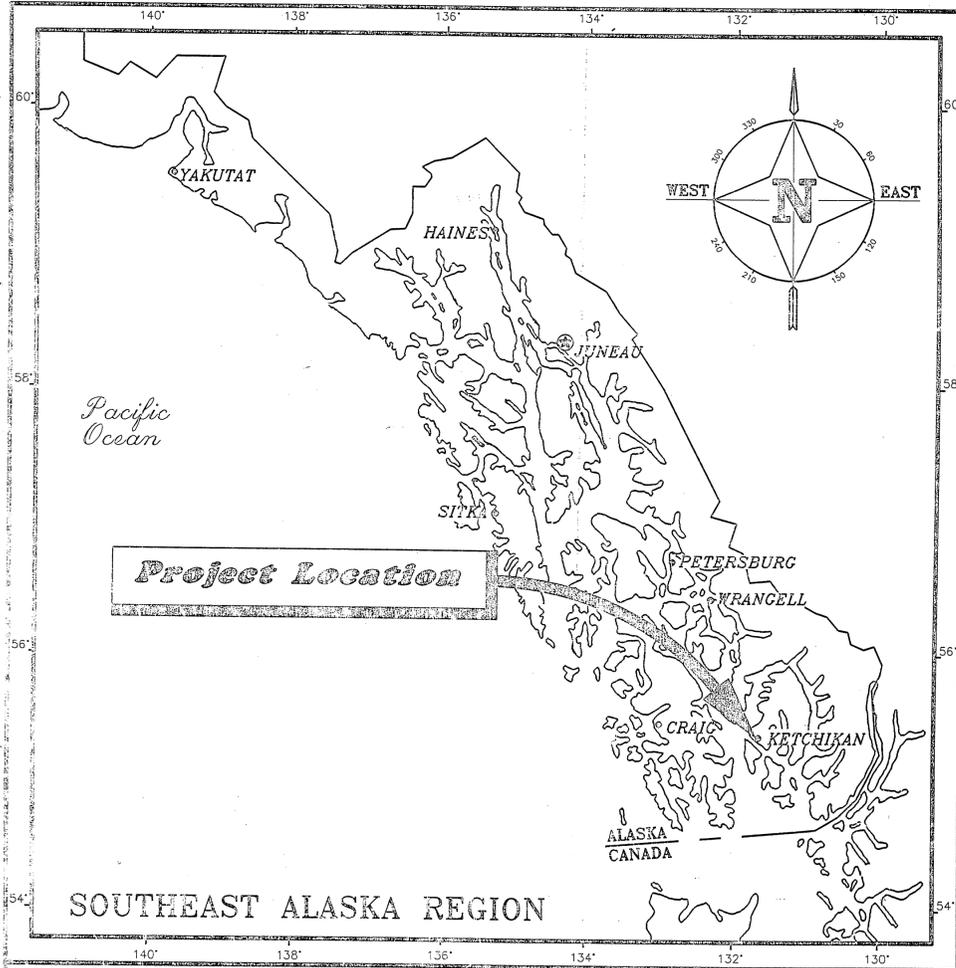


STATE OF ALASKA  
 DEPARTMENT OF TRANSPORTATION  
 AND  
 PUBLIC FACILITIES  
 SOUTHEASTERN REGION  
 DESIGN AND CONSTRUCTION DIVISION



**Ketchikan Airport**  
**Apron & Taxiway Improvements**

Project No. 70635  
 A.I.P. No. 3-02-0144-08

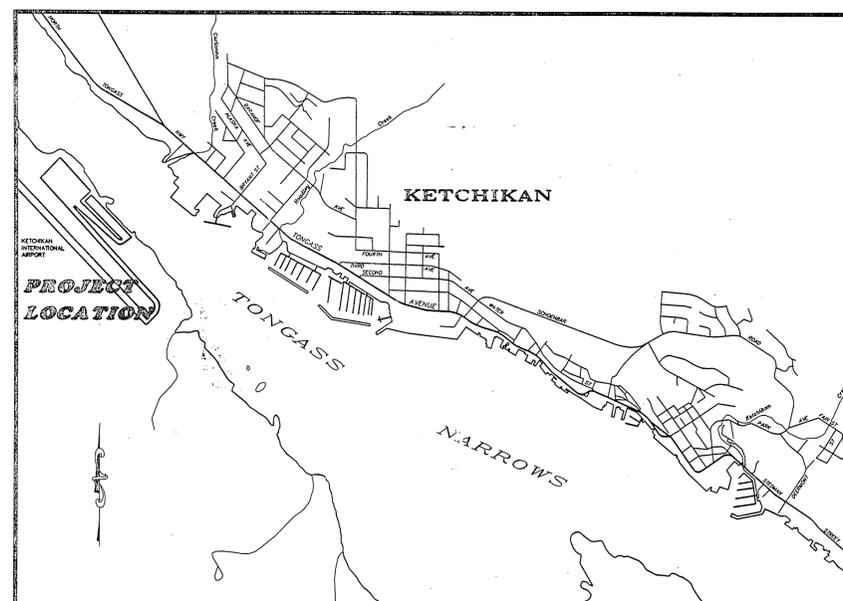


INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	Title Sheet
2	Estimate of Quantities
3	Project Layout Plan
4-6	Typical Sections
7	Terminal Apron Layout & Control
8	Terminal Apron Grade Control
9	Heavy Aircraft Apron Expansion
10	Light Aircraft Apron Expansion
11	Taxiway Pavement Improvements
12	Taxiway Drainage Improvements
13	Oil / Water Separator
14	Drainage Details
15	Concrete Jet Hardstand
16	Subdrain Inlet & Edge Drain Details
17-18	Striping Plan
19	Construction Sequence & Traffic Plan
E1-E3	Runway Lighting
E4	Single Line Diagrams
E5-E6	Details
E7	Airport Lighting Controls

DESIGN DATA

AIRPORT TYPE .....	COMMERCIAL SERVICE
RUNWAY DIMENSIONS .....	7500'x150'
SAFETY AREA .....	7900'x400'
RUNWAY CATAGORY .....	TRANSPORT
RUNWAY INSTRUMENTATION .....	PRECISION
RUNWAY/TAXIWAY SURFACE .....	ASPHALT CONCRETE
TAXIWAY DIMENSIONS .....	3905'x75'
TERMINAL APRON AREA .....	46,175 SQUARE YARDS



Vicinity Map

"AS BUILT"

CONTRACTOR - WILDER CONSTRUCTION INC

BEGIN CONST. APRIL 1993

END CONST. OCT 22, 1998

PROJECT ENGR. DALE F. ROBBINS

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

APPROVED  
*[Signature]* Date 8/25/92  
 S.E. Region Engineering Manager

APPROVED  
*[Signature]* Date 8-25-92  
 Director, S.E. Region Design & Construction

PROJECT NUMBER: 70635	
DATE: JULY, 1992	
SHEET 1 OF 19	

# Estimate of Quantities

Item No.	Item	Unit	Quantity
<b>Basic Bid</b>			
90	MBE and WBE Adjustments	CS	All Req'd.
100	Mobilization and Demobilization	LS	All Req'd.
111	Temporary Erosion & Pollution Control	CS	All Req'd.
121	Construction Surveying by Contractor	LS	All Req'd.
125	Engineering Transportation	LS	All Req'd.
260	Excavation & Disposal of existing Concrete Jet Hardstand	LS	All Req'd.
270	Surface Preparation	SQ. YD.	1,300 1,353
290	Tapered Pavement Milling	SQ. YD.	1,550 1,667
330a	Unclassified Excavation	CY	9,200 10,010.64
330c	Embankment	CY	26,700 16,280.61
400a	8" , Perforated, Galvanized, 14 ga. Steel Corrugated Metal Pipe	LF	1,070 1,047.5
400b	18" , Perforated, Galvanized, 14 ga. Steel Corrugated Metal Pipe	LF	458 461
400c	18" ,Galvanized, 14 ga. Steel Corrugated Metal Pipe	LF	570 547.5
400d	24" ,Galvanized, 14 ga. Steel Corrugated Metal Pipe	LF	220 192.0
400e	36" , Galvanized, 14 ga. Steel Corrugated Metal Pipe	LF	20
440a	Chain-link Fence	LF	475
440b	Drive Thru Gate	Each	1
510a	Crushed Aggregate Base Course	Ton	5,800 5,792.66
525a	Recycled Asphalt Pavement-3" depth	SQ. YD.	26,700 23,170.94
525b	Recycled Asphalt Pavement-6" depth	SQ. YD.	14,610 15,346.60
600a	Bituminous Prime Coat, Cutback	Ton	8 5.37
610	Bituminous Tack Coat	Ton	53 50.07
660a	Asphalt Concrete	Ton	13,400 13,831.59
660c	Asphalt Cement, PBA-2	Ton	1,260 1,216.24
660e	Asphalt Price Adjustment	CS	All Req'd.
670a	Asphalt Treated Base Course	Ton	9,700 9,206.77
700c	State Traffic Marking Paint	LS	All Req'd.
810	Concrete Jet Hardstands	LS	All Req'd.
1000-b	New Remote Relay Assembly, L-841	Each	1
1000-c	New Remote Control Panel, L-821	Each	1
1000-f	New Taxiway Marker Light, L-861T	Each	27 22
1000-g	New Handhole, L-867	Each	4
1000-h	4" Rigid Steel Conduit	LF	430 128
1000-i	2" Rigid Steel Conduit	LF	500 495
1000-k	2" PVC Conduit	LF	3550 3,289.5
280	PAVEMENT GROOVING	Sy	34,089.70
405	PAVEMENT EDGE DRAIN	LF	1,911.0
1000-v	ROUTE CONTROL CABLE CONDUIT, C.D.#6	LS	All Req'd
1000-w	TAXI LIGHTS ADJUSTMENTS & REPAIRS, C.D.#6	LS	All Req'd

# Estimate of Quantities

Item No.	Item	Unit	Quantity
1000-l	Underground Cable, #6 AWG Copper, 5KV, Type "B", L-824	LF	3,100 1,926
1000-m	#8 XHHW Insulated Copper Ground Conductor	LF	800 963
1000-n	Control Cable	LF	4,000 3,957.14
1000-o	Remove Existing Taxiway Lights	Each	14 13
1000-q	Ground Rod	Each	15 6
1000-r	Lighted Taxiway/Runway Intersection Sign	Each	1
1000-s	Lighted Taxiway Identification Sign	Each	4
1000-t	Lighted Runway Distance Remaining Sign	Each	6
1000-u	Receiver-Controller, Type I, L-854	Each	1
1020	Airport Beacon	LS	All Req'd
1100	Electrical Systems	LS	All Req'd.
1200a	Trench Drain, New Construction	LF	686
1200b	Trench Drain, Reconstructed	LF	268
1210	Oil-Water Separator System	LS	All Req'd.
1220a	48" Concrete Manhole	Each	1
1220b	24" Corrugated Metal Field Inlet	Each	3
1220c	36" Corrugated Metal Field Inlet	Each	5
1230	Energy Dissipator Unit	Each	3
1240	Ditch Cleaning	LF	1,000 944
1000-x	IDENTIFY EXISTING SECONDARY CONDUCTORS, C.D.#6	LS	All Req'd
1000-y	#16/12 CONDUCTOR CONTROL CABLE, C.D.#6	LS	All Req'd

## Additive Alternate No. 1

405	Pavement Edge Drains	LF	2,000
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## Additive Alternate No. 2

280	Pavement Grooving	SQ. YD.	31,785
-----	-------------------	---------	--------

# Basis of Estimate

Item No.	Item	Estimating Factor
510a	Crushed Agg. Base Course	2.03 Tons/Cu. Yds.
600a	Bituminous Prime Coat, Cutback	0.25 Gal./Sy. at 256 Gal./Ton
610	Bituminous Tack Coat	0.10 Gal./Sy. at 240 Gal./Ton
660a	Asphalt Concrete	122 Lbs./Sy. (1" Depth)
660c	Asphalt Cement, PBA-2	6.5% of Item 660a Plus 4.0% of Item 670a
670a	Asphalt Treated Base Course	120 Lbs./Sy. (1" Depth)

BY:	DATE:	DESCRIPTION OF CHANGE:

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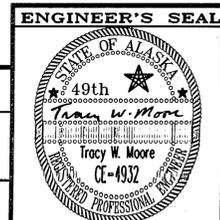
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AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

Ketchikan

Ketchikan Airport  
Apron & Taxiway Improvements  
Estimate of Quantities

Alaska

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DRAWN BY: AutoCAD / BWB	DATE: JULY, 1992
CHECKED BY: T.W. Moore	SHEET 2 OF 19

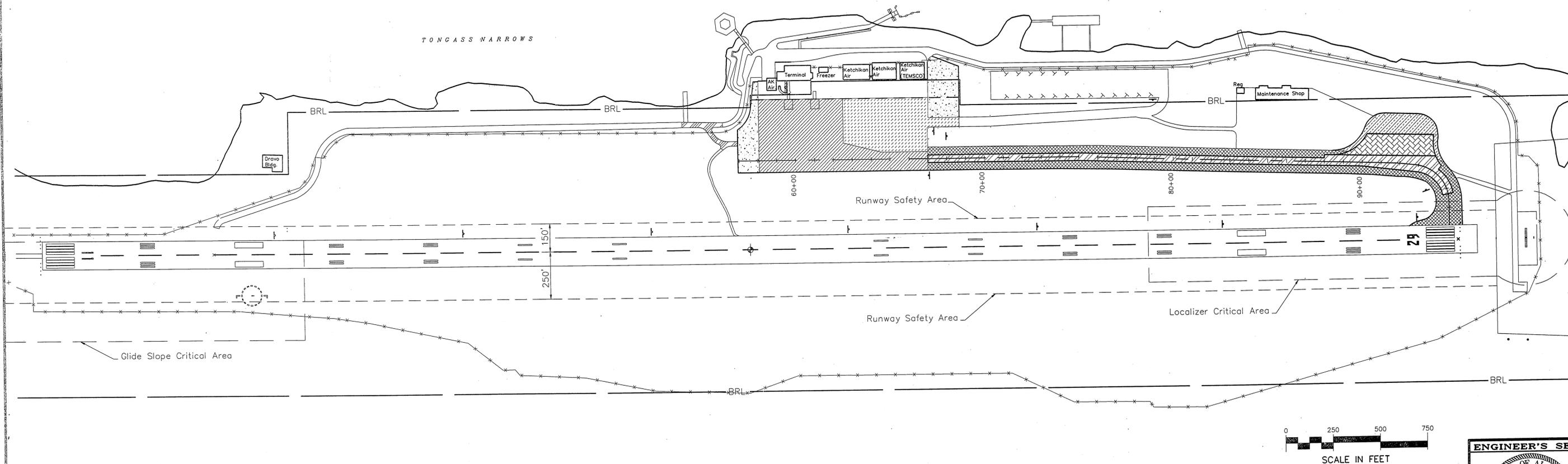
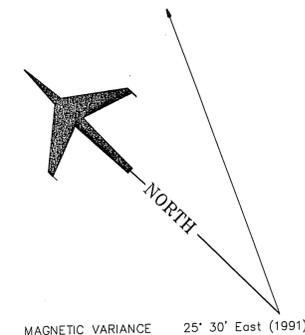


**GENERAL NOTES :**

1. THE EXISTING TAXIWAY CENTERLINE GRADE AND CROSS SLOPE SHALL BE USED AS CONTROL FOR THE NEW ASPHALT PAVEMENT OVERLAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LOCATION OF THE EXISTING CENTERLINE TO THE SATISFACTION OF THE ENGINEER.
2. THE CONTRACTOR SHALL LOCATE ALL SURVEY MONUMENTS AND CASES IN THE PAVEMENT OVERLAY AREA AND SHALL ADJUST THE CASE 1/4" BELOW FINISHED GRADE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER ITEMS OF WORK AND NO SEPARATE PAYMENT SHALL BE MADE.
3. THE WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE CONSTRUCTION SEQUENCE AND TRAFFIC PLANS.
4. THE NEW ASPHALT PAVEMENT SURFACE OF THE TAXIWAY SHALL BE GROOVED AS DETAILED ON SHEET 5 AND AS SPECIFIED IN SECTION 280 OF THE SPECIFICATIONS. THIS WORK SHALL IDENTIFIED AS ALTERNATIVE 2.
5. ONLY NIGHT TIME CLOSURES WILL BE ALLOWED FOR THE THE PAVING OPERATION. FOR MORE INFORMATION, SEE CLOSURE PLAN AND SECTION 80 OF THE SPECIFICATIONS. THESE CLOSURES ARE FOR LARGER (JET TYPE) AIRCRAFT AND ARE LIMITED AS INDICATED IN THE SPECIFICATIONS.
6. THE CULVERT LENGTHS AND GRADES ARE APPROXIMATE AND ARE SUBJECT TO MINOR REVISIONS.

**LEGEND**

-  RECONSTRUCT TERMINAL APRON  
HEAVY AIRCRAFT AREA
-  OVERLAY TERMINAL APRON  
LIGHT AIRCRAFT AREA
-  CONSTRUCT APRON EXPANSIONS
-  OVERLAY HOLDING APRON
-  OVERLAY TAXIWAY
-  PAVE FLOAT PLANE RAMP  
ACCESS ROAD
-  RECONSTRUCT TAXIWAY KEEL SECTION
-  RECONSTRUCT HOLDING APRON
-  SIGN INSTALLATION



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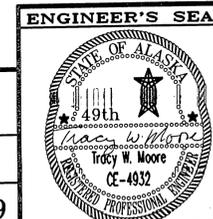
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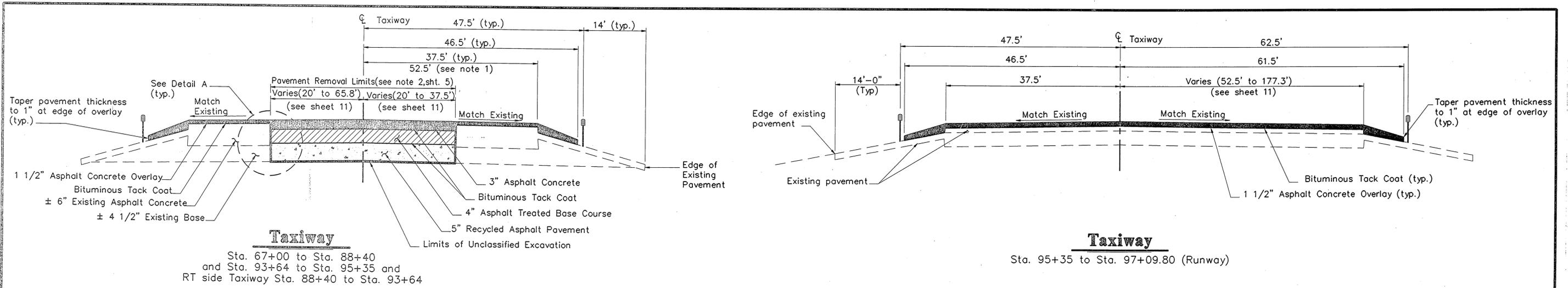
Ketchikan

Alaska  
Ketchikan Airport  
Apron & Taxiway Improvements  
Project Layout Plan

DESIGNED BY:  
L.P. Carroll  
DRAWN BY:  
AutoCAD / BWB  
CHECKED BY:  
T.W. Moore

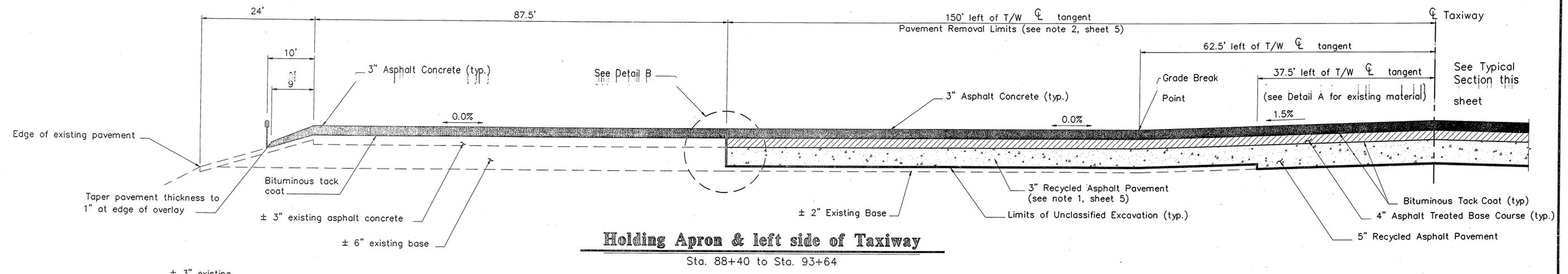
PROJECT No:  
70635  
DATE:  
JULY, 1992  
SHEET 3 OF 19



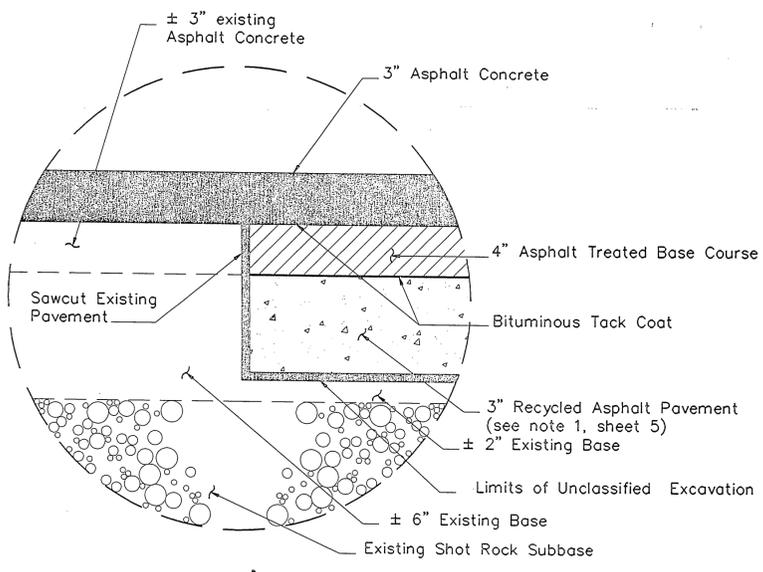


**Taxiway**  
 Sta. 67+00 to Sta. 88+40  
 and Sta. 93+64 to Sta. 95+35 and  
 RT side Taxiway Sta. 88+40 to Sta. 93+64

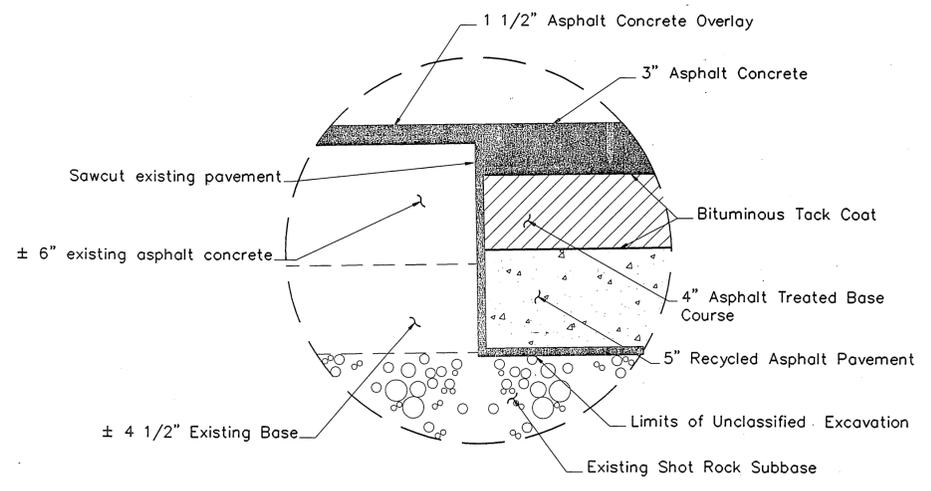
**Taxiway**  
 Sta. 95+35 to Sta. 97+09.80 (Runway)



**Holding Apron & left side of Taxiway**  
 Sta. 88+40 to Sta. 93+64



**Detail B**



**Detail A**

- NOTES :**
1. Transition right side of Taxiway from 37.5' to 52.5' from sta. 90+00 to sta. 92+76. (See Sheet 11)
  2. See Holding Apron section for transition of left side of Taxiway to Holding Apron.

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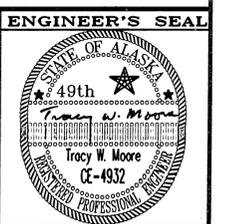
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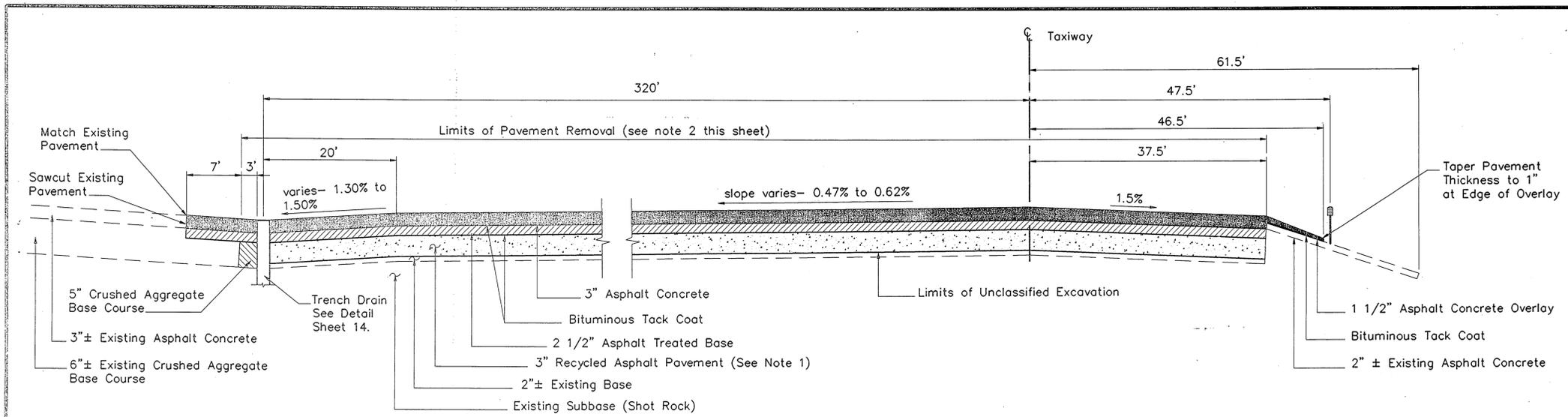
STATE OF ALASKA  
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 SOUTHEAST REGION DESIGN & CONSTRUCTION

Ketchikan  
 Alaska  
 Ketchikan Airport  
 Apron & Taxiway Improvements  
 Typical Sections

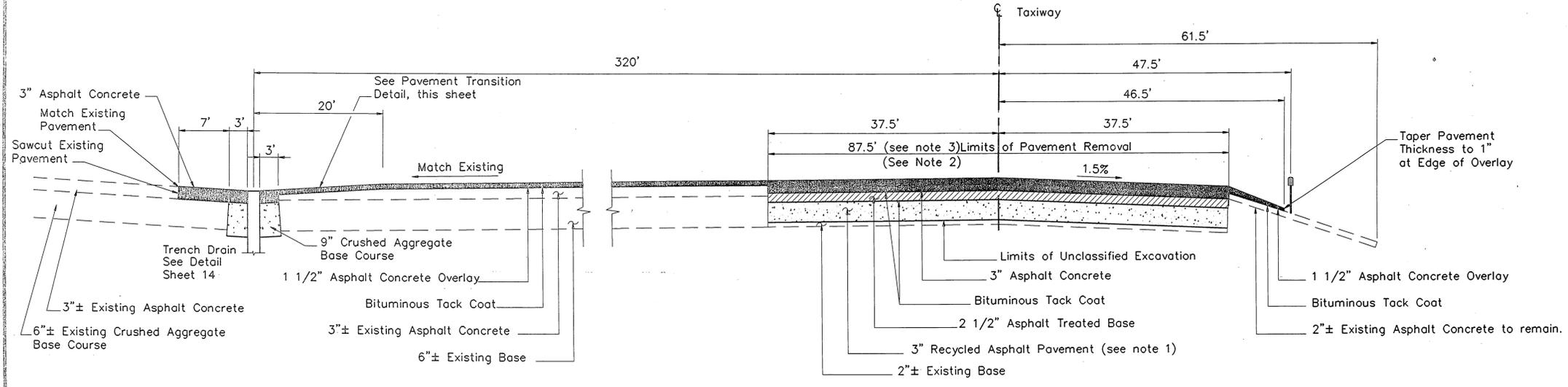
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 L.P. Carroll  
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 AutoCAD / BWB  
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 T.W. Moore

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 70835  
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 JULY 1992  
 SHEET 4 OF 19

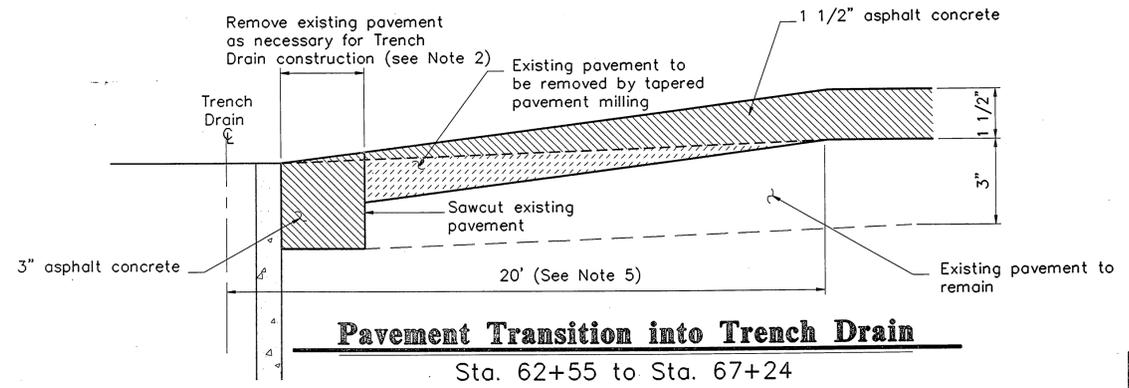




**Heavy Aircraft Apron Reconstruction**  
Sta. 58+05 to Sta. 62+55

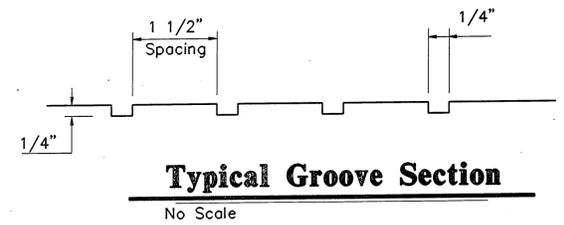


**Light Aircraft Apron**  
Sta. 62+55 to Sta. 67+24



**Pavement Transition into Trench Drain**  
Sta. 62+55 to Sta. 67+24

- TYPICAL SECTION NOTES:**
- 1 The recycled asphalt pavement on the terminal and holding aprons shall be mixed with 2" of the existing base.
  - 2 Pavement removal shall be in accordance with Specifications Section 525 Recycled Asphalt Pavement.
  - 3 Transition reconstruction section from 87.5' left at Station 62+55 to 37.5' left at Station 64+55, see Plan View, sheet 7.
  - 4 See sheet 9 for Finish Grade Elevations.
  - 5 Grade into Trench Drain shall not exceed 1.5%. Length of taper into Trench Drain shall be increased as necessary to meet this requirement.



See Section 280 of the Construction Specifications for details of the Grooving Operation. See Note 3, Sheet 11 for areas to be Grooved.

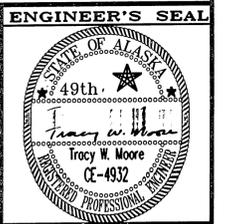
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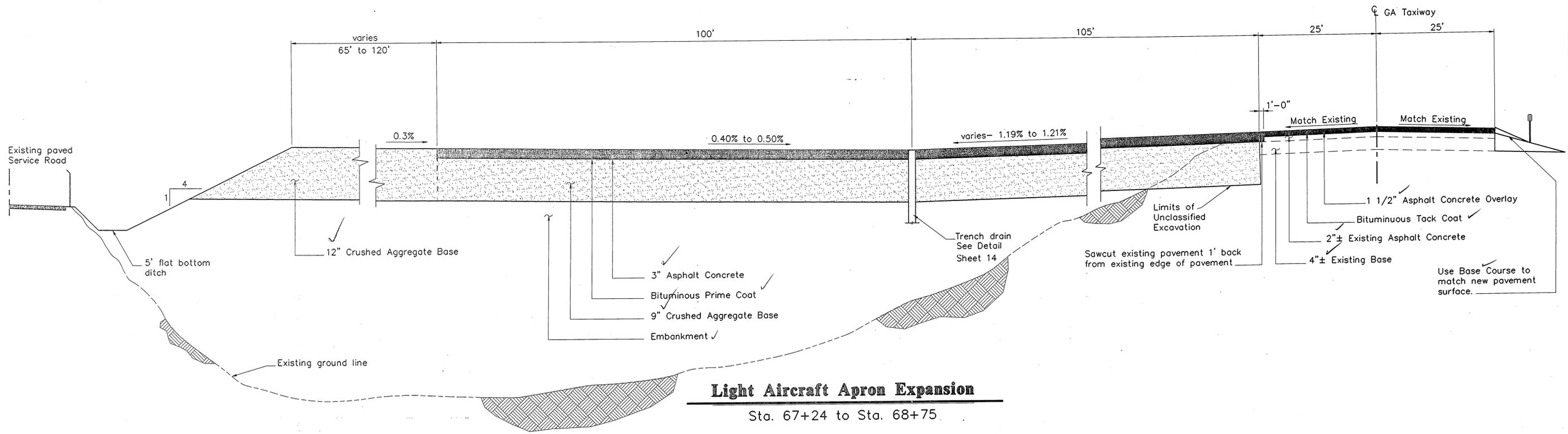
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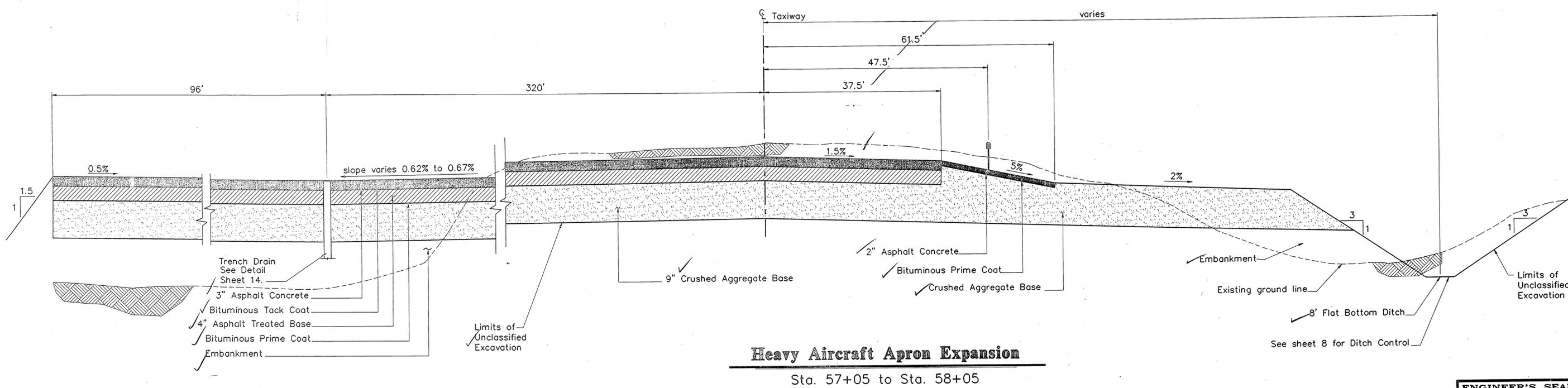
Ketchikan  
Alaska  
Ketchikan Airport  
Apron & Taxiway Improvements  
Typical Sections

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**Light Aircraft Apron Expansion**  
Sta. 67+24 to Sta. 68+75



**Heavy Aircraft Apron Expansion**  
Sta. 57+05 to Sta. 58+05

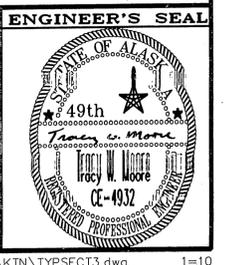
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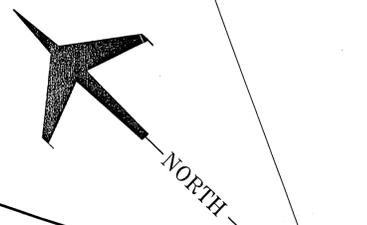
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Ketchikan Alaska  
**Ketchikan Airport**  
Apron & Taxiway Improvements  
**Typical Sections**

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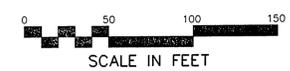
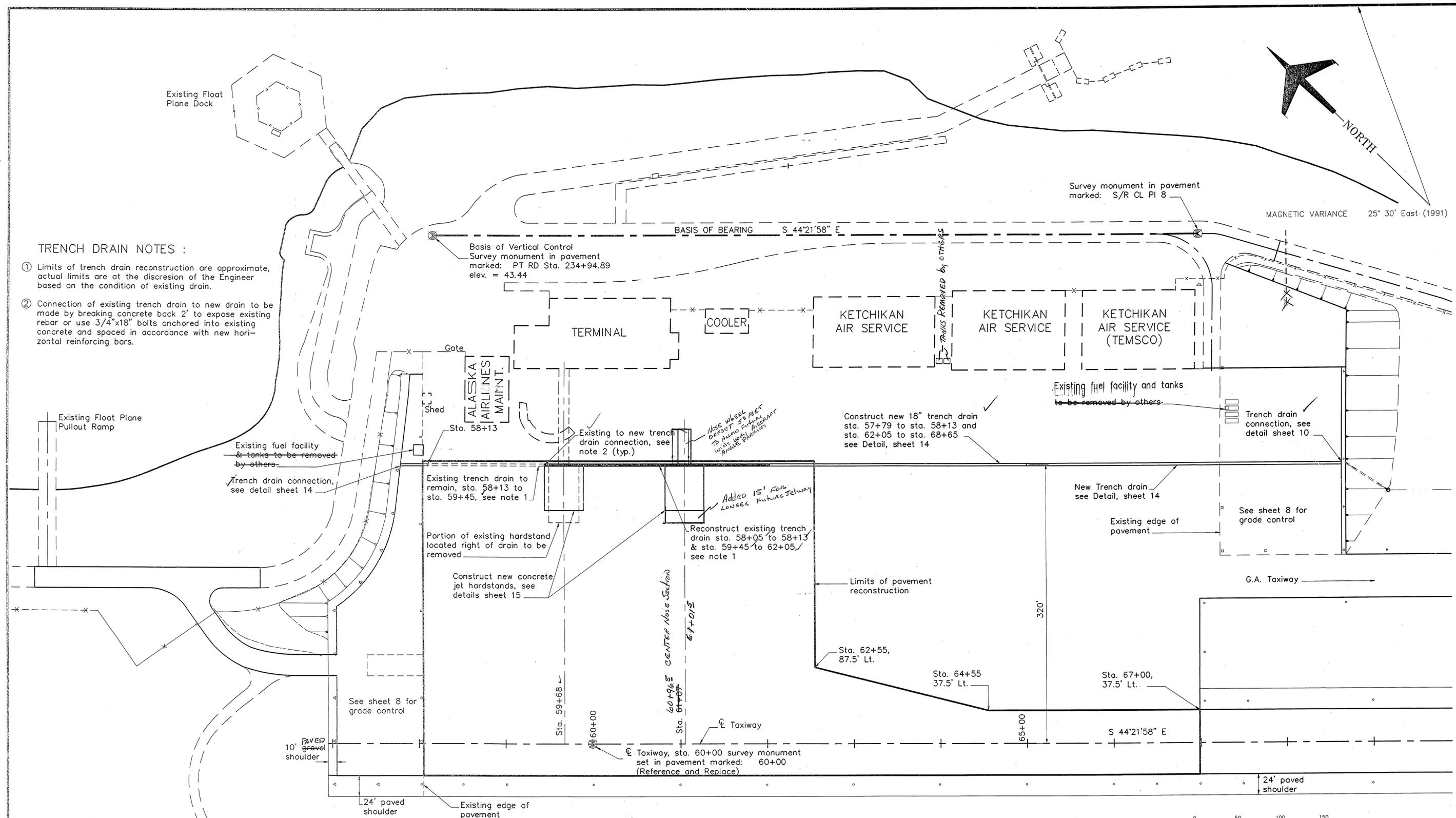
MAGNETIC VARIANCE 25' 30" East (1991)

BASIS OF BEARING S 44°21'58" E

Basis of Vertical Control  
Survey monument in pavement  
marked: PT RD Sta. 234+94.89  
elev. = 43.44

**TRENCH DRAIN NOTES :**

- ① Limits of trench drain reconstruction are approximate, actual limits are at the discretion of the Engineer based on the condition of existing drain.
- ② Connection of existing trench drain to new drain to be made by breaking concrete back 2' to expose existing rebar or use 3/4"x18" bolts anchored into existing concrete and spaced in accordance with new horizontal reinforcing bars.



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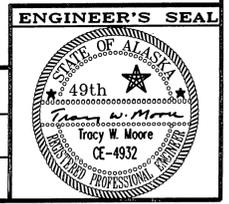
Ketchikan

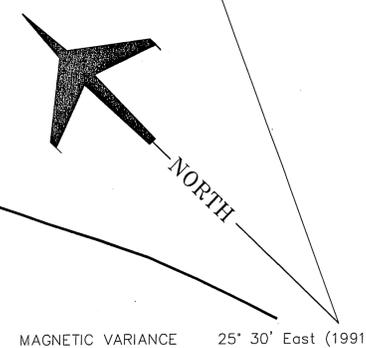
Ketchikan Airport  
Apron & Taxiway Improvements  
Terminal Apron Layout & Control

Alaska

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PROJECT No. 70635  
DATE: JULY, 1992  
SHEET 7 OF 19





MAGNETIC VARIANCE 25° 30' East (1991)

NOTES :

- GRADES HAVE BEEN ESTABLISHED ON 25 FOOT GRID PATTERN FROM EVEN STATIONS. THE EDGE LIMITS ARE AT VARIOUS OFFSETS AS SHOWN ON SHEETS 9 AND 10.

BASIS OF VERTICAL CONTROL  
Survey Monument in Pavement  
Marked: PT RD Sta. 234+94.89  
Elev = 43.44

Sawcut existing edge of pavement  
1'-0" from edge to provide neat  
joint. Match existing grade.

Gate  
ALASKA  
AIRLINES  
MAINT.

Sta. 58+13  
Match Existing  
Trench Drain

Sta. 59+45  
Match Existing  
Trench Drain

Trench Drain

25'  
(typ.)

Sawcut existing edge of pavement 1'-0"  
from edge to provide neat joint. Match  
existing grade.

Sawcut existing edge of pavement 1'-0"  
from edge to provide neat joint. Match  
existing grade +1.5"

5' gravel shoulder  
at 5.0%

1 1/2" Overlay Area  
match existing grade

Limits of Pavement Reconstruction  
match existing grade +1.5"

10' gravel shoulder  
at 5.0%

1 1/2" Overlay to Lights (see Typical)



Sta. 58+00      Sta. 60+00      Sta. 62+00      Sta. 64+00      Sta. 66+00

BY:	DATE:	DESCRIPTION OF CHANGE:

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SOUTHEAST REGION DESIGN & CONSTRUCTION

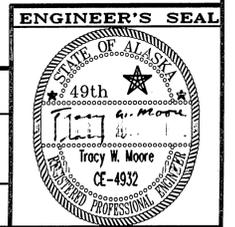
Ketchikan

Ketchikan Airport  
Apron & Taxiway Improvements  
**Terminal Apron Grade Control**

Alaska

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AutoCAD / BWB  
CHECKED BY:  
T.W. Moore

PROJECT No.  
70635  
DATE:  
JULY, 1992  
SHEET 8 OF 19

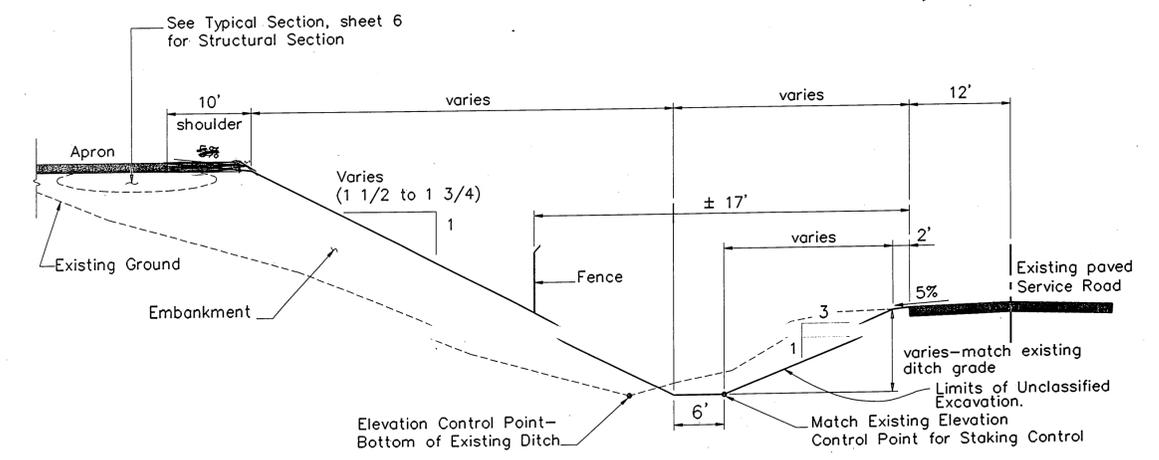
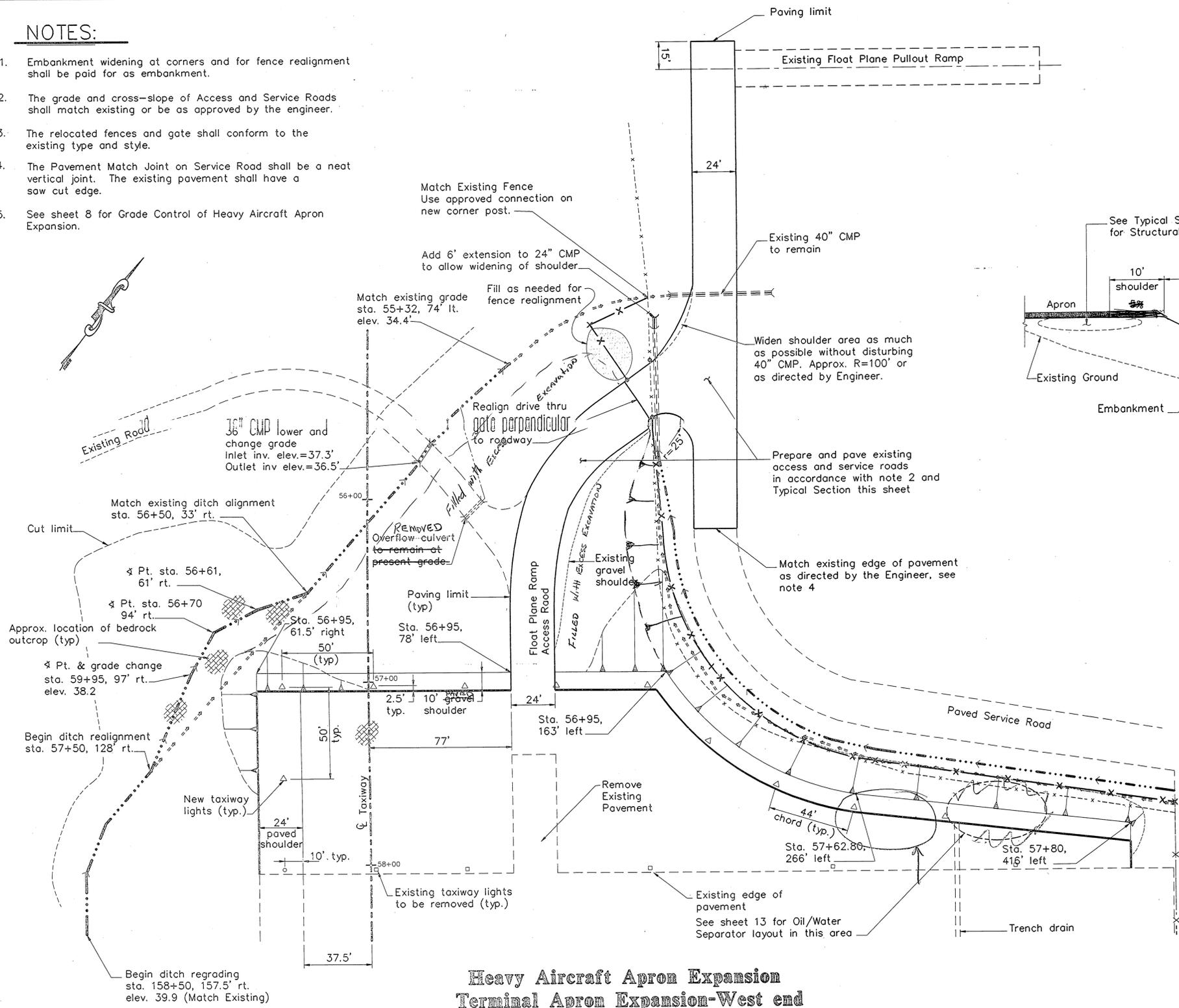


**NOTES:**

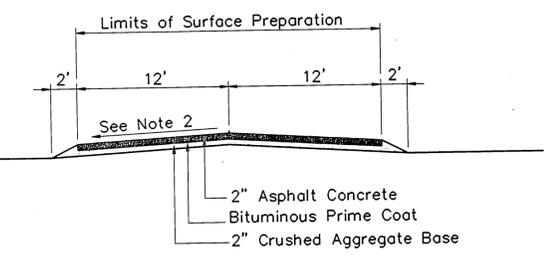
1. Embankment widening at corners and for fence realignment shall be paid for as embankment.
2. The grade and cross-slope of Access and Service Roads shall match existing or be as approved by the engineer.
3. The relocated fences and gate shall conform to the existing type and style.
4. The Pavement Match Joint on Service Road shall be a neat vertical joint. The existing pavement shall have a saw cut edge.
5. See sheet 8 for Grade Control of Heavy Aircraft Apron Expansion.

**LEGEND**

- X— REALIGNED FENCE
  - - - - - EXISTING FENCE
  - · - · - · - REALIGNED DITCH
  - - - - - EXISTING DITCH
  - △ NEW TAXIWAY LIGHT
  - EXISTING LIGHT TO BE REMOVED
  - EXISTING LIGHT TO REMAIN
- See Electrical Plans for Lighting Details

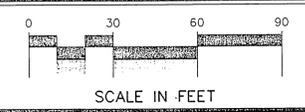


**Typical Section Apron Expansion along Service Road**



**Typical Section Access and Service Roads**

**Heavy Aircraft Apron Expansion  
Terminal Apron Expansion-West end**

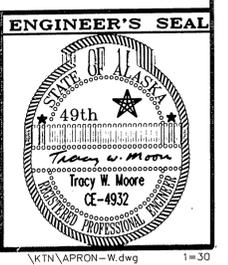


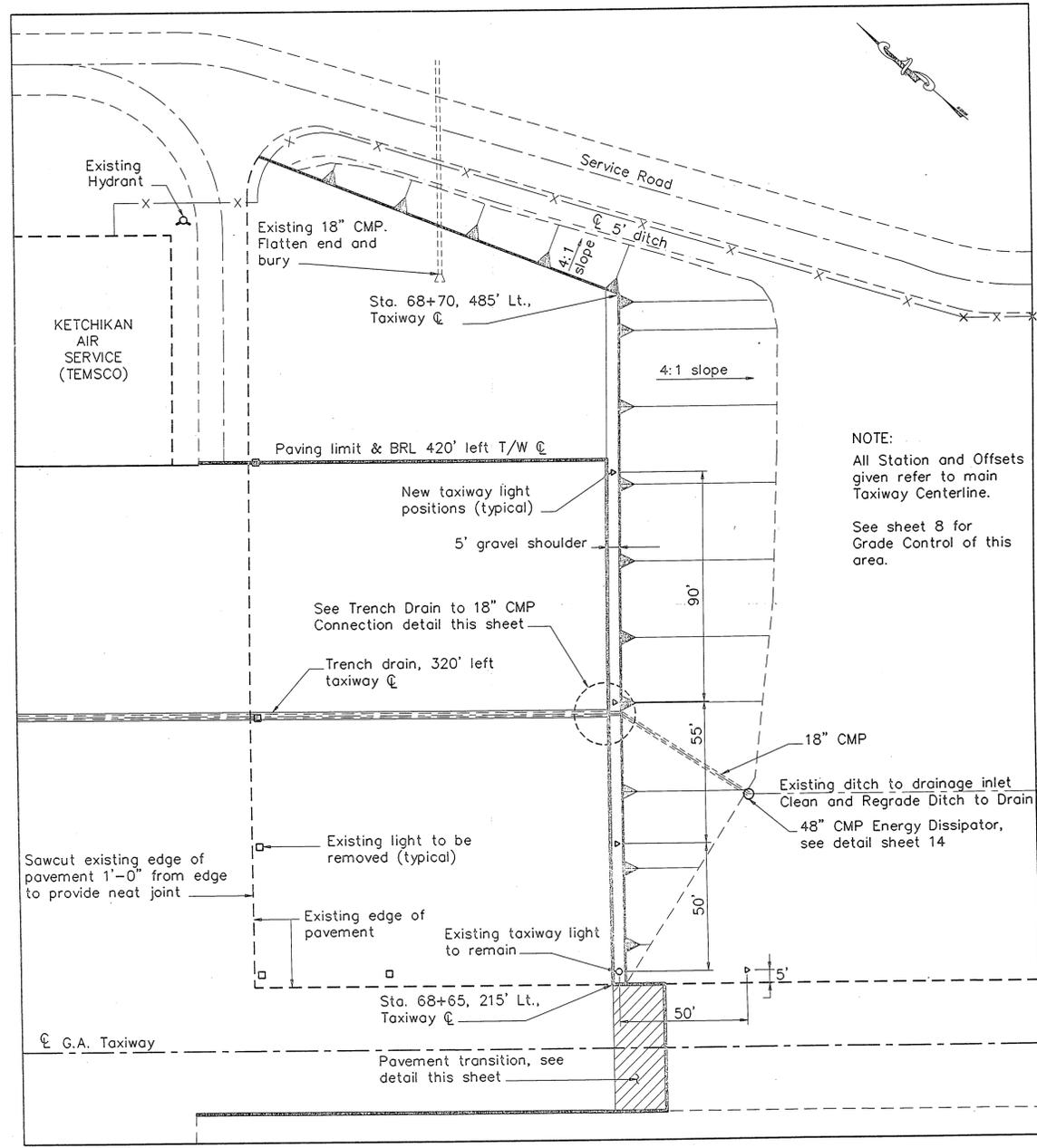
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AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

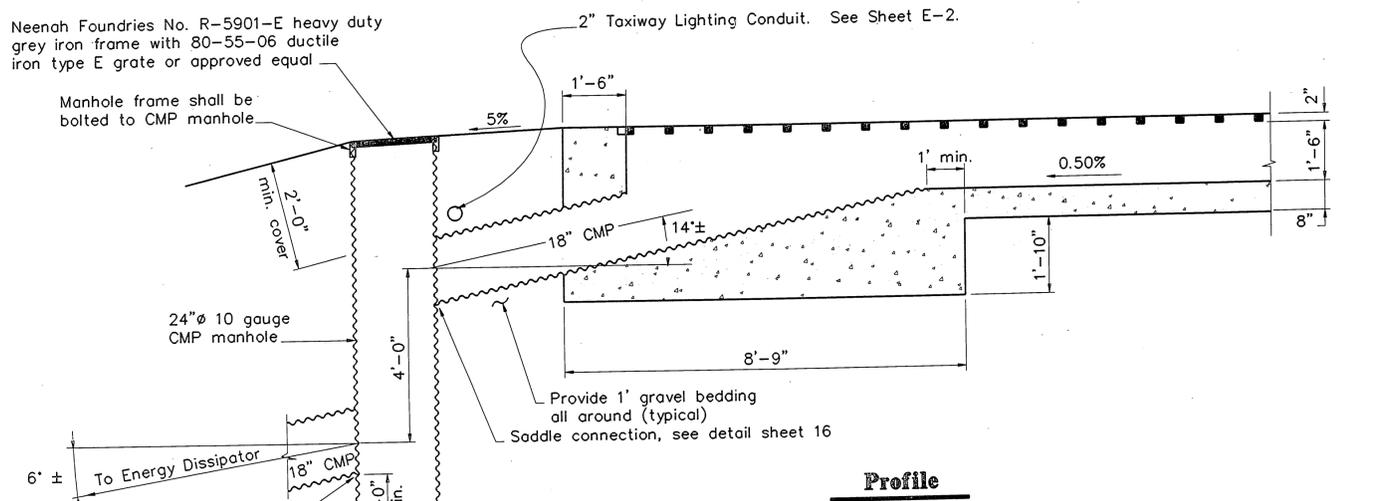
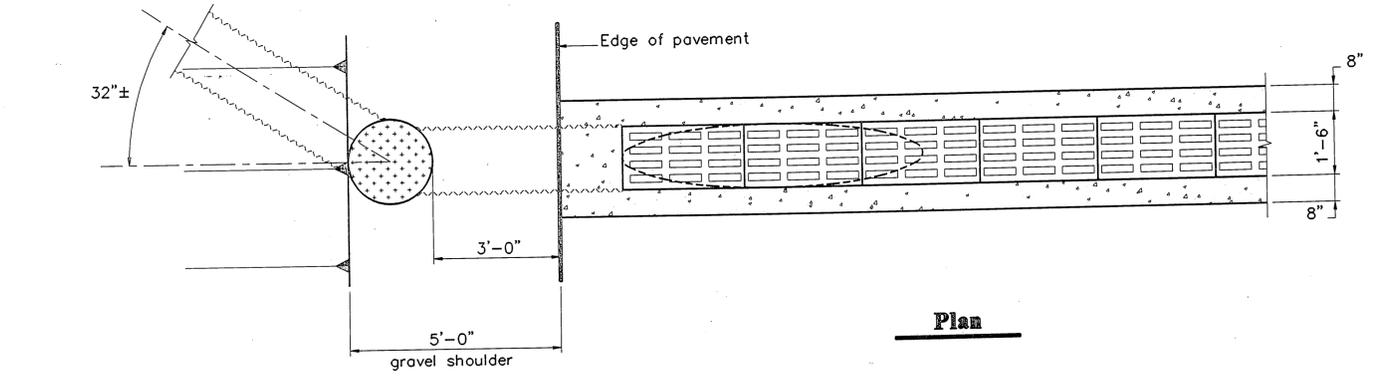
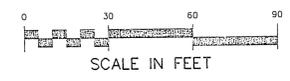
Ketchikan  
Alaska  
Ketchikan Airport  
Apron & Taxiway Improvements  
Heavy Aircraft Apron Expansion

DESIGNED BY: L.P. Carroll	PROJECT No. 70035
DRAWN BY: AutoCAD / BWB	DATE: JULY 1992
CHECKED BY: T.W. Moore	SHEET 9 OF 19



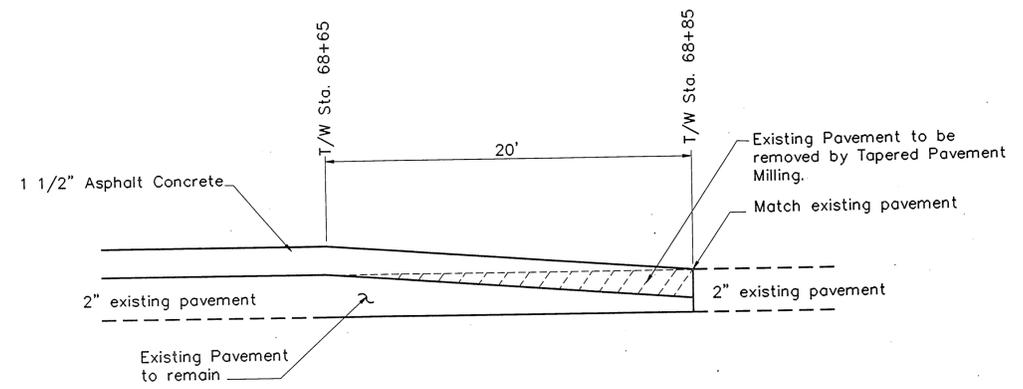


**Light Aircraft Apron Expansion**



**Trench Drain to 18" CMP Connection**

NOT TO SCALE



**Pavement Transition Detail**

NOT TO SCALE

BY:	DATE:	DESCRIPTION OF CHANGE:

**RECORD OF REVISIONS**

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

Ketchikan

Ketchikan Airport  
**Apron & Taxiway Improvements**  
 Light Aircraft Apron Expansion

Alaska

DESIGNED BY:  
L.P. Carroll

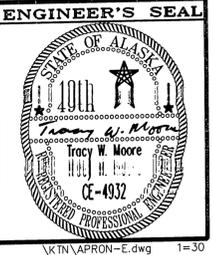
DRAWN BY:  
AutoCAD / BWB

CHECKED BY:  
T.W. Moore

PROJECT No.  
70635

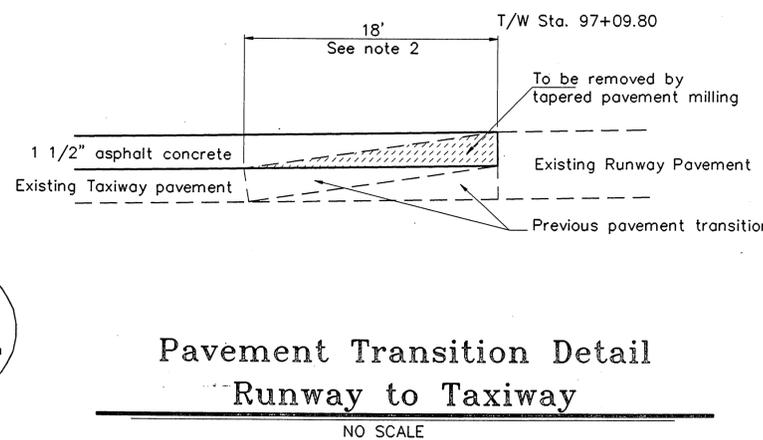
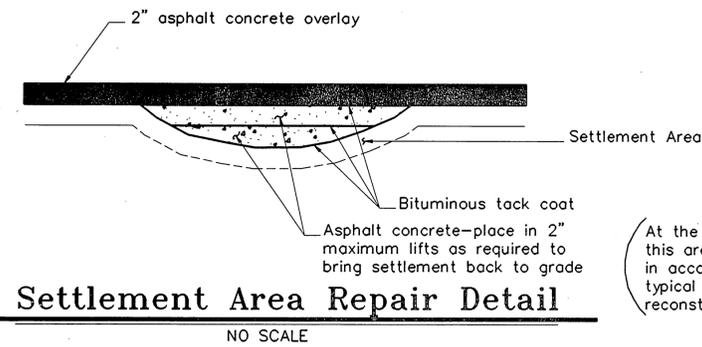
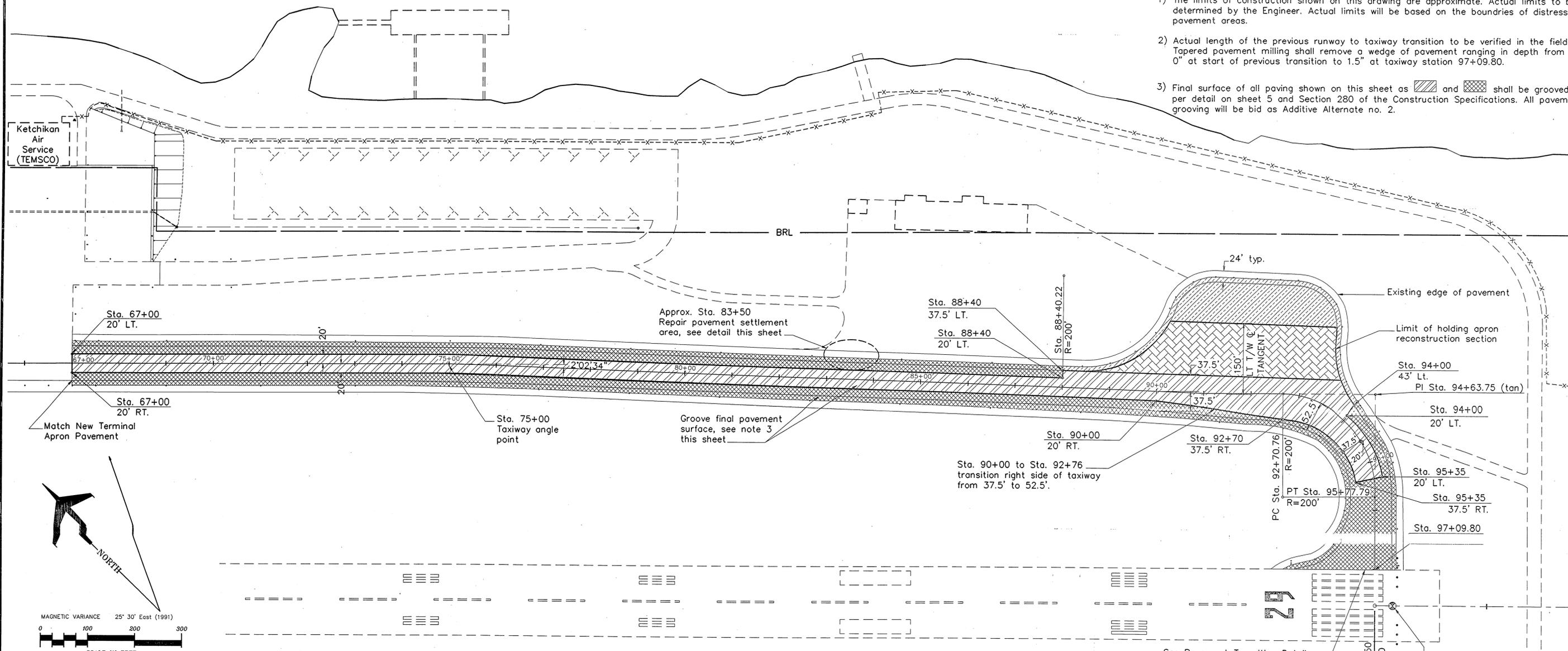
DATE:  
JULY 1992

SHEET 10 OF 19



**TAXIWAY NOTES :**

- 1) The limits of construction shown on this drawing are approximate. Actual limits to be determined by the Engineer. Actual limits will be based on the boundaries of distressed pavement areas.
- 2) Actual length of the previous runway to taxiway transition to be verified in the field. Tapered pavement milling shall remove a wedge of pavement ranging in depth from 0" at start of previous transition to 1.5" at taxiway station 97+09.80.
- 3) Final surface of all paving shown on this sheet as  and  shall be grooved per detail on sheet 5 and Section 280 of the Construction Specifications. All pavement grooving will be bid as Additive Alternate no. 2.



**CONSTRUCTION LEGEND**

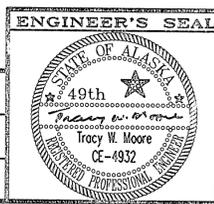
-  RECONSTRUCT HOLDING APRON
-  OVERLAY HOLDING APRON
-  RECONSTRUCT TAXIWAY KEEL SECTION
-  OVERLAY TAXIWAY

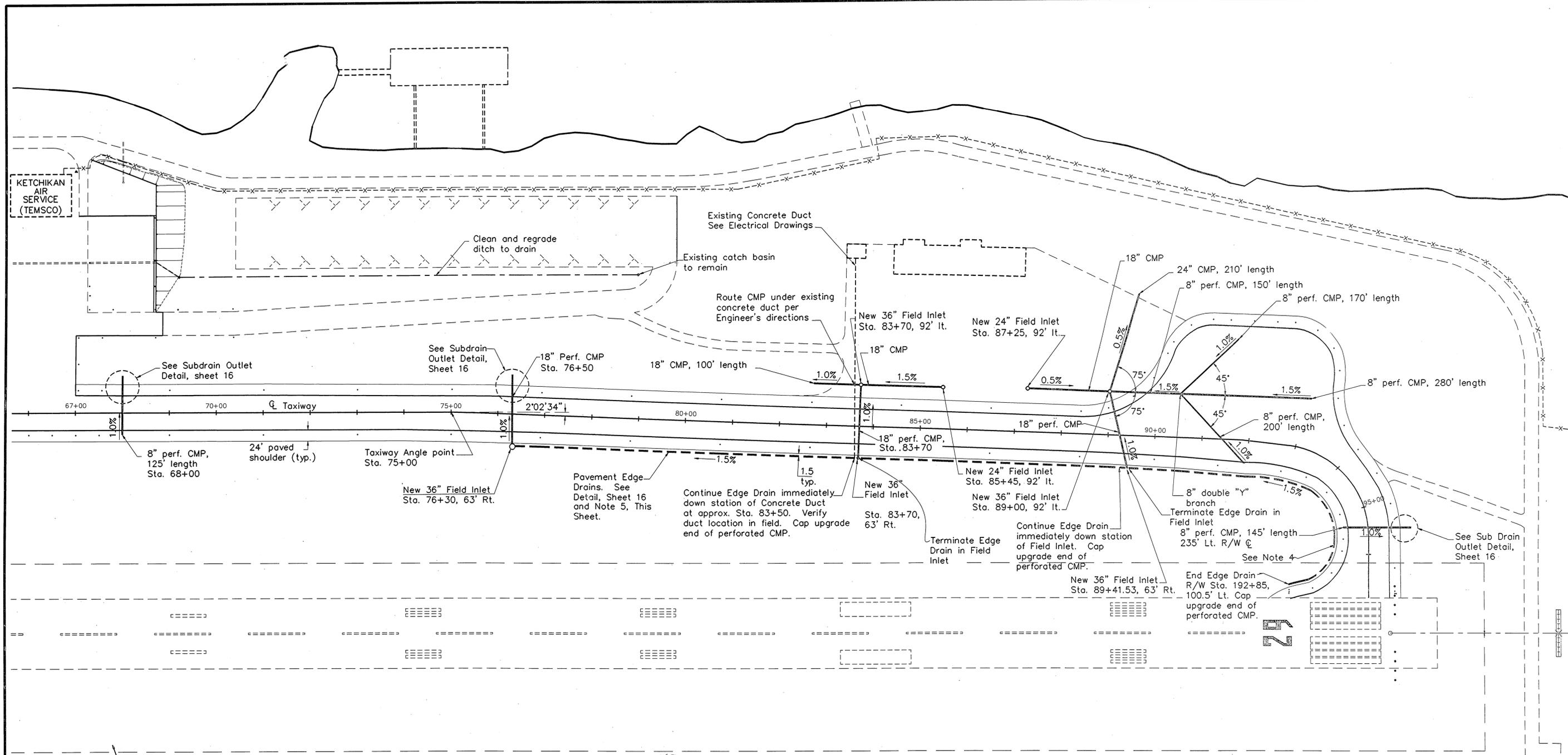
BY:	DATE:	DESCRIPTION OF CHANGE:

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

Ketchikan  
 Alaska  
 Ketchikan Airport  
 Apron & Taxiway Improvements  
 Taxiway Pavement Improvements

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DRAWN BY: AutoCAD / BWB	DATE: JULY, 1992
CHECKED BY: T.W. Moore	SHEET 11 OF 19





**NOTES:**

1. ALL CMP CULVERTS AND SUBDRAINS TO BE 14 GAUGE GALVANIZED STEEL.
2. ALL CMP FIELD INLETS TO BE 12 GAUGE GALVANIZED STEEL.
3. SEE SHEET 16 FOR SUB DRAIN, INLET, AND EDGE DRAIN DETAILS.
4. LAY PIPE FOR EDGE DRAINS AROUND TAXIWAY CURVE IN CHORDS USING 11 1/4" ELBOWS AND CHORD LENGTHS AS NECESSARY TO MATCH CURVE.
5. ALL PAVEMENT EDGE DRAINS WILL BE BID AS ADDITIVE ALTERNATE NO. 1.

BY:	DATE:	DESCRIPTION OF CHANGE:

**RECORD OF REVISIONS**

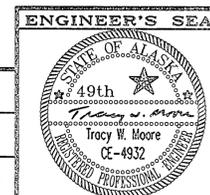
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 DEPARTMENT OF TRANSPORTATION  
 AND PUBLIC FACILITIES  
 SOUTHEAST REGION DESIGN & CONSTRUCTION

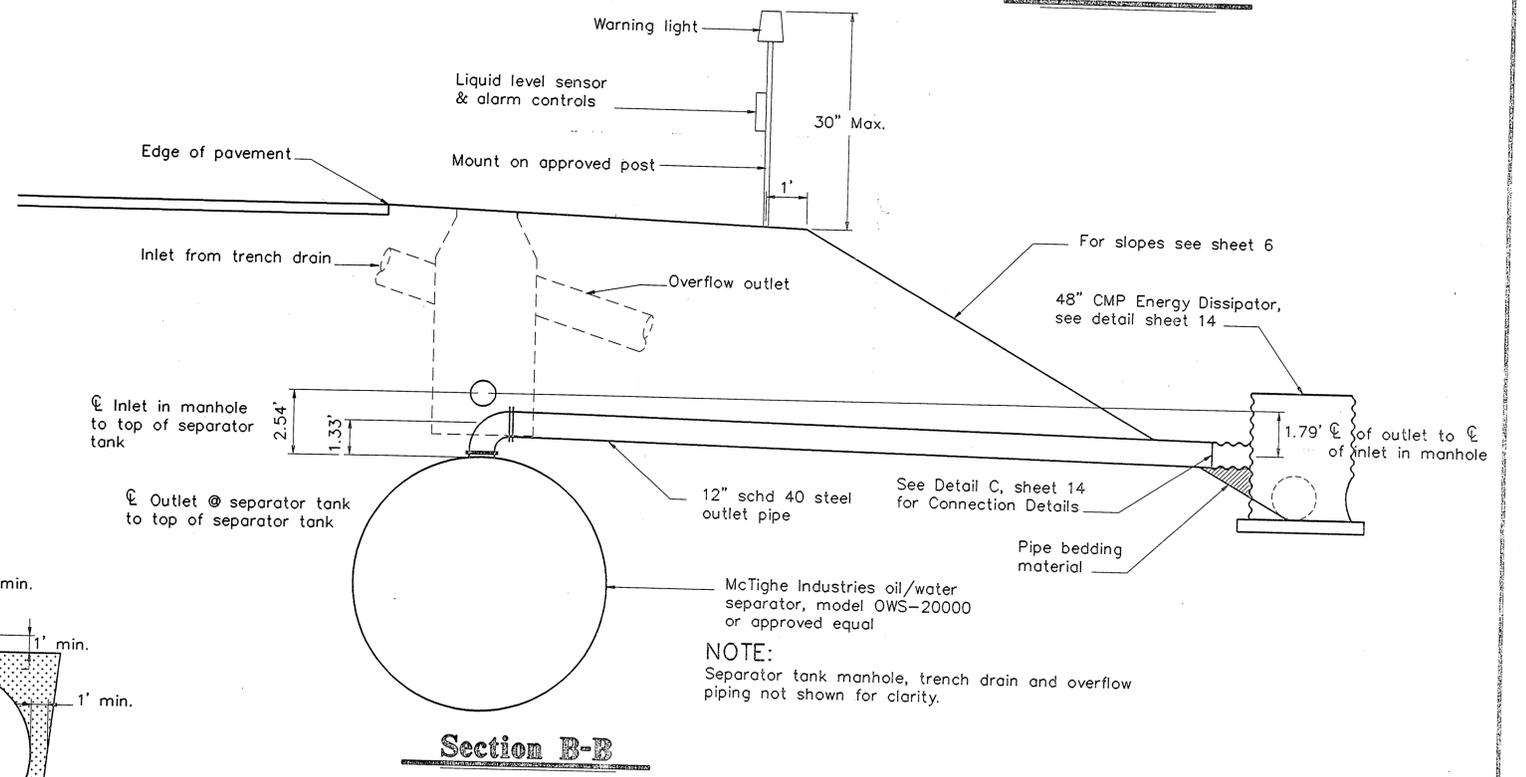
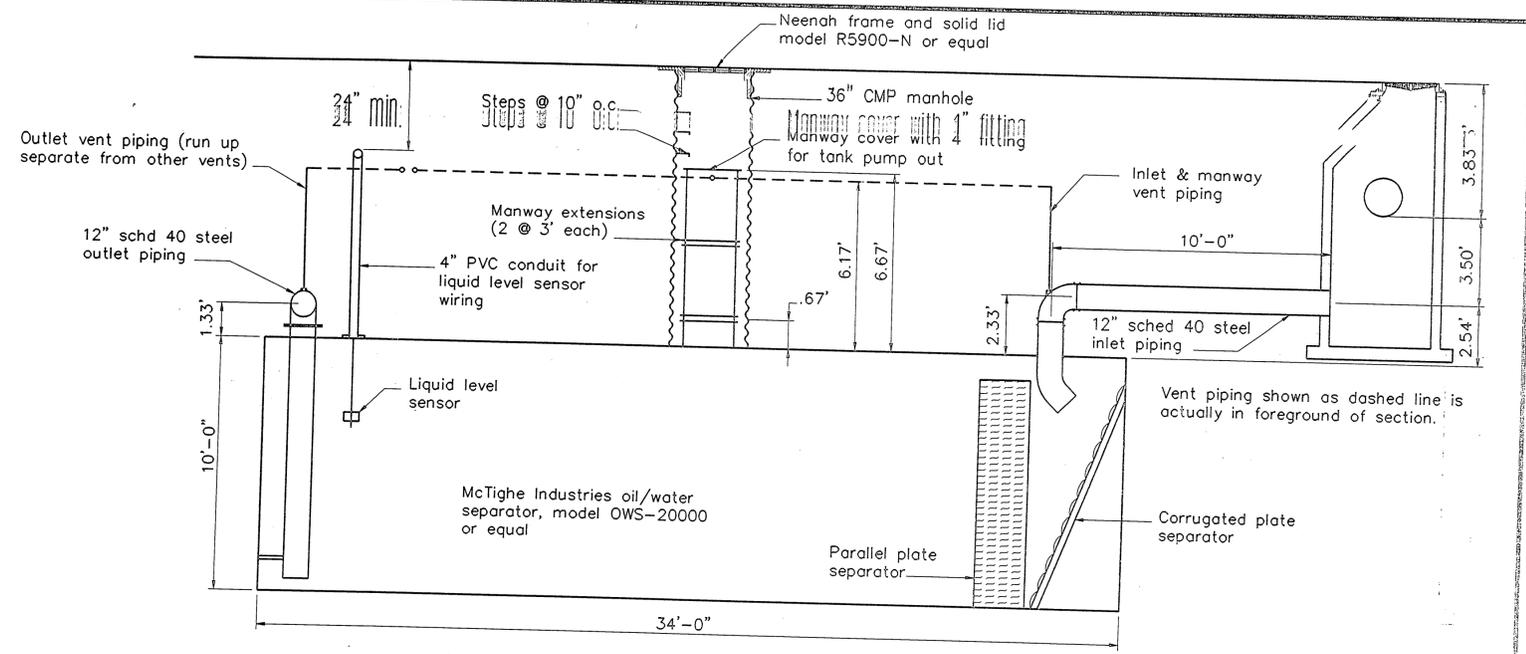
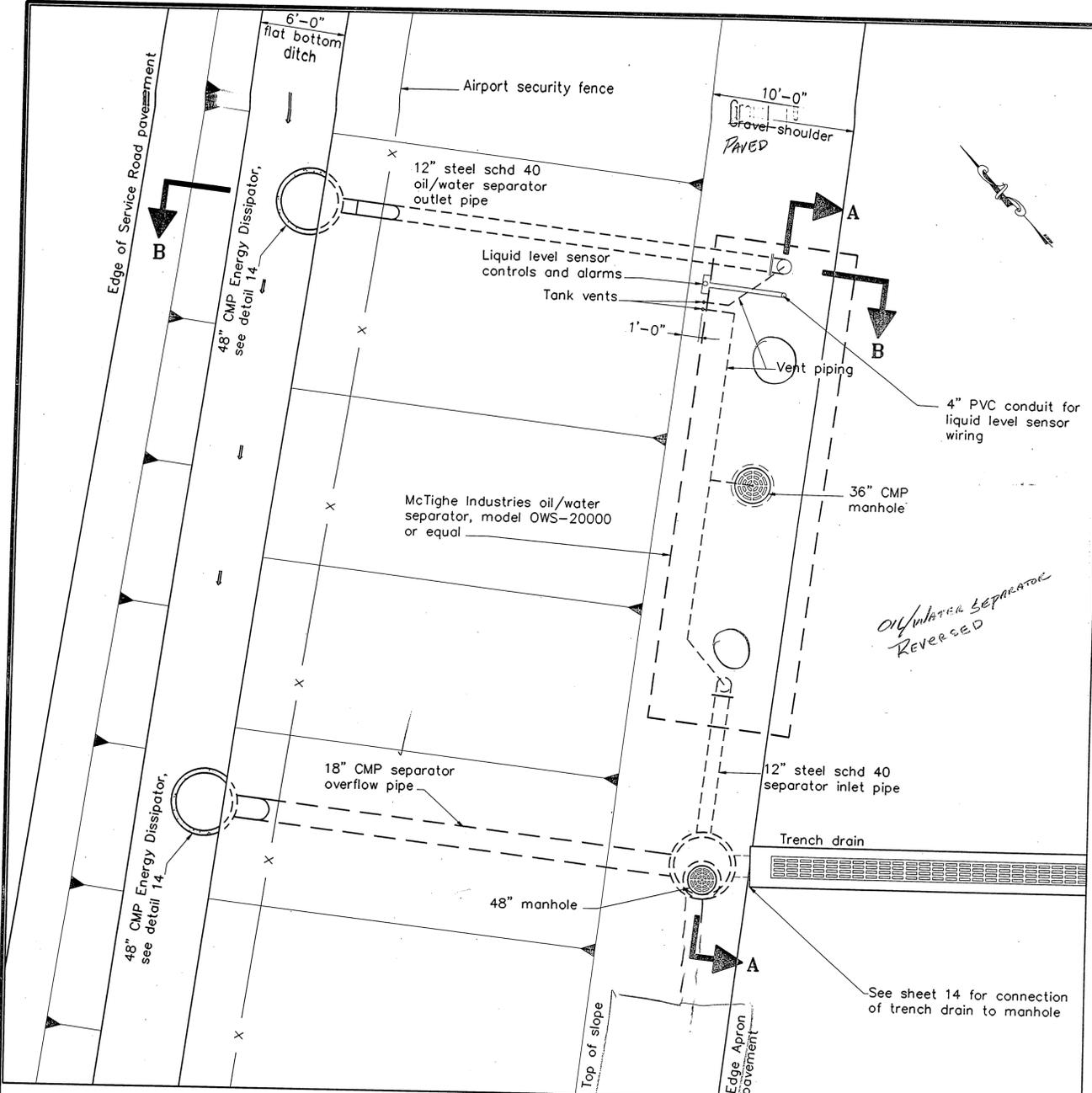
Ketchikan

Alaska  
 Ketchikan Airport  
 Apron & Taxiway Improvements  
 Taxiway Drainage Improvements

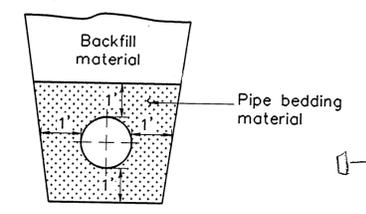
Alaska

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DRAWN BY: AutoCAD / BWB	DATE: JULY 1992
CHECKED BY: T.W. Moore	SHEET 12 OF 19

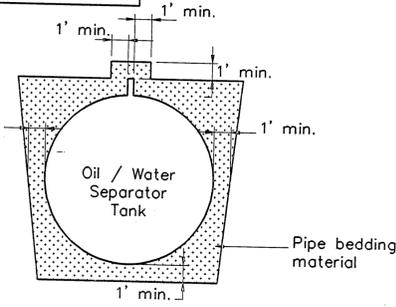




**Oil / Water Separator Plan View**



**Typ. Pipe Bedding Detail**



**Oil / Water Separator Tank Bedding Detail**

**DESIGN DATA:**  
Maximum Design Flow - 2820 GPM into Separator

BY:	DATE:	DESCRIPTION OF CHANGE:

**RECORD OF REVISIONS**

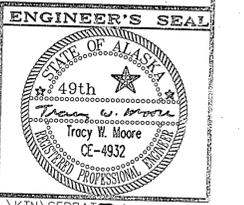
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DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

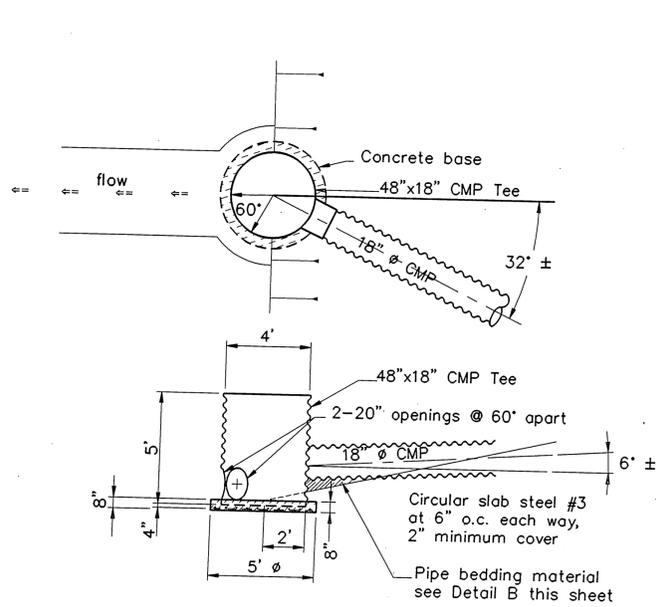
Ketchikan

Alaska  
Ketchikan Airport  
Apron & Taxiway Improvements  
Oil / Water Separator

Alaska

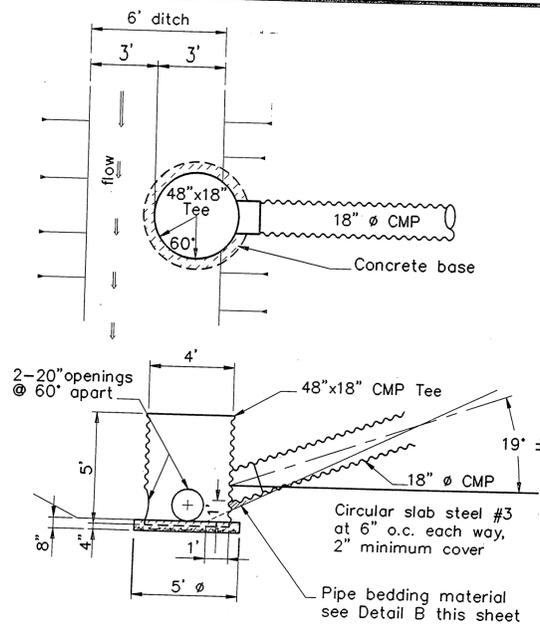
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DRAWN BY: AutoCAD / BWB	DATE: JULY 1992
CHECKED BY: T.W. Moore	SHEET 13 OF 19





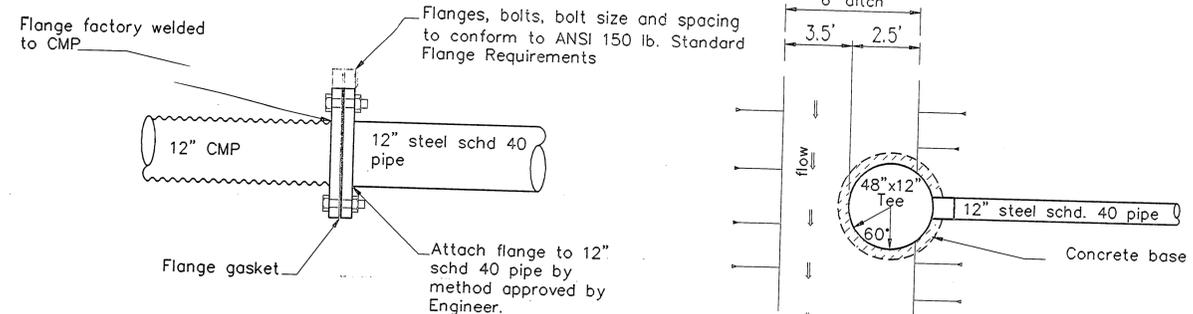
**Light Aircraft Apron Expansion Energy Dissipator Detail**

( No Scale )

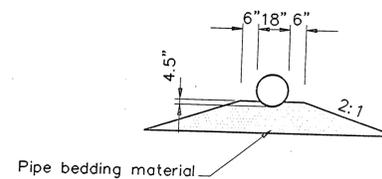


**Overflow Outlet Energy Dissipator Detail**

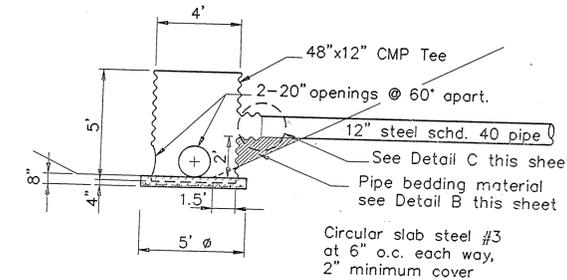
( No Scale )



**Detail C**

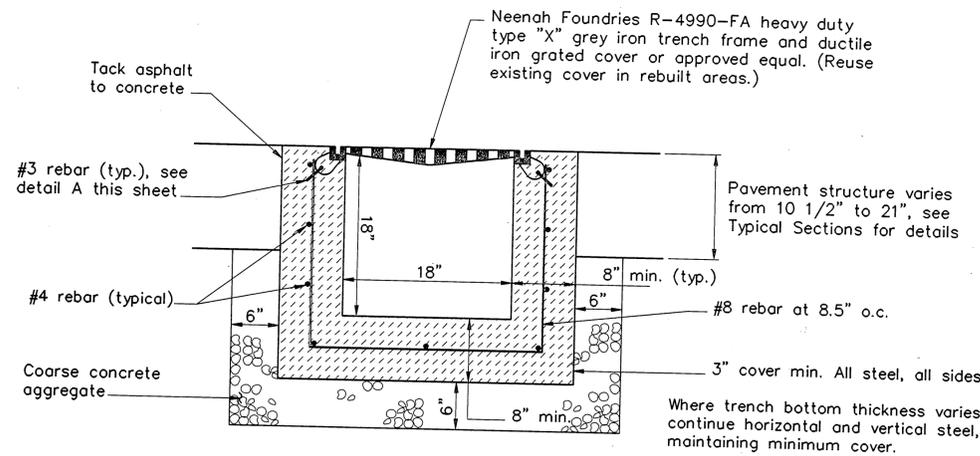


**Detail B**



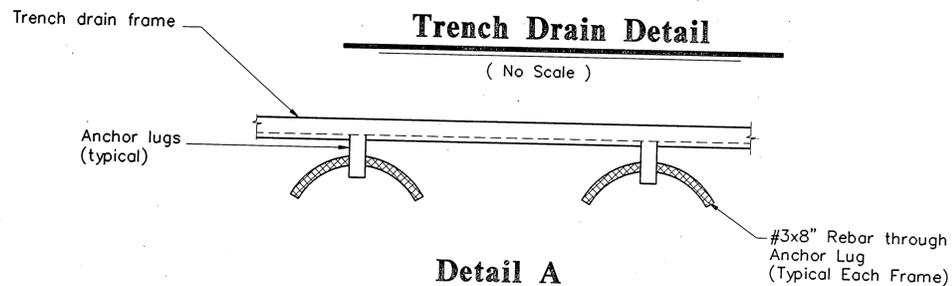
**Oil/Water Separator Outlet Energy Dissipator Detail**

( No Scale )



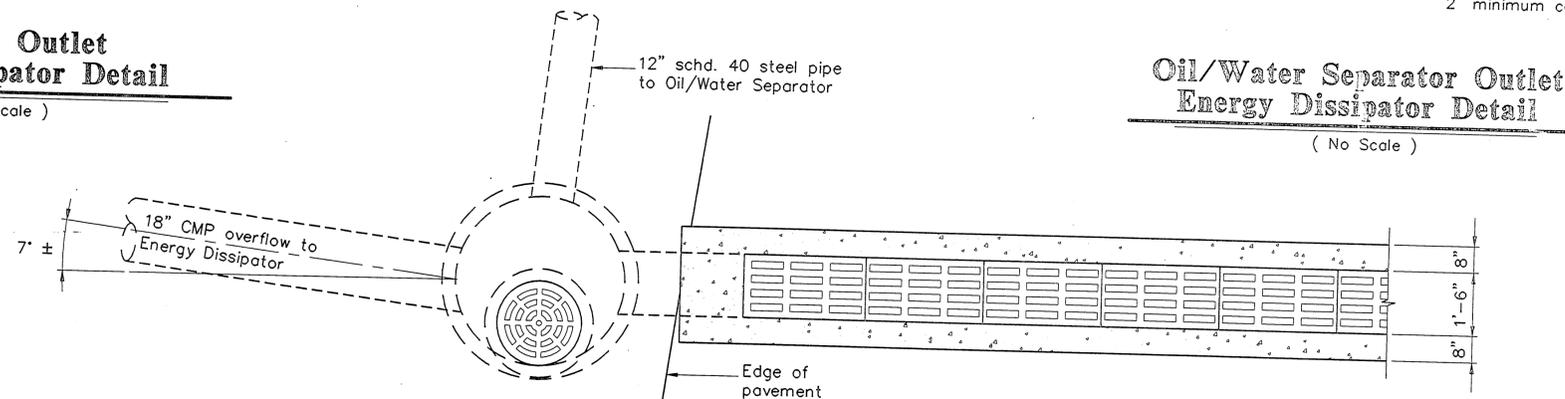
**Trench Drain Detail**

( No Scale )

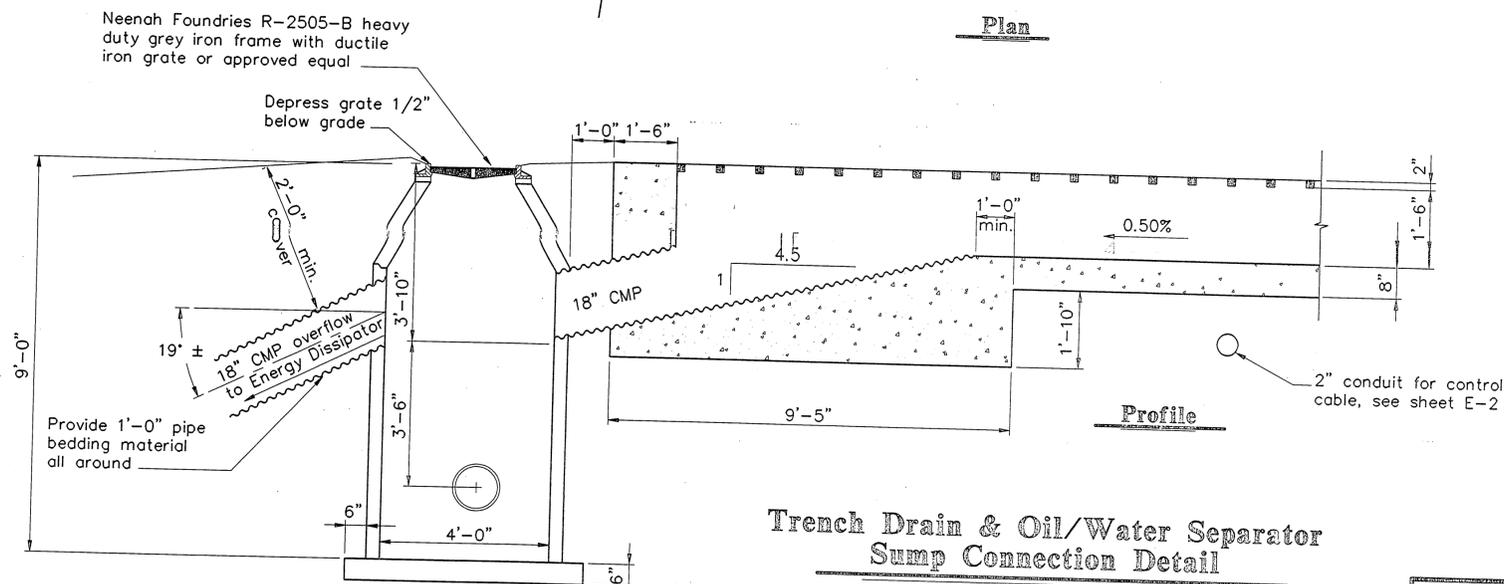


**Detail A Anchor Lugs sideview**

( No Scale )



**Plan**



**Profile**

**Trench Drain & Oil/Water Separator Sump Connection Detail**

( No Scale )

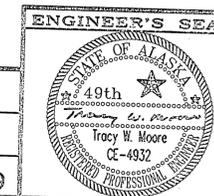
BY:	DATE:	DESCRIPTION OF CHANGE:

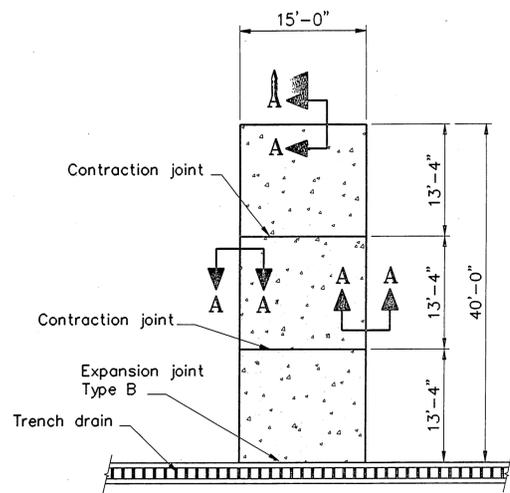
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

Ketchikan

Ketchikan Airport  
Apron and Taxiway Improvements  
Drainage Details

Alaska	DESIGNED BY: L.P. Carroll	PROJECT No. 70635
	DRAWN BY: AutoCAD / BWB	DATE: JULY, 1992
	CHECKED BY: T.W. Moore	SHEET 14 OF 19



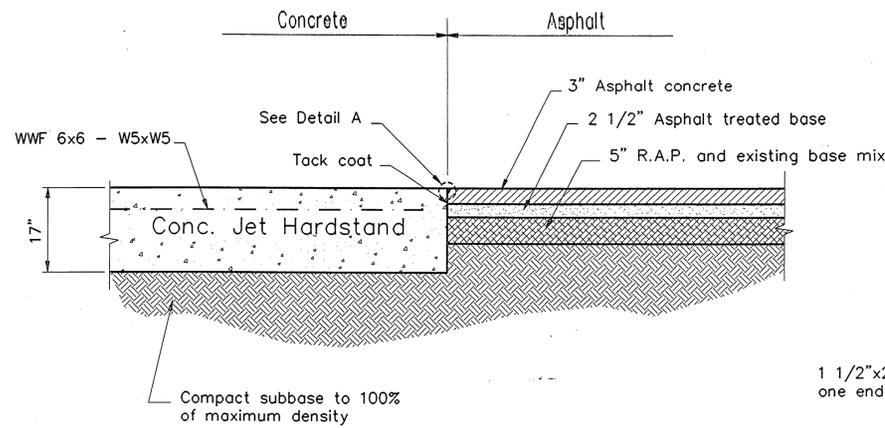


**Concrete Jet Hardstands  
Nosewheel Section (see note 1)**

Plan View

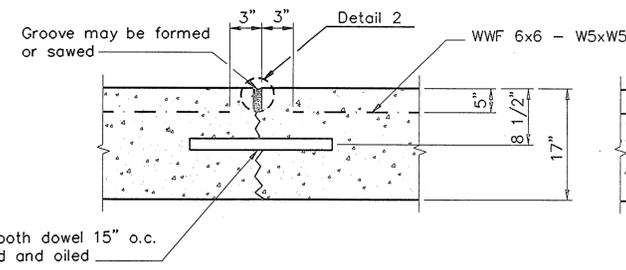
**NOTES :**

1. Nosewheel section to be constructed for new hardstand position. Rebuilt hardstand to retain existing nosewheel section.
2. See sheet 7 for hardstand locations.

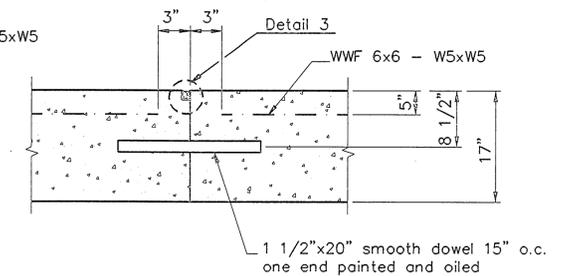


**Section A-A**

Not to Scale



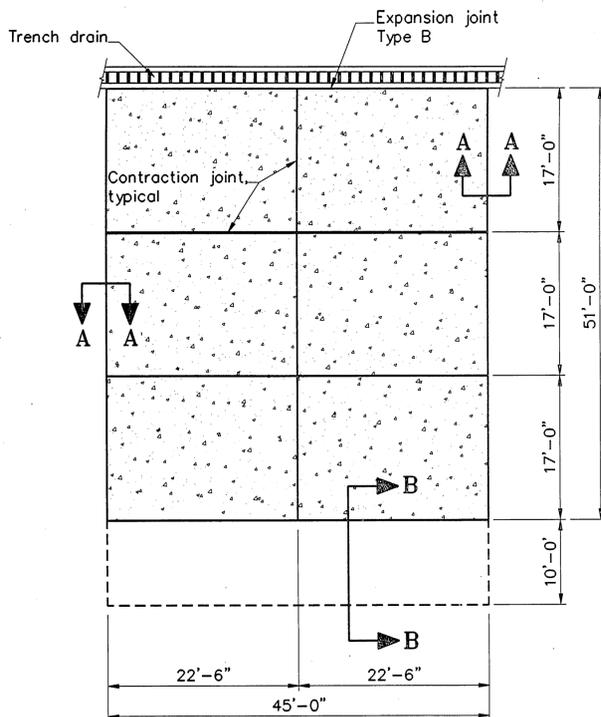
**Contraction Joint Detail**



**Construction Joint Detail**

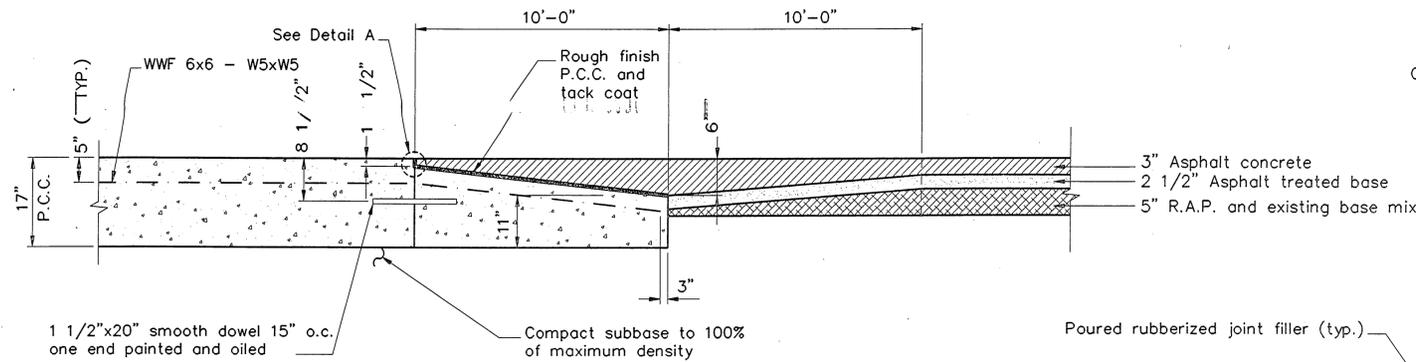
**Note :**

Minimum 12" end lap and minimum 6" side lap on welded wire fabric.



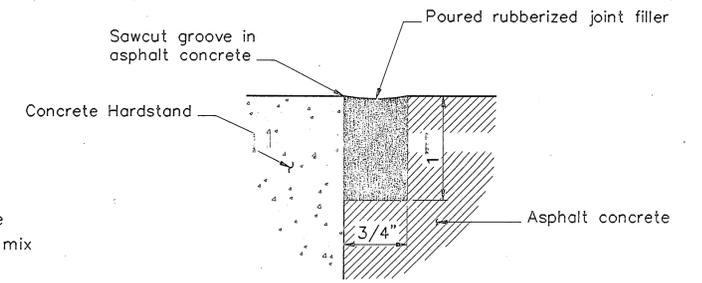
**Concrete Jet Hardstands  
Maingear Section**

Plan View

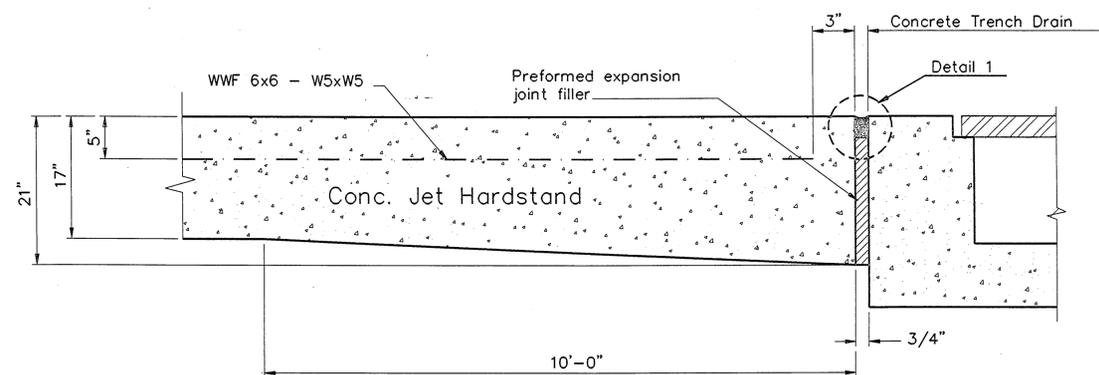


**Section B-B**

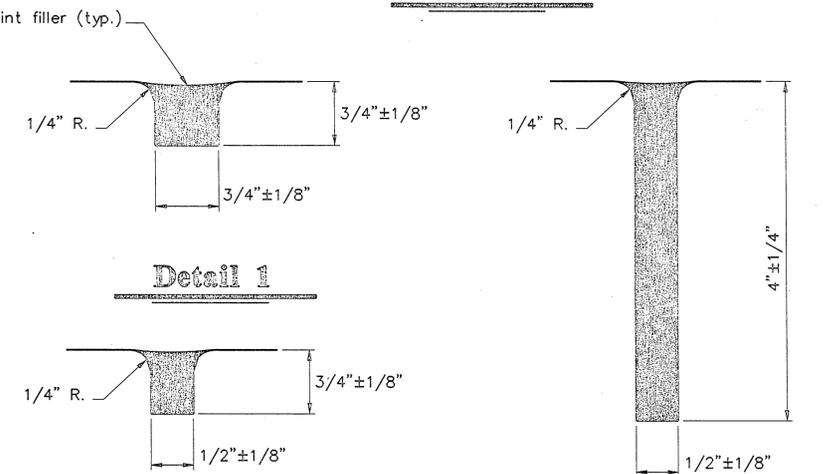
Not to Scale



**Detail A**



**Expansion Joint - Type B Detail**



**Detail 1**

**Detail 3**

**Detail 2**

**Joint Sealant Details**

BY:	DATE:	DESCRIPTION OF CHANGE:

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
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SOUTHEAST REGION DESIGN & CONSTRUCTION

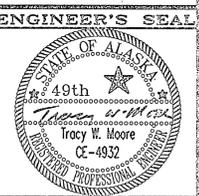
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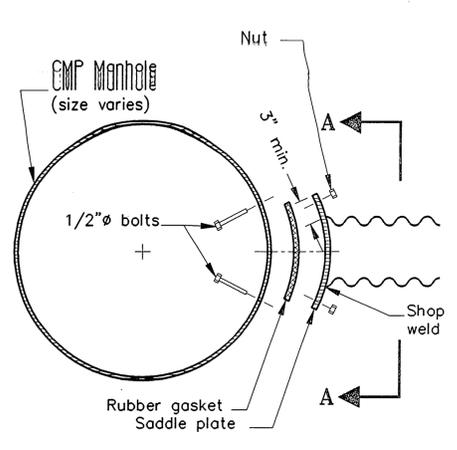
Ketchikan Airport  
Apron & Taxiway Improvements  
Concrete Jet Hardstands

Alaska

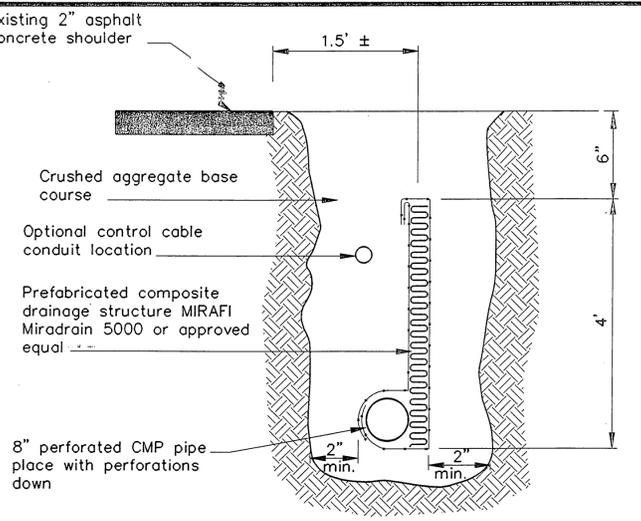
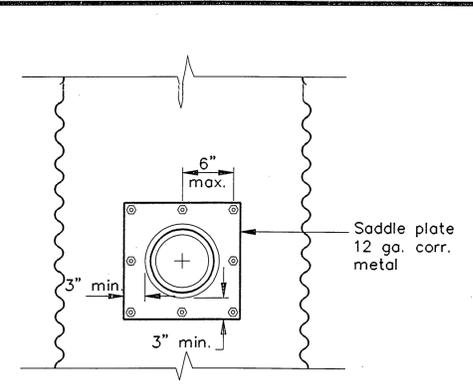
DESIGNED BY:  
L.P. Carroll  
DRAWN BY:  
AutoCAD / BWB  
CHECKED BY:  
T.W. Moore

PROJECT No.  
70835  
DATE:  
JULY, 1992  
SHEET 15 OF 19

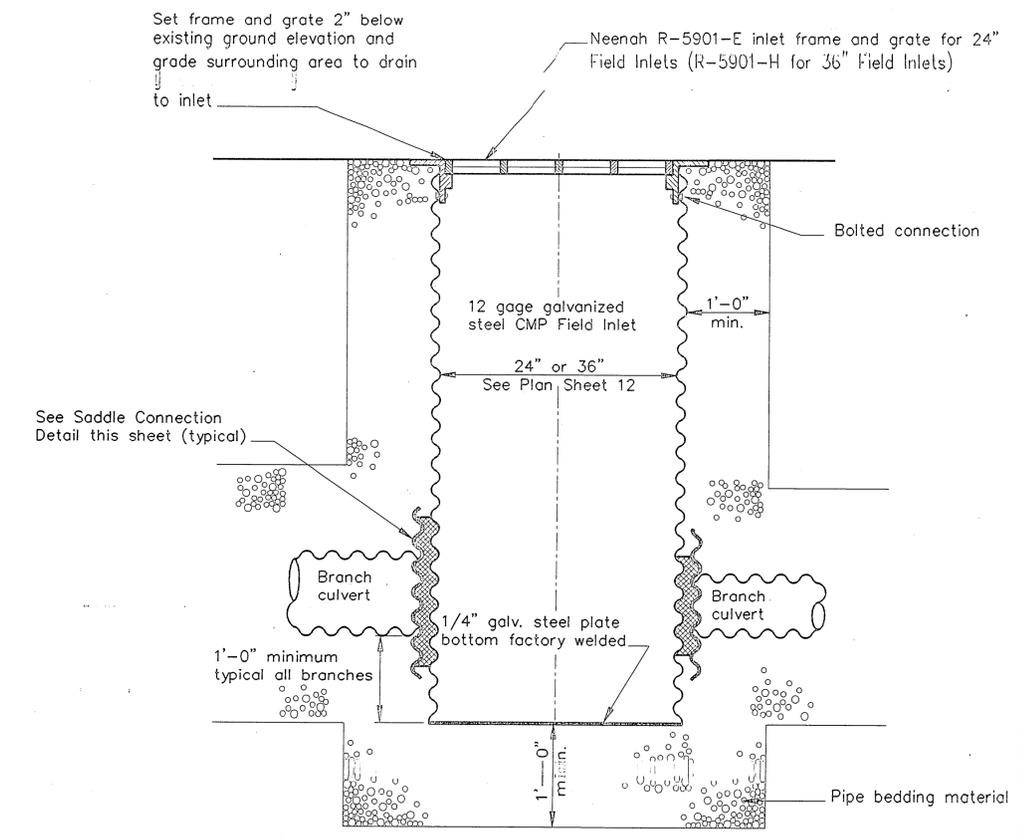




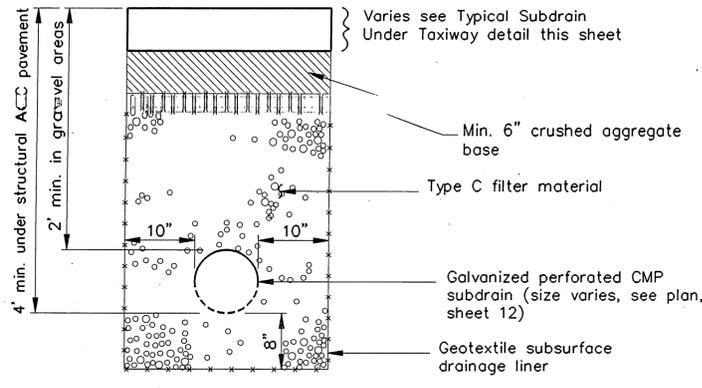
**Saddle Connection Detail**  
(See Note 1)



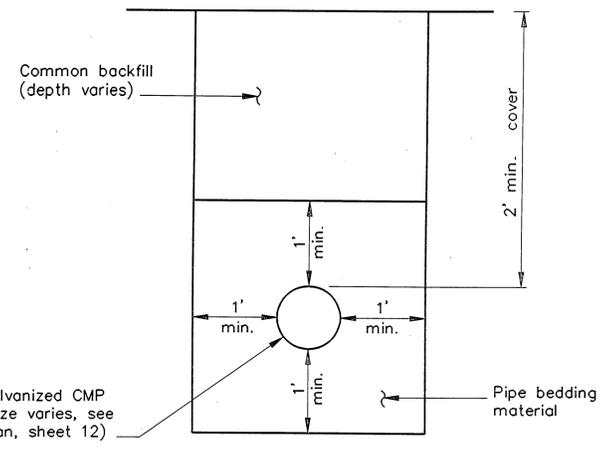
**Pavement Edge Drain Detail**



**Typical Field Inlet Detail**

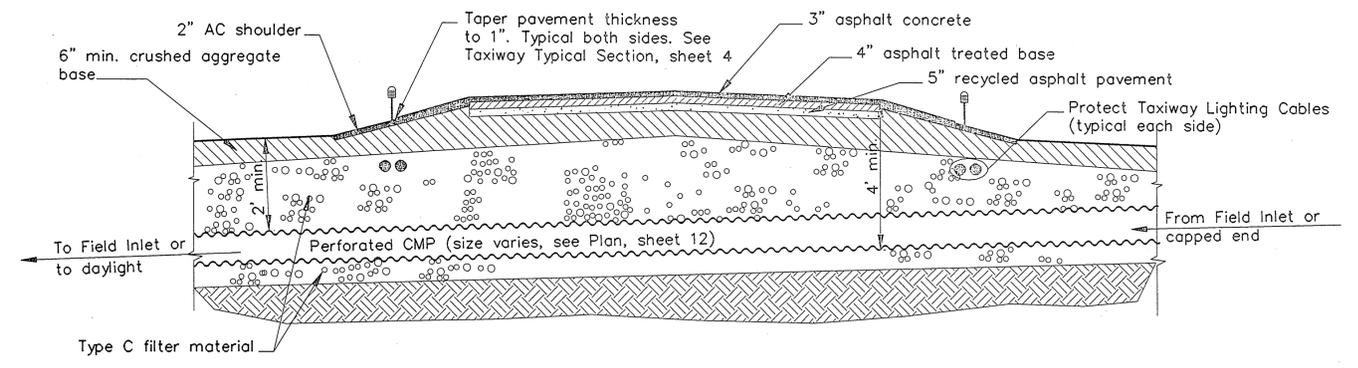


**Subdrain Detail**



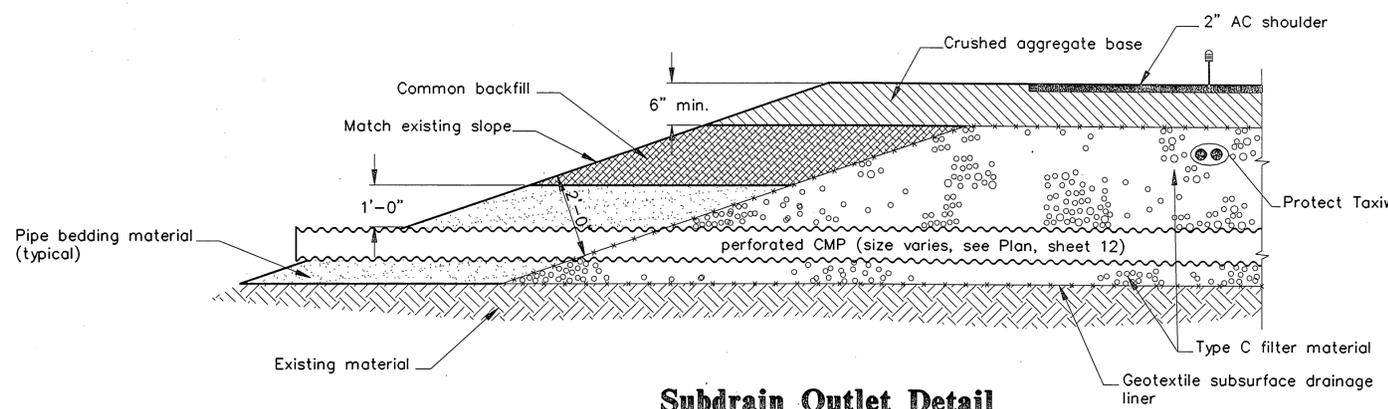
**Typical Non-Perforated CMP Bedding Detail**

**NOTES :**  
1. At the Contractor's option, factory branch culvert sections may be fabricated onto the field inlets in lieu of Saddle Connection.



**Typical Subdrain Under Taxiway**

Subdrains under Holding Apron are similar, maintain minimum 4' distance from pavement grade to pipe invert (may be less under A.C. shoulders), 2' minimum cover over pipe in gravel areas, and minimum 6' of crushed aggregate base over filter material. Pavement section shall be constructed to the Taxiway Keel section, as shown, across the entire full strength pavement section in all areas.



**Subdrain Outlet Detail**

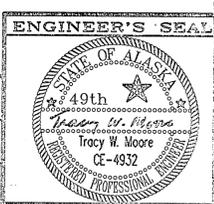
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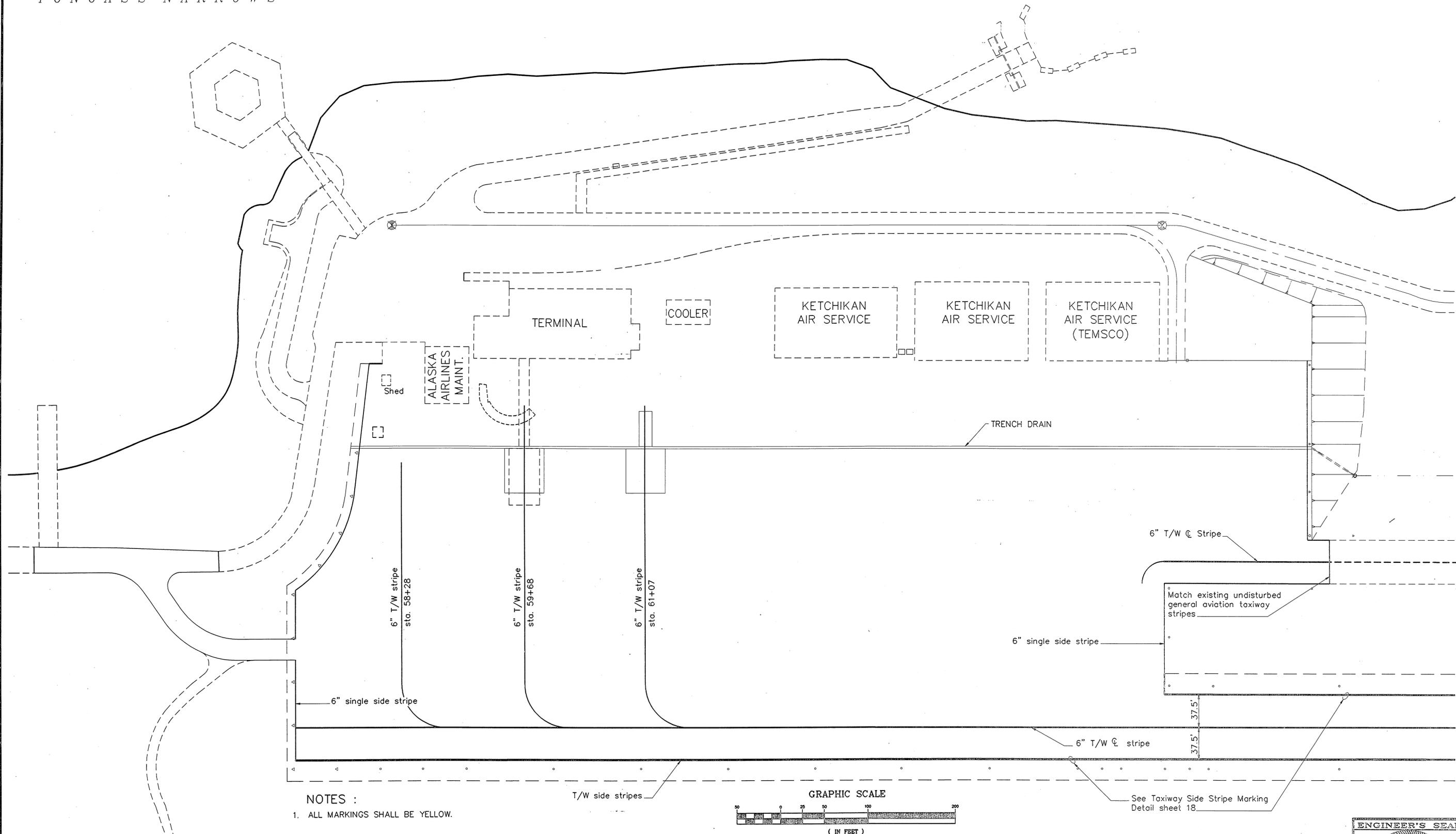
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

Ketchikan

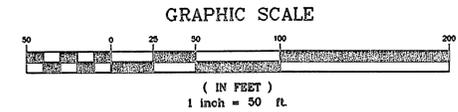
Alaska  
Ketchikan Airport  
Apron & Taxiway Improvements  
Subdrain Inlet & Edge Drain Details

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CHECKED BY: T.W. Moore	SHEET 16 OF 19





NOTES :  
1. ALL MARKINGS SHALL BE YELLOW.



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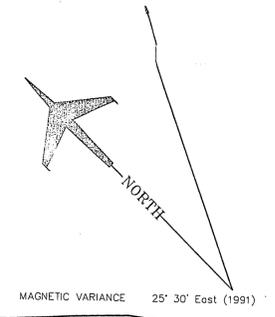
STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION DESIGN & CONSTRUCTION

Ketchikan  
Alaska  
Ketchikan Airport  
Apron & Taxiway Improvements  
Striping Plan

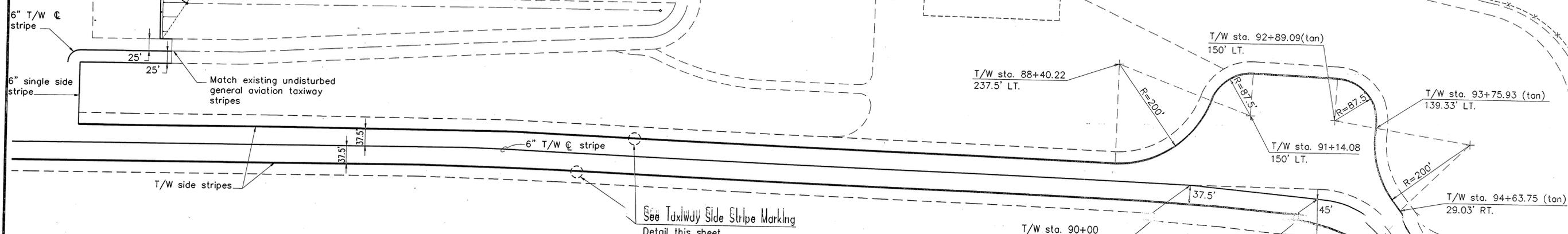
DESIGNED BY:  
L.P. Carroll  
DRAWN BY:  
AutoCAD / BWB  
CHECKED BY:  
T.W. Moore

PROJECT No.  
70635  
DATE:  
JULY, 1992  
SHEET 17 OF 19



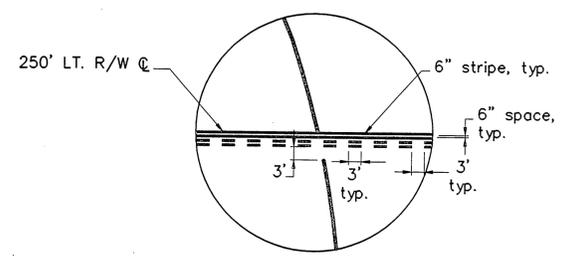
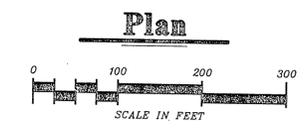


Ketchikan Air Service (TEMSCO)

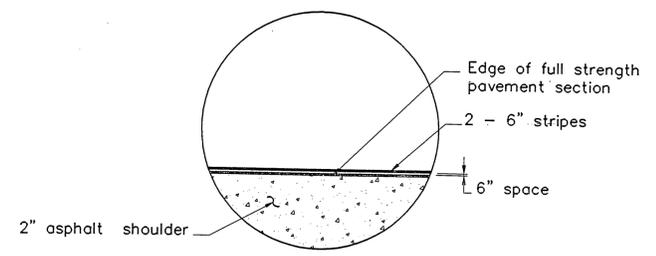


- NOTES:**
1. ALL TAXIWAY MARKINGS SHALL BE YELLOW.

See Taxiway Side Stripe Marking Detail this sheet



**Holding Line Marking Detail**



**Taxiway Side Stripe Marking Detail**



BY:	DATE:	DESCRIPTION OF CHANGE:

**RECORD OF REVISIONS**

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

Ketchikan

Alaska  
Ketchikan Airport  
Apron & Taxiway Improvements  
Striping Plan

DESIGNED BY:  
L.P. Carroll

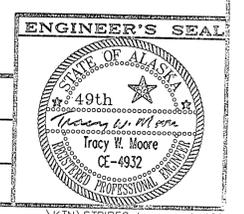
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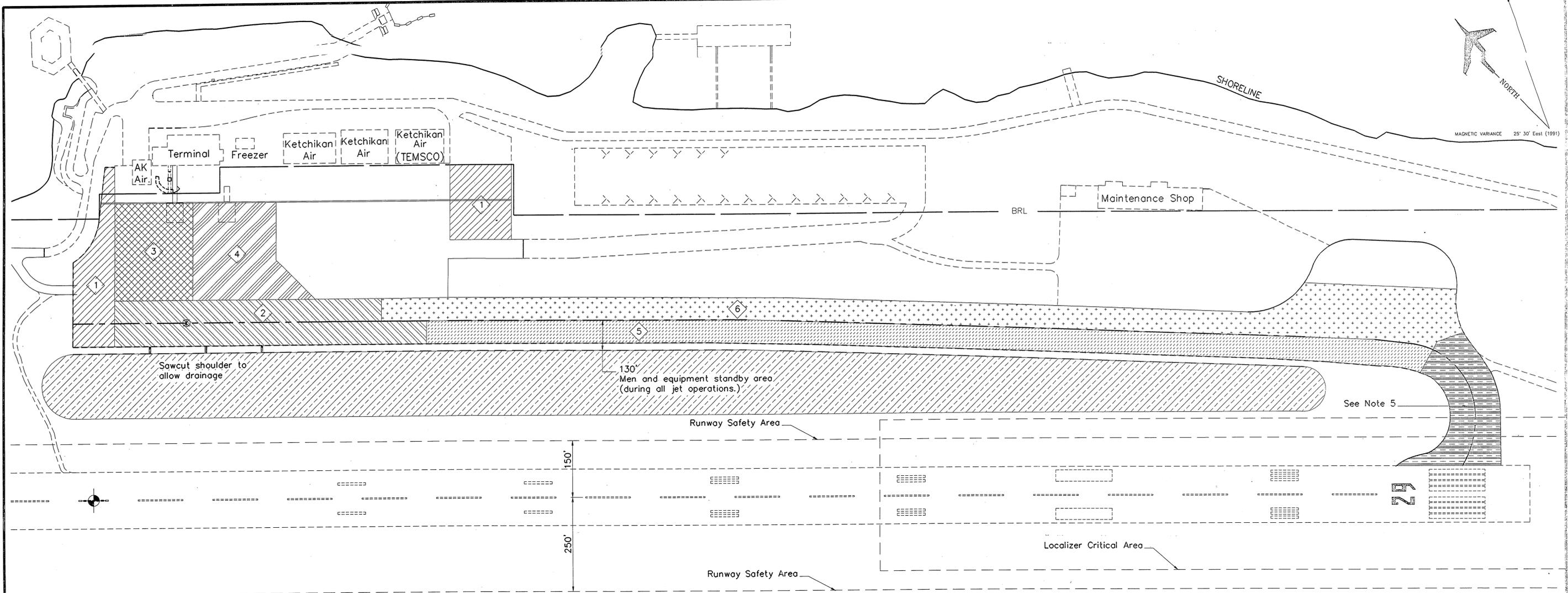
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PROJECT No.  
73835

DATE:  
JULY, 1992

SHEET 18 OF 19



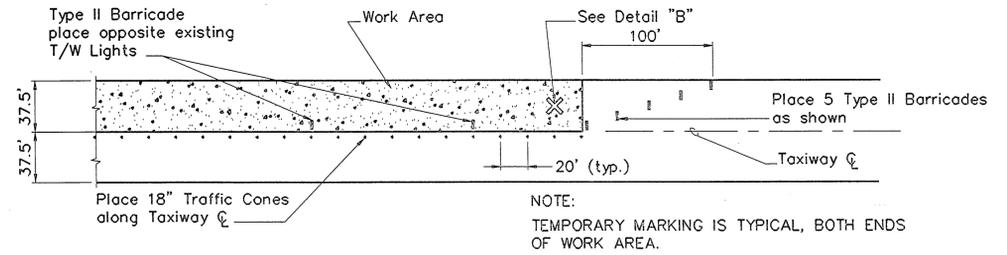


**NOTES :**

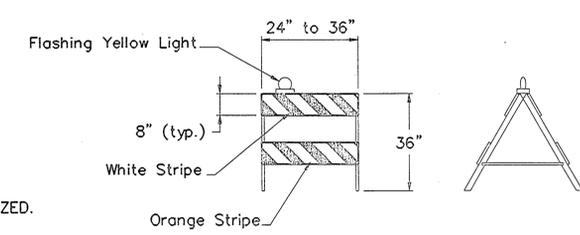
- 1 TEMPORARY PAVEMENT TRANSITIONS SHALL BE CONSTRUCTED AT ALL VERTICAL DROPS OF 1 1/2" OR GREATER IN THICKNESS. PAVEMENT TRANSITIONS SHALL BE SIZED SUCH THAT THE GRADE OF THE TRANSITION DOES NOT EXCEED 1.5%.
- 2 TEMPORARY DRAINAGE SHALL BE PROVIDED ALONG LOW SPOTS BY PLANING OUT A PORTION OF SHOULDER PAVEMENT OR BY MODIFYING THE TRENCH DRAIN TO ACCEPT WATER AT THE LOWER ELEVATIONS.
- 3 CHANGES TO THE CONSTRUCTION SEQUENCE MUST BE APPROVED IN WRITING BY THE AIRPORT MANAGER AND ENGINEER PRIOR TO COMMENCING THE WORK.
- 4 THE AIRPORT TAXIWAY (HALF WIDTH) AND APRON SHALL REMAIN OPERATIONAL AT ALL TIMES. TEMPORARY RELOCATION OF THE ITERANT OPERATIONS TO THE LIGHT APRON EXPANSION AREA WILL BE REQUIRED DURING APRON WORK. DURING THIS RELOCATION PERIOD THE CONTRACTOR SHALL PROVIDE A SHUTTLE FOR PASSENGER AND FREIGHT MOVEMENT FROM THE TERMINAL BUILDING.
- 5 THE SHARP CORNER OF TAXIWAY NEAR THE RUNWAY MAY NOT BE CONSTRUCTED IN A HALF WIDTH CONSTRUCTION SEQUENCE DUE TO THE TURNING RADIUS OF DESIGN AIRCRAFT. NIGHT TIME OPERATIONS ARE REQUIRED.
- 6 NO WORK (MEN AND EQUIPMENT) SHALL BE ALLOWED WITHIN THE RUNWAY SAFETY AREA DURING JET OPERATIONS.
- 7 SEE SECTION 80 OF THE SPECIFICATIONS FOR SPECIAL LIMITATIONS AND OPERATIONAL SAFETY CONCERNS.
- 8 DURING NIGHT TIME RUNWAY CLOSURES "X" MARKINGS (SEE DETAIL B, THIS SHEET) SHALL BE PLACED OVER RUNWAY NUMERALS AT EACH END OF RUNWAY.

**CONSTRUCTION SEQUENCE :**

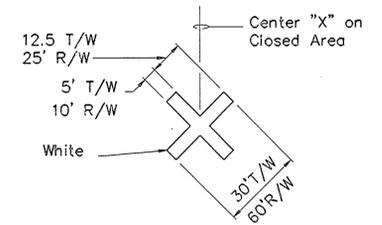
- A) COMPLETE EMBANKMENT WORK FOR APRON EXPANSION AREAS.
- B) COMPLETE MISCELLANEOUS WORK ON DRAINAGE, HARDSTANDS AND ELECTRICAL ITEMS.
- C) RECONSTRUCT THE APRON IN SECTIONS AS SHOWN ON ABOVE NUMBERS ②, ③ AND ④.
- D) PAVE TO TOP OF ASPHALT TREATED BASE IN AREAS ① THRU ④.
- E) RECONSTRUCT AREA ⑤ ON TAXIWAY TO TOP OF ATB.
- F) RECONSTRUCT AREA ⑥ ON TAXIWAY AND HOLDING AREA TO TOP OF ATB.
- G) PROVIDE FINAL OVERLAY ON REMAINING HOLDING AREA, TAXIWAY & APRON.
- H) COMPLETE STRIPING AND CLEANUP WORK.



**Taxiway Closure**



**Type II Barricade**



**Detail "B" (SEE NOTE 8)**

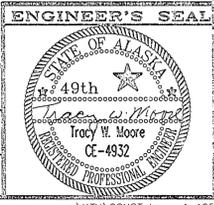
- BARRICADE NOTES :**
1. BARRICADE SHALL BE EITHER WOOD OR METAL.
  2. ORANGE AND WHITE STRIPES SHALL BE REFLECTORIZED.
  3. BARRICADES SHALL BE ANCHORED TO RESIST MOVEMENT BY JET BLAST.

BY:	DATE:	DESCRIPTION OF CHANGE:

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

Ketchikan  
 Alaska  
 Ketchikan Airport  
 Apron & Taxiway Improvements  
 Construction Sequence & Traffic Plan

DESIGNED BY: L.P. CARROLL	PROJECT No. 70635
DRAWN BY: AutoCAD / BWB	DATE: JULY, 1992
CHECKED BY: T. W. MOORE	SHEET 19 OF 19



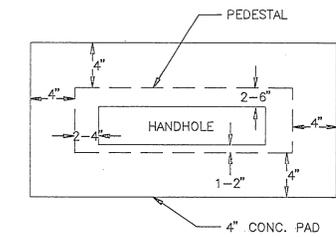
NOTES:

- SCOPE OF WORK: THIS PROJECT INCLUDES THE FOLLOWING ELEMENTS OF WORK AS SHOWN IN THESE DRAWINGS:
  - REPLACE PRIMARY POWER CABLES UTILIZED BY THE UTILITY, KEA.
  - REPLACE PRIMARY POWER TRANSFORMERS AND ADD PRIMARY SECTIONALIZING PEDESTALS.
  - REPLACE MANHOLE MH-13.
  - RECONFIGURE THE SERVICES AND STANDBY POWER FOR THE FAA CIRCUITS.
  - PROVIDE NEW TAXIWAY AND RUNWAY GUIDANCE SIGNS.
  - PROVIDE NEW TAXIWAY LIGHTING FOR APRON EXTENSIONS.
  - REPLACE EXISTING TAXIWAY LIGHTING CANS WHERE SHOWN IN THE DRAWINGS DUE TO FROST HEAVE.
  - REPLACE LIGHTING CONTROLS AND ADD RADIO CONTROLS FOR TAXIWAY, RUNWAY AND BEACON LIGHTING.
  - REPLACE THE LIGHTING CONTROL CABLE FROM THE FLIGHT SERVICE STATION (FSS) IN THE TERMINAL BUILDING TO THE REGULATOR BUILDING.
- OBTAIN THE FAA APPROVED TAXIWAY AND RUNWAY SIGNING PLAN FROM THE ENGINEER.
- REMOVE ALL WATER, SILT, AND DEBRIS FROM ALL OF THE EXISTING ELECTRICAL MANHOLES SHOWN IN THE DRAWINGS AT THE BEGINNING AND CONCLUSION OF THE PROJECT.
- REFER TO SHEET E-4 FOR THE EXISTING POWER SYSTEM SINGLE LINE DIAGRAM. REFER TO SHEET E-6 FOR THE RACEWAY/CABLE SCHEDULE.

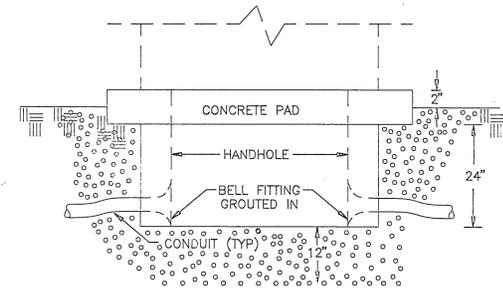
**SYMBOL LEGEND**

○	EXTG RUNWAY LIGHT
○	EXTG TAXIWAY LIGHT
⊙	EXTG THRESHOLD LIGHT
⊗	HANDHOLE
□	MANHOLE
⊠	NEW GUIDANCE SIGN
—E—	ELECTRIC CONDUIT
—C—	CONTROL CABLE
D-XX	DUCT BANK-NUMBER
MH-XX	MANHOLE-NUMBER
PP-XX	PRIMARY PEDESTAL-NUMBER

NOTE:  
DARK LINES IDENTIFY AREAS WHERE NEW EQUIPMENT OR MATERIALS ARE REQUIRED, EX, NEW CABLES IN EXISTING RACEWAYS.



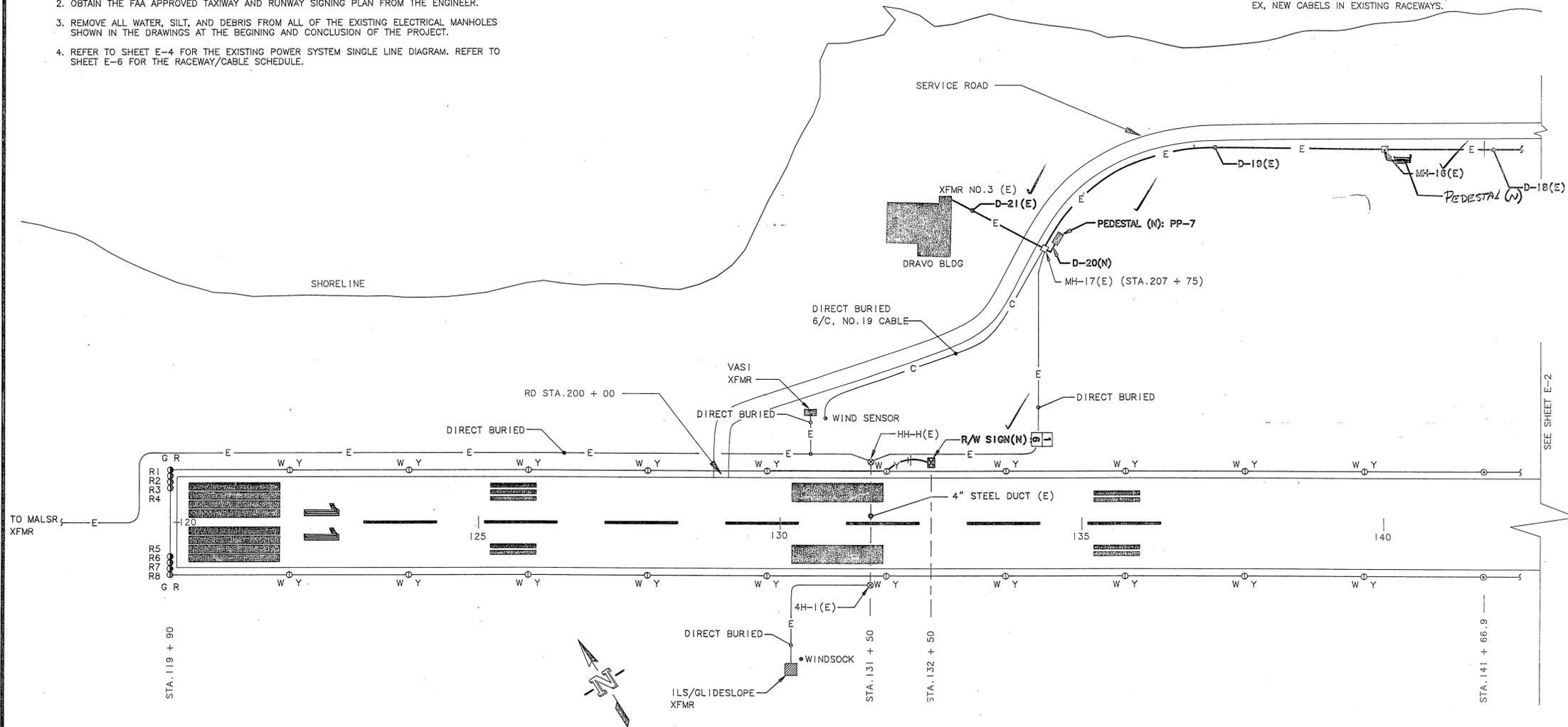
TOP VIEW



SIDE VIEW

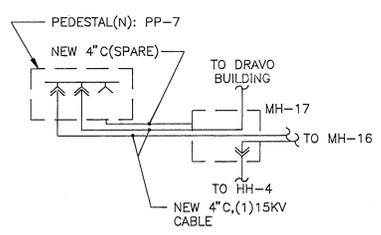
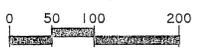
**DETAIL: PRIMARY PEDESTAL**

NO SCALE



**SITE PLAN - WEST END**

SCALE: 1" = 100'

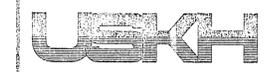


**SINGLE LINE DIA. NO. 8: ADDED PRIMARY PEDESTAL**

NO SCALE

NOTE: SEE SHEET E-4

REV	DATE	ACTION	DESCRIPTION	BY	APVD



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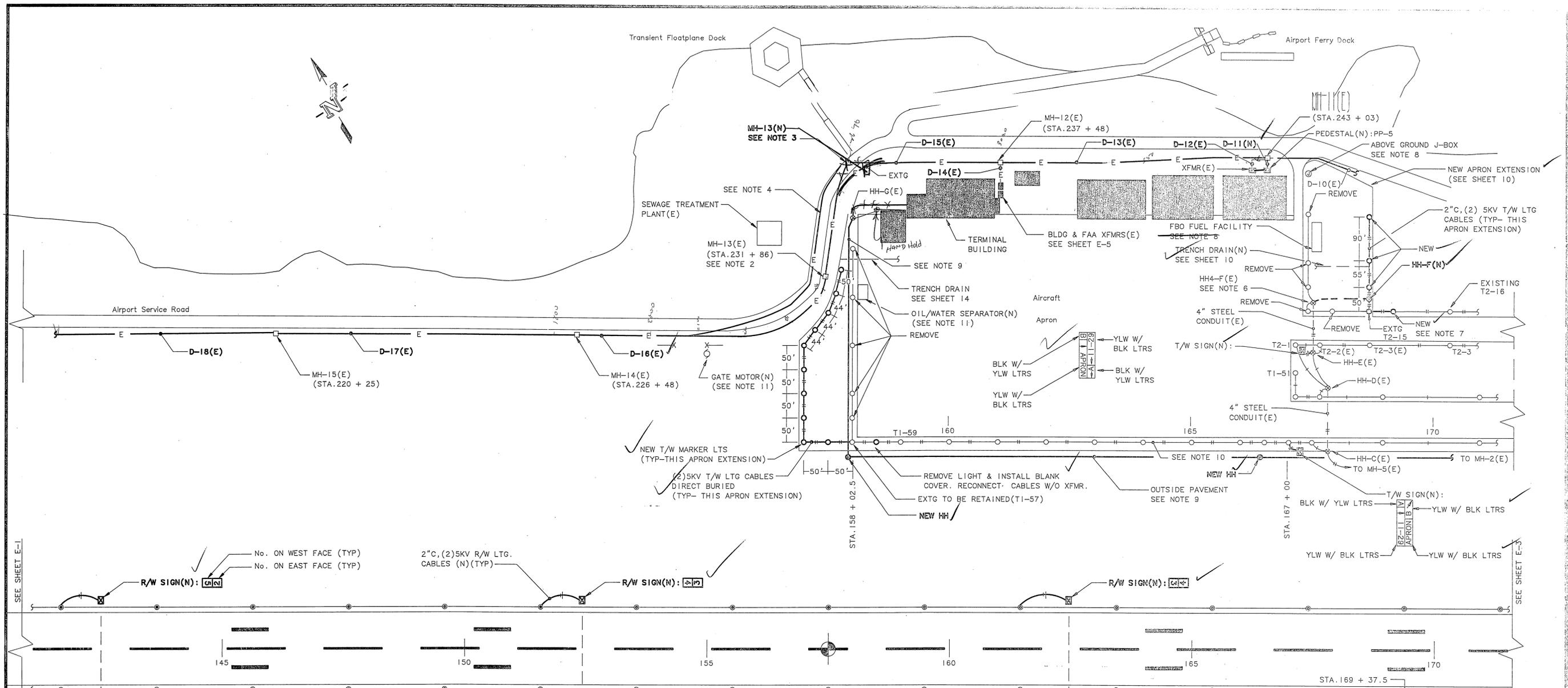
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Ketchikan Airport Runway Lighting  
Ketchikan, Alaska

**RUNWAY LIGHTING**

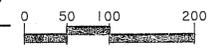
PROJECT NUMBER 3-02-0144-08/70635	Scale: AS NOTED Date: 12 AUG 92	Sheet No. E-1 OF E-6
Drwn. JLC	Dsgn. BCH	Apvd. BCH





### SITE PLAN - CENTER RUNWAY

SCALE: 1" = 100'

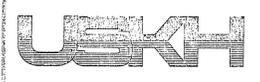


**NOTES:**

1. REMOVE CABLES FROM MANHOLES MH-12 TO MH-14.
2. REMOVE THE TOP AND DEMOLITION THE SIDES OF EXISTING MANHOLE MH-13. EXTEND AND SPLICE THE CONDUITS FROM ONE SIDE OF THE MANHOLE TO THE OTHER. BACKFILL AND COMPACT BEDDING MATERIAL AROUND THE EXTENDED CONDUIT.
3. INSTALL A NEW MANHOLE MH-13 BESIDE OR IN LINE WITH THE EXISTING CONDUITS FROM MANHOLES MH-12(E) TO MH-13(E). CUT AND EXTEND THE EXISTING CONDUITS INTO THE NEW MANHOLE MH-13. SEE SINGLE LINE DIAGRAM NO. 5, SHEET E-5.
4. OPTION TO NOTES 2 & 3: INSTALL THE NEW MANHOLE MH-13 SUCH THAT IT INTERCEPTS THE EXISTING CONDUITS FROM MANHOLE MH-12(E). PROVIDE NEW CONDUITS FROM THE NEW MANHOLE MH-13 TO THE MH-14(E) SIDE OF MH-13(E). EXTEND AND SPLICE INTO THE EXISTING CONDUIT TO MANHOLE MH-14(E) TO PROVIDE CONTINUOUS RACEWAY FROM MH-13(N) TO MH-14(E).
5. REPLACE CABLES FROM MH-12(E) TO MH-14(E).
6. REMOVE HANDHOLE HH-F(E). EXTEND EXTG 4" STEEL CONDUIT TO THE NEW HANDHOLE HH-F(N). PROVIDE NEW CONDUCTORS BETWEEN HH-E(E) & HH-F(N).
7. PROVIDE AN ADDITIONAL T/W LIGHT BETWEEN T2-15 & T2-16. PROVIDE NEW 2" CONDUIT AND CABLE BETWEEN T2-15 & THE NEW LIGHT TO YIELD AN ADEQUATE LENGTH.
8. REMOVE CONDUIT & WIRE FROM ABOVE GROUND J-BOX TO FUEL FACILITY. REMOVE ALL OF FUEL FACILITY ELECTRICAL DISCONNECT CIRCUITING FROM SOURCE. FUEL TANKS NOT REMOVED.
9. EXISTING 12PR CONTROL CABLE FROM TERMINAL BLDG FSS TO REGULATOR BUILDING - ROUTED IN 2" CONDUIT FROM TERMINAL BLDG TO CORNER OF APRON (STA. 158 + 02.5) VIA HH-D THEN DIRECT BURIED TO MH-2(E). PROVIDE NEW 2" C AND HANDHOLES FROM HH-G(E) TO MH-2(E). PROVIDE NEW 19/C, NO. 16 CONTROL CABLE FROM FSS TO THE REGULATOR BUILDING.
10. ALL DIRECT BURIED CABLES FOR T/W & R/W LIGHTS EXCEPT CROSSINGS BENEATH T/W & R/W ROUTED IN CONDUIT AS SHOWN.
11. CONNECT THE NEW GATE MOTOR TO AN EXISTING CIRCUIT FROM THE SEWAGE TREATMENT PLANT. PROVIDE A NEW 20 AMP, 120 VOLT, (3 NO. 10 USE IN 3/4 INCH GR) FROM THE SEWAGE TREATMENT PLANT TO THE OIL/WATER SEPARATOR ALARM.

*Result*  
 Existing conduit crushed (ABANDONED) new routed on outside of Alaska Airlines Maint. Building to NEW HH and in conduit HH-G(E)

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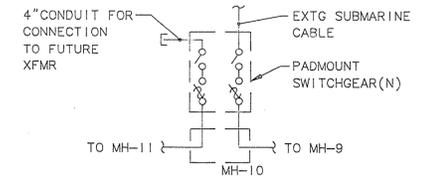
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 Ketchikan, Alaska

**RUNWAY LIGHTING**

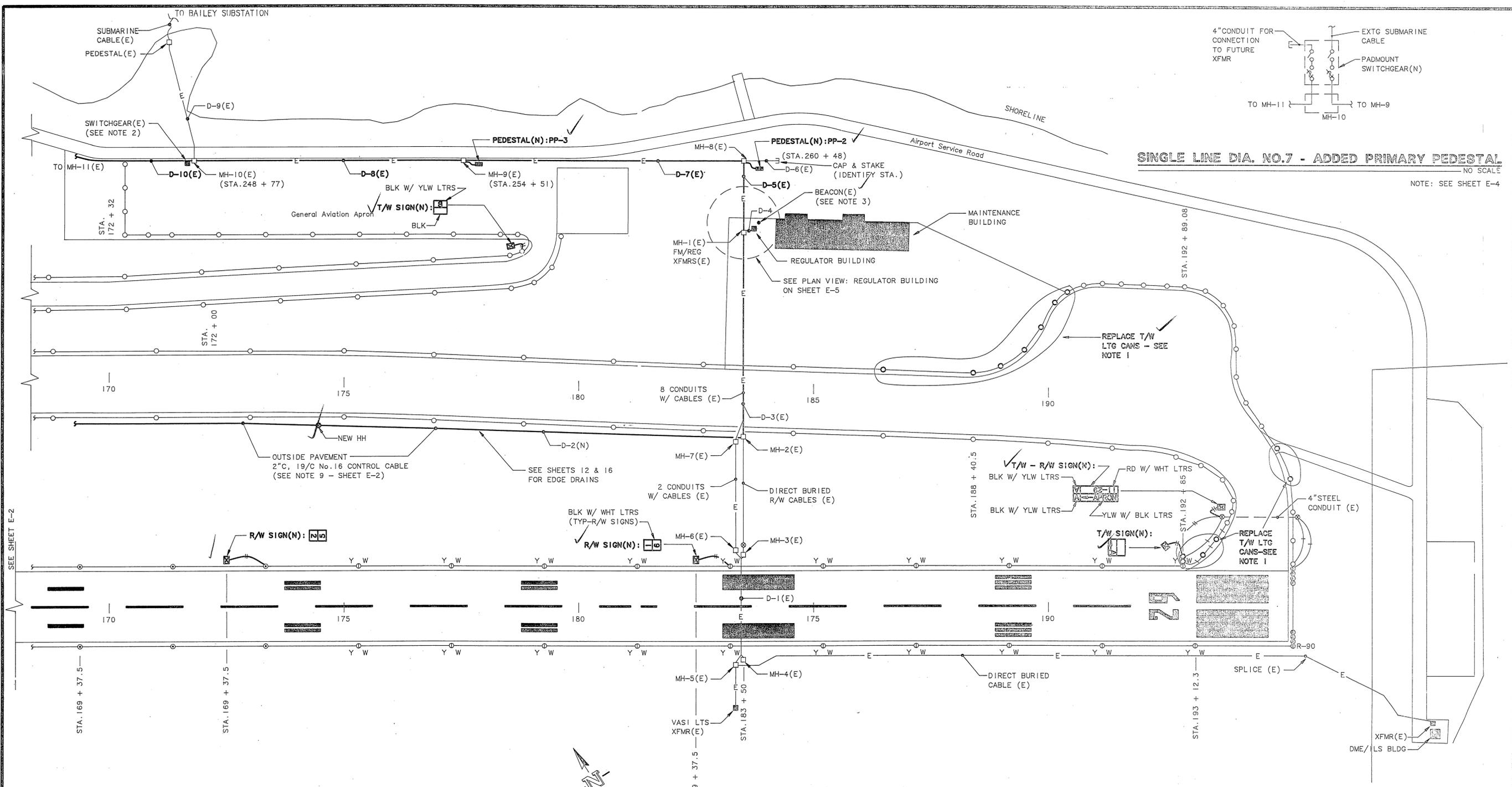


PROJECT NUMBER 3-02-0144-08/70635	Scale: AS NOTED Date: 12 AUG 92	Sheet No. <b>E-2</b>
Drwn. JLC	Desgn. BCH	Apvd. BCH



**SINGLE LINE DIA. NO.7 - ADDED PRIMARY PEDESTAL**

NO SCALE  
NOTE: SEE SHEET E-4



SEE SHEET E-2

- NOTES:
1. THE EXISTING T/W LTG CANS HAVE JACKED OUT OF THE GROUND DUE TO FREEZE/THAW CYCLES. REPLACE THE EXTG CANS WITH NEW CANS. RECONNECT EXISTING DIRECT BURIED T/W CABLES. BURY NEW CANS PER DETAILS ON SHEET E-6. REFER TO CIVIL DRAWINGS FOR DRAINAGE WORK IN SAME AREA.
  2. REPLACE EXISTING PADMOUNT SWITCHGEAR WITH NEW SWITCHGEAR (S & C PMCS, OR EQUAL.)
  3. REPLACE BEACON ON EXISTING STRUCTURE WITH NEW REMANUFACTURED UNIT.

**SITE PLAN - EAST END**

SCALE: 1" = 100'



**USKH**

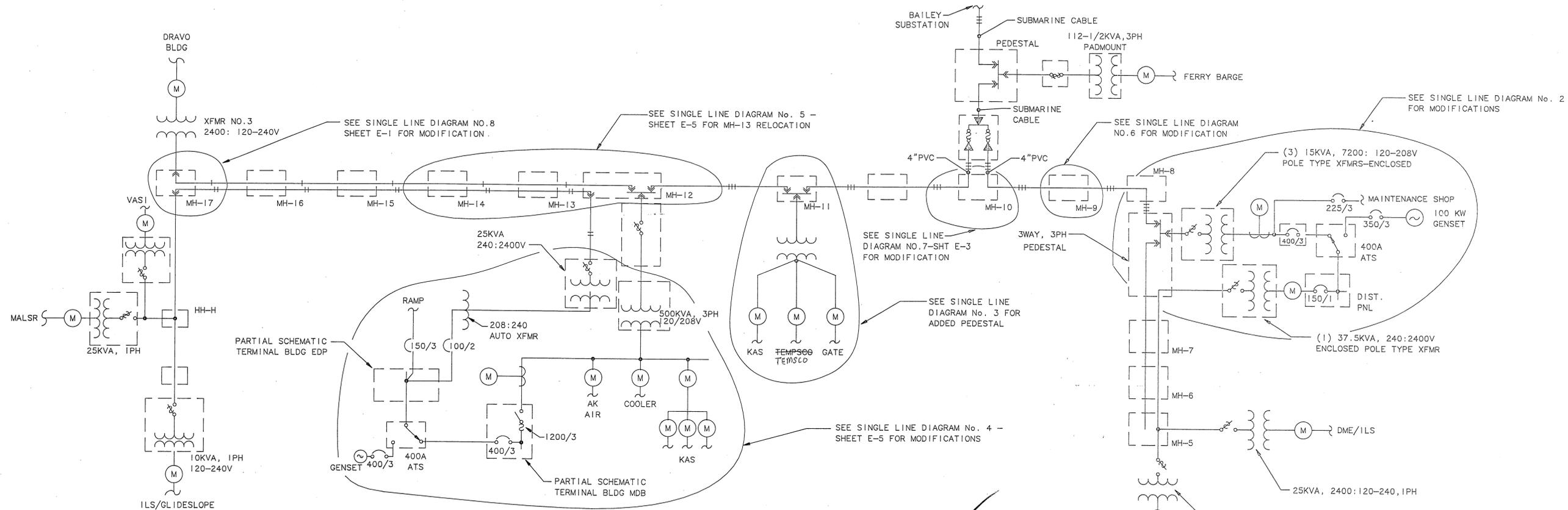
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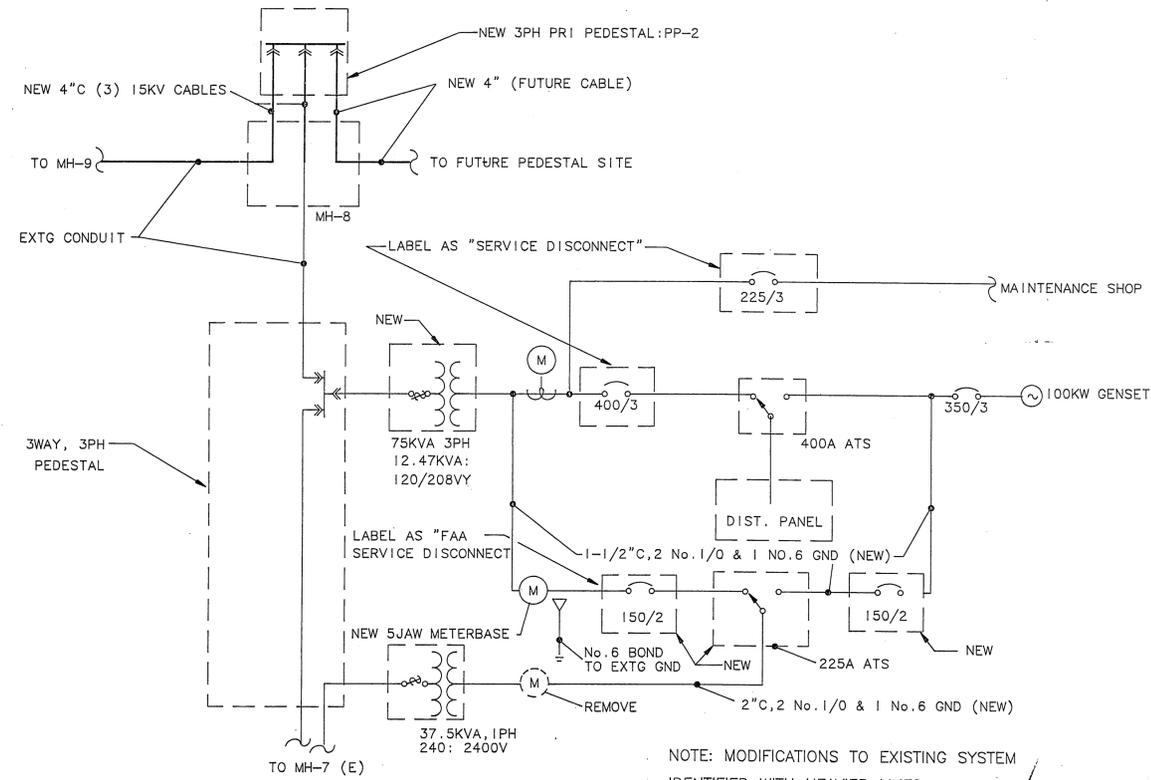
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**RUNWAY LIGHTING**

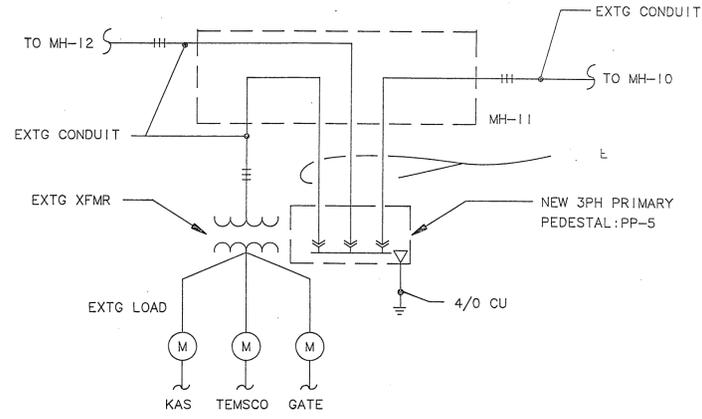
PROJECT NUMBER 3-02-0144-08/70635	Scale: AS NOTED Date: 12 AUG 92	Sheet No. <b>E-3</b>
Drwn. JLC	Dsgn. BCH	Apvd. BCH



**SINGLE LINE DIAGRAM NO.1: EXISTING POWER SYSTEM**  
NO SCALE



**SINGLE LINE DIAGRAM NO.2: REGULATOR BUILDING MODIFICATIONS**  
NO SCALE



**SINGLE LINE DIAGRAM NO.3: ADDED PRIMARY PEDESTAL**  
NO SCALE

**SINGLE LINE DIAGRAM NO.6: ADDED PRIMARY PEDESTAL**  
NO SCALE

REV	DATE	ACTION	DESCRIPTION	BY	APVD

**UEKH**  
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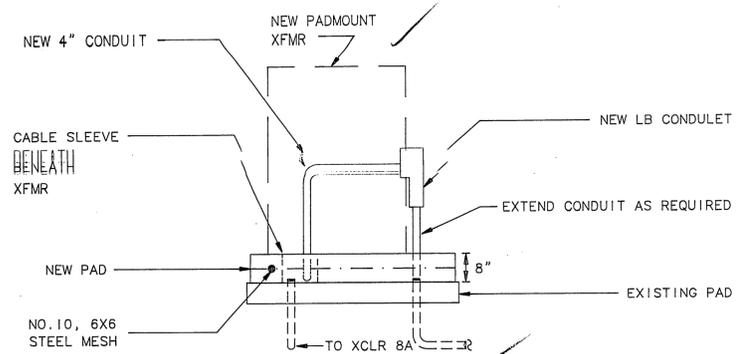
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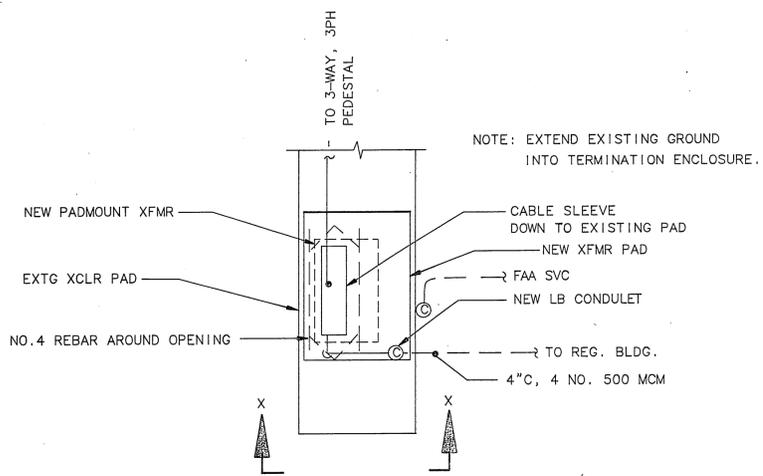
**RUNWAY LIGHTING**



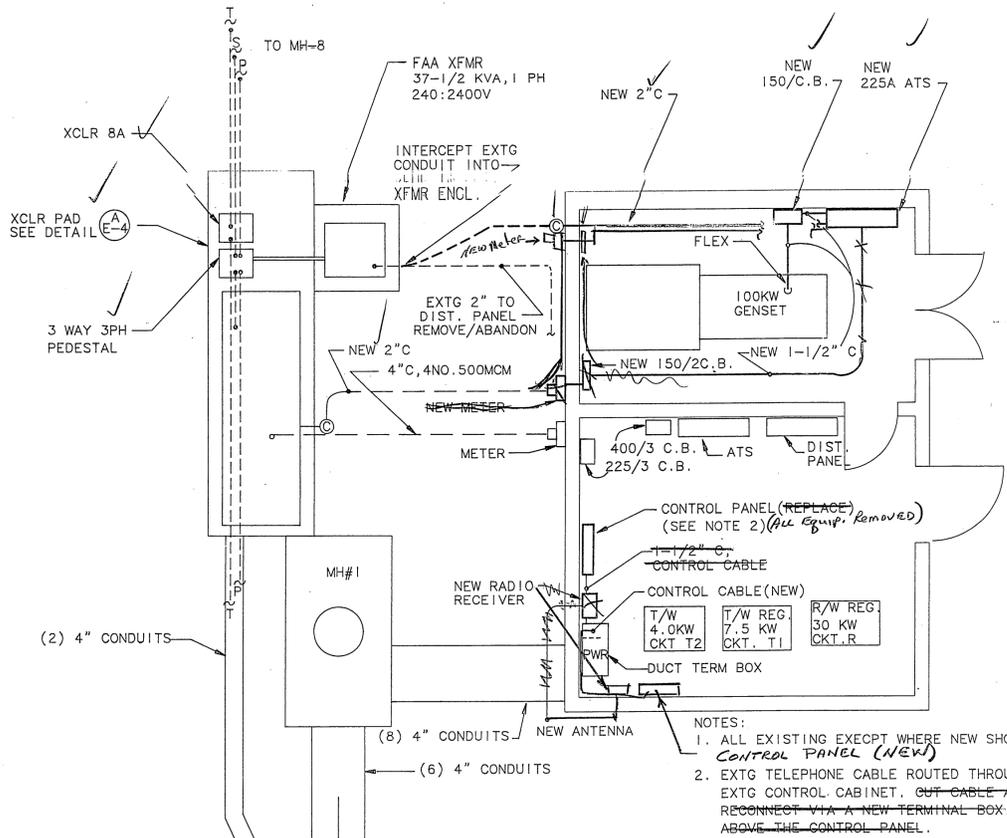
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Drwn. JLC	Dsgn. BCH	Apvd. BCH



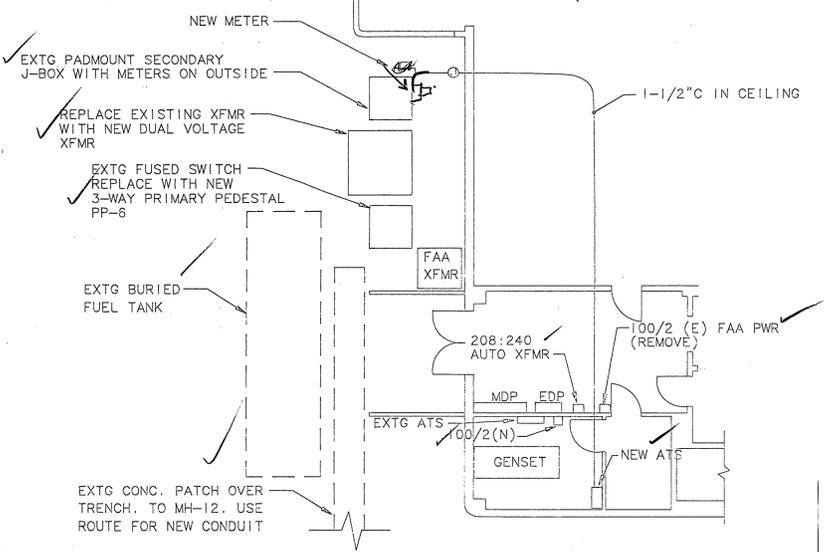
**SECTION X - X**  
SCALE: 1/2" = 1'0"



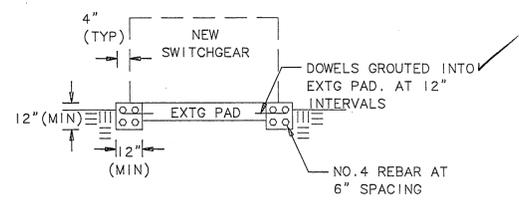
**DETAIL: NEW TRANSFORMER PAD**  
1/4" = 1'0"



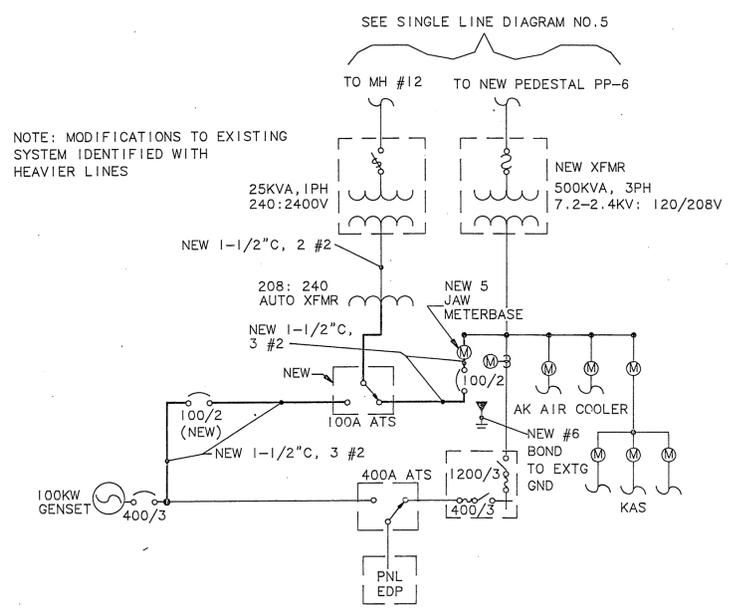
**PLAN VIEW: REGULATOR BUILDING**  
SCALE 1/4" = 1'0"



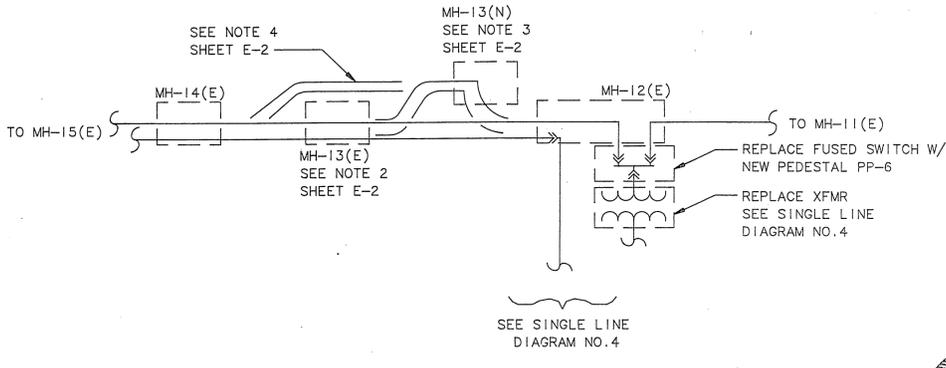
**PARTIAL PLAN VIEW: TERMINAL BUILDING**  
SCALE 1/8" = 1'0"



**DETAIL: SWITCHGEAR AT MH-10**  
NO SCALE



**SINGLE LINE DIAGRAM NO. 4: TERMINAL BUILDING MODIFICATIONS**  
NO SCALE



**SINGLE LINE DIAGRAM NO. 5**  
NO SCALE

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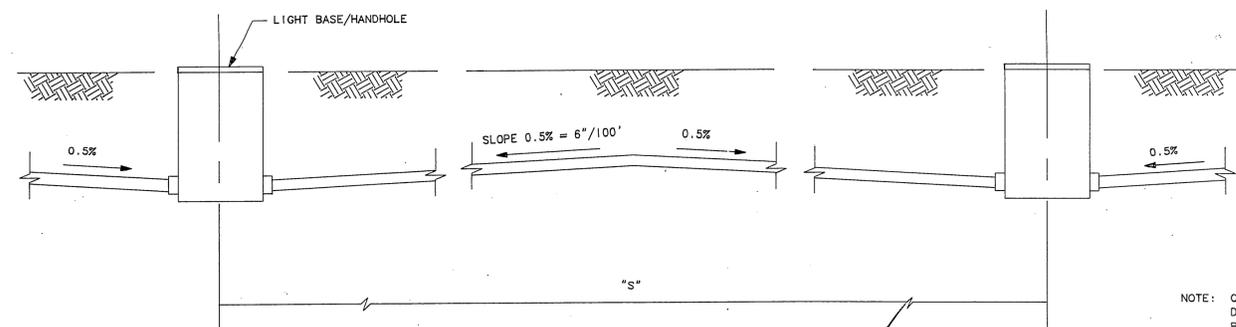
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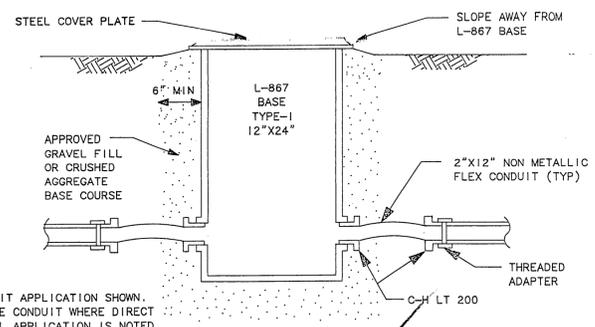
**RUNWAY LIGHTING**

PROJECT NUMBER	Scale:	Sheet No.
3-02-0144-08/70635	AS NOTED	E-5
Drwn. JLC	Date: 12 AUG 92	
Dsgn. BCH	Apvd. BCH	SH. OF

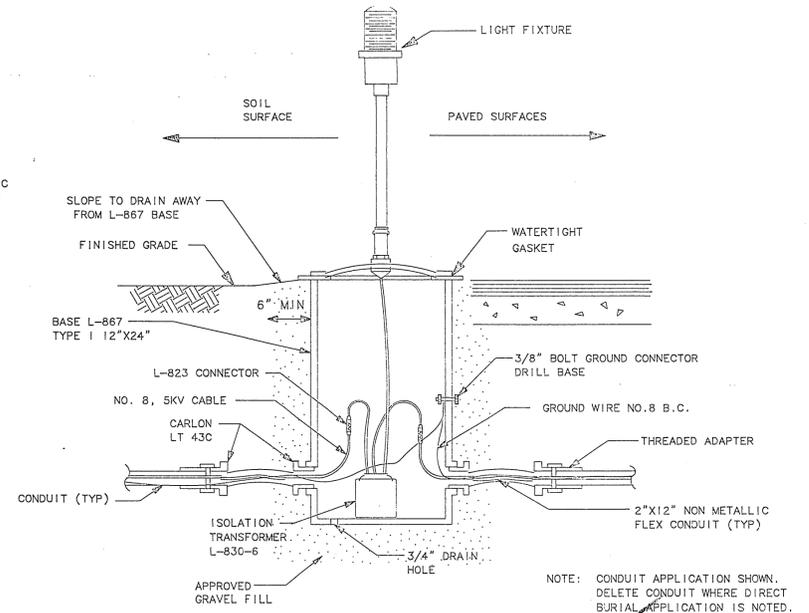




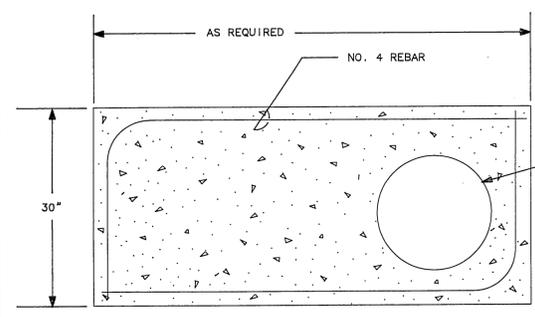
**DETAIL: CONDUIT INSTALLATION**  
NO SCALE



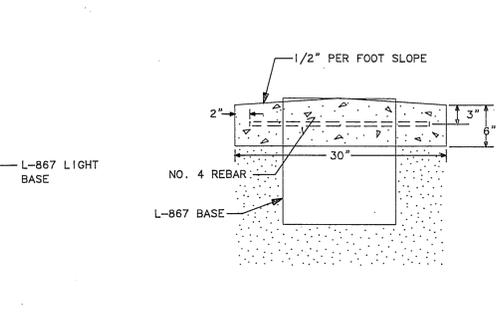
**DETAIL: HANDHOLE**  
NO SCALE



**DETAIL: TAXIWAY EDGE LIGHT**  
NO SCALE

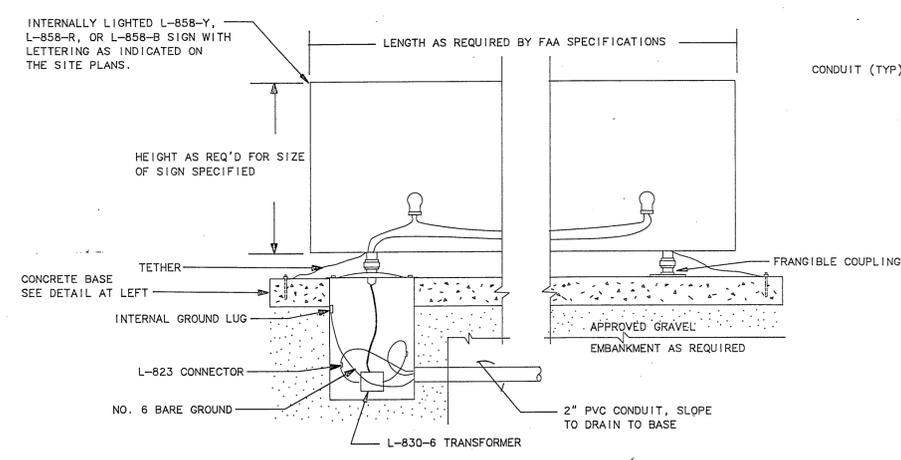


TOP VIEW

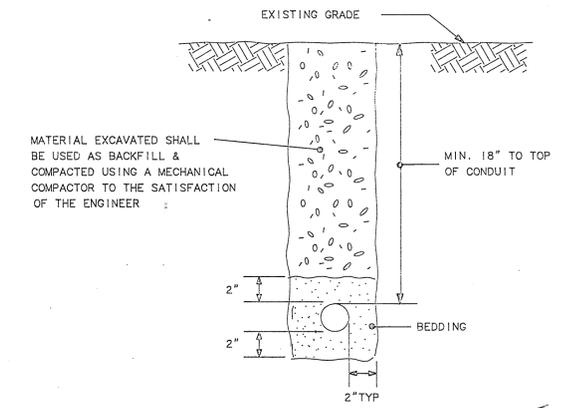


SIDE VIEW

**DETAIL: LIGHTED SIGN CONCRETE BASE**  
NO SCALE



**DETAIL: LIGHTED SIGN**  
NO SCALE



**DETAIL: CONDUIT TRENCH**  
NO SCALE

**RACEWAY/CABLE SCHEDULE**

DUCT	FROM	TO	CONDUITS	CABLES	REMARKS	DUCT	FROM	TO	CONDUITS	CABLES	REMARKS
D-1	MH-4 MH-5	MH-3 MH-6	(4) 4" PVC (1) 4" PVC (1) 4" PVC	(3) 15KV 12/C No. 16 (new) 19/C, NO. 16 CONTROL (NEW)	FAA 2400 V POWER - TO ILS SITE, ETC <i>(Both installed same conduit)</i>	D-11	MH-11	PP NO. 5(N)	(1) 4" GRS(N) (1) 4" GRS(N) (1) 4" GRS(N)	(3) 15KV(NEW) (3) 15KV(NEW) (3) 15KV(NEW)	KPU 12.5 KV POWER - FROM CHNL XNG KPU 12.5 KV POWER - TO TERM BLDG KPU 12.5 KV POWER - TO KAS XFMR(#2)
D-2	HH-6	MH-2	2" PVC	19/C, NO. 16 CONTROL (NEW)	NEW CABLE FROM FSS TO REG. BLDG <i>(Both installed same conduit)</i>	D-12	MH-11	XFMR NO. 2	(1) 4" PVC (1) 4" PVC (1) 4" PVC	(3) 15KV(NEW) (1) 4" GRS (1) 4" GRS	KPU 12.5 KV POWER - FROM PP NO. 2 KPU 12.5 KV POWER - REPLACE CABLES
D-3	MH-2	MH-1	(1) 4" PVC (1) 4" PVC (1) 4" PVC (1) 4" PVC (1) 4" PVC (1) 4" PVC (1) 4" PVC	(2) 5KV, NO. 8 (2) 5KV, NO. 8 (2) 5KV, NO. 8 NO. 6 GND EMPTY	RUNWAY, CKT R-1 TAXIWAY, CKT T-1 TAXIWAY, CKT T-2	D-13	MH-11	MH-12	(1) 4" PVC (1) 4" PVC (1) 4" PVC	(3) 15KV(NEW) (1) 4" GRS (1) 4" GRS	KPU 12.5 KV POWER - REPLACE CABLES KPU 12.5 KV POWER - REPLACE CABLES KPU 12.5 KV POWER - REPLACE CABLES
D-4	MH-7 REG. BLDG	REG. BLDG MH-1	(1) 4" PVC (1) 4" PVC (1) 4" PVC (1) 4" PVC	(3) 15KV CNTL 12/C No. 16 (new) 19/C, NO. 16 CONTROL (NEW)	FAA 2400 V POWER <i>(Both installed same conduit)</i>	D-14	MH-12	XFMR NO. 3	(1) 4" GRS (1) 2" GRS (1) 2" GRS	(3) 15KV(NEW) (1) 4" GRS (1) 15KV, (1) GND	KPU 12.5 KV POWER - REPLACE CABLES KPU 12.5 KV POWER - REPLACE CABLES FAA 2400 V POWER - TO MALSR SITE, ETC
D-5	REG. BLDG	MH-1	(1) 4" GRS (1) 4" GRS (1) 4" GRS (1) 4" GRS (1) 4" GRS (2) 4" GRS	(2) 5KV, NO. 8 (2) 5KV, NO. 8 (2) 5KV, NO. 8 NO. 6 GND EMPTY	FAA 2400 V POWER NEW CABLE FROM FSS TO REG. BLDG CONTROL (NEW) RUNWAY, CKT R-1 TAXIWAY, CKT T-1 TAXIWAY, CKT T-2	D-15	MH-12	MH-13	(1) 4" PVC (1) 4" PVC	(1) 15KV, (1) GND (1) 15KV(N) (SEE NOTE 1) 6/C, NO. 19	FAA 2400 V POWER - TO MALSR SITE, ETC KPU 12.5 KV POWER - REPLACE CABLES FAA CONTROL FROM FSS TO WIND SENSOR
D-6	REG. BLDG	MH-8	(1) 4" PVC (2) 4" PVC	(3) 15KV, (NEW) EMPTY	KPU 12.5 KV POWER - REPLACE CABLES	D-16	MH-13	MH-14	(1) 4" PVC(N) (1) 4" PVC(N)	(1) 15KV, (1) GND (1) 15KV(N) 6/C, NO. 19 (SEE NOTE 1)	FAA 2400 V POWER - TO MALSR SITE, ETC KPU 12.5 KV POWER - REPLACE CABLES FAA CONTROL FROM FSS TO WIND SENSOR
D-7	MH-8	EAST	(2) 4" PVC(N)	EMPTY	CAP & STAKE AT APPROX RD STA. 263 + 00	D-17	MH-14	MH-15	(1) 4" PVC (1) 4" PVC	(1) 15KV, (1) GND (1) 15KV(N) 6/C, NO. 19 (SEE NOTE 1)	FAA 2400 V POWER - TO MALSR SITE, ETC KPU 12.5 KV POWER - REPLACE CABLES FAA CONTROL FROM FSS TO WIND SENSOR
D-8	MH-8	MH-9	(1) 4" PVC (2) 4" PVC	(3) 15KV, (NEW) EMPTY	KPU 12.5 KV POWER - REPLACE CABLES	D-18	MH-15	MH-16	(1) 4" PVC (1) 4" PVC	(1) 15KV, (1) GND (1) 15KV(N) 6/C, NO. 19 (SEE NOTE 1)	FAA 2400 V POWER - TO MALSR SITE, ETC KPU 12.5 KV POWER - REPLACE CABLES FAA CONTROL FROM FSS TO WIND SENSOR
D-9	MH-9	MH-10	(1) 4" PVC (2) 4" PVC	(3) 15KV, (NEW) EMPTY	KPU 12.5 KV POWER - REPLACE CABLES	D-19	MH-16	MH-17	(1) 4" PVC (1) 4" PVC	(1) 15KV, (1) GND (1) 15KV(N) 6/C, NO. 19 (SEE NOTE 1)	FAA 2400 V POWER - TO MALSR SITE, ETC KPU 12.5 KV POWER - REPLACE CABLES FAA CONTROL FROM FSS TO WIND SENSOR
D-10	CHNL XNG	MH-10	(1) 4" PVC	(1) 25KV, CABLE TELEPHONE	KPU 12.5 KV POWER KPU TELEPHONE CABLE TO THE TERM BLDG	D-20	MH-17	P.P. NO. 7(N)	(1) 4" GRS(N) (1) 4" GRS(N) (1) 4" GRS(N)	(1) 15KV(N) (1) 15KV(N) EMPTY	KPU 12.5 KV POWER - FROM PP NO. 2 KPU 12.5 KV POWER - TO XFMR NO. 3
D-11	MH-10	MH-11	(1) 4" PVC (1) 4" PVC (1) 4" PVC	(3) 15KV, (NEW) EMPTY TELEPHONE	KPU 12.5 KV POWER - REPLACE CABLES	D-21	MH-17	XFMR NO. 3	(1) 4" GRS	(1) 15KV(N)	KPU 12.5 KV POWER - REPLACE CABLES

REV	DATE	ACTION	DESCRIPTION	BY	APPV

**UEKH**  
Architecture Engineering Land Surveying Planning  
2515 'A' Street Anchorage, Alaska 99503  
520 Fifth Avenue, Suite 319 Fairbanks, Alaska 99701  
(907) 276-4245 (907) 452-2128

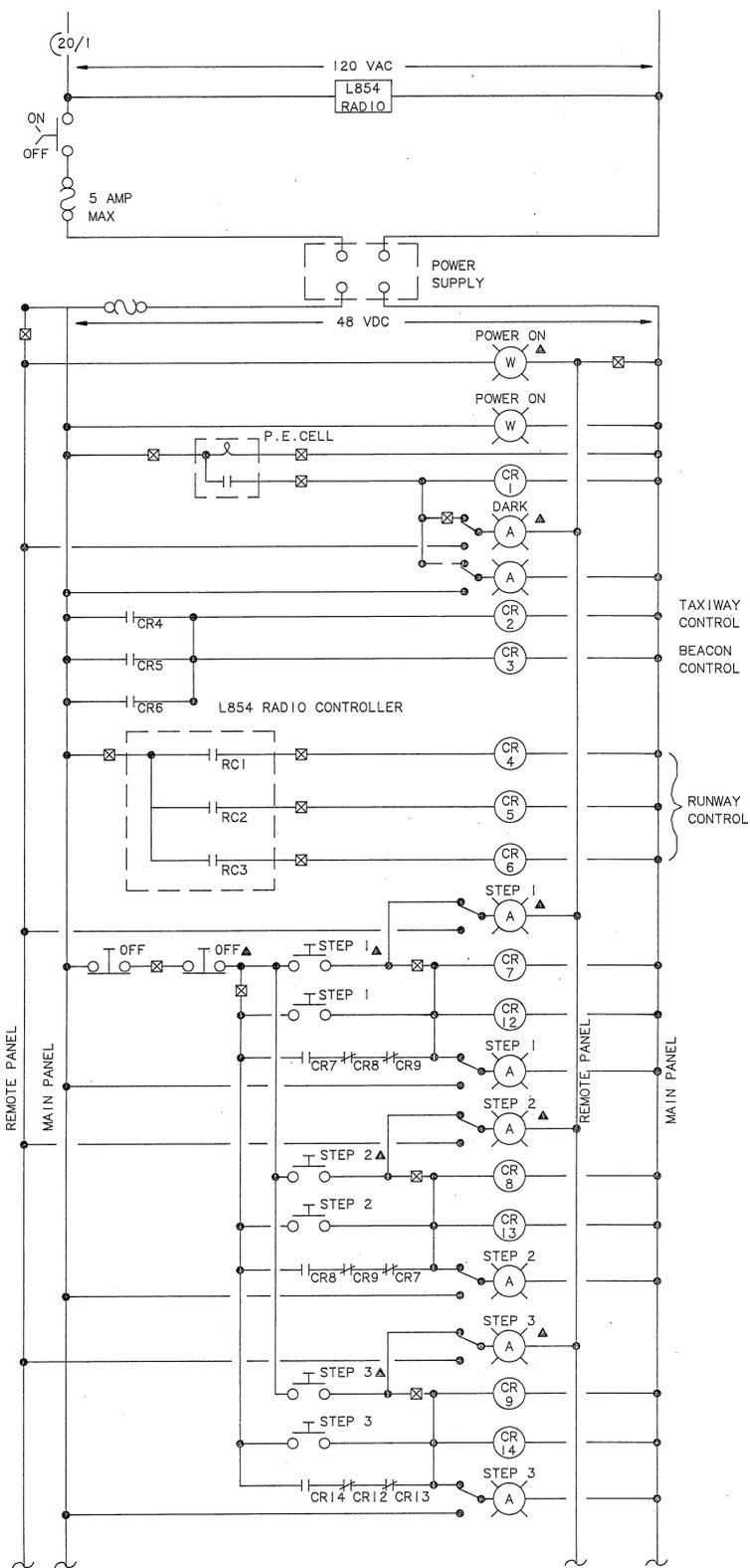
**B.C. HAIGHT - CONSULTING ENGINEERS**  
418 Harris Street, Juneau, Alaska 99801 (907) 586-8788

State of Alaska, DOT/PF  
Ketchikan Airport Runway Lighting  
Ketchikan, Alaska

**RUNWAY LIGHTING**

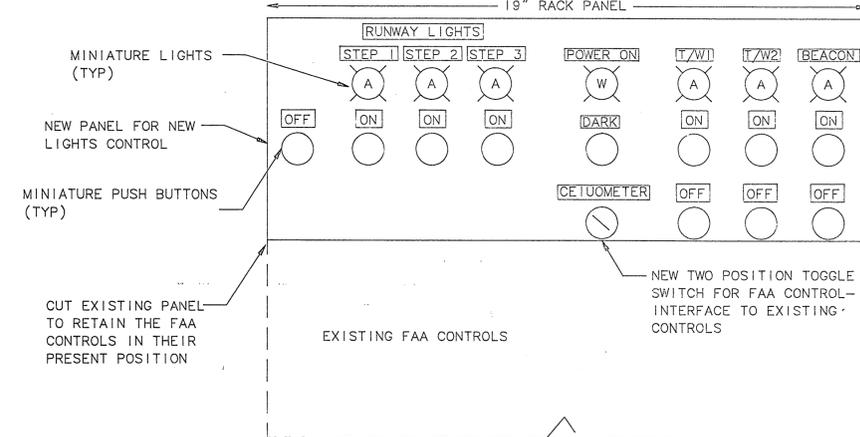
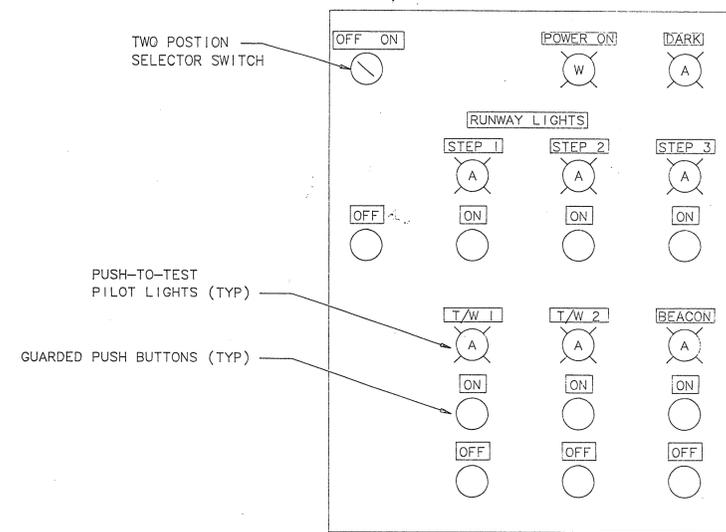
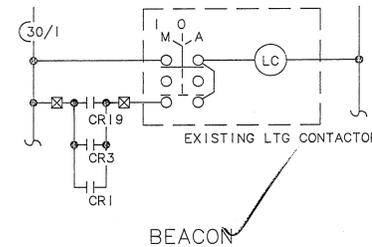
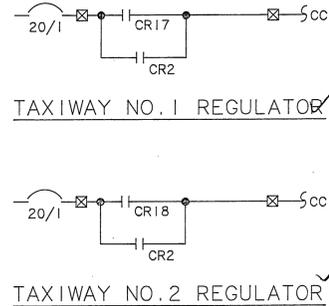
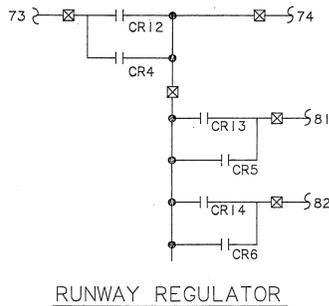
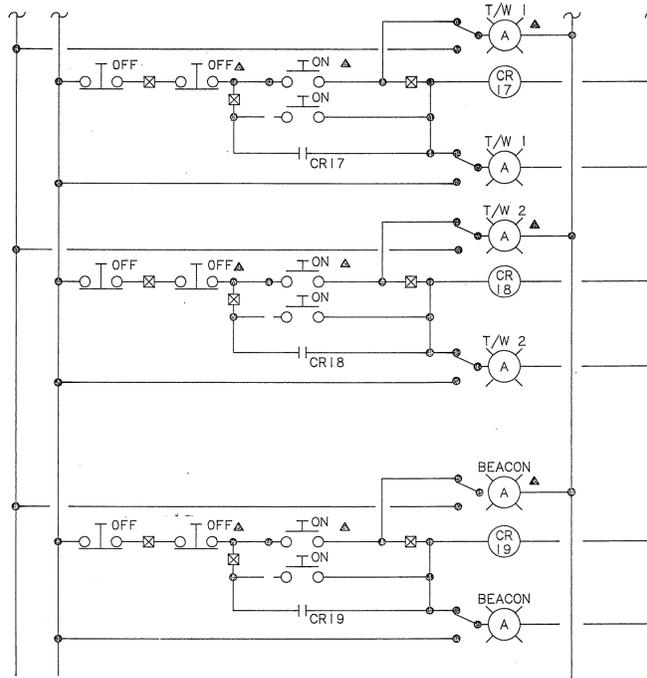
PROJECT NUMBER	Scale: AS NOTED	Sheet No.
3-02-0144-06/70835	Date: 12 AUG 92	6
Drwn. JLC	Dsgn. BCH	Apvd. BCH
SH. OF		





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

**SCHEMATIC DIAGRAM: LIGHTING**  
NO SCALE



REMOTE CONTROL PANEL  
 (LOCATE IN FLIGHT SERVICE STATION CONTROL CONSOLE)  
 MAIN CONTROL PANEL  
 (LOCATE IN REGULATOR BUILDING)  
**DETAIL: PANEL LAYOUTS**  
 NO SCALE

REV	DATE	ACTION	DESCRIPTION	BY	APVD



Architecture Engineering Land Surveying Planning  
 2515 'A' Street Anchorage, Alaska 99503  
 520 Fifth Avenue, Suite 319 Fairbanks, Alaska 99701  
 (907) 276-4245 (907) 452-2128

**B.C. HAIGHT - CONSULTING ENGINEERS**  
 418 Harris Street, Juneau, Alaska 99801 (907) 586-9788

State of Alaska, DOT/PF  
 Ketchikan Airport Runway Lighting  
 Ketchikan, Alaska

**RUNWAY LIGHTING**



PROJECT NUMBER	Scale: AS NOTED	Sheet No.
3-02-0144-09/70635	Date: 12 AUG 92	7
Drwn. JLC	Dsgn. BCH	Apvd. BCH
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