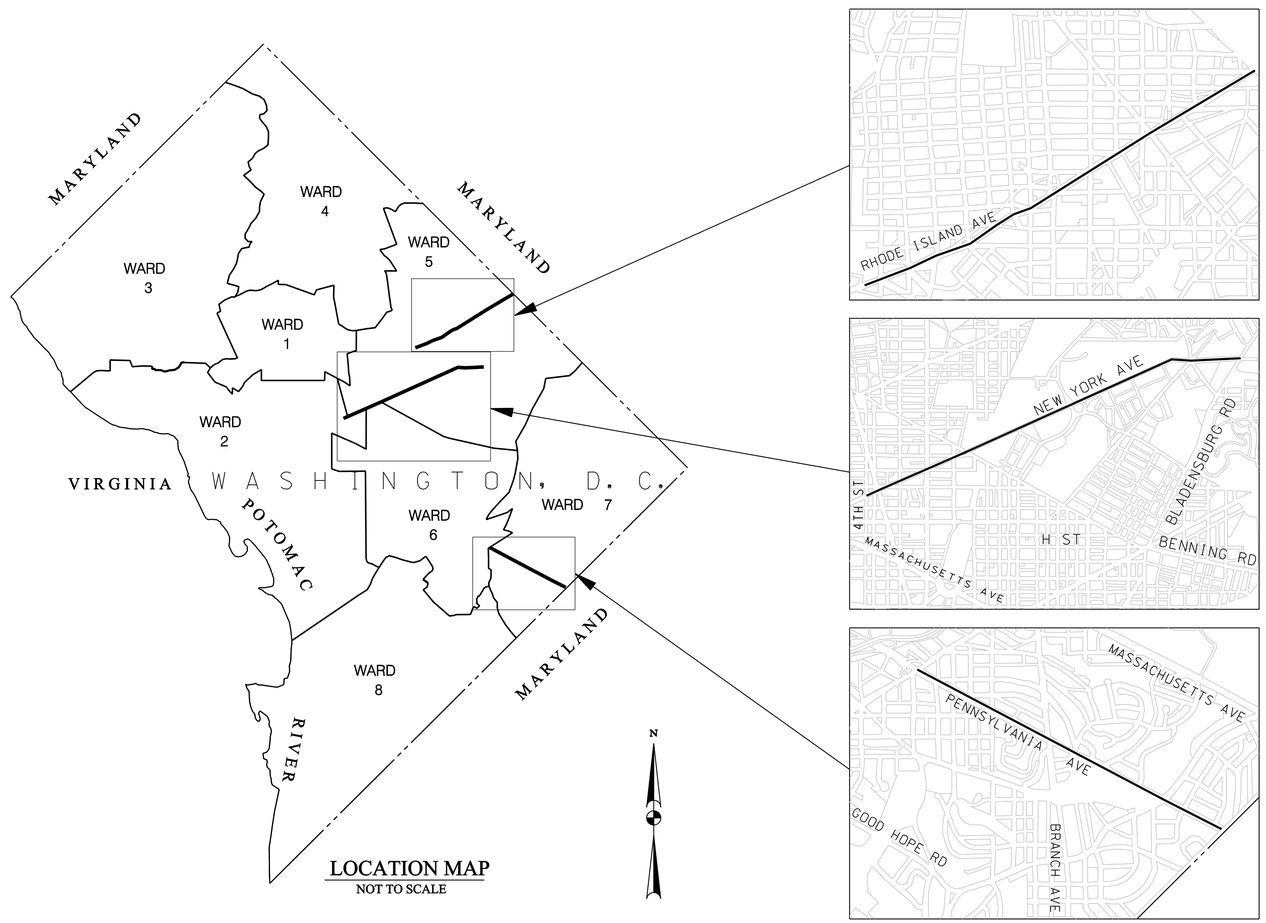
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C.	DCKA-2010-T-0050	1	32

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION
ADAPTIVE SIGNAL CONTROL SYSTEM DESIGN



LOCATION MAP
NOT TO SCALE

DISTRICT OF COLUMBIA DEPARTMENT OF TRANSPORTATION TRANSPORTATION OPERATIONS ADMINISTRATION	DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION
RECOMMENDED FOR APPROVAL: PROJECT MANAGER, ITS DIVISION /CHIEF, ITS DIVISION APPROVED: TRANSPORTATION OPERATIONS ADMINISTRATION TRANSPORTATION POLICY AND PLANNING ADMINISTRATION CHIEF ENGINEER, INFRASTRUCTURE PROJECT MANAGEMENT ADMINISTRATION DATE:	APPROVED: DIVISION ADMINISTRATOR DATE:

H:\projfile\12455 - DDOT Adaptive Signal Design\dwgs\design\1 - Title Sheet.dgn
Thursday, June 12, 2014 AT 03:53 PM

REVISION									
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	2	32

GENERAL NOTES:

SHEET INDEX:

SHEET NUMBER	DESCRIPTION
2	SHEET INDEX AND GENERAL NOTES
3	ADAPTIVE SIGNAL CONTROL DETECTION INDEX
4	SYSTEM BLOCK DIAGRAM
5	CABINET DETAIL
6	SENSOR INSTALLATION DETAILS
7	DEVICE ORIENTATION
8 TO 31	ADAPTIVE SIGNAL CONTROL DESIGN PLANS•
32	TRAFFIC CONTROL PLANS

• REFER TO ADAPTIVE SIGNAL CONTROL DETECTION INDEX (SHEET NO. 3) FOR INDIVIDUAL DETECTOR AND CORRESPONDING SHEET NUMBERS.

PROJECT DESCRIPTION:

THE DDOT ADAPTIVE SIGNAL CONTROL SYSTEM DESIGN PROJECT INSTALLS VEHICLE DETECTION EQUIPMENT AND SIGNAL SYSTEM UPGRADES ALONG THREE CORRIDORS: NEW YORK AVENUE, N.W./N.E., RHODE ISLAND AVENUE, N.E., AND PENNSYLVANIA AVENUE, S.E.

THE PROJECT LIMITS FOR THE STUDY CORRIDORS CONSIST OF THE FOLLOWING:

NEW YORK AVENUE CORRIDOR: 4TH STREET, N.W/I-395 TO BLADENSBURG AVENUE, N.E.

RHODE ISLAND AVENUE CORRIDOR: 4TH STREET, N.E. TO EASTERN AVENUE, N.E.

PENNSYLVANIA AVENUE CORRIDOR: FAIRLAWN AVENUE, S.E./ANACOSTIA FREEWAY RAMP TO SOUTHERN AVENUE, S.E.

1. ALL WORK RELATING TO THE INSTALLATION OF THE TRAFFIC SIGNALS SHALL COMPLY WITH APPROPRIATE PROVISIONS OF 2009 DDOT STANDARD DRAWINGS, LATEST DDOT STANDARD SPECIFICATIONS, AND THE CONTRACT SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL SUBMIT TO DDOT CATALOG CUT SHEETS OF ALL EQUIPMENT AND MATERIALS TO BE FURNISHED AND INSTALLED. WRITTEN APPROVAL FROM DDOT SHALL BE SECURED PRIOR TO PROCUREMENT.
3. THE LOCATION OF PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL, INCLUDING ELECTRICAL CONDUIT, SHALL BE FIELD LOCATED, VERIFIED AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL PROPOSED DETECTION MAGNETOMETERS, ACCESS POINTS, REPEATERS, ACCESS POINT DIGITAL RADIOS, AND ALL MOUNTING HARDWARE.
5. THE LOCATION OF UTILITIES SHOWN ARE APPROXIMATE AND THE INFORMATION SHOWN IS NOT NECESSARILY COMPLETE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE OF ALL UTILITIES WELL IN ADVANCE OF CONDUCTING CONSTRUCTION OPERATIONS THAT COULD DAMAGE THESE FACILITIES. IN AREAS WHERE PROPOSED CONSTRUCTION MAY CONFLICT WITH EXISTING UTILITIES, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING UTILITIES. IF A UTILITY IS DAMAGED, THE CONTRACTORSHALL IMMEDIATELY NOTIFY THE ENGINEER AND THE OWNER OF SAID UTILITY. ANY DAMAGE SUSTAINED TO UTILITIES ABOVE OR BELOW THE GROUND SHALL BE REPAIRED BY OR UNDER THE DIRECTION OF THE OWNER AT CONTRACTOR'S EXPENSE. UNDER NO CIRCUMSTANCE SHALL THE CONTRACTOR BACKFILL AN EXCAVATION AFFECTING SAID UTILITY WITHOUT FIRST RECEIVING PERMISSION FROM THE UTILITY OWNER.
6. PEPCO HAS UNDERGROUND MANHOLES AND CONDUITS WHICH CONTAIN PRIMARY AND SECONDARY CABLE THROUGHOUT THE PROJECT. EXTREME CAUTION SHALL BE EXERCISED DURING ALL PHASES OF THE PROJECT TO MAINTAIN AND PROTECT THE CABLES AND FEEDERS IF ANY.
7. THE CONTRACTOR SHALL EXCAVATE AND LOCATE VERTICALLY AND HORIZONTALLY THE UTILITIES IN CLOSE PROXIMITY TO THE PROPOSED TRAFFIC SIGNAL WORK AREA AS NECESSARY FOR CONSTRUCTION.
8. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777, 48 HOURS PRIOR TO EXCAVATING.
9. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 2-FOOT HORIZONTAL CLEARANCE TO ALL UTILITIES DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL NOT WORK ON MORE THAN THREE (3) SITES AT ONE TIME.
11. IF A NEW PEPCO ELECTRICAL SERVICE IS REQUIRED. THE CONTRACTOR SHALL COORDINATE SERVICE INSTALLATION AND PAYMENT WITH PEPCO IN ACCORDANCE WITH CONTRACT SPECIAL PROVISIONS.
12. THE CONTRACTOR SHALL RETURN ALL REMOVED TRAFFIC SIGNAL EQUIPMENT TO DDOT TRAFFIC SIGNAL SHOP. CONTACT MR. RANDOLPH COOPER 72 HOURS IN ADVANCE AT (202) 905-6059 TO ARRANGE SERVICE.
13. NO ABOVE GROUND HARDWARE OR EQUIPMENT SHALL BE LOCATED SUCH THAT A 4-FOOT CLEAR PATH IS NOT AVAILABLE FOR ADA PURPOSES.
14. THE CONTRACTOR SHALL USE EXISTING CONDUIT TO CONNECT TO THE TRAFFIC SIGNAL CONTROL CABINETS UNLESS SPECIFIED OTHERWISE. ALL CONDUIT AND CONDUIT PATHS TO THE CONTROLLER CABINET SHALL BE FIELD VERIFIED PRIOR TO COMMUNICATION CABLE INSTALLATION.
15. THE CONTRACTOR SHALL CONFIRM THE CABLE ROUTE SHOWN BETWEEN THE PROPOSED ACCESS POINT OR ACCESS POINT DIGITAL RADIO LOCATIONS AND THE CABINET PRIOR TO INSTALLATION OF CABLES. THE INSTALLATION OF NEW CABLES SHALL NOT AFFECT OR DAMAGE THE EXISTING CABLES IN THE CONDUIT DURING INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING THE DAMAGED CABLES. IF REQUIRED, CLEAR THE CONDUITS PRIOR TO INSTALLATION OF CABLES.
15. ACCESS POINTS, DIGITAL RADIOS, AND REPEATERS SHALL BE ORIENTED SO AS TO ENABLE WIRELESS COMMUNICATION AMONG DETECTORS, ACESS POINT, AND REPEATERS. THE MANUACTURER OR A QUALIFIED MANUFACTURER'S REPRESENTATIVE SHALL APPROVE THE ORIENTATION FOR ALL SITES.
16. LOCATE SENSORS AT LEAST 10 FT AWAY FROM ALL MANHOLES. AVOID LOCATING SENSORS ON DRIVEWAYS.
17. ROADWAY DIMENSIONS, WIDTHS, LOCATION OF MANHOLES, AND TRAFFIC CABINET ARE APPROXIMATE. IF REQUIRED, VERIFY THIS INFORMATION PRIOR TO INSTALLATION OF DEVICES.
18. COORDINATE WITH URBAN FORESTRY DEPARTMENT FOR TREE TRIMMING OPERATIONS.
19. INSTALL ALL ACCESS POINTS AND REPEATERS ON EXISTING POLES. NO NEW POLES ARE REQUIRED TO BE INSTALLED AS PART OF THIS PROJECT.
20. LEAVE 10FT SLACK OF CAT 5E CABLE IN EACH OF THE MANHOLE, VAULT, TRANSFORMER BASE, AND TRAFFIC CABINET THROUGH WHICH THE CAT 5E CABLE PASSES THROUGH.
21. SOME OF THE LOCATIONS MAY BE IN THE NATIONAL PARK SERVICES (NPS) PROPERTY. THE CONTRACTOR SHALL IDENTIFY ALL THE LOCATIONS WITHIN NPS PROPERTY AND SUBMIT THE LIST OF LOCATIONS WITHIN NPS PROPERTY FOR APPROVAL. THE CONTRACTOR SHALL ALSO COORDINATE WITH NPS AND OBTAIN PERMIT FROM NPS PRIOR TO INSTALLATION OF DEVICES.
22. ALL THE DETECTORS ARE CENTERED WITHIN THE LANES. THE CONTRACTOR SHALL FOLLOW MANUFACTURER'S RECOMMENDATION ON PLACEMENT OF DETECTORS WITHIN WIDER LANES, WHICH ACT AS BOTH PARKING AND TRAVEL LANE.
23. FOR DETECTION SYSTEM INSTALLATION, THE REPEATER POLE SHALL ALLOW TYPICAL HEIGHT INSTALLS, AND THE REPEATER DEVICE SHALL BE ATTACHED TO THE REPEATER POLE USING METAL BANDS.
24. DETECTION EQUIPMENT SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

100% DESIGN PLAN SUBMITTAL

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

SHEET INDEX AND GENERAL NOTES

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	
DESIGNED BY	
DRAWN BY	BRL
REVIEWED BY	KSL
DATE	04/14
SCALE	NTS
SHEET / OF	2 / 32
DRAWING NO.	GENNOTES

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Thursday, June 12, 2014 AT 03:53 PM

REVISION									
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
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F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	3	32

ADAPTIVE SIGNAL CONTROL DETECTION INDEX

ID NO.	ACISA NO.	S PLAN NO.	MAIN STREET	SIDE STREET	LOCATION QUADRANT	PLAN SHEET NO.	SENSOR INSTALL DEPTH
1	3012	S-400-B	New York Avenue NE	4th Street NW/ I-395	Northwest	8	5"
2	3045a	S-2111-A	New York Avenue NE	M Street NW at New Jersey Avenue NW	Northwest	9	5"
3	3045	S-2111-A	New York Avenue NE	New Jersey Avenue NW	Northwest	9	5"
4	3039	S-1807-D	New York Avenue NE	North Capitol Street NE	Northeast	10	5"
5	3031	S-1178-C	New York Avenue NE	1st Street NE	Northeast	11	5"
6	3244	S-2004-B	New York Avenue NE	Florida Avenue at P Street NE	Northeast	12	5"
6	3030	S-753-C	New York Avenue NE	Florida Avenue NE at Eckington Place NE	Northeast	13	5"
7	3033	S-1776-B	New York Avenue NE	Florida Avenue NE	Northeast	14	5"
8	3185	S-1806-B	New York Avenue NE	Montana Avenue (along circle)	Northeast	15	5"
9	3180	S-880-F	New York Avenue NE	Bladensburg Road NE	Northeast	16	5"
10	3032	S-262-G	Rhode Island Avenue NE	4th Street NE	Northeast	17	5"
11	3243	S-2013-B	Rhode Island Avenue NE	Rhode Isl. Ave. Shopping Plaza	Northeast	18	5"
12	3196	S-1676-B	Rhode Island Avenue NE	Reed Street NE	Northeast	19	5"
13	3188	S-265-B	Rhode Island Avenue NE	13th Street NE/ Brentwood Road NE	Northeast	20	5"
14	3189	S-741	Rhode Island Avenue NE	14th Street NE (Montana Avenue NE)	Northeast	21	5"
15	3191	S-686	Rhode Island Avenue NE	20th Street NE	Northeast	22	5"
16	3197	S-2098-A	Rhode Island Avenue NE	South Dakota Avenue NE	Northeast	23	5"
17	3192	S-521-A	Rhode Island Avenue NE	Eastern Avenue NE	Northeast	24	5"
18	4236	S-1576	Pennsylvania Avenue SE	Anacostia Freeway Ramp/ Fairlawn Avenue SE	Southeast	25	5"
19	4201	S-1397-A	Pennsylvania Avenue SE	L'Enfant Square SE	Southeast	26	5"
20	4146	S-1397-A	Pennsylvania Avenue SE	Minnesota Avenue SE	Southeast	27	5"
21	4202	S-2209-E	Pennsylvania Avenue SE	29th Street SE/ P Street SE	Southeast	28	5"
22	4145	S-1085-A	Pennsylvania Avenue SE	Branch Avenue SE	Southeast	29	5"
23	4258	S-2324	Pennsylvania Avenue SE	Fort Davis Street SE	Southeast	30	5"
24	4147	S-218-K	Pennsylvania Avenue SE	Southern Avenue SE	Southeast	31	5"

100% DESIGN PLAN SUBMITTAL

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ADAPTIVE SIGNAL CONTROL
DETECTION INDEX

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	
DESIGNED BY	
DRAWN BY	BRL
REVIEWED BY	KSL
DATE	04/14
SCALE	NO SCALE
SHEET / OF	3 / 32
DRAWING NO.	DETINDEX

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REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
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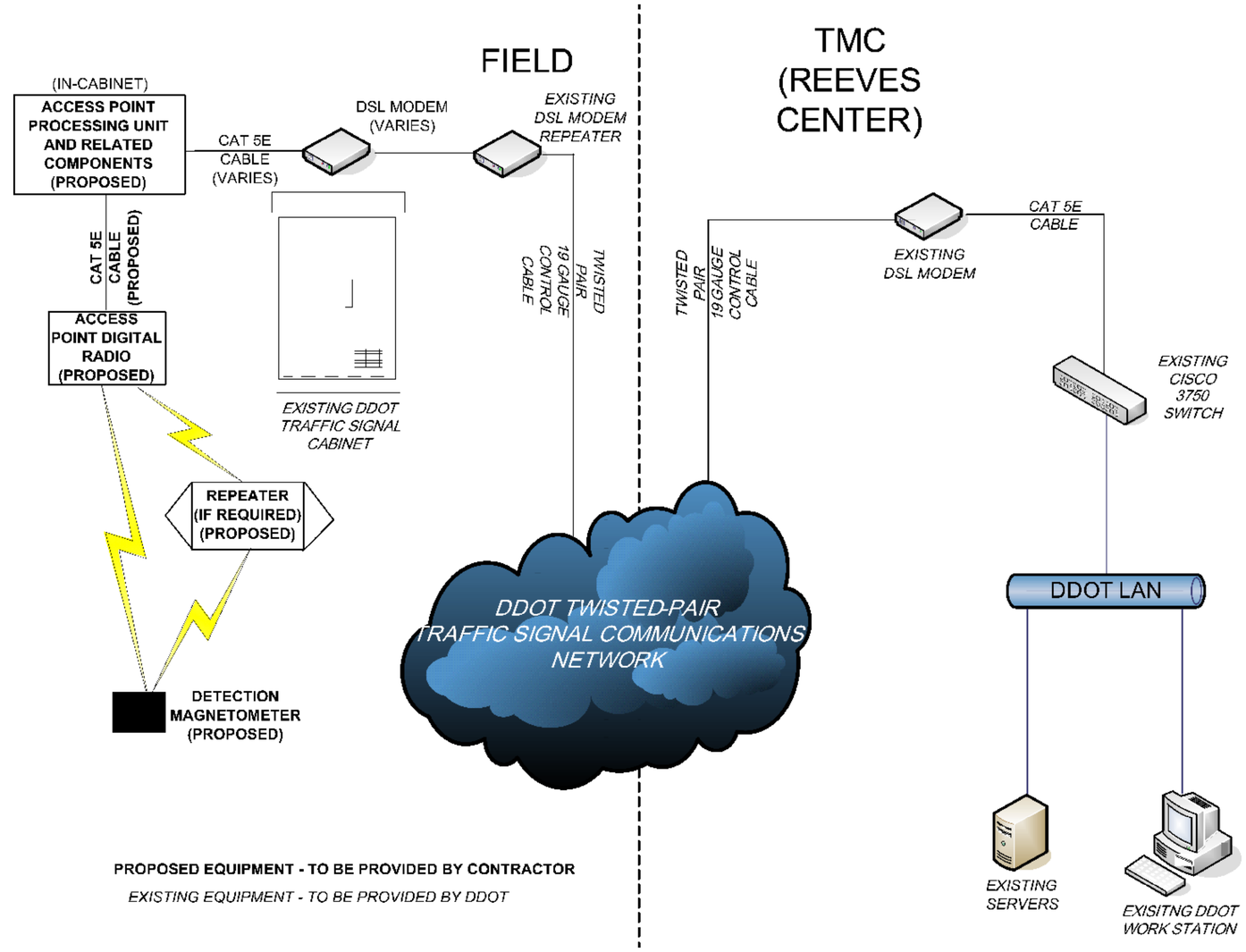
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	4	32

WIRELESS VEHICLE DETECTION SYSTEM



PROPOSED EQUIPMENT - TO BE PROVIDED BY CONTRACTOR

EXISTING EQUIPMENT - TO BE PROVIDED BY DDOT

NOTES:

1. PROPOSED EQUIPMENT TO BE FURNISHED AND INSTALLED PER PLAN SHEETS AND MANUFACTURER'S SPECIFICATIONS.

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

SYSTEM BLOCK DIAGRAM

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	KSL
DESIGNED BY	TST
DRAWN BY	TST
REVIEWED BY	KSL
DATE	04/14
SCALE	NO SCALE
SHEET	4 OF 32
DRAWING NO.	SYSTMDGRM

100% DESIGN PLAN SUBMITTAL

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Thursday, June 12, 2014 AT 03:54 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
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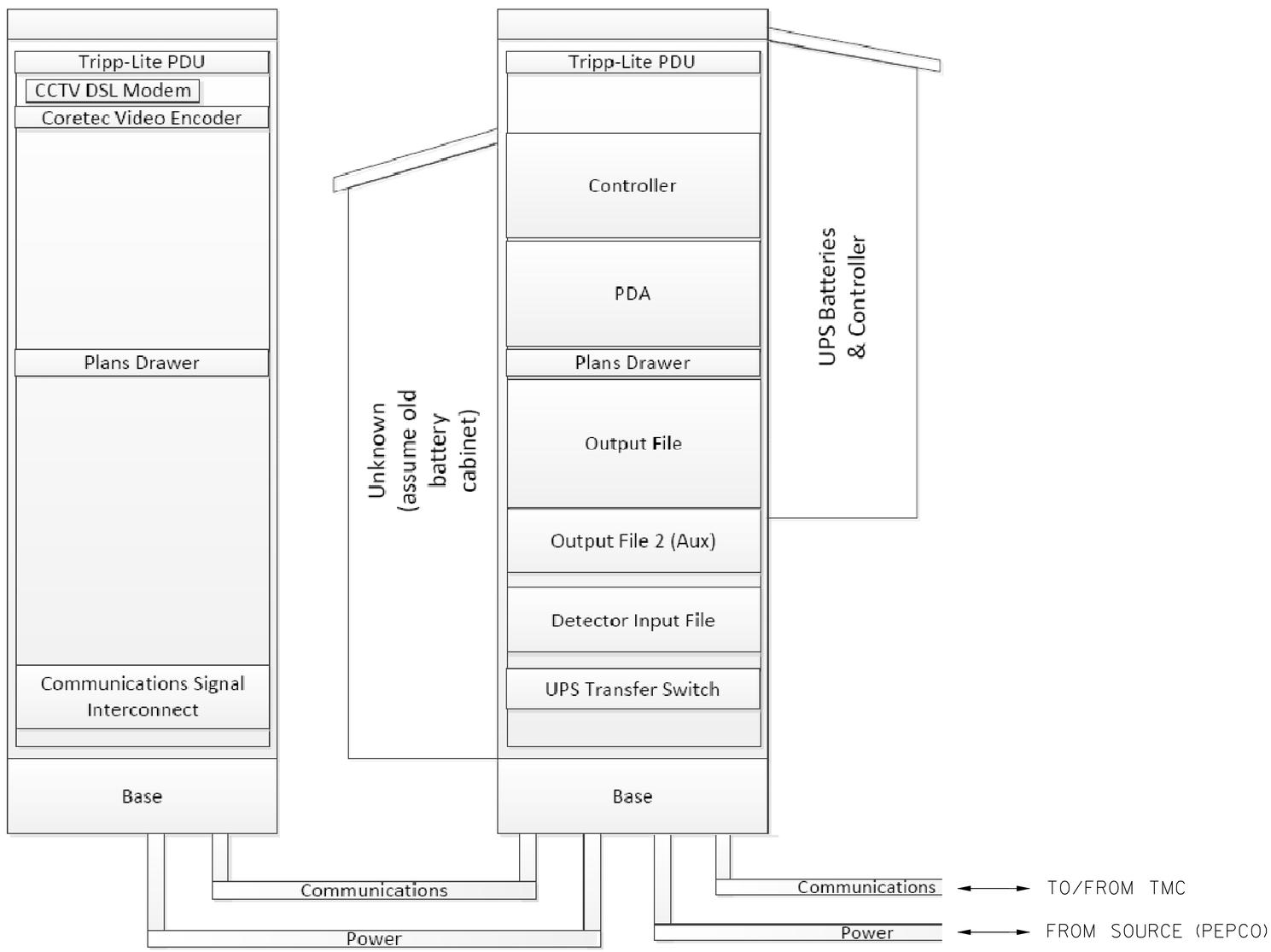
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	5	32

NEW COMMUNICATIONS AND EXISTING TRAFFIC SIGNAL CABINET DETAIL



DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

CABINET DETAIL

RECOMMENDED
DDOT/ TOA PROJECT MANAGER — DATE
CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

S.L.F. NO.
APPROVED BY — DATE

FIELD CHECKED BY	
DESIGNED BY	
DRAWN BY	BRL
REVIEWED BY	KSL
DATE	04/14
SCALE	NO SCALE
SHEET	5 OF 32
DRAWING NO.	DETAIL

100% DESIGN PLAN SUBMITTAL

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Thursday, June 12, 2014 AT 03:34 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
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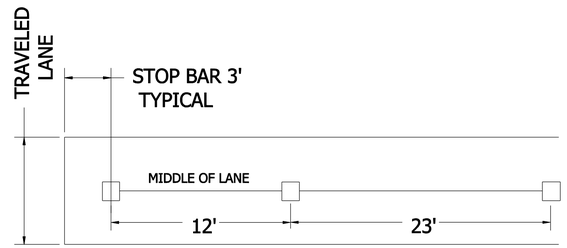
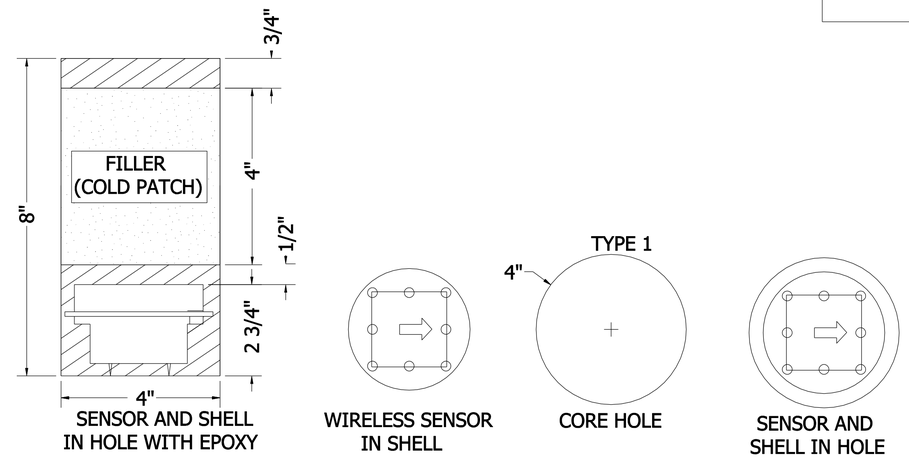
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	6	32

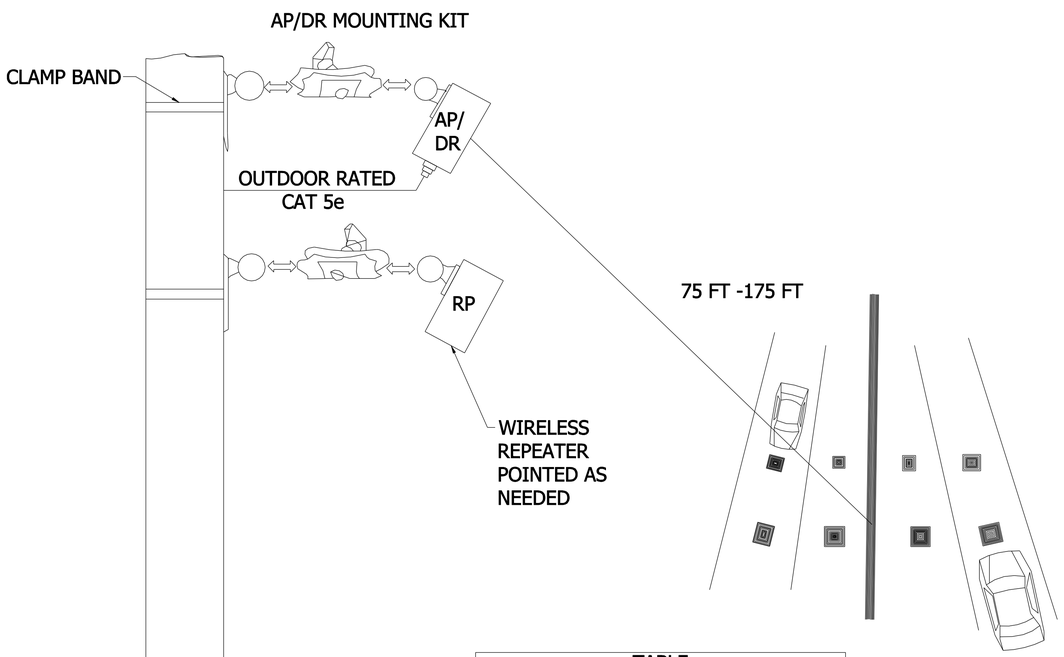


40 ' PRESENCE DETECTION

STOP BAR DETECTION SENSOR CONFIGURATION



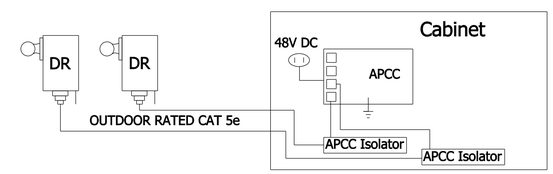
MAGNETOMETER DETAIL



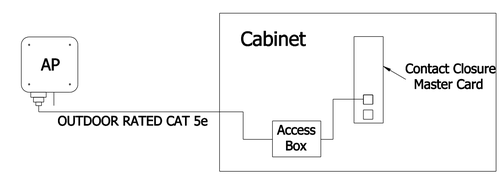
MOUNTING BRACKET ATTACHMENT AND LINE OF SIGHT DETAIL

TABLE	
MOUNT HEIGHT	MAX RF RANGE
16 FT (5 METERS)	100 FT (30 METERS)
20 FT (6 METERS)	150 FT (45 METERS)
30 FT (9 METERS)	175 FT (50 METERS)

ACCESS POINTS, REPEATERS, AND ACCESS POINT DIGITAL RADIOS USE A DIRECTIONAL ANTENNA RANGE VALID FOR "LINE OF SITE" DISTANCE.



ACCESS POINT CONTROLLER CARD AND DIGITAL RADIO WIRING DETAIL



ACCESS POINT WIRING DETAIL

100% DESIGN PLAN SUBMITTAL

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

SENSOR INSTALLATION DETAILS

RECOMMENDED
DDOT/ TOA PROJECT MANAGER — DATE
CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

S.L.F. NO.
APPROVED BY — DATE

FIELD CHECKED BY	
DESIGNED BY	
DRAWN BY	BRL
REVIEWED BY	KSL
DATE	04/14
SCALE	NO SCALE
SHEET / OF	6 / 32
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Thursday, June 12, 2014 AT 03:56 PM

REVISION									
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
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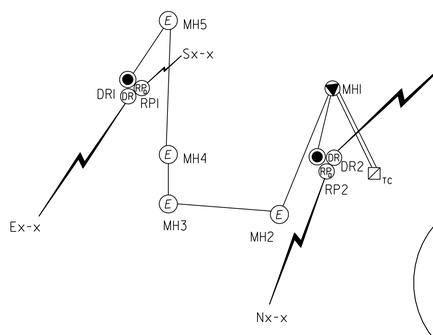
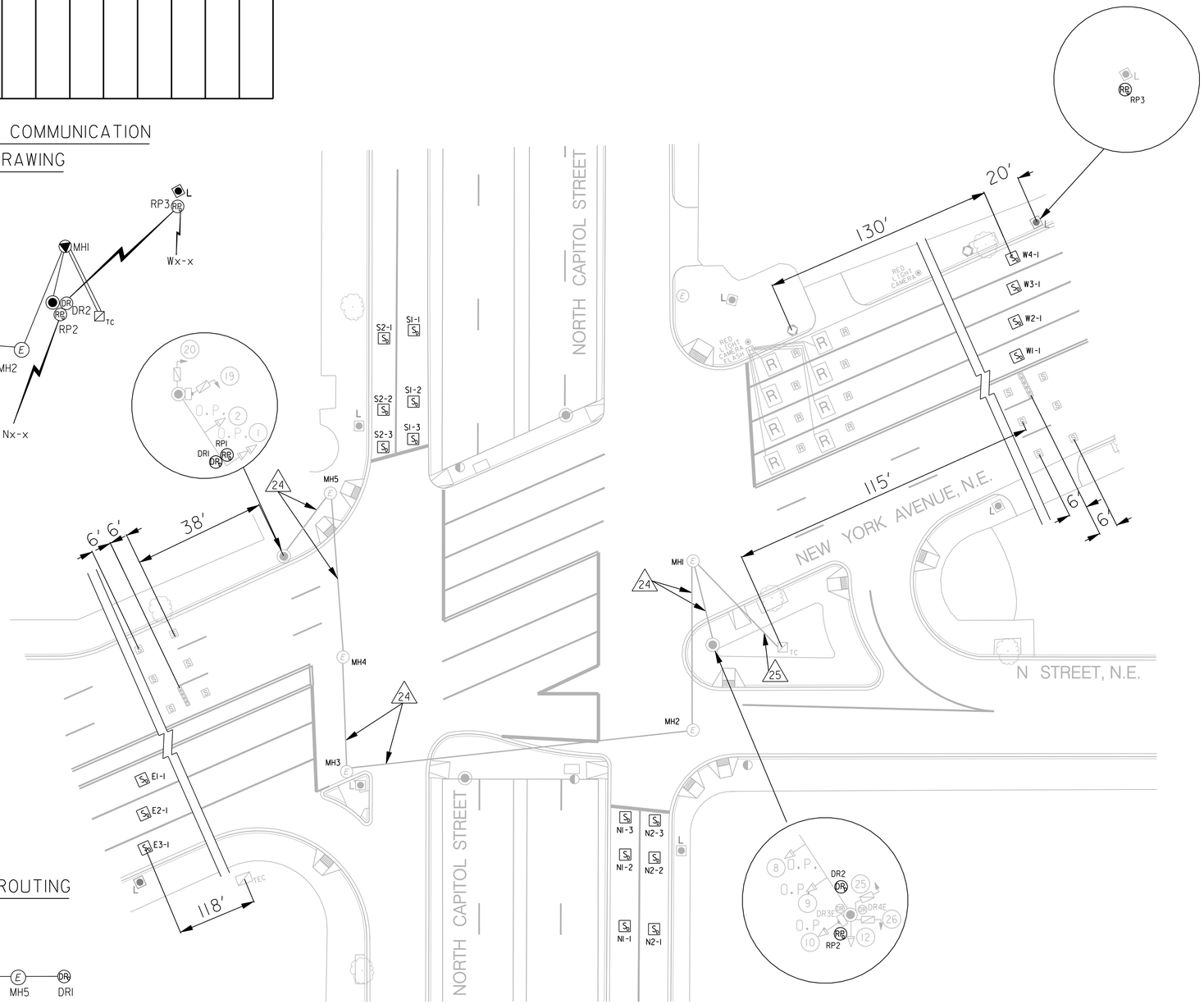
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	10	32

PROPOSED COMMUNICATION DRAWING

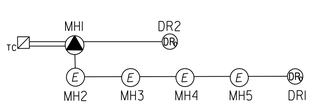




LEGEND:

- TC — EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- L — EXISTING 28-FOOT PENDANT POST STREETLIGHT POLE WITH LUMINAIRE AND A TRANSFORMER BASE
- EXISTING 20-FOOT TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING AD-11 TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING 20 FOOT TALL MONOTUBE POLE WITH MAST ARM
- EXISTING #4 STREET LIGHT POLE WITH RED LIGHT CAMERA
- DR — EXISTING ACCESS POINT DIGITAL RADIO
- D — EXISTING MAGNETIC SENSOR DETECTOR (TRAVEL TIME)
- S — EXISTING SENSYS VDS MEGNETOMETER
- R — EXISTING SENSYS RED LIGHT MEGNETOMETER
- EXISTING WHEELCHAIR RAMP
- EXISTING TREE
- EXISTING TRAFFIC SIGN
- PB — EXISTING PULL BOX
- EXISTING FIRE HYDRANT
- E — EXISTING PEPCO ELECTRICAL MANHOLE
- EXISTING DDOT MANHOLE
- R — EXISTING RED LIGHT CAMERA LOOP DETECTOR
- S — PROPOSED DETECTION MAGNETOMETER
- RP — PROPOSED REPEATER
- DR — PROPOSED ACCESS POINT DIGITAL RADIO
- EXISTING ELECTRICAL PVC CONDUIT

PROPOSED CABLE ROUTING



24 — CAT5 ETHERNET CABLE

25 — 2-CAT5 ETHERNET CABLES

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3039 – NEW YORK AVENUE, NORTH CAPITOL STREET AND N STREET

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AYY
DESIGNED BY	AYY
DRAWN BY	WL/ WZ/ SG
REVIEWED BY	AYY
DATE	04/14
SCALE	1"=20'
SHEET	10 OF 32
DRAWING NO.	S-1807-D

100% DESIGN PLAN SUBMITTAL

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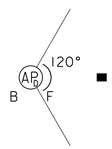
Thursday, June 12, 2014 AT 03:40 PM

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	SHEETS
D.C.	D.C	DCKA-2010-T-0050	7	32

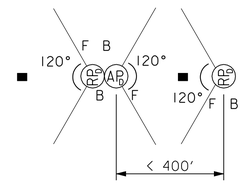
TYPICAL ORIENTATION DECTECTION COMMUNICATIONS EQUIPMENT

LEGEND

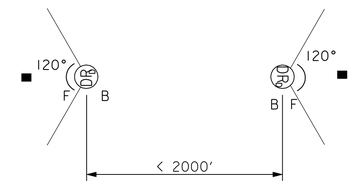
- AP PROPOSED ACCESS POINT
- RP PROPOSED REPEATER
- RP PROPOSED ACCESS POINT DIGITAL RADIO
- ■ PROPOSED DETECTION MAGNETOMETER
- F FRONT OF THE ACCESS POINT OR REPEATER
- B BACK OF THE ACCESS POINT OR REPEATER



ORIENTATION 1



ORIENTATION 2



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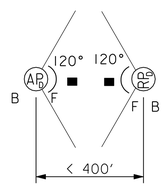

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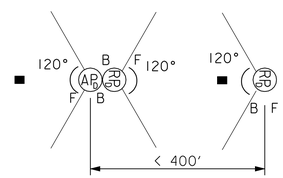
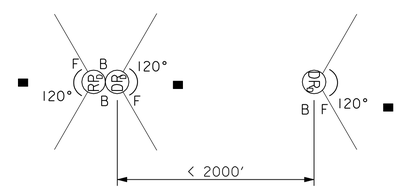
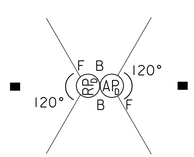


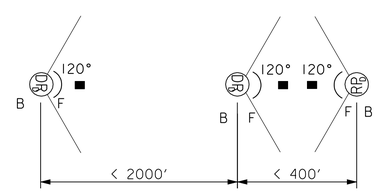
ORIENTATION 5



ORIENTATION 6



ORIENTATION 7



ORIENTATION 8

DEVICE ORIENTATION NOTES:

1. DEVICE ORIENTATION DETAIL SHOWS COMMUNICATIONS FOR ACCESS POINTS, ACCESS POINT DIGITAL RADIOS, AND COMMUNICATIONS BETWEEN ACCESS POINTS AND REPEATERS, BETWEEN DIGITAL RADIOS AND REPEATERS, AND COMMUNICATIONS BETWEEN TWO REPEATERS.
2. THE CONTRACTOR SHALL FOLLOW MANUFACTURER'S RECOMMENDATION FOR ORIENTATION OF ACCESS POINTS AND REPEATERS. SOME TYPICAL ORIENTATIONS OF ACCESS POINTS AND REPEATERS AND THE MAXIMUM ALLOWABLE DISTANCES BETWEEN ACCESS POINTS AND REPEATER ARE SHOWN ABOVE.
3. IF REQUIRED USE MANUFACTURER RECOMMENDED EXTENSION ARM TO AVOID THE DEGRADATION OF SIGNAL STRENGTH DUE TO THE POLES TO WHICH THE ACCESS POINT OR REPEATER IS ATTACHED.
4. CAT5 CABLE MUST CONNECT THE DIGITAL RADIO TO THE ACCESS POINT THROUGH AN ISOLATOR AND MUST MEET STANDARD LENGTH LIMITATIONS (2,000 FT WITH ISOLATOR) FOR RS422 COMMUNICATION.
5. ORIENTATION OF ACCESS POINT DIGITAL RADIOS SHALL FOLLOW GUIDELINES FOR ORIENTATION OF ACCESS POINTS.

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

DEVICE ORIENTATION

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	
DESIGNED BY	
DRAWN BY	BRL
REVIEWED BY	KSL
DATE	04/14
SCALE	NO SCALE
SHEET / OF	7 / 32
DRAWING NO.	DEVICEORIENT

100% DESIGN PLAN SUBMITTAL

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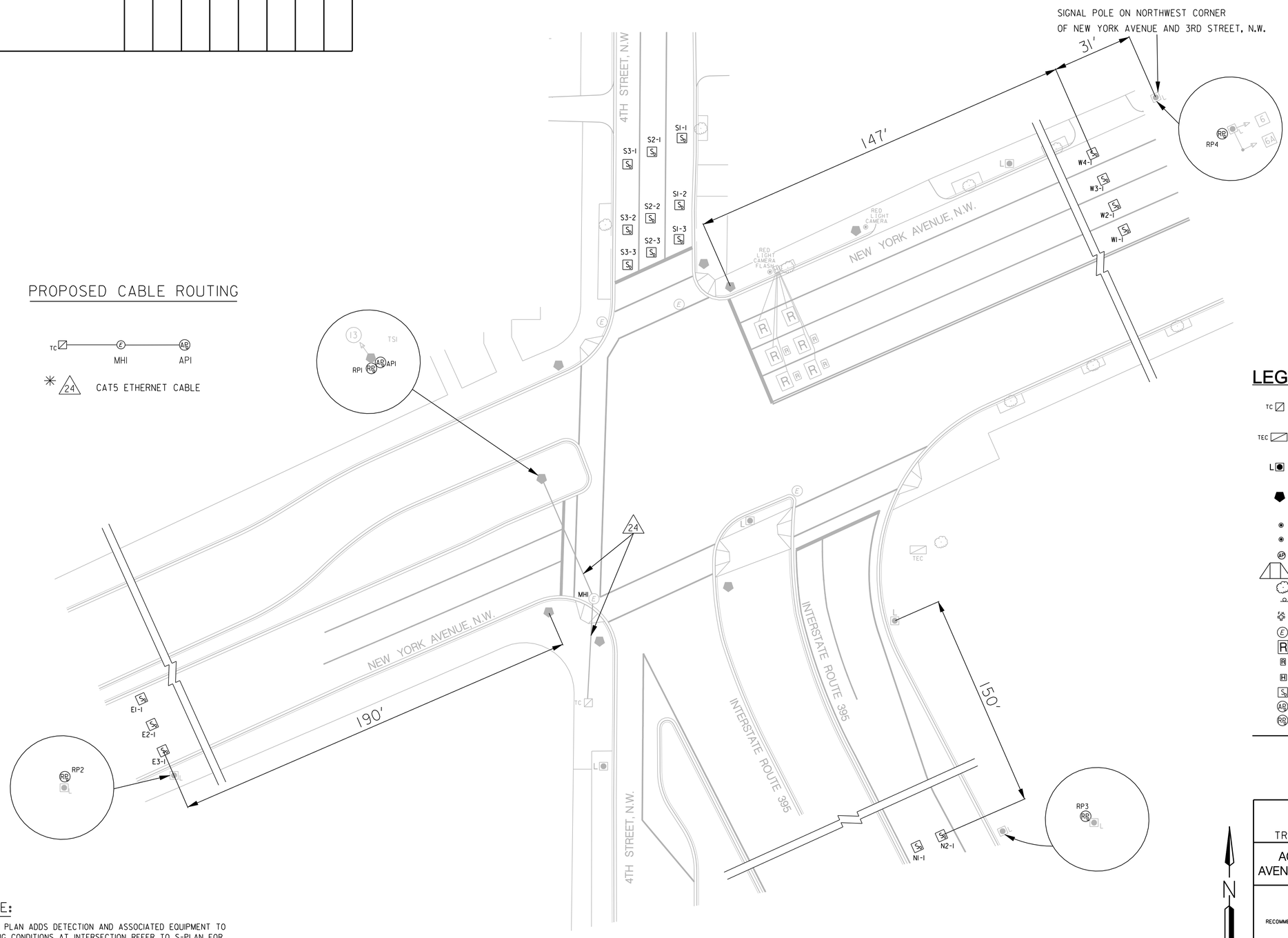
Thursday, June 12, 2014 AT 03:59 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	8	32

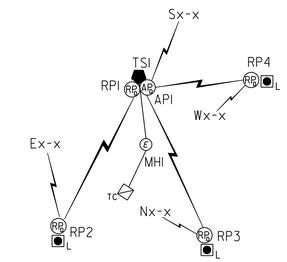


PROPOSED CABLE ROUTING

TC — MHI — API

24 CAT5 ETHERNET CABLE

PROPOSED COMMUNICATION DRAWING



LEGEND:

- TC — EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- TEC — EXISTING COMMUNICATION CABLE TERMINATION CABINET
- L — EXISTING 28-FOOT PENDANT POST STREETLIGHT POLE WITH LUMINAIRE AND A TRANSFORMER BASE
- EXISTING 20-FOOT TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING RED LIGHT CAMERA POLE
- EXISTING RED LIGHT FLASH
- AP — EXISTING SENSOR ACCESS POINT
- EXISTING WHEELCHAIR RAMP
- EXISTING TREE
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- E — EXISTING PEPCO ELECTRICAL MANHOLE
- R — EXISTING RED LIGHT CAMERA LOOP DETECTOR
- R — EXISTING SENSYS RED LIGHT MAGNETOMETER
- H — EXISTING HAND BOX
- S — PROPOSED DETECTION MAGNETOMETER
- AP — PROPOSED ACCESS POINT
- RP — PROPOSED REPEATER
- EXISTING ELECTRICAL PVC CONDUIT

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO. _____

APPROVED BY _____ DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3012 – 4TH STREET, NEW YORK AVENUE AND INTERSTATE 395 FREEWAY, N.W.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AYY
DESIGNED BY	AYY
DRAWN BY	WL/ WZ/ SG
REVIEWED BY	AYY
DATE	04/14
SCALE	1"=20'
SHEET	8 OF 32
DRAWING NO.	S-400-B

100% DESIGN PLAN SUBMITTAL

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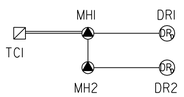
Thursday, June 12, 2014 AT 03:42 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A								

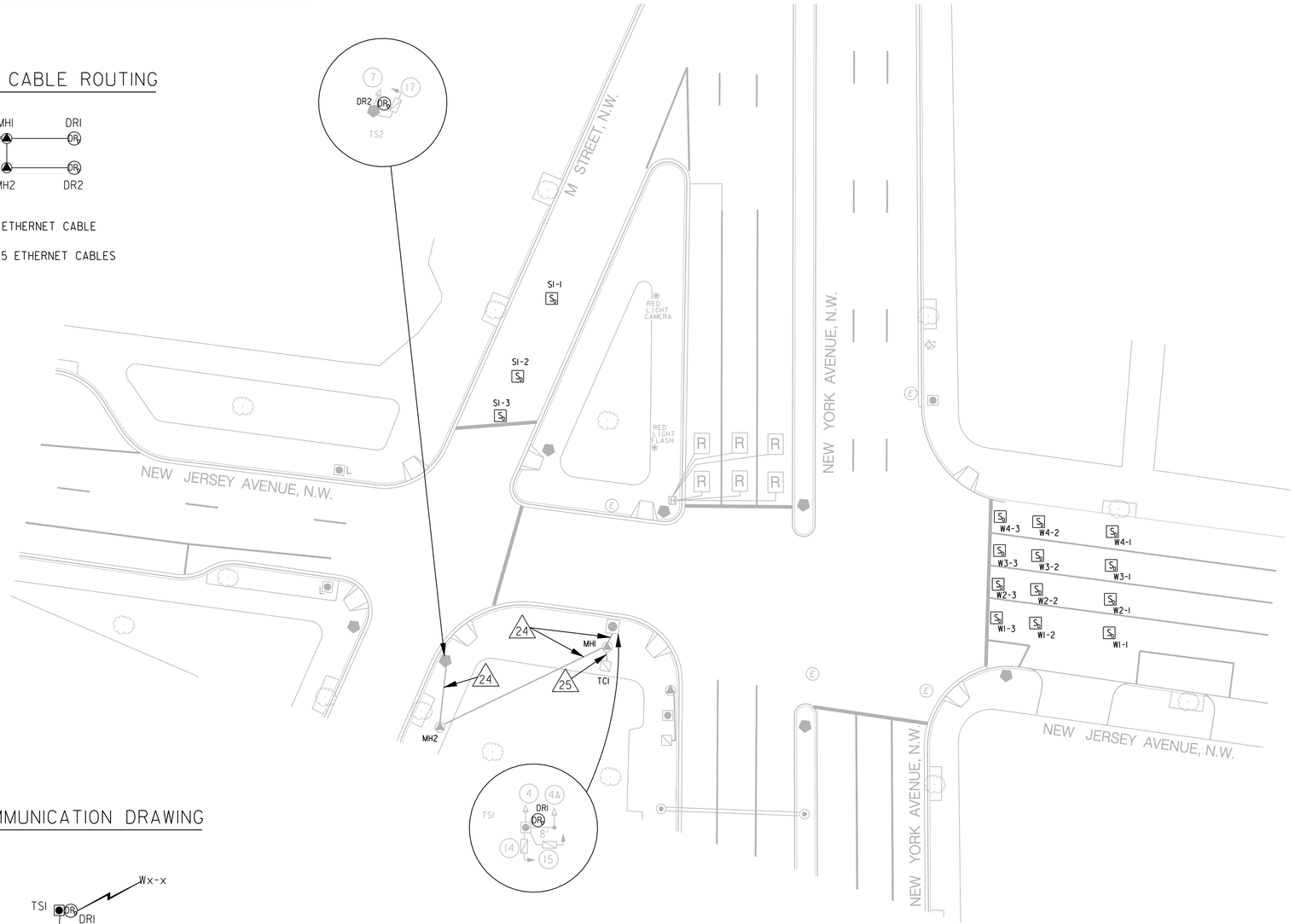
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	9	32

PROPOSED CABLE ROUTING



24 CAT5 ETHERNET CABLE

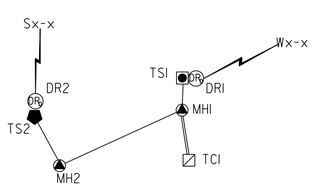
25 2-CAT5 ETHERNET CABLES



LEGEND:

- TC — EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- L — EXISTING 28-FOOT PENDANT POST STREETLIGHT POLE WITH LUMINAIRE AND A TRANSFORMER BASE
- EXISTING 20-FOOT TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING OVERHEAD SIGN SUPPORT STRUCTURE
- EXISTING WHEELCHAIR RAMP
- EXISTING TREE
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- E — EXISTING PEPCO ELECTRICAL MANHOLE
- EXISTING DDOT MANHOLE
- H — EXISTING HAND BOX
- R — EXISTING RED LIGHT CAMERA LOOP DETECTOR
- S — PROPOSED DETECTION MAGNETOMETER
- DR — PROPOSED ACCESS POINT DIGITAL RADIO
- EXISTING ELECTRICAL PVC CONDUIT

PROPOSED COMMUNICATION DRAWING



NOTE:

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B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

S.L.F. NO.

APPROVED BY DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3045 – NEW YORK AVENUE, NEW JERSEY AVENUE AND M STREET, N.W.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AYY
DESIGNED BY	AYY
DRAWN BY	WL/ WZ/ SG
REVIEWED BY	AYY
DATE	04/14
SCALE	1"=20'
SHEET	9 OF 32
DRAWING NO.	S-211I-A

100% DESIGN PLAN SUBMITTAL

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Thursday, June 12, 2014 AT 03:40 PM

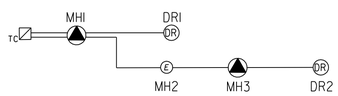
REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	11	32

LEGEND:

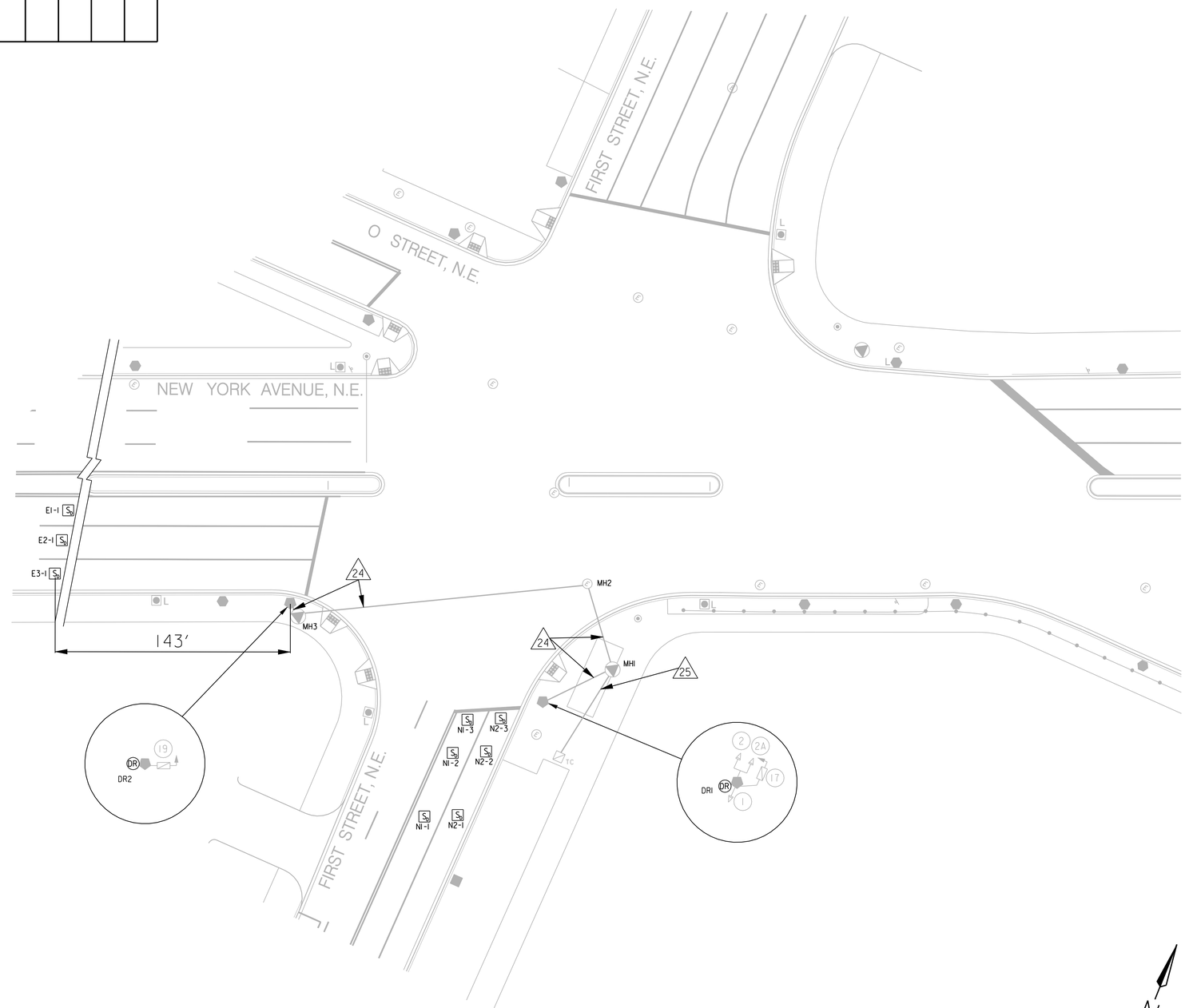
- TC — EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING TWIN-20 STREETLIGHT POLE
- EXISTING 20 FOOT TALL MONOTUBE POLE
- L — EXISTING 28-FOOT PENDANT POST STREETLIGHT POLE WITH LUMINAIRE AND A TRANSFORMER BASE
- EXISTING 20-FOOT TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING WHEELCHAIR RAMP WITH TRUNCATED DOMES
- EXISTING TREE
- EXISTING FIRE HYDRANT
- E — EXISTING PEPCO ELECTRICAL MANHOLE
- EXISTING DDOT MANHOLE (4'X4'X4')
- S — PROPOSED DETECTION MAGNETOMETER
- DR — PROPOSED ACCESS POINT DIGITAL RADIO
- EXISTING ELECTRICAL PVC CONDUIT

PROPOSED CABLE ROUTING

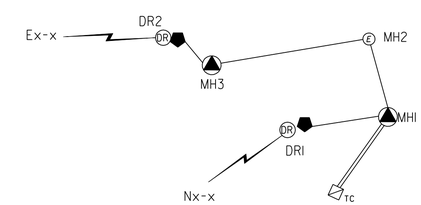


✳ 24 — CAT5 ETHERNET CABLE

25 — 2-CAT5 ETHERNET CABLES



PROPOSED COMMUNICATION DRAWING



NOTE:

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GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3031 – FIRST STREET, NEW YORK AVENUE AND O STREET, N.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AYY
DESIGNED BY	AYY
DRAWN BY	WL/ WZ/ SG
REVIEWED BY	AYY
DATE	04/14
SCALE	1"=20'
SHEET / OF	11 / 32
DRAWING NO.	S-1178-C

100% DESIGN PLAN SUBMITTAL

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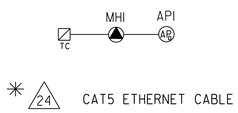
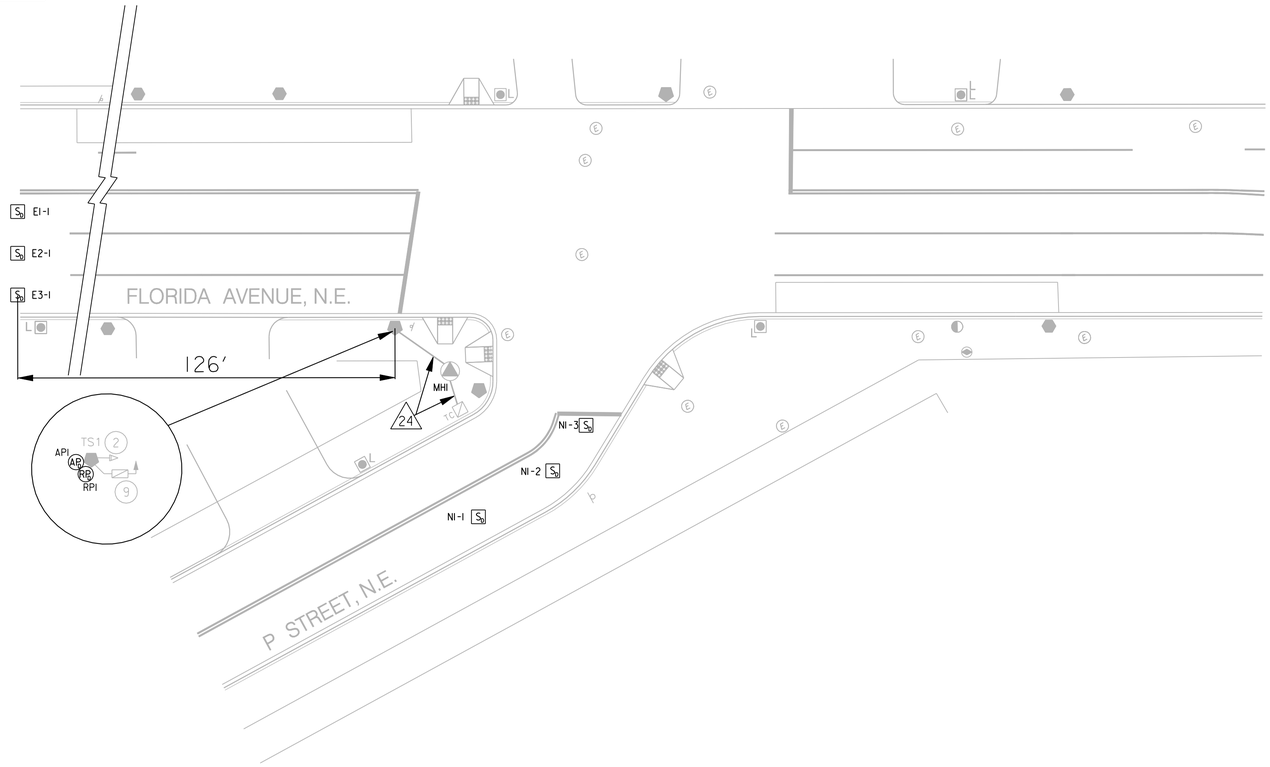
Thursday, June 12, 2014 AT 03:39 PM

REVISION									
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	12	32

PROPOSED CABLE ROUTING

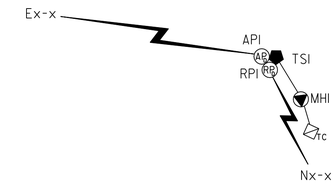




LEGEND:

- TC — EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- L — EXISTING 28-FOOT PENDANT POST STREETLIGHT POLE WITH LUMINAIRE AND A TRANSFORMER BASE
- EXISTING TWIN-20 STREETLIGHT POLE
- EXISTING 20-FOOT TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING WHEELCHAIR RAMP
- EXISTING TRAFFIC SIGN
- E — EXISTING PEPCO ELECTRICAL MANHOLE
- EXISTING DDOT MANHOLE
- S — PROPOSED DETECTION MAGNETOMETER
- AR — PROPOSED ACCESS POINT
- RR — PROPOSED REPEATER
- EXISTING ELECTRICAL PVC CONDUIT
- EXISTING 3'X3'X3' ELECTRICAL MANHOLE

PROPOSED COMMUNICATION DRAWING



NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3244 – FLORIDA AVENUE AND P STREET, N.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AYY
DESIGNED BY	AYY
DRAWN BY	WL/ WZ/ SG
REVIEWED BY	AYY
DATE	04/14
SCALE	1"=20'
SHEET / OF	12 / 32
DRAWING NO.	S-2004-B

100% DESIGN PLAN SUBMITTAL

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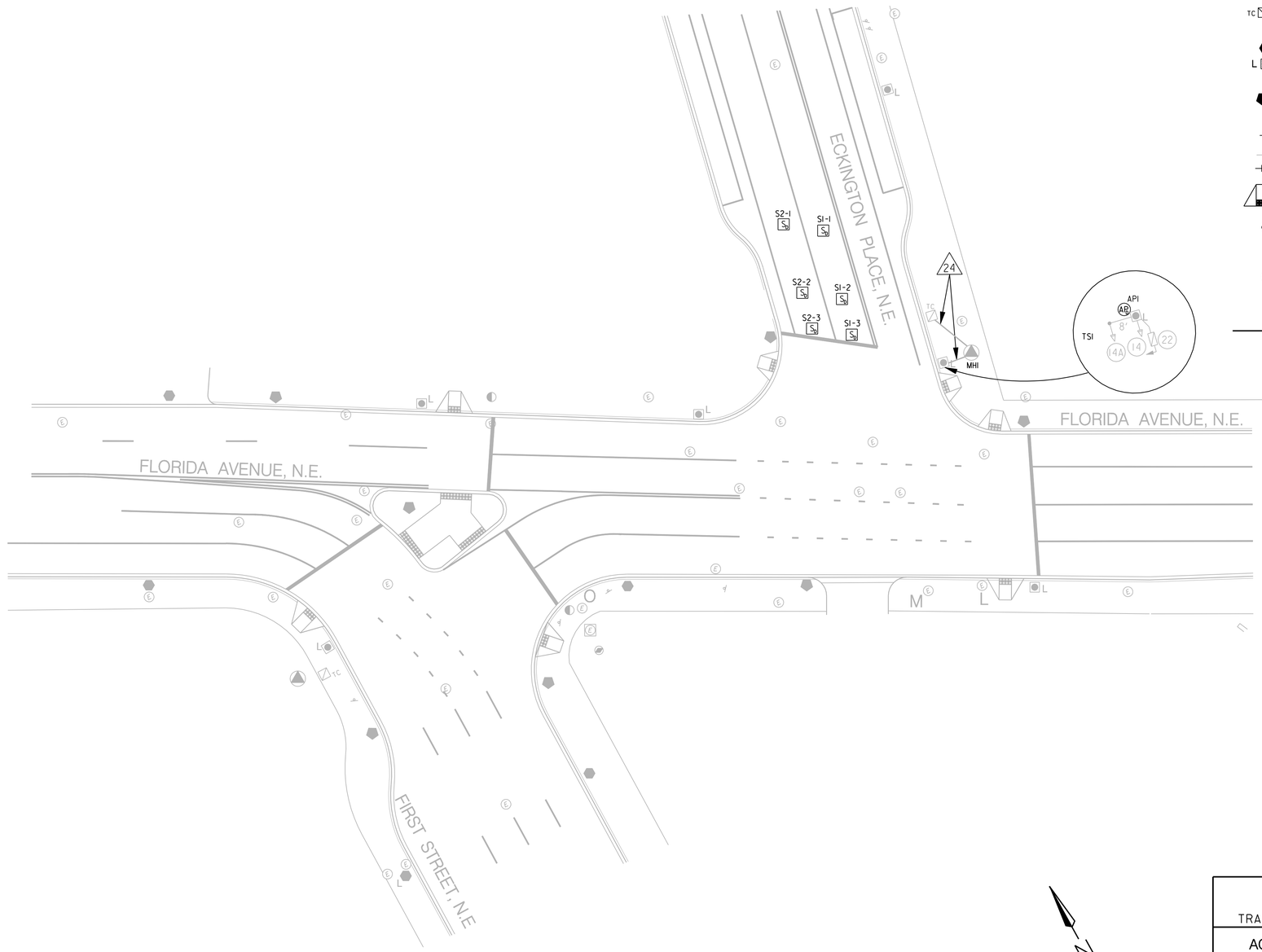
Thursday, June 12, 2014 AT 03:40 PM

REVISION								
DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A								

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	13	32



LEGEND:

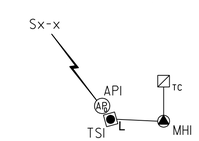
- TC — EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING TWIN-20 STREETLIGHT POLE
- L — EXISTING 28-FOOT PENDANT POST STREETLIGHT POLE WITH LUMINAIRE AND A TRANSFORMER BASE
- EXISTING 20-FOOT TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- 8' — EXISTING 8 FOOT MAST ARM WITH CAP AND CLAMP
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING WHEELCHAIR RAMP WITH TRUNCATED DOMES
- EXISTING TREE
- EXISTING FIRE HYDRANT
- E — EXISTING PEPCO ELECTRICAL MANHOLE
- EXISTING DDOT MANHOLE (4'X4'X4')
- S — PROPOSED DETECTION MAGNETOMETER
- AP — PROPOSED ACCESS POINT
- EXISTING ELECTRICAL PVC CONDUIT

PROPOSED CABLE ROUTING

TC — MHI — AP

* 24 — CAT5 ETHERNET CABLE

PROPOSED COMMUNICATION DRAWING



NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3030 – FIRST STREET, ECKINGTON PLACE, AND FLORIDA AVENUE, N.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AYY
DESIGNED BY	AYY
DRAWN BY	WL/ WZ/ SG
REVIEWED BY	AYY
DATE	04/14
SCALE	1"=20'
SHEET / OF	13 / 32
DRAWING NO.	S-753-C

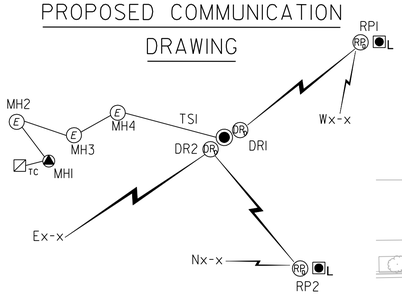
100% DESIGN PLAN SUBMITTAL

H:\projfile\2455 - DDOT Adaptive Signal Design\dwgs\design\2455A\10-1st Street Florida Avenue and Eckington Place NE\SG-P013_12455A_3030.dgn
Thursday, June 12, 2014 AT 03:38 PM

REVISION									
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

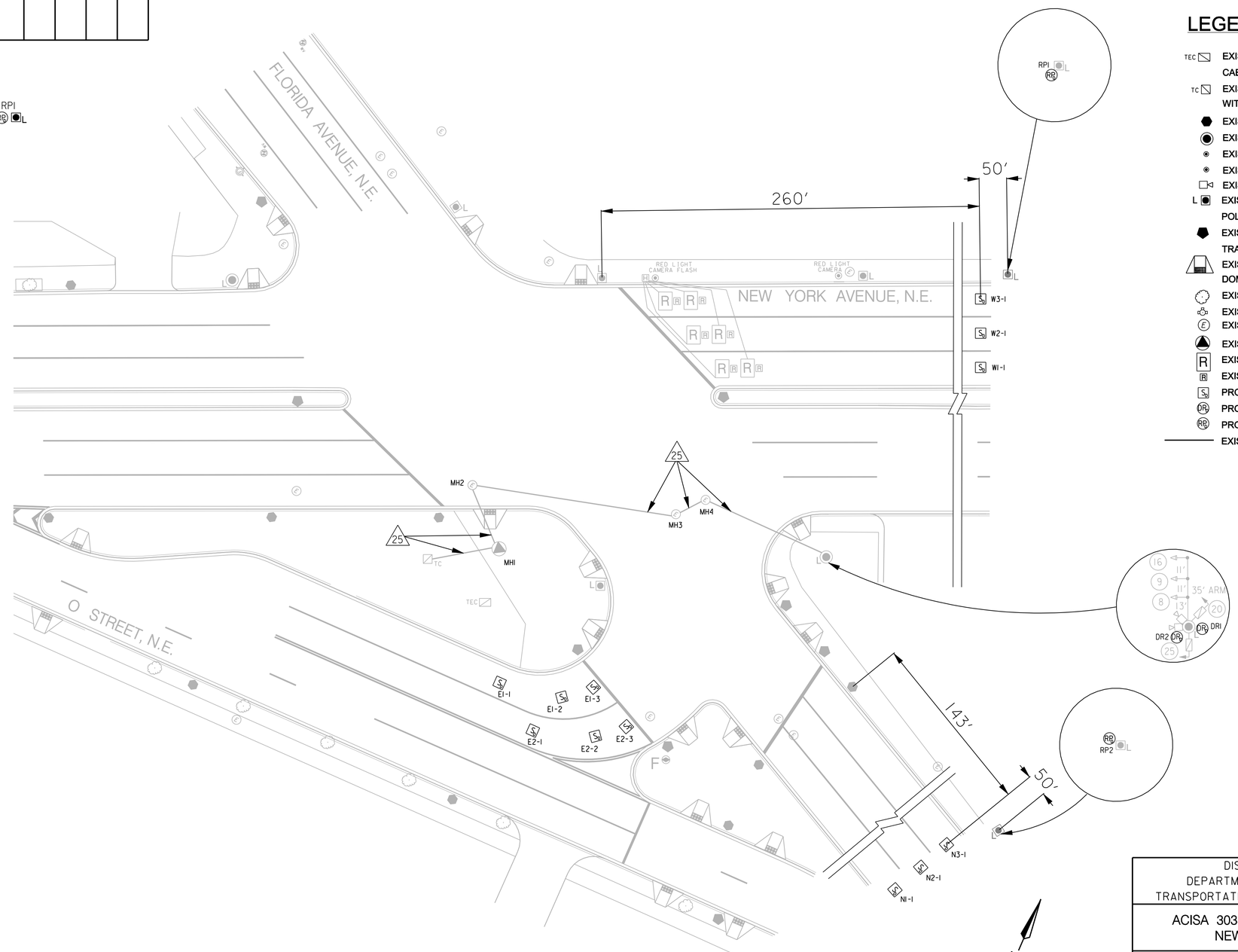
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	14	32

PROPOSED COMMUNICATION DRAWING



PROPOSED CABLE ROUTING

✳ 25 2-CAT5 ETHERNET CABLES



LEGEND:

- TEC — EXISTING TRAFFIC SIGNAL COMMUNICATION CABLE TERMINATION CABINET
- TC — EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING TWIN-20 STREETLIGHT POLE
- EXISTING 20 FOOT MONOTUBE POLE
- EXISTING RED LIGHT CAMRTA POLE
- EXISTING RED LIGHT FLASH
- EXISTING DETECTION CAMERA
- L — EXISTING 28-FOOT PENDANT POST STREETLIGHT POLE WITH LUMINAIRE AND A TRANSFORMER BASE
- EXISTING 20-FOOT TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING WHEELCHAIR RAMP WITH TRUNCATED DOMES
- EXISTING TREE
- EXISTING FIRE HYDRANT
- EXISTING PEPCO ELECTRICAL MANHOLE
- EXISTING DDOT MANHOLE (4'X4'X4')
- EXISTING RED LIGHT CAMERA LOOP DETECTOR
- EXISTING SENSYS RED LIGHT MAGNETOMETER
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT DIGITAL RADIO
- PROPOSED REPEATER
- EXISTING ELECTRICAL PVC CONDUIT

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

S.L.F. NO. _____

APPROVED BY _____ DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3033 – FLORIDA AVENUE AND NEW YORK AVENUE, N.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AYY
DESIGNED BY	AYY
DRAWN BY	WL/ WZ/ SG
REVIEWED BY	AYY
DATE	04/14
SCALE	1"=20'
SHEET / OF	14 / 32
DRAWING NO.	S-1776-B

100% DESIGN PLAN SUBMITTAL

H:\projfile\2455 - DDOT Adaptive Signal Design\dwgs\design\12455A\09-New York Avenue and Florida Avenue NE\pSG-P014_12455A_3033.dgn
Thursday, June 12, 2014 AT 03:37 PM

REVISION									
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

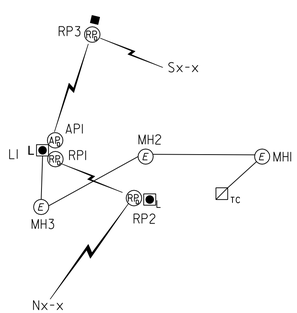
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C		15	32

PROPOSED CABLE ROUTING

TC — MHI — MH2 — MH3 — API

24 CAT5 ETHERNET CABLE

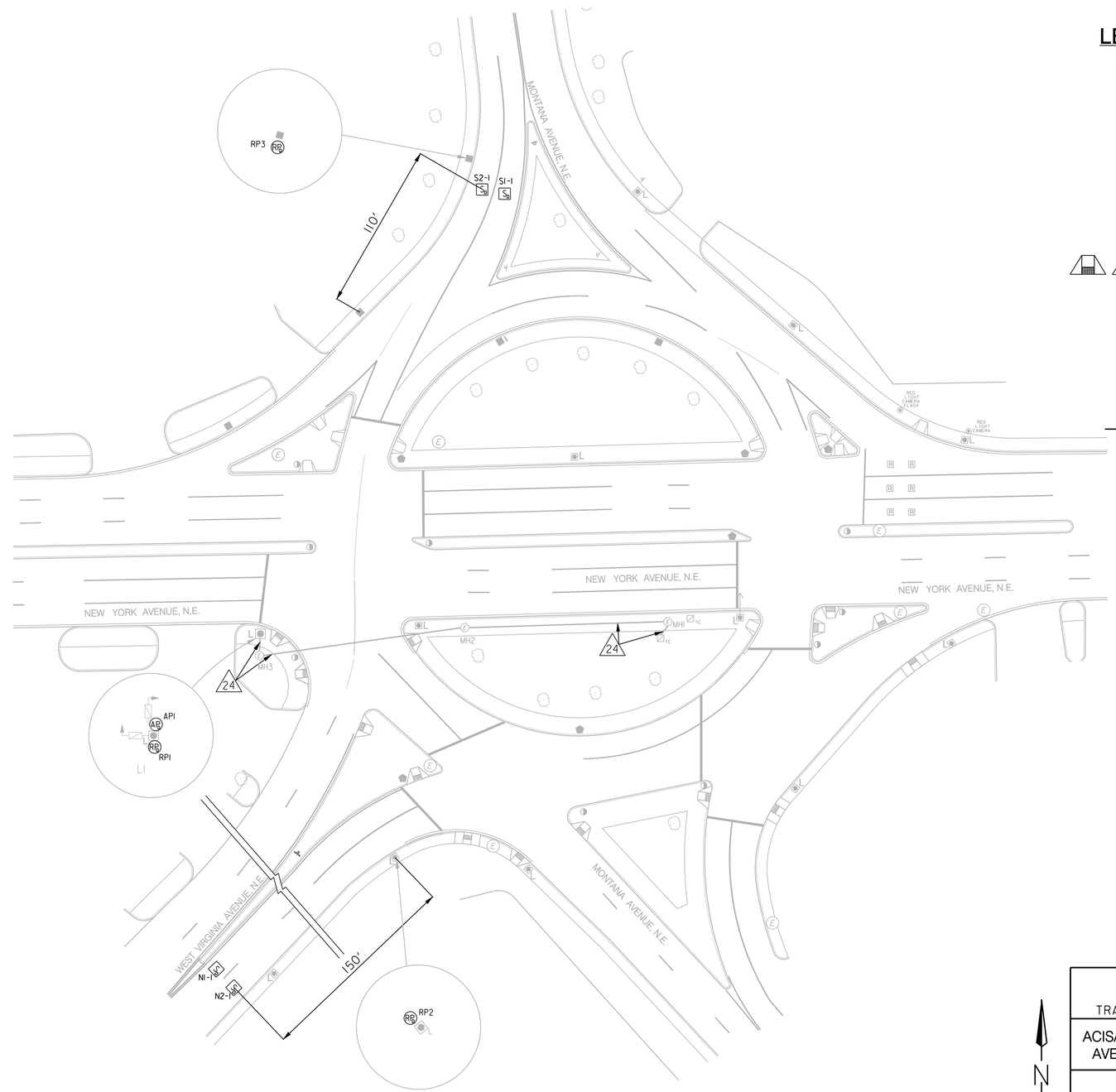
PROPOSED COMMUNICATION DRAWING



NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.



LEGEND:

- TC — EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- L — EXISTING 28-FOOT PENDANT POST STREETLIGHT POLE WITH LUMINAIRE AND A TRANSFORMER BASE
- EXISTING 20-FOOT TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING RED LIGHT CAMERA POLE
- EXISTING RED LIGHT FLASH
- EXISTING AD-11 TRAFFIC SIGNAL POLE
- EXISTING # 16 STREETLIGHT POLE
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING WHEELCHAIR RAMP
- EXISTING TREE
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- E — EXISTING PEPCO ELECTRICAL MANHOLE
- R — EXISTING SENSYS RED LIGHT MAGNETOMETER
- S — PROPOSED DETECTION MAGNETOMETER
- AP — PROPOSED ACCESS POINT
- RP — PROPOSED REPEATER
- EXISTING ELECTRICAL PVC CONDUIT

GRAPHIC SCALE

30 15 0 30 60

1" = 30'-0" HORIZ.

N

S.L.F. NO. _____

APPROVED BY _____ DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3185 – NEW YORK AVENUE, MONTANA AVENUE AND WEST VIRGINIA AVENUE, N.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AYY
DESIGNED BY	AYY
DRAWN BY	WL/ WZ/ SG
REVIEWED BY	AYY
DATE	04/14
SCALE	1"=30'
SHEET	15 OF 32
DRAWING NO.	S-1806-B

100% DESIGN PLAN SUBMITTAL

H:\proj\file\12455 - DDOT Adaptive Signal Design\dwgs\design\12455A\02-New York Avenue and Montana Avenue NE\p5G-P015_12455A_3185.dgn
Thursday, June 12, 2014 AT 03:28 PM

REVISION									
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

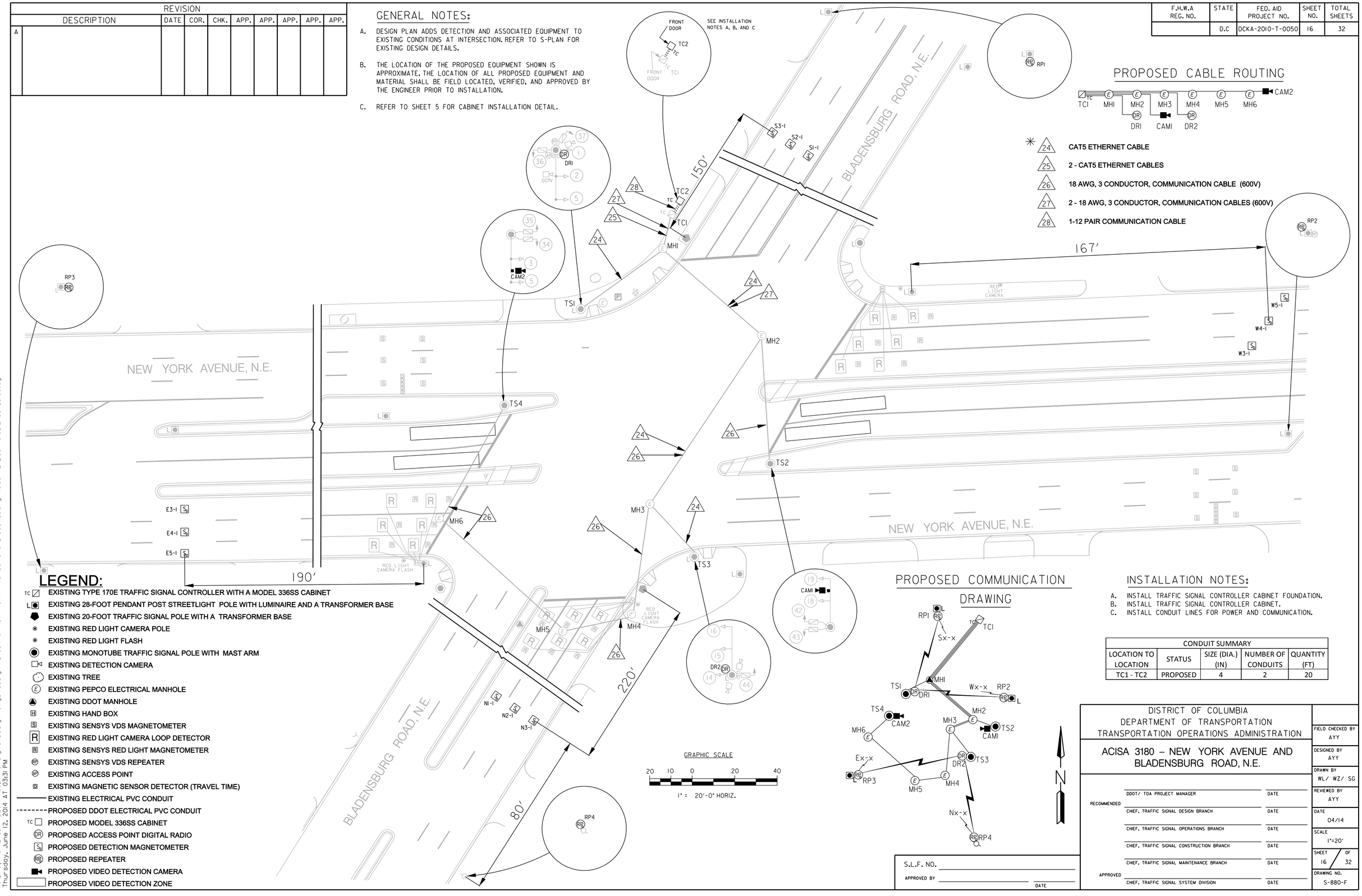
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	16	32

GENERAL NOTES:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

C. REFER TO SHEET 5 FOR CABINET INSTALLATION DETAIL.



PROPOSED CABLE ROUTING

24	CAT5 ETHERNET CABLE
25	2 - CAT5 ETHERNET CABLES
26	18 AWG, 3 CONDUCTOR, COMMUNICATION CABLE (600V)
27	2 - 18 AWG, 3 CONDUCTOR, COMMUNICATION CABLES (600V)
28	1-12 PAIR COMMUNICATION CABLE

LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING 28-FOOT PENDANT POST STREETLIGHT POLE WITH LUMINAIRE AND A TRANSFORMER BASE
- EXISTING 20-FOOT TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING RED LIGHT CAMERA POLE
- EXISTING RED LIGHT FLASH
- EXISTING MONOTUBE TRAFFIC SIGNAL POLE WITH MAST ARM
- EXISTING DETECTION CAMERA
- EXISTING TREE
- EXISTING PEPCO ELECTRICAL MANHOLE
- EXISTING DDOT MANHOLE
- EXISTING HAND BOX
- EXISTING SENSYS VDS MAGNETOMETER
- EXISTING RED LIGHT CAMERA LOOP DETECTOR
- EXISTING SENSYS RED LIGHT MAGNETOMETER
- EXISTING SENSYS VDS REPEATER
- EXISTING ACCESS POINT
- EXISTING MAGNETIC SENSOR DETECTOR (TRAVEL TIME)
- EXISTING ELECTRICAL PVC CONDUIT
- PROPOSED DDOT ELECTRICAL PVC CONDUIT
- PROPOSED MODEL 336SS CABINET
- PROPOSED ACCESS POINT DIGITAL RADIO
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED REPEATER
- PROPOSED VIDEO DETECTION CAMERA
- PROPOSED VIDEO DETECTION ZONE

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

PROPOSED COMMUNICATION DRAWING

INSTALLATION NOTES:

A. INSTALL TRAFFIC SIGNAL CONTROLLER CABINET FOUNDATION.
B. INSTALL TRAFFIC SIGNAL CONTROLLER CABINET.
C. INSTALL CONDUIT LINES FOR POWER AND COMMUNICATION.

CONDUIT SUMMARY				
LOCATION TO LOCATION	STATUS	SIZE (DIA.) (IN)	NUMBER OF CONDUITS	QUANTITY (FT)
TC1 - TC2	PROPOSED	4	2	20

S.L.F. NO.

APPROVED BY DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3180 – NEW YORK AVENUE AND BLADENSBURG ROAD, N.E.

RECOMMENDED
DDOT/ TOA PROJECT MANAGER — DATE
CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE
APPROVED
CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

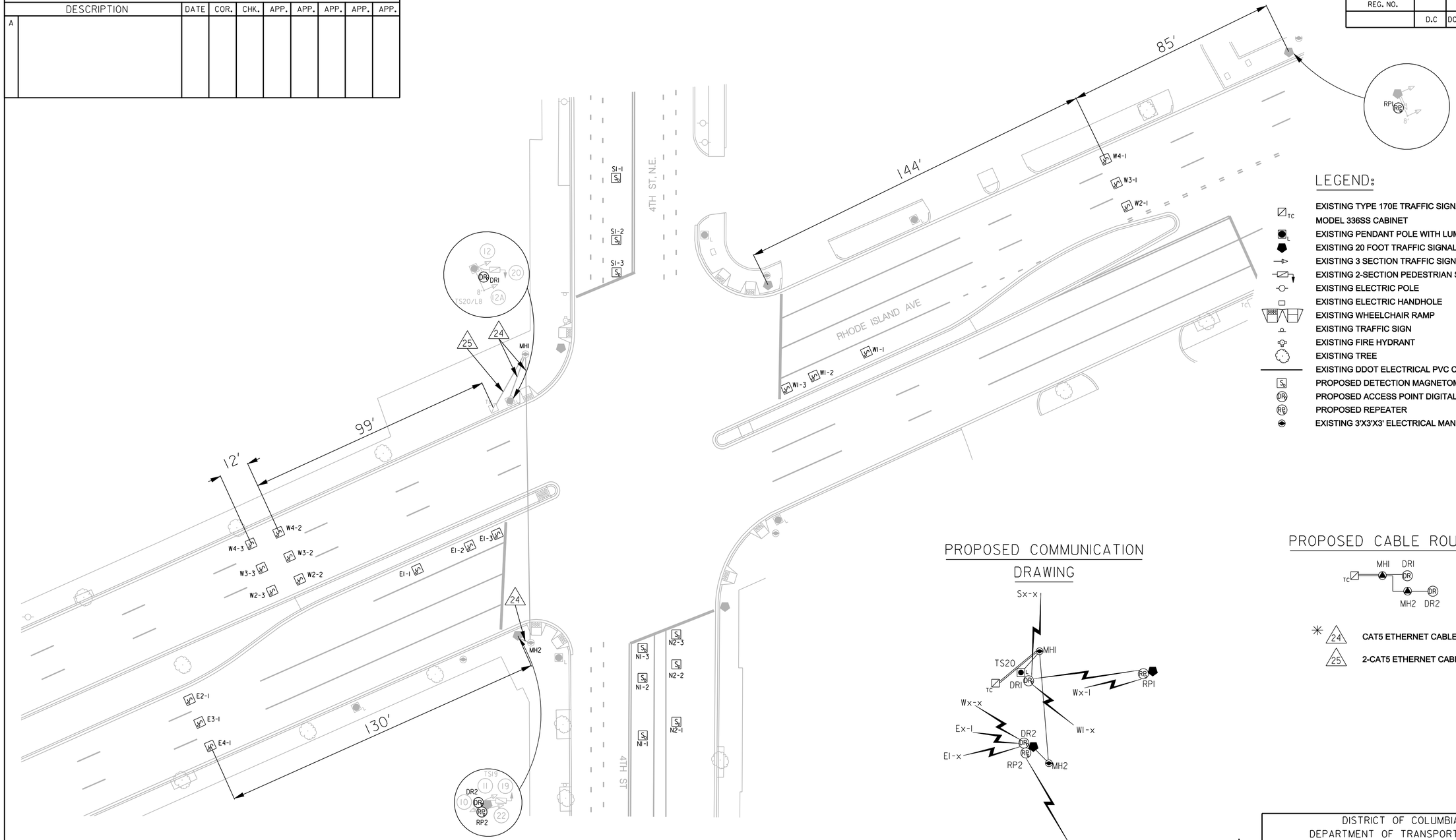
FIELD CHECKED BY	AYY
DESIGNED BY	AYY
DRAWN BY	WL/ WZ/ SG
REVIEWED BY	AYY
DATE	04/14
SCALE	1"=20'
SHEET	16 OF 32
DRAWING NO.	S-880-F

100% DESIGN PLAN SUBMITTAL

H:\projfile\12455 - DDOT Adaptive Signal Design\dwgs\design\12455A\01-New York Avenue and Bladensburg Road NE\pSG-P016_12455A_3180.dgn
Thursday, June 12, 2014 AT 03:31 PM

REVISION									
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	17	32



LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING 20 FOOT TRAFFIC SIGNAL POLE
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING ELECTRIC POLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING WHEELCHAIR RAMP
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- EXISTING DDOT ELECTRICAL PVC CONDUIT
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT DIGITAL RADIO
- PROPOSED REPEATER
- EXISTING 3'X3'X3' ELECTRICAL MANHOLE

PROPOSED COMMUNICATION DRAWING

PROPOSED CABLE ROUTING

24 CAT5 ETHERNET CABLE

25 2-CAT5 ETHERNET CABLES

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO. _____

APPROVED BY _____ DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3032 – RHODE ISLAND AVENUE AND 4TH STREET, N.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AMT/TMR
DESIGNED BY	KSL/AMT
DRAWN BY	AMT/TMR
REVIEWED BY	KSL/AMT
DATE	04/14
SCALE	1"=20'
SHEET	17 OF 32
DRAWING NO.	S-262-G

100% DESIGN PLAN SUBMITTAL

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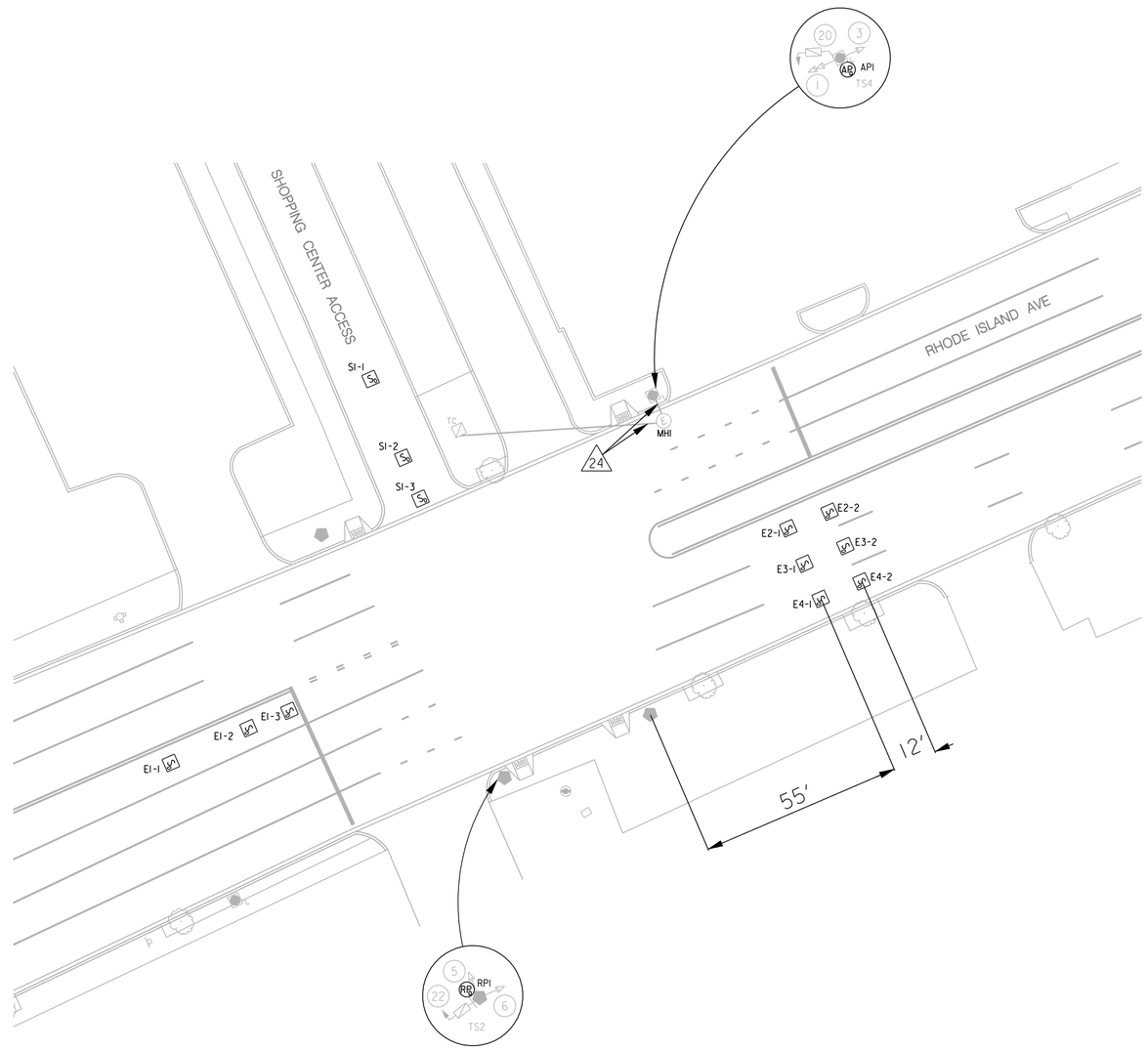
Thursday, June 12, 2014 AT 03:45 PM

REVISION									
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

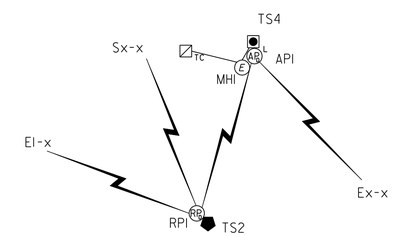
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	18	32



LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING 20 FOOT TRAFFIC SIGNAL POLE
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 4 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING 3'X3'X3' ELECTRICAL MANHOLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING WHEELCHAIR RAMP
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- EXISTING ELECTRICAL PVC CONDUIT
- PROPOSED ACCESS POINT
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED REPEATER
- EXISTING ELECTRICAL MANHOLE

PROPOSED COMMUNICATION DRAWING



PROPOSED CABLE ROUTING

TC — E — AP
MHI API

* 24 CAT5 ETHERNET CABLE

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

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GRAPHIC SCALE
20 10 0 20 40
1" = 20'-0" HORIZ.

N

S.L.F. NO.
APPROVED BY DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3243 – RHODE ISLAND AVENUE, N.E. AND SHOPPING PLAZA DRIVEWAY

RECOMMENDED
DDOT/ TOA PROJECT MANAGER — DATE
CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE
APPROVED
CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AMT/TMR
DESIGNED BY	KSL/AMT
DRAWN BY	AMT/TMR
REVIEWED BY	KSL/AMT
DATE	04/14
SCALE	1"=20'
SHEET / OF	18 / 32
DRAWING NO.	S-2013-B

100% DESIGN PLAN SUBMITTAL

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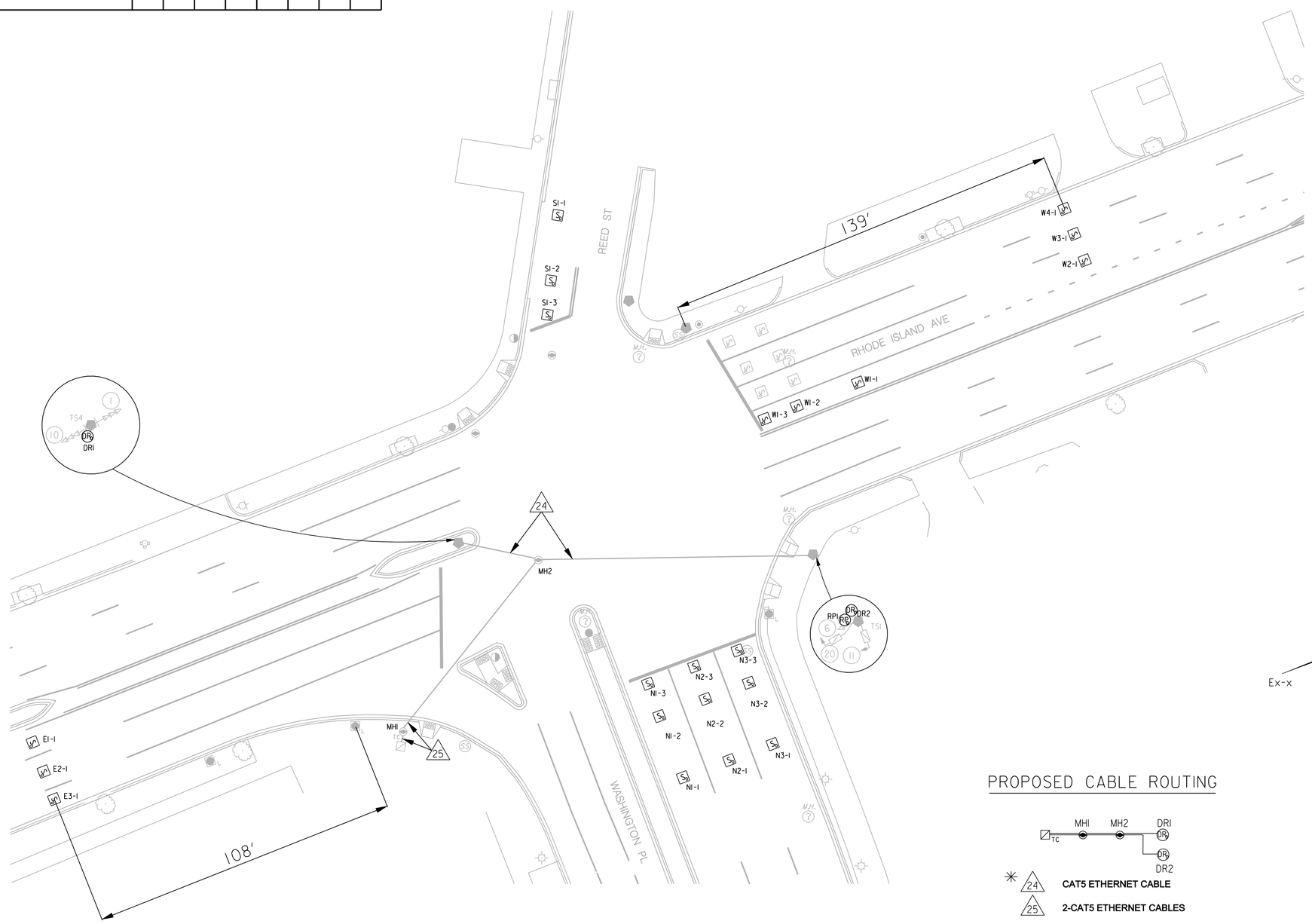
Thursday, June 12, 2014 AT 03:45 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

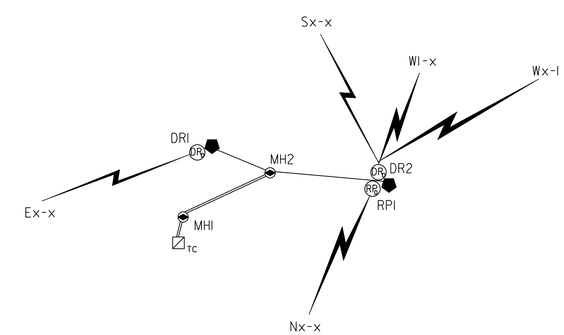
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	19	32



LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING 20 FOOT TRAFFIC SIGNAL POLE
- EXISTING AD-11 TRAFFIC SIGNAL POLE
- EXISTING SENSYS RED LIGHT MAGNETOMETER
- EXISTING RED LIGHT CAMERA POLE
- EXISTING RED LIGHT FLASH
- EXISTING 5 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING 3'X3'X3' ELECTRICAL MANHOLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING WHEELCHAIR RAMP
- EXISTING STREET LIGHT
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- EXISTING ELECTRICAL PVC CONDUIT
- EXISTING UTILITY POLE (WOOD)
- EXISTING ELECTRICAL MANHOLE
- PROPOSED ACCESS POINT DIGITAL RADIO
- PROPOSED REPEATER
- PROPOSED DETECTION MAGNETOMETER

PROPOSED COMMUNICATION DRAWING



PROPOSED CABLE ROUTING

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

Kittelson & Associates, Inc.

S.L.F. NO. _____

APPROVED BY _____ DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3196 – RHODE ISLAND AVENUE AND REED STREET, N.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	BRL/CMF
DESIGNED BY	KSL/AMT
DRAWN BY	BRL/TMR
REVIEWED BY	KSL/AMT
DATE	04/14
SCALE	1"=20'
SHEET	19 OF 32
DRAWING NO.	S-1676-B

100% DESIGN PLAN SUBMITTAL

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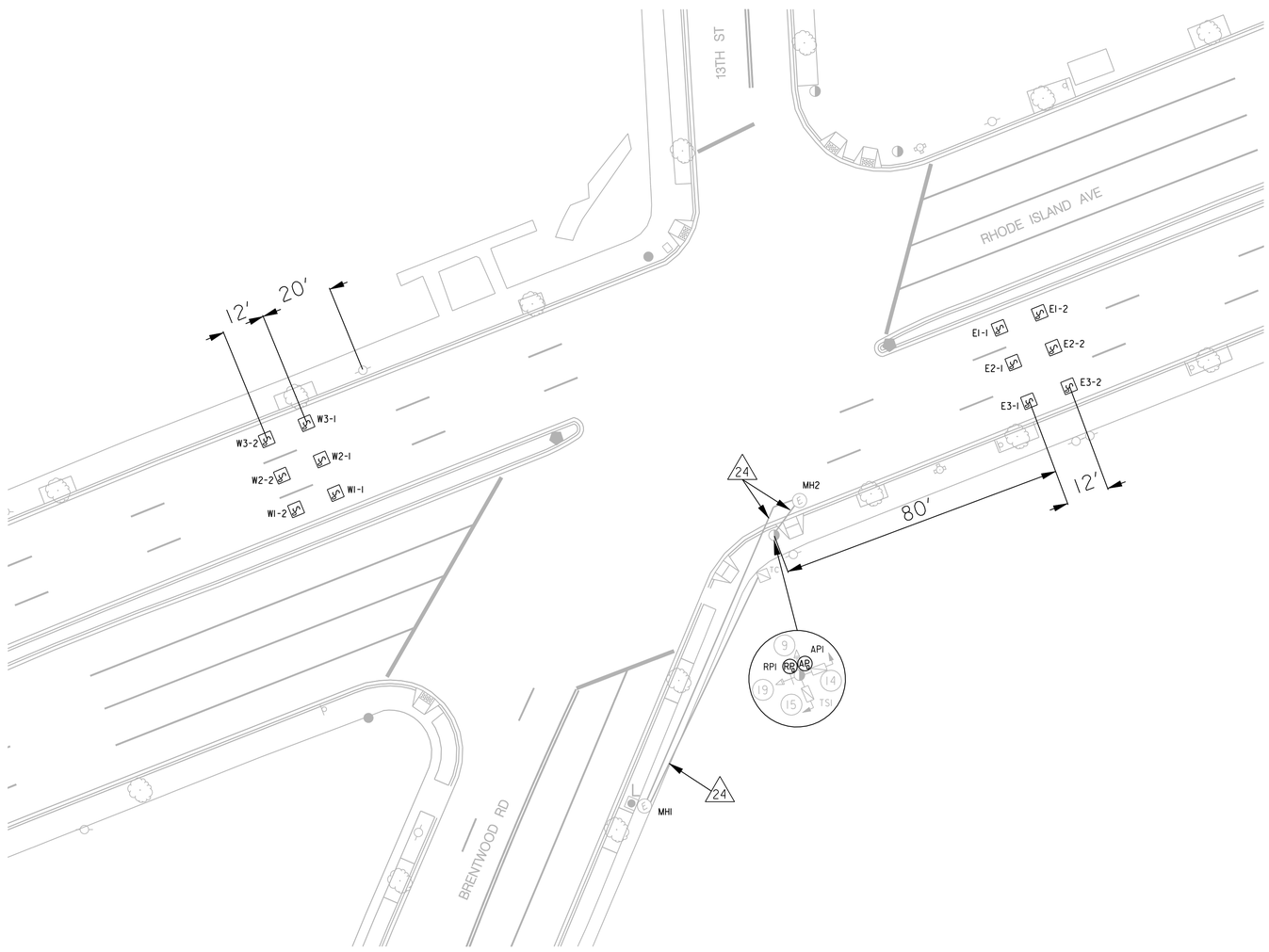
Thursday, June 12, 2014 AT 03:46 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	20	32

LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING 20-FOOT TRAFFIC SIGNAL POLE WITH A TRANSFORMER BASE
- EXISTING PEPCO WOOD POLE
- EXISTING AD-11 TRAFFIC SIGNAL POLE
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING ELECTRIC HANDHOLE
- EXISTING WHEELCHAIR RAMP
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- EXISTING ELECTRICAL PVC CONDUIT
- EXISTING ELECTRIC POLE
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT
- PROPOSED REPEATER
- EXISTING ELECTRICAL MANHOLE

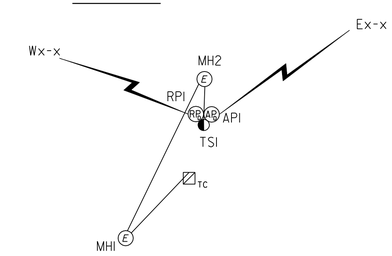


PROPOSED CABLE ROUTING

TC — MH1 — MH2 — AP1

24 CAT5 ETHERNET CABLE

PROPOSED COMMUNICATION DRAWING



NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3188 – RHODE ISLAND AVENUE, 13TH STREET, AND BRENTWOOD ROAD, N.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	AMT/TMR
DESIGNED BY	KSL/AMT
DRAWN BY	BRL/TMR
REVIEWED BY	KSL/AMT
DATE	04/14
SCALE	1"=20'
SHEET	20 OF 32
DRAWING NO.	S-265-B

100% DESIGN PLAN SUBMITTAL

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Thursday, June 12, 2014 AT 03:48 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	21	32

GENERAL NOTES:

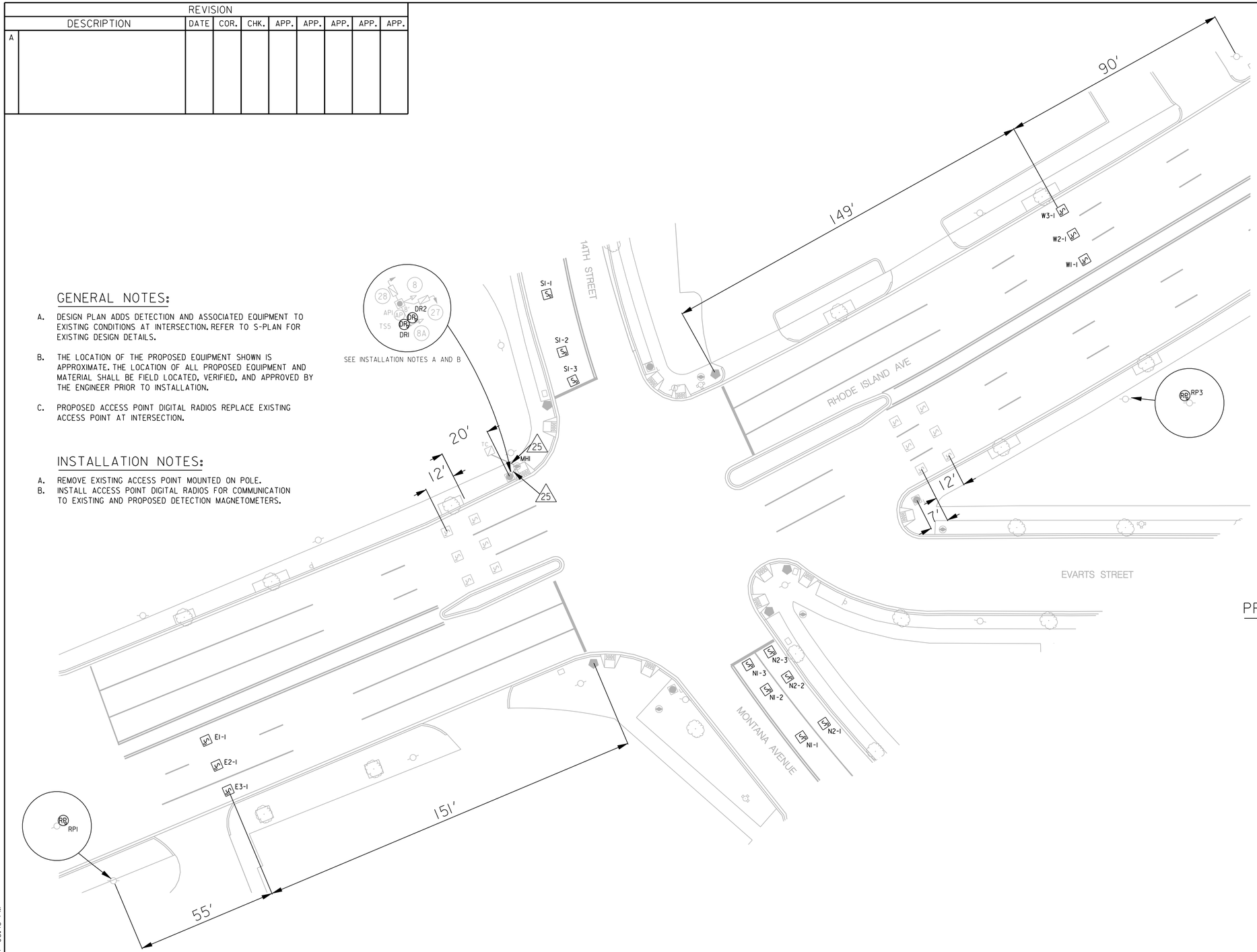
A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

C. PROPOSED ACCESS POINT DIGITAL RADIOS REPLACE EXISTING ACCESS POINT AT INTERSECTION.

INSTALLATION NOTES:

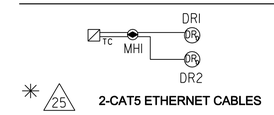
A. REMOVE EXISTING ACCESS POINT MOUNTED ON POLE.
B. INSTALL ACCESS POINT DIGITAL RADIOS FOR COMMUNICATION TO EXISTING AND PROPOSED DETECTION MAGNETOMETERS.



LEGEND:

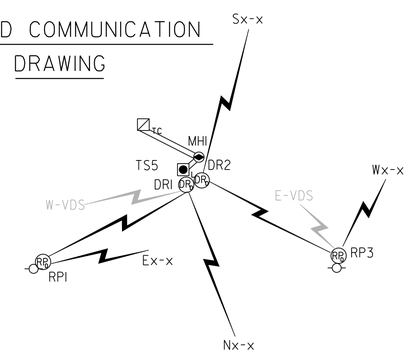
- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING ELECTRIC POLE
- EXISTING 20 FOOT TRAFFIC SIGNAL POLE
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING ELECTRIC HANDHOLE
- EXISTING ELECTRICAL MANHOLE
- EXISTING WHEELCHAIR RAMP
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- EXISTING ELECTRICAL PVC CONDUIT
- EXISTING ACCESS POINT
- EXISTING SENSYS VDS MAGNETOMETER
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED REPEATER
- PROPOSED ACCESS POINT DIGITAL REPEATER

EXISTING CABLE ROUTING



2-CAT5 ETHERNET CABLES

PROPOSED COMMUNICATION DRAWING



100% DESIGN PLAN SUBMITTAL

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO.

APPROVED BY DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3189 – RHODE ISLAND AVENUE, 14TH STREET, AND MONTANA AVENUE, N.E.

RECOMMENDED
DDOT/ TOA PROJECT MANAGER — DATE
CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	BRL/CMF
DESIGNED BY	KSL/AMT
DRAWN BY	BRL/TMR
REVIEWED BY	KSL/AMT
DATE	04/14
SCALE	1"=20'
SHEET	21 OF 32
DRAWING NO.	S-741

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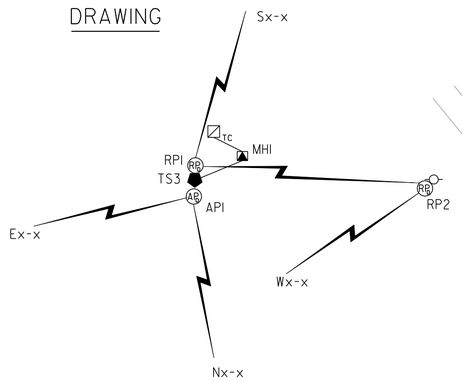
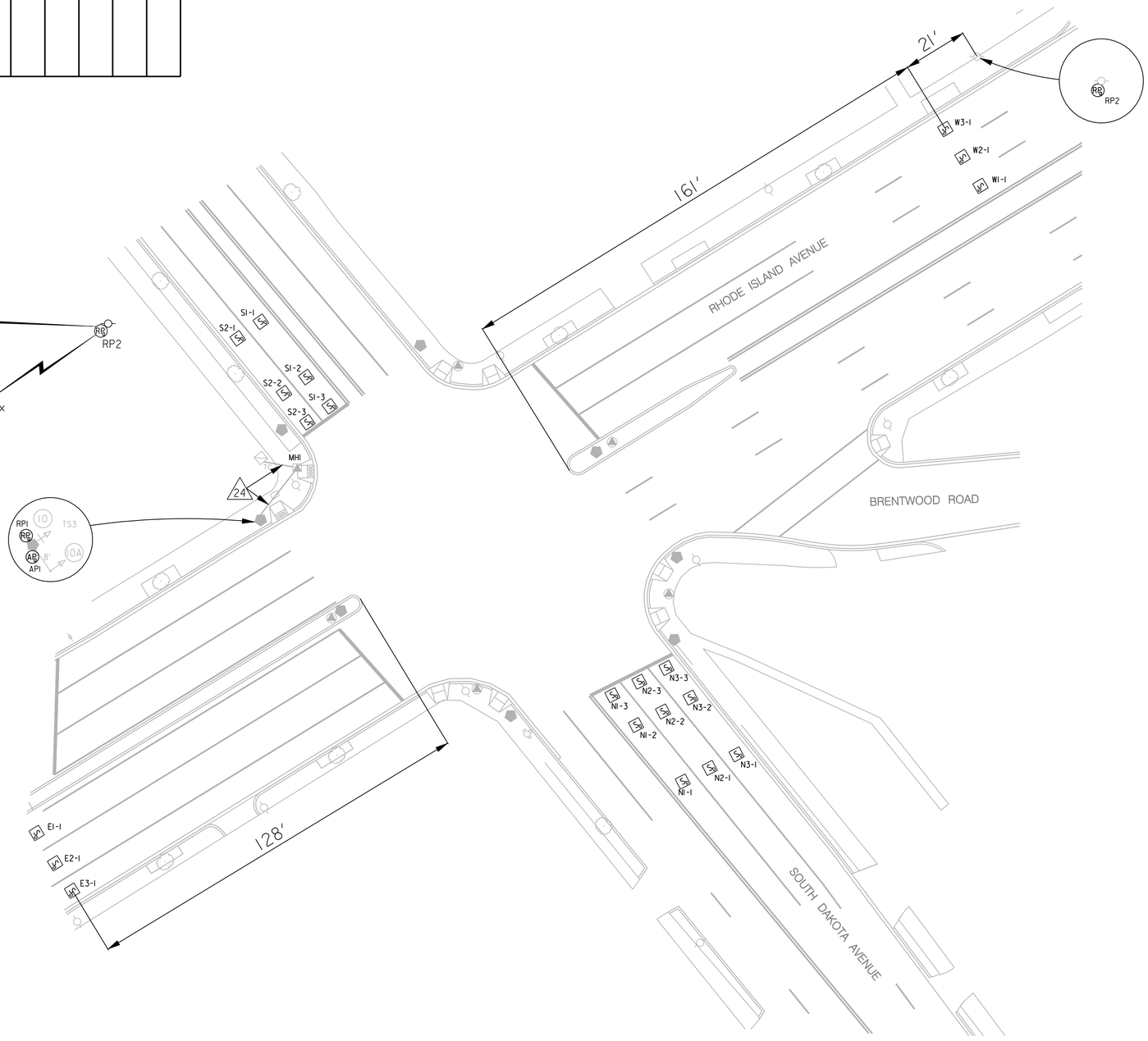
Thursday, June 12, 2014 AT 03:48 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	23	32

PROPOSED COMMUNICATION DRAWING





LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING TRAFFIC SIGNAL POLE (NO TRANSFORMER BASE)
- EXISTING TRAFFIC SIGNAL POLE WITH TRANSFORMER BASE
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 4'X4'X4' ELECTRICAL MANHOLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING DDOT PULL BOX
- EXISTING JUNCTION BOX
- EXISTING WHEELCHAIR RAMP
- EXISTING ELECTRIC POLE
- EXISTING FIRE HYDRANT
- EXISTING TREE
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT
- PROPOSED REPEATER
- EXISTING ELECTRICAL PVC CONDUIT

PROPOSED CABLE ROUTING

TC — MHI — API

* 24 CAT5 ETHERNET CABLE

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO.

APPROVED BY _____ DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3197 – SOUTH DAKOTA AVENUE AND RHODE ISLAND AVENUE, N.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	TST
DESIGNED BY	TST
DRAWN BY	JCH
REVIEWED BY	KSL
DATE	04/14
SCALE	1"=20'
SHEET / OF	23 / 32
DRAWING NO.	S-2098-A

100% DESIGN PLAN SUBMITTAL

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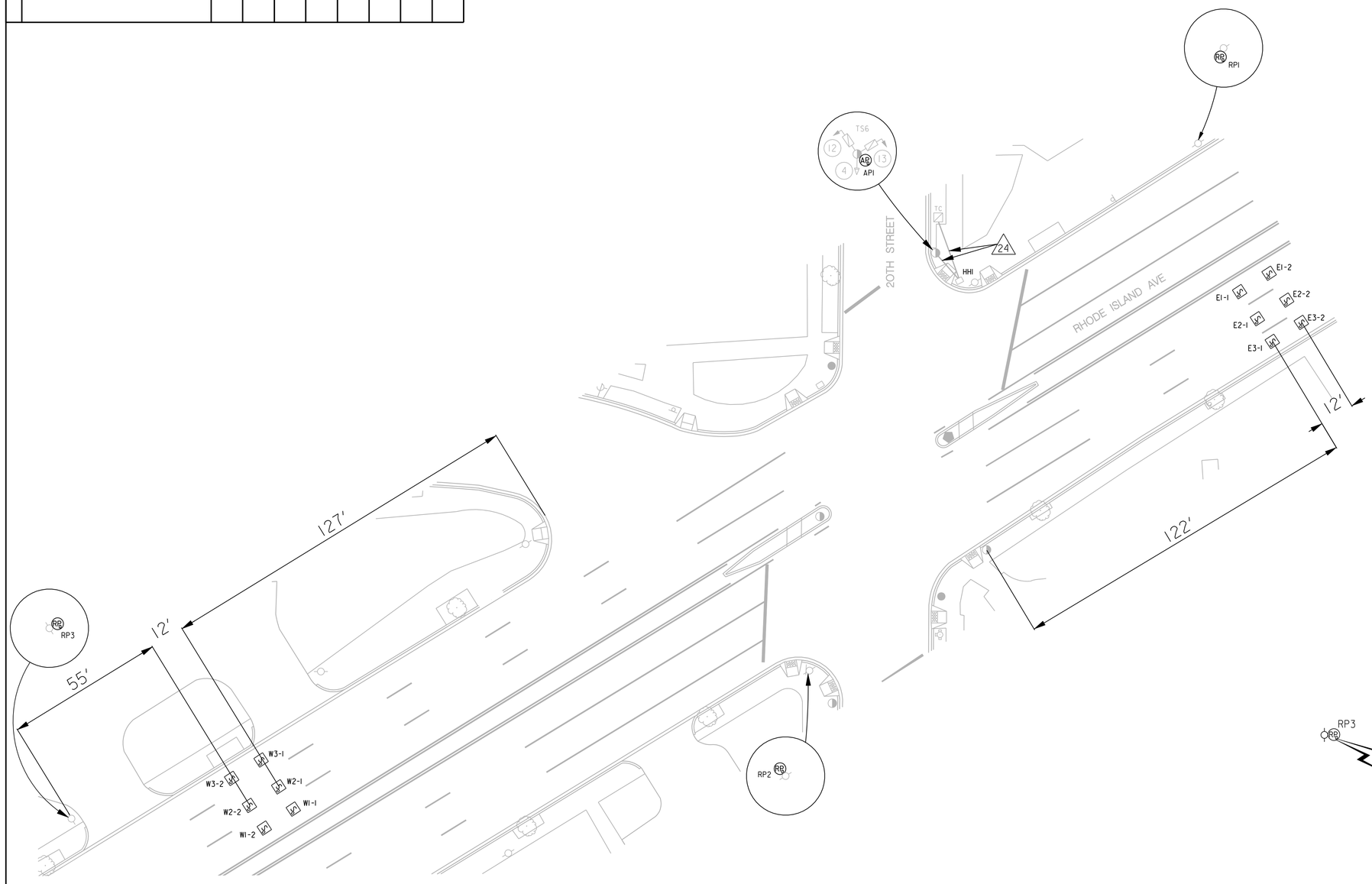
Thursday, June 12, 2014 AT 03:42 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	22	32



LEGEND:

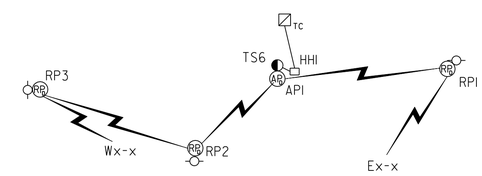
- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING ELECTRIC POLE
- EXISTING 20 FOOT TRAFFIC SIGNAL POLE
- EXISTING AD-11 TRAFFIC SIGNAL POLE
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING ELECTRIC HANDHOLE
- EXISTING WHEELCHAIR RAMP
- EXISTING PEPCO WOOD POLE
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- EXISTING ELECTRICAL PVC CONDUIT
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT
- PROPOSED REPEATER

PROPOSED CABLE ROUTING

TC — HHI — AP API

* 24 CAT5 ETHERNET CABLE

PROPOSED COMMUNICATION DRAWING



NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO.

APPROVED BY _____ DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3191 – RHODE ISLAND AVENUE AND 20TH STREET, N.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	BRL/CMF
DESIGNED BY	KSL/AMT
DRAWN BY	BRL/TMR
REVIEWED BY	KSL/AMT
DATE	04/14
SCALE	1"=20'
SHEET / OF	22 / 32
DRAWING NO.	S-686

100% DESIGN PLAN SUBMITTAL

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Thursday, June 12, 2014 AT 03:51 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	24	32

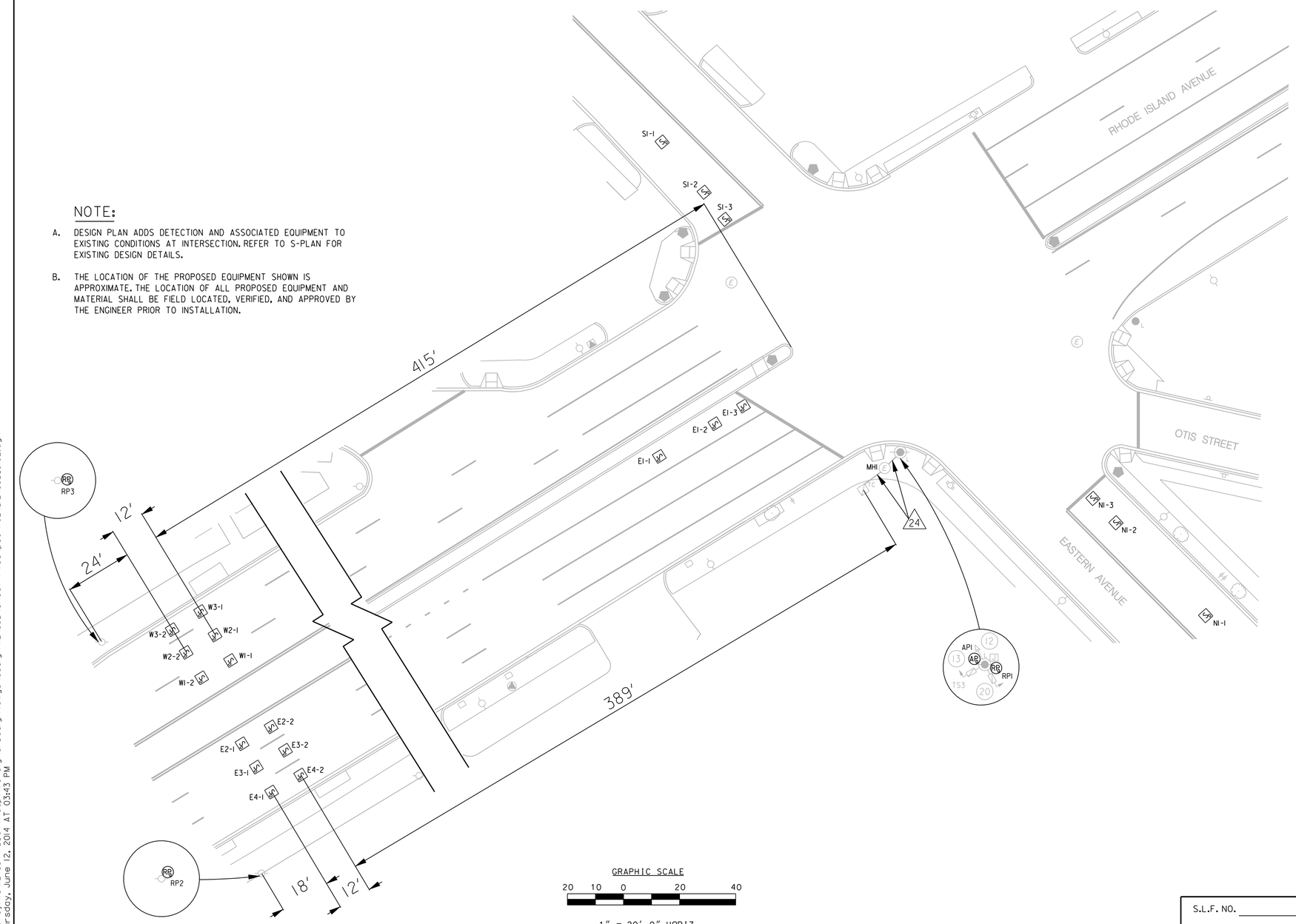
LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PEPCO WOOD POLE WITH LUMINAIRE
- EXISTING WOOD TRAFFIC SIGNAL POLE WITH LUMINAIRE
- EXISTING TRAFFIC SIGNAL POLE WITH TRANSFORMER BASE
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 4'X4'X4' ELECTRICAL MANHOLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING DDOT PULL BOX
- EXISTING JUNCTION BOX
- EXISTING ELECTRICAL PVC CONDUIT
- EXISTING WHEELCHAIR RAMP
- EXISTING ELECTRICAL MANHOLE
- EXISTING ELECTRIC POLE
- EXISTING TRAFFIC SIGN
- EXISTING BUS STOP SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT
- PROPOSED REPEATER

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

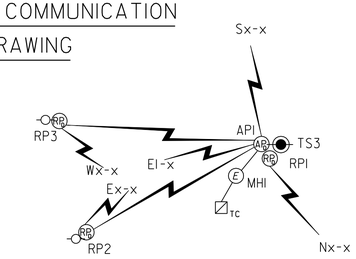


PROPOSED CABLE ROUTING

TC — MHI — API

24 CAT5 ETHERNET CABLE

PROPOSED COMMUNICATION DRAWING



DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 3192 – RHODE ISLAND AVENUE, EASTERN AVENUE, AND OTIS STREET N.E.

RECOMMENDED
DDOT/ TOA PROJECT MANAGER — DATE
CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

S.L.F. NO.
APPROVED BY — DATE

FIELD CHECKED BY	TST
DESIGNED BY	TST
DRAWN BY	JCH
REVIEWED BY	KSL
DATE	04/14
SCALE	1"=20'
SHEET	24 OF 32
DRAWING NO.	S-521-A

100% DESIGN PLAN SUBMITTAL

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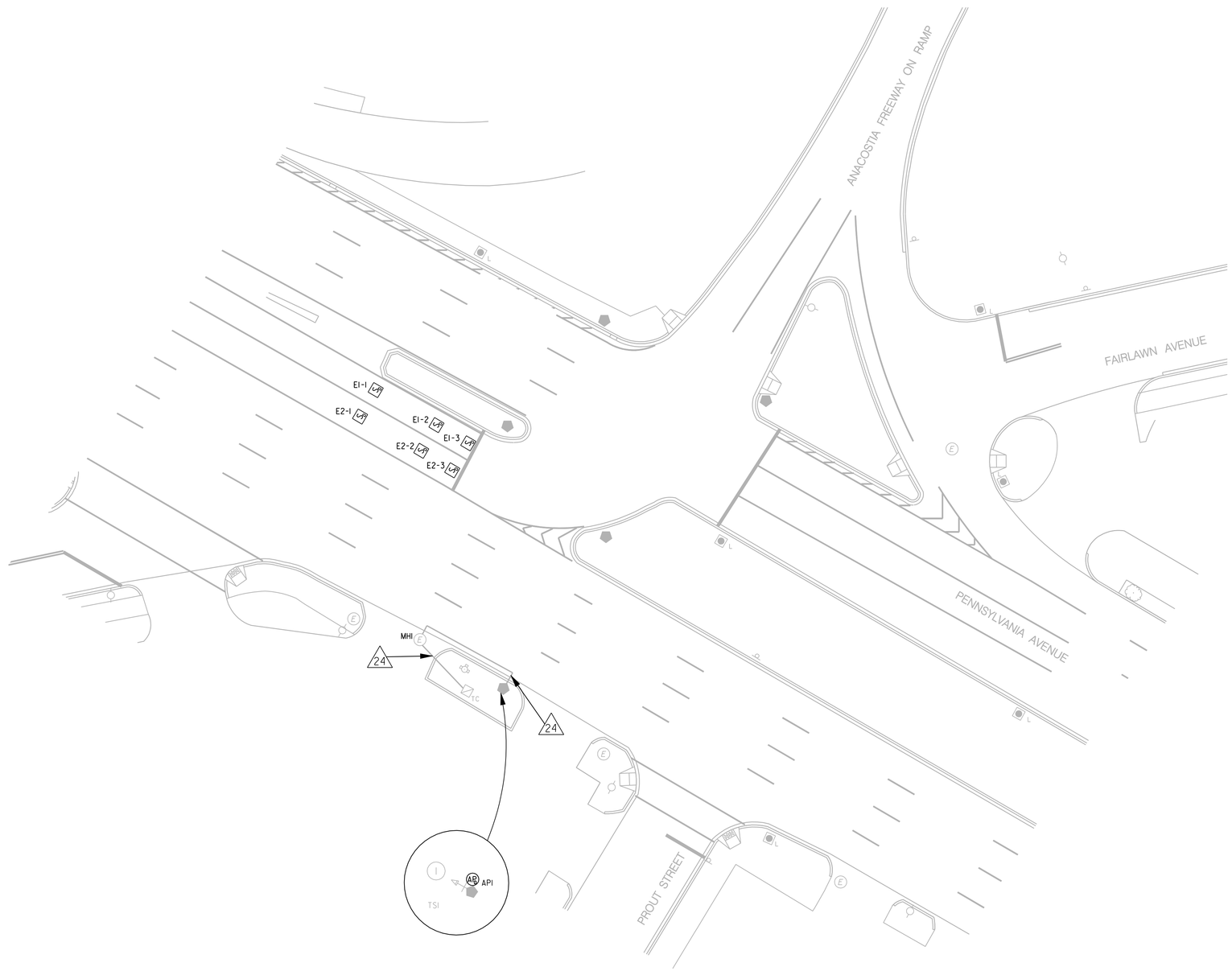
Thursday, June 12, 2014 AT 03:43 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	25	32



LEGEND:

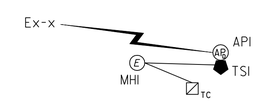
- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING TRAFFIC SIGNAL POLE WITH TRANSFORMER BASE
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING WHEELCHAIR RAMP
- EXISTING ELECTRICAL MANHOLE
- EXISTING ELECTRIC POLE
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT
- EXISTING DDOT ELECTRICAL PVC CONDUIT

PROPOSED CABLE ROUTING

TC — MHI — API

24 CAT5 ETHERNET CABLE

PROPOSED COMMUNICATION DRAWING



NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO. _____

APPROVED BY _____ DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 4236 – PENNSYLVANIA AVENUE AND NORTHBOUND ANACOSTIA FREEWAY RAMP, S.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	TST
DESIGNED BY	TST
DRAWN BY	JCH
REVIEWED BY	KSL
DATE	04/14
SCALE	1"=20'
SHEET / OF	25 / 32
DRAWING NO.	S-1756

100% DESIGN PLAN SUBMITTAL

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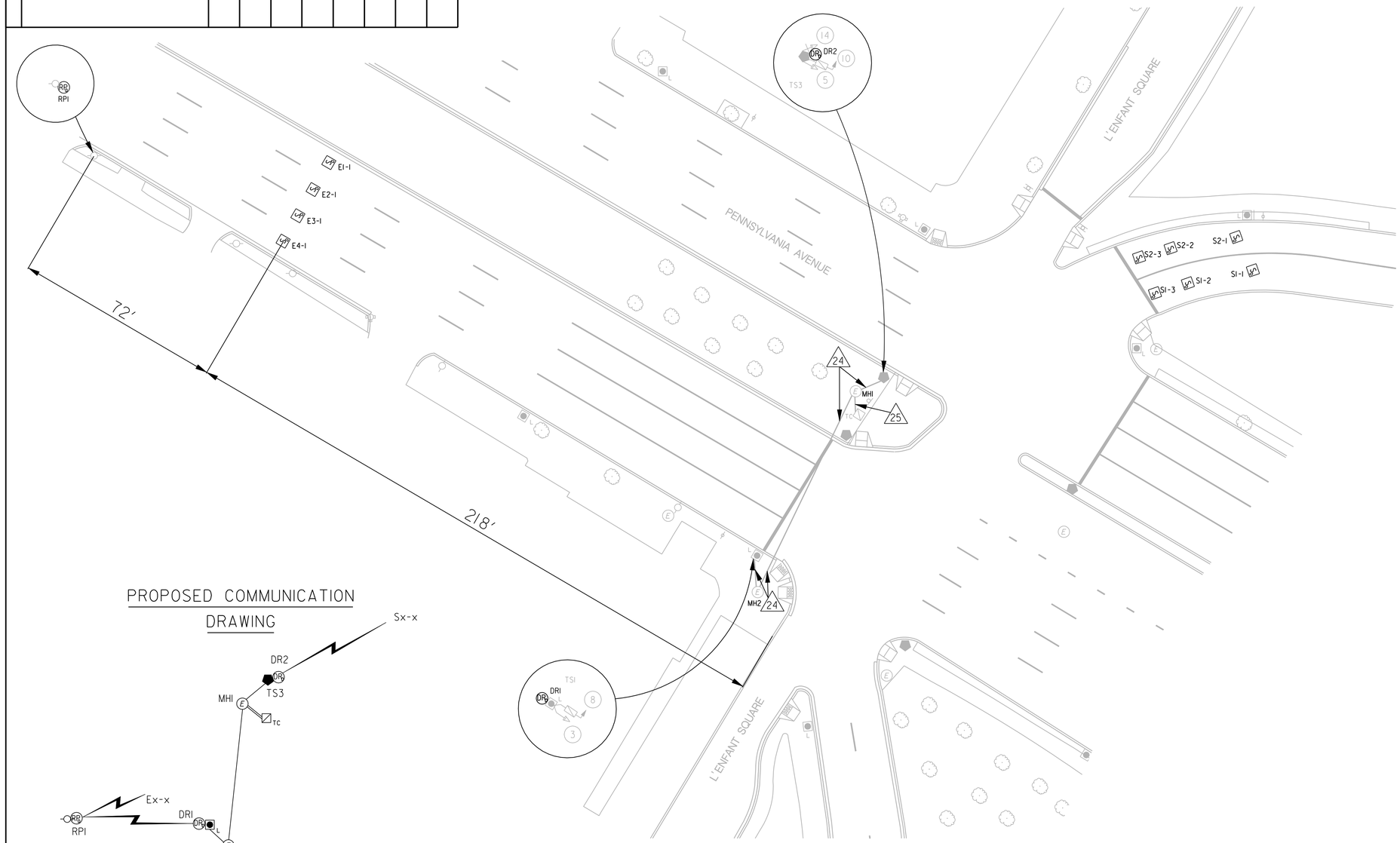
Thursday, June 12, 2014 AT 03:43 PM

REVISION								
DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A								

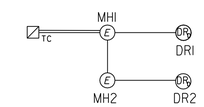
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	26	32



LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING TRAFFIC SIGNAL POLE WITH TRANSFORMER BASE
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING WHEELCHAIR RAMP
- EXISTING ELECTRICAL MANHOLE
- EXISTING ELECTRIC POLE
- EXISTING TRAFFIC SIGN
- EXISTING BUS STOP SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT DIGITAL RADIO
- PROPOSED REPEATER
- EXISTING ELECTRICAL PVC CONDUIT
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD

PROPOSED CABLE ROUTING



* 24 CAT5 ETHERNET CABLE

25 2-CAT5 ETHERNET CABLES

PROPOSED COMMUNICATION DRAWING

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 4201 – PENNSYLVANIA AVENUE AND L'ENFANT SQUARE, S.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	TST
DESIGNED BY	TST
DRAWN BY	JCH
REVIEWED BY	KSL
DATE	04/14
SCALE	1"=20'
SHEET / OF	26 / 32
DRAWING NO.	S-1397-A

100% DESIGN PLAN SUBMITTAL

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Thursday, June 12, 2014 AT 03:43 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
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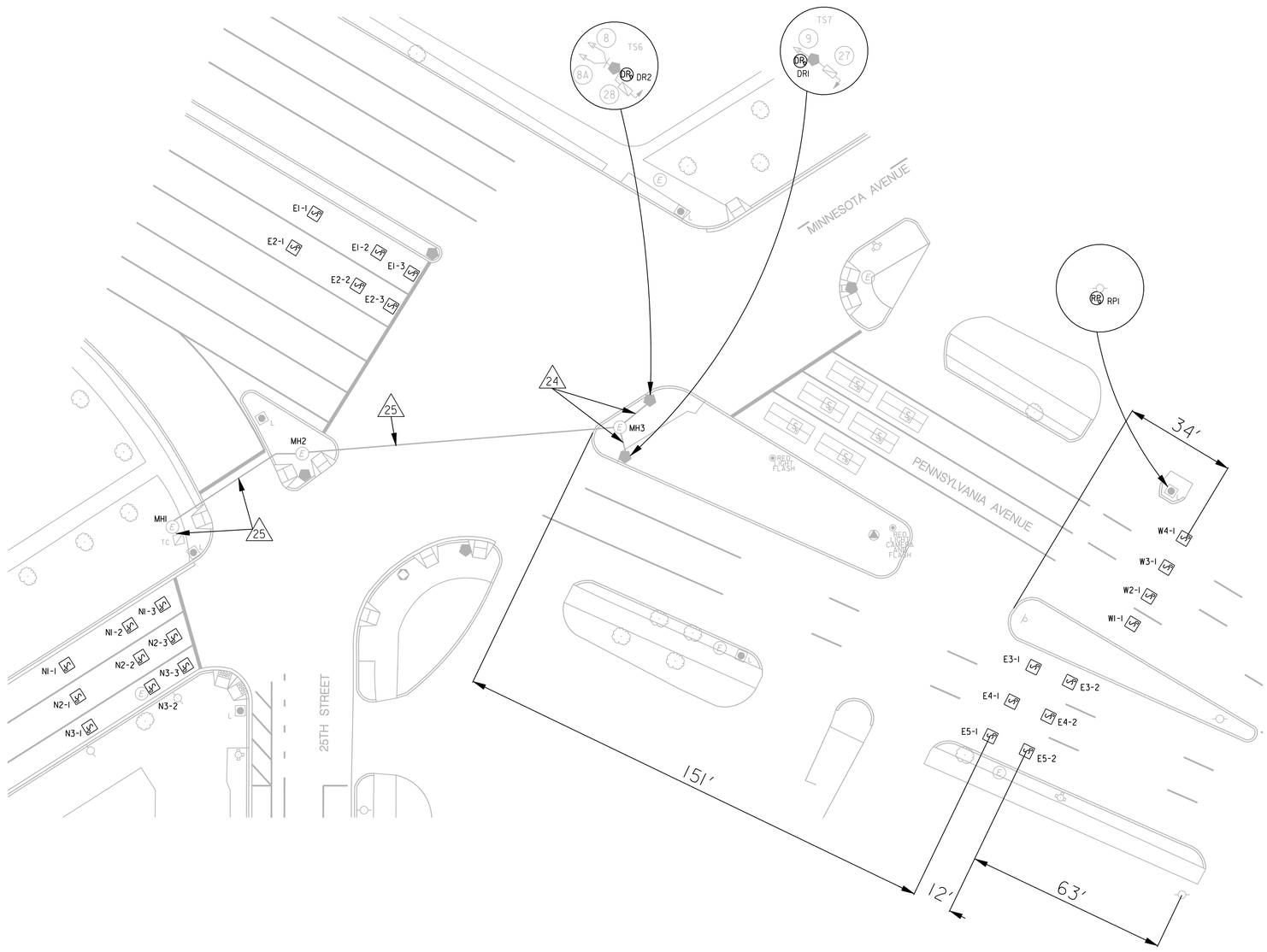
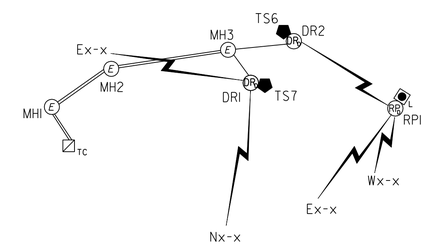
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	27	32



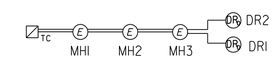
LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING NO. 4 STREETLIGHT POLE
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING TRAFFIC SIGNAL POLE WITH TRANSFORMER BASE
- EXISTING RED LIGHT CAMERA POLE
- EXISTING RED LIGHT FLASH
- EXISTING LOOP DETECTOR
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING SENSYS RED LIGHT MAGNETOMETER
- EXISTING WHEELCHAIR RAMP
- EXISTING ELECTRICAL MANHOLE
- EXISTING ELECTRIC POLE
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT DIGITAL RADIO
- PROPOSED REPEATER
- EXISTING DDOT ELECTRICAL PVC CONDUIT

PROPOSED COMMUNICATION DRAWING



PROPOSED CABLE ROUTING



* 24 CAT5 ETHERNET CABLE

25 2-CAT5 ETHERNET CABLES

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 4146 – PENNSYLVANIA AVENUE, MINNESOTA AVENUE AND 25TH STREET, S.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	TST
DESIGNED BY	BPP
DRAWN BY	BPP
REVIEWED BY	KSL
DATE	04/14
SCALE	1"=20'
SHEET	27 OF 32
DRAWING NO.	S-1397-A

100% DESIGN PLAN SUBMITTAL

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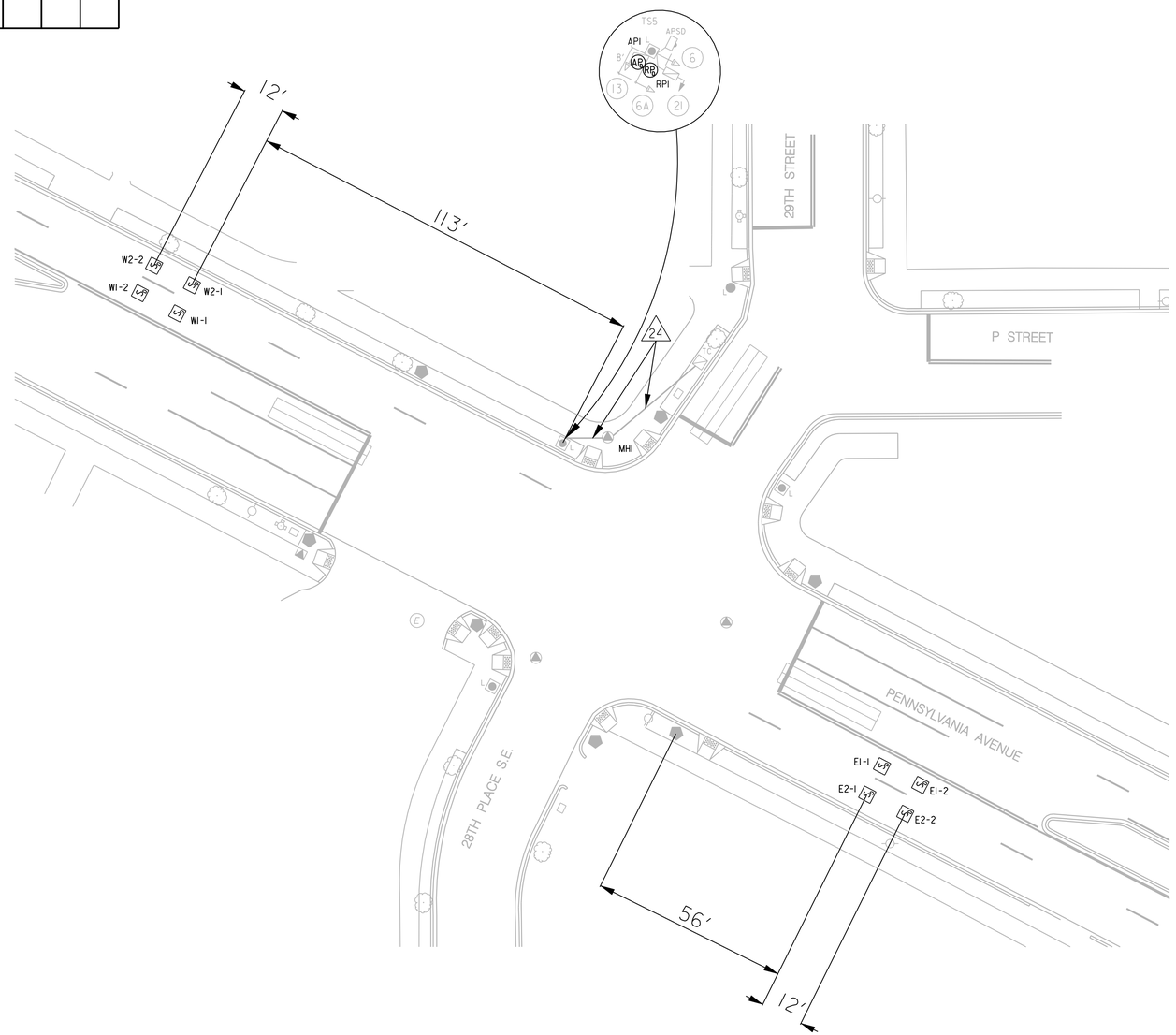
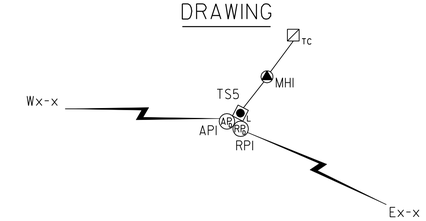
Thursday, June 12, 2014 AT 04:13 PM



LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING TRAFFIC SIGNAL POLE WITH TRANSFORMER BASE
- EXISTING PEPCO WOOD POLE WITH LUMINAIRE
- EXISTING ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTON
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING 4'X4'X4' ELECTRICAL MANHOLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING DDOT PULL BOX
- EXISTING WHEELCHAIR RAMP
- EXISTING ELECTRICAL MANHOLE
- EXISTING ELECTRIC POLE
- EXISTING TRAFFIC SIGN
- EXISTING BUS STOP SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- EXISTING 6'X30' LOOP DETECTOR
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT
- PROPOSED REPEATER
- EXISTING ELECTRICAL PVC CONDUIT

PROPOSED COMMUNICATION DRAWING



PROPOSED CABLE ROUTING

* 24 CAT5 ETHERNET CABLE

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

ACISA 4202 – PENNSYLVANIA AVENUE AND 29TH STREET, S.E.

TST	
BPP	
BPP	
KSL	
04/14	
1"=20'	
28	32
S-2209-E	

100% DESIGN PLAN SUBMITTAL

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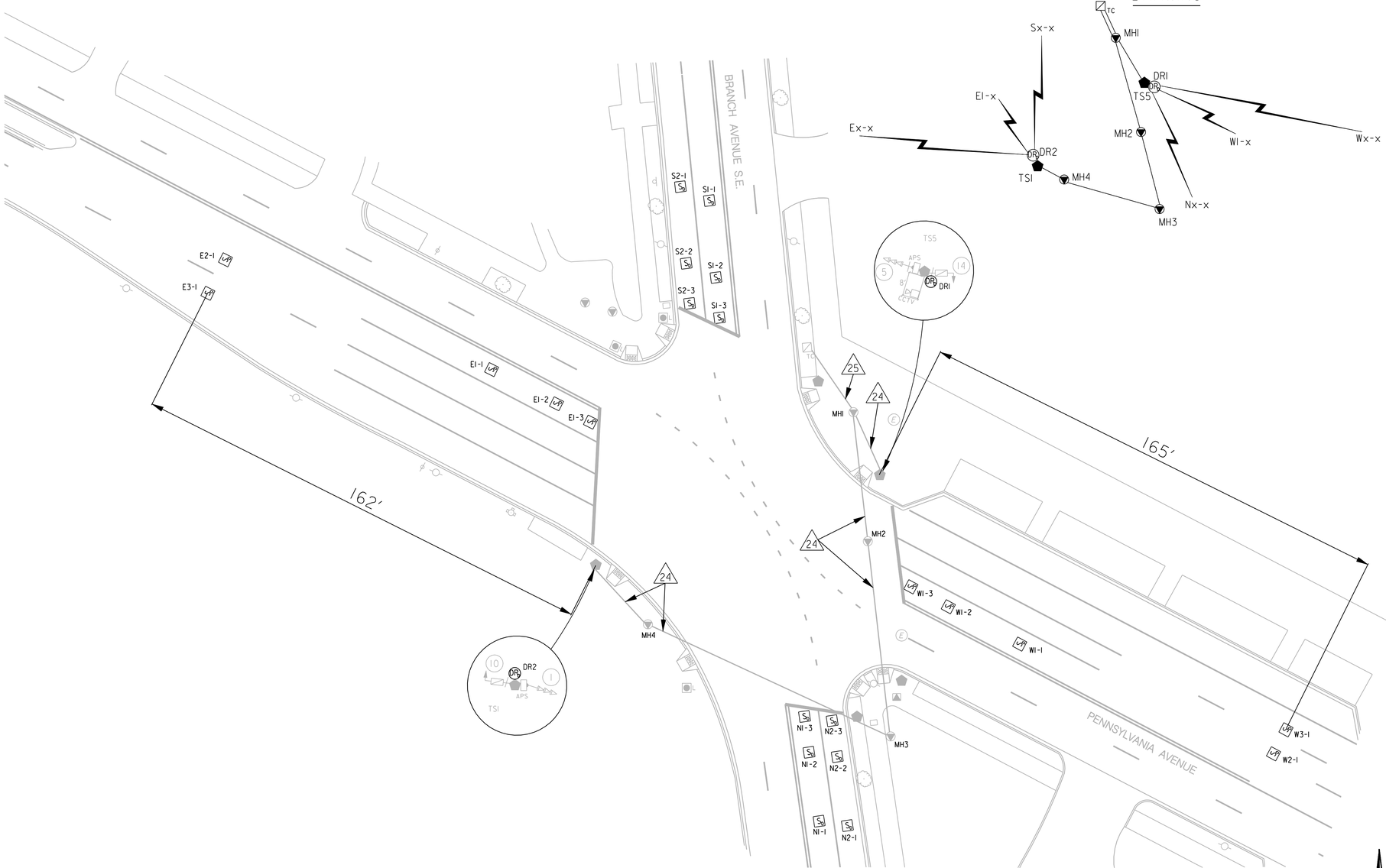
Thursday, June 12, 2014 AT 03:44 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	29	32

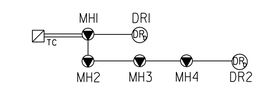


PROPOSED COMMUNICATION DRAWING

LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING TRAFFIC SIGNAL POLE WITH TRANSFORMER BASE
- EXISTING ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTON
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING 8 FOOT MAST ARM WITH CAP AND CLAMP
- EXISTING 4'X4'X4' ELECTRICAL MANHOLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING DDOT PULL BOX
- EXISTING JUNCTION BOX
- EXISTING WHEELCHAIR RAMP
- EXISTING ELECTRICAL MANHOLE
- EXISTING STORMDRAIN MANHOLE
- EXISTING ELECTRIC POLE
- EXISTING TRAFFIC SIGN
- EXISTING BUS STOP SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT DIGITAL RADIO
- PROPOSED REPEATER
- EXISTING ELECTRICAL PVC CONDUIT
- EXISTING 5 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING CCTV CAMERA

PROPOSED CABLE ROUTING



* 24 CAT5 ETHERNET CABLE

25 2-CAT5 ETHERNET CABLES

NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

S.L.F. NO. _____

APPROVED BY _____ DATE _____

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 4145 – PENNSYLVANIA AVENUE AND BRANCH AVENUE, S.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	TST
DESIGNED BY	BPP
DRAWN BY	JCH
REVIEWED BY	KSL
DATE	04/14
SCALE	1"=20'
SHEET	29 OF 32
DRAWING NO.	S-1085-A

100% DESIGN PLAN SUBMITTAL

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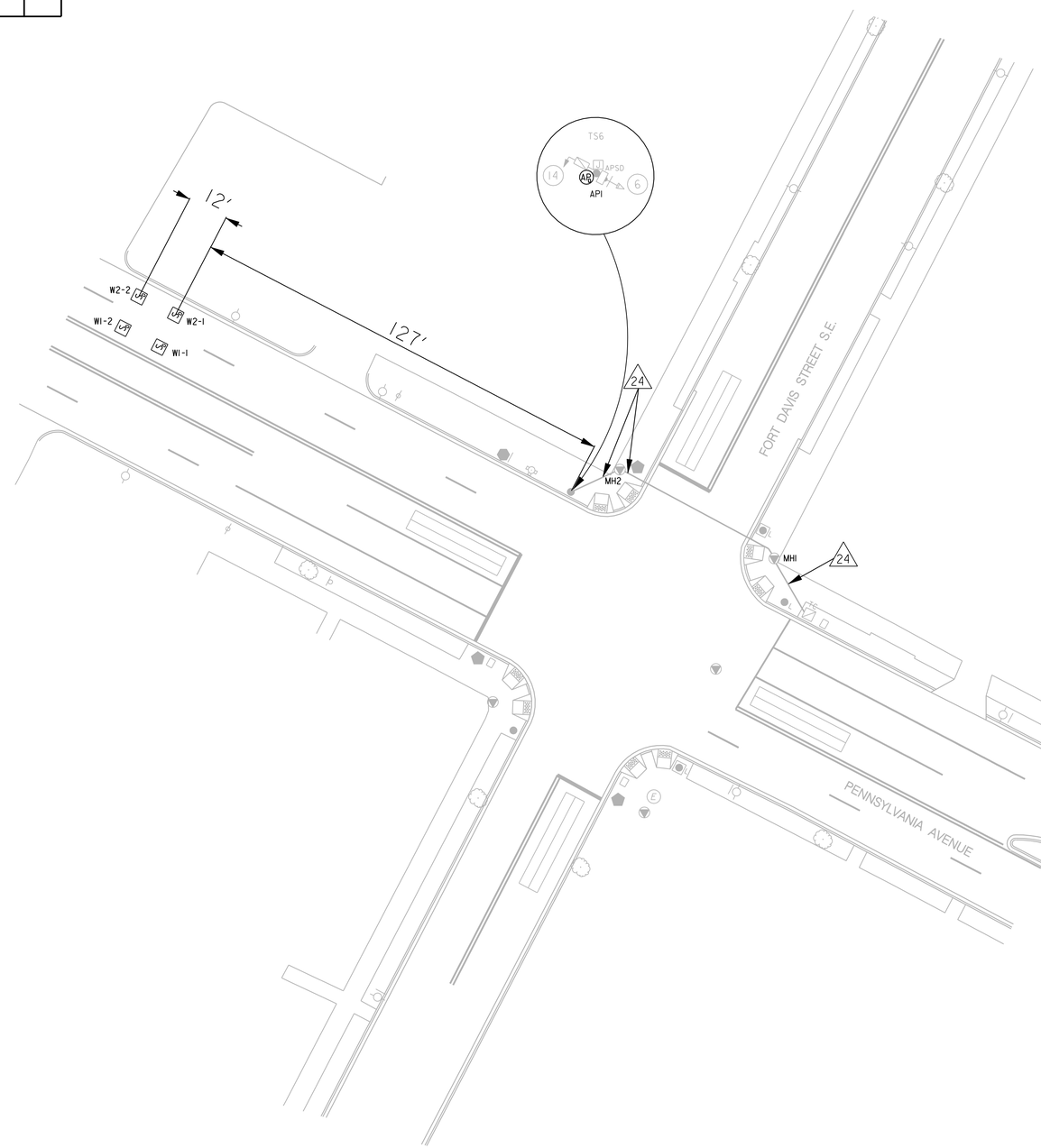
Thursday, June 12, 2014 AT 03:44 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

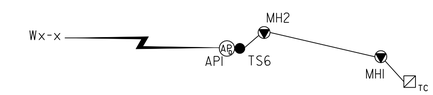
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	30	32



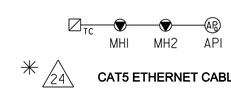
LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING TWIN 20 FOOT STREETLIGHT POLE
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING PEPCO WOOD POLE WITH LUMINAIRE
- EXISTING PEPCO WOOD POLE
- EXISTING TRAFFIC SIGNAL POLE WITH TRANSFORMER BASE
- EXISTING ACCESSIBLE PEDESTRIAN SIGNAL PUSH BUTTON
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING ELECTRIC HANDHOLE
- EXISTING 4'X4'X4' ELECTRICAL MANHOLE
- EXISTING DDOT PULL BOX
- EXISTING JUNCTION BOX
- EXISTING WHEELCHAIR RAMP
- EXISTING ELECTRIC POLE
- EXISTING TRAFFIC SIGN
- EXISTING BUS STOP SIGN
- EXISTING FIRE HYDRANT
- EXISTING TREE
- EXISTING LOOP DETECTOR
- PROPOSED DETECTION MAGNETOMETER
- PROPOSED ACCESS POINT
- EXISTING ELECTRICAL PVC CONDUIT

PROPOSED COMMUNICATION DRAWING



PROPOSED CABLE ROUTING



NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO.

APPROVED BY DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 4258 – PENNSYLVANIA AVENUE AND FORT DAVIS STREET, S.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	TST
DESIGNED BY	BPP
DRAWN BY	JCH
REVIEWED BY	KSL
DATE	04/14
SCALE	1"=20'
SHEET	30 OF 32
DRAWING NO.	S-2324

100% DESIGN PLAN SUBMITTAL

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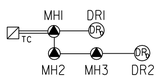
Thursday, June 12, 2014 AT 03:44 PM

REVISION								
DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A								

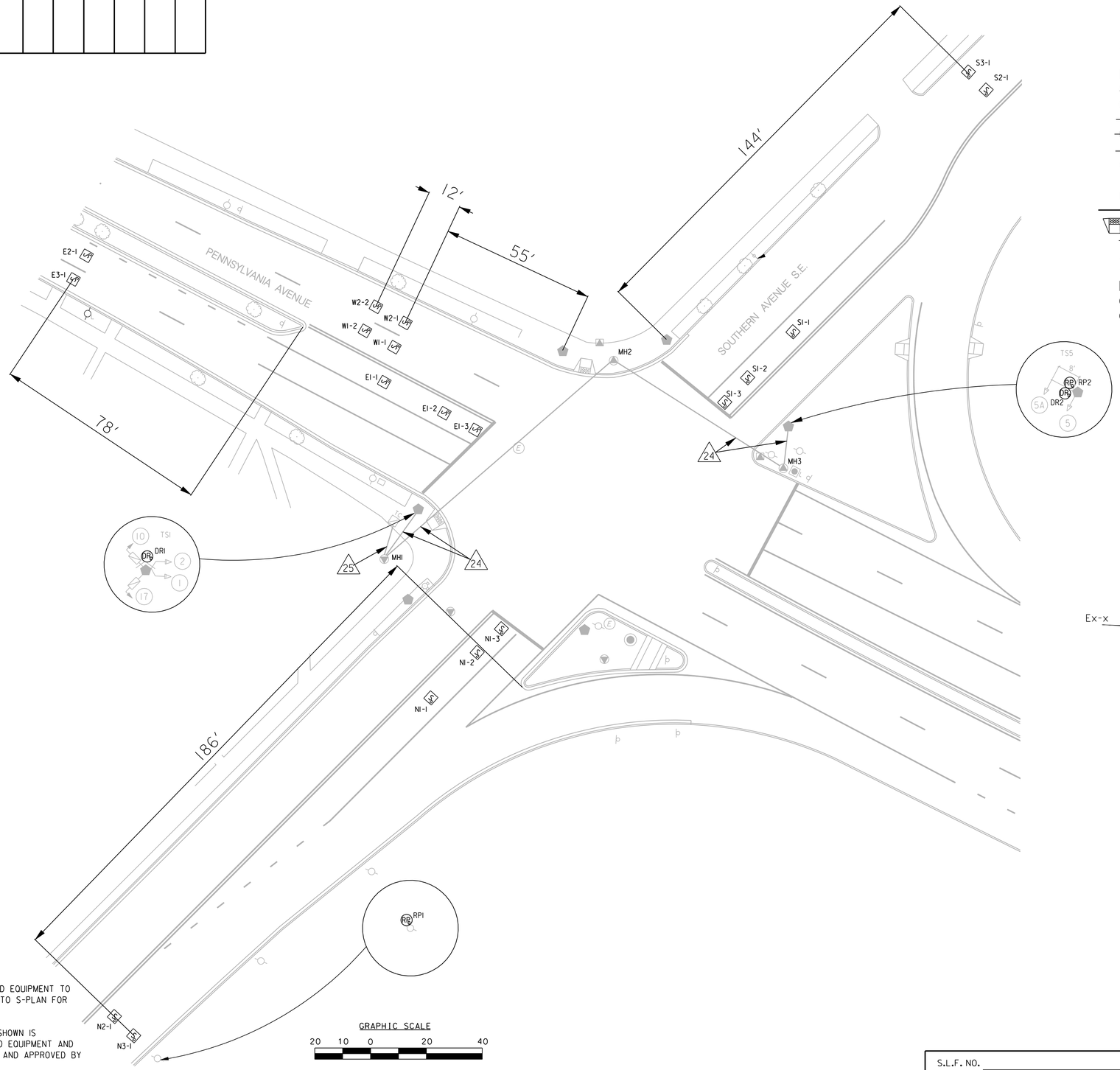
F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	31	32

PROPOSED CABLE ROUTING



✳ 24 CAT5 ETHERNET CABLE

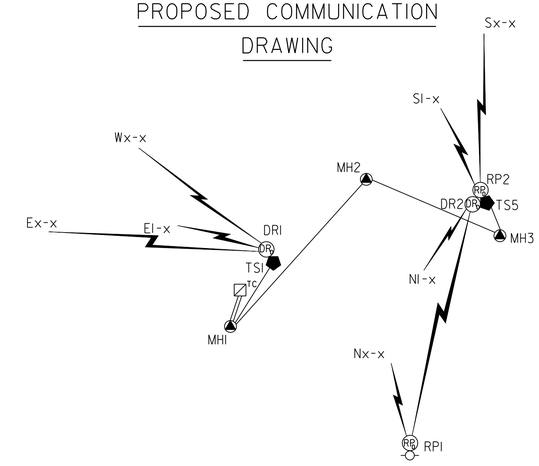
25 2-CAT5 ETHERNET CABLES



LEGEND:

- EXISTING TYPE 170E TRAFFIC SIGNAL CONTROLLER WITH A MODEL 336SS CABINET
- EXISTING PENDANT POLE WITH LUMINAIRE
- EXISTING TRAFFIC SIGNAL POLE WITH TRANSFORMER BASE
- EXISTING MONOTUBE TRAFFIC SIGNAL POLE WITH MAST ARM
- EXISTING 3 SECTION TRAFFIC SIGNAL HEAD (ALL LENSES 12")
- EXISTING 2-SECTION PEDESTRIAN SIGNAL HEAD
- EXISTING 8 FOOT MAST ARM WITH CAP AND CLAMP
- EXISTING 4'X4'X4' ELECTRICAL MANHOLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING DDOT PULL BOX
- EXISTING ELECTRICAL PVC CONDUIT
- EXISTING WHEELCHAIR RAMP
- EXISTING ELECTRIC POLE
- EXISTING TRAFFIC SIGN
- EXISTING FIRE HYDRANT
- PROPOSED SENSYS DETECTION MAGNETOMETER
- PROPOSED SENSYS ACCESS POINT DIGITAL RADIO
- PROPOSED SENSYS REPEATER

PROPOSED COMMUNICATION DRAWING



NOTE:

A. DESIGN PLAN ADDS DETECTION AND ASSOCIATED EQUIPMENT TO EXISTING CONDITIONS AT INTERSECTION. REFER TO S-PLAN FOR EXISTING DESIGN DETAILS.

B. THE LOCATION OF THE PROPOSED EQUIPMENT SHOWN IS APPROXIMATE. THE LOCATION OF ALL PROPOSED EQUIPMENT AND MATERIAL SHALL BE FIELD LOCATED, VERIFIED, AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.

GRAPHIC SCALE

20 10 0 20 40

1" = 20'-0" HORIZ.

N

S.L.F. NO. _____

APPROVED BY _____ DATE

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

ACISA 4147 – PENNSYLVANIA AVENUE AND SOUTHERN AVENUE, S.E.

RECOMMENDED
- DDOT/ TOA PROJECT MANAGER — DATE
- CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
- CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
- CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

FIELD CHECKED BY	TST
DESIGNED BY	BPP
DRAWN BY	JCH
REVIEWED BY	KSL
DATE	04/14
SCALE	1"=20'
SHEET	31 OF 32
DRAWING NO.	S-218-K

100% DESIGN PLAN SUBMITTAL

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Thursday, June 12, 2014 AT 03:45 PM

REVISION								
	DESCRIPTION	DATE	COR.	CHK.	APP.	APP.	APP.	APP.	APP.
A									

F.H.W.A REG. NO.	STATE	FED. AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
	D.C	DCKA-2010-T-0050	32	32

Main Street	Side Street	TCP for Parking Lane Closure	TCP for Travel Lane, Parking Lane, Sidewalk Closure	TCP for Parking Lane/Sidewalk Closure	Lane Closure on Two-way Road and No Existing Parking with Flaggers	Alley Closure	Right Lane Closure with No Parking Permitted	Approaching Left Lane Closure with Parking Permitted	Multiple Lane Closure at Intersection	Right Lane Closure Far Side of Intersection	Left Lane Closure on Far Side of Intersection
		TCP 1	TCP 2	TCP 3	TCP 8	TCP 9	TCP 11	TCP 12	TCP 13	TCP 14	TCP 15
New York Avenue NE	4th Street NW/ I-395	x					x	x			
New York Avenue NE	M Street NW at New Jersey Avenue NW	x				x					
New York Avenue NE	New Jersey Avenue NW			x			x	x			
New York Avenue NE	North Capitol Street NE			x			x	x		x	
New York Avenue NE	1st Street NE						x	x			
New York Avenue NE	Florida Avenue at P Street NE				x		x	x		x	
New York Avenue NE	Florida Avenue NE at Eckington Place NE		x				x	x			
New York Avenue NE	Florida Avenue NE						x	x		x	
New York Avenue NE	Montana Avenue (along circle)						x	x			
New York Avenue NE	Bladensburg Road NE										
Rhode Island Avenue NE	4th Street NE		x				x	x		x	x
Rhode Island Avenue NE	Rhode Isl. Ave. Shopping Plaza					x	x	x		x	x
Rhode Island Avenue NE	Reed Street NE				x		x	x			
Rhode Island Avenue NE	13th Street NE/ Brentwood Road NE									x	x
Rhode Island Avenue NE	14th Street NE (Montana Avenue NE)				x		x	x		x	
Rhode Island Avenue NE	20th Street NE									x	x
Rhode Island Avenue NE	South Dakota Avenue NE						x	x		x	
Rhode Island Avenue NE	Eastern Avenue NE		x				x	x			
Pennsylvania Avenue SE	Anacostia Freeway Ramp/ Fairlawn Avenue SE							x		x	
Pennsylvania Avenue SE	L'Enfant Square SE						x	x			x
Pennsylvania Avenue SE	Minnesota Avenue SE						x	x		x	x
Pennsylvania Avenue SE	29th Street SE/ P Street SE									x	x
Pennsylvania Avenue SE	Branch Avenue SE						x	x			
Pennsylvania Avenue SE	Fort Davis Street SE									x	x
Pennsylvania Avenue SE	Southern Avenue SE						x	x		x	x

NOTES:

A. DURING PULLING CABLES THROUGH THE MANHOLE IN THE SIDEWALK AND WORKING AT THE TRAFFIC SIGNAL CABINET, THE CONTRACTOR SHALL INSTALL APPROPIATE TRAFFIC CONE PROTECTION.

B. THE STANDARD TCP CHOSEN FOR EACH SITE IN THE ABOVE TABLE MAY BE USED AS GUIDELINES.THE CONTRACTOR SHALL SUBMIT THE DETAILED TCP FOR EACH SITE TO DDOT FOR APPROVAL PRIOR TO STARTING ANY WORK AT THE SITE.

C. THE CONTRACTOR SHALL DEVELOP SPECIAL TCP FOR SITES WHEN NECESSARY.

100% DESIGN PLAN SUBMITTAL

DISTRICT OF COLUMBIA
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION OPERATIONS ADMINISTRATION

TRAFFIC CONTROL PLAN

RECOMMENDED
DDOT/ TOA PROJECT MANAGER — DATE
CHIEF, TRAFFIC SIGNAL DESIGN BRANCH — DATE
CHIEF, TRAFFIC SIGNAL OPERATIONS BRANCH — DATE
CHIEF, TRAFFIC SIGNAL CONSTRUCTION BRANCH — DATE
CHIEF, TRAFFIC SIGNAL MAINTENANCE BRANCH — DATE

APPROVED
CHIEF, TRAFFIC SIGNAL SYSTEM DIVISION — DATE

S.L.F. NO.
APPROVED BY — DATE

FIELD CHECKED BY	TST
DESIGNED BY	BPP
DRAWN BY	KSL
REVIEWED BY	BPP
DATE	04/14
SCALE	NO SCALE
SHEET / OF	32 / 32
DRAWING NO.	TCP

H:\projfile\2455 - DDOT Adaptive Signal Design\dwgs\design\32 - TCP.dgn
Thursday, June 12, 2014 AT 04:01 PM