

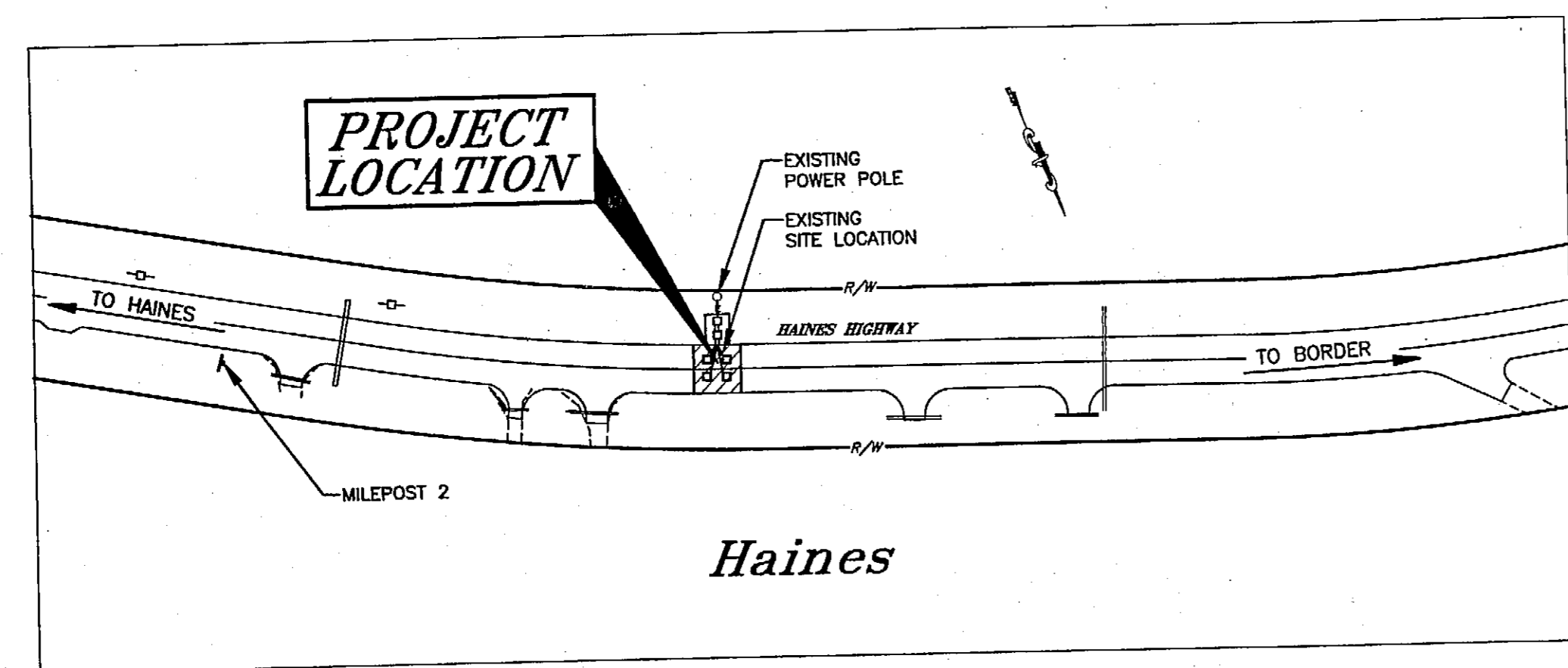
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION

**SOUTHEASTERN REGION AREA WIDE
PTR IMPROVEMENTS
PHASE II ✓**

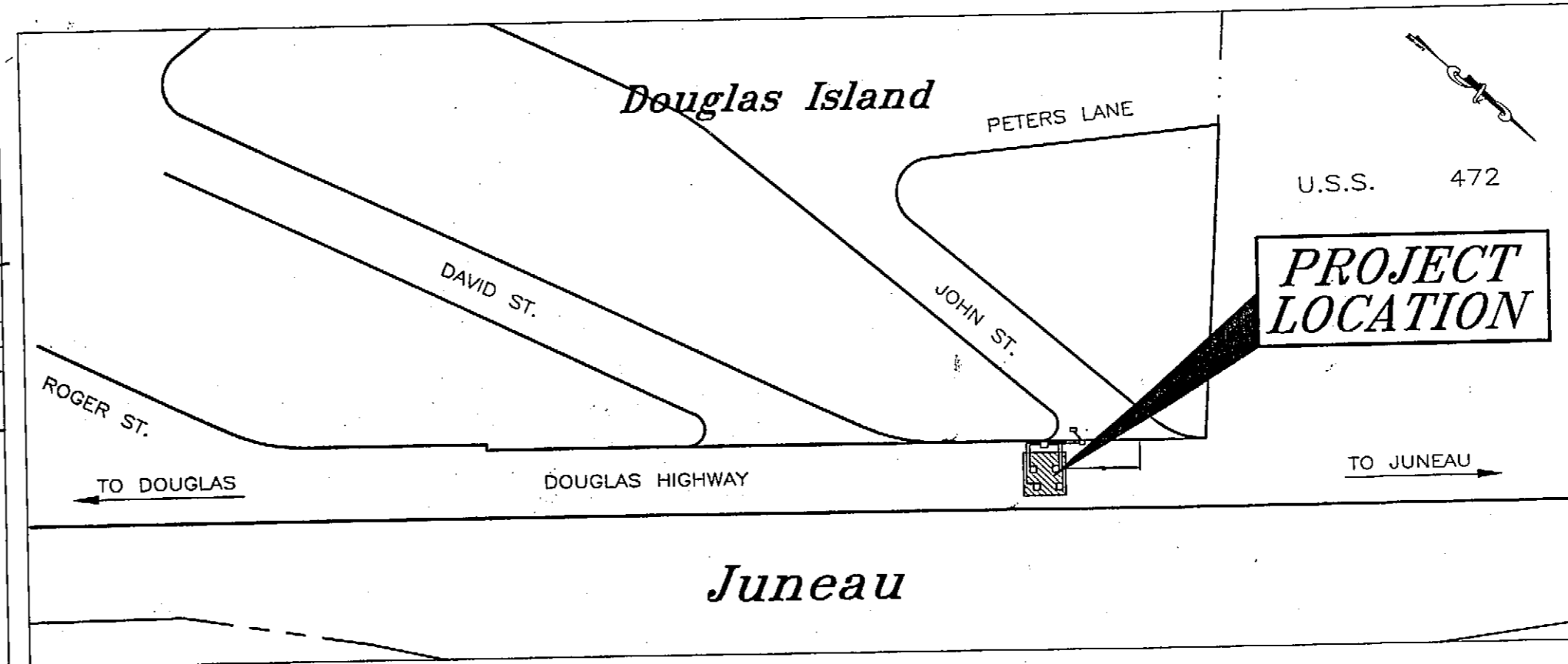
PROJECT NO. 68627~STP-CM-0003(61) ✓
INSTALL NEW PERMANENT TRAFFIC RECORDER ✓
SYSTEM COMPLETE ✓

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL NOTES/ESTIMATE OF QUANTITIES
3	HAINES HWY. PTR SITE LAYOUT/DETAILS
4	SOUTH DOUGLAS HWY. PTR SITE LAYOUT/DETAILS
5	HARBOR DRIVE PTR SITE LAYOUT/DETAILS
6	KLONDIKE HWY. PIEZO SENSOR REPLACEMENTS
7	LOOP DETECTOR DETAILS
8	CONTROL CABINET DETAILS
9	PIEZO DETAILS
10	LOAD CENTER SUMMARY
11	TRAFFIC CONTROL PLAN

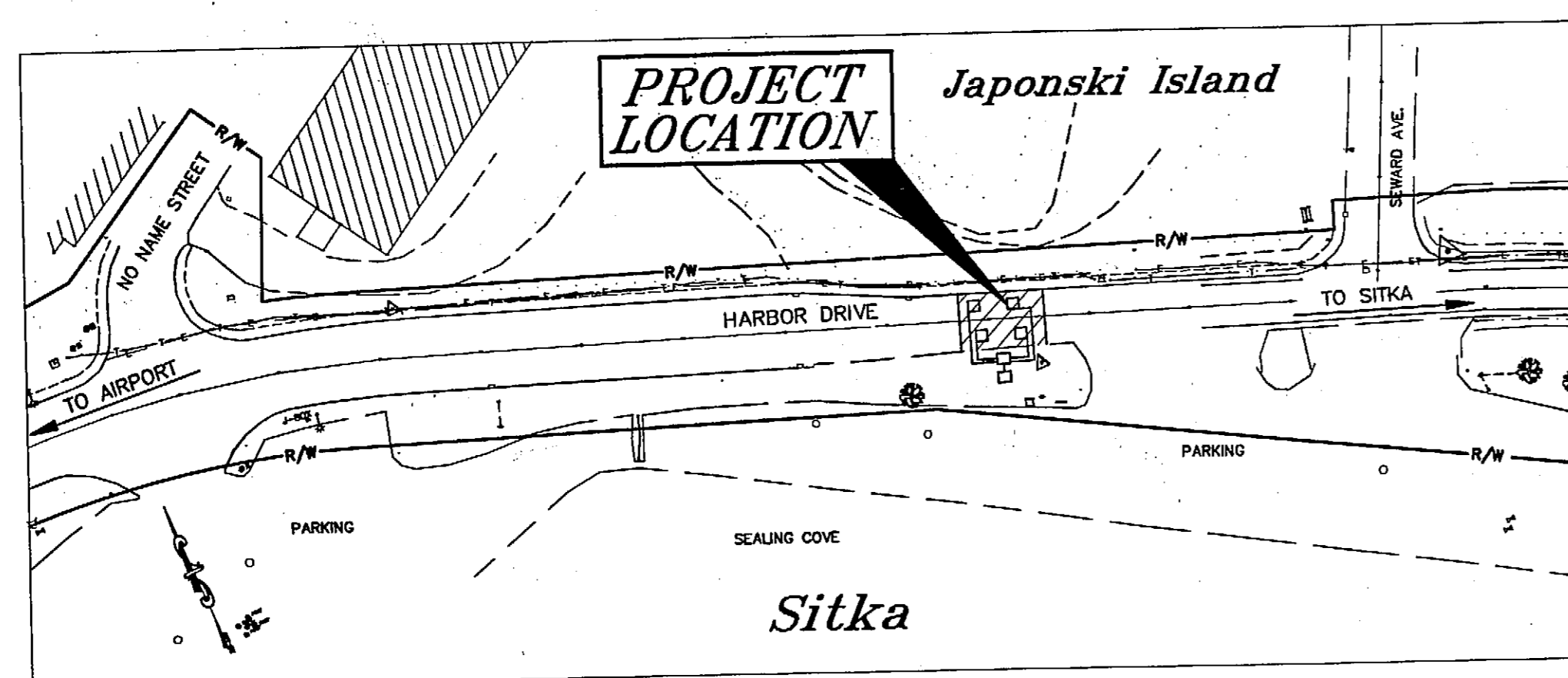
THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:
A-✓ L-23.01 ✓ L-26.00 ✓



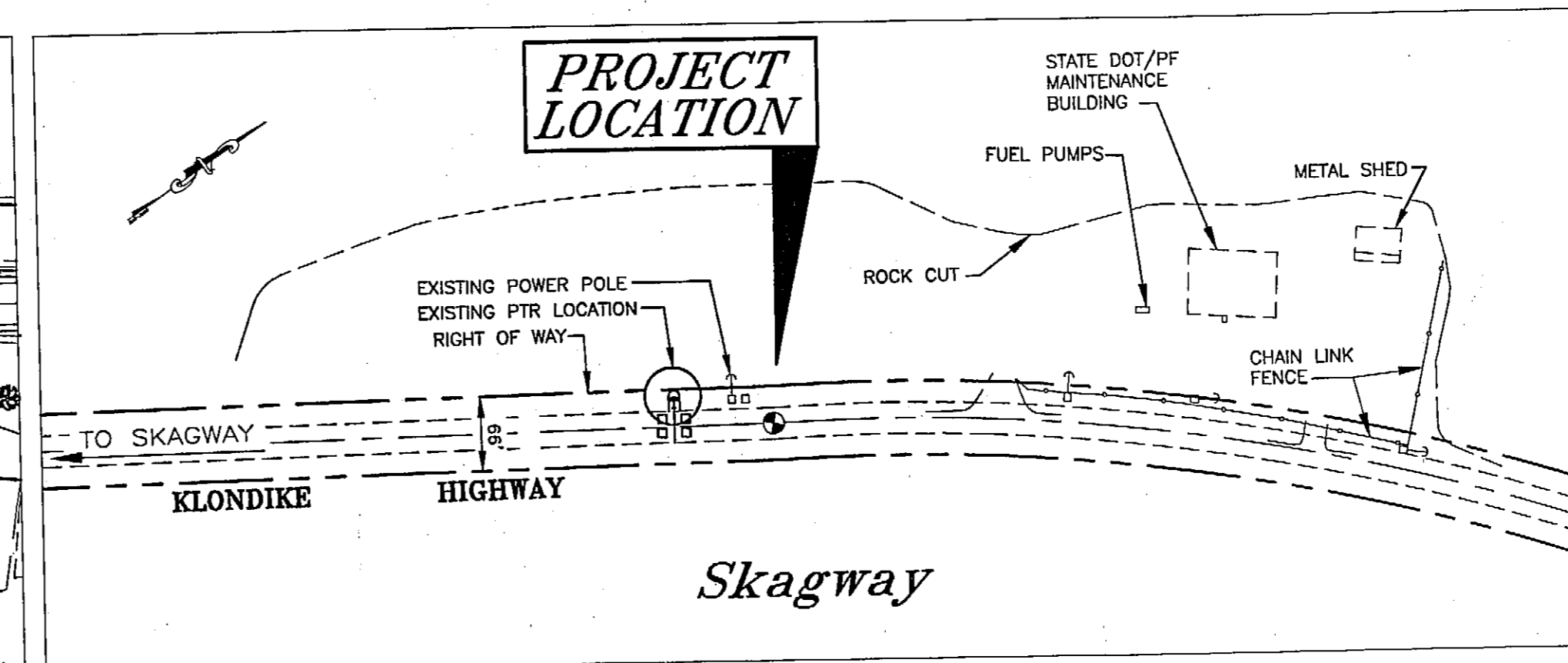
VICINITY MAP
H1 HAINES HWY.-ROUTE NO. 298000



VICINITY MAP
H2 S. DOUGLAS HWY.-ROUTE NO. 296110



VICINITY MAP
H3 HARBOR DRIVE-ROUTE NO. 295460



VICINITY MAP
H4 KLONDIKE HWY.-ROUTE NO. 299500

As BUILT PLAN
P.E = JOHN HOLLATZ
Cont = Alaska Electric Control
Proj Beg = Sept 30, 2003
Proj End = JUNE 26, 2004
TOTAL CONTRACT AMT = \$ 171,590.90

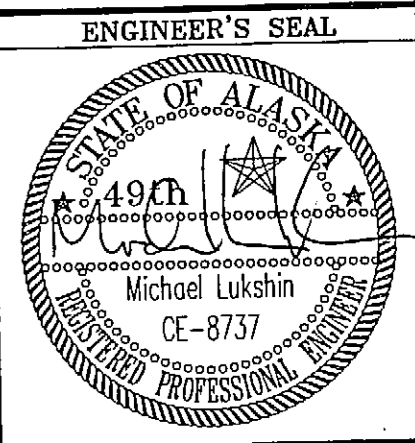
Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE: [Signature] Date 7/29/04

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEAST REGION

APPROVED [Signature] Date 7/9/03
Patrick J. Kemp, P.E.
Regional Preconstruction Engineer

APPROVED [Signature] Date 7/9/03
Gary Paxton
Regional S.E. Director

PROJECT NUMBER: 68627
DATE: 2003
SHEET 1 OF 11



2. PTR/SEA PTRS VI-SE TISHIELDING

HNS HAINES HIGHWAY ROUTE NO 298000

PTR ASSEMBLY SCHEDULE							
SITE DESIGNATION	CDS MILEPOST	CABINET OFFSET <1>	CABINET ASSEMBLY STYLE	INDUCTIVE LOOPS (QTY.)	AVC SENSOR & TYPE	LOAD CENTER & TYPE	ELECTRICAL & TELEPHONE SERVICE
H1	1.36	42'	TYPE G ALUMINUM	4	2 PIEZO	TYPE 2	BOTH REQUIRED

JUN S. DOUGLAS HIGHWAY ROUTE NO 296110

PTR ASSEMBLY SCHEDULE							
SITE DESIGNATION	CDS MILEPOST	CABINET OFFSET <1>	CABINET ASSEMBLY STYLE	INDUCTIVE LOOPS (QTY.)	AVC SENSOR & TYPE	LOAD CENTER & TYPE	ELECTRICAL & TELEPHONE SERVICE
H2	1.03	42'	TYPE G ALUMINUM	4 ✓	N/A	TYPE 2	BOTH REQUIRED

SITKA HARBOR DR. ROUTE NO 295460

PTR ASSEMBLY SCHEDULE							
SITE DESIGNATION	CDS MILEPOST	CABINET OFFSET <1>	CABINET ASSEMBLY STYLE	INDUCTIVE LOOPS (QTY.)	AVC SENSOR & TYPE	LOAD CENTER & TYPE	ELECTRICAL & TELEPHONE SERVICE
H3	0.76	41'	TYPE G ALUMINUM	4	N/A	TYPE 2	BOTH REQUIRED

SKG KLONDIKE HWY. ROUTE NO 299500

PTR ASSEMBLY SCHEDULE							
SITE DESIGNATION	CDS MILEPOST	CABINET OFFSET <1>	CABINET ASSEMBLY STYLE	INDUCTIVE LOOPS (QTY.)	AVC SENSOR & TYPE	LOAD CENTER & TYPE	ELECTRICAL & TELEPHONE SERVICE
H4	2.70	23.5'	EXISTING	EXISTING	2 PIEZO	EXISTING	EXISTING

<1> CABINET OFFSET AS MEASURED FROM THE CENTERLINE, TO BE FIELD ADJUSTED.

BASIS OF ESTIMATE

Specifications Section	ITEM	UNIT	QUANTITY
202	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	N/A
301	CRUSHED AGGREGATE BASE COURSE D-1	TON	86
401	ASPHALT CONCRETE TYPE II CLASS "B"	TON	95
641	EROSION & POLLTION CONTROL	L.S.	N/A
643	TRAFFIC MAINTENANCE	L.S.	N/A
643	FLAGGING	C.S.	N/A
661	LOAD CENTER, TYPE 2	EACH	3
669	PERMANENT TRAFFIC COUNTER SYSTEM COMPLETE	EACH	2
669	PIEZO AXLE SENSOR REPLACEMENT	EACH	1
669	PERMANENT TRAFFIC COUNTER & PIEZO AXLE SENSOR SYSTEM COMPLETE	EACH	1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
121(1)	PERMANENT TRAFFIC RECORDER COMPLETE-JUNEAU	L.S.	ALL REQ'D.
121(2)	PERMANENT TRAFFIC RECORDER COMPLETE-SITKA	L.S.	ALL REQ'D.
121(3)	PIEZO AXLE SENSOR REPLACEMENT-SKAGWAY	L.S.	ALL REQ'D.
121(4)	PERMANENT TRAFFIC RECORDER & PIEZO AXLE SENSOR COMPLETE-HAINES	L.S.	ALL REQ'D.

GENERAL NOTES:

1. INSTALLATION OF EQUIPMENT AND MATERIALS SHALL CONFORM TO APPLICABLE REQUIREMENTS OF THE CURRENT NESC AND NEC.
2. EVERY EFFORT HAS BEEN MADE TO MAKE THE INFORMATION CONTAINED IN THESE DOCUMENTS COMPLETE AND ACCURATE, HOWEVER THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS AND DIMENSIONS.
3. USE ONLY RIGID METAL CONDUIT (RMC) EXCEPT FOR THE POLYVINYL CHLORIDE (PVC) LOOPS.
4. ALL CONSTRUCTION SHALL BE WITHIN STATE RIGHT-OF-WAY.
5. UNUSEABLE EXCAVATION SHALL BE HAULED AND DISPOSED TO WASTE SITE PER THE ENGINEER'S APPROVAL.
6. THE CONTRACTOR SHALL MARK THE TRENCH BY PLACING WARNING TAPE OVER ALL POWER CONDUITS UNDERGROUND.

REFERENCE SPECIFICATIONS

ALL WIRING IN THIS SECTION SHALL BE CONSTRUCTED PER SPECIFICATIONS SECTIONS 660 & 740 SIGNALS AND LIGHTING, EXCEPT WHERE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS. IN PARTICULAR, ALL CONSTRUCTION SHALL CONFORM TO SPECIFICATION SECTIONS 660-3.03 CONDUIT, 660-3.04 JUNCTION BOXES, 740-2.05 CONDUCTORS, 660-2.09(A) WIRING, 660-3.06 BONDING AND GROUNDING, AND 660-3.01 NO. 7 FIELD TESTS, EXCEPT AS MODIFIED BY SECTION 669 AUTOMATED TRAFFIC RECORDERS.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge.
 PE *[Signature]* Date 7/20/04

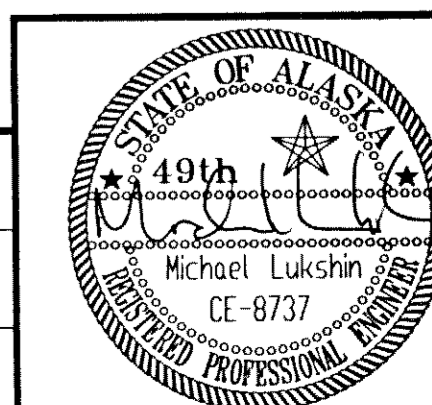
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

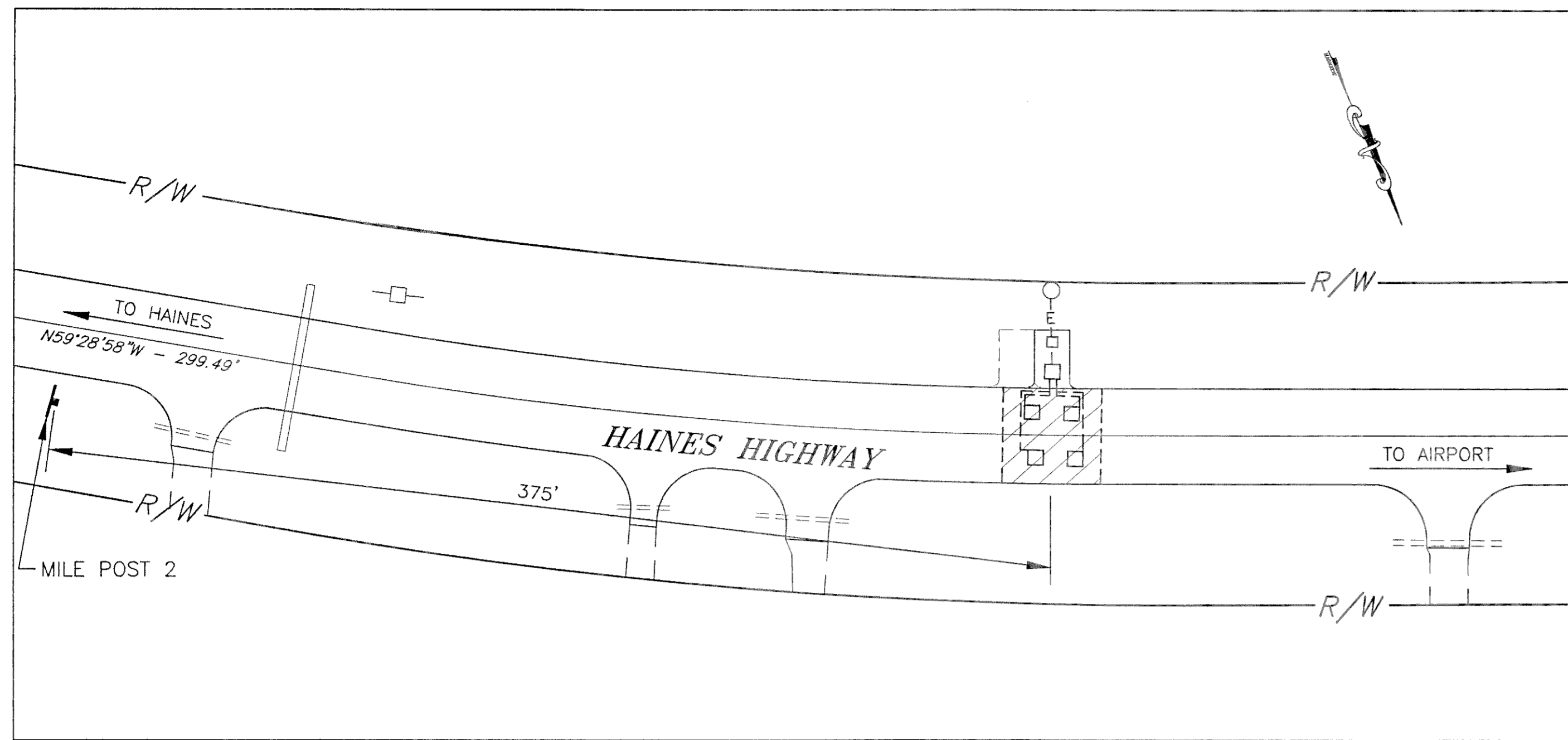
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BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

SOUTHEAST REGION
 SOUTHEASTERN REGION AREAWIDE
 PTR IMPROVEMENTS-PHASE II
 PROJECT NO. 68627~STP-CM-0003(61)
 GENERAL NOTES/
 ESTIMATE OF QUANTITIES

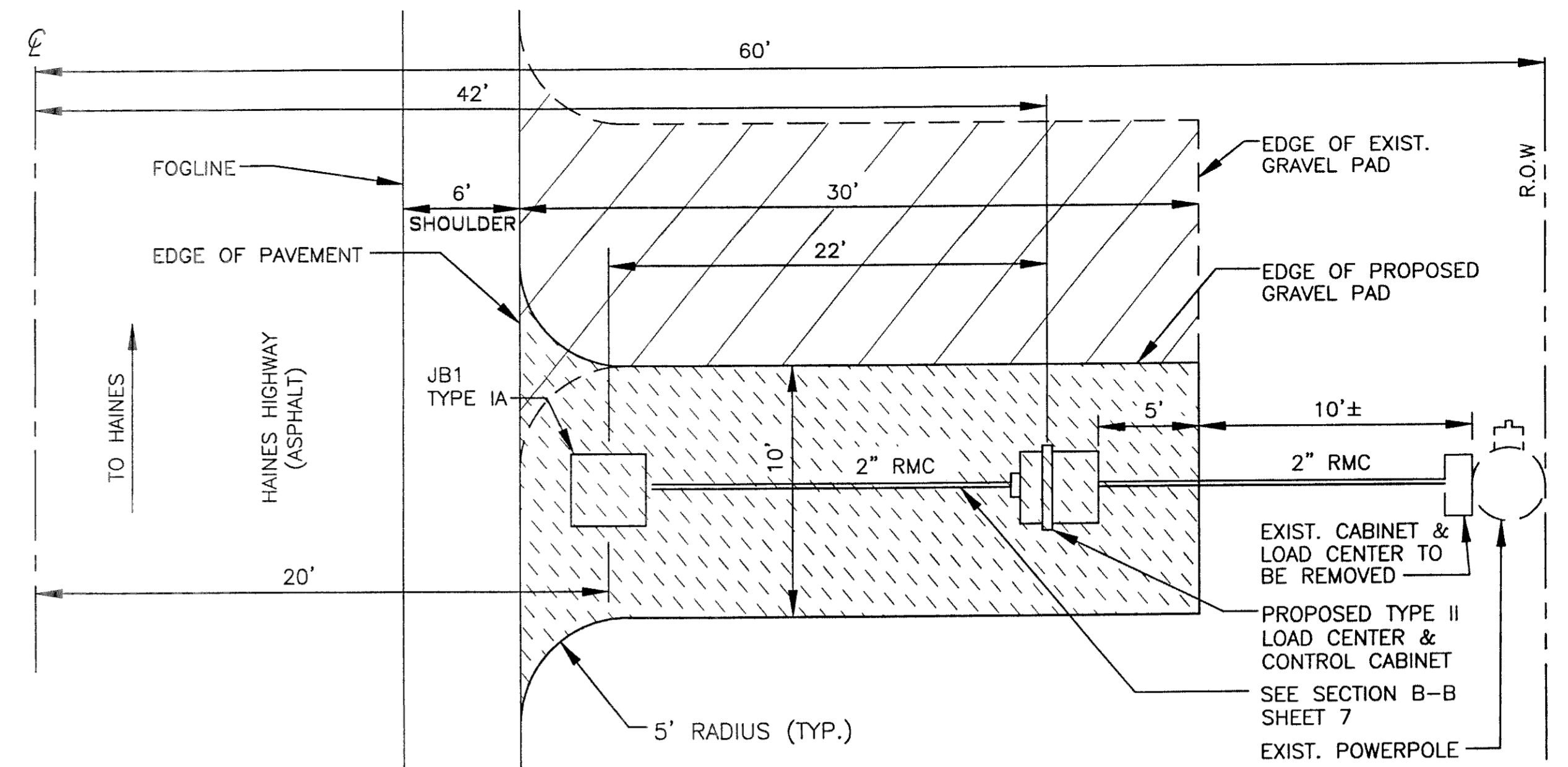
DESIGNED BY:	P. JONES	PROJECT NO.	68627
DRAWN BY:	D. STEVENS	DATE:	2003
CHECKED BY:	K. MATTSON	SHEET	2 OF 11





SITE LAYOUT
HAINES HIGHWAY-ROUTE NO. 298000

HAINES HIGHWAY
THE CONTRACTOR SHALL INSTALL (2) 2" RIGID STEEL CONDUIT FOR POWER AND TELEPHONE FROM THE NEW LOAD CENTER TO THE BASE OF THE EXISTING POWER POLE. IT SHALL BE THE RESPONSIBILITY OF THE LOCAL UTILITIES TO INSTALL THE RISERS AND WEATHERHEADS AND MAKE ALL REQUIRED SERVICE CONNECTIONS.



PLAN VIEW OF PAD
N.T.S.

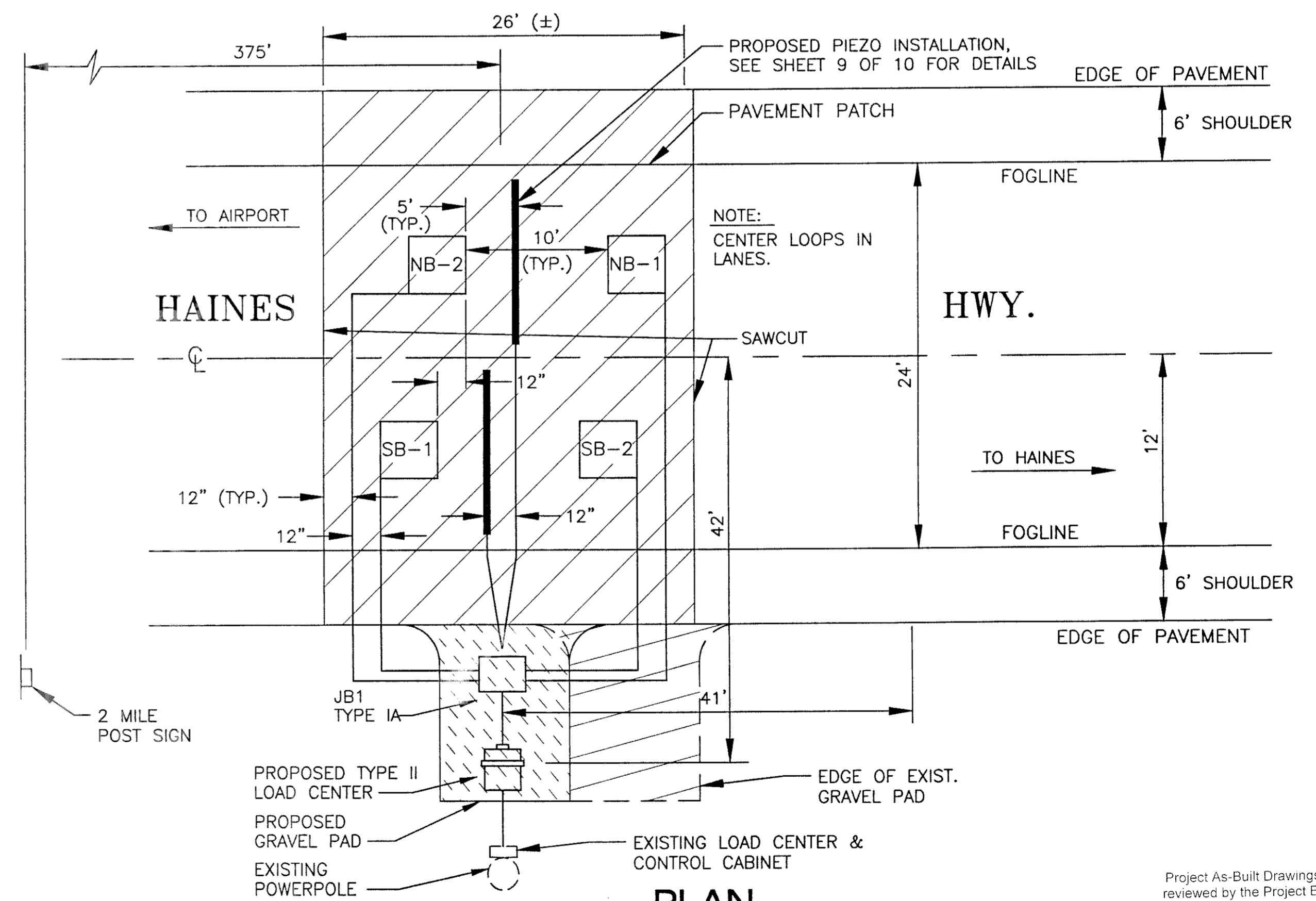
SHEET NOTES

- SEE TYPICAL SECTIONS FOR DIMENSIONS.
- INDUCTION LOOPS TO BE CENTERED IN TRAFFIC LANES.
- JUNCTION BOX SHALL BE TYPE IA.
- FOR PIEZO INSTALLATION DETAILS SEE SHEET 9 OF 10.
- FOR CONTROL CABINET DETAIL SEE SHEET 8-10.
- FOR TRAFFIC LOOPS DETAIL SEE SHEET 7-10.
- PROJECT LIMITS SHALL BE CLEARLY IDENTIFIED WITH FLAGGING, STAKING OR SILT FENCE PRIOR TO CLEARING AND CONSTRUCTION.

HAINES HIGHWAY

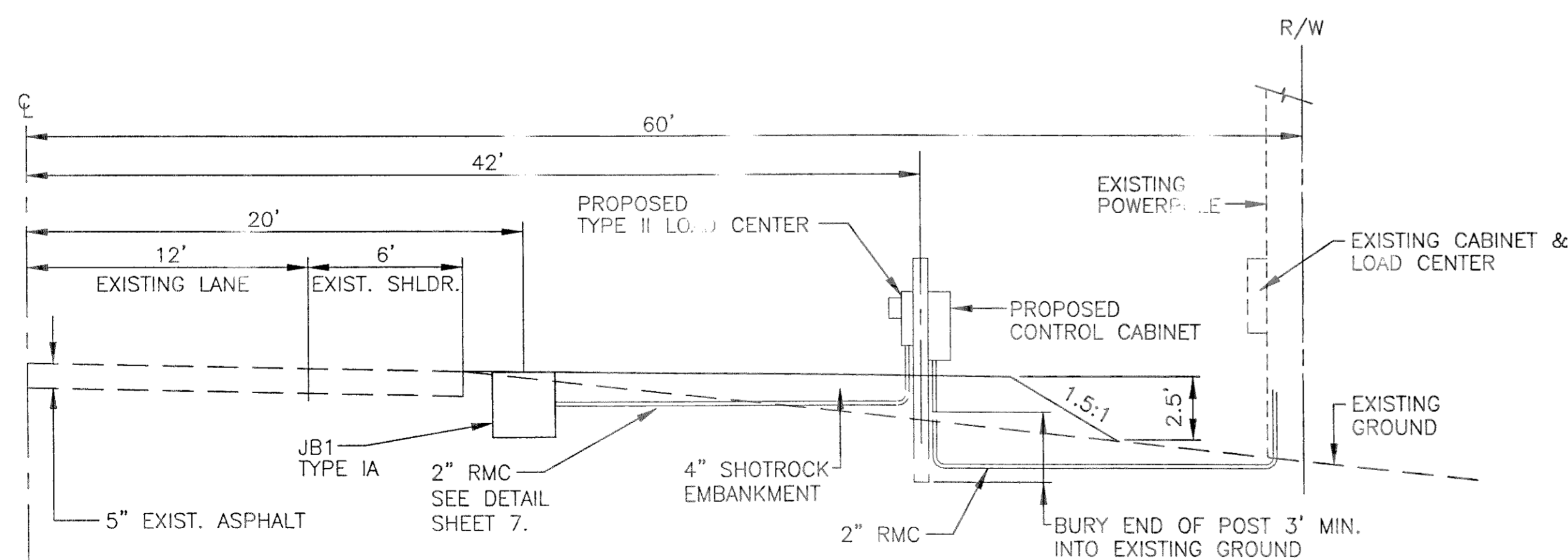
CONDUIT TYPE	SIZE	FROM	TO	CABLE QTY.	CABLE TYPE
RMC	2"	PTR	JB1	1	(1) 6PR No. 18
PVC	1"	JB1	NB-1	1	1PR No.14
PVC	1"	JB1	NB-2	1	1PR No.14
PVC	1"	JB1	SB-1	1	1PR No.14
PVC	1"	JB1	SB-2	1	1PR No.14

CONDUIT/CONDUCTOR SCHEDULE



PLAN
TRAFFIC COUNTER TYPICAL
N.T.S.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS



PROFILE VIEW
NOT TO SCALE

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PLOT:		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

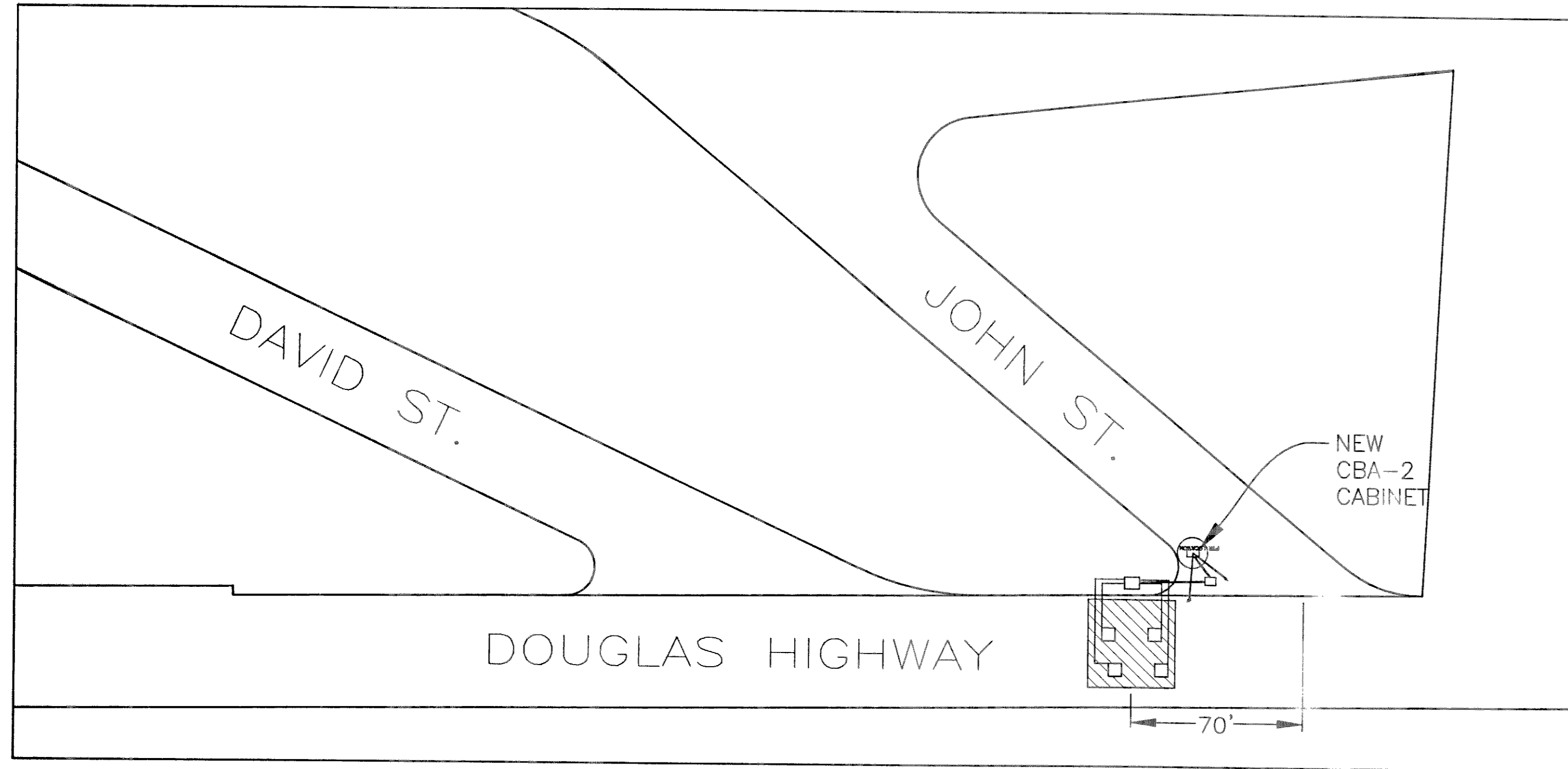
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

SOUTHEAST REGION
SOUTHEASTERN REGION AREA WIDE
PTR IMPROVEMENTS-PHASE II
PROJECT NO. STP-CM-0003(61)-68627
**HAINES HWY. PTR SITE LAYOUT/
DETAILS**

DESIGNED BY: P. JONES	PROJECT NO. 68627
DRAWN BY: D. STEVENS	DATE: 2003
CHECKED BY: M. LUKSHIN	SHEET 3 OF 11

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
Date 7/20/04





SITE LAYOUT
S. DOUGLAS-ROUTE NO. 296110

H2

NTS

DOUGLAS HIGHWAY

THE CONTRACTOR SHALL INSTALL (1) 2" RIGID STEEL CONDUIT AND (1) 1 1/4" RIGID STEEL CONDUIT POWER FROM THE NEW TYPE II LOAD CENTER TO THE BASE OF THE POWER POLE. TELEPHONE WILL BE INSTALLED FROM CONTROL CABINET TO THE BASE OF THE POWER POLE. IT SHALL BE THE RESPONSIBILITY OF THE LOCAL UTILITIES TO INSTALL THE POLE RISER AND WEATHERHEADS AND MAKE ALL REQUIRED SERVICE CONNECTIONS. THE CONTRACTOR SHALL BE REQUIRED TO HAVE A FIELD LOCATE OF ALL UNDERGROUND UTILITIES, THIS INCLUDES GATE VALVES, INLET BOXES AND CROSS CULVERTS.

SHEET NOTES

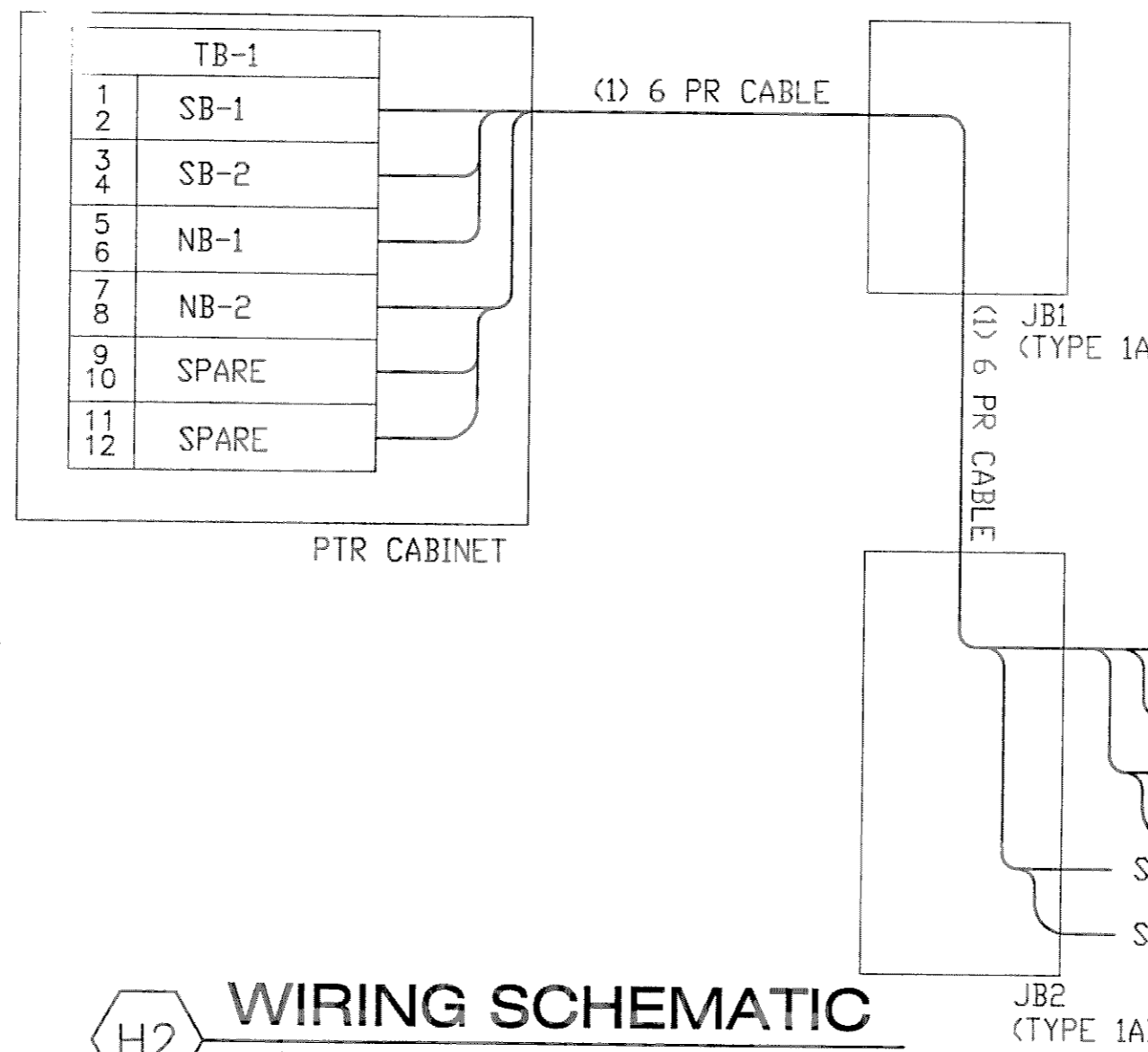
1. SEE TYPICAL SECTIONS FOR DIMENSIONS.
2. INDUCTION LOOPS TO BE CENTERED IN TRAFFIC LANES.
3. ALL JUNCTION BOXES SHALL BE TYPE 1A.
4. THE CONTRACTOR SHALL INSTALL A TELEPHONE LINE INTO THE PTR CABINET AND PAY ALL FEES AND PERMITS FOR PROVIDING TELEPHONE SERVICE. THE STATE WILL ACCEPT BILLING FOR THE TELEPHONE AFTER PROJECT COMPLETION.

JUN SOUTH DOUGLAS

CONDUIT TYPE	SIZE	FROM	TO	QTY.	CABLE TYPE
RMC	2"	PTR	JB1	1	(1) 6PR CABLE
RMC	2"	JB1	JB2	1	(1) 6PR CABLE
PVC	1"	JB2	NB-1	1	1PR No.14
PVC	1"	JB2	NB-2	1	1PR No.14
PVC	1"	JB2	SB-1	1	1PR No.14
PVC	1"	JB2	SB-2	1	1PR No.14

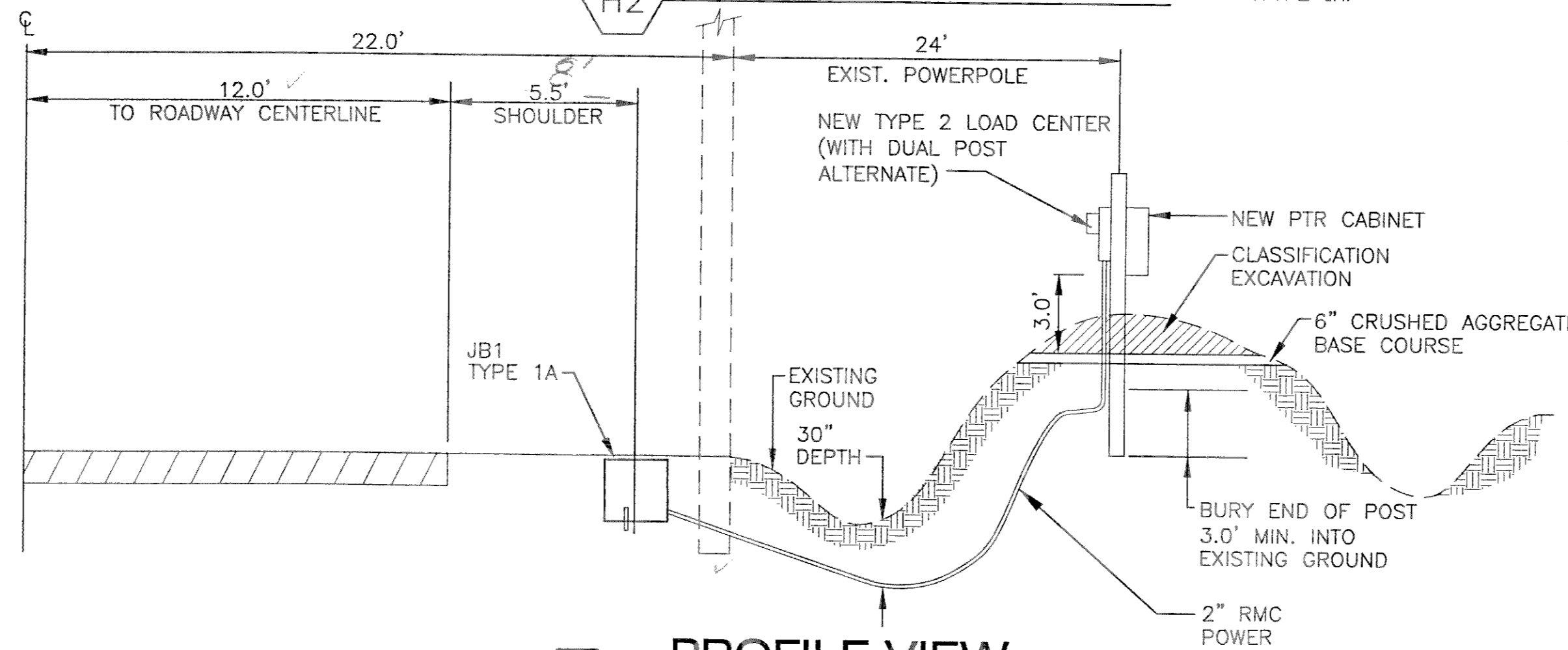
CONDUIT/CONDUCTOR SCHEDULE

H2



WIRING SCHEMATIC

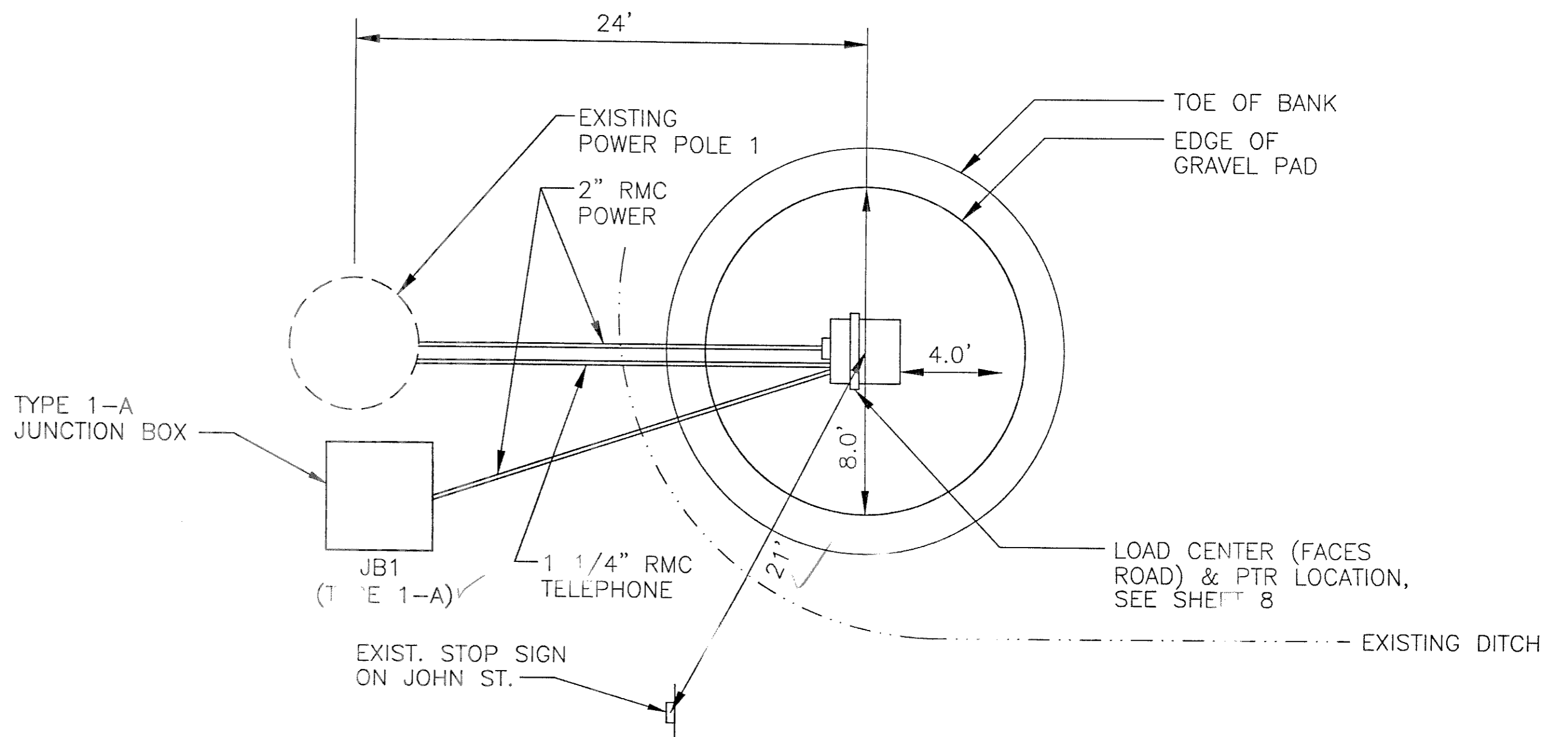
H2



PROFILE VIEW

H2

NOT TO SCALE



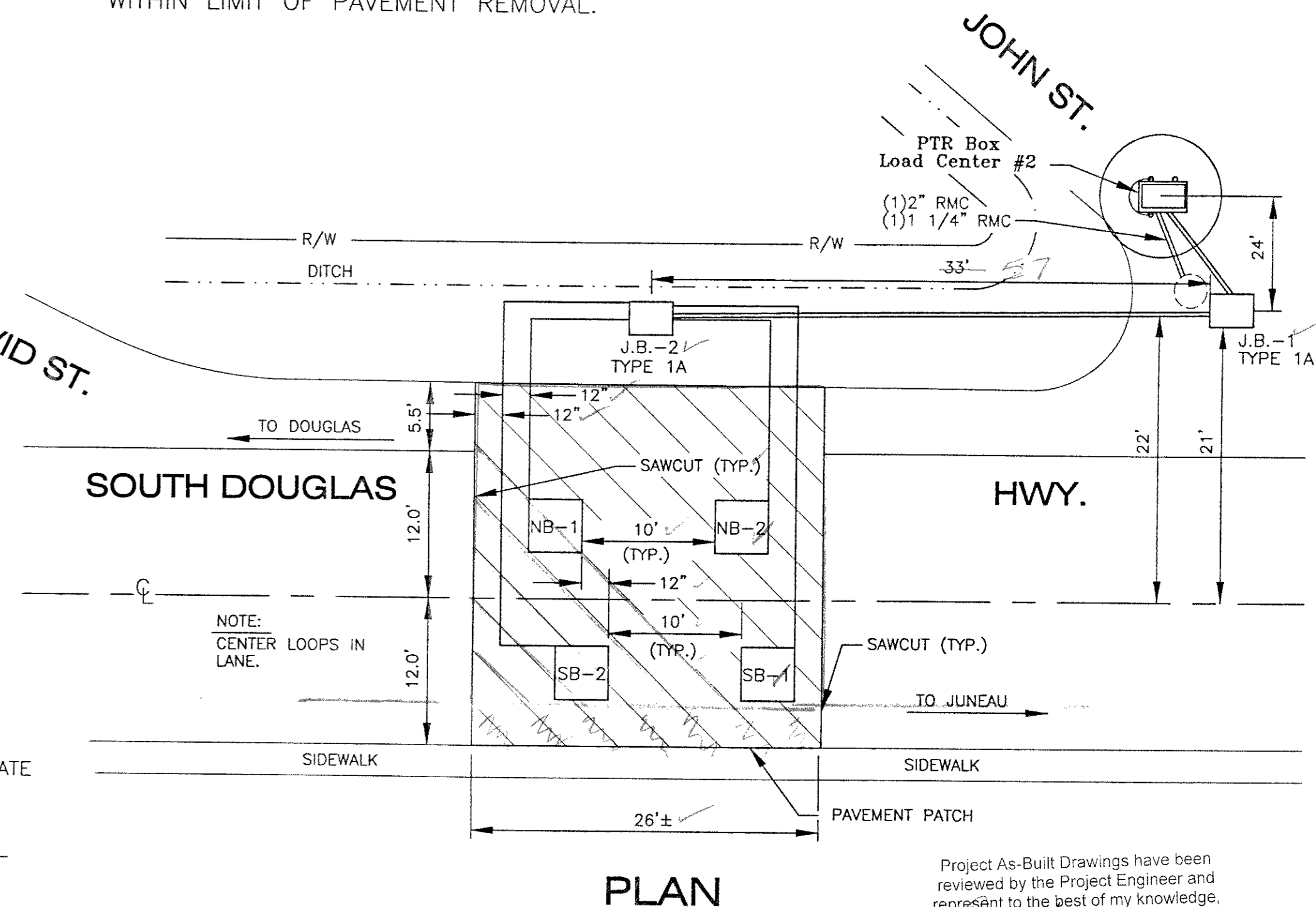
PLAN VIEW OF PAD

H2

N.T.S.

NOTES:

1. THE CONTRACTOR SHALL DO A FIELD LOCATE OF GATE VALVES PRIOR TO REMOVING THE EXIST. ASPHALT ROADWAY SECTION.
2. THE CONTRACTOR SHALL INSTALL 2" RMC FROM THE LOAD CENTER TERMINATING AT THE EXIST. POWER POLE.
3. THE CONTRACTOR SHALL INSTALL 1 1/4" RMC TELEPHONE FROM WITHIN LIMIT OF PAVEMENT REMOVAL.



PLAN

H2

TRAFFIC COUNTER TYPICAL

N.T.S.

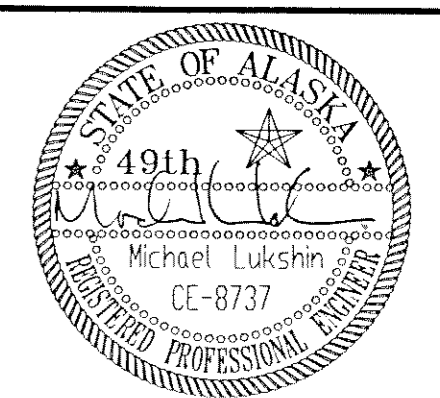
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

SOUTHEAST REGION
SOUTHEASTERN REGION AREA WIDE
PTR IMPROVEMENTS-PHASE II
PROJECT NO. 68627~STP-CM-0003(61)
S. DOUGLAS HWY. PTR SITE LAYOUT/
DETAILS

ALASKA
DESIGNED BY:
P. JONES
DRAWN BY:
D. STEVENS
CHECKED BY:
K. MATTON

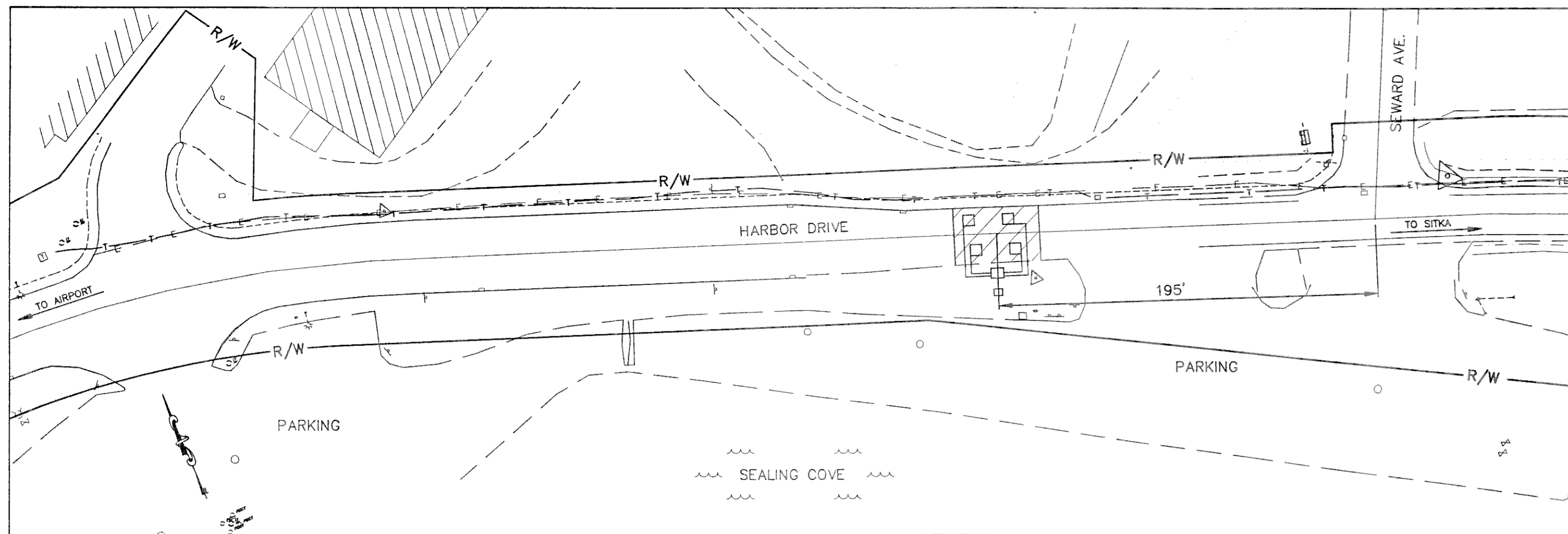
PROJECT NO.
68627
DATE:
2003
SHEET 4 OF 11



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BY:	DATE:	DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

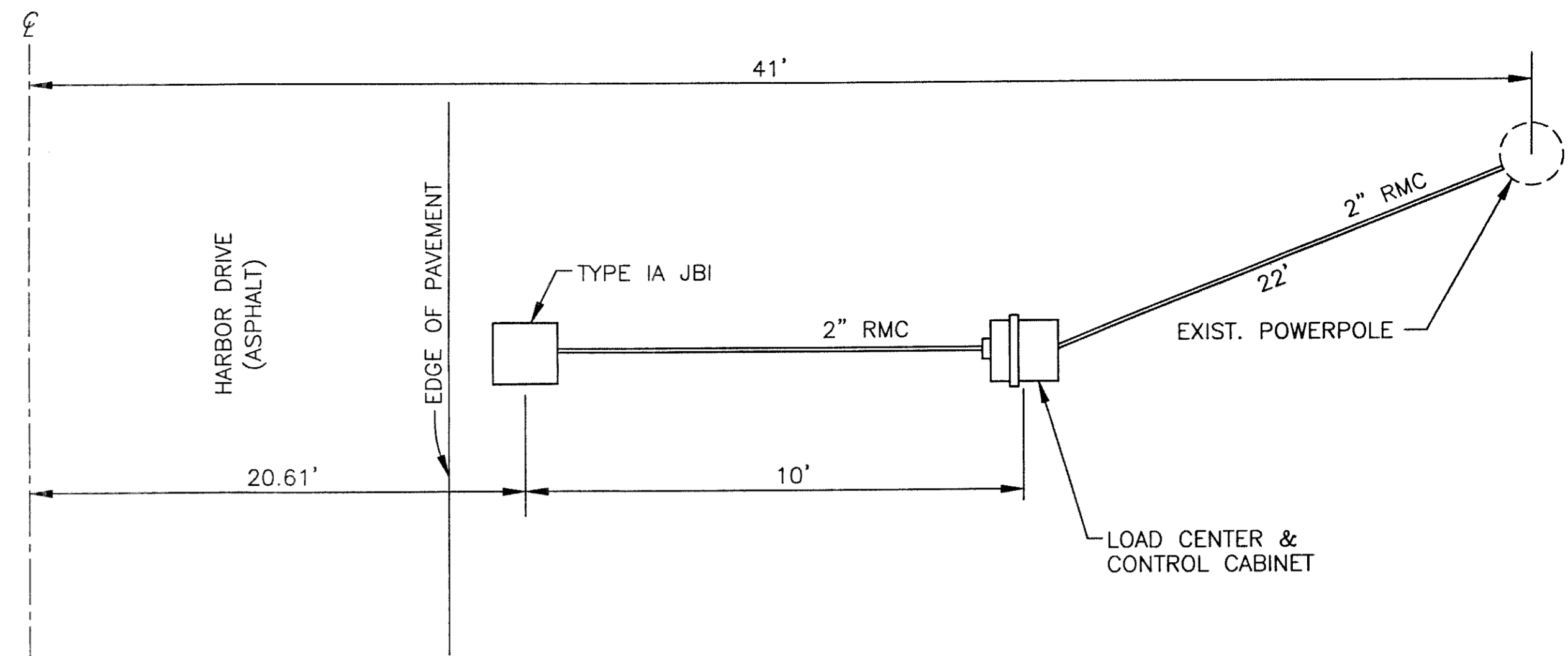


SITE LAYOUT
HARBOR DRIVE-ROUTE NO. 295460

NOT TO SCALE

H3

HARBOR DRIVE
THE CONTRACTOR SHALL REQUIRE A FIELD LOCATION OF UNDERGROUND POWER, TELEPHONE, WATERLINE AND WATER GATE VALVE.



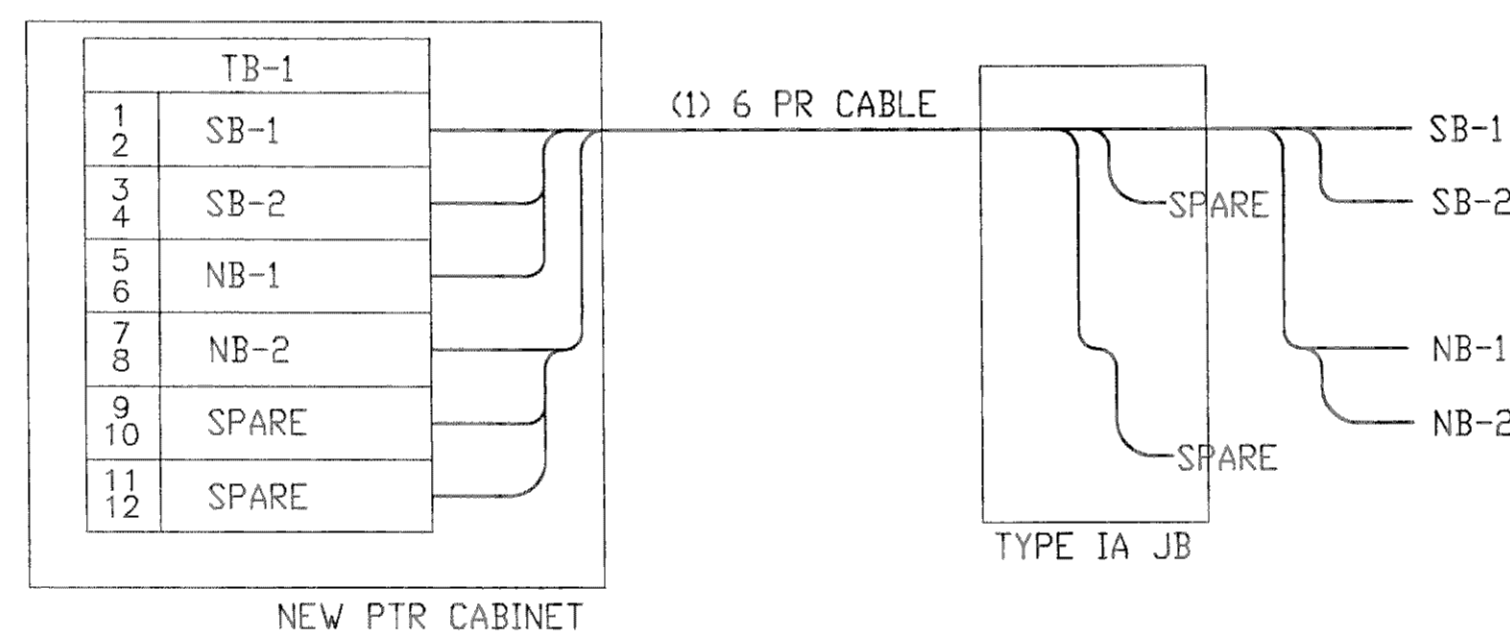
PLAN VIEW OF PAD

N.T.S.

H3

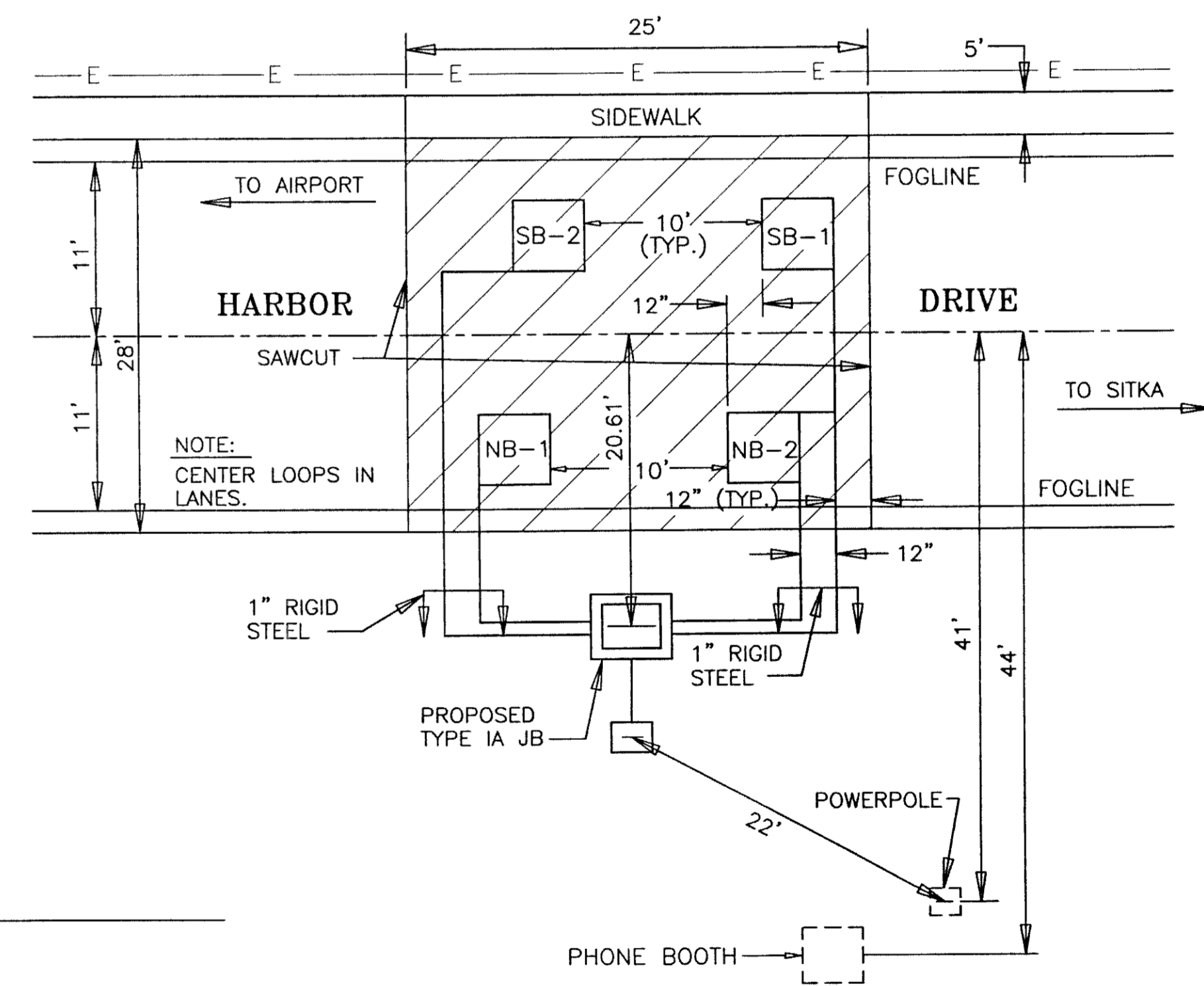
SHEET NOTES

- SEE TYPICAL SECTIONS FOR DIMENSIONS.
- INDUCTION LOOPS TO BE CENTERED IN TRAFFIC LANES.
- JUNCTION BOX SHALL BE TYPE IA.
- THE CONTRACTOR SHALL INSTALL A TELEPHONE LINE INTO THE PTR CABINET AND PAY ALL FEES AND PERMITS FOR PROVIDING TELEPHONE SERVICE. THE STATE WILL ACCEPT BILLING FOR THE TELEPHONE AFTER PROJECT COMPLETION.
- PTR CABINET AND LOAD CENTER CABINET SHALL BE LOCATED ON EXISTING LAWN. THE CONTRACTOR SHALL CUT OUT AND REAPPLY SOD AFTER INSTALLING PTR CABINET.



WIRING SCHEMATIC

H3



PLAN

TRAFFIC COUNTER TYPICAL

N.T.S.

H3

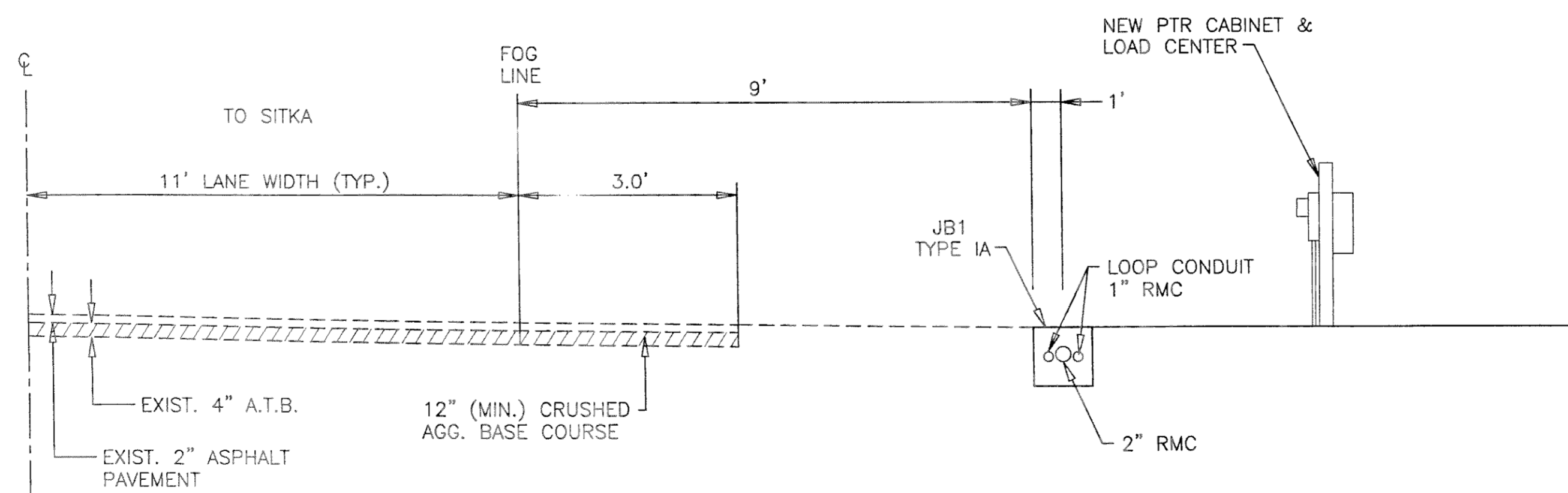
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

SITKA HARBOR DRIVE

CONDUIT TYPE	SIZE	FROM	TO	QTY.	CABLE TYPE
RMC	2"	PTR	JB1	1	(1)6PR CABLE No.18
PVC	1"	JB1	NB-2	1	1PR No.14
PVC	1"	JB1	SB-2	1	1PR No.14
PVC	1"	JB1	SB-1	1	1PR No.14
PVC	1"	JB1	SB-1	1	1PR No.14

CONDUIT/CONDUCTOR SCHEDULE

H3

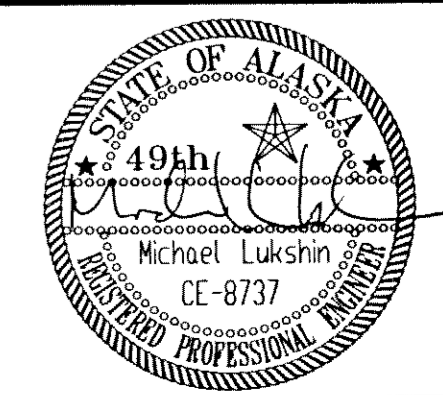


PROFILE VIEW

NOT TO SCALE
(EXISTING CROSS SECTION)

H3

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE: [Signature] Date: 9/29/04



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PLOT:

BY: DATE: DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

SOUTHEAST REGION

SOUTHEASTERN REGION AREAWIDE
PTR IMPROVEMENTS-PHASE II
PROJECT NO. 68627~STP-CM-0003(61)

**HARBOR DRIVE PTR SITE LAYOUT/
DETAILS**

ALASKA

DESIGNED BY:
P. JONES

DRAWN BY:
D. STEVENS

CHECKED BY:
K. MATTSO

PROJECT NO.
68627

DATE:
2003

SHEET 5 OF 11

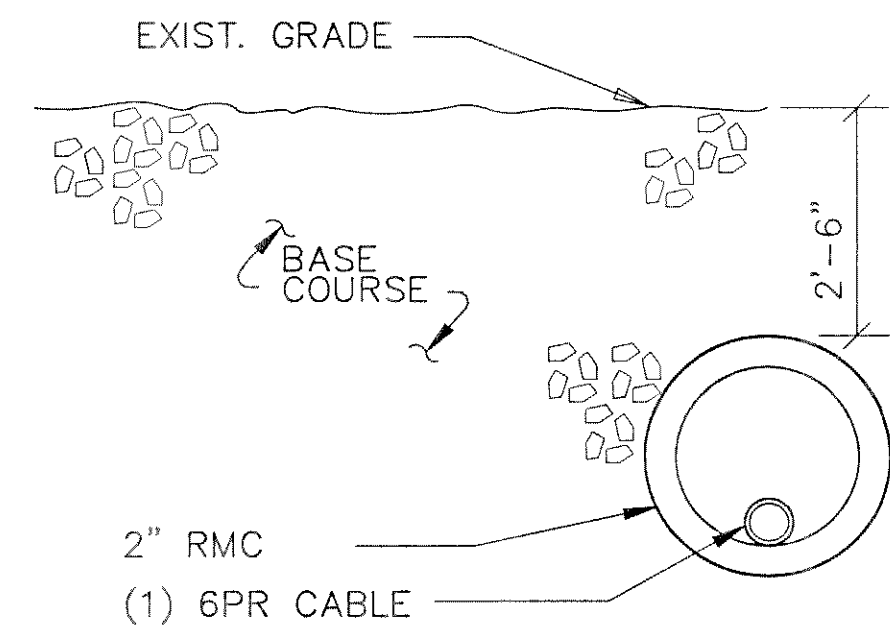
GENERAL NOTES

- EACH LOOP DETECTOR SHALL CONSIST OF A SINGLE PIECE OF #14 AWG CONDUCTOR INSTALLED IN 1" SCHEDULE 80 PVC CONDUIT. FORM ALL LOOPS 6 FEET SQUARE, SOLVENT WELD ALL PVC TO PVC JOINTS. USE TYPE X OUTLET BODIES THAT ARE MADE OF HOT DIP GALVANIZED STEEL TO JOIN THE LOOPS AND TAILS.
- INSTALL 4 TURNS OF CONDUCTOR IN ALL LOOPS AND PROVIDE TAILS THAT EXTEND TO THE JUNCTION BOX SPECIFIED ON THE PLANS. USE #14 AWG CONDUCTOR IN A POLYETHYLENE TUBE CONFORMING TO IMSA SPECIFICATION 51-5. WIND THE TAIL CONDUCTORS TOGETHER AT A RATE OF 3 TWISTS PER FOOT.
- INSTALL ALL LOOP DETECTORS PRIOR TO OVERLAYING EXISTING PAVEMENT OR PAVING A NEW ROADWAY.
- INSTALL ALL LOOP DETECTORS SLOPED TO DRAIN INTO THE JUNCTION BOX THE LOOP TAIL ENTERS.
- NO MINIMUM CLEARANCE IS REQUIRED BETWEEN A LOOP AND A TAIL OR BETWEEN TAILS. LOOP TAILS SHALL NOT CROSS LOOP CONDUITS.
- TEST ALL LOOP DETECTORS FOR CONTINUITY AND INSULATION INTEGRITY PRIOR TO SEALING THE LOOPS UNDER ASPHALT.
- WHEN INSTALLING LOOP DETECTORS IN EXISTING PAVEMENT, CUT THE ASPHALT WITH A SAW AND REMOVE ALL ASPHALT WITHIN THE SAW CUT. MATCH EXISTING PAVEMENT THICKNESS WHEN REPAIRING THE CUTOUT.
- WHERE EXISTING PAVEMENT WILL NOT BE OVERLAID, ENCLOSE ALL LOOPS THAT ENTER A COMMON JUNCTION BOX WITHIN A TRAPEZOIDAL SAW CUT. CUT TO WITHIN 12" OF THE LANE AND EDGE LINES, PRESERVING THESE PAVEMENT MARKINGS; REMOVE THE ASPHALT TO THE LIP OF THE GUTTER WHEN THERE ARE NO EDGE LINES. CUT ACROSS LANE LINES WHEN LOOPS IN ADJACENT LANES ARE SIDE BY SIDE. CUT TRENCHES A MINIMUM OF 1 METER WIDE WHEN INSTALLING LOOP TAILS ACROSS A LANE; TRENCHES CROSSING A SHOULDER ONLY MAY BE A MINIMUM 12" WIDE.
- HEAT AND TACK COAT THE EDGES OF EXISTING PAVEMENT PRIOR TO PAVING THE CUTOUTS. COMPACT THE ASPHALT MIXTURE WITH A SELF PROPELLED STEEL WHEELED ROLLER. THE ASPHALT MIX SHALL CONFORM TO SECTION 401 OF THE SPECIFICATIONS, AND APPROVED FOR USE BY THE ENGINEER.
- MAINTAIN THE REPLACEMENT ASPHALT MIX AT A TEMPERATURE OF 225° F UNTIL THE TIME OF APPLICATION; IF NECESSARY, STORE THE MIX IN AN INSULATED BOX TO MAINTAIN THE SPECIFIED TEMPERATURE.
- ALL WORK ASSOCIATED WITH INSTALLING LOOP DETECTORS IS CONSIDERED PART OF ITEM 121(1) AND WILL NOT BE MEASURED SEPARATELY OR PAID FOR DIRECTLY. THIS WORK INCLUDES BUT IS NOT LIMITED TO: LOOP MATERIALS, JUNCTION BOXES, CONDUIT, LOOP LEAD IN CABLE, TESTING, SPLICING, CONDUCTOR LABELING AND SAW CUTTING. ASPHALT REMOVAL AND INSTALLATION OF NEW ASPHALT SHALL BE PAID UNDER THEIR RESPECTIVE PAY ITEMS.
- DUCK SEAL ALL CONDUITS INSIDE THE JUNCTION BOXES.

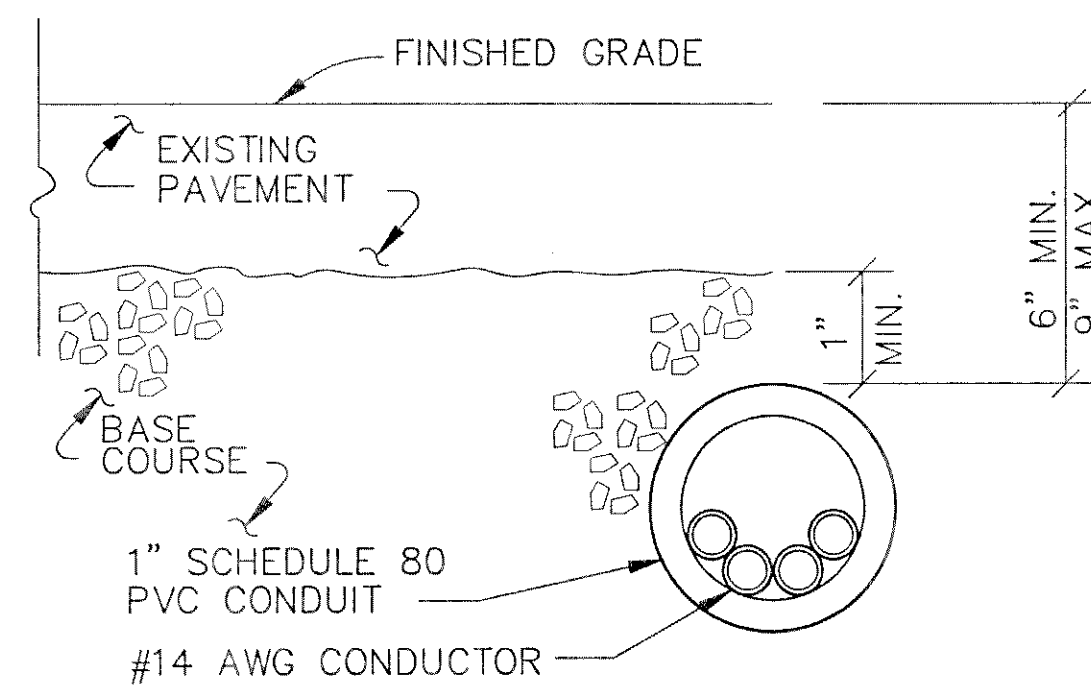
INDUCTIVE LOOPS

LEAD-IN WIRES FOR EACH LOOP SHALL BE IN SEPARATE CONDUITS TO THE FIRST JUNCTION BOX. THESE CONDUITS SHALL BE SEPARATED FROM OTHER LOOPS BY A MINIMUM OF 12".

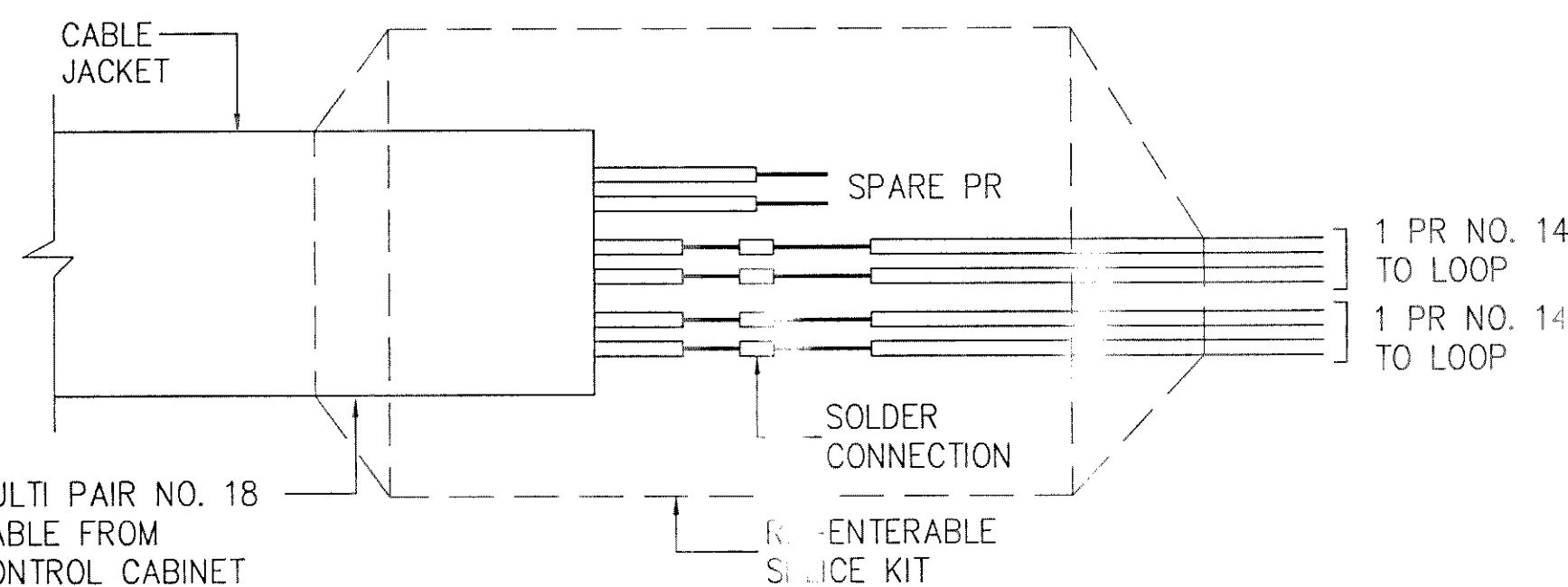
INDUCTIVE LOOPS SHALL BE INSTALLED IMMEDIATELY PRIOR TO PAVING THIS SECTION OF ROADWAY. FINAL LIFT ASPHALT PAVEMENT SHALL BE SMOOTH OVER ALL INDUCTIVE LOOPS AND WITHOUT TRANSVERSE SEAMS, JOINTS, OR ROUGHNESS WITHIN 50' OF THE LOOPS.



SECTION B-B



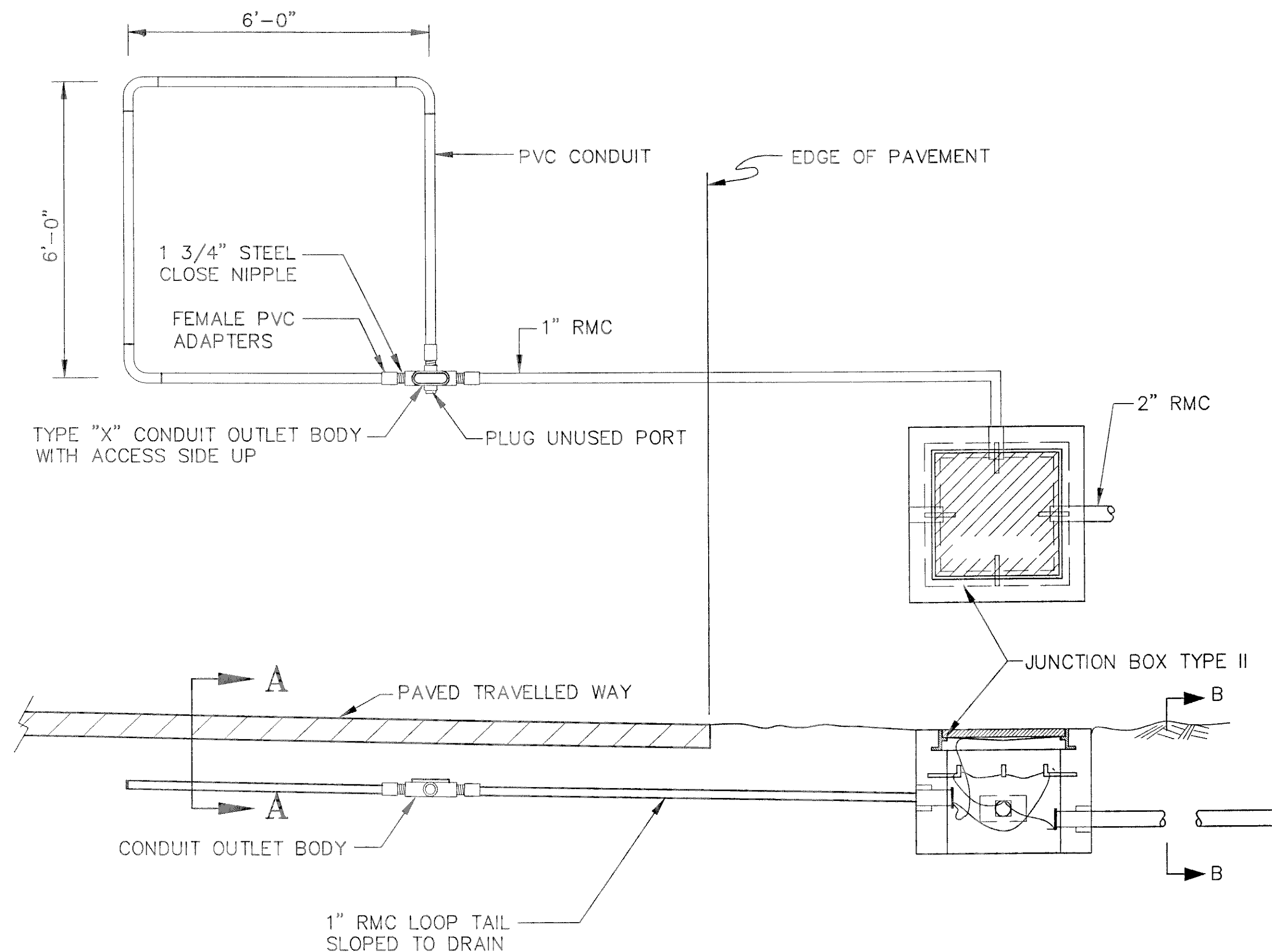
PVC CONDUIT DETAIL
SECTION A-A



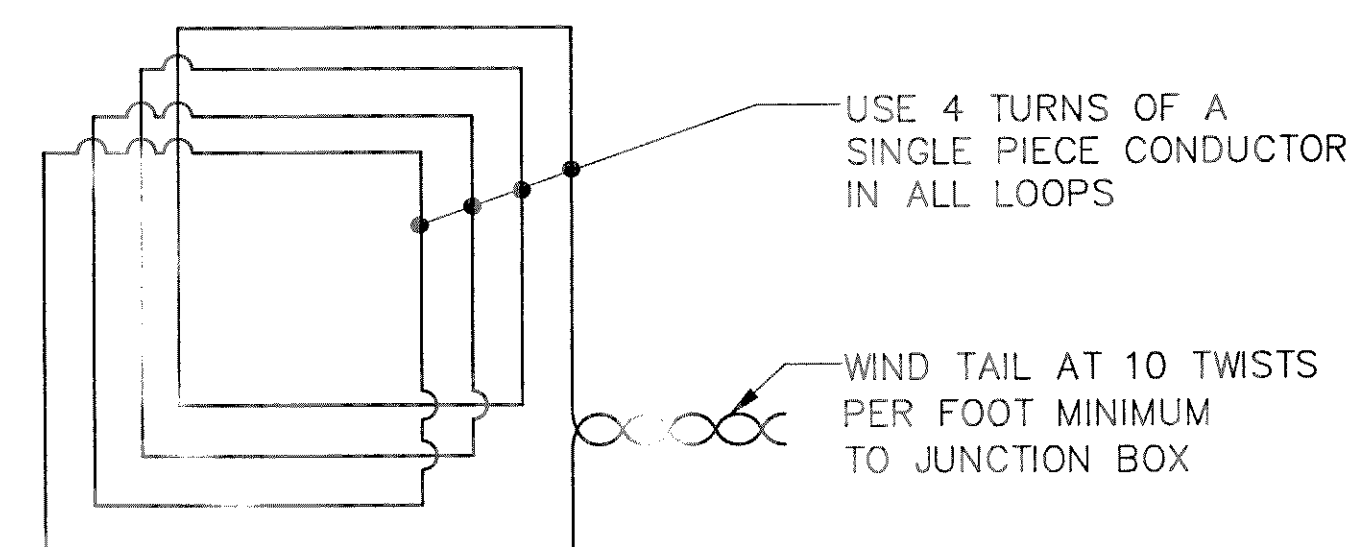
TYPICAL SPLICE DETAILS

NOTES:

- SCHEMATIC SKETCH SHOWS AN EXAMPLE OF TWO PAIRS USED WITH ONE SPARE
- TERMINATE ALL SPARES WITHIN THE SPLICE BODY.
- SPLICE BODY TO ENCLOSE ALL CABLE JACKETS.
- SOLDER CONNECTIONS. DO NOT USE COMPRESSION CONNECTORS WRAP EACH CONDUCTOR OVER OTHER CONDUCTOR BEFORE SOLDERING.
- USE COMMERCIAL SPLICE KITS SIMILAR OR EQUAL TO 3M PRODUCTS, TYPE 82-2F1.



SHOULDER SECTION



LOOP WIRING DETAIL

TYPICAL PVC CONDUIT ENCASED LOOP DETECTOR INSTALLATION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the conditions constructed.
PE: [Signature] Date: 7/27/04

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

PATH: Q:\PTR\SEA PTRs II\SE Detector.dwg

PLOT: FULL (1000=1) or HALF (1000=2)

BY: DATE: DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

SOUTHEAST REGION

SOUTHEASTERN REGION AREAWIDE
PTR IMPROVEMENTS—PHASE II
PROJECT NO. 68627~STP-CM-0003(61)
LOOP DETECTOR DETAILS

ALASKA

DESIGNED BY:
P. JONES

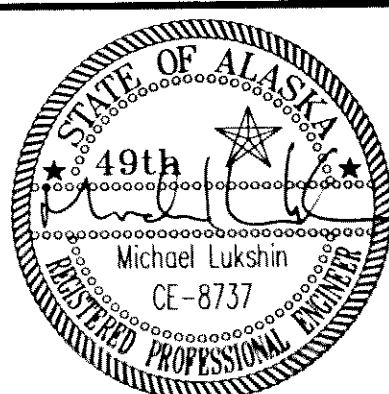
DRAWN BY:
D. STEVENS

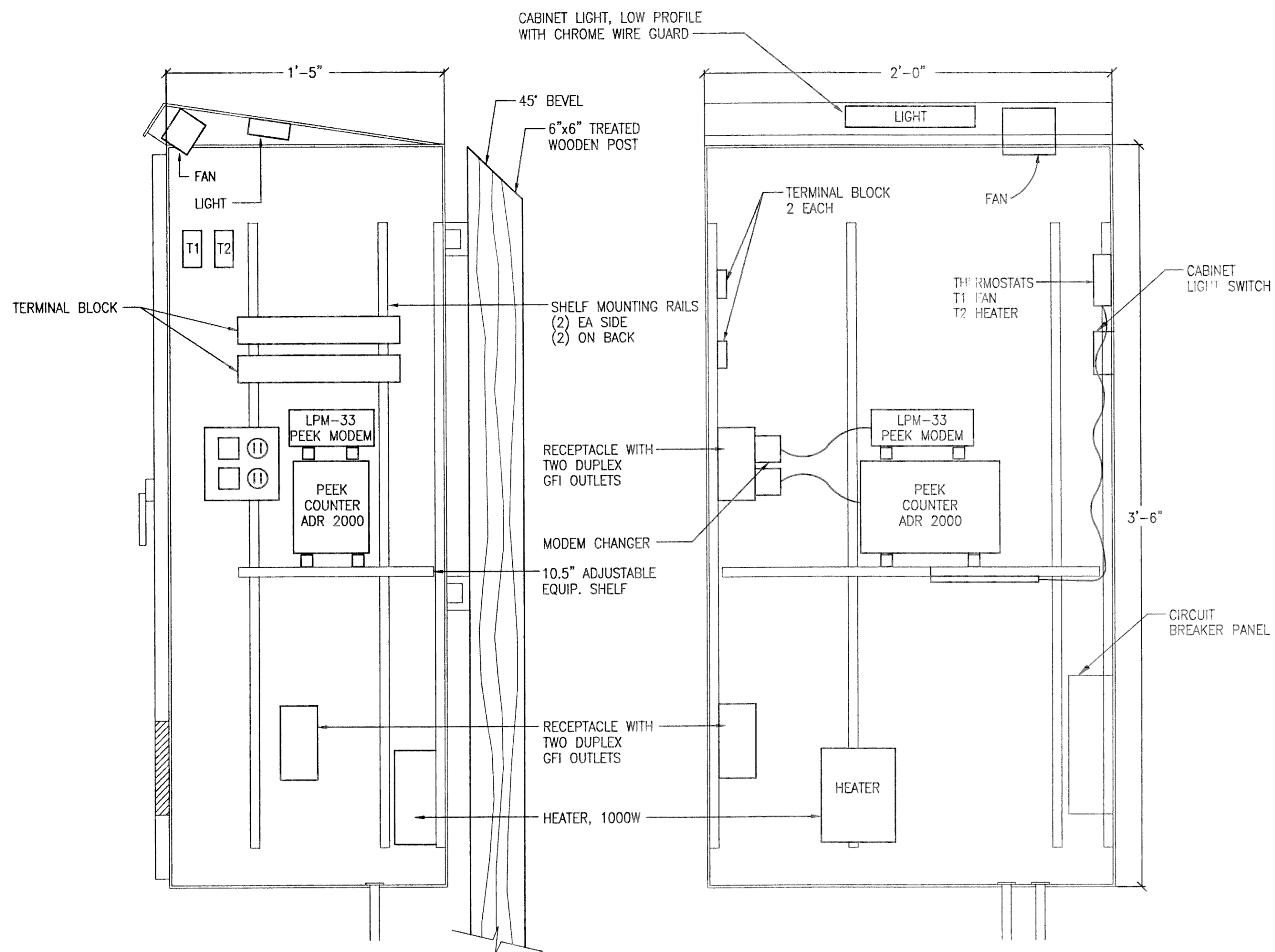
CHECKED BY:
K. MATTON

PROJECT NO.
68627

DATE:
2003

SHEET 7 OF 11

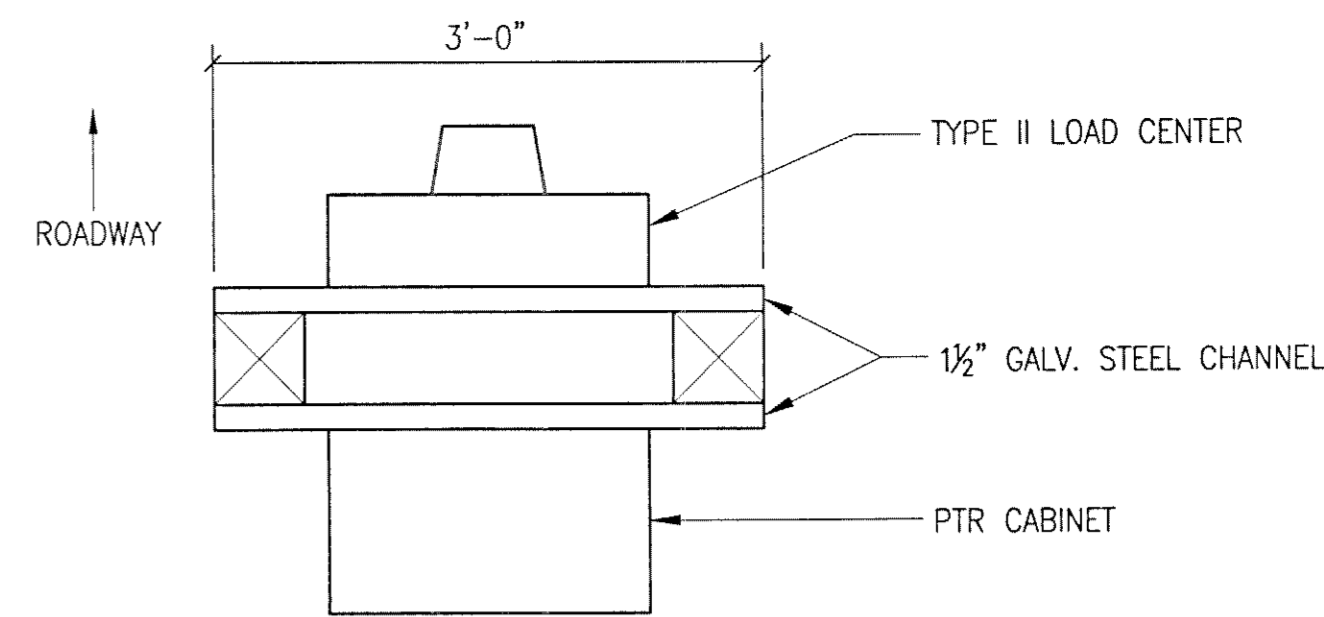




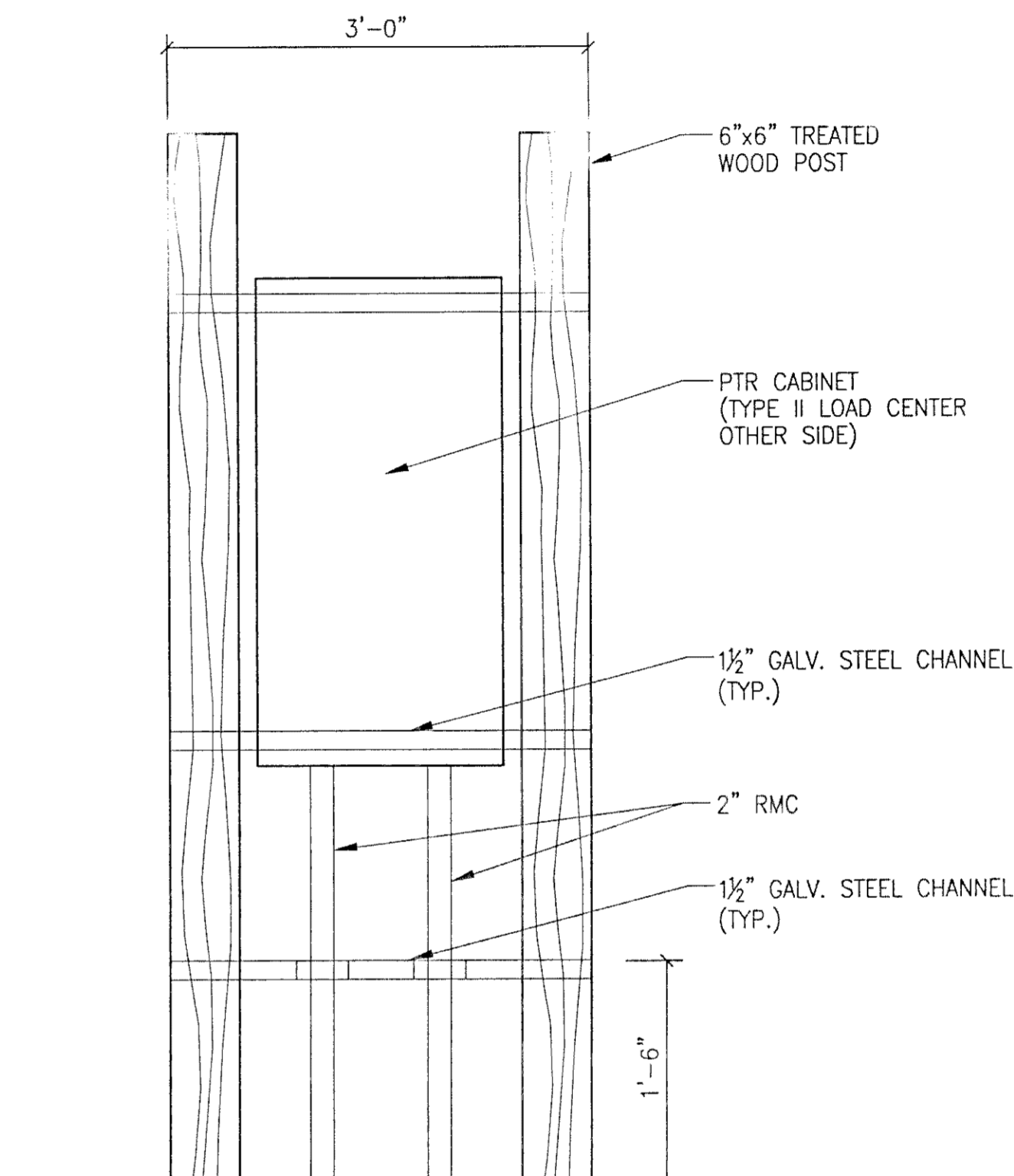
PTR CABINET DETAILS

NOTES:

1. USE CONDUIT HUBS IN BOTTOM OF CABINET. USE TYPE CHT WITH NEOPRENE SEAL AND INSULATED THROAT FOR NON-POWER CONDUITS WITH DETECTOR LEAD-IN CABLES AND TELEPHONE SERVICE. USE TYPE CHN FOR SERVICE ENTRANCE CONDUIT AND CONNECT FLEXIBLE METAL CONDUIT TO CB PANEL INSIDE CABINET.
2. SEE SPECIFICATIONS FOR ADDITIONAL CABINET REQUIREMENTS.
3. CABINET DOOR SHALL FACE AWAY FROM ROADWAY.
4. PROVIDE VOLTAGE SURGE PROTECTION IN CB PANEL.
5. ALL 120V WIRING, INCLUDING THAT FOR PANELBOARD, LIGHT, FAN, AND THERMOSTATS TO BE IN FLEXIBLE METAL CONDUIT WITH EXCEPTION OF CORD CONNECTED ELECTRONIC EQUIPMENT.
6. ALL EQUIPMENT INSIDE CABINET TO BE FASTENED TO RAILS WITH NO SCREW PENETRATIONS OF THE CABINET SURFACE.
7. THE PTR CABINET SHALL BE AN ALUMINUM TYPE 6 BOX WITH NOMINAL DIMENSIONS AS SHOWN ON THE PLAN.

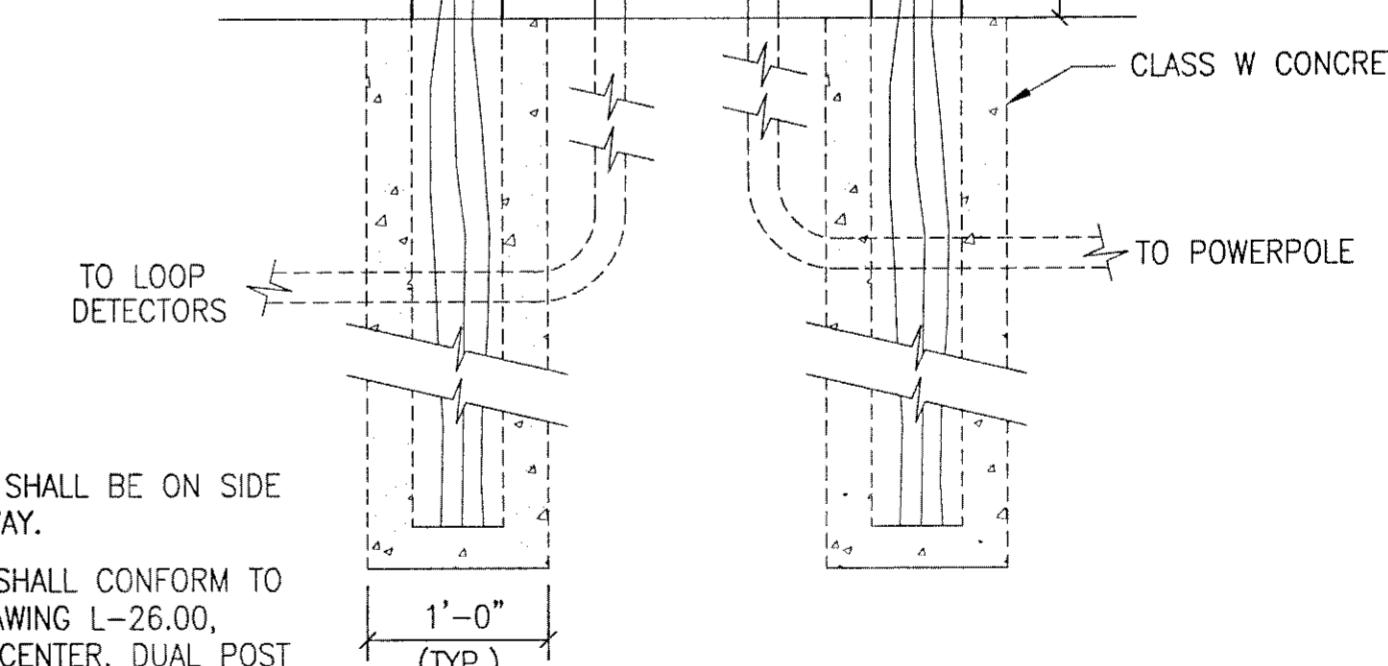


PLAN



ELEVATION

TYPICAL CABINET & LOAD-CENTER DETAIL



NOTES:

1. LOAD CENTER SHALL BE ON SIDE FACING ROADWAY.
2. INSTALLATION SHALL CONFORM TO STANDARD DRAWING L-26.00, TYPE II LOAD CENTER, DUAL POST ALTERNATIVE EXCEPT AS NOTED ON THESE PLANS.

- (H1) HAINES HWY-HNS
- (H2) S. DOUGLAS HWY-JUN
- (H3) HARBOR DRIVE-SITKA

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the construction. Date 9/20/04

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

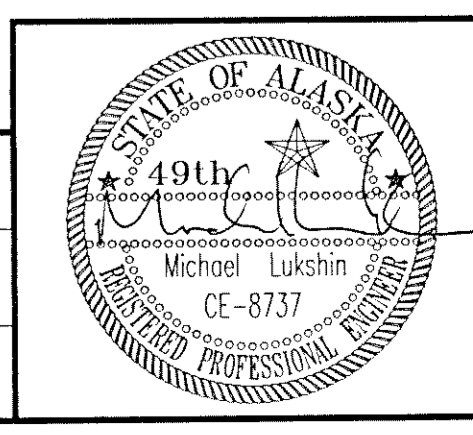
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BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

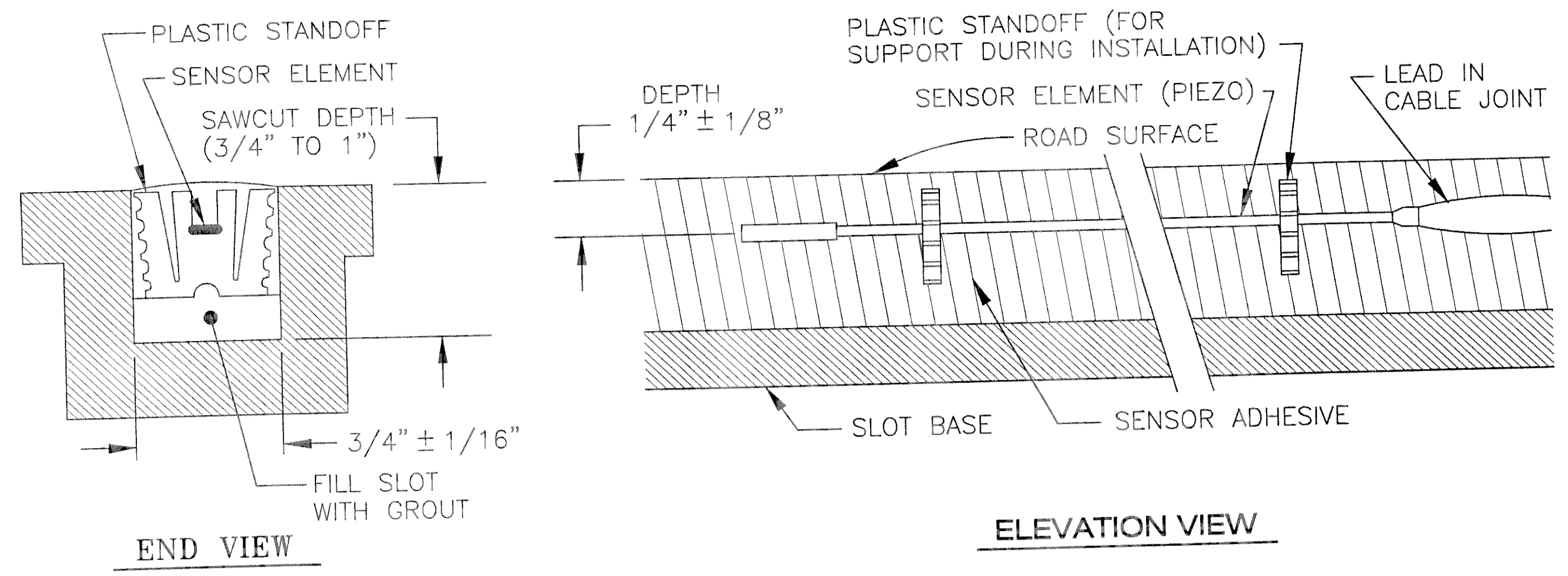
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

SOUTHEAST REGION
SOUTHEASTERN REGION AREAWIDE
PTR IMPROVEMENTS-PHASE II
PROJECT NO. STP-CM-0003(61)~68627
CONTROL CABINET DETAILS

DESIGNED BY: P. JONES
DRAWN BY: D. STEVENS
CHECKED BY: K. MATTSON

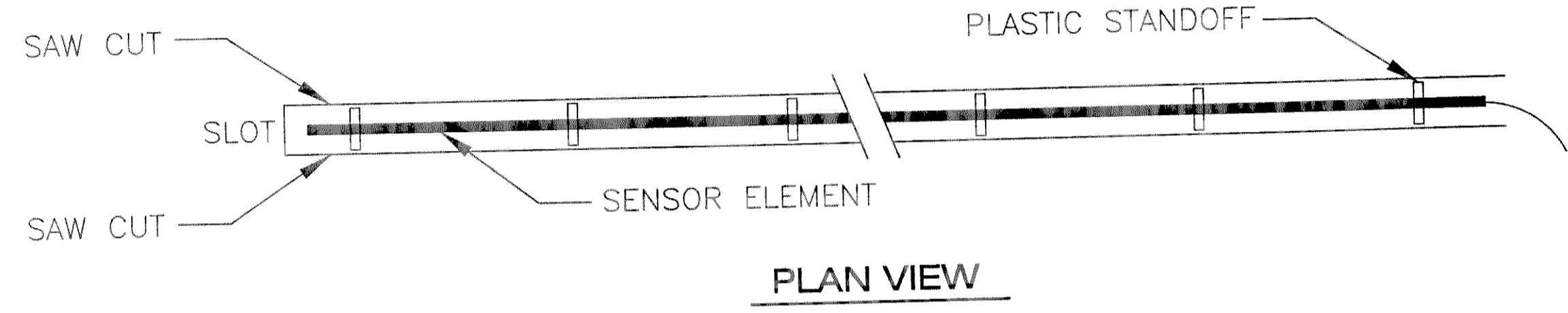
PROJECT NO. 68627
DATE: 2003
SHEET 8 OF 11





END VIEW

ELEVATION VIEW

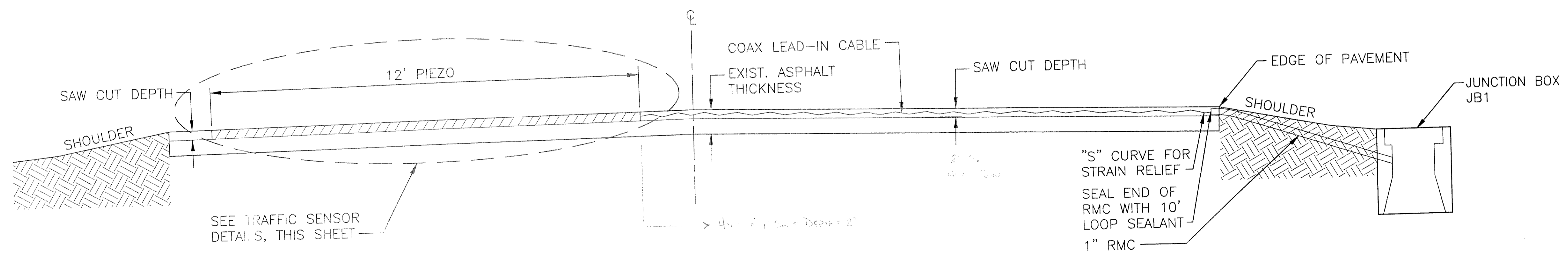


PLAN VIEW

TRAFFIC SENSOR DETAILS

N.T.S.

NOTE:
THE TRAFFIC SENSOR (PIEZO) SHALL BE INSTALLED PER THE SPECIFICATIONS AND ONLY WHEN A PEEK MANUFACTURER'S REPRESENTATIVE IS PRESENT.



TRAFFIC SENSOR INSTALLATION DETAIL

N.T.S.

- NOTES:**
- FOR CLARITY, ONLY FAR LANE PIEZO DETAIL SHOWN. NEAR LANE PIEZO IS SIMILAR.
 - THE SLOT FOR THE PIEZO SENSOR SHALL BE CUT USING BLADES THAT ARE GANGED TOGETHER.
 - CLEAN THE SLOT WITH COMPRESSED AIR AND HIGH PRESSURE WATER PER THE MANUFACTURER'S INSTRUCTIONS.
 - THE SLOT SHALL BE CLEAN AND COMPLETELY DRY BEFORE INSTALLING THE PIEZO SENSOR.
 - AFTER INSTALLING THE PIEZO SENSOR, THE CONTRACTOR SHALL FOLLOW THE PIEZO MANUFACTURER'S RECOMMENDATIONS TO PROPERLY INSTALL THE GROUT.

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge.
 PE: *[Signature]* Date: 7/20/04

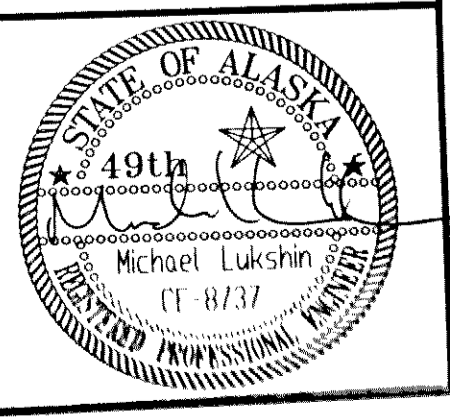
RECORD OF REVISIONS		
BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

SOUTHEAST REGION
 H1 H4

SOUTHEASTERN REGION AREAWIDE
 PTR IMPROVEMENTS—PHASE II
 PROJECT NO. STP-CM-0003(61)~68627
PIEZO DETAILS
HAINES HWY. & KLONDIKE HWY.

DESIGNED BY: P. JONES	PROJECT NO. 68627
DRAWN BY: D. STEVENS	DATE: 2003
CHECKED BY: M. LUKSHIN	SHEET 9 OF 11



SUMMARY OF LOAD CENTER: H1				
LOAD CENTER TYPE 2				
LOAD CENTER: LOCATION DATA: TYP. FOR ALL				
POWER SOURCE: POWER POLE, TYP. FOR ALL				
PHOTOELECTRIC CONTROL: NO				
SERVICE VOLTAGE	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	125
MAIN BREAKER A:	120/240 VOLT,	1 POLE,	100 AMPHERES	
CONTACTOR:	600 VOLT,	12 POLE,	30 AMPHERES	
LOAD PANEL A SUMMARY				
CIRCUIT NUMBER	DESCRIPTION	KVA LOAD	BREAKER	
			AMPS	POLES
A1	PERMANENT TRAFFIC RECORDER & MODEM		20A	2
A2	FAN, LIGHTS & HEATER		20A	2
A3	SPACE	-	-	-
A4	SPACE	-	-	-

HAINES HIGHWAY ROUTE NO 298000

SUMMARY OF LOAD CENTER: H2				
LOAD CENTER TYPE 2				
LOAD CENTER: LOCATION DATA: TYP. FOR ALL				
POWER SOURCE: POWER POLE, TYP. FOR ALL				
PHOTOELECTRIC CONTROL: NO				
SERVICE VOLTAGE	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	125
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	PERMANENT TRAFFIC RECORDER & MODEM		20A	2
A2	FAN, LIGHTS & HEATER		20A	2
A3	SPACE	-	-	-
A4	SPACE	-	-	-

JUN SOUTH DOUGLAS ROUTE NO 296110

SUMMARY OF LOAD CENTER: H3				
LOAD CENTER TYPE 2				
LOAD CENTER: LOCATION DATA: TYP. FOR ALL				
POWER SOURCE: POWER POLE, TYP. FOR ALL				
PHOTOELECTRIC CONTROL: NO				
SERVICE VOLTAGE	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	125
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	PERMANENT TRAFFIC RECORDER & MODEM		20A	2
A2	FAN, LIGHTS & HEATER		20A	2
A3	SPACE	-	-	-
A4	SPACE	-	-	-

HARBOR DRIVE ROUTE NO 295460

LOAD CENTER NOTES

1. CONTRACTOR SHALL HAVE METERS INSTALLED, AND PAY ANY FEES REQUIRED BY THE LOCAL UTILITY. THE STATE WILL ACCEPT MONTHLY BILLING WHEN THE FINAL PROJECT IS ACCEPTED BY THE ENGINEER.
2. SEE STANDARD DRAWING L-26.00.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the actual construction.
 PE: *[Signature]* Date: 9/10/04

NOTE: DO NOT SCALE FROM THESE PLANS--USE DIMENSIONS

PATH: Q:\PTR\SEA PTRs II\SE LOAD-C.DWG		
PLOT:		
BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

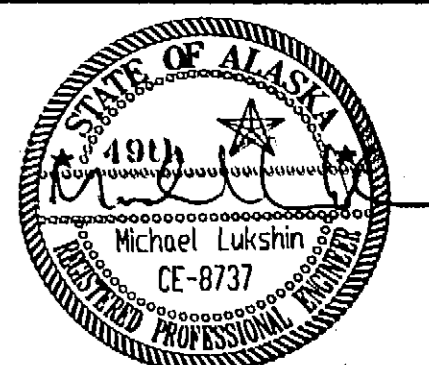
SOUTHEAST REGION

SOUTHEASTERN REGION AREAWIDE
 PTR IMPROVEMENTS-PHASE II
 PROJECT NO. STP-CM-0003(61)~68627
LOAD CENTER SUMMARY

ALASKA

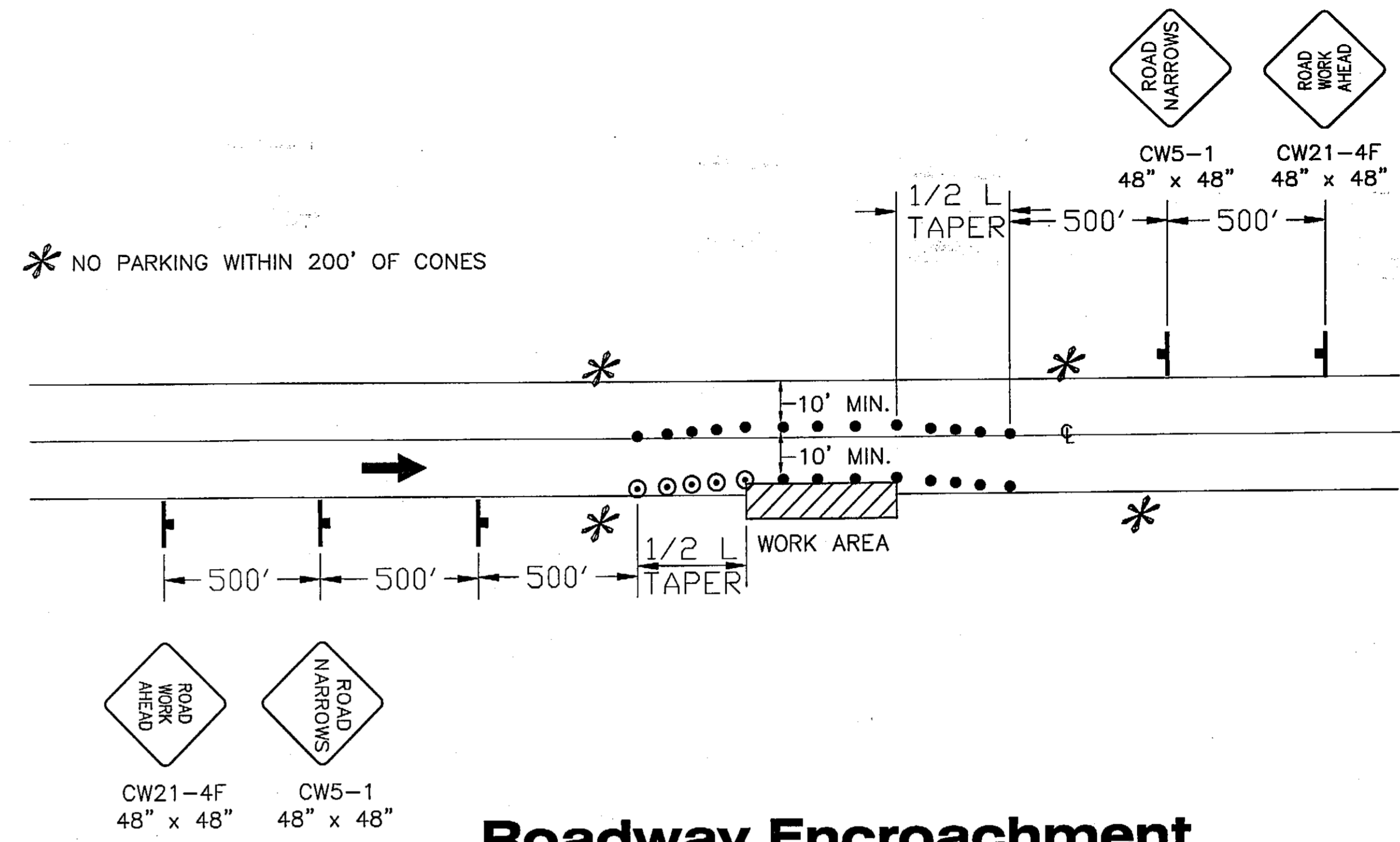
DESIGNED BY:
P. JONES
 DRAWN BY:
D. STEVENS
 CHECKED BY:
K. MATTSO

PROJECT NO.
68627
 DATE:
2003
 SHEET 10 OF 11



TRAFFIC CONTROL NOTES

- IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. PLANS FOR CONFIGURATIONS NOT COVERED BY THE TCP SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. WHERE APPROPRIATE, THEY SHALL INCORPORATE APPLICABLE PORTIONS OF DETAILS ON THESE SHEETS.
- TWO LANES SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORKING HOURS.
- TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'.
- CONSTRUCTION SIGNS SHALL BE IN PLACE ONLY WHEN THE CONDITIONS THEY WARN ABOUT EXIST.
- THE CONTRACTOR SHALL DELINEATE PEDESTRIAN AND BICYCLE ACCESS WITH TRAFFIC CONES AS REQUIRED DURING CONSTRUCTION ACTIVITIES, CONE SPACING SHALL BE 10' MAXIMUM.
- THE CONTRACTOR SHALL PROVIDE VEHICULAR ACCESS THRU WORK ZONES AS REQUIRED BY THE ENGINEER.
- FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
- CHANNELIZATION DEVICES IF USED AT NIGHT SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
- A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES, THROUGH ALL WORK AREAS.
- PAVEMENT WORK SHALL NOT OCCUR BETWEEN 7:00-9:00 A.M. AND 4:30-6:30 P.M. DURING WEEK DAYS IN JUNEAU AND SITKA.



NOTE: IF ONLY ONE LANE IS EFFECTED BY ROAD WORK (THAT IS, THE CONES ALONG THE WORK AREA ARE NO CLOSER THAN 10' TO CENTERLINE) THE CENTERLINE CONES FOR THE OPPOSING LANE MAY BE DELETED.

LEGEND

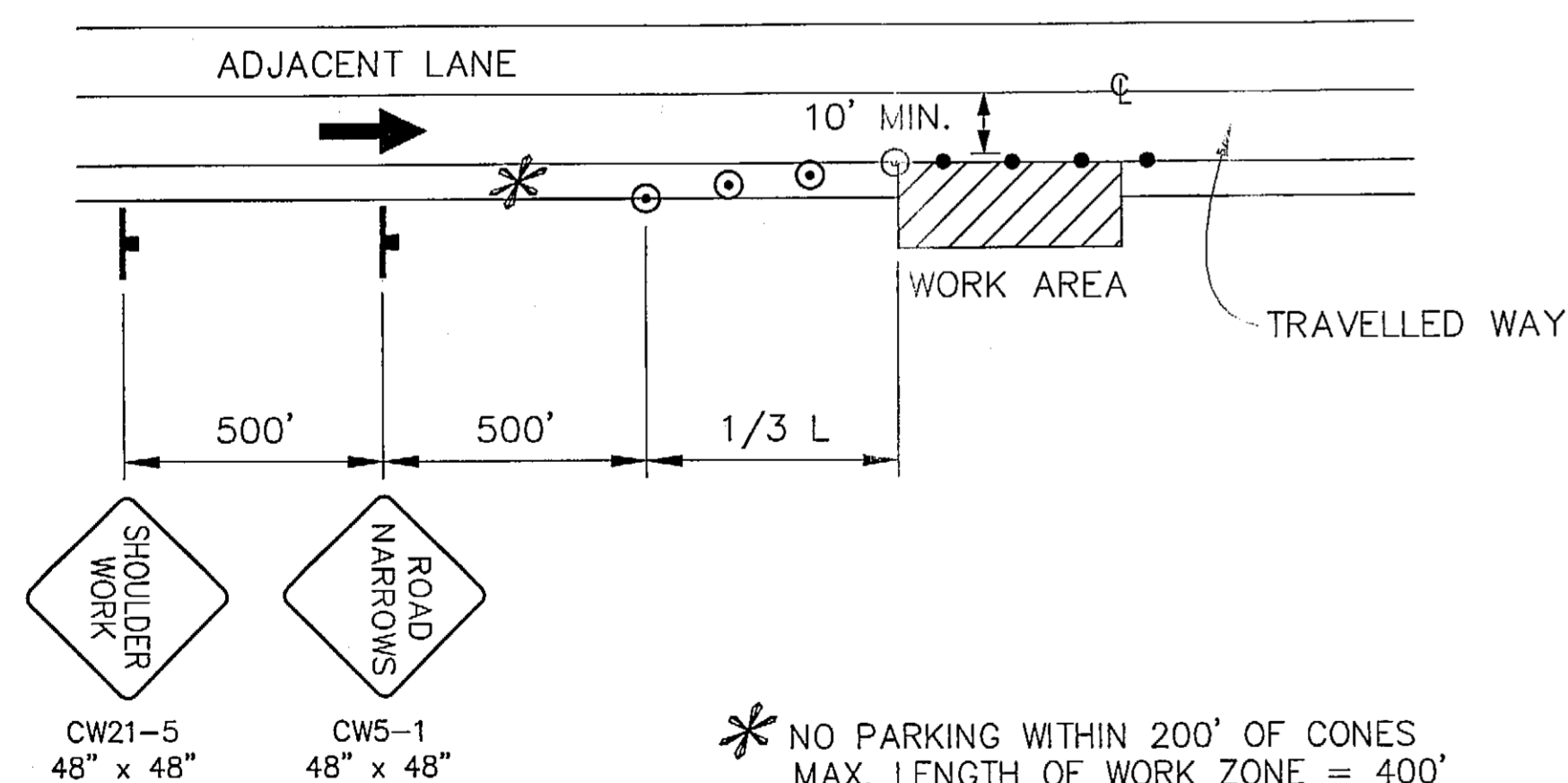
- SIGN
- CONE
- DRUM
- TYPE III BARRICADE
- FLAGGING STATION

WHERE

- L = LENGTH OF TAPER
- W = WIDTH OF OFFSET
- T = TAPER RATE
- $L = W \times T$

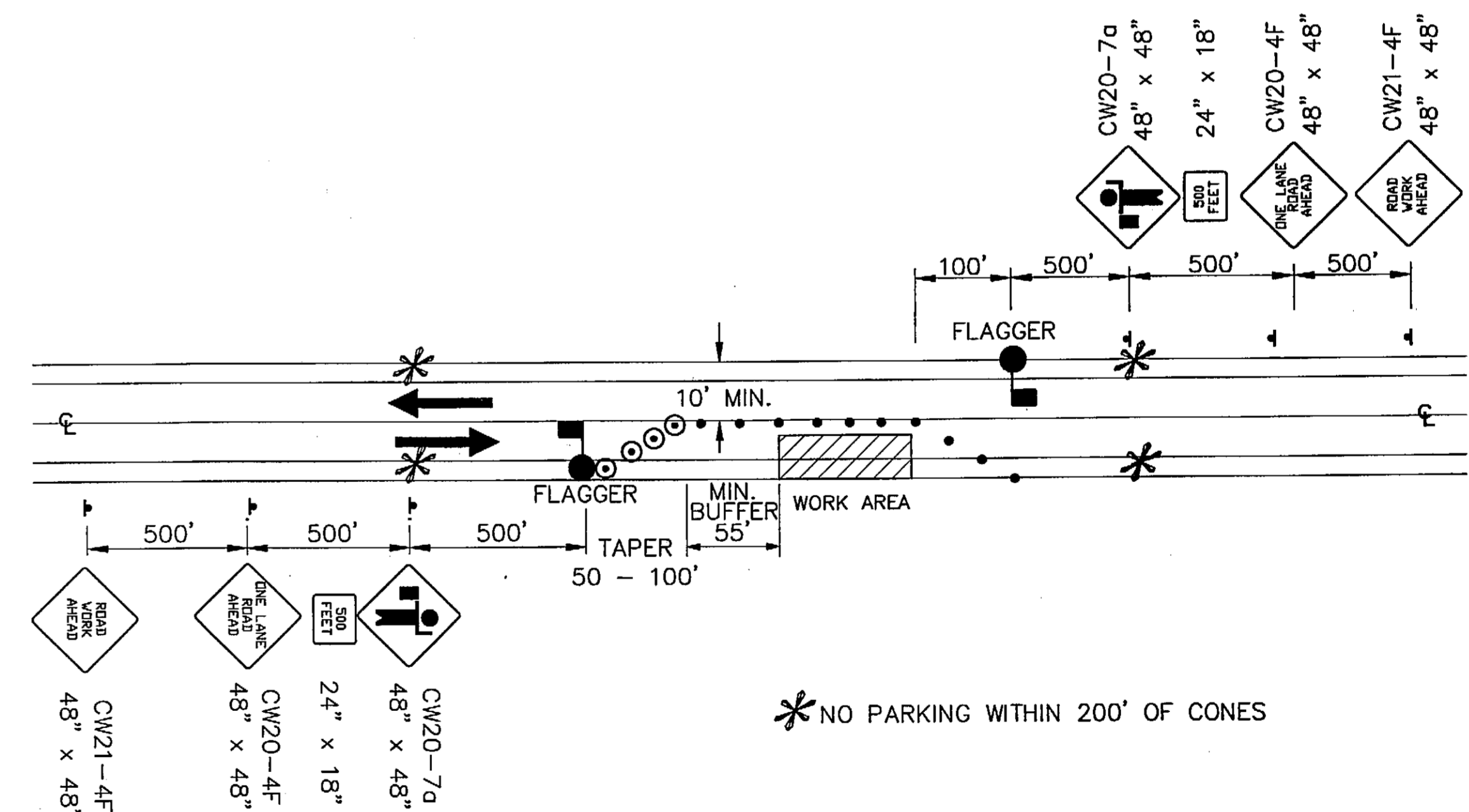
TCP TABLE SETUP

SPEED (MPH)	BUFFER/LENGTH (ft.)	CONE/DRUM SPACING (ft.)	TAPER FACTOR (T)
20	35	20	7:1
25	55	25	10:1
30	85	30	15:1
35	120	35	20:1
40	170	40	30:1
45	220	45	45:1
50	280	50	50:1
55	335	55	55:1
60	415	60	60:1
65	485	65	65:1



* NO PARKING WITHIN 200' OF CONES. MAX. LENGTH OF WORK ZONE = 400'

Shoulder Work



Two Lane Road - Single Lane Closure Double Flagger

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the work as constructed.
 Date: 9/20/04
 Michael Lukshin
 CE-8737

PATH: Q:\PTR\SEA PTRs II\TrafficControl.dwg

PLOT:

BY: DATE: DESCRIPTION OF CHANGE:

RECORD OF REVISIONS

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION DESIGN & CONSTRUCTION

SOUTHEAST REGION

SOUTHEASTERN REGION AREAWIDE
 PTR IMPROVEMENTS-PHASE II
 PROJECT NO. STP-CM-0003(61)-68627
TRAFFIC CONTROL PLAN

ALASKA

DESIGNED BY: P. JONES
 DRAWN BY: D. STEVENS
 CHECKED BY: K. MATTSON

PROJECT NO. 68627
 DATE: 2003
 SHEET 11 OF 11

