

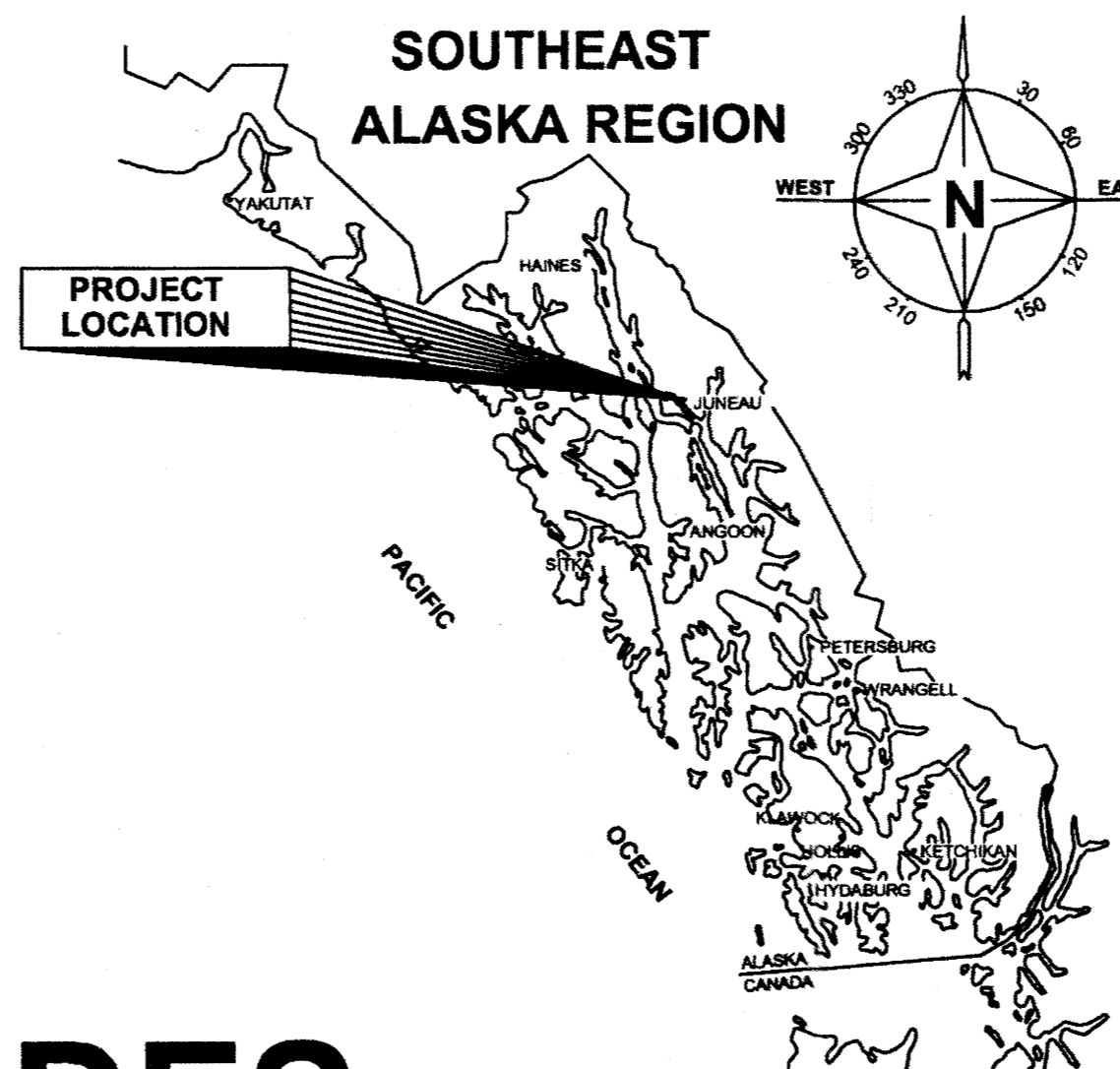
# State of Alaska

## Department of Transportation and Public Facilities

Southeast Region

The undersigned hereby certifies that this duplicated document is an exact and true copy of the original.  
*Narda Randolph*

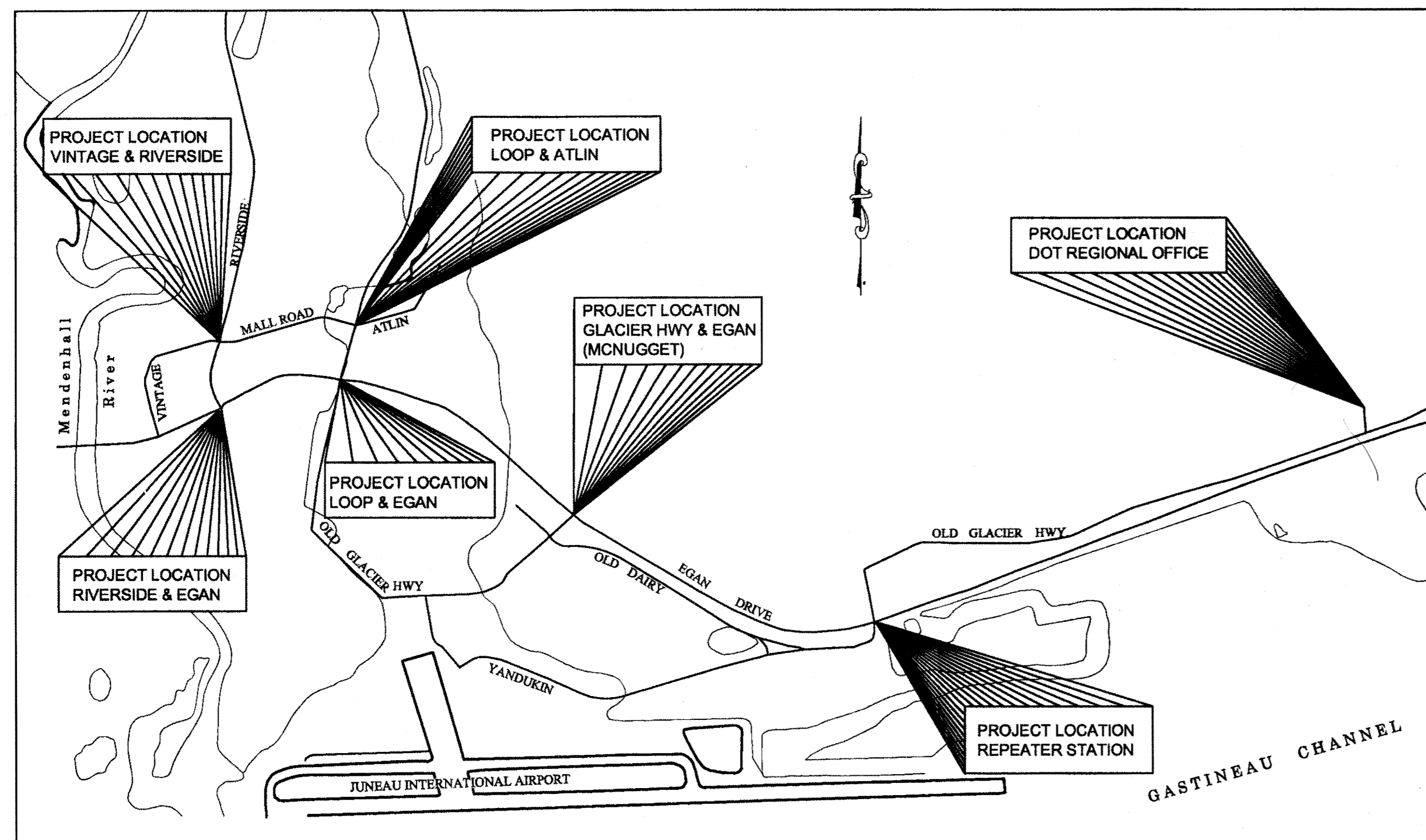
DEC 11 2009



# JUNEAU AREAWIDE TRAFFIC SIGNAL SYSTEM UPGRADES

PROJECT No. STP-0003(136) ~ 68057

ADDITIVE ALTERNATE A: LOOP & ATLIN  
 ADDITIVE ALTERNATE B: RIVERSIDE & VINTAGE



VICINITY MAP

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

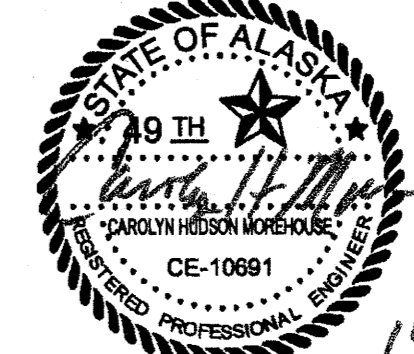
- A-1
- L-24.00
- T-35.00

INDEX	
SHEET NO.	DESCRIPTION
A1	TITLE SHEET
D1-D3	SUMMARIES
J1-J5	DETAILS
Q1-Q3	EGAN DR & GLACIER HWY SIGNAL PLANS
Q4-Q5	EGAN DR & LOOP RD SIGNAL PLANS
Q6-Q8	EGAN DR & RIVERSIDE DR SIGNAL PLANS
Q9-Q10	LOOP RD & ATLIN DR SIGNAL PLANS
Q11-Q12	RIVERSIDE DR & VINTAGE BLVD SIGNAL PLANS
S1-S2	TRAFFIC CONTROL PLANS

AS-BUILT PLANS  
 CONTRACTOR : Ever Electric, dba Island Electric  
 PROJECT ENGINEER : Thad Hopper  
 BEGIN DATE : JUNE 2, 2010  
 END DATE : September 29, 2010

PATH: Q:\JUN\68057\TRA\1 JUNEAU ITS TITLE.DWG TAB:A1-TITLE SHEET  
 Wednesday, July 30, 2008 10:33:26 AM  
 PLOT: PSPACE OR MSPACE: 1=1(F)

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

  
 APPROVED: *Victor Winters* 10/5/09 10/07/09  
 REGIONAL PRE-CONSTRUCTION ENGINEER DATE  
 VICTOR M. WINTERS, P.E.  
 APPROVED: *Gary L. Davis* 10-7-09  
 DIRECTOR, SOUTHEAST REGION DATE  
 GARY L. DAVIS  
 CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:  
*Maura A. Hanse* 11-9-12  
 CONSTRUCTION PROJECT MANAGER DATE

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

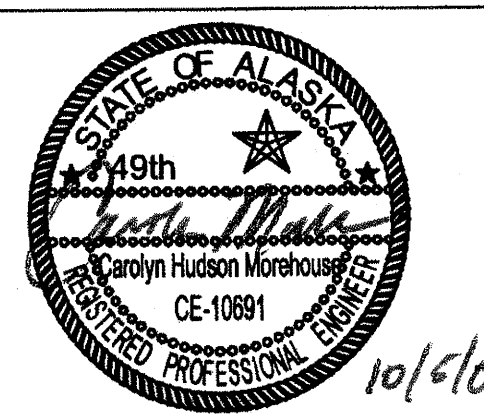
# EQUIPMENT SUMMARY

	ITEM	QUANTITY	BID	INSTALL LOCATIONS	REFERENCE	NOTES	
SIGNAL CONTROLLER AND CABINET	EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLERS	5	BASIC BID	1 - EGAN DR & GLACIER HWY (MCNUGGET) 1 - EGAN DR & MENDENHALL LOOP RD 1 - EGAN DR & RIVERSIDE DR 1 - MENDENHALL LOOP RD & ATLIN DR 1 - RIVERSIDE DR & VINTAGE BLVD	740-2.10	CONTRACTOR WILL SUPPLY AND INSTALL CONTROLLERS IN THE CABINETS. DOT & PF DEVELOP TRAFFIC SIGNAL CONTROLLER PROGRAMS.	
	TRAFFIC SIGNAL CONTROLLER CABINETS (FOUNDATION NOT INCLUDED)	2	BASIC BID	1 - EGAN DR & GLACIER HWY (MCNUGGET) 1 - EGAN DR & RIVERSIDE DR	740-2.11		
		1	ADDITIVE ALTERNATE A	1 - MENDENHALL LOOP RD & ATLIN DR			
	1	ADDITIVE ALTERNATE B	1 - RIVERSIDE DR & VINTAGE BLVD				
	TRAFFIC SIGNAL CONTROLLER CABINET FOUNDATION	1	BASIC BID	1 - EGAN DR & RIVERSIDE DR	660-3.02, STD DWG T-35.00		
LOAD CENTER	TYPE 1 LOAD CENTER	1	BASIC BID	1 - EGAN DR & RIVERSIDE DR	STD DWG L-24.00		
	TYPE 1 LOAD CENTER FOUNDATION	1	BASIC BID	1 - EGAN DR & RIVERSIDE DR	STD DWG L-24.00		
VIDEO	VIDEO DETECTION CAMERAS	11	BASIC BID	3 - EGAN DR & GLACIER HWY (MCNUGGET) 4 - EGAN DR & MENDENHALL LOOP RD 3 - EGAN DR & RIVERSIDE DR 1 - SPARE	740-2.13 (6) (d)		
		4	ADDITIVE ALTERNATE A	4 - MENDENHALL LOOP RD & ATLIN DR			
		1	ADDITIVE ALTERNATE B	1 - SPARE			
	VIDEO DETECTOR MOUNTING HARDWARE - SIGNAL MAST ARM	2	BASIC BID	1 - EGAN DR & GLACIER HWY (MCNUGGET) 1 - EGAN DR & RIVERSIDE DR	PLAN SHEET DETAILS, Q3		
		4	ADDITIVE ALTERNATE A	4 - MENDENHALL LOOP RD & ATLIN DR			
	VIDEO DETECTOR MOUNTING HARDWARE - LUMINAIRE MAST ARM	8	BASIC BID	2 - EGAN DR & GLACIER HWY (MCNUGGET) 4 - EGAN DR & MENDENHALL LOOP RD 2 - EGAN DR & RIVERSIDE DR	PLAN SHEET DETAILS, Q3		
	VIDEO DETECTION CABLES	ALL REQUIRED		BASIC BID	EGAN DR & GLACIER HWY (MCNUGGET) EGAN DR & MENDENHALL LOOP RD EGAN DR & RIVERSIDE DR	740-2.05 (8)	
				ADDITIVE ALTERNATE A	MENDENHALL LOOP RD & ATLIN DR		
	VIDEO DETECTION PROCESSORS	11	BASIC BID	3 - EGAN DR & GLACIER HWY (MCNUGGET) 4 - EGAN DR & MENDENHALL LOOP RD 3 - EGAN DR & RIVERSIDE DR 1 - SPARE	740-2.13 (6) (c)		
		4	ADDITIVE ALTERNATE A	4 - MENDENHALL LOOP RD & ATLIN DR			
1		ADDITIVE ALTERNATE B	1 - SPARE				
VIDEO MONITORS	3	BASIC BID	1 - EGAN DR & GLACIER HWY (MCNUGGET) 1 - EGAN DR & MENDENHALL LOOP RD 1 - EGAN DR & RIVERSIDE DR	740-2.13 (6) (g)			
	1	ADDITIVE ALTERNATE A	1 - MENDENHALL LOOP RD & ATLIN DR				

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

SUMMARIES

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic Signal System Upgrade Project #68057

SUMMARIES	
PROJECT DESIGNATION	
<b>STP - 0003(136)</b>	
STATE	YEAR
<b>ALASKA</b>	<b>2009</b>
SHEET NUMBER	TOTAL SHEETS
<b>D1</b>	<b>23</b>

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

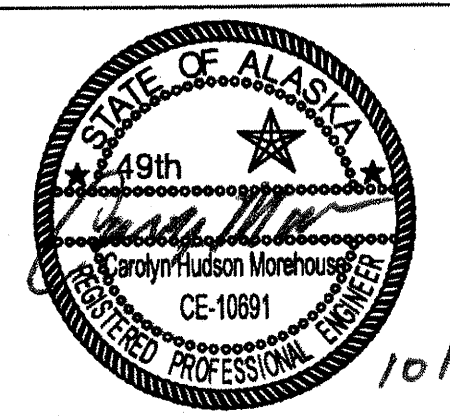
## EQUIPMENT SUMMARY (CONTINUED)

	ITEM	QUANTITY	BID	INSTALL LOCATIONS	REFERENCE	NOTES
ETHERNET INTERFACE	ETHERNET INTERFACE UNITS	5	BASIC BID	1 - EGAN DR & GLACIER HWY (MCNUGGET) 1 - EGAN DR & MENDENHALL LOOP RD 1 - EGAN DR & RIVERSIDE DR 1 - MENDENHALL LOOP RD & ATLIN DR 1 - RIVERSIDE DR & VINTAGE BLVD	740-2.13 (3) (a)	
	CABLE FOR ETHERNET INTERFACE UNITS	ALL REQUIRED	BASIC BID	EGAN DR & GLACIER HWY (MCNUGGET) EGAN DR & MENDENHALL LOOP RD EGAN DR & RIVERSIDE DR MENDENHALL LOOP RD & ATLIN DR RIVERSIDE DR & VINTAGE BLVD	AS PER MANUFACTURER'S RECOMMENDATION	
RADIOS AND ANTENNAS	RADIOS	5	BASIC BID	1 - DOT REGIONAL OFFICE 2 - EGAN DR & YANDUKIN 2 - EGAN DR & SUNNY POINT 1 - EGAN DR & GLACIER HWY (MCNUGGET)	740-2.13 (3) (b)	
	RADIO MOUNTING HARDWARE	ALL REQUIRED	BASIC BID	DOT REGIONAL OFFICE EGAN DR & YANDUKIN EGAN DR & SUNNY POINT EGAN DR & GLACIER HWY (MCNUGGET)	PER PLANS AND MANUFACTURER'S RECOMMENDATION	
	RADIO CABLE (CAT-5E)	ALL REQUIRED	BASIC BID	DOT REGIONAL OFFICE EGAN DR & YANDUKIN EGAN DR & SUNNY POINT EGAN DR & GLACIER HWY (MCNUGGET)	740-2.05 (10)	
	RADIO POWER CABLE	ALL REQUIRED	BASIC BID	DOT REGIONAL OFFICE EGAN DR & YANDUKIN EGAN DR & SUNNY POINT EGAN DR & GLACIER HWY (MCNUGGET)	740-2.05 (9)	
CONDUIT AND ACCESSORIES	5C TRAFFIC SIGNAL POWER CABLE	ALL REQUIRED	BASIC BID	EGAN DR & GLACIER HWY (MCNUGGET)	740-2.05	
	1.5" GALVANIZED RMC	ALL REQUIRED	BASIC BID	EGAN DR & GLACIER HWY (MCNUGGET)	740-2.06	
	"L" CONDUIT BODIES	2	BASIC BID	2 - EGAN DR & GLACIER HWY (MCNUGGET)	740-2.06	
	RUBBER GROMMETS	ALL REQUIRED	BASIC BID	EGAN DR & GLACIER HWY (MCNUGGET) EGAN DR & MENDENHALL LOOP RD EGAN DR & RIVERSIDE DR EGAN DR & YANDUKIN		INSTALL WHENEVER PENETRATING A TRAFFIC SIGNAL POLE, SIGNAL MAST ARM, OR ELECTROLIER
			ADDITIVE ALTERNATE A	MENDENHALL LOOP RD & ATLIN DR		
	ZINC RICH PAINT	ALL REQUIRED	BASIC BID	EGAN DR & GLACIER HWY (MCNUGGET) EGAN DR & MENDENHALL LOOP RD EGAN DR & RIVERSIDE DR EGAN DR & YANDUKIN		INSTALL WHENEVER PENETRATING A TRAFFIC SIGNAL POLE, SIGNAL MAST ARM, OR ELECTROLIER
ADDITIVE ALTERNATE A			MENDENHALL LOOP RD & ATLIN DR			

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

SUMMARIES

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DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic Signal System Upgrade  
 Project #68057

**SUMMARIES**

PROJECT DESIGNATION	
<b>STP - 0003(136)</b>	
STATE	YEAR
<b>ALASKA</b>	<b>2009</b>
SHEET NUMBER	TOTAL SHEETS
<b>D2</b>	<b>23</b>

## EQUIPMENT SUMMARY (CONTINUED)

	ITEM	QUANTITY	BID	INSTALL LOCATIONS	REFERENCE	NOTES
EARTHWORK	BORROW	ALL REQUIRED	BASIC BID	EGAN DR & RIVERSIDE DR	203	CONTRACTOR SUPPLIED AND INSTALLED, (USE TO RAISE CONTROLLER CABINET ELEVATION)
	ASPHALT	ALL REQUIRED	BASIC BID	EGAN DR & RIVERSIDE DR	401	
	SEEDING	ALL REQUIRED	BASIC BID	EGAN DR & RIVERSIDE DR	618	
MISCELLANEOUS	TRAFFIC CONTROL ITEMS	ALL REQUIRED	BASIC BID	EGAN DR & GLACIER HWY (MCNUGGET) EGAN DR & MENDENHALL LOOP RD EGAN DR & RIVERSIDE DR EGAN DR & YANDUKIN	PLANS: S1-S2 SPECS: 643	CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING AND IMPLEMENTING ALL TRAFFIC CONTROL ITEMS AND PLANS ON THIS PROJECT. THIS MAY INCLUDE BUT IS NOT LIMITED TO SIGNS, FLAGGERS AND FLAGGING EQUIPMENT, CONES, DRUMS, BARRICADES, DETOURS, AND BALLOON LIGHTING.
			ADDITIVE ALTERNATE A	MENDENHALL LOOP RD & ATLIN DR		
			ADDITIVE ALTERNATE B	RIVERSIDE DR & VINTAGE BLVD		
	TEMPORARY EROSION AND POLLUTION CONTROL ITEMS	ALL REQUIRED	BASIC BID	EGAN DR & GLACIER HWY (MCNUGGET) EGAN DR & MENDENHALL LOOP RD EGAN DR & RIVERSIDE DR EGAN DR & YANDUKIN	ENVIRONMENTAL COMMITMENTS	CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING AND IMPLEMENTING ALL TEMPORARY EROSION AND POLLUTION CONTROL ITEMS ON THIS PROJECT.
			ADDITIVE ALTERNATE A	MENDENHALL LOOP RD & ATLIN DR		
			ADDITIVE ALTERNATE B	RIVERSIDE DR & VINTAGE BLVD		

JUNEAU AREAWIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057

SUMMARIES

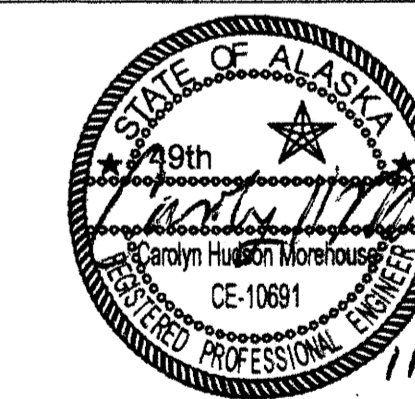
### SUMMARY OF LOAD CENTER: 1

LOAD CENTER TYPE 1				
LOCATION DATA: ~409+35, ~83' LT SEE SHEET Q6				
LOAD CENTER: POWER SOURCE: PHOTOELECTRIC CONTROL: YES				
SERVICE VOLTAGE 1 PHASE, 3-WIRE, 120/240 VOLTS, 60 Hz. SUPPLIED BY AEL&P				
INTERRUPTING CAPACITY OF CIRCUIT BREAKERS-SERIES RATED 10,000 AIC PROVIDE METER SOCKET? YES SERVICE AMPS 125A				
MAIN BREAKER A: 120/240 VOLT, 2 POLE, 100 AMPHERES				
CONTACTOR: 600 VOLT, 12 POLE, 30 AMPHERES				
LOAD PANEL A SUMMARY				
CIRCUIT NUMBER	DESCRIPTION	KVA LOAD	BREAKER	
			AMPS	POLES
A1	TRAFFIC SIGNAL SYSTEM	5.54	20A	1
A2	FAN, LIGHT AND HEATER	1.44	40A	1
LT1	LIGHTING CIRCUIT	1.2	20A	2
LT2	LIGHTING CIRCUIT	2.4	20A	2
LT3	LIGHTING CIRCUIT	3.7	30A	2
TOTAL DEMAND LOAD:		14.28		

### NEW CONDUIT SUMMARY

ALL RMC					
PLAN SHEET	QUANTITY	SIZE	LENGTH	COMMENTS	
Q2	1	1.5"	~25'	J-BOX 7 TO POLE 1	
Q2	1	1.5"	~10'	J-BOX 5 TO POLE 3	
Q5	1	2"	~20'	J-BOX 1 TO POLE 1	
Q8	1	3"	~10'	OLD CABINET TO NEW LOAD CENTER	
Q8	1	3"	~10'	NEW CABINET TO UPS	

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Areawide Traffic  
Signal System Upgrade  
Project #68057

#### SUMMARIES

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
<b>ALASKA</b>	<b>2009</b>

SHEET NUMBER	TOTAL SHEETS
<b>D3</b>	<b>23</b>

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

## EQUIPMENT SUMMARY (CONTINUED)

	ITEM	QUANTITY	BID	INSTALL LOCATIONS	REFERENCE	NOTES
EARTHWORK	BORROW	ALL REQUIRED	BASIC BID	EGAN DR & RIVERSIDE DR	203	CONTRACTOR SUPPLIED AND INSTALLED, (USE TO RAISE CONTROLLER CABINET ELEVATION)
	ASPHALT	ALL REQUIRED	BASIC BID	EGAN DR & RIVERSIDE DR	401	
	SEEDING	ALL REQUIRED	BASIC BID	EGAN DR & RIVERSIDE DR	618	
MISCELLANEOUS	TRAFFIC CONTROL ITEMS	ALL REQUIRED	BASIC BID	EGAN DR & GLACIER HWY (MCNUGGET) EGAN DR & MENDENHALL LOOP RD EGAN DR & RIVERSIDE DR EGAN DR & YANDUKIN	PLANS: S1-S2 SPECS: 643	CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING AND IMPLEMENTING ALL TRAFFIC CONTROL ITEMS AND PLANS ON THIS PROJECT. THIS MAY INCLUDE BUT IS NOT LIMITED TO SIGNS, FLAGGERS AND FLAGGING EQUIPMENT, CONES, DRUMS, BARRICADES, DETOURS, AND BALLOON LIGHTING.
			ADDITIVE ALTERNATE A	MENDENHALL LOOP RD & ATLIN DR		
			ADDITIVE ALTERNATE B	RIVERSIDE DR & VINTAGE BLVD		
	TEMPORARY EROSION AND POLLUTION CONTROL ITEMS	ALL REQUIRED	BASIC BID	EGAN DR & GLACIER HWY (MCNUGGET) EGAN DR & MENDENHALL LOOP RD EGAN DR & RIVERSIDE DR EGAN DR & YANDUKIN	ENVIRONMENTAL COMMITMENTS	CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING AND IMPLEMENTING ALL TEMPORARY EROSION AND POLLUTION CONTROL ITEMS ON THIS PROJECT.
			ADDITIVE ALTERNATE A	MENDENHALL LOOP RD & ATLIN DR		
			ADDITIVE ALTERNATE B	RIVERSIDE DR & VINTAGE BLVD		

### SUMMARY OF LOAD CENTER: 1

LOAD CENTER TYPE 1				
LOAD CENTER: LOCATION DATA: ~409+35, ~83' LT SEE SHEET Q6				
POWER SOURCE:				
PHOTOELECTRIC CONTROL: YES				
SERVICE VOLTAGE SUPPLIED BY AEL&P	1 PHASE,	3-WIRE,	120/240 VOLTS,	60 Hz.
INTERRUPTING CAPACITY OF CIRCUIT BREAKERS-SERIES RATED	10,000 AIC			
PROVIDE METER SOCKET? YES	SERVICE AMPS 125A			
MAIN BREAKER A:	120/240 VOLT,	2 POLE,	100 AMPHERES	
CONTACTOR:	600 VOLT,	12 POLE,	30 AMPHERES	
LOAD PANEL A SUMMARY				
CIRCUIT NUMBER	DESCRIPTION	KVA LOAD	BREAKER	
			AMPS	POLES
A1	TRAFFIC SIGNAL SYSTEM	5.54	20A	1
A2	FAN, LIGHT AND HEATER	1.44	40A	1
LT1	LIGHTING CIRCUIT	1.2	20A	2
LT2	LIGHTING CIRCUIT	2.4	20A	2
LT3	LIGHTING CIRCUIT	3.7	30A	2
TOTAL DEMAND LOAD:		14.28		

### NEW CONDUIT SUMMARY

ALL RMC					
PLAN SHEET	QUANTITY	SIZE	LENGTH	COMMENTS	
Q2	1	1.5"	~25'	J-BOX 7 TO POLE 1	
Q2	1	1.5"	~10'	J-BOX 5 TO POLE 3	
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Q8	1	3"	~10'	OLD CABINET TO NEW LOAD CENTER	
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Jenny  
321-1369

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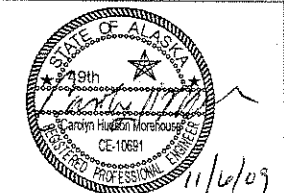
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ADDENDUM NUMBER		
2		
ATTACHMENT NUMBER		
2		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057

SUMMARIES

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Area Wide Traffic  
Signal System Upgrade  
Project #68057

SUMMARIES

PROJECT DESIGNATION

STP - 0003(136)

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
D3	23

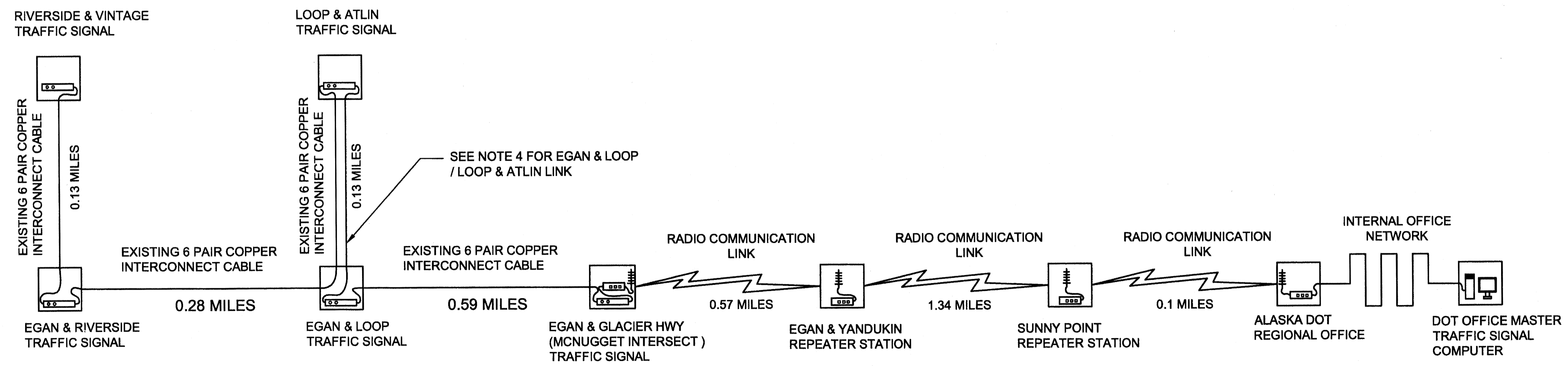
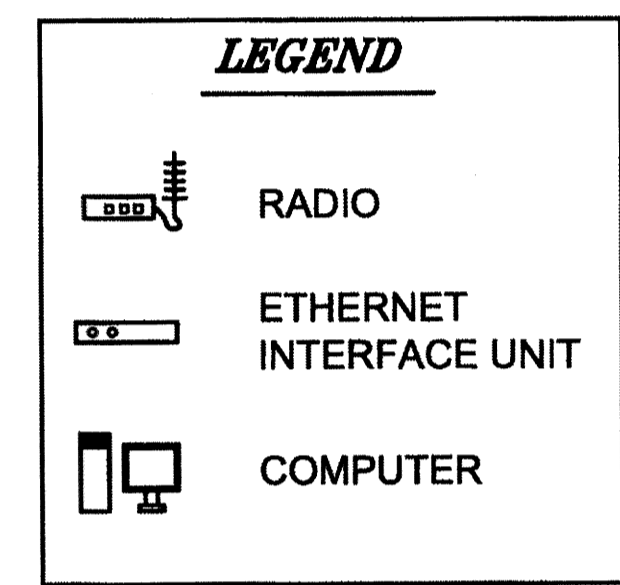
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ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057  
 NETWORK COMMUNICATION SCHEMATIC

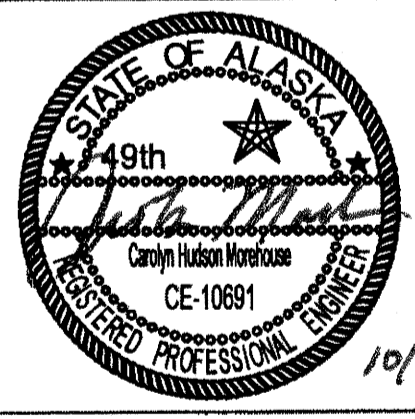
**NOTES:**

1. THE DATA COMMUNICATION BIT RATE RATE FOR THE ETHERNET OVER COPPER NETWORK SHALL BE 15 Mbps MINIMUM. THE RIVERSIDE & VINTAGE INTERSECTION SHALL HAVE THE ABILITY TO ADD FUTURE INTERSECTIONS TO THE COPPER OVER ETHERNET NETWORK. SEE SECTION 740-2.13 (3) (a) OF THE SPECIAL PROVISIONS FOR MORE REQUIREMENTS.
2. THE ACTELIS 688 MEETS THE REQUIREMENTS FOR THE POINT-TO-POINT ETHERNET INTERFACE UNITS. USE THESE DEVICES OR OTHER DEVICES THAT MEET THE ABOVE REQUIREMENTS TO ESTABLISH AN ETHERNET NETWORK OVER THE EXISTING 6PR COPPER INTERCONNECT CABLE.
3. ALL DISTANCES SHOWN IN THE SCHEMATIC BELOW ARE THE DISTANCES FROM ONE INTERSECTION TO THE NEXT AS TRAVELED ALONG THE ROADWAY. ASSUME THAT CONDUCTOR LENGTHS FROM ONE INTERSECTION TO THE NEXT ARE APPROXIMATELY 50% GREATER, AS CONDUITS DO NOT RUN IN A STRAIGHT LINE DIRECTLY FROM ONE INTERSECTION TO THE NEXT.
4. THE EGAN & LOOP AND LOOP & ATLIN INTERSECTIONS ARE CONNECTED OVER EXISTING 6PR COPPER INTERCONNECT CABLE. THREE PAIRS SHALL CONNECT THE TWO INTERSECTIONS. THE OTHER THREE PAIRS SHALL CONNECT THE LOOP & ATLIN TRAFFIC SIGNAL TO THE 6 PAIR CONNECTION BETWEEN THE EGAN & LOOP AND THE EGAN & RIVERSIDE INTERSECTIONS. THE CONTRACTOR SHALL CREATE THE NEW CONFIGURATION BY USING SPLICE KIT TO PATCH TOGETHER THE EXISTING WIRING. THIS SHALL BE CONSIDERED A PART OF THE SIGNAL COMMUNICATION SYSTEM COMPLETE BID ITEM, 660 (14).
5. COMMUNICATION SYSTEMS WERE IDENTIFIED BY BOREAL CONTROLS.



**NETWORK COMMUNICATION SCHEMATIC**

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

**NETWORK COMMUNICATION SCHEMATIC**

PROJECT DESIGNATION  
**STP - 0003(136)**

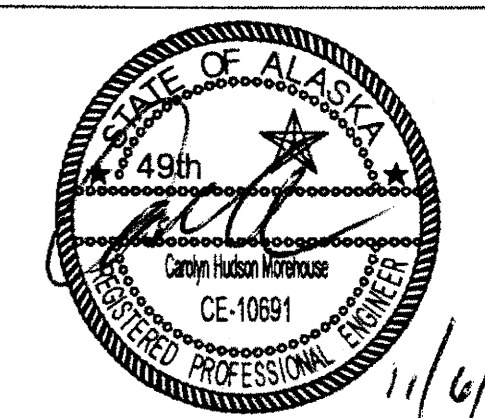
STATE	YEAR
<b>ALASKA</b>	<b>2009</b>
SHEET NUMBER	TOTAL SHEETS
<b>J1</b>	<b>23</b>

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

ADDENDUM NUMBER		
2		
ATTACHMENT NUMBER		
3		
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JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057  
 OFFICE RADIO DETAILS

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

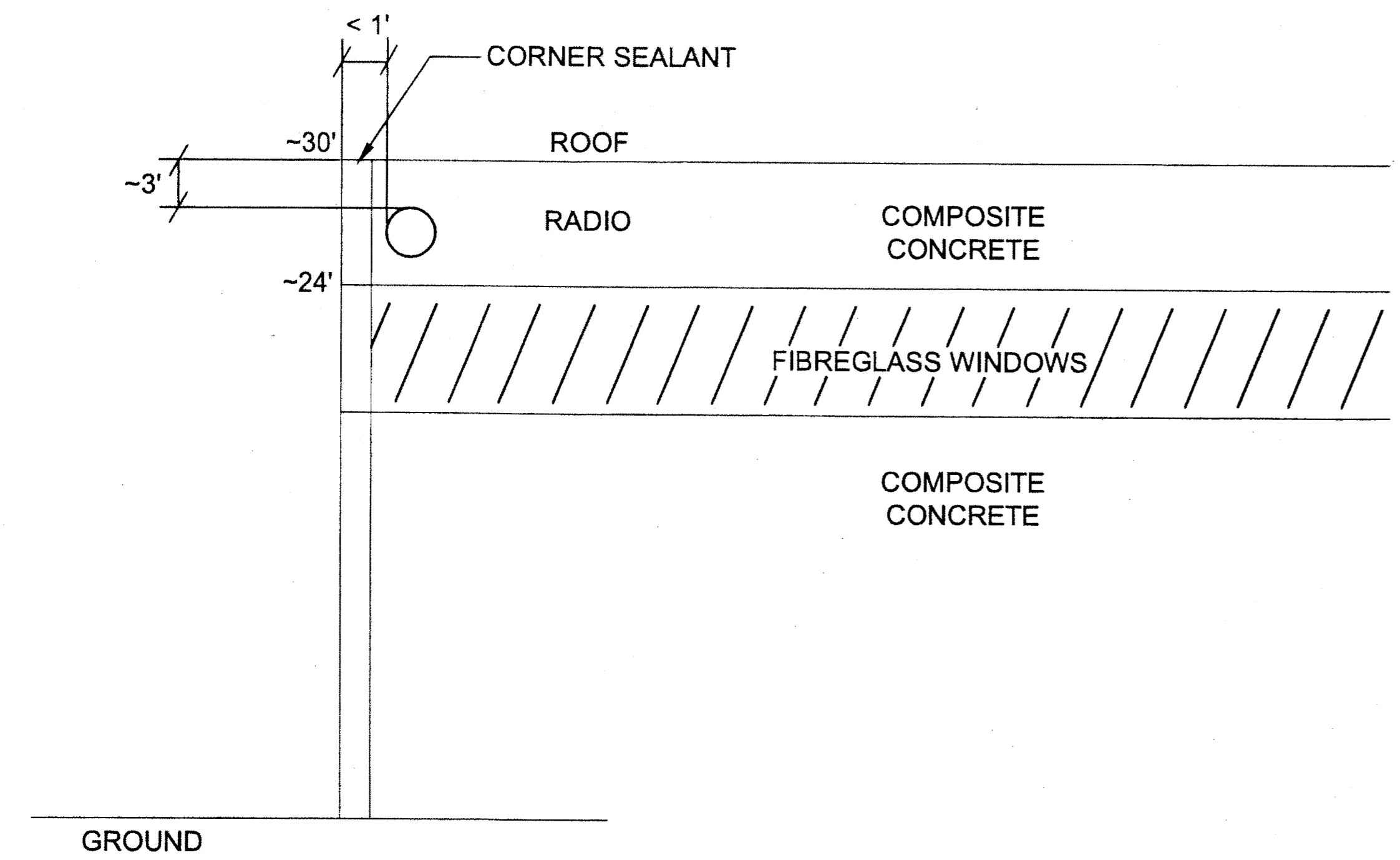
JNU Area-wide Traffic  
 Signal System Upgrade  
 Project #68057

**OFFICE RADIO DETAILS**

PROJECT DESIGNATION  
**STP - 0003(136)**

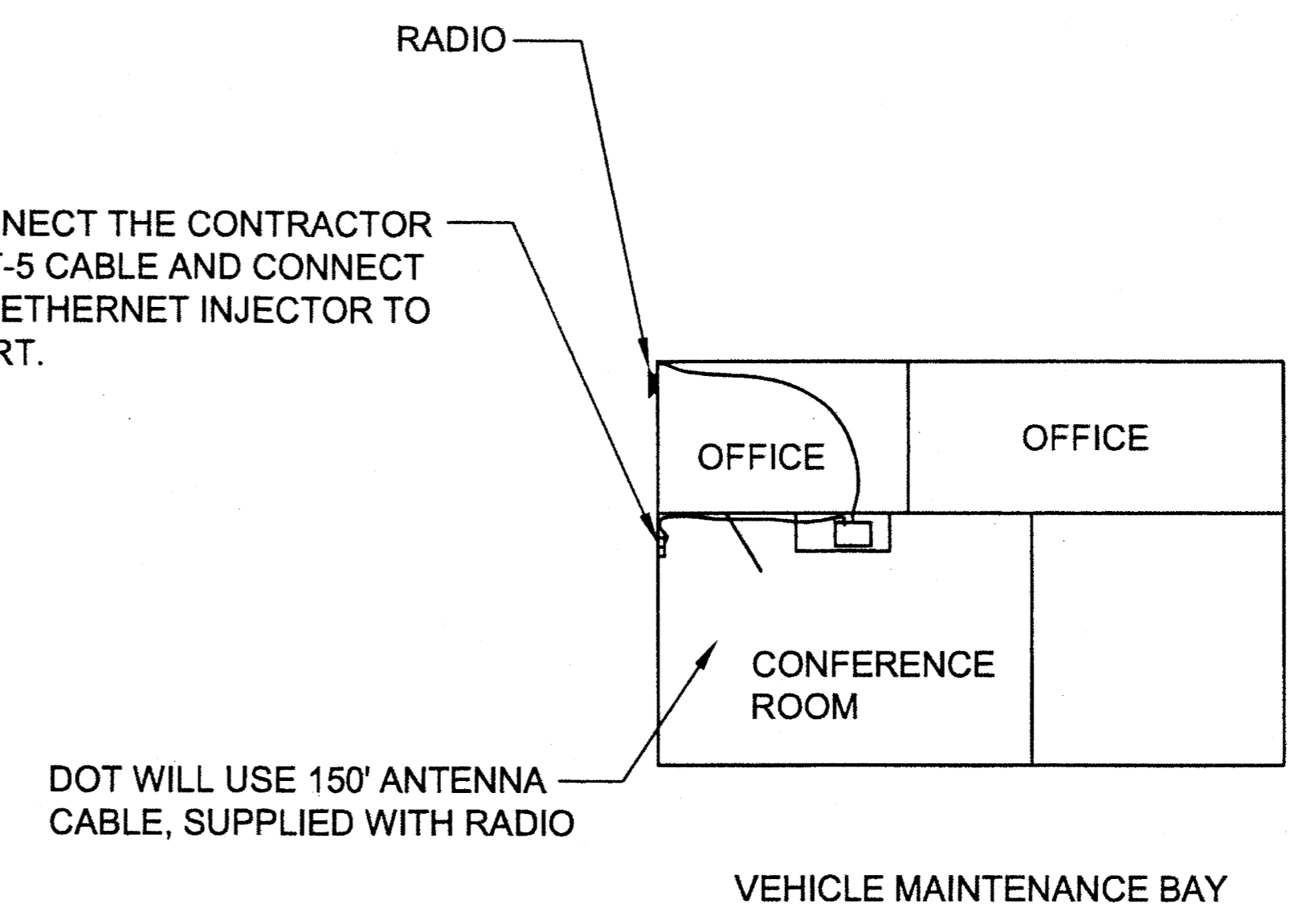
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<b>ALASKA</b>	<b>2009</b>

SHEET NUMBER	TOTAL SHEETS
<b>J2</b>	<b>23</b>

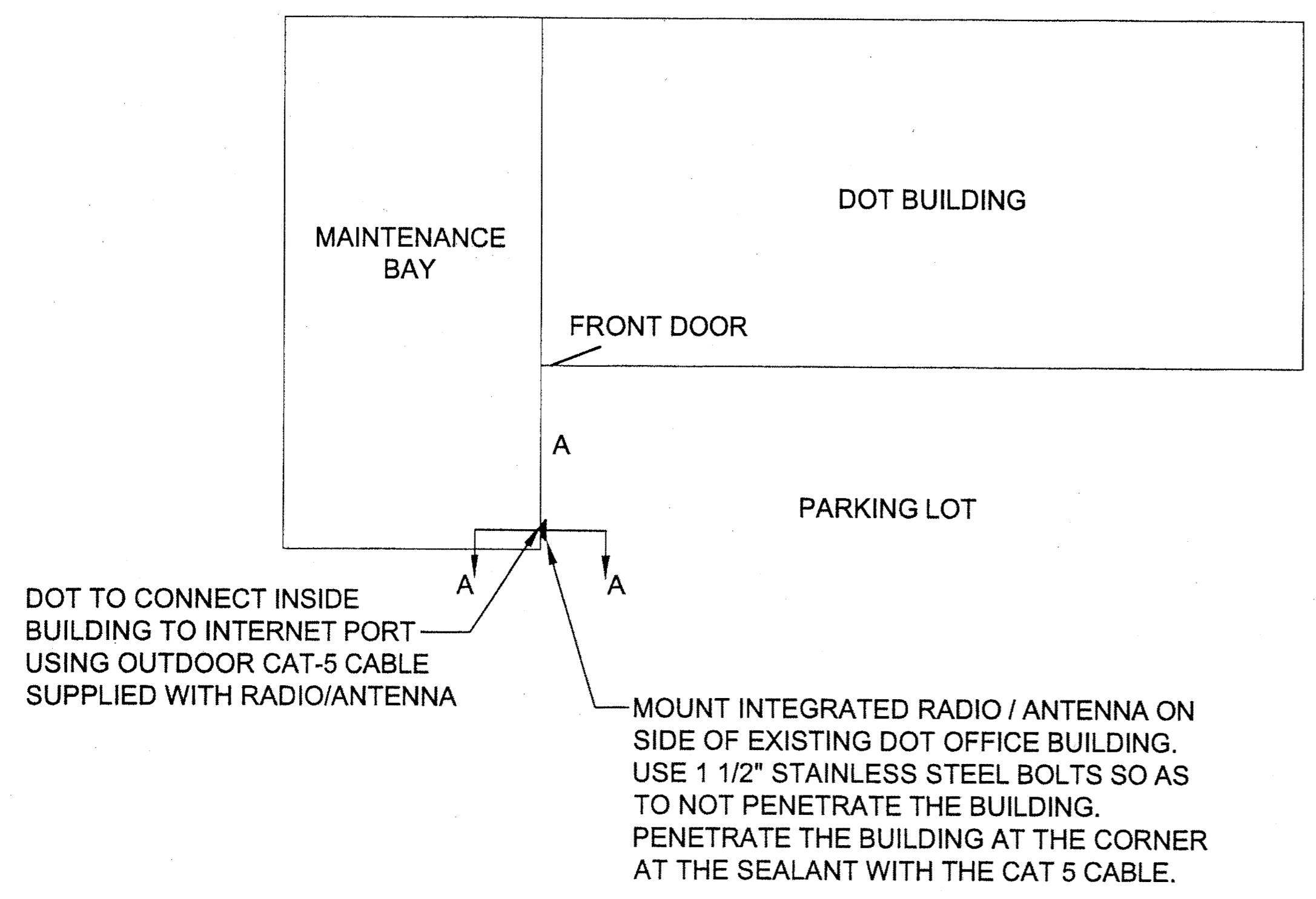


**OUTSIDE DOT BUILDING RADIO MOUNT  
 ELEVATION**

DOT WILL CONNECT THE CONTRACTOR SUPPLIED CAT-5 CABLE AND CONNECT POWER OVER ETHERNET INJECTOR TO NETWORK PORT.



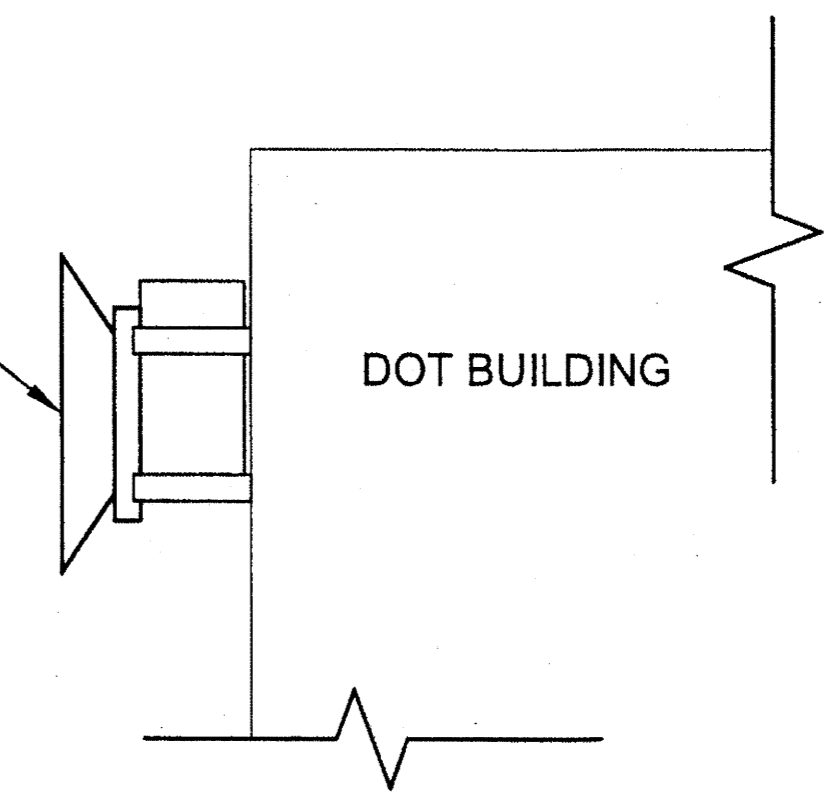
**OFFICE RADIO INSTALLATION DETAIL**



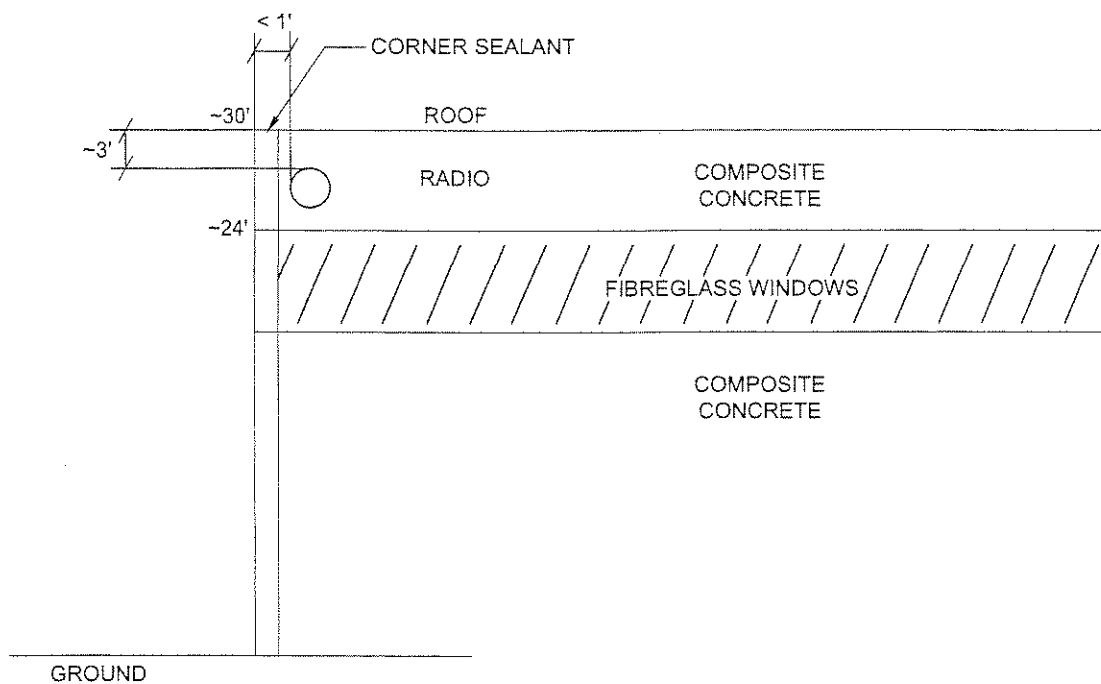
**OFFICE ANTENNA INSTALLATION DETAIL**

GLACIER HIGHWAY

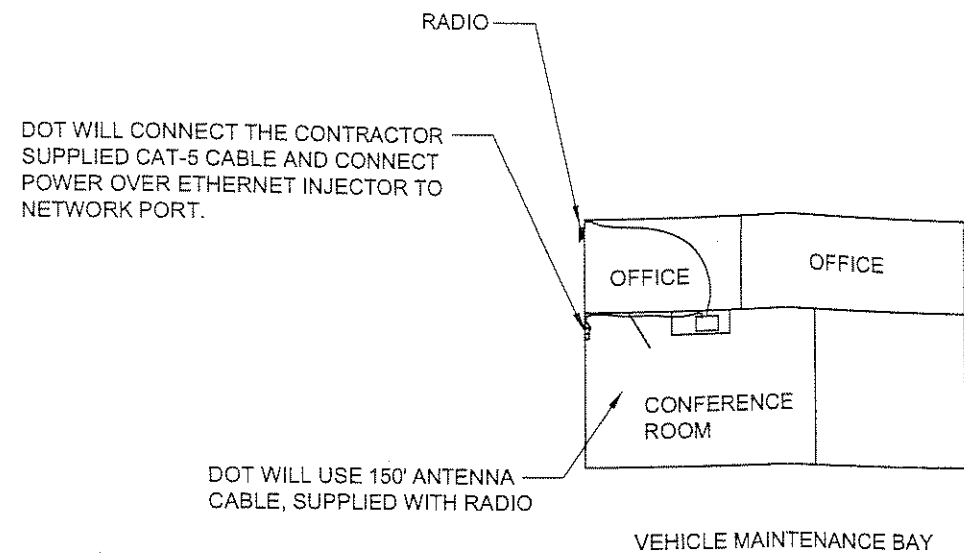
PROVIDE RECEIVER (RADIO) WITH INTEGRATED SECTOR ANTENNA AT THE SOUTHEAST AK DOT REGIONAL OFFICE. MOUNT THE RADIO TO THE BUILDING USING STAINLESS STEEL BOLTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CONNECT TO PRIMARY RADIO ANTENNA IN ACCORDANCE WITH THE RADIO EQUIPMENT SUPPLIER'S INSTRUCTIONS.



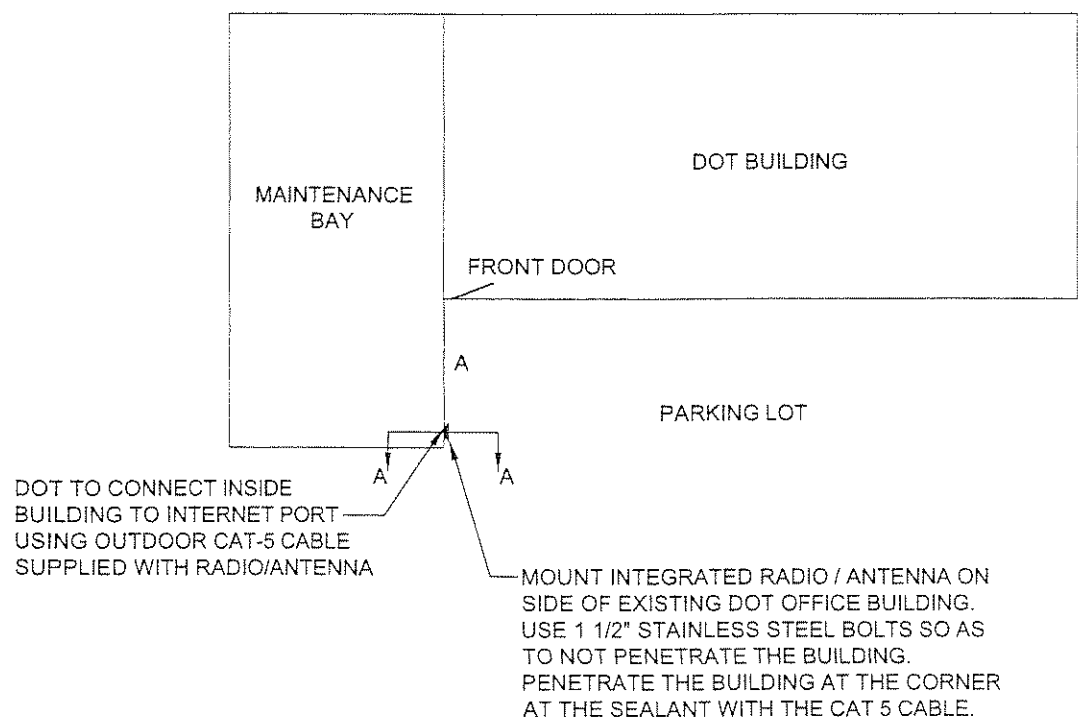
**RADIO MOUNTING DETAIL  
 A-A'**



**OUTSIDE DOT BUILDING RADIO MOUNT  
ELEVATION**

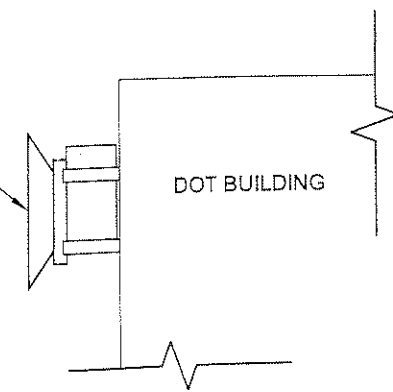


**OFFICE RADIO INSTALLATION DETAIL**



**OFFICE ANTENNA INSTALLATION DETAIL**

PROVIDE RECEIVER (RADIO) WITH INTEGRATED SECTOR ANTENNA AT THE SOUTHEAST AK DOT REGIONAL OFFICE. MOUNT THE RADIO TO THE BUILDING USING STAINLESS STEEL BOLTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CONNECT TO PRIMARY RADIO ANTENNA IN ACCORDANCE WITH THE RADIO EQUIPMENT SUPPLIER'S INSTRUCTIONS.



**RADIO MOUNTING DETAIL  
A-A'**

GLACIER HIGHWAY

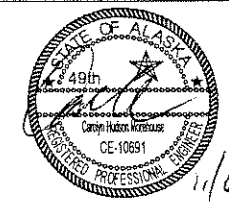
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

ADDENDUM NUMBER	2	
ATTACHMENT NUMBER	3	
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057

OFFICE RADIO DETAILS

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

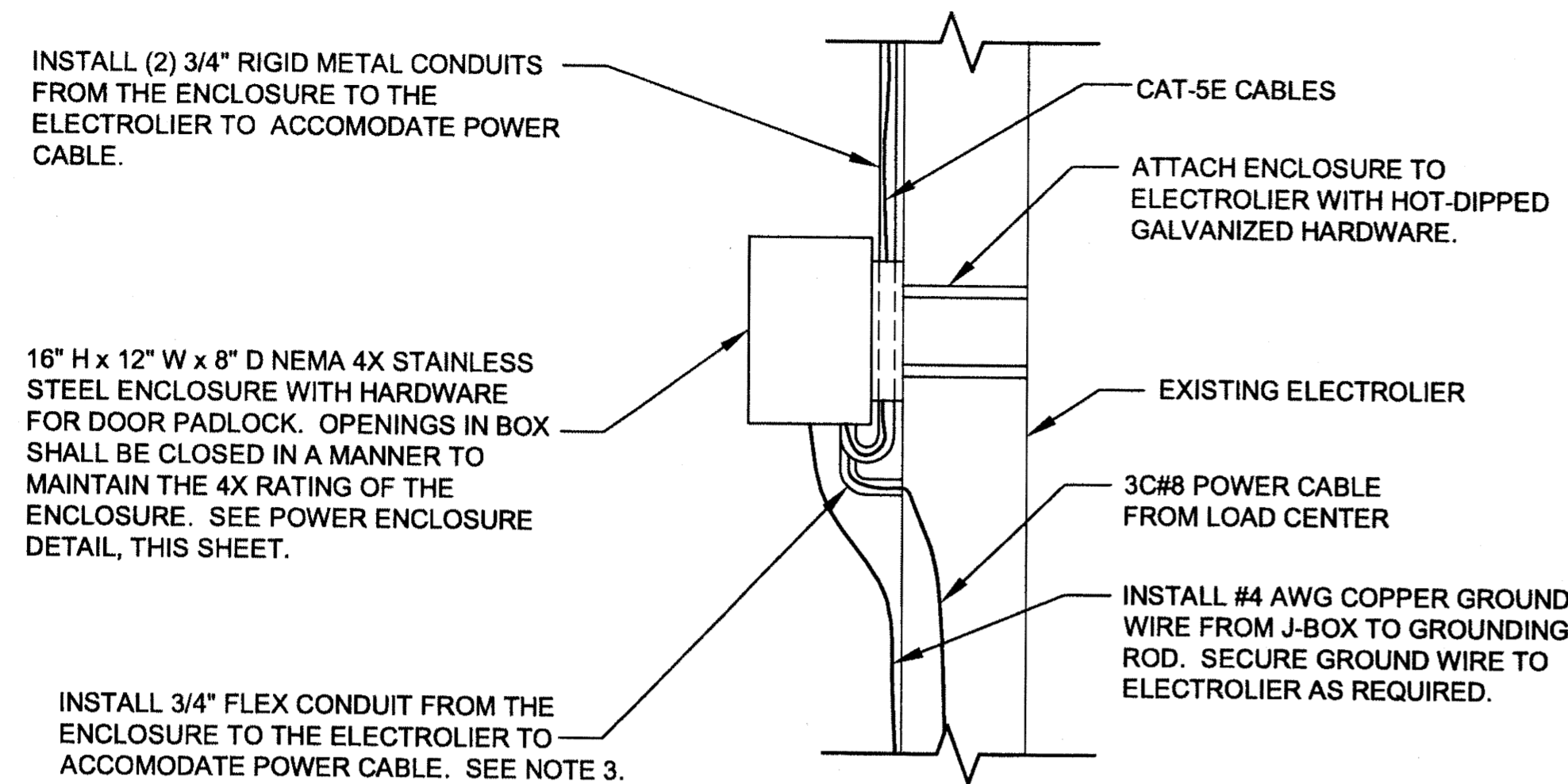
DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

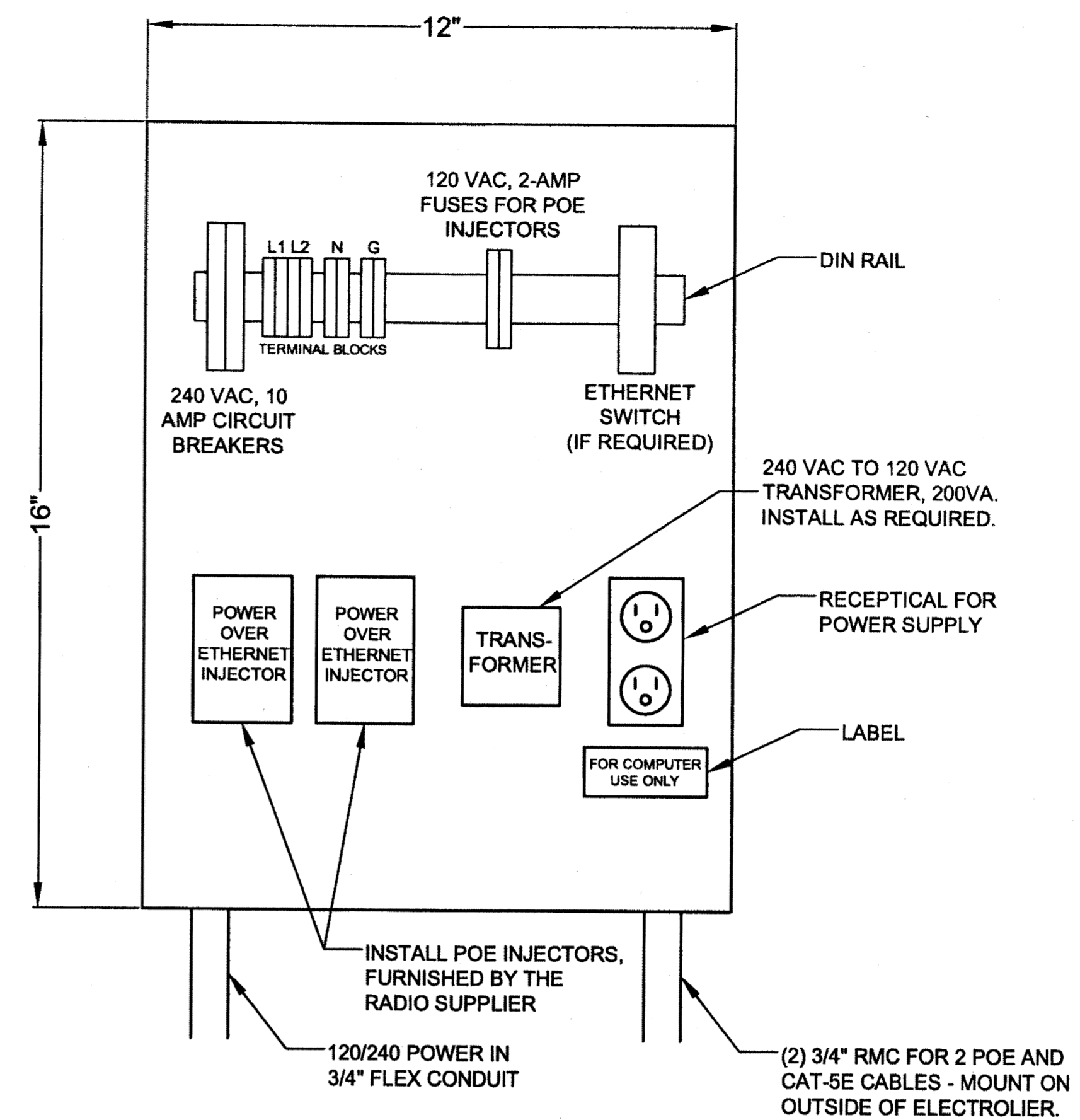
JNU Areowide Traffic  
Signal System Upgrade  
Project #68057

OFFICE RADIO DETAILS

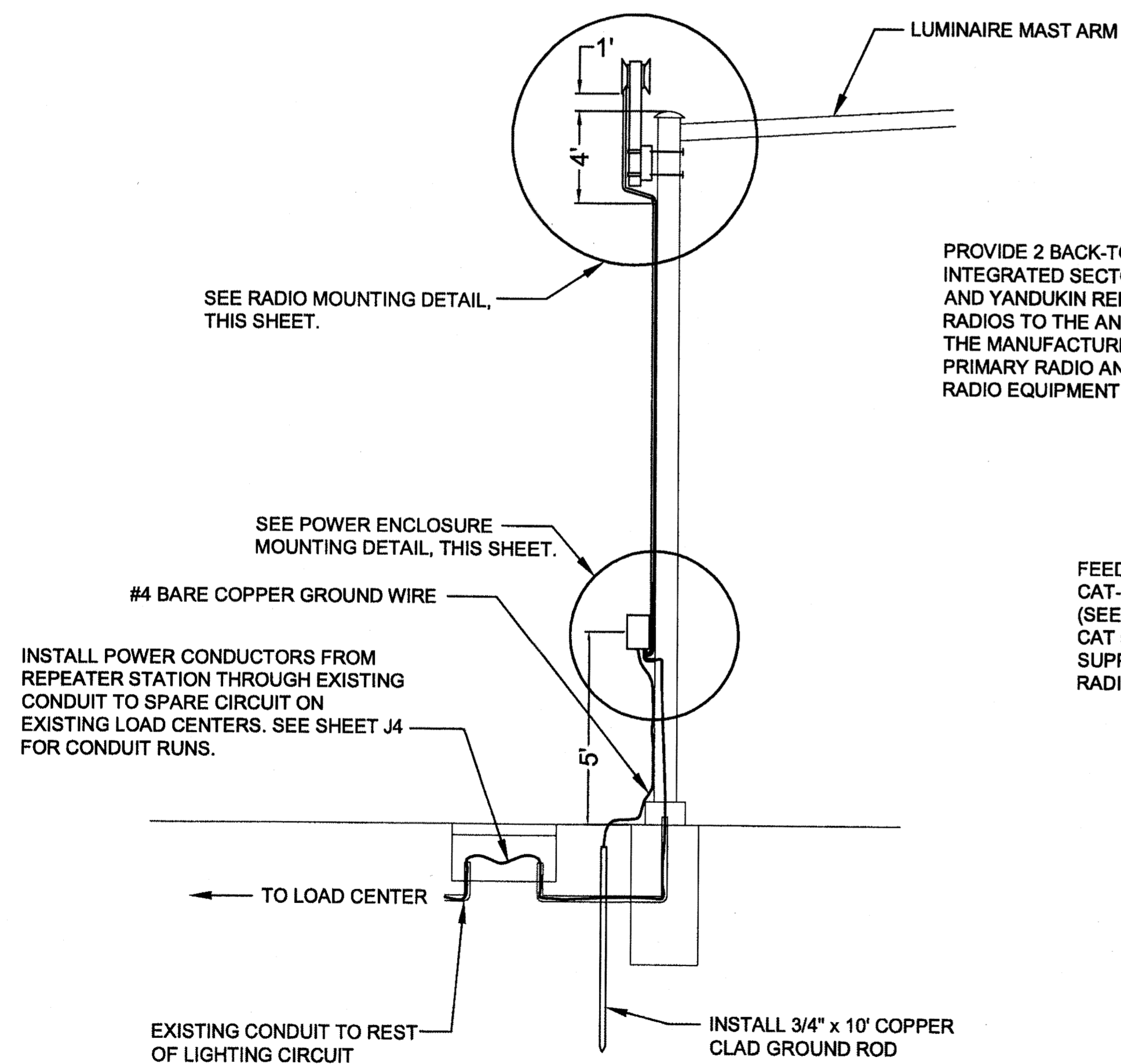
PROJECT DESIGNATION	
STP - 0003(136)	
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
J2	23



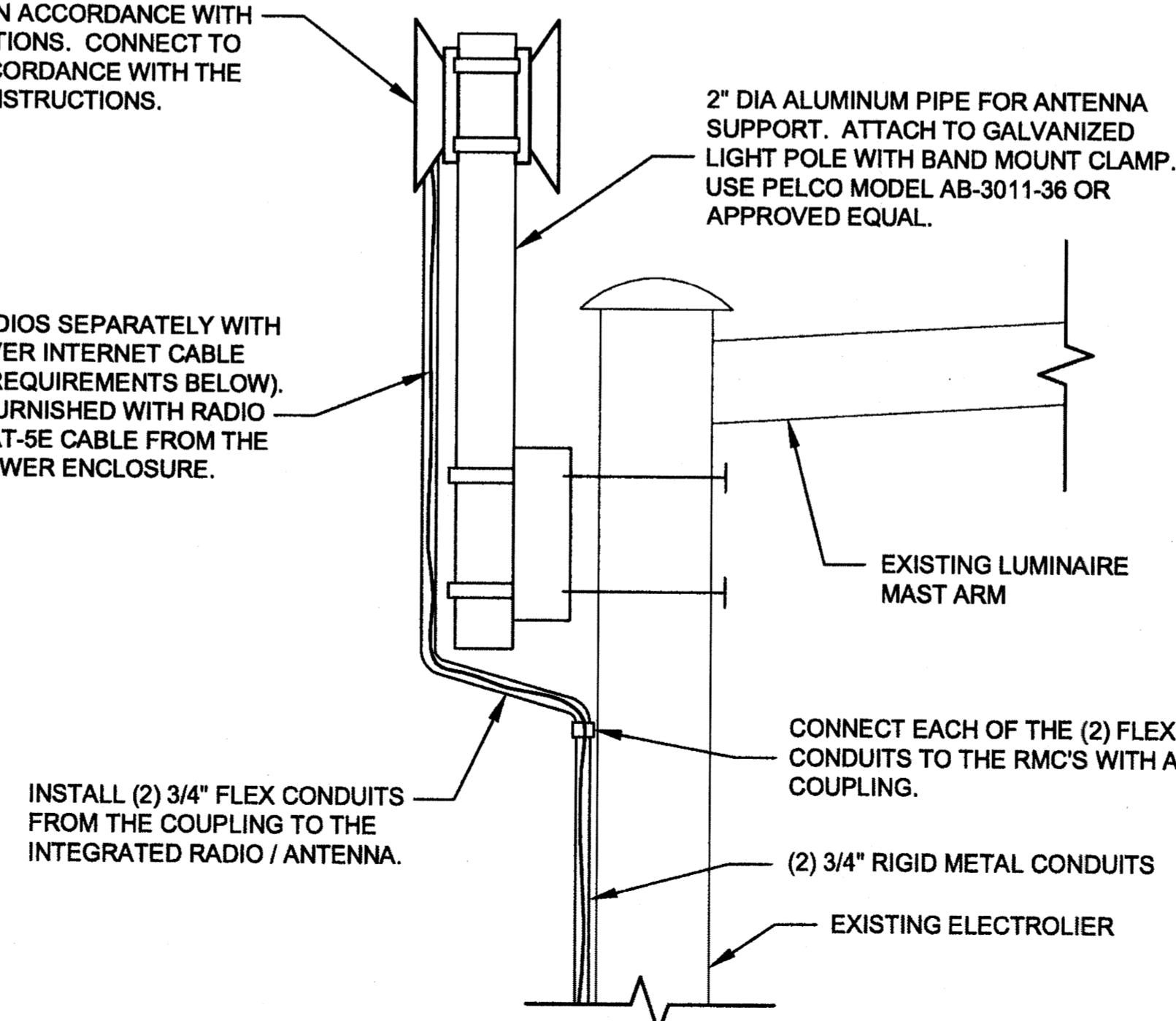
**POWER ENCLOSURE MOUNTING DETAIL**



**POWER ENCLOSURE DETAIL**



**RADIO COMMUNICATION DETAIL  
YANDUKIN AND SUNNY POINT REPEATERS**



**RADIO MOUNTING DETAIL**

- NOTES:**
- THE REPEATER STATION SHALL CONTAIN THE FOLLOWING EQUIPMENT:
    - INTEGRATED RADIO AND ANTENNAS AS REQUIRED
    - CIRCUIT BREAKERS, FUSES AND POWER OVER ETHERNET (POE) INJECTORS AS REQUIRED.
    - ALL CABLES AND CONNECTORS REQUIRED, AS PER MANUFACTURER'S RECOMMENDATION.
  - ALL ANTENNA MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
  - WHENEVER PENETRATING TRAFFIC SIGNAL POLES OR ELECTROLIERES, PAINT THE PENETRATION HOLE WITH A COAT OF ZINC RICH PAINT AND INSERT A RUBBER GROMMET AROUND THE INSIDE OF THE HOLE.
  - THE CONTRACTOR SHALL REPLACE ANY GUARDRAIL OR FENCE TEMPORARILY REMOVED DURING THE REPEATER INSTALLATION.

PATH:Q:\JNU\68057\TRUJ3-J5 RADIO DETAILS.DWG

STEVENS, DAVID A (DOT)

TAB: J3 Tuesday, October 06, 2009 11:04:58

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057

REPEATER STATION DETAILS

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
SOUTHEAST REGION

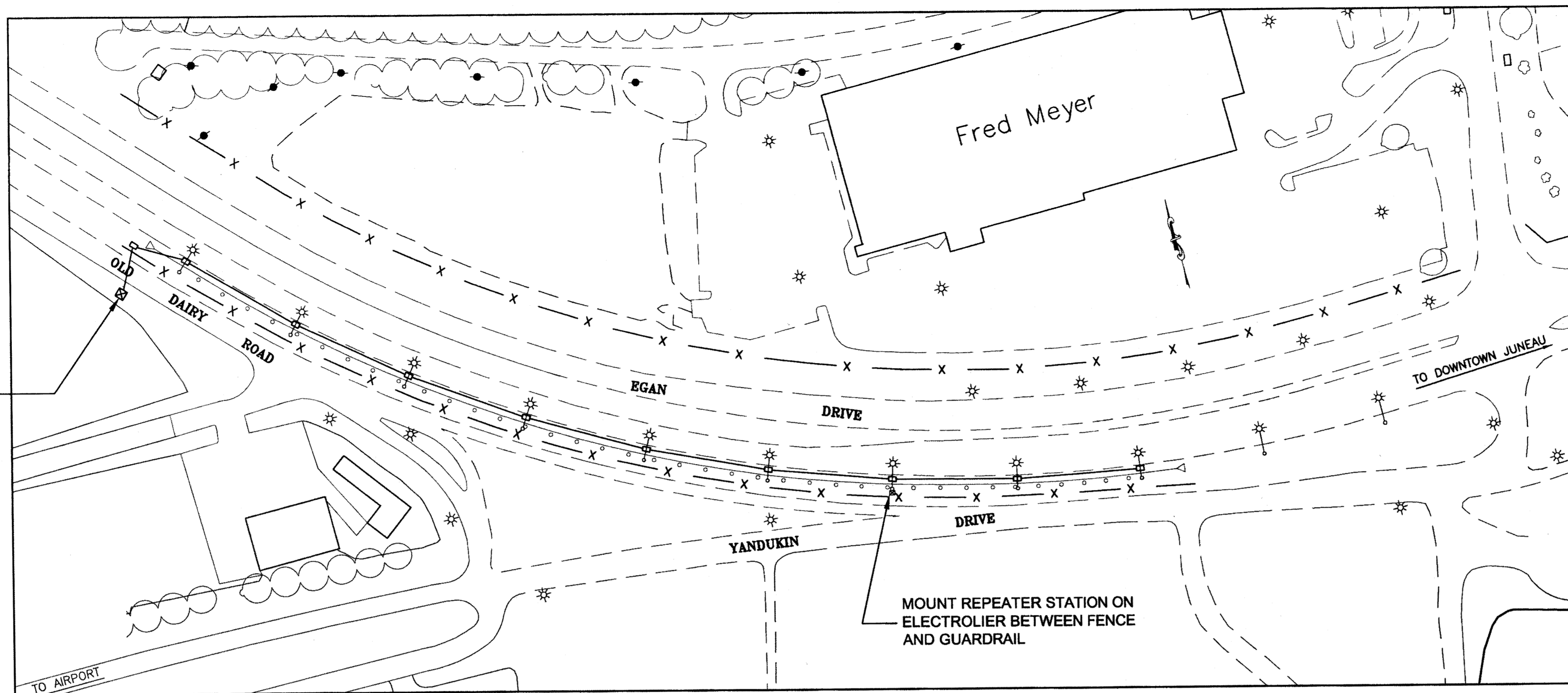
JNU Areawide Traffic Signal System Upgrade  
Project #68057

**REPEATER STATION DETAILS**

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
<b>ALASKA</b>	<b>2009</b>

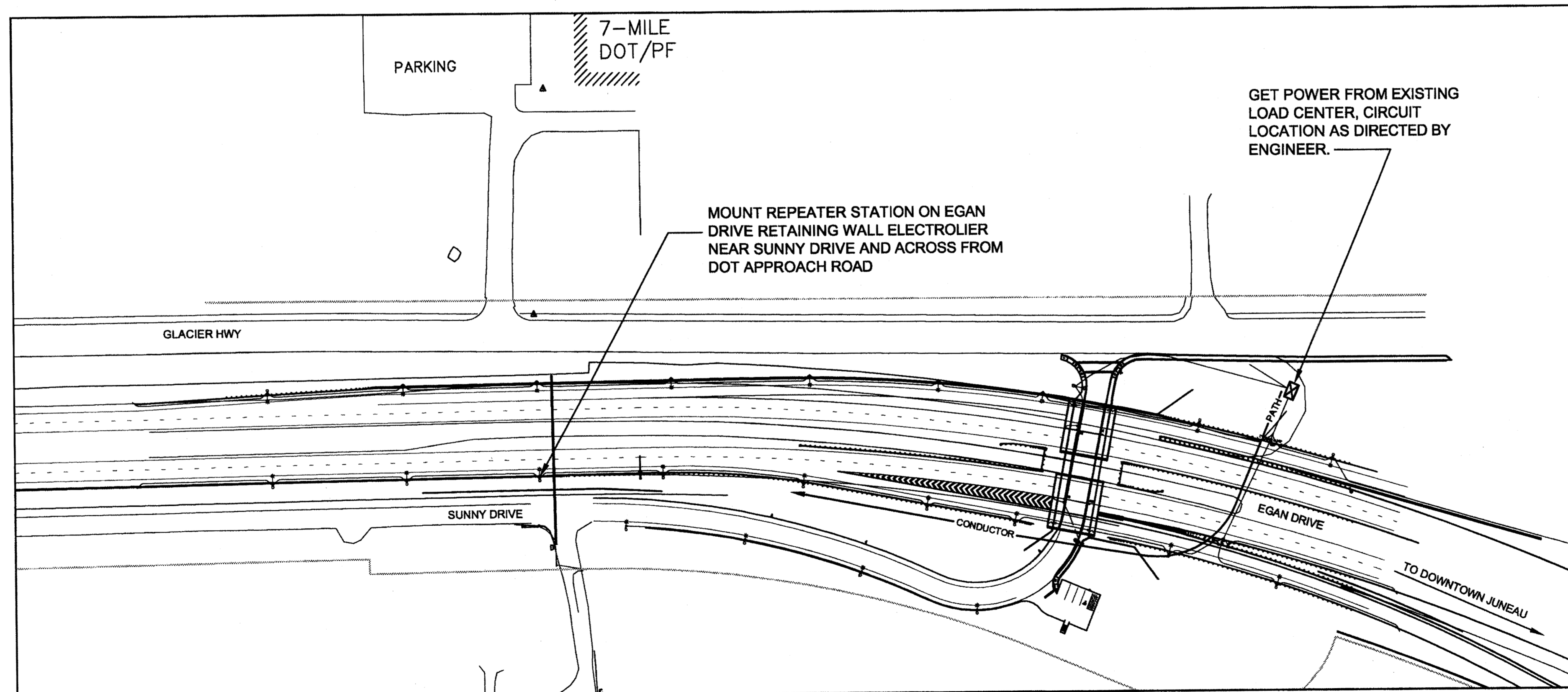
SHEET NUMBER	TOTAL SHEETS
<b>J3</b>	<b>23</b>



GET POWER FROM EXISTING LOAD CENTER, CIRCUIT LOCATION AS DIRECTED BY ENGINEER.

MOUNT REPEATER STATION ON ELECTROLIER BETWEEN FENCE AND GUARDRAIL

**YANDUKIN DR REPEATER STATION**  
AREA LOCATION



GET POWER FROM EXISTING LOAD CENTER, CIRCUIT LOCATION AS DIRECTED BY ENGINEER.

MOUNT REPEATER STATION ON EGAN DRIVE RETAINING WALL ELECTROLIER NEAR SUNNY DRIVE AND ACROSS FROM DOT APPROACH ROAD

**SUNNY POINT REPEATER STATION**  
AREA LOCATION

**NOTES:**

1. YANDUKIN DR REPEATER STATION: APPROXIMATE DISTANCE FROM LOAD CENTER TO REPEATER STATION ELECTROLIER = 1350'.
2. SUNNY POINT REPEATER STATION: APPROXIMATE DISTANCE FROM LOAD CENTER TO REPEATER STATION ELECTROLIER = 1150'.
3. FOR BOTH REPEATER STATIONS, INSTALL A 3C#8 POWER CABLE FOR EACH REPEATER STATION FROM THE LOAD CENTER TO THE REPEATER STATION. INSTALL THE CONDUCTORS IN EXISTING CONDUIT FOR THE LIGHTING CIRCUITS.

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREAWIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057  
REPEATER STATION AREA MAPS

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

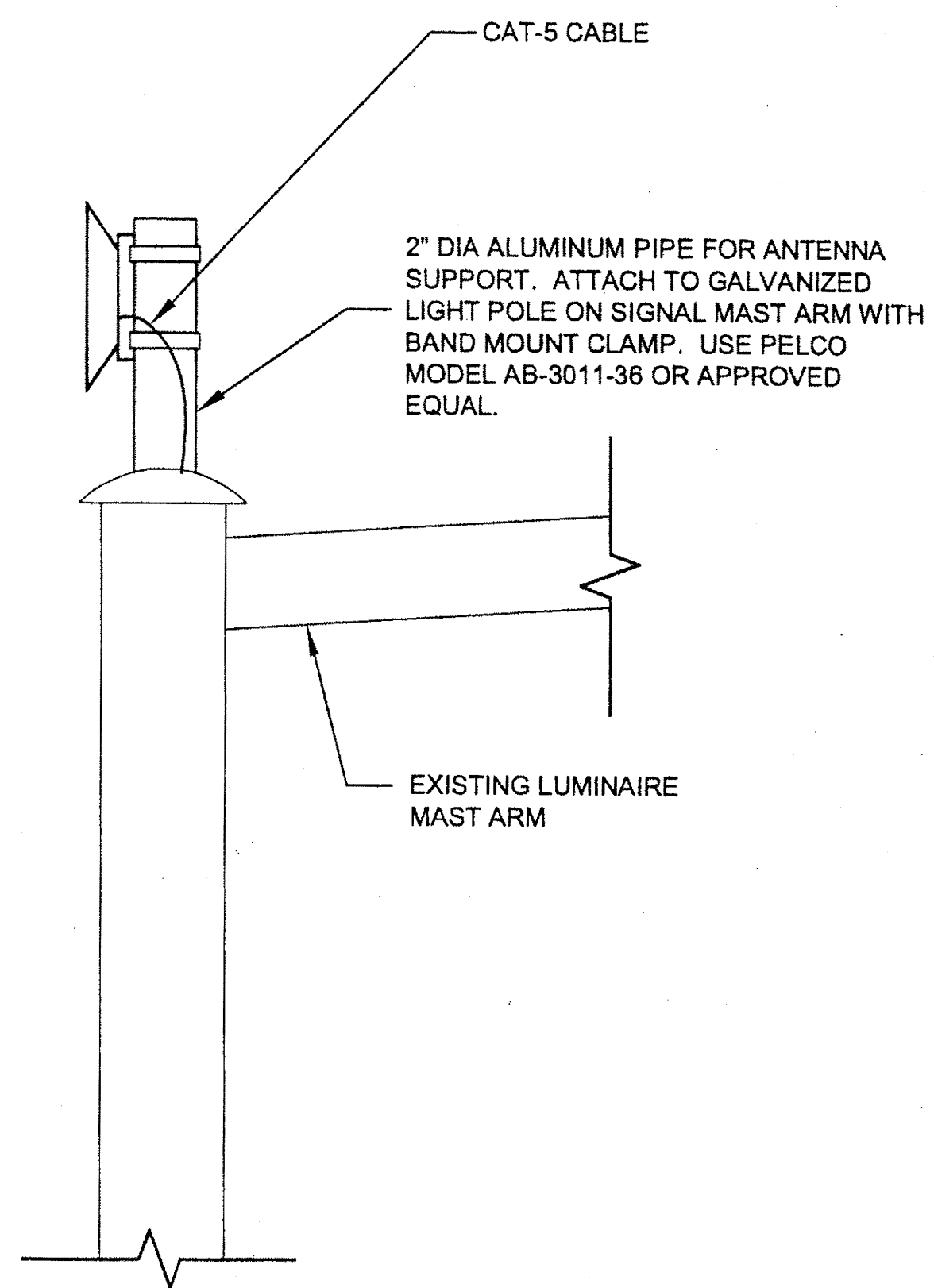
DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Areawide Traffic  
Signal System Upgrade  
Project #68057

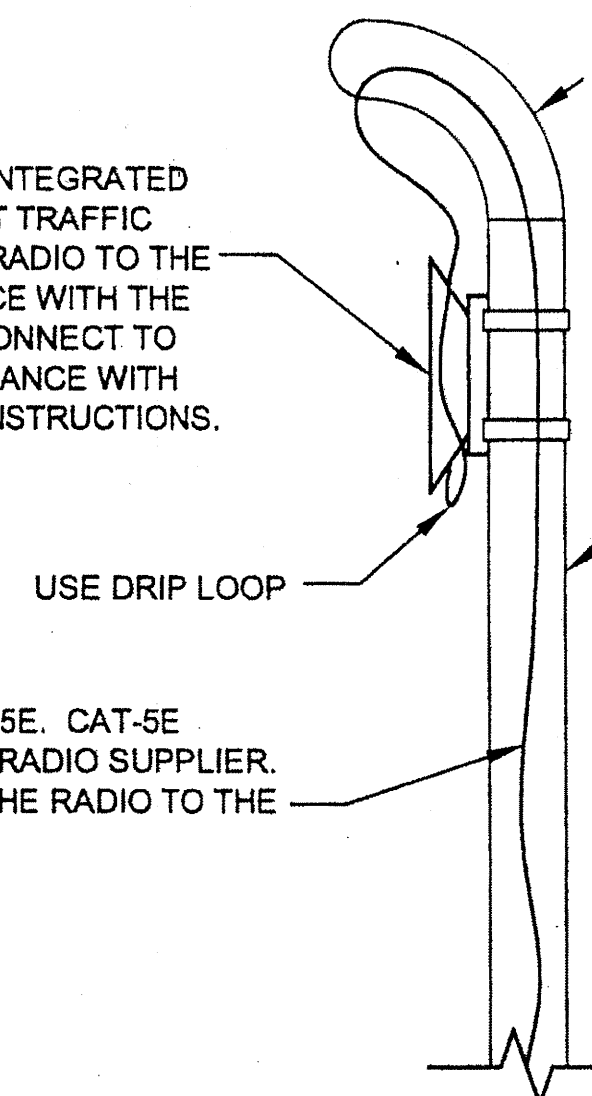
**REPEATER STATION  
AREA MAPS**  
PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
<b>ALASKA</b>	<b>2009</b>
SHEET NUMBER	TOTAL SHEETS
<b>J4</b>	<b>23</b>



**RADIO MOUNTING DETAIL**

PROVIDE TRANSMITTER RADIO WITH INTEGRATED SECTOR ANTENNA AT THE MCNUGGET TRAFFIC SIGNAL INTERSECTION. MOUNT THE RADIO TO THE TRAFFIC SIGNAL POLE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CONNECT TO PRIMARY RADIO ANTENNA IN ACCORDANCE WITH THE RADIO EQUIPMENT SUPPLIER'S INSTRUCTIONS.



**RADIO TO SIGNAL POLE MOUNTING DETAIL**

**NOTES:**

1. ALL ANTENNA MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
2. WHENEVER PENETRATING THE RADIO POLE, ELECTROLIERES, OR SIGNAL POLE, PAINT THE PENETRATION HOLE WITH A COAT OF ZINC RICH PAINT AND INSERT A RUBBER GROMMET AROUND THE INSIDE OF THE HOLE. ENSURE THAT A WATER-TIGHT SEAL IS MAINTAINED FOR ANY PENETRATIONS.

DIONISIO, CHRISTOPHER J (DOT)		
TAB: J5 Friday, November 06, 2009 1:04:34		
ADDENDUM NUMBER		
2		
ATTACHMENT NUMBER		
4		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

MCNUGGET INTERSECTION  
 RADIO COMMUNICATION DETAILS

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

**MCNUGGET INTERSECTION  
 RADIO COMMUNICATION  
 DETAILS**

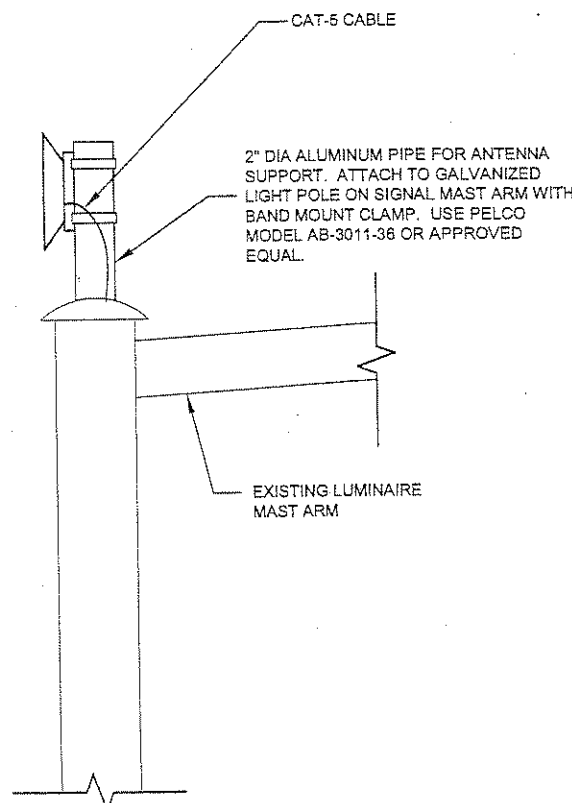
PROJECT DESIGNATION

**STP - 0003(136)**

STATE	YEAR
<b>ALASKA</b>	<b>2009</b>

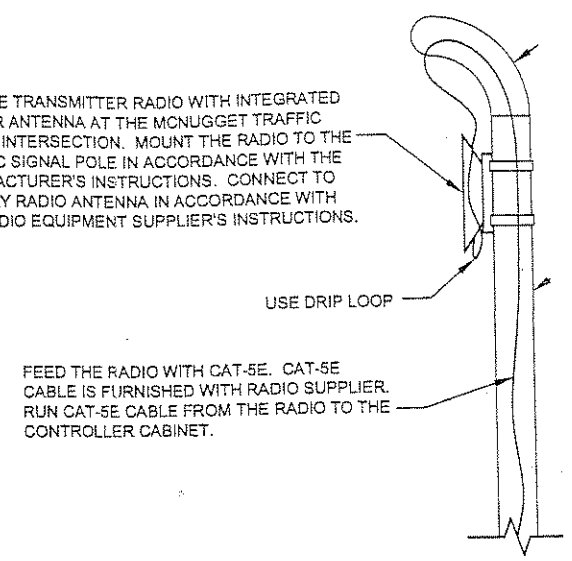
SHEET NUMBER	TOTAL SHEETS
<b>J5</b>	<b>23</b>

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**



RADIO MOUNTING DETAIL

PROVIDE TRANSMITTER RADIO WITH INTEGRATED SECTOR ANTENNA AT THE MCNUGGET TRAFFIC SIGNAL INTERSECTION. MOUNT THE RADIO TO THE TRAFFIC SIGNAL POLE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. CONNECT TO PRIMARY RADIO ANTENNA IN ACCORDANCE WITH THE RADIO EQUIPMENT SUPPLIER'S INSTRUCTIONS.



RADIO TO SIGNAL POLE MOUNTING DETAIL

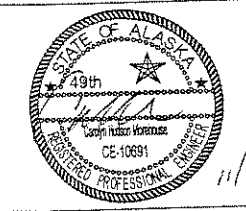
NOTES:

1. ALL ANTENNA MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
2. WHENEVER PENETRATING THE RADIO POLE, ELECTROLIERES, OR SIGNAL POLE, PAINT THE PENETRATION HOLE WITH A COAT OF ZINC RICH PAINT AND INSERT A RUBBER GROMMET AROUND THE INSIDE OF THE HOLE. ENSURE THAT A WATER-TIGHT SEAL IS MAINTAINED FOR ANY PENETRATIONS.

JUNEAU AREAWIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

MCNUGGET INTERSECTION  
 RADIO COMMUNICATION DETAILS

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

MCNUGGET INTERSECTION  
 RADIO COMMUNICATION  
 DETAILS

PROJECT DESIGNATION  
 STP - 0003(136)

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
J5	23

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

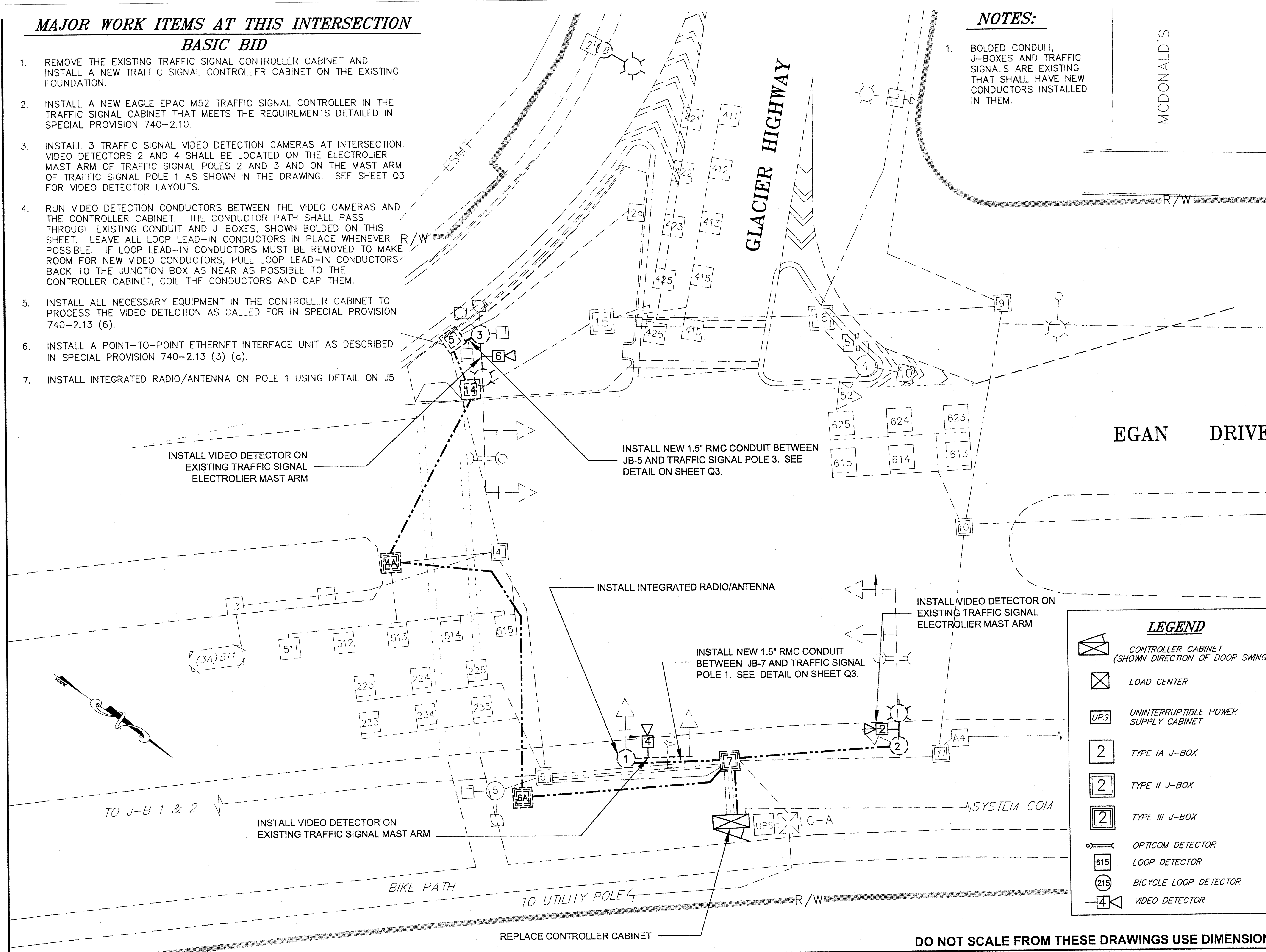
**MAJOR WORK ITEMS AT THIS INTERSECTION**

**BASIC BID**

1. REMOVE THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINET AND INSTALL A NEW TRAFFIC SIGNAL CONTROLLER CABINET ON THE EXISTING FOUNDATION.
2. INSTALL A NEW EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLER IN THE TRAFFIC SIGNAL CABINET THAT MEETS THE REQUIREMENTS DETAILED IN SPECIAL PROVISION 740-2.10.
3. INSTALL 3 TRAFFIC SIGNAL VIDEO DETECTION CAMERAS AT INTERSECTION. VIDEO DETECTORS 2 AND 4 SHALL BE LOCATED ON THE ELECTROLIER MAST ARM OF TRAFFIC SIGNAL POLES 2 AND 3 AND ON THE MAST ARM OF TRAFFIC SIGNAL POLE 1 AS SHOWN IN THE DRAWING. SEE SHEET Q3 FOR VIDEO DETECTOR LAYOUTS.
4. RUN VIDEO DETECTION CONDUCTORS BETWEEN THE VIDEO CAMERAS AND THE CONTROLLER CABINET. THE CONDUCTOR PATH SHALL PASS THROUGH EXISTING CONDUIT AND J-BOXES, SHOWN BOLDED ON THIS SHEET. LEAVE ALL LOOP LEAD-IN CONDUCTORS IN PLACE WHENEVER POSSIBLE. IF LOOP LEAD-IN CONDUCTORS MUST BE REMOVED TO MAKE ROOM FOR NEW VIDEO CONDUCTORS, PULL LOOP LEAD-IN CONDUCTORS BACK TO THE JUNCTION BOX AS NEAR AS POSSIBLE TO THE CONTROLLER CABINET, COIL THE CONDUCTORS AND CAP THEM.
5. INSTALL ALL NECESSARY EQUIPMENT IN THE CONTROLLER CABINET TO PROCESS THE VIDEO DETECTION AS CALLED FOR IN SPECIAL PROVISION 740-2.13 (6).
6. INSTALL A POINT-TO-POINT ETHERNET INTERFACE UNIT AS DESCRIBED IN SPECIAL PROVISION 740-2.13 (3) (a).
7. INSTALL INTEGRATED RADIO/ANTENNA ON POLE 1 USING DETAIL ON J5

**NOTES:**

1. BOLDED CONDUIT, J-BOXES AND TRAFFIC SIGNALS ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM.



INSTALL VIDEO DETECTOR ON EXISTING TRAFFIC SIGNAL ELECTROLIER MAST ARM

INSTALL NEW 1.5" RMC CONDUIT BETWEEN JB-5 AND TRAFFIC SIGNAL POLE 3. SEE DETAIL ON SHEET Q3.

INSTALL INTEGRATED RADIO/ANTENNA

INSTALL VIDEO DETECTOR ON EXISTING TRAFFIC SIGNAL ELECTROLIER MAST ARM

INSTALL NEW 1.5" RMC CONDUIT BETWEEN JB-7 AND TRAFFIC SIGNAL POLE 1. SEE DETAIL ON SHEET Q3.

INSTALL VIDEO DETECTOR ON EXISTING TRAFFIC SIGNAL MAST ARM

REPLACE CONTROLLER CABINET

**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

EGAN.DWG

DIONISIO, CHRISTOPHER J (DOT)

TAB: Q1 Friday, November 06, 2009 12:44:50

ADDENDUM NUMBER		
2		
ATTACHMENT NUMBER		
5		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE TRAFFIC SIGNAL SYSTEM UPGRADE PROJECT NO. 68057  
 EGAN DR & GLACIER HWY (MCNUGGET) INTERSECTION

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic Signal System Upgrade Project #68057

**EGAN DR & GLACIER HWY (MCNUGGET) INTERSECTION**

PROJECT DESIGNATION

**STP - 0003(136)**

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
Q1	23

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

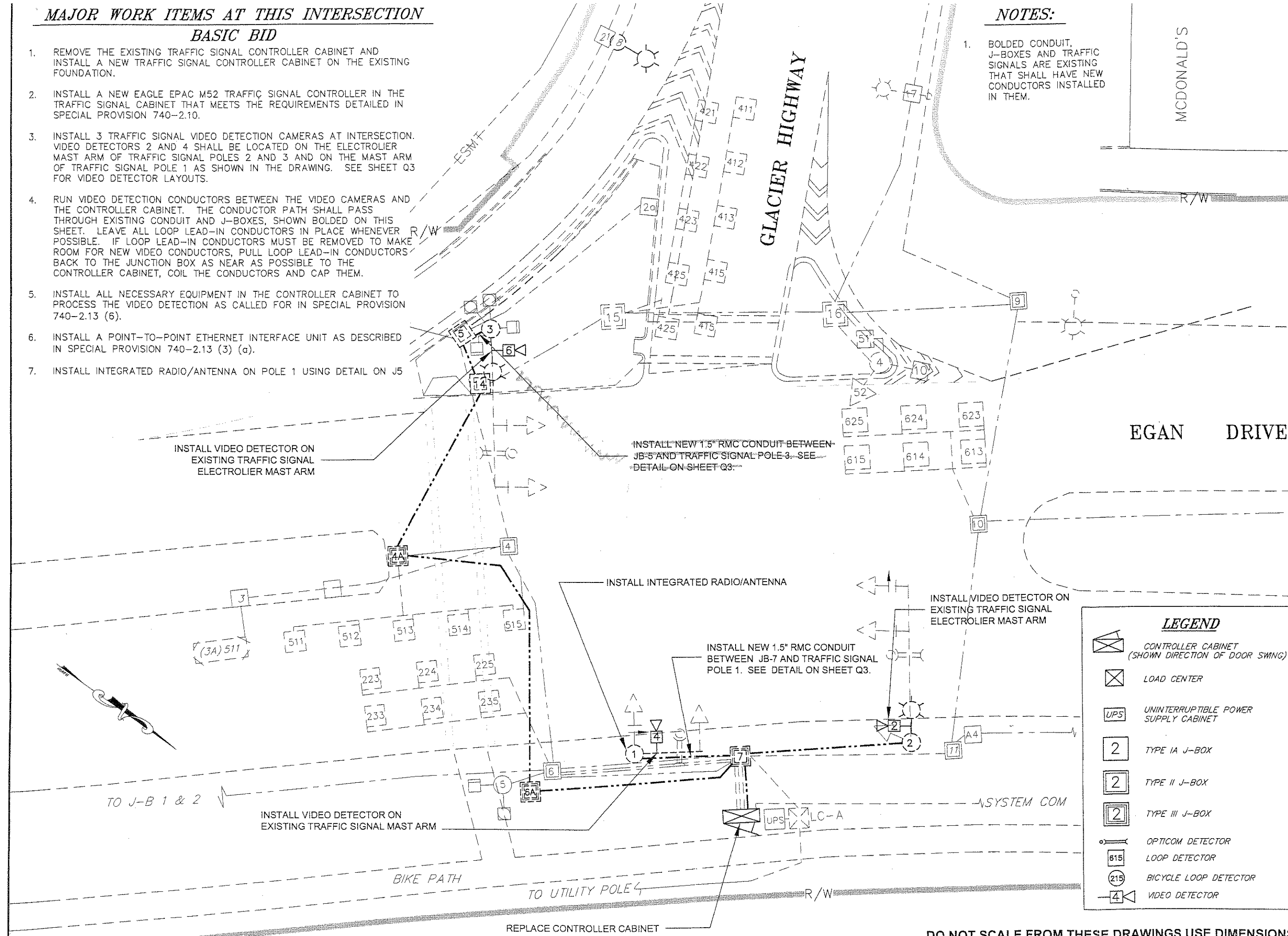
**MAJOR WORK ITEMS AT THIS INTERSECTION**

**BASIC BID**

1. REMOVE THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINET AND INSTALL A NEW TRAFFIC SIGNAL CONTROLLER CABINET ON THE EXISTING FOUNDATION.
2. INSTALL A NEW EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLER IN THE TRAFFIC SIGNAL CABINET THAT MEETS THE REQUIREMENTS DETAILED IN SPECIAL PROVISION 740-2.10.
3. INSTALL 3 TRAFFIC SIGNAL VIDEO DETECTION CAMERAS AT INTERSECTION. VIDEO DETECTORS 2 AND 4 SHALL BE LOCATED ON THE ELECTROLIER MAST ARM OF TRAFFIC SIGNAL POLES 2 AND 3 AND ON THE MAST ARM OF TRAFFIC SIGNAL POLE 1 AS SHOWN IN THE DRAWING. SEE SHEET Q3 FOR VIDEO DETECTOR LAYOUTS.
4. RUN VIDEO DETECTION CONDUCTORS BETWEEN THE VIDEO CAMERAS AND THE CONTROLLER CABINET. THE CONDUCTOR PATH SHALL PASS THROUGH EXISTING CONDUIT AND J-BOXES, SHOWN BOLDED ON THIS SHEET. LEAVE ALL LOOP LEAD-IN CONDUCTORS IN PLACE WHENEVER POSSIBLE. IF LOOP LEAD-IN CONDUCTORS MUST BE REMOVED TO MAKE ROOM FOR NEW VIDEO CONDUCTORS, PULL LOOP LEAD-IN CONDUCTORS BACK TO THE JUNCTION BOX AS NEAR AS POSSIBLE TO THE CONTROLLER CABINET, COIL THE CONDUCTORS AND CAP THEM.
5. INSTALL ALL NECESSARY EQUIPMENT IN THE CONTROLLER CABINET TO PROCESS THE VIDEO DETECTION AS CALLED FOR IN SPECIAL PROVISION 740-2.13 (6).
6. INSTALL A POINT-TO-POINT ETHERNET INTERFACE UNIT AS DESCRIBED IN SPECIAL PROVISION 740-2.13 (3) (a).
7. INSTALL INTEGRATED RADIO/ANTENNA ON POLE 1 USING DETAIL ON J5

**NOTES:**

1. BOLDED CONDUIT, J-BOXES AND TRAFFIC SIGNALS ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM.



**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

EGAN.DWG

DIONISIO, CHRISTOPHER J (DOT)  
TAB: Q1 Friday, November 06, 2009 12:44:50

ADDENDUM NUMBER		
ATTACHMENT NUMBER	2	
RECORD OF REVISIONS	5	
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

EGAN DR & GLACIER HWY  
 (MCNUGGET) INTERSECTION

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Areawide Traffic Signal System Upgrade  
Project #68057

**EGAN DR & GLACIER HWY (MCNUGGET) INTERSECTION**

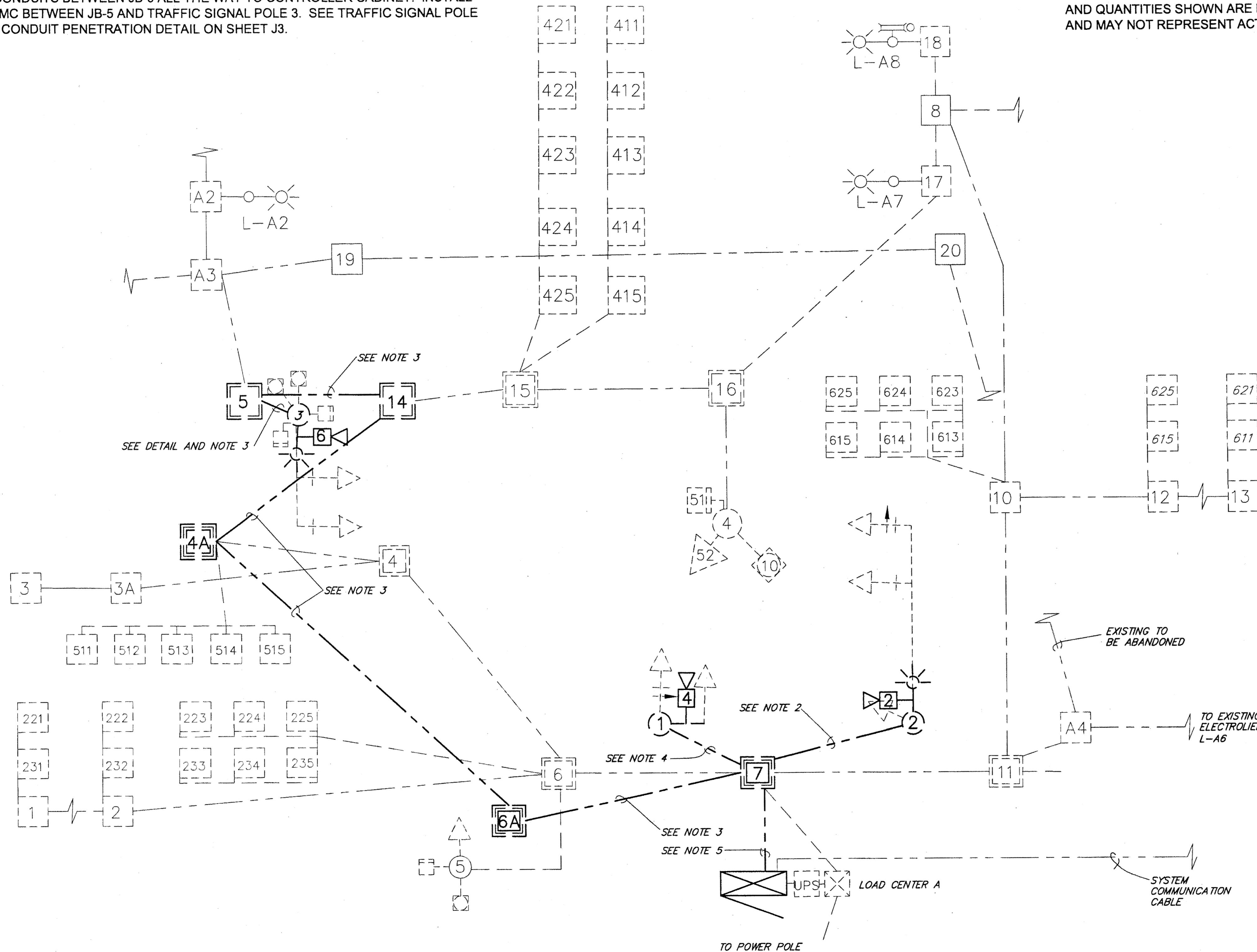
PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
Q1	23

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

**NOTES:**

1. BOLDDED CONDUIT, J-BOXES AND TRAFFIC SIGNAL ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM. THE ONLY NEW CONDUIT THAT IS REQUIRED IS BETWEEN JB-5 AND TRAFFIC SIGNAL POLE 3, AND JB-7 AND TRAFFIC SIGNAL POLE 1.
2. EXISTING 1.25" CONDUIT FROM TRAFFIC SIGNAL 2 TO JB-7 IS FULL. INSTALL NEW VDC FROM VIDEO DETECTORS 2 TO TRAFFIC SIGNAL CABINET. REPLACE EXISTING 7C POWER CABLE FOR SIGNAL HEADS ON SIGNAL POLE 2 TO MAKE ROOM FOR NEW VIDEO CABLE. NEW POWER CABLES SHALL BE 5C AND SHALL BE RUN FROM SIGNAL HEADS ON TRAFFIC SIGNAL POLES 2 TO CONTROLLER CABINET.
3. RUN NEW VDC FROM VIDEO DETECTOR 6 TO CONTROLLER CABINET. USE SERIES OF SPARE 2" CONDUITS BETWEEN JB-5 ALL THE WAY TO CONTROLLER CABINET. INSTALL NEW 1.5" RMC BETWEEN JB-5 AND TRAFFIC SIGNAL POLE 3. SEE TRAFFIC SIGNAL POLE EXTERNAL CONDUIT PENETRATION DETAIL ON SHEET J3.



**NOTES (CONT):**

4. RUN NEW VDC FROM VIDEO DETECTOR 4 TO CONTROLLER CABINET. RUN NEW CAT-5 ANTENNA CABLE FROM ANTENNA ON SIGNAL POLE 2 TO CONTROLLER CABINET. INSTALL NEW 1.5" RMC BETWEEN JB-7 AND TRAFFIC SIGNAL POLE 1. SEE TRAFFIC SIGNAL POLE EXTERNAL CONDUIT PENETRATION DETAIL ON SHEET J3.
5. RUN ALL VDC CABLES IN THE SAME 2" SPARE CONDUIT BETWEEN JB-7 AND THE CONTROLLER CABINET.
6. DOT STAFF FIELD VERIFIED THAT SIGNAL CONDUIT FILL SPACE IS AVAILABLE TO INSTALL NEW VIDEO DETECTION CABLES, WITH THE EXCEPTIONS STATED IN NOTES 1 AND 2. CONDUIT AND CONDUCTOR SIZE AND QUANTITIES SHOWN ARE BASED OFF OF EXISTING DESIGN DRAWINGS AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS.

**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- 2" RIGID METAL CONDUIT
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

2-XX QUANTITY OF CABLES OF INDICATED TYPE

**LOW VOLTAGE SIGNAL CONDUCTOR**

- LMR ANTENNA CABLE
- 1C #14: LOOP WIRES
- 2C #14: LOOP LEAD-IN
- 2C: PEDESTRIAN PUSH BUTTON
- 6PR: MULTI-LOOP LEAD-IN
- 3C #20: PROPRIETARY OPTICOM CABLE

**120 VOLT SIGNAL CONDUCTOR**

- 5C: PEDESTRIAN AND STANDARD SIGNAL HEADS
- 7C: 5 SECTION SIGNAL HEADS

**LIGHTING AND POWER CONDUCTOR**

- 3C#X: LIGHTING OR SIGNAL POWER

**VIDEO DETECTOR CABLE**

- VDC VIDEO DETECTOR CABLE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

WIRING.DWG

DIONISIO, CHRISTOPHER J (DOT)  
 TAB: Q2 Friday, November 06, 2009 12:43:32

ADDENDUM NUMBER  
 2

ATTACHMENT NUMBER  
 6

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JUNEAU AREA-WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

EGAN DR & GLACIER HWY (MCNUGGET)  
 WIRING DIAGRAM

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Area-wide Traffic  
 Signal System Upgrade  
 Project #68057

EGAN DR & GLACIER HWY  
 (MCNUGGET)  
 WIRING DIAGRAM

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
ALASKA	2009

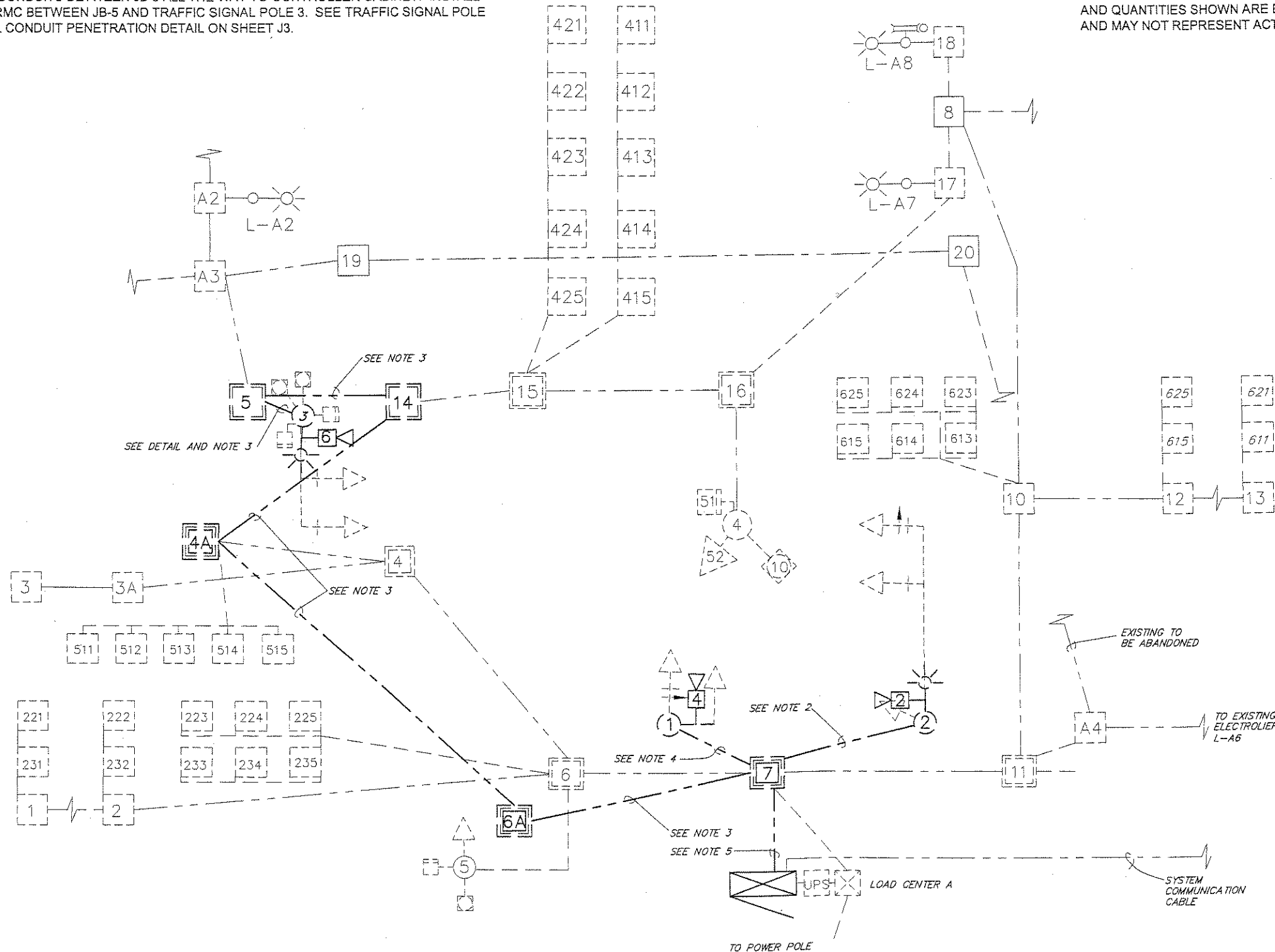
SHEET NUMBER	TOTAL SHEETS
Q2	23

NOTES:

1. BOLDDED CONDUIT, J-BOXES AND TRAFFIC SIGNAL ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM. THE ONLY NEW CONDUIT THAT IS REQUIRED IS BETWEEN JB-5 AND TRAFFIC SIGNAL POLE 3, AND JB-7 AND TRAFFIC SIGNAL POLE 1.
2. EXISTING 1.25" CONDUIT FROM TRAFFIC SIGNAL 2 TO JB-7 IS FULL. INSTALL NEW VDC FROM VIDEO DETECTORS 2 TO TRAFFIC SIGNAL CABINET. REPLACE EXISTING 7C POWER CABLE FOR SIGNAL HEADS ON SIGNAL POLE 2 TO MAKE ROOM FOR NEW VIDEO CABLE. NEW POWER CABLES SHALL BE 5C AND SHALL BE RUN FROM SIGNAL HEADS ON TRAFFIC SIGNAL POLES 2 TO CONTROLLER CABINET.
3. RUN NEW VDC FROM VIDEO DETECTOR 6 TO CONTROLLER CABINET. USE SERIES OF SPARE 2" CONDUITS BETWEEN JB-5 ALL THE WAY TO CONTROLLER CABINET. INSTALL NEW 1.5" RMC BETWEEN JB-5 AND TRAFFIC SIGNAL POLE 3. SEE TRAFFIC SIGNAL POLE EXTERNAL CONDUIT PENETRATION DETAIL ON SHEET J3.

NOTES (CONT):

4. RUN NEW VDC FROM VIDEO DETECTOR 4 TO CONTROLLER CABINET. RUN NEW CAT-5 ANTENNA CABLE FROM ANTENNA ON SIGNAL POLE 2 TO CONTROLLER CABINET. INSTALL NEW 1.5" RMC BETWEEN JB-7 AND TRAFFIC SIGNAL POLE 1. SEE TRAFFIC SIGNAL POLE EXTERNAL CONDUIT PENETRATION DETAIL ON SHEET J3.
5. RUN ALL VDC CABLES IN THE SAME 2" SPARE CONDUIT BETWEEN JB-7 AND THE CONTROLLER CABINET.
6. DOT STAFF FIELD VERIFIED THAT SIGNAL CONDUIT FILL SPACE IS AVAILABLE TO INSTALL NEW VIDEO DETECTION CABLES, WITH THE EXCEPTIONS STATED IN NOTES 1 AND 2. CONDUIT AND CONDUCTOR SIZE AND QUANTITIES SHOWN ARE BASED OFF OF EXISTING DESIGN DRAWINGS AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS.



**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- 2" RIGID METAL CONDUIT
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

2-XX QUANTITY OF CABLES OF INDICATED TYPE

**LOW VOLTAGE SIGNAL CONDUCTOR**

- LMR ANTENNA CABLE
- 1C #14: LOOP WIRES
- 2C #14: LOOP LEAD-IN
- 2C: PEDESTRIAN PUSH BUTTON
- 6PR: MULTI-LOOP LEAD-IN
- 3C #20: PROPRIETARY OPTICOM CABLE

**120 VOLT SIGNAL CONDUCTOR**

- 5C: PEDESTRIAN AND STANDARD SIGNAL HEADS
- 7C: 5 SECTION SIGNAL HEADS

**LIGHTING AND POWER CONDUCTOR**

- 3C #X: LIGHTING OR SIGNAL POWER

**VIDEO DETECTOR CABLE**

- VDC VIDEO DETECTOR CABLE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DIONISIO, CHRISTOPHER J (DOT)  
 TAB: Q2 Friday, November 06, 2009 12:43:32

ADDENDUM NUMBER		
2		
ATTACHMENT NUMBER		
6		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

EGAN DR & GLACIER HWY (MCNUGGET)  
 WIRING DIAGRAM

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

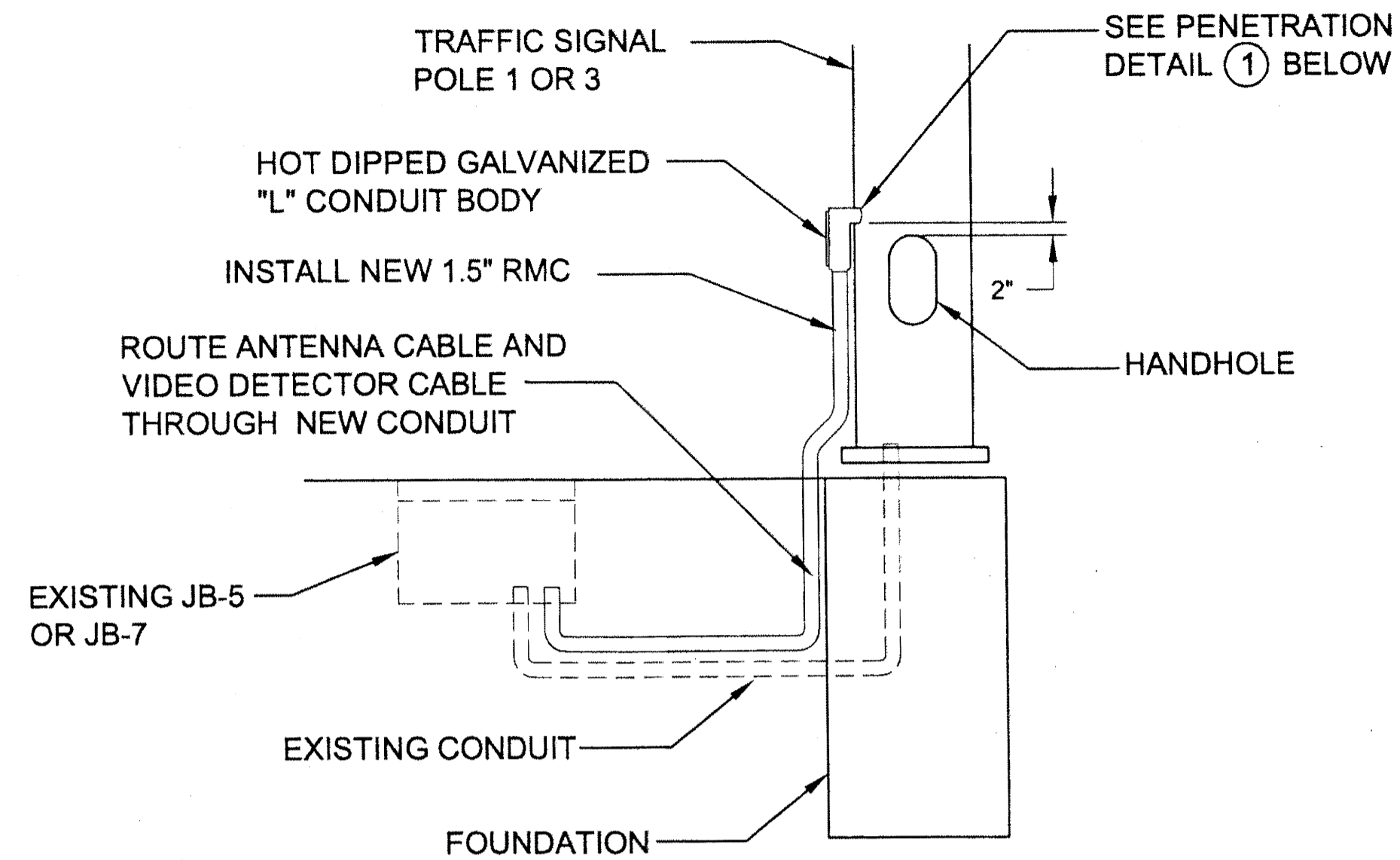
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

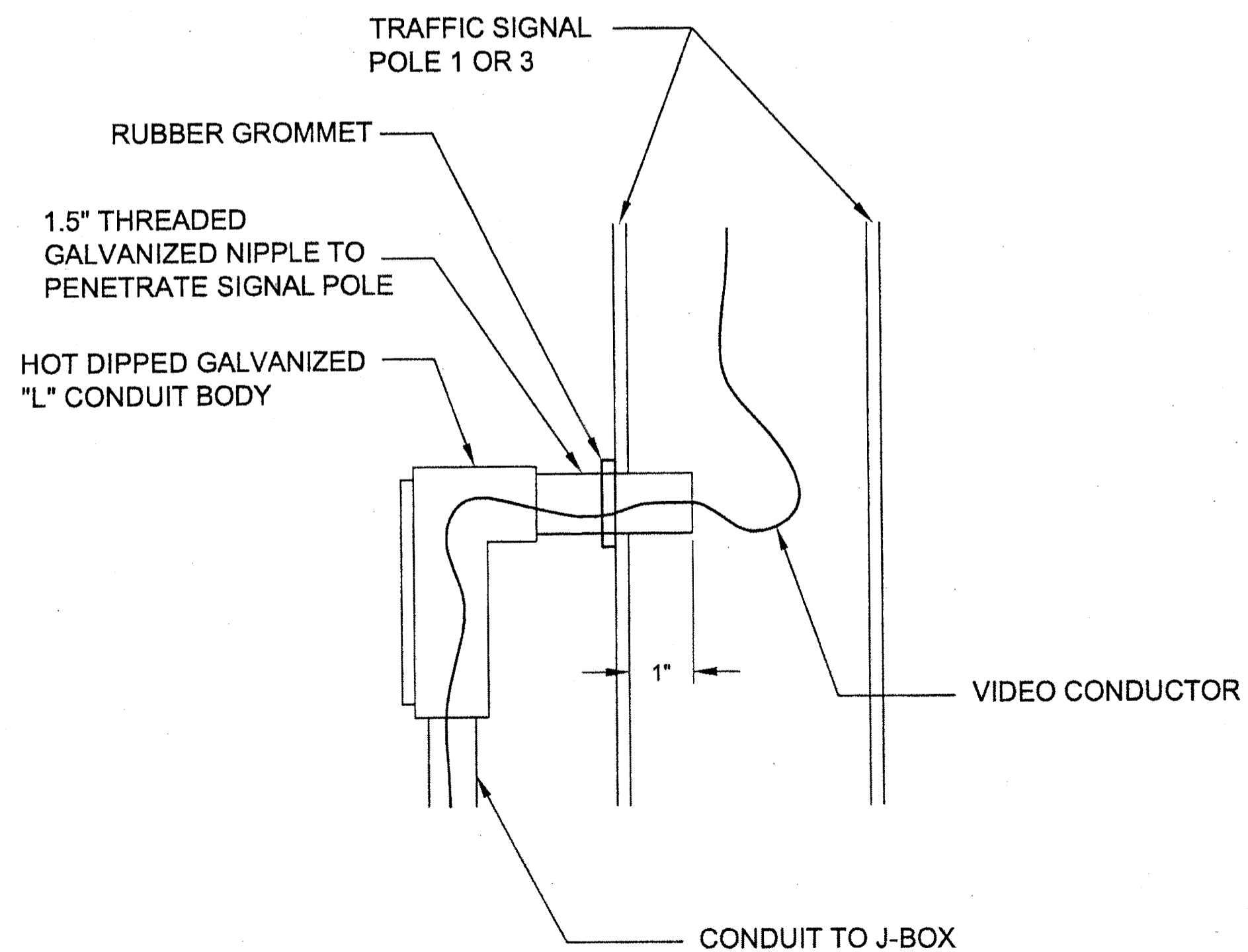
**EGAN DR & GLACIER HWY  
 (MCNUGGET)  
 WIRING DIAGRAM**

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
Q2	23



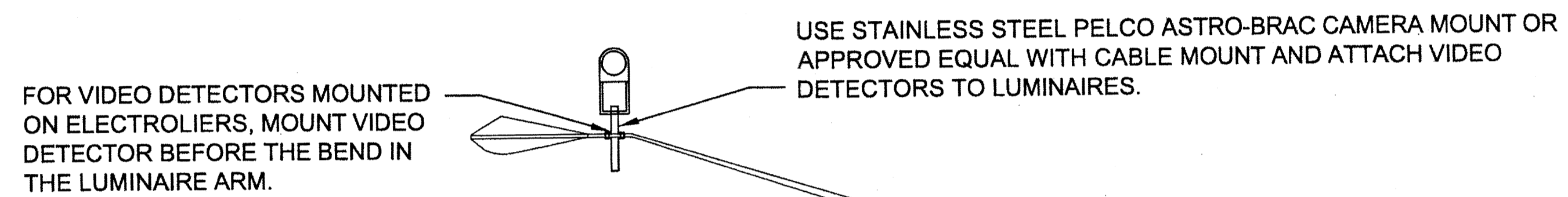
**TRAFFIC SIGNAL POLE EXTERNAL  
CONDUIT PENETRATION DETAIL**



**PENETRATION DETAIL ①**

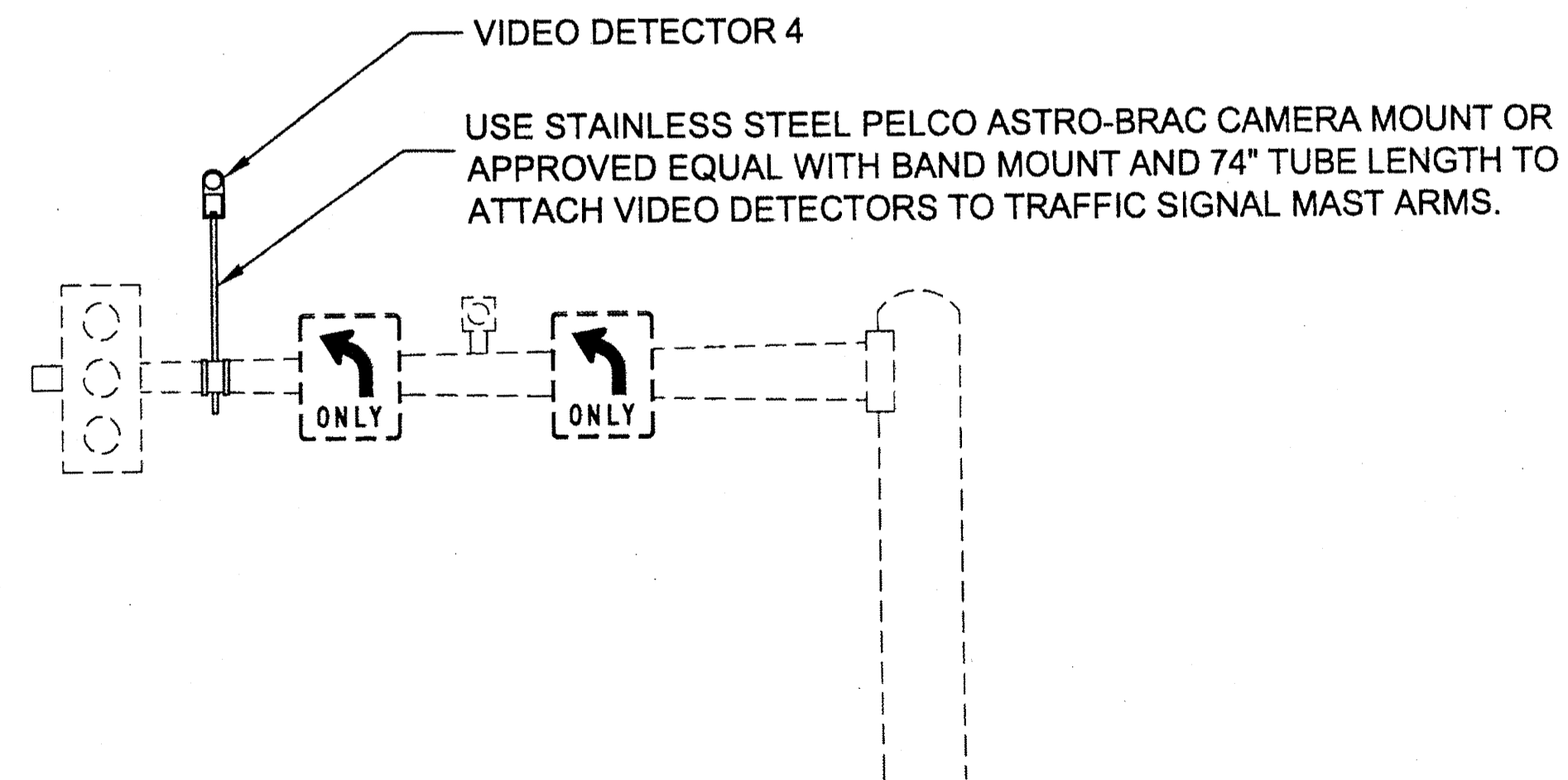
**GENERAL NOTES:**

1. ALL TRAFFIC SIGNAL POLES ARE SCHEMATIC ONLY AND NOT TO SCALE.
2. SIGNS, SIGNAL HEADS AND OPTICOM DETECTORS ARE ALL EXISTING AND SHOWN FOR LAYOUT PURPOSES ONLY.
3. WHENEVER PENETRATING TRAFFIC SIGNAL POLES OR ELECTROLIERS, DRILL A 1" HOLE. PAINT THE PENETRATION HOLE WITH A COAT OF ZINC RICH PAINT AND INSERT A RUBBER GROMMET AROUND THE INSIDE OF THE HOLE.



**VIDEO DETECTOR INSTALLATION DETAIL**

USE THIS DETAIL FOR VIDEO DETECTORS 2 AND 6



**MCNUGGET INTERSECTION, POLE 1**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

DETAILS.DWG

DIONISIO, CHRISTOPHER J (DOT)  
TAB: Q3 Thursday, November 05, 2009 12:37

ADDENDUM NUMBER  
**2**

ATTACHMENT NUMBER  
**7**

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JUNEAU AREAWIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057

EGAN DR & GLACIER HWY  
(MCNUGGET INTERSECTION) DETAILS

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Areawide Traffic  
Signal System Upgrade  
Project #68057

EGAN DR & GLACIER HWY  
(MCNUGGET INTERSECTION)  
DETAILS

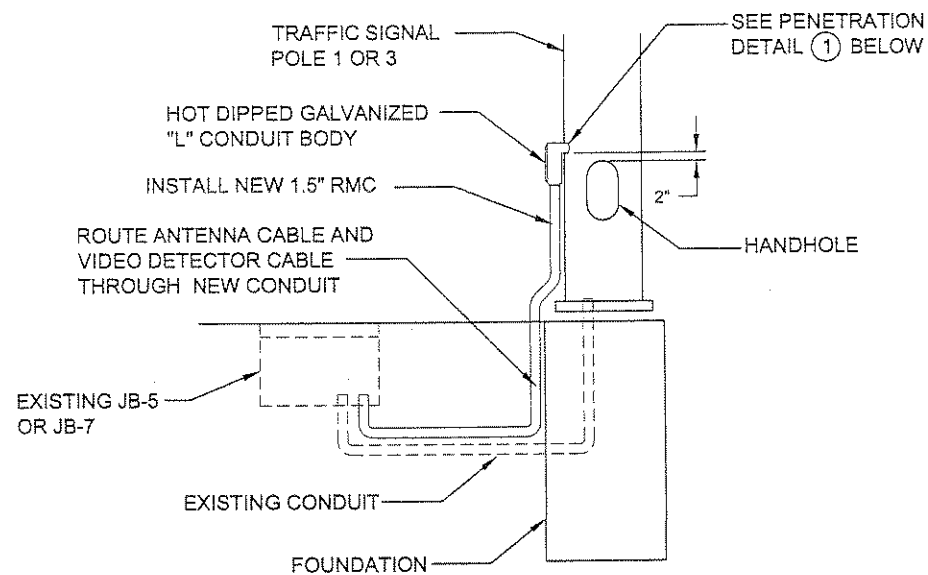
PROJECT DESIGNATION

STP - 0003(136)

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
Q3	23

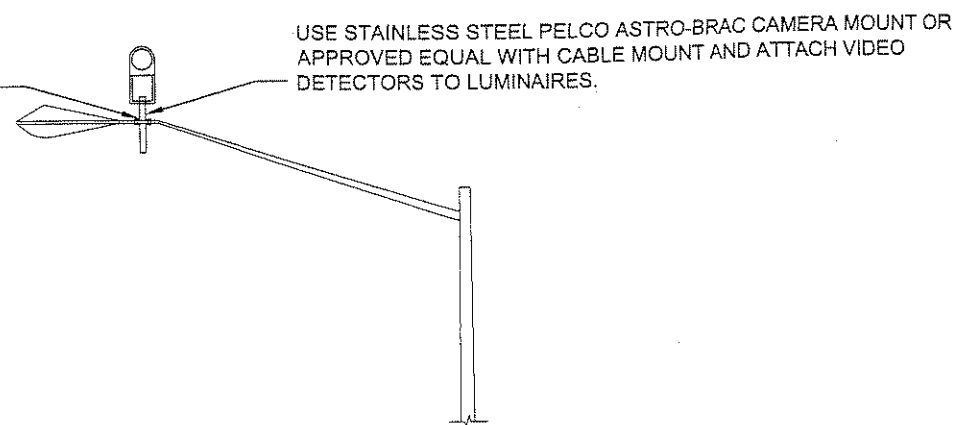
**GENERAL NOTES:**

1. ALL TRAFFIC SIGNAL POLES ARE SCHEMATIC ONLY AND NOT TO SCALE.
2. SIGNS, SIGNAL HEADS AND OPTICOM DETECTORS ARE ALL EXISTING AND SHOWN FOR LAYOUT PURPOSES ONLY.
3. WHENEVER PENETRATING TRAFFIC SIGNAL POLES OR ELECTROLIERS, DRILL A 1" HOLE. PAINT THE PENETRATION HOLE WITH A COAT OF ZINC RICH PAINT AND INSERT A RUBBER GROMMET AROUND THE INSIDE OF THE HOLE.



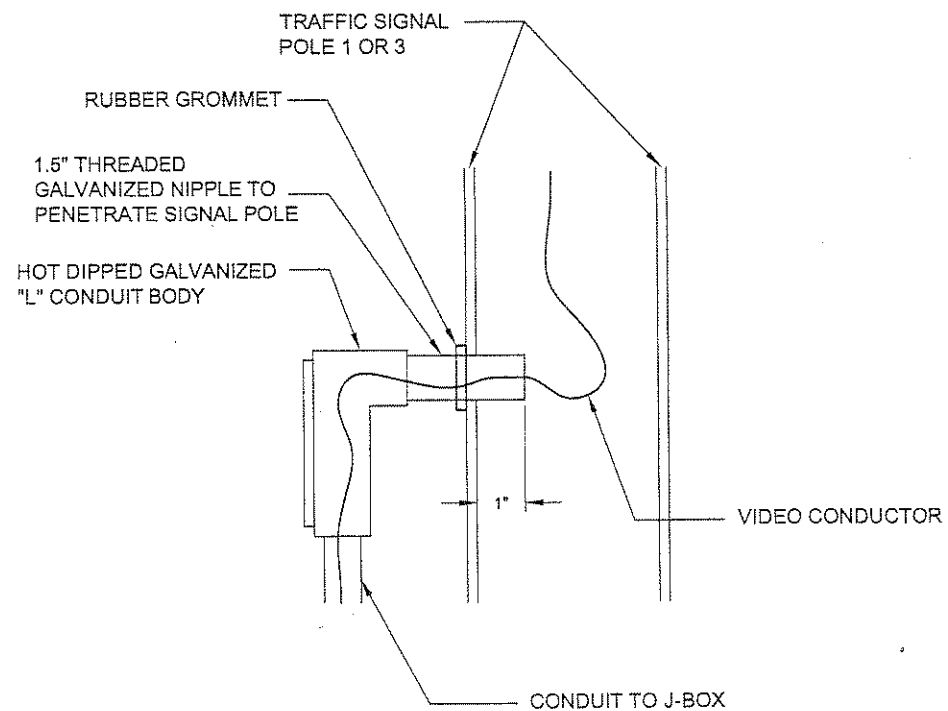
***TRAFFIC SIGNAL POLE EXTERNAL  
CONDUIT PENETRATION DETAIL***

FOR VIDEO DETECTORS MOUNTED ON ELECTROLIERS, MOUNT VIDEO DETECTOR BEFORE THE BEND IN THE LUMINAIRE ARM.

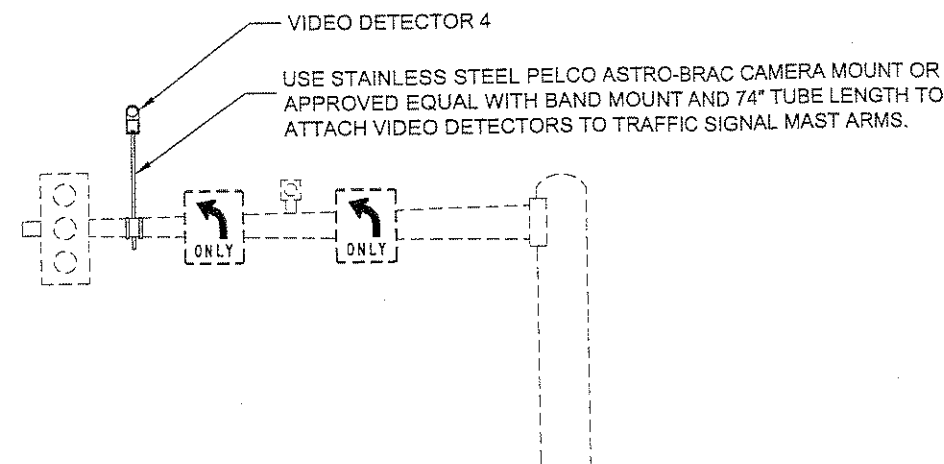


***VIDEO DETECTOR INSTALLATION DETAIL***

USE THIS DETAIL FOR VIDEO DETECTORS 2 AND 6



***PENETRATION DETAIL ①***



***MCNUGGET INTERSECTION, POLE 1***

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

TAB: L		
ATTACHMENT		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREAWIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057

EGAN DR & GLACIER HWY  
(MCNUGGET INTERSECTION) DETAILS

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Areawide Traffic  
Signal System Upgrade  
Project #68057

EGAN DR & GLACIER HWY  
(MCNUGGET INTERSECTION)  
DETAILS

PROJECT DESIGNATION  
STP - 0003(136)

STATE	YEAR
ALASKA	2009

SHEET NUMBER	TOTAL SHEETS
Q3	23

**MAJOR ITEMS OF WORK AT THIS INTERSECTION**

**BASIC BID**

1. INSTALL A NEW EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLER IN THE TRAFFIC SIGNAL CABINET THAT MEETS THE REQUIREMENTS DETAILED IN SPECIAL PROVISION 740-2.10.
2. INSTALL 4 VIDEO DETECTION CAMERAS AT INTERSECTION. VIDEO DETECTORS SHALL BE LOCATED ON THE ELECTROLIER MAST ARM OF TRAFFIC SIGNAL POLES 1, 2, 3, AND 4 AS SHOWN IN THE DRAWING.
3. RUN VIDEO DETECTION CONDUCTORS BETWEEN THE VIDEO CAMERAS AND THE CONTROLLER CABINET. THE CONDUCTOR PATH SHALL PASS THROUGH EXISTING CONDUIT AND J-BOXES, SHOWN BOLDED ON THIS SHEET. USE SPARE CONDUITS WHERE AVAILABLE. LEAVE ALL LOOP LEAD-IN CONDUCTORS IN PLACE, EXCEPT FOR THE LOOP LEAD-IN CABLES BETWEEN JB-32 AND THE CONTROLLER CABINET. PULL THESE CABLES BACK TO JB-32, COIL THEM AND CAP THEM.
4. INSTALL ALL NECESSARY EQUIPMENT IN THE CONTROLLER CABINET TO PROCESS THE VIDEO DETECTION AS CALLED FOR IN SPECIAL PROVISION 740-2.13 (6).
5. INSTALL A POINT-TO-MULTI-POINT ETHERNET INTERFACE UNIT AS DESCRIBED IN SPECIAL PROVISION 740-2.13 (3) (a).

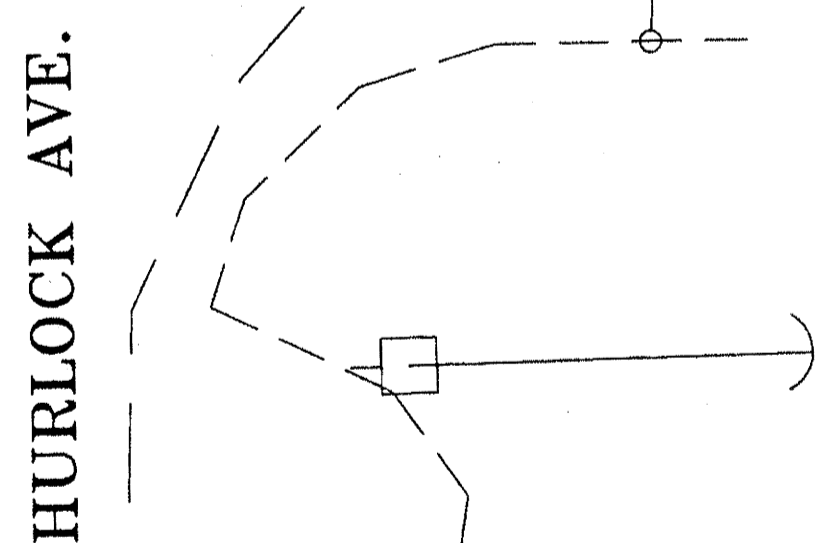
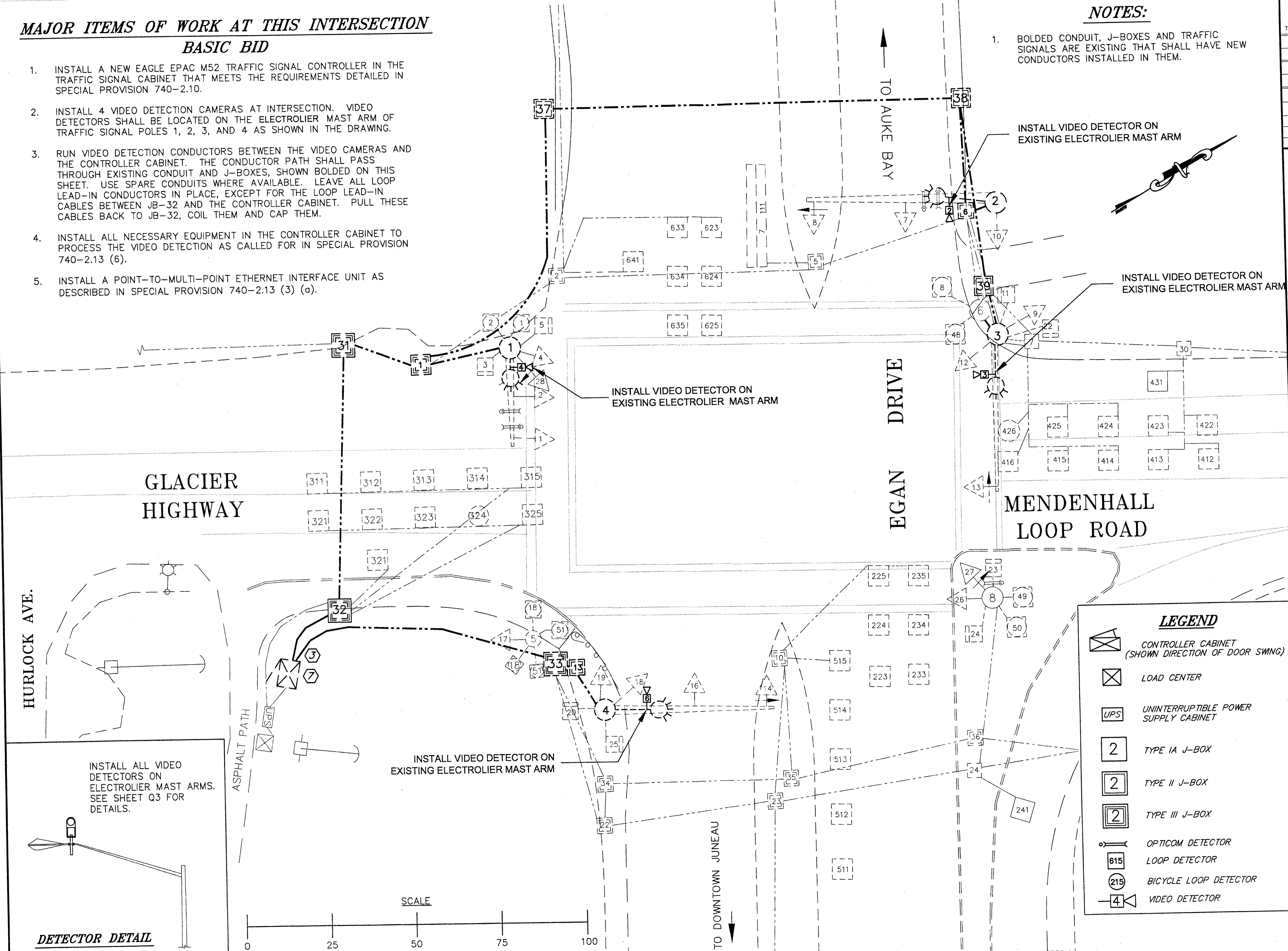
**NOTES:**

1. BOLDED CONDUIT, J-BOXES AND TRAFFIC SIGNALS ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM.

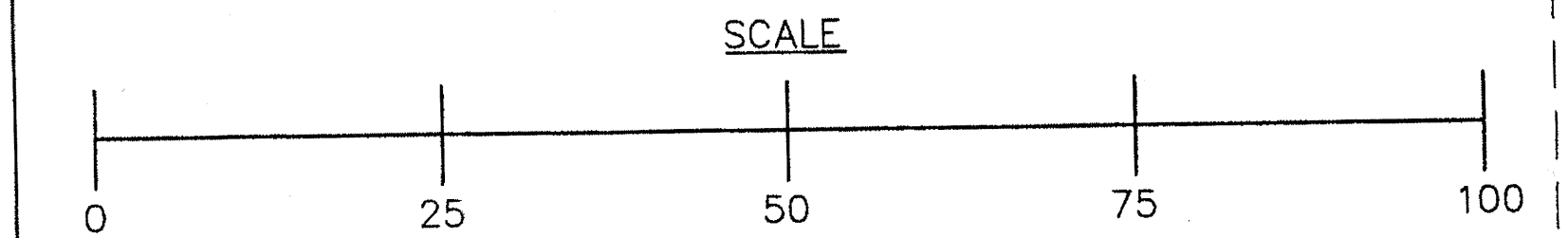
PATH: Q:\JUN06057\TRUCK LOOP & EGAN.DWG

DIONISIO, CHRISTOPHER J (DOT)  
TAB: Q4 Thursday, November 05, 2009 12:39

ADDENDUM NUMBER	2	
ATTACHMENT NUMBER	8	
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



**DETECTOR DETAIL**



**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

JUNEAU AREAWIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057

EGAN DR & LOOP RD  
INTERSECTION

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Areawide Traffic Signal System Upgrade  
Project #68057

**EGAN DR & LOOP RD INTERSECTION**

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
<b>ALASKA</b>	<b>2009</b>
SHEET NUMBER	TOTAL SHEETS
<b>Q4</b>	<b>23</b>

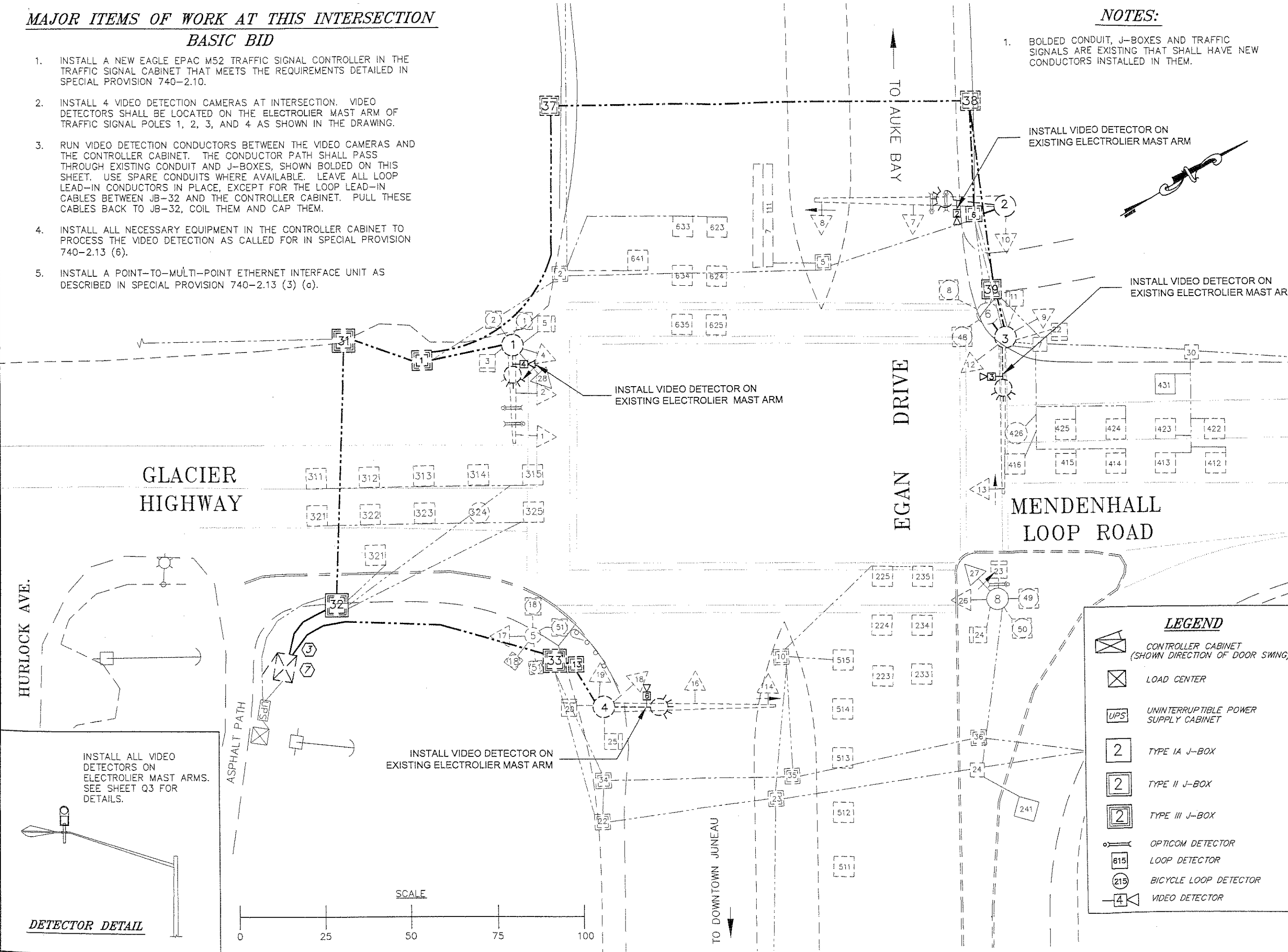
**MAJOR ITEMS OF WORK AT THIS INTERSECTION**

**BASIC BID**

1. INSTALL A NEW EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLER IN THE TRAFFIC SIGNAL CABINET THAT MEETS THE REQUIREMENTS DETAILED IN SPECIAL PROVISION 740-2.10.
2. INSTALL 4 VIDEO DETECTION CAMERAS AT INTERSECTION. VIDEO DETECTORS SHALL BE LOCATED ON THE ELECTROLIER MAST ARM OF TRAFFIC SIGNAL POLES 1, 2, 3, AND 4 AS SHOWN IN THE DRAWING.
3. RUN VIDEO DETECTION CONDUCTORS BETWEEN THE VIDEO CAMERAS AND THE CONTROLLER CABINET. THE CONDUCTOR PATH SHALL PASS THROUGH EXISTING CONDUIT AND J-BOXES, SHOWN BOLDED ON THIS SHEET. USE SPARE CONDUITS WHERE AVAILABLE. LEAVE ALL LOOP LEAD-IN CONDUCTORS IN PLACE, EXCEPT FOR THE LOOP LEAD-IN CABLES BETWEEN JB-32 AND THE CONTROLLER CABINET. PULL THESE CABLES BACK TO JB-32, COIL THEM AND CAP THEM.
4. INSTALL ALL NECESSARY EQUIPMENT IN THE CONTROLLER CABINET TO PROCESS THE VIDEO DETECTION AS CALLED FOR IN SPECIAL PROVISION 740-2.13 (6).
5. INSTALL A POINT-TO-MULTI-POINT ETHERNET INTERFACE UNIT AS DESCRIBED IN SPECIAL PROVISION 740-2.13 (3) (a).

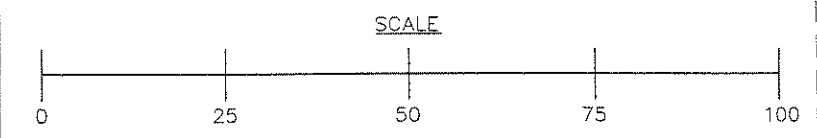
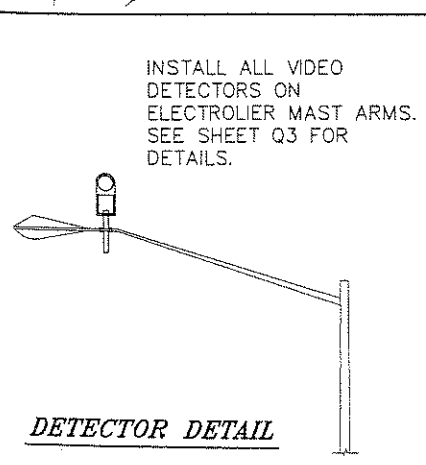
**NOTES:**

1. BOLDED CONDUIT, J-BOXES AND TRAFFIC SIGNALS ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM.



**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR



DIONISIO, CHRISTOPHER J (DOT)  
 TAB: Q4 Thursday, November 05, 2009 12:38

ADDENDUM NUMBER	2	
ATTACHMENT NUMBER	3	
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

EGAN DR & LOOP RD  
 INTERSECTION

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Area Wide Traffic  
 Signal System Upgrade  
 Project #68057

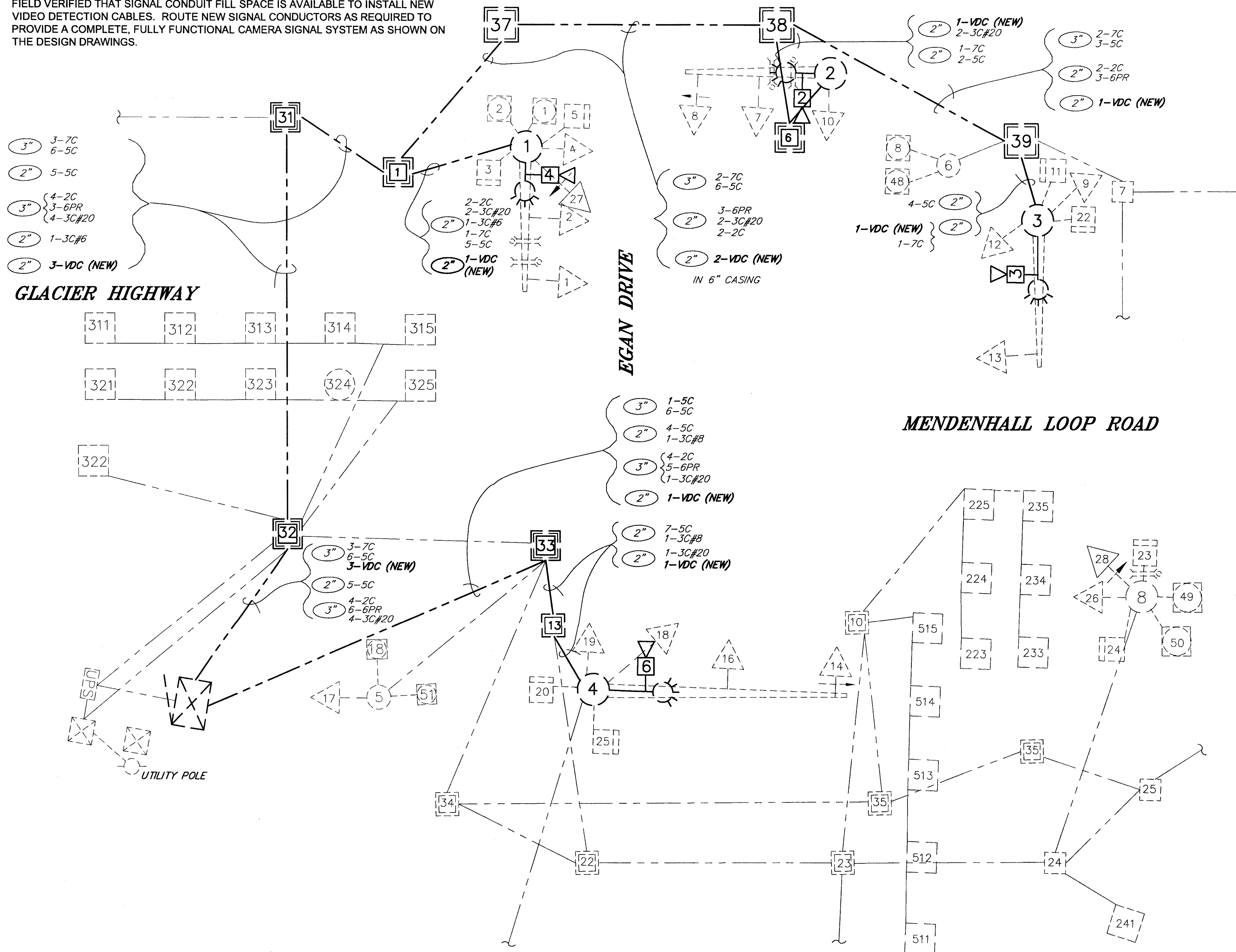
**EGAN DR & LOOP RD  
 INTERSECTION**

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
Q4	23

NOTES:

- BOLDED CONDUIT, J-BOXES AND TRAFFIC SIGNAL ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM. THE ONLY NEW CONDUIT THAT IS REQUIRED IS A 2" RMC BETWEEN JB-1 AND POLE 1.
- CONDUIT AND CONDUCTOR SIZE AND QUANTITIES SHOWN ARE BASED OFF OF EXISTING DESIGN DRAWINGS AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS. DOT STAFF FIELD VERIFIED THAT SIGNAL CONDUIT FILL SPACE IS AVAILABLE TO INSTALL NEW VIDEO DETECTION CABLES. ROUTE NEW SIGNAL CONDUCTORS AS REQUIRED TO PROVIDE A COMPLETE, FULLY FUNCTIONAL CAMERA SIGNAL SYSTEM AS SHOWN ON THE DESIGN DRAWINGS.



**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- 2" RIGID METAL CONDUIT
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

2-XX QUANTITY OF CABLES OF INDICATED TYPE

**LOW VOLTAGE SIGNAL CONDUCTOR**

- LMR: ANTENNA CABLE
- 1C #14: LOOP WIRES
- 2C #14: LOOP LEAD-IN
- 2C: PEDESTRIAN PUSH BUTTON
- 6PR: MULTI-LOOP LEAD-IN
- 3C #20: PROPRIETARY OPTICOM CABLE

**120 VOLT SIGNAL CONDUCTOR**

- 5C: PEDESTRIAN AND STANDARD SIGNAL HEADS
- 7C: 5 SECTION SIGNAL HEADS

**LIGHTING AND POWER CONDUCTOR**

- 3C#X: LIGHTING OR SIGNAL POWER

**VIDEO DETECTOR CABLE**

- VDC: VIDEO DETECTOR CABLE

PATH: Q:\JNU\68057\TRIQ5 LOOP & EGAN WIRING.DWG

STEVENS, DAVID A (DOT)  
 TAB: Q5 Tuesday, October 06, 2009 11:42:22

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREAWIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

EGAN DR & LOOP RD  
 WIRING DIAGRAM

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

EGAN DR & LOOP RD  
 WIRING DIAGRAM

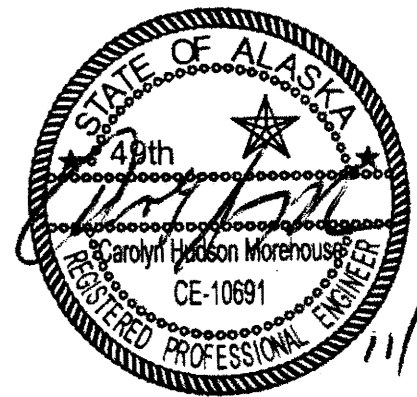
PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
ALASKA	2009

SHEET NUMBER	TOTAL SHEETS
Q5	23

JUNEAU AREAWIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057  
 EGAN DR & RIVERSIDE DR  
 INTERSECTION

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

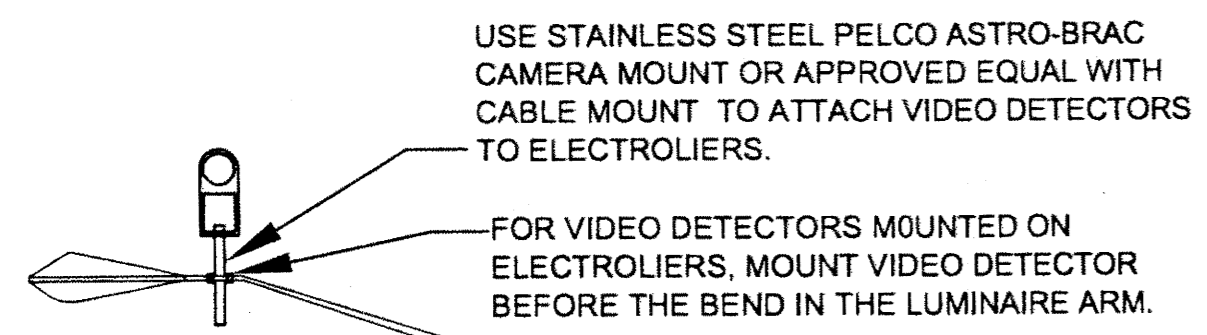
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

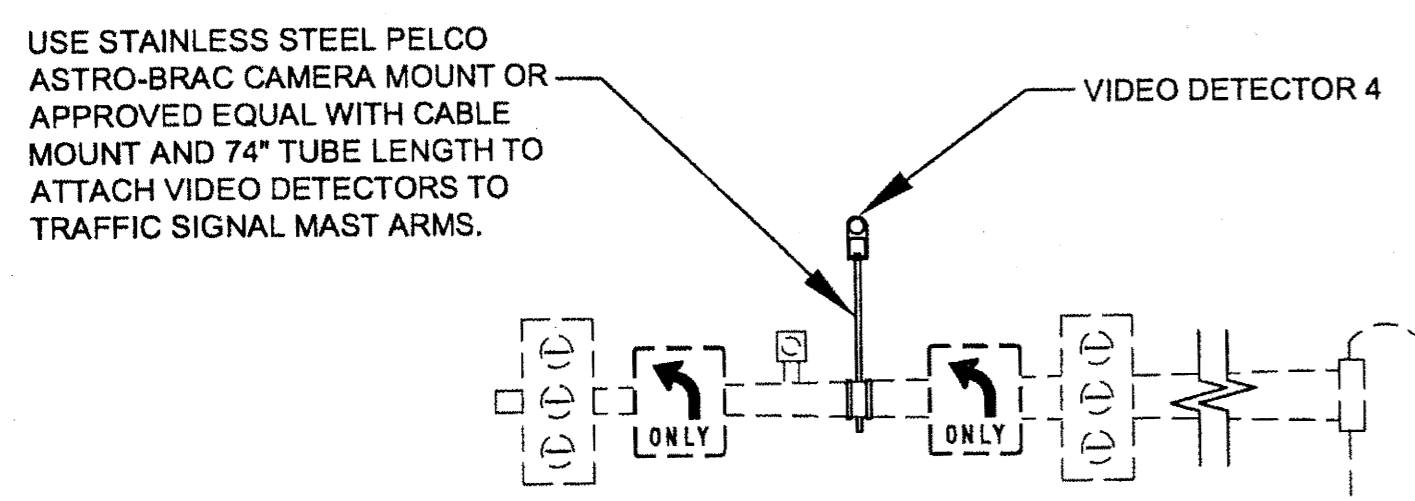
EGAN DR & RIVERSIDE DR  
 INTERSECTION

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
Q6	23



**VIDEO DETECTOR INSTALLATION DETAIL**  
 USE THIS DETAIL FOR VIDEO DETECTORS 2 AND 6



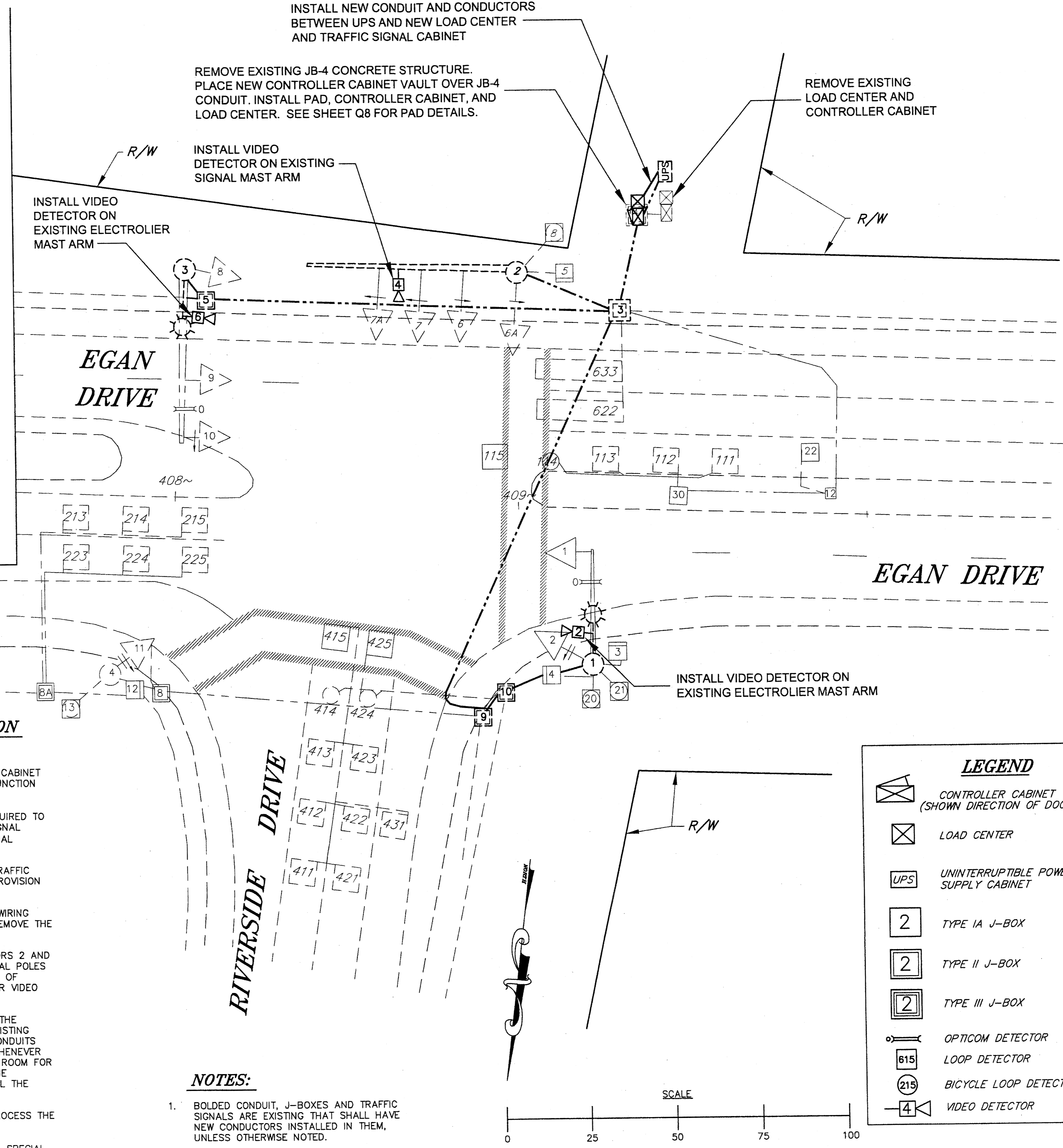
**RIVERSIDE & EGAN, POLE 2**

**MAJOR ITEMS OF WORK AT THIS INTERSECTION**  
**BASIC BID**

1. REMOVE JUNCTION BOX 4. INSTALL A NEW TRAFFIC SIGNAL CONTROLLER CABINET COMPLETE WITH FOUNDATION AND VAULT IN THE FORMER LOCATION OF JUNCTION BOX 4. THE NEW CONTROLLER CABINET FOUNDATION SHALL BE RAISED APPROXIMATELY 2', TO THE SAME ELEVATION AS THE ROAD SHOULDER. EARTHWORK, SEEDING, CONDUIT EXTENSIONS, AND THE ASPHALT PAD REQUIRED TO ACCOMPLISH THIS SHALL BE CONSIDERED SUBSIDIARY TO THE TRAFFIC SIGNAL SYSTEM COMPLETE BID ITEM 660(1). REMOVE THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINET. SEE DETAILS, SHEET Q8.
2. INSTALL A NEW EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLER IN THE TRAFFIC SIGNAL CABINET THAT MEETS THE REQUIREMENTS DETAILED IN SPECIAL PROVISION 740-2.10.
3. INSTALL A NEW TYPE 1 LOAD CENTER AND ALL REQUIRED CONDUIT AND WIRING BETWEEN THE LOAD CENTER, UPS, AND TRAFFIC SIGNAL CONTROLLER. REMOVE THE EXISTING LOAD CENTER.
4. INSTALL 3 VIDEO DETECTION CAMERAS AT INTERSECTION. VIDEO DETECTORS 2 AND 6 SHALL BE LOCATED ON THE ELECTROLIER MAST ARM OF TRAFFIC SIGNAL POLES 1 AND 3 AND VIDEO DETECTOR 4 SHALL BE LOCATED ON THE MAST ARM OF TRAFFIC SIGNAL POLE 2 AS SHOWN IN THE DRAWING. SEE SHEET Q8 FOR VIDEO DETECTOR LAYOUTS.
5. RUN VIDEO DETECTION CONDUCTORS BETWEEN THE VIDEO CAMERAS AND THE CONTROLLER CABINET. THE CONDUCTOR PATH SHALL PASS THROUGH EXISTING CONDUIT AND J-BOXES, SHOWN BOLDED ON THIS SHEET. USE SPARE CONDUITS WHERE AVAILABLE. LEAVE ALL LOOP LEAD-IN CONDUCTORS IN PLACE WHENEVER POSSIBLE. IF LOOP LEAD-IN CONDUCTORS MUST BE REMOVED TO MAKE ROOM FOR NEW VIDEO CONDUCTORS, PULL LOOP LEAD-IN CONDUCTORS BACK TO THE JUNCTION BOX AS NEAR AS POSSIBLE TO THE CONTROLLER CABINET, COIL THE CONDUCTORS AND CAP THEM.
6. INSTALL ALL NECESSARY EQUIPMENT IN THE CONTROLLER CABINET TO PROCESS THE VIDEO DETECTION AS CALLED FOR IN SPECIAL PROVISION 740-2.13 (6).
7. INSTALL A POINT-TO-POINT ETHERNET INTERFACE UNIT AS DESCRIBED IN SPECIAL PROVISION 740-2.13 (3) (a).

**NOTES:**

1. BOLDED CONDUIT, J-BOXES AND TRAFFIC SIGNALS ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM, UNLESS OTHERWISE NOTED.



**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

ADDENDUM NUMBER		
2		
ATTACHMENT NUMBER		
9		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREAWIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057  
 EGAN DR & RIVERSIDE DR  
 INTERSECTION

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

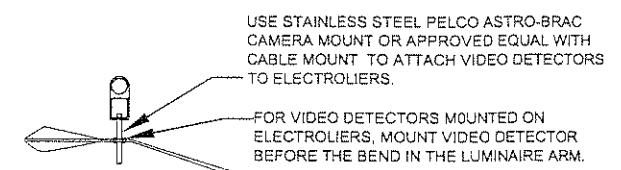
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

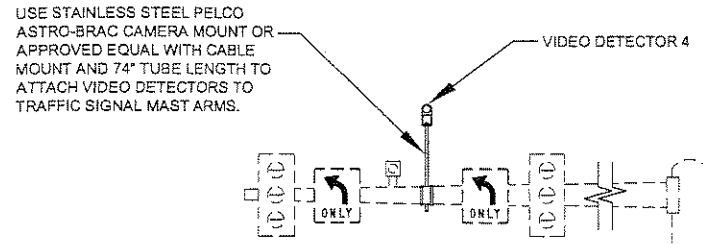
**EGAN DR & RIVERSIDE DR  
 INTERSECTION**

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
<b>ALASKA</b>	<b>2009</b>
SHEET NUMBER	TOTAL SHEETS
<b>Q6</b>	<b>23</b>



**VIDEO DETECTOR INSTALLATION DETAIL**  
 USE THIS DETAIL FOR VIDEO DETECTORS 2 AND 6



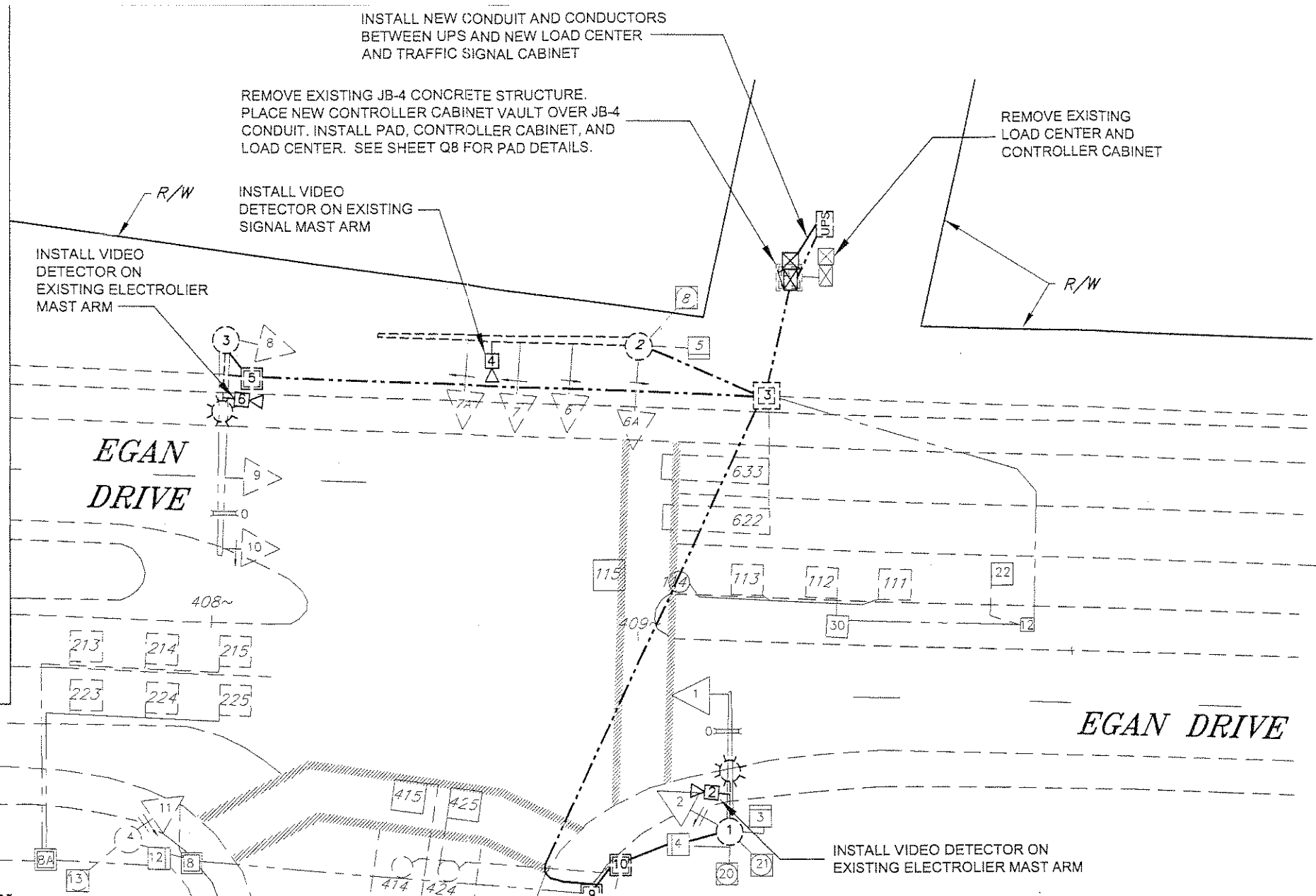
**RIVERSIDE & EGAN, POLE 2**

INSTALL NEW CONDUIT AND CONDUCTORS BETWEEN UPS AND NEW LOAD CENTER AND TRAFFIC SIGNAL CABINET

REMOVE EXISTING JB-4 CONCRETE STRUCTURE. PLACE NEW CONTROLLER CABINET VAULT OVER JB-4 CONDUIT. INSTALL PAD, CONTROLLER CABINET, AND LOAD CENTER. SEE SHEET Q8 FOR PAD DETAILS.

REMOVE EXISTING LOAD CENTER AND CONTROLLER CABINET

R/W  
 INSTALL VIDEO DETECTOR ON EXISTING ELECTROLIER MAST ARM  
 R/W  
 INSTALL VIDEO DETECTOR ON EXISTING SIGNAL MAST ARM



INSTALL VIDEO DETECTOR ON EXISTING ELECTROLIER MAST ARM

**MAJOR ITEMS OF WORK AT THIS INTERSECTION**  
**BASIC BID**

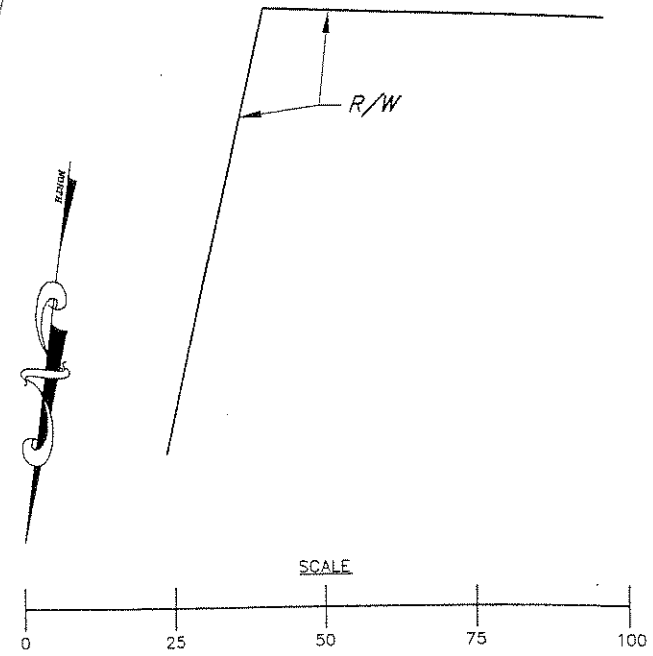
1. REMOVE JUNCTION BOX 4. INSTALL A NEW TRAFFIC SIGNAL CONTROLLER CABINET COMPLETE WITH FOUNDATION AND VAULT IN THE FORMER LOCATION OF JUNCTION BOX 4. THE NEW CONTROLLER CABINET FOUNDATION SHALL BE RAISED APPROXIMATELY 2', TO THE SAME ELEVATION AS THE ROAD SHOULDER. EARTHWORK, SEEDING, CONDUIT EXTENSIONS, AND THE ASPHALT PAD REQUIRED TO ACCOMPLISH THIS SHALL BE CONSIDERED SUBSIDIARY TO THE TRAFFIC SIGNAL SYSTEM COMPLETE BID ITEM 660(1). REMOVE THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINET. SEE DETAILS, SHEET Q8.
2. INSTALL A NEW EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLER IN THE TRAFFIC SIGNAL CABINET THAT MEETS THE REQUIREMENTS DETAILED IN SPECIAL PROVISION 740-2.10.
3. INSTALL A NEW TYPE 1 LOAD CENTER AND ALL REQUIRED CONDUIT AND WIRING BETWEEN THE LOAD CENTER, UPS, AND TRAFFIC SIGNAL CONTROLLER. REMOVE THE EXISTING LOAD CENTER.
4. INSTALL 3 VIDEO DETECTION CAMERAS AT INTERSECTION. VIDEO DETECTORS 2 AND 6 SHALL BE LOCATED ON THE ELECTROLIER MAST ARM OF TRAFFIC SIGNAL POLES 1 AND 3 AND VIDEO DETECTOR 4 SHALL BE LOCATED ON THE MAST ARM OF TRAFFIC SIGNAL POLE 2 AS SHOWN IN THE DRAWING. SEE SHEET Q8 FOR VIDEO DETECTOR LAYOUTS.
5. RUN VIDEO DETECTION CONDUCTORS BETWEEN THE VIDEO CAMERAS AND THE CONTROLLER CABINET. THE CONDUCTOR PATH SHALL PASS THROUGH EXISTING CONDUIT AND J-BOXES, SHOWN BOLDED ON THIS SHEET. USE SPARE CONDUITS WHERE AVAILABLE. LEAVE ALL LOOP LEAD-IN CONDUCTORS IN PLACE WHENEVER POSSIBLE. IF LOOP LEAD-IN CONDUCTORS MUST BE REMOVED TO MAKE ROOM FOR NEW VIDEO CONDUCTORS, PULL LOOP LEAD-IN CONDUCTORS BACK TO THE JUNCTION BOX AS NEAR AS POSSIBLE TO THE CONTROLLER CABINET, COIL THE CONDUCTORS AND CAP THEM.
6. INSTALL ALL NECESSARY EQUIPMENT IN THE CONTROLLER CABINET TO PROCESS THE VIDEO DETECTION AS CALLED FOR IN SPECIAL PROVISION 740-2.13 (6).
7. INSTALL A POINT-TO-POINT ETHERNET INTERFACE UNIT AS DESCRIBED IN SPECIAL PROVISION 740-2.13 (3) (a).

**NOTES:**

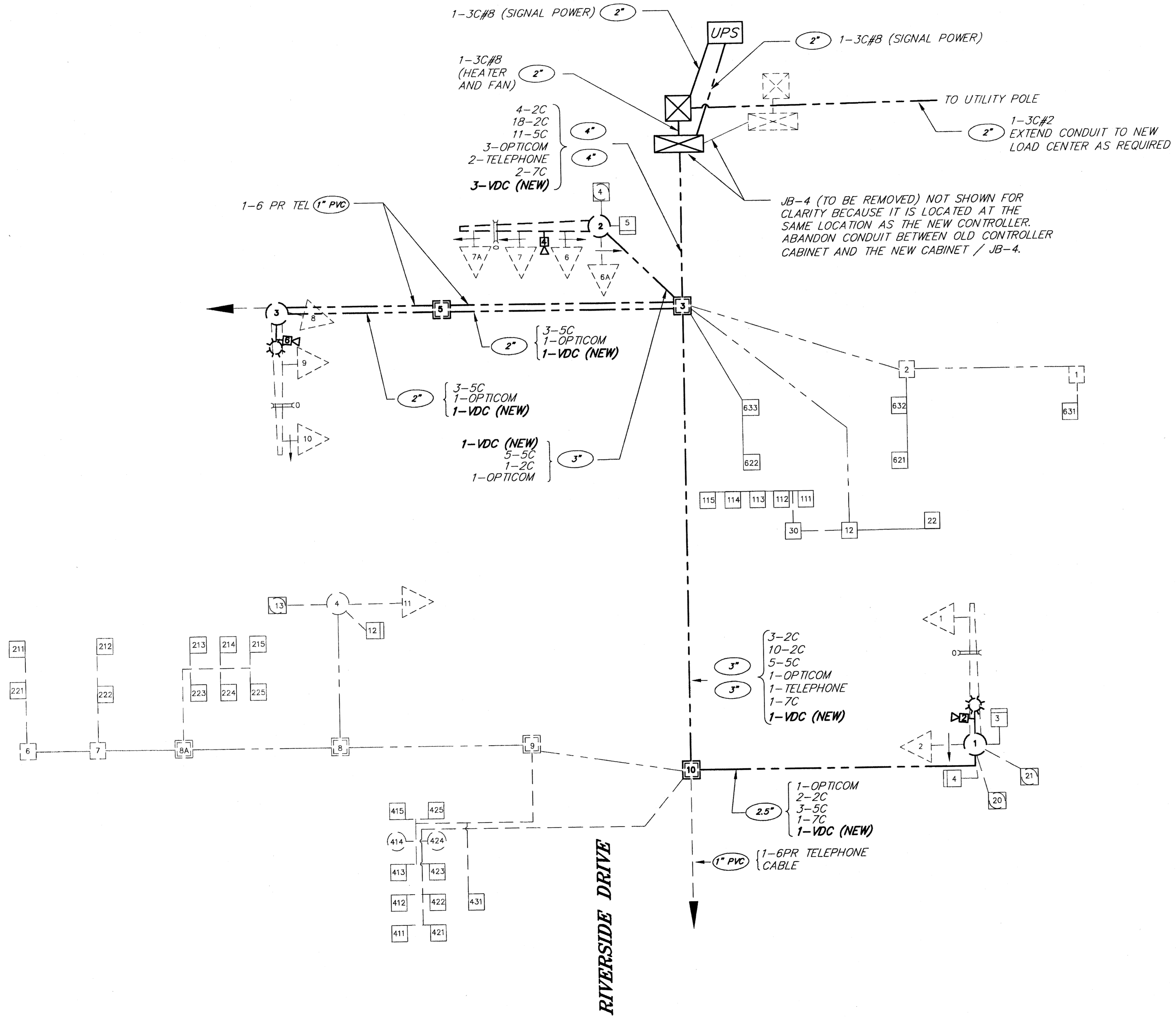
1. BOLDED CONDUIT, J-BOXES AND TRAFFIC SIGNALS ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM, UNLESS OTHERWISE NOTED.

**LEGEND**

	CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
	LOAD CENTER
	UNINTERRUPTIBLE POWER SUPPLY CABINET
	TYPE IA J-BOX
	TYPE II J-BOX
	TYPE III J-BOX
	OPTICOM DETECTOR
	LOOP DETECTOR
	BICYCLE LOOP DETECTOR
	VIDEO DETECTOR



- NOTES:**
- ALL EXISTING ELECTRICAL SHOWN IS TO REMAIN UNLESS OTHERWISE NOTED.
  - DOT STAFF FIELD VERIFIED THAT SIGNAL CONDUIT FILL SPACE IS AVAILABLE TO INSTALL NEW VIDEO DETECTION CABLES. CONDUIT AND CONDUCTOR SIZE AND QUANTITIES SHOWN ARE BASED OFF OF EXISTING DESIGN DRAWINGS AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS.
  - BOLDED CONDUIT, J-BOXES AND TRAFFIC SIGNALS ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM EXCEPT FOR THE FOLLOWING:
    - A NEW CONTROLLER CABINET AND LOAD CENTER WILL BE INSTALLED. THE EXISTING UPS SHALL REMAIN.
    - ALL RIGID METAL CONDUIT BETWEEN THE UPS, THE LOAD CENTER, AND THE CONTROLLER CABINET SHALL BE INSTALLED NEW. ALL CONDUCTORS SHALL BE RE-ROUTED AS REQUIRED.



**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- 2" RIGID METAL CONDUIT
- OPTICOM DETECTOR
- 615 LOOP DETECTOR
- 215 BICYCLE LOOP DETECTOR
- 4 VIDEO DETECTOR

2-XX QUANTITY OF CABLES OF INDICATED TYPE

**LOW VOLTAGE SIGNAL CONDUCTOR**

LMR ANTENNA CABLE  
 1C #14: LOOP WIRES  
 2C #14: LOOP LEAD-IN  
 2C: PEDESTRIAN PUSH BUTTON  
 6PR: MULTI-LOOP LEAD-IN  
 3C #20: PROPRIETARY OPTICOM CABLE

**120 VOLT SIGNAL CONDUCTOR**

5C: PEDESTRIAN AND STANDARD SIGNAL HEADS  
 7C: 5 SECTION SIGNAL HEADS

**LIGHTING AND POWER CONDUCTOR**

3C#X: LIGHTING OR SIGNAL POWER

**VIDEO DETECTOR CABLE**

VDC VIDEO DETECTOR CABLE

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

EGAN DR & RIVERSIDE DR  
 WIRING DIAGRAM

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic Signal System Upgrade  
 Project #68057

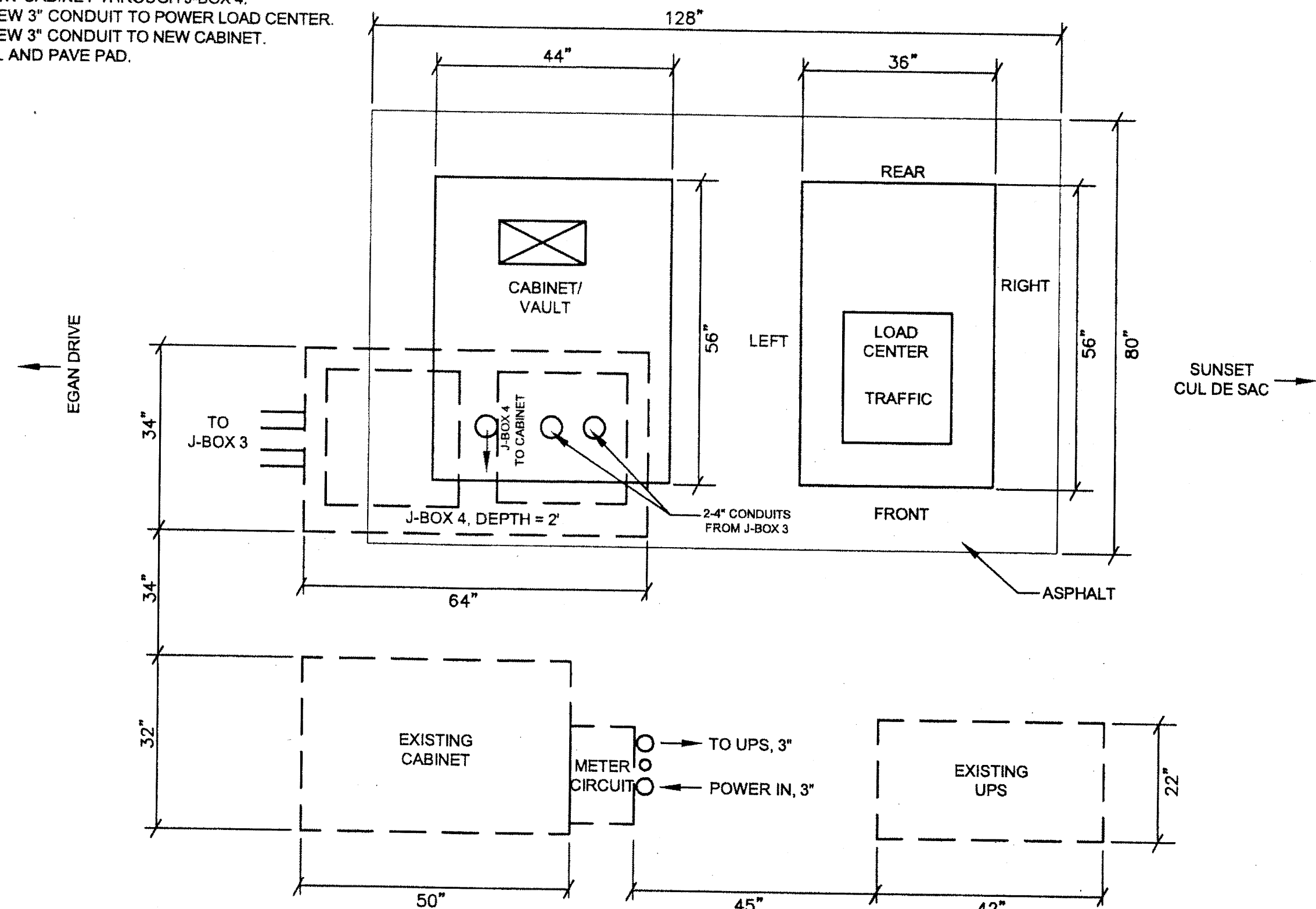
**EGAN DR & RIVERSIDE DR WIRING DIAGRAM**

PROJECT DESIGNATION  
**STP - 0003(136)**

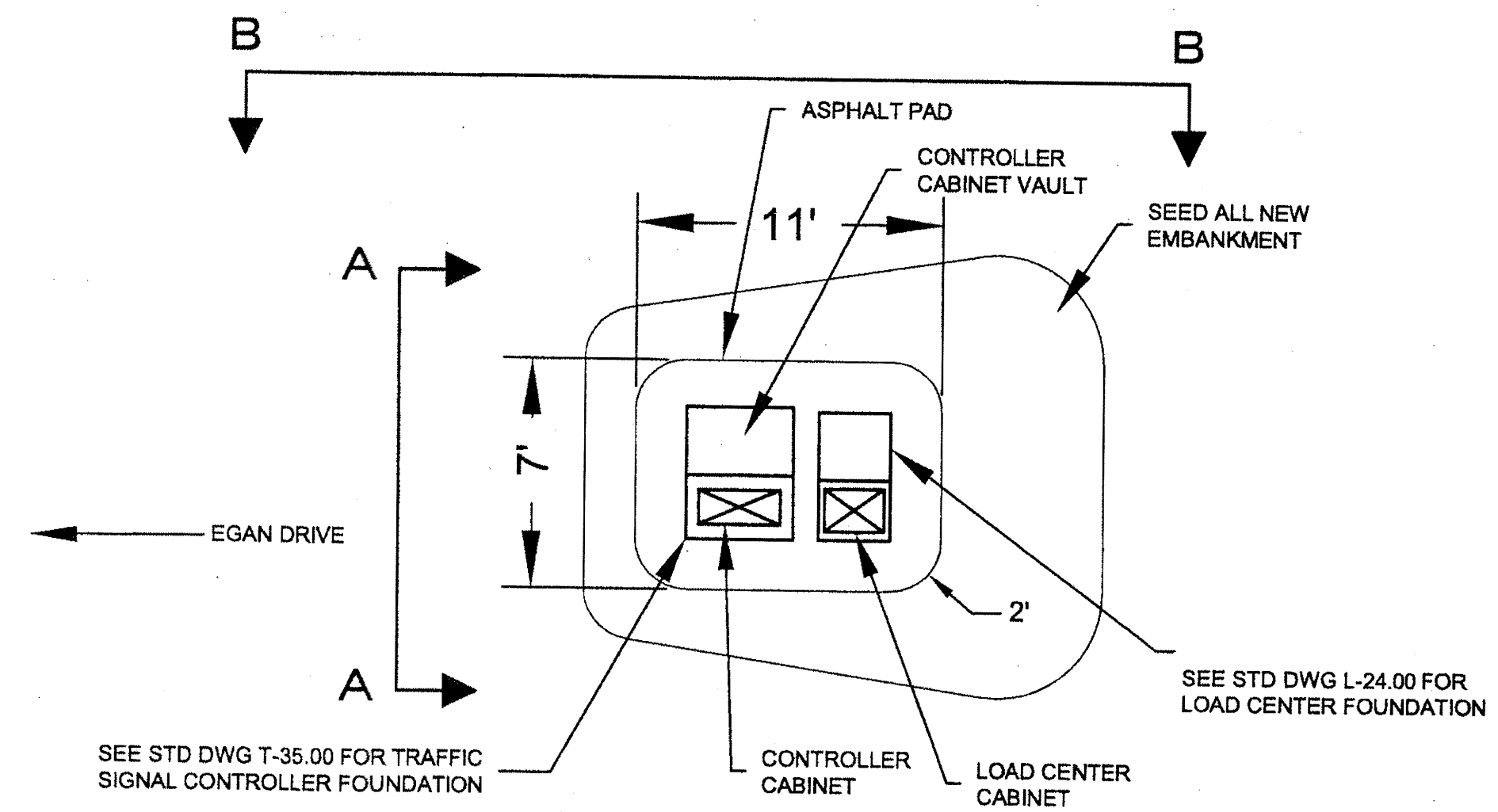
STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
Q7	23

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

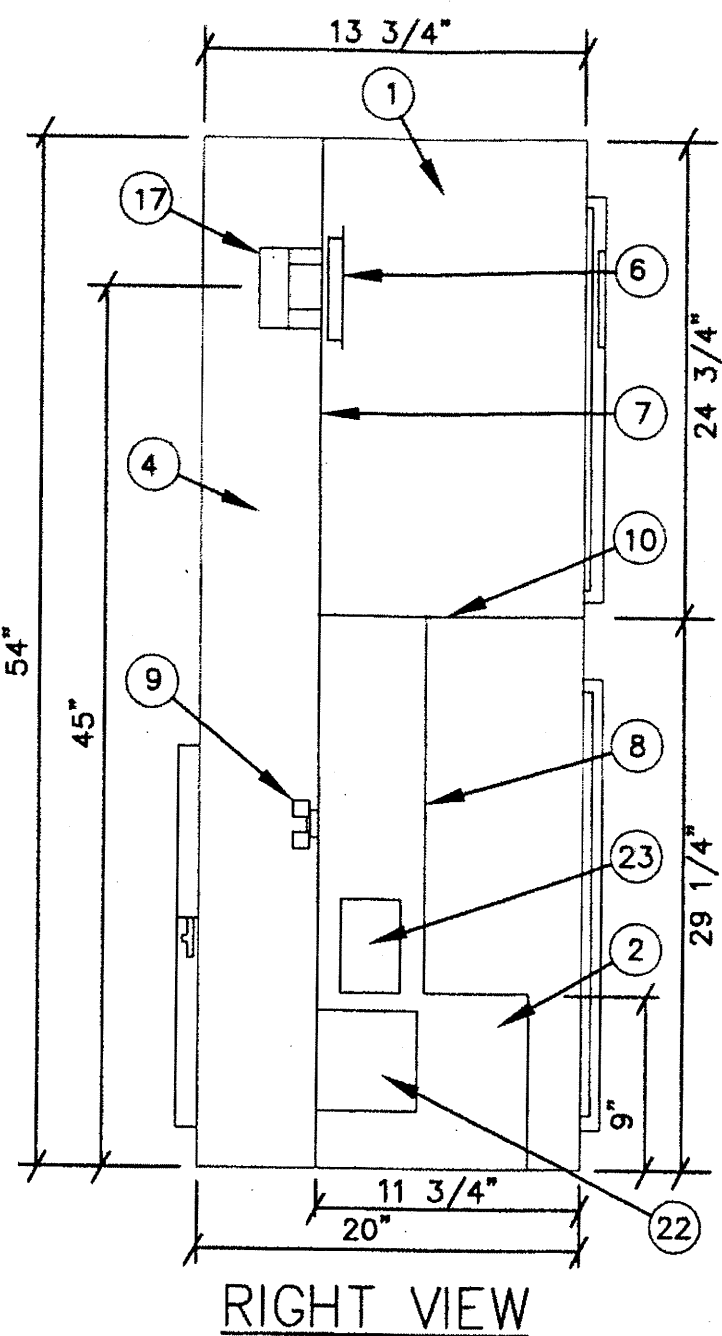
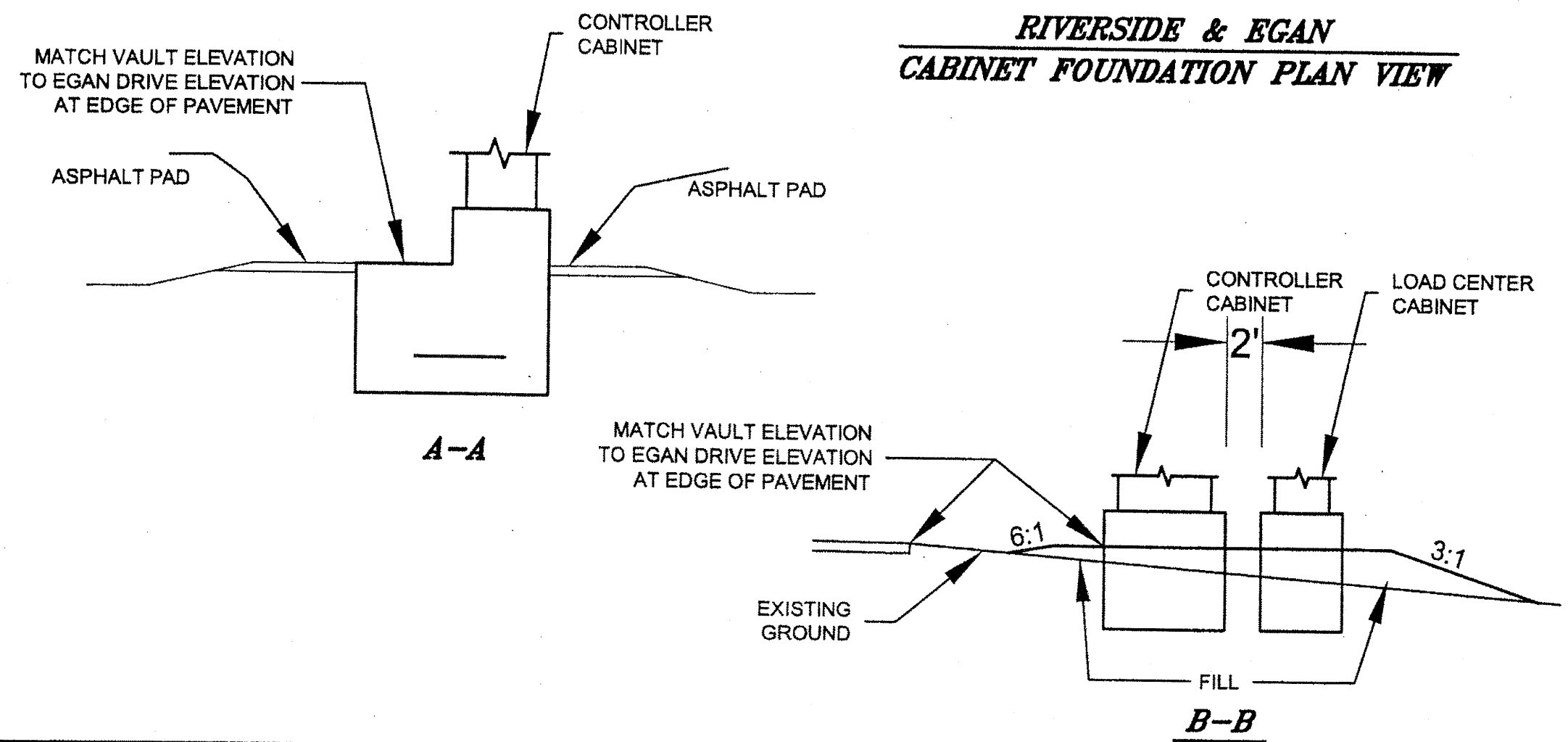
- NOTES:  
 1. BREAK J-BOX 4 CONCRETE STRUCTURE.  
 2. PLACE NEW CABINET/VAULT OVER J-BOX 4.  
 3. POWER NEW CABINET THROUGH J-BOX 4.  
 4. INSTALL NEW 3" CONDUIT TO POWER LOAD CENTER.  
 5. INSTALL NEW 3" CONDUIT TO NEW CABINET.  
 6. PLACE FILL AND PAVE PAD.



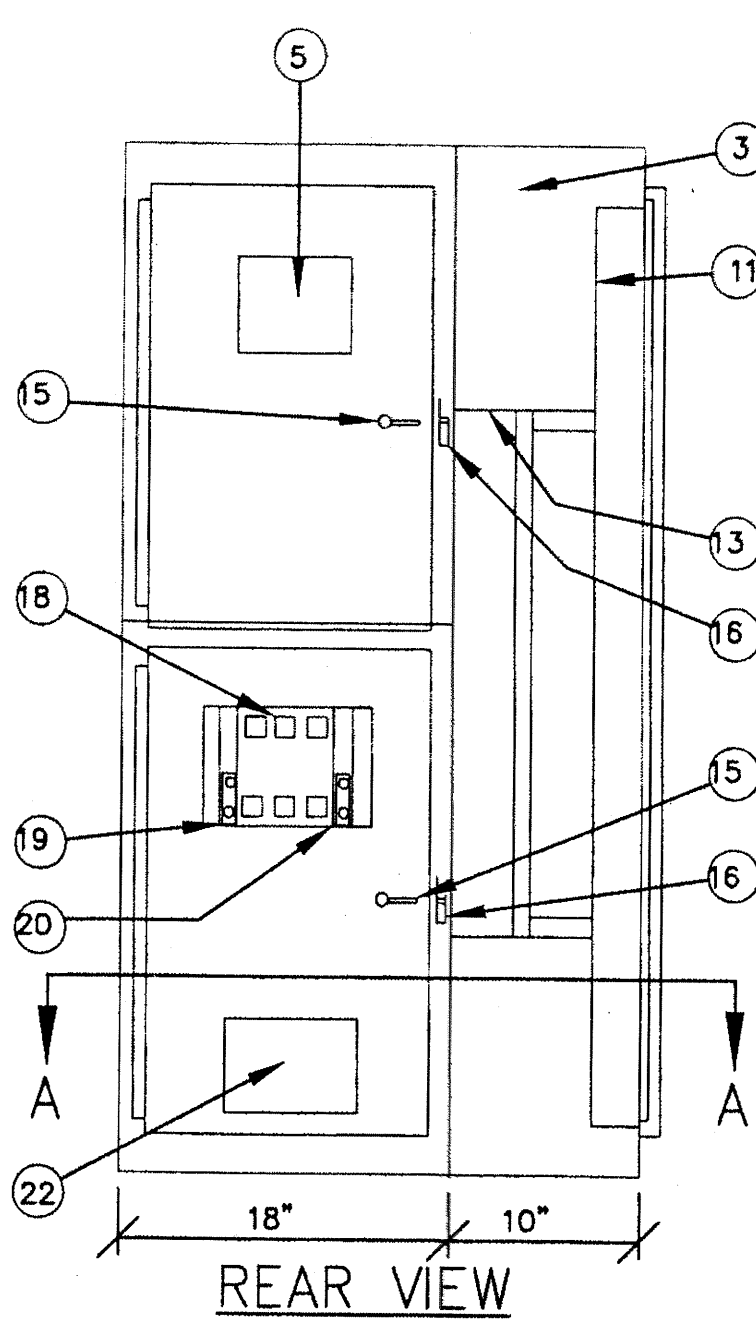
**RIVERSIDE & EGAN  
 CABINET CONSTRUCTION DETAILS**



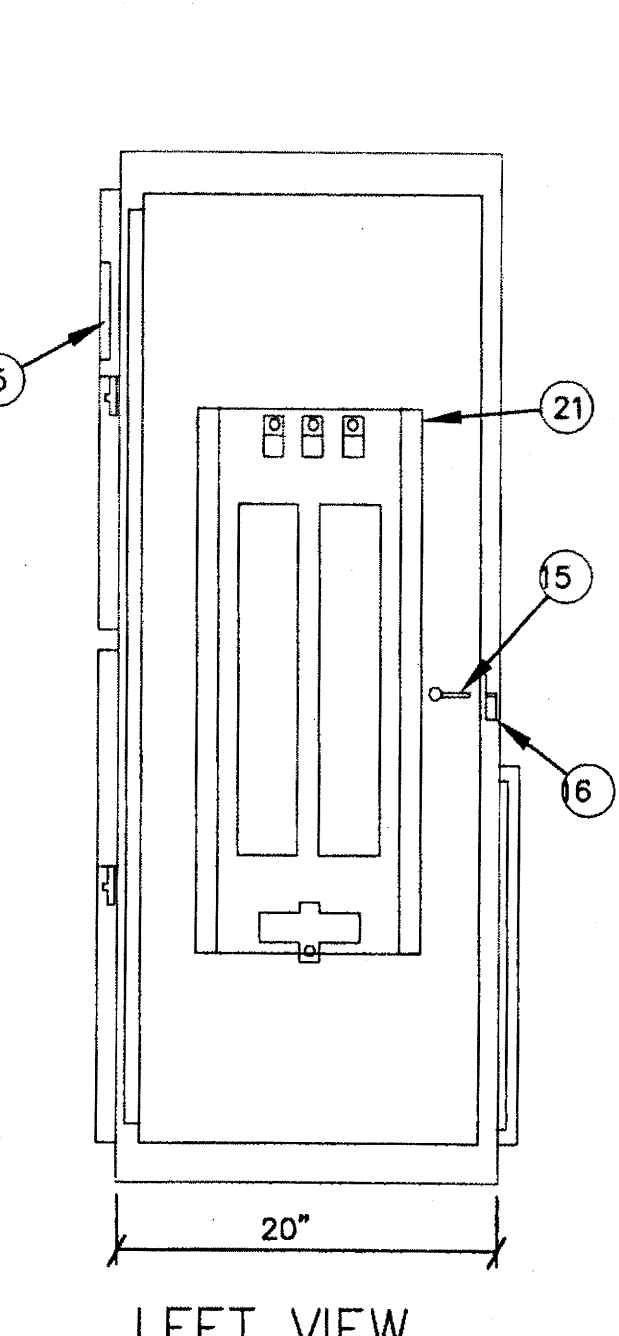
**RIVERSIDE & EGAN  
 CABINET FOUNDATION PLAN VIEW**



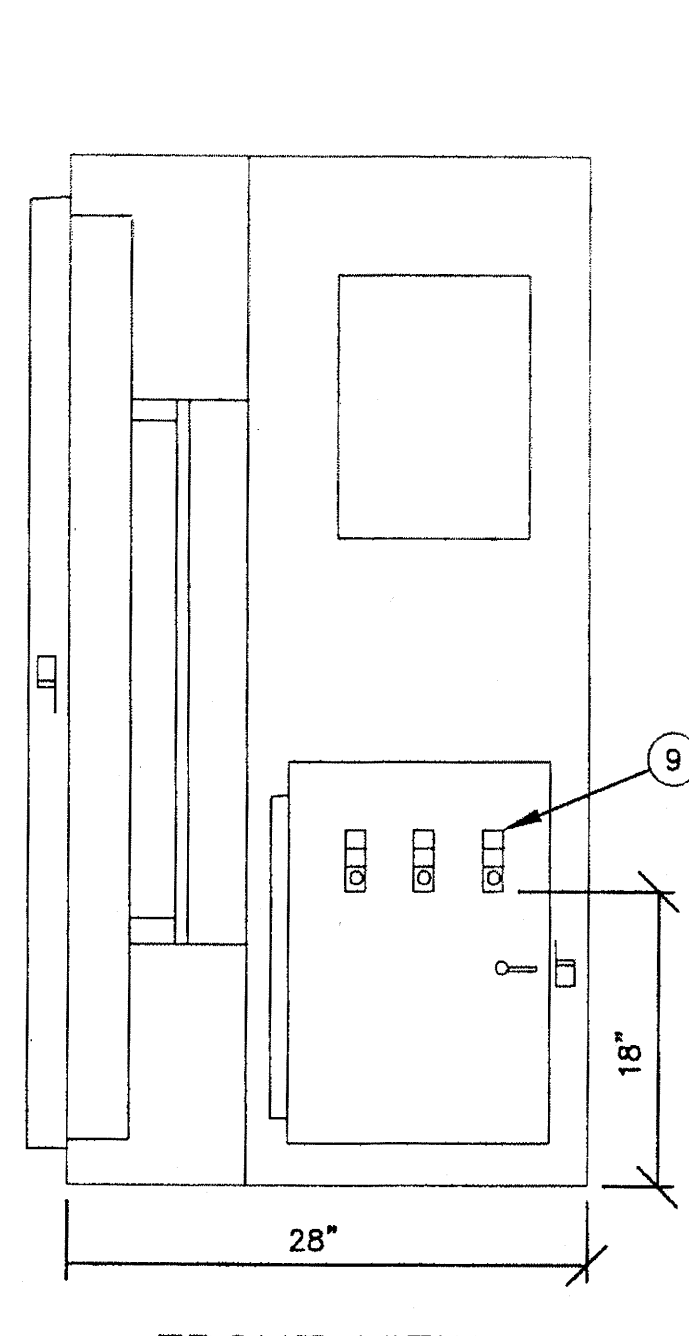
**RIGHT VIEW**



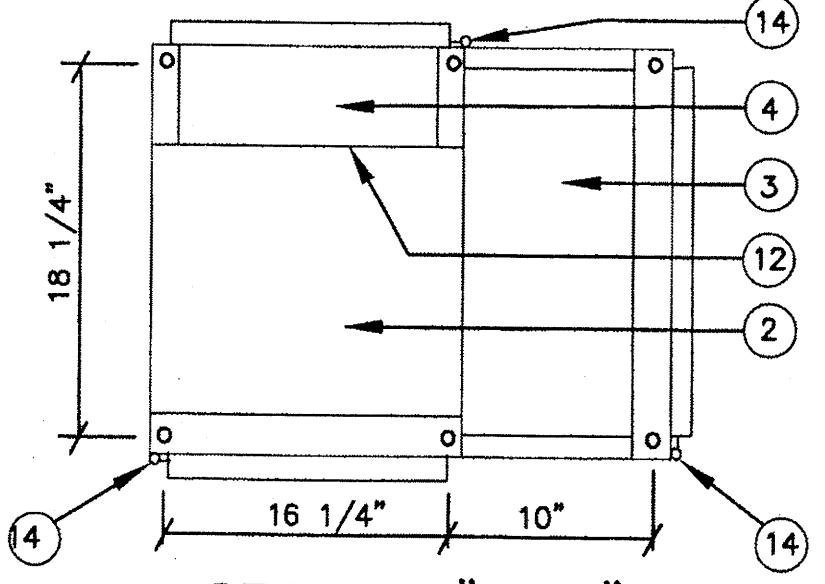
**REAR VIEW**



**LEFT VIEW**



**FRONT VIEW**

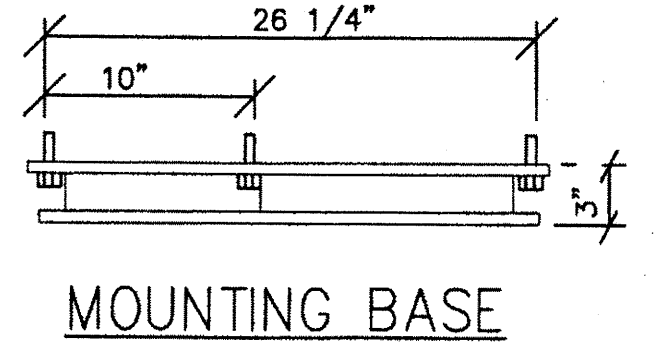


**SECTION "A-A"**

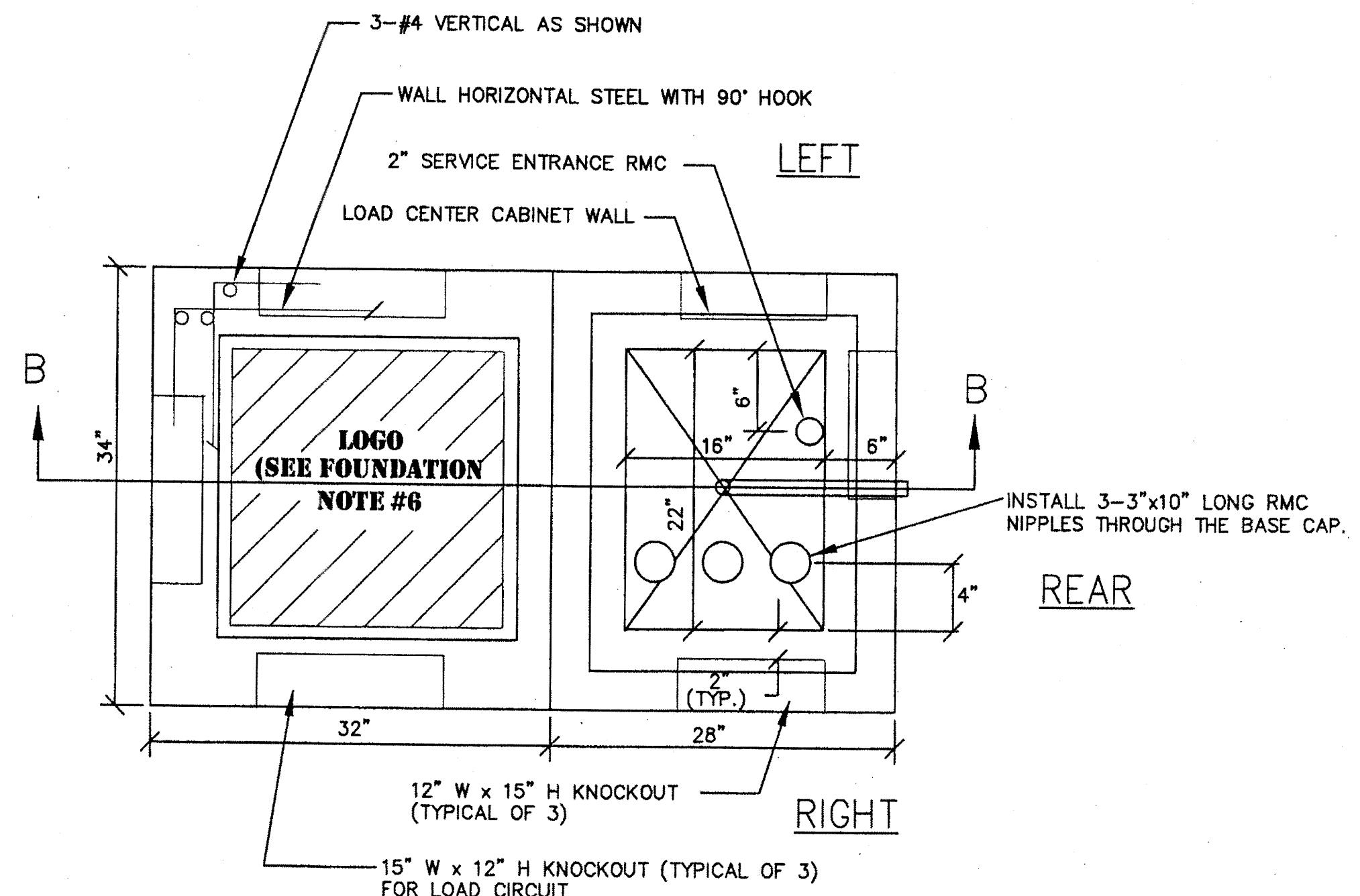
**TYPE 1 LOAD CENTER CABINET SECTION / ELEVATION**

- EQUIPMENT LEGEND**
- METER SECTION
  - LOAD SECTION (MAIN)
  - LOAD SECTION (DISTRIBUTION)
  - SERVICE PULL SECTION
  - METER READING WINDOW
  - METER SOCKET COVER
  - TEST SECTION COVER
  - DEAD FRONT
  - UTILITY LANDING LUGS
  - METER SECTION BARRIER
  - PANEL BOARD DEADFRONT
  - EQUIPMENT CHASSIS

- MOUNTING PAN
- STAINLESS STEEL PIN HINGE
- COIN LATCH
- HASP FOR PADLOCK
- METER SOCKET KIT ASS'Y.
- MAIN BREAKER(S)
- NEUTRAL BAR
- GROUND BAR
- PANEL BOARD INTERIOR
- ALTERNATE CONTACTOR LOCATION
- CABLE OPENING



**MOUNTING BASE**



**VIEW "A-A"  
 (PLAN VIEW)**

**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

DETAILS.DWG

DIONISIO, CHRISTOPHER J (DOT)  
 TAB: Q8 Friday, November 06, 2009 11:01:46

ADDENDUM NUMBER  
 2

ATTACHMENT NUMBER  
 10

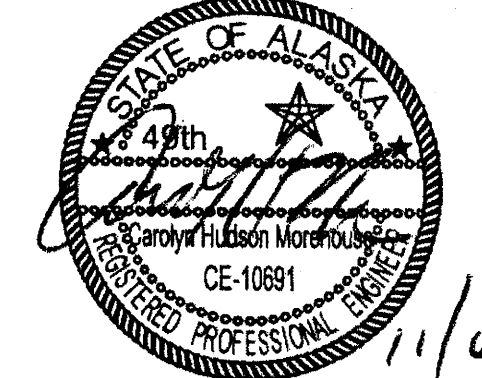
RECORD OF REVISIONS

No.	DATE	DESCRIPTION

**JUNEAU AREAWIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057**

**EGAN DR & RIVERSIDE DR  
 DETAILS**

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

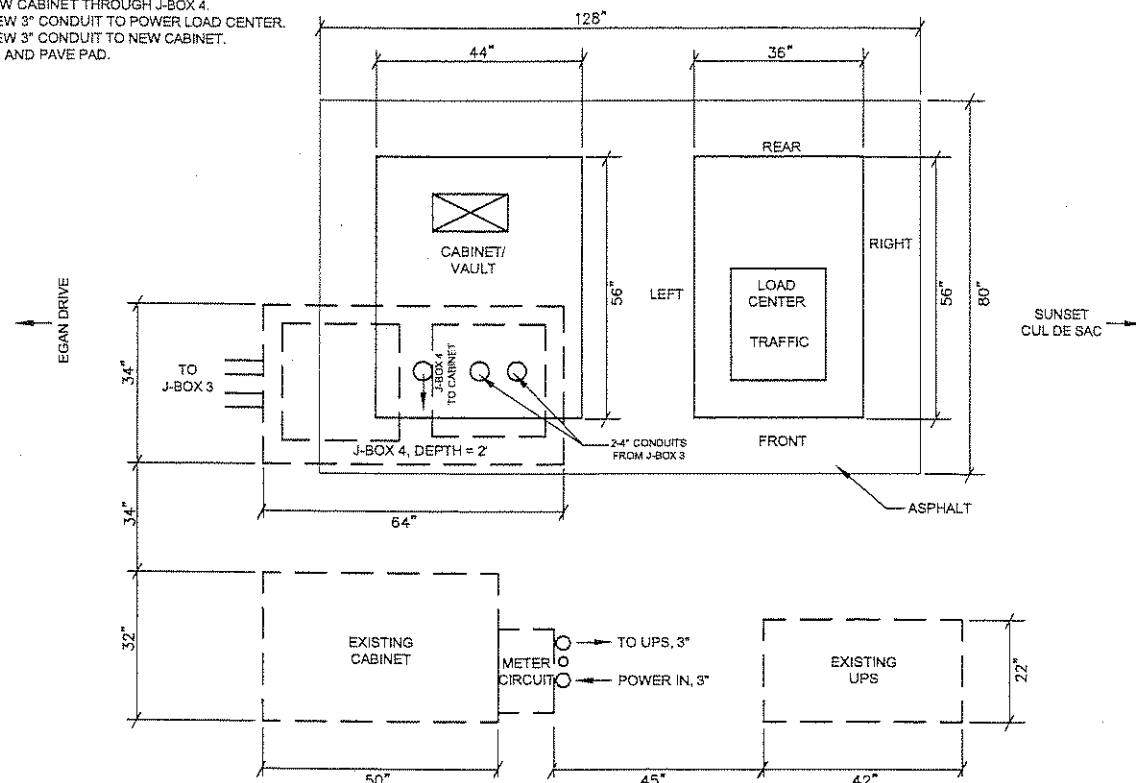
**EGAN DR & RIVERSIDE DR  
 DETAILS**

PROJECT DESIGNATION  
**STP - 0003(136)**

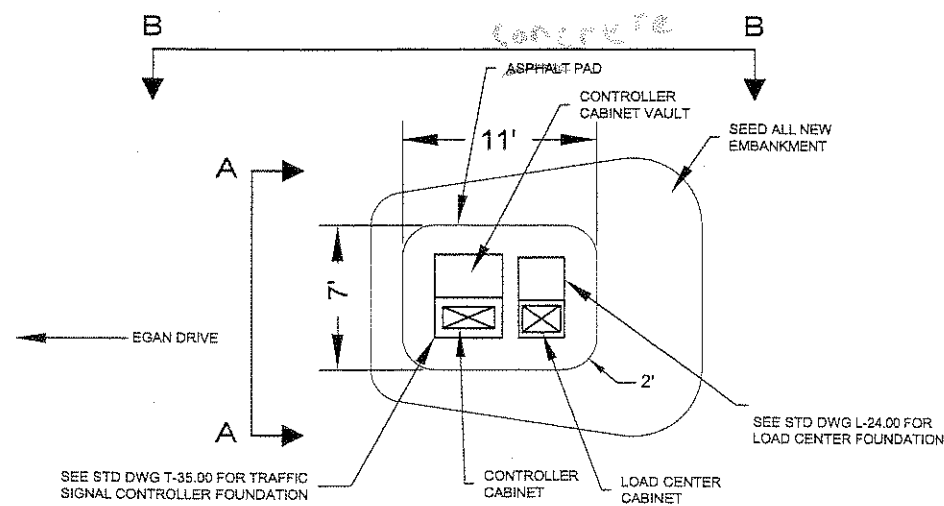
STATE	YEAR
<b>ALASKA</b>	<b>2009</b>

SHEET NUMBER	TOTAL SHEETS
<b>Q8</b>	<b>23</b>

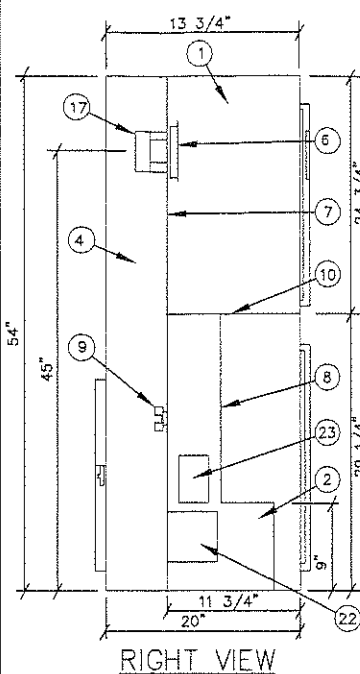
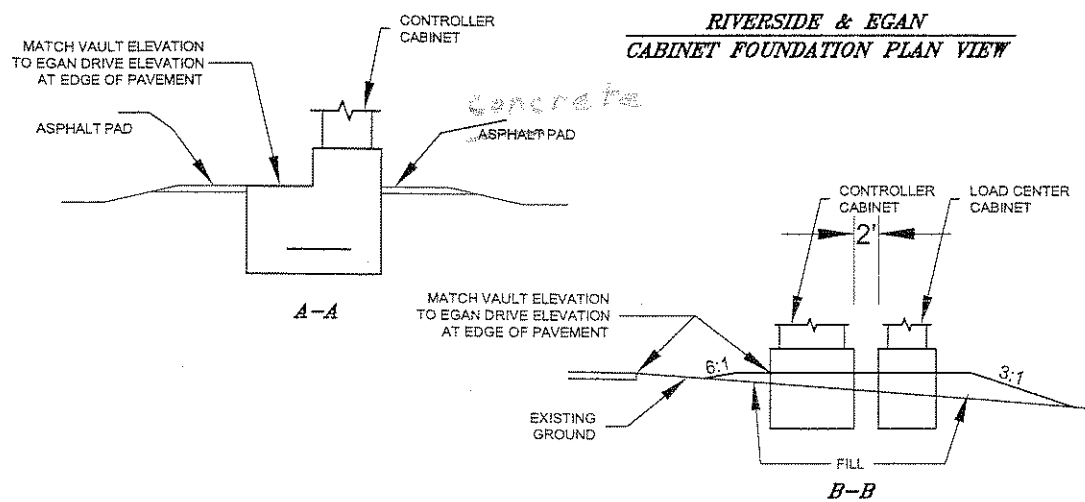
- NOTES:  
 1. BREAK J-BOX 4 CONCRETE STRUCTURE.  
 2. PLACE NEW CABINET/VAULT OVER J-BOX 4.  
 3. POWER NEW CABINET THROUGH J-BOX 4.  
 4. INSTALL NEW 3" CONDUIT TO POWER LOAD CENTER.  
 5. INSTALL NEW 3" CONDUIT TO NEW CABINET.  
 6. PLACE FILL AND PAVE PAD.



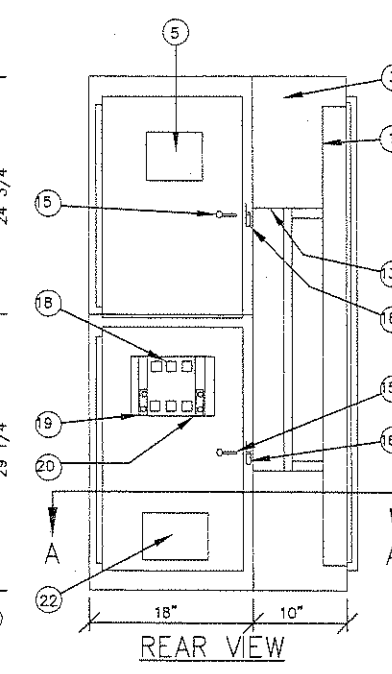
**RIVERSIDE & EGAN  
 CABINET CONSTRUCTION DETAILS**



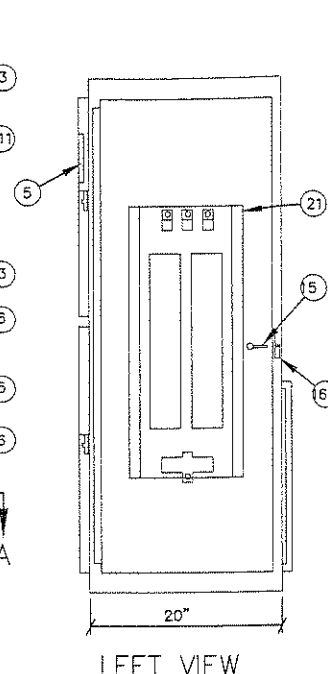
**RIVERSIDE & EGAN  
 CABINET FOUNDATION PLAN VIEW**



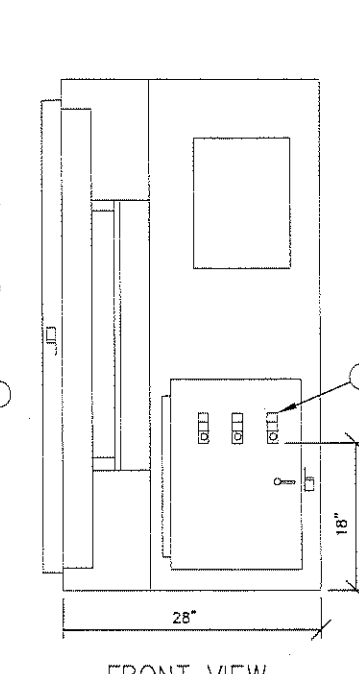
**RIGHT VIEW**



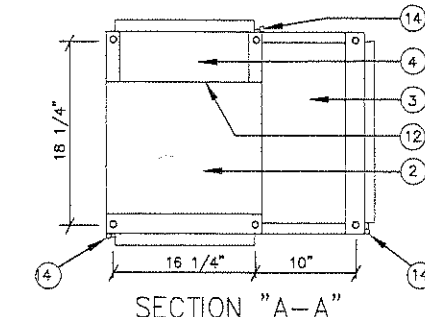
**REAR VIEW**



**LEFT VIEW**



**FRONT VIEW**



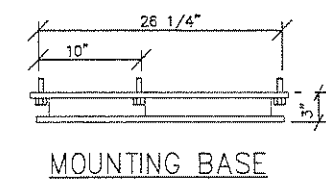
**SECTION "A-A"**

**TYPE 1 LOAD CENTER CABINET SECTION / ELEVATION**

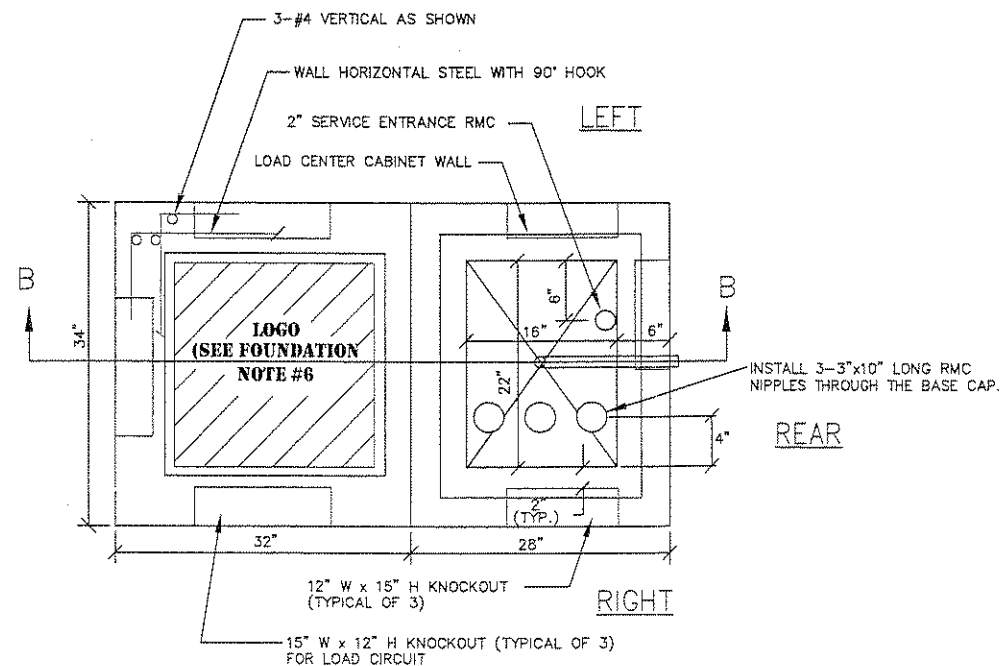
**EQUIPMENT LEGEND**

1. METER SECTION
2. LOAD SECTION (MAIN)
3. LOAD SECTION (DISTRIBUTION)
4. SERVICE PULL SECTION
5. METER READING WINDOW
6. METER SOCKET COVER
7. TEST SECTION COVER
8. DEAD FRONT
9. UTILITY LANDING LUGS
10. METER SECTION BARRIER
11. PANEL BOARD DEADFRONT
12. EQUIPMENT CHASSIS

13. MOUNTING PAN
14. STAINLESS STEEL PIN HINGE
15. COIN LATCH
16. HASP FOR PADLOCK
17. METER SOCKET KIT ASS'Y.
18. MAIN BREAKER(S)
19. NEUTRAL BAR
20. GROUND BAR
21. PANEL BOARD INTERIOR
22. ALTERNATE CONTACTOR LOCATION
23. CABLE OPENING



**MOUNTING BASE**



**VIEW "A-A"  
 (PLAN VIEW)**

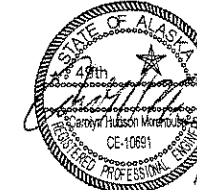
**DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS**

ADDENDUM NUMBER		
2		
ATTACHMENT NUMBER		
10		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

**JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057**

**EGAN DR & RIVERSIDE DR  
 DETAILS**

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

**EGAN DR & RIVERSIDE DR  
 DETAILS**

PROJECT DESIGNATION

**STP - 0003(136)**

STATE YEAR

**ALASKA 2009**

SHEET NUMBER TOTAL SHEETS

**Q8 23**

**MAJOR WORK ITEMS AT THIS INTERSECTION**

**BASIC BID**

1. INSTALL A NEW EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLER IN THE TRAFFIC SIGNAL CABINET THAT MEETS THE REQUIREMENTS DETAILED IN SPECIAL PROVISION 740-2.10.
2. INSTALL A POINT-TO-POINT ETHERNET INTERFACE UNIT AS DESCRIBED IN SPECIAL PROVISION 740-2.13 (A).

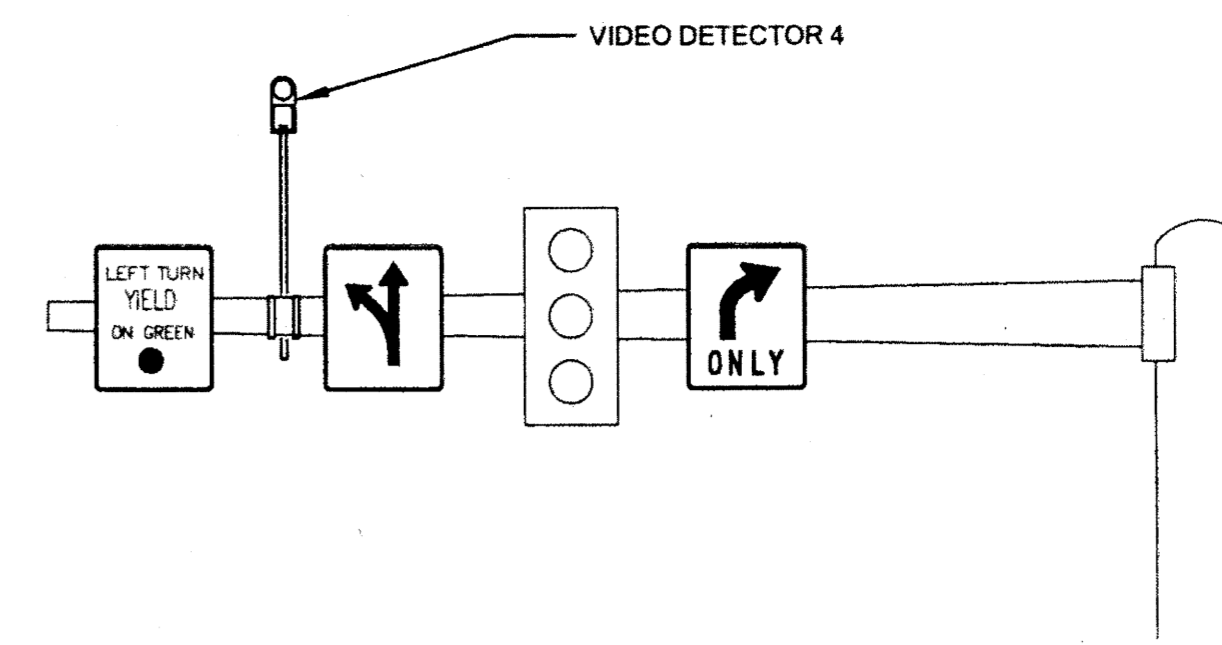
**MAJOR WORK ITEMS AT THIS INTERSECTION**

**ALTERNATE A**

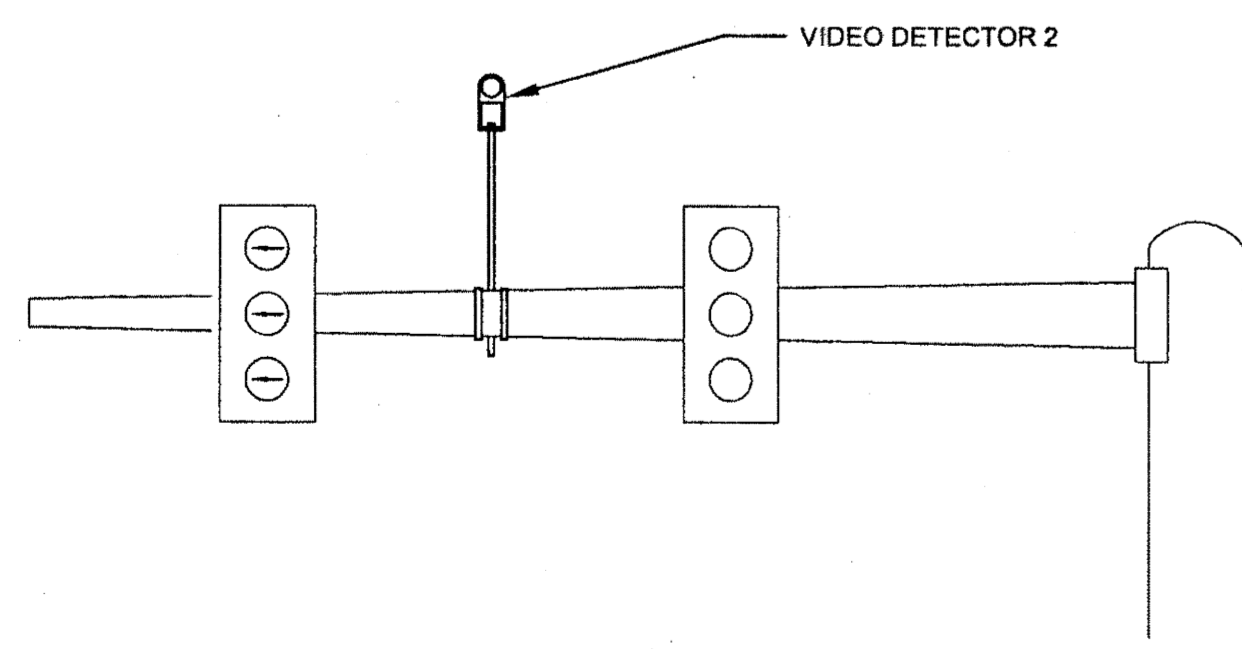
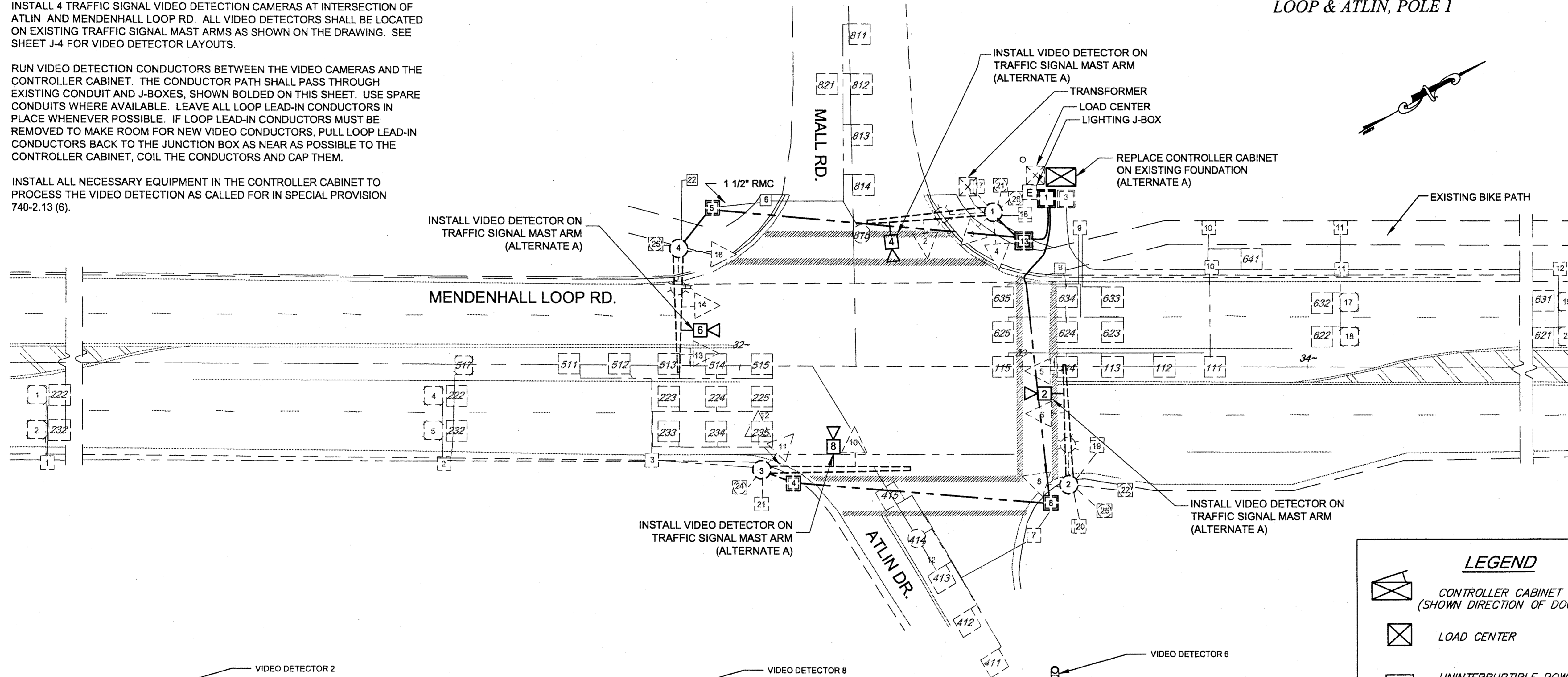
1. REMOVE THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINET AND INSTALL A NEW TRAFFIC SIGNAL CONTROLLER CABINET ON THE EXISTING FOUNDATION.
2. INSTALL 4 TRAFFIC SIGNAL VIDEO DETECTION CAMERAS AT INTERSECTION OF ATLIN AND MENDENHALL LOOP RD. ALL VIDEO DETECTORS SHALL BE LOCATED ON EXISTING TRAFFIC SIGNAL MAST ARMS AS SHOWN ON THE DRAWING. SEE SHEET J-4 FOR VIDEO DETECTOR LAYOUTS.
3. RUN VIDEO DETECTION CONDUCTORS BETWEEN THE VIDEO CAMERAS AND THE CONTROLLER CABINET. THE CONDUCTOR PATH SHALL PASS THROUGH EXISTING CONDUIT AND J-BOXES, SHOWN BOLDED ON THIS SHEET. USE SPARE CONDUITS WHERE AVAILABLE. LEAVE ALL LOOP LEAD-IN CONDUCTORS IN PLACE WHENEVER POSSIBLE. IF LOOP LEAD-IN CONDUCTORS MUST BE REMOVED TO MAKE ROOM FOR NEW VIDEO CONDUCTORS, PULL LOOP LEAD-IN CONDUCTORS BACK TO THE JUNCTION BOX AS NEAR AS POSSIBLE TO THE CONTROLLER CABINET, COIL THE CONDUCTORS AND CAP THEM.
4. INSTALL ALL NECESSARY EQUIPMENT IN THE CONTROLLER CABINET TO PROCESS THE VIDEO DETECTION AS CALLED FOR IN SPECIAL PROVISION 740-2.13 (6).

**NOTES:**

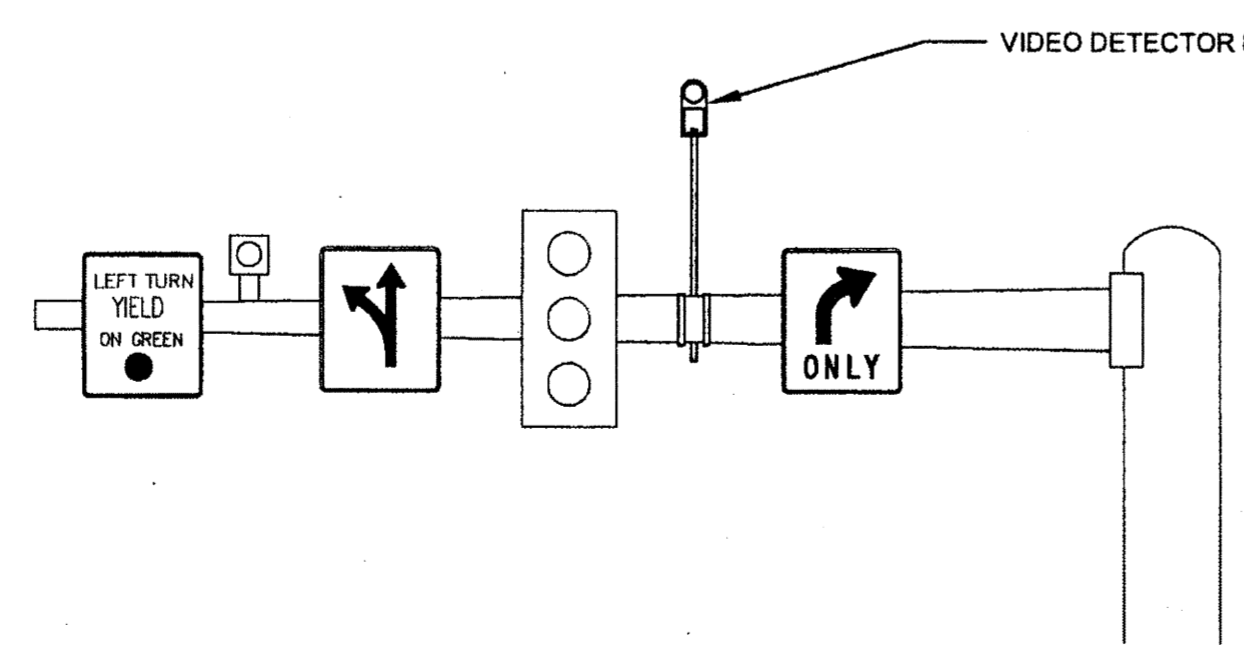
1. BOLDED CONDUIT, J-BOXES AND TRAFFIC SIGNALS ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM.
2. ALL TRAFFIC SIGNAL POLES SHOWN IN VIDEO DETECTOR INSTALLATION DETAILS ARE SCHEMATIC ONLY AND NOT TO SCALE.
3. SIGNS, SIGNAL HEADS AND OPTICOM DETECTORS ARE ALL EXISTING AND SHOWN FOR LAYOUT PURPOSES ONLY.
4. WHENEVER PENETRATING TRAFFIC SIGNAL POLES OR ELECTROLIERES, DRILL A 1" HOLE. PAINT THE PENETRATION HOLE WITH A COAT OF ZINC RICH PAINT AND INSERT A RUBBER GROMMET AROUND THE INSIDE OF THE HOLE.



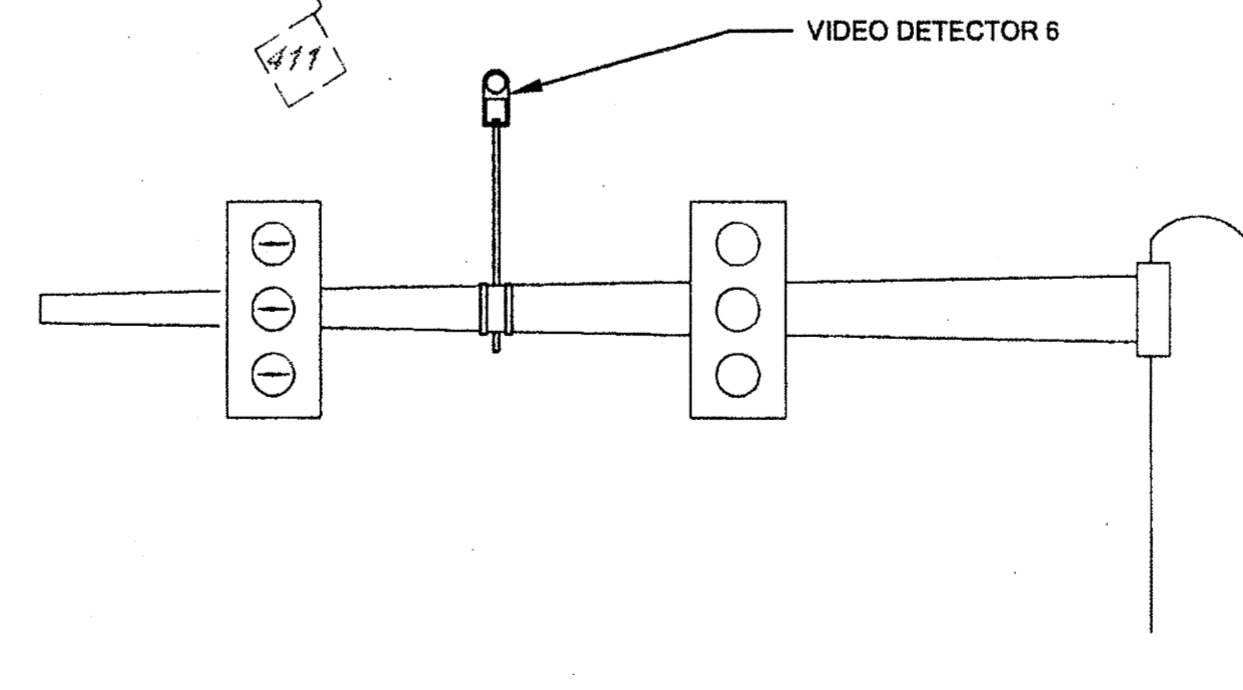
**VIDEO DETECTOR DETAIL  
LOOP & ATLIN, POLE 1**



**VIDEO DETECTOR DETAIL  
LOOP & ATLIN, POLE 2**

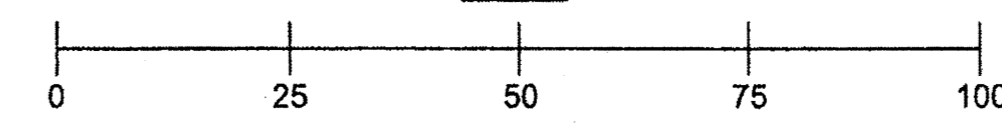


**VIDEO DETECTOR DETAIL  
LOOP & ATLIN, POLE 3**



**VIDEO DETECTOR DETAIL  
LOOP & ATLIN, POLE 4**

SCALE



**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

PATH: Q:\JNU\68057\TR\Q9-10 LOOP-ATLIN SIGNAL.DWG

DIONISIO, CHRISTOPHER J (DOT)  
TAB: Q9 Thursday, November 05, 2009 12:45

ADDENDUM NUMBER  
2

ATTACHMENT NUMBER  
11

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

**JUNEAU AREA WIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057**

**LOOP RD & ATLIN DR  
INTERSECTION**

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Area Wide Traffic  
Signal System Upgrade  
Project #68057

**LOOP RD & ATLIN DR  
INTERSECTION**

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
<b>ALASKA</b>	<b>2009</b>

SHEET NUMBER	TOTAL SHEETS
<b>Q9</b>	<b>23</b>

**MAJOR WORK ITEMS AT THIS INTERSECTION**

**BASIC BID**

1. INSTALL A NEW EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLER IN THE TRAFFIC SIGNAL CABINET THAT MEETS THE REQUIREMENTS DETAILED IN SPECIAL PROVISION 740-2.10.
2. INSTALL A POINT-TO-POINT ETHERNET INTERFACE UNIT AS DESCRIBED IN SPECIAL PROVISION 740-2.13 (A).

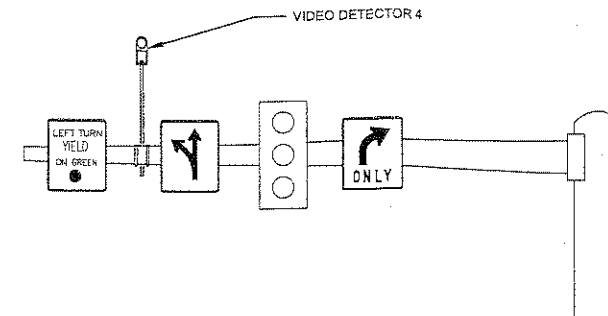
**MAJOR WORK ITEMS AT THIS INTERSECTION**

**ALTERNATE A**

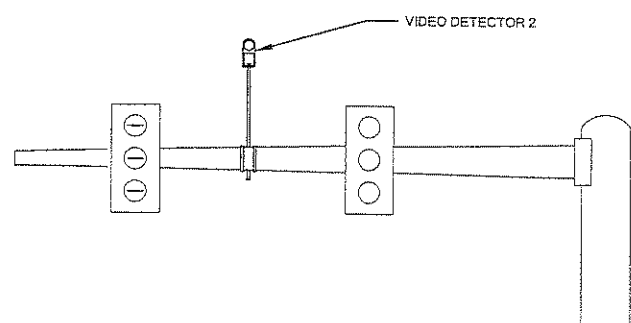
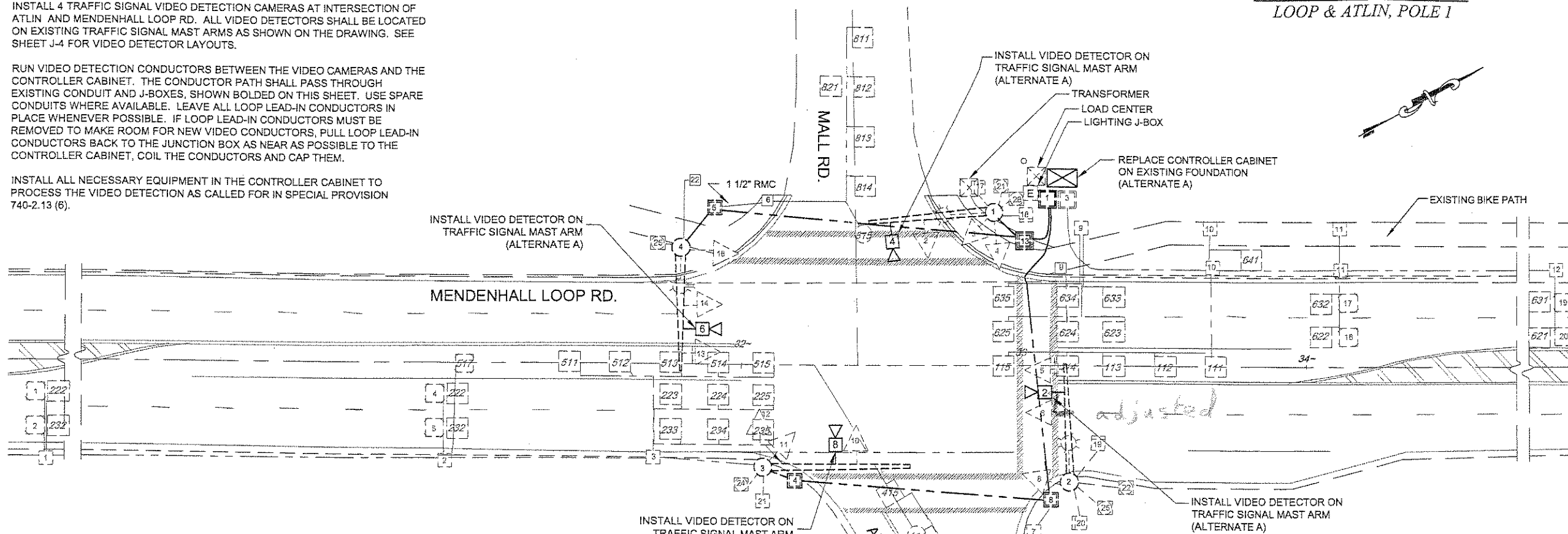
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4. INSTALL ALL NECESSARY EQUIPMENT IN THE CONTROLLER CABINET TO PROCESS THE VIDEO DETECTION AS CALLED FOR IN SPECIAL PROVISION 740-2.13 (6).

**NOTES:**

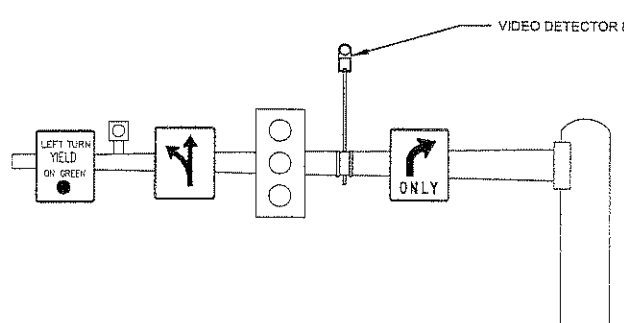
1. BOLDDED CONDUIT, J-BOXES AND TRAFFIC SIGNALS ARE EXISTING THAT SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM.
2. ALL TRAFFIC SIGNAL POLES SHOWN IN VIDEO DETECTOR INSTALLATION DETAILS ARE SCHEMATIC ONLY AND NOT TO SCALE.
3. SIGNS, SIGNAL HEADS AND OPTICOM DETECTORS ARE ALL EXISTING AND SHOWN FOR LAYOUT PURPOSES ONLY.
4. WHENEVER PENETRATING TRAFFIC SIGNAL POLES OR ELECTROLIERES, DRILL A 1" HOLE. PAINT THE PENETRATION HOLE WITH A COAT OF ZINC RICH PAINT AND INSERT A RUBBER GROMMET AROUND THE INSIDE OF THE HOLE.



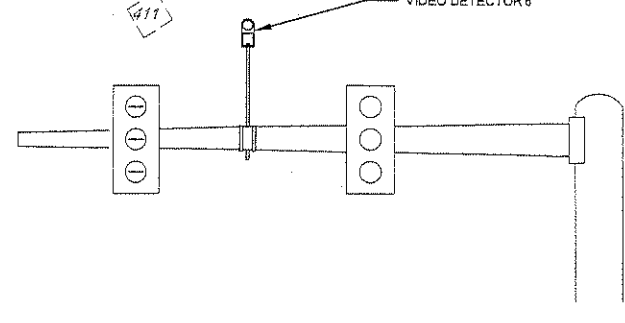
**VIDEO DETECTOR DETAIL  
LOOP & ATLIN, POLE 1**



**VIDEO DETECTOR DETAIL  
LOOP & ATLIN, POLE 2**

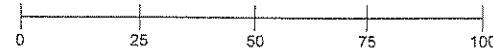


**VIDEO DETECTOR DETAIL  
LOOP & ATLIN, POLE 3**



**VIDEO DETECTOR DETAIL  
LOOP & ATLIN, POLE 4**

SCALE



**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE I A J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

PATH: Q:\JUNU168057\TRIQ9-10 LOOP-ATLIN SIGNAL.DWG

DIONISIO, CHRISTOPHER J (DOT)  
TAB: Q9 Thursday, November 05, 2009 12:45

ADDENDUM NUMBER  
2

ATTACHMENT NUMBER  
11

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057

LOOP RD & ATLIN DR  
INTERSECTION

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Area Wide Traffic  
Signal System Upgrade  
Project #68057

LOOP RD & ATLIN DR  
INTERSECTION

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
ALASKA	2009

SHEET NUMBER	TOTAL SHEETS
Q9	23

STEVENS, DAVID A (DOT)  
 TAB: Q10 Tuesday, October 06, 2009 12:41:39

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

LOOP RD & ATLIN DR  
 WIRING DIAGRAM

NOTES:

- ALL EXISTING ELECTRICAL SHOWN IS TO REMAIN UNLESS OTHERWISE NOTED.
- CONDUITS SHOULD HAVE EXCESS ROOM TO INSTALL NEW VIDEO DETECTION CABLES. CONDUIT AND CONDUCTOR SIZE AND QUANTITIES SHOWN ARE BASED OFF OF EXISTING DESIGN DRAWINGS AND MAY NOT REPRESENT ACTUAL FIELD CONDITIONS.
- BOLDED CONDUIT, J-BOXES AND TRAFFIC SIGNAL ARE EXISTING AND SHALL HAVE NEW CONDUCTORS INSTALLED IN THEM.

**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- 2" RIGID METAL CONDUIT
- OPTICOM DETECTOR
- 615 LOOP DETECTOR
- 215 BICYCLE LOOP DETECTOR
- 4 VIDEO DETECTOR

2-XX QUANTITY OF CABLES OF INDICATED TYPE

**LOW VOLTAGE SIGNAL CONDUCTOR**

LMR ANTENNA CABLE  
 1C #14: LOOP WIRES  
 2C: LOOP LEAD-IN OR PEDESTRIAN PUSH BUTTON MULTI-LOOP LEAD-IN  
 6PR: PROPRIETARY OPTICOM CABLE  
 3C #20: PROPRIETARY OPTICOM CABLE

**120 VOLT SIGNAL CONDUCTOR**

5C: PEDESTRIAN AND STANDARD SIGNAL HEADS  
 7C: 5 SECTION SIGNAL HEADS

**LIGHTING AND POWER CONDUCTOR**

3C#X: LIGHTING OR SIGNAL POWER

**VIDEO DETECTOR CABLE**

VDC VIDEO DETECTOR CABLE

CHECKED BY: C. MOREHOUSE

10/5/09

DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

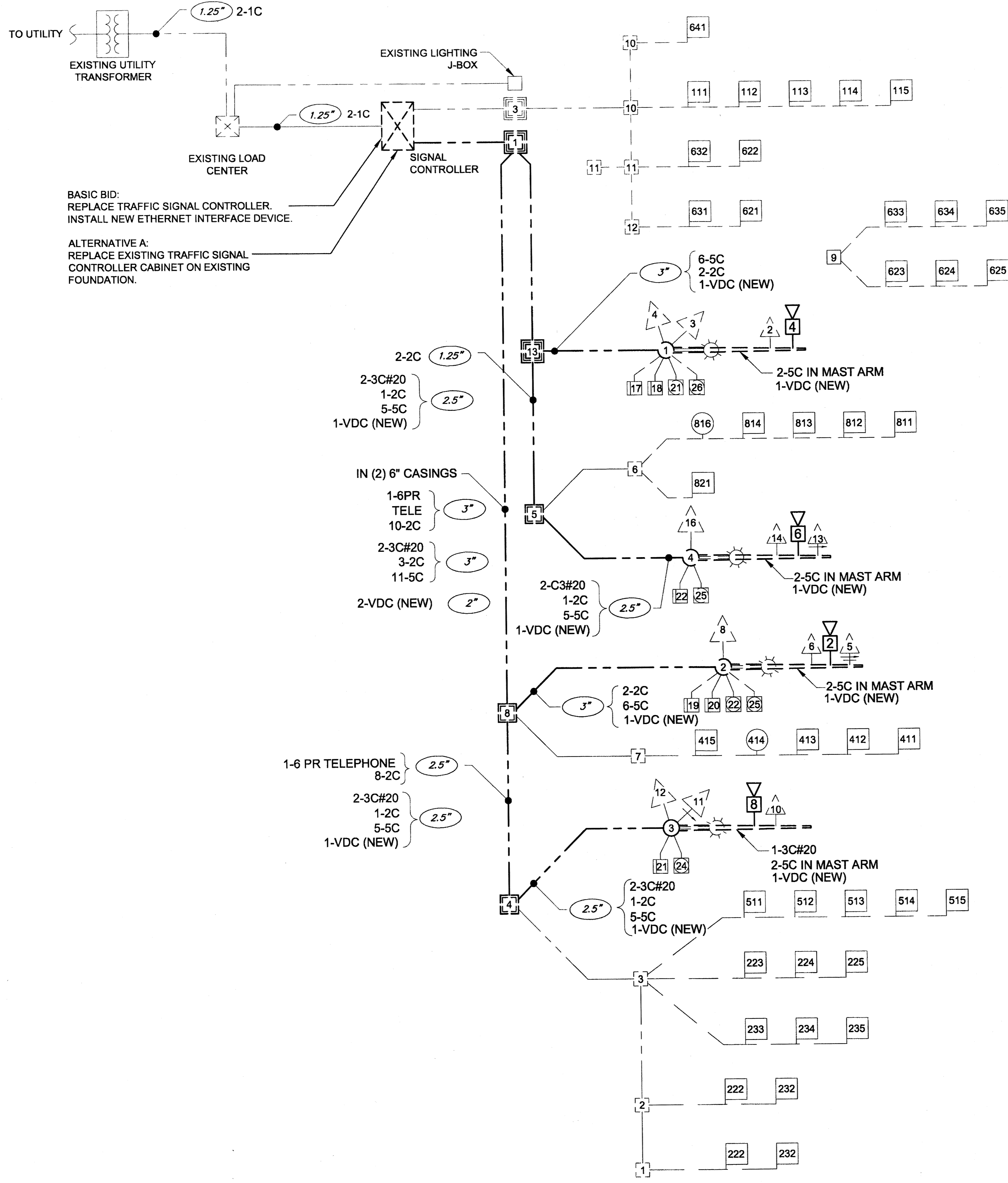
STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic Signal System Upgrade  
 Project #68057

**LOOP RD & ATLIN DR  
 WIRING DIAGRAM**

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
Q10	23



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

**MAJOR WORK ITEMS AT THIS INTERSECTION**

**BASIC BID**

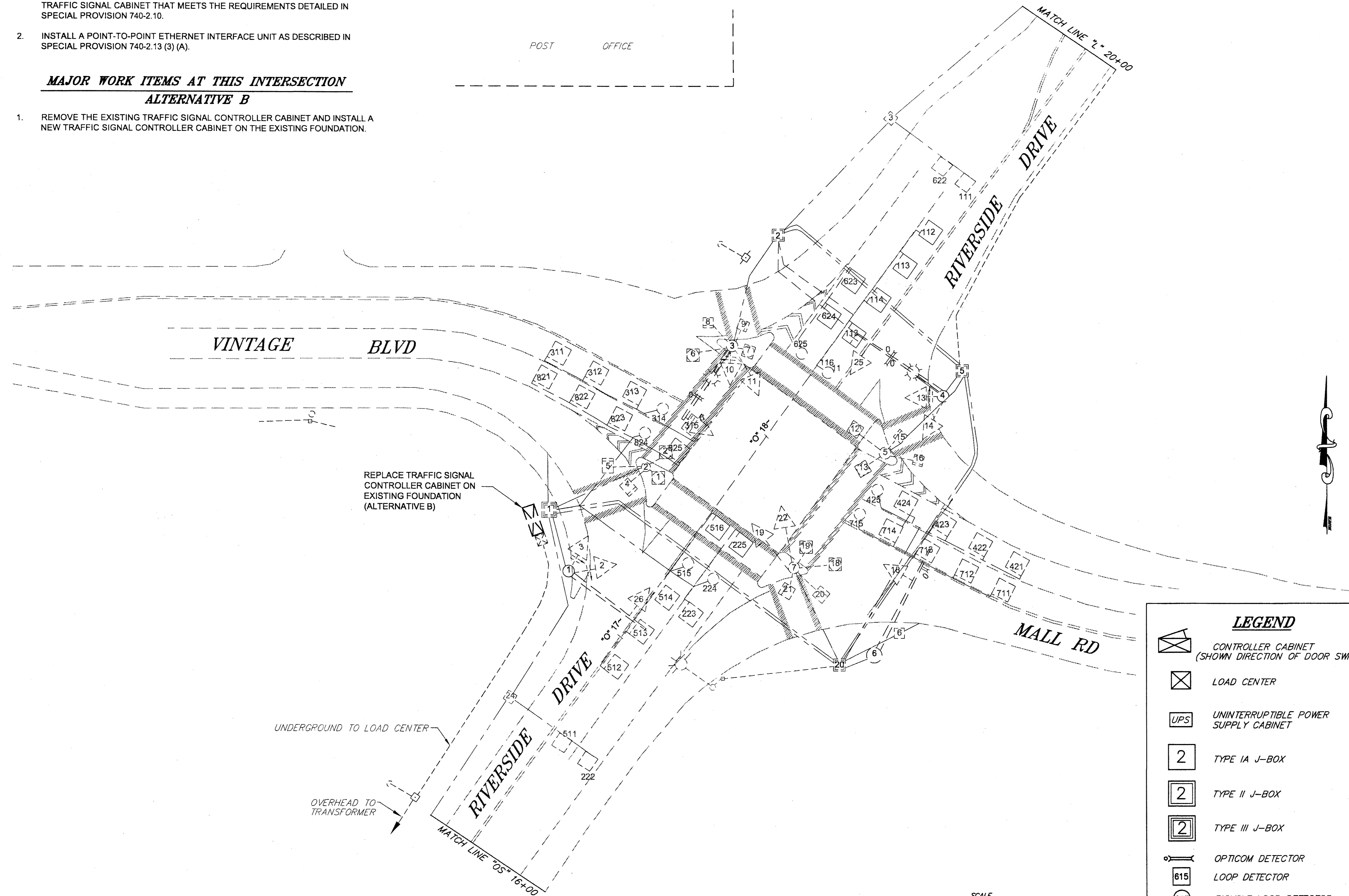
1. INSTALL A NEW EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLER IN THE TRAFFIC SIGNAL CABINET THAT MEETS THE REQUIREMENTS DETAILED IN SPECIAL PROVISION 740-2.10.
2. INSTALL A POINT-TO-POINT ETHERNET INTERFACE UNIT AS DESCRIBED IN SPECIAL PROVISION 740-2.13 (3) (A).

**MAJOR WORK ITEMS AT THIS INTERSECTION**

**ALTERNATIVE B**

1. REMOVE THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINET AND INSTALL A NEW TRAFFIC SIGNAL CONTROLLER CABINET ON THE EXISTING FOUNDATION.

POST OFFICE



REPLACE TRAFFIC SIGNAL CONTROLLER CABINET ON EXISTING FOUNDATION (ALTERNATIVE B)

UNDERGROUND TO LOAD CENTER

OVERHEAD TO TRANSFORMER

**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

PATH: Q:\JNU\68057\TRIQ11-12  
VINTAGE-RIVERSIDE SIGNAL.DWG

DIONISIO, CHRISTOPHER J (DOT)  
TAB: Q11 Thursday, November 05, 2009 12:49

ADDENDUM NUMBER  
**2**

ATTACHMENT NUMBER  
**12**

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057

RIVERSIDE DR & VINTAGE BLVD  
INTERSECTION

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Areawide Traffic  
Signal System Upgrade  
Project #68057

**RIVERSIDE DR & VINTAGE BLVD INTERSECTION**

PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
<b>ALASKA</b>	<b>2009</b>

SHEET NUMBER	TOTAL SHEETS
<b>Q11</b>	<b>23</b>

**MAJOR WORK ITEMS AT THIS INTERSECTION**

**BASIC BID**

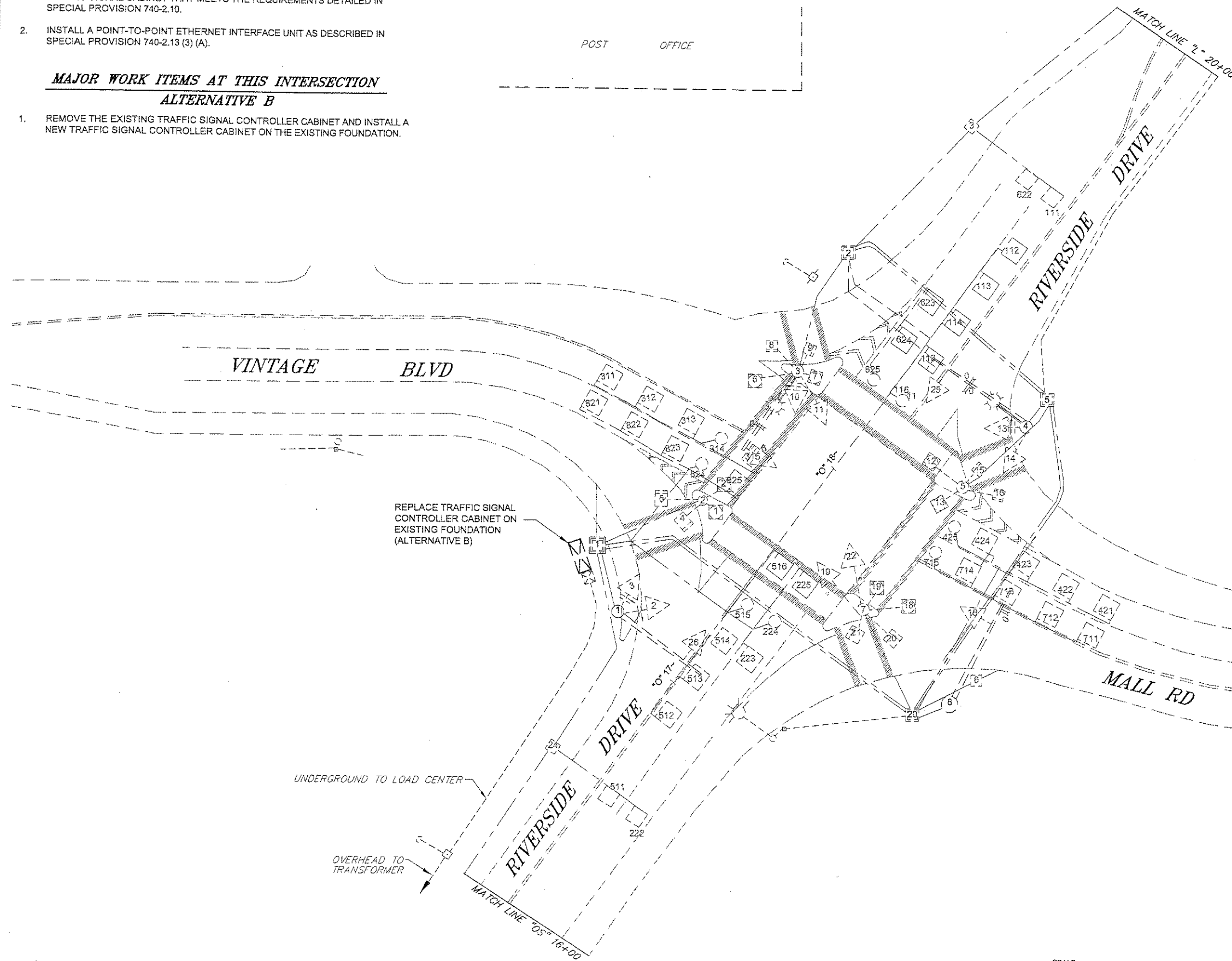
1. INSTALL A NEW EAGLE EPAC M52 TRAFFIC SIGNAL CONTROLLER IN THE TRAFFIC SIGNAL CABINET THAT MEETS THE REQUIREMENTS DETAILED IN SPECIAL PROVISION 740-2.10.
2. INSTALL A POINT-TO-POINT ETHERNET INTERFACE UNIT AS DESCRIBED IN SPECIAL PROVISION 740-2.13 (3) (A).

**MAJOR WORK ITEMS AT THIS INTERSECTION**

**ALTERNATIVE B**

1. REMOVE THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINET AND INSTALL A NEW TRAFFIC SIGNAL CONTROLLER CABINET ON THE EXISTING FOUNDATION.

POST OFFICE



**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR



PATH: Q:\JUNU\68057\TRIG11-12 VINTAGE-RIVERSIDE SIGNAL.DWG

DIONISIO, CHRISTOPHER J (DOT)  
 TAB: Q11 Thursday, November 05, 2009 12:49

ADDENDUM NUMBER  
2

ATTACHMENT NUMBER  
12

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JUNEAU AREAWIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

RIVERSIDE DR & VINTAGE BLVD  
 INTERSECTION

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic Signal System Upgrade  
 Project #68057

RIVERSIDE DR & VINTAGE BLVD INTERSECTION

PROJECT DESIGNATION  
**STP - 0003(136)**

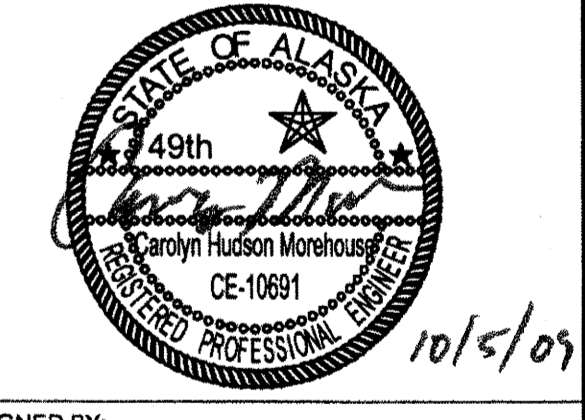
STATE	YEAR
ALASKA	2009

SHEET NUMBER	TOTAL SHEETS
Q11	23

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057  
 RIVERSIDE DR & VINTAGE BLVD  
 WIRING DIAGRAM

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

**RIVERSIDE DR & VINTAGE BLVD  
 WIRING DIAGRAM**

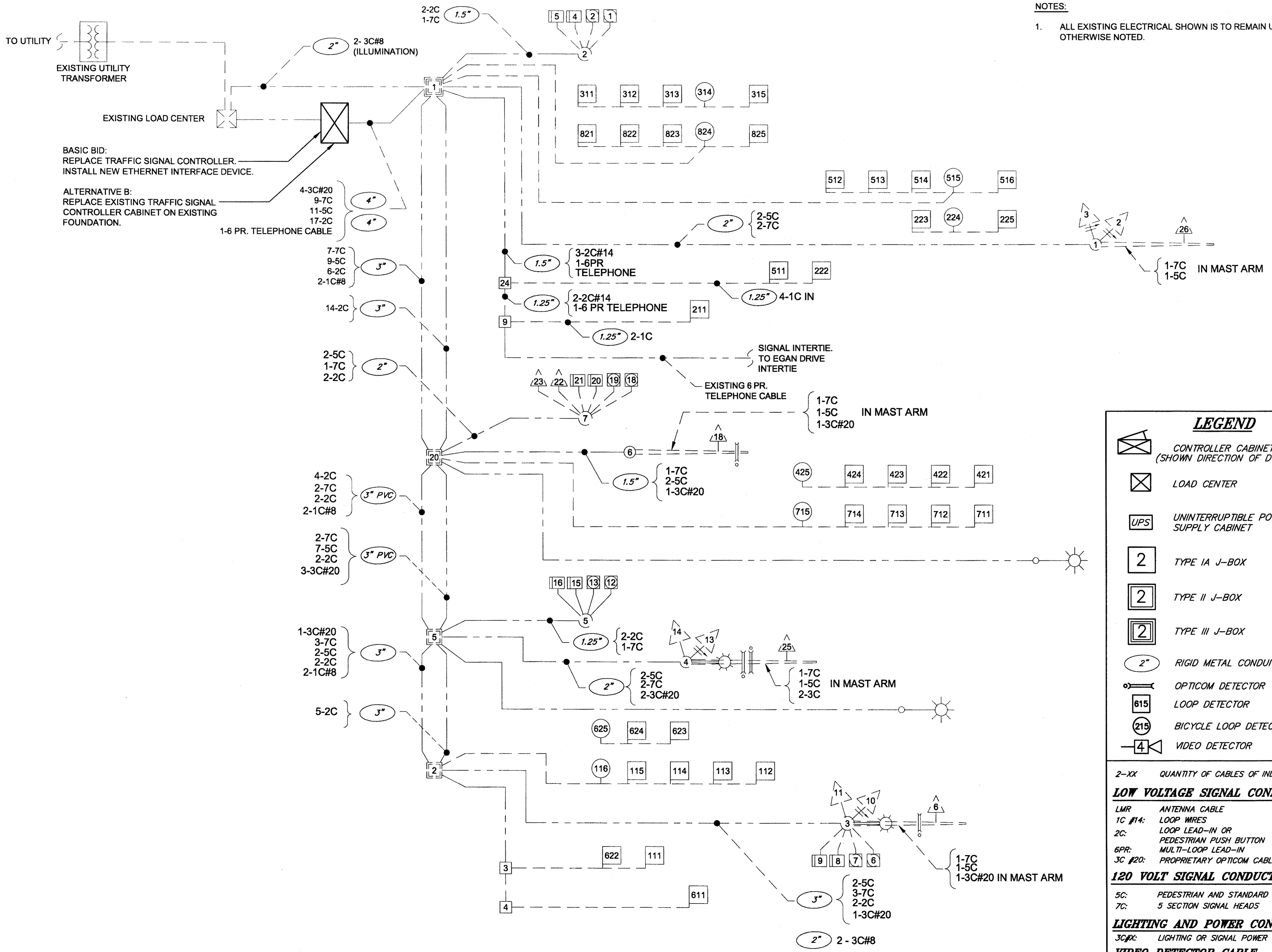
PROJECT DESIGNATION  
**STP - 0003(136)**

STATE	YEAR
<b>ALASKA</b>	<b>2009</b>

SHEET NUMBER	TOTAL SHEETS
<b>Q12</b>	<b>23</b>

**NOTES:**

- ALL EXISTING ELECTRICAL SHOWN IS TO REMAIN UNLESS OTHERWISE NOTED.



**BASIC BID:**  
 REPLACE TRAFFIC SIGNAL CONTROLLER.  
 INSTALL NEW ETHERNET INTERFACE DEVICE.

**ALTERNATIVE B:**  
 REPLACE EXISTING TRAFFIC SIGNAL  
 CONTROLLER CABINET ON EXISTING  
 FOUNDATION.

**LEGEND**

- CONTROLLER CABINET (SHOWN DIRECTION OF DOOR SWING)
- LOAD CENTER
- UNINTERRUPTIBLE POWER SUPPLY CABINET
- TYPE IA J-BOX
- TYPE II J-BOX
- TYPE III J-BOX
- 2" RIGID METAL CONDUIT
- OPTICOM DETECTOR
- LOOP DETECTOR
- BICYCLE LOOP DETECTOR
- VIDEO DETECTOR

2-XX QUANTITY OF CABLES OF INDICATED TYPE

**LOW VOLTAGE SIGNAL CONDUCTOR**

LMR ANTENNA CABLE  
 1C #14: LOOP WRES  
 2C: LOOP LEAD-IN OR PEDESTRIAN PUSH BUTTON  
 6PR: MULTI-LOOP LEAD-IN  
 3C #20: PROPRIETARY OPTICOM CABLE

**120 VOLT SIGNAL CONDUCTOR**

5C: PEDESTRIAN AND STANDARD SIGNAL HEADS  
 7C: 5 SECTION SIGNAL HEADS

**LIGHTING AND POWER CONDUCTOR**

3C#X: LIGHTING OR SIGNAL POWER

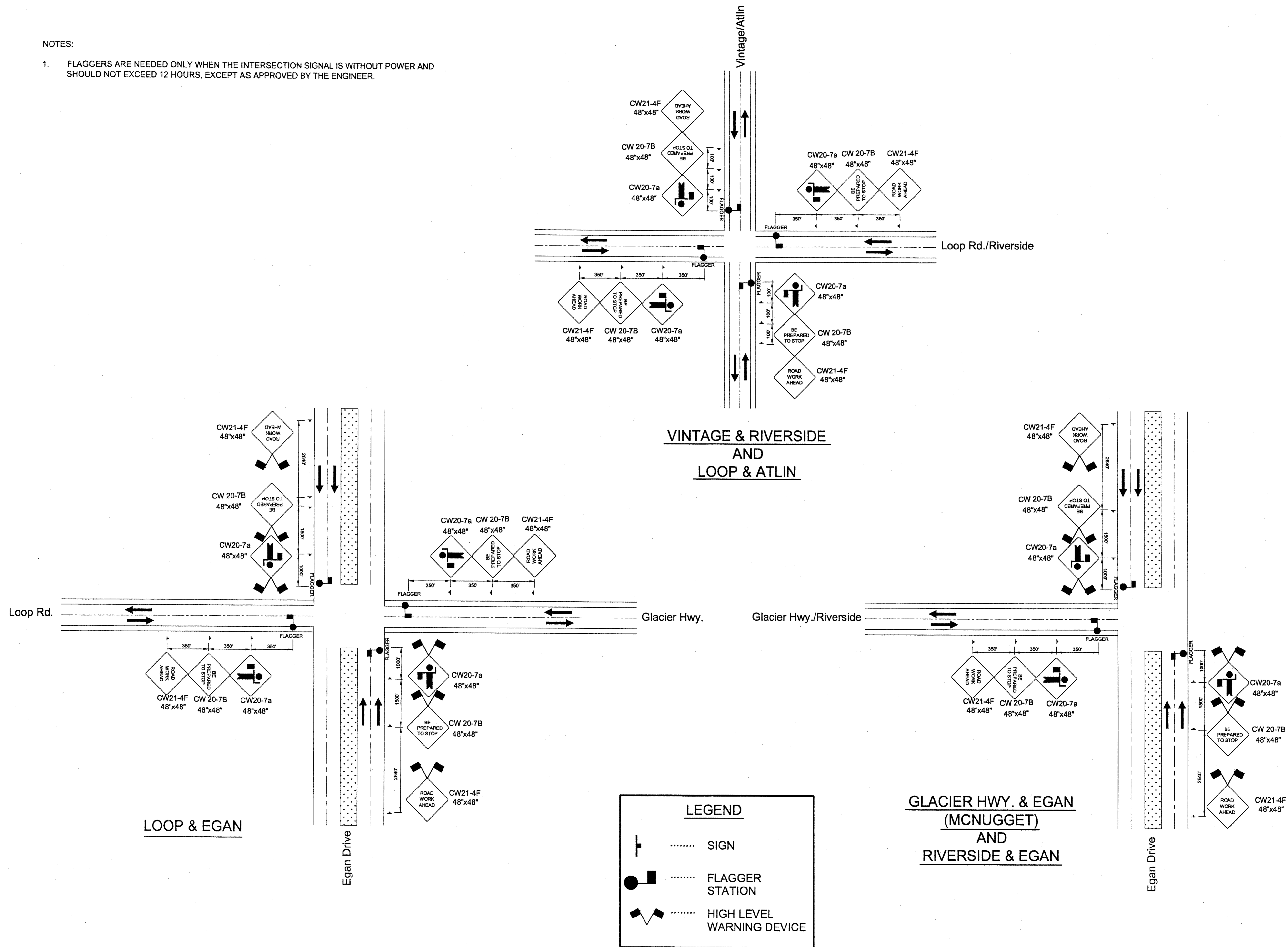
**VIDEO DETECTOR CABLE**

VDC VIDEO DETECTOR CABLE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

NOTES:

1. FLAGGERS ARE NEEDED ONLY WHEN THE INTERSECTION SIGNAL IS WITHOUT POWER AND SHOULD NOT EXCEED 12 HOURS, EXCEPT AS APPROVED BY THE ENGINEER.



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PREPARED BY: CHRISTOPHER J. DIONISIO  
 DIONISIO, CHRISTOPHER J (DOT)  
 TAB: S1 Thursday, November 05, 2009 12:52:33

ADDENDUM NUMBER  
 2

ATTACHMENT NUMBER  
 13

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

TRAFFIC CONTROL PLAN

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
 DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

TRAFFIC CONTROL PLAN

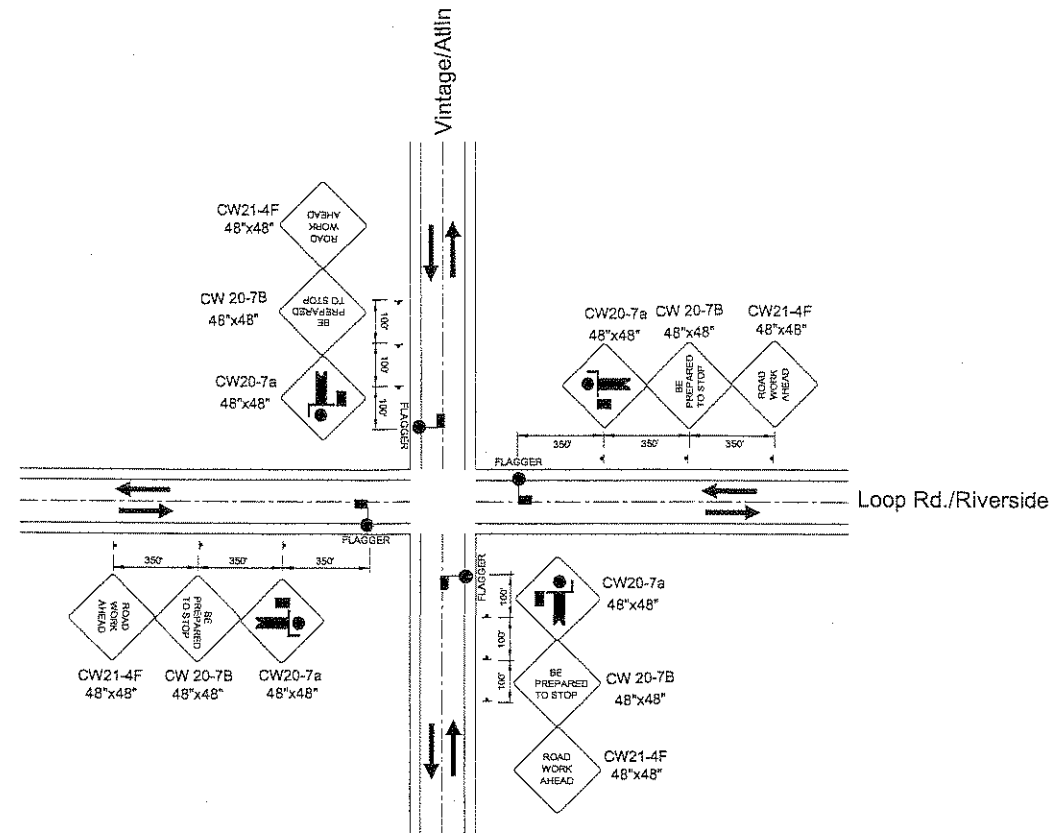
PROJECT DESIGNATION  
 STP - 0003(136)

STATE	YEAR
ALASKA	2009

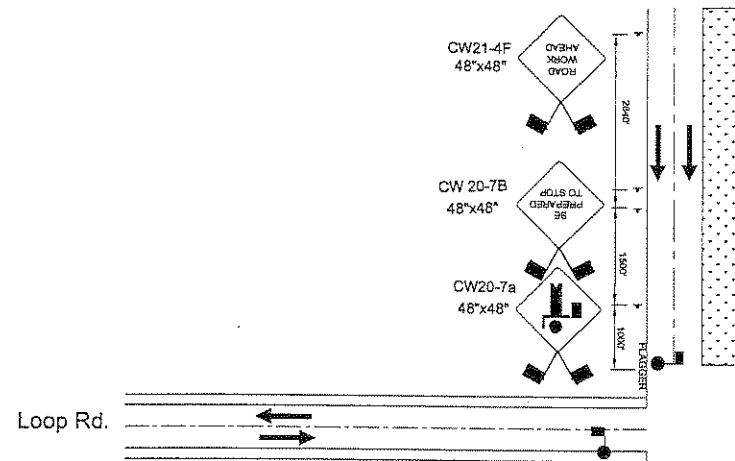
SHEET NUMBER	TOTAL SHEETS
S1	23

NOTES:

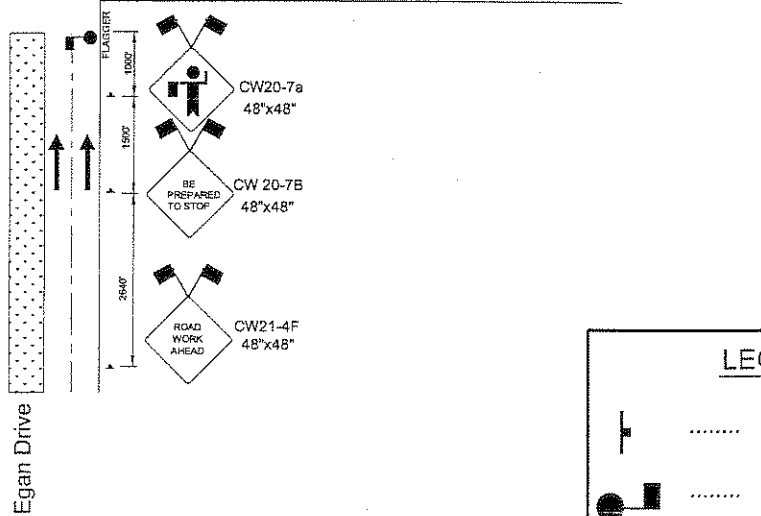
1. FLAGGERS ARE NEEDED ONLY WHEN THE INTERSECTION SIGNAL IS WITHOUT POWER AND SHOULD NOT EXCEED 12 HOURS, EXCEPT AS APPROVED BY THE ENGINEER.



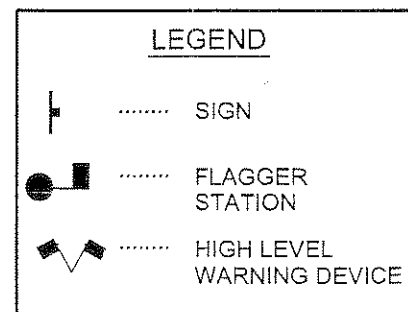
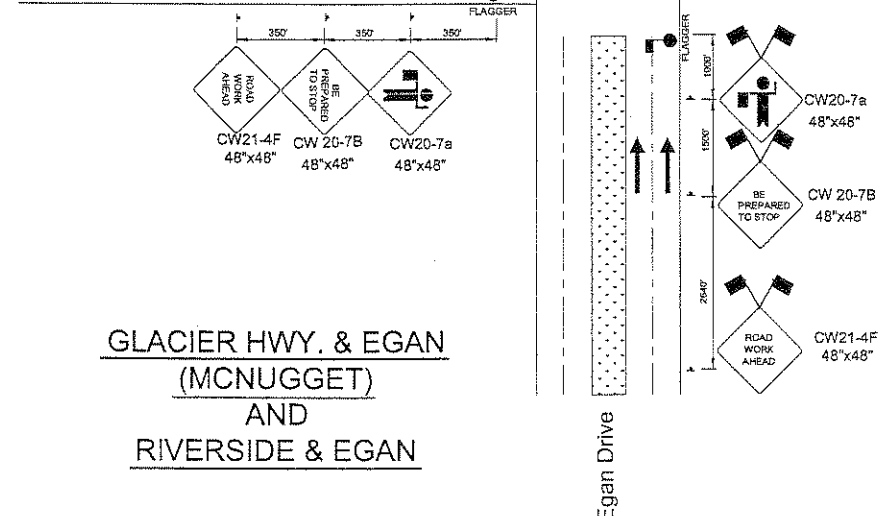
VINTAGE & RIVERSIDE  
AND  
LOOP & ATLIN



LOOP & EGAN



GLACIER HWY. & EGAN  
(MCNUGGET)  
AND  
RIVERSIDE & EGAN



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:Q:\JNU\68057\TRIS1-2 TCP.DWG

DIONISIO, CHRISTOPHER J (DOT)  
TAB: 81 Thursday, November 05, 2009 12:53:33

ADDENDUM NUMBER		
2		
ATTACHMENT NUMBER		
13		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
TRAFFIC SIGNAL SYSTEM UPGRADE  
PROJECT NO. 68057

TRAFFIC CONTROL PLAN

CHECKED BY: C. MOREHOUSE

DESIGNED BY: D. FAGNANT  
DRAWN BY: D. FAGNANT

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
& PUBLIC FACILITIES  
SOUTHEAST REGION

JNU Areawide Traffic  
Signal System Upgrade  
Project #68057

TRAFFIC CONTROL PLAN

PROJECT DESIGNATION

STP - 0003(136)

STATE	YEAR
ALASKA	2009
SHEET NUMBER	TOTAL SHEETS
S1	23

ADDENDUM NUMBER		
2		
ATTACHMENT NUMBER		
14		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREAWIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057

TRAFFIC CONTROL PLAN

CONSTRUCTION PHASING NOTES:

- CONSTRUCTION PHASING SHALL BE AS FOLLOWS:
  - INSTALL NEW TRAFFIC SIGNAL CABINETS - RE-ESTABLISH PROPER INTERSECTION OPERATION BEFORE PROCEEDING TO B.
  - INSTALL VIDEO CAMERAS AND CABLE - VERIFY PROPER VIDEO DETECTION AND OPERATION BEFORE PROCEEDING TO C.
  - INSTALL ETHERNET OVER COPPER NETWORK BETWEEN TRAFFIC SIGNAL CABINETS
  - INSTALL RADIOS, REPEATER STATIONS, AND OFFICE FIBER OPTIC CABLES - VERIFY COMMUNICATION.
- ASSEMBLE AND WIRE NEW TRAFFIC SIGNAL CABINETS AS COMPLETELY AS POSSIBLE BEFORE REPLACING EXISTING TRAFFIC SIGNAL CABINETS TO ENSURE AS SHORT OF A TRAFFIC DISRUPTION AS POSSIBLE.
- WHEN CHANGING OUT TRAFFIC SIGNAL CABINETS, THE TRAFFIC SIGNAL SHALL BE TURNED OFF AND THE INTERSECTION SHALL BE FLAGGED AS PER DETAILS SHOWN ON SHEET S1.
- WHEN ANY TRAFFIC SIGNAL IS TO BE TURNED OFF, SCHEDULE WORK BETWEEN 9PM ON FRIDAY THROUGH 6AM ON MONDAY OR AS APPROVED BY ENGINEER.
- THE CONTRACTOR MAY SUGGEST CHANGES IN THE CONSTRUCTION PHASING WITH APPROVAL OF THE ENGINEER.
- SIGNALS MAY BE OPERATED IN TIMING PHASE WHILE WORK IS PERFORMED ON LOOP OR VIDEO DETECTORS.

RIVERSIDE DRIVE CONSTRUCTION PHASING NOTES:

- FOR THE RIVERSIDE DR & EGAN DR TRAFFIC SIGNAL CABINET INSTALLATION (GENERAL NOTE 1, A), CONSTRUCTION PHASING SHALL BE AS FOLLOWS:
  - POUR THE NEW TRAFFIC SIGNAL FOUNDATION
  - INSTALL AND WIRE THE NEW TRAFFIC SIGNAL CABINET AND ALL REQUIRED CONDUIT
  - TRANSFER ALL CONDUCTOR LANDINGS FROM THE EXISTING TRAFFIC SIGNAL CABINET TO THE NEW TRAFFIC SIGNAL CABINET
  - REMOVE THE EXISTING TRAFFIC SIGNAL CABINET AND FOUNDATION.

GENERAL CONSTRUCTION NOTES:

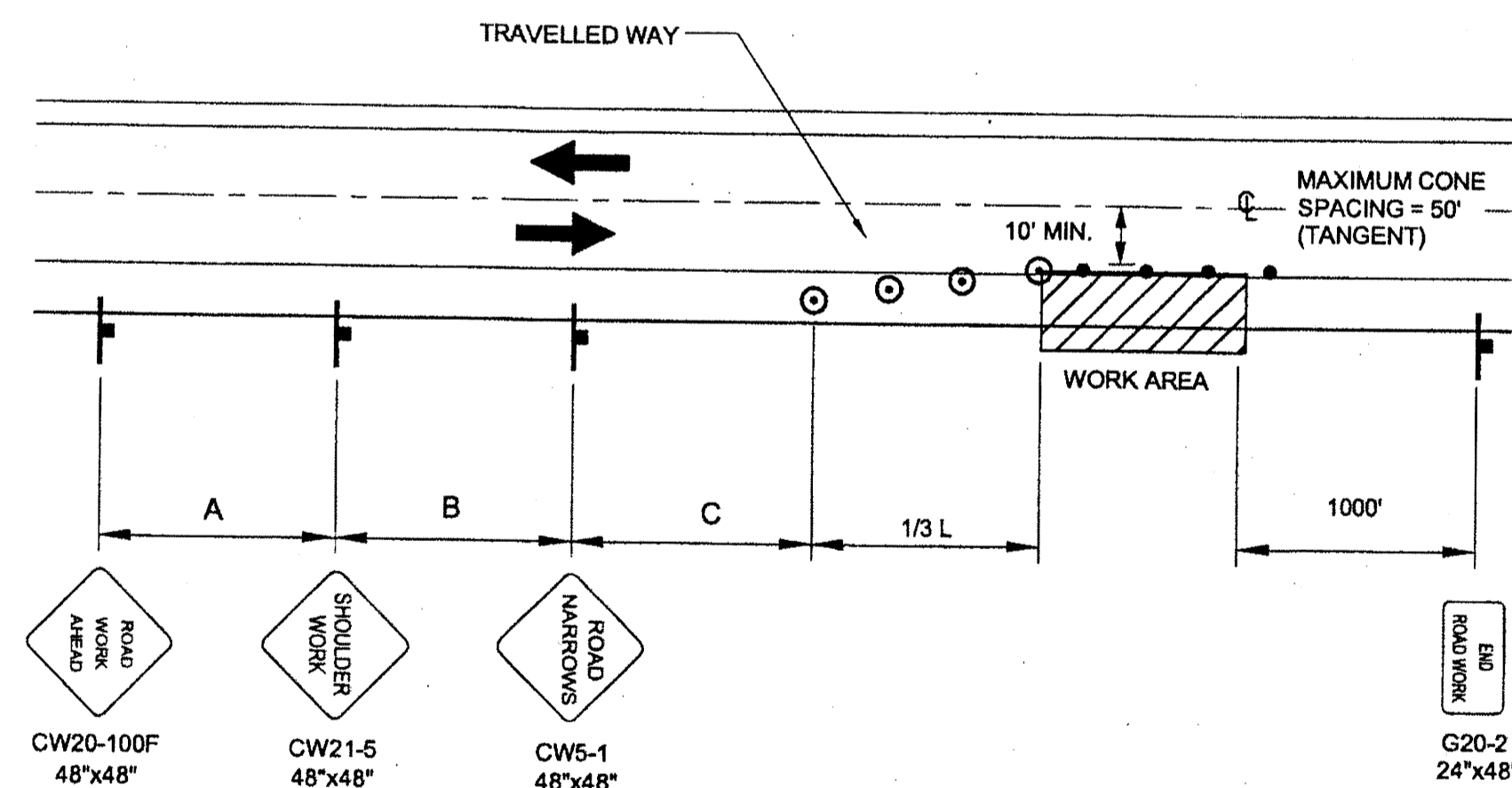
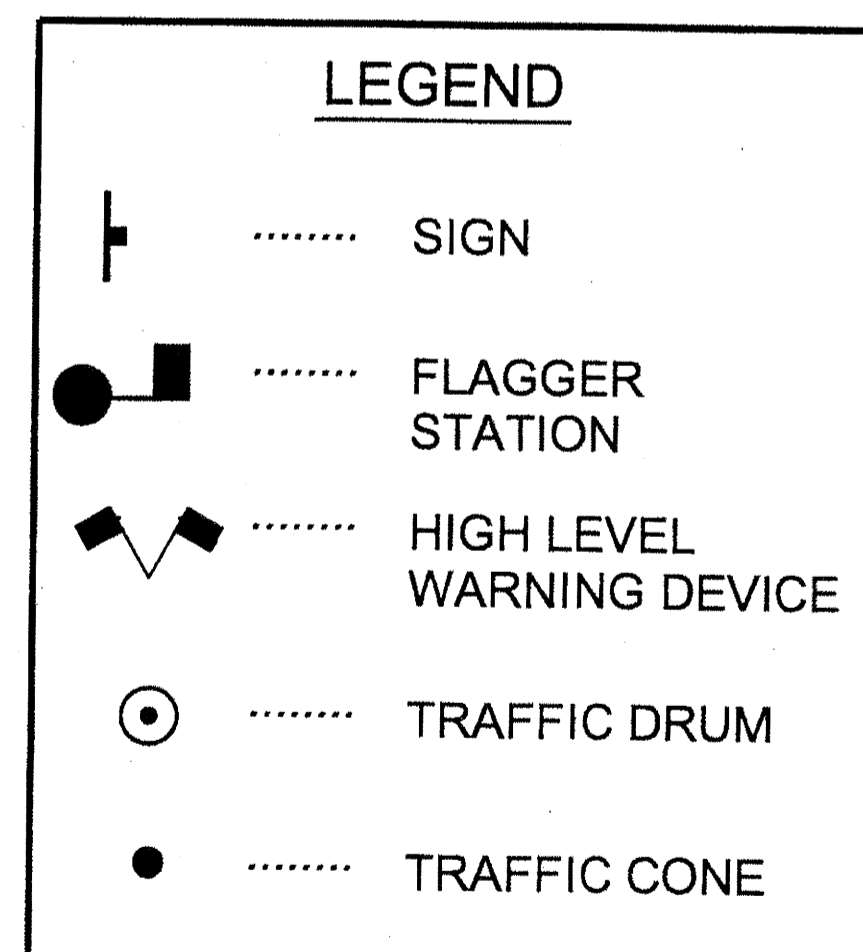
- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
- ALL TRAFFIC CONTROL PLANS SUBMITTED BY THE CONTRACTOR SHALL BE NUMBERED. ALL TRAFFIC CONTROL PLANS THAT USE A TYPICAL APPLICATION AS DESCRIBED IN THE MUTCD SHALL REFERENCE THE TYPICAL APPLICATION. EXAMPLE: TCP 3, MUTCD TA-10.
- ORANGE CONSTRUCTION SIGNS SHALL USE TYPE VIII OR IX FLOURESCENT SHEETING AS DETAILED IN SECTION 615-2.01.
- CONTACT THE SOUTHEAST REGION DOT TRAFFIC ENGINEER (465-4483) A MINIMUM OF 1 WEEK BEFORE ANTICIPATED SIGNAL TURNON.
- AS MUCH AS POSSIBLE, THE CONTRACTOR SHALL STAGE HIS WORK FROM THE SHOULDER OF THE ROAD. LANE CLOSURES SHALL ONLY BE USED IF ABSOLUTELY NECESSARY AND ONLY WITH THE WRITTEN AUTHORIZATION OF THE ENGINEER.

$$L = WS \text{ (45 MPH OR >)}$$

$$L = \frac{WS}{60} \text{ (40 MPH OR <)}$$

WHERE:  
 L= LENGTH OF TAPER (FT)  
 W= WIDTH OF OFFSET (FT)  
 S= SPEED (MPH)

TCP TABLE SETUP		
SPEED (MILES PER HOUR)	BUFFER/LENGTH (ft)	CONE/DRUM SPACING ON TAPER (ft)
25	155	25
30	200	30
35	250	35
40	305	40
45	360	45
50	425	50
55	495	55
60	570	60



STREET	Distance		
	A	B	C
EGAN DRIVE	2640'	1500'	1000'
RIVERSIDE DRIVE	350'	350'	350'
MENDENHALL LOOP ROAD	350'	350'	350'
VINTAGE BOULEVARD	100'	100'	100'
ATLIN DRIVE	100'	100'	100'

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Areawide Traffic  
 Signal System Upgrade  
 Project #68057

TRAFFIC CONTROL PLAN

PROJECT DESIGNATION

STP - 0003(136)

STATE	YEAR
ALASKA	2009

SHEET NUMBER	TOTAL SHEETS
S2	23

ADDENDUM NUMBER		
2		
ATTACHMENT NUMBER		
14		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

JUNEAU AREA WIDE  
 TRAFFIC SIGNAL SYSTEM UPGRADE  
 PROJECT NO. 68057  
 TRAFFIC CONTROL PLAN

**CONSTRUCTION PHASING NOTES:**

- CONSTRUCTION PHASING SHALL BE AS FOLLOWS:
  - INSTALL NEW TRAFFIC SIGNAL CABINETS - RE-ESTABLISH PROPER INTERSECTION OPERATION BEFORE PROCEEDING TO B.
  - INSTALL VIDEO CAMERAS AND CABLE - VERIFY PROPER VIDEO DETECTION AND OPERATION BEFORE PROCEEDING TO C.
  - INSTALL ETHERNET OVER COPPER NETWORK BETWEEN TRAFFIC SIGNAL CABINETS
  - INSTALL RADIOS, REPEATER STATIONS, AND OFFICE FIBER OPTIC CABLES - VERIFY COMMUNICATION.
- ASSEMBLE AND WIRE NEW TRAFFIC SIGNAL CABINETS AS COMPLETELY AS POSSIBLE BEFORE REPLACING EXISTING TRAFFIC SIGNAL CABINETS TO ENSURE AS SHORT OF A TRAFFIC DISRUPTION AS POSSIBLE.
- WHEN CHANGING OUT TRAFFIC SIGNAL CABINETS, THE TRAFFIC SIGNAL SHALL BE TURNED OFF AND THE INTERSECTION SHALL BE FLAGGED AS PER DETAILS SHOWN ON SHEET S1.
- WHEN ANY TRAFFIC SIGNAL IS TO BE TURNED OFF, SCHEDULE WORK BETWEEN 9PM ON FRIDAY THROUGH 6AM ON MONDAY OR AS APPROVED BY ENGINEER.
- THE CONTRACTOR MAY SUGGEST CHANGES IN THE CONSTRUCTION PHASING WITH APPROVAL OF THE ENGINEER.
- SIGNALS MAY BE OPERATED IN TIMING PHASE WHILE WORK IS PERFORMED ON LOOP OR VIDEO DETECTORS.

**GENERAL CONSTRUCTION NOTES:**

- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATIONS NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO USE.
- ALL TRAFFIC CONTROL PLANS SUBMITTED BY THE CONTRACTOR SHALL BE NUMBERED. ALL TRAFFIC CONTROL PLANS THAT USE A TYPICAL APPLICATION AS DESCRIBED IN THE MUTCD SHALL REFERENCE THE TYPICAL APPLICATION. EXAMPLE: TCP 3, MUTCD TA-10.
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- CONTACT THE SOUTHEAST REGION DOT TRAFFIC ENGINEER (465-4483) A MINIMUM OF 1 WEEK BEFORE ANTICIPATED SIGNAL TURNON.
- AS MUCH AS POSSIBLE, THE CONTRACTOR SHALL STAGE HIS WORK FROM THE SHOULDER OF THE ROAD. LANE CLOSURES SHALL ONLY BE USED IF ABSOLUTELY NECESSARY AND ONLY WITH THE WRITTEN AUTHORIZATION OF THE ENGINEER.

**RIVERSIDE DRIVE CONSTRUCTION PHASING NOTES:**

- FOR THE RIVERSIDE DR & EGAN DR TRAFFIC SIGNAL CABINET INSTALLATION (GENERAL NOTE 1, A), CONSTRUCTION PHASING SHALL BE AS FOLLOWS:
  - POUR THE NEW TRAFFIC SIGNAL FOUNDATION
  - INSTALL AND WIRE THE NEW TRAFFIC SIGNAL CABINET AND ALL REQUIRED CONDUIT
  - TRANSFER ALL CONDUCTOR LANDINGS FROM THE EXISTING TRAFFIC SIGNAL CABINET TO THE NEW TRAFFIC SIGNAL CABINET
  - REMOVE THE EXISTING TRAFFIC SIGNAL CABINET AND FOUNDATION.

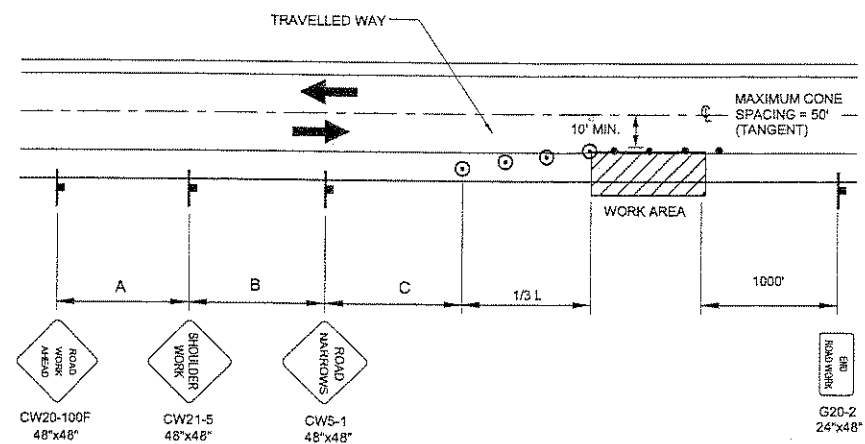
$L = \frac{WS}{45}$  (45 MPH OR >)  
 $L = \frac{WS}{60}$  (40 MPH OR <)  
 WHERE:  
 L= LENGTH OF TAPER (FT)  
 W= WIDTH OF OFFSET (FT)  
 S= SPEED (MPH)

SPEED (MILES PER HOUR)	BUFFER LENGTH (ft)	CONE/DRUM SPACING ON TAPER (ft)
25	155	25
30	200	30
35	250	35
40	305	40
45	360	45
50	425	50
55	495	55
60	570	60

STREET	Distance		
	A	B	C
EGAN DRIVE	2640'	1500'	1000'
RIVERSIDE DRIVE	350'	350'	350'
MENDENHALL LOOP ROAD	350'	350'	350'
VINTAGE BOULEVARD	100'	100'	100'
ATLIN DRIVE	100'	100'	100'

**LEGEND**

- SIGN
- FLAGGER STATION
- HIGH LEVEL WARNING DEVICE
- TRAFFIC DRUM
- TRAFFIC CONE



**SHOULDER WORK**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: C. MOREHOUSE



DESIGNED BY: D. FAGNANT

DRAWN BY: D. FAGNANT

STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 & PUBLIC FACILITIES  
 SOUTHEAST REGION

JNU Area-wide Traffic  
 Signal System Upgrade  
 Project #68057

<b>TRAFFIC CONTROL PLAN</b>	
PROJECT DESIGNATION	
<b>STP - 0003(136)</b>	
STATE	YEAR
<b>ALASKA</b>	<b>2009</b>
SHEET NUMBER	TOTAL SHEETS
<b>S2</b>	<b>23</b>