

SAMPLE ITS WORKING DRAWINGS

CCTV COMMUNICATION NETWORK ASSIGNMENT TABLE

NO.	NODE	LOCATION	PLAN SHEET #	LAT IN DECIMAL DEGREES	LONG IN DECIMAL DEGREES	PAY ITEM	SERVICE PROVIDER	DESCRIPTION	FUNCTION	CLE ID	VLAN	MAC ADDRESS	IP ADDRESS	CCTV PTZ ADDRESS
1	1					47		VIDEO ENCODER	DIGITAL VIDEO (HIGH RESOLUTION)					
2									DIGITAL VIDEO (LOW RESOLUTION)					
3									UNIT CONTROL					
4									ADDITIONAL DATA PORT					
5									PTZ					
6							VERIZON	DSL MODEM	DATA PORT					
7									UNIT CONTROL					
8								IP POWER DIST. UNIT	UNIT CONTROL					
9	2					47		VIDEO ENCODER	DIGITAL VIDEO (HIGH RESOLUTION)					
10									DIGITAL VIDEO (LOW RESOLUTION)					
11									UNIT CONTROL					
12									ADDITIONAL DATA PORT					
13									PTZ					
14							COMCAST	CABLE MODEM	DATA PORT					
15									UNIT CONTROL					
16								IP POWER DIST. UNIT	UNIT CONTROL					
17	3					47		VIDEO ENCODER	DIGITAL VIDEO (HIGH RESOLUTION)					
18									DIGITAL VIDEO (LOW RESOLUTION)					
19									UNIT CONTROL					
20									ADDITIONAL DATA PORT					
21									PTZ					
22							VERIZON	DSL MODEM	DATA PORT					
23									UNIT CONTROL					
24								IP POWER DIST. UNIT	UNIT CONTROL					
25	4					47		VIDEO ENCODER	DIGITAL VIDEO (HIGH RESOLUTION)					
26									DIGITAL VIDEO (LOW RESOLUTION)					
27									UNIT CONTROL					
28									ADDITIONAL DATA PORT					
29									PTZ					
30							VERIZON	DSL MODEM	DATA PORT					
31									UNIT CONTROL					
32								IP POWER DIST. UNIT	UNIT CONTROL					
33	5					65		VIDEO DECODER	DIGITAL VIDEO (HIGH RESOLUTION)					
34									DIGITAL VIDEO (LOW RESOLUTION)					
35									UNIT CONTROL					
36									ADDITIONAL DATA PORT					
37									PTZ					
38								ETHERNET SWITCH	UNIT CONTROL					
39								TERMINAL SERVER	DATA PORT 1					
40									DATA PORT 2					
41									UNIT CONTROL					
42	6					47		VIDEO ENCODER	DIGITAL VIDEO (HIGH RESOLUTION)					
43									DIGITAL VIDEO (LOW RESOLUTION)					
44									UNIT CONTROL					
45									ADDITIONAL DATA PORT					
46									PTZ					
47							VERIZON	FIOS MODEM	DATA PORT					
48									UNIT CONTROL					
49								IP POWER DIST. UNIT	UNIT CONTROL					
50	7					47		VIDEO ENCODER	DIGITAL VIDEO (HIGH RESOLUTION)					
51									DIGITAL VIDEO (LOW RESOLUTION)					
52									UNIT CONTROL					
53									ADDITIONAL DATA PORT					
54									PTZ					
55								ETHERNET SWITCH	UNIT CONTROL					
56								IP POWER DIST. UNIT	UNIT CONTROL					
57	8					47		VIDEO ENCODER	DIGITAL VIDEO (HIGH RESOLUTION)					
58									DIGITAL VIDEO (LOW RESOLUTION)					
59									UNIT CONTROL					
60									ADDITIONAL DATA PORT					
61									PTZ					
62							VERIZON	DSL MODEM	DATA PORT					
63									UNIT CONTROL					
64								IP POWER DIST. UNIT	UNIT CONTROL					
65	9					47		VIDEO ENCODER	DIGITAL VIDEO (HIGH RESOLUTION)					
66									DIGITAL VIDEO (LOW RESOLUTION)					
67									UNIT CONTROL					
68									ADDITIONAL DATA PORT					
69									PTZ					
70							VERIZON	DSL MODEM	DATA PORT					
71									UNIT CONTROL					
72								IP POWER DIST. UNIT	UNIT CONTROL					
73	10			EXISTING	EXISTING	65		VIDEO DECODER	DIGITAL VIDEO (HIGH RESOLUTION)					
74									DIGITAL VIDEO (LOW RESOLUTION)					
75									UNIT CONTROL					
76									ADDITIONAL DATA PORT					
77									PTZ					
78								ETHERNET SWITCH	UNIT CONTROL					
79								TERMINAL SERVER	DATA PORT 1					
80									DATA PORT 2					
81									UNIT CONTROL					
82	11			EXISTING	EXISTING	66		VIDEO DECODER	DIGITAL VIDEO (HIGH RESOLUTION)					
83									DIGITAL VIDEO (LOW RESOLUTION)					
84									UNIT CONTROL					
85									ADDITIONAL DATA PORT					
86									PTZ					
87								ETHERNET SWITCH	UNIT CONTROL					
88								GIG-E SWITCH	UNIT CONTROL					
89								TERMINAL SERVER	DATA PORT 1					
90									DATA PORT 2					
91									UNIT CONTROL					
92							CABLEVISION	CABLE MODEM	DATA PORT					
93									UNIT CONTROL					
94								ROUTER	UNIT CONTROL					

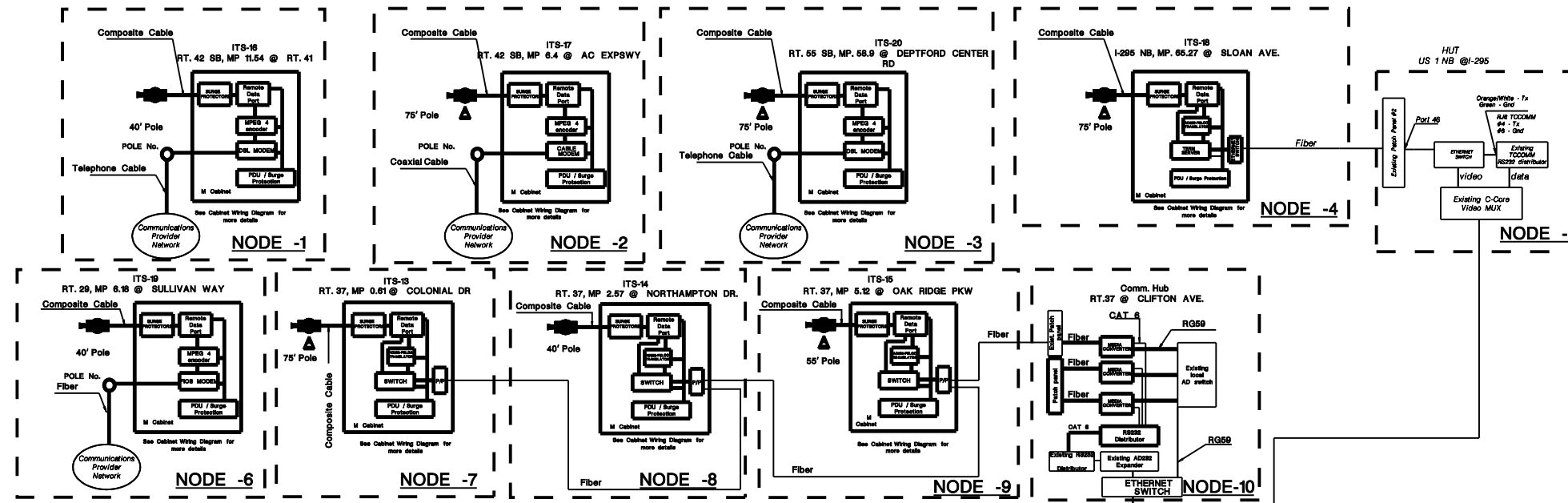
NJDOT APPROVAL

**DESIGNER
RECOMMENDATION
FOR APPROVAL**

**CONTRACTOR APRVL
STAMP & SIGNATURE**

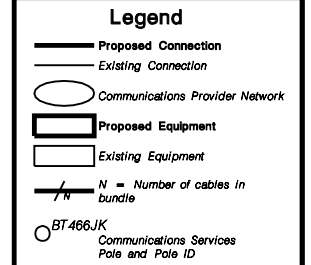
**PROJECT TITLE
CCTV COMMUNICATION NETWORK
ASSIGNMENT TABLE
XXX REGION
CONTRACTOR NAME
CONTRACT NO. XXXXXXXX
FEDERAL PROJECT NO. XXXXXXXXXXXX**

SAMPLE ITS WORKING DRAWINGS



- SAMPLE BLOCK-DIAGRAM NOTES :**
1. Block diagram presents a proposed system solution. See cabinet wiring diagrams for details.
 2. CCTV Composite cable consists of RG59, two shielded twisted pairs, power conductors
 3. Only one "Blue-White" pair is used for telephone connection. All the others are not connected.
 4. Indicated camera addresses correspond to video switcher ports at TOC-N and TOC-S
 5. Each DMS, CCTV and DMS controller cabinet is powered by 120VAC provided by local power utility
 6. Existing AD Video Switching System as shown includes switching and expansion chassis, CPU, Code converters, keyboards and interconnecting cables.

- ABBREVIATIONS**
- DMS- Dynamic Message Sign
 - UPS- Uninterruptible Power Supply
 - PDU- Power Distribution Unit
 - TEL- Telephone Number
 - P/P- Patch Panel
 - UTP- Unshielded Twisted Pair
 - STP- Shielded Twisted Pair
 - F/O- Fiber Optics
 - ISP- Internet Services Provider
 - W/S- PC workstation

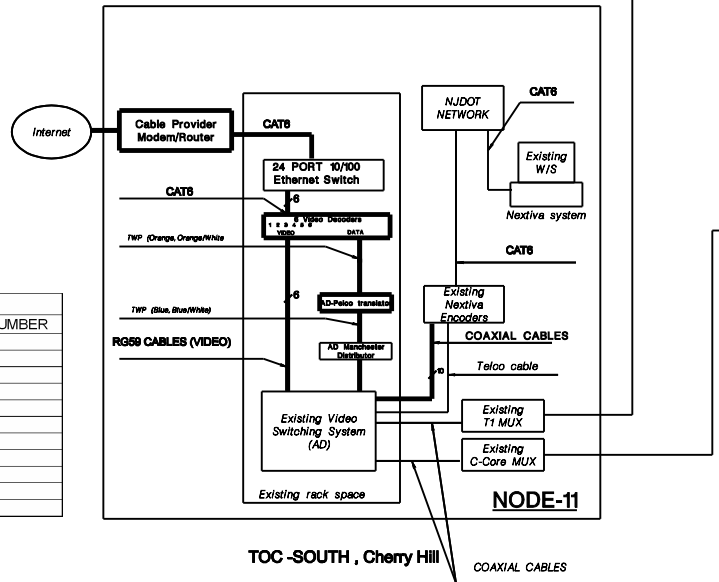


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CONTRACTOR APRVL
STAMP & SIGNATURE

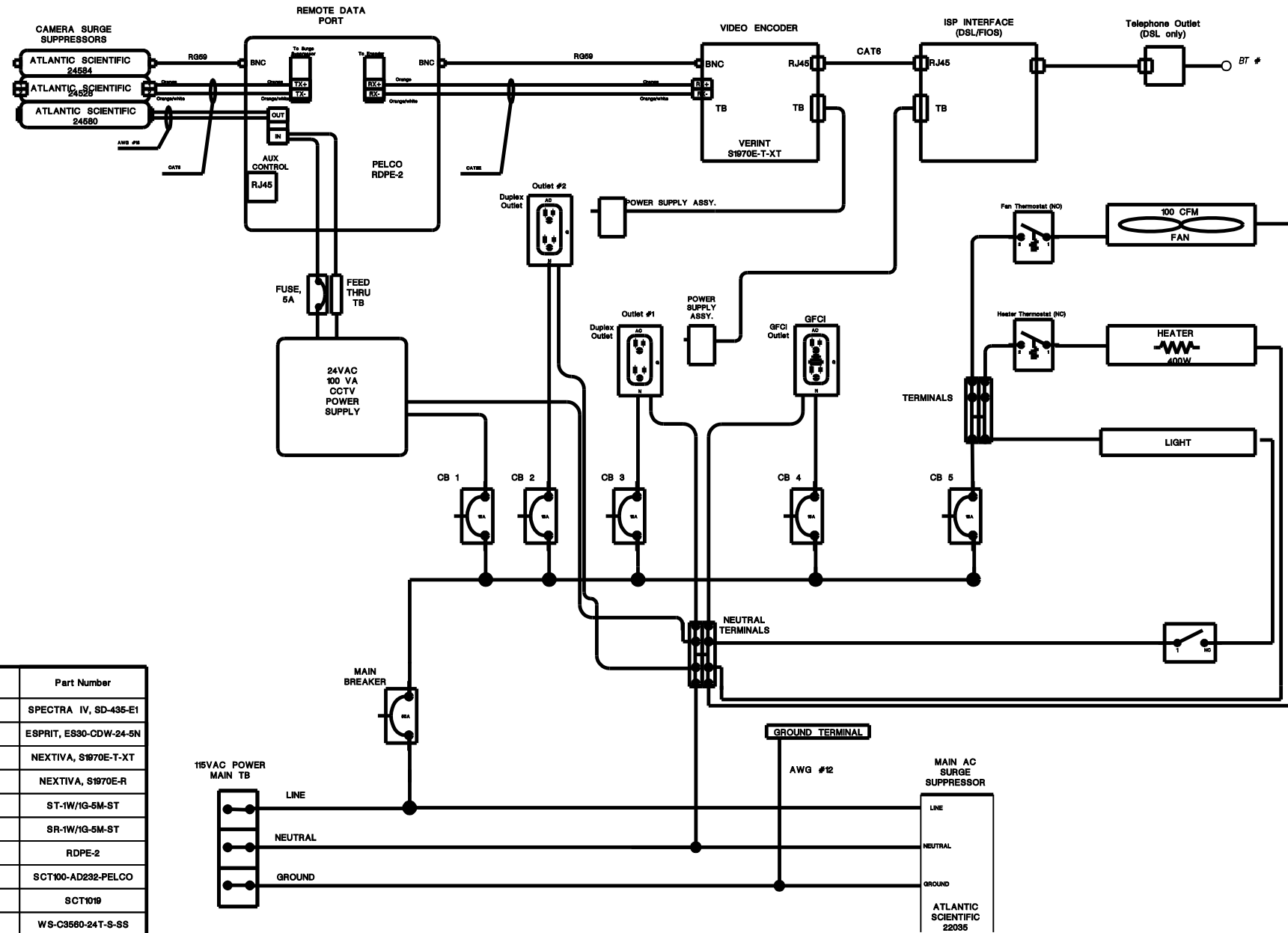
UTILITY SERVICE TABLE					
NODE #	UTILITY POLE #	UTILITY POLE LOCATION	UTILITY COMPANY NAME	TYPE OF SERVICE	ACCOUNT NUMBER
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					



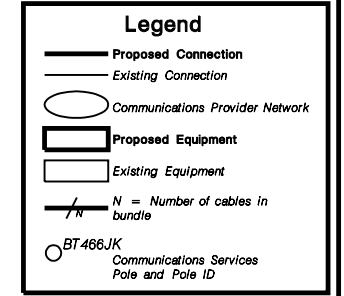
PROJECT TITLE
CCTV BLOCK DIAGRAM
XXX REGION
CONTRACTOR NAME
CONTRACT NO. XXXXXXX
FEDERAL PROJECT NO. XXXXXXXXXX

SAMPLE ITS WORKING DRAWINGS

- SAMPLE WIRING-DIAGRAM NOTES :**
- 1 All connections are via AWG #14 solid copper wire unless otherwise noted.
 2. Blue wire is used for 24VAC connections.
 3. All CCTV camera interface surge suppressors are grounded via DIN rail.
 4. All device ground connections are made to ground bar.
 5. Fan and Heater thermostat are adjustable type
 6. Door switch is N.O. type - closes when the cabinet door is opened.



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- DMS- Dynamic Message Sign
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 - STP- Shielded Twisted Pair
 - F/O- Fiber Optics
 - ISP- Internet Services Provider
 - W/S- PC workstation



SAMPLE EQUIPMENT LIST

No	Item	Manufacturer	Part Number
1	CCTV-DOME	PELCO	SPECTRA IV, SD-435-E1
2	CCTV-POSITIONAL	PELCO	ESPRIT, E830-CDW-24-5N
3	VIDEO ENCODER	VERINT	NEXTIVA, S1970E-T-XT
4	VIDEO DECODER	VERINT	NEXTIVA, S1970E-R
5	F/O VIDEO/DATA TRANSMITTER	MERIDIAN	ST-1W/1G-5M-ST
6	F/O VIDEO/DATA RECEIVER	MERIDIAN	SR-1W/1G-5M-ST
7	CCTV REMOTE DATA PORT	PELCO	RDPE-2
8	AD232-PELCO CODE TRANSLATOR	SENNETECH	SCT100-AD232-PELCO
9	AD MANCHESTER-PELCO CODE TRANSLATOR	SENNETECH	SCT1019
10	24 PORT ETHERNET SWITCH 10/100/1000	CISCO	WS-C3660-24T-S-SS
11	AD MANCHESTER CODE DISTRIBUTOR	AMERICAN DYNAMICS	AD2091
12	F/O PATCH PANEL, CCTV CONTROLLER	L-COM	FCM-2
13	F/O PATCH PANEL, TRAFFIC CONTROLLER -RT37	FIS	F105818BLK
14	120VAC MAIN LINE SURGE SUPPRESSOR	ATLANTIC SCIENTIFIC	22035
15	24VAC SURGE SUPPRESSOR	ATLANTIC SCIENTIFIC	24580
16	RS422/485 SURGE SUPPRESSOR	ATLANTIC SCIENTIFIC	24528
17	COAXIAL VIDEO SURGE SUPPRESSOR	ATLANTIC SCIENTIFIC	24584

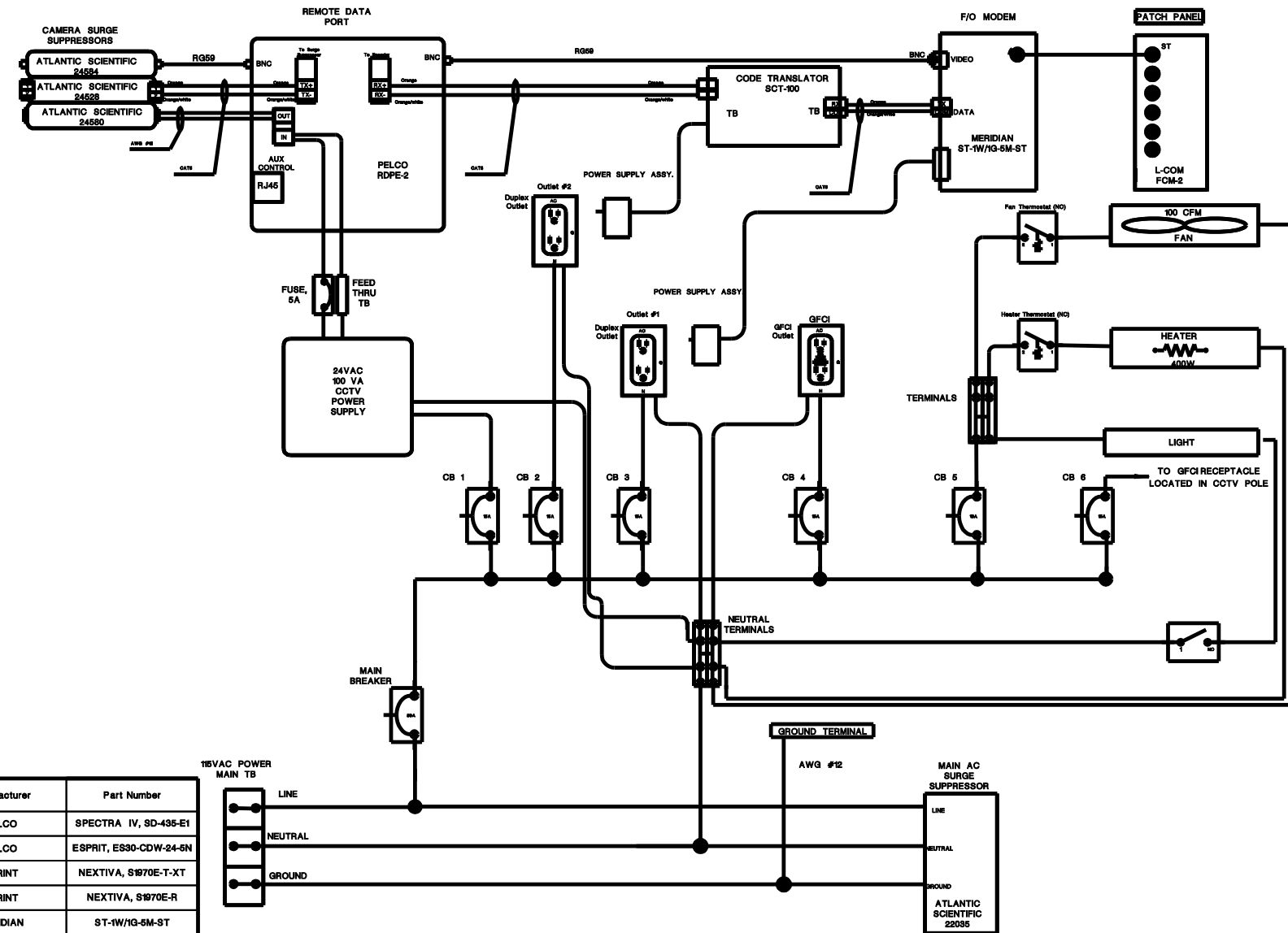
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RECOMMENDATION
FOR APPROVAL

CONTRACTOR APRVL
STAMP & SIGNATURE

PROJECT TITLE
CCTV CABINET WIRING DIAGRAM
(LEASED COMMUNICATIONS)
XXX REGION
CONTRACTOR NAME
CONTRACT NO. XXXXXXXX
FEDERAL PROJECT NO. XXXXXXXXXX

SAMPLE ITS WORKING DRAWINGS



- SAMPLE WIRING-DIAGRAM NOTES :**
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 - UTP- Unshielded Twisted Pair
 - STP- Shielded Twisted Pair
 - F/O- Fiber Optics
 - ISP- Internet Services Provider
 - W/S- PC workstation

Legend

- Proposed Connection
- Existing Connection
- Communications Provider Network
- Proposed Equipment
- Existing Equipment
- N = Number of cables in bundle
- BT466JK Communications Services Pole and Pole ID

SAMPLE EQUIPMENT LIST

No	Item	Manufacturer	Part Number
1	CCTV-DOME	PELCO	SPECTRA IV, SD-435-EI
2	CCTV-POSITIONAL	PELCO	ESPRIT, ES30-CDW-24-5N
3	VIDEO ENCODER	VERINT	NEXTIVA, S970E-T-XT
4	VIDEO DECODER	VERINT	NEXTIVA, S970E-R
5	F/O VIDEO/DATA TRANSMITTER	MERIDIAN	ST-1W/1G-5M-ST
6	F/O VIDEO/DATA RECEIVER	MERIDIAN	SR-1W/1G-5M-ST
7	CCTV REMOTE DATA PORT	PELCO	RDPE-2
8	AD232-PELCO CODE TRANSLATOR	SENNETECH	SCT100-AD232-PELCO
9	AD MANCHESTER-PELCO CODE TRANSLATOR	SENNETECH	SCT1019
10	24 PORT ETHERNET SWITCH 10/100/1000	CISCO	WS-C3560-24T-S-SS
11	AD MANCHESTER CODE DISTRIBUTOR	AMERICAN DYNAMICS	AD2091
12	F/O PATCH PANEL, CCTV CONTROLLER	L-COM	FCM-2
13	F/O PATCH PANEL, TRAFFIC CONTROLLER -RT37	FIS	F1105818BLK
14	120VAC MAIN LINE SURGE SUPPRESSOR	ATLANTIC SCIENTIFIC	22035
15	24VAC SURGE SUPPRESSOR	ATLANTIC SCIENTIFIC	24590
16	R9422/485 SURGE SUPPRESSOR	ATLANTIC SCIENTIFIC	24528
17	COAXIAL VIDEO SURGE SUPPRESSOR	ATLANTIC SCIENTIFIC	24584

NJDOT APPROVAL

DESIGNER RECOMMENDATION FOR APPROVAL

CONTRACTOR APRVL STAMP & SIGNATURE

PROJECT TITLE
CCTV CABINET WIRING DIAGRAM
(FIBER COMMUNICATION)
XXX REGION
CONTRACTOR NAME
CONTRACT NO. XXXXXXXX
FEDERAL PROJECT NO. XXXXXXXXXX

SAMPLE ITS WORKING DRAWINGS

DMS COMMUNICATION NETWORK ASSIGNMENT TABLE

NO.	NODE	LOCATION	PLAN SHEET #	LAT	LONG	PAY ITEM	SERVICE PROVIDER	DESCRIPTION	FUNCTION	CLEI ID	VLAN	MAC ADDRESS	IP ADDRESS
1	12			IN DECIMAL DEGREES	IN DECIMAL DEGREES	48		TERMINAL SERVER	DATA PORT 1				
2									DATA PORT 2				
3									UNIT CONTROL				
4								DMS	SIGN DATA				
5									CONTROLLER				
6									UNIT CONTROL				
7								ETHERNET SWITCH	UNIT CONTROL				
8							SPRINT	IP WIRELESS MODEM	DATA PORT				
9									UNIT CONTROL				
10								IP POWER DIST. UNIT	UNIT CONTROL				
11	13			IN DECIMAL DEGREES	IN DECIMAL DEGREES	48		TERMINAL SERVER	DATA PORT 1				
12									DATA PORT 2				
13									UNIT CONTROL				
14								DMS	SIGN DATA				
15									CONTROLLER				
16									UNIT CONTROL				
17								ETHERNET SWITCH	UNIT CONTROL				
18							SPRINT	IP WIRELESS MODEM	DATA PORT				
19									UNIT CONTROL				
20								IP POWER DIST. UNIT	UNIT CONTROL				
21	14			IN DECIMAL DEGREES	IN DECIMAL DEGREES	48		TERMINAL SERVER	DATA PORT 1				
22									DATA PORT 2				
23									UNIT CONTROL				
24								DMS	SIGN DATA				
25									CONTROLLER				
26									UNIT CONTROL				
27								ETHERNET SWITCH	UNIT CONTROL				
28								IP POWER DIST. UNIT	UNIT CONTROL				
29	15			IN DECIMAL DEGREES	IN DECIMAL DEGREES	48		TERMINAL SERVER	DATA PORT 1				
30									DATA PORT 2				
31									UNIT CONTROL				
32								DMS	SIGN DATA				
33									CONTROLLER				
34									UNIT CONTROL				
35								ETHERNET SWITCH	UNIT CONTROL				
36								IP POWER DIST. UNIT	UNIT CONTROL				
37	16			IN DECIMAL DEGREES	IN DECIMAL DEGREES	48		TERMINAL SERVER	DATA PORT 1				
38									DATA PORT 2				
39									UNIT CONTROL				
40								DMS	SIGN DATA				
41									CONTROLLER				
42									UNIT CONTROL				
43								ETHERNET SWITCH	UNIT CONTROL				
44								IP POWER DIST. UNIT	UNIT CONTROL				
45	17			IN DECIMAL DEGREES	IN DECIMAL DEGREES	48		TERMINAL SERVER	DATA PORT 1				
46									DATA PORT 2				
47									UNIT CONTROL				
48								DMS	SIGN DATA				
49									CONTROLLER				
50									UNIT CONTROL				
51								ETHERNET SWITCH	UNIT CONTROL				
52								IP POWER DIST. UNIT	UNIT CONTROL				
53	18			EXISTING	EXISTING	65		PORT SHARER	DATA PORT 1				
54									DATA PORT 2				
55									UNIT CONTROL				
56								ETHERNET SWITCH	UNIT CONTROL				
57								TERMINAL SERVER	DATA PORT 1				
58									DATA PORT 2				
59									UNIT CONTROL				
60	11			EXISTING	EXISTING	66		PORT SHARER	DATA PORT 1				
61									DATA PORT 2				
62									DATA PORT 3				
63									DATA PORT 4				
64									UNIT CONTROL				
65								ETHERNET SWITCH	UNIT CONTROL				
66								GIG-E SWITCH	UNIT CONTROL				
67								TERMINAL SERVER	DATA PORT 1				
68									DATA PORT 2				
69									UNIT CONTROL				
70							CABLEVISION	CABLE MODEM	DATA PORT				
71									UNIT CONTROL				
72								ROUTER	UNIT CONTROL				

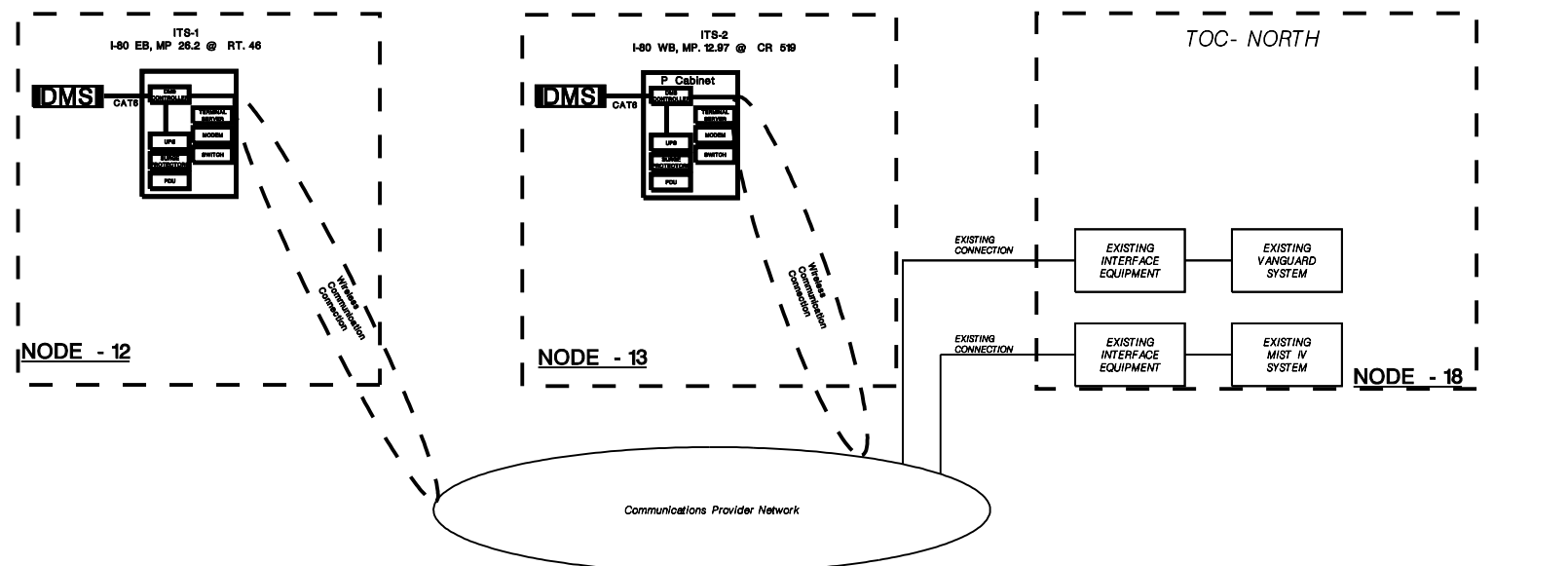
NJDOT APPROVAL

DESIGNER
RECOMMENDATION
FOR APPROVAL

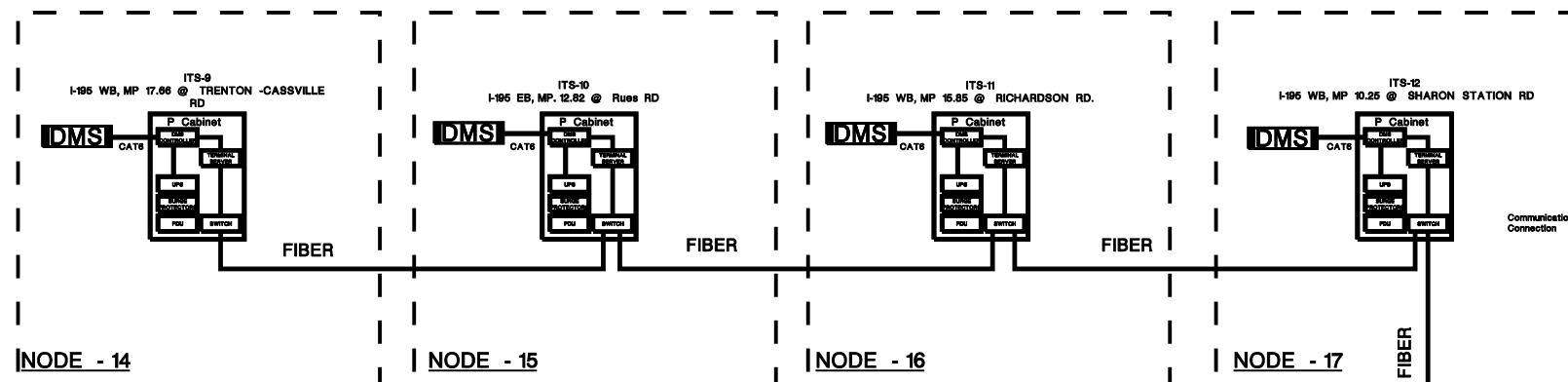
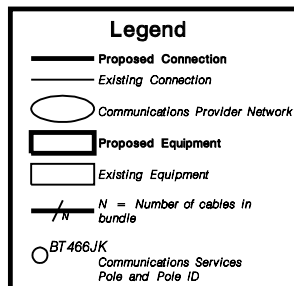
CONTRACTOR APRVL
STAMP & SIGNATURE

PROJECT TITLE
DMS COMMUNICATION NETWORK
ASSIGNMENT TABLE
XXX REGION
CONTRACTOR NAME
CONTRACT NO. XXXXXXXX
FEDERAL PROJECT NO. XXXXXXXXXX

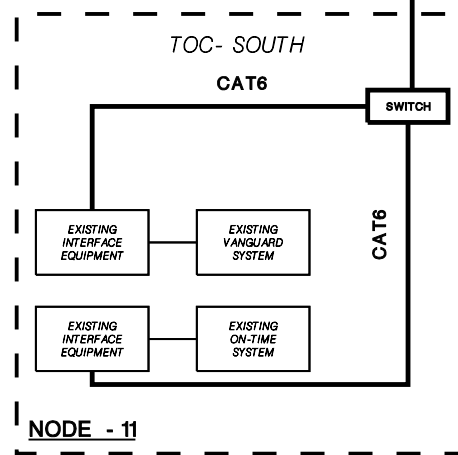
SAMPLE ITS WORKING DRAWINGS



- ABBREVIATIONS**
 DMS- Dynamic Message Sign
 UPS- Uninterruptible Power Supply
 PDU- Power Distribution Unit
 TEL- Telephone Number
 P/P- Patch Panel
 UTP- Unshielded Twisted Pair
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 W/S- PC workstation



UTILITY SERVICE TABLE					
NODE #	UTILITY POLE #	UTILITY POLE LOCATION	UTILITY COMPANY NAME	TYPE OF SERVICE	ACCOUNT NUMBER
11					
12					
13					
14					
15					
16					
17					
18					

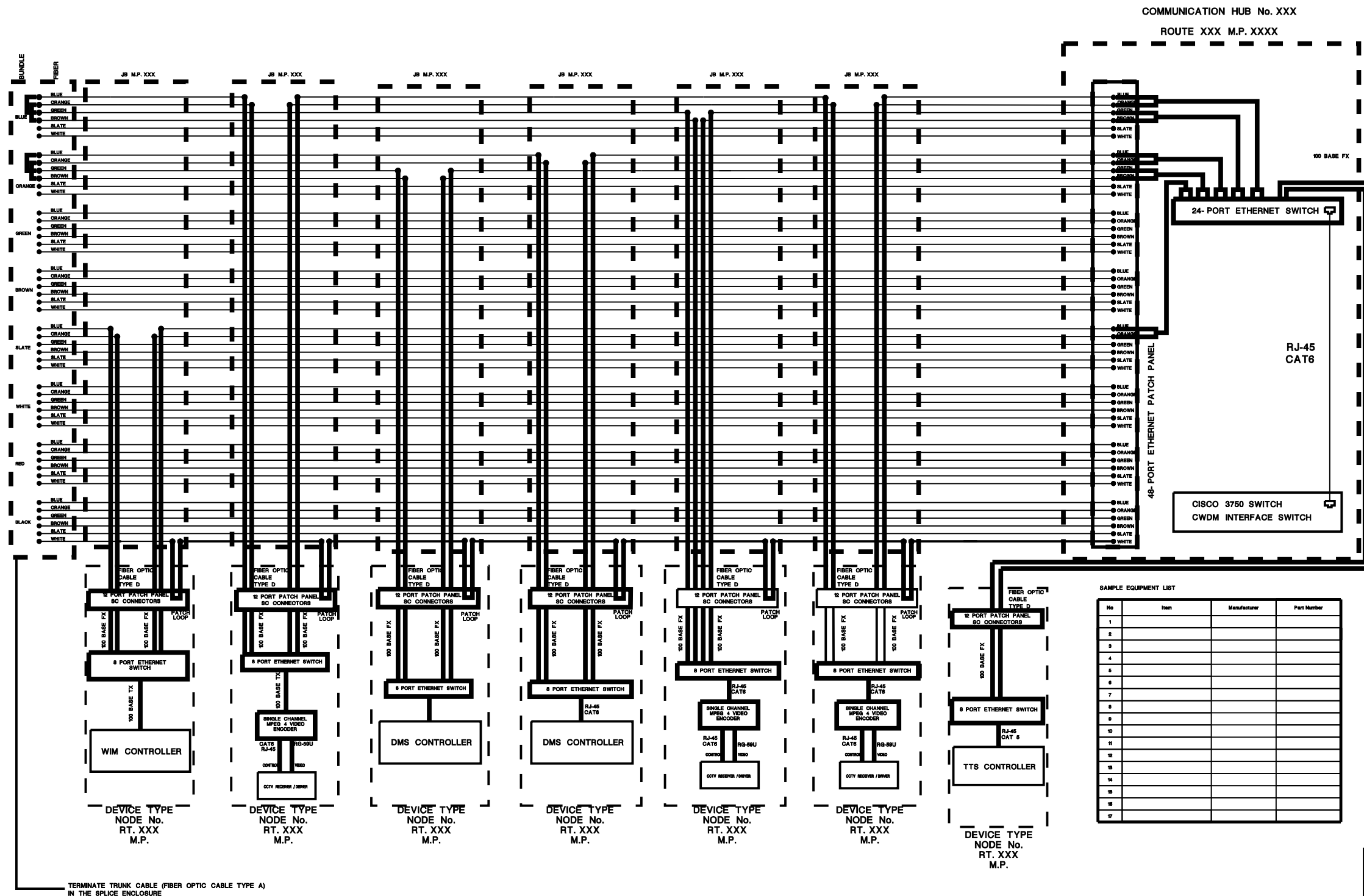


NJDOT APPROVAL

DESIGNER RECOMMENDATION FOR APPROVAL	CONTRACTOR APRVL STAMP & SIGNATURE
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PROJECT TITLE
 DMS SYSTEM BLOCK DIAGRAM
 XXX REGION
 CONTRACTOR NAME
 CONTRACT NO. XXXXXXXX
 FEDERAL PROJECT NO. XXXXXXXXXXXX

SAMPLE ITS WORKING DRAWINGS



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Legend

- Proposed Connection
- Existing Connection
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- Proposed Equipment
- Existing Equipment
- $\frac{N}{n}$ N = Number of cables in bundle
- BT466JK
Communications Services Pole and Pole ID

SAMPLE EQUIPMENT LIST

No	Item	Manufacturer	Part Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			

NJDOT APPROVAL

DESIGNER
RECOMMENDATION
FOR APPROVAL

CONTRACTOR APRVL
STAMP & SIGNATURE

PROJECT TITLE
 FIBER ASSIGNMENT DIAGRAM
 XXX REGION
 CONTRACTOR NAME
 CONTRACT NO. XXXXXXXX
 FEDERAL PROJECT NO. XXXXXXXXXXXX

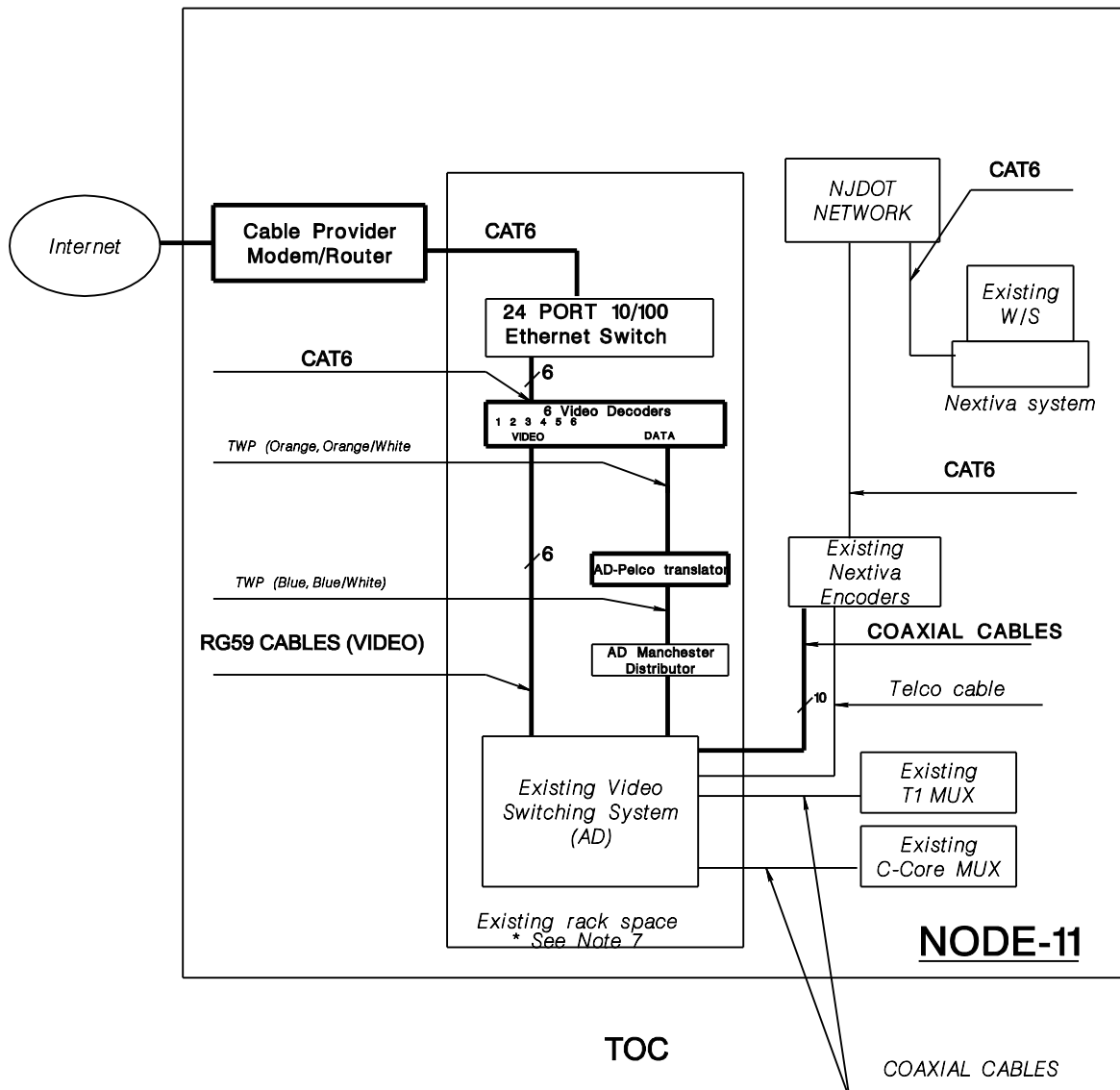
TERMINATE TRUNK CABLE (FIBER OPTIC CABLE TYPE A) IN THE SPLICE ENCLOSEURE

SAMPLE ITS WORKING DRAWINGS

- SAMPLE BLOCK-DIAGRAM NOTES :**
1. Block diagram presents a proposed system solution. See cabinet wiring diagrams for details.
 2. CCTV Composite cable consists of RG59, two shielded twisted pairs, power conductors
 3. Only one "Blue-White" pair is used for telephone connection. All the others are not connected.
 4. Indicated camera addresses correspond to video switcher ports at TOC-N and TOC-S
 5. Each DMS, CCTV and DMS controller cabinet is powered by 120VAC provided by local power utility
 6. Existing AD Video Switching System as shown includes switching and expansion chassis, CPU, Code converters, keyboards and interconnecting cables.
 7. Provide rack layout diagram.

SAMPLE EQUIPMENT LIST

No	Item	Manufacturer	Part Number
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			



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- Existing Equipment
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NJDOT APPROVAL

DESIGNER
RECOMMENDATION
FOR APPROVAL

CONTRACTOR APRVL
STAMP & SIGNATURE

PROJECT TITLE
TOC BLOCK DIAGRAM
XXX REGION
CONTRACTOR NAME
CONTRACT NO. XXXXXXXX
FEDERAL PROJECT NO. XXXXXXXXXXXX