Pre-Inspection Mezzanine Walkthrough Checklist

Date: 09/30/2014	**Station Name:** E02 Shaw-Howard U (S)	**Mezzanine #** 071	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: Essential SWBD LOAD Source Breaker Name/Number: "PANEL SF" Circuit #5 Electrical AFC Panel Name/Number: SF	220 220 208	AC Switchboard room is located on platform level, Track 2 wayside.
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: N/A SMNT/POWR escorts: HIGH Voltage		Kiosk Emergency Panel is Panel SKE (Kiosk). Source Panel is Panel SMEP (Rm. 208) and circuit #6.
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support:		
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		Access to multiple handholes are required.

Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:		
Date:	9/30/14	

Photo #1: E02 Shaw-Howard U (North) – Handhole in mezzanine floor

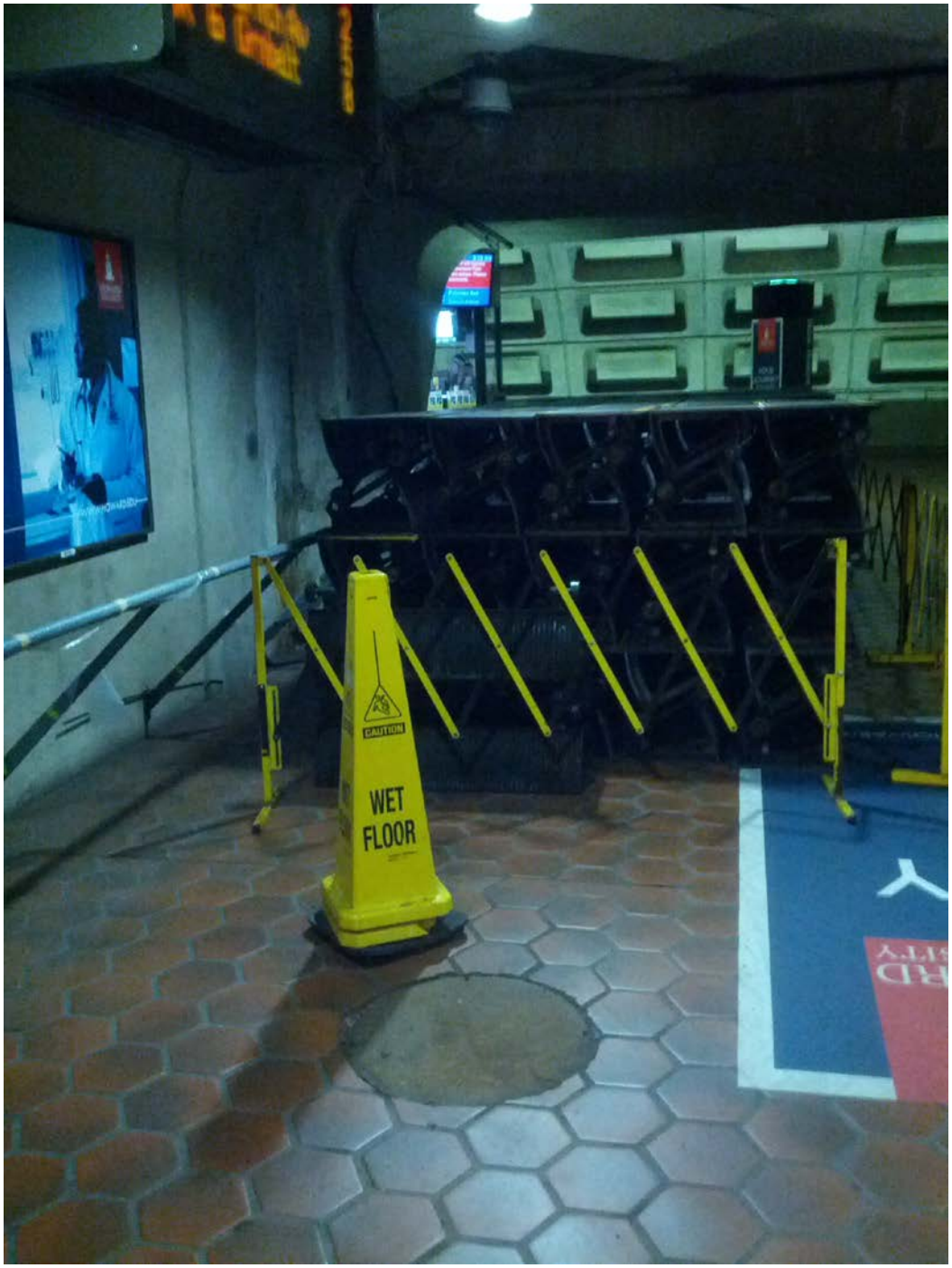


Photo #2: E02 Shaw-Howard U (North) – Pullbox and top of panel NF in room 205

Photo #3: E02 Shaw-Howard U (North) – Panel NF in room 205

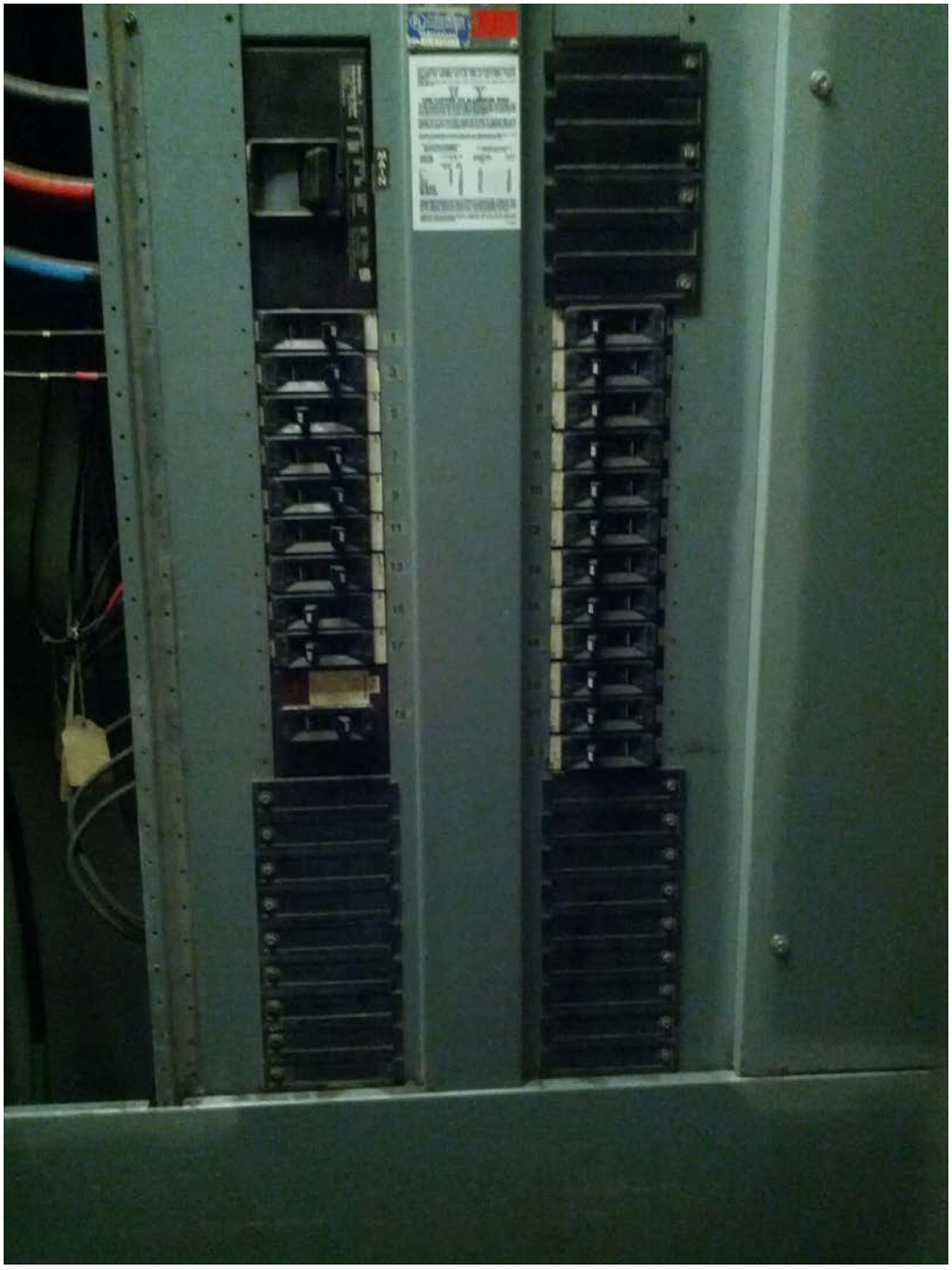
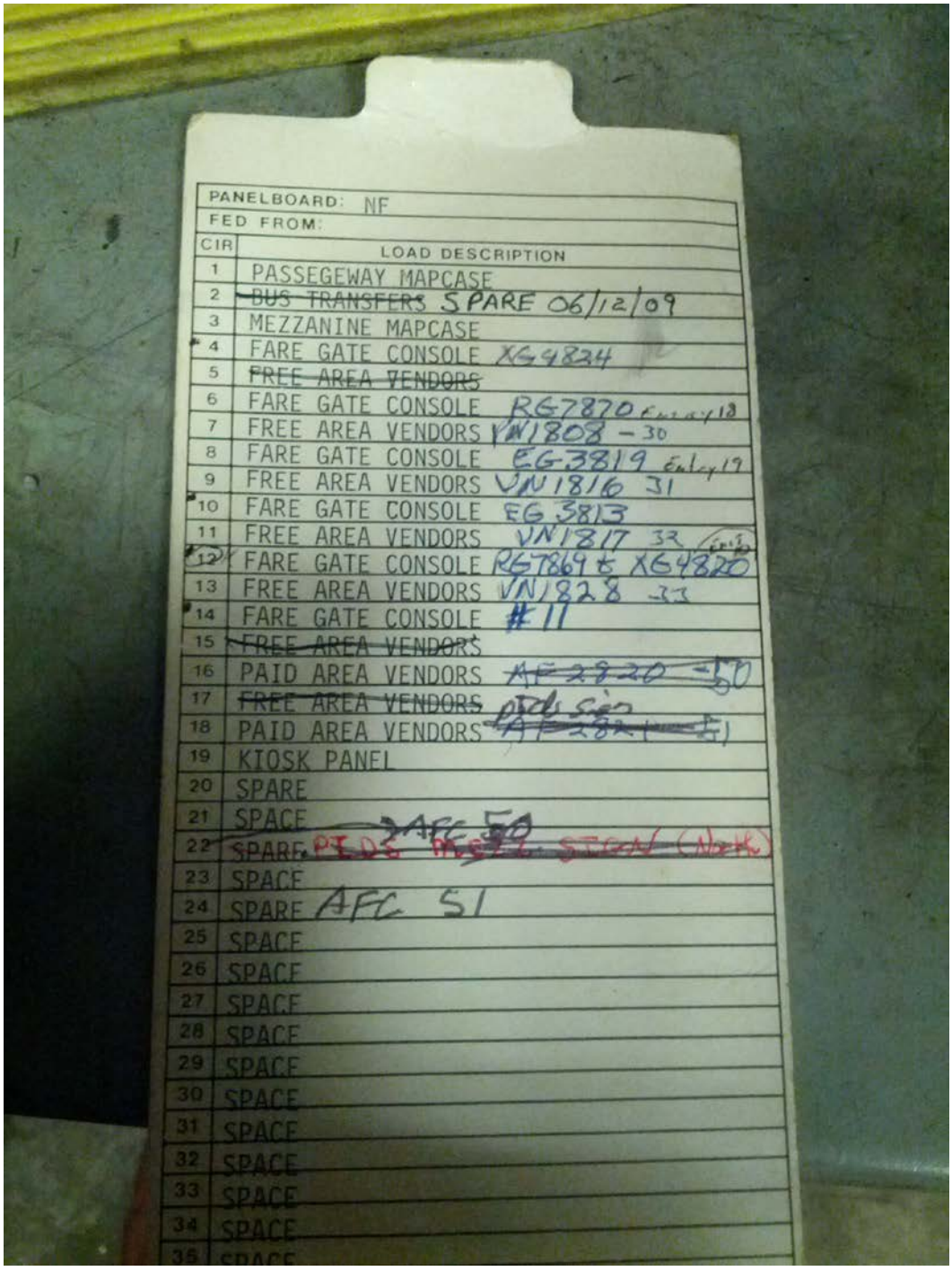


Photo #4: E02 Shaw-Howard U (North) – Schedule Panel NF in room 205



PANELBOARD: NF

FED FROM:

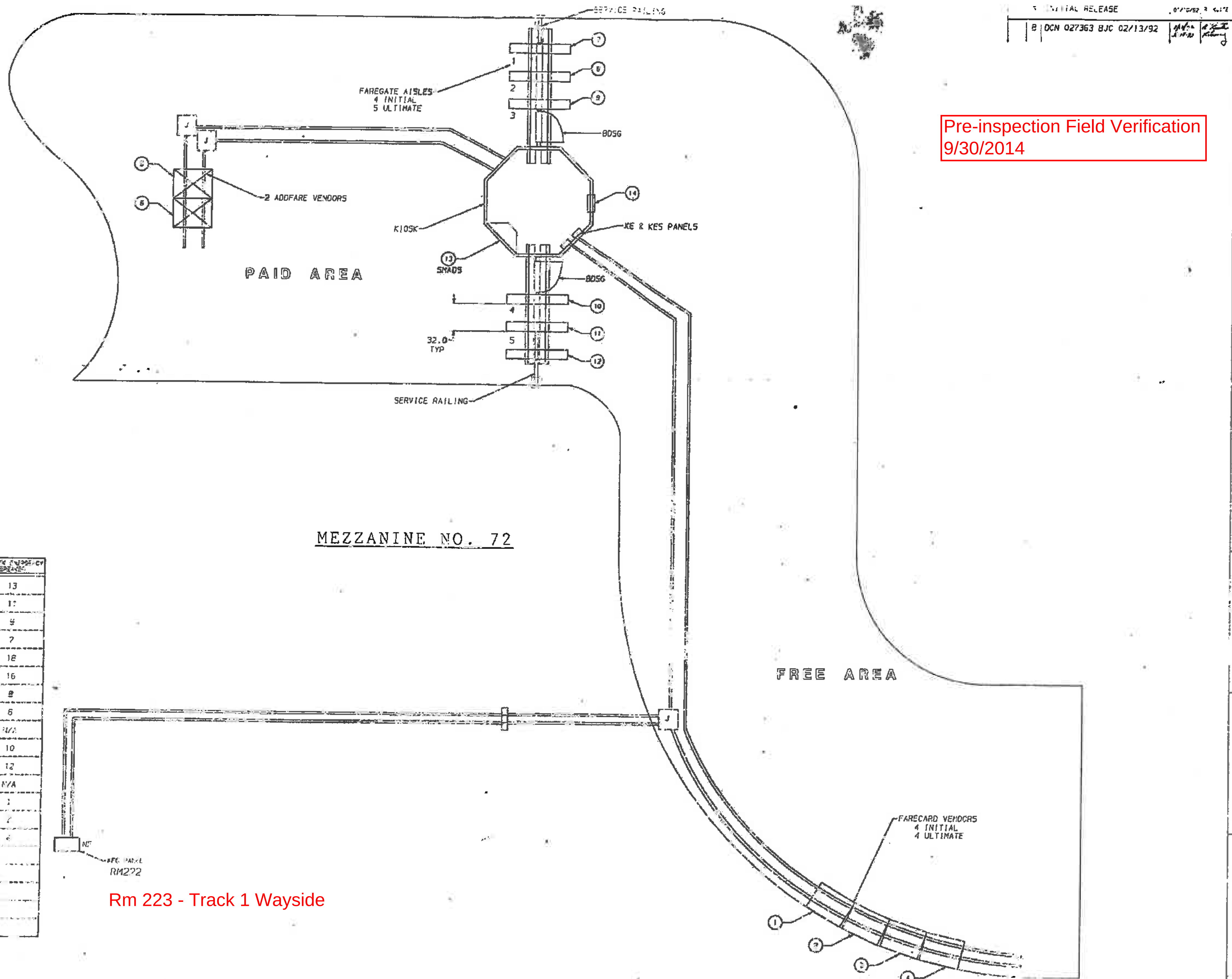
CIR	LOAD DESCRIPTION
1	PASSEGEWAY MAPCASE
2	~~BUS TRANSFERS~~ SPARE 06/12/09
3	MEZZANINE MAPCASE
4	FARE GATE CONSOLE XG4834
5	~~FREE AREA VENDORS~~
6	FARE GATE CONSOLE RG7870
7	FREE AREA VENDORS VN1808 - 30
8	FARE GATE CONSOLE EG3819
9	FREE AREA VENDORS VN1816 31
10	FARE GATE CONSOLE EG3813
11	FREE AREA VENDORS VN1817 32
12	FARE GATE CONSOLE RG7869 & XG4820
13	FREE AREA VENDORS VN1828 33
14	FARE GATE CONSOLE #11
15	~~FREE AREA VENDORS~~
16	PAID AREA VENDORS ~~AF 2820 - 50~~
17	~~FREE AREA VENDORS~~ PIDS Sign
18	PAID AREA VENDORS ~~AF 2821 - 51~~
19	KIOSK PANEL
20	SPARE
21	SPACE ~~AFC 50~~
22	~~SPARE~~ PIDS ~~MSB~~ STCW (North)
23	SPACE
24	SPARE AFC 51
25	SPACE
26	SPACE
27	SPACE
28	SPACE
29	SPACE
30	SPACE
31	SPACE
32	SPACE
33	SPACE
34	SPACE
35	SPACE

Photo #5: E02 Shaw-Howard U (North) – SWBD breaker for Panel NF in room 223

Photo #6: E02 Shaw-Howard U (North) – SWBD breaker for Panel NF in room 223

1. FOR VENDOR AND ADDFARE INSTALLATION SEE 931-4002.
2. FOR SMADS INSTALLATION SEE 931-4001.
3. FOR ENTRY, EXIT AND REVERSIBLE GATE INSTALLATION SEE 931-4003.
4. FOR BI-DIRECTIONAL SERVICE GATE INSTALLATION 931-4005
5. FOR A TYPICAL MEZZANINE INSTALLATION SEE 931-4000.
6. CIRCUIT BREAKERS WITH COMMON NEUTRAL, 7, 9 & 11, 16 & 18, 6 & 8, 10 & 12.

Pre-inspection Field Verification
9/30/2014



	NAME	S/N	PANEL AFJ	KIOSK EMERGENCY BREAKER
1	VENDOR	VN1828	NF	13
2	VENDOR	VN1817	NF	11
3	VENDOR	VN1816	NF	9
4	VENDOR	[illegible]	NF	7
5	ADDFARE	AF2821	NF	18
6	ADDFARE	AF2820	NF	16
7	ENTRY GATE	EG3819	NF	8
8	REV. GATE	RG7070	NF	6
9	EXIT GATE	XG4821	NF	N/A
10	ENTRY GATE	EG3813	NF	10
11	REV. GATE	RG7365	NF	12
12	EXIT GATE	XG4820	NF	N/A
13	SMADS	[illegible]	KE	1
14	SMADS CLOCK	[illegible]	KES	2
	EMERGENCY LT		KES	4

	INITIAL RELEASE			
B	DCN 027363 BJC 02/13/92			

CUBIC

TITLE: SHAW STATION NORTH MEZZANINE LAYOUT

27580 931-4013

DO NOT SCALE DRAWING

Pre-inspection Field Verification
9/30/2014

EXISTING PANEL "NF" ✓

AMPERES 400		VOLTS. 120/208			MOUNTING: SURFACE						
MAINS: 250A MCB		PHASE: 3			LOCATION: ELECTRICAL EQUIPMENT ROOM 205 ✓						
RATING: 10K AIC		WIRE: 4			SECTION: 1 OF 1						
		CKT BKRS		CKT		CKT	CKT BKRS				
LOAD DESCRIPTION	KVA	AMP	POLE	NO		NO.	POLE	AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
1&2 SPARE (KIOSK)	0.0	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	3.3	40	3	17	- - C	18	1	20	0.8	EXISTING VENDOR	
-	2.5	-	-	19	A - -	20	1	20	0.8	EXISTING VENDOR	
-	2.5	-	-	21	- B -	22	1	20	0.8	EXISTING VENDOR	
SPACE	0.0	-	-	23	- - C	24	1	20	0.8	EXISTING VENDOR	
SPACE	0.0	-	-	25	A - -	26	-	-	0.0	SPACE	
SPACE	0.0	-	-	27	- B -	28	-	-	0.0	SPACE	
SPACE	0.0	-	-	29	- - C	30	-	-	0.0	SPACE	
SPACE	0.0	-	-	31	A - -	32	-	-	0.0	SPACE	
SPACE	0.0	-	-	33	- B -	34	-	-	0.0	SPACE	
SPACE	0.0	-	-	35	- - C	36	-	-	0.0	SPACE	
SPACE	0.0	-	-	37	A - -	38	-	-	0.0	SPACE	
SPACE	0.0	-	-	39	- B -	40	-	-	0.0	SPACE	
SPACE	0.0	-	-	41	- - C	42	-	-	0.0	SPACE	

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	6.0 x 50%		3.0 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	23.5 KVA	TOTAL DEMAND KVA	21.3 KVA
		TOTAL DEMAND AMPS	59.0 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	8.1 KVA		
PHASE B:	7.3 KVA		
PHASE C	8.1 KVA		

Mechanical Equipment Room Rm. 217

NOTES: A. EXISTING PANEL "NF" IS FED FROM 277/480V, 3ø, 4W EXISTING SWITCHBOARD "NSB" LOCATED IN AC SWBD. ROOM 223, ~~#6~~ 125/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E08).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-4" C. TO TRANSFORMER (1-WIRING FILL >40%).
- 3-3" C. (1-EMPTY & 2-WIRING FILL >40%).
- 2-3/4" C. (WIRING FILL >40%).

Rm 223 - Track 1 Wayside Essential Circuit #4

EXISTING PANEL "SF"

AMPERES 400		VOLTS 120/208			MOUNTING: SURFACE						
MAINS: 250A MCB		PHASE: 3			LOCATION: ELECTRICAL EQUIPMENT ROOM 208						
RATING: 10K AIC		WIRE: 4			SECTION: 1 OF 1						
		CKT BKRS		CKT.		CKT	CKT BKRS				
LOAD DESCRIPTION	KVA	AMP	POLE	NO.		NO	POLE	AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR	
EXIST. LOAD CENTER "KES"	3.3	40	3	19	A - -	20	1	20	0.8	EXISTING VENDOR	
-	2.5	-	-	21	- B -	22	1	20	0.8	EXISTING VENDOR	
-	2.5	-	-	23	- - C	24	1	20	0.8	EXISTING VENDOR	
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	25	A - -	26	-	-	0.0	SPACE	
1&2 ~~SPARE (KIOSK)~~	0.0	20	1	27	- B -	28	-	-	0.0	SPACE	
SPACE	0.0	-	-	29	- - C	30	-	-	0.0	SPACE	
SPACE	0.0	-	-	31	A - -	32	-	-	0.0	SPACE	
SPACE	0.0	-	-	33	- B -	34	-	-	0.0	SPACE	
SPACE	0.0	-	-	35	- - C	36	-	-	0.0	SPACE	
SPACE	0.0	-	-	37	A - -	38	-	-	0.0	SPACE	
SPACE	0.0	-	-	39	- B -	40	-	-	0.0	SPACE	
SPACE	0.0	-	-	41	- - C	42	-	-	0.0	SPACE	

NOTES 1. PROVIDE 2-NEW 20A, 1P CB IN AVAILABLE SPACES (NEW CB'S SHALL MATCH EXISTING CB'S) AND CONNECT NEW FEEDER TO 2-NEW CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	8.4 x 50%		4.2 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	25.9 KVA	TOTAL DEMAND KVA	22.5 KVA
		TOTAL DEMAND AMPS	62.4 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	9.7 KVA		
PHASE B.	8.1 KVA		
PHASE C	8.1 KVA		

NOTES: A. EXISTING PANEL "SF" IS FED FROM 277/480V, 3ø, 4W EXISTING SWITCHBOARD "SSB" LOCATED IN AC SWBD. ROOM 220, #6-125/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E08).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-4" C. TO TRANSFORMER (1-WIRING FILL >40%).
- 3-3" C. (1-EMPTY & 2-WIRING FILL >40%).
- 2-3/4" C. (WIRING FILL >40%).

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED C. MOO	08-14 DATE	REFERENCE DRAWINGS: NUMBER / DESCRIPTION
DRAWN C. MOO	08-14 DATE	REVISIONS: DATE / BY / DESCRIPTION
CHECKED S. DUS	08-14 DATE	
APPROVED N/A	DATE	

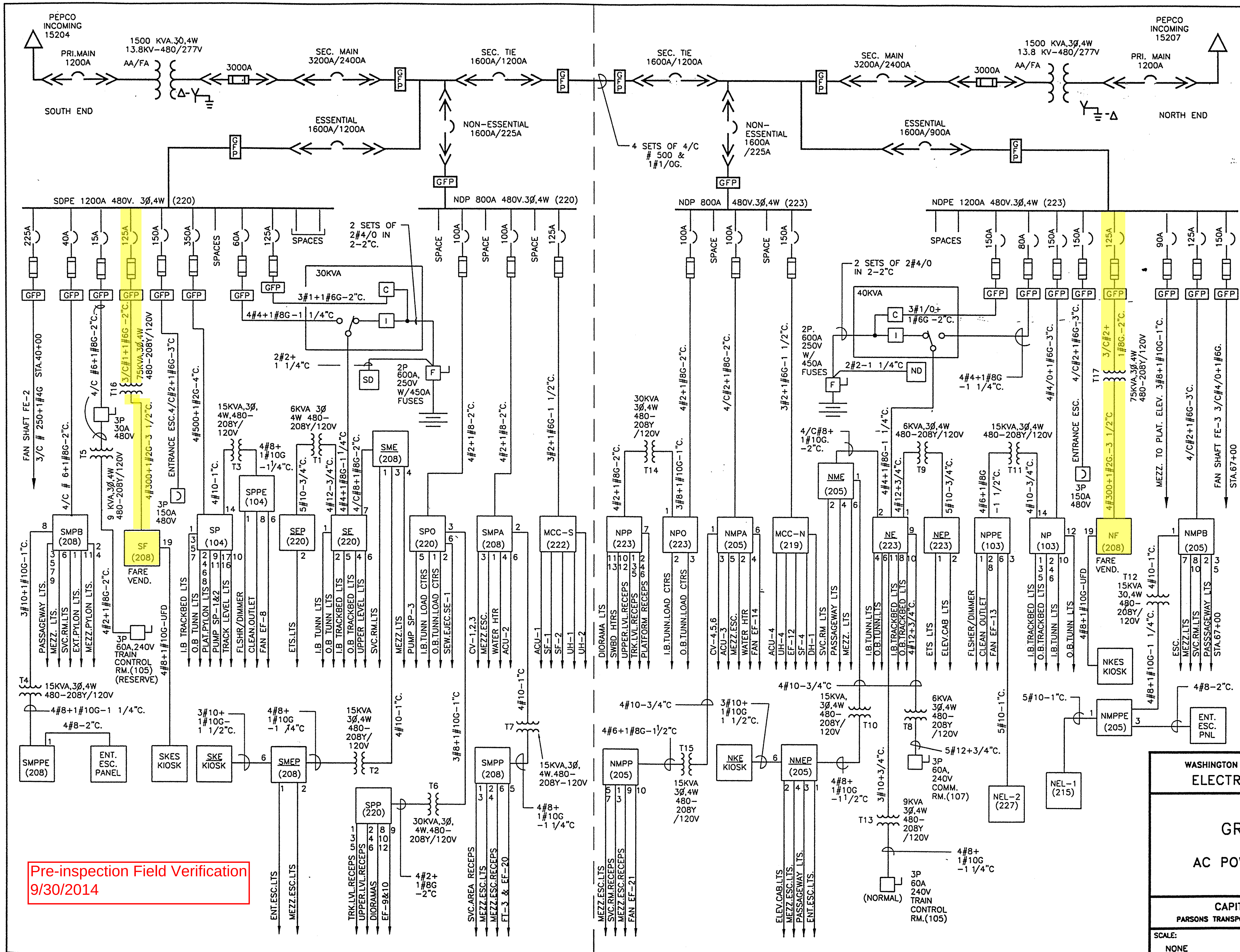
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM
APPROVED _____

GFP A Gannett Fleming/Parsons JOINT VENTURE
SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP)
IN METRORAIL STATIONS
SHAW - NORTH & SOUTH
PANEL SCHEDULES

SCALE: NOT TO SCALE
DRAWING NO.: E02-E-102

0: \ELECT\NewMaintMap\E-Route\MM-E-E08.dwg Wed Jun 14 10:37:23 2000 LP



Pre-inspection Field Verification
9/30/2014

NOTES:

1. WEA (205) — PANEL DESIGNATION; PANEL DESIGNATION WHEN UNDERLINED IS EMERGENCY; ROOM NUMBER; 8 (CIRCUIT NUMBER)

2. 3#2, 2"C — CONDUIT SIZE *; AWG OR KCMIL CIRCUIT WIRES *
   * AS TAKEN FROM AS BUILT DWGS.

3. CIRCUIT BREAKERS
   DRAW OUT 1600A/1200A — FRAME SIZE; CONTINUOUS CURRENT SETTING

4. 4/C # 4/0 — INDICATES MULTICONDUCTOR CABLE WITH 4 CONDUCTORS AND SIZE OF EACH 4/0

5. INDICATES FUSE CURRENT LIMITER AT BREAKER

6. SWITCHGEAR INFORMATION:
   MANUFACTURER-WESTINGHOUSE
   ORDER NO.-VN-10001
   DWG. NO.-ST88D1360 (NORTH)
   DWG. NO.-ST88D1361 (SOUTH)

7. UPS MANUFACTURER:
   HDR POWER SYSTEMS

8. ROOM DESIGNATIONS:

ROOM	DESCRIPTION
103	N. MECH.RM.(TRACK LEVEL)
104	S. MECH.RM.(TRACK LEVEL)
105	TRAIN CONTROL RM.
107	COMM.RM.
205	ELEC.RM.(S. ENT.MEZZ.)
208	ELEC.RM.(N. ENT.MEZZ.)
215	N. ENT. ELEV.MACH. RM.
219	MECH.RM.(N. UPPER LEVEL)
220	S. A.C.RM.(S. UPPER LEVEL)
222	MECH.RM.(S. UPPER LEVEL)
223	N. A.C.RM.(N. UPPER LEVEL)
227	S. SVC. AREA ELEV.MACH.RM.

REVISIONS

DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
ELECTRICAL MAINTENANCE MAP

GREENBELT ROUTE
SHAW STATION
AC POWER ONE LINE DIAGRAM

CAPITAL IMPROVEMENT PROGRAM
PARSONS TRANSPORTATION GROUP – CAPITAL TRANSIT CONSULTANTS

SCALE: NONE
DRAWING No. MM-E-E08

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 09/30/2014	**Station Name:** U Street - East - E03	**Mezzanine #:** 073	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify that electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: SWBD East / Essential SWBD Source Breaker Name/Number: XFMR Panel EF (Circuit #7) Electrical AFC Panel Name/Number: EF	Rm 109 Rm 109 Rm 213	AC SWBD Rm 109 is located on Platform level, wayside of Track 2.
☑	Verify if disconnect switch is connected to the AFC electrical power panel. Low or High voltage SMNT/POWR escorts requirements?	Disconnect Name/Number: N/A SMNT/POWR escorts: HIGH Voltage		
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to be de-energized.	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of duct / conduit, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support:		
☑	Identify handhole or manhole access requirement.	Required PLNT Mason for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		All conduits/ducts are on mezzanine level.

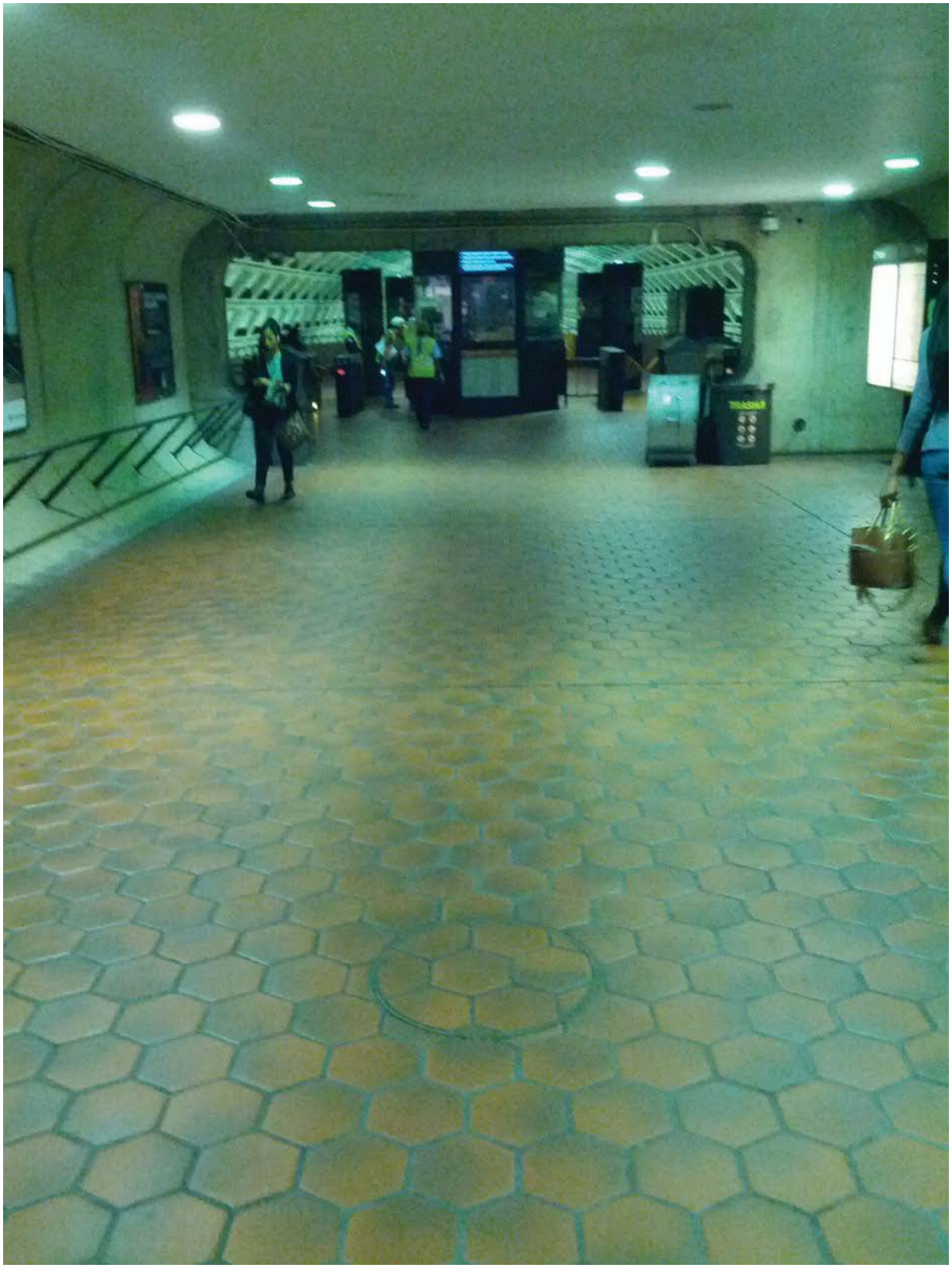
Emergency Power Verification

Check	Task	Equipment	Room ID	Notes
☑	Verify if AFC electrical panel is connected to an Automatic Transfer Switch (ATS).	ATS Name/Number:		
☑	Verification of Kiosk Emergency Panel(s) (KE, KES, KESS, etc)	Source Panel Name/Number: Panel EEA Source Breaker Name/Number: Circuit #9 Panel Name/Number: Panel EKE	Rm 109 Rm 109 Kiosk	

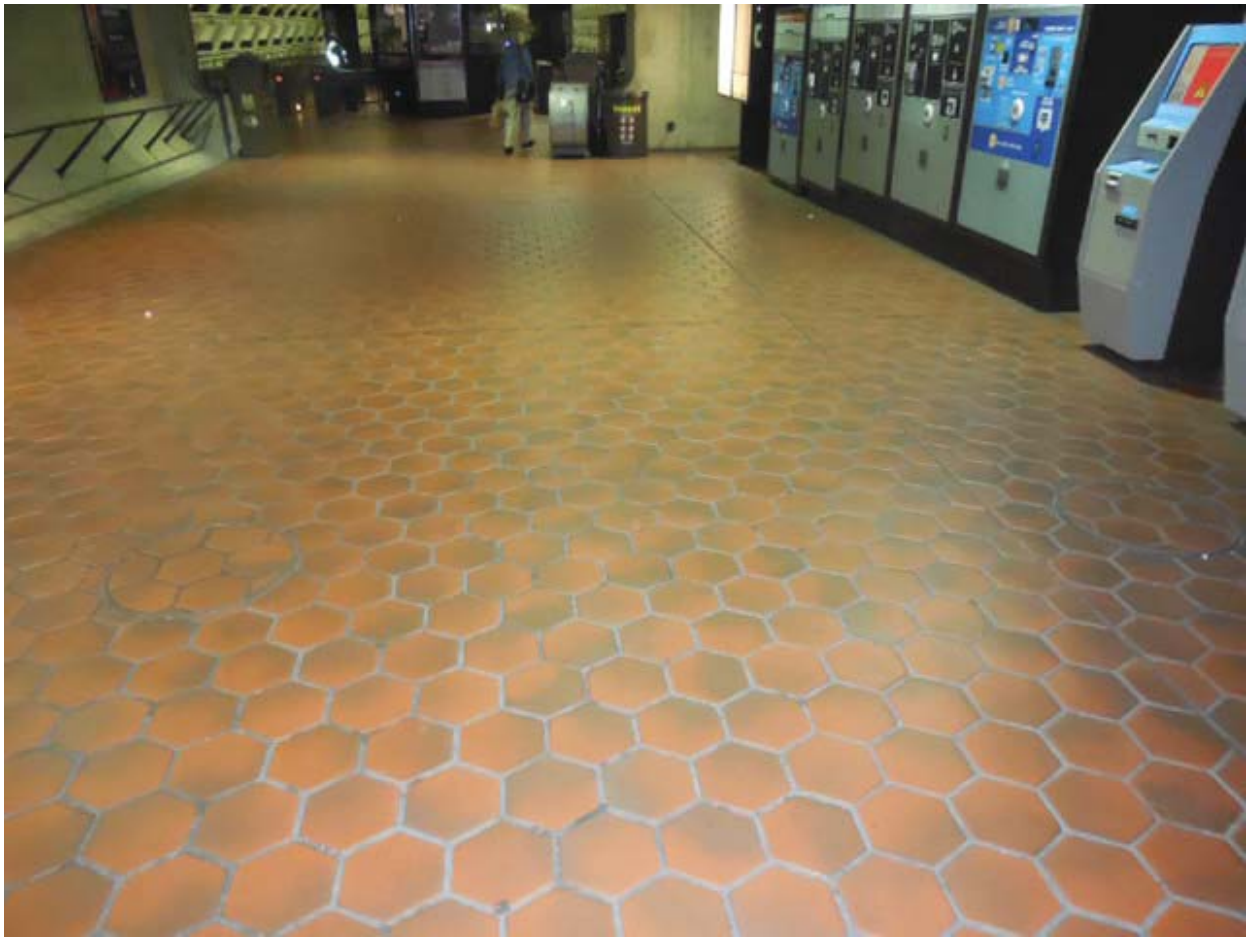
Notes and Discrepancies: Kiosk panel on right hand side in Kiosk (breaker #4) de-energizes emergency power to all faregates. (Panel is not labeled)

Sign Off	**GFP Representative**	**WMATA PRGM**
Name:	Tino Sahoo	
Signature:	Tarmina Sahoo	
Date:	09/30/2014	

Picture 1: E03 U Street East – Mezzanine manhole



Picture 2: E03 U Street East – Mezzanine manhole



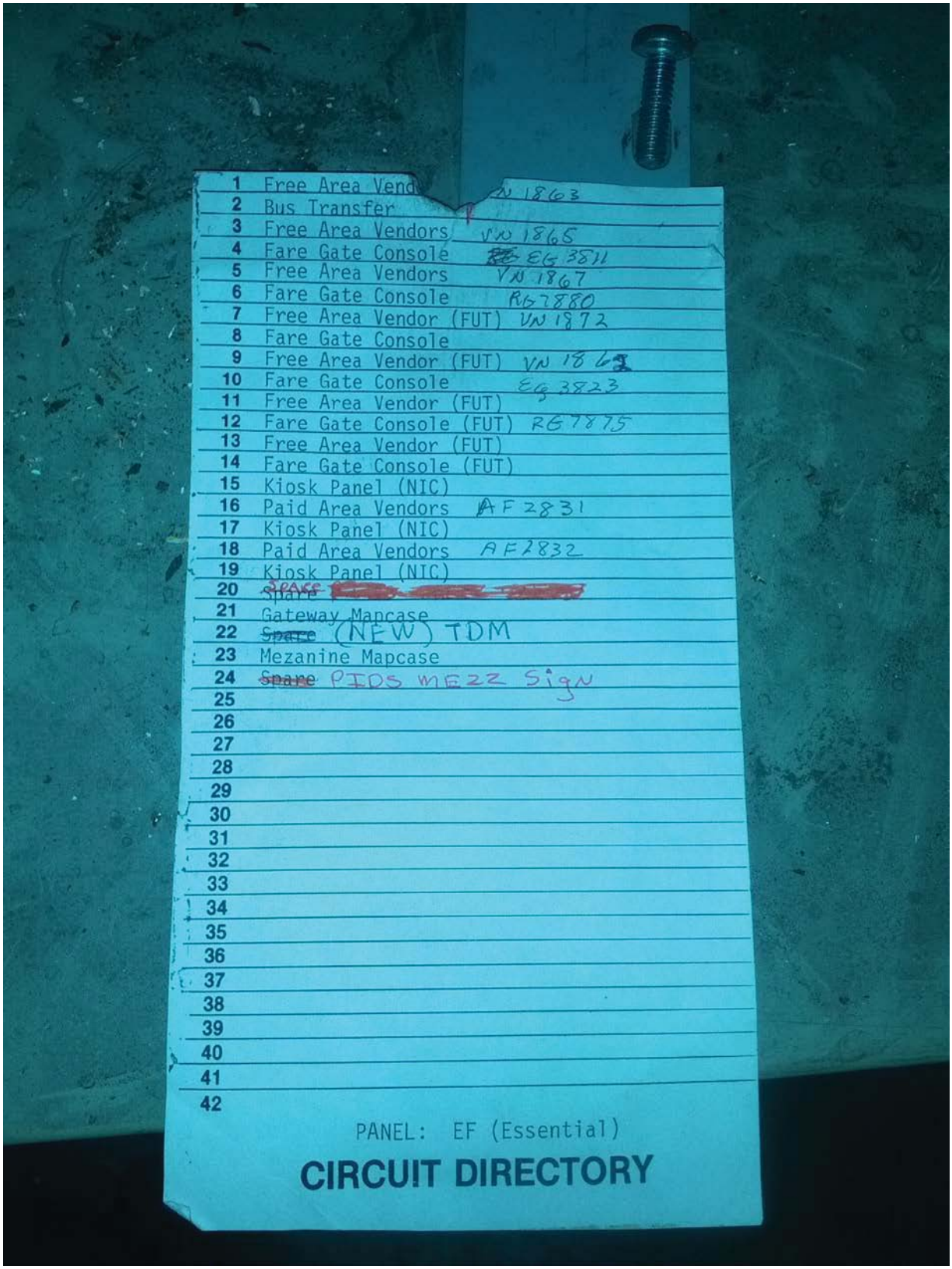
Picture 3: E03 U Street East – AFC Panel in Room 213

Picture 4: E03 U Street East – AFC Panel in Room 213

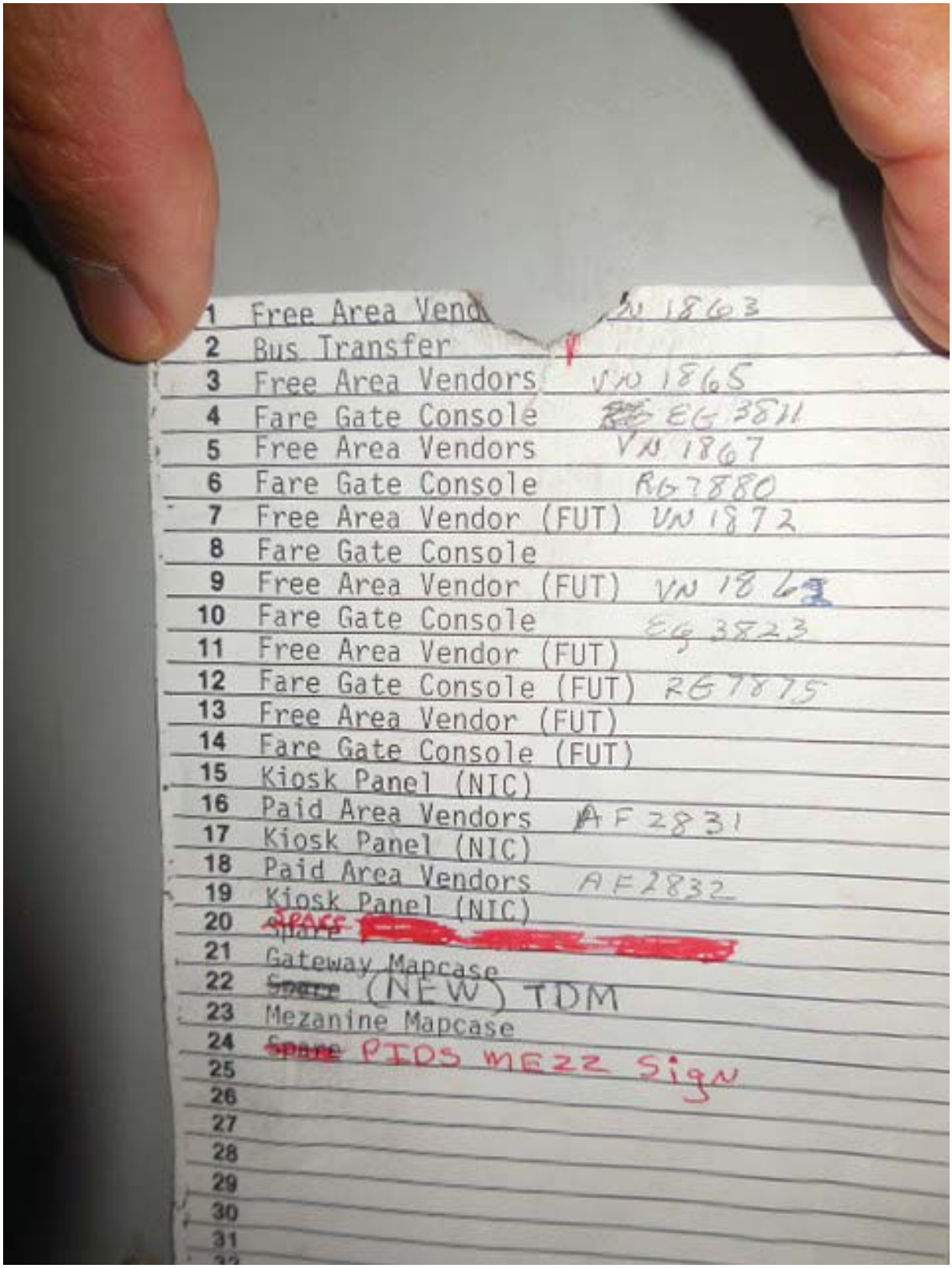
Picture 5: E03 U Street East – AFC Panel in Room 213

Picture 6: E03 U Street East – AFC Panel in Room 213

Picture 7: E03 U Street East – AFC Panel schedule in Room 213



Picture 8: E03 U Street East – AFC Panel schedule in Room 213



Picture 9: E03 U Street East – Essential SWBD Transformer in Room 109

EXISTING PANEL "EF"

AMPERES: 400	VOLTS: 120/208			MOUNTING: SURFACE						
MAINS: 250A MCB	PHASE: 3			LOCATION: ELECTRICAL EQUIPMENT ROOM 213						
RATING: 10K AIC	WIRE: 4			SECTION: 1 OF 1						
	CKT BKRS		CKT		CKT	CKT BKRS				
LOAD DESCRIPTION	KVA	AMP	POLE	NO		NO.	POLE	AMP	KVA	LOAD DESCRIPTION
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.0	SPARE (KIOSK) 1&2
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR
EXISTING LOAD CENTER "KES"	3.3	40	3	15	- B -	16	1	20	0.8	EXISTING VENDOR
	2.5	-	-	17	- - C	18	1	20	0.8	EXISTING VENDOR
	2.5	-	-	19	A - -	20	1	20	0.0	SPARE
EXISTING VENDOR	0.0	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.0	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR
SPACE	0.0	-	-	25	A - -	26	1	20	0.0	SPACE
SPACE	0.0	-	-	27	- B -	28	1	20	0.0	SPACE
SPACE	0.0	-	-	29	- - C	30	1	20	0.0	SPACE
SPACE	0.0	-	-	31	A - -	32	1	20	0.0	SPACE
SPACE	0.0	-	-	33	- B -	34	1	20	0.0	SPACE
SPACE	0.0	-	-	35	- - C	36	1	20	0.0	SPACE
SPACE	0.0	-	-	37	A - -	38	1	20	0.0	SPACE
SPACE	0.0	-	-	39	- B -	40	1	20	0.0	SPACE
SPACE	0.0	-	-	41	- - C	42	1	20	0.0	SPACE
-	0.0	-	-	43	A - -	44	1	20	0.0	-

NOTES 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	4.4 x 50%		2.2 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	21.9 KVA	TOTAL DEMAND KVA	20.5 KVA
		TOTAL DEMAND AMPS	56.8 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	6.5 KVA		
PHASE B:	8.1 KVA		
PHASE C:	7.3 KVA		

NOTES: A. EXISTING PANEL "EF" IS FED FROM 277/480V, 3ø, 4W EXISTING SWITCHBOARD ~~"SWBD EAST"~~ LOCATED IN AC SWBD. RM. 109, ~~#7-125/3P~~ VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E10).

B. EXISTING WIRING FED FROM LEFT SIDE OF PANEL BY:
- 1-3" C. TO TRANSFORMER (WIRING FILL >40%).

EXISTING WIRING FED FROM TOP OF PANEL BY:
- 2- 3" C. (WIRING FILL >30%).
- 1- 3/4" C. (WIRING FILL >40%).

Essential SWBD Track 2 Wayside

XFMR for Panel EF (Breaker #7 - 125/3P)

U-Street East Pre-Inspection Field Verification 9/30/2014

EXISTING PANEL "WF"

AMPERES: 400	VOLTS: 120/208			MOUNTING: SURFACE						
MAINS: 250A MCB	PHASE: 3			LOCATION: ELECTRICAL EQUIPMENT ROOM 212						
RATING: 10K AIC	WIRE: 4			SECTION: 1 OF 1						
	CKT BKRS		CKT		CKT	CKT BKRS				
LOAD DESCRIPTION	KVA	AMP	POLE	NO		NO	POLE	AMP	KVA	LOAD DESCRIPTION
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	13	A - -	14	1	20	0.0	SPARE
EXISTING LOAD CENTER "KES"	3.3	40	3	15	- B -	16	1	20	0.8	EXISTING VENDOR
	2.5	-	-	17	- - C	18	1	20	0.8	EXISTING VENDOR
	2.5	-	-	19	A - -	20	1	20	0.8	NEW KIOSK RECEPT. (IT & NEPP) 1
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.0	SPARE (KIOSK) 1&2
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR
SPACE	0.0	-	-	25	A - -	26	-	-	0.0	SPACE
SPACE	0.0	-	-	27	- B -	28	-	-	0.0	SPACE
SPACE	0.0	-	-	29	- - C	30	-	-	0.0	SPACE
SPACE	0.0	-	-	31	A - -	32	-	-	0.0	SPACE
SPACE	0.0	-	-	33	- B -	34	-	-	0.0	SPACE
SPACE	0.0	-	-	35	- - C	36	-	-	0.0	SPACE
SPACE	0.0	-	-	37	A - -	38	-	-	0.0	SPACE
SPACE	0.0	-	-	39	- B -	40	-	-	0.0	SPACE
SPACE	0.0	-	-	41	- - C	42	-	-	0.0	SPACE

NOTES 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	4.4 x 50%		2.2 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	21.9 KVA	TOTAL DEMAND KVA	20.5 KVA
		TOTAL DEMAND AMPS	56.8 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	5.7 KVA		
PHASE B:	8.1 KVA		
PHASE C:	8.1 KVA		

NOTES: A. EXISTING PANEL "WF" IS FED FROM 277/480V, 3ø, 4W EXISTING SWITCHBOARD "SWBD WEST" LOCATED IN AC SWBD. RM. 106, #3-125/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E10).

B. EXISTING WIRING FED FROM RIGHT SIDE OF PANEL BY:
- 1-4" C. TO TRANSFORMER (WIRING FILL >40%).

EXISTING WIRING FED FROM TOP OF PANEL BY:
- 2- 3/4" C. (WIRING FILL >30%).

EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 3- 3" C. (1-EMPTY CONDUIT & 2-WIRING FILL >30%).

CONTRACT NO 14-FQ10060-CENI-24

DESIGNED C. MOD	08-14 DATE	REFERENCE DRAWINGS: NUMBER / DESCRIPTION	REVISIONS: DATE / BY / DESCRIPTION
DRAWN C. MOD	08-14 DATE		
CHECKED T. IDLER	08-15 DATE		
APPROVED N/A	DATE		

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

GFP A Gannett Fleming/Parsons JOINT VENTURE

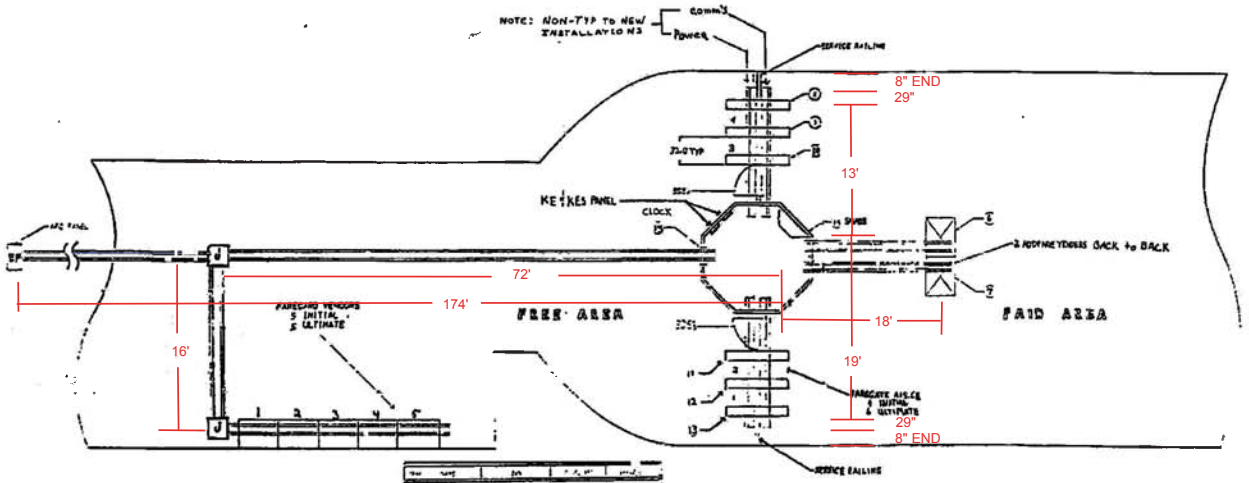
SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP) IN METRORAIL STATIONS
U STREET - EAST & WEST
PANEL SCHEDULES

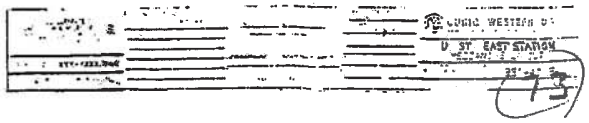
SCALE: NOT TO SCALE

DRAWING NO.: E03-E-102

Pre-Inspection Field Verification 9/30/2014



	VN1862	WF	9
	VN1872	"	7
	VN1867	"	5
	VN1865	"	3
	VN1863	"	1
	AF2832	"	18
	AF2831	"	16
	XG4808	"	
	RG7880	"	6
	EG3811	"	4
	XG4816	"	
	RG7825	"	12
	EG3863	"	10
	SM8811	KE	1
	95718	KES	8
EMER		KE	4



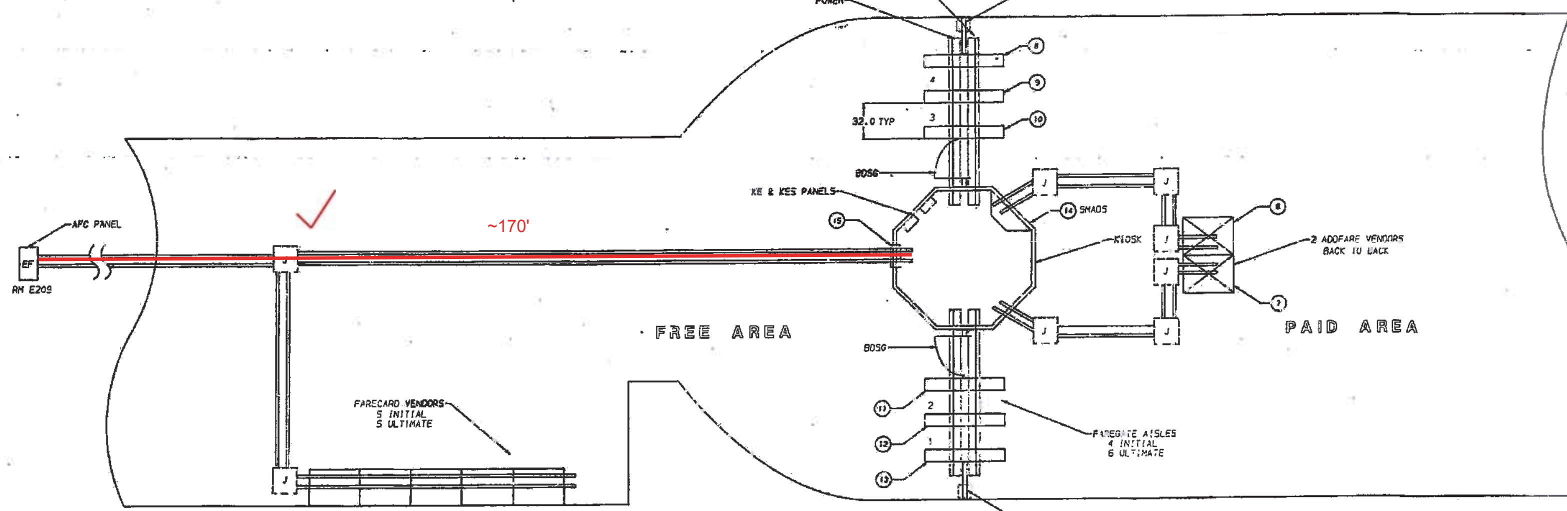
Pre-Inspection Field Verification 9/30/2014

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	INITIAL RELEASE	[illegible]	R. KULTE
	B	CCN 028900 BJC 03/20/92	[illegible]	[illegible]

NOTES:

1. FOR VENDOR AND ADDFARE INSTALLATION SEE 931-4002.
2. FOR SMADS INSTALLATION SEE 931-4001.
3. FOR ENTRY, EXIT AND REVERSIBLE GATE INSTALLATION SEE 931-4003.
4. FOR BI-DIRECTIONAL SERVICE GATE INSTALLATION SEE 931-4005.
5. FOR A TYPICAL MEZZANINE INSTALLATION SEE 931-4000.
6. CIRCUIT BREAKERS WITH COMMON NEUTRAL: 5,7 & 9; 1 & 3; 16 & 18; 4 & 6; 10 & 12.



ITEM	NAME	S/N	PANEL AFC	1/25 BREAKER
1	VENDOR	1862	EF	9
2	VENDOR	1865	EF	7
3	VENDOR	1867	EF	5
4	VENDOR	1872	EF	3
5	VENDOR	1863	EF	1
6	ADDFARE	2832	EF	18
7	ADDFARE	2831	EF	16
8	EXIT GATE	4808	EF	N/A
9	REV. GATE	7808	EF	6
10	ENTRY GATE	3811	EF	4
11	EXIT GATE	4816	EF	N/A
12	REV. GATE	7875	EF	12
13	ENTRY GATE	3823	EF	10
14	SMADS	8811	KE	1
15	SMADS CLOCK	95718	KES	8
16	EMERGENCY LT		KE	4

MEZZANINE NO. 73

SEE SEPARATE AL WHEN ITEM NUMBERS ARE USED (REF DESIGNATOR MAY BE USED IN LIEU OF ITEM NUMBERS)

NEXT ASSY:

DO NOT SCALE DRAWING

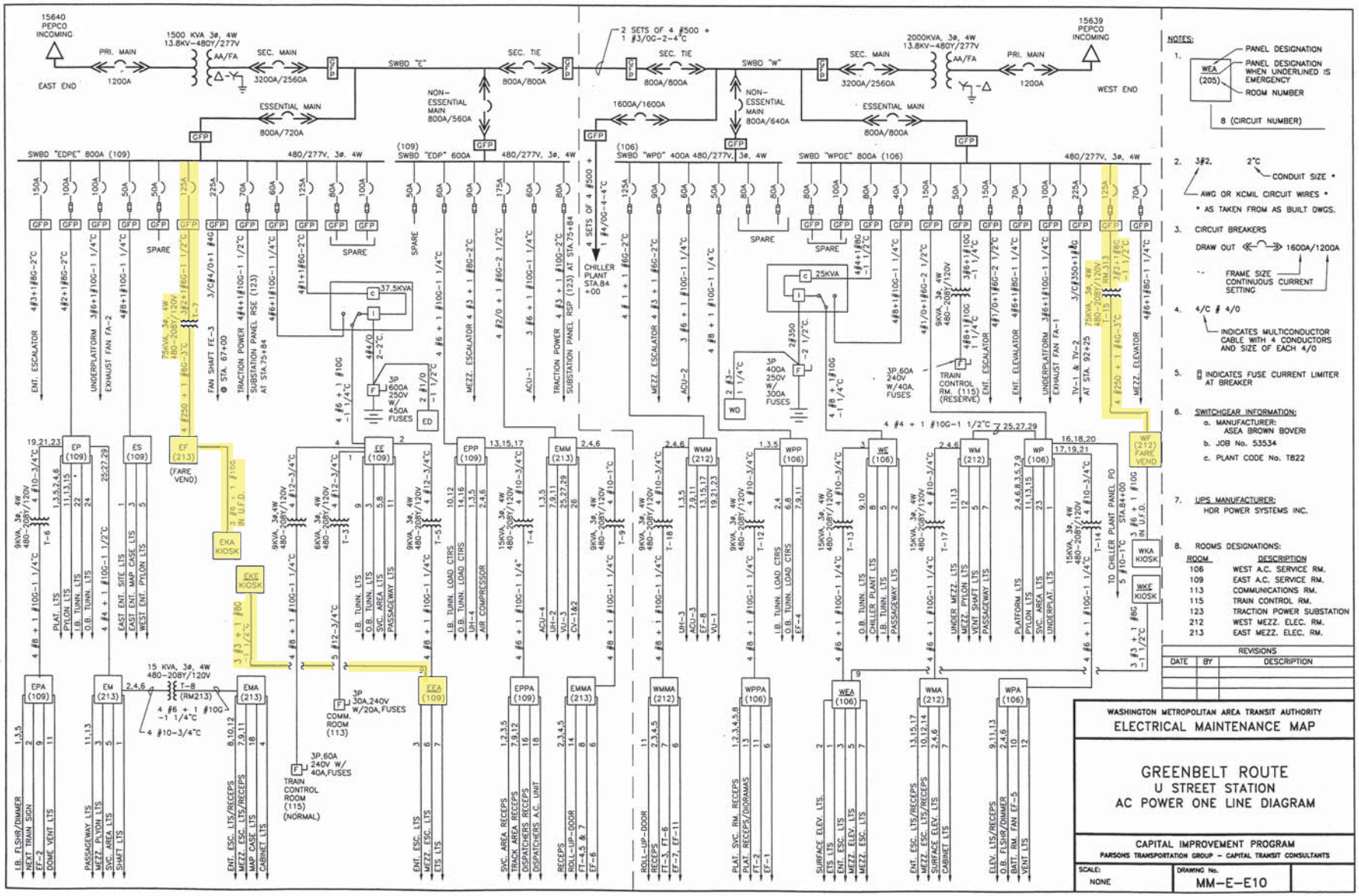
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES

CUBIC AUTOMATIC REVENUE COLLECTION GROUP WESTERN DATA DIVISION

TITLE: U. ST. EAST STATION MEZZANINE LAYOUT

B 67600 931-4015



Pre-Inspection Field Verification 9/30/2014

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 09/30/2014	**Station Name:** U Street - West - E03	**Mezzanine #:** 074	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify that electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: SWBD West / Essential SWBD Source Breaker Name/Number: SWBD Panel WF (Circuit #3) Electrical AFC Panel Name/Number: WF	Rm 106 Rm 106 Rm 212	AC SWBD Rm 106 is located on Platform level, wayside of Track 1.
☑	Verify if disconnect switch is connected to the AFC electrical power panel. Low or High voltage SMNT/POWR escorts requirements?	Disconnect Name/Number: N/A SMNT/POWR escorts: HIGH Voltage		
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to be de-energized.	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of duct / conduit, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support: AFC		Run could be problematic. (100+ ft) Very long run from AFC Panel WF to Kiosk with intermediate manhole. Water in room adjacent to AFC Panel.
☑	Identify handhole or manhole access requirement.	Required PLNT Mason for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		All conduits/ducts are on mezzanine level.

Emergency Power Verification

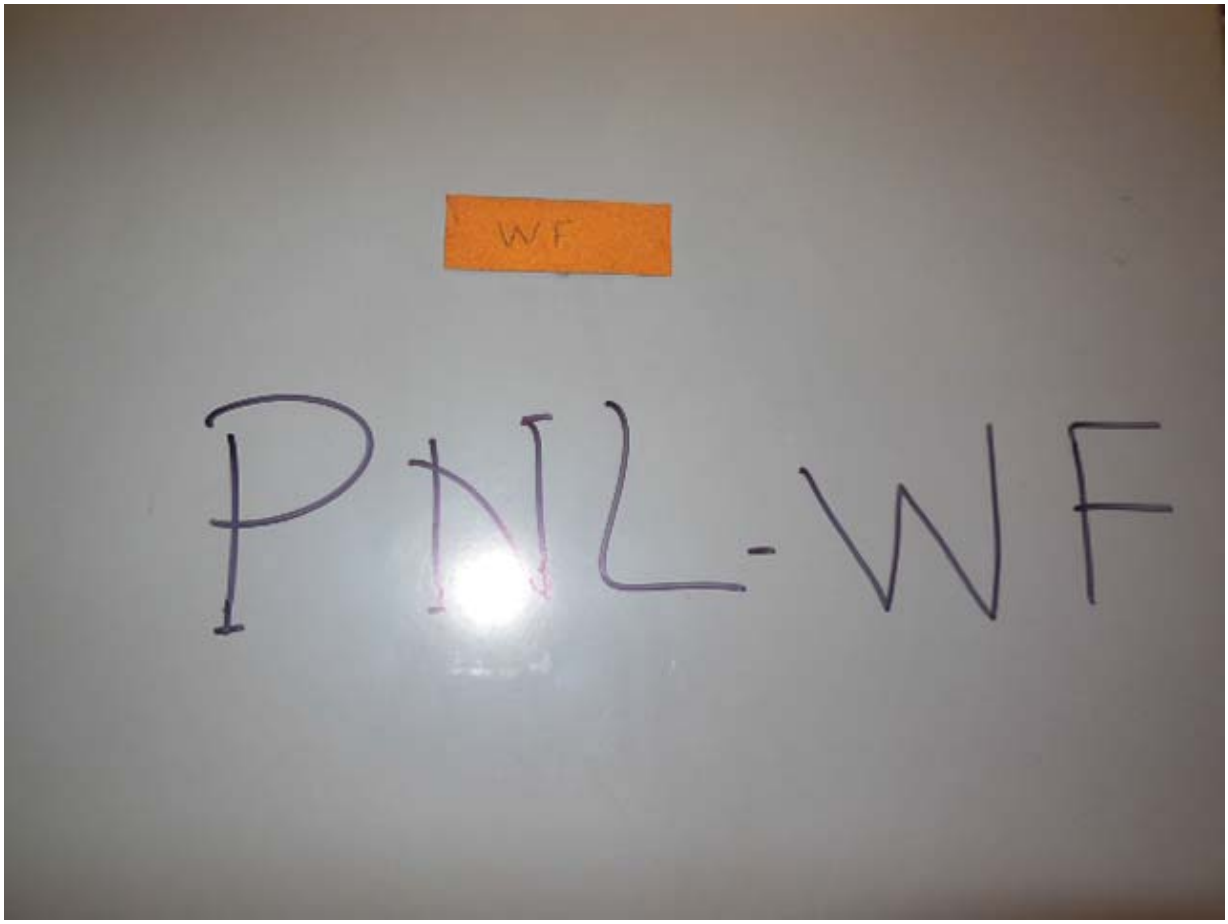
Check	Task	Equipment	Room ID	Notes
☑	Verify if AFC electrical panel is connected to an Automatic Transfer Switch (ATS).	ATS Name/Number:		
☑	Verification of Kiosk Emergency Panel(s) (KE, KES, KESS, etc)	Source Panel Name/Number: Panel WEA Source Breaker Name/Number: Circuit #9 Panel Name/Number: Panel WKE	Rm 106 Rm 106 Kiosk	

Notes and Discrepancies: Panel 2 in Kiosk (breaker #4) de-energizes emergency power to faregates.

Sign Off	**GFP Representative**	**WMATA PRGM**
Name:	Tino Sahoo	
Signature:	Tarmina Sahoo	
Date:	09/30/2014	

Picture 1: E03 U Street West – Intermediate manhole in mezzanine

Picture 2: E03 U Street West - AFC Panel WF in Room 212



Picture 3: E03 U Street West - AFC Panel WF in Room 212

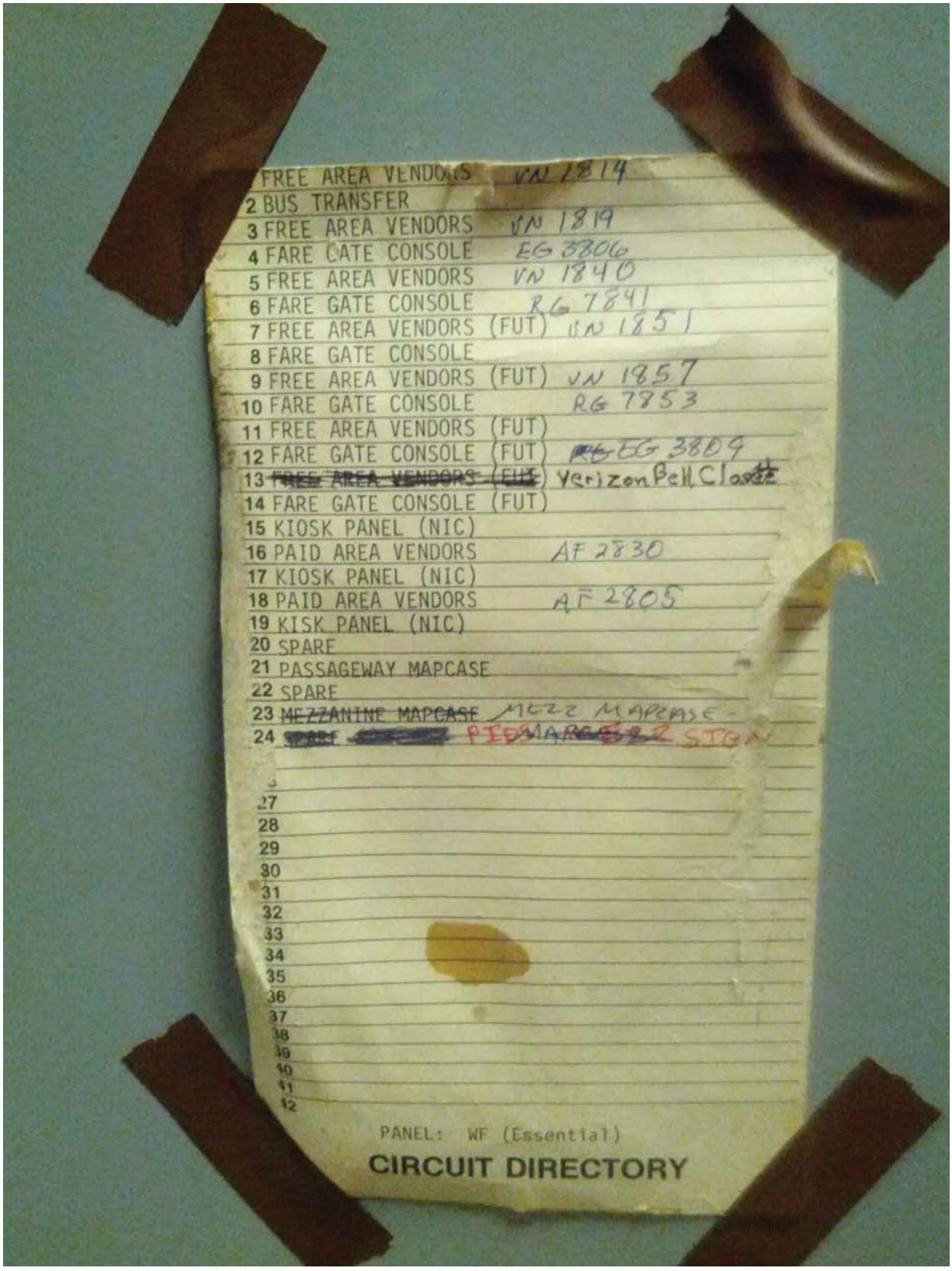
Picture 4: E03 U Street West - AFC Panel WF in Room 212

Picture 5: E03 U Street West - AFC Panel WF in Room 212

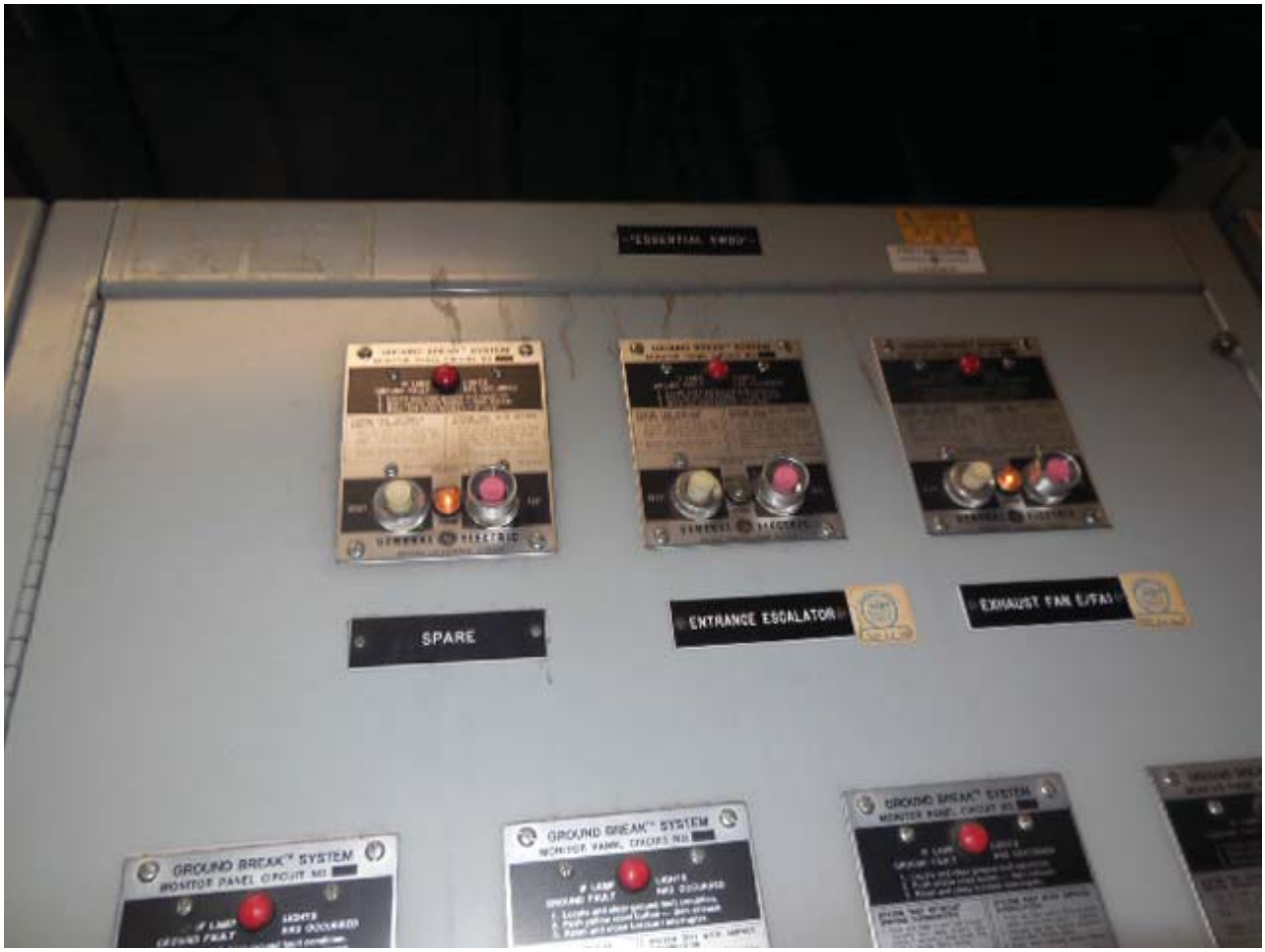
Picture 6: E03 U Street West - AFC Panel WF bottom conduits in Room 212

Picture 7: E03 U Street West - AFC Panel WF bottom conduits in Room 212

Picture 8: E03 U Street West – AFC Panel WF schedule in Room 212



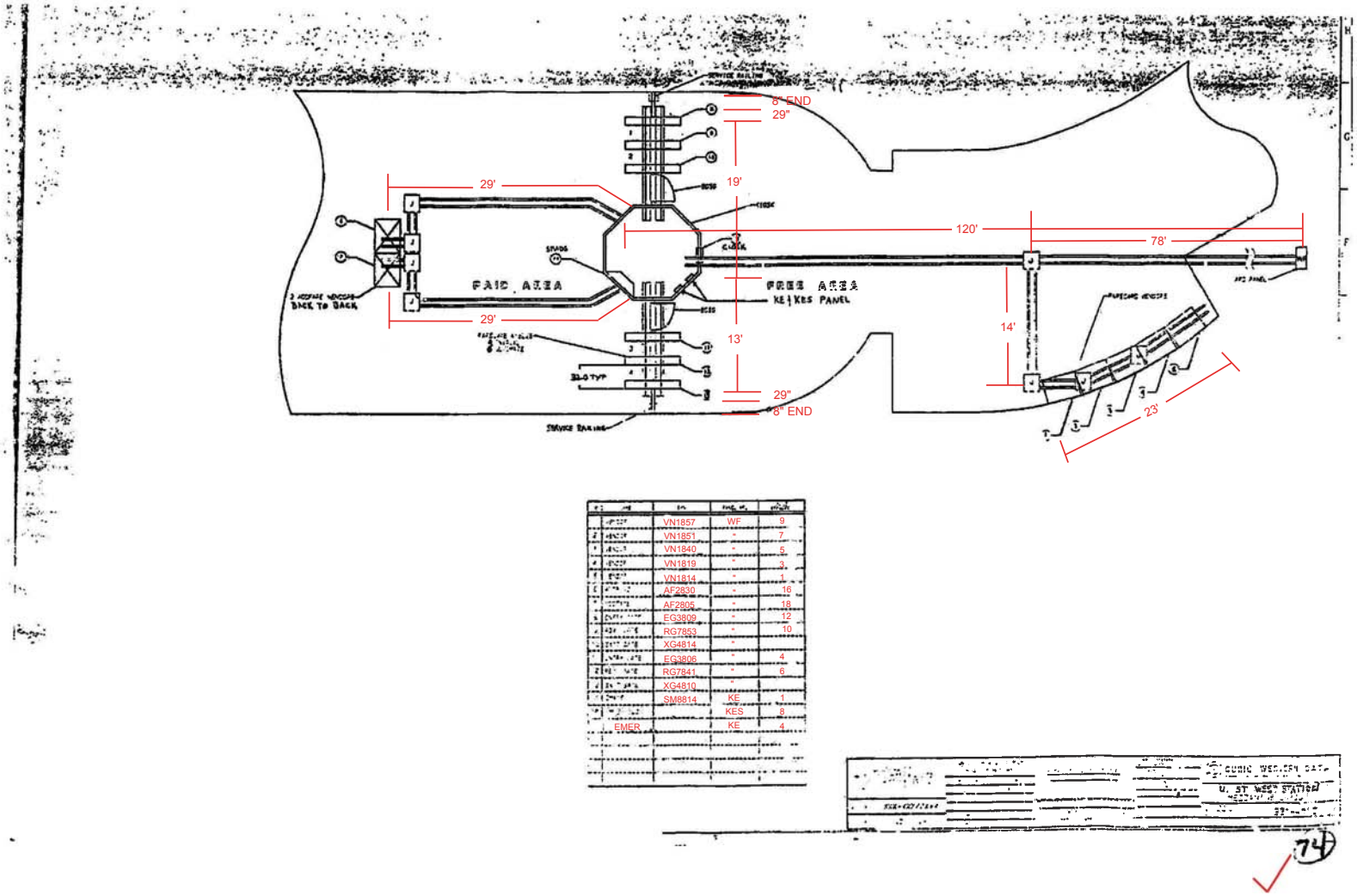
Picture 9: E03 U Street West - Essential SWBD



Picture 10: E03 U Street West – Essential SWBD – Panel WF Circuit 3

Picture 11: E03 U Street West – Standing water in room adjacent to AFC Panel

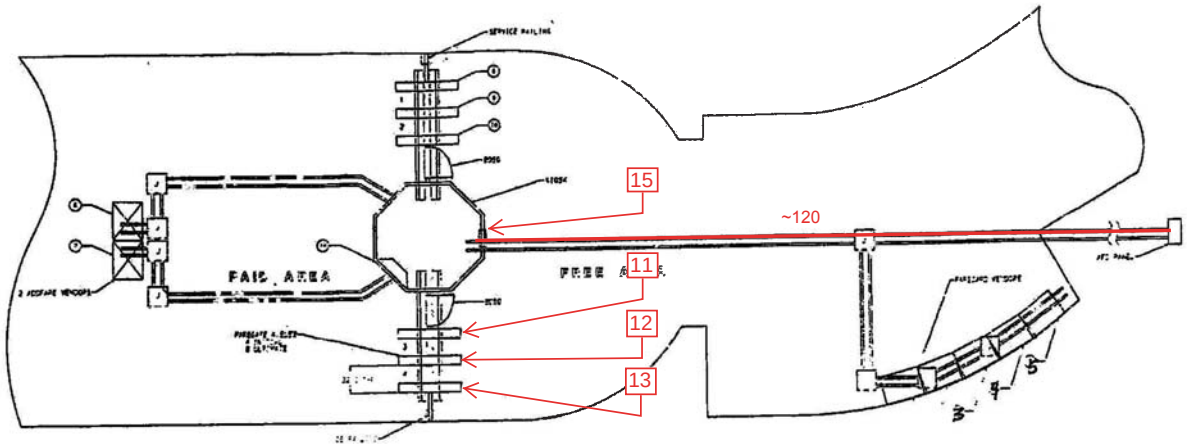
Pre-Inspection Field
Verification 9/30/2014



	VN1857	WF	9
	VN1851	"	7
	VN1840	"	5
	VN1819	"	3
	VN1814	"	1
	AF2830	"	16
	AF2805	"	18
	EG3809	"	12
	RG7853	"	10
	XG4814	"	
	EG3808	"	4
	RG7841	"	6
	XG4810	"	
	SM8814	KE	1
		KES	8
EMER		KE	4

74

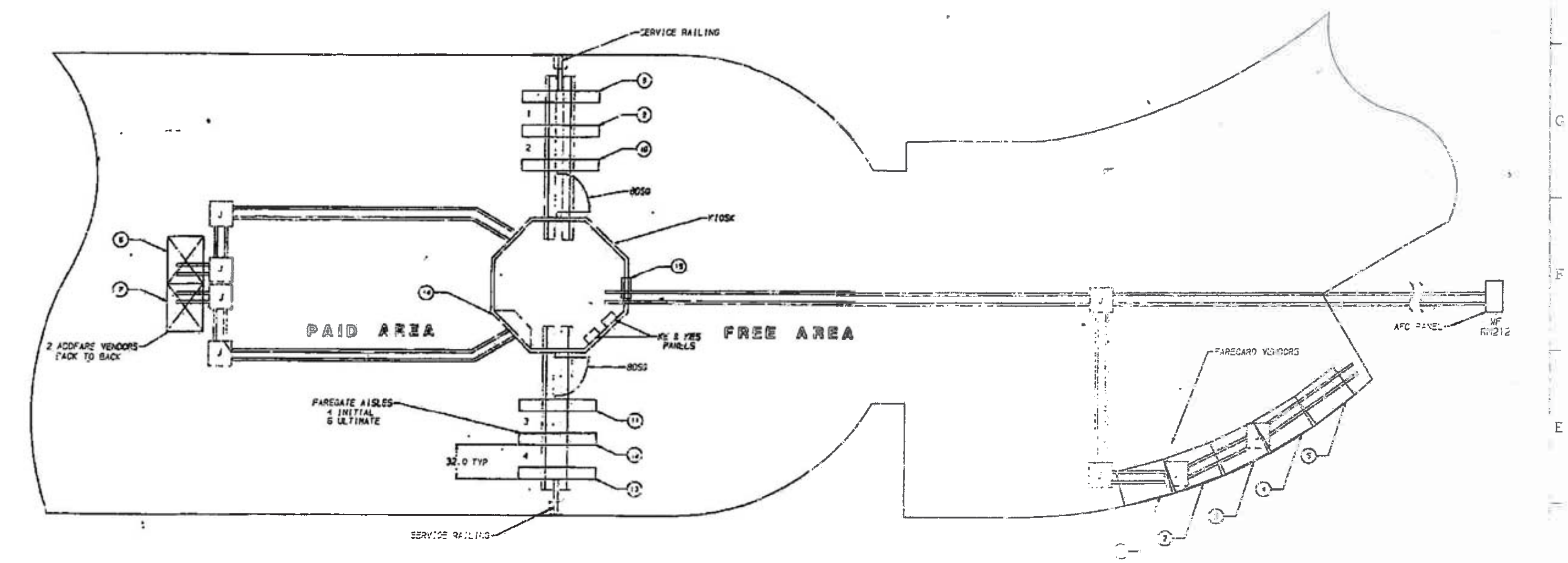
Pre-Inspection Field Verification 9/30/2014



	VN1857	WF	9
	VN1851	"	7
	VN1840	"	5
	VN1819	"	3
	VN1814	"	
	AF2830	"	16
	AF2805	"	18
	EG3809	"	12
	RG7853	"	10
	XG4814	"	
	EG3806	"	4
	RG7841	"	6
	XG4810	"	
	SM8814	KE	1
		KES	8
	EMER	KE	4

(74) ✓

Pre-Inspection Field Verification 9/30/2014



MEZZANINE NO. 74

NOTES:

VENDOR AND ADDFARE INSTALLATION SEE

FOR SMADS INSTALLATION SEE 931-4001.

ENTRY, EXIT AND REVERSIBLE GATE INSTALLATION 931-4003.

BI-DIRECTIONAL SERVICE GATE INSTALLATION 931-4005.

A TYPICAL MEZZANINE INSTALLATION SEE 931-4000.

CIRCUIT BREAKERS WITH COMMON NEUTRAL:
7 & 9; 1,3 & 5; 16 & 18; 10 & 12; 4 & 6.

ITEM	NAME	S/N	PANEL AFC	
1	VENDOR	1857	MF	9
2	VENDOR	1888	MF	7
3	VENDOR	1840	MF	5
4	VENDOR	1819	MF	4
5	VENDOR	1814	MF	1
6	ADDFARE	2120	MF	14
7	ADDFARE	2025	MF	[illegible]
8	ENTRY GATE	3825	MF	[illegible]
9	[illegible] GATE	7853	MF	10
10	EXIT GATE	[illegible]	MF	N/A
11	ENTRY GATE	3805	MF	4
12	REV. GATE	7841	MF	6
13	EXIT GATE	4810	MF	
14	SMADS	8814	KE	1
15	SMADS CLOCK	43512	[illegible]	8
16	EMERGENCY LT		[illegible]	1

CUBIC
AUTOMATIC REVENUE COLLECTION GROUP
WESTERN DATA DIVISION
U ST. WEST STATION
MEZZANINE LAYOUT

EXISTING PANEL "EF"

AMPERES: 400	VOLTS: 120/208			MOUNTING: SURFACE							
MAINS: 250A MCB	PHASE: 3			LOCATION: ELECTRICAL EQUIPMENT ROOM 213							
RATING: 10K AIC	WIRE: 4			SECTION: 1 OF 1							
		CKT BKRS		CKT		CKT	CKT BKRS				
LOAD DESCRIPTION	KVA	AMP	POLE	NO		NO.	POLE	AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.0	SPARE (KIOSK)	1&2
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	1
EXISTING LOAD CENTER "KES"	3.3	40	3	15	- B -	16	1	20	0.8	EXISTING VENDOR	
	2.5	-	-	17	- - C	18	1	20	0.8	EXISTING VENDOR	
	2.5	-	-	19	A - -	20	1	20	0.0	SPARE	
EXISTING VENDOR	0.0	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.0	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR	
SPACE	0.0	-	-	25	A - -	26	1	20	0.0	SPACE	
SPACE	0.0	-	-	27	- B -	28	1	20	0.0	SPACE	
SPACE	0.0	-	-	29	- - C	30	1	20	0.0	SPACE	
SPACE	0.0	-	-	31	A - -	32	1	20	0.0	SPACE	
SPACE	0.0	-	-	33	- B -	34	1	20	0.0	SPACE	
SPACE	0.0	-	-	35	- - C	36	1	20	0.0	SPACE	
SPACE	0.0	-	-	37	A - -	38	1	20	0.0	SPACE	
SPACE	0.0	-	-	39	- B -	40	1	20	0.0	SPACE	
SPACE	0.0	-	-	41	- - C	42	1	20	0.0	SPACE	
-	0.0	-	-	43	A - -	44	1	20	0.0	-	

NOTES 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	4.4 x 50%		2.2 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	**21.9 KVA**	**TOTAL DEMAND KVA**	**20.5 KVA**
		TOTAL DEMAND AMPS	**56.8 AMPS**
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	**6.5 KVA**		
PHASE B:	**8.1 KVA**		
PHASE C:	**7.3 KVA**		

NOTES: A. EXISTING PANEL "EF" IS FED FROM 277/480V, 3ø, 4W EXISTING SWITCHBOARD "SWBD EAST" LOCATED IN AC SWBD. RM. 109, #7-125/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E10).

B. EXISTING WIRING FED FROM LEFT SIDE OF PANEL BY:
- 1-3" C. TO TRANSFORMER (WIRING FILL >40%).

EXISTING WIRING FED FROM TOP OF PANEL BY:
- 2- 3" C. (WIRING FILL >30%).
- 1- 3/4" C. (WIRING FILL >40%).

U-Street West
Pre-Inspection Field
Verification 9/30/2014

SWBD Panel WF
(Breaker #3)

EXISTING PANEL "WF"

AMPERES: 400	VOLTS: 120/208			MOUNTING: SURFACE							
MAINS: 250A MCB	PHASE: 3			LOCATION: ELECTRICAL EQUIPMENT ROOM 212							
RATING: 10K AIC	WIRE: 4			SECTION: 1 OF 1							
		CKT BKRS		CKT		CKT	CKT BKRS				
LOAD DESCRIPTION	KVA	AMP	POLE	NO		NO	POLE	AMP	KVA	LOAD DESCRIPTION	
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
SPARE	0.0	20	1	13	A - -	14	1	20	0.0	SPARE	
EXISTING LOAD CENTER "KES"	3.3	40	3	15	- B -	16	1	20	0.8	EXISTING VENDOR	
	2.5	-	-	17	- - C	18	1	20	0.8	EXISTING VENDOR	
	2.5	-	-	19	A - -	20	1	20	0.8	NEW KIOSK RECEPT. (IT & NEPP)	1
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.0	SPARE (KIOSK)	1&2
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR	
SPACE	0.0	-	-	25	A - -	26	-	-	0.0	SPACE	
SPACE	0.0	-	-	27	- B -	28	-	-	0.0	SPACE	
SPACE	0.0	-	-	29	- - C	30	-	-	0.0	SPACE	
SPACE	0.0	-	-	31	A - -	32	-	-	0.0	SPACE	
SPACE	0.0	-	-	33	- B -	34	-	-	0.0	SPACE	
SPACE	0.0	-	-	35	- - C	36	-	-	0.0	SPACE	
SPACE	0.0	-	-	37	A - -	38	-	-	0.0	SPACE	
SPACE	0.0	-	-	39	- B -	40	-	-	0.0	SPACE	
SPACE	0.0	-	-	41	- - C	42	-	-	0.0	SPACE	

NOTES 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	4.4 x 50%		2.2 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	**21.9 KVA**	**TOTAL DEMAND KVA**	**20.5 KVA**
		TOTAL DEMAND AMPS	**56.8 AMPS**
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	**5.7 KVA**		
PHASE B:	**8.1 KVA**		
PHASE C:	**8.1 KVA**		

NOTES: A. EXISTING PANEL "WF" IS FED FROM 277/480V, 3ø, 4W EXISTING SWITCHBOARD ~~"SWBD WEST"~~ LOCATED IN AC SWBD. RM. 106, ~~#3-125/3P~~ VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E10).

B. EXISTING WIRING FED FROM RIGHT SIDE OF PANEL BY:
- 1-4" C. TO TRANSFORMER (WIRING FILL >40%).

EXISTING WIRING FED FROM TOP OF PANEL BY:
- 2- 3/4" C. (WIRING FILL >30%).

EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 3- 3" C. (1-EMPTY CONDUIT & 2-WIRING FILL >30%).

Essential SWBD
Track 1 Wayside

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED C. MOD	08-14 DATE	REFERENCE DRAWINGS	REVISIONS
DRAWN C. MOD	08-14 DATE	NUMBER / DESCRIPTION	DATE / BY / DESCRIPTION
CHECKED T. IDELSI	08-14 DATE		
APPROVED N/A	DATE		

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED

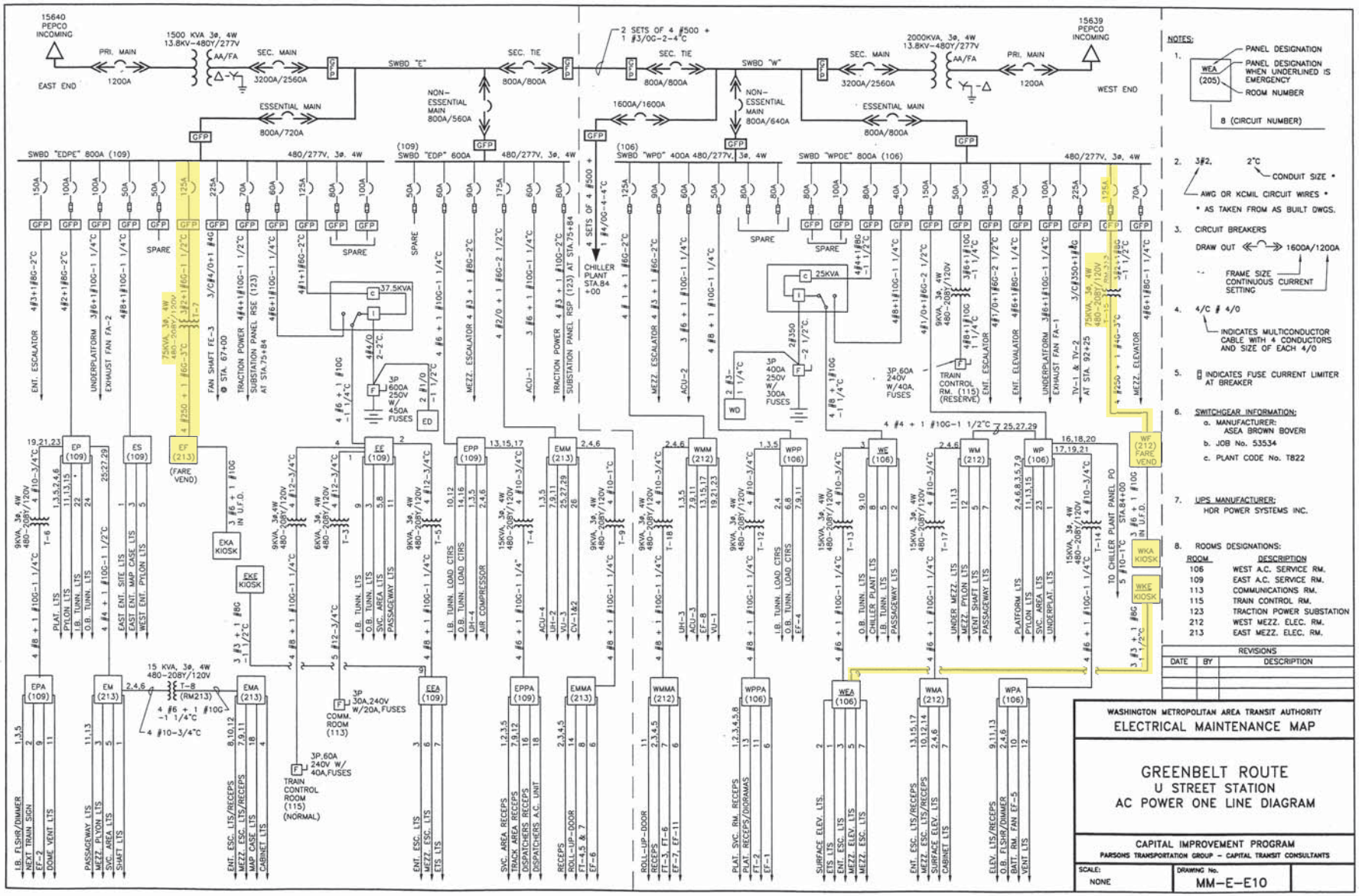
GFP A Gannett Fleming/Parsons JOINT VENTURE

SUBMITTED PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP)
IN METRORAIL STATIONS
U STREET - EAST & WEST
PANEL SCHEDULES

SCALE: NOT TO SCALE

DRAWING NO.: E03-E-102



Pre-Inspection Field Verification 9/30/2014

O:\ELECT\NewMainMap\E-Route\MM-E-E10.dwg Wed Jun 14 11:43:54 2000 LP

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 10/28/2014	**Station Name:** Georgia Ave - E05	**Mezzanine #:** 076	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify that electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: Panel SAES Source Breaker Name/Number: Breaker #37, 39, 41 Electrical AFC Panel Name/Number: MESS Essential	Rm C219 Rm C219 Rm C213	
☑	Verify if disconnect switch is connected to the AFC electrical power panel. Low or High voltage SMNT/POWR escorts requirements?	Disconnect Name/Number: SMNT/POWR escorts: HIGH Voltage		
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to be de-energized.	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of duct / conduit, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support: AFC		Power duct run from Kiosk to AFC Panel is apprx. 53' with one manhole in room C213. Four small manholes on paid side of Kiosk for access to faregate array ducts.
☑	Identify handhole or manhole access requirement.	Required PLNT Mason for handhole/manhole access? NO Identified Conduit/Duct Transition to mezzanine level? UNDETERMINED		No as-built AFC installation plan. Segment 1 of AFC Power run is duct from Kiosk to manhole in room C213. Segment 2 is manhole to duct. Segment 3 is duct to 2" conduit embedded in floor.

Emergency Power Verification

Check	Task	Equipment	Room ID	Notes
☑	Verify if AFC electrical panel is connected to an Automatic Transfer Switch (ATS).	ATS Name/Number:		
☑	Verification of Kiosk Emergency Panel(s) (KE, KES, KESS, etc)	Source Panel Name/Number: Panel KE Source Breaker Name/Number: Breakers #8,10 Panel Name/Number: Emergency Power to Faregates	Kiosk Kiosk	

Notes and Discrepancies:

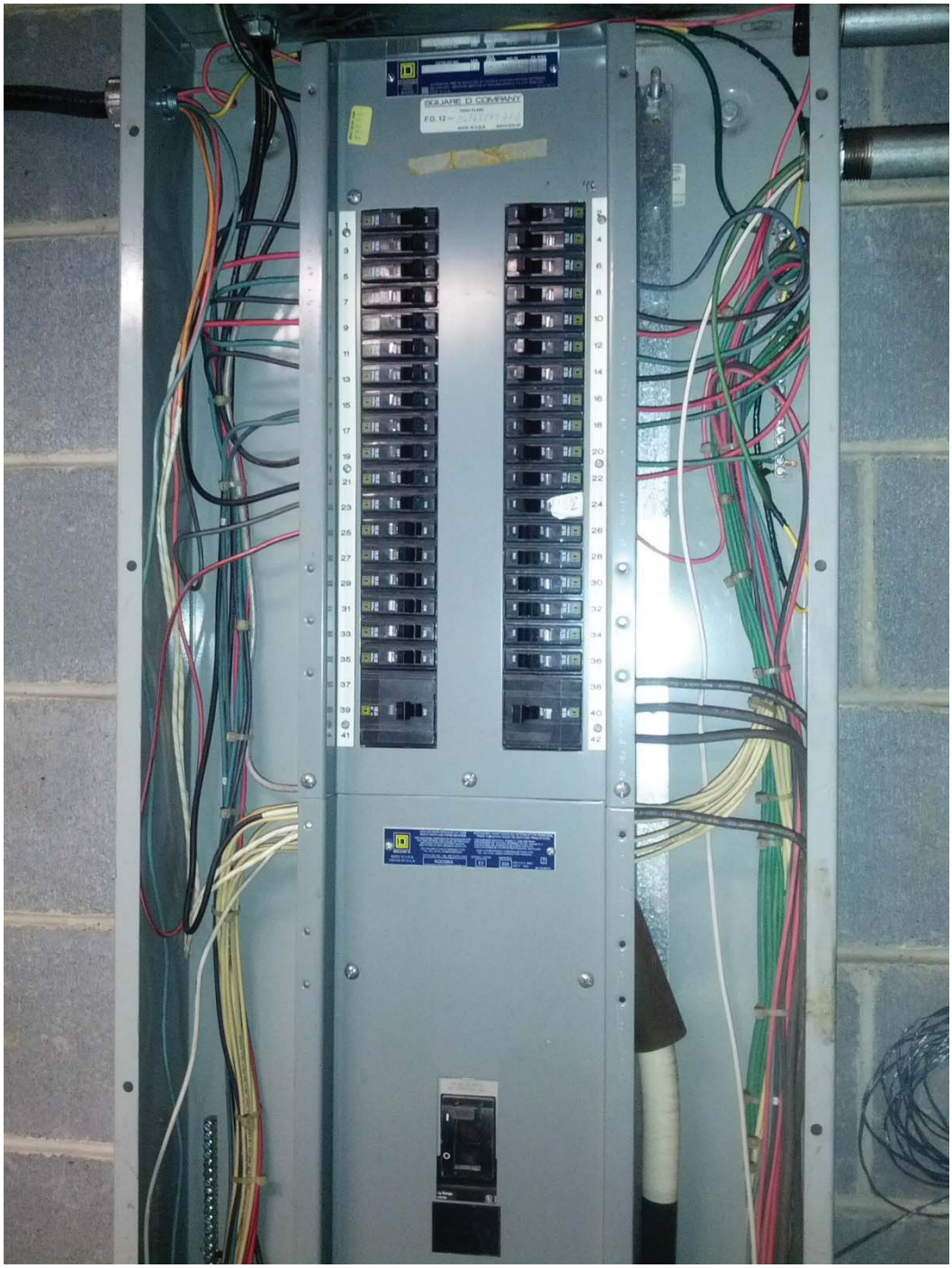
Sign Off	**GFP Representative**	**WMATA PRGM**
Name:	Tino Sahoo	
Signature:	Tarmina Sahoo	
Date:	10/28/2014	

Picture 1: E05 Georgia Ave – Handholes on paid-side of mezzanine for faregate duct access

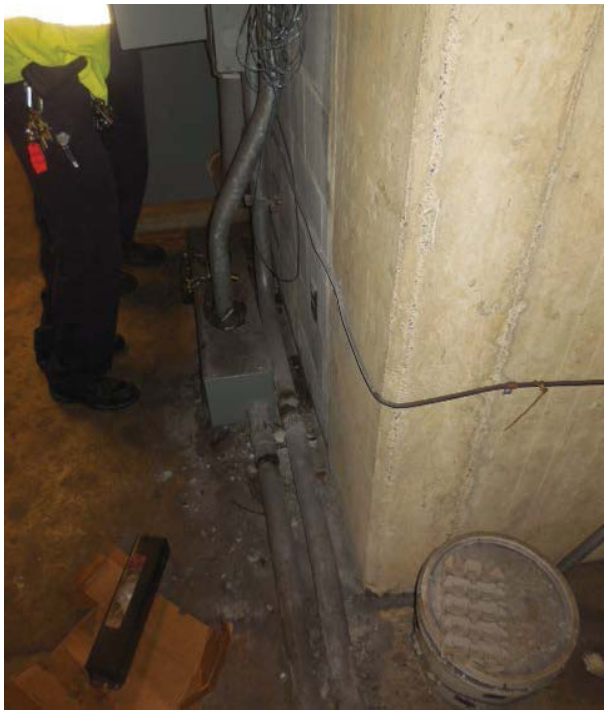
Picture 2: E05 Georgia Ave – Manhole in room C213

Picture 3: E05 Georgia Ave – AFC Panel MESS ESSE in room C213

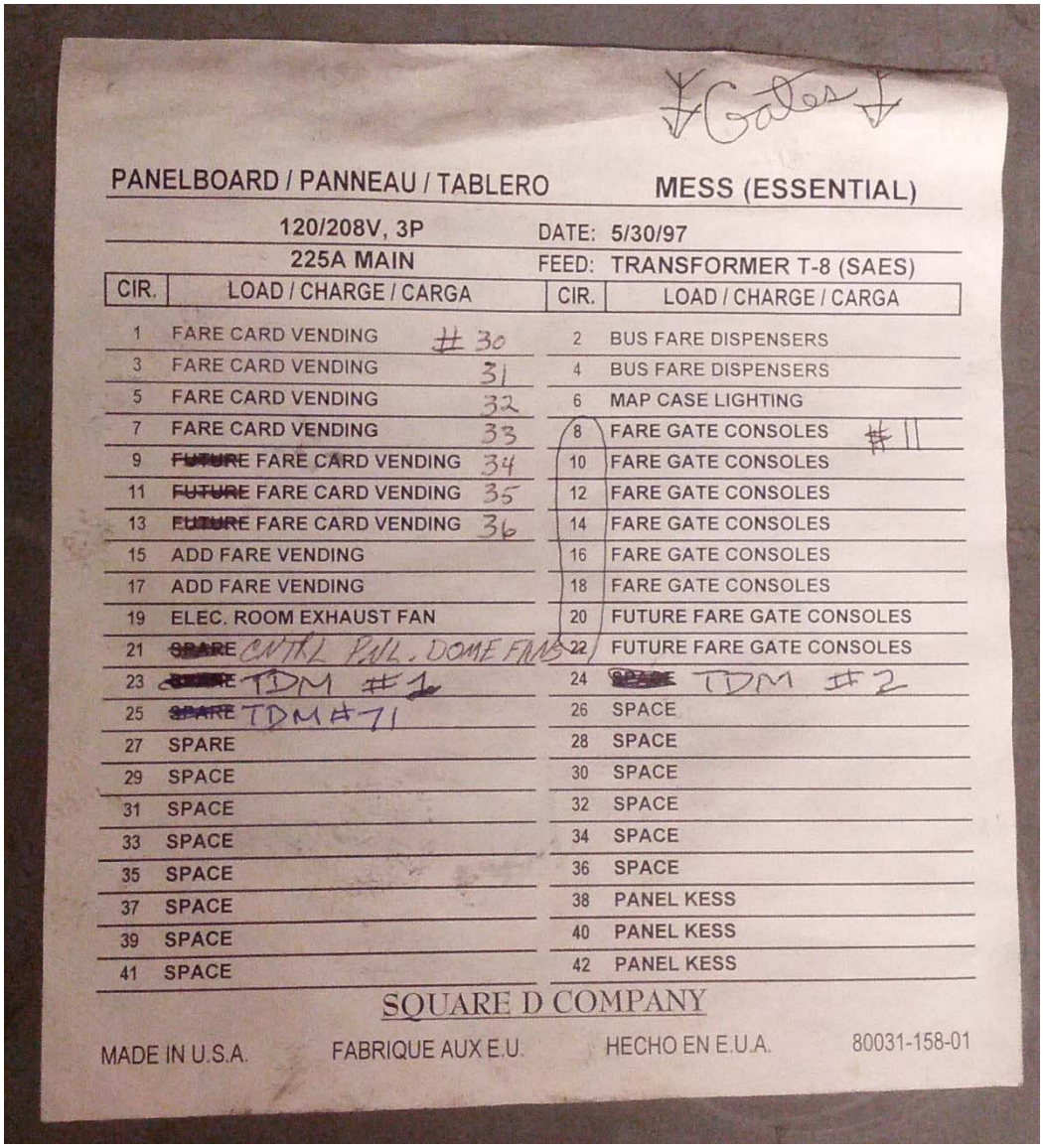
Picture 4: E05 Georgia Ave – AFC Panel MESS ESSE in room C213



Pictures 5-7: E05 Georgia Ave – AFC Panel MESS ESSE in room C213, bottom conduits



Picture 8: E05 Georgia Ave – AFC Panel MESS ESSE in room C213, panel schedule



PANELBOARD / PANNEAU / TABLERO — MESS (ESSENTIAL)

120/208V, 3P — DATE: 5/30/97

225A MAIN — FEED: TRANSFORMER T-8 (SAES)

CIR.	LOAD / CHARGE / CARGA	CIR.	LOAD / CHARGE / CARGA
1	FARE CARD VENDING # 30	2	BUS FARE DISPENSERS
3	FARE CARD VENDING 31	4	BUS FARE DISPENSERS
5	FARE CARD VENDING 32	6	MAP CASE LIGHTING
7	FARE CARD VENDING 33	8	FARE GATE CONSOLES #11
9	~~FUTURE~~ FARE CARD VENDING 34	10	FARE GATE CONSOLES
11	~~FUTURE~~ FARE CARD VENDING 35	12	FARE GATE CONSOLES
13	~~FUTURE~~ FARE CARD VENDING 36	14	FARE GATE CONSOLES
15	ADD FARE VENDING	16	FARE GATE CONSOLES
17	ADD FARE VENDING	18	FARE GATE CONSOLES
19	ELEC. ROOM EXHAUST FAN	20	FUTURE FARE GATE CONSOLES
21	~~SPARE~~ CNTRL PNL. DOME FANS	22	FUTURE FARE GATE CONSOLES
23	~~SPARE~~ TDM #1	24	~~SPARE~~ TDM #2
25	~~SPARE~~ TDM #71	26	SPACE
27	SPARE	28	SPACE
29	SPACE	30	SPACE
31	SPACE	32	SPACE
33	SPACE	34	SPACE
35	SPACE	36	SPACE
37	SPACE	38	PANEL KESS
39	SPACE	40	PANEL KESS
41	SPACE	42	PANEL KESS

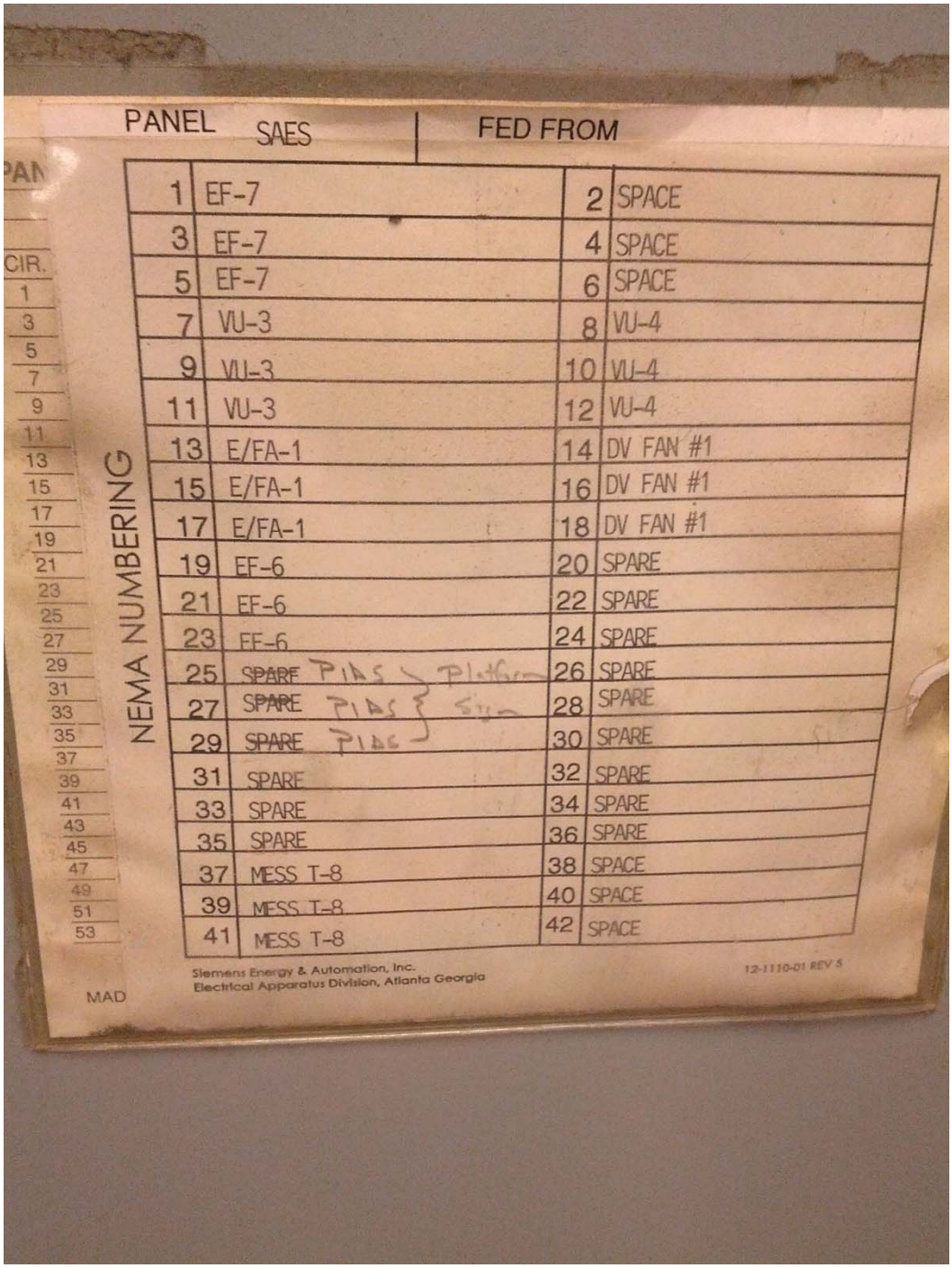
SQUARE D COMPANY

MADE IN U.S.A. FABRIQUE AUX E.U. HECHO EN E.U.A. 80031-158-01

Picture 9: E05 Georgia Ave – Panel SAES in room C219

Picture 10: E05 Georgia Ave – Panel SAES in room C219, Circuits 37,39,41

Picture 11: E05 Georgia Ave – Panel SAES in room C219, panel schedule



PANEL SAES | FED FROM

NEMA NUMBERING

CIR.			
1	EF-7	2	SPACE
3	EF-7	4	SPACE
5	EF-7	6	SPACE
7	VU-3	8	VU-4
9	VU-3	10	VU-4
11	VU-3	12	VU-4
13	E/FA-1	14	DV FAN #1
15	E/FA-1	16	DV FAN #1
17	E/FA-1	18	DV FAN #1
19	EF-6	20	SPARE
21	EF-6	22	SPARE
23	EF-6	24	SPARE
25	~~SPARE~~ PIAS } Platform	26	SPARE
27	~~SPARE~~ PIAS } Sign	28	SPARE
29	~~SPARE~~ PIAS }	30	SPARE
31	SPARE	32	SPARE
33	SPARE	34	SPARE
35	SPARE	36	SPARE
37	MESS T-8	38	SPACE
39	MESS T-8	40	SPACE
41	MESS T-8	42	SPACE

Siemens Energy & Automation, Inc.
Electrical Apparatus Division, Atlanta Georgia

12-1110-01 REV 5

MAD

Pre-Inspection Field Verification 10/28/2014

EXISTING PANEL "MESS" ESSENTIAL

AMPERES: 225	VOLTS: 120/208	MOUNTING: SURFACE
MAINS: 225 MCB	PHASE: 3	LOCATION: ELECTRICAL ROOM C213
RATING: 10K AIC	WIRE: 4	SECTION: 1 OF 1

LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT. NO.		CKT. NO.	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.6	20	1	25	A - -	26	1	20	0.0	SPARE
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	27	- B -	28	1	20	0.0	SPARE
1&2 SPARE (KIOSK)	0.0	20	1	29	- - C	30	1	20	0.0	SPARE
SPARE	0.0	20	1	31	A - -	32	1	20	0.0	SPARE
SPARE	0.0	20	1	33	- B -	34	1	20	0.0	SPARE
SPARE	0.0	20	1	35	- - C	36	1	20	0.0	SPARE
SPARE	0.0	20	3	37	A - -	38	3	100	3.3	EXIST. KIOSK LOAD CENTER "KES"
	0.0	-	-	39	- B -	40	-	-	2.5	
	0.0	-	-	41	- - C	42	-	-	2.5	

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	10.0 x 50%		5.0 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	27.5 KVA	TOTAL DEMAND KVA	23.3 KVA
		TOTAL DEMAND AMPS	64.6 AMPS

CONNECTED LOAD PHASE SUMMARY

PHASE A:	9.7 KVA
PHASE B:	8.9 KVA
PHASE C:	6.4 KVA

NOTES: A. EXISTING PANEL "MESS" IS FED FROM 277/480V, 3Ø, 4W EXISTING PANEL "SAES" LOCATED IN AC SWBD. RM. C219, CIRCUIT #~~35,37,39~~ 125/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E18).

Breakers #37,39,41

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 2-1/2" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 1-4" C. TO TRANSFORMER (WIRING FILL >40%).
- 1-1 1/2" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM LEFT SIDE OF PANEL BY:
- 1-1/2" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM RIGHT SIDE OF PANEL BY:
- 2-3/4" C. (1-WIRING FILL >40% & 1-EMPTY).

CONTRACT NO. 14-FQ10060-CENI-24

DESIGNED C. MCD 09-14 DATE
DRAWN C. MCD 09-14 DATE
CHECKED S. KHAN 09-14 DATE
APPROVED N/A DATE

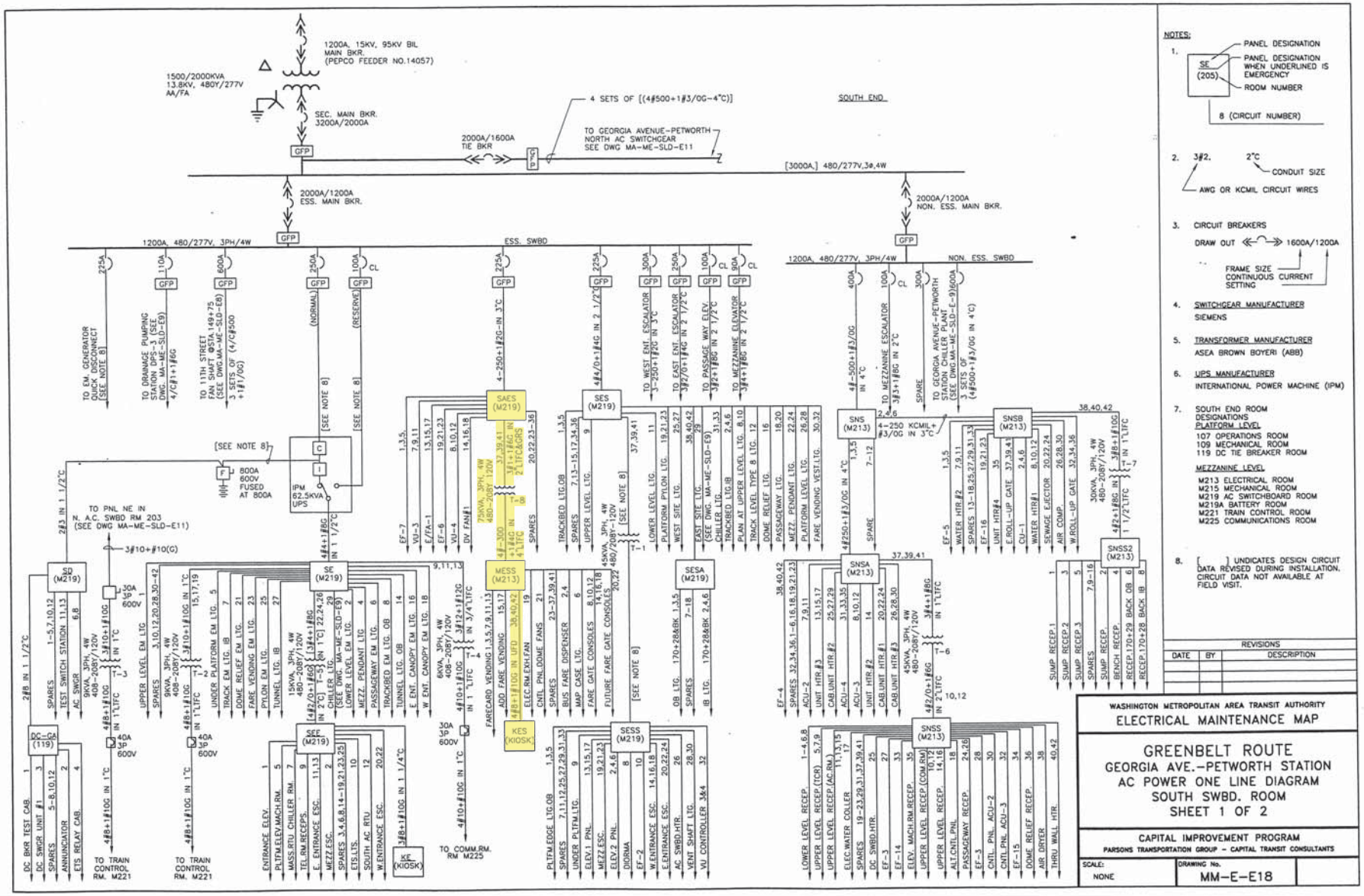
REFERENCE DRAWINGS NUMBER	DESCRIPTION	REVISIONS DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM
APPROVED

GFP A Gannett Fleming/Parsons JOINT VENTURE
SUBMITTED PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP) IN METRORAIL STATIONS
GEORGIA AVENUE
PANEL SCHEDULE

SCALE NOT TO SCALE
DRAWING NO. E05-E-102



Pre-Inspection Field Verification 10/28/2014

O:\ELECT\NewMaintMap\E-Route\MM-E-E18.dwg Wed Jun 14 16:47:59 2000 LP

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 09/11/2014	**Station Name:** E07 West Hyattsville	**Mezzanine #** 077	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: SWBD - A Source Breaker Name/Number: "PANEL F" Circuit #6 Electrical AFC Panel Name/Number: F	108 108 114	
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: N/A SMNT/POWR escorts: HIGH Voltage		
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support:		
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		All conduits/ducts are one level; handhole access is required.

Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	Oscar Ilagan
Signature:	Tarmeya Sahoo	
Date:	9/11/14	

Photo #1: E07 West Hyattsville – Handhole in mezzanine floor

Photo #2: E07 West Hyattsville – Handhole in mezzanine floor

Photo #3: E07 West Hyattsville – Handhole in mezzanine level corridor

Photo #4: E07 West Hyattsville – Panel F in Room 108

Photo #5: E07 West Hyattsville – Panel F in Room 108

Photo #6: E07 West Hyattsville – SWBD-A in Room 108

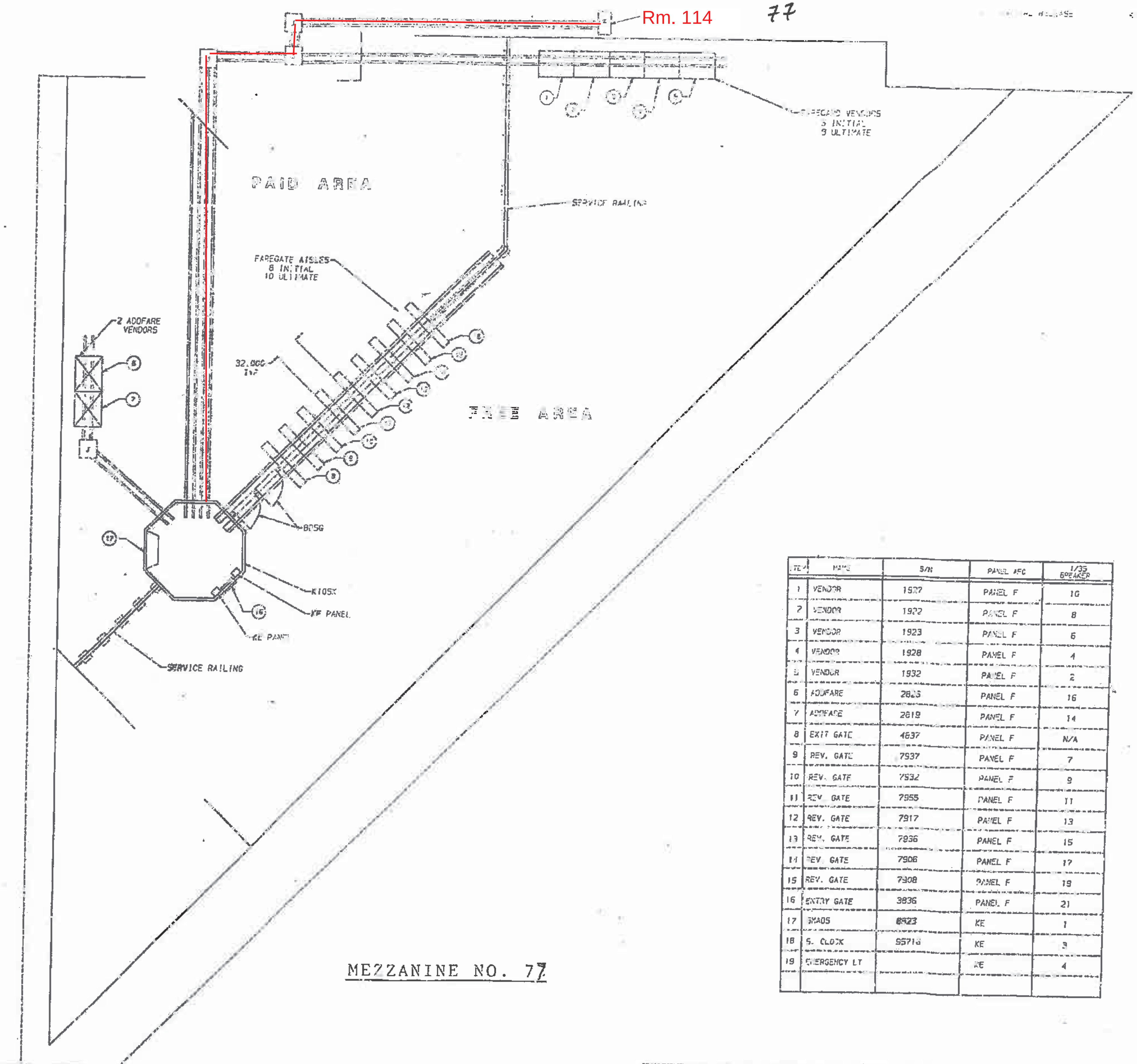
Photo #7: E07 West Hyattsville – SWBD A breaker for Panel F in Room 108

77

NOTES:

1. FOR VENDOR AND ADDFARE INSTALLATION SEE 931-4002.
2. FOR SMADS INSTALLATION SEE 931-4001.
3. FOR ENTRY, EXIT AND REVERSIBLE GATE INSTALLATION SEE 931-4003.
4. FOR BI-DIRECTIONAL SERVICE GATE INSTALLATION SEE 931-4005.
5. FOR A TYPICAL MEZZANINE INSTALLATION SEE 931-4006.
6. CIRCUIT BREAKERS WITH COMMON NEUTRAL, 2,4 & 6; 8 & 10; 7,9 & 11; 13,15 & 17; 19 & 21.

Pre-inspection Field Verification 9/11/2014



ITEM	NAME	S/N	PANEL AFC	1/35 BREAKER
1	VENDOR	1927	PANEL F	10
2	VENDOR	1922	PANEL F	8
3	VENDOR	1923	PANEL F	6
4	VENDOR	1928	PANEL F	4
5	VENDOR	1932	PANEL F	2
6	ADDFARE	2825	PANEL F	16
7	ADDFARE	2819	PANEL F	14
8	EXIT GATE	4637	PANEL F	N/A
9	REV. GATE	7937	PANEL F	7
10	REV. GATE	7932	PANEL F	9
11	REV. GATE	7955	PANEL F	11
12	REV. GATE	7917	PANEL F	13
13	REV. GATE	7936	PANEL F	15
14	REV. GATE	7906	PANEL F	17
15	REV. GATE	7908	PANEL F	19
16	ENTRY GATE	3836	PANEL F	21
17	SMADS	8923	KE	1
18	S. CLOCK	95718	KE	3
19	EMERGENCY LT		KE	4

MEZZANINE NO. 77

NOTICE OF PROPRIETARY RIGHTS IN DATA

DO NOT SCALE DRAWING

CUBIC WESTERN DATA

W. HYATTSVILLE STATION MEZZANINE LAYOUT

931-4021

Pre-inspection Field Verification
9/11/2014

EXISTING PANEL "F"

AMPERES: 250	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 250 A MCB	PHASE: 3	LOCATION: ELECTRICAL EQUIPMENT ROOM 114	
RATING: 10K AIC	WIRE: 4	SECTION: 1 OF 1	

LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT. NO.		CKT. NO	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION
EXISTING VENDOR	0.8	20	1	1	A	2	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	3	B	4	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	5	C	6	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	7	A	8	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	9	B	10	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	11	C	12	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	13	A	14	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	15	B	16	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	17	C	18	1	20	0.8	NEW KIOSK RECEPT. (IT & NEPP) 1
EXISTING VENDOR	0.8	20	1	19	A	20	1	20	0.0	SPARE (KIOSK) 1&2
EXISTING VENDOR	0.8	20	1	21	B	22	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	23	C	24	1	20	0.0	SPARE
SPARE	0.0	20	1	25	A	26	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	27	B	28	1	20	0.0	SPARE
SPARE	0.0	20	1	29	C	30	1	20	0.0	SPARE
SPARE	0.0	20	1	31	A	32	1	20	0.0	SPARE
SPARE	0.0	20	1	33	B	34	1	20	0.0	SPARE
SPARE	0.0	20	1	35	C	36	1	20	0.0	SPARE
SPARE	0.0	30	3	37	A	38	1	20	0.0	SPARE
	0.0	-	-	39	B	40	1	20	0.0	SPARE
	0.0	-	-	41	C	42	1	20	0.0	SPARE

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	6.8 x 50%		3.4 KVA
MISC APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	0.0 x 125%		0.0 KVA
AC	0.0 x 100%		0.0 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	16.8 KVA	TOTAL DEMAND KVA	13.4 KVA
		TOTAL DEMAND AMPS	37.2 AMPS

CONNECTED LOAD PHASE SUMMARY

PHASE A.	5.8 KVA
PHASE B.	6.4 KVA
PHASE C.	4.8 KVA

NOTES: A. EXISTING PANEL "F" IS FED FROM 277/480V, 3Ø, 4W EXISTING SWITCHBOARD "SWBD–A" LOCATED IN AC SWBD. RM. 108, CIRCUIT #6–125/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM–E–E24).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1–4" C. TO TRANSFORMER (WIRING FILL >40%).
- 1–1/2" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM RIGHT SIDE OF PANEL BY:
- 2–1" C. (WIRING FILL >40%).
- 1–1" C. (WIRING FILL >20%).
- 1–1" EMPTY CONDUIT.

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED C. [illegible] 09-14 DATE
DRAWN C. [illegible] 09-14 DATE
CHECKED B. [illegible] 09-14 DATE
APPROVED N/A DATE

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION

REVISIONS		
DATE	BY	DESCRIPTION

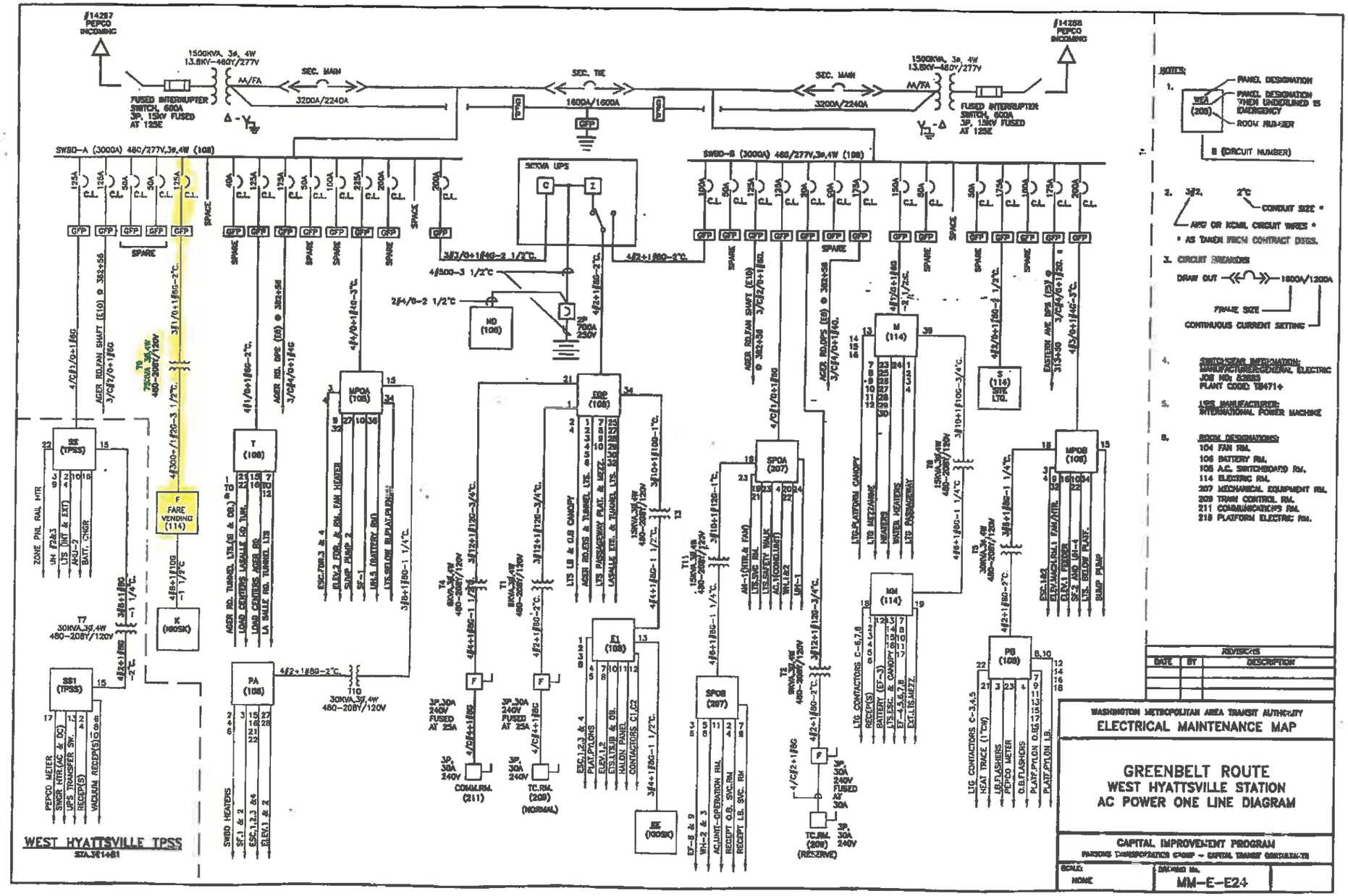
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM
APPROVED

GFP A Bennett Fleming/Parsons JOINT VENTURE
SUBMITTED
PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP)
IN METRORAIL STATIONS
WEST HYATTSVILLE
PANEL SCHEDULE

SCALE: NOT TO SCALE
DRAWING NO.: E07-E-102

Pre-inspection Field Verification
9/11/2014



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Pre-Inspection Mezzanine Walkthrough Checklist

Date: 09/11/2014	**Station Name:** Prince George's Plaza	**Mezzanine #** 078	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: Switchboard #1 Source Breaker Name/Number: "PANEL-KESS" Circuit #2 Electrical AFC Panel Name/Number: KESS	130 130 210	Switchboard #1 located in AC SWBD Room 130. AFC Panel "KESS" located in Room 210 on mezzanine floor.
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: N/A SMNT/POWR escorts: HIGH Voltage		
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support: AFC		
☐	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? NO		All conduits/ducts are on one level.

Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:	Tarmeza Sahoo	
Date:	9/11/14	

Photo #1: E08 Prince George's Plaza –Handhole in mezzanine floor

Photo #2: E08 Prince George's Plaza – Bottom of Panel KESS in room 210

Photo #3: E08 Prince George's Plaza – Panel KESS in room 210

Photo #4: E08 Prince George's Plaza – Panel KESS in room 210

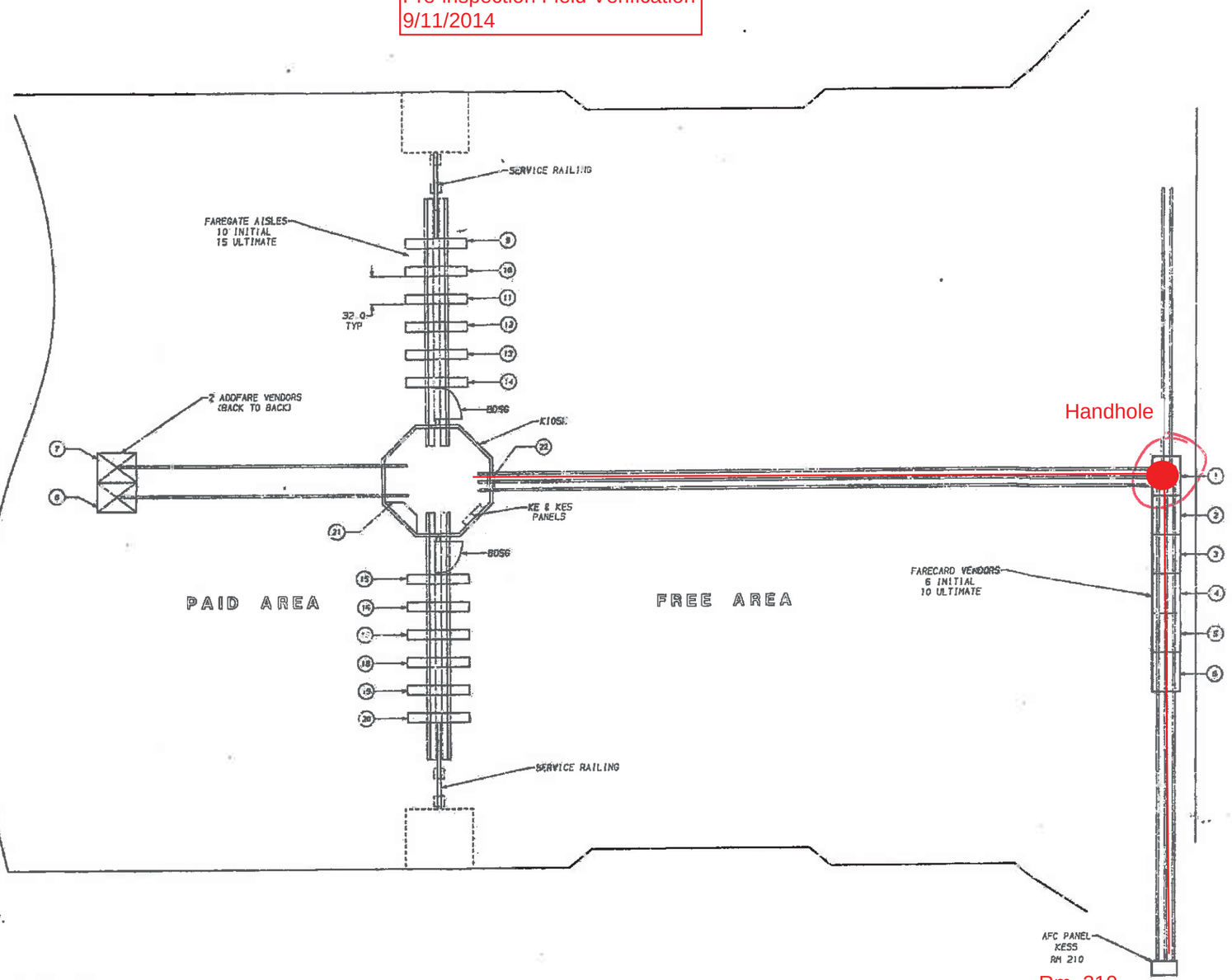
Photo #5: E08 Prince George's Plaza – SWBD breaker for Panel KESS in room 130 near track#1

Photo #3: E08 Prince George's Plaza – Top of Panel KESS in room 210

REVISIONS			
SYMBOL	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	11/05/14	

Pre-inspection Field Verification
9/11/2014

ITEM	NAME	S/N	PANEL AFC	1/3S BREAKER
1	VENDOR	1940	KESS	7
2	VENDOR	1933	KESS	9
3	VENDOR	1941	KESS	11
4	VENDOR	1935	KESS	13
5	VENDOR	1939	KESS	15
6	VENDOR	1942	KESS	17
7	ADDFARE	2827	KESS	21
8	ADDFARE	2838	KESS	19
9	ENTRY GATE	FUTURE	KESS	N/A
10	REV. GATE	7934	KESS	2
11	REV. GATE	7909	KESS	4
12	REV. GATE	7930	KESS	6
13	REV. GATE	7938	KESS	8
14	EXIT GATE	4835	KESS	N/A
15	ENTRY GATE	3837	KESS	10
16	REV. GATE	7931	KESS	12
17	REV. GATE	7915	KESS	14
18	REV. GATE	7920	KESS	16
19	REV. GATE	7928	KESS	18
20	REV. GATE	7913	KESS	N/A
21	SMADS	8803	KE	1
22	S. CLOCK	98918	KE	6
23	EMERGENCY LT		KE	4



NOTES:

1. FOR VENDOR AND ADDFARE INSTALLATION SEE 931-4002.
2. FOR SMADS INSTALLATION SEE 931-4001.
3. FOR ENTRY, EXIT AND REVERSIBLE GATE INSTALLATION SEE 931-4003.
4. FOR BI-DIRECTIONAL SERVICE GATE INSTALLATION SEE 931-4005.
5. FOR A TYPICAL MEZZANINE INSTALLATION SEE 931-4000.
6. CIRCUIT BREAKERS WITH COMMON NEUTRAL:
   3,7 & 9; 13,15 & 17; 19 & 21; 2,4 & 6; 10 & 12; 14,16 & 18.

MEZZANINE NO. 78

SEE SEPARATE PL WHEN ITEM NUMBERS ARE USED (REF DESIGNATOR MAY BE USED IN LIEU OF ITEM NUMBERS)

NEXT ASSY: XXX-XXXX/XXX

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES

LINEAR

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

CUBIC

PRINCE GEORGES STATION
MEZZANINE LAYOUT

SIZE 31 87680 931-4034 A

SCALE 1/4" SHEET 1 OF 1

Pre-inspection Field Verification
9/11/2014

EXISTING PANEL "KESS"

AMPERES: 400	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 250A MCB	PHASE: 3	LOCATION: ELECTRICAL EQUIPMENT ROOM 210	
RATING: 10K AIC	WIRE: 4	SECTION: 1 OF 1	

LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT. NO.		CKT. NO.	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION	
EXIST. KIOSK LOAD CENTER "KES"	2.9	30	3	1	A - -	2	1	20	0.8	EXISTING VENDOR	
	2.5	-	-	3	- B -	4	1	20	0.8	EXISTING VENDOR	
	2.5	-	-	5	- - C	6	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR	
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.8	NEW KIOSK RECEPT. (IT & NEPP)	1
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.8	SPARE (KIOSK)	1&2
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	25	A - -	26	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	27	- B -	28	1	20	0.8	SPARE	
EXISTING VENDOR	0.8	20	1	29	- - C	30	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	31	A - -	32	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	33	- B -	34	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	35	- - C	36	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	37	A - -	38	1	20	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	39	- B -	40	2	80	0.0	SPARE	
EXISTING VENDOR	0.8	20	1	41	- - C	42	-	-	0.0		

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	12.8 x 50%		6.4 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	30.3 KVA	TOTAL DEMAND KVA	24.7 KVA
		TOTAL DEMAND AMPS	68.5 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	10.9 KVA		
PHASE B:	9.7 KVA		
PHASE C:	9.7 KVA		

NOTES: A. EXISTING PANEL "KESS" IS FED FROM 277/480V, 3ø, 4W EXISTING SWITCHBOARD "SW BD #1" LOCATED IN AC SWBD. RM. 130, CIRCUIT #2-125/3P VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E26).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 1-4" C. TO TRANSFORMER (WIRING FILL >40%).
- 2-3/4" C. (WIRING FILL >40%).
- 1-1/2" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 2-6 1/2"x 1 1/2" FLOOR DUCT (WIRING FILL >40%).
- 1-1 1/2" EMPTY CONDUIT.
- 1-3/4" EMPTY CONDUIT.

CONTRACT NO. 14-FQ10060-CENI-24

DESIGNED	[illegible]	09-14 DATE
DRAWN	[illegible]	09-14 DATE
CHECKED	[illegible]	09-14 DATE
APPROVED	[illegible]	DATE

REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

GFP A Gannett Fleming/Parsons JOINT VENTURE

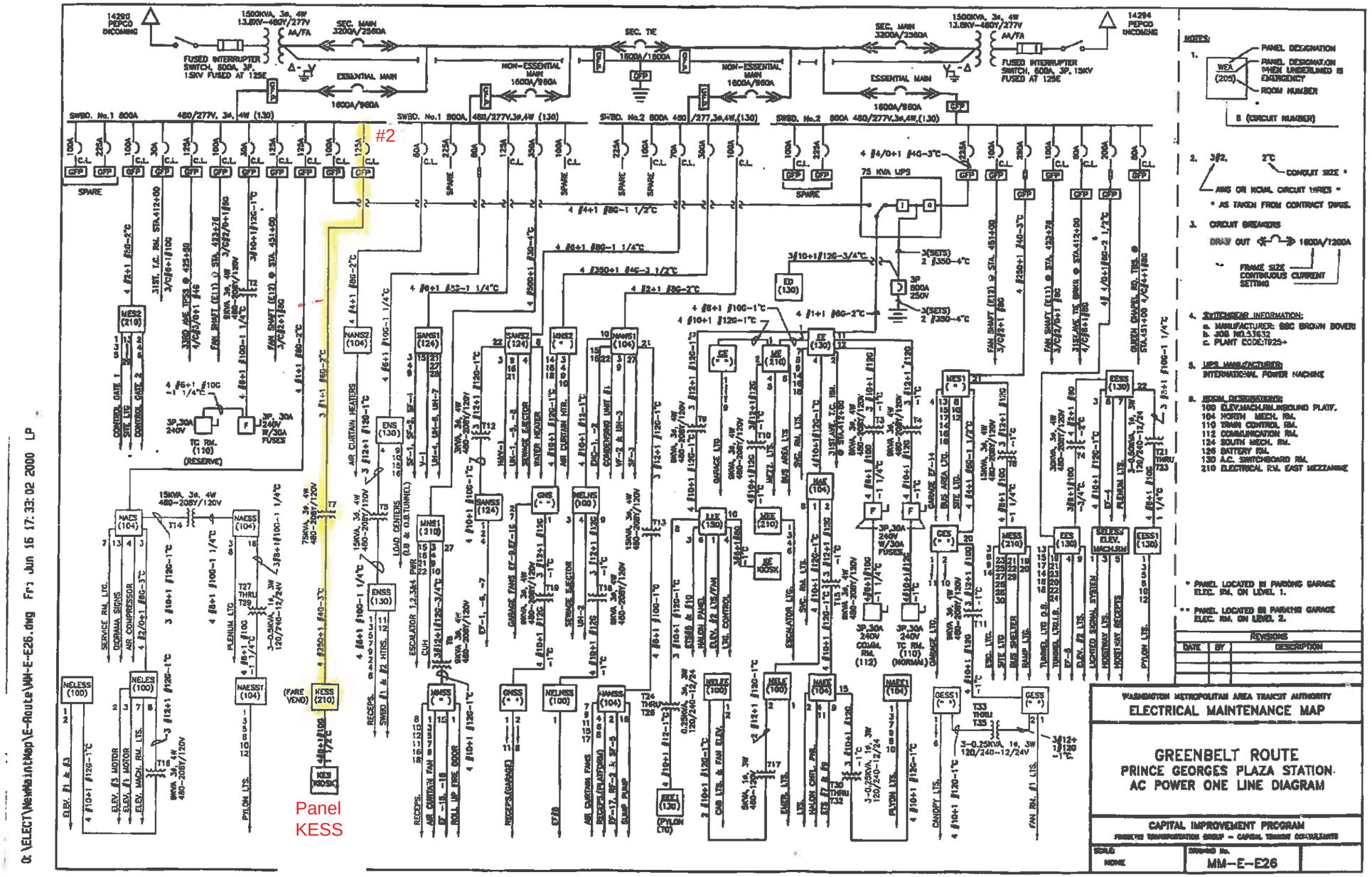
SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP) IN METRORAIL STATIONS
PRINCE GEORGE PLAZA
PANEL SCHEDULE

SCALE: NOT TO SCALE

DRAWING NO.: E08-E-102

Pre-inspection Field Verification
9/11/2014



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Pre-Inspection Mezzanine Walkthrough Checklist

Date: 09/11/2014	**Station Name:** E09 College Park	**Mezzanine #** 079	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: CL Source Breaker Name/Number: Disconnect Switch "DS4/T4" Electrical AFC Panel Name/Number: F1	C100/104 C100/104 C100/104	Located in room C104, which is inside room C100.
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: DS4/T4 SMNT/POWR escorts: LOW Voltage	C104	
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO		
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support:		
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		Handhole access required in hallway on mezzanine floor. All conduits / ducts and on the same level.

Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:	Tanmaya Sahoo	
Date:	09/11/2014	

Photo #1: E09 College Park – Handholes in Mezzanine Floor

Photo #2: E09 College Park – Handholes in hallway

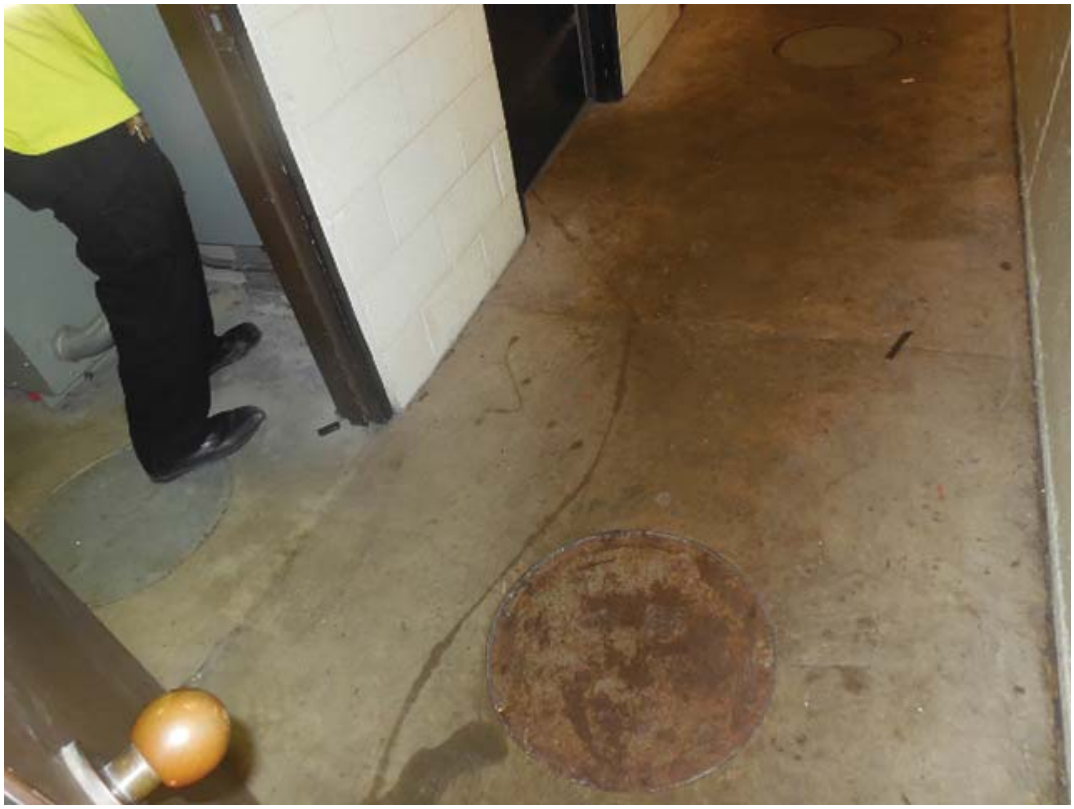


Photo #3: E09 College Park – Ducts at bottom of Panel F1 in Room C104

Photo #4: E09 College Park – Panel F1 in Room C104

Photo #5: E09 College Park – Panel F1 in Room C104

Photo #6: E09 College Park – Schedule of Panel F1 in Room C104

Photo #7: E09 College Park – Disconnect Switch DS4/T4 in Room C104

REVISIONS

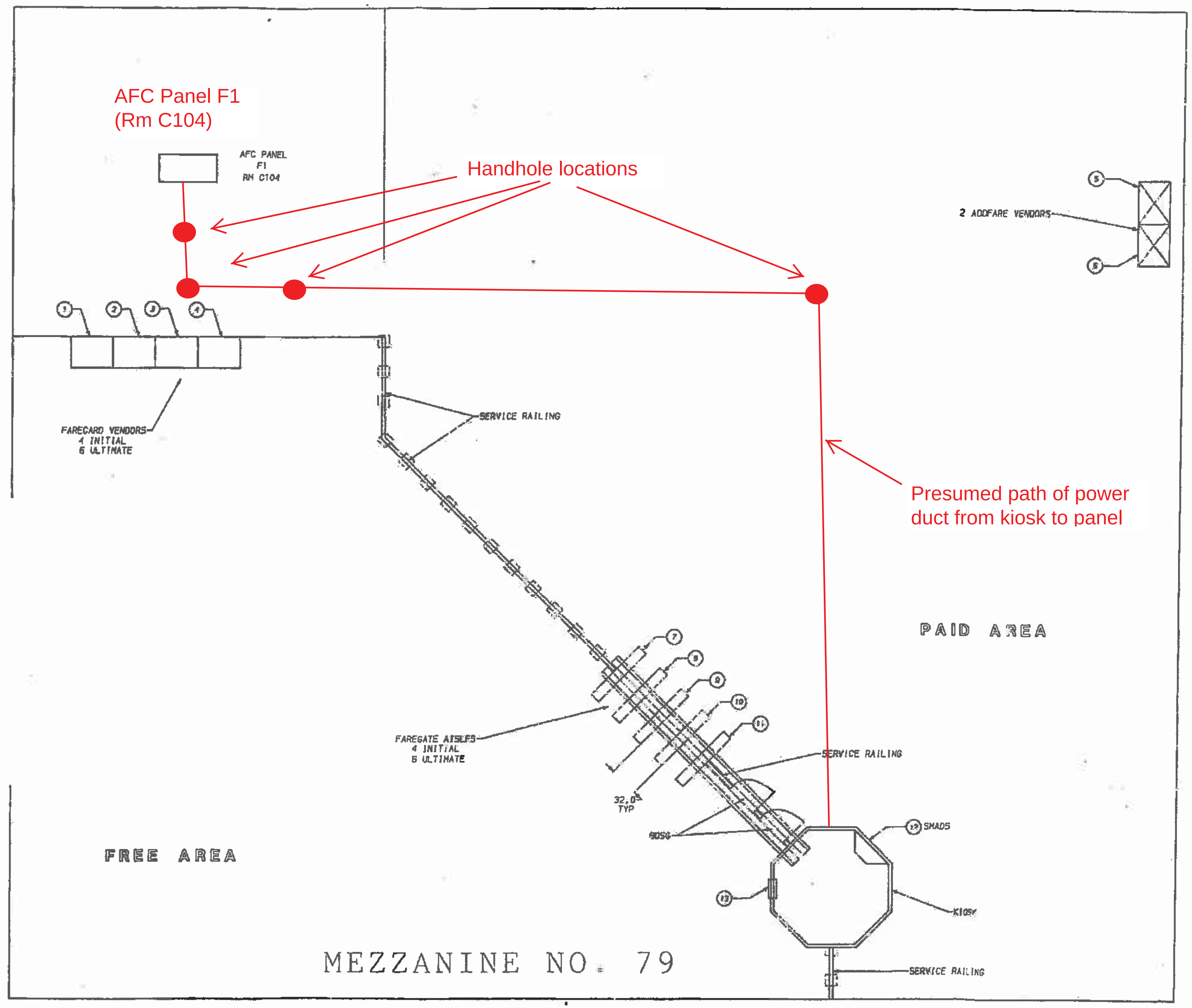
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	INITIAL RELEASE		

Pre-inspection Field Verification
9/11/2014

NOTES:

1. FOR VENDOR AND ADDFARE INSTALLATION SEE 931-4002.
2. FOR SMADS INSTALLATION SEE 931-4001.
3. FOR ENTRY, EXIT AND REVERSIBLE GATE INSTALLATION SEE 931-4003.
4. FOR BI-DIRECTIONAL SERVICE GATE INSTALLATION SEE 931-4005.
5. FOR A TYPICAL MEZZANINE INSTALLATION SEE 931-4000.
6. CIRCUIT BREAKERS WITH COMMON NEUTRAL: 9, 11 & 13; 14 & 16; 2, 4 & 6.

ITEM	NAME	S/N	PANEL AFC	1/35 BREAKER
1	VENDOR	1918	F1	7
2	VENDOR	1937	F1	9
3	VENDOR	1908	F1	11
4	VENDOR	1936	F1	13
5	ADDFARE	2828	F1	14
6	ADDFARE	2813	F1	16
7	EXIT GATE	4809	F1	N/A
8	REV. GATE	7828	F1	2
9	REV. GATE	7919	F1	4
10	REV. GATE	7926	F1	6
11	ENTRY GATE	3807	F1	8
12	SMADS	8819	KE	7
13	S. CLOCK	88913	KE	8
14	EMERGENCY LT		KE	4



SEE SEPARATE PL
WHEN ITEM NUMBERS ARE USED
REF DESIGNATOR MAY BE USED
IN LIEU OF ITEM NUMBERS

NEXT ASSY: XXX-XXXX/XXX

DO NOT SCALE DRAWING

CUBIC
AUTOMATIC REVENUE COLLECTION GROUP
WESTERN DATA DIVISION

TITLE COLLEGE PARK STATION
MEZZANINE LAYOUT

DWG NO. 931-4025 REV A

SCALE 1/40 SHEET 1 OF 1

Pre-inspection Field Verification
9/11/2014

EXISTING PANEL "F1"

AMPERES: 250	VOLTS: 120/208	MOUNTING: SURFACE	
MAINS: 250A MCB	PHASE: 3	LOCATION: ELEC. EQUIPMENT ROOM C104	
RATING: 10K AIC	WIRE: 4	SECTION: 1 OF 1	

LOAD DESCRIPTION	KVA	CKT BKRS AMP	CKT BKRS POLE	CKT. NO		CKT. NO.	CKT BKRS POLE	CKT BKRS AMP	KVA	LOAD DESCRIPTION
NEW KIOSK RECEPT. (IT & NEPP)	0.9	20	1	1	A - -	2	1	20	0.9	EXISTING VENDOR
SPARE (KIOSK)	0.0	20	1	3	- B -	4	1	20	0.9	EXISTING VENDOR
SPARE	0.0	20	1	5	- - C	6	1	20	0.9	EXISTING VENDOR
EXISTING VENDOR	0.9	20	1	7	A - -	8	1	20	0.9	EXISTING VENDOR
EXISTING VENDOR	0.9	20	1	9	- B -	10	1	20	0.0	SPARE
EXISTING VENDOR	0.9	20	1	11	- - C	12	1	20	0.0	SPARE
EXISTING VENDOR	0.9	20	1	13	A - -	14	1	20	0.9	EXISTING VENDOR
EXISTING VENDOR	0.9	20	1	15	- B -	16	1	20	0.9	EXISTING VENDOR
EXISTING VENDOR	0.9	20	1	17	- - C	18	1	20	0.0	SPARE
EXISTING VENDOR	0.9	20	1	19	A - -	20	1	20	0.0	SPARE
EXISTING VENDOR	0.9	20	1	21	- B -	22	1	20	0.0	SPARE
EXISTING VENDOR	0.9	20	1	23	- - C	24	1	20	0.0	SPARE
SPARE	0.0	20	1	25	A - -	26	1	20	0.0	SPARE
SPARE	0.0	20	1	27	- B -	28	1	20	0.0	SPARE
SPARE	0.0	20	1	29	- - C	30	1	20	0.0	SPARE
SPARE	0.0	20	1	31	A - -	32	1	20	0.0	SPARE
SPARE	0.0	20	1	33	- B -	34	1	20	0.0	SPARE
SPARE	0.0	20	1	35	- - C	36	1	20	0.0	SPARE
SPARE	0.0	20	1	37	A - -	38	3	30	3.3	EXIST. KIOSK LOAD CENTER "KES"
SPARE	0.0	20	1	39	- B -	40	-	-	2.5	
SPACE	0.0	20	1	41	- - C	42	-	-	2.5	

NOTES 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	3.6 x 50%		1.8 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	21.1 KVA	TOTAL DEMAND KVA	20.1 KVA
		TOTAL DEMAND AMPS	55.7 AMPS
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	8.9 KVA		
PHASE B.	6.5 KVA		
PHASE C	3.2 KVA		

NOTES: A. EXISTING PANEL "F1" IS FED FROM 277/480V, 3ϕ, 4W EXISTING PANEL "CL" THRU 200A DISC. SW. LOCATED IN ELEC. EQUIPMENT RM. C104, VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E28).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
* 2-1/2" C. (WIRING FILL >40%).
EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
* 2-6 1/2"x 1 1/2" FLOOR DUCT (WIRING FILL >40%).
EXISTING WIRING FED FROM LEFT SIDE OF PANEL BY:
* 1-4" C. TO TRANSFORMER (WIRING FILL >40%).

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED C. NIO	05-14 DATE	
DRAWN C. NIO	05-14 DATE	
CHECKED B. KULE	05-14 DATE	
APPROVED N/A	DATE	

REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

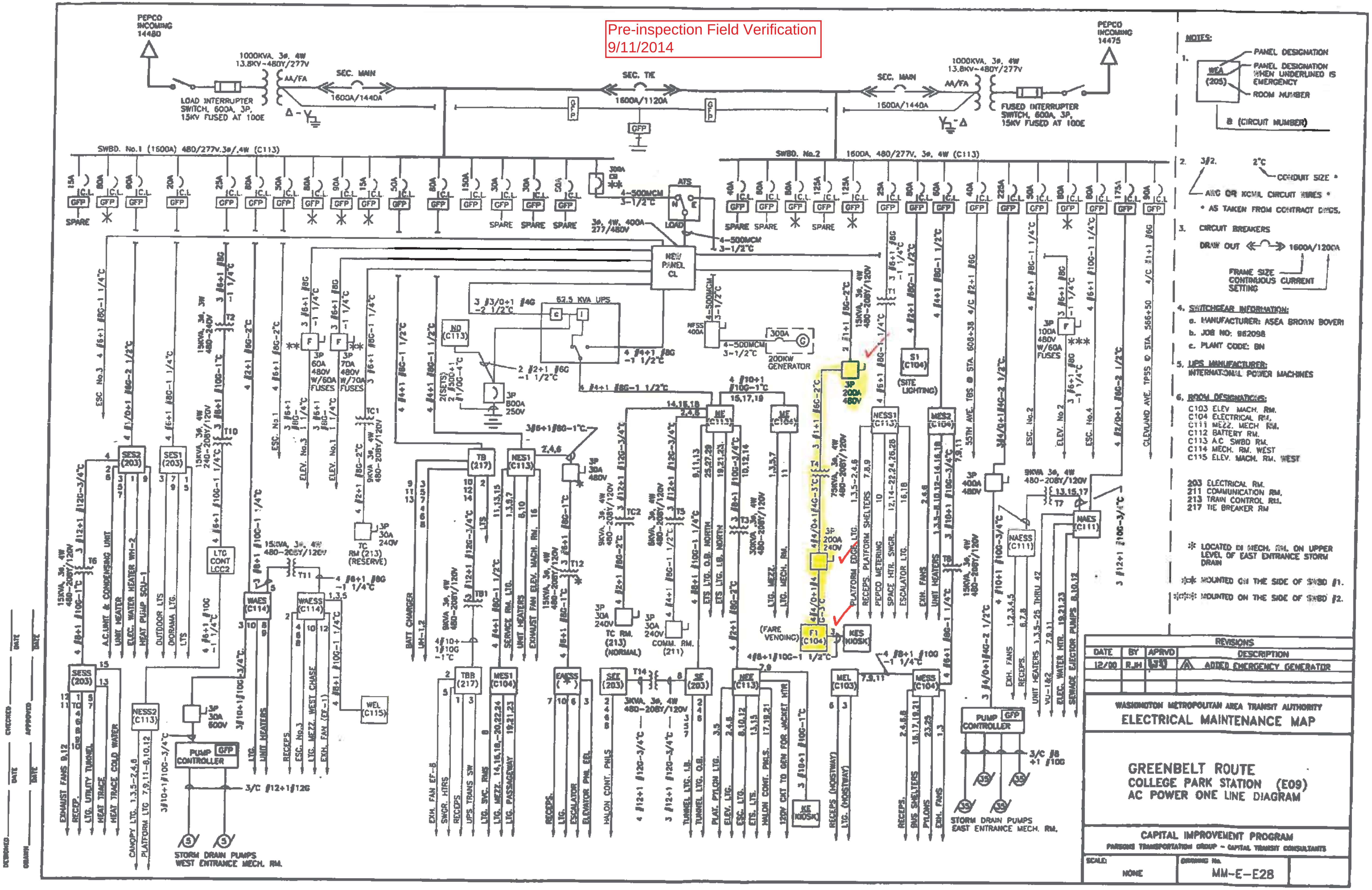
GFP A Gannett Fleming/Parsons JOINT VENTURE

SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP) IN METRORAIL STATIONS
COLLEGE PARK
PANEL SCHEDULE

SCALE: NOT TO SCALE

DRAWING NO: E09-E-102


Pre-inspection Field Verification
9/11/2014
PEPCO INCOMING 14480
1000KVA, 3ø, 4W 13.8KV-480Y/277V
LOAD INTERRUPTER SWITCH, 600A, 3P, 15KV FUSED AT 100E
SEC. MAIN
1600A/1440A
SEC. TIE
1600A/1120A
GFP
PEPCO INCOMING 14475
FUSED INTERRUPTER SWITCH, 600A, 3P, 15KV FUSED AT 100E
SWBD. No.1 (1600A) 480/277V.3ø/.4W (C113)
SWBD. No.2
1600A, 480/277V, 3ø, 4W (C113)
SPARE
ATS
LOAD
NEW PANEL CL
3ø, 4W, 400A 277/480V
4-500MCM 3-1/2"C
52.5 KVA UPS
NFSS 400A
200KW GENERATOR
3P 200A 480V
3P 200A 240V
F1 (C104)
(FARE VENDING)
KES KIOSK
S1 (C104)
(SITE LIGHTING)
ND (C113)
3P 800A 250V
NE (C113)
NE (C104)
NESS1 (C113)
MES2 (C104)
SES2 (203)
SES1 (203)
SESS (203)
LTG CONT LCC2
WAES (C114)
WAESS (C114)
WEL (C115)
NESS2 (C113)
PUMP CONTROLLER
STORM DRAIN PUMPS WEST ENTRANCE MECH. RM.
TB (217)
NES1 (C113)
TBB (217)
MES1 (C104)
EAESS (*)
SEE (203)
SE (203)
NEE (C113)
MEL (C103)
MESS (C104)
NAESS (C111)
NAES (C111)
KE KIOSK
STORM DRAIN PUMPS EAST ENTRANCE MECH. RM.
TC RM (213) (RESERVE)
TC RM. (213) (NORMAL)
COMM. RM. (211)
NOTES:
1. PANEL DESIGNATION
PANEL DESIGNATION WHEN UNDERLINED IS EMERGENCY
ROOM NUMBER
WEA (205)
8 (CIRCUIT NUMBER)
2. 3#2. 2"C CONDUIT SIZE *
AWG OR KCMIL CIRCUIT WIRES *
* AS TAKEN FROM CONTRACT DWGS.
3. CIRCUIT BREAKERS
DRAW OUT 1600A/1200A
FRAME SIZE
CONTINUOUS CURRENT SETTING
4. SWITCHGEAR INFORMATION:
a. MANUFACTURER: ASEA BROWN BOVERI
b. JOB NO: 862098
c. PLANT CODE: BN
5. UPS MANUFACTURER: INTERNATIONAL POWER MACHINES
6. ROOM DESIGNATIONS:
C103 ELEV MACH. RM.
C104 ELECTRICAL RM.
C111 MEZZ. MECH RM.
C112 BATTERY RM.
C113 A.C SWBD RM.
C114 MECH. RM. WEST
C115 ELEV. MACH. RM. WEST
203 ELECTRICAL RM.
211 COMMUNICATION RM.
213 TRAIN CONTROL RM.
217 TIE BREAKER RM
* LOCATED IN MECH. RM. ON UPPER LEVEL OF EAST ENTRANCE STORM DRAIN
** MOUNTED ON THE SIDE OF SWBD #1.
*** MOUNTED ON THE SIDE OF SWBD #2.
REVISIONS
DATE BY APRVD DESCRIPTION
12/00 RJH ADDED EMERGENCY GENERATOR
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
ELECTRICAL MAINTENANCE MAP
GREENBELT ROUTE
COLLEGE PARK STATION (E09)
AC POWER ONE LINE DIAGRAM
CAPITAL IMPROVEMENT PROGRAM
PARSONS TRANSPORTATION GROUP - CAPITAL TRANSIT CONSULTANTS
SCALE: NONE
DRAWING No. MM-E-E28
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

Pre-Inspection Mezzanine Walkthrough Checklist

Date: 09/11/2014	**Station Name:** E10 Greenbelt	**Mezzanine #** 080	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: Switchboard No. 2 Source Breaker Name/Number: Disconnect Switch Electrical AFC Panel Name/Number: Panel FF	C106 C106 C100/106	
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: NO NAME SMNT/POWR escorts: LOW Voltage	C106	
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. NO	C106	
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☐ RAIL ☐ CMNT ☐ Other Access/Support:		
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		Handhole access required. All conduits/duct are on one level.

Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:	Tarmeena Sahoo	
Date:	9/11/14	

Photo #1: E10 Greenbelt – Handholes at Mezzanine

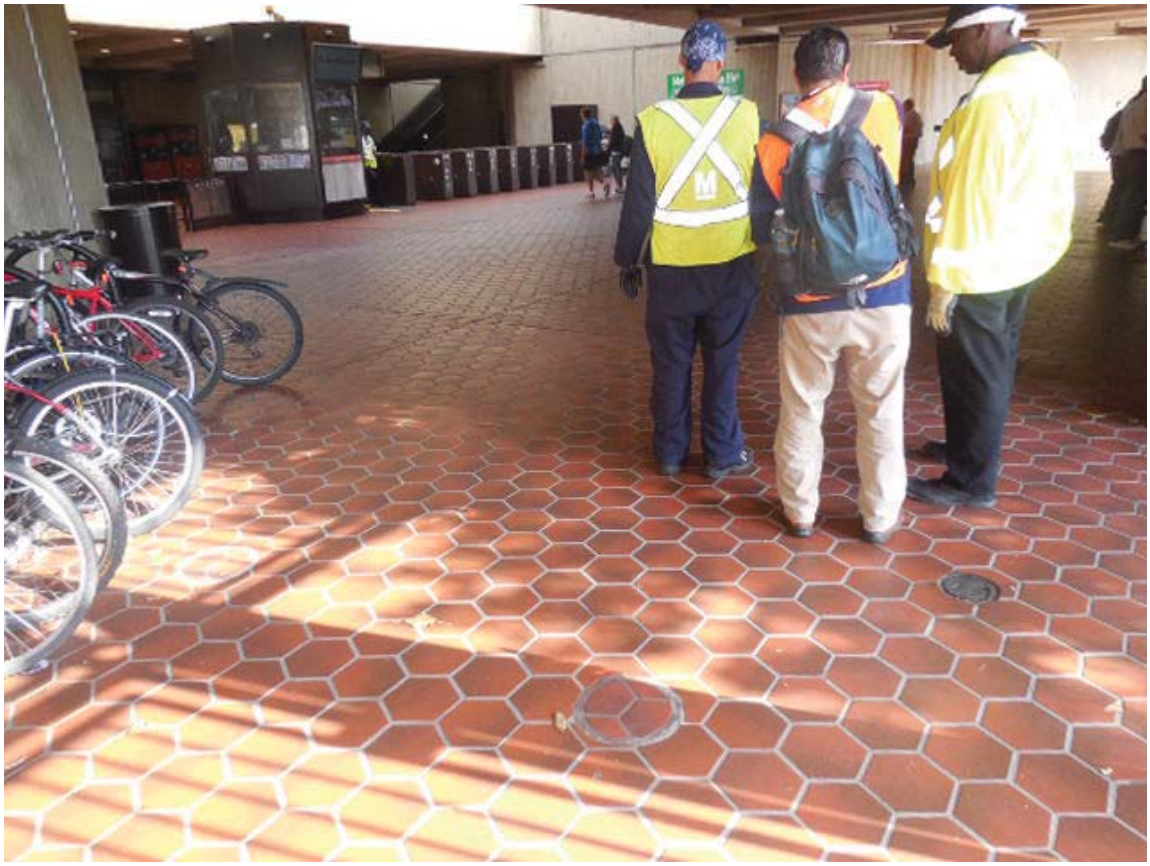


Photo #2: E10 Greenbelt – Handholes at Mezzanine

Photo #3: E10 Greenbelt – Panel FF in Room C106

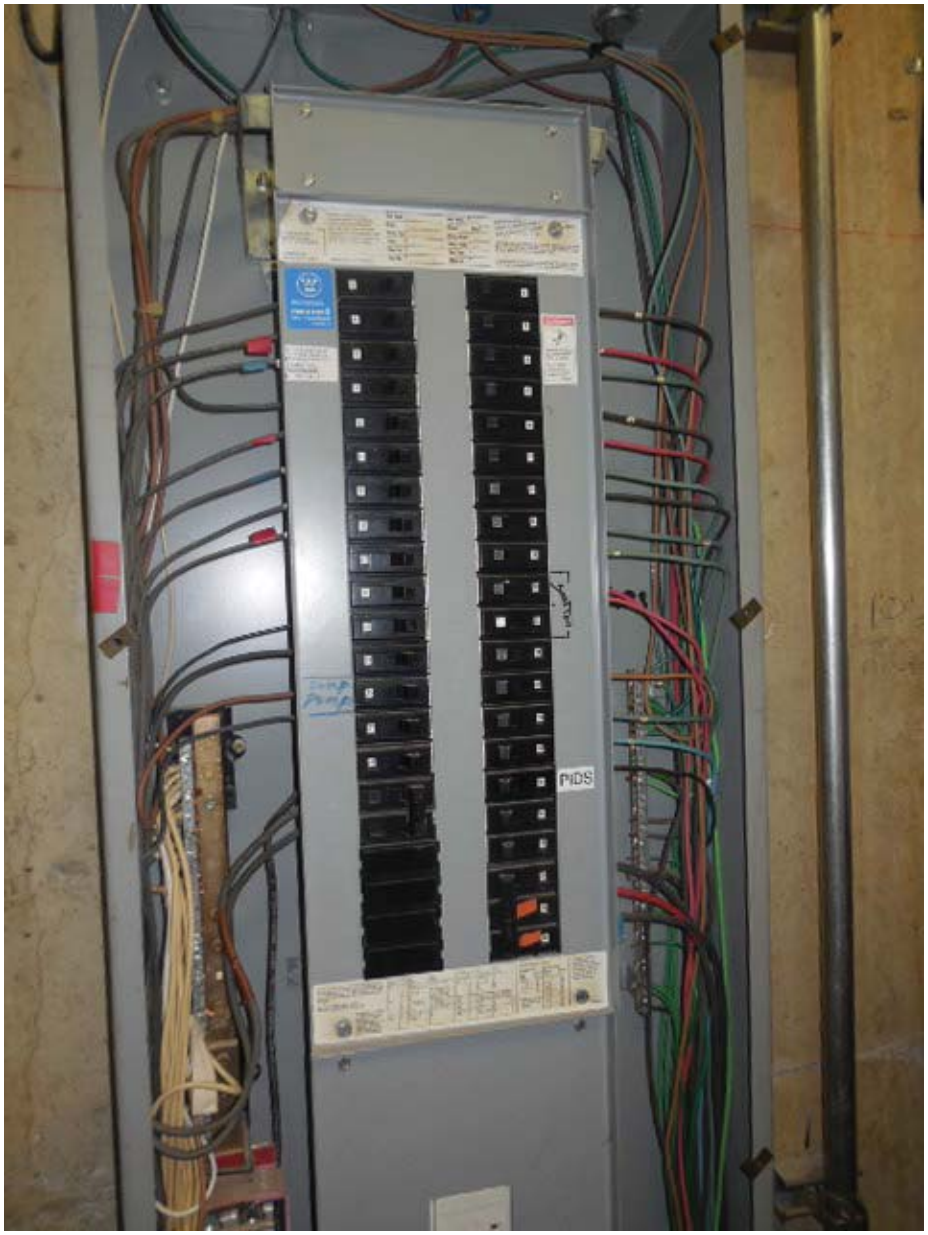


Photo #4: E10 Greenbelt – Ducts below Panel FF in Room C106

Photo #5: E10 Greenbelt – Disconnect Switch in Room C106

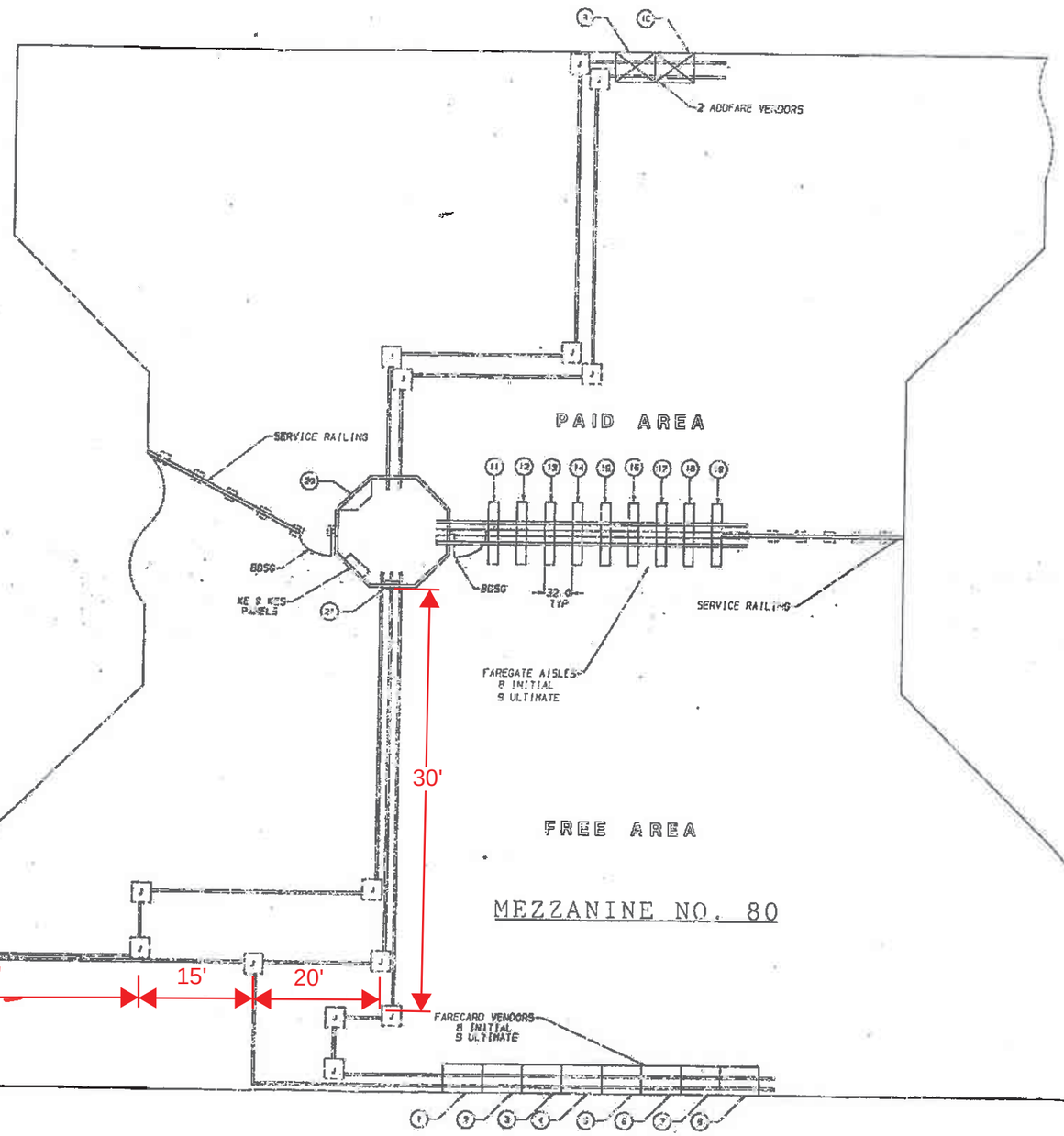
Photo #6: E10 Greenbelt – SWBD #2 breaker for Panel FF in Room C106

NOTES:

1. FOR VENDOR AND ADDFARE INSTALLATION SEE 931-4002.
2. FOR SMADS INSTALLATION SEE 931-4001.
3. FOR ENTRY, EXIT AND REVERSIBLE GATE INSTALLATION SEE 931-4003.
4. FOR BI-DIRECTIONAL SERVICE GATE INSTALLATION SEE 931-4005.
5. FOR A TYPICAL MEZZANINE INSTALLATION SEE 931-4000.
6. CIRCUIT BREAKERS WITH COMMON NEUTRAL:
   13 & 15, 7,9 & 11, 1,3 & 5, 28 & 30, 2,4 & 16, 8,10 & 12, 14 & 16.

ITEM	NAME	S/N	PANEL AFC	I/O BREAKER
1	VENDOR	1372	FF	15
2	VENDOR	1934	FF	13
3	VENDOR	1938	FF	11
4	VENDOR	1924	FF	9
5	VENDOR	1925	FF	7
6	VENDOR	1920	FF	5
7	VENDOR	1930	FF	3
8	VENDOR	1931	FF	1
9	ADDFARE	2801	FF	28
10	ADDFARE	2999	FF	30
11	EXIT GATE	4801	FF	N/A
12	REV. GATE	7904	FF	2
13	REV. GATE	7929	FF	4
14	REV. GATE	7907	FF	6
15	REV. GATE	7933	FF	8
16	REV. GATE	7935	FF	10
17	REV. GATE	7921	FF	12
18	REV. GATE	7916	FF	14
19	ENTRY GATE	3801	FF	16
20	SMADS	8821	KE	1
21	CLOCK	98989	KE	9
22	EMERGENCY LIGHT		KE5	4

Pre-inspection Field Verification
9/11/2014



CUBIC
GREENBELT STATION
MEZZANINE LAYOUT
931-4006

Pre-inspection Field Verification
9/11/2014

EXISTING PANEL "FF"

AMPERES: 250	VOLTS: 120/208		MOUNTING: SURFACE						
MAINS: 250AMCB	PHASE: 3		LOCATION: ELECTRICAL EQUIPMENT ROOM C106						
RATING: 10K AIC	WIRE: 4		SECTION: 1 OF 1						
	CKT BKRS		CKT.		CKT.	CKT BKRS			
LOAD DESCRIPTION	KVA	AMP	POLE	NO.		NO.	POLE	AMP	KVA	LOAD DESCRIPTION
EXISTING VENDOR	0.8	20	1	1	A - -	2	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	3	- B -	4	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR
1A,2 SPARE (KIOSK)	0.0	20	1	19	A - -	20	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	23	- - C	24	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	25	A - -	26	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	27	- B -	28	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	29	- - C	30	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	1.0	20	2	31	A - -	32	1	20	0.8	EXISTING VENDOR
	1.0	-	-	33	- B -	34	1	20	0.0	SPARE
SPACE	0.0	20	1	35	- - C	36	1	20	0.0	SPARE
SPACE	0.0	20	1	37	A - -	38	3	30	3.3	EXIST KIOSK LOAD CENTER "KES"
SPACE	0.0	20	1	39	- B -	40	-	-	2.5	
SPACE	0.0	20	1	41	- - C	42	-	-	2.5	

NOTES: 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	16.0 x 50%		8.0 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	3.0 x 125%		3.8 KVA
AC	4.5 x 100%		4.5 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	33.5 KVA	TOTAL DEMAND KVA	26.3 KVA
		TOTAL DEMAND AMPS	72.9 AMPS

CONNECTED LOAD PHASE SUMMARY

PHASE A:	12.3 KVA
PHASE B:	11.5 KVA
PHASE C:	7.2 KVA

NOTES:
A. EXISTING PANEL "FF" IS FED FROM 277/480V, 3Φ, 4W EXISTING SWBD "SWBD No. 2" THRU 200A DISC. SW. LOCATED IN ELEC. EQUIPMENT RM. C106, VIA 75KVA TRANSFORMER (SEE ATTACHED DWG. MM-E-E30).

B. EXISTING WIRING FED FROM TOP OF PANEL BY:
- 4-1/2" C. (WIRING FILL >40%).
- 1-3/4" C. (WIRING FILL >40%).

EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
- 1-12"x 4" C. WIRE TROUGH (WIRING FILL >20%).

EXISTING WIRING FED FROM LEFT SIDE OF PANEL BY:
- 1-4" C. TO TRANSFORMER (WIRING FILL >40%).

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED	C. H30	08-14 DATE
DRAWN	C. H30	08-14 DATE
CHECKED	S. SHM	08-14 DATE
APPROVED	N/A	DATE

REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE
AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

GFP A Gannett Fleming/Parsons JOINT VENTURE

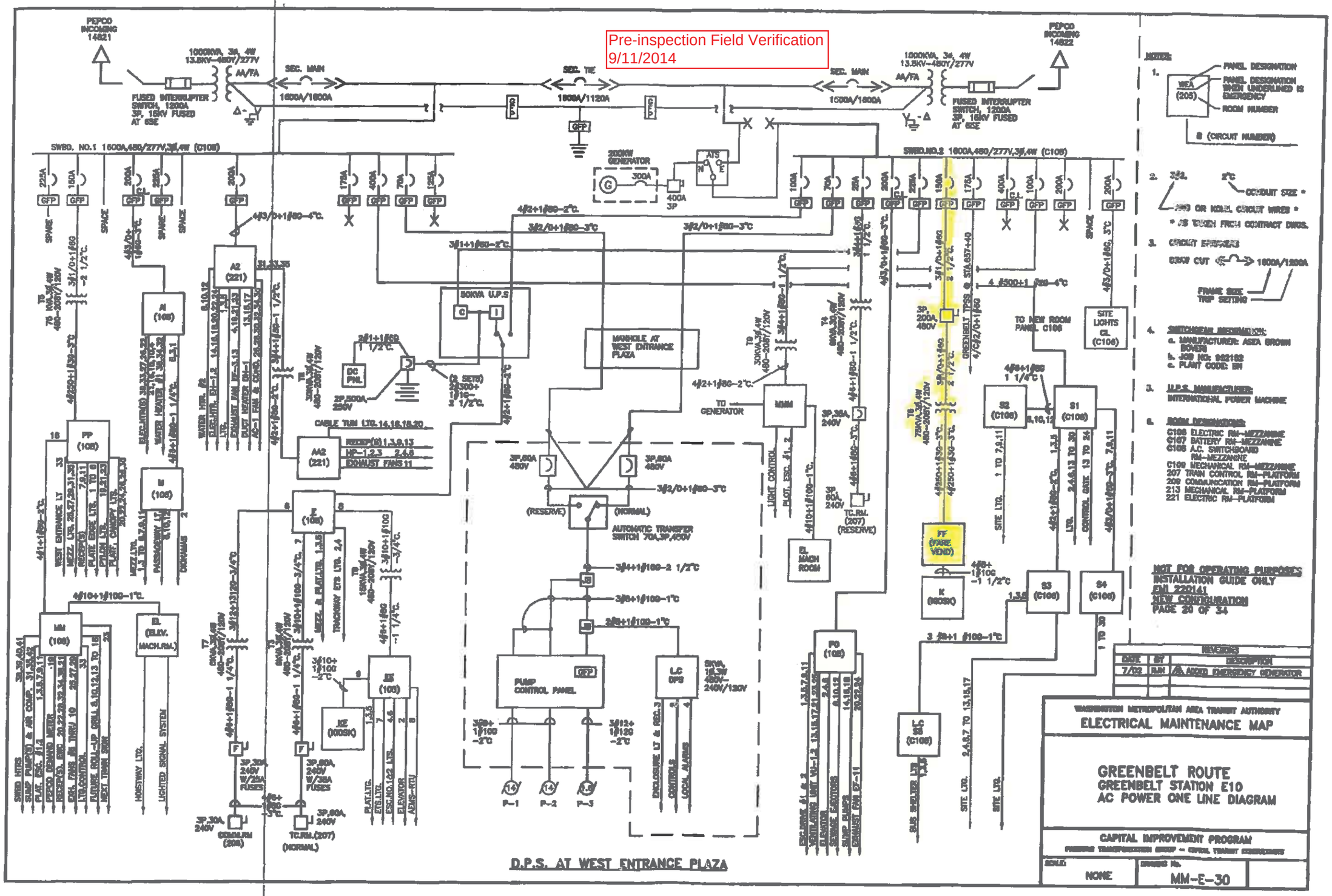
SUBMITTED _____
PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP)
IN METRORAIL STATIONS
GREENBELT
PANEL SCHEDULE

SCALE: NOT TO SCALE

DRAWING NO.: E10-E-102

Pre-inspection Field Verification
9/11/2014



Pre-Inspection Mezzanine Walkthrough Checklist

Date: 08/28/2014	**Station Name:** F02 Archives	**Mezzanine #** 081	**Completed By:** Tino Sahoo

Check	Task	Equipment	Room ID	Notes
☑	Verify electrical power design matches the field/record. Identify locations of the electrical equipment.	Electrical Source Panel Name/Number: MM Source Breaker Name/Number: Disconnect Switch - "Disc. MF" Electrical AFC Panel Name/Number: MF	203 203 203	AFC Panel (MF) is fed from/tapped from existing Panel (MM). AC SWBD Room is 113 and located Platform level on Track 1 Wayside (SWBD. NB and Panel NE is located here);
☑	Is there a disconnect switch connected to the AFC electrical power panel? Low or High voltage SMNT/POWR escorts required?	Disconnect Name/Number: "Disc. MF" SMNT/POWR escorts: HIGH AND LOW VOLTAGE	203	Disconnect Switch ("Disc. MF") will be used to de-energize AFC Panel (MF).
☑	Check if there is a shared raceway between AFC Panel and Kiosk and identify additional source panels to de-energize	Do AFC Panel loads feed into a shared raceway e.g. trench or trough? If Yes, specify source panels in notes. YES (see notes)	203	With a shared raceway (trough), multiple other panels have to be de-energized. Panel MPO (Breaker: "Panel MPO" Circuit #1, SWBD NB); Panel M (Breaker: "Panel M" Circuit #5, SWBD NB); Panel ME (Breaker: Circuit #18 3PH, Panel NE (Room #113);
☑	Identify the assumed pathway of the duct, the location of the handholes, manholes and boxes and accessibility or special escort requirement?	PLNT ☑ COMM / IT ☐ ELES ☑ RAIL ☐ CMNT ☐ Other Access/Support: AFC		Panel MM (Breaker: "Lighting and Fare Vending Equipment" Circuit #9, SWBD NB); Will need access to Elevator Machine Room #205, therefore ELES escort is needed.
☑	Identify handhole or manhole access requirement.	Required PLNT Support for handhole/manhole access? YES (see notes) Identified Conduit/Duct Transition to mezzanine level? YES		No Handholes found, however AFC as-built plan shows one handhole that is no longer there. An AFC Escort needed to open Fare Vending Machine - VN1279 to verify if handhole is underneath this machine. PLNT escorts also needed just in case.

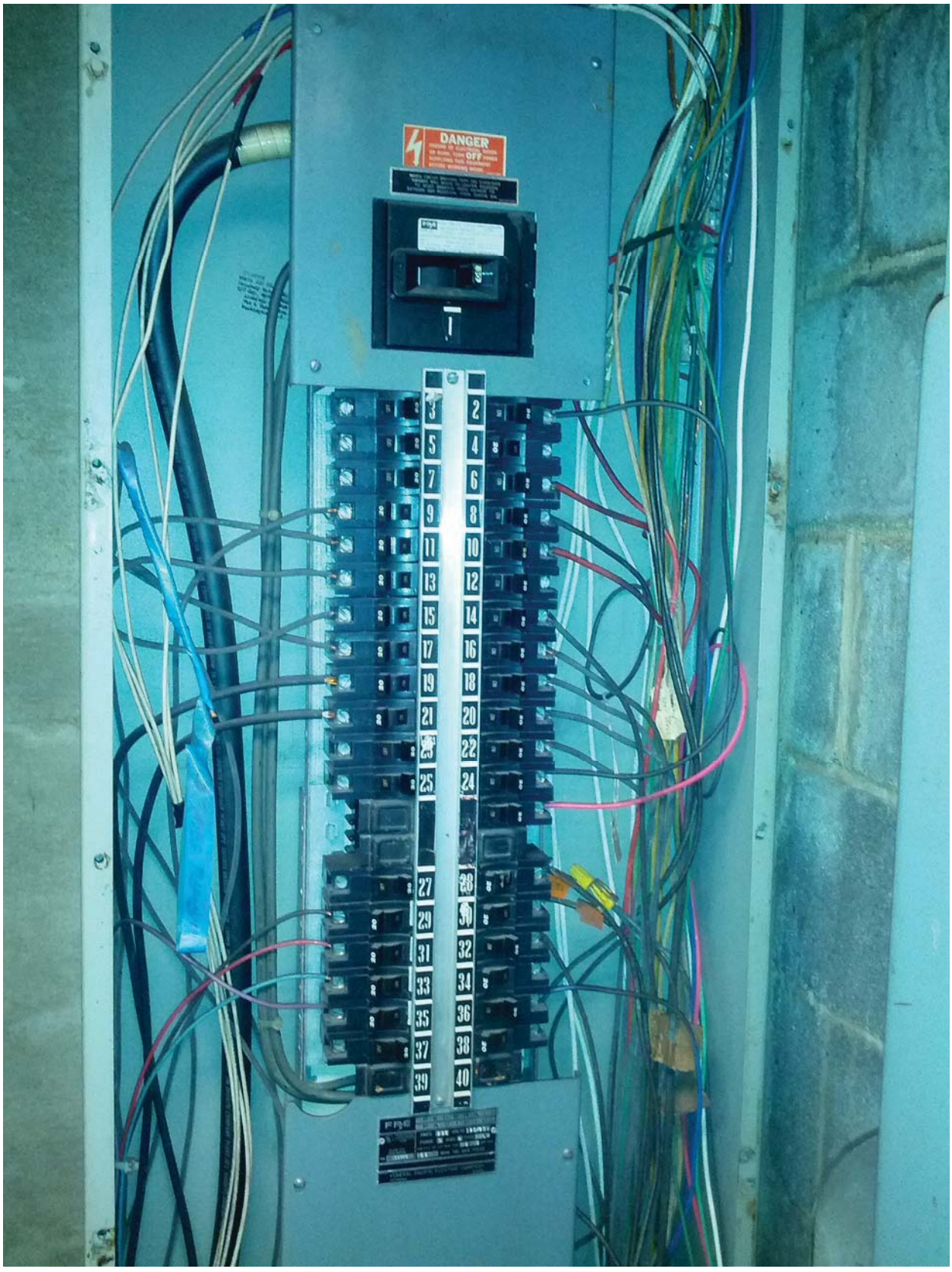
Emergency Power Verification

Check	Task	YES	NO	NA	Comments
☑	Verification of the electrical plan to the existing schematic if the AFC electrical panel is connected to a Automatic Transfer Switch (ATS) / emergency power source	☐	☐	☑	

Notes and Discrepancies:

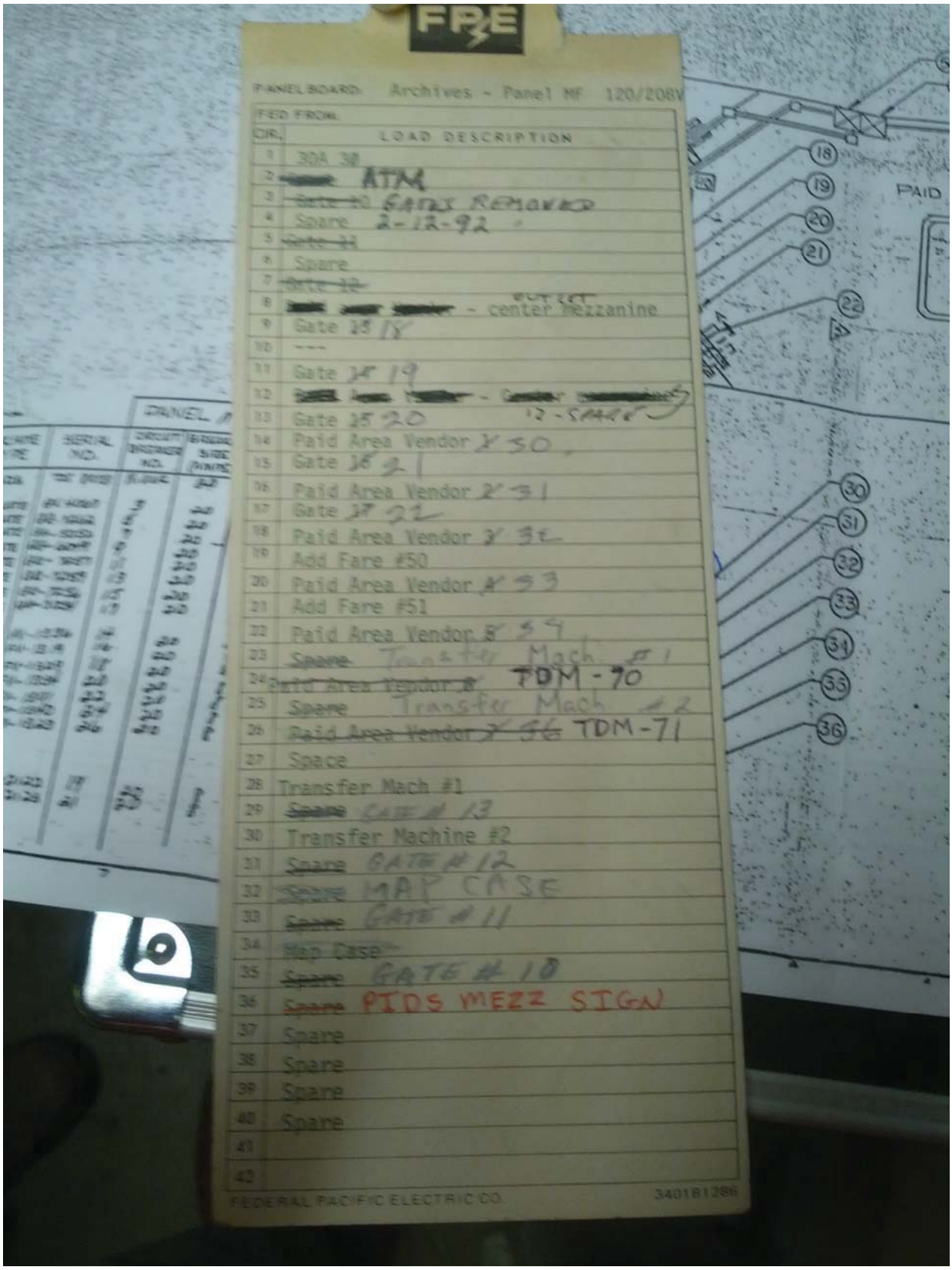
Sign Off	GFP Representative	WMATA PRGM
Name:	Tino Sahoo	
Signature:		
Date:	08/28/2014	

Archives Photo #1 – AFC Panel (MF) - Room 203 (Mezzanine Level)

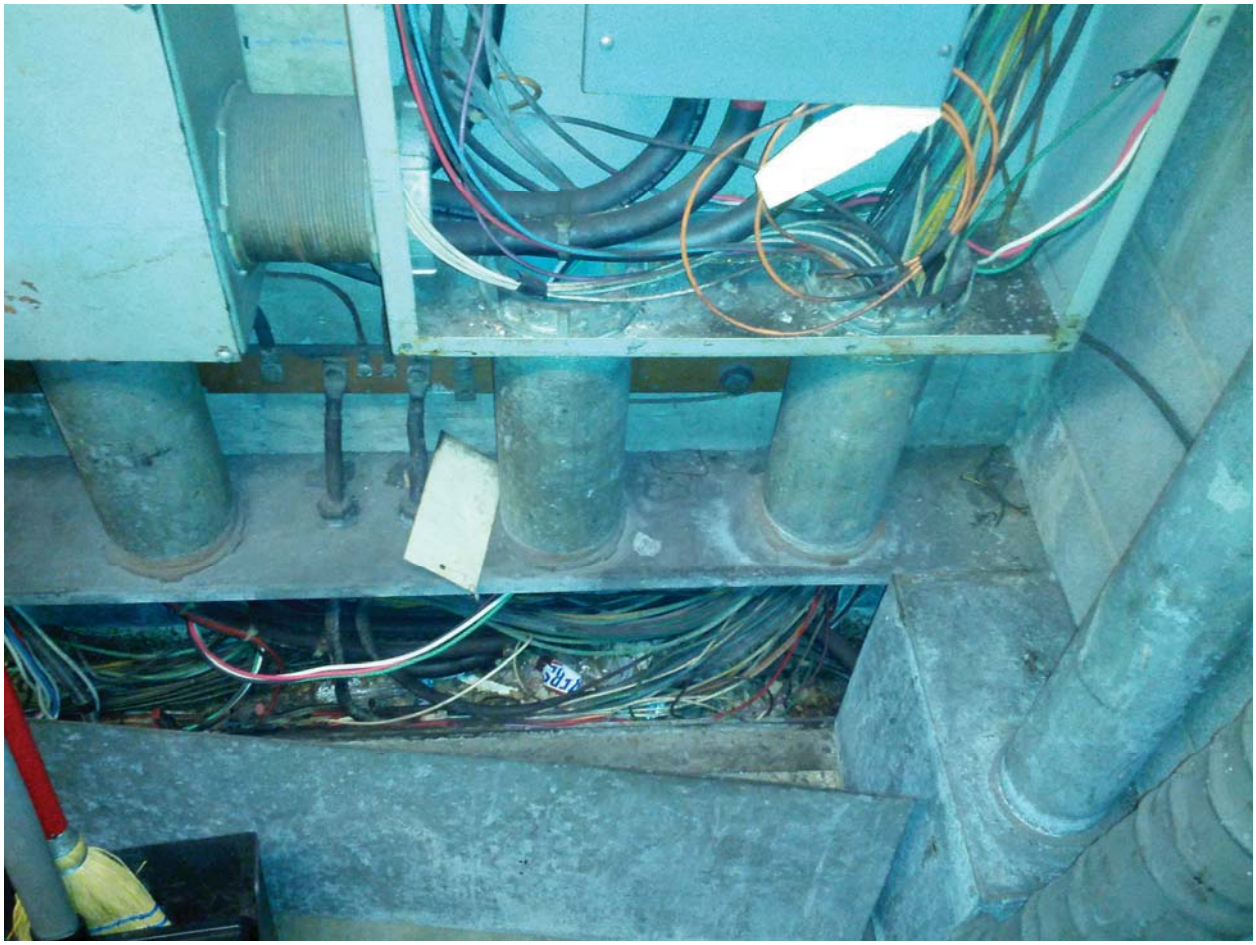


Archives Photo #2 – Disconnect Switch “Disc. MF” for AFC Panel (MF) - Room 203 (Mezzanine Level)

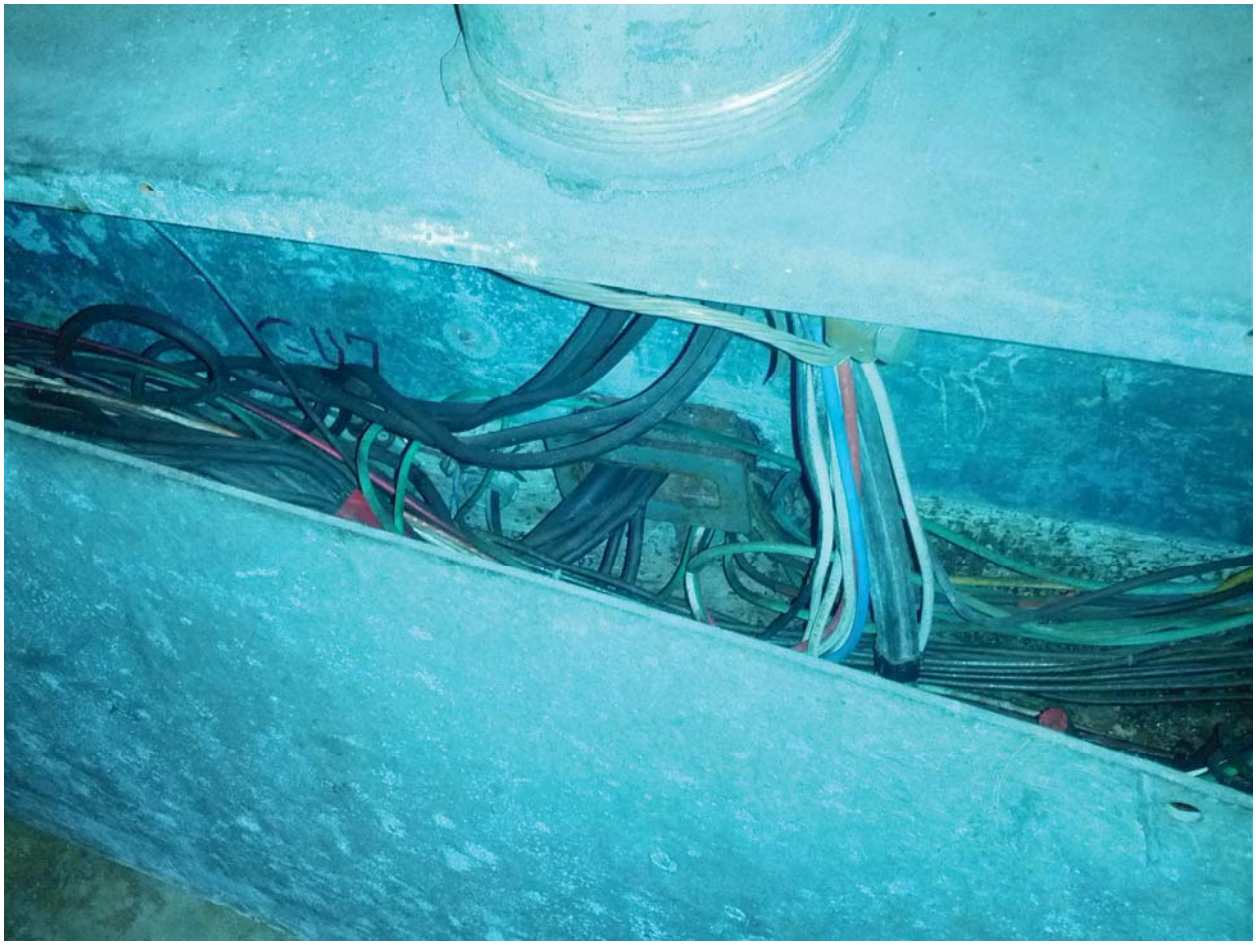
Archives Photo #3 – AFC Panel (MF) Panel Schedule - Room 203 (Mezzanine Level)



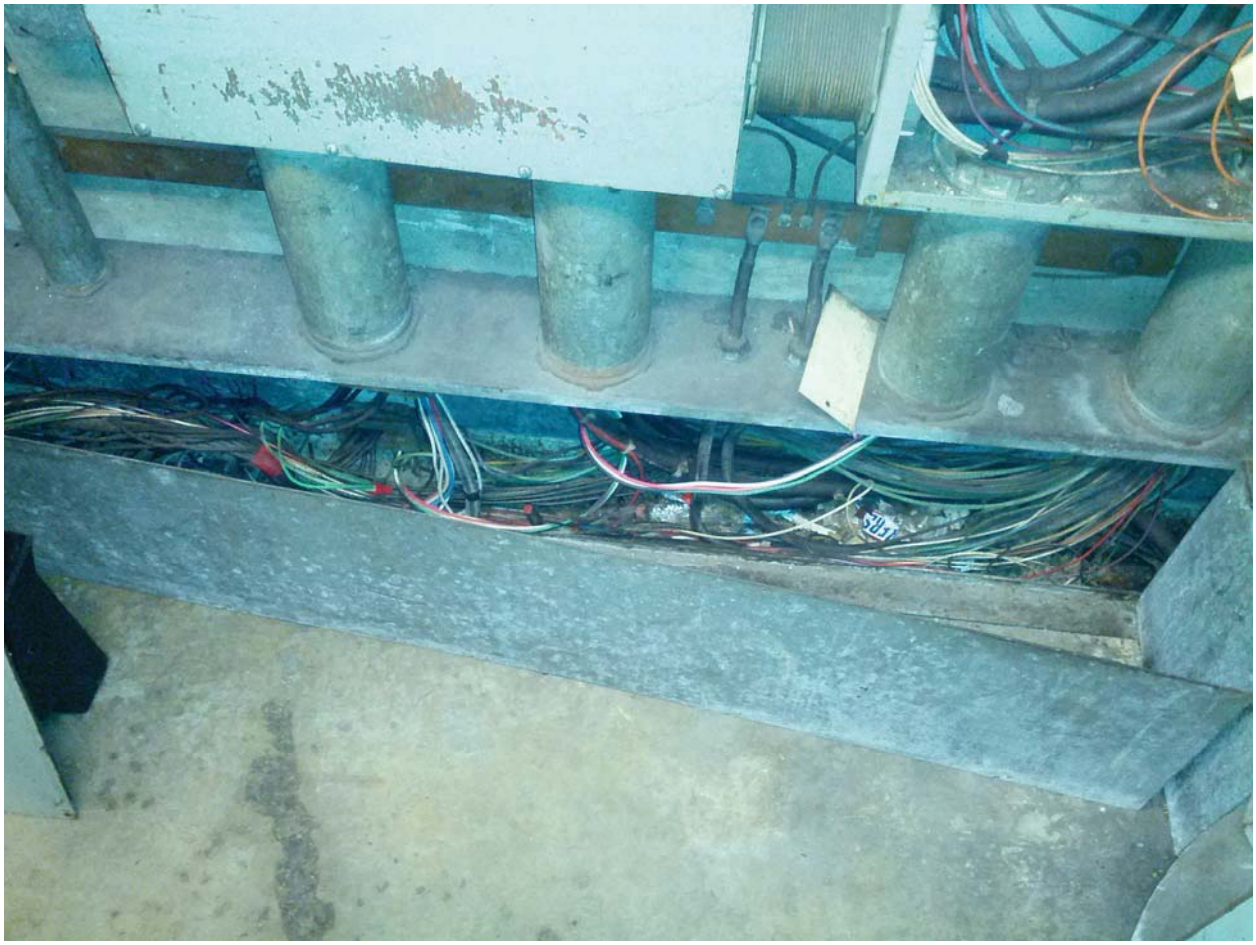
Archives Photo #4 – AFC Panel (MF) shared raceway (trough) with Panels MPO, M, ME, and MM (All in Room 203 Mezzanine Level)



Archives Photo #5 – AFC Panel (MF) shared raceway (trough) with Panels MPO, M, ME, and MM (All in Room 203 Mezzanine Level)



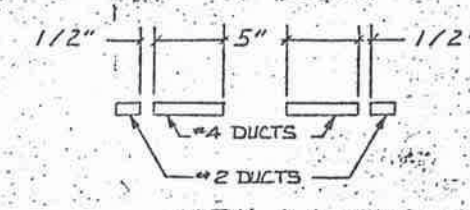
Archives Photo #6 – AFC Panel (MF) shared raceway (trough) with Panels MPO, M, ME, and MM (All in Room 203 Mezzanine Level)

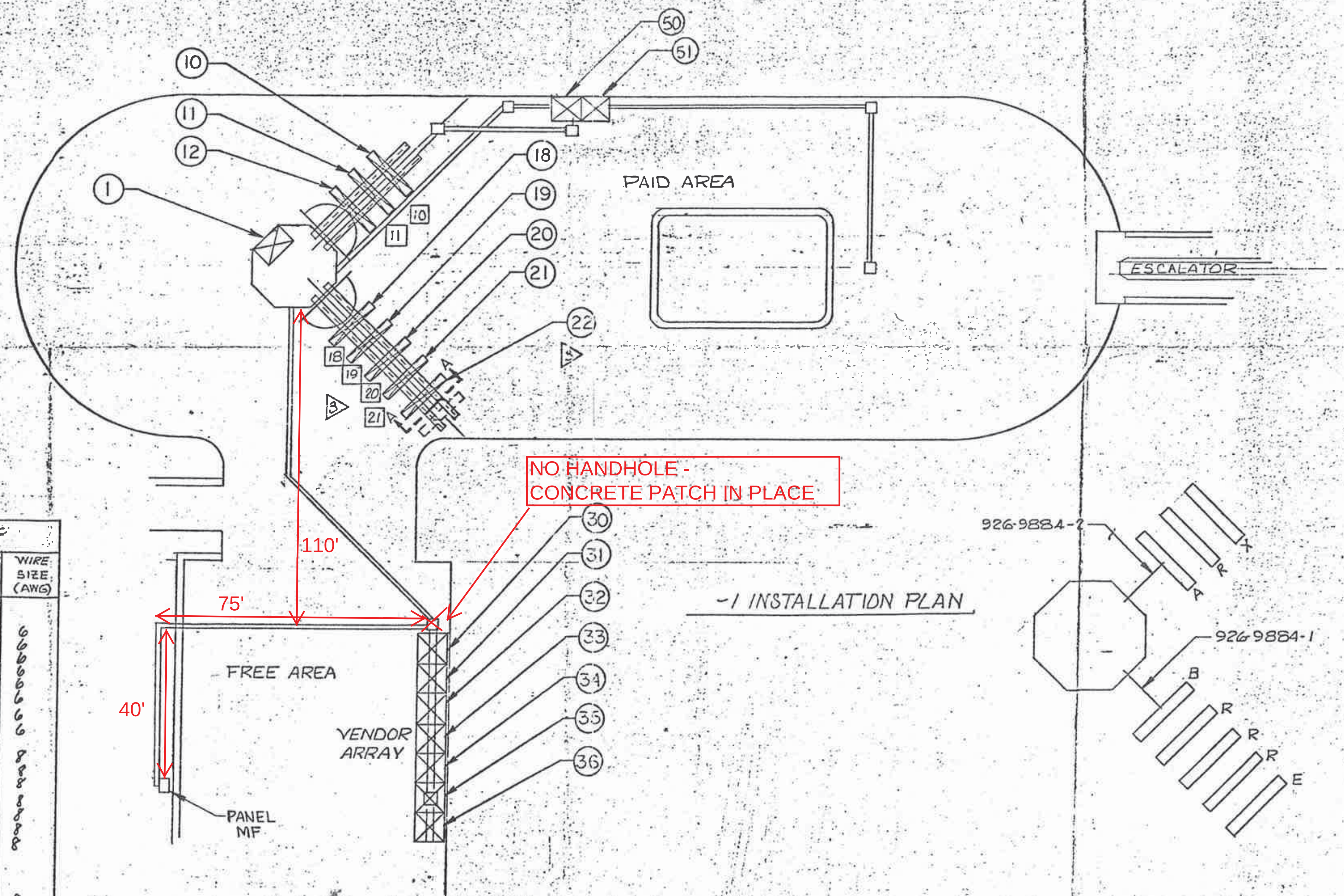


Archives Photo #7 – Location of Handhole noted on AFC As-Built Plan, but it could not be found.

NOTES

1. THE MINIMUM OPERATIONAL MACHINE INVENTORY IS REFERENCED ON THIS DRAWING BY THE "X" DRAWN THROUGH THE MACHINE.
2. FOR REFERENCE DRAWINGS USED SEE SUPPORT DOCUMENTATION PACKAGE FOR THIS MEZZANINE.
3. (X) INDICATES POSITION NO. [X] INDICATES AISLE NO.





-1 INSTALLATION PLAN

			PANEL MF		
POSITION NO.	MACHINE TYPE	SERIAL NO.	CIRCUIT BREAKER NO.	BREAKER SIZE (AMPS)	WIRE SIZE (AWG)
1	DADS	DS 8073	KIOSK	20	
10	EXIT GATE	GX 4067	3	20	6
11	REV GATE	GR-7262	5	20	6
12	A GATE	GA-5052	7	20	6
18	B GATE	GB-6049	9	20	6
19	REV GATE	GR-7257	11	20	6
20	REV GATE	GR-7259	13	20	6
21	REV GATE	GR-7256	15	20	6
22	ENTRY GATE	GN-3054	17	20	6
30	VENDOR	FV-1336	14	20	8
31	VENDOR	FV-1319	16	20	8
32	VENDOR	FV-1329	18	20	8
33	VENDOR	FV-1334	20	20	8
34	VENDOR	FV-1301	22	20	8
35	VENDOR	FV-1340	24	20	8
36	VENDOR	FV-1323	26	20	8
50	ADDFARE	AM-2122	19	20	8
51	ADDFARE	AM-2123	21	20	8

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. BREAK SHARP EDGES .010 MAX. TOLERANCES ON DECIMALS: .XX ± .03 .XXX ± .010 ANGLES: ± 0.5 DEG.

CONTRACT NUMBER

SIZE D | REV A1

DRAWING NUMBER 926-0453

SHEET 1 OF 1

CUBIC WESTERN DATA

TITLE: INSTALLATION PLAN ARCHIVES STATION

CODE IDENT NO. 94987

D 926-0453

Labeled as 3,5

EXISTING PANEL "MF"

AMPERES 225		VOLTS. 120/208			MOUNTING: SURFACE					
MAINS: 225A MCB		PHASE 3			LOCATION: ELECTRICAL EQUIPMENT RM. 203					
RATING: 10K AIC		WIRE 4			SECTION: 1 OF 1					
		CKT BKRS		CKT		CKT.	CKT BKRS			
LOAD DESCRIPTION	KVA	AMP	POLE	NO		NO.	POLE	AMP	KVA	LOAD DESCRIPTION
1 NEW KIOSK RECEPT. (IT & NEPP)	0.8	20	1	~~1~~ 3	A -	2	1	20	0.8	EXISTING VENDOR
1&2 SPARE (KIOSK)	0.0	20	1	~~3~~ 5	- B -	4	1	20	0.0	SPARE
SPARE	0.0	20	1	5	- - C	6	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	7	A - -	8	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	9	- B -	10	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	11	- - C	12	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	13	A - -	14	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	15	- B -	16	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	17	- - C	18	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	19	A - -	20	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	21	- B -	22	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	23	- - C	24	1	20	0.8	EXISTING VENDOR
SPACE	0.0	-	-	25	A - -	26	1	20	0.8	EXISTING VENDOR
SPACE	0.0	-	-	27	- B -	28	-	-	0.0	SPACE
SPARE	0.0	20	1	29	- - C	30	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	31	A - -	32	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	33	- B -	34	1	20	0.8	EXISTING VENDOR
EXISTING VENDOR	0.8	20	1	35	- - C	36	1	20	0.0	SPARE
EXISTING VENDOR	0.8	20	1	37	A - -	38	1	20	0.8	EXISTING VENDOR
SPARE	0.0	20	1	39	- B -	40	1	20	0.0	SPARE
SPACE	0.0	-	-	41	- - C	42	-	-	0.0	SPACE

NOTES 1. CONNECT NEW FEEDER TO EXISTING SPARE 20A, 1P CB
2. CB TO BE RESERVED FOR FUTURE AFC

LOAD SUMMARY

LIGHTS	0.0 x 125%		0.0 KVA
RECEPTACLES, FIRST 10 KVA	10.0 x 100%		10.0 KVA
RECEPTACLES	11.6 x 50%		5.8 KVA
MISC. APPLIANCES	0.0 x 100%		0.0 KVA
LARGEST MOTOR	0.0 x 125%		0.0 KVA
MOTORS	0.0 x 100%		0.0 KVA
HEAT	0.0 x 125%		0.0 KVA
AC	0.0 x 100%		0.0 KVA
WATER HEATING	0.0 x 125%		0.0 KVA
TOTAL CONNECTED LOAD	**21.6 KVA**	**TOTAL DEMAND KVA**	**15.8 KVA**
		TOTAL DEMAND AMPS	**43.9 AMPS**
CONNECTED LOAD PHASE SUMMARY			
PHASE A:	**10.4 KVA**		
PHASE B:	**5.6 KVA**		
PHASE C:	**5.6 KVA**		

NOTES:
A. EXISTING PANEL "MF" IS TAP-OFF FROM 120/208V, 3ø, 4W EXISTING PANEL "MM" LOCATED IN ELECTRICAL EQUIPMENT RM. 203, VIA 112KVA TRANSFORMER (SEE ATTACHED DWG. MM-F-E06).
B. EXISTING WIRING FED FROM BOTTOM OF PANEL BY:
* 2-4" C. (1-WIRING FILL >40% & 1-WIRING FILL >20%).
EXISTING WIRING FED FROM TOP OF PANEL BY:
* 2- 1 1/2" C. (1-WIRING FILL >40% & 1-EMPTY CONDUIT).
EXISTING WIRING FED FROM LEFT SIDE OF PANEL BY:
* 1- 4" C. TO TAP-OFF PANEL "MM" (WIRING FILL >40%).

CONTRACT NO
14-FQ10060-CENI-24

DESIGNED C. NGO 06-14 DATE
DRAWN C. NGO 06-14 DATE
CHECKED B. IDLE 06-14 DATE
APPROVED N/A DATE

REFERENCE DRAWINGS	
NUMBER	DESCRIPTION

REVISIONS		
DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

DEPARTMENT OF TRANSIT INFRASTRUCTURE
AND ENGINEERING SERVICES
OFFICE OF INFRASTRUCTURE RENEWAL PROGRAM

APPROVED _____

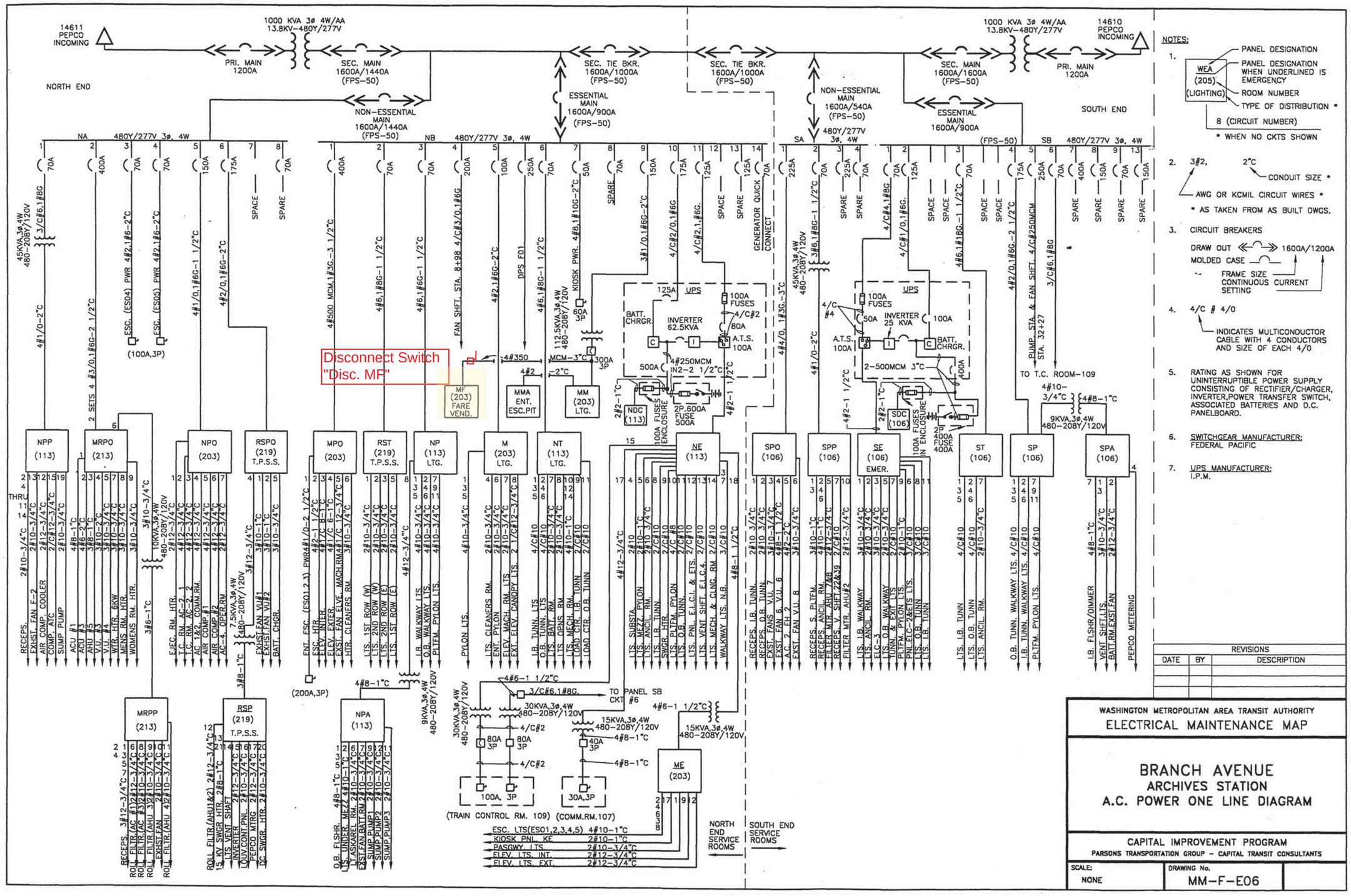
GFP A Gannett Fleming/Parsons JOINT VENTURE

SUBMITTED _____ PROJECT MANAGER

NEW ELECTRONIC PAY PROGRAM (NEPP)
IN METRORAIL STATIONS
ARCHIVES
PANEL SCHEDULE

SCALE NOT TO SCALE

DRAWING NO F02-E-102



NOTES:

1. WEA (205) (LIGHTING) — PANEL DESIGNATION; PANEL DESIGNATION WHEN UNDERLINED IS EMERGENCY; ROOM NUMBER; TYPE OF DISTRIBUTION *; 8 (CIRCUIT NUMBER); * WHEN NO CKTS SHOWN
2. 3#2, 2"C — CONDUIT SIZE *; AWG OR KCMIL CIRCUIT WIRES *; * AS TAKEN FROM AS BUILT DWGS.
3. CIRCUIT BREAKERS — DRAW OUT, MOLDED CASE, FRAME SIZE, CONTINUOUS CURRENT SETTING (1600A/1200A)
4. 4/C # 4/0 — INDICATES MULTICONDUCTOR CABLE WITH 4 CONDUCTORS AND SIZE OF EACH 4/0
5. RATING AS SHOWN FOR UNINTERRUPTIBLE POWER SUPPLY CONSISTING OF RECTIFIER/CHARGER, INVERTER, POWER TRANSFER SWITCH, ASSOCIATED BATTERIES AND D.C. PANELBOARD.
6. SWITCHGEAR MANUFACTURER: FEDERAL PACIFIC
7. UPS MANUFACTURER: I.P.M.

REVISIONS		
DATE	BY	DESCRIPTION

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

ELECTRICAL MAINTENANCE MAP

BRANCH AVENUE
ARCHIVES STATION
A.C. POWER ONE LINE DIAGRAM

CAPITAL IMPROVEMENT PROGRAM

PARSONS TRANSPORTATION GROUP – CAPITAL TRANSIT CONSULTANTS

SCALE:	DRAWING No.	
NONE	MM–F–E06	

O:\ELECT\NewMaintMap\F-Route\MM-F-E06.dwg Thu Jun 08 04:49:25 2000 R.M.