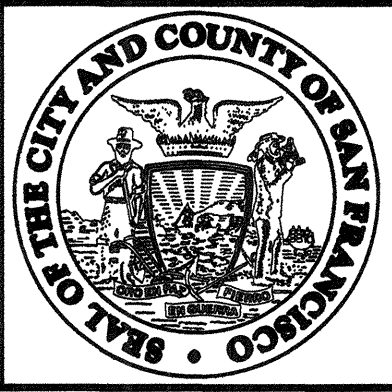
1289	
CL-29054	
TYPICAL BOARDING ISLAND LAYOUT	REVISION
CN-26	0
CN-31	

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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED <i>M. Chen</i>
DRAWN <i>D. Chen</i>
CHECKED <i>W. Chen</i>
REVIEWED <i>P. Chen</i>
RECOMMENDED <i>P. Chen</i>
APPROVED <i>F. Chen</i>
DATE MAY 13 2016



CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

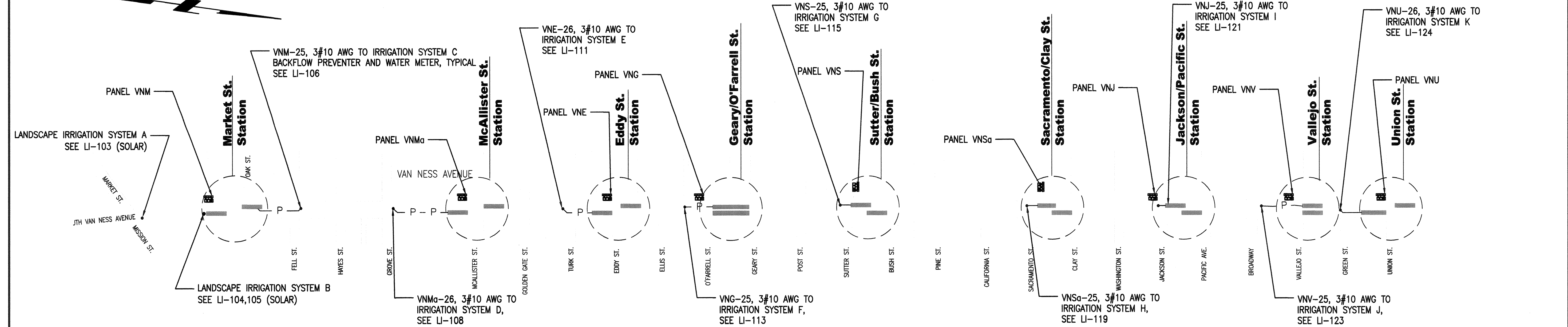
APPROVED
Vincent J. Har
 for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

FIBER NETWORK AND TELEPHONE DISTRIBUTION COMPOSITE

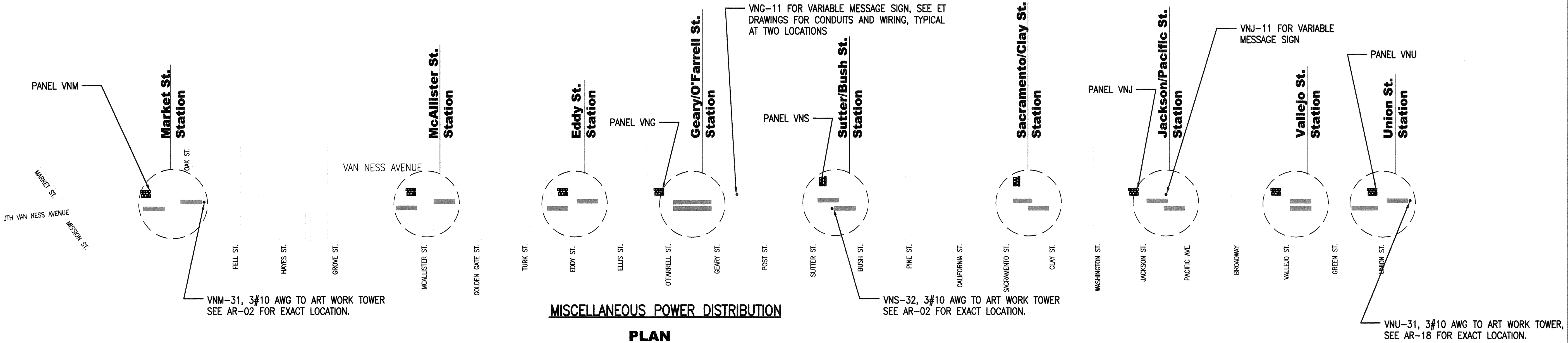
1289	
CL-29058	
CN-27	REVISION
CN-31	0

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LANDSCAPE IRRIGATION POWER DISTRIBUTION

PLAN
NTS



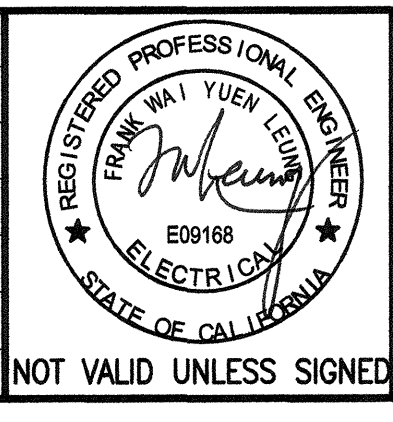
MISCELLANEOUS POWER DISTRIBUTION

PLAN
NTS

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>[Signature]</i>
DRAWN	<i>[Signature]</i>
CHECKED	<i>[Signature]</i>
REVIEWED	<i>[Signature]</i>
RECOMMENDED	<i>[Signature]</i>
APPROVED	<i>[Signature]</i>
DATE	MAY 13 2016

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CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

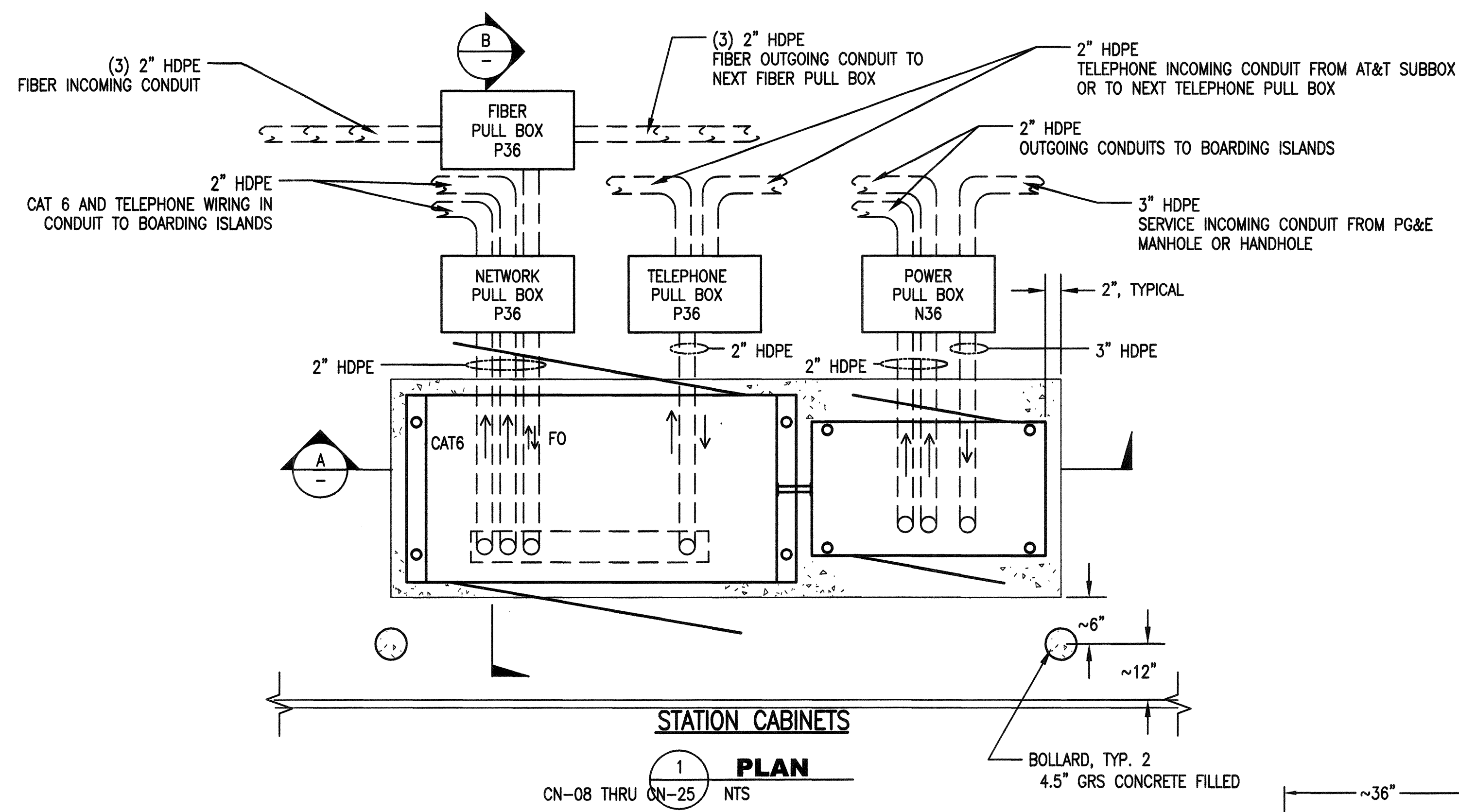
APPROVED
[Signature]
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

LANDSCAPE IRRIGATION AND MISCELLANEOUS POWER DISTRIBUTION COMPOSITE

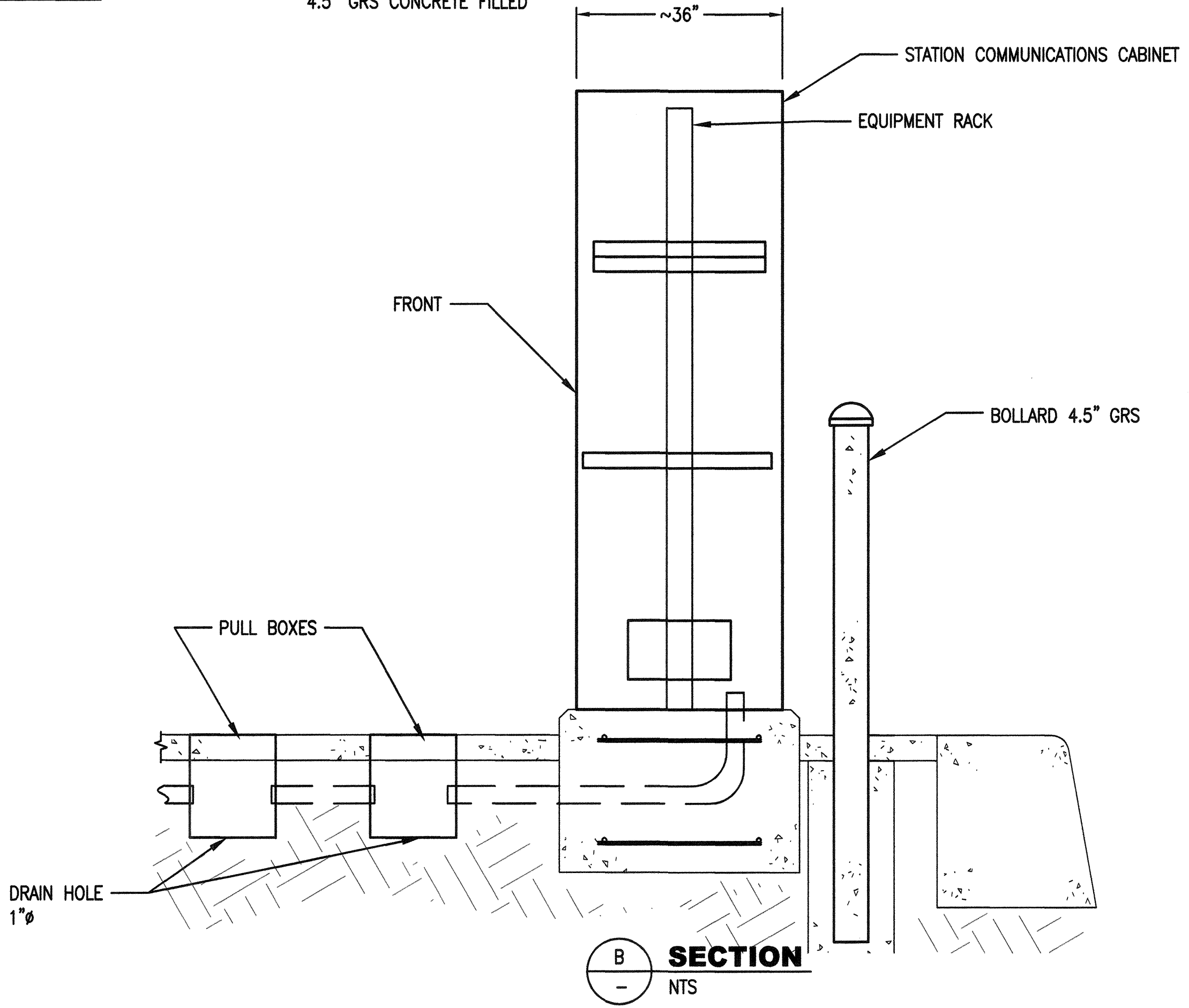
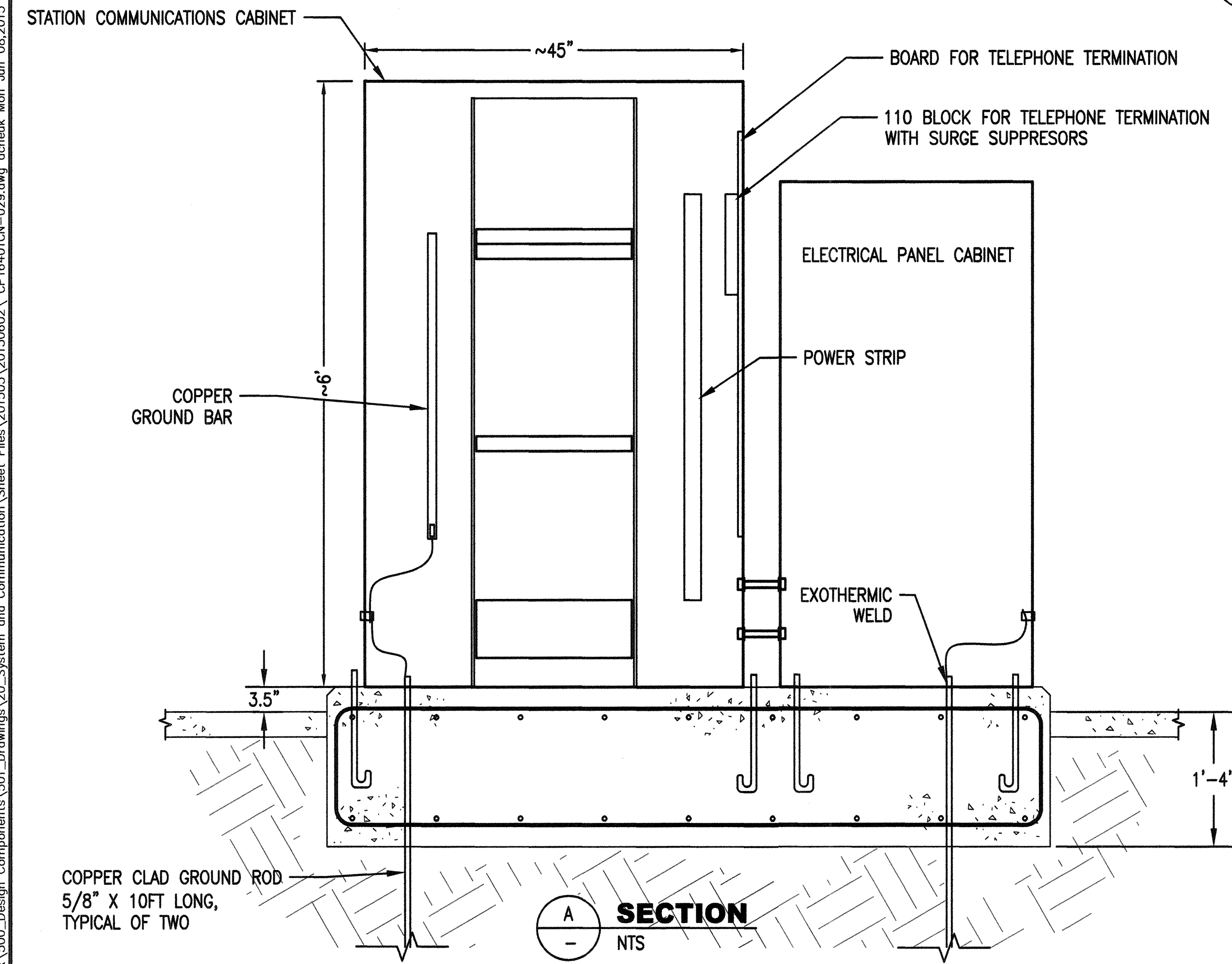
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CL-29059	
CN-28	REVISION
CN-31	0

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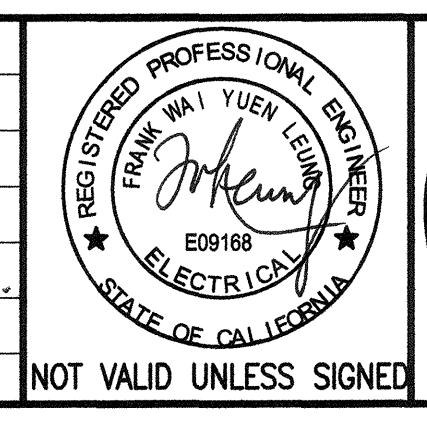
NOTES

1. CONCRETE SHALL BE CLASS 6.5-3500-3/4 TYPE II CEMENT.
2. 1/2" FIBER EXPANSION JOINT SHALL BE BITUMINOUS MATERIAL CONFORMING TO ASTM D 994. INSTALL ON ALL SIDES OF CONCRETE FOUNDATION.
3. FILL GAPS BETWEEN CABINET AND FOUNDATION WITH DOW CORNING 791 SILICONE PERIMETER SEALANT.
4. INSTALL SIZE AND QUANTITY OF CONDUIT AS SHOWN ON ELECTRICAL DRAWING.
5. RECONSTRUCT SIDEWALK TO NEAREST JOINT PER STANDARD SPECIFICATION SECTION 204. COMPACT SUBGRADE TO MINIMUM OF 95% RELATIVE COMPACTION.
6. ALL EXPOSED CONCRETE EDGES SHALL HAVE 1/8" X 1/8" CHAMFER EDGE.
7. CURING COMPOUND SHALL BE SEALTIGHT WHITE-PIGMENTED MANUFACTURED BY R.W. MEADOW, INC. THAT MEETS ASTM C 309, TYPE 2 CLASS B.
8. INSTALL GROUND WIRE PRIOR TO CASTING CONCRETE.
9. CABINET GROUNDING & BONDING SHALL MEET OR EXCEED TIA-607 & NEC.
10. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF CONCRETE PAD AND EQUIPMENT ANCHORAGE TO CONCRETE PAD FOR APPROVAL PRIOR TO CONSTRUCTION.
11. ALL COMMUNICATION CABINETS SHALL HAVE LIGHTING, LIGHTING SWITCHES, HEATERS, & THERMOSTATS, AND RECEPTACLES.



NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

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

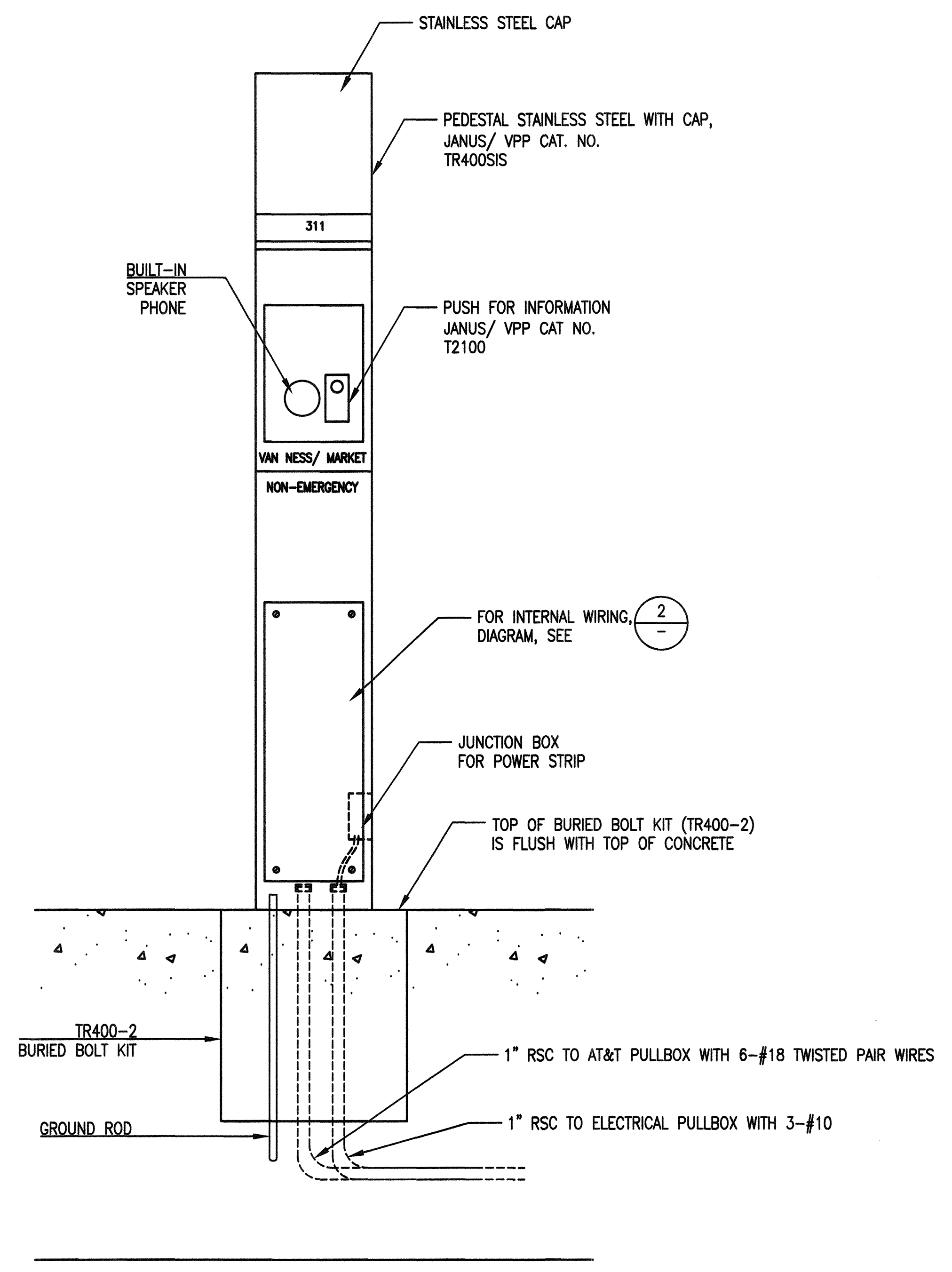


CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
 APPROVED: *[Signature]*
 for the DIRECTOR OF TRANSPORTATION

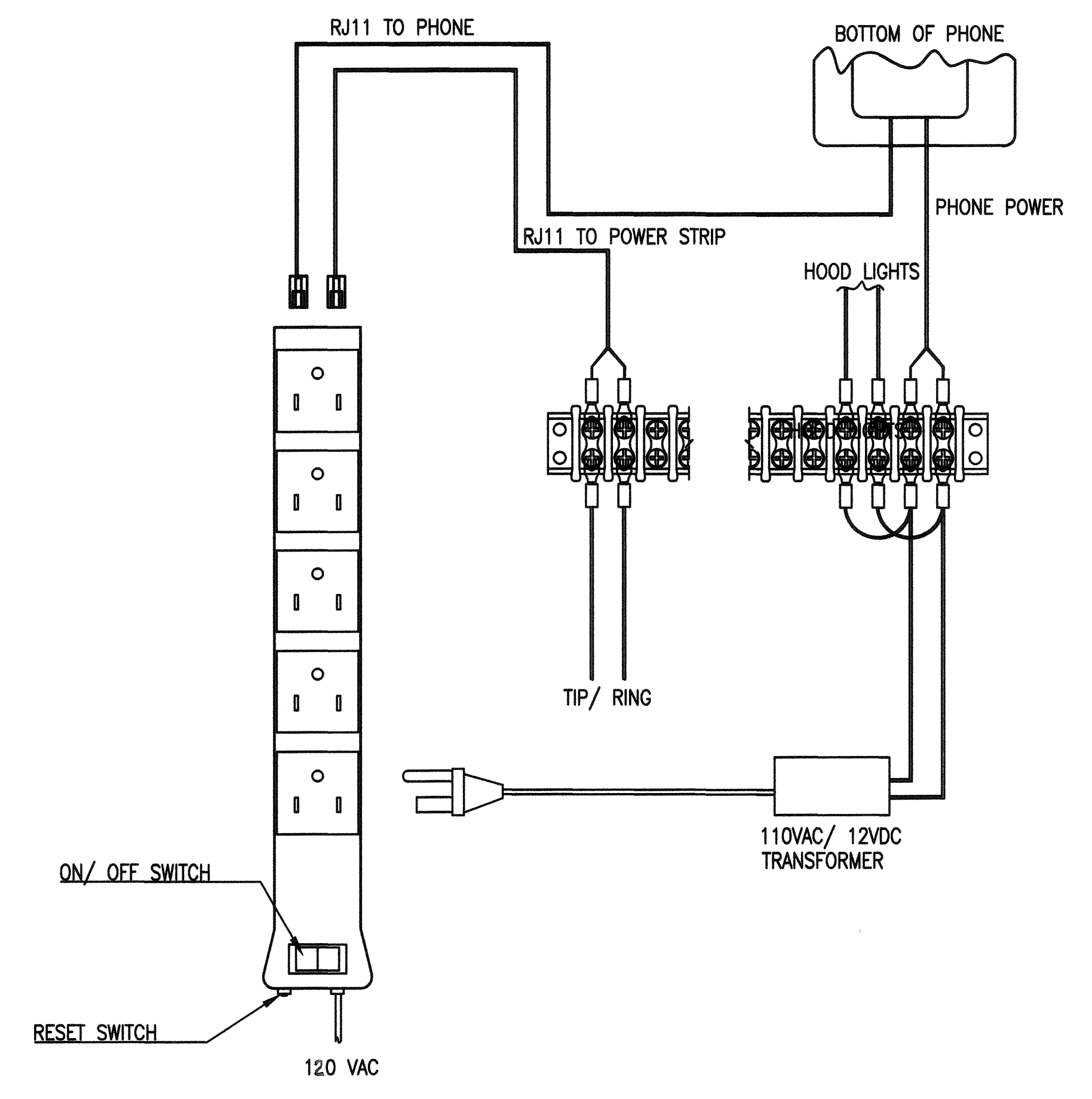
MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 STATION COMMUNICATION AND ELECTRICAL PANEL CABINET LAYOUT - TYPICAL STATION CABINETS DETAILS

1289	
CL-29060	
CN-29	REVISION
CN-31	0

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311 PHONE PEDESTAL
 1 **DETAIL**
 - NTS

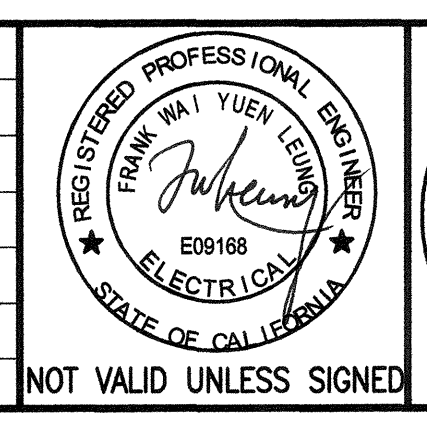


311 PHONE INTERNAL WIRING DIAGRAM
 2 **DETAIL**
 - NTS

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
REVISIONS					

DESIGNED	<i>J. Cheng</i>
DRAWN	<i>D. Chazelle</i>
CHECKED	<i>William J. B. Dine</i>
REVIEWED	<i>Joe</i>
RECOMMENDED	<i>Prashant</i>
APPROVED	<i>P. Mahabadi</i>
DATE	MAY 13 2016

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

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
 311 PHONE PEDESTAL DETAIL & WIRING DIAGRAM

1289	CL-29061
CN-30	REVISION
CN-31	0

