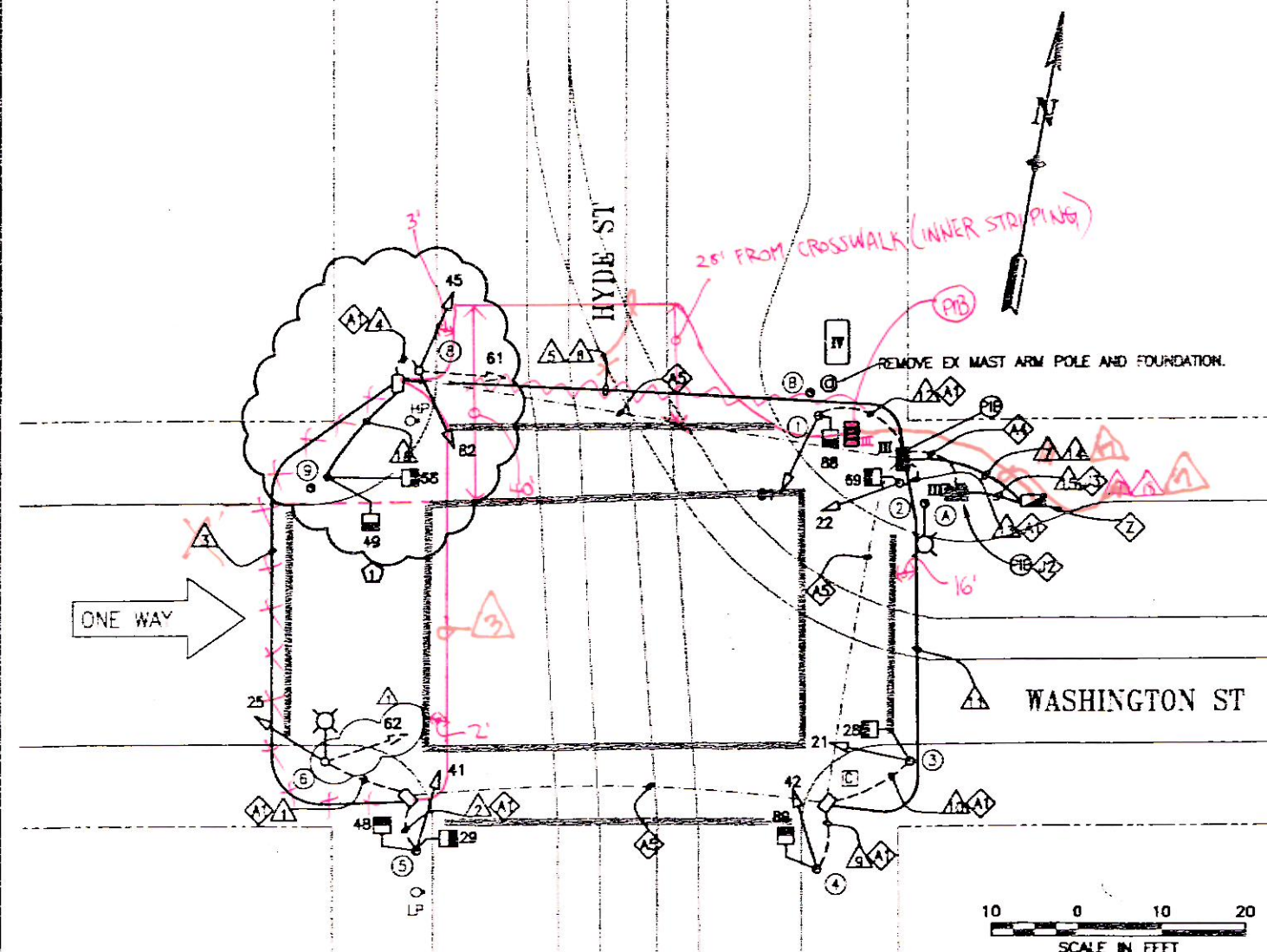


PED SIGNALS ACTIVATED AS PART OF CT 32 ON 4/30/09



DETAIL NOTES:

- 1. EX CONDUIT AND WIRING. R/C EX WIRING. F/I NEW WIRING AS NOTED.
- 2. R/C EX WIRING AND CONDUIT. REPAIR SIDEWALK TO MATCH EX.
- 3. EX CONDUIT AND WIRING. R/C EX WIRING. CUT CONDUIT FLUSH TO PULL BOX WALL OR 12" DEPTH. CAP OR DUCT SEAL END(S).
- 4. RETAIN EX SERVICE WIRES. SPLICE AND EXTEND TO NEW IC LOCATION. F/I 40A IN LINE FUSE AND FUSE HOLDER IN PULL BOX.
- 5. EXTEND EX CABLE CAR PRE-EMPT WIRES TO NEW IC LOCATION. SPLICE WIRES IF NEEDED.
- 6. CONTRACTOR SHALL F/I A STAINLESS STEEL LOCKABLE NEMA 4X ENCLOSURE BOX (12"H X 12"W X 6"D) ON EXTERIOR OF IC CABINET. CONTRACTOR SHALL MOUNT THE BOTTOM ON NEMA BOX AT A HEIGHT OF 48" ABOVE SIDEWALK GRADE. CONTRACTOR SHALL F/I A TERMINAL BLOCK WITH AT LEAST 12 POSITIONS INSIDE THE NEMA BOX. CONTRACTOR TO F/I A 2" GRSC NIPPLE BETWEEN BOXES TO ALLOW WIRES TO BE ROUTED BETWEEN NEMA BOX AND THE IC CABINET.

SHEET NOTES

- 1. CONDUITS INSTALLED UNDER TRACKS SHALL BE INSTALLED BY JACKING, PUSHING OR PULLING.
- 2. CONDUITS SHALL BE INSTALLED UNDER CABLE TRACKS. SEE SSDPWSF SECTION 601.03 (TYPICAL). CONDUIT SHALL BE 4" TO 6" BELOW SURFACE. CONTRACTOR SHALL KEEP CABLE CAR PRE-EMPTION SYSTEM RUNNING DURING CONSTRUCTION.
- 3. CONTRACTOR SHALL NOTIFY CABLE CAR OPERATIONS WILLEY TOM AT 415-307-8988, SEVEN DAYS PRIOR TO WORKING UNDER CAR TRACKS OF ACCESSING MUNI PULL BOX. PULL BOX CAN ONLY BE ACCESSED DURING NON-OPERATION HOURS (1:30 AM TO 4:30AM).
- 4. CONTRACTOR AND HIS EMPLOYEES WHO WILL PERFORM WORK WITHIN 48" OF THE CABLE CAR TRACKS AT THIS INTERSECTION SHALL FIRST RECEIVE ON TRACK SAFETY TRAINING AND CERTIFICATE FROM THE MTA BEFORE STARTING THE WORK. CONTRACTOR SHALL SCHEDULE TRAINING BY CONTACTING NAPOLEON KHALILNAMI FROM THE MTA AT (415) 701-4679. CONTRACTOR SHALL SIGN A "HOLD HARMLESS" AGREEMENT WITH RESPECT TO THE SAFETY TRAINING (SEE CONTRACT SPECIFICATIONS). IN ADDITION TO THE SAFETY TRAINING, THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE MUNI OPERATIONS CONTROL CENTER (OCC) BEFORE WORKING WITHIN 48" OF THE CABLE CAR TRACKS. MUNI OCC PERMIT APPLICATION PROCEDURE WILL BE DISCUSSED AS PART OF THE MTA SAFETY TRAINING.

AS-BUILT

Date: By: *Hurf*

PLANS ARE TO BE RETURNED WITH CORRECTIONS MADE AND CERTIFIED TO IN RED INK AND DATED BY THE INSPECTOR IN CHARGE UPON COMPLETION OF THE WORK BEFORE FINAL PAYMENT CAN BE MADE.

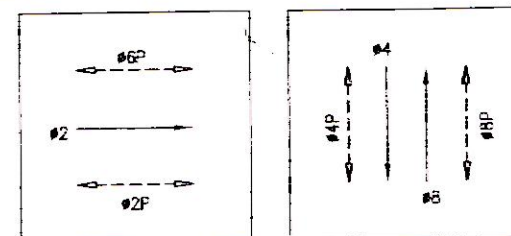
Damathy Cotton 10/25/09
SIGNED-INSPECTOR

NOTE:
THIS AUTOCAD DRAWING HAS BEEN REVISED AND REPLOTTED SUBSEQUENT TO INTERNAL ENGINEERING APPROVAL AND SIGN-OFF. FOR THOSE SIGNATURES, SEE THE DRAWING PLOTTED AND ISSUED PREVIOUSLY DURING BIDDING. THE SIGNED DRAWING REMAINS VALID EXCEPT FOR THE CHANGES ONLY AS CLEARLY MARKED ON THIS DRAWING AND ISSUED UNDER THIS LATEST REVISION NUMBER AS SHOWN IN THE TABLE OF REVISIONS LOCATED AT THE LOWER LEFT CORNER OF THE DRAWING. ALL ISSUED REVISIONS SUBSEQUENT TO PREVIOUSLY PLOTTED DRAWING DURING BIDDING REMAIN VALID UNLESS SUPERSEDED BY LATER ISSUED REVISIONS. CHECK ALL ISSUED REVISIONS OF THIS DRAWING.

REFERENCE INFORMATION & FILE NO. OF SURVEYS			BUREAU OF ENGINEERING DEPARTMENT OF PUBLIC WORKS CITY AND COUNTY OF SAN FRANCISCO		DESIGNED: DATE	APPROVED	SCALE	CONTRACT 32 TRAFFIC SIGNAL MODIFICATIONS	SPECIFICATION NO. 0985J	
17	8/26/08 POC				11: VARIOUS CHANGES BASED ON POLE LAYOUT	JS	SL			EF/CD
NO.	DATE	DESCRIPTION	BY	APP	CXL	10/07	DEPUTY BUREAU MANAGER	DATE	SHEET OF SHEETS	FILE NO.
TABLE OF REVISIONS					BC	10/07			11 OF 78	87.477
CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION										

POLE AND EQUIPMENT SCHEDULE										CONTRACT WORK IN BOLD
POLE No.	TYPE OF POLE	VEHICLE SIGNAL					PEDESTRIAN SIGNAL			REMARKS
		No.	TYPE	MOUNTING	VISORS	LOUVERS	No.	TYPE	MOUNTING	
①	EX 1-A (10')	81	3S8"				88	1S-COUNT	SP-1✓	
②	EX 1-A (10')	22	3S8"				69	1S-COUNT	SP-1✓	
③	EX 1-B (10')	21	3S8"				28	1S-COUNT	SP-1✓	
④	EX 1-B (10')	42	5S8"				89	1S-COUNT	SP-1✓	
⑤	EX 1-B (10')	41	5S8"				48 29	1S-COUNT 1S-COUNT	SP-1 (22") SP-1-SF (12")	EXISTING SIGNAL 62 TO BE REMOVED. EXISTING SIGNAL FRAMEWORK TO BE MODIFIED AS REQUIRED.
⑥	UTILITY/SL	25	3S8"	SV-1-T						
⑦	NOT USED									
⑧	EX 1-B (10')	45 51	5S8" 3S8"	TV-2-T						EXISTING SIGNAL 82 TO BE REMOVED. EXISTING SIGNAL FRAMEWORK TO BE MODIFIED AS REQUIRED.
⑨	1-A (7')						49 68	1S-COUNT 1S-COUNT	TF-2-T✓	

PHASE DIAGRAM



PLANS ARE TO BE RETURNED WITH CORRECTIONS MADE AND CERTIFIED TO IN RED INK AND DATED BY THE INSPECTOR IN CHARGE UPON COMPLETION OF THE WORK BEFORE FINAL PAYMENT CAN BE MADE.

Sumathy C. Wren 10/25/01
SIGNED-INSPECTOR

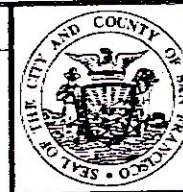
AS-BUILT

Date:

By: *Handwritten Signature*

PHASE SEQUENCE

G		Y	R		WASHINGTON ST. (EB)-#2	
R			G	Y	R	HYDE ST. (SB-NB)- 4 -#8
WM	FRH		RH			PED XING HYDE ST. (SS+NS)-2F+6P
RH		WM	FRH	RH	PED XING WASHINGTON ST. (WS+ES)-4P-BP	



BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO



DESIGNED: GD	DATE: 10/07	APPROVED: SECTION MANAGER	DATE:
DRAWN: CXL	DATE: 10/07	DEPUTY BUREAU MANAGER	DATE:
CHECKED: BC	DATE: 10/07	CITY ENGINEER	DATE:

SCALE: NONE
SHEET OF SHEETS: 12 OF 78

CONTRACT 32
TRAFFIC SIGNAL MODIFICATIONS

HYDE ST & WASHINGTON ST
SCHEDULE

SPECIFICATION NO. 0985J
DRAWING NO. E-2.1
FILE NO. 87.478
REV. NO. 1

[illegible]

AS-BUILT

By: *Humb*

PLANS ARE TO BE RETURNED WITH
CORRECTIONS MADE AND CERTIFIED
TO IN RED INK AND DATED BY THE
INSPECTOR IN CHARGE UPON
COMPLETION OF THE WORK BEFORE
FINAL PAYMENT CAN BE MADE.

Sammy C. Brown 10/25/09
SIGNED-INSPECTOR

1. GROUNDING WIRES NOT INCLUDED IN THIS WIRING SCHEDULE. FOR REQUIREMENTS SEE DETAIL

REFERENCE INFORMATION & FILE NO. OF SURVEYS		 BUREAU OF ENGINEERING DEPARTMENT OF PUBLIC WORKS CITY AND COUNTY OF SAN FRANCISCO		DESIGNED: DATE: _____ EF 10/07	APPROVED: _____ DATE: _____	SCALE: _____ NONE	CONTRACT 32 TRAFFIC SIGNAL MODIFICATIONS	SHEET NO. _____ 0985J
NO. DATE DESCRIPTION BY APP.				DRAWN: DATE: _____ CXL 10/07	SECTION MANAGER: DATE: _____	SHEET OF SHEETS: _____ 13 OF 78	HYDE ST & WASHINGTON ST SCHEDULE	DRAWING NO. _____ E-2.2
8/26/08 PCD #1: VARIOUS CHANGES BASED ON POLE LAYOUT JS S. TABLE OF REVISIONS CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION				CHECKED: DATE: _____ BC 10/07	DEPUTY BUREAU MANAGER: DATE: _____ CITY ENGINEER: DATE: _____		FILE NO. _____ 87,479	REV. NO. _____ 1

PED SIGNALS ACTIVATED ON 4/30/09 AT 12:56PM
 ATTENDED BY: GERALDINE DE LEON (DPT), FERDI LUMBAD (SIGNAL SHOP),
 WEI ZHANG (SIGNAL SHOP), AND TIM WONG (DPW BCM)

DETAIL NOTES:

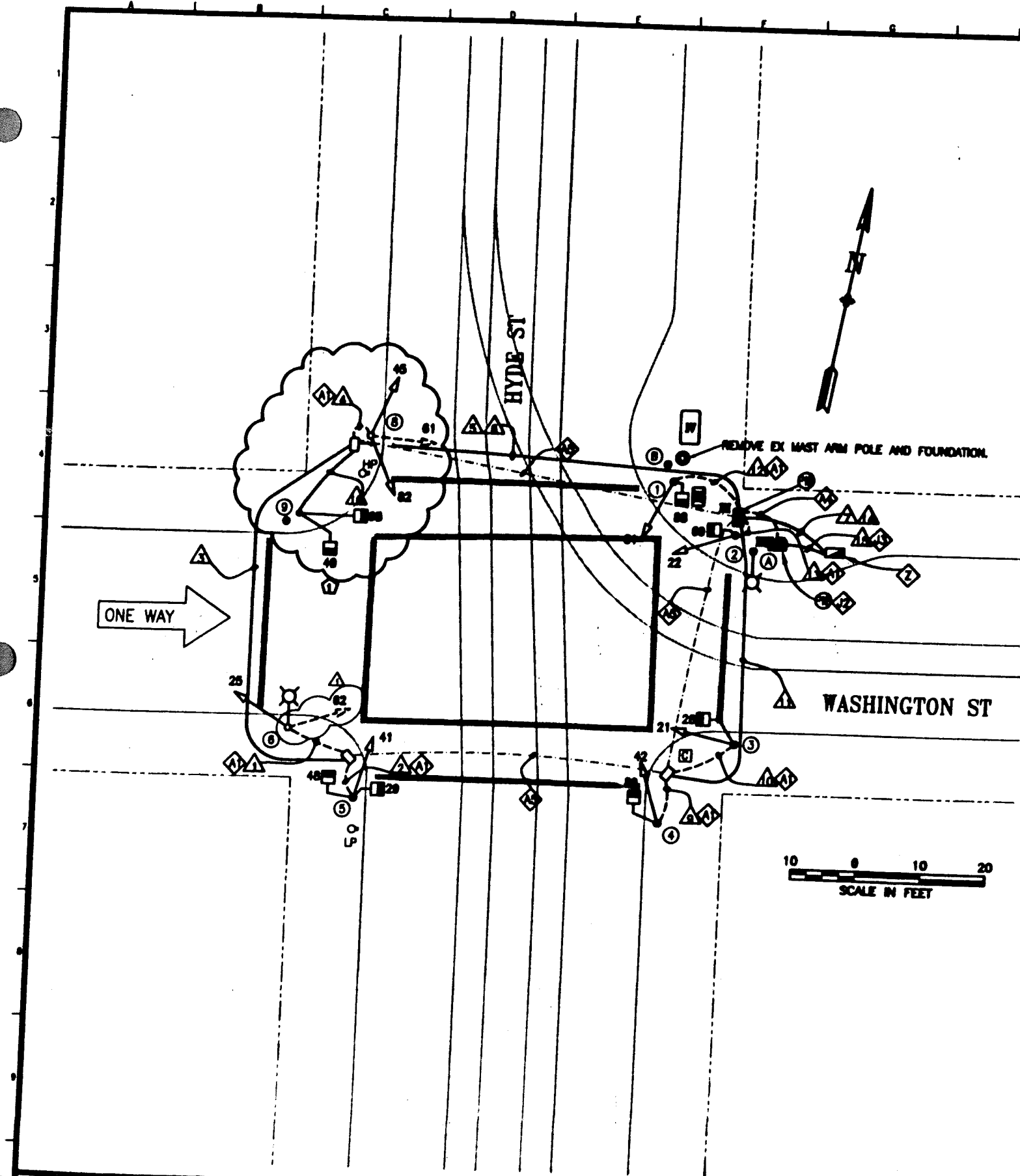
- ① EX CONDUIT AND WIRING. R/C EX WIRING. F/I NEW WIRING AS NOTED.
- ④ R/C EX WIRING AND CONDUIT. REPAIR SIDEWALK TO MATCH EX.
- ④ EX CONDUIT AND WIRING. R/C EX WIRING. CUT CONDUIT FLUSH TO PULL BOX WALL OR 12" DEPTH. CAP OR DUCT SEAL END(S).
- ② RETAIN EX SERVICE WIRES. SPLICE AND EXTEND TO NEW IC LOCATION. F/I 40A IN LINE FUSE AND FUSE HOLDER IN PULL BOX.
- ④ EXTEND EX CABLE CAR PRE-EMPT WIRES TO NEW IC LOCATION. SPLICE WIRES IF NEEDED.
- ② CONTRACTOR SHALL F/I A STAINLESS STEEL LOCKABLE NEMA 4X ENCLOSURE BOX (12" X 12" X 6") ON EXTERIOR OF IC CABINET. CONTRACTOR SHALL MOUNT THE BOTTOM ON NEMA BOX AT A HEIGHT OF 48" ABOVE SIDEWALK GRADE. CONTRACTOR SHALL F/I A TERMINAL BLOCK WITH AT LEAST 12 POSITIONS INSIDE THE NEMA BOX. CONTRACTOR TO F/I A 2" ORSC NIPPLE BETWEEN BOXES TO ALLOW WIRES TO BE ROUTED BETWEEN NEMA BOX AND THE IC CABINET.

SHEET NOTES

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2. CONDUITS SHALL BE INSTALLED UNDER CABLE TRACKS. SEE SSOPWSF SECTION 801.03 (TYPICAL). CONDUIT SHALL BE 4" TO 6" BELOW SURFACE. CONTRACTOR SHALL KEEP CABLE CAR PRE-EMPTION SYSTEM RUNNING DURING CONSTRUCTION.
3. CONTRACTOR SHALL NOTIFY CABLE CAR OPERATIONS WILLEY TOM AT 415-307-8888. SEVEN DAYS PRIOR TO WORKING UNDER CAR TRACKS OF ACCESSING MUNI PULL BOX. PULL BOX CAN ONLY BE ACCESSED DURING NON-OPERATION HOURS (1:30 AM TO 4:30AM).
4. CONTRACTOR AND HIS EMPLOYEES WHO WILL PERFORM WORK WITHIN 48" OF THE CABLE CAR TRACKS AT THIS INTERSECTION SHALL FIRST RECEIVE ON TRACK SAFETY TRAINING AND CERTIFICATE FROM THE MTA BEFORE STARTING THE WORK. CONTRACTOR SHALL SCHEDULE TRAINING BY CONTACTING NAPOLEON KHALILMAN FROM THE MTA AT (415) 701-4878. CONTRACTOR SHALL SIGN A "HOLD HARMLESS" AGREEMENT WITH RESPECT TO THE SAFETY TRAINING (SEE CONTRACT SPECIFICATIONS). IN ADDITION TO THE SAFETY TRAINING, THE CONTRACTOR SHALL OBTAIN A PERMIT FROM THE MUNI OPERATIONS CONTROL CENTER (OCC) BEFORE WORKING WITHIN 48" OF THE CABLE CAR TRACKS. MUNI OCC PERMIT APPLICATION PROCEDURE WILL BE DISCUSSED AS PART OF THE MTA SAFETY TRAINING.

NOTE:

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NO.	DATE	DESCRIPTION	BY	APP.
17	6/26/08	PCO #1: VARIOUS CHANGES BASED ON POLE LAYOUT	JS	SL
TABLE OF REVISIONS				
CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION				

REFERENCE INFORMATION
 & FILE NO. OF SURVEYS



BUREAU OF ENGINEERING
 DEPARTMENT OF PUBLIC WORKS
 CITY AND COUNTY OF SAN FRANCISCO

DESIGNER: DATE:
 ET/GO 10/07

APPROVED
 SECTION MANAGER DATE:
 DEPUTY BUREAU MANAGER DATE:
 CITY ENGINEER DATE:

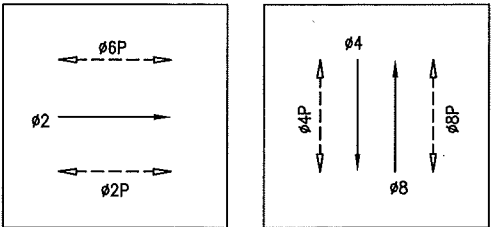
SCALE:
 AS SHOWN
 SHEET OF SHEETS
 11 OF 78

CONTRACT 32
 TRAFFIC SIGNAL MODIFICATIONS
 HYDE ST & WASHINGTON ST

SPECIFICATION NO.
 0985J
 DRAWING NO.
 E-2.0
 FILE NO.
 87,477
 REV. NO.

POLE AND EQUIPMENT SCHEDULE							CONTRACT WORK IN BOLD			
POLE No.	TYPE OF POLE	VEHICLE SIGNAL					PEDESTRIAN SIGNAL			REMARKS
		No.	TYPE	MOUNTING	VISORS	LOUVERS	No.	TYPE	MOUNTING	
①	EX 1-A (10')	81	3S8"				88	1S-COUNT	SP-1	
②	EX 1-A (10')	22	3S8"				69	1S-COUNT	SP-1	
③	EX 1-B (10')	21	3S8"				28	1S-COUNT	SP-1	
④	EX 1-B (10')	42	5S8" (R,Y,G) (R,Y,G)				89	1S-COUNT	SP-1	
⑤	EX 1-B (10')	41	5S8" (R,Y,G) (R,Y,G)				48 29	1S-COUNT 1S-COUNT	SP-1 (22") SP-1-SF (12")	EXISTING SIGNAL 62 TO BE REMOVED. EXISTING SIGNAL FRAMEWORK TO BE MODIFIED AS REQUIRED.
⑥	UTILITY/SL	25	3S8"	SV-1-T						
⑦	NOT USED									
⑧	EX 1-B (10')	45 61	5S8" 3S8" (R,Y,G) (R,Y,G)	TV-2-T						EXISTING SIGNAL 82 TO BE REMOVED. EXISTING SIGNAL FRAMEWORK TO BE MODIFIED AS REQUIRED.
⑨	1-A (7')						49 68	1S-COUNT 1S-COUNT	TP-2-T	

PHASE DIAGRAM



PHASE SEQUENCE

G	Y	R	WASHINGTON ST. (EB)-#2		
R		G	Y	R	HYDE ST.(SB+NB)-#4+8
WM	FRH	RH	PED XING HYDE ST. (SS+NS)-2P+6P		
RH		WM	FRH	RH	PED XING WASHINGTON ST. (WS+ES)-4P+8P

NO.		DATE	DESCRIPTION	BY	APP.
1	8/26/08	PCO #1: VARIOUS CHANGES BASED ON POLE LAYOUT	JS	SL	
TABLE OF REVISIONS					
CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION					

REFERENCE INFORMATION & FILE NO. OF SURVEYS
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BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO



DESIGNED: GD	DATE: 10/07
DRAWN: CXL	DATE: 10/07
CHECKED: BC	DATE: 10/07

APPROVED	DATE:
SECTION MANAGER	DATE:
DEPUTY BUREAU MANAGER	DATE:
CITY ENGINEER	DATE:

SCALE:	NONE
SHEET OF SHEETS	12 OF 78

CONTRACT 32 TRAFFIC SIGNAL MODIFICATIONS
HYDE ST & WASHINGTON ST SCHEDULE

SPECIFICATION NO. 0985J
DRAWING NO. E-2.1
FILE NO. 87,478
REV. NO. 1

CONDUIT AND WIRING SCHEDULE (FURNISH AND INSTALL CONDUIT AND WIRES)																															
CONDUIT RUN NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16															
CONDUIT SIZE (INCH)	EX	EX	2	EX	2	2	3		EX	EX	2	EX	EX	3	2	2															
CONDUIT SIZE (mm)																															
NOTES	NOT USED																														
SIGNAL 25(E)		3		3		3		3																							
SIGNAL 41(E)			3	3		3		3																							
SIGNAL 48			2	2		2		2																							
SIGNAL 29			2	2		2		2																							
SIGNAL 45(E)					3		3	3																							
SIGNAL 82(E)			3				3	3																							
SIGNAL 49							2	2								2															
SIGNAL 68							2	2								2															
SIGNAL 42(EX)									3		3				3																
SIGNAL 80									2		2				2																
SIGNAL 21(EX)										3	3				3																
SIGNAL 28										2	2				2																
SIGNAL 81(EX)												3			3																
SIGNAL 88												2			2																
SIGNAL 22(EX)														3	3																
SIGNAL 69														2	2																

SHEET NOTE:

- GROUNDING WIRES NOT INCLUDED IN THIS WIRING SCHEDULE. FOR REQUIREMENTS SEE DETAIL 8
E-0.5

NO.	DATE	DESCRIPTION	BY	APP.
1	8/28/08	PCD #1: VARIOUS CHANGES BASED ON POLE LAYOUT	JS	SL
TABLE OF REVISIONS				
CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION				

REFERENCE INFORMATION
& FILE NO. OF SURVEYS



BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO



DESIGNED: DATE: EF 10/07
DRAWN: DATE: CXL 10/07
CHECKED: DATE: BC 10/07

APPROVED
SECTION MANAGER DATE:
DEPUTY BUREAU MANAGER DATE:
CITY ENGINEER DATE:

SCALE: NONE
SHEET OF SHEETS: 13 OF 78

CONTRACT 32
TRAFFIC SIGNAL MODIFICATIONS
HYDE ST & WASHINGTON ST
SCHEDULE

SPECIFICATION NO. 0985J
DRAWING NO. E-2.2
FILE NO. 87,479
REV. NO. 1