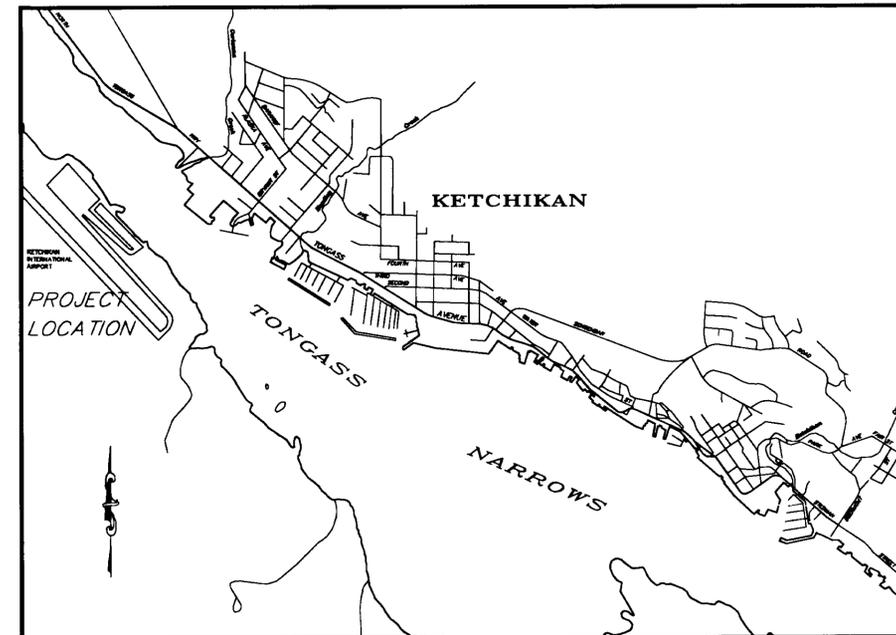


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEASTERN REGION
DESIGN AND CONSTRUCTION DIVISION

Ketchikan Airport
Runway & Taxiway Lights
Replacement

Project No. 67995
A.I.P. No. 3-02-0144-1300



Vicinity Map

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	Title Sheet
2	Estimate of Quantities
3	Project Layout Plan
4-8	Existing Runway & Taxiway Lighting & Power
9-13	New Runway & Taxiway Lighting & Power
14-16	Equipment Installation Details, Lights, etc.
17	Regulator Building Existing Electrical Plan
18	Regulator Building New Electrical Plan
19	Regulator Building Genset Details
20	Existing Single Line Diagram
21	New Single Line Diagram
22	Lighting Control Panel Revised Schematic
23	Traffic and Sediment Control Details
24-26	Architectural Plans - Regulator Building
27	Trench and Pipe Drain Details
28	Safety Plan & Sediment Control Plan

AS-BUILTS

contractor: Swanson General Contractors
Anchorage, Alaska
project engineer : A.K. Shepard

begin date: February 2001
end date: September 2001

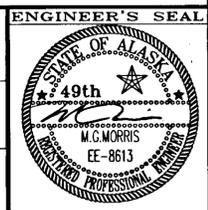
DESIGN DATA

AIRPORT TYPE COMMERCIAL SERVICE
 RUNWAY DIMENSIONS..... 2286 m x45.720 m
 SAFETY AREA 2407.920 m x121.920 m
 RUNWAY CATAGORY..... TRANSPORT
 RUNWAY INSTRUMENTATION PRECISION
 RUNWAY/TAXIWAY SURFACE ASPHALT CONCRETE
 TAXIWAY DIMENSIONS..... 1190.244 m x22.860 m
 TERMINAL APRON AREA 38 606 SQUARE METERS
 RUNWAY LIGHTING..... HIGH INTENSITY RUNWAY LIGHTING (HIRL)
 TAXIWAY LIGHTING.....MEDIUM INTENSITY TAXIWAY LIGHTING (MITL)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND
PUBLIC FACILITIES
SOUTHEASTERN REGION DESIGN SECTION

APPROVED _____ Date _____
 Preconstruction Engineer
 APPROVED _____ Date _____
 Director, S.E. Region

PROJECT NUMBER:
67995
 DATE:
AUG, 2000
 SHEET **1** OF **28**



ESTIMATE OF QUANTITIES

Item No	Pay Item	Pay Unit	Quantity
111a	Erosion & Pollution Control Administration	Lump Sum	ALL REQUIRED
111b	Erosion and Pollution Control	Contingent Sum	ALL REQUIRED
G-100	Mobilization and Demobilization	Lump Sum	ALL REQUIRED
G-130a	Field Office	Lump Sum	ALL REQUIRED
G-130b	Field Laboratory	Lump Sum	ALL REQUIRED
G-131	Engineering Transportation	Lump Sum	ALL REQUIRED
G-135	Construction Surveying by the Contractor	Lump Sum	ALL REQUIRED
L-100a	10 KW Regulator, L-828	Each	2
L-100b	30 KW Regulator, L-828	Each	2
L-100c	Remote Control Panel, L-821	Each	1
L-100d	HIRL Runway Light, Edge and Threshold, L-862	Each	90
L-100e	Removal of Runway/Taxiway Marker Light	Each	106
L-100f	Taxiway Marker Light, L-861T	Each	133
L-100g	New Windcone Handhole, L-867, Size D	Each	2
L-100h	New Primary Handhole, L-868, Size B	Each	2
L-100i	53mm Rigid Steel Conduit	Meter	255
L-100j	101.6mm Rigid Steel Conduit	Meter	320
L-100k	No.8, 5 KV Cable, Type C, L-824	Meter	12500
L-100l	#6 XHHW Ground Conductor	Meter	9756
L-100m	51mm HDPE Conduit not covered by asphalt	Meter	7012
L-100n	51mm HDPE Conduit covered by asphalt	Meter	3078
L-100o	Work on existing handholes and manholes	Lump Sum	ALL REQUIRED
L-100p	New Manhole	Each	8
L-100q	Replacement of Existing Sign Legend	Each	1
L-100r	Relocated Airport Sign	Each	1
L-100s	Control Cable	Meter	2600
L-100w	New Airport Sign, L-858	Each	1
L-104a	New Beacon Tower	Lump Sum	ALL REQUIRED
L-104b	Electrical Equipment Installation	Lump Sum	ALL REQUIRED
L-107a	3.5m Windcone, in place	Each	2
P-675	Hazardous Material Removal	Lump Sum	ALL REQUIRED
S-142	Regulator Building Renovations	Lump Sum	ALL REQUIRED

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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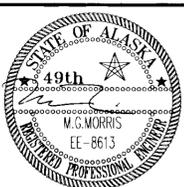
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN

KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
ESTIMATE OF QUANTITIES

ALASKA

DESIGNED BY: <i>MGM</i>	PROJECT NO. 67995
DRAWN BY: <i>SHS</i>	DATE: AUGUST 2000
CHECKED BY: <i>MGM</i>	SHEET E2 OF 28

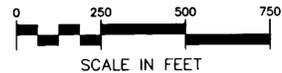
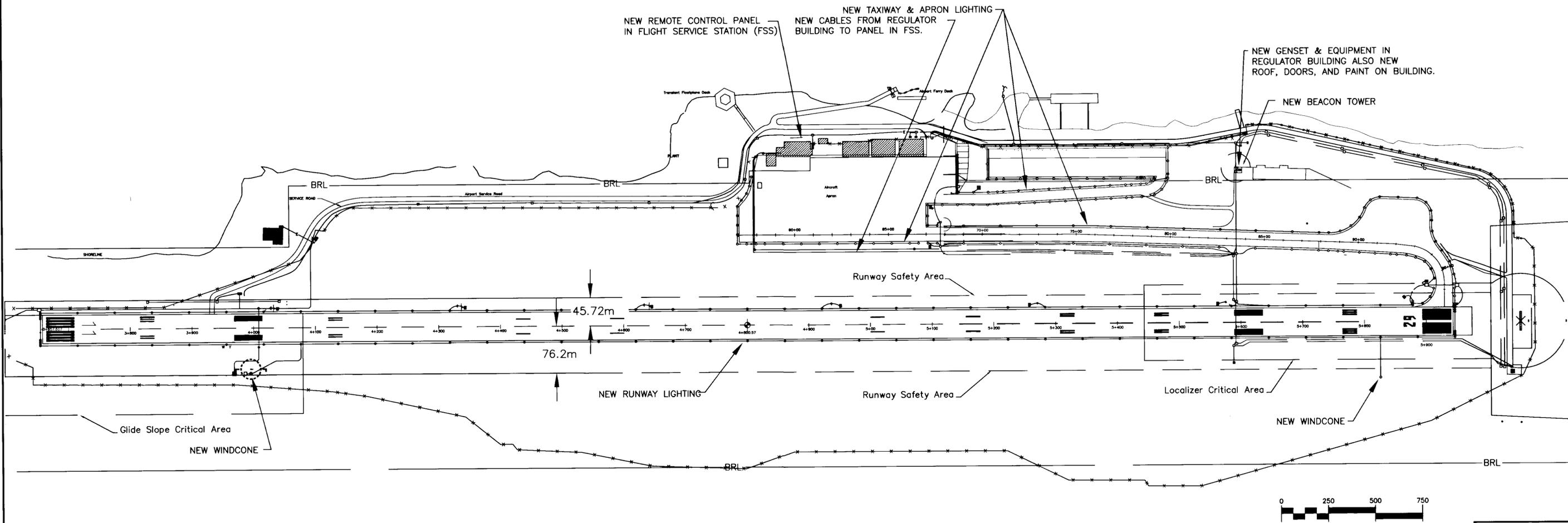
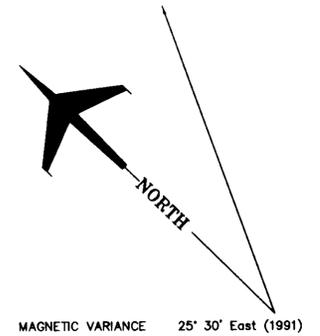


GENERAL NOTES :

1. THE STATION LINES ON TAXIWAY A AND ON THE RUNWAY SHALL BE USED FOR HORIZONTAL CONTROL OF SIGNS, MANHOLES, HANDHOLES, WINDONES AND OTHER ELECTRICAL EQUIPMENT OTHER THAN THE EDGE LIGHTS. LOCATE THE NEW RUNWAY EDGE LIGHTS 3.048m FROM THE OUTSIDE EDGE OF THE RUNWAY EDGE LINE. LOCATE THE NEW TAXIWAY EDGE LIGHTS 3.048m FROM THE OUTSIDE EDGE OF THE TAXIWAY EDGE LINE. SPACE THE TAXIWAY LIGHTS ACCORDING TO THE DIMENSIONS SHOWN ON THE DRAWINGS. SPACE THE RUNWAY LIGHTS WITH THE EXACT SAME SPACING AS THE EXISTING LIGHTS.
2. THE CONTRACTOR SHALL LOCATE ALL UNDERGROUND FACILITIES PRIOR TO DIGGING. THIS INCLUDES THE FAA POWER AND CONTROL WIRING, THE POWER AND TELEPHONE UTILITY WIRING, THE RUNWAY AND TAXIWAY LIGHTING CIRCUITS, THE AIRPORT LIGHTING CONTROL PANEL CABLES, AND ANY OTHER UNDERGROUND WIRING IN THE WORK AREA. THE CONTRACTOR SHALL PROVIDE THEIR OWN LOCATING EQUIPMENT TO DO THIS WORK. THE CONTRACTOR SHALL NOT DEPEND UPON THE LOCAL UTILITIES FOR LOCATING SERVICES.
3. THE WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE SAFETY PLAN.
4. ALL WORK ON THE RUNWAY SHALL BE DONE DURING NIGHT TIME CLOSURES. WORK ON THE TAXIWAYS AND APRON MAY BE DONE DURING THE DAY PER THE REQUIREMENTS CONTAINED IN THE SPECIFICATIONS AND ON THE SAFETY PLAN.
5. ALL MATERIALS AND EQUIPMENT SHALL BE STORED IN THE STAGING AREAS SHOWN ON THESE DRAWINGS AND ALL EQUIPMENT MOVEMENT SHALL BE LIMITED ONLY TO THE VEHICLE DRIVING AREAS..
6. SEE SHEETS E4 AND E5 TO ESTABLISH HORIZONTAL CONTROL.

LEGEND

G ● R	RUNWAY THRESHOLD LIGHT LENS, LETTERS INDICATE COLOR	GRS	GALVANIZED RIGID STEEL
W ⊙ Y	RUNWAY EDGE LIGHT WITH SPLIT LENS, LETTERS INDICATE COLOR	GALV.	HOT DIPPED GALVANIZED
⊙	RUNWAY EDGE LIGHT WITH CLEAR LENSE	PVC	POLY VINYL CHLORIDE
○	TAXIWAY EDGE LIGHT WITH BLUE LENS	D-XX	DUCT BANK - NUMBER
—	EXISTING CONDUIT OR CABLE	DUCT BANK	SINGLE OR GROUP OF CONDUITS OR DIRECT BURY CABLE
—	NEW CONDUIT OR CABLE	MH-XX	MANHOLE - NUMBER
⊗	HANDHOLE	HH-XX	HANDHOLE - NUMBER
□	MANHOLE	AFF	ABOVE FINISHED FLOOR
⊠	AIRPORT SIGN	AFG	ABOVE FINISHED GRADE
⊗	HANDHOLE	EXTG	EXISTING
△	DRAIN CLEANOUT	XFMR	TRANSFORMER
W	WHITE	C/B	CIRCUIT BREAKER
A	AMBER	ATS	AUTOMATIC TRANSFER SWITCH
Y	YELLOW	GND	GROUND
G	GREEN	UON	UNLESS OTHERWISE NOTED
R	RED	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION DEVICE
●	TEMPORARY CHECK DAM		



NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN

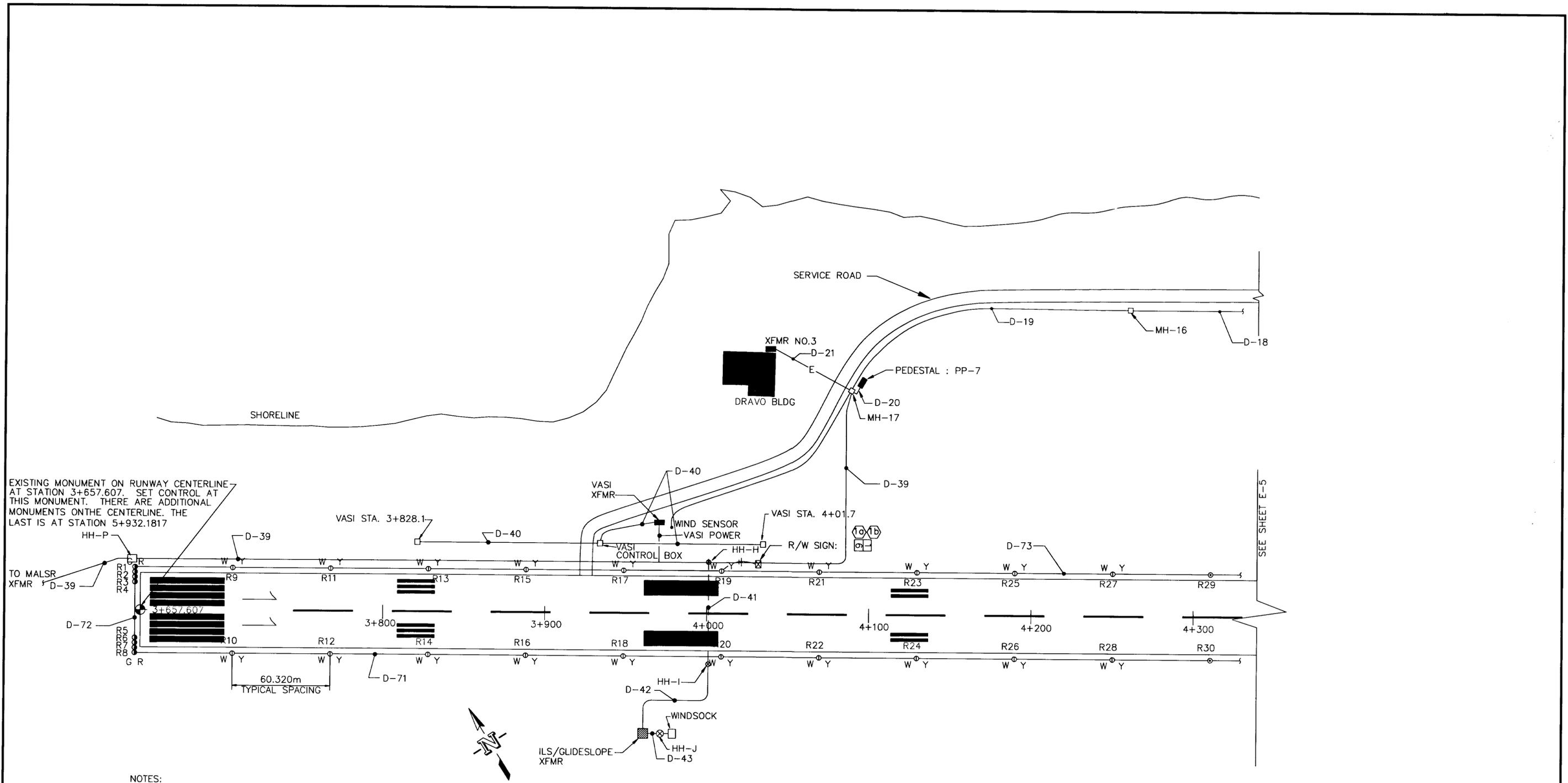
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
PROJECT LAYOUT PLAN

ALASKA

DESIGNED BY:	MGM
DRAWN BY:	SHS
CHECKED BY:	MGM

PROJECT NO.	67995
DATE:	AUGUST 2000
SHEET E3 OF 28	





EXISTING MONUMENT ON RUNWAY CENTERLINE AT STATION 3+657.607. SET CONTROL AT THIS MONUMENT. THERE ARE ADDITIONAL MONUMENTS ON THE CENTERLINE. THE LAST IS AT STATION 5+932.1817

- NOTES:
1. REMOVE ALL RUNWAY AND THRESHOLD LIGHTS INCLUDING THE CABLE BETWEEN THE LIGHTS.
 2. REMOVE THE EXISTING WINDSOCK AND THE POWER CONNECTION TO THE FAA TRANSFORMER. COORDINATE DISCONNECT WITH FAA. FAA PERSONNEL SHALL DISCONNECT POWER IN THE FAA TRANSFORMER.
 3. DUCTS D-39, 40, & 42 RUN VERY CLOSE TO THE RUNWAY LIGHTS. LOCATE CABLES AND EXERCISE EXTREME CAUTION WHEN WORKING IN THE AREA. COORDINATE WITH FAA TO DE-ENERGIZE THE LINE PRIOR TO WORKING IN THE AREA.

SITE PLAN - WEST END



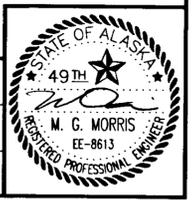
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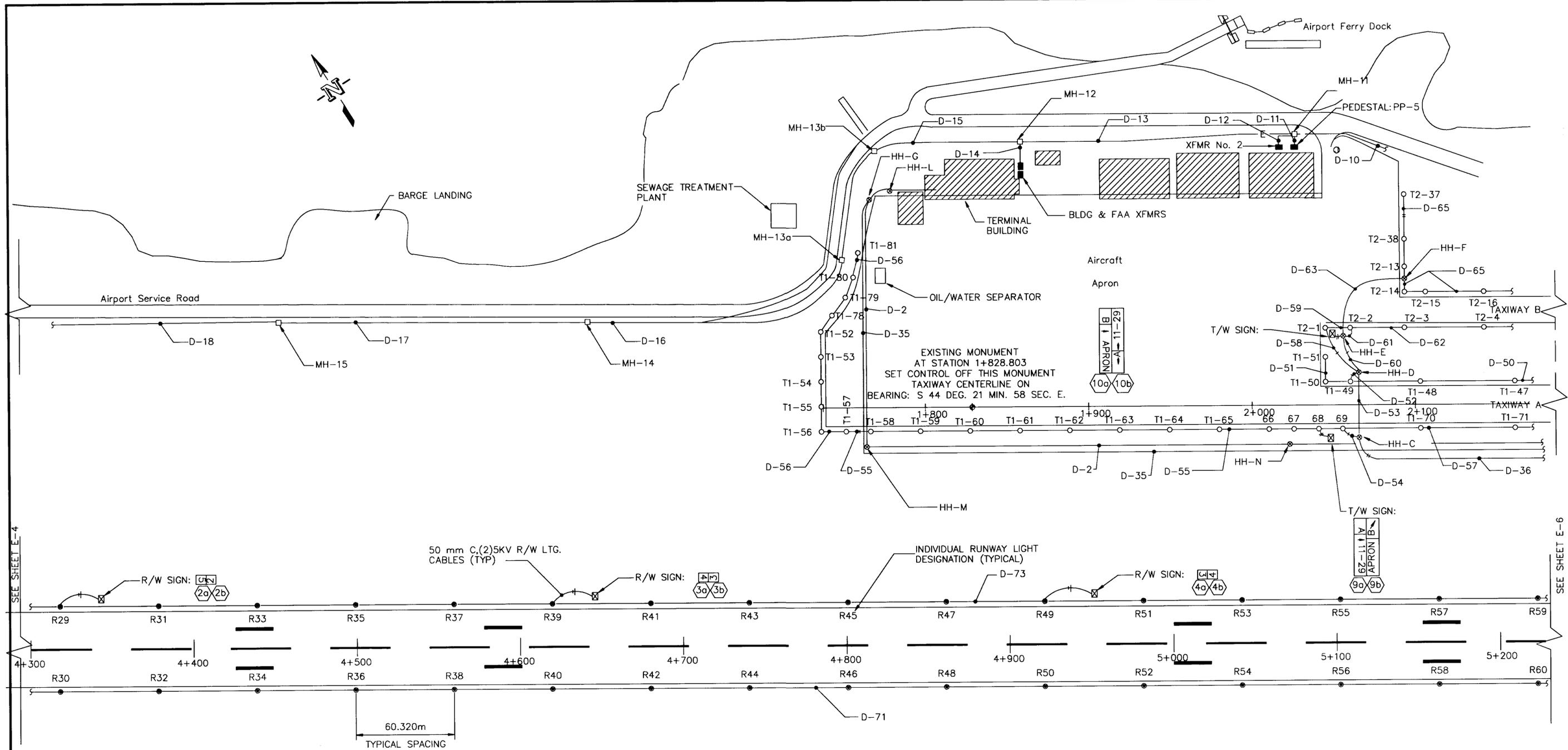
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN KETCHIKAN AIRPORT ALASKA
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
EXISTING RUNWAY, TAXIWAY, APRON - WEST END

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

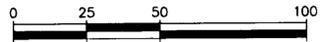
DESIGNED BY: MGM	PROJECT NO. 67995
DRAWN BY: SHS	DATE: AUGUST 2000
CHECKED BY: MGM	SHEET E4 OF 28





SITE PLAN - CENTER RUNWAY

- NOTES:
1. REMOVE ALL RUNWAY AND TAXIWAY LIGHTS INCLUDING THE CABLE BETWEEN THE LIGHTS. DO NOT REMOVE LIGHTS NOS. T1-52,53,54,55,56,57,78,79,80,&81.
 2. DISCONNECT THE SIGNS FROM THE LIGHTING SYSTEM. RECONNECT THE SIGNS TO THE NEW LIGHTS USING NEW CONDUIT, CABLE, AND CONNECTOR KITS.



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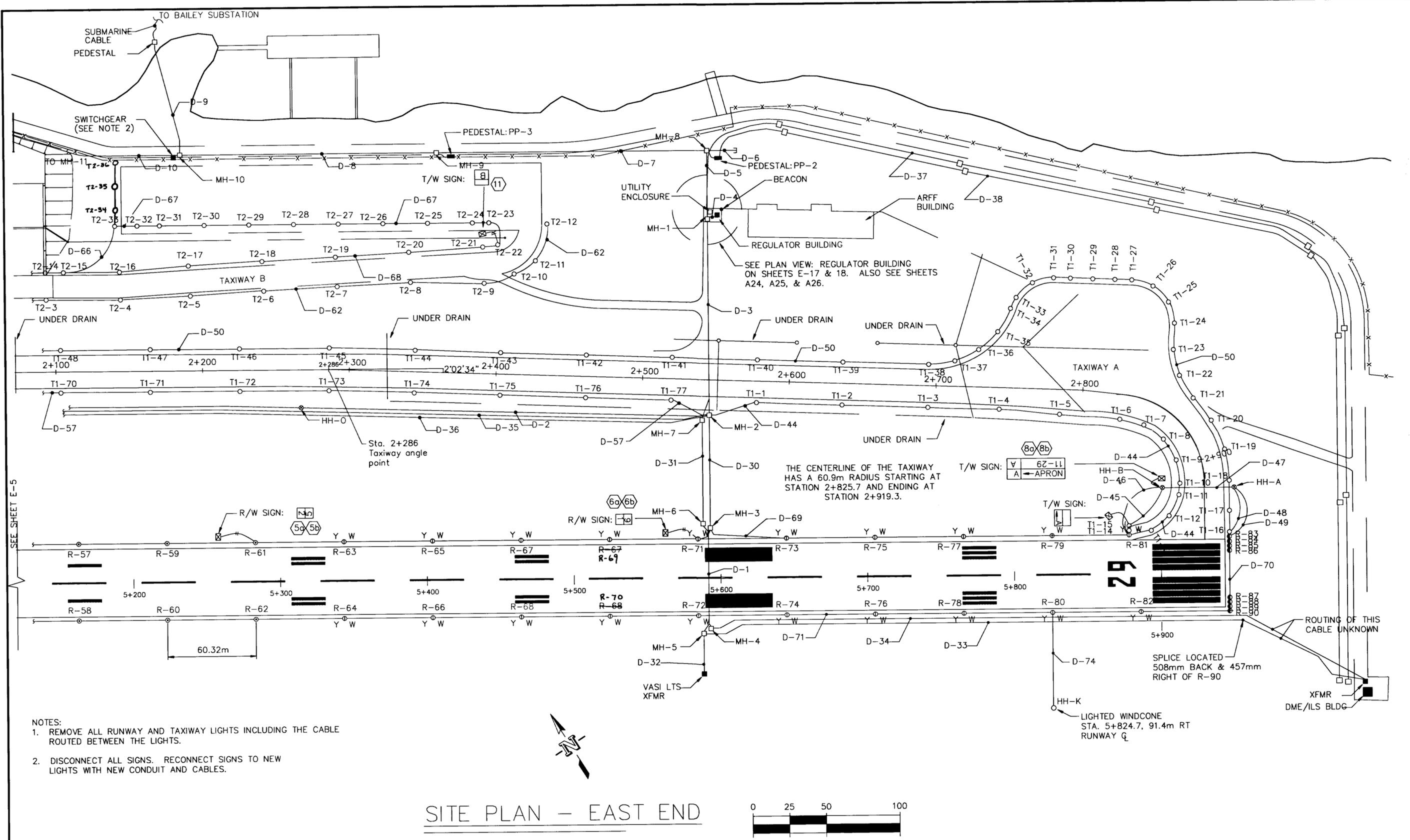
STATE OF ALASKA
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SOUTHEAST REGION

KETCHIKAN ALASKA
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
EXISTING RUNWAY, TAXIWAY, APRON - CENTER

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

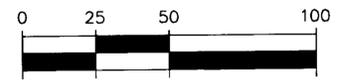
DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET E5 OF 28	





- NOTES:
1. REMOVE ALL RUNWAY AND TAXIWAY LIGHTS INCLUDING THE CABLE ROUTED BETWEEN THE LIGHTS.
 2. DISCONNECT ALL SIGNS. RECONNECT SIGNS TO NEW LIGHTS WITH NEW CONDUIT AND CABLES.

SITE PLAN - EAST END



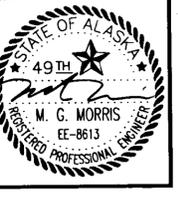
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 SOUTHEAST REGION

KETCHIKAN
 KETCHIKAN AIRPORT
 RUNWAY & TAXIWAY LIGHTS REPLACEMENT
 A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
 EXISTING RUNWAY, TAXIWAY, APRON - EAST END

DESIGNED BY:	M. MORRIS	PROJECT NO.	67995
DRAWN BY:		DATE:	AUGUST 2000
CHECKED BY:	M. MORRIS	SHEET	E6 OF 28



EXISTING RACEWAY/CABLE SCHEDULE

DUCT	FROM	TO	(C)= CONCRETE ENCASED CONDUIT		IDENTIFICATION	INSTRUCTIONS/REMARKS	DUCT	FROM	TO	(C)= CONCRETE ENCASED CONDUIT		IDENTIFICATION	INSTRUCTIONS/REMARKS
			CONDUITS	CABLES						CONDUITS	CABLES		
D-1	MH-3	MH-4	(1) 102mm PVC (C)	TELE CABLE	FAA TELEPHONE	FAA COMMUNICATIONS TO ILS/DME BUILDING	D-31	MH-7	MH-6	(1) 102mm PVC (C)	(1) 15KV, NO. 1/0 AL.	FAA POWER	POWER STEPPED UP FROM FAA ATS IN REG BLDG.
	MH-6	MH-5	(3) 102mm PVC (C)	EMPTY	SPARE CONDUIT					(1) 102mm PVC (C)	(2) 15KV, NO. 1/0 AL.	UTILITY POWER	KPU PRIMARY TO MH-5
	MH-6	MH-5	(1) 102mm PVC (C)	(1) 15KV, NO. 1/0 AL.	FAA POWER	POWER STEPPED UP FROM FAA ATS IN REG BLDG.				(1) 102mm PVC (C)	TELE CABLE	UTILITY TELEPHONE	THIS CABLE IS ABANDONED IN PLACE
	MH-6	MH-5	(1) 102mm PVC (C)	TELE CABLE	UTILITY POWER	KPU PRIMARY TO THREE WAY CONNECTOR	D-32	MH-5	VASI XFMR	DIRECT BURY CABLE	(1) 15 KV, NO. 1/0 AL.	FAA POWER	
D-2	MH-2	HH-6	50mm PVC	(2) 12 COND. NO. 16 CABLE	REGULATOR CONTROLS	TO LIGHTING CONTROL PANEL IN FSS	D-33	MH-5	ILS/DME BLDG	DIRECT BURY CABLE	(1) 15 KV, NO. 1/0 AL.	FAA POWER	THIS CABLE IS ABANDONED IN PLACE
				CONTROL	CONTROL	REMOVE CABLES.	D-34	MH-4	ILS/DME BLDG	DIRECT BURY CABLE	TELE CABLE	FAA TELEPHONE	THIS CABLE IS 5.486-6.400 m FROM RUNWAY EDGE LINE
D-3	MH-1	MH-2	(1) 102mm PVC (C)	(2) 12 COND. NO. 16 CABLE	REGULATOR CONTROLS	REMOVE CABLES	D-35	MH-2	HH-6	DIRECT BURY CABLE	(1) 12 PR TELE CABLE	ORIGINAL REGULATOR CONTROL	THIS CABLE IS VERY CLOSE TO RUNWAY LIGHTS
			(1) 102mm PVC (C)	(2) 5KV, NO. 8	RUNWAY CKT R	REMOVE CABLES							
			(1) 102mm PVC (C)	(2) 5KV, NO. 8	TAXIWAY CKT T-1	REMOVE CABLES	D-36	MH-2	HH-C	DIRECT BURY CABLE	(2) 5 KV, NO. 8	TAXIWAY CKT T-2	THIS CABLE ROUTING UNKNOWN, ABANDON IN PLACE
			(1) 102mm PVC (C)	(2) 5KV, NO. 8	TAXIWAY CKT T-2	REMOVE CABLES							
			(1) 102mm PVC (C)	(1) 12 PR TELE CABLE	ORIGINAL REGULATOR CONTROL	THIS CABLE IS ABANDONED IN PLACE	D-37	UTILITY ENCL	ILS/DME BLDG	(1) 102mm C	15 KV CABLES	UTILITY POWER	
			(1) 102mm PVC (C)	TELE CABLE	FAA TELEPHONE	FAA COMMUNICATIONS TO ILS/DME BLDG.				(1) 102mm C	SPARE	UTILITY POWER	
	UTILITY ENCL.	MH-7	(1) 102mm PVC (C)	(1) 15KV, NO. 1/0 AL.	FAA POWER	POWER STEPPED UP FROM FAA ATS IN REG BLDG.	D-38	UTILITY ENCL	ILS/DME BLDG	(1) 102mm C	UNKNOWN	UTILITY TELEPHONE	KPU TELEPHONE CONDUIT
			(1) 102mm PVC (C)	(2) 15KV, NO. 1/0 AL.	UTILITY POWER	KPU PRIMARY TO MH-5							
			(1) 102mm PVC (C)	TELE CABLE	UTILITY TELEPHONE	THIS CABLE IS ABANDONED IN PLACE	D-39	MH-17	MALSR	DIRECT BURY CABLE	(1)15 KV, NO. 2 AL	FAA POWER	THIS CABLE IS 914-1524 mm FROM RUNWAY LIGHTS, MAYBE CLOSER.
D-4	REG. BLDG.	MH-1	(1) 102mm GRS (C)	(2) 12 COND. NO. 16 CABLE	REGULATOR CONTROLS	REMOVE CABLES.	D-40	VASI XFMR	VASI	(1) OR (2) 50mm C	FAA CABLES	FAA VASI	FAA VASI POWER AND CONTROL
			(1) 102mm GRS (C)	(1) 12 PR TELE CABLE	ORIGINAL REGULATOR CONTROL	THIS CABLE IS ABANDONED IN PLACE. REMOVE IT	D-41	HH-H	HH-1	(1) 102mm GRS	(1) 15 KV	FAA POWER	
			(1) 102mm GRS (C)	TELE CABLE	UTILITY TELEPHONE	ARFF BUILDING TELEPHONE SERVICE	D-42	HH-1	ILS/GS XFMR	DIRECT BURY CABLE	(1) 15 KV	FAA POWER	
			(1) 102mm GRS (C)	TELE CABLE	UTILITY TELEPHONE	FROM UTILITY VIA REGULATOR BUILDING TO SPLICE IN VAULT	D-43	ILS/GS XFMR	HH-J	DIRECT BURY CABLE	3 COND NO. 10	WINDSOCK POWER	COORDINATE WITH FAA TO DISCONNECT THIS POWER. REMOVE CABLE BACK 3.048m FROM FAA XFMR
			(1) 102mm GRS (C)	(2) 5KV, NO. 8	RUNWAY CKT R	REMOVE CABLES	D-44	MH-2	T1-15	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T-1	REMOVE CABLE
			(1) 102mm GRS (C)	(2) 5KV, NO. 8	TAXIWAY CKT T-1	REMOVE CABLES	D-45	T1-15	HH-B	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T-1	REMOVE CABLE
			(1) 102mm GRS (C)	(2) 5KV, NO. 8	TAXIWAY CKT T-2	REMOVE CABLES	D-46	R81	HH-B	DIRECT BURY CABLE	(1) 5 KV, NO. 8	RUNWAY CKT R	REMOVE CABLE
			(1) 102mm GRS (C)	NO. 6 GND	LIGHTING GROUND	REMOVE CABLES	D-47	HH-B	HH-A	(1) 102mm GRS	(1) 5 KV, NO. 8	TAXIWAY CKT T1	REMOVE CABLE
			(2) 102mm GRS (C)	EMPTY	SPARE CONDUIT	CONVERT TO GROUND FOR MH-1					(1) 5 KV, NO. 8	RUNWAY CKT R	REMOVE CABLE
D-5, 7, 8	UTILITY ENCL.	MH-10	(1) 102mm PVC (C)	15KV CABLES	UTILITY POWER	KPU PRIMARY	D-48	HH-A	T1-16	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T1	REMOVE CABLE
			(1) 102mm PVC (C)	TELE CABLE	UTILITY TELEPHONE	KPU TELEPHONE CABLE	D-49	HH-A	R83	DIRECT BURY CABLE	(1) 5 KV, NO. 8	RUNWAY CKT R	REMOVE CABLE
			(1) 102mm PVC (C)	UNKNOWN			D-50	T1-16	T1-49	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T1	REMOVE CABLE
D-6	MH-8	EAST	(2) 102mm PVC	UNKNOWN		CAPPED & STAKED AT APPROX RD STA. 263 + 00	D-51	T1-49	T1-51	DIRECT BURY CABLE	(2) 5 KV, NO. 8	TAXIWAY CKT T1	REMOVE CABLES
D-9	CHANNEL XNG	MH-10	(1) 102mm PVC	15 KV CABLES	UTILITY POWER	KPU PRIMARY	D-52	T1-49	HH-D	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T1	REMOVE CABLE
			(1) 102mm PVC	TELE CABLE	UTILITY TELEPHONE	KPU TELEPHONE CABLE TO THE TERM BLDG	D-53	HH-D	HH-C	(1) 102mm GRS	(1) 5 KV, NO. 8	TAXIWAY CKT T1	REMOVE CABLE
D-10	MH-10	MH-11	(1) 102mm PVC (C)	15KV CABLES	UTILITY POWER	KPU PRIMARY	D-54	HH-C	T1-69	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T1	REMOVE CABLES
			(1) 102mm PVC (C)	UNKNOWN	UTILITY TELEPHONE	KPU TELEPHONE SERVICES TO HANGARS	D-55	T1-69	T1-57	DIRECT BURY CABLE	(2) 5 KV, NO. 8	TAXIWAY CKT T1	REMOVE CABLES
			(1) 102mm PVC (C)	TELE CABLES			D-56	T1-57	T1-81	(1) 50mm PVC	(2) 5 KV, NO. 8	TAXIWAY CKT T1	TO REMAIN
D-11	MH-11	PEDESTAL	(1) 102mm GRS	15 KV CABLES	UTILITY POWER	KPU PRIMARY - FROM CHNL XNG	D-57	T1-69	MH-2	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T1	REMOVE CABLE
			(1) 102mm GRS	15 KV CABLES	UTILITY POWER	KPU PRIMARY - TO TERM BLDG	D-58	HH-D	T2-1	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLE
			(1) 102mm GRS	15 KV CABLES	UTILITY POWER	KPU PRIMARY - TO HANGAR XFMR(#2)	D-59	T2-1	T2-2	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLE
			(1) 102mm GRS	TELE CABLE	UTILITY TELEPHONE	KPU TELEPHONE SERVICES TO HANGARS	D-60	HH-D	HH-E	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLE
D-12	MH-11	XFMR NO. 2	(1) 102mm PVC	15 KV CABLES	UTILITY POWER	KPU PRIMARY	D-61	HH-E	T2-2	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLE
D-13	MH-11	MH-12	(1) 102mm PVC (C)	15 KV CABLES	UTILITY POWER	KPU PRIMARY	D-62	T2-2	T2-12	DIRECT BURY CABLE	(2) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLES
			(1) 102mm PVC (C)	UNKNOWN	UTILITY TELEPHONE	KPU TELEPHONE CABLE(S)	D-63	HH-E	HH-F	(1) 102mm GRS	(2) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLES
			(1) 102mm PVC (C)	TELE CABLE(S)			D-64	HH-F	T2-37	DIRECT BURY CABLE	(2) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLES
D-14	MH-12	XFMR NO. 3	(1) 102mm GRS	15 KV CABLES	UTILITY POWER	KPU PRIMARY	D-65	HH-F	T2-15	DIRECT BURY CABLE	(2) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLES
			(1) 50mm GRS	TELEPHONE	UTILITY TELEPHONE	KPU TELEPHONE CABLE(S)	D-66	T2-15	T2-33	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLE
			(1) 50mm GRS	(1) 15KV, (1) GND	FAA POWER	FAA POWER - TO MALSR SITE, ETC	D-67	T2-33	T2-23	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLE
D-15, 16, 17, 18, 19	MH-12	MH-17	(1) 102mm PVC (C)	(1) 15KV, (1) GND	FAA POWER	FAA POWER - TO MALSR SITE, ETC	D-68	T2-23	T2-15	DIRECT BURY CABLE	(1) 5 KV, NO. 8	TAXIWAY CKT T2	REMOVE CABLE
			(1) 102mm PVC (C)	15 KV CABLES	UTILITY POWER	KPU PRIMARY	D-69	MH-3	R-81	DIRECT BURY CABLE	(1) 5 KV, NO. 8	RUNWAY CKT	REMOVE CABLE
			(1) 102mm PVC (C)	6/C, NO. 19	FAA CONTROL	FAA CONTROL FROM FSS TO WIND SENSOR	D-70	R-83	R-89	(1) 50mm GRS	(1) 5 KV, NO. 8	RUNWAY CKT	REMOVE CABLE AND CONDUIT
			(1) 102mm PVC (C)	TELE CABLE	UTILITY TELEPHONE	KPU TELEPHONE CABLE	D-71	R-90	R-8	DIRECT BURY CABLE	(1) 5 KV, NO. 8	RUNWAY CKT	REMOVE CABLE
D-20	MH-17	PEDESTAL	(1) 102mm GRS	15 KV CABLE(S)	UTILITY POWER	KPU PRIMARY	D-72	R-8	R-1	(1) 50mm GRS	(1) 5 KV, NO. 8	RUNWAY CKT	REMOVE CABLE AND CONDUIT
			(1) 102mm GRS	15 KV CABLE	UTILITY POWER	KPU PRIMARY - TO XFMR NO. 3	D-73	R-1	MH-3	DIRECT BURY CABLE	(1) 5 KV, NO. 8	RUNWAY CKT	REMOVE CABLE
			(1) 102mm GRS	EMPTY	SPARE		D-74	R-80	HH-K	DIRECT BURY CABLE	(2) 5 KV, NO. 8	WINDCONE POWER	REMOVE CABLES
D-21	MH-17	XFMR NO. 3	(1) 102mm GRS	15 KV CABLE(S)	UTILITY POWER	KPU PRIMARY							
D-30	MH-2	MH-3	DIRECT BURY CABLE	(2) 5 KV, NO.8	RUNWAY CKT R	REMOVE CABLES							
			DIRECT BURY CABLE	TELE CABLE	FAA TELEPHONE	FAA COMMUNICATIONS TO ILS/DME BLDG.							

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN

KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
EXISTING CABLING SCHEDULE

ALASKA

DESIGNED BY: **MGM**
DRAWN BY: **SHS**
CHECKED BY: **MGM**

PROJECT NO. **67995**
DATE: **AUGUST 2000**
SHEET **E7 OF 28**



EXISTING AIRPORT SIGN SUMMARY								
SIGN NO.	LEGEND	LETTER SIZE & COLOR	BACKGROUND COLOR	LEGEND STATION DIRECTION	RWY OR TWY OFFSET DISTANCE TO NEAR EDGE OF SIGN	REMARKS	TYPE	SIZE
1a	6	635mm WHITE	BLACK	NW RWY 4+038.6			RUNWAY DISTANCE REMAINING	5
1b	1	635mm WHITE	BLACK	SE RWY 4+038.6			RUNWAY DISTANCE REMAINING	5
2a	5	635mm WHITE	BLACK	NW RWY 4+343.4			RUNWAY DISTANCE REMAINING	5
2b	2	635mm WHITE	BLACK	SE RWY 4+343.4			RUNWAY DISTANCE REMAINING	5
3a	4	635mm WHITE	BLACK	NW RWY 4+648.2			RUNWAY DISTANCE REMAINING	5
3b	3	635mm WHITE	BLACK	SE RWY 4+648.2			RUNWAY DISTANCE REMAINING	5
4a	3	635mm WHITE	BLACK	NW RWY 4+953			RUNWAY DISTANCE REMAINING	5
4b	4	635mm WHITE	BLACK	SE RWY 4+953			RUNWAY DISTANCE REMAINING	5
5a	2	635mm WHITE	BLACK	NW RWY 5+257.8			RUNWAY DISTANCE REMAINING	5
5b	5	635mm WHITE	BLACK	SE RWY 5+257.8			RUNWAY DISTANCE REMAINING	5
6a	1	635mm WHITE	BLACK	NW RWY 5+562.6			RUNWAY DISTANCE REMAINING	5
6b	6	635mm WHITE	BLACK	SE RWY 5+562.6			RUNWAY DISTANCE REMAINING	5
7	← A	305mm BLACK	YELLOW	NW			RUNWAY EXIT	1
8a	A ← APRON	305mm YELLOW/BLACK	BLACK/YELLOW	SW			LOCATION / DESTINATION	1
8b	11-29 A	305mm WHITE/YELLOW	RED/BLACK	NE			HOLDING POSITION / LOCATION	1
9a	A ↑ 11-29	305mm YELLOW/BLACK	BLACK/YELLOW	NW			LOCATION / DESTINATION	1
9b	APRON B ↘	305mm BLACK/BLACK	YELLOW/YELLOW	SE			DESTINATION / DIRECTION	
10a	B ↑ APRON	305mm YELLOW/BLACK	BLACK/YELLOW	NW			LOCATION / DESTINATION	
10b	←A ↔ 11-29	305mm YELLOW/BLACK	BLACK/YELLOW	SE			DIRECTION / DESTINATION	
11	B	305mm YELLOW	BLACK				LOCATION	

EXISTING HANDHOLE SCHEDULE		
NUMBER	LOCATION	INSTRUCTIONS
HH-A	TWY A	REPLACE WITH NEW MH-20
HH-B	TWY A	REPLACE WITH NEW MH-21
HH-C	TWY A	REPLACE WITH NEW MH-22
HH-D	TWY A	REPLACE WITH NEW MH-23
HH-E	TWY B	TO BE REMOVED
HH-F	APRON	REPLACE WITH NEW MH-24
HH-G	APRON	TO REMAIN
HH-H	RWY STA. 4+008	TO REMAIN
HH-I	RWY STA. 4+008	TO REMAIN
HH-J	RWY 11 WINDCONE	REPLACE WITH NEW & RELOCATE
HH-K	RWY 29 WINDCONE	REPLACE WITH NEW
HH-L	APRON	TO REMAIN
HH-M	APRON	TO REMAIN
HH-N	APRON	TO REMAIN
HH-O	TWY A	TO REMAIN
HH-P	RWY STA 3+654, 26m LT.	TO REMAIN

HANDHOLE NOTES:

- REFER TO SHEETS E-4, 5, 6 FOR LOCATIONS OF HANDHOLES AND MANHOLES.
- REPLACE HH-J WITH A NEW WINDCONE HANDHOLE AND LOCATE WHERE SHOWN ON SHEET E-9. REPLACE HH-K WITH A NEW WINDCONE HANDHOLE IN THE SAME LOCATION.

EXISTING MANHOLE SCHEDULE		
NUMBER	LOCATION	INSTRUCTIONS
MH-1	REGULATOR BLDG	TO REMAIN INSTALL 102mm DRAIN PIPE
MH-2	TWY A	TO REMAIN
MH-3	RWY	TO REMAIN INSTALL 102mm DRAIN PIPE
MH-4	RWY	TO REMAIN SEE NOTE NO.1
MH-5	RWY	TO REMAIN SEE NOTE NO.1
MH-6	RWY	TO REMAIN INSTALL 102mm DRAIN PIPE
MH-7	TWY A	TO REMAIN. SEE NOTE NO.1
MH-8 TO MH-17	THESE MANHOLES ARE LOCATED ALONG THE AIRPORT SERVICE ROAD AND ARE EXISTING TO REMAIN	

- NOTES:
1. CUT A 610mm HOLE IN THE BOTTOM OF THIS MANHOLE.

PATH: C:\CAD\102\10\E8.DWG		
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STATE OF ALASKA
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AND PUBLIC FACILITIES
SOUTHEAST REGION

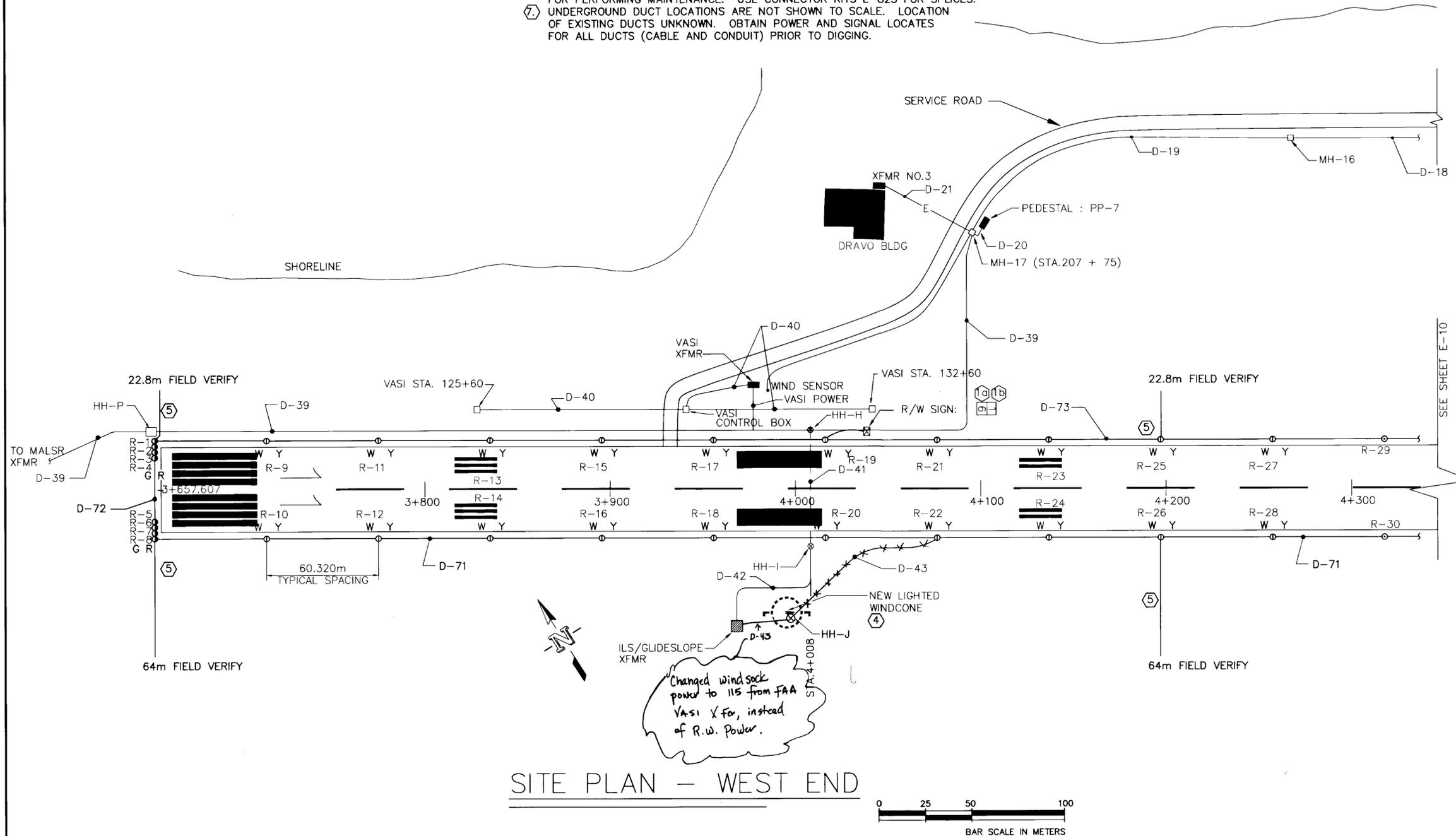
KETCHIKAN KETCHIKAN AIRPORT ALASKA
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
EXISTING SIGN, HH, & MH SCHEDULES

DESIGNED BY: MGM	PROJECT NO. 67995
DRAWN BY: SHS	DATE: AUGUST 2000
CHECKED BY: MGM	SHEET E8 OF 28



NOTES:

- ① INSTALL NEW RUNWAY LIGHTS 3.05m FROM THE RUNWAY EDGELINE. INSTALL THE LIGHTS WITHIN 6.35m OF A STRAIGHT LINE AS MEASURED BY A LASER. INSTALL THE NEW LIGHTS IN THE SAME LOCATIONS AS THE EXISTING LIGHTS BUT ADJUST THEM TO THE STRAIGHT LINE CRITERIA ABOVE.
- ② INSTALL THE RUNWAY LIGHTS PER THE DETAILS ON SHEETS E14 & E15.
- ③ RECONNECT THE EXISTING RUNWAY SIGNS TO THE NEW LIGHTS. PROVIDE NEW CONDUIT, CABLE, AND CONNECTORS TO THE SIGNS.
- ④ INSTALL THE NEW WINDCONE IN THE CENTER OF THE SEGMENTED CIRCLE. POWER THE WINDCONE FROM THE RUNWAY LIGHTING CIRCUIT. PROVIDE A NEW WINDCONE HANDHOLE. FEED THE WINDCONE FROM THE WINDCONE HANDHOLE. REMOVE AND DISPOSE OF THE EXISTING WINDCONE. INSTALL THE WINDCONE PER THE DETAIL ON SHEET E16.
- ⑤ ROUTE AN EMPTY 51mm HDPE CONDUIT FROM THE LIGHT BASE SHOWN TO DAYLIGHT INTO THE DITCH OR EMBANKMENT. SLOPE THE CONDUIT AT 0.5% TO DRAIN. INSTALL THIS CONDUIT NO DIFFERENTLY THAN THE REST OF THE CONDUIT ON THE PROJECT. TRANSITION TO GRS CONDUIT FOR THE LAST 4.57 METERS WHERE THE CONDUIT DAYLIGHTS. THE APPROXIMATE LENGTH OF THE CONDUIT IS SHOWN. FIELD VERIFY THE LENGTH NECESSARY TO DAYLIGHT. IF A PORTION OF THE CONDUIT WILL BE UNDER ASPHALT, CUT AND PATCH THE ASPHALT PER THE DETAIL ON SHEET C27. THE APPROXIMATE LENGTH OF THE ASPHALT CUT AND PATCH IS SHOWN. FIELD VERIFY THE CUT AND PATCH DISTANCE.
- ⑥ PROVIDE SPLICES OF ALL TAXIWAY AND RUNWAY LIGHTING CABLES IN ALL MANHOLES TO ALLOW PORTIONS OF THE CIRCUITS TO BE ISOLATED FOR PERFORMING MAINTENANCE. USE CONNECTOR KITS L-823 FOR SPLICES.
- ⑦ UNDERGROUND DUCT LOCATIONS ARE NOT SHOWN TO SCALE. LOCATION OF EXISTING DUCTS UNKNOWN. OBTAIN POWER AND SIGNAL LOCATES FOR ALL DUCTS (CABLE AND CONDUIT) PRIOR TO DIGGING.



SITE PLAN - WEST END

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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STATE OF ALASKA
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KETCHIKAN
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
NEW RUNWAY, TAXIWAY, APRON - WEST END

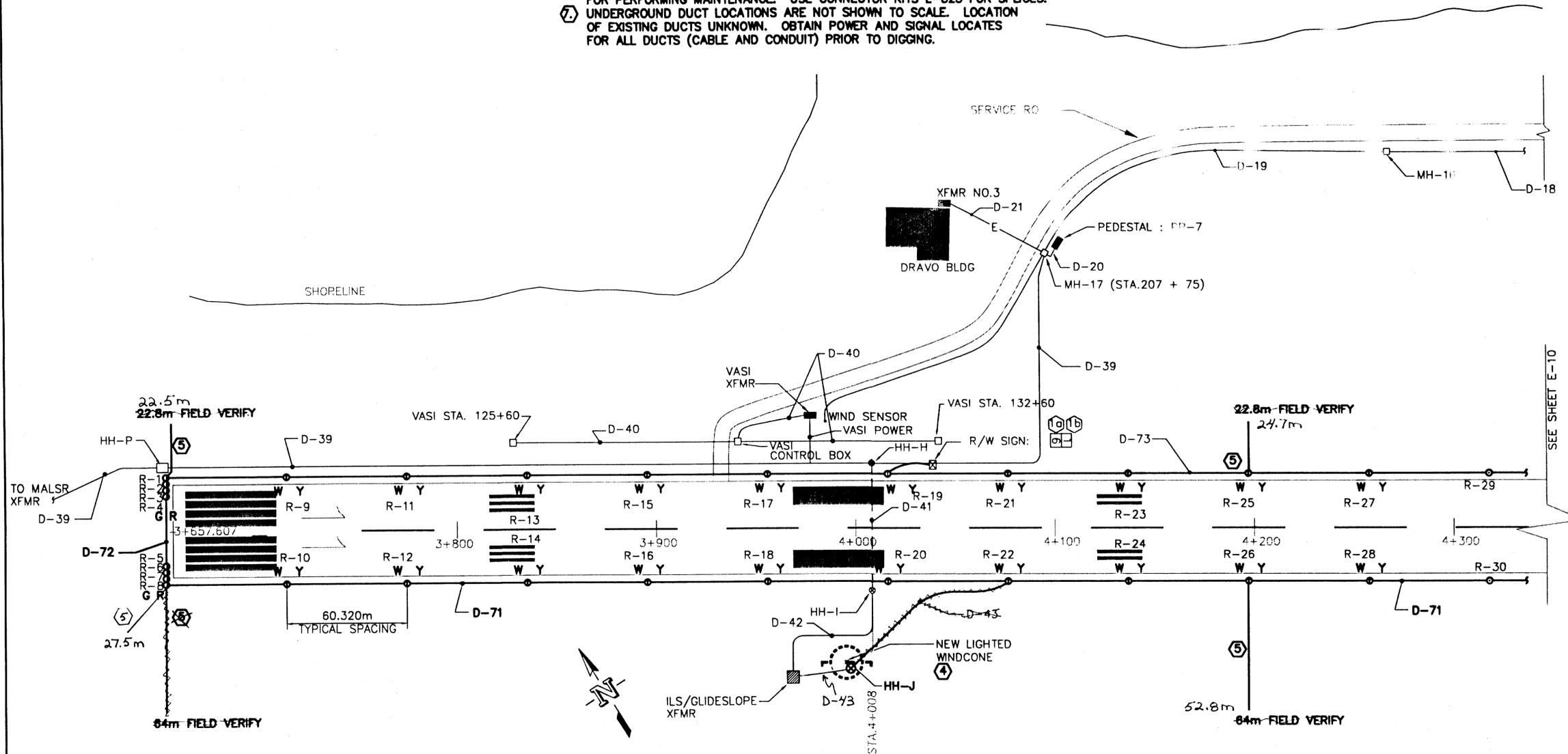
DESIGNED BY:	MGM
DRAWN BY:	SHS
CHECKED BY:	MGM

PROJECT NO.	67995
DATE:	AUGUST 2000
SHEET	E9 OF 28



NOTES:

- ① INSTALL NEW RUNWAY LIGHTS 3.05m FROM THE RUNWAY EDGE LINE. INSTALL THE LIGHTS WITHIN 6.35m OF A STRAIGHT LINE AS MEASURED BY A LASER. INSTALL THE NEW LIGHTS IN THE SAME LOCATIONS AS THE EXISTING LIGHTS BUT ADJUST THEM TO THE STRAIGHT LINE CRITERIA ABOVE.
- ② INSTALL THE RUNWAY LIGHTS PER THE DETAILS ON SHEETS E14 & E15.
- ③ RECONNECT THE EXISTING RUNWAY SIGNS TO THE NEW LIGHTS. PROVIDE NEW CONDUIT, CABLE, AND CONNECTORS TO THE SIGNS.
- ④ INSTALL THE NEW WINDCONE IN THE CENTER OF THE SEGMENTED CIRCLE. POWER THE WINDCONE FROM THE RUNWAY LIGHTING CIRCUIT. PROVIDE A NEW WINDCONE HANDHOLE. FEED THE WINDCONE FROM THE WINDCONE HANDHOLE. REMOVE AND DISPOSE OF THE EXISTING WINDCONE. INSTALL THE WINDCONE PER THE DETAIL ON SHEET E16.
- ⑤ ROUTE AN EMPTY 51mm HDPE CONDUIT FROM THE LIGHT BASE SHOWN TO DAYLIGHT INTO THE DITCH OR EMBANKMENT. SLOPE THE CONDUIT AT 0.5% TO DRAIN. INSTALL THIS CONDUIT NO DIFFERENTLY THAN THE REST OF THE CONDUIT ON THE PROJECT. TRANSITION TO GRS CONDUIT FOR THE LAST 4.57 METERS WHERE THE CONDUIT DAYLIGHTS. THE APPROXIMATE LENGTH OF THE CONDUIT IS SHOWN. FIELD VERIFY THE LENGTH NECESSARY TO DAYLIGHT. IF A PORTION OF THE CONDUIT WILL BE UNDER ASPHALT, CUT AND PATCH THE ASPHALT PER THE DETAIL ON SHEET C27. THE APPROXIMATE LENGTH OF THE ASPHALT CUT AND PATCH IS SHOWN. FIELD VERIFY THE CUT AND PATCH DISTANCE.
- ⑥ PROVIDE SPLICES OF ALL TAXIWAY AND RUNWAY LIGHTING CABLES IN ALL MANHOLES TO ALLOW PORTIONS OF THE CIRCUITS TO BE ISOLATED FOR PERFORMING MAINTENANCE. USE CONNECTOR KITS L-823 FOR SPLICES.
- ⑦ UNDERGROUND DUCT LOCATIONS ARE NOT SHOWN TO SCALE. LOCATION OF EXISTING DUCTS UNKNOWN. OBTAIN POWER AND SIGNAL LOCATES FOR ALL DUCTS (CABLE AND CONDUIT) PRIOR TO DIGGING.



SITE PLAN - WEST END

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

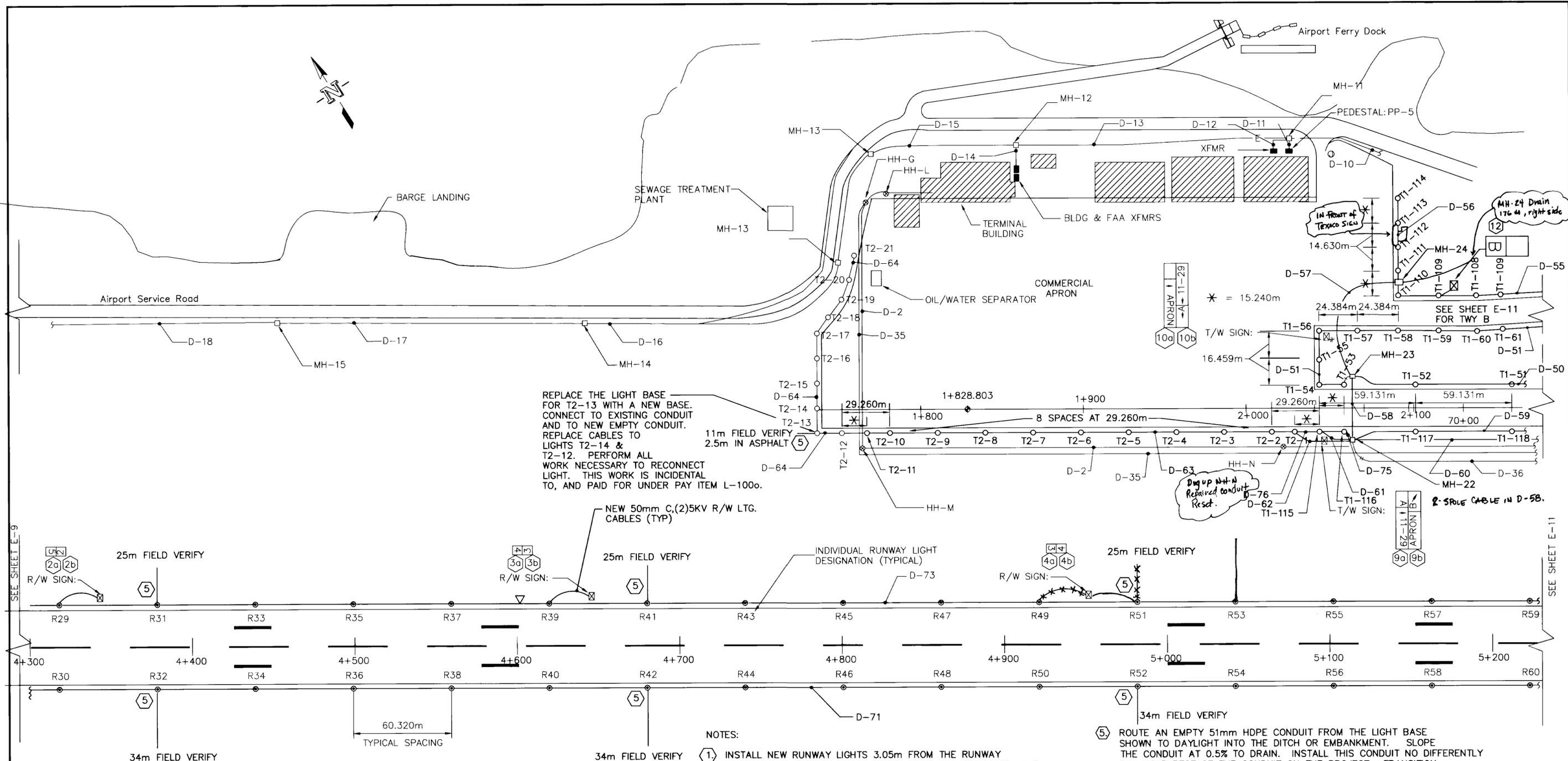
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STATE OF ALASKA
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SOUTHEAST REGION

KETCHIKAN
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
NEW RUNWAY, TAXIWAY, APRON - WEST END

DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SES	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET	59 OF 28





REPLACE THE LIGHT BASE FOR T2-13 WITH A NEW BASE. CONNECT TO EXISTING CONDUIT AND TO NEW EMPTY CONDUIT. REPLACE CABLES TO LIGHTS T2-14 & T2-12. PERFORM ALL WORK NECESSARY TO RECONNECT LIGHT. THIS WORK IS INCIDENTAL TO, AND PAID FOR UNDER PAY ITEM L-100o.

NEW 50mm C,(2)5KV R/W LTG. CABLES (TYP)

SITE PLAN - CENTER RUNWAY



NOTES:

1. INSTALL NEW RUNWAY LIGHTS 3.05m FROM THE RUNWAY EDGELINE. INSTALL THE LIGHTS WITHIN 6.35mm OF A STRAIGHT LINE AS MEASURED BY A LASER. INSTALL THE NEW LIGHTS IN THE SAME LOCATIONS AS THE EXISTING LIGHTS BUT ADJUST THEM TO THE STRAIGHT LINE CRITERIA ABOVE.
2. INSTALL THE RUNWAY LIGHTS PER THE DETAILS ON SHEETS E14 & E15.
3. RECONNECT THE EXISTING RUNWAY SIGNS TO THE NEW LIGHTS. PROVIDE NEW CONDUIT, CABLE, AND CONNECTORS TO THE SIGNS.
4. INSTALL NEW TAXIWAY LIGHTS PER SPACING SHOWN ON DRAWING. START AT THE RUNWAY. ADJUST THE DISTANCES SHOWN AS NECESSARY TO EVENLY DISTRIBUTE THE LIGHTS AROUND CURVES AND ALONG STRAIGHT SECTIONS. WHERE 15.24m OFFSETS ARE SHOWN, SPACE THE FIRST LIGHT AT 15.24m AND ADJUST THE LARGER DISTANCE AS NECESSARY. REFER TO AC 150/5340-24. INSTALL THE TAXIWAY LIGHTS PER THE DETAILS ON SHEETS E14 & E15.
5. ROUTE AN EMPTY 51mm HDPE CONDUIT FROM THE LIGHT BASE SHOWN TO DAYLIGHT INTO THE DITCH OR EMBANKMENT. SLOPE THE CONDUIT AT 0.5% TO DRAIN. INSTALL THIS CONDUIT NO DIFFERENTLY THAN THE REST OF THE CONDUIT ON THE PROJECT. TRANSITION TO GRS CONDUIT FOR THE LAST 4.57 METERS WHERE THE CONDUIT DAYLIGHTS. THE APPROXIMATE LENGTH OF THE CONDUIT IS SHOWN. FIELD VERIFY THE LENGTH NECESSARY TO DAYLIGHT. IF A PORTION OF THE CONDUIT WILL BE UNDER ASPHALT, CUT AND PATCH THE ASPHALT PER THE DETAIL ON SHEET C27. THE APPROXIMATE LENGTH OF THE ASPHALT CUT AND PATCH IS SHOWN. FIELD VERIFY THE CUT AND PATCH DISTANCE.
6. INSTALL A 101mm D.I.P. DRAIN PIPE FROM EACH MANHOLE TO DAYLIGHT INTO THE NEAREST DITCH OR EMBANKMENT. SLOPE THE PIPE AT 0.5% MIN.
7. PROVIDE SPLICES OF ALL TAXIWAY AND RUNWAY LIGHTING CABLES IN ALL MANHOLES TO ALLOW PORTIONS OF THE CIRCUITS TO BE ISOLATED FOR PERFORMING MAINTENANCE. USE CONNECTOR KITS L-823 FOR SPLICES. UNDERGROUND DUCT LOCATIONS ARE NOT SHOWN TO SCALE. LOCATION OF EXISTING DUCTS UNKNOWN. OBTAIN POWER AND SIGNAL LOCATES FOR ALL DUCTS (CABLE AND CONDUIT) PRIOR TO DIGGING. PROVIDE 3 NEW CONTROL CABLES IN EXISTING DUCTS D-2,3,&4. ROUTE CABLES FROM THE REGULATOR BUILDING TO THE FSS IN THE TERMINAL BLDG.

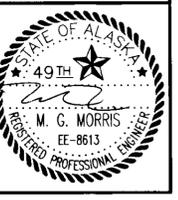
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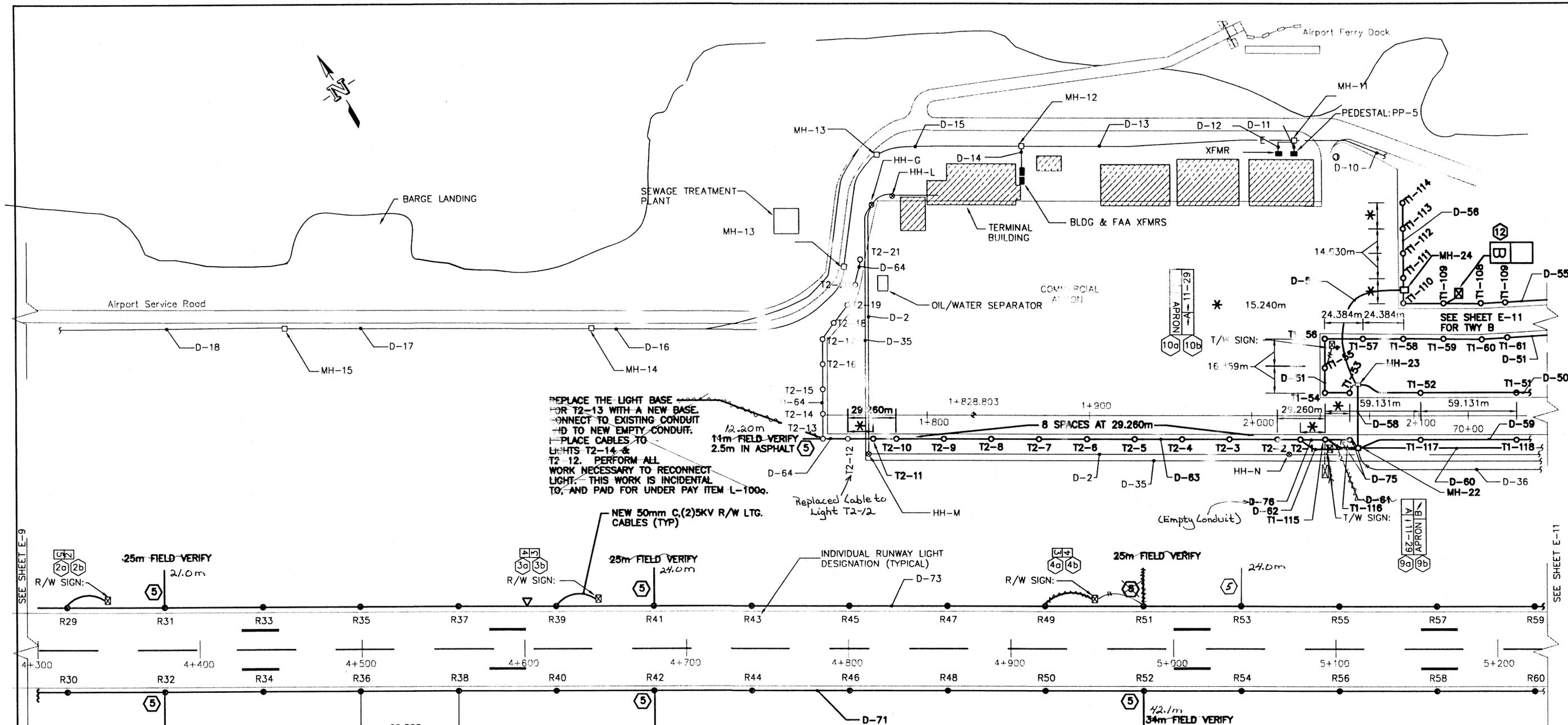
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KETCHIKAN
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
NEW RUNWAY, TAXIWAY, APRON - CENTER

DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET	E10 OF 28





REPLACE THE LIGHT BASE FOR T2-13 WITH A NEW BASE. CONNECT TO EXISTING CONDUIT AND TO NEW EMPTY CONDUIT. PLACE CABLES TO LIGHTS T2-14 & T2-12. PERFORM ALL WORK NECESSARY TO RECONNECT LIGHT. THIS WORK IS INCIDENTAL TO, AND PAID FOR UNDER PAY ITEM L-1000.

NEW 50mm C.(2)5KV R/W LTG. CABLES (TYP)

SITE PLAN - CENTER RUNWAY



NOTES:

- ① INSTALL NEW RUNWAY LIGHTS 3.05m FROM THE RUNWAY EDGELINE. INSTALL THE LIGHTS WITHIN 6.35mm OF A STRAIGHT LINE AS MEASURED BY A LASER. INSTALL THE NEW LIGHTS IN THE SAME LOCATIONS AS THE EXISTING LIGHTS BUT ADJUST THEM TO THE STRAIGHT LINE CRITERIA ABOVE.
- ② INSTALL THE RUNWAY LIGHTS PER THE DETAILS ON SHEETS E14 & E15.
- ③ RECONNECT THE EXISTING RUNWAY SIGNS TO THE NEW LIGHTS. PROVIDE NEW CONDUIT, CABLE, AND CONNECTORS TO THE SIGNS.
- ④ INSTALL NEW TAXIWAY LIGHTS PER SPACING SHOWN ON DRAWING. START AT THE RUNWAY. ADJUST THE DISTANCES SHOWN AS NECESSARY TO EVENLY DISTRIBUTE THE LIGHTS AROUND CURVES AND ALONG STRAIGHT SECTIONS. WHERE 15.24m OFFSETS ARE SHOWN, SPACE THE FIRST LIGHT AT 15.24m AND ADJUST THE LARGER DISTANCE AS NECESSARY. REFER TO AC 150/5340-24. INSTALL THE TAXIWAY LIGHTS PER THE DETAILS ON SHEETS E14 & E15.
- ⑤ ROUTE AN EMPTY 51mm HDPE CONDUIT FROM THE LIGHT BASE SHOWN TO DAYLIGHT INTO THE DITCH OR EMBANKMENT. SLOPE THE CONDUIT AT 0.5% TO DRAIN. INSTALL THIS CONDUIT NO DIFFERENTLY THAN THE REST OF THE CONDUIT ON THE PROJECT. TRANSITION TO GRS CONDUIT FOR THE LAST 4.57 METERS WHERE THE CONDUIT DAYLIGHTS. THE APPROXIMATE LENGTH OF THE CONDUIT IS SHOWN. FIELD VERIFY THE LENGTH NECESSARY TO DAYLIGHT. IF A PORTION OF THE CONDUIT WILL BE UNDER ASPHALT, CUT AND PATCH THE ASPHALT PER THE DETAIL ON SHEET C27. THE APPROXIMATE LENGTH OF THE ASPHALT CUT AND PATCH IS SHOWN. FIELD VERIFY THE CUT AND PATCH DISTANCE.
- ⑥ INSTALL A 101mm D.I.P. DRAIN PIPE FROM EACH MANHOLE TO DAYLIGHT INTO THE NEAREST DITCH OR EMBANKMENT. SLOPE THE PIPE AT 0.5% MIN.
- ⑦ PROVIDE SPLICES OF ALL TAXIWAY AND RUNWAY LIGHTING CABLES IN ALL MANHOLES TO ALLOW PORTIONS OF THE CIRCUITS TO BE ISOLATED FOR PERFORMING MAINTENANCE. USE CONNECTOR KITS L-823 FOR SPLICES.
- ⑧ UNDERGROUND DUCT LOCATIONS ARE NOT SHOWN TO SCALE. LOCATION OF EXISTING DUCTS UNKNOWN. OBTAIN POWER AND SIGNAL LOCATIONS FOR ALL DUCTS (CABLE AND CONDUIT) PRIOR TO DIGGING. PROVIDE NEW CONTROL CABLES IN EXISTING DUCTS D-2,3,&4. ROUTE CABLES FROM THE REGULATOR BUILDING TO THE FSS IN THE TERMINAL BLDG.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

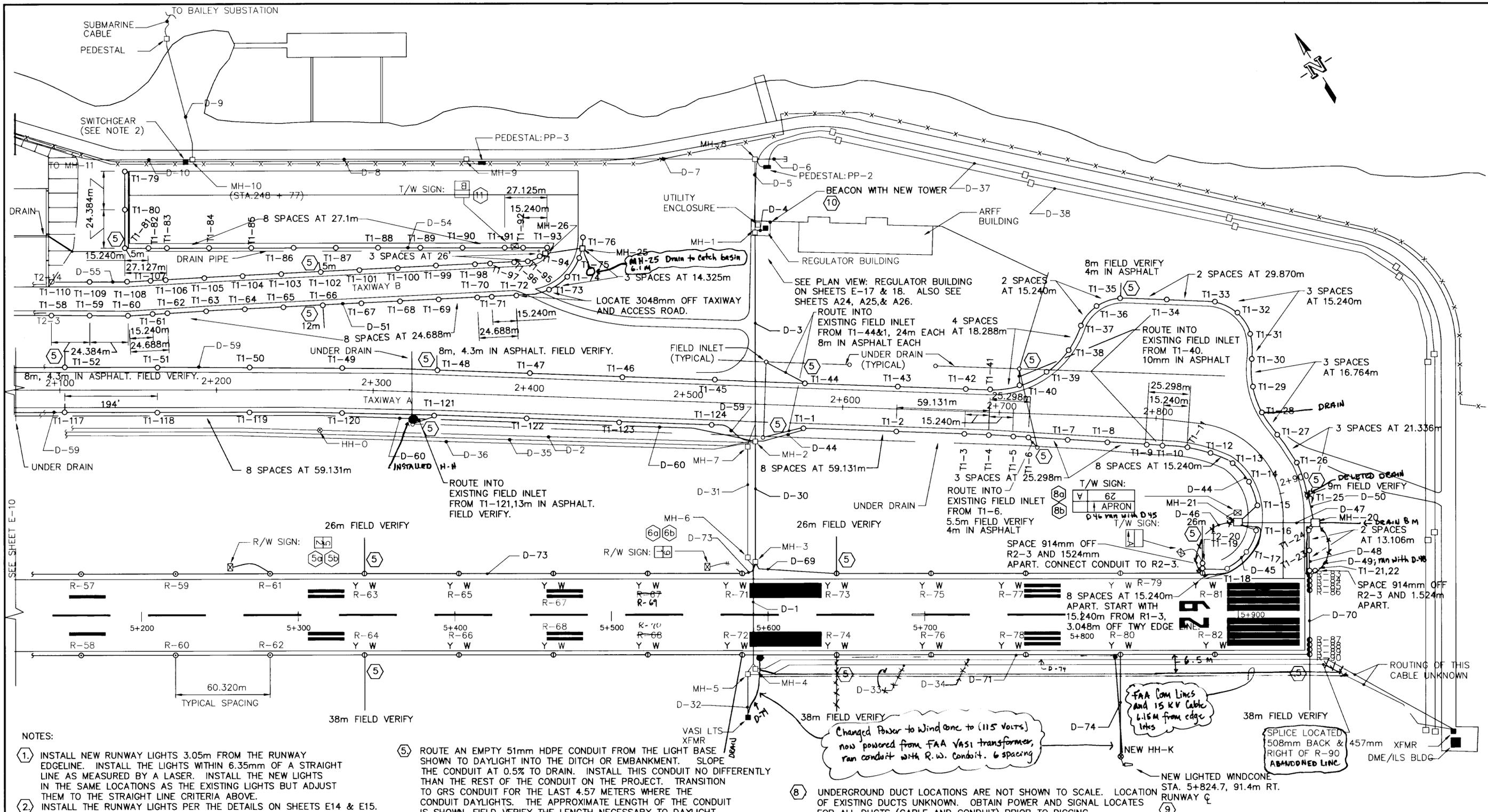
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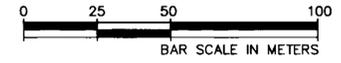
KETCHIKAN
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1500 ~ PROJECT NO. 67995
ALASKA
NEW RUNWAY, TAXIWAY, APRON - CENTER

DESIGNED BY: MGM	PROJECT NO. 67995
DRAWN BY: SRS	DATE: AUGUST 2000
CHECKED BY: MGM	SHEET E10 OF 20





SITE PLAN - EAST END



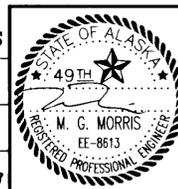
- NOTES:**
1. INSTALL NEW RUNWAY LIGHTS 3.05m FROM THE RUNWAY EDGE LINE. INSTALL THE LIGHTS WITHIN 6.35m OF A STRAIGHT LINE AS MEASURED BY A LASER. INSTALL THE NEW LIGHTS IN THE SAME LOCATIONS AS THE EXISTING LIGHTS BUT ADJUST THEM TO THE STRAIGHT LINE CRITERIA ABOVE.
 2. INSTALL THE RUNWAY LIGHTS PER THE DETAILS ON SHEETS E14 & E15.
 3. RECONNECT THE EXISTING RUNWAY SIGNS TO THE NEW LIGHTS. PROVIDE NEW CONDUIT, CABLE, AND CONNECTORS TO THE SIGNS.
 4. INSTALL NEW TAXIWAY LIGHTS PER SPACING SHOWN ON DRAWING. START AT THE RUNWAY. ADJUST THE DISTANCES SHOWN AS NECESSARY TO EVENLY DISTRIBUTE THE LIGHTS AROUND CURVES AND ALONG STRAIGHT SECTIONS. WHERE 15.24m OFFSETS ARE SHOWN, SPACE THE FIRST LIGHT AT 15.24m AND ADJUST THE LARGER DISTANCE AS NECESSARY. REFER TO AC 150/5340-24. INSTALL THE TAXIWAY LIGHTS PER THE DETAILS ON SHEETS E14 & E15.
 5. ROUTE AN EMPTY 51mm HDPE CONDUIT FROM THE LIGHT BASE SHOWN TO DAYLIGHT INTO THE DITCH OR EMBANKMENT. SLOPE THE CONDUIT AT 0.5% TO DRAIN. INSTALL THIS CONDUIT NO DIFFERENTLY THAN THE REST OF THE CONDUIT ON THE PROJECT. TRANSITION TO GRS CONDUIT FOR THE LAST 4.57 METERS WHERE THE CONDUIT DAYLIGHTS. THE APPROXIMATE LENGTH OF THE CONDUIT IS SHOWN. FIELD VERIFY THE LENGTH NECESSARY TO DAYLIGHT. IF A PORTION OF THE CONDUIT WILL BE UNDER ASPHALT, CUT AND PATCH THE ASPHALT PER THE DETAIL ON SHEET C27. THE APPROXIMATE LENGTH OF THE ASPHALT CUT AND PATCH IS SHOWN. FIELD VERIFY THE CUT AND PATCH DISTANCE.
 6. INSTALL A 101mm D.I.P. DRAIN PIPE FROM EACH MANHOLE TO DAYLIGHT INTO THE NEAREST DITCH OR EMBANKMENT. SLOPE THE PIPE AT 0.5% MIN.
 7. PROVIDE SPLICES OF ALL TAXIWAY AND RUNWAY LIGHTING CABLES IN ALL MANHOLES TO ALLOW PORTIONS OF THE CIRCUITS TO BE ISOLATED FOR PERFORMING MAINTENANCE. USE CONNECTOR KITS L-823 FOR SPLICES.
 8. UNDERGROUND DUCT LOCATIONS ARE NOT SHOWN TO SCALE. LOCATION OF EXISTING DUCTS UNKNOWN. OBTAIN POWER AND SIGNAL LOCATES FOR ALL DUCTS (CABLE AND CONDUIT) PRIOR TO DIGGING.
 9. REMOVE THE EXISTING WINDCONE. PROVIDE A NEW WINDCONE AND WINDCONE HANDHOLE PER THE DETAIL ON SHEET E16. LOCATE THE NEW WINDCONE IN THE SAME LOCATION. DISPOSE OF THE OLD WINDCONE.
 10. REMOVE THE EXISTING BEACON AND TOWER. INSTALL A NEW TOWER ON THE EXISTING FOUNDATION. REINSTALL THE EXISTING BEACON ON THE NEW TOWER. PROVIDE A NEW CIRCUIT FROM THE REGULATOR BUILDING TO THE RE-INSTALLED BEACON. RE-LEVEL THE BEACON PER THE MANUFACTURER'S REQUIREMENTS.
- NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS**

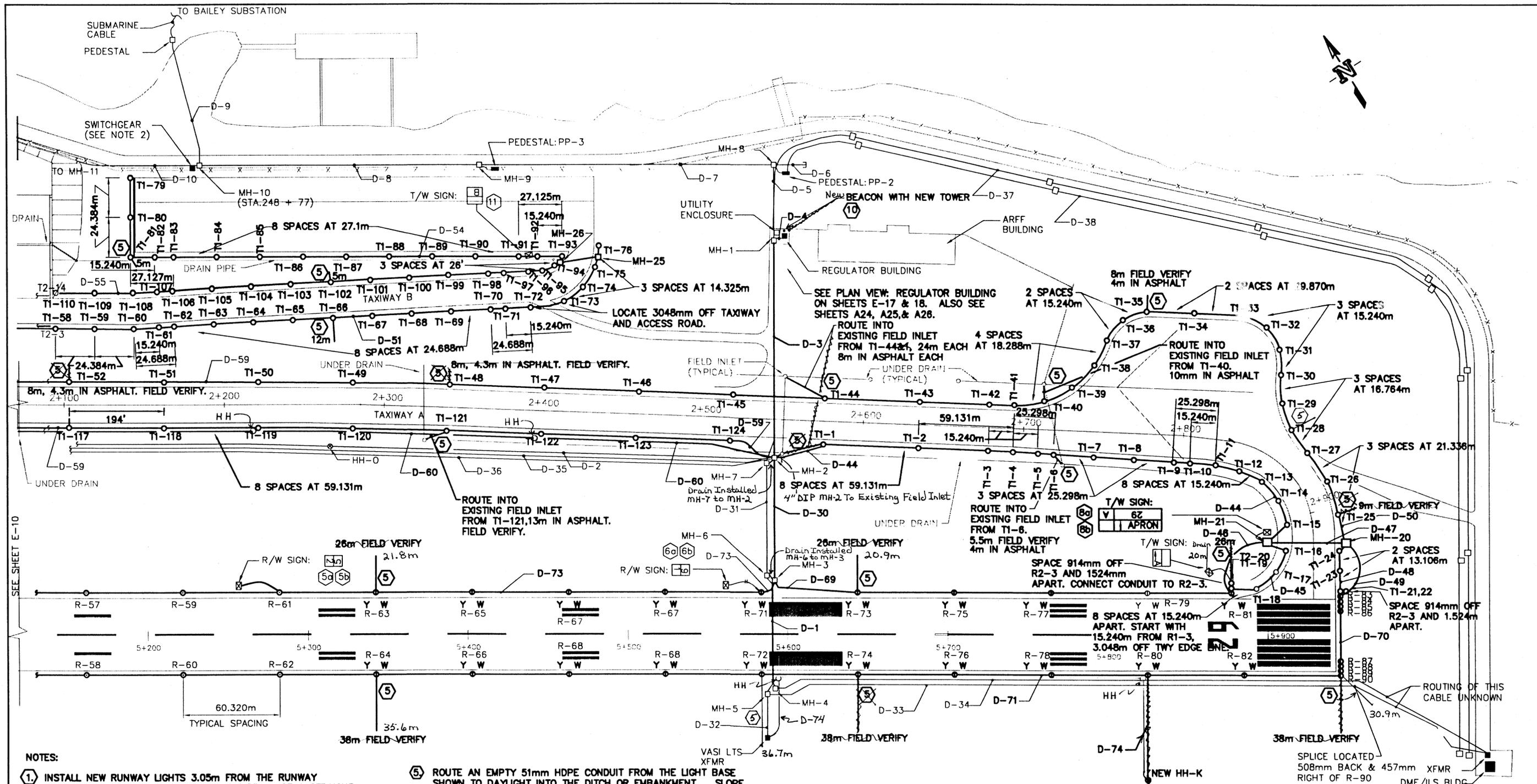
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
NEW RUNWAY, TAXIWAY, APRON - EAST END

DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET	E11 OF 28





NOTES:

- 1) INSTALL NEW RUNWAY LIGHTS 3.05m FROM THE RUNWAY EDGELINE. INSTALL THE LIGHTS WITHIN 6.35m OF A STRAIGHT LINE AS MEASURED BY A LASER. INSTALL THE NEW LIGHTS IN THE SAME LOCATIONS AS THE EXISTING LIGHTS BUT ADJUST THEM TO THE STRAIGHT LINE CRITERIA ABOVE.
- 2) INSTALL THE RUNWAY LIGHTS PER THE DETAILS ON SHEETS E14 & E15.
- 3) RECONNECT THE EXISTING RUNWAY SIGNS TO THE NEW LIGHTS. PROVIDE NEW CONDUIT, CABLE, AND CONNECTORS TO THE SIGNS.
- 4) INSTALL NEW TAXIWAY LIGHTS PER SPACING SHOWN ON DRAWING. START AT THE RUNWAY. ADJUST THE DISTANCES SHOWN AS NECESSARY TO EVENLY DISTRIBUTE THE LIGHTS AROUND CURVES AND ALONG STRAIGHT SECTIONS. WHERE 15.24m OFFSETS ARE SHOWN, SPACE THE FIRST LIGHT AT 15.24m AND ADJUST THE LARGER DISTANCE AS NECESSARY. REFER TO AC 150/5340-24. INSTALL THE TAXIWAY LIGHTS PER THE DETAILS ON SHEETS E14 & E15.
- 5) ROUTE AN EMPTY 51mm HDPE CONDUIT FROM THE LIGHT BASE SHOWN TO DAYLIGHT INTO THE DITCH OR EMBANKMENT. SLOPE THE CONDUIT AT 0.5% TO DRAIN. INSTALL THIS CONDUIT NO DIFFERENTLY THAN THE REST OF THE CONDUIT ON THE PROJECT. TRANSITION TO GRS CONDUIT FOR THE LAST 4.57 METERS WHERE THE CONDUIT DAYLIGHTS. THE APPROXIMATE LENGTH OF THE CONDUIT IS SHOWN. FIELD VERIFY THE LENGTH NECESSARY TO DAYLIGHT. IF A PORTION OF THE CONDUIT WILL BE UNDER ASPHALT, CUT AND PATCH THE ASPHALT PER THE DETAIL ON SHEET C27. THE APPROXIMATE LENGTH OF THE ASPHALT CUT AND PATCH IS SHOWN. FIELD VERIFY THE CUT AND PATCH DISTANCE.
- 6) INSTALL A 101mm D.I.P. DRAIN PIPE FROM EACH MANHOLE TO DAYLIGHT INTO THE NEAREST DITCH OR EMBANKMENT. SLOPE THE PIPE AT 0.5% MIN.
- 7) PROVIDE SPLICES OF ALL TAXIWAY AND RUNWAY LIGHTING CABLES IN ALL MANHOLES TO ALLOW PORTIONS OF THE CIRCUITS TO BE ISOLATED FOR PERFORMING MAINTENANCE. USE CONNECTOR KITS L-823 FOR SPLICES.
- 8) UNDERGROUND DUCT LOCATIONS ARE NOT SHOWN TO SCALE. LOCATION OF EXISTING DUCTS UNKNOWN. OBTAIN POWER AND SIGNAL LOCATES FOR ALL DUCTS (CABLE AND CONDUIT) PRIOR TO DIGGING.
- 9) REMOVE THE EXISTING WINDCONE. PROVIDE A NEW WINDCONE AND WINDCONE HANDHOLE PER THE DETAIL ON SHEET E16. LOCATE THE NEW WINDCONE IN THE SAME LOCATION. DISPOSE OF THE OLD WINDCONE.
- 10) REMOVE THE EXISTING BEACON AND TOWER. INSTALL A NEW TOWER ON THE EXISTING FOUNDATION. REINSTALL THE EXISTING BEACON ON THE NEW TOWER. PROVIDE A NEW CIRCUIT FROM THE REGULATOR BUILDING TO THE RE-INSTALLED BEACON. RELEVEL THE BEACON PER THE MANUFACTURER'S REQUIREMENTS.

SITE PLAN - EAST END



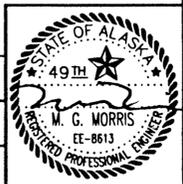
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DESIGNED BY:	MGM	PROJECT NO.	67995
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CHECKED BY:	MGM	SHEET	E11 OF 28



NEW RACEWAY/CABLE SCHEDULE

		(C) = CONCRETE ENCASED CONDUIT (E) = EXISTING (N) = NEW						(C) = CONCRETE ENCASED CONDUIT (E) = EXISTING (N) = NEW					
DUCT	FROM	TO	CONDUITS	IDENTIFICATION	INSTRUCTIONS/REMARKS	DUCT	FROM	TO	CONDUITS	CONDUITS	IDENTIFICATION	INSTRUCTIONS/REMARKS	INSTRUCTIONS/REMARKS
D-1	MH-3	MH-4	(1) 102mm PVC (C)(E) (3) 102mm PVC (C)(E)	TELE CABLE (E) EMPTY	FAA TELEPHONE SPARE CONDUIT	D-31	MH-7	MH-6	(1) 102mm PVC (C)(E)	(1) 15KV, NO. 1/0 AL. (E)	FAA POWER	POWER STEPPED UP FROM FAA ATS IN REG BLDG.	
	MH-6	MH-5	(1) 102mm PVC (C)(E)	(1) 15KV, NO. 1/0 AL. (E) (2) 15KV, NO. 1/0 AL. (E)	FAA POWER UTILITY POWER UTILITY TELEPHONE				(1) 102mm PVC (C)(E)	(2) 15KV, NO. 1/0 AL. (E) TELE CABLE (E)	UTILITY POWER UTILITY TELEPHONE	KPU PRIMARY TO MH-5 THIS CABLE IS ABANDONED IN PLACE	
	MH-6	MH-5	(1) 102mm PVC (C)(E)	TELE CABLE (E)	UTILITY TELEPHONE	D-32	MH-5	VASI XFMR	DIRECT BURY CABLE (E)	(1) 15 KV, NO. 1/0 AL. (E)	FAA POWER	THIS CABLE IS ABANDONED IN PLACE	
D-2	MH-2	HH-G	50mm PVC (E)	(2) 18 COND. NO. 16 CABLE CONTROL (N)	REGULATOR CONTROLS CONTROL (N)	D-33	MH-5	ILS/DME BLDG	DIRECT BURY CABLE (E)	(1) 15 KV, NO. 1/0 AL. (E)	FAA POWER	REMOVE EXISTING CABLES. INSTALL NEW CABLES ALL THE WAY THROUGH TERMINAL BLDG TO FSS.	
						D-34	MH-4	ILS/DME BLDG	DIRECT BURY CABLE (E)	TELE CABLE (E)	FAA TELEPHONE	THIS CABLE IS 5.486-6.400 m FROM RUNWAY EDGE LINE, MAYBE CLOSER	
D-3	MH-1	MH-2	(1) 102mm PVC (C)(E) (1) 102mm PVC (C)(E)	(3) 12 COND. NO. 16 CABLE(N) (2) 5KV, NO. 8 (N) (2) 5KV, NO. 8 (N) (2) 5KV, NO. 8 (N) (1) 12 PR TELE CABLE (E) TELE CABLE (E)	REGULATOR CONTROLS RUNWAY CKT R TAXIWAY CKT T1 TAXIWAY CKT T2 ORIGINAL REGULATOR CONTROL FAA TELEPHONE FAA POWER UTILITY POWER UTILITY TELEPHONE	D-35	MH-2	HH-G	DIRECT BURY CABLE (E)	(1) 12 PR TELE CABLE (E)	ORIGINAL REGULATOR CONTROL	THIS CABLE IS VERY CLOSE TO RUNWAY LIGHTS (ABANDON IN PLACE)	
	UTILITY ENCL.	MH-7	(1) 102mm PVC (C)(E) (1) 102mm PVC (C)(E)	(1) 15KV, NO. 1/0 AL. (E) (2) 15KV, NO. 1/0 AL. (E)	FAA TELEPHONE FAA POWER UTILITY POWER UTILITY TELEPHONE	D-36	MH-2	NEXT TO MH22	DIRECT BURY CABLES(E)	(2) 5 KV, NO. 8(E)	TAXIWAY CKT T2	THIS CABLE ROUTING UNKNOWN, ABANDON IN PLACE, REMOVE IF FOUND.	
			(1) 102mm PVC (C)(E)	TELE CABLE (E)	UTILITY TELEPHONE	D-37	UTILITY ENCL	ILS/DME BLDG	(1) 102mm C (E) (1) 102mm C (E)	15 KV CABLES (E) SPARE	UTILITY POWER UTILITY POWER	KPU PRIMARY	
D-4	REG. BLDG.	MH-1	(1) 102mm GRS (C)(E)	(3) 12 COND. NO. 16 CABLE(N)	REGULATOR CONTROLS	D-38	UTILITY ENCL	ILS/DME BLDG	(1) 102mm C (E)	UNKNOWN (E)	UTILITY TELEPHONE	KPU TELEPHONE CONDUIT	
			(1) 102mm GRS (C)(E)	TELE CABLE (E) TELE CABLE (E)	UTILITY TELEPHONE UTILITY TELEPHONE	D-39	MH-17	MALSR	DIRECT BURY CABLE (E)	(1)15 KV, NO. 2 AL (E)	FAA POWER	THIS CABLE IS 914-1524mm FROM RWY LIGHTS,MAYBE CLOSER. DO NOT DAMAGE.	
			(1) 102mm GRS (C)(E) (1) 102mm GRS (C)(E) (1) 102mm GRS (C)(E) (1) 102mm GRS (C)(E) (1) 102mm GRS (C)(E) (2) 102mm GRS (C)(E)	(2) 5KV, NO. 8 (N) (2) 5KV, NO. 8 (N) (2) 5KV, NO. 8 (N) NO. 6 GND EMPTY	RUNWAY CKT R TAXIWAY CKT T1 TAXIWAY CKT T2 GROUND SPARE CONDUIT	D-40	VASI XFMR	VASI	(1) OR (2) 50mm C (E)	FAA CABLES (E)	FAA VASI	FAA VASI POWER AND CONTROL	
			(1) 102mm GRS (C)(E)	TELE CABLE (E)	UTILITY TELEPHONE	D-41	HH-H	HH-I	(1) 102mm GRS (E)	(1) 15 KV (E)	FAA POWER		
			(1) 102mm GRS (C)(E)	TELE CABLE (E)	UTILITY TELEPHONE	D-42	HH-I	ILS/GS XFMR(E)	DIRECT BURY CABLE (E)	(1) 15 KV	FAA POWER		
			(1) 102mm GRS (C)(E)	TELE CABLE (E)	UTILITY TELEPHONE	D-43	R-22	HH-J	(1) 50mm C (N)	(2) 5 KV, NO. 8 (N)	RUNWAY CKT R	POWER NEW WINDCONE	
			(1) 102mm GRS (C)(E)	TELE CABLE (E)	UTILITY TELEPHONE	D-44	MH-2	MH-21	(1) 50mm C (N)	(1) 5 KV, NO. 8(N)	TAXIWAY CKT T1	Ⓣ	
D-5, 7, 8	UTILITY ENCL.	MH-10	(1) 102mm PVC (C)(E) (1) 102mm PVC (C)(E) (1) 102mm PVC (C)(E)	15KV CABLES (E) TELE CABLE (E) UNKNOWN (E)	UTILITY POWER UTILITY TELEPHONE	D-45	MH-21	T1-20	(1) 50mm C (N)	(2) 5 KV, NO. 8(N)	TAXIWAY CKT T1	Ⓣ	
			(1) 102mm PVC (C)(E)	UNKNOWN (E)	UTILITY TELEPHONE	D-46	R-81	MH-21	(1) 50mm C (N)	(1) 5 KV, NO. 8(N)	RUNWAY CKT R		
			(1) 102mm PVC (C)(E)	UNKNOWN (E)	UTILITY TELEPHONE	D-47	MH-21	MH-20	(1) 102mm GRS (E)	(1) 5 KV, NO. 8(N) (1) 5 KV, NO. 8(N)	TAXIWAY CKT T1 RUNWAY CKT R	EXTEND EXISTING CONDUIT TO NEW MH-21 & MH-20	
D-6	MH-8	EAST	(2) 102mm PVC (E)	UNKNOWN (E)		D-48	MH-20	T1-22	(1) 50mm C (N)	(2) 5 KV, NO. 8(N)	TAXIWAY CKT T1	Ⓣ	
D-9	CHNL XNG	MH-10	(1) 102mm PVC (E) (1) 102mm PVC (E)	15 KV CABLES (E) TELE CABLE (E)	UTILITY POWER UTILITY TELEPHONE	D-49	MH-20	R-83	(1) 50mm C (N)	(1) 5 KV, NO. 8(N)	RUNWAY CKT R		
D-10	MH-10	MH-11	(1) 102mm PVC (C)(E) (1) 102mm PVC (C)(E) (1) 102mm PVC (C)(E)	15KV CABLES (E) UNKNOWN (E) TELE CABLES (E)	UTILITY POWER UTILITY TELEPHONE	D-50	MH-20	MH-23	(1) 50mm C (N)	(1) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	Ⓣ	
			(1) 102mm PVC (C)(E)	TELE CABLES (E)	UTILITY TELEPHONE	D-51	MH-23	MH-25	(1) 50mm C (N)	(1) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	Ⓣ	
D-11	MH-11	PEDESTAL	(1) 102mm GRS (E) (1) 102mm GRS (E) (1) 102mm GRS (E) (1) 102mm GRS (E)	15 KV CABLES (E) 15 KV CABLES (E) 15 KV CABLES (E) TELE CABLE (E)	UTILITY POWER UTILITY POWER UTILITY POWER UTILITY TELEPHONE	D-52	MH-25	T1-78	(1) 50mm C (N)	(2) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	Ⓣ	
			(1) 102mm GRS (E)	TELE CABLE (E)	UTILITY TELEPHONE	D-53	MH-25	MH-26	(1) 102mm GRS (N)(C)	(1) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	Ⓣ	
D-12	MH-11	XFMR NO. 2	(1) 102mm PVC (E)	15 KV CABLES (E)	UTILITY POWER	D-54	MH-26	T1-79	(1) 50mm C (N)	(2) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	Ⓣ	
			(1) 102mm PVC (C)(E)	15 KV CABLES (E)	UTILITY POWER	D-55	MH-26	MH-24	(1) 50mm C (N)	(1) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	Ⓣ	
			(1) 102mm PVC (C)(E)	UNKNOWN (E)	UTILITY POWER	D-56	MH-24	T1-114	(1) 50mm C (N)	(2) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	Ⓣ	
			(1) 102mm PVC (C)(E)	TELE CABLE(S)(E)	UTILITY TELEPHONE	D-57	MH-24	MH-23	(1) 102mm GRS (E)	(1) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	EXTEND EXTG C. INTO NEW MH-24 & 23	
D-13	MH-11	MH-12	(1) 102mm PVC (C)(E) (1) 102mm PVC (C)(E) (1) 102mm PVC (C)(E)	15 KV CABLES (E) UNKNOWN (E) TELE CABLE(S)(E)	UTILITY POWER UTILITY TELEPHONE	D-58	MH-23	MH-22	(1) 102mm GRS (E)	(1) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	EXTEND EXTG C. INTO NEW MH-22 & 23	
			(1) 102mm PVC (C)(E)	TELE CABLE(S)(E)	UTILITY TELEPHONE	D-59	MH-22	MH-2	(1) 50mm C (N)	(1) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	Ⓣ	
D-14	MH-12	XFMR NO. 3	(1) 102mm GRS (E) (1) 50mm GRS (E) (1) 50mm GRS (E)	15 KV CABLES (E) TELEPHONE (E) (1) 15KV, (1) GND (E)	UTILITY POWER UTILITY TELEPHONE FAA POWER	D-60	MH-2	MH-22	(1) 50mm C (N)	(2) 5 KV, NO. 8 (N)	TAXIWAY CKT T2	ROUTE DIRECTLY NO LIGHTS.	
			(1) 50mm GRS (E)	TELEPHONE (E)	UTILITY TELEPHONE	D-61	MH-22	T1-115	(1) 50mm C (N)	(2) 5 KV, NO. 8 (N)	TAXIWAY CKT T1		
			(1) 50mm GRS (E)	(1) 15KV, (1) GND (E)	FAA POWER	D-62	MH-22	T2-1	(1) 50mm C (N)	(2) 5 KV, NO. 8 (N)	TAXIWAY CKT T2		
D-15, 16, 17, 18, 19	MH-12	MH-17	(1) 102mm PVC (C)(E) (1) 102mm PVC (C)(E)	(1) 15KV, (1) GND (E) 15 KV CABLES (E) 6/C, NO. 19 (E) TELE CABLE (E)	FAA POWER UTILITY POWER FAA CONTROL UTILITY TELEPHONE	D-63	T2-1	T2-12	(1) 50mm C (N)	(2) 5 KV, NO. 8 (N)	TAXIWAY CKT T2	CONNECT TO EXTG T2-12.	
			(1) 102mm PVC (C)(E)	TELE CABLE (E)	UTILITY TELEPHONE	D-64	T2-12	T2-21	(1) 50mm C (E)	(2) 5 KV, NO. 8 (E)	TAXIWAY CKT T2	TO REMAIN.	
D-20	MH-17	PEDESTAL	(1) 102mm GRS (E) (1) 102mm GRS (E) (1) 102mm GRS (E)	15 KV CABLE(S)(E) 15 KV CABLE (E) EMPTY	UTILITY POWER UTILITY POWER SPARE	D-69	MH-3	R-81	(1) 50mm C (N)	(1) 5 KV, NO. 8 (N)	RUNWAY CKT R	Ⓣ	
			(1) 102mm GRS (E)	EMPTY	SPARE	D-70	R-83	R-90	(1) 50mm GRS (N)	(1) 5 KV, NO. 8 (N)	RUNWAY CKT R	Ⓣ	
			(1) 102mm GRS (E)	EMPTY	SPARE	D-71	R-90	R-8	(1) 50mm C (N)	(1) 5 KV, NO. 8 (N)	RUNWAY CKT R	Ⓣ	
D-21	MH-17	XFMR NO. 3	(1) 102mm GRS (E)	15 KV CABLE(S)(E)	UTILITY POWER	D-72	R-8	R-1	(1) 50mm GRS (N)	(1) 5 KV, NO. 8 (N)	RUNWAY CKT R	Ⓣ	
			(1) 102mm GRS (E)	15 KV CABLE(S)(E)	UTILITY POWER	D-73	R-1	MH-3	(1) 50mm C (N)	(1) 5 KV, NO. 8 (N)	RUNWAY CKT R	Ⓣ	
D-30	MH-2	MH-3	(1) 102mm GRS (N) DIRECT BURY CABLE(E) (1) 102mm GRS (N)	(2) 5 KV, NO.8 (N) TELE CABLE (E) SPARE (N)	RUNWAY CKT R FAA TELEPHONE	D-74	R-80	HH-K	(1) 50mm C (N)	(2) 5 KV, NO. 8 (N)	RUNWAY CKT R	POWER NEW WINDCONE	
			(1) 102mm GRS (N)	SPARE (N)	SPARE	D-75	MH-22	T1-115	(1) 50mm C (N)	(1) 5 KV, NO. 8 (N)	TAXIWAY CKT T1	Ⓣ	
			(1) 102mm GRS (N)	SPARE (N)	SPARE	D-76	T1-115	T2-1	(1) 50mm C (N)		SPARE		

NOTES: 1. PROVIDE A GROUND CONDUCTOR IN EVERY CONDUIT CONTAINING NEW CABLES. PROVIDE A NO. 8 COPPER CONDUCTOR.
2. ROUTE NEW CONDUIT TO EVERY LIGHT BASE BETWEEN "FROM" AND "TO" LOCATIONS.

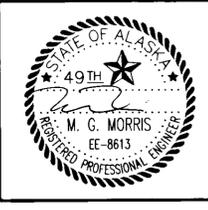
3. ROUTE NEW CONTROL CABLES FROM THE NEW CONTROL PANEL IN THE REGULATOR BUILDING TO THE NEW CONTROL PANEL IN THE FSS. FOLLOW THE ROUTING OF THE OLD CONTROL CABLES THAT WERE REMOVED. REUSE THE SAME CONDUIT IF POSSIBLE.

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NEW AIRPORT SIGN SUMMARY

SIGN NO.	LEGEND	LETTER SIZE & COLOR	BACKGROUND COLOR	LEGEND DIRECTION	STATION	RWY OR TWY OFFSET DISTANCE TO NEAR EDGE OF SIGN	REMARKS	TYPE	SIZE
1a	6	635mm WHITE	BLACK	NW	RWY 4+038.6		EXISTING TO REMAIN	RUNWAY DISTANCE REMAINING	5
1b	1	635mm WHITE	BLACK	SE	RWY 4+038.6			RUNWAY DISTANCE REMAINING	5
2a	5	635mm WHITE	BLACK	NW	RWY 4+343.4			RUNWAY DISTANCE REMAINING	5
2b	2	635mm WHITE	BLACK	SE	RWY 4+343.4			RUNWAY DISTANCE REMAINING	5
3a	4	635mm WHITE	BLACK	NW	RWY 4+648.2			RUNWAY DISTANCE REMAINING	5
3b	3	635mm WHITE	BLACK	SE	RWY 4+648.2			RUNWAY DISTANCE REMAINING	5
4a	3	635mm WHITE	BLACK	NW	RWY 4+953			RUNWAY DISTANCE REMAINING	5
4b	4	635mm WHITE	BLACK	SE	RWY 4+953			RUNWAY DISTANCE REMAINING	5
5a	2	635mm WHITE	BLACK	NW	RWY 5+257.8			RUNWAY DISTANCE REMAINING	5
5b	5	635mm WHITE	BLACK	SE	RWY 5+257.8			RUNWAY DISTANCE REMAINING	5
6a	1	635mm WHITE	BLACK	NW	RWY 5+562.6			RUNWAY DISTANCE REMAINING	5
6b	6	635mm WHITE	BLACK	SE	RWY 5+562.6			RUNWAY DISTANCE REMAINING	5
7	← A	305mm BLACK	YELLOW	NW				RUNWAY EXIT	1
8a	↑ APRON	305mm BLACK	YELLOW	SW			PROVIDE NEW LEGEND	LOCATION / DESTINATION	1
8b	29 A	305mm WHITE/YELLOW	RED/BLACK	NE			PROVIDE NEW LEGEND	HOLDING POSITION / LOCATION	1
9a	A ↑ 11-29	305mm YELLOW/BLACK	BLACK/YELLOW	NW			EXISTING TO REMAIN	LOCATION / DESTINATION	1
9b	APRON B	305mm BLACK/BLACK	YELLOW/YELLOW	SE			EXISTING TO REMAIN	DESTINATION / DIRECTION	1
10a	↑ APRON	305mm BLACK	YELLOW	NW			PROVIDE NEW LEGEND	LOCATION / DESTINATION	1
10b	← A 11-29	305mm YELLOW/BLACK	BLACK/YELLOW	SE			RAISE SIGN. SEE NOTE NO.7	DIRECTION / DESTINATION	1
11	B	305mm YELLOW	BLACK	N	TWY B		EXISTING TO REMAIN	LOCATION	1
12	B	305mm YELLOW	BLACK	NW	TWY B	6.096m FROM TWY EDGE LINE	NEW SIGN	LOCATION	1

NEW MANHOLE SCHEDULE

NUMBER	LOCATION	INSTRUCTIONS
MH-1	REGULATOR BLDG	TO REMAIN INSTALL 102mm DRAIN PIPE
MH-2	TWY A	REPLACE WITH NEW
MH-3	RWY	TO REMAIN INSTALL 102mm DRAIN PIPE
MH-4	RWY	TO REMAIN CUT 305mm DIA. HOLE IN BOTTOM
MH-5	RWY	TO REMAIN CUT 305mm DIA. HOLE IN BOTTOM
MH-6	RWY	TO REMAIN INSTALL 102mm DRAIN PIPE
MH-7	TWY A	TO REMAIN
MH-8 TO MH-17	THESE MANHOLES ARE LOCATED ALONG THE AIRPORT SERVICE ROAD AND ARE EXISTING TO REMAIN	
MH-20	TWY A STA 96, 16.764m RT.	NEW INSTALL 102mm DRAIN PIPE
MH-21	TWY A STA. 96, 16.764m LT.	NEW INSTALL 102mm DRAIN PIPE
MH-22	TWY A STA 67+70, 16.764m RT.	NEW INSTALL 102mm DRAIN PIPE
MH-23	TWY A STA 67+70, 16.764m LT.	NEW INSTALL 102mm DRAIN PIPE
MH-24	APRON 3.048m FROM EDGE LINE	NEW INSTALL 102mm DRAIN PIPE
MH-25	TWY B 3.048m FROM EDGE LINE	NEW INSTALL 102mm DRAIN PIPE
MH-26	TWY B 3.048m FROM EDGE LINE	NEW INSTALL 102mm DRAIN PIPE

AIRPORT SIGNING NOTES:

- ALL SIGNS NEW OR EXISTING SHALL COMPLY WITH FAA A/C 150/5340-18C, A/C 150/5345-44F, AND WITH THE SPECIFICATIONS.
- WHEN RELOCATING A SIGN, REPLACE THE EXISTING FOUNDATION INCLUDING LIGHT BASES, AND COVERS, FRANGIBLE, COUPLINGS, MOUNTING HARDWARE AND ELECTRICAL DISCONNECTS. THE RELOCATED FOUNDATION SHALL MEET THE SAME REQUIREMENTS AS A NEW FOUNDATION. SEE SIGN DETAILS ON SHEET E-14.
- ALL MEASUREMENTS USING THE TAXIWAY EDGE LINE SHALL BE FROM THE OUTSIDE EDGE OF THE EDGE LINE.
- ALL NEW HARDWARE FOR A RELOCATED SIGN SHALL BE MADE BY THE ORIGINAL SIGN MANUFACTURER FOR THAT TYPE OF SIGN.
- REPOWER RELOCATED SIGNS WITH NEW CONDUIT, CONDUCTORS, AND OTHER REQUIRED MATERIAL. ROUTE THE CONDUIT FROM AN ADJACENT LIGHT BASE AS SHOWN. USE 50mm CONDUIT AND NO. 6 (5 KV) LIGHTING CABLE.
- WHEN REPLACING A SIGN LEGEND, PROVIDE ADDITIONAL NEW SIGN MODULES AS REQUIRED BY THE MANUFACTURER. THE NEW MODULES SHALL BE THE SAME SIZE AND COLOR AS THE EXISTING MODULES AND SHALL BE BY THE SAME MANUFACTURER.
- RAISE SIGN 10 SO CONCRETE BASE IS AT SAME ELEVATION AS THE EDGE OF TAXIWAY A. REPLACE FOUNDATION PER NOTE. NO. 2.

NEW HANDHOLE SCHEDULE

NUMBER	LOCATION	INSTRUCTIONS
HH-G	APRON	EXTG TO REMAIN
HH-H	RWY STA. 131+50	EXTG TO REMAIN
HH-I	RWY STA. 131+50	EXTG TO REMAIN
HH-J	RWY 11 WINDCONE	REPLACE WITH NEW IN NEW LOCATION
HH-K	RWY 29 WINDCONE	REPLACE WITH NEW
HH-L	APRON	EXTG TO REMAIN
HH-M	APRON	EXTG TO REMAIN
HH-N	APRON	EXTG TO REMAIN
HH-O	TWY A	EXTG TO REMAIN
HH-P	RWY STA 119+90	EXTG TO REMAIN

HANDHOLE NOTES:

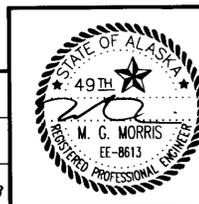
- REFER TO SHEETS E-9, E-10, & E-11 FOR LOCATIONS OF HANDHOLES.
- PROVIDE NEW 102mm DRAIN PIPE FOR EXISTING MANHOLES MH-1, MH-3, & MH-6. PROVIDE NEW 102mm DRAIN PIPE FOR ALL NEW MANHOLES. SLOPE PIPE AT 1% MIN. TO DAYLIGHT INTO EITHER A DITCH OR TO DAYLIGHT OUT OF THE BANK. PROVIDE PIPE LENGTH AS NECESSARY.
- PROVIDE A 50mm GRS DRAIN PIPE OUT OF HH-M. SEAL PIPE AROUND HH-M. SLOPE PIPE AT 1% MIN. TO DAYLIGHT INTO DITCH.
- WHERE A HANDHOLE IS REMOVED, BACKFILL HOLE WITH CRUSHED AGGREGATE BASE COURSE AND COMPACT TO 95%.
- PROVIDE NEW HANDHOLES AND MANHOLES PER THE DETAILS ON SHEETS E-14 AND E-15.
- ROUTE DRAIN PIPE FROM MH-2 TO DRAIN INTO ADJACENT CATCH BASIN.

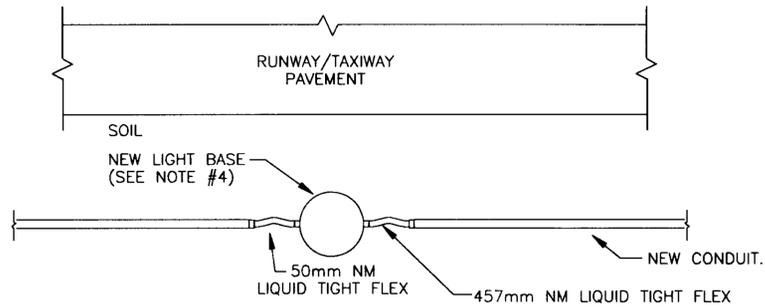
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BY:	DATE:	DESCRIPTION OF CHANGE:
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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SOUTHEAST REGION

KETCHIKAN **KETCHIKAN AIRPORT** ALASKA
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
NEW SIGN, MANHOLE, & HANDHOLE SCHED.

DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET	E13 OF 28

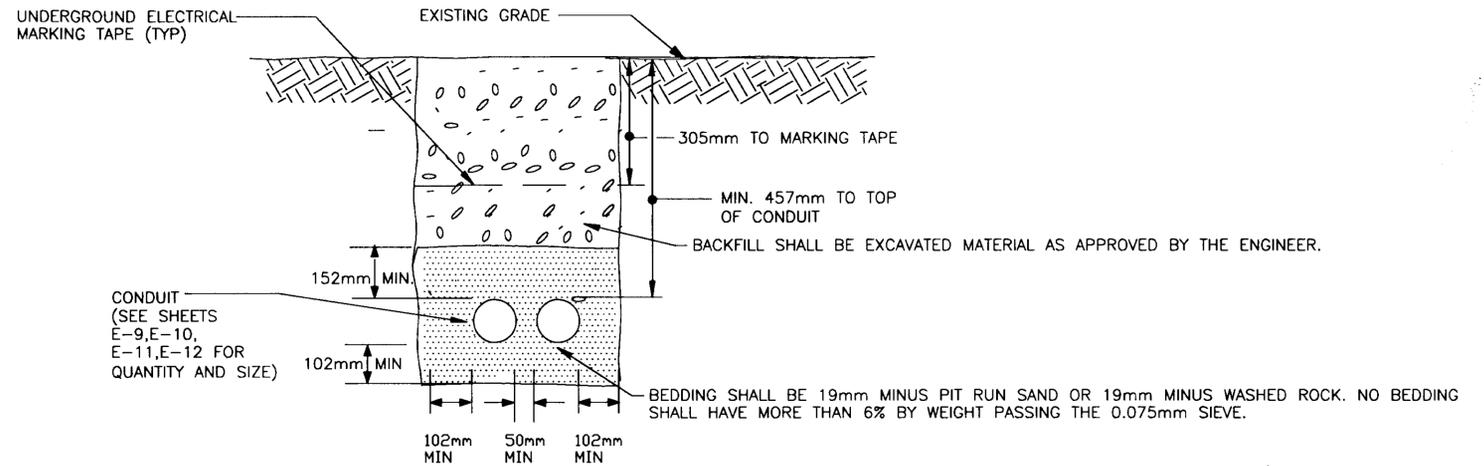




DETAIL: LIGHT BASE & CONDUIT INSTALLATION (TYP)
NO SCALE

NOTES:

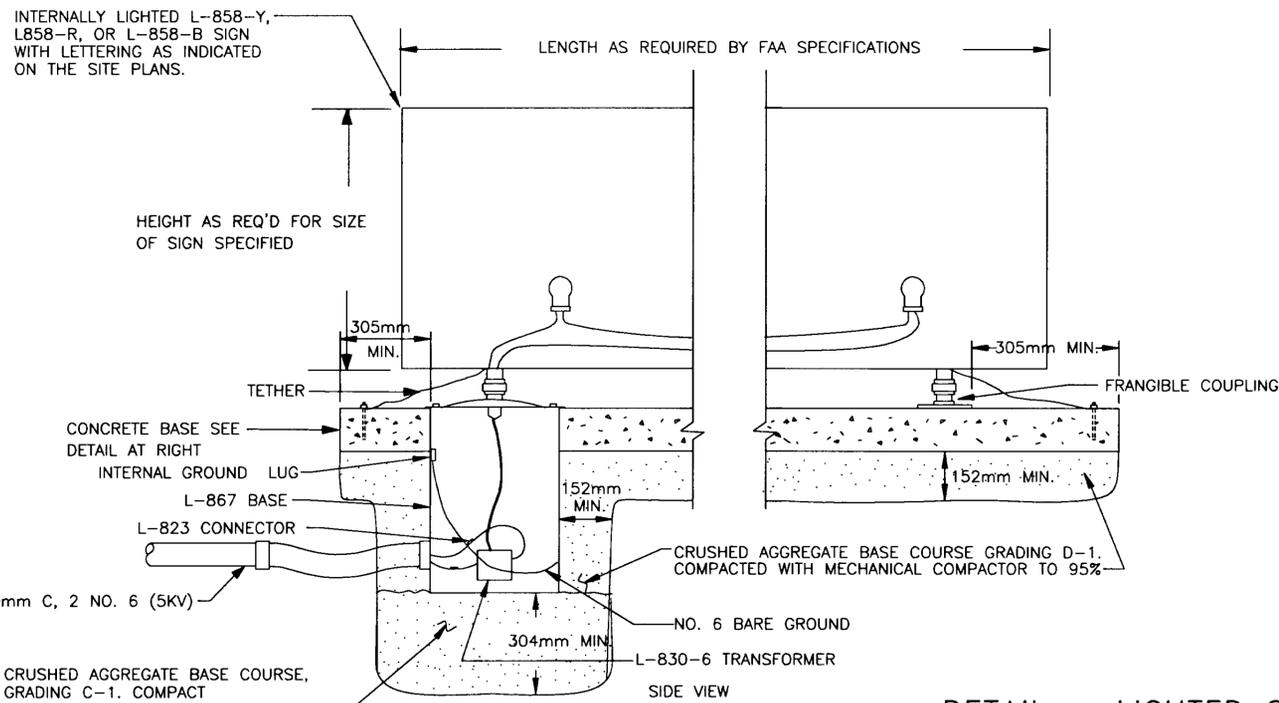
1. REMOVE THE EXISTING LIGHT BASES AND THE EXISTING CABLES.
2. WHERE THE LIGHTS ARE IN ASPHALT, CUT THE ASPHALT A MINIMUM OF 1.371m WIDE. IF MORE ROOM IS NEEDED TO PLACE THE LIGHT BASE, WIDEN THE ENTIRE CUT TO AT LEAST 457mm WIDER THAN THE WIDTH OF THE EXCAVATION ON EACH SIDE OF THE TRENCH.
3. PATCH THE ASPHALT PER THE TRENCH DETAIL ON SHEET C-27.
4. INSTALL THE NEW RUNWAY LIGHT BASES 3.048m FROM THE OUTSIDE EDGE OF THE RUNWAY EDGE LINE TO THE CENTER OF THE LIGHT LENS. INSTALL THE NEW TAXIWAY LIGHT BASES 3.048m FROM THE OUTSIDE EDGE OF THE TAXIWAY EDGE LINE TO THE CENTER OF THE LIGHT LENS.
5. INSTALL THE CONDUIT IN A STRAIGHT LINE BETWEEN THE LIGHT BASES.



DETAIL: CONDUIT TRENCH WITH NO ASPHALT
NO SCALE

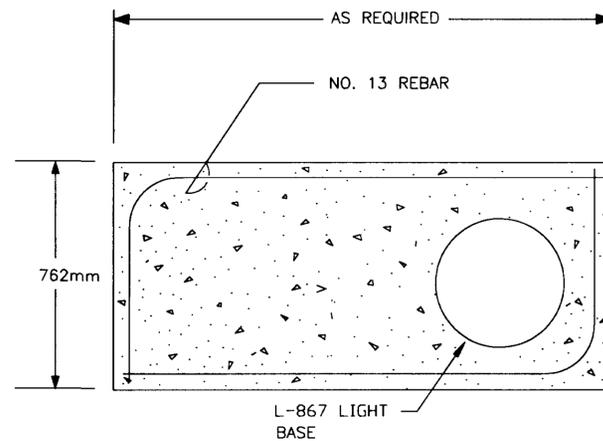
NOTES:

1. THIS IS A TYPICAL TRENCH SECTION SHOWING MINIMUM DIMENSIONS AND REQUIRED MATERIALS. CONFIGURE ALL TRENCHES AS NECESSARY TO COMPLY WITH DIMENSIONS SHOWN.
2. BURY ALL CONDUIT AT 457mm MINIMUM BELOW FINISH GRADE UNLESS OTHERWISE NOTED.
3. SLOPE CONDUIT AT 0.5% MIN. PER DETAIL ON SHEET E-15.
4. TRENCH BEDDING AND BACKFILL TO BE COMPACTED TO 95% MAXIMUM DENSITY (SPECIFICATION P-152).
5. SEE SHEETS E-9,10,11,&12 FOR NUMBER OF CONDUITS IN TRENCH.
6. WHERE TRENCHING THROUGH EXISTING ASPHALT, PATCH ASPHALT PER TRENCH DETAIL, SHEET C-27.
7. BEDROCK MAY BE ENCOUNTERED DURING EXCAVATION. SEE GEOTECH INFORMATION IN APPENDIX C. REMOVAL OF THE BEDROCK IS INCIDENTAL TO THE EXCAVATION AND PAID FOR UNDER THE BID ITEM FOR THE CONDUIT. THIS INCLUDES RIPPING OR DRILLING AND BLASTING AND ALL OTHER WORK REQUIRED TO REMOVE THE BEDROCK TO THE REQUIRED EXCAVATION DEPTH.



DETAIL - LIGHTED SIGN
NO SCALE

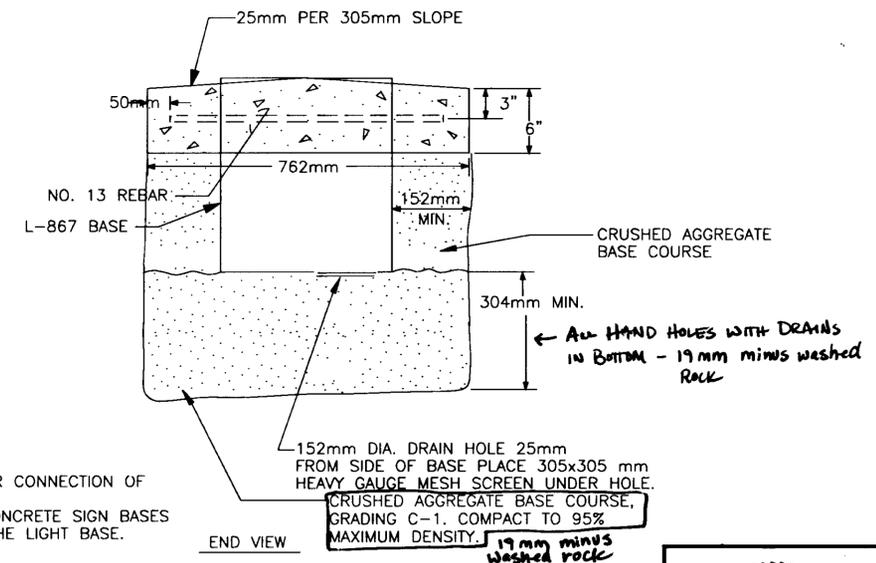
NOTE: BEDROCK MAY BE ENCOUNTERED DURING EXCAVATION. SEE GEOTECH INFORMATION IN APPENDIX C. REMOVAL OF THE BEDROCK IS INCIDENTAL TO THE EXCAVATION AND PAID FOR UNDER THE BID ITEM FOR THE CONDUIT. THIS INCLUDES RIPPING, DRILLING AND BLASTING AND ALL OTHER WORK REQUIRED TO REMOVE THE BEDROCK TO THE REQUIRED EXCAVATION DEPTH.



TOP VIEW

NOTES:

1. REFER TO HANDHOLE DETAIL ON SHEET E-15 FOR CONNECTION OF CONDUITS TO L-867 BASE.
2. WHEN RELOCATING A SIGN, RELOCATE EXISTING CONCRETE SIGN BASES OR PROVIDE NEW CONCRETE BASES INCLUDING THE LIGHT BASE.



END VIEW

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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KETCHIKAN

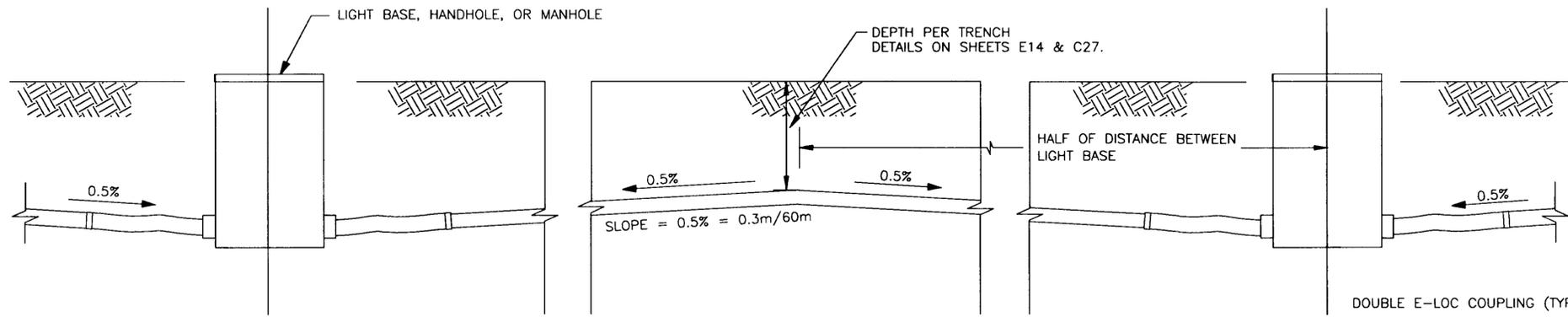
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
TRENCHING AND SIGN DETAILS

ALASKA

DESIGNED BY:	MGM
DRAWN BY:	SHS
CHECKED BY:	MGM

PROJECT NO.	67995
DATE:	AUGUST 2000
SHEET	E14 OF 28





DETAIL: CONDUIT INSTALLATION (TYP)

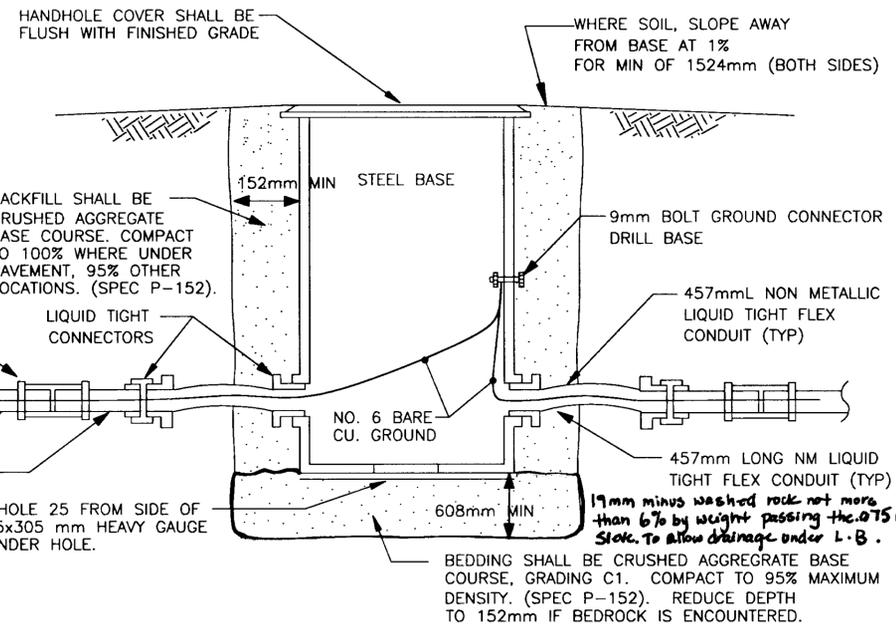
NO SCALE

NOTES:

1. ALL CONDUIT SHALL BE SLOPED TO DRAIN.
2. REFER TO HANDHOLE, MAN HOLE, OR EDGE LIGHT DETAILS THIS SHEET FOR CONNECTIONS TO HANDHOLES, MAN HOLES, OR L-867 BASES.
3. WHERE THE FINISHED GRADE SLOPE BETWEEN TWO LIGHT BASES, OR A LIGHT BASE AND A MANHOLE EXCEEDS 0.25%, INSTALL THE CONDUIT AT A CONSTANT SLOPE BETWEEN TERMINATIONS, OTHERWISE SLOPE CONDUIT AS SHOWN ABOVE.

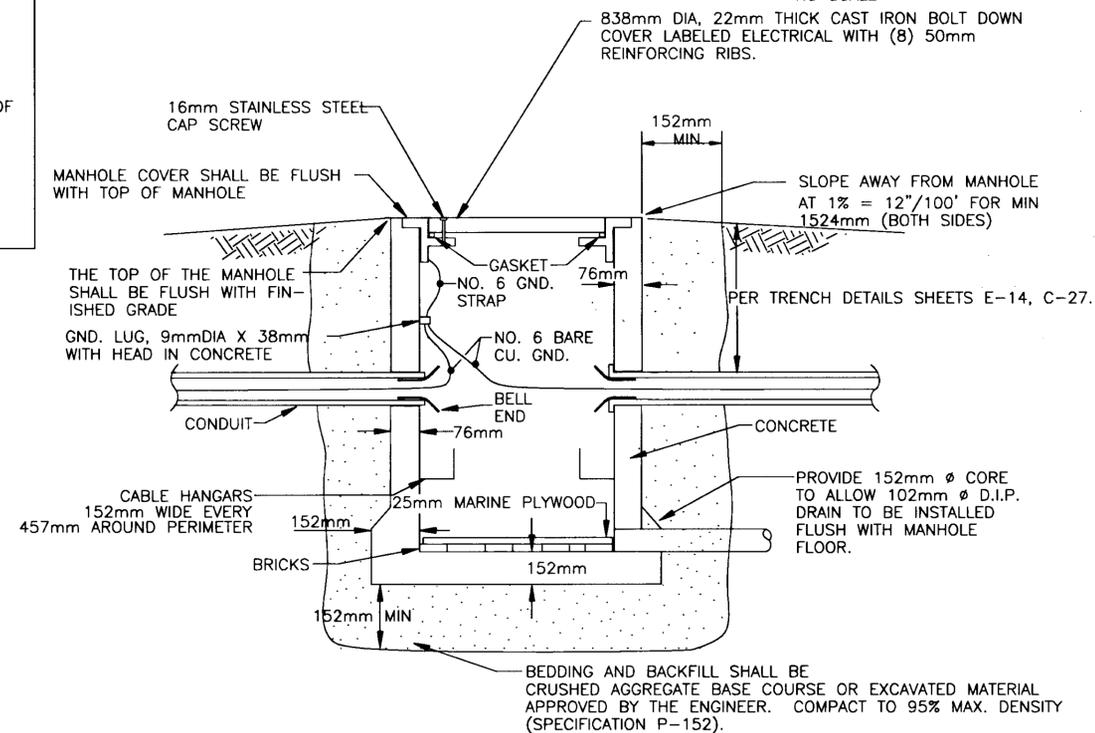
GENERAL NOTE FOR ALL DETAILS THIS SHEET:

BEDROCK MAY BE ENCOUNTERED DURING EXCAVATION. SEE GEOTECH INFORMATION IN APPENDIX C. REMOVAL OF BEDROCK IS INCIDENTAL TO THE EXCAVATION AND IS PAID FOR UNDER THE BID ITEM FOR THE LIGHT BASE, HANDHOLE, OR MANHOLE (WHATEVER IS BEING INSTALLED IN EXCAVATED AREA). THIS INCLUDES RIPPING, DRILLING, BLASTING AND ALL OTHER WORK REQUIRED TO REMOVE THE BEDROCK TO THE REQUIRED EXCAVATION DEPTH. DRAINAGE SHALL BE PROVIDED UNDER ALL LIGHT BASES, HANDHOLES, AND MANHOLES. FRACTURE THE BEDROCK AT LEAST 12 INCHES BELOW THE LIGHT BASE, HANDHOLE, OR MANHOLE AND LATERALLY TO ALLOW THE WATER TO ESCAPE FROM UNDER THE BASE, HANDHOLE, OR MANHOLE. FRACTURE THE BEDROCK TO ALLOW WATER TO DRAIN AT THE SLOPE OF THE RUNWAY/TAXIWAY TO MAINTAIN DRAINAGE. WATER SHALL NOT BE ALLOWED TO POND UNDER THE BASE, HANDHOLE, OR MANHOLE. THE WORK REQUIRED TO FRACTURE THE BEDROCK TO ALLOW DRAINAGE SHALL BE INCIDENTAL TO AND PAID FOR UNDER THE BID ITEM FOR THE BASE, HANDHOLE, OR MANHOLE.



DETAIL: HANDHOLE (TYP)

NO SCALE



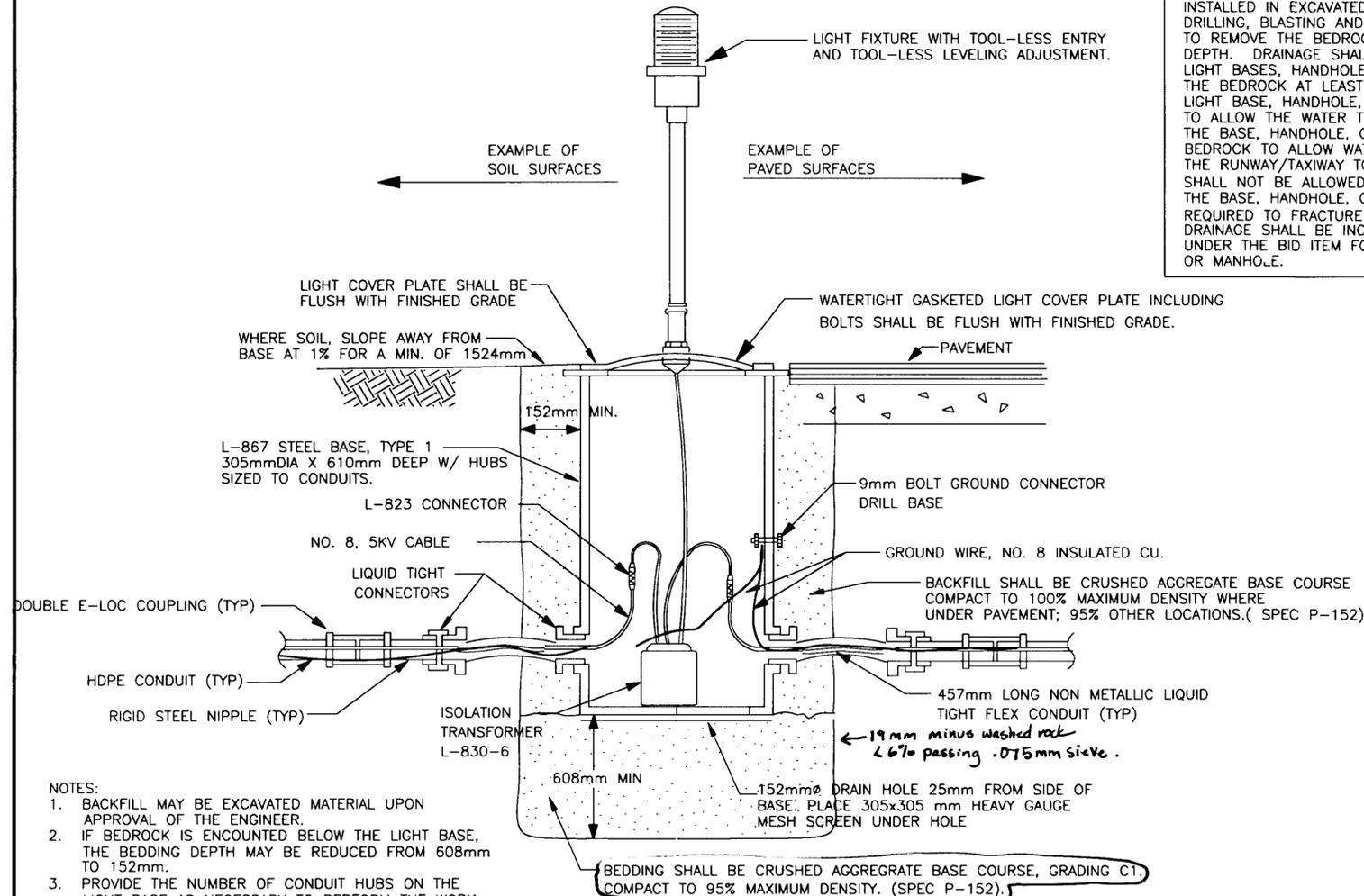
DETAIL: MANHOLE (TYP)

NO SCALE

NOTE:

1. MANHOLES SHALL BE 1219mm WIDE X 1219mm LONG X 914mm DEEP OUTSIDE DIMENSIONS. UTILITVAULT 443-LA OR APPROVED EQUAL.
2. THE COVERS FOR MANHOLES CONTAINING POWER CABLES SHALL BE LABELED "ELECTRICAL".
3. PROVIDE 102mm DRAINS FOR ALL MANHOLES. SLOPE AT 1% MIN. TO DAYLIGHT. PROVIDE LENGTH AS NECESSARY.

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS



DETAIL: TAXIWAY/RUNWAY EDGE LIGHT (TYP)

NO SCALE

NOTES:

1. BACKFILL MAY BE EXCAVATED MATERIAL UPON APPROVAL OF THE ENGINEER.
2. IF BEDROCK IS ENCOUNTERED BELOW THE LIGHT BASE, THE BEDDING DEPTH MAY BE REDUCED FROM 608mm TO 152mm.
3. PROVIDE THE NUMBER OF CONDUIT HUBS ON THE LIGHT BASE AS NECESSARY TO PERFORM THE WORK SHOWN ON THE DRAWINGS.

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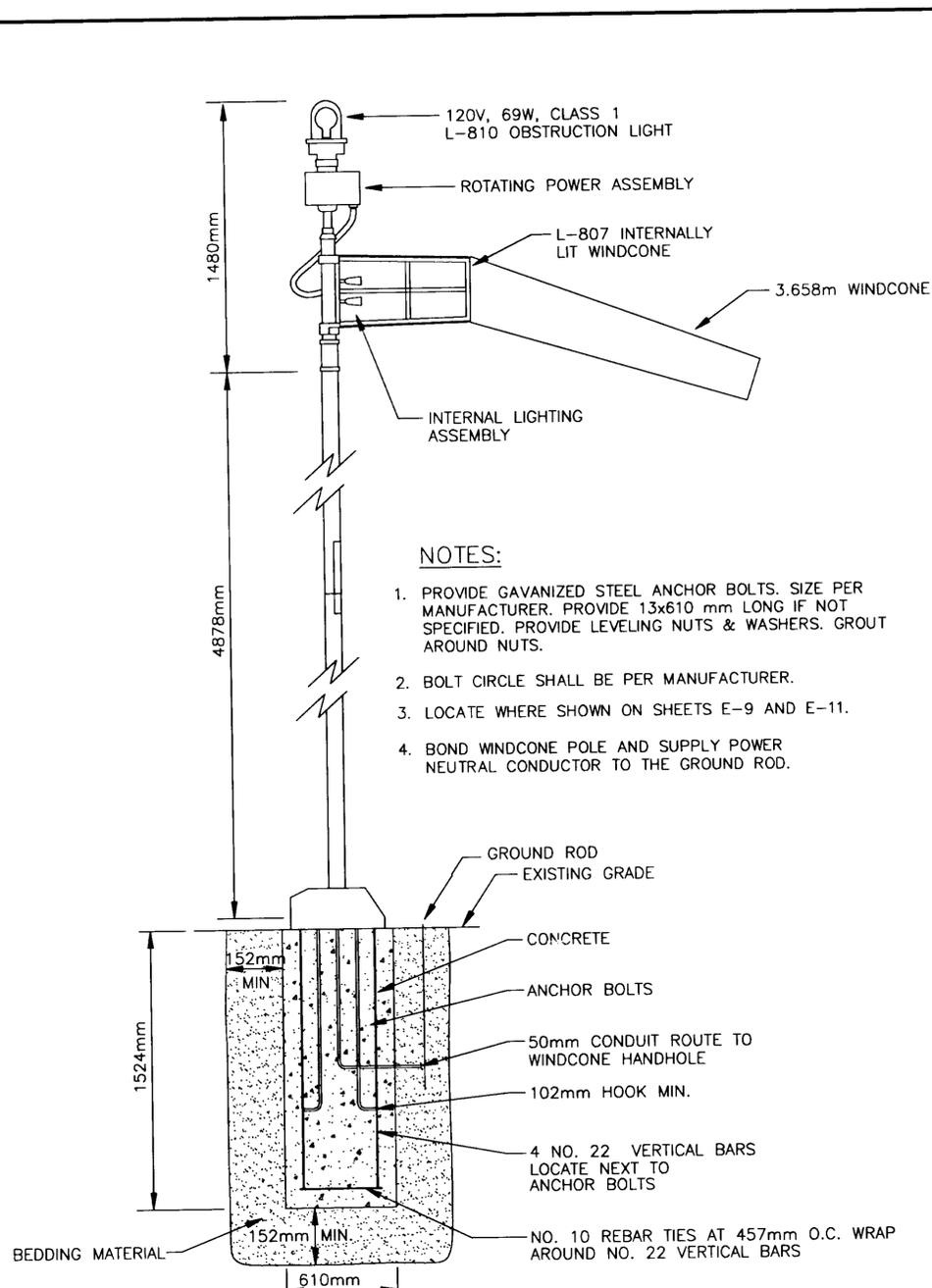
KETCHIKAN

KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
LIGHT BASE & HANDHOLE DETAILS

ALASKA

DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET	E15 OF 28





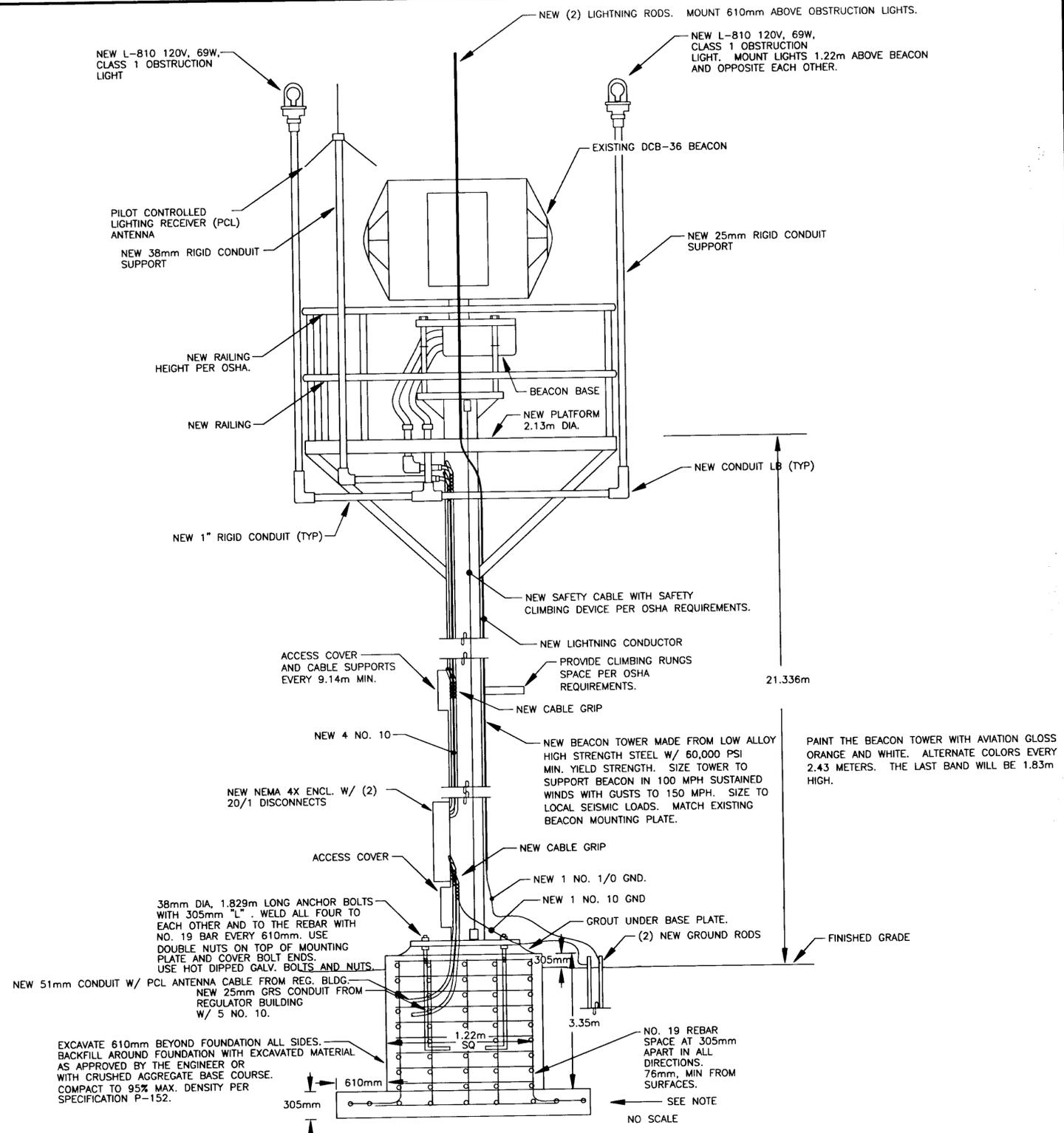
- NOTES:**
1. PROVIDE GAVANIZED STEEL ANCHOR BOLTS. SIZE PER MANUFACTURER. PROVIDE 13x610 mm LONG IF NOT SPECIFIED. PROVIDE LEVELING NUTS & WASHERS. GROUT AROUND NUTS.
 2. BOLT CIRCLE SHALL BE PER MANUFACTURER.
 3. LOCATE WHERE SHOWN ON SHEETS E-9 AND E-11.
 4. BOND WINDCONE POLE AND SUPPLY POWER NEUTRAL CONDUCTOR TO THE GROUND ROD.

NEW ILLUMINATED WINDCONE

NO SCALE

WINDCONE NOTES:

1. POWER THE WINDCONE FROM THE ADJACENT HANDHOLE (SEE SHEETS E-9 & E-11 FOR LOCATION). POWER THE WINDCONE FROM THE RUNWAY LIGHTING CIRCUIT. PROVIDE ALL PARTS AND MATERIALS FOR PROPER OPERATION OF THE WINDCONE FROM THIS POWER SOURCE. THE ILLUMINATION INTENSITY ON THE WINDCONE LAMPS SHALL NOT VARY WITH CHANGES IN THE RUNWAY LIGHTS INTENSITY (STEPS 1-5). THE ILLUMINATION INTENSITY OF THE WINDCONE LAMPS SHALL MEET THE FAA REQUIRED BRIGHTNESS FOR ALL STEPS OF THE RUNWAY LIGHTING CIRCUIT. THE OPERATING VOLTAGE SHALL BE PLACARDED AND POSTED ON THE WINDCONE. IF ANY VOLTAGE INSIDE THE WINDCONE IS ABOVE 240 VOLTS TO GROUND, A DANGER-HIGH VOLTAGE SIGN PER OSHA REQUIREMENTS SHALL BE MOUNTED TO THE WINDCONE. THE SIGN SHALL BE STAINLESS STEEL OR ALUMINUM AND SHALL BE MOUNTED TO WITHSTAND 100 MPH WINDS.



EXISTING ROTATING BEACON & NEW BEACON TOWER DETAIL

NOTE: PROVIDE A NEW FOUNDATION. PROVIDE A FOUNDATION DESIGN FOR APPROVAL BY THE ENGINEER. FOUNDATION SHALL SUPPORT STRUCTURE FOR 100MPH CONTINUOUS WINDS, MIN. COORDINATE W/STRUCTURE MANUFACTURER. THE MINIMUM FOUNDATION SIZE IS SHOWN ABOVE.

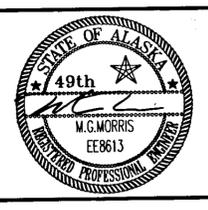
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

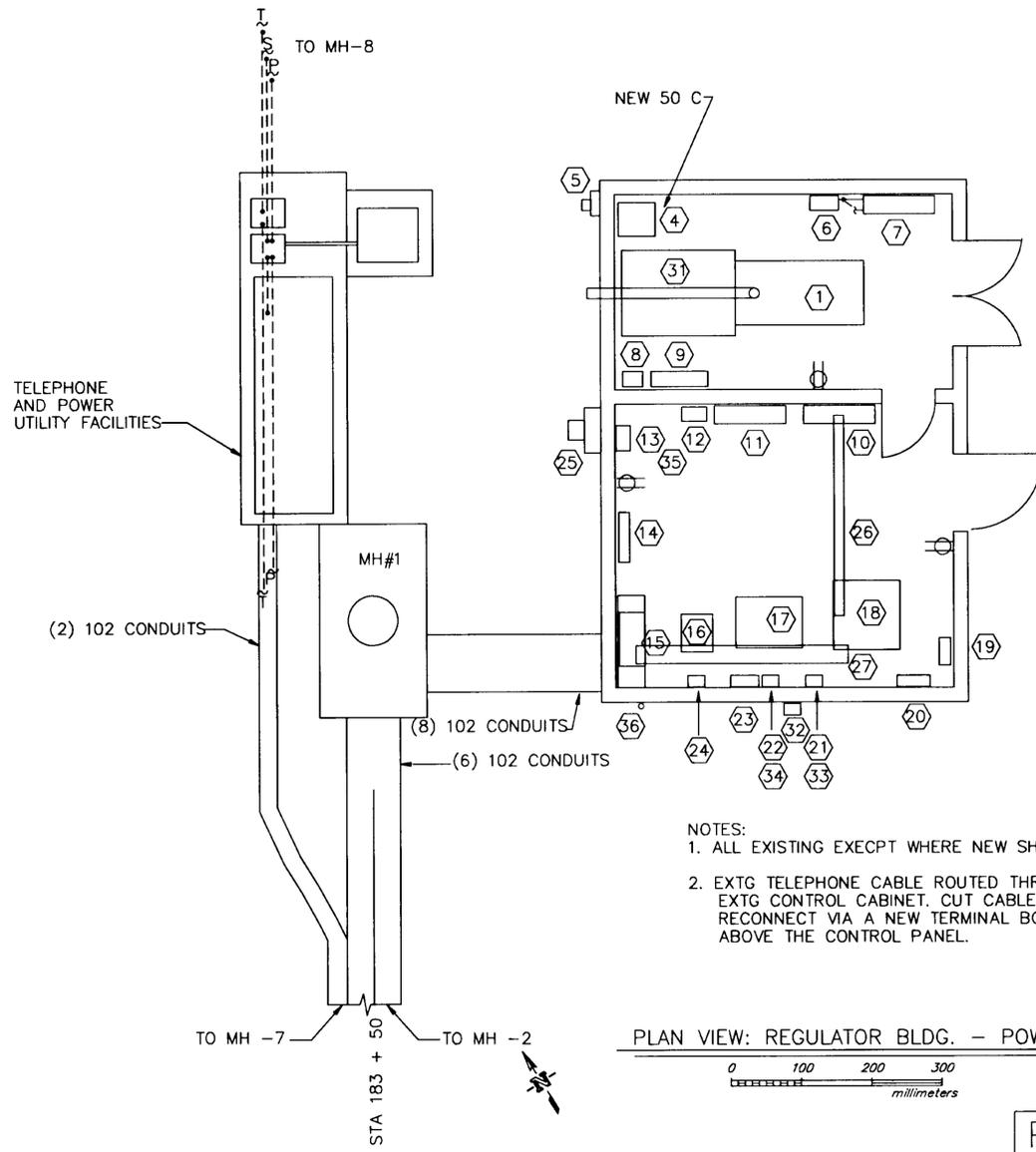
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RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300~ PROJECT NO. 67995
ALASKA
LIGHTED WINDCONE DETAILS

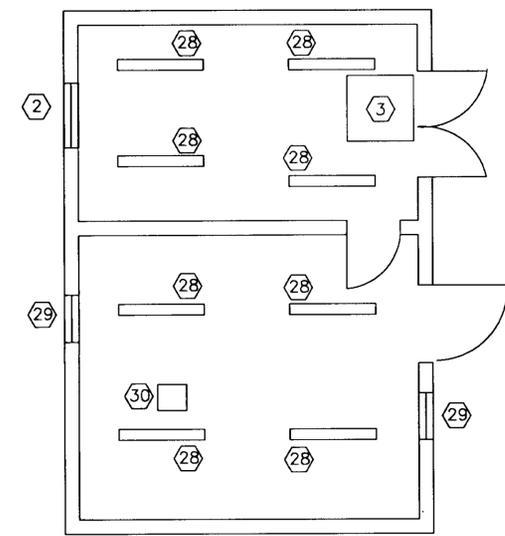
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DRAWN BY:	SHS	DATE:	AUGUST 2000
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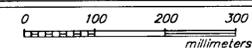


NOTES:
 1. ALL EXISTING EXCEPT WHERE NEW SHOWN.
 2. EXTG TELEPHONE CABLE ROUTED THROUGH EXTG CONTROL CABINET. CUT CABLE AND RECONNECT VIA A NEW TERMINAL BOX ABOVE THE CONTROL PANEL.

PLAN VIEW: REGULATOR BLDG. - POWER



PLAN VIEW: REGULATOR BLDG. - LIGHTING, HEAT, VENTILATION

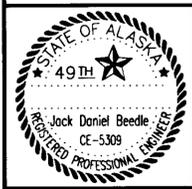


EQUIPMENT LIST

- 1 100 KW GENSET, 120/208V, 3Ø, 4W TO BE REMOVED.
- 2 914x914 mm MOTOR OPERATED EXHAUST LOUVER TO BE RECONNECTED TO NEW GENSET. LOUVER TO OPEN WITH GENSET VOLTAGE.
- 3 1219x914 mm MOTOR OPERATED INTAKE LOUVER TO BE REMOVED.
- 4 DAY TANK TO REMAIN. CONNECT TO NEW GENSET.
- 5 120/208V, 1Ø, 3W, 200 AMP METER MAIN (FAA METER) TO REMAIN.
- 6 208V, 150 AMP, 2 POLE CIRCUIT BREAKER TO REMAIN (GENSET CIRCUIT BREAKER FOR FAA).
- 7 225 AMP, 4 POLE, AUTOMATIC TRANSFER SWITCH (FAA) TO REMAIN.
- 8 AUTOMATIC BATTERY CHARGER, TO BE REMOVED.
- 9 GENSET BATTERIES, TO BE REMOVED.
- 10 120/208V, 3Ø, 4W, 400A MAIN DIST. PANEL (MDP) TO BE REMOVED.
- 11 120/208V, 3Ø, 3 POLE 400A AUTOMATIC TRANSFER SWITCH, TO BE REMOVED.
- 12 208V, 400AMP, 3 POLE CIRCUIT BREAKER (REGULATOR BUILDING MAIN C/B) TO BE REMOVED.
- 13 208V, 225 AMP, 3 POLE CIRCUIT BREAKER (ARFF BUILDING MAIN C/B) TO BE REMOVED.
- 14 TELEPHONE ENCLOSURE TO BE REMOVED.
- 15 PULLBOX TO REMAIN.
- 16 TAXIWAY REGULATOR 4.5 KW (CKT T-2). TO BE REMOVED.
- 17 TAXIWAY REGULATOR 7 KW (CKT T-1). TO BE REMOVED.
- 18 RUNWAY REGULATOR 30 KW (CKT R). TO BE REMOVED.
- 19 PCB FILLED CAPCITORS FOR RUNWAY REGULATOR. TO BE REMOVED PER BID ITEM P-675. REMOVAL OF THESE CAPACITORS NOT PART OF THE ELECTRICAL PORTION OF THIS PROJECT.
- 20 200 AMP CIRCUIT BREAKER FOR CAPACITORS. TO BE REMOVED
- 21 FUEL DISPENSER LOAD CENTER TO BE RELOCATED.
- 22 FUEL MONITORING PANEL TO BE RELOCATED.
- 23 AIRPORT LIGHTING CONTROL PANEL. TO BE REMOVED.
- 24 PILOT CONTROLLED LIGHTING RECEIVER. TO BE REMOVED.
- 25 CT CABINET WITH METER (REGULATOR BUILDING SERVICE). TO REMAIN.
- 26 152x152 mm WIREWAY TO REMAIN AT CONTRACTOR'S OPTION. REMOVE CONDUCTORS.
- 27 152x152 mm WIREWAY TO REMAIN AT CONTRACTOR'S OPTION. REMOVE CABLES.
- 28 2 LAMP STRIP FLUORESCENT TO BE REMOVED.
- 29 406x406 mm MOTOR OPERATED LOUVER. TO BE REMOVED.
- 30 CEILING EXHAUST FAN TO BE REMOVED.
- 31 EXHAUST PIPE W/INSULATION. TO BE REMOVED.
- 32 TANK MONITORING ALARM BOX TO REMAIN.
- 33 102x102 mm JUNCTION BOX BELOW FUEL LOAD CENTER. TO REMAIN.
- 34 102x102 mm JUNCTION BOX BELOW FUEL MONITORING PANEL. TO REMAIN.
- 35 BATTERY ACID HAS BEEN SPILLED ON THE FLOOR IN THIS AREA. REMOVE IT AND CLEAN FLOOR. CLEAN UP OF THIS CONTAMINANT SHALL BE PAID FOR UNDER BID ITEM P-675. THIS IS NOT PART OF THE ELECTRICAL PORTION OF THIS PROJECT.
- 36 PCL ANTENNA TO BE REMOVED.

- NOTES:
- REMOVE ALL WIRING EXCEPT WHERE NOTED ON SINGLE LINE DIAGRAM.
 - REUSE EXISTING CONDUIT WHERE PRACTICAL.
 - PROVIDE ALL NEW FEEDER AND BRANCH CIRCUITS PER NEW SINGLE LINE DIAGRAM AND NEW POWER AND LIGHTING PLANS, SHEETS E-18 AND E-21. PROVIDE NEW CONDUIT WHEN NOT REUSING EXISTING.

PANEL MDP		SIZE	VOLTS, PHASE				MOUNTING	MAIN	LOCATION
		400A	120/208V, 3Ø, 4W				SURFACE	LUGS ONLY	REG. ROOM
CKT NO.	DESCRIPTION	C/B SIZE	KVA				C/B SIZE	DESCRIPTION	CKT NO.
			CKT	AØ	BØ	CØ			
1	30 KVA	250/2	14.5				20/1	SPARE	2
3	REGULATOR	—	14.5				200/2	SPARE	4
5	SPACE	—					—	—	6
7	7 KVA	70/2	2.5				2.4	20/2	UNIT HEATER
9	REGULATOR	—	2.5				2.4	—	GENERATOR ROOM
11	4 KVA	40/2	1.9				2.4	20/2	UNIT HEATER
13	REGULATOR	—	1.9				2.4	—	REG. ROOM
15	7.5 KVA CONTROL	20/1	0.1				0.1	20/1	DAY TANK
17	4 KVA CONTROL	20/1	0.1				0.6	20/1	LIGHTING
19	CONTROL PANEL	20/1	0.1				1.0	30/1	ROTATING BEACON
21	REC.	20/1	0.6				0.0	20/1	EXTERIOR LIGHTING
23	LOUVERS, REG. ROOM	20/1	0.1				0.1	20/1	LOUVERS - GENERATOR ROOM
25	FUEL PANEL	40/2	0.5				0.1	20/1	BATTERY CHARGER
27	—	—	0.5				0.5	20/1	BLOCK HEATER
29	PCL REGVER	20/1	0.2				90/3	—	PANEL EP
31	SPARE	20/1					—	—	ARFF BUILDING
33	SPARE	20/1					—	—	—
TOTAL CONNECTED LOAD = 72 KVA/200 AMPS									



THE CIVIL ENGINEERING SEAL APPLIES TO THE REMOVAL OF THE HAZARDOUS MATERIAL FROM THE REGULATOR BUILDING. ALL OTHER WORK SHOWN IS COVERED BY THE ELECTRICAL ENGINEERING SEAL.

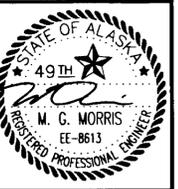
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
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 AND PUBLIC FACILITIES
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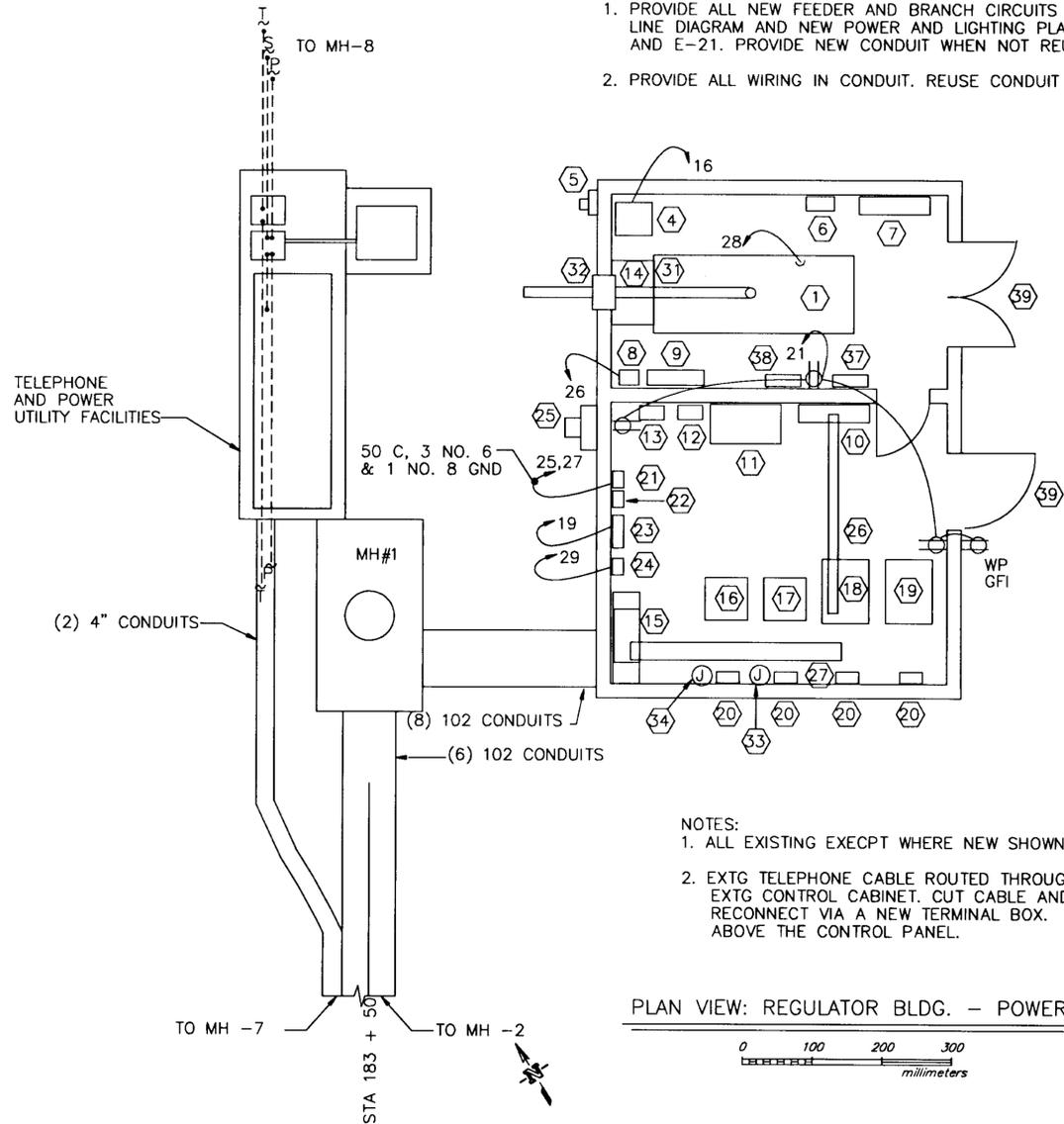
KETCHIKAN
 KETCHIKAN AIRPORT
 RUNWAY & TAXIWAY LIGHTS REPLACEMENT
 A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
 EXISTING REGULATOR BUILDING

DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET	E17 OF 28



NOTES:

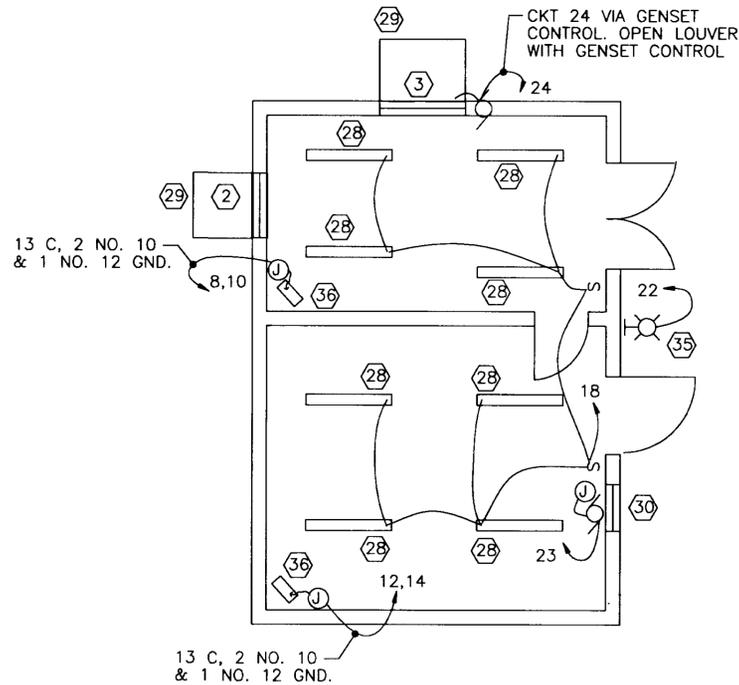
1. PROVIDE ALL NEW FEEDER AND BRANCH CIRCUITS PER LINE DIAGRAM AND NEW POWER AND LIGHTING PLANS, S AND E-21. PROVIDE NEW CONDUIT WHEN NOT REUSING
2. PROVIDE ALL WIRING IN CONDUIT. REUSE CONDUIT WHEN



NOTES:

1. ALL EXISTING EXCEPT WHERE NEW SHOWN.
2. EXTG TELEPHONE CABLE ROUTED THROUGH EXTG CONTROL CABINET. CUT CABLE AND RECONNECT VIA A NEW TERMINAL BOX ABOVE THE CONTROL PANEL.

PLAN VIEW: REGULATOR BLDG. - POWER



PLAN VIEW: REGULATOR BLDG. - LIGHTING, HEAT, VENTILATION

PANEL MDP		SIZE	VOLTS, PHASE				MOUNTING	MAIN	LOCATION	
		400A	120/208V, 3Ø, 4W				SURFACE	LUGS ONLY	REG. ROOM	
CKT NO.	DESCRIPTION	C/B SIZE	KVA				C/B SIZE	DESCRIPTION	CKT NO.	
			CKT	AØ	BØ	CØ				
1	30 KVA RWY	175/2	14	14			175/2	30 KVA RWY	2	
3	REGULATOR		14		14			REGULATOR SPARE	4	
5	SPACE					0.0		SPACE	6	
7	10 KVA TWY	60/2	4.0	6.4		2.4	20/2	UNIT HEATER	8	
9	REGULATOR T-1		4.0		6.4	2.4		GENERATOR ROOM	10	
11	10 KVA TWY	60/2	0.5			2.9	20/2	UNIT HEATER	12	
13	REGULATOR T-2		0.5	2.9		2.4		REG. ROOM	14	
15	SPARE	20/1	0.0		0.1	0.1	20/1	DAY TANK	16	
17	BEACON OBSTRUCTION LIGHTS	20/1	0.1			0.7	0.6	20/1	LIGHTING	18
19	CONTROL PANEL	20/1	0.1	1.1		1.0	30/1	ROTATING BEACON	20	
21	REC.	20/1	0.6		0.6	0.0	20/1	EXTERIOR LIGHTING	22	
23	EXHAUST FAN	20/1	0.2			0.3	0.1	20/1	LOUVERS - GENERATOR ROOM	24
25	FUEL PANEL	40/2	0.5	0.6		0.1	20/1	BATTERY CHARGER	26	
27			0.5		1.0	0.5	20/1	BLOCK HEATER	28	
29	PCL RECEIVER	20/1	0.2			0.2	90/3	PANEL EP	30	
31	SPARE	20/1						ARFF BUILDING	32	
33	SPARE	20/1							34	
TOTAL CONNECTED LOAD = 51.2 KVA/142 AMPS			25	22.1	4.1					

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

EQUIPMENT LIST

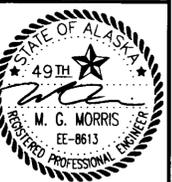
- 1 NEW GENSET WITH 100KW STANDBY RATING AT 0.8 PF, 120/208V, 3Ø, 4W. MOUNT TO ISOLATION SPRINGS. BOLT SPRINGS TO FLOOR W/ STOPS. ONAN 100DGB OR APPROVED EQUAL.
- 2 EXISTING EXHAUST LOUVER
- 3 NEW 1219WX1219H mm MOTORIZED INTAKE DAMPER. EXTRUDED AL. INSULATED BLADES IN AL. FRAME. TAMCO SERIES 8000. PROVIDE WITH INTAKE AIR SHROUD. SEE DETAIL SHEET E-19.
- 4 EXISTING DAY TANK. CONNECT TO NEW GENSET WITH AUTOMATIC SHUTOFF VALVES. EXTEND EXISTING VENT PIPE ABOVE NEW ROOF.
- 5 EXISTING 120/208V, 1Ø, 3W, 200 AMP METER MAIN (FAA).
- 6 EXISTING 208V, 150 AMP, 2 POLE CIRCUIT BREAKER (GENSET CIRCUIT BREAKER FOR FAA).
- 7 EXISTING 225 AMP, 4 POLE, AUTOMATIC TRANSFER SWITCH (FAA)
- 8 NEW 12V, 10A, AUTOMATIC BATTERY CHARGER.
- 9 NEW GENSET BATTERIES. SIZED TO CRANK ENGINE FOR 20 MINUTES CONTINUOUSLY.
- 10 NEW 120/208V, 3Ø, 4W, 400A MAIN PANEL (MDP) MOUNT TOP AT 1981 mm AFF.
- 11 NEW 120/208V, 3Ø, 4 POLE 400A AUTOMATIC TRANSFER SWITCH. MOUNT TOP AT 1981 mm AFF.
- 12 NEW 400 AMP MAIN C/B (REG. BLDG). MOUNT TOP AT 1981 mm AFF.
- 13 NEW 225 AMP MAIN C/B (ARFF BLDG). MOUNT TOP AT 1981 mm AFF.
- 14 RADIATOR EXHAUST AIR DUCT WITH RADIATOR MOUNTED 75 KW AUTOMATIC LOAD BANK. PROVIDE W/ AUTO LOAD REGULATION AND REMOTE CONTROL PANEL. SIMPLEX LBD-75A OR EQUAL.
- 15 EXISTING SPLIT COMPARTMENT PULLBOX.
- 16 NEW TAXIWAY REGULATOR 10 KW (CKT T2).
- 17 NEW TAXIWAY REGULATOR 10 KW (CKT T1).
- 18 NEW RUNWAY REGULATOR 30 KW (SPARE).
- 19 NEW RUNWAY REGULATOR 30 KW (CKT R).
- 20 NEW PLUG CUTOUT. MOUNT TOP AT 1727 mm AFF.
- 21 RELOCATED FUEL DISPENSER LOAD CENTER. CONNECT TO EXISTING LOADS.
- 22 RELOCATED FUEL MONITOR PANEL. CONNECT TO EXISTING LOADS.
- 23 NEW AIRPORT LIGHTING CONTROL PANEL. MOUNT TOP AT 1829 mm. CONNECT TO REMOTE FAA CONTROL PANEL CABLE. CONNECT TO NEW REGULATORS, PCL, BEACON, ETC.
- 24 NEW PCL RECEIVER. MOUNT TOP AT 1829 mm AFF.
- 25 EXISTING CT CABINET WITH METER (REG. BLDG. SERVICE)
- 26 EXISTING 152x152 mm WIREWAY. REUSE IF CONVENIENT.
- 27 EXISTING 152x152 mm WIREWAY. REUSE IF CONVENIENT.
- 28 NEW FLUORESCENT WRAPAROUND LIGHT. LITHONIA LB232.
- 29 NEW EXHAUST OR INTAKE AIR SHROUD. SEE DETAIL, SHEET E-19.
- 30 NEW WALL MOUNTED EXHAUST FAN CONTROLLED BY REMOTE THERMOSTAT. SIZE TO FIT EXISTING WALL OPENING. SEAL FAN.
- 31 NEW GENSET SILENCER AND EXHAUST PIPE. SIZE PIPE AND SILENCER PER GENSET MANUFACTURER'S REQUIREMENTS. PROVIDE COMMERCIAL GRADE SILENCER. SEE DETAIL, SHEET E-19.
- 32 NEW EXHAUST THIMBLE. SEE DETAIL, SHEET E-19.
- 33 EXISTING JUNCTION BOX (FUEL DISPENSER CIRCUITS).
- 34 EXISTING JUNCTION BOX (FUEL MONITOR CIRCUITS).
- 35 EXTERIOR DEEP SHIELDED 35W HPS WALL PACK. PROVIDE WITH PHOTOCCELL AND HIGH POWER FACTOR BALLAST, RUUD EB503-1 HP. MOUNT AT 2438 mm AFG.
- 36 EXISTING 208V, 5 KW UNIT HEATER.
- 37 NEW FIRE ALARM PANEL WITH (1) PULL STATION, (1) COMB. ROR/135F HEAT DETECTOR, & (1) SMOKE DET. CONNECT TO TWO DEDICATED TELE. LINES OFF TELE. NID. PROVIDE A HORN STROBE IN REGULATOR ROOM, A STROBE IN GENERATOR ROOM, A WEATHERPROOF HORN OUTSIDE DOOR.
- 38 NEW TELEPHONE NETWORK INTERFACE DEVICE (NID). PAY KPU TO PROVIDE A NEW TELEPHONE SERVICE TO THE BUILDING IN CONDUIT TO THE NID. PROVIDE A NEW WALL MOUNTED TELEPHONE SINGLE LINE. NORTEL OR EQUAL.
- 39 NEW WARNING SIGN MOUNTED ON DOOR. SIGN SHALL COMPLY WITH OSHA REGULATIONS AND SHALL SAY "DANGER, HIGH VOLTAGE! AUTHORIZED PERSONNEL ONLY. TAMPERING WITH EQUIPMENT IN THIS BUILDING MAY CAUSE SERIOUS INJURY OR LOSS OF LIFE." SIGN SHALL BE PAINTED ALUMINUM OR STEEL. RED ON WHITE BACKGROUND.

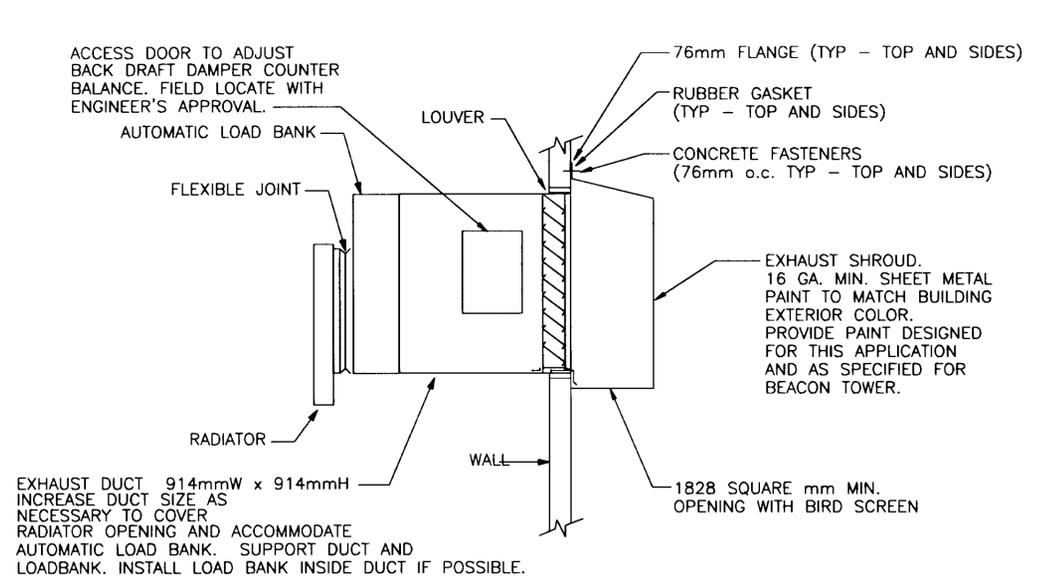
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SOUTHEAST REGION

KETCHIKAN
KETCHIKAN AIRPORT
ALASKA
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
REGULATOR BUILDING PLAN VIEW - NEW

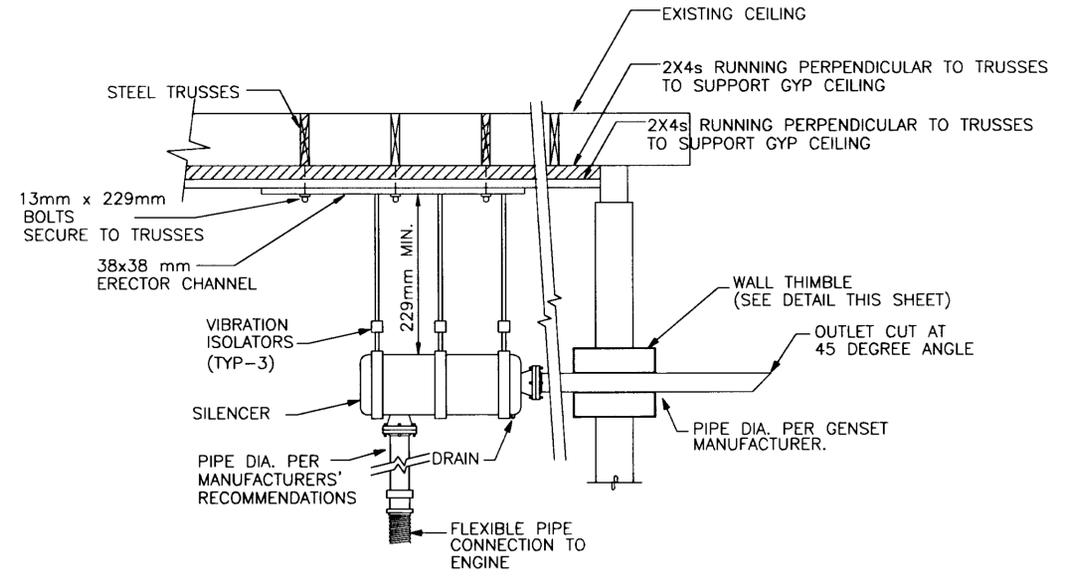
DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM		SHEET E18 OF 28





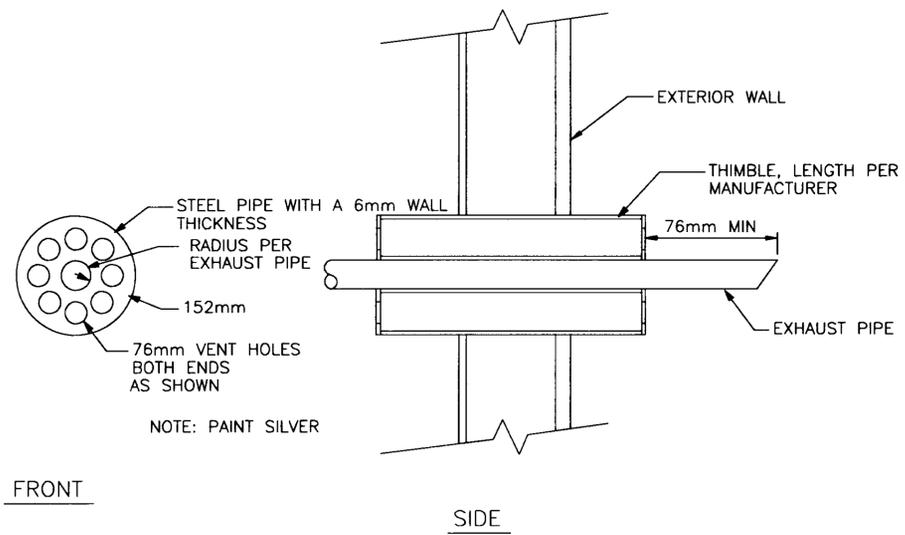
DETAIL - EXHAUST LOUVER AND SHROUD
NO SCALE

NOTE: SEE SHEETS A01 & A02 FOR ADDITIONAL REQUIREMENTS.



DETAIL - GENSET SILENCER
NO SCALE

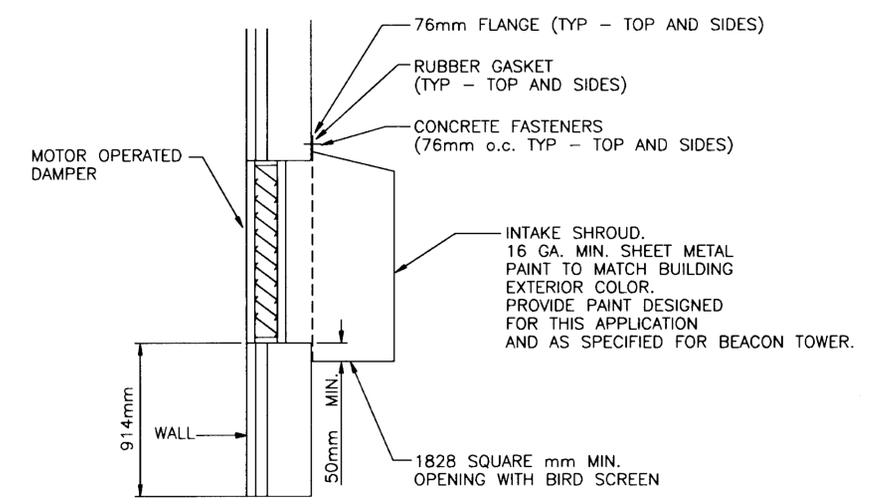
NOTE: PROVIDE 50mm MIN. INSULATION WITH JACKET OVER SILENCER AND EXHAUST PIPES FROM FLEX PIPE TO WALL THIMBLE.



FRONT

SIDE

DETAIL - EXHAUST THIMBLE
NO SCALE



DETAIL - INTAKE DAMPER AND SHROUD
NO SCALE

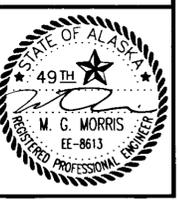
NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

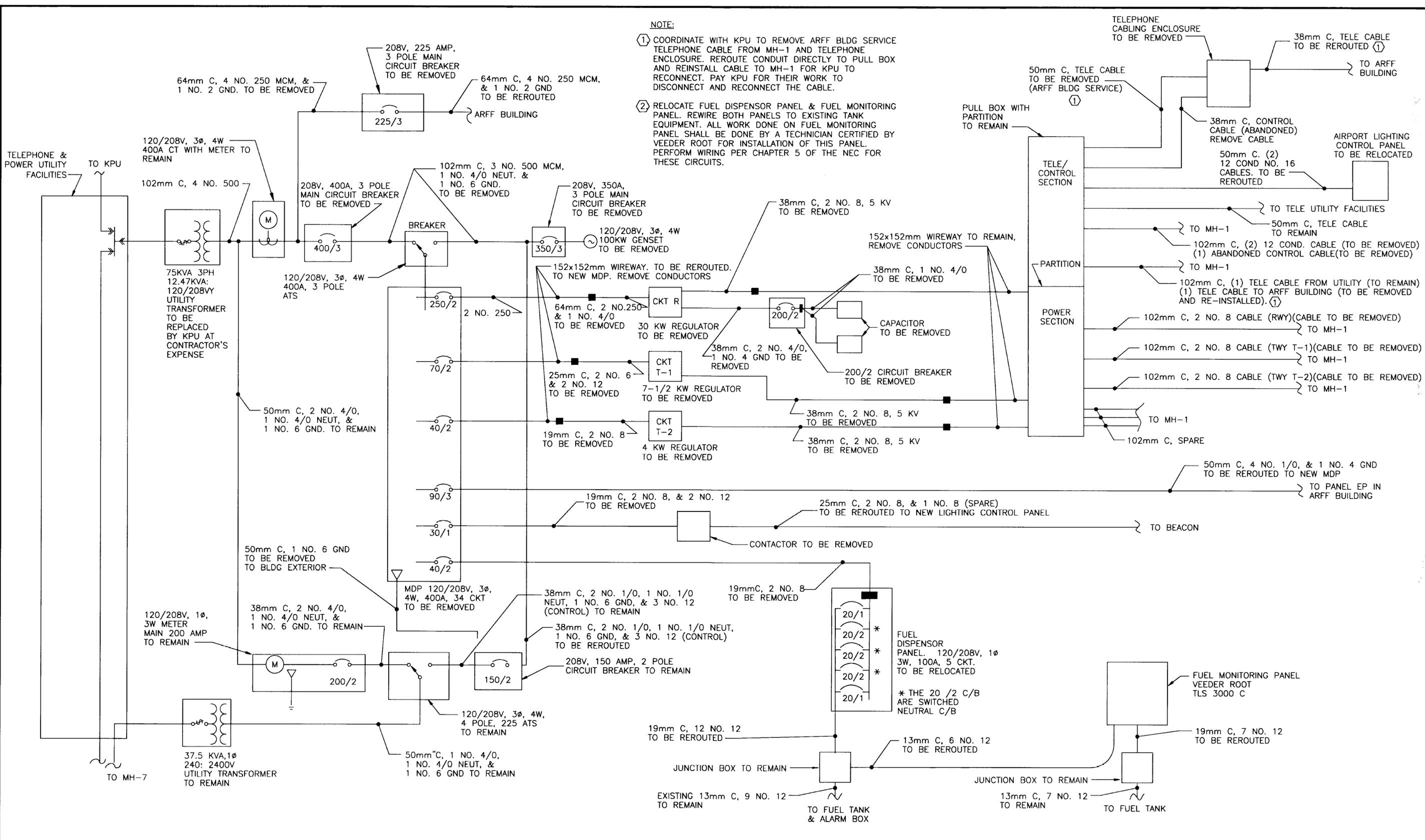
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KETCHIKAN
KETCHIKAN AIRPORT
ALASKA
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
REGULATOR BLDG-GENSET EQUIPMENT DETAILS

DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET	E19 OF 28





NOTE:

① COORDINATE WITH KPU TO REMOVE ARFF BLDG SERVICE TELEPHONE CABLE FROM MH-1 AND TELEPHONE ENCLOSURE. REROUTE CONDUIT DIRECTLY TO PULL BOX AND REINSTALL CABLE TO MH-1 FOR KPU TO RECONNECT. PAY KPU FOR THEIR WORK TO DISCONNECT AND RECONNECT THE CABLE.

② RELOCATE FUEL DISPENSOR PANEL & FUEL MONITORING PANEL. REWIRE BOTH PANELS TO EXISTING TANK EQUIPMENT. ALL WORK DONE ON FUEL MONITORING PANEL SHALL BE DONE BY A TECHNICIAN CERTIFIED BY VEEDER ROOT FOR INSTALLATION OF THIS PANEL. PERFORM WIRING PER CHAPTER 5 OF THE NEC FOR THESE CIRCUITS.

EXISTING SINGLE LINE DIAGRAM - REGULATOR BUILDING

NO SCALE

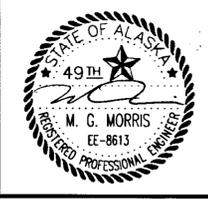
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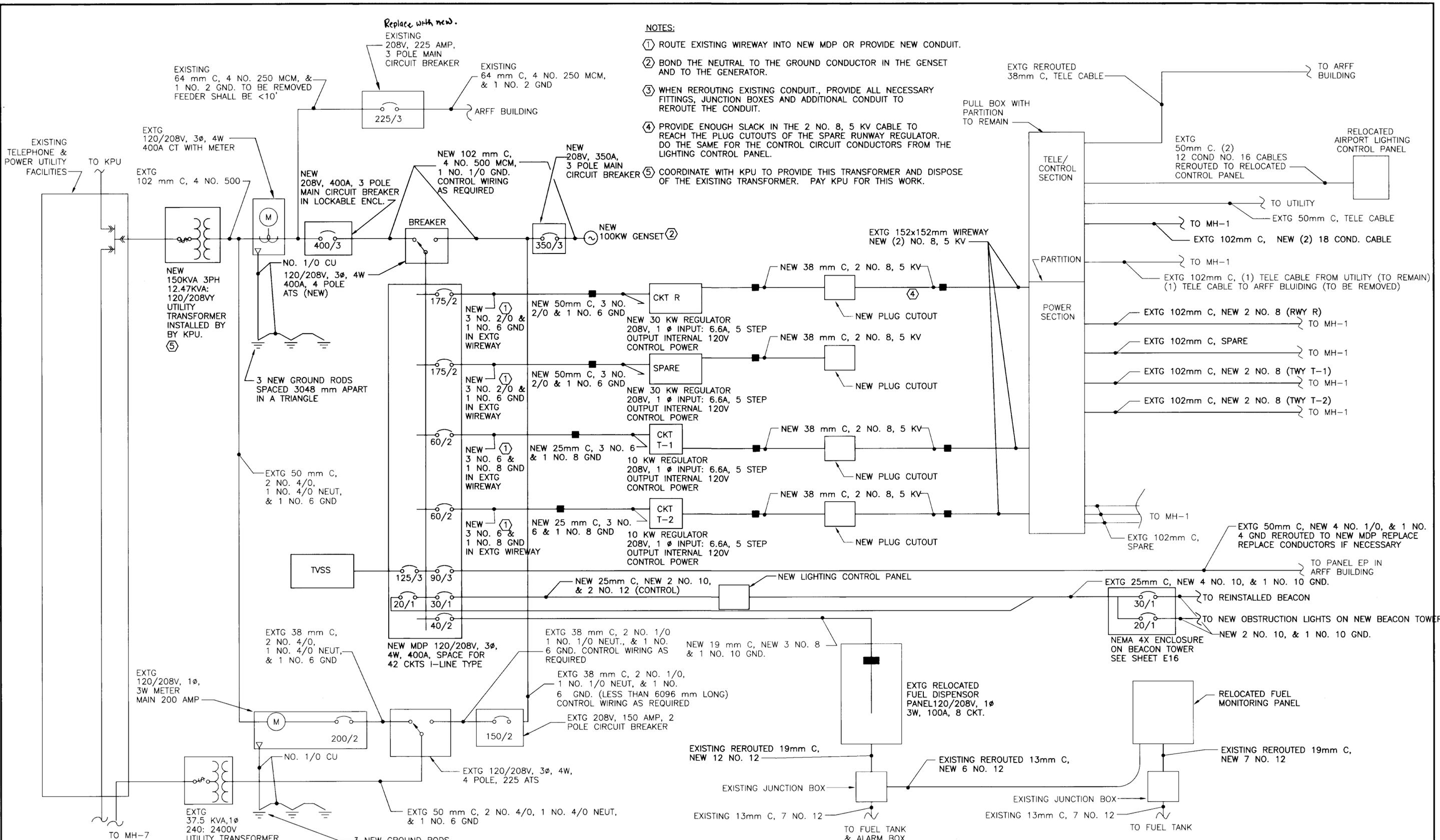
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BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
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KETCHIKAN
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ALASKA
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
EXISTING SINGLE LINE - REGULATOR BUILDING

DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM		
			SHEET E20 OF 28





- NOTES:**
- ① ROUTE EXISTING WIREWAY INTO NEW MDP OR PROVIDE NEW CONDUIT.
 - ② BOND THE NEUTRAL TO THE GROUND CONDUCTOR IN THE GENSET AND TO THE GENERATOR.
 - ③ WHEN REROUTING EXISTING CONDUIT., PROVIDE ALL NECESSARY FITTINGS, JUNCTION BOXES AND ADDITIONAL CONDUIT TO REROUTE THE CONDUIT.
 - ④ PROVIDE ENOUGH SLACK IN THE 2 NO. 8, 5 KV CABLE TO REACH THE PLUG CUTOUPS OF THE SPARE RUNWAY REGULATOR. DO THE SAME FOR THE CONTROL CIRCUIT CONDUCTORS FROM THE LIGHTING CONTROL PANEL.
 - ⑤ COORDINATE WITH KPU TO PROVIDE THIS TRANSFORMER AND DISPOSE OF THE EXISTING TRANSFORMER. PAY KPU FOR THIS WORK.

SINGLE LINE DIAGRAM NO.2: REGULATOR BUILDING MODIFICATIONS

NO SCALE NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

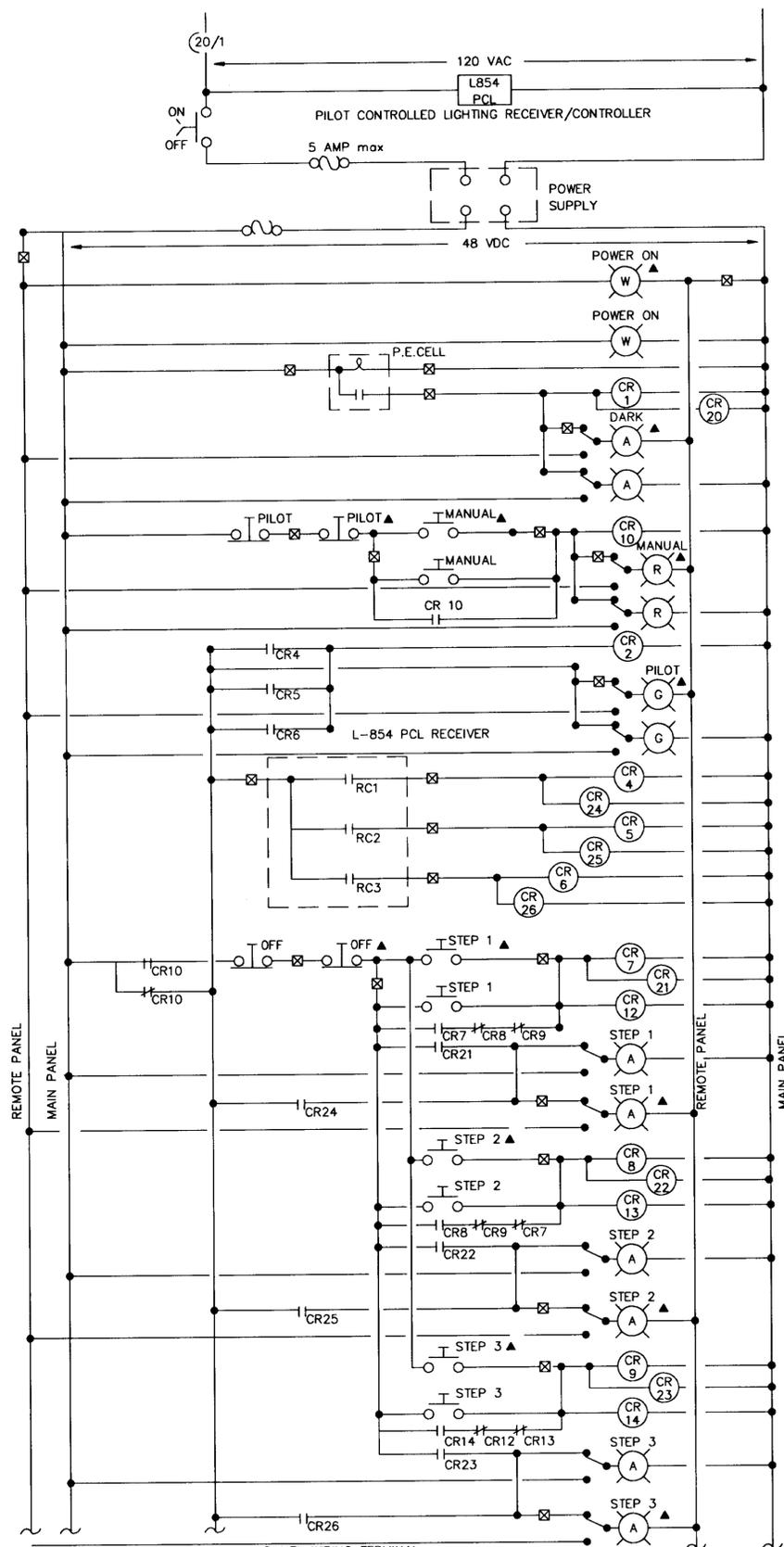
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BY:	DATE:	DESCRIPTION OF CHANGE:
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RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
NEW SINGLE LINE DIAGRAM - REGULATOR BLDG

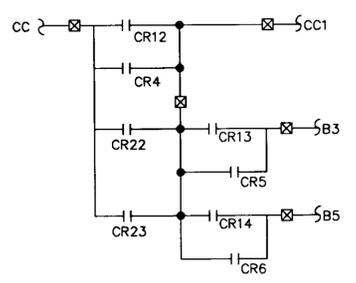
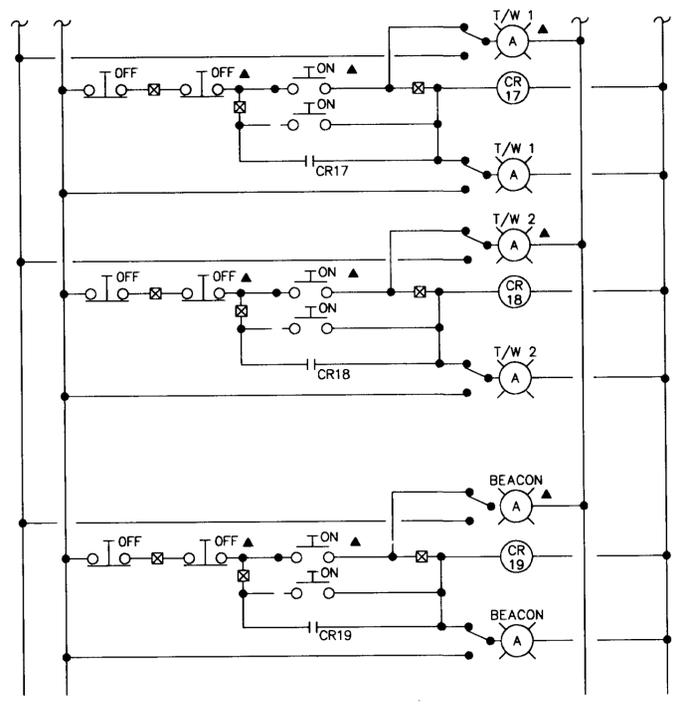
DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET	E21 OF 28



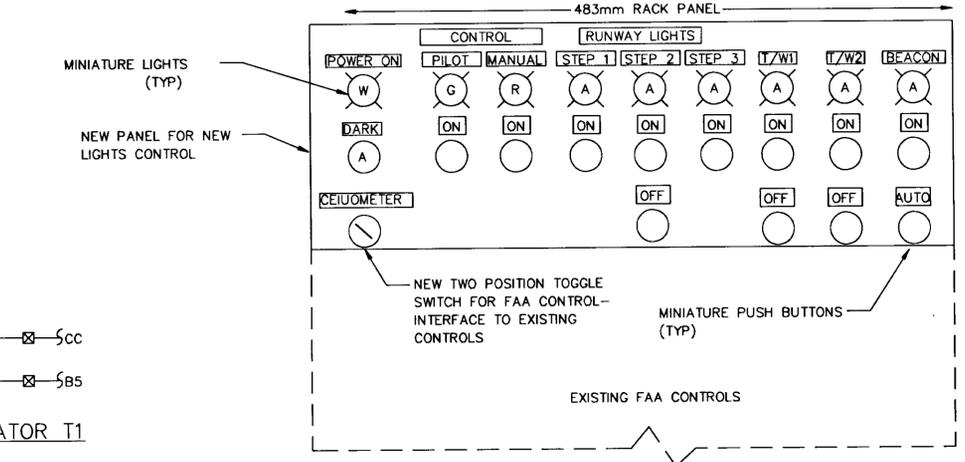
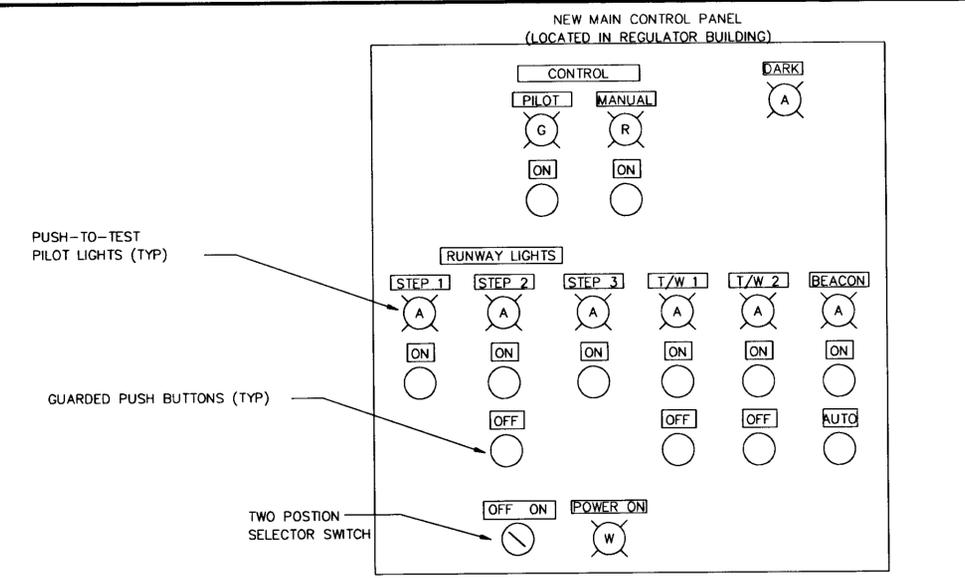
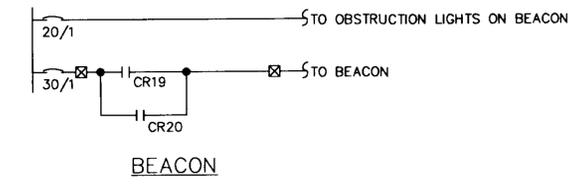
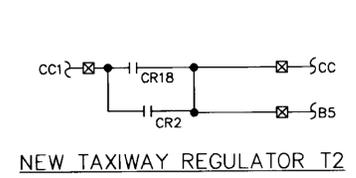
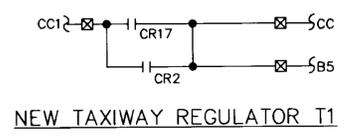


SCHEMATIC DIAGRAM: LIGHTING

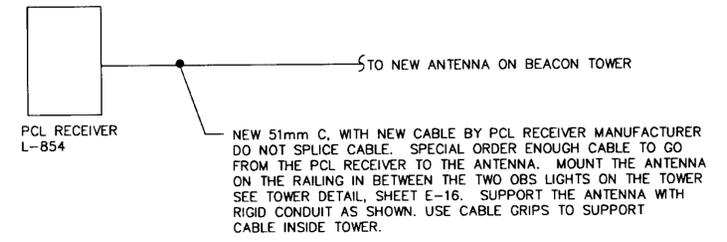
☒ MAIN PANEL WIRING TERMINAL
 ▲ DEVICES LOCATED IN FSS REMOTE CONTROL PANEL



NEW RUNWAY REGULATOR R
 NOTE: PROVIDE ENOUGH SLACK IN CONTROL CONDUCTORS TO CONNECT THEM TO THE SPARE RUNWAY REGULATOR.



DETAIL: PANEL LAYOUTS
 NO SCALE



PCL RECEIVER ANTENNA WIRING

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

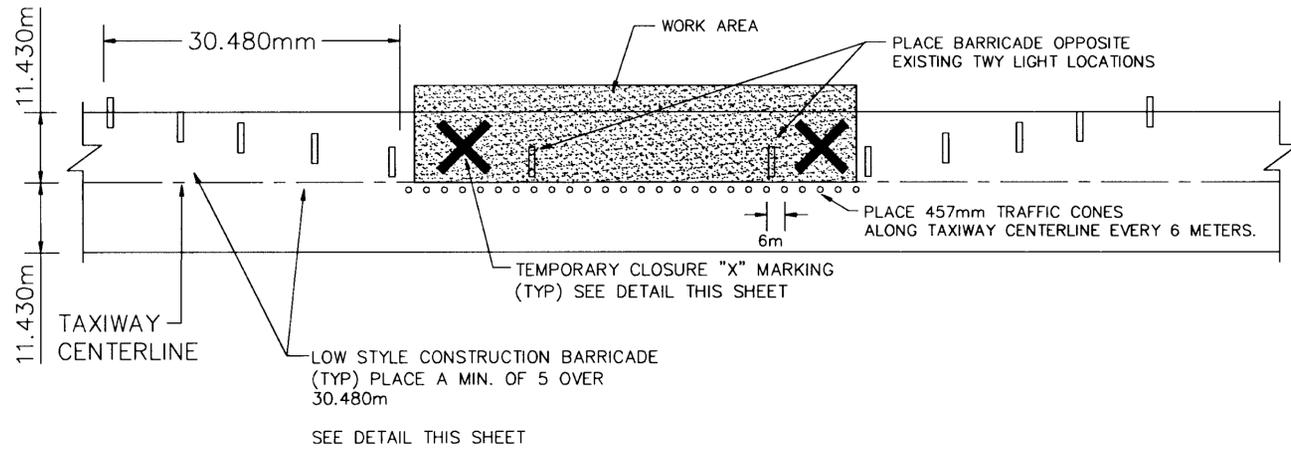
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BY:	DATE:	DESCRIPTION OF CHANGE:
RECORD OF REVISIONS		

STATE OF ALASKA
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KETCHIKAN
 KETCHIKAN AIRPORT
 RUNWAY & TAXIWAY LIGHTS REPLACEMENT
 A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995
 LTG. CONTROL PANEL - REVISED SCHEMATIC

DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	SHS	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET E22 OF 28	



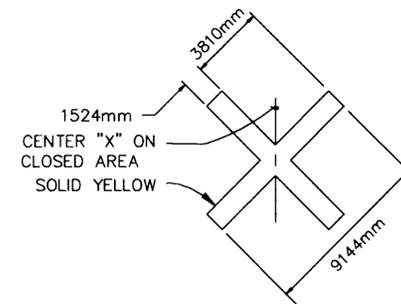


NOTES:

1. TAXIWAY CLOSURES HAVE TO BE SCHEDULED PER THE REQUIREMENTS IN THE SPECIFICATIONS AND PER THE SAFETY PLAN.
2. THE PORTION OF TAXIWAY A FROM TWY STA 2+700 TO 2+960 (RUNWAY INTERSECTION) MAY NOT BE CLOSED AT ANY TIME.
3. NO EXCAVATION OR BACKFILL MATERIAL OR EQUIPMENT MAY BE STORED ON THE CLOSED PORTION OF THE TAXIWAY. NO VEHICLES MAY BE PARKED ON THE CLOSED PORTION OF THE TAXIWAY. ONLY HALF OF THE TAXIWAY MAY BE CLOSED AT A TIME.

TYPICAL TAXIWAY CLOSURE

N.T.S.

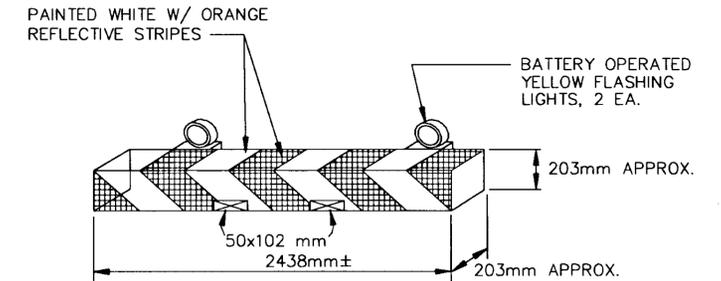


TEMPORARY MARKINGS

N.T.S.

NOTES:

1. CROSSES SHALL BE YELLOW AND MAY BE CONSTRUCTED OF PLASTIC OR OTHER SUITABLE MATERIAL AND WEIGHTED DOWN SO AS NOT TO BE MOVED BY WIND OR JET BLAST.
2. CROSSES SHALL BE PLACED AT EACH END OF THE CLOSED PORTION OF THE TAXIWAY.

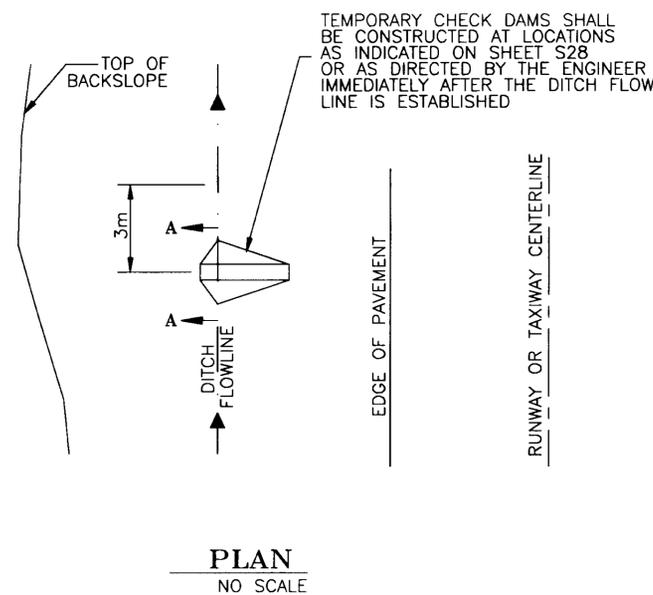


NOTES:

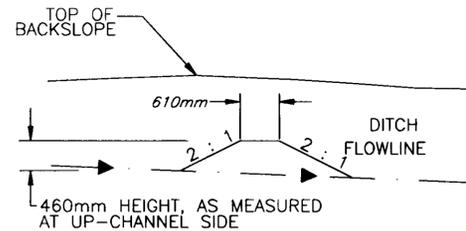
1. BASE MAY BE MADE FROM WOOD OR SIMILAR MATERIAL AND MUST BE ANCHORED.

TYPICAL LOW STYLE CONSTRUCTION BARRICADE

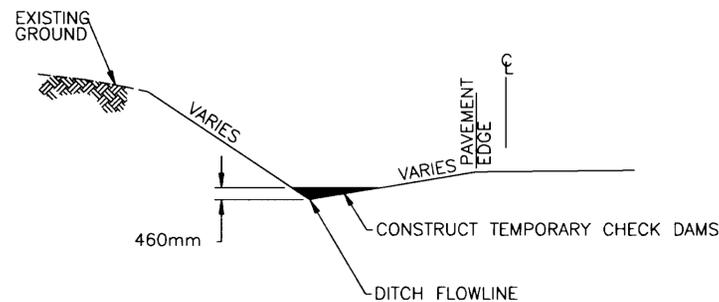
N.T.S.



TEMPORARY CHECK DAMS SHALL BE CONSTRUCTED AT LOCATIONS AS INDICATED ON SHEET S28 OR AS DIRECTED BY THE ENGINEER IMMEDIATELY AFTER THE DITCH FLOW LINE IS ESTABLISHED



SECTION A-A



ELEVATION

TEMPORARY CHECK DAM DETAILS TYPE "C" SEDIMENT FILTERS

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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PLOT: PSPACE: 1=1(F) OR MSPACE: 1=100(F)		
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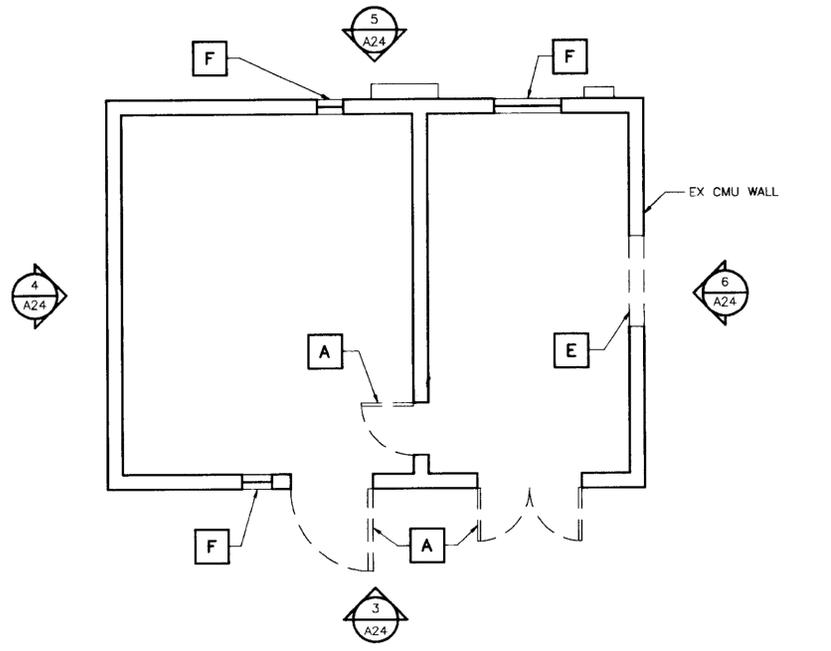
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN

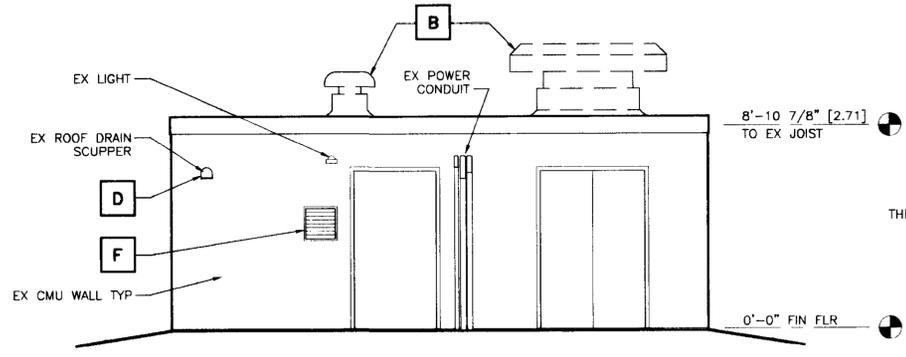
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RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 72200
TRAFFIC AND SEDIMENT CONTROL DETAILS

DESIGNED BY:	MGM	PROJECT NO.	67995
DRAWN BY:	MGM	DATE:	AUGUST 2000
CHECKED BY:	MGM	SHEET	E23 OF 28

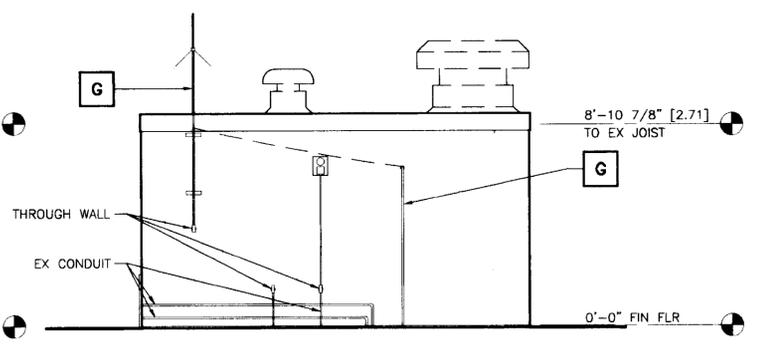




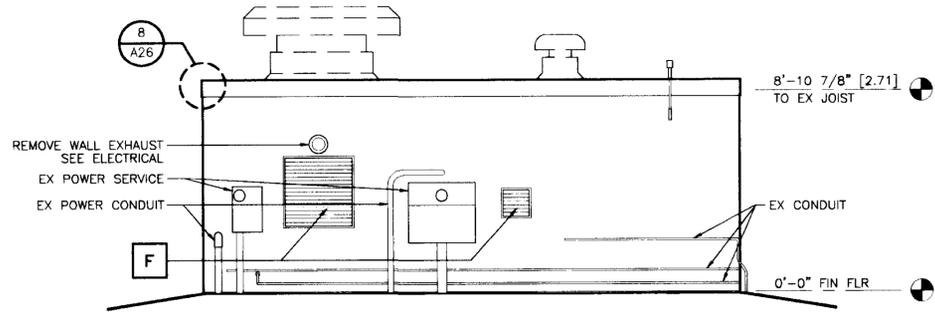
1 EXISTING FLOOR PLAN
SCALE 0 2' 4' 8'
NORTH



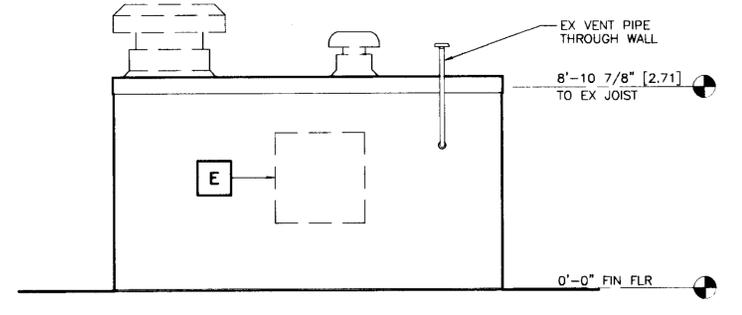
3 EAST ELEVATION
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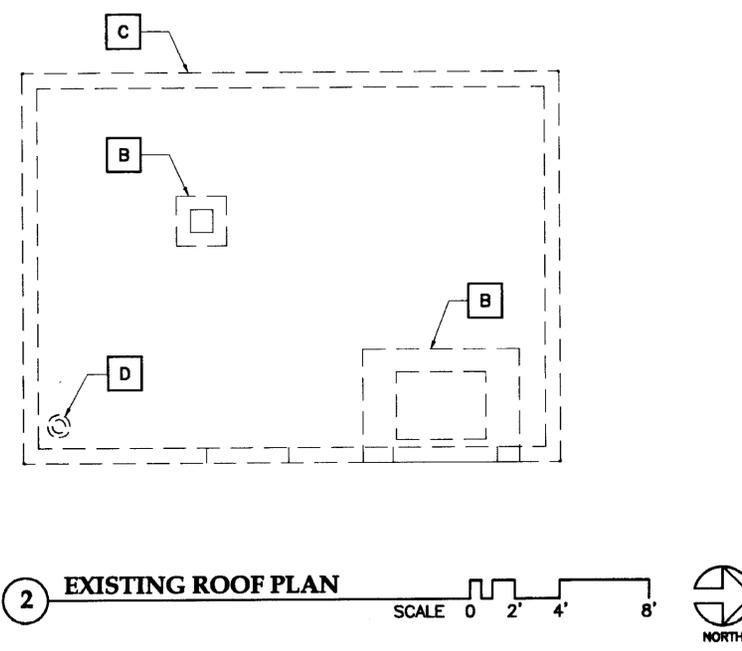
4 SOUTH ELEVATION
SCALE 0 2' 4' 8'



5 WEST ELEVATION
SCALE 0 2' 4' 8'



6 NORTH ELEVATION
SCALE 0 2' 4' 8'



2 EXISTING ROOF PLAN
SCALE 0 2' 4' 8'
NORTH

DEMOLITION KEY NOTES

- A** REMOVE HM DOOR, FRAME & HDWR
- B** REMOVE ROOF EXHAUST HOOD
- C** REMOVE ROOFING & ROOF FLASHING AS REQ FOR NEW WORK SEE 8/A26
- D** REMOVE ROOF DRAIN & SCUPPER
- E** REMOVE CMU TO PROVIDE 48"x48" RO FOR NEW INTAKE LOUVER
- F** REMOVE LOUVER SEE ELECTRICAL
- G** REMOVE ANTENNA & CABLE SEE ELECTRICAL

NOTE:
ALL DIMENSIONS IN PARENTHESES ARE IN METERS UNLESS OTHERWISE NOTED
ALL LUMBER DIMENSIONS ARE NOMINAL

NOTE: DO NOT SCALE FROM THESE PLANS—USE DIMENSIONS

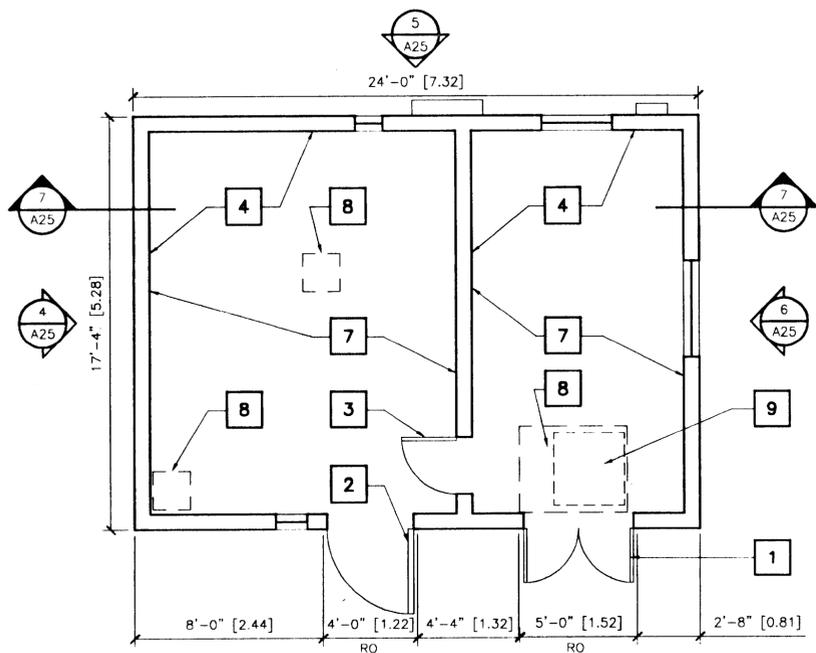
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

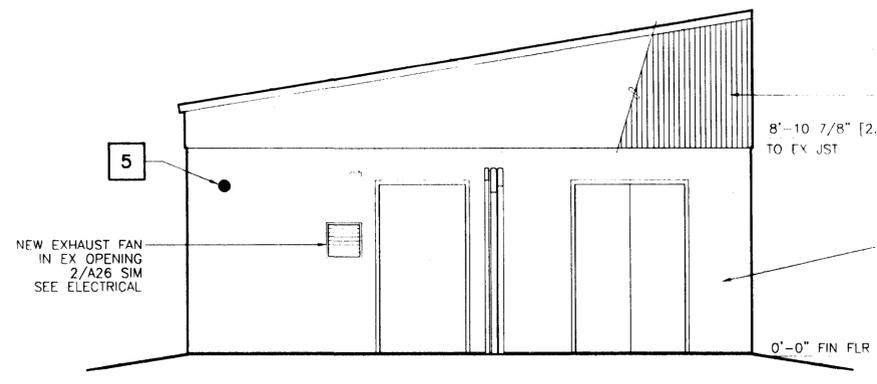
KETCHIKAN ALASKA
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67996
REGULATOR BUILDING DEMO PLAN & ELEVS

DESIGNED BY: JENSEN YORBA LOTT, INC.	PROJECT NO. 67996
DRAWN BY: A. WINGATE	DATE: AUGUST 10, 2000
CHECKED BY: J. LOTT	SHEET 424 OF 28

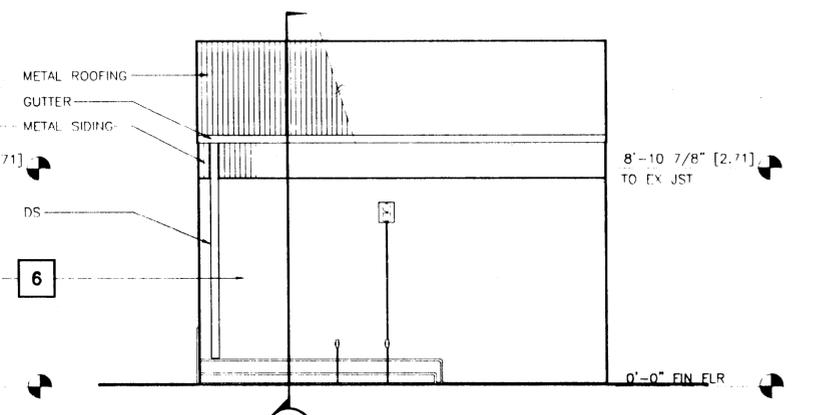




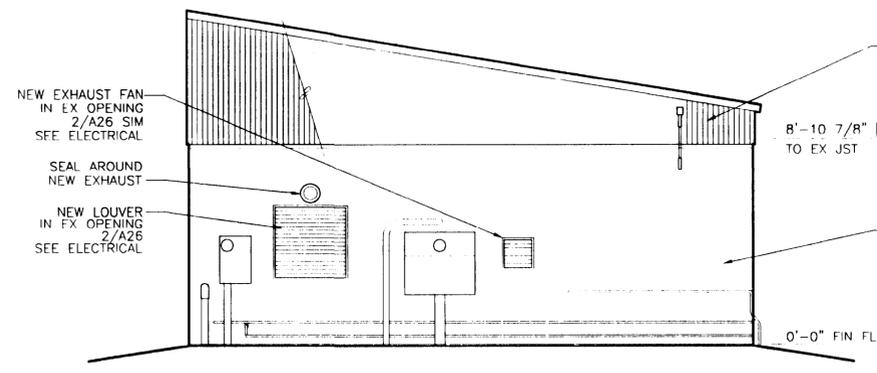
1 FLOOR PLAN
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NORTH



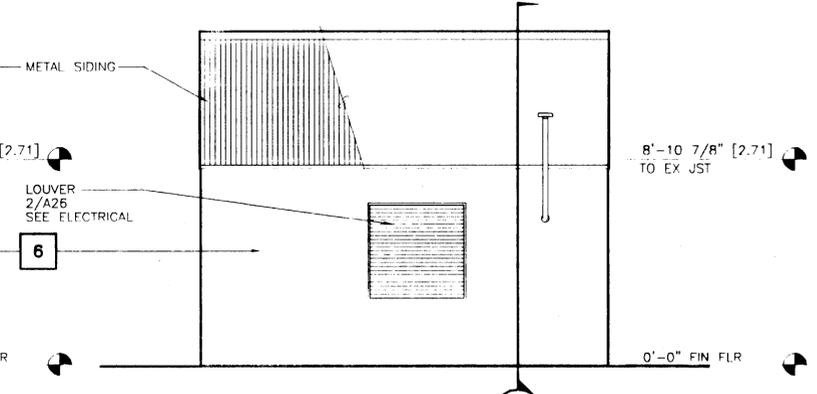
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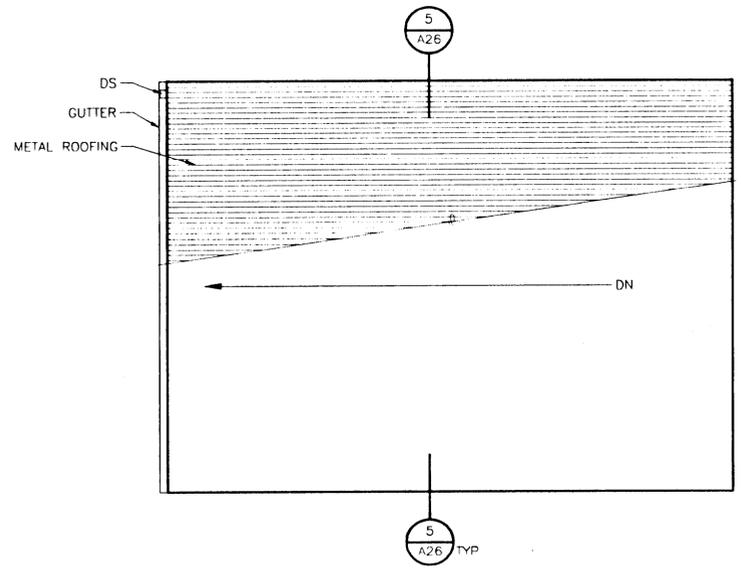
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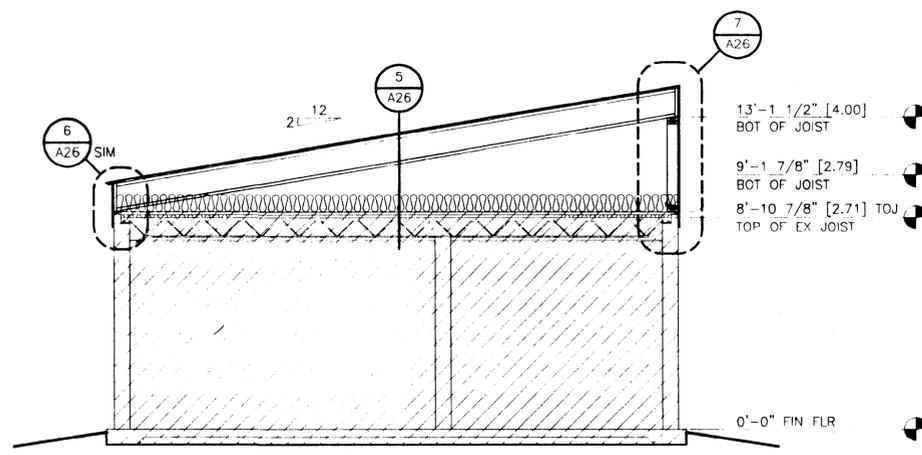
5 WEST ELEVATION
SCALE 0 2' 4' 8'



6 NORTH ELEVATION
SCALE 0 2' 4' 8'



2 ROOF PLAN
SCALE 0 2' 4' 8'
NORTH



7 SECTION
SCALE 0 2' 4' 8'

GENERAL NOTES

CODE:
UNIFORM BUILDING CODE, 1997 EDITION

DESIGN LIVE LOAD:

ROOF = 40 PSF
SNOW DRIFT = APPENDIX CHAPTER 16, DIV 1
FLOORS = 40 PSF
CORRIDORS, STAIRS = 100 PSF
WIND = 100 MPH, EXPOSURE C
SEISMIC = ZONE III

NOTE:
ALL DIMENSIONS IN PARENTHESES ARE IN METERS
UNLESS OTHERWISE NOTED
ALL LUMBER DIMENSIONS ARE NOMINAL

RENOVATION KEY NOTES

- 1** HM DOOR & FRAME
PAIR 2'-6"x7'-0" [0.76x2.13]
HARDWARE GROUP 1
- 2** HM DOOR & FRAME
3'-8"x7'-0" [1.12x2.13]
HARDWARE GROUP 2
- 3** HM DOOR & FRAME
2'-8"x7'-0" [0.81x2.13]
HARDWARE GROUP 3
- 4** PATCH CMU WALL & GWB CEILING
WHERE DEVICES ARE REMOVED
SEE ELECTRICAL
PAINT
- 5** PATCH CMU WHERE SCUPPER IS REMOVED
- 6** PAINT CMU, WALL BRACKETS & CONDUIT,
DOOR & FRAME TYPICAL
- 7** PAINT INTERIOR OF CMU WALL, CONC FLOOR,
& GWB CEILINGS
- 8** PATCH EX GWB CEILING WHERE MECH OR
ELECT DEVICES ARE REMOVED
SEE MECH/ELECT
PATCH ROOF DECK W/ 3/4" [0.02] PWD
- 9** 36"x36" [0.91x0.91] CEILING ACCESS DOOR
JUL INDUSTRIES MODEL TWI OR APPROVED EQUAL
PROVIDE 2x4 [0.05x0.10] FRAMING AT OPENING

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

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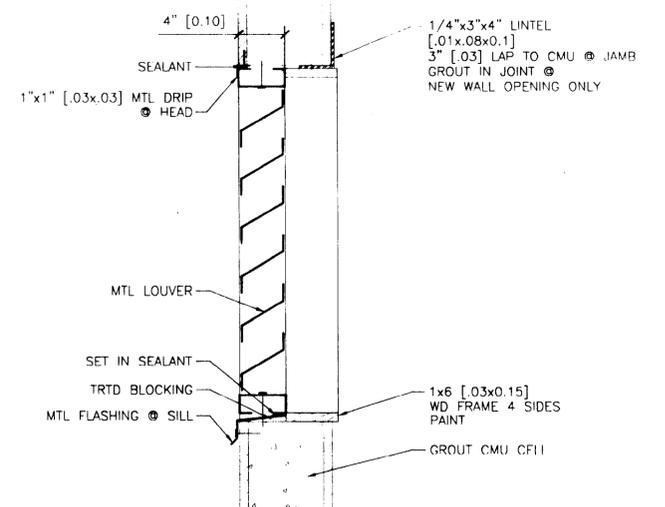
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-08-0144-1300 ~ PROJECT NO. 67995
REGULATOR BUILDING PLAN & ELEVS

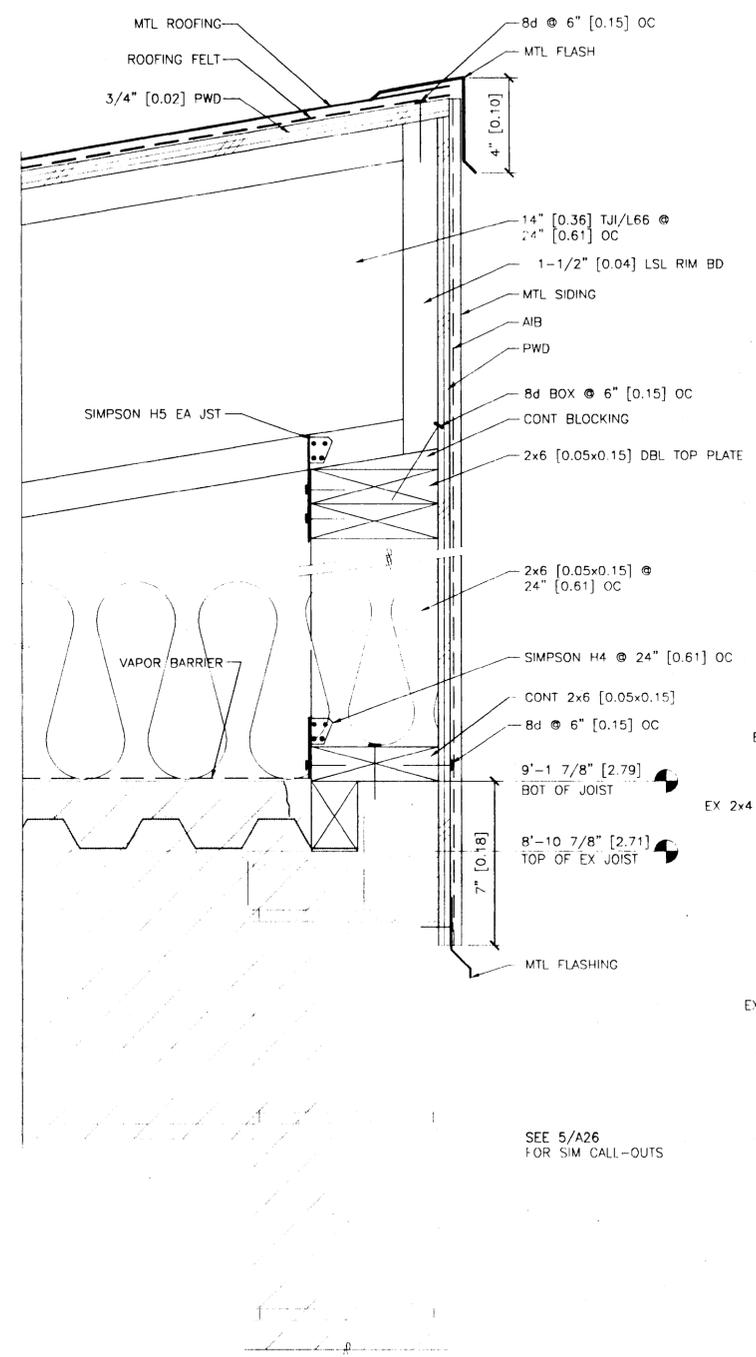
ALASKA
DESIGNED BY:
JENSEN YORBA LOTT, INC.
DRAWN BY:
A. WINGATE
CHECKED BY:
J. LOTT

PROJECT NO.
67995
DATE:
AUGUST 10, 2000
SHEET 483 OF 89



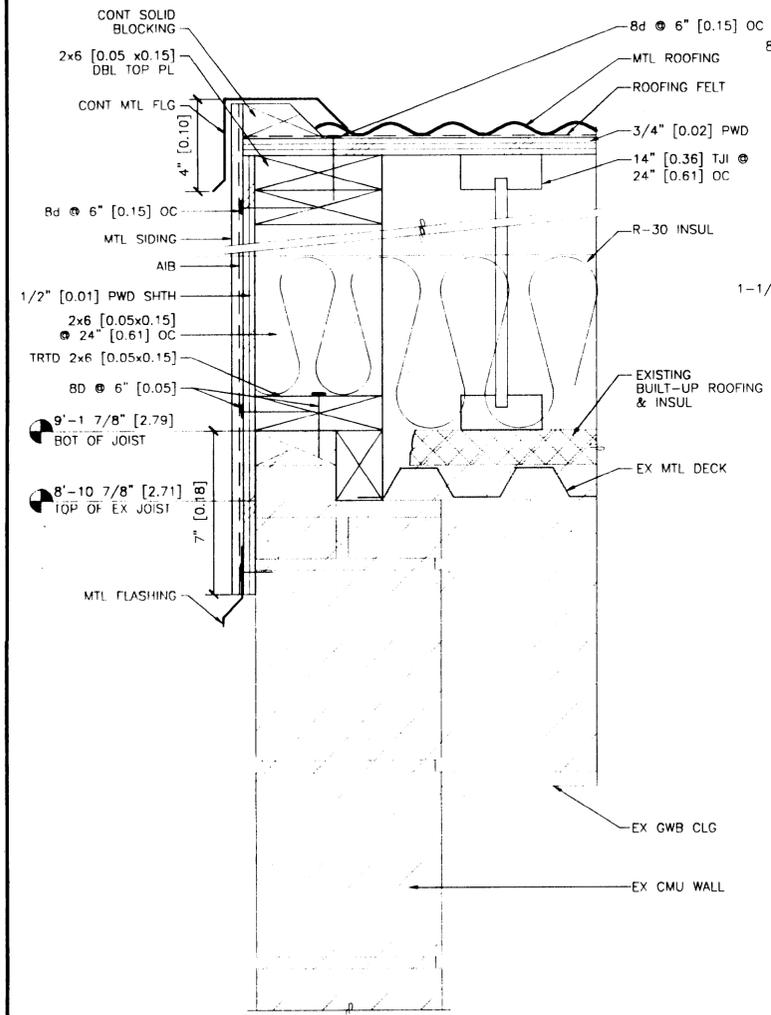


2 LOUVER
0017/A301-2 SCALE: 0 6\"/>

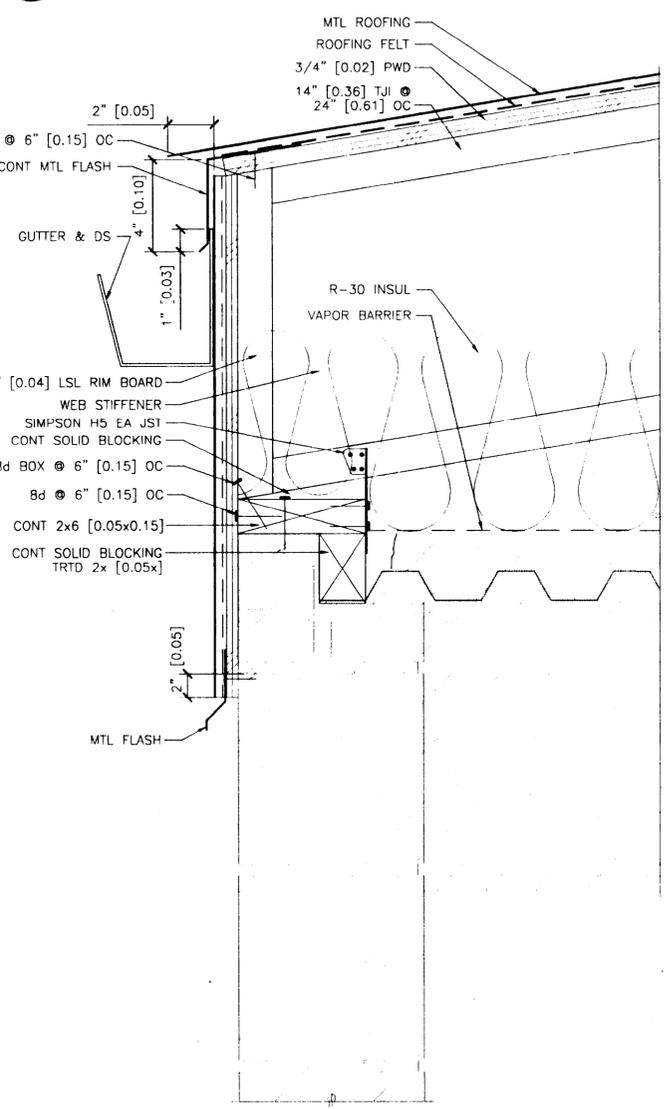


7 DETAIL
0017/A301-7 SCALE: 0 3\"/>

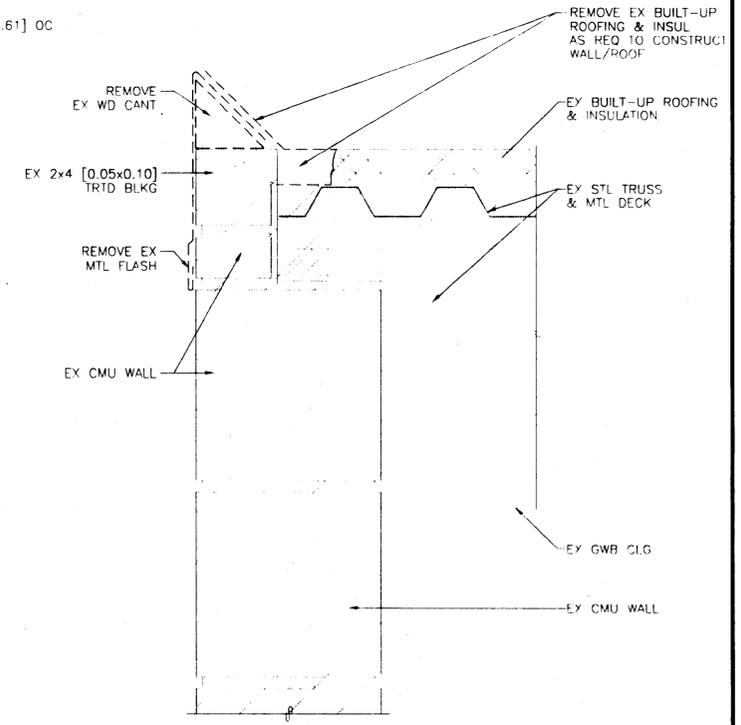
NOTE:
ALL DIMENSIONS IN PARENTHESES ARE IN METERS
UNLESS OTHERWISE NOTED
ALL LUMBER DIMENSIONS ARE NOMINAL



5 DETAIL
0017/A301-5 SCALE: 0 3\"/>



6 DETAIL
0017/A301-7 SCALE: 0 3\"/>



8 DEMO @ ROOF EDGE
0017/A301-7 SCALE: 0 3\"/>

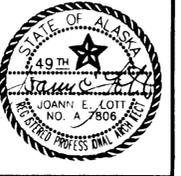
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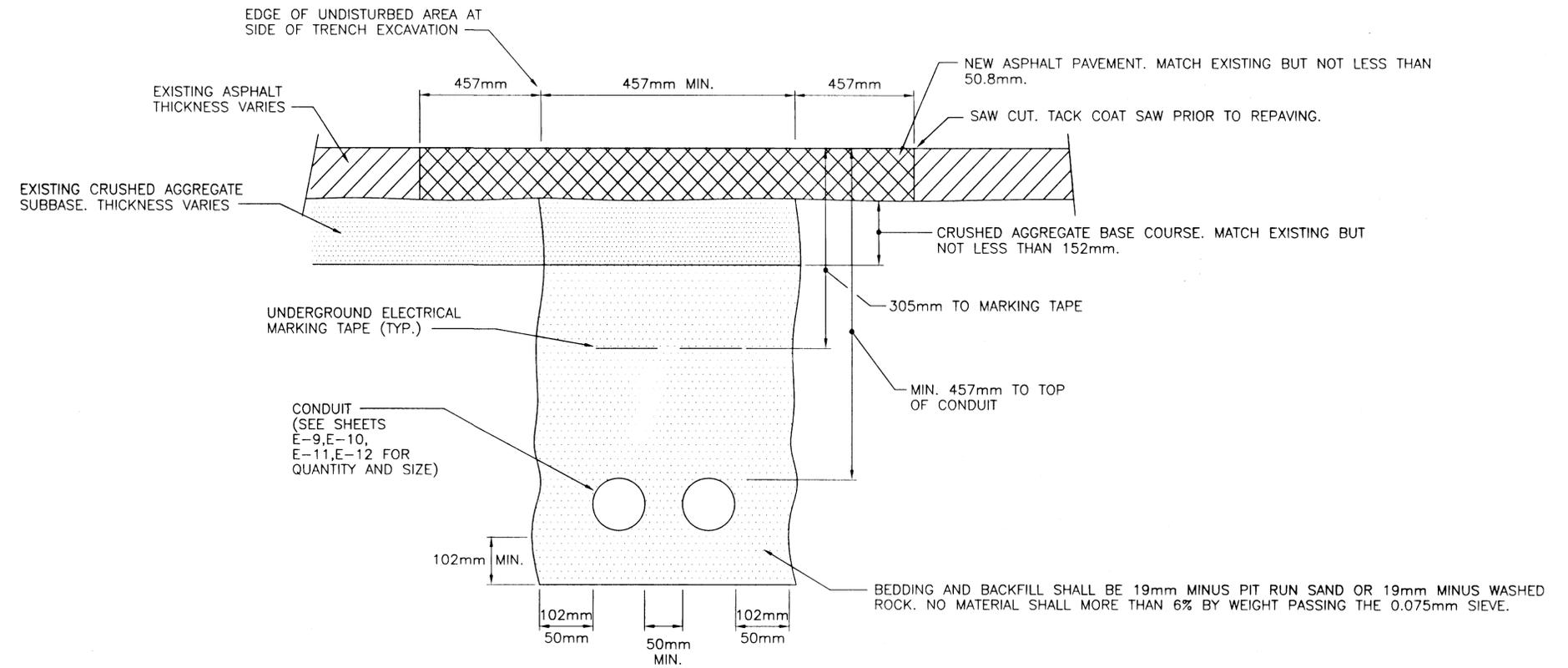
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN
KETCHIKAN AIRPORT
RUNWAY & TAXIWAY LIGHTS REPLACEMENT
A.I.P. NO. 3-08-0144-1300 ~ PROJECT NO. 67996
ALASKA
REGULATOR BUILDING DETAILS

NOTE: DO NOT SCALE FROM THESE PLANS-USE DIMENSIONS

DESIGNED BY: JENSEN TORRA LOTT, INC.	PROJECT NO. 67996
DRAWN BY: A. WINGATE	DATE: AUGUST 10, 2000
CHECKED BY: J. LOTT	SHEET 480 OF 80





DETAIL: CONDUIT TRENCH WITHIN PAVED AREAS
NO SCALE

NOTES:

- THIS IS A TYPICAL TRENCH SECTION SHOWING MINIMUM DIMENSIONS AND REQUIRED MATERIALS. CONFIGURE ALL TRENCHES AS NECESSARY TO COMPLY WITH DIMENSIONS SHOWN.
- BURY ALL CONDUIT AT 457mm MINIMUM BELOW FINISH GRADE UNLESS OTHERWISE NOTED.
- SLOPE CONDUIT AT 0.5% MIN. PER DETAIL ON SHEET E-15.
- TRENCH BEDDING AND BACKFILL TO BE COMPACTED TO 95% MAXIMUM DENSITY (SPECIFICATION P-152).
- CRUSHED AGGREGATE BASE COURSE TO BE COMPACTED TO 100% MAXIMUM DENSITY (SPECIFICATION P-152).
- SEE SHEETS E-9,10,11,&12 FOR NUMBER OF CONDUITS IN TRENCH.
- RETURN PAVEMENT TO THE CONDITION IT WAS PRIOR TO MAKING THE SAW CUT.
- BEDROCK MAY BE ENCOUNTERED DURING EXCAVATION. SEE GEOTECH INFORMATION IN APPENDIX C. REMOVAL OF BEDROCK IS INCIDENTAL TO THE EXCAVATION AND IS PAID FOR UNDER THE BID ITEM FOR THE CONDUIT. THIS INCLUDES DRILLING AND BLASTING AND ALL OTHER WORK REQUIRED TO REMOVE THE BEDROCK TO THE REQUIRED EXCAVATION DEPTH.



PATH: C:\CAD\102\10\E14.DWG	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES SOUTHEAST REGION	KETCHIKAN KETCHIKAN AIRPORT ALASKA RUNWAY & TAXIWAY LIGHTS REPLACEMENT A.I.P. NO. 3-02-0144-1300 ~ PROJECT NO. 67995 TRENCH AND DRAIN PIPE DETAILS	DESIGNED BY: EPG, MGM	PROJECT NO. 67995
PLOT: 1=1(F) OR 1=2(H)			DRAWN BY: SHS	DATE: AUGUST 2000
BY: DATE: DESCRIPTION OF CHANGE:			CHECKED BY: MGM	SHEET C27 OF 28

RECORD OF REVISIONS

