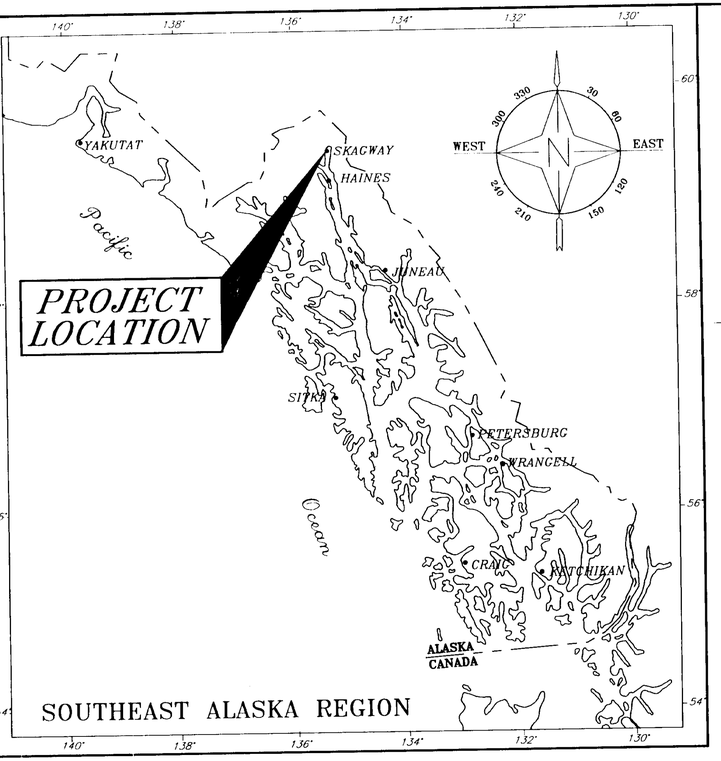


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

SKAGWAY

KLONDIKE HIGHWAY

PERMANENT TRAFFIC RECORDER

PROJECT NO. STP-CM-0003(59) 74162

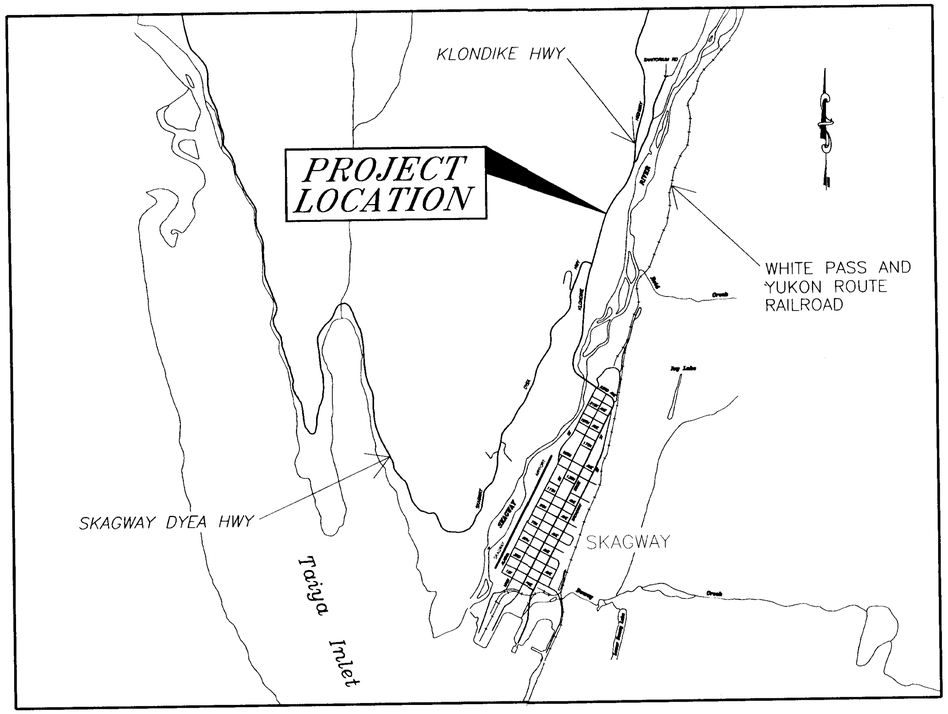
INSTALL NEW PERMANENT TRAFFIC RECORDER SYSTEM COMPLETE

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	PTR SITE LAYOUT/ESTIMATE OF QUANTITIES
3	MISCELLANEOUS DETAILS
4	LOOP DETECTOR DETAILS
5	PIEZO DETAILS
6	CONTROL CABINET DETAILS
7	TYPE 2 & 3 LOAD CENTER DETAILS
8	TRAFFIC CONTROL PLAN

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1, C-01.03[M], C-02.01[M], D-01.02[M], L-23.01[M], S-05.00[M], S-30.01[M]



VICINITY MAP

PTR ASSEMBLY SCHEDULE

STATION	CABINET OFFSET <1>	CABINET ASSEMBLY STYLE	INDUCTIVE LOOPS (QTY.)	AVC SENSOR & TYPE	LOAD CENTER & TYPE	ELECTRICAL & TELEPHONE SERVICE
Station 1+000.00	7.6m LT.	CAB2	4	2 PIEZO	TYPE 2	120 VOLTS 2.5 KVM <2> LANDLINE

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

<2> 20 AMP - 120/240 VOLT SINGLE PHASE THREE - WIRE CIRCUIT.

AS 54.L.15

Contractor - Alaska Electric & Control

Project Engineer - Cliff Douglas

Work Began - October 9, 2000

Work Completed - November 15, 2000

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

APPROVED

_____ Date _____

Regional Preconstruction Engineer

APPROVED

_____ Date _____

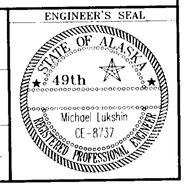
Regional S.E. Director

PROJECT NUMBER: *74162*

DATE: *JUNE, 2000*

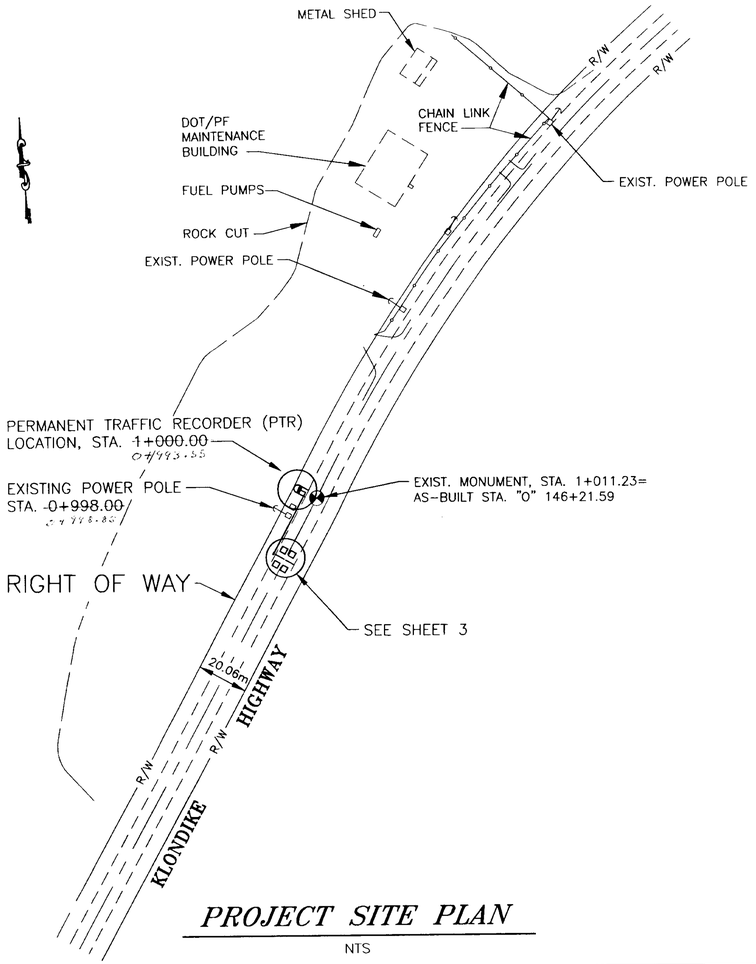
SHEET *1* OF *8*

ENGINEER'S SEAL



BASIS OF HORIZONTAL & VERTICAL CONTROL

1. HORIZONTAL AND VERTICAL CONTROL IS BASED ON THE EXISTING CENTERLINE AND EXISTING FINISHED SURFACE. THE STATIONING SHOWN ON THE PLANS IS FOR INFORMATIONAL PURPOSES ONLY AND SUBJECT TO CHANGE.



PROJECT SITE PLAN

NTS

LABELS

ALL CABLES SHALL BE LABELED AT BOTH ENDS AND AT EVERY JUNCTION BOX THROUGH WHICH THE CABLES PASS, PER SPECIFICATION SECTION 660-209(a).

ALL WIRE PAIRS SHALL BE LABELED AT THE TERMINAL BLOCK AND AT ANY LOOSE ENDS.

THE CONVENTIONS BELOW SHALL APPLY TO DESIGNATING AND LABELING CABLES AND WIRE PAIRS.

LANES: TRAFFIC LANES AND THEIR RESPECTIVE LOOPS AND SENSORS SHALL BE LABELED FROM THE OUTSIDE EDGE OF THE ROAD TOWARD THE CENTER AS FOLLOWS:

TERMINAL BLOCKS: WIRES FROM SENSORS PLACED IN LANES WHICH ARE CLOSED TO THE CONTROL BOX SHALL BE PLACED AT THE LEFT OR AT THE TOP OF THE TERMINAL BLOCK, DEPENDING ON ORIENTATION.

WIRES FOR INDUCTIVE LOOP, SENSORS AND RESERVES SHALL BE LABELED AS FOLLOWED:

PnDLc

PnDLc

WHERE:

P IS THE PREFIX:
- V = TRAFFIC VOLUME LOOP
- Ga = AUTOMATIC VEHICLE CLASSIFICATION (AVC) SENSOR
- D = PIEZO

N NUMBER SUFFIX FOR MULTIPLE LOOPS IN THE SAME LANE

D DIRECTION (N,S,E,W)

L IS THE PREFIX FOR ROAD DESIGNATION
- L = LANE*
- LP = LOOP **
- P = PIEZO***

(X) – CONDUIT REFERENCE NUMBER

RMC– RIGID METAL CONDUIT
IMC –INTERMEDIATE METAL CONDUIT

(#/#M) – DETAIL NUMBER

GENERAL NOTES:

1. INSTALLATION OF EQUIPMENT AND MATERIALS SHALL CONFORM TO APPLICABLE REQUIREMENTS OF THE CURRENT NEC, ALASKA DOT/PF STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION.
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 RMC CONDUIT.
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 OF WHICH PAYMENT WILL BE INCIDENTAL TO ITEM 669(1).
6. THE TYPE 3 LOAD CENTER SHALL BE INCIDENTAL TO PAY ITEM 669(1).

REFERENCE SPECIFICATIONS

ALL WIRING IN THIS SECTION SHALL BE CONSTRUCTED PER SPECIFICATION SECTION 660 SIGNALS AND LIGHTING, EXCEPT WHERE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS. IN PARTICULAR, ALL CONSTRUCTION SHALL CONFORM TO SPECIFICATION SECTIONS 660-2.05 CONDUIT, 660-2.06 JUNCTION BOXES, 660-2.08 CONDUCTORS, 660-2.09(A) WIRING, 660-2.10 BONDING AND GROUNDING, AND 660-2.13 FIELD TESTS, EXCEPT AS MODIFIED BY SECTION 669 AUTOMATED TRAFFIC RECORDERS.

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
120 (1)	DBE ADJUSTMENT	C.S.	ALL REQ'D.
669 (1)	PERMANENT TRAFFIC COUNTER SYSTEM COMPLETE	L.S.	ALL REQ'D.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: Q:\JNU\57801\TRAFFIC\SKAGWAY3.DWG
PLOT: 1=100.5

BY:	DATE:	DESCRIPTION OF CHANGE:

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

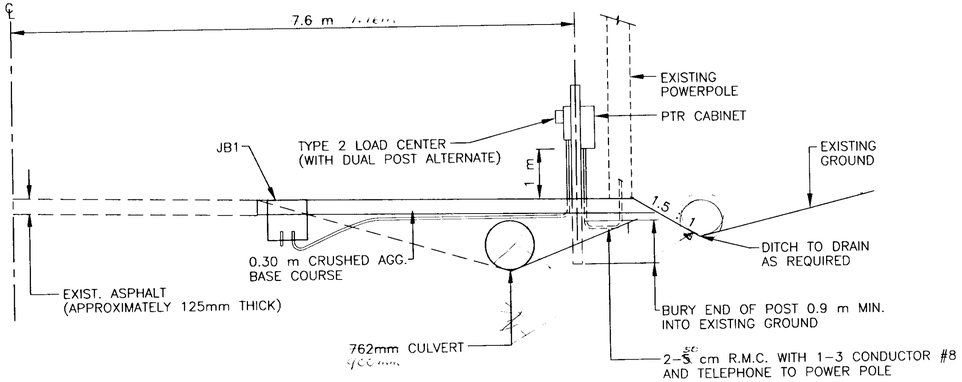
SKAGWAY

KLONDIKE HIGHWAY PTR SITE LAYOUT/ ESTIMATE OF QUANITIES

ALASKA

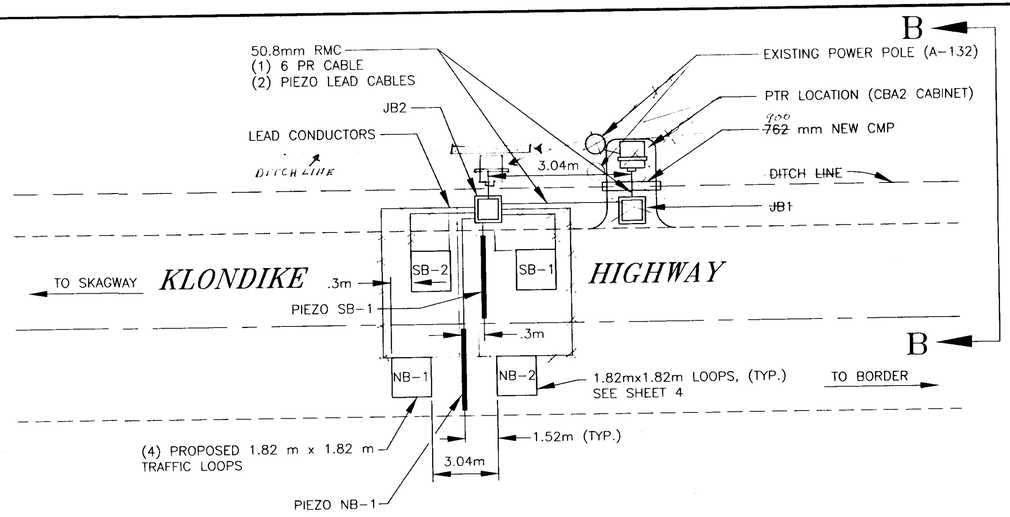
DESIGNED BY: P. JONES	PROJECT NO. 74162
DRAWN BY: D. STEVENS	DATE: JUNE, 2000
CHECKED BY: K. MATTSON	SHEET 2 OF 8

STATE OF ALASKA 49th Michael Lukshin CE-8737 REGISTERED PROFESSIONAL ENGINEER



PROFILE VIEW SECTION B – B

NOT TO SCALE



PLAN

TRAFFIC COUNTER TYPICAL

N.T.S.

JUNCTION BOX SUMMARY	
NUMBER	*TYPE*
JB1	*II*
JB2	*II*

SEE STANDARD DRAWING L-23-01[M] FOR J-BOX DETAILS.

INDUCTIVE LOOPS

ALL INDUCTIVE LOOPS SHALL BE WOUND IN THE SAME DIRECTION WITH THE STARTING LEAD MARKED "S" PER SECTION 660-209(A).

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 300 mm.

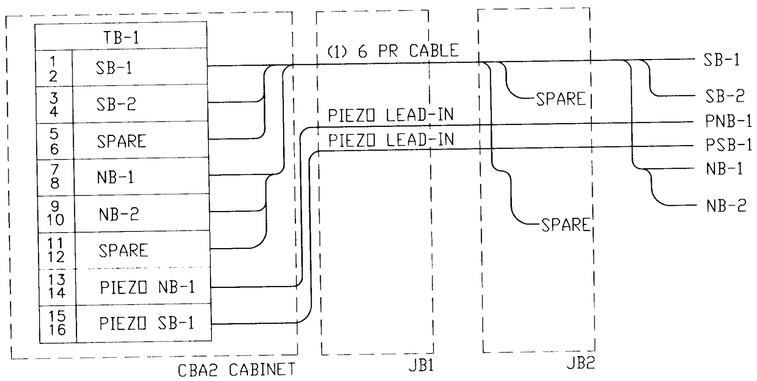
INDUCTIVE LOOPS SHALL BE INSTALLED IMMEDIATELY PRIOR TO PAVING THIS SECTION OF ROADWAY. FINAL LIFT ASPHALT PAVEMENT SHALL BE SMOOTH OVER ALL INDUCTIVE LOOPS AND WITHOUT TRANSVERSE SEAMS, JOINTS, OR ROUGHNESS WITHIN 15 METERS OF THE LOOPS.

SHEET NOTES (X REFERENCED ON DRAWING)

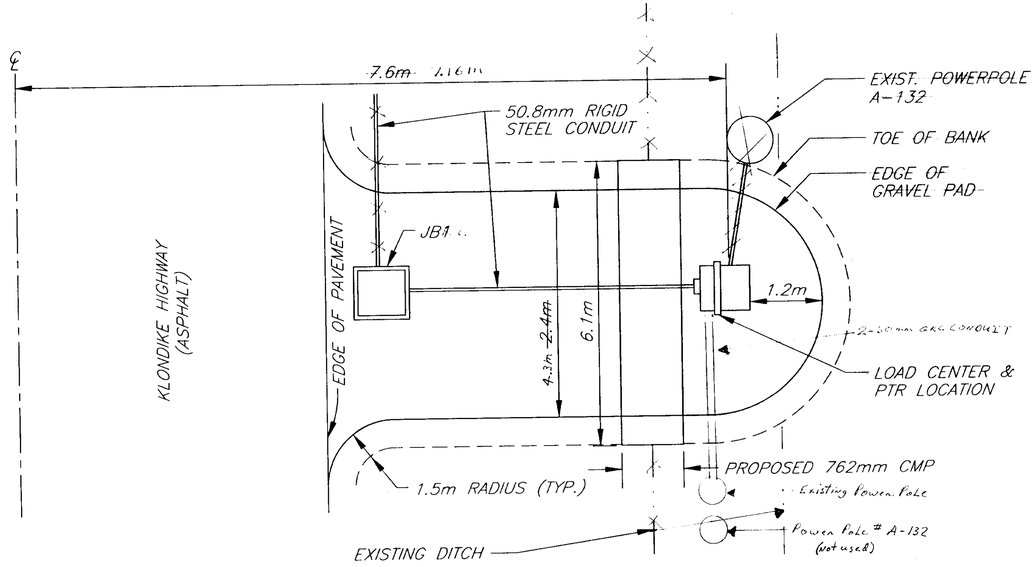
1. SEE TYPICAL SECTIONS FOR DIMENSIONS.
2. INDUCTION LOOPS TO BE CENTERED IN TRAFFIC LANES.
3. SEE SUMMARY SHEET SCHEDULE.
4. DIMENSIONS ARE TYPICAL FOR ALL LANES.

CONDUIT NO.	SIZE	FROM	TO	CABLE QTY.	TYPE
1	50.8mm	CBA2	JB1	2	6PR No.18
2	50.8mm	JB1	JB2	2	(1) 6PR CABLE (2) PIEZO CABLES
3	25.4mm	JB2	NB-2	1	1PR No.12
4	25.4mm	JB2	SB-2	1	1PR No.12
5	25.4mm	JB2	SB-1	1	1PR No.12
6	25.4mm	JB2	SB-1	1	1PR No.12

CONDUIT/CONDUCTOR SCHEDULE



WIRING SCHEMATIC



PLAN VIEW OF PAD

N.T.S.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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BY:	DATE:	DESCRIPTION OF CHANGE:

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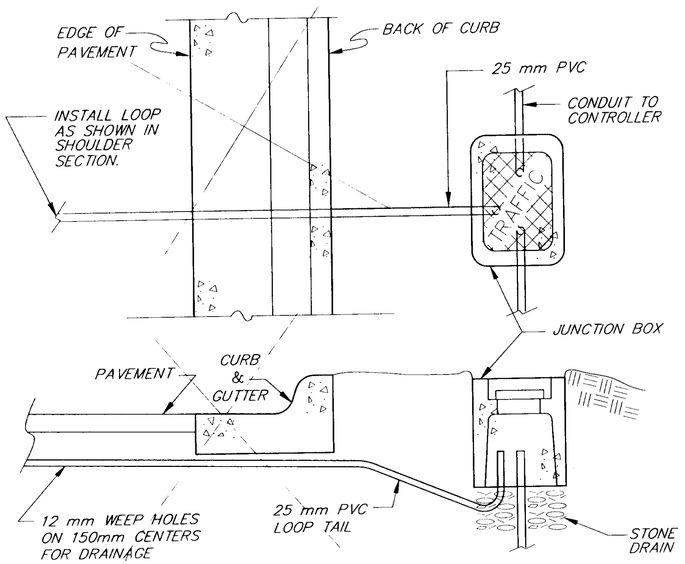
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

SKAGWAY *ALASKA*

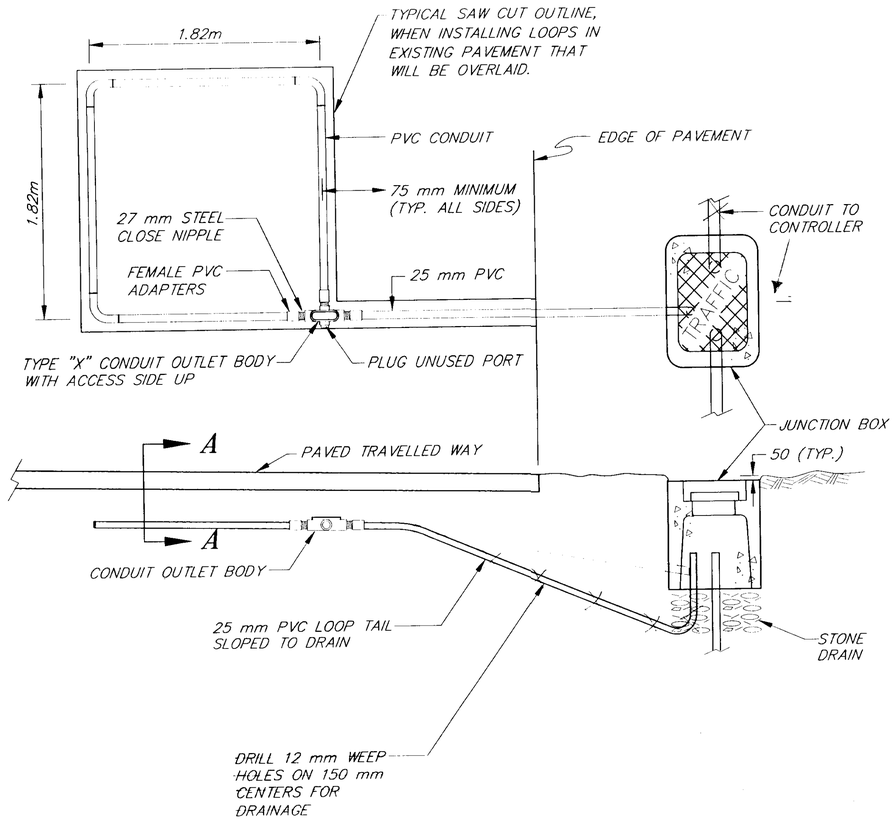
KLONDIKE HIGHWAY MISCELLANEOUS DETAILS

DESIGNED BY: *P. JONES*	PROJECT NO. *74162*
DRAWN BY: *D. STEVENS*	DATE: *JUNE, 2000*
CHECKED BY: *K. MATTSON*	SHEET *3* OF *8*

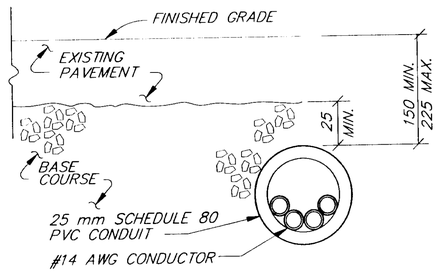
STATE OF ALASKA 49th Michael Lukshin CE-8737 REGISTERED PROFESSIONAL ENGINEER



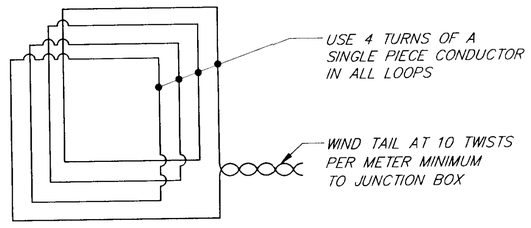
CURB SECTION



SHOULDER SECTION



SECTION A–A



LOOP WIRING DETAIL

TYPICAL PVC CONDUIT ENCASED LOOP DETECTOR INSTALLATION

GENERAL NOTES

1. EACH LOOP DETECTOR SHALL CONSIST OF A SINGLE PIECE OF #14 AWG CONDUCTOR INSTALLED IN 25 mm SCHEDULE 80 PVC CONDUIT. FORM ALL LOOPS 2 METERS 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.

2. 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 10 TWISTS PER METER.

3. INSTALL ALL LOOP DETECTORS PRIOR TO OVERLAYING EXISTING PAVEMENT OR PAVING A NEW ROADWAY.

4. INSTALL ALL LOOP DETECTORS SLOPED TO DRAIN INTO THE JUNCTION BOX THE LOOP TAIL ENTERS.

5. NO MINIMUM CLEARANCE IS REQUIRED BETWEEN A LOOP AND A TAIL OR BETWEEN TAILS. LOOP TAILS SHALL NOT CROSS LOOP CONDUITS.

6. TEST ALL LOOP DETECTORS FOR CONTINUITY AND INSULATION INTEGRITY PRIOR TO SEALING THE LOOPS UNDER ASPHALT.

7. 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.

8. WHERE EXISTING PAVEMENT WILL NOT BE OVERLAID, ENCLOSE ALL LOOPS THAT ENTER A COMMON JUNCTION BOX WITHIN A TRAPEZOIDAL SAW CUT. CUT TO WITHIN 300 mm 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 300 mm WIDE.

9. 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.

10. MAINTAIN THE REPLACEMENT ASPHALT MIX AT A TEMPERATURE OF 108° C UNTIL THE TIME OF APPLICATION; IF NECESSARY, STORE THE MIX IN AN INSULATED BOX TO MAINTAIN THE SPECIFIED TEMPERATURE.

11. ALL WORK ASSOCIATED WITH INSTALLING LOOP DETECTORS IS CONSIDERED PART OF THE TRAFFIC SIGNAL ITEM 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.

12. TO ESTABLISH THE REFERENCE LINES, EXTEND THE RIGHT EDGES OF THE OUTERMOST THROUGH LANES ACROSS THE INTERSECTION. IF THE ROADWAY GEOMETRY IS CURVED, EXTEND THE CURVE THROUGH THE INTERSECTION.

NOTE: DO NOT SCALE FROM THESE PLANS–USE DIMENSIONS

PATH: Q:\Jnu\57801\TRAFFIC\DETECTOR.DWG
DOT: FULL (1000=1) or HALF (1000=2)

	DATE:	DESCRIPTION OF CHANGE:

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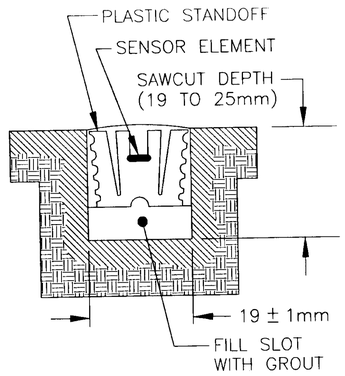
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION

SKAGWAY — ALASKA

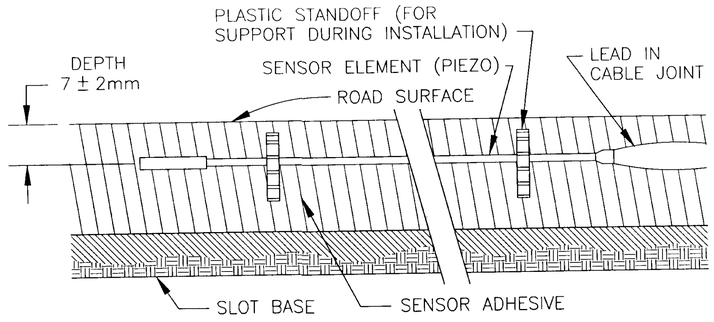
KLONDIKE HIGHWAY
LOOP DETECTOR DETAILS

DESIGNED BY: P. JONES	PROJECT NO. 74162
DRAWN BY: D. STEVENS	DATE: JUNE, 2000
CHECKED BY: K. MATTSON	SHEET 4 OF 8

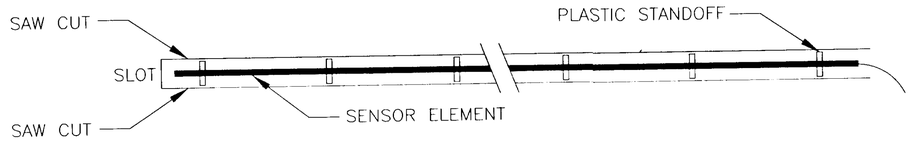
STATE OF ALASKA
49th
Michael Lukshin
CE-8737
REGISTERED PROFESSIONAL ENGINEER



END VIEW



ELEVATION VIEW

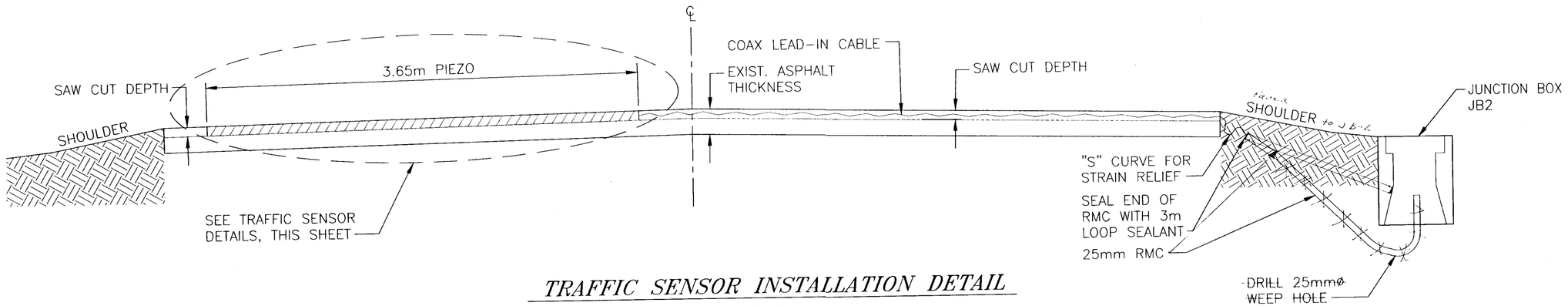


PLAN VIEW

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:

1. *FOR CLARITY, ONLY FAR LANE PIEZO DETAIL SHOWN. NEAR LANE PIEZO IS SIMILAR.*
2. *THE SLOT FOR THE PIEZO SENSOR SHALL BE CUT USING BLADES THAT ARE GANGED TOGETHER.*
3. *CLEAN THE SLOT WITH COMPRESSED AIR AND HIGH PRESSURE WATER PER THE MANUFACTURER'S INSTRUCTIONS.*
4. *THE SLOT SHALL BE CLEAN AND COMPLETELY DRY BEFORE INSTALLING THE PIEZO SENSOR.*
5. *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

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PLOT:

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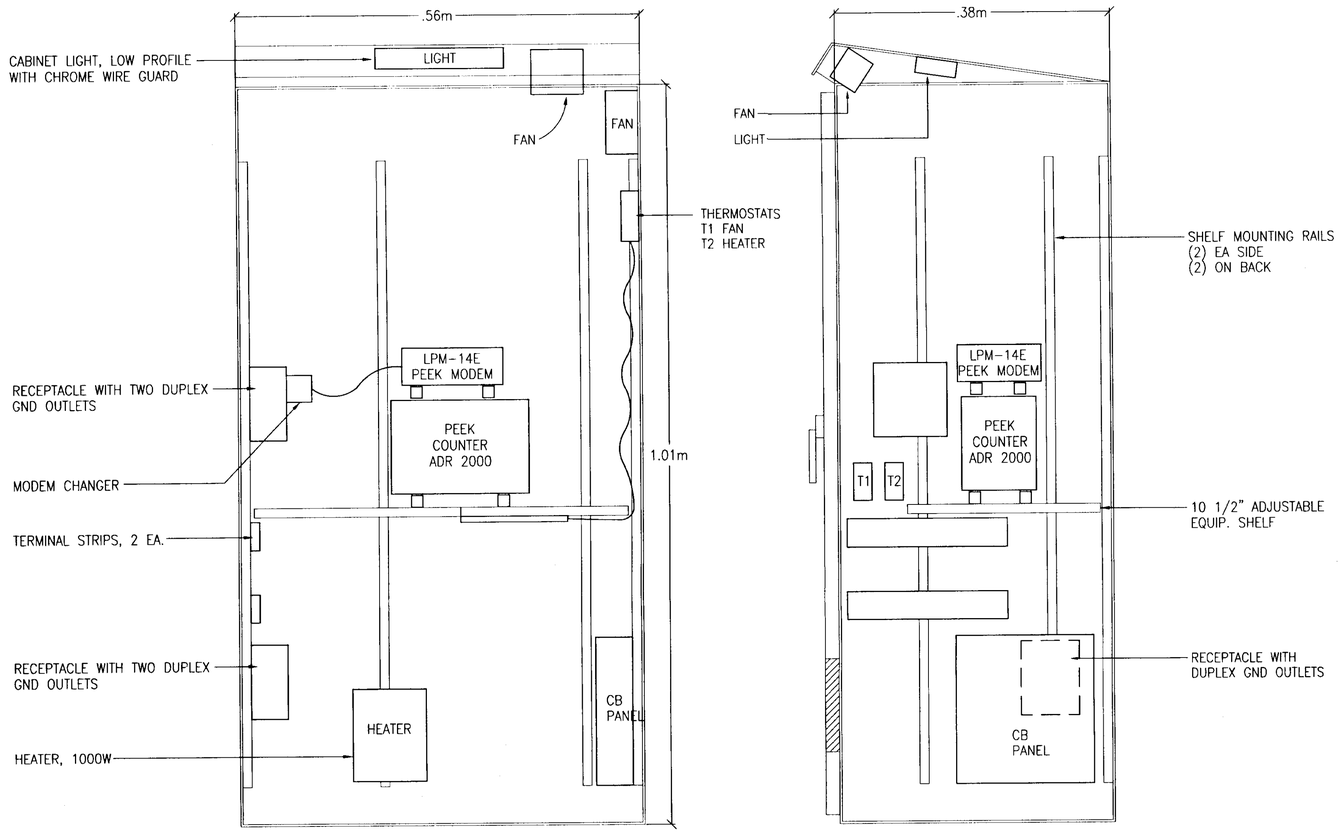
SOUTHEAST REGION DESIGN & CONSTRUCTION

SKAGWAY — *ALASKA*

KLONDIKE HIGHWAY
PIEZO DETAILS

DESIGNED BY: *M. LUKSHIN*	PROJECT NO. *74162*
DRAWN BY: *D. STEVENS*	DATE: *JUNE, 2000*
CHECKED BY: *K. MATTSON*	SHEET *5* OF *8*

STATE OF ALASKA
49th
Michael Lukshin
CE-8737
REGISTERED PROFESSIONAL ENGINEER



CBA2 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. MOUNT COMPLETE CBA2 CABINET TO BACK OF A TYPE 2 LOAD CENTER WITH THE DUAL POST ALTERNATE DETAIL (SEE PLAN SHEET 6). CBA2 CABINET SHALL BE ATTACHED TO THE POSTS FOR THE LOAD CENTER WITH SIX 12mm DIA.x 101.6mm LAG BOLTS.
8. PAYMENT FOR INSTALLATION OF THE LOAD CENTER AND MOUNTING THE CBA2 CABINET SHALL BE INCIDENTAL TO ITEM 669(1).

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: Q:\JNU\57801\TRAFFIC\CAB-DET.DWG		
PLOT:		
BY:	DATE:	DESCRIPTION OF CHANGE:

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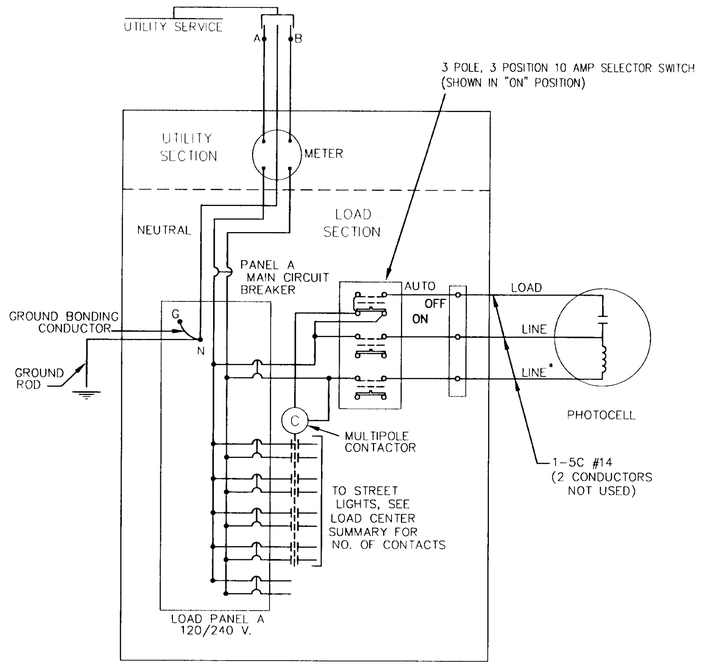
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
SOUTHEAST REGION DESIGN & CONSTRUCTION

SKAGWAY *ALASKA*

KLONDIKE HIGHWAY CONTROL CABINET DETAILS

DESIGNED BY: *P. JONES*	PROJECT NO. *74162*
DRAWN BY: *D. STEVENS*	DATE: *JUNE, 2000*
CHECKED BY: *K. MATTSON*	SHEET *6* OF *8*

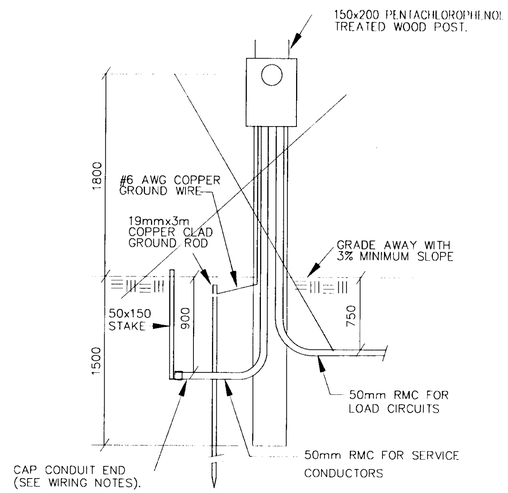
STATE OF ALASKA
49th
Michael Lukshin
CE-8737
REGISTERED PROFESSIONAL ENGINEER



LOAD CENTER ONE LINE DIAGRAM AND SELECTOR SWITCH WIRING

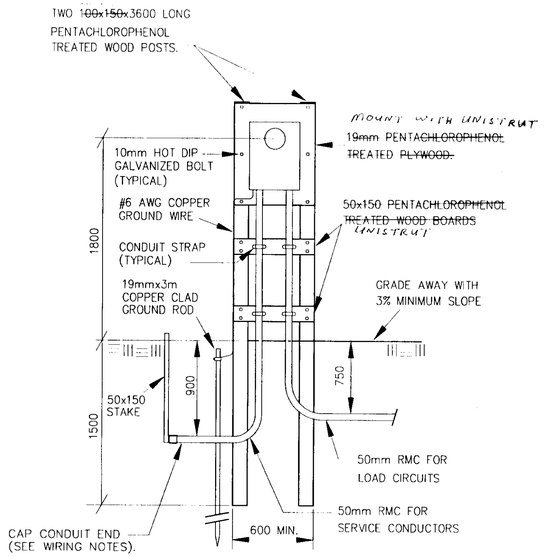
TYPE 2 & 3 LOAD CENTERS – USED FOR LIGHTING WITH PHOTOELECTRIC AND THERMOSTATIC CONTROLS

* GROUNDED NEUTRAL, IF SERVICE IS 240/480 VOLT SINGLE PHASE OR 277/480 VOLT THREE-PHASE; AND UNDERGROUND LINE, IF SERVICE IS 120/240 VOLT SINGLE PHASE.



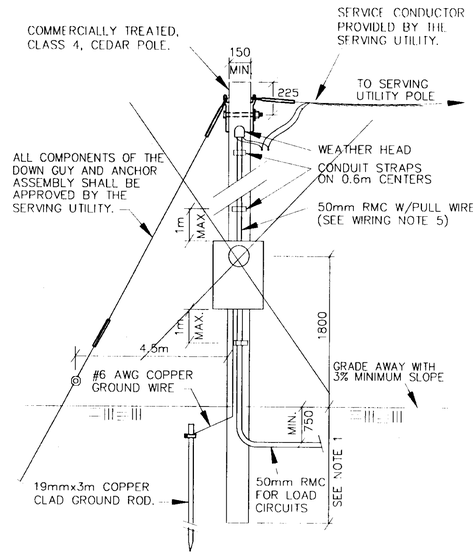
TYPE 2 LOAD CENTER

SINGLE POST – STANDARD



TYPE 2 LOAD CENTER

DUAL POST – ALTERNATE



TYPE 3 LOAD CENTER

INSTALLATION NOTES:

1. INSTALL TYPE 2 & 3 LOAD CENTER POLES OF SUFFICIENT LENGTH TO PROVIDE THE FOLLOWING MINIMUM GROUND TO SERVICE CONDUCTOR CLEARANCE:
   A. 6.4 METERS, IF THE SERVICE CONDUCTORS ARE LOCATED ABOVE ROADWAYS OR PARKING AREAS.
   B. 8.0 METERS, IF THE SERVICE CONDUCTORS ARE LOCATED WITHIN 6.1 METERS OF A RAILROAD TRACK.
   C. 5.5 METERS IN ALL OTHER CIRCUMSTANCES.
2. SET THE BUTT END OF TYPE 2 & 3 LOAD CENTER POLES TO THE FOLLOWING MINIMUM DEPTH:
   A. 10 PERCENT OF ITS LENGTH PLUS 0.6 METERS, OR 1.5 METERS, WHICHEVER IS GREATER, IF IT IS INSTALLED IN EARTH OTHER THAN SOLID ROCK OR MUSKEG.
   B. 10 PERCENT OF ITS LENGTH, OR 1.2 METERS, WHICHEVER IS GREATER, IF IT IS INSTALLED IN SOLID ROCK.
   C. CONSIDER MUSKEG TO BE AIR, AND SET THE BUTT ENDS TO THE DEPTH GIVEN IN A OR B, WHICHEVER APPLIES, IN THE UNDERLYING EARTH OR ROCK.

   WHENEVER MORE THAN 0.6 METERS OF EARTH OVERLAYS ROCK, OR THE DIAMETER OF THE DRILLED HOLE IN ROCK EXCEEDS TWICE THE DIAMETER OF THE POLE AT THE GROUND LINE, CONSIDER THE INSTALLATION AS EARTH.
3. ATTACH ALL CONDUITS TO THE POSTS AND POLES USING TWO HOLE RIGID METAL CONDUIT STRAPS LOCATED ON 600mm MAXIMUM CENTERS.
4. ATTACH ALL GROUND CONDUCTORS TO THE POSTS AND POLES USING CABLE STAPLES LOCATED ON 300mm CENTERS.

SUMMARY OF LOAD CENTER: 1

LOAD CENTER TYPE 1

LOCATION DATA: 1+000, 7.6 LT.

LOAD CENTER:					
POWER SOURCE:	POWER POLE, 0+998, 7.5 LT.				
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	BREAKER POLES
A1	PERMANENT TRAFFIC RECORDER		20A	2
A2	SPARE		20A	2
A3	SPACE	–	–	–
A4	SPACE	–	–	–

LOAD CENTER SUMMARY

NO.	STATION	OFFSET	TYPE	REMARKS
	0+993.55	7.16 LT.		
1	~~1+000~~	~~7.6 LT.~~	2	DUAL POST ALTERNATIVE, OWNER IS DOT/PF

JUNCTION BOX SUMMARY

NO.	STATION	OFFSET	TYPE	REMARKS
1	~~1+000~~	~~4.0 LT.~~	~~II~~	TRAFFIC
2	0+997	~~4.0 LT.~~	II	TRAFFIC

0+993.55 7.16 LT.

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.

WIRING NOTES:

1. FURNISH ALL EQUIPMENT NOTED IN THE LOAD CENTER SUMMARY, PLUS TWO 20-AMP 2-POLE SPARE CIRCUIT BREAKERS, AND SPACE FOR A MINIMUM OF TWO ADDITIONAL TWO-POLE CIRCUIT BREAKERS, IN EACH LOAD PANEL. SEE SUMMARIES FOR LOAD PANEL VOLTAGES, CURRENT RATINGS, SHORT CIRCUIT INTERRUPTING RATINGS, AND THE NAME OF THE SERVING UTILITY.
2. SIZE THE TYPE 2 AND 3 LOAD CENTER CABINETS TO HOLD THE EQUIPMENT SHOWN IN THE WIRING DIAGRAM AND DETAILED IN EACH LOAD CENTER SUMMARY, ALLOWING SPACE FOR WIRING PER THE NATIONAL ELECTRICAL CODE. INSTALLING A METER BASE AND MAIN BREAKER IN A SEPARATE ENCLOSURE IS ALLOWABLE. HOWEVER IN THIS CASE, FURNISH A BREAKER PANEL WITH A MAIN BREAKER.
3. LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION. LABEL THE SELECTOR SWITCH "LIGHTING" AND ITS POSITIONS "ON-OFF-AUTO".
4. THE VOLTAGE FOR THE PHOTOELECTRIC CONTROL EQUIPMENT SHALL BE 240-VOLT, DERIVED FROM THE SERVICE VOLTAGE, OR FROM A CONTROL TRANSFORMER.
5. LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION.
6. STORE A SCHEMATIC DIAGRAM, A CIRCUIT DIRECTORY, AND A MATERIALS LIST THAT INCLUDES THE MANUFACTURER'S NAME AND PART/CATALOG NUMBERS, ALL LAMINATED IN PLASTIC, IN A METAL POCKET ATTACHED TO THE INSIDE OF THE LOAD CENTER. INSTALL THE POCKET ON THE LOAD CENTER DOOR, PROVIDING DRAIN HOLES TO PREVENT WATER ACCUMULATION.
7. WHEN METAL HALIDE OR MERCURY VAPOR LAMPED FIXTURES ARE USED, PROVIDE A REMOTE BULB THERMOSTAT, SO THAT THE CONTACT CLOSES AND THE LIGHTS TURN ON WHEN THE TEMPERATURE DROPS TO -9° CELSIUS. WIRE THERMOSTAT SO THAT ITS CONTACT IS PARALLEL THE CONTACT IN THE PHOTOELECTRIC CELL
8. USE THE SINGLE-POST TYPE 2 "STANDARD" LOAD CENTER IN ALL LOCATIONS EXCEPT WHERE THE SERVING UTILITY REQUIRES THE TWO-POST TYPE 2 "ALTERNATIVE" LOAD CENTER. REFER TO THE LOAD CENTER SUMMARY FOR WHICH TO INSTALL.
9. THE LENGTH AND TYPE OF SERVICE ENTRANCE CONDUIT INSTALLED BY THE CONTRACTOR VARIES BY UTILITY. REGARDLESS OF ITS LENGTH, INSTALL A PULL ROPE IN THE SERVICE CONDUIT AND A CAP ON THE BURIED END: MARK THE BURIED END WITH A 50mmX150mm STAKE. SEE THE LOAD CENTER SUMMARIES FOR THE FOLLOWING INFORMATION.
   A. STATION AND OFFSET OF THE LOAD CENTER AND POWER SOURCE.
   B. WHERE THE CONTRACTOR TERMINATES THE SERVICE ENTRANCE CONDUIT.
   C. THE TYPE OF SERVICE ENTRANCE CONDUIT (SUCH AS RIGID METAL CONDUIT OR LIQUID-TIGHT FLEXIBLE METAL CONDUIT).
   D. THE MAXIMUM AND MINIMUM DISTANCES ALLOWED BETWEEN THE TYPE-3 LOAD CENTER POLE AND UTILITY POLE TO WHICH THE AERIAL DROP IS CONNECTED.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: Q:\JNU\57801\TRAFFIC\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

SKAGWAY ALASKA

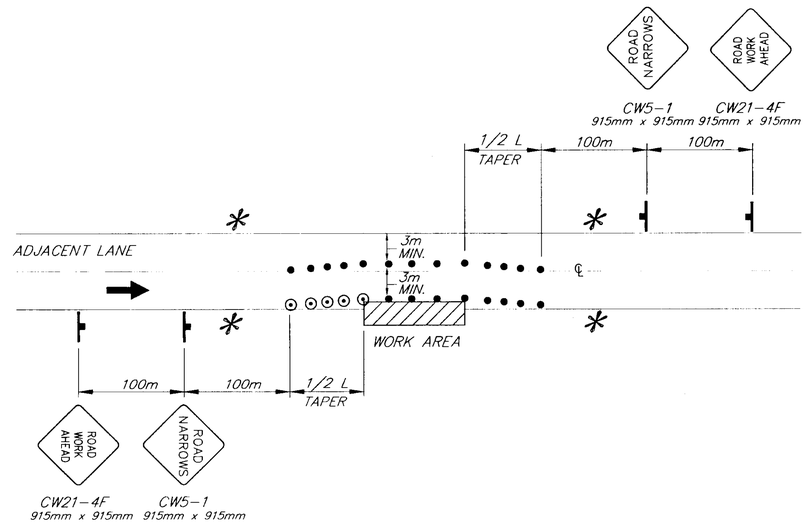
KLONDIKE HIGHWAY
TYPE 2 & 3 LOAD CENTER DETAILS

DESIGNED BY: M. LUKSHIN	PROJECT NO. 74162
DRAWN BY: D. STEVENS	DATE: JUNE, 2000
CHECKED BY: K. MATTSON	SHEET 7 OF 8

STATE OF ALASKA 49th
Michael Lukshin CE-8737
REGISTERED PROFESSIONAL ENGINEER

TRAFFIC CONTROL NOTES

1. A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES, THROUGH ALL WORK AREAS.
2. TWO LANES SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORKING HOURS.
3. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 3m.
4. CONSTRUCTION SIGNS SHALL BE IN PLACE ONLY WHEN THE CONDITIONS THEY WARN ABOUT EXIST.
5. THE CONTRACTOR SHALL DELINEATE PEDESTRIAN AND BICYCLE ACCESS WITH TRAFFIC CONES AS REQUIRED DURING CONSTRUCTION ACTIVITIES, CONE SPACING SHALL BE 3m MAXIMUM.
6. THE CONTRACTOR SHALL PROVIDE VEHICULAR ACCESS THRU WORK ZONES AS REQUIRED BY THE ENGINEER.
7. FLOOD LIGHTS SHALL BE PROVIDED FOR FLAGGER STATIONS DURING NIGHT OPERATIONS.
8. CHANNELIZATION DEVICES IF USED AT NIGHT SHALL BE LIT IN ACCORDANCE WITH THE ALASKA TRAFFIC MANUAL.
9. 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.



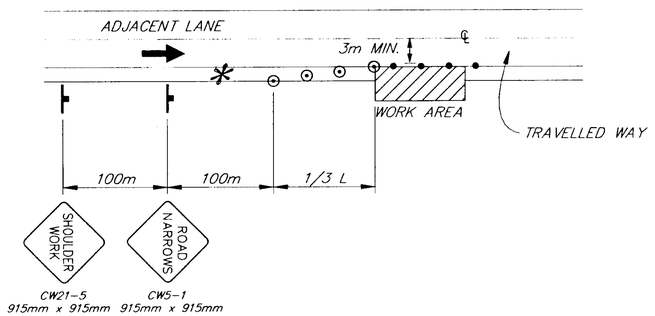
ROADWAY ENCROACHMENT

NOTE: IF ONLY ONE LANE IS AFFECTED BY ROAD WORK (THAT IS, THE CONES ALONG THE WORK AREA ARE NO CLOSER THAN 3m TO CENTERLINE) THE SIGNS AND CENTERLINE CONES FOR THE OPPOSING LANE MAY BE DELETED.

LEGEND

- ..... SIGN
- ..... CONE
- ..... DRUM
- ..... TYPE III BARRICADE
- ..... FLAGGING STATION
- ..... HI-LEVEL WARNING DEVICE

* NO PARKING WITHIN 60m OF CONES



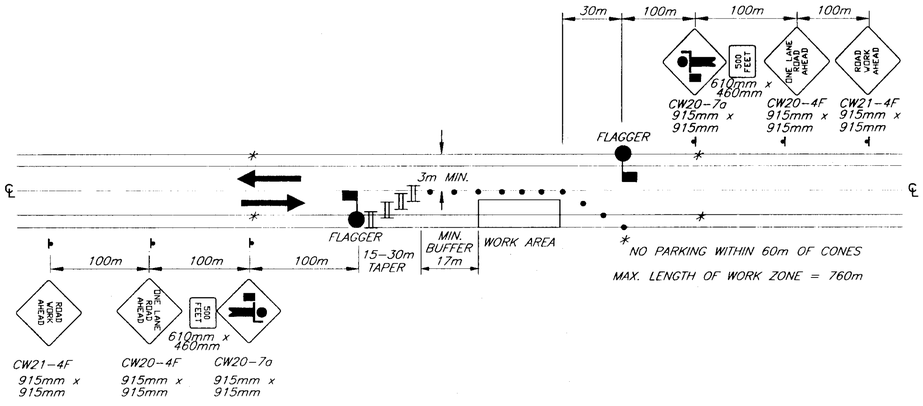
SHOULDER WORK

$L = W \times T$

WHERE:
L= LENGTH OF TAPER
W= WIDTH OF OFFSET
T= TAPER FACTOR

TCP TABLE SETUP

SPEED (KILOMETERS PER HOUR)	SPEED (MILES PER HOUR)	BUFFER/ LENGTH (m)	CONE/DRUM SPACING (m)	TAPER FACTOR (T)
25	16	9	5	4:1
30	19	11	6	6:1
35	22	14	7	8:1
40	25	17	8	10:1
45	28	21	9	13:1
50	31	26	10	16:1
55	34	35	11	19:1
60	37	43	12	23:1
65	40	52	13	27:1
70	43	62	14	32:1
75	47	75	15	47:1
80	50	85	16	50:1
85	53	98	17	53:1
90	56	110	18	56:1



TWO LANE ROAD - SINGLE LANE CLOSURE
DOUBLE FLAGGER

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

PATH: Q:\JNU\57801\TRAFFIC\TRAF-PLAN.DWG
PLOT:

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SKAGWAY ALASKA

KLONDIKE HIGHWAY
TRAFFIC CONTROL PLAN

DESIGNED BY: P. JONES	PROJECT NO. 74162
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STATE OF ALASKA 49th Michael Lukshin CL 8737 REGISTERED PROFESSIONAL ENGINEER