

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
and PUBLIC FACILITIES
S.E. REGION AVIATION—DESIGN & CONSTRUCTION

CONSTRUCTION PLANS FOR
KLAWOCK AIRPORT
RUNWAY EXTENSION, GRADING, & APRON IMPROVEMENTS

AIRPORT DEVELOPMENT AID PROGRAM

~~A.D.A.P. NO. 6-02-0154-02~~

STATE NO. D-21512

A.I.P. No. 3-02-0154-01

SPONSORED BY
THE STATE OF ALASKA
1982

"As - Built" Plans

CONTRACTOR: SELEY INC.

PROJECT ENGINEER: BRIAN BELT

NOTICE TO PROCEED: 3-17-83

COMPLETION DATE: 10-19-83

APPROVED

Charles S. Matlock

CHARLES S. MATLOCK, DIRECTOR, S.E. REGION DESIGN & CONSTRUCTION

DATE

October 5, 1982

APPROVED

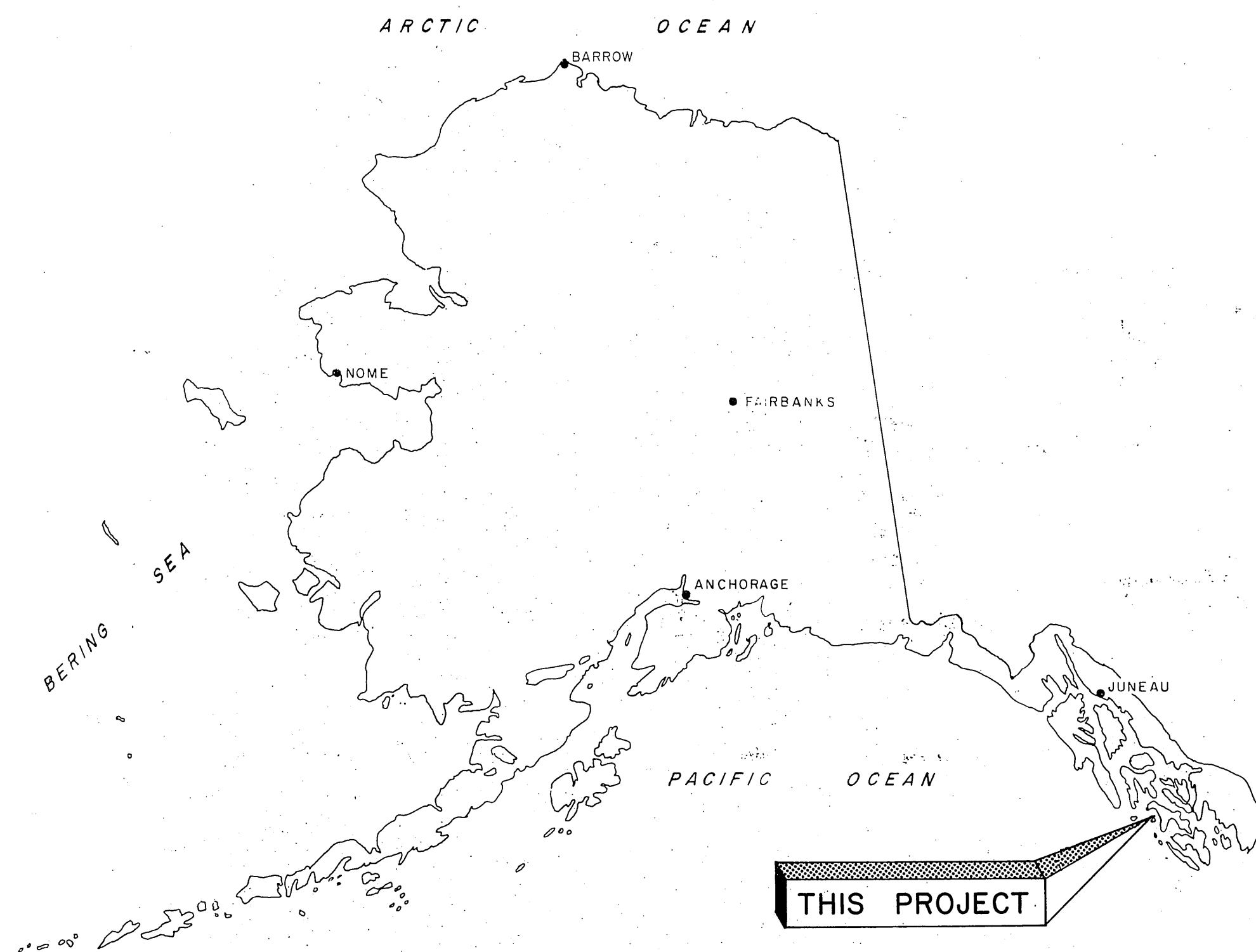
W. K. Williams

WALLACE K. WILLIAMS, CHIEF, S.E. REGION HIGHWAY & AVIATION
DESIGN & CONSTRUCTION

DATE

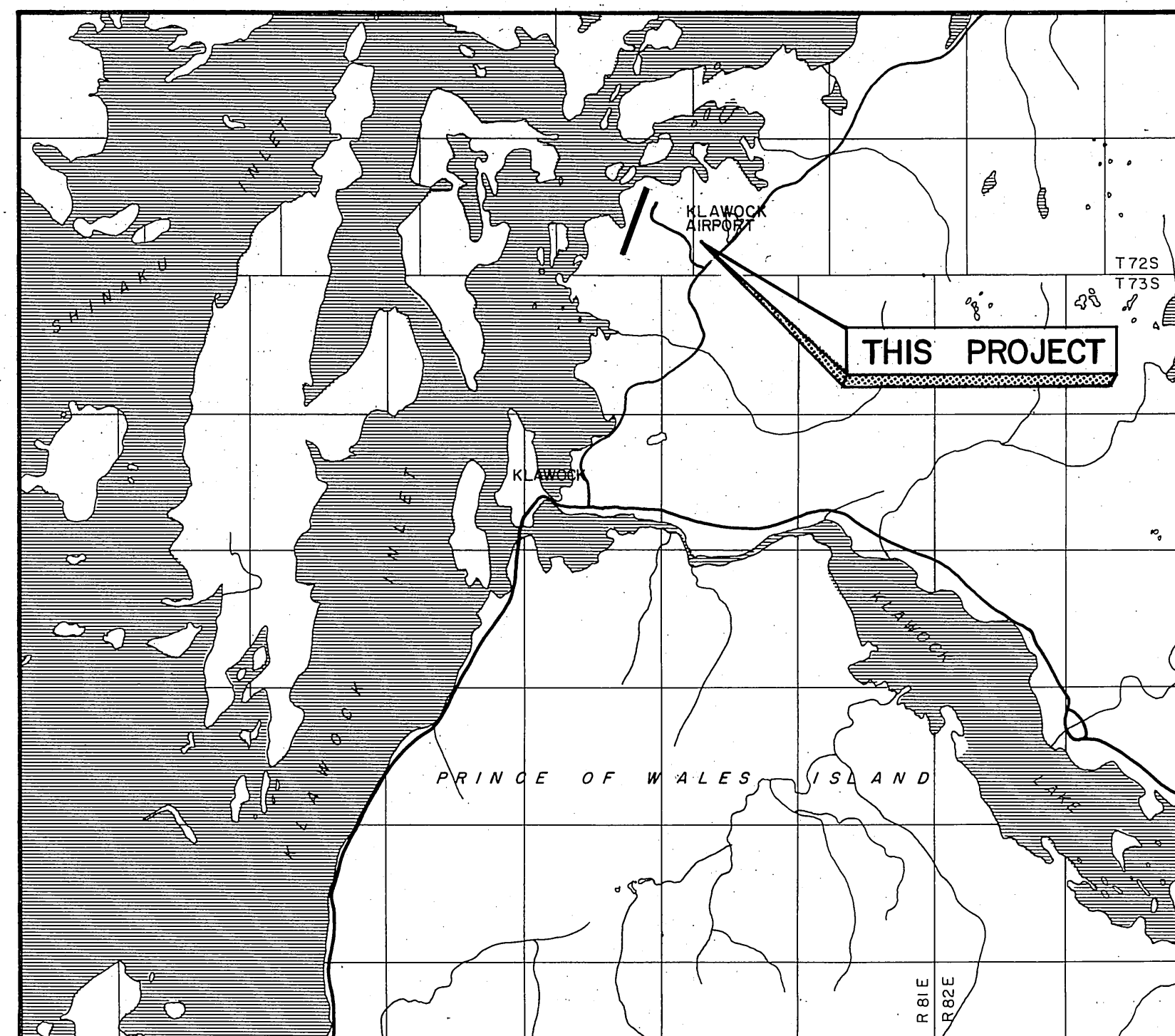
Oct 5, 1982

SHEET 1 OF 20



LOCATION MAP

NOT TO SCALE



VICINITY MAP

SCALE: 1" = 1 MILE

ESTIMATED QUANTITIES

NO.	ITEM	QUANTITY	UNIT
BASIC BID			
100	MOBILIZATION & DEMOBILIZATION	ONE JOB	LUMP SUM
125	ENGINEERS VEHICLE	1	EACH
130	ENGINEERS FIELD OFFICE WITH LABORATORY	ONE JOB	LUMP SUM
200 a	CLEARING	9.51	ACRES
330 d	BORROW EMBANKMENT	26,200	CU.YARDS
540	AGGREGATE SURFACE COARSE	5,050	CU.YARDS
550 a	WOVEN POLYMERIC FABRIC	9,110	SQ.YARDS
710	RUNWAY BOUNDARY MARKERS	4	EACH
730 a	REFLECTIVE MARKERS, TYPE I	63	EACH
800	PORTLAND CEMENT CONCRETE	11.57	CU. YARDS
820 a	TIEDOWN ANCHORS	15	EACH
900	SEEDING	6.3	M.S.F
980	RAIN SHELTER BUILDING	1	LUMP SUM

FINAL CONSTRUCTION QUANTITIES

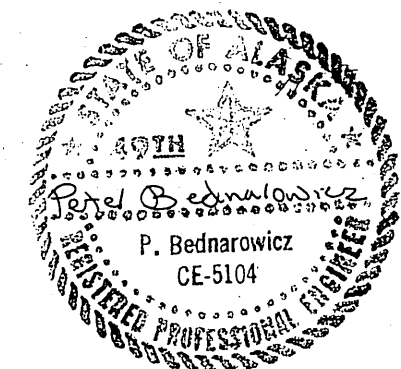
ITEM NO.	ITEM	QUANTITY	UNIT
100	Mobilization & Demobilization	All Req'd.	L.S.
125	Engineers Vehicle	" "	L.S.
125a	Supplemental Vehicle (S.A. #1)	" "	L.S.
130	Engineers Field Office with Laboratory	" "	L.S.
130a	Supplemental Office (S.A. #1)	" "	L.S.
200a	Clearing	21.72	Acres
330a	Unclassified Excavation (S.A. #1)	17,970.50	C.Y.
330d	Borrow Embankment	35,518.40	C.Y.
330e	Subsidence (S.A. #1)	All Req'd.	L.S.
330f	Apron Subsidence (S.A. #2)	All Req'd.	L.S.
400a	36" Corrugated Metal Pipe (S.A. #1)	(Deleted by C.O. #1)	
540	Aggregate Surface Course	5,802.40	C.Y.
550a	Woven Polymeric Fabric	14,298.20	S.Y.
710	Runway Boundary Markers	4.0	Each
710a	Marker Relocation (C.O. #2)	All Req'd.	L.S.
730a	Reflective Markers, Type I	64.0	Each
800	Portland Cement Concrete	11.57	C.Y.
820a	Tiedown Anchors	15.0	Each
900	Seeding	6.30	M.S.F.
900a	Supplemental Seeding	51.90	M.S.F.
980	Rain Shelter Building	All Req'd.	L.S.

INDEX

SHEET	TITLE	SHEET NO.
	TITLE SHEET	1
	LOCATION, VICINITY MAPS, INDEX & EST. QUAN.	2
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CHANGE DOCUMENT SUMMARY

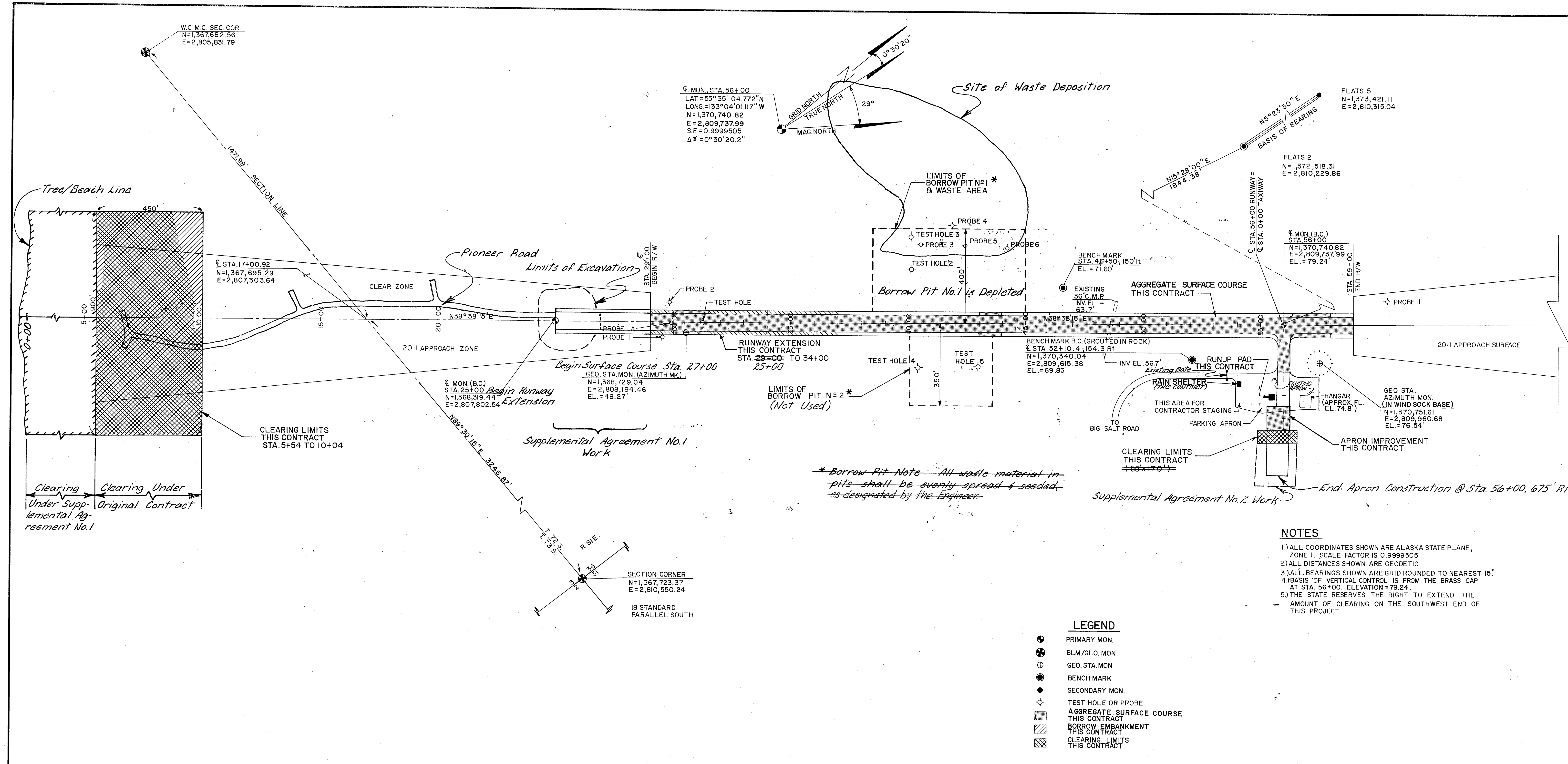
DOCUMENT	WORK SPECIFIED
Supplemental Agreement Number 1	Extend runway construction: Increase length by 400 L.F. from Sta. 25+00 to Sta. 29+00: Extend aggregate surface from Sta. 27+00 to Sta. 29+00: Extend clearing.
Change Order Number 1	Delete 36" Corrugated Metal Pipe.
Supplemental Agreement Number 2	Extend aircraft apron construction: Increase length by 200 L.F. from (Sta. 56+00) 475' Rt. to 675' Rt.
Change Order Number 2	Marker Relocation: Remove already placed Item 710, Runway Boundary Markers, and reinstall to conform to new state-wide runway clear-zone marking specifications.



	ROBERTSON & ASSOCIATES CONSULTING ENGINEERS 2820 "C" ST. SUITE 2 ANCHORAGE, AK 99503 PHONE: (907) 277-1438
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DIVISION OF AVIATION-DESIGN AND CONSTRUCTION	
KLAWOCK AIRPORT A.I.P. No. ADAP 6-02-0154-02 3-02-0154-01 LOCATION, VICINITY MAPS, INDEX & ESTIMATED QUANTITIES	

APPROVED	W. A. Locher	SE. REGION AVIATION DESIGN ENGINEER			
APPROVED	W. L. Baumgartner	SE. REGION DESIGN ENGINEER			
DESIGNED	W. B.	DRAWN	W. B.		
CHECKED	W. B.	DATE	8-27-81	SHEET	2 OF 20

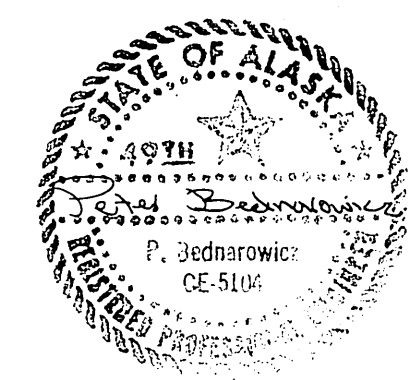
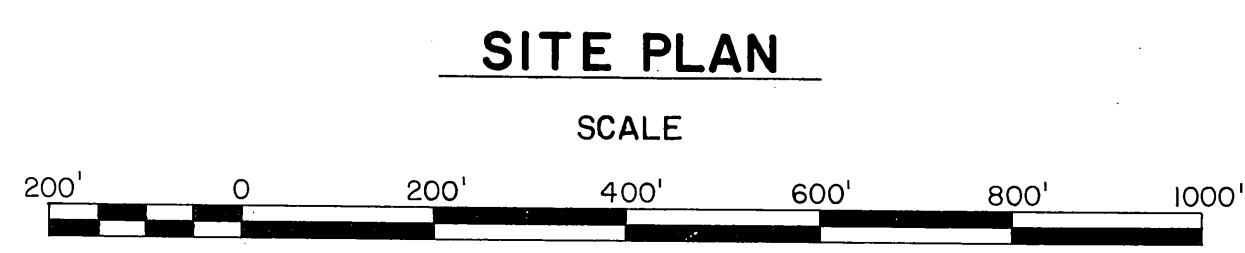
REVISIONS



** Borrow Pit Note - All waste material in pits shall be evenly spread & seeded, as designated by the Engineer.*

- NOTES**
- 1) ALL COORDINATES SHOWN ARE ALASKA STATE PLANE, ZONE 1. SCALE FACTOR IS 0.9999505.
 - 2) ALL DISTANCES SHOWN ARE GEODETIC.
 - 3) ALL BEARINGS SHOWN ARE GRID ROUNDED TO NEAREST 15".
 - 4) BASIS OF VERTICAL CONTROL IS FROM THE BRASS CAP AT STA. 56+00. ELEVATION = 79.24.
 - 5) THE STATE RESERVES THE RIGHT TO EXTEND THE AMOUNT OF CLEARING ON THE SOUTHWEST END OF THIS PROJECT.

- LEGEND**
- PRIMARY MON.
 - ⊕ BLM./GLO. MON.
 - ⊙ GEO. STA. MON.
 - BENCHMARK
 - SECONDARY MON.
 - ⬠ TEST HOLE OR PROBE
 - ▨ AGGREGATE SURFACE COURSE THIS CONTRACT
 - ▨ BORROW EMBANKMENT THIS CONTRACT
 - ▨ CLEARING LIMITS THIS CONTRACT



BY	DATE	CHANGE
REVISIONS		
PB	10/1/82	Added an additional 23' of clearing at the south end.
PB	7/19/82	Added note to borrow pit no. 1. Added existing gate.
PB	6/2/82	Incorporated alternate as part of main contract.
PB	5/26/82	Changed extension from North end to South end. Widened Surface Top. Added Runup Pad, Bar Scale & Last 3 legends.
W.K.	8/24/81	ADDITIVE ALTERNATE NO. 1

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF AVIATION-DESIGN AND CONSTRUCTION

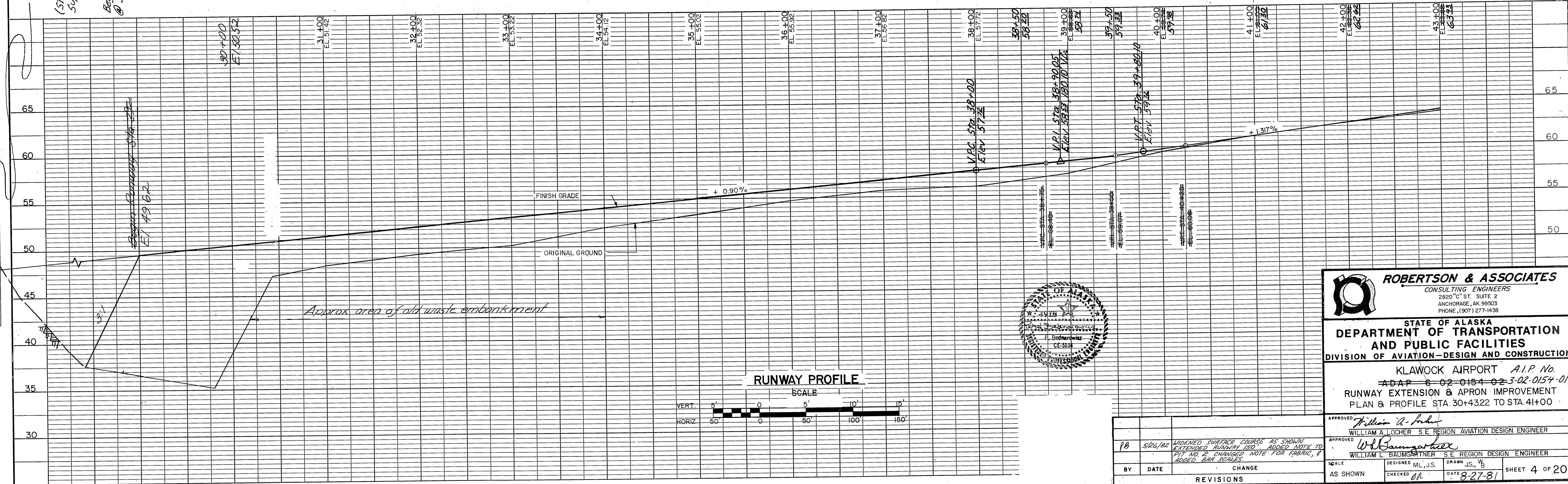
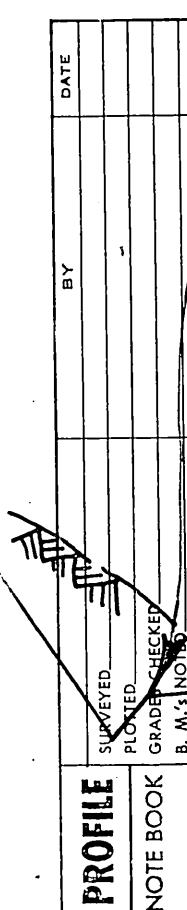
KLAWOCK AIRPORT. A.I.P. No. ADAP 6-02-0154-02 3-02-0154-01
RUNWAY EXTENSION & APRON IMPROVEMENT
SITE PLAN

APPROVED: *William A. Locher*
WILLIAM A. LOCHER, S.E. REGION AVIATION DESIGN ENGINEER

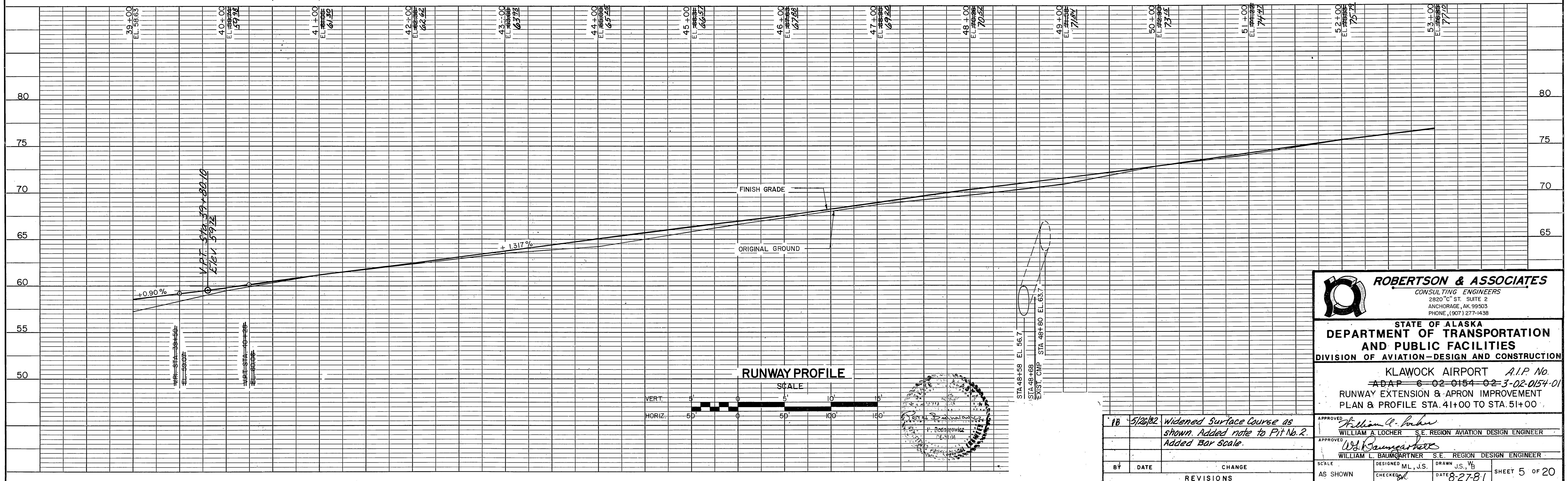
APPROVED: *W. L. Baumgartner*
WILLIAM L. BAUMGARTNER, S.E. REGION DESIGN ENGINEER

SCALE: AS SHOWN
DESIGNED: M.L.J.S.
CHECKED: M
DATE: 8-27-81

SHEET 3 OF 20

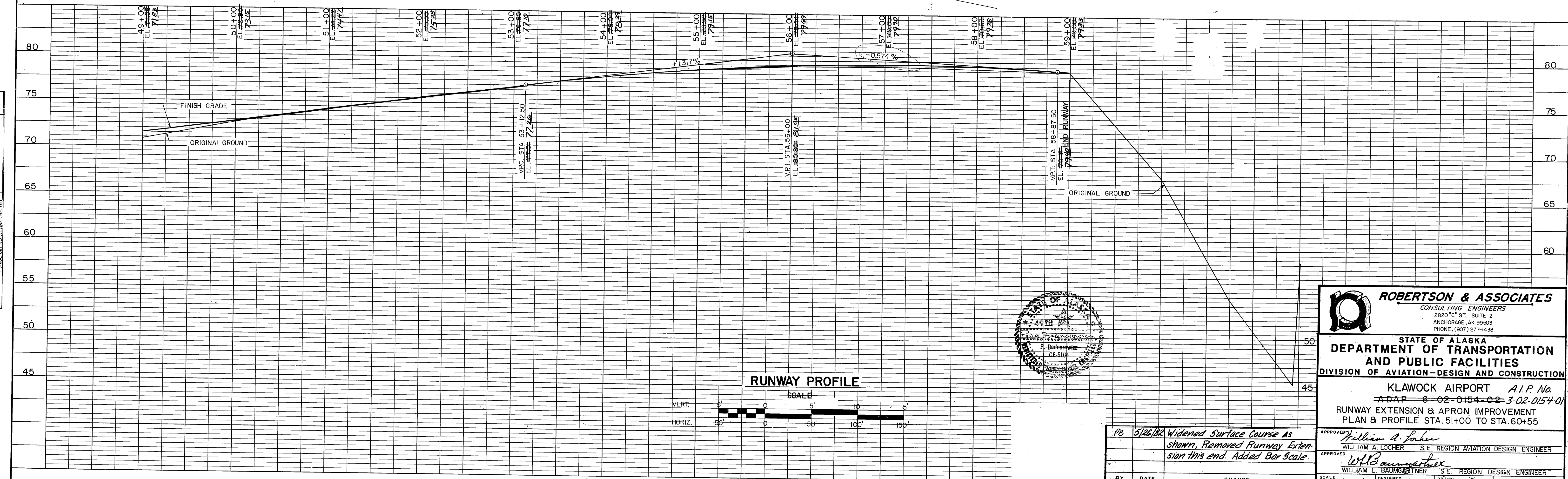
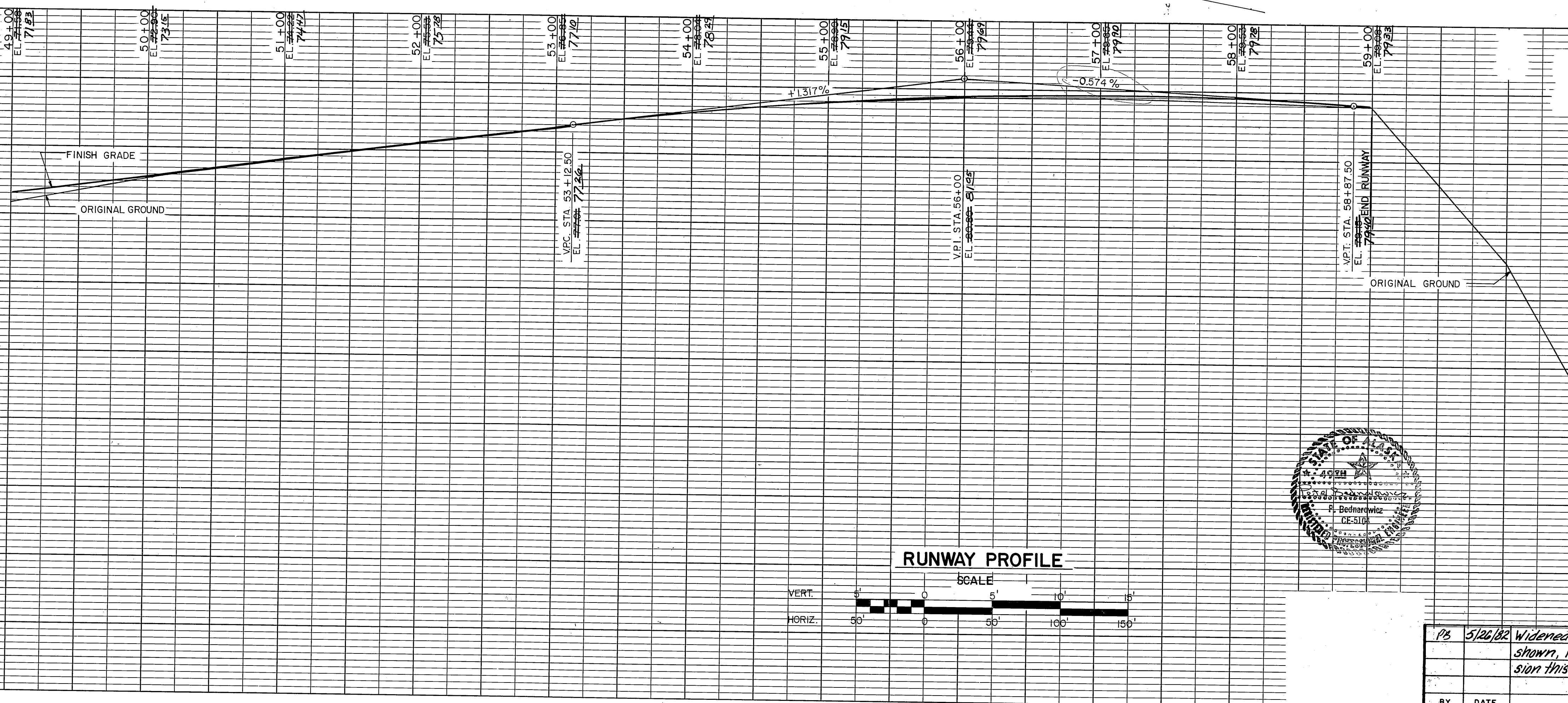


PROFILE	SURVEYED _____	BY _____	DATE _____
	PLOTTED _____		
	GRADES CHECKED _____		
	B. M.'s NOTED _____		
NOTE BOOK	STRUCTURE NOTATIONS CHECKED _____		
No. _____			



	ROBERTSON & ASSOCIATES CONSULTING ENGINEERS 2820 "C" ST., SUITE 2 ANCHORAGE, AK 99503 PHONE, (907) 277-1438
	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
	DIVISION OF AVIATION—DESIGN AND CONSTRUCTION
	KLAWOCK AIRPORT <i>A.I.P. No.</i> ADAP 6-02-0154-02 <i>3-02-0154-01</i> RUNWAY EXTENSION & APRON IMPROVEMENT PLAN & PROFILE STA. 41+00 TO STA. 51+00
APPROVED <i>William L. Locher</i> WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER	APPROVED <i>W.L. Baumgartner</i> WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER
SCALE AS SHOWN	DESIGNED <i>ML, J.S.</i> DRAWN <i>J.S. W.</i> CHECKED _____ DATE <i>8-27-81</i> SHEET <i>5</i> OF <i>20</i>

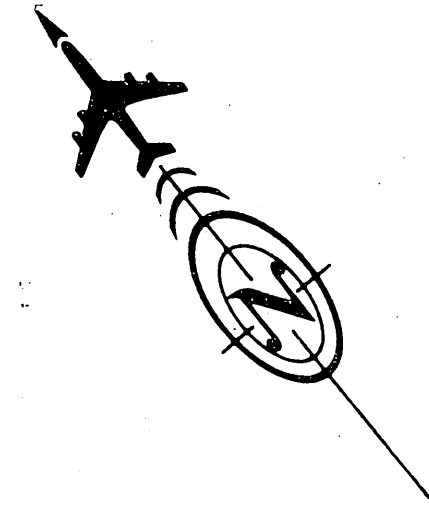
PROFILE		BY	DATE
SURVEYED.....			
PLOTTED.....			
GRADES CHECKED.....			
B. M.'s NOTED.....			
STRUCTURE NOTATIONS CHECKED.....			
No.			



	ROBERTSON & ASSOCIATES CONSULTING ENGINEERS 2820 "C" ST. SUITE 2 ANCHORAGE, AK 99503 PHONE, (907) 277-1438
	STATE OF ALASKA
	DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
	DIVISION OF AVIATION-DESIGN AND CONSTRUCTION
KLAWOCK AIRPORT <i>A.I.P. No.</i> ADAP 6-02-0154-02 <i>3-02-0154-01</i>	
RUNWAY EXTENSION & APRON IMPROVEMENT PLAN & PROFILE STA. 51+00 TO STA. 60+55	
APPROVED	<i>William A. Locher</i> WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER
APPROVED	<i>William L. Baumgartner</i> WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER
SCALE	DESIGNED <i>ML, J.S.</i> CHECKED <i>ML</i> DRAWN <i>CS, VB</i> DATE <i>8.27.81</i>
AS SHOWN	SHEET 6 OF 20

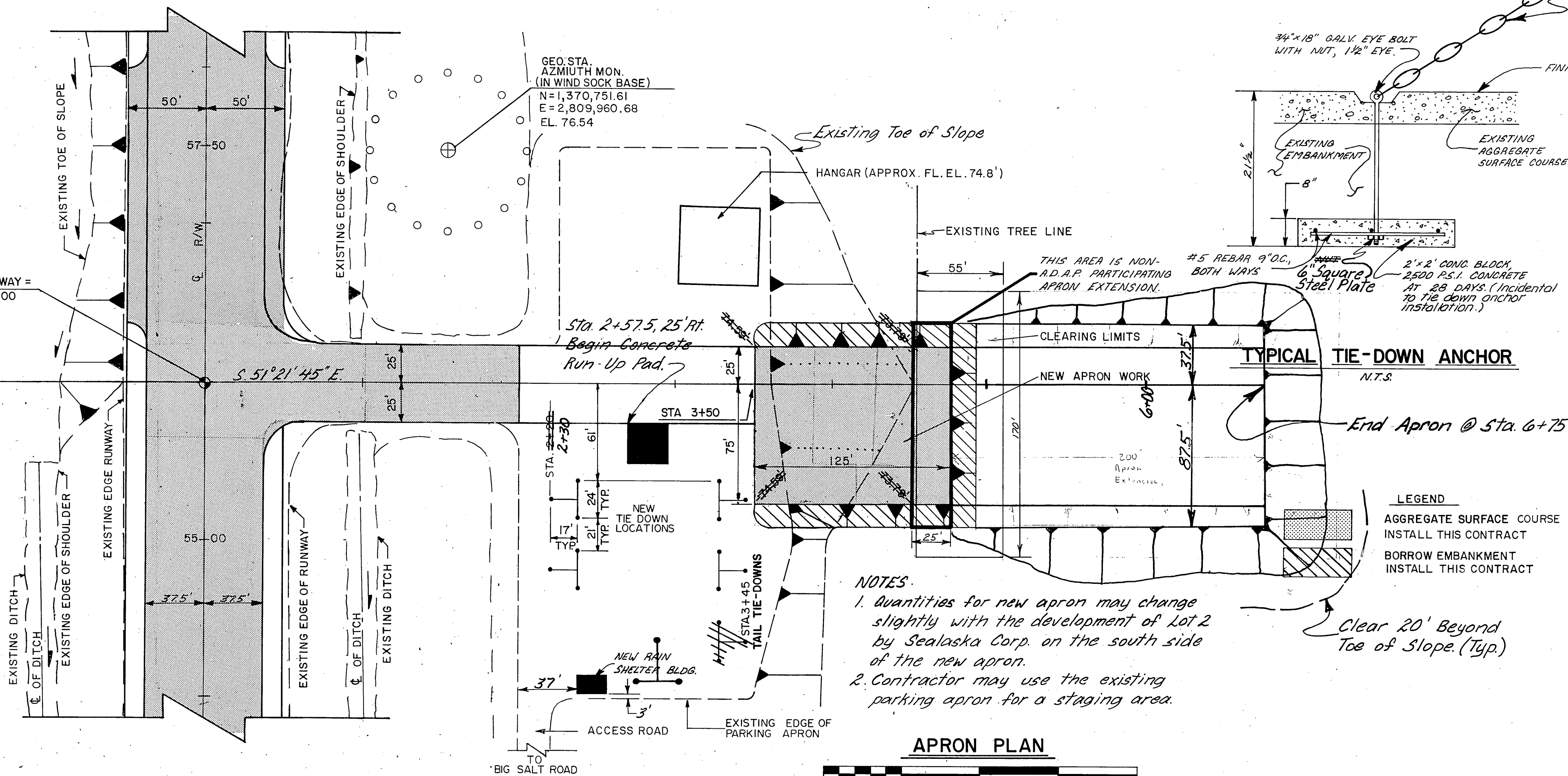
PLAN	DATE	BY	DATE	BY
SURVEYED				
NOTED				
NOTE BOOK				
No.				

PROFILE	DATE	BY	DATE	BY
SURVEYED				
NOTED				
NOTE BOOK				
No.				



GEO. STA.
 STA. 56+00
 N=1,370,740.82
 E=2,809,737.99
 EL.=79.24'

EQUATION
 @ STA. 56+00 RUNWAY =
 TAXIWAY @ STA. 0+00



NOTES
 1. Quantities for new apron may change slightly with the development of Lot 2 by Sealaska Corp. on the south side of the new apron.
 2. Contractor may use the existing parking apron for a staging area.

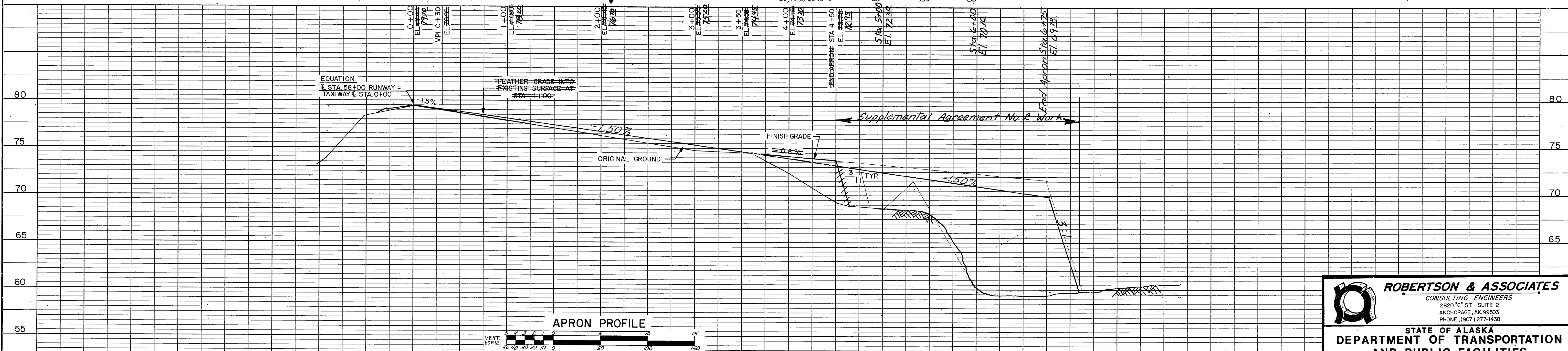
LEGEND
 AGGREGATE SURFACE COURSE
 INSTALL THIS CONTRACT
 BORROW EMBANKMENT
 INSTALL THIS CONTRACT

TYPICAL TIE-DOWN ANCHOR

NOT USED
OPTIONAL TIE-DOWN ANCHOR
 N.T.S.

TIEDOWN ANCHOR
NOTES

- It is the contractors responsibility to verify the type of material at the tiedowns.
- Where rock is encountered rock anchors may be used. Rod dia. shall be 3/4" Depth of anchor shall be as required to develop 4000 lbs. of pull out strength per anchor.



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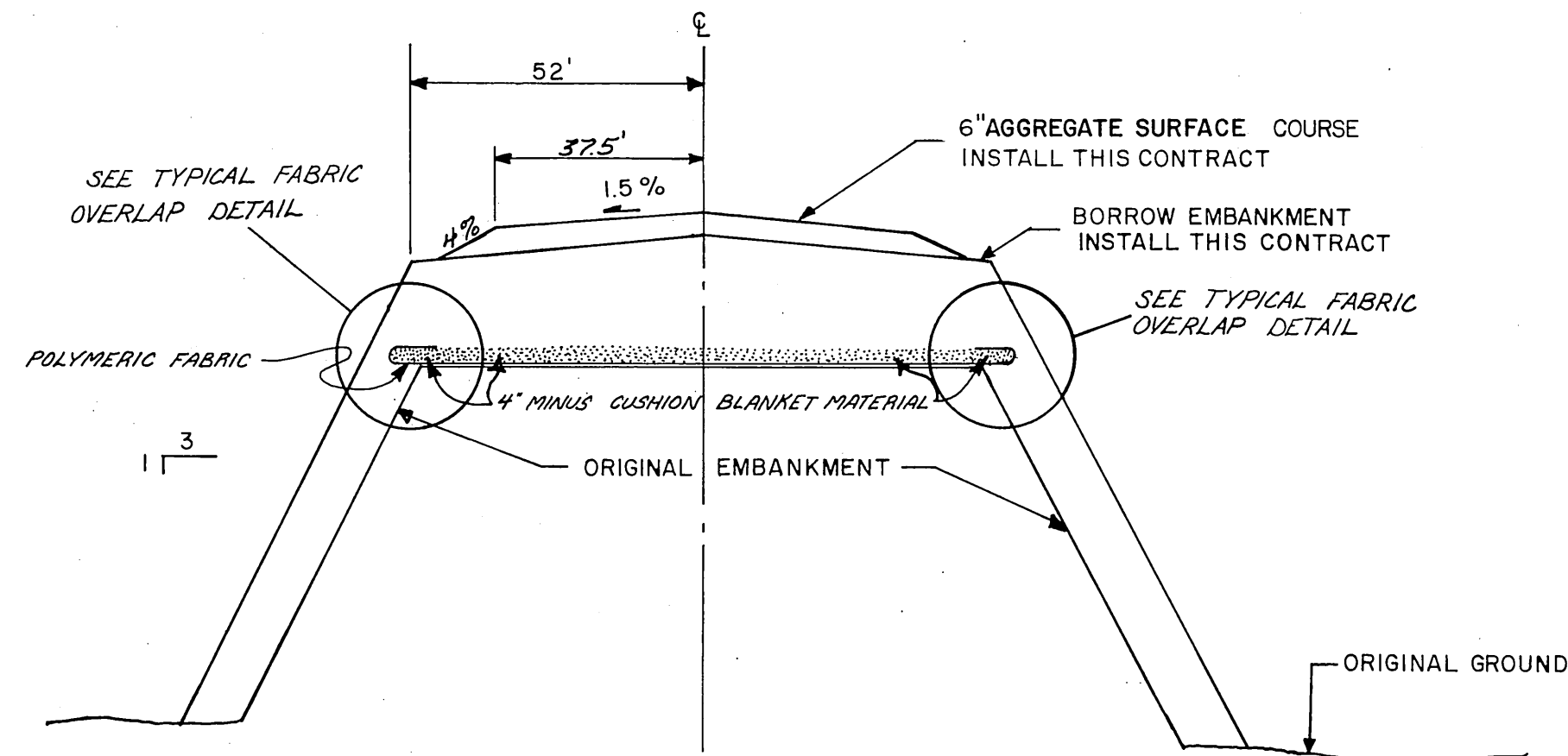
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 AND PUBLIC FACILITIES
 DIVISION OF AVIATION-DESIGN AND CONSTRUCTION

Klawock Airport A.I.P. No.
 ADAP 6-02-0154-02-3-02-0154-01
 RUNWAY EXTENSION & APRON IMPROVEMENT
 PLAN & PROFILE

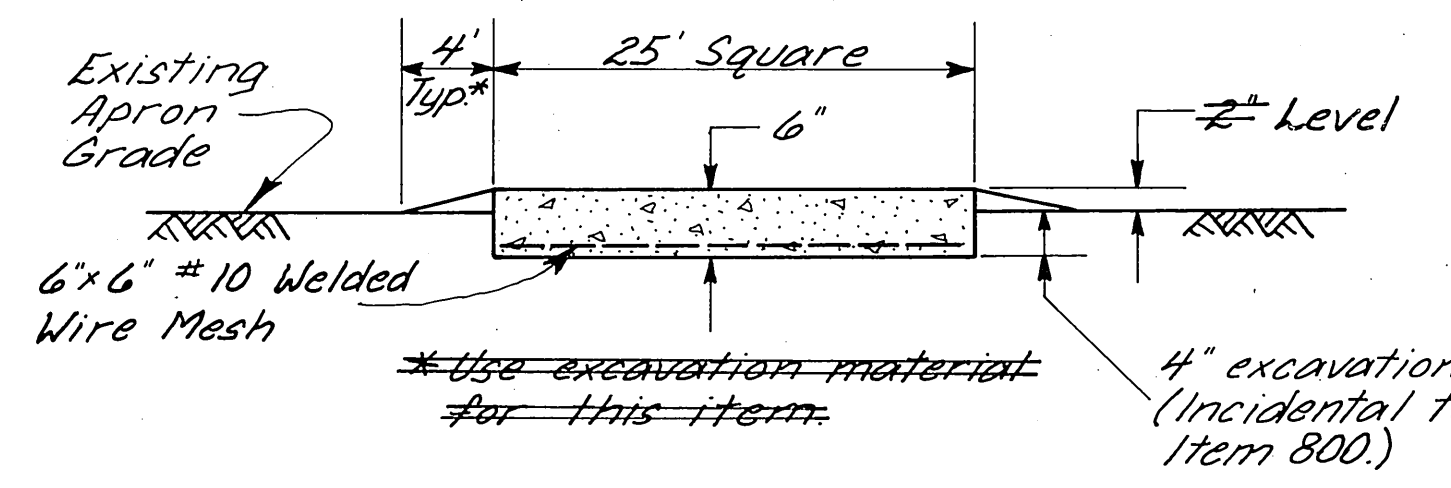
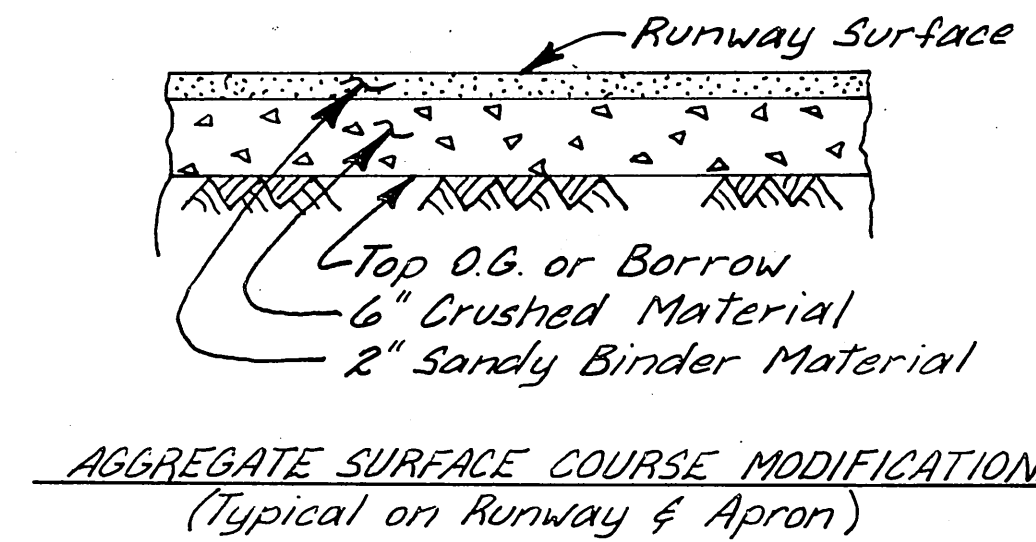
APPROVED	William A. Locher	S.E. REGION AVIATION DESIGN ENGINEER
APPROVED	William L. Baumsartner	S.E. REGION DESIGN ENGINEER
BY	DATE	CHANGE
W.L.	8/24/88	ADDITIVE ALTERNATE NO. 1

SCALE AS SHOWN
 DESIGNED ML, J.S.
 DRAWN J.S., J.B.
 CHECKED J.B.
 DATE 8-27-81
 SHEET 7 OF 20

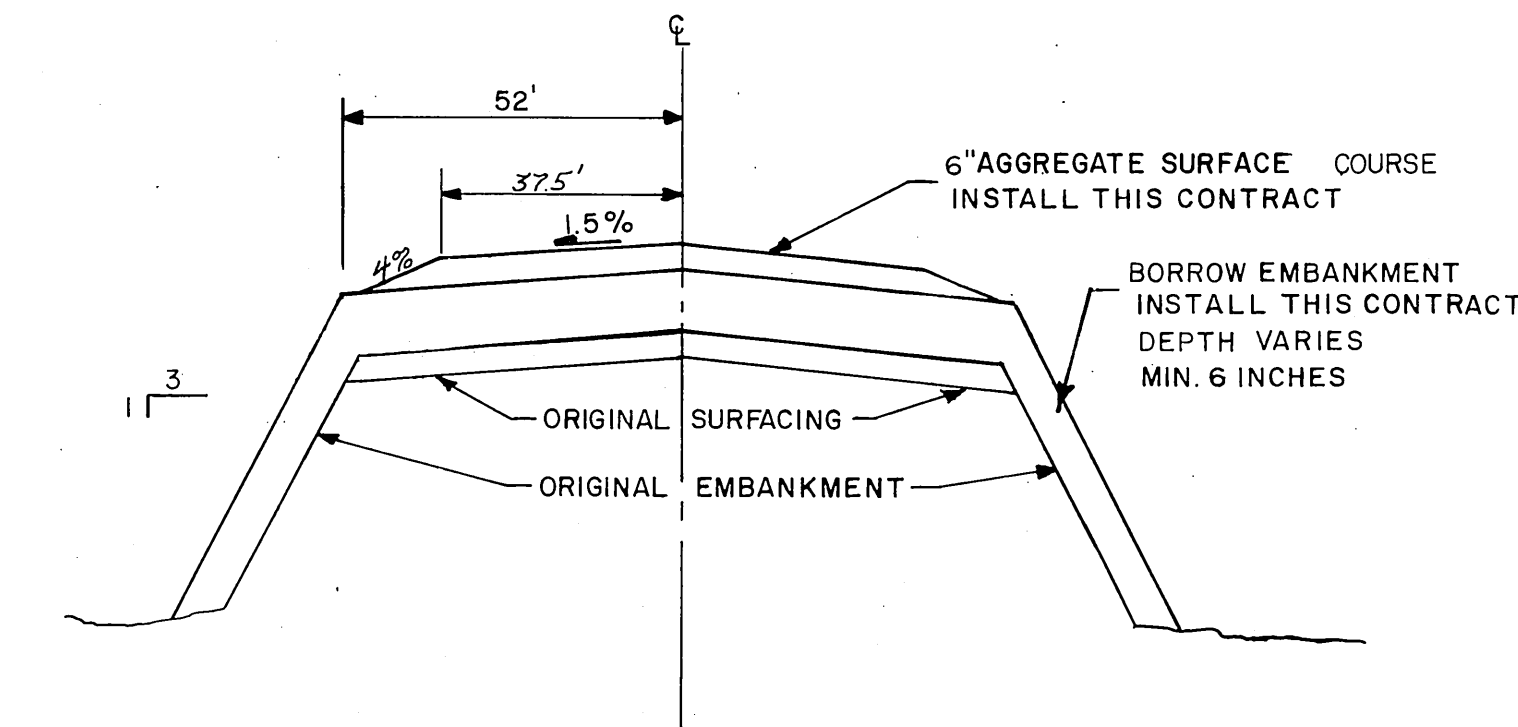
REVISIONS
10/1/82 ADDED AN ADDITIONAL 25' OF APRON EXTENSION
6/2/82 INCORPORATED ALTERNATE AS PART OF MAIN CONTRACT
5/26/82 CHANGED SURFACE TOP WIDTHS & TIE DOWN ANCHORS - ADDED NEW RUN-UP PAD, NEW BAR SCALE, & NEW LEGEND FOR ADDIT. ALT.



TYPICAL RUNWAY SECTION
STA. 30+43 TO 34+00
N.T.S.

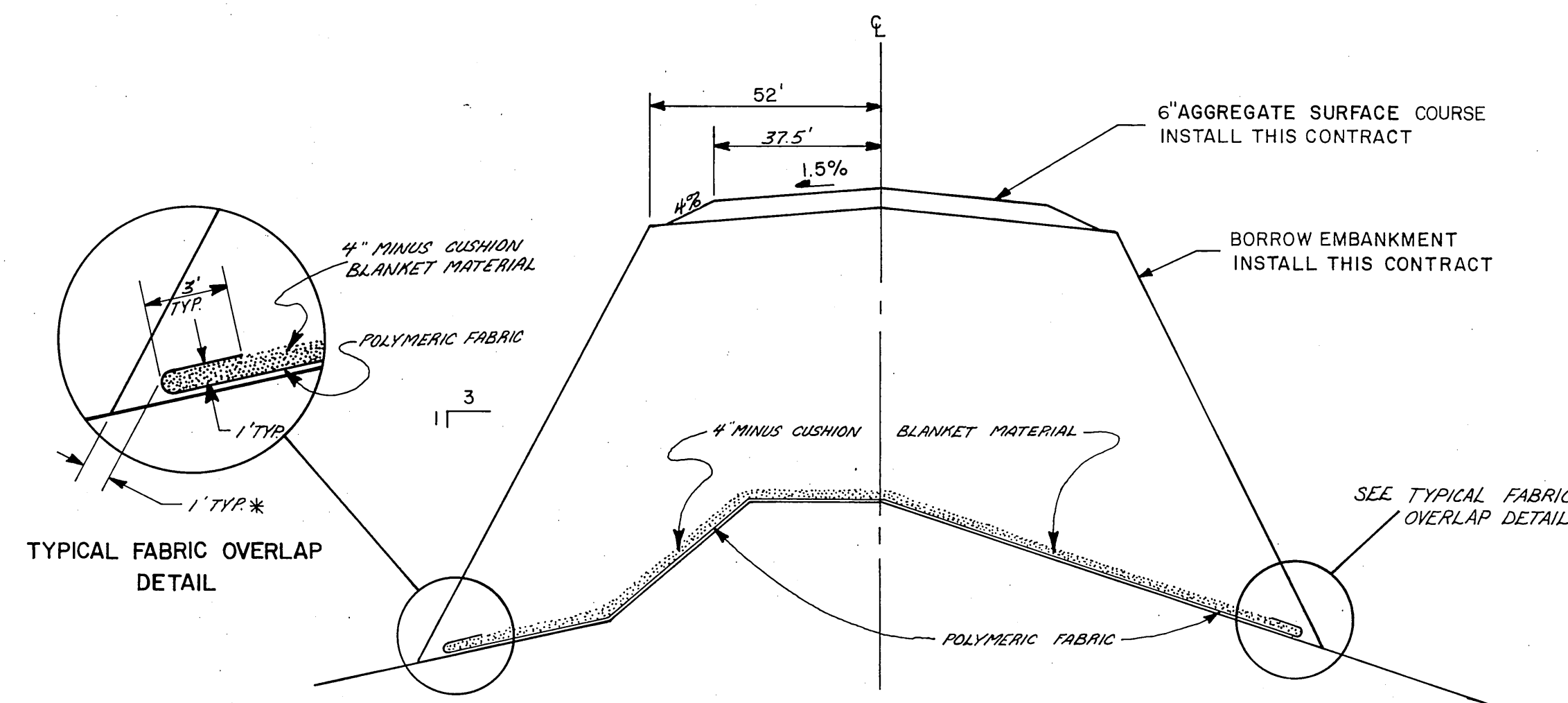


TYPICAL CONCRETE RUN-UP PAD SECTION
N.T.S.

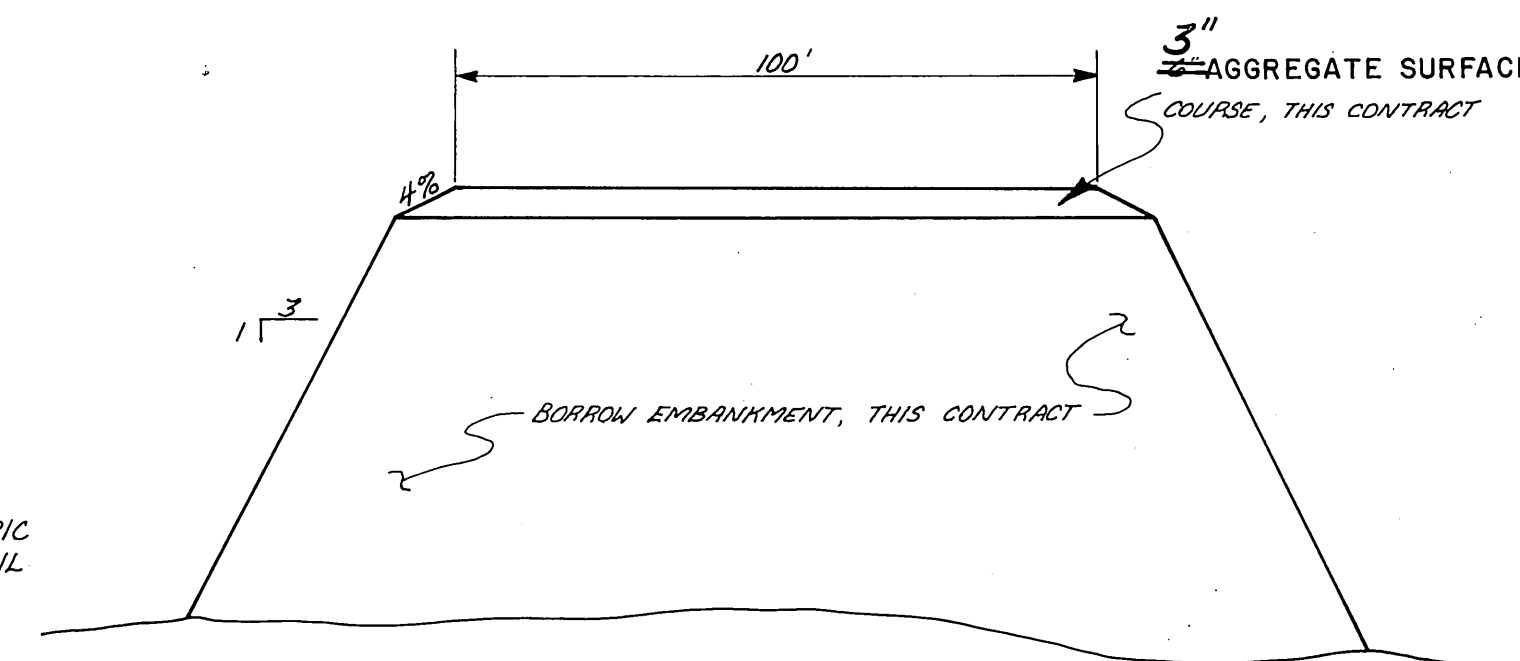


TRANSITION RUNWAY SECTION
WITH ADDITIONAL NEW BORROW EMBANKMENT
STA. 34+00 TO 59+00
N.T.S.

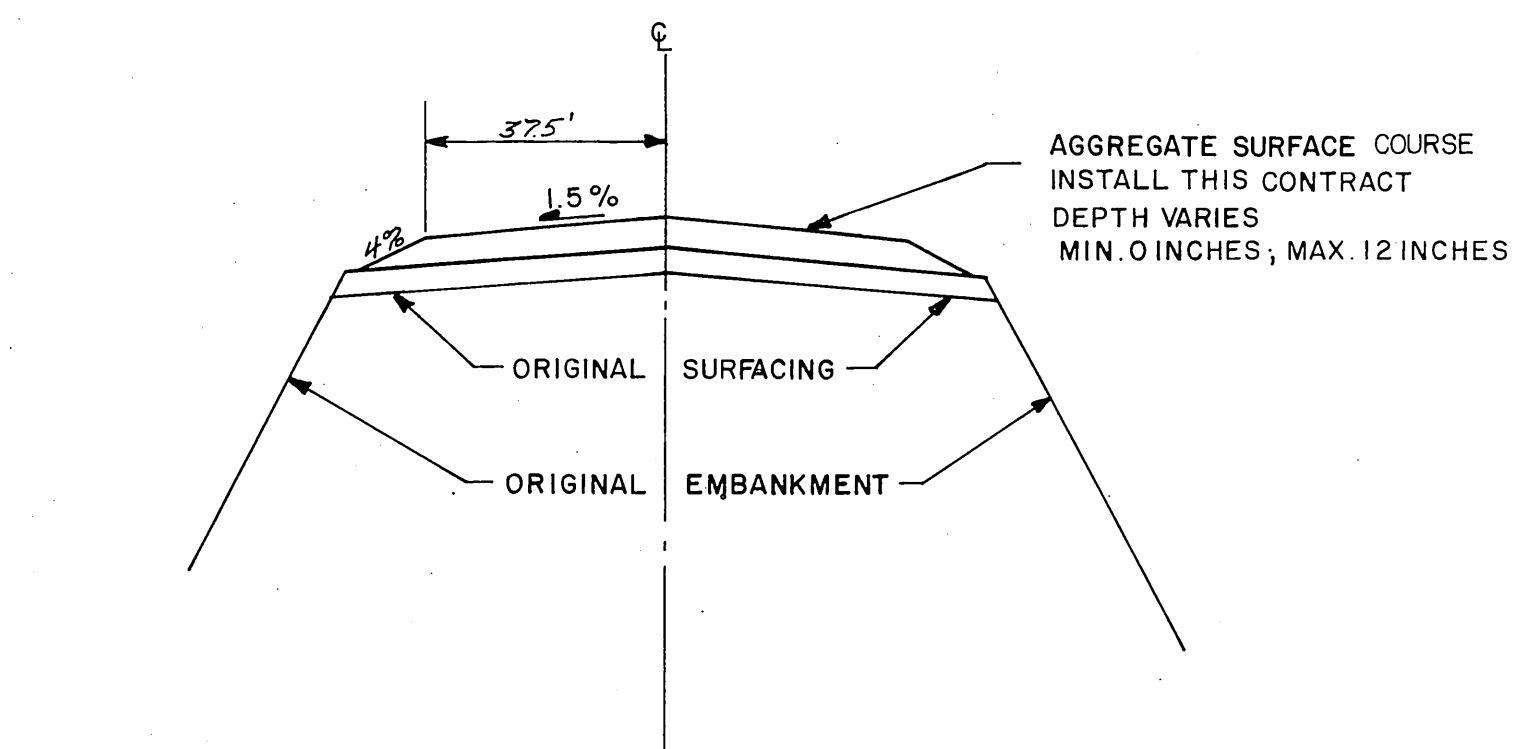
NOTE:
When embankment is to be placed on ground whose slope is 4:1 or greater, the new embankment shall be continuously benched over those areas, as the work is brought up in layers. Benching shall be of sufficient width to permit operations of placing and compacting equipment. Each horizontal cut shall begin at the intersection of the original ground and the vertical sides of the previous cuts. Material thus cut out and deemed suitable shall be incorporated into the new embankment and recompacted along with the new material at the Contractor's expense. Benching as required above, will not be measured for payment, but will be considered incidental to Item 330(d) Borrow Embankment.



TYPICAL RUNWAY SECTION
STA. 29+00 TO 30+43
N.T.S.

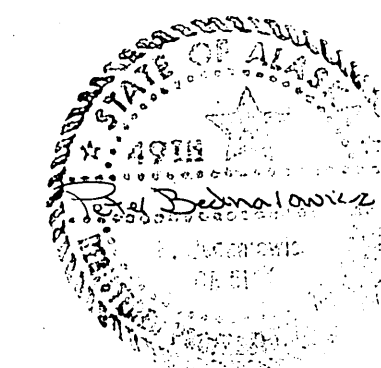


TYPICAL APRON EXPANSION SECTION
N.T.S.



TYPICAL RUNWAY SECTION
WITHOUT ADDITIONAL NEW BORROW EMBANKMENT
STA. 34+00 TO 59+00
N.T.S.

* NECESSARY FOR SUNLIGHT PROTECTION ONLY



BY	DATE	CHANGE
PD	12/16/82	CORRECTED FABRIC OVERLAP DETAIL, ADDED NOTE FOR BENCHING
PD	6/18/82	ADDED RUN-UP PAD SECTION
PD	5/26/82	ADDED NEW APRON SECTION, CHANGED SURFACE TOP WIDTH, ADDED NEW POLYMERIC FABRIC DETAILS.

ROBERTSON & ASSOCIATES
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PHONE: (907) 277-1438

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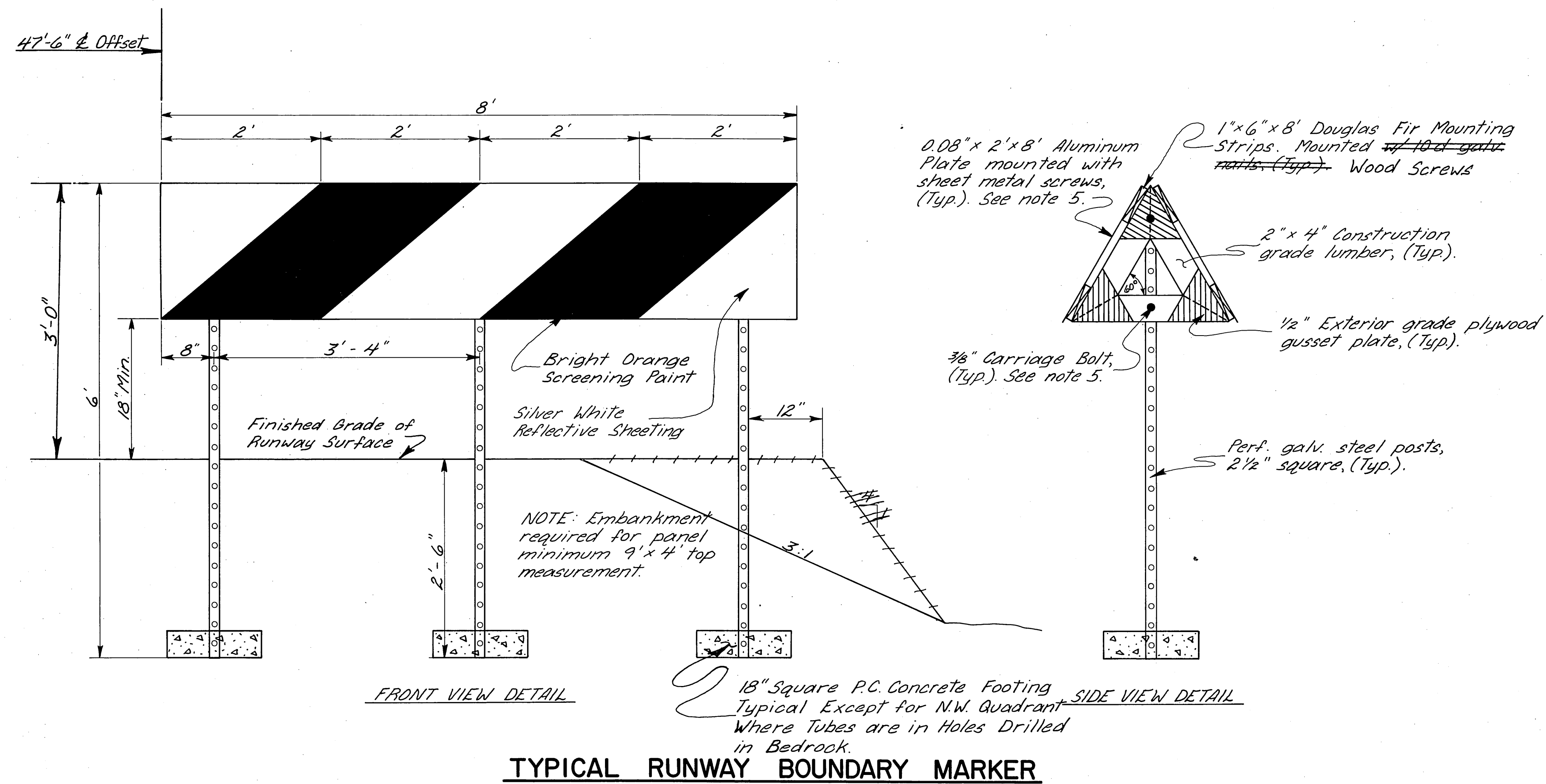
KLAWOCK AIRPORT A.I.P. No. 3-02-0154-01
A.I.P. No. 3-02-0154-01
RUNWAY EXTENSION & APRON IMPROVEMENT
TYPICAL SECTIONS

APPROVED: *William A. Locher*
WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER

APPROVED: *William L. Baumgartner*
WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER

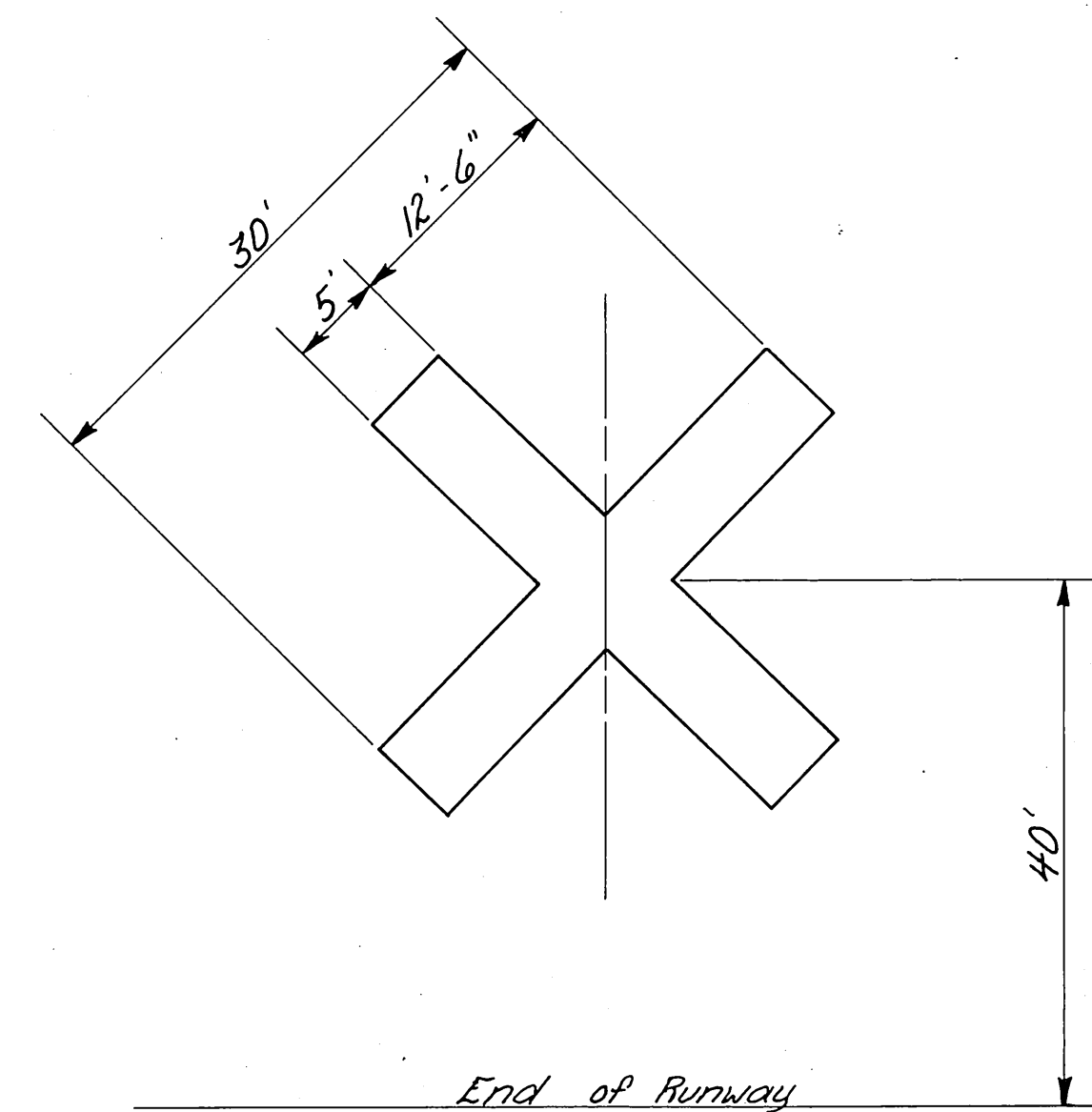
SCALE: AS SHOWN
DESIGNED: ML, J.S.
DRAWN: J.S., B
CHECKED: *ML*
DATE: 8-27-81

SHEET 8 OF 20



RUNWAY BOUNDARY MARKER
NOTES

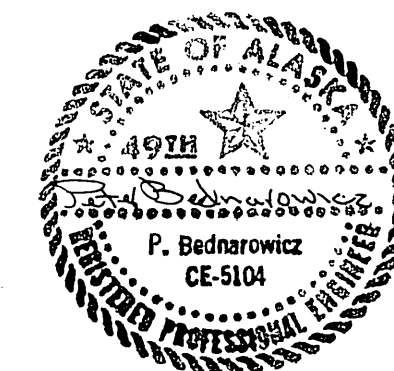
1. Direct boundary marker stripes downward & toward the runway & when observed from an approach to the runway.
2. ~~Install runway boundary markers as shown on sheets # 4 & 6~~
3. Miscellaneous grading for installation of runway boundary markers as per detail shall be considered incidental to this contract & no separate payment shall be made therefore.
4. Fasten gusset plates to 2" x 4" frame w/ exterior cement & galv. nails.
5. Fasten mounting frames to steel posts w/ 2 - 3/8" x 5" galv. carriage bolts.
6. Pre-punch aluminum plates on 12" centers 3" from top & bottom. Fasten to mounting strips w/ 1/2" x #8 zinc coated, panhead sheet metal screws.



CLOSED RUNWAY MARKER

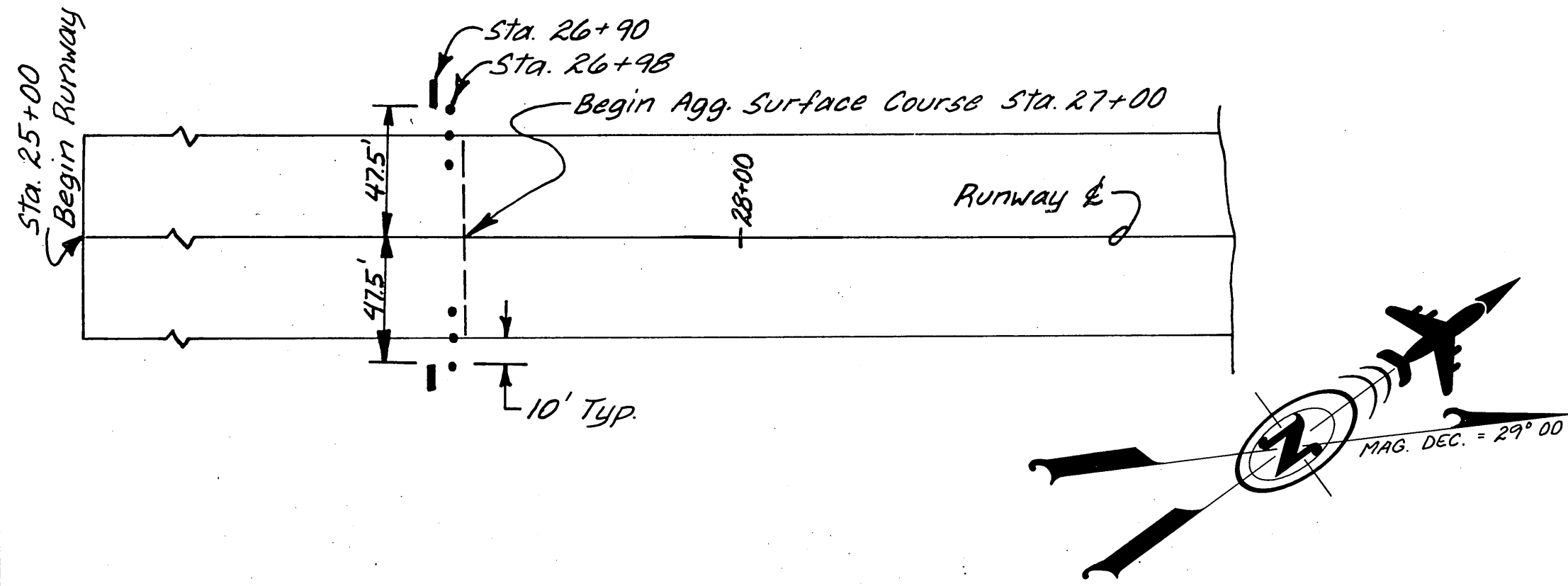
CLOSED RUNWAY MARKER
NOTES

1. Crosses shall be white in color & may be constructed of ~~plastic, plywood, or other suitable material~~.
2. Crosses shall be placed at each end of, & in the middle of the closed runway.

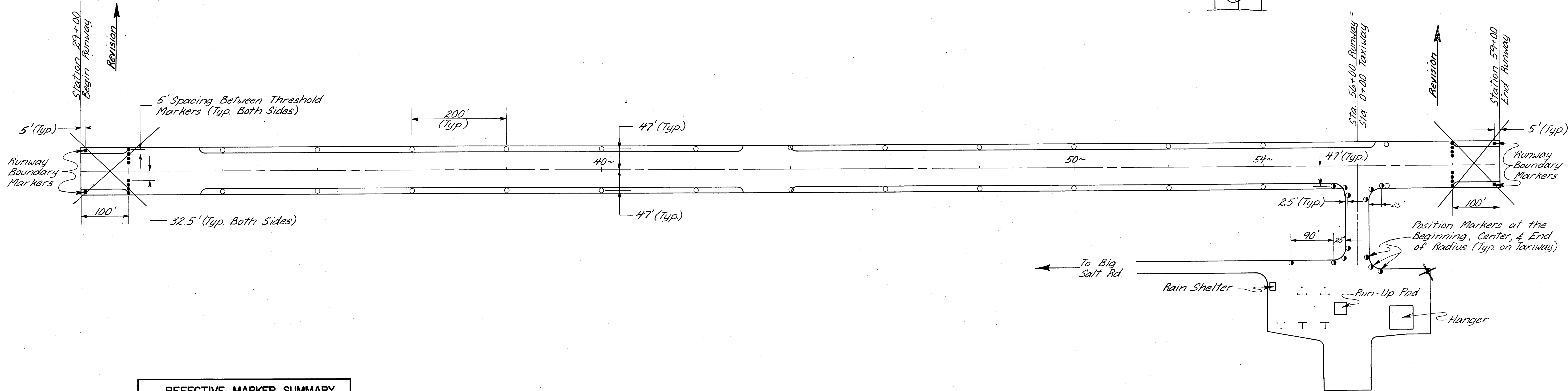
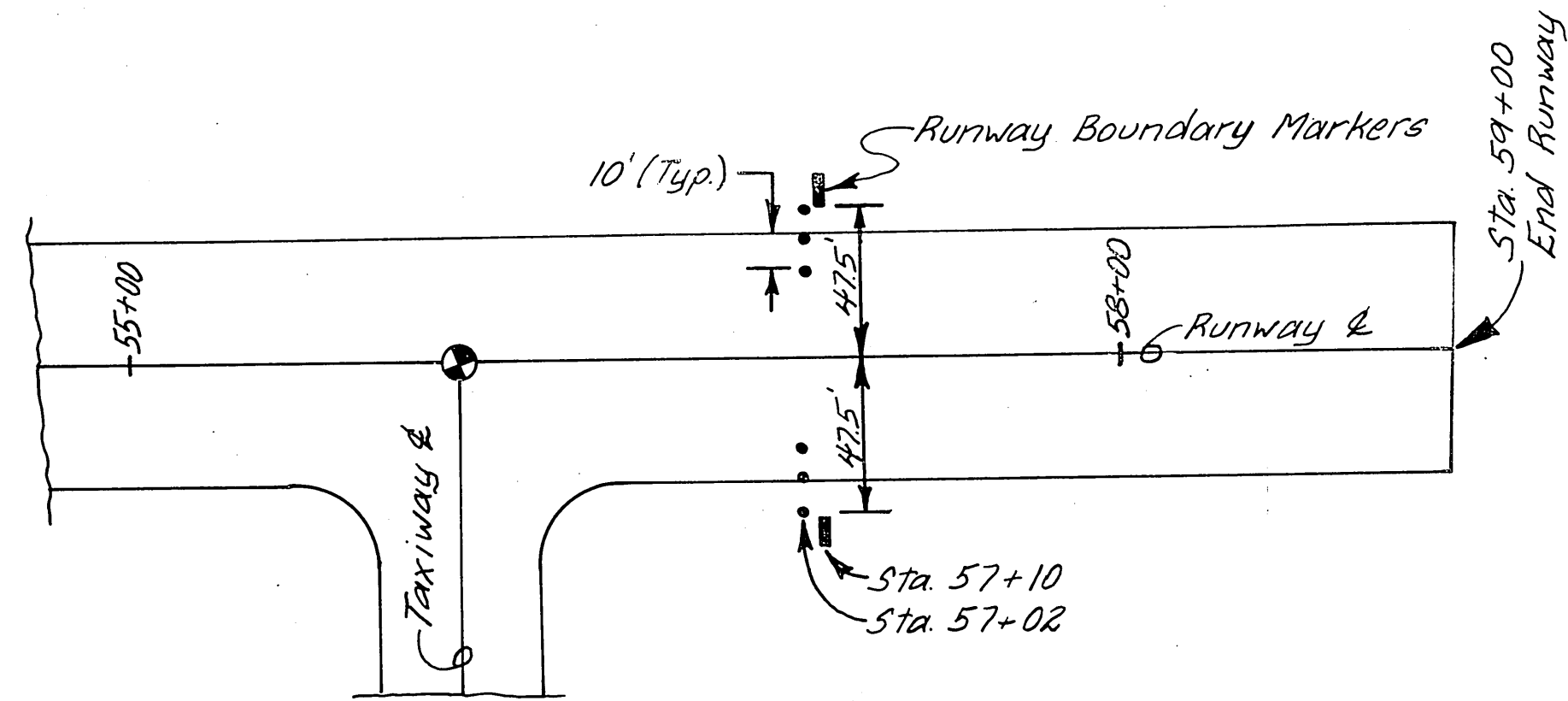
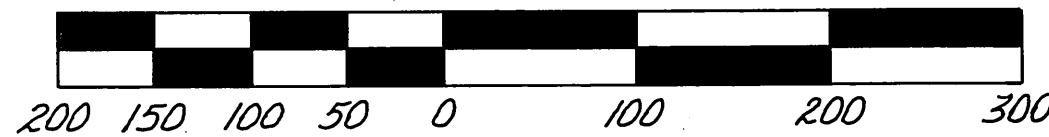


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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S.E. REGION, DIVISION OF AVIATION DESIGN AND CONSTRUCTION
Klawock Airport A.I.P. No.
ADAP 6-02-0154-02 3-02-0154-01
RUNWAY BOUNDARY MARKER AND
RUNWAY X MARKING DETAILS

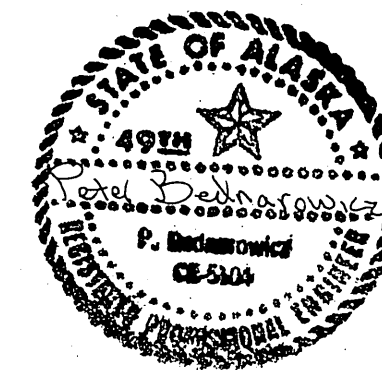
APPROVED	William A. Locher	WILLIAM A. LOCHER	S.E. REGION AVIATION DESIGN ENGINEER
APPROVED	William L. Baumgartner	WILLIAM L. BAUMGARTNER	S.E. REGION DESIGN ENGINEER
BY	DATE	CHANGE	SCALE
			NO SCALE
			CHECKED
			DATE
			SHEET



REFLECTIVE MARKER PLAN



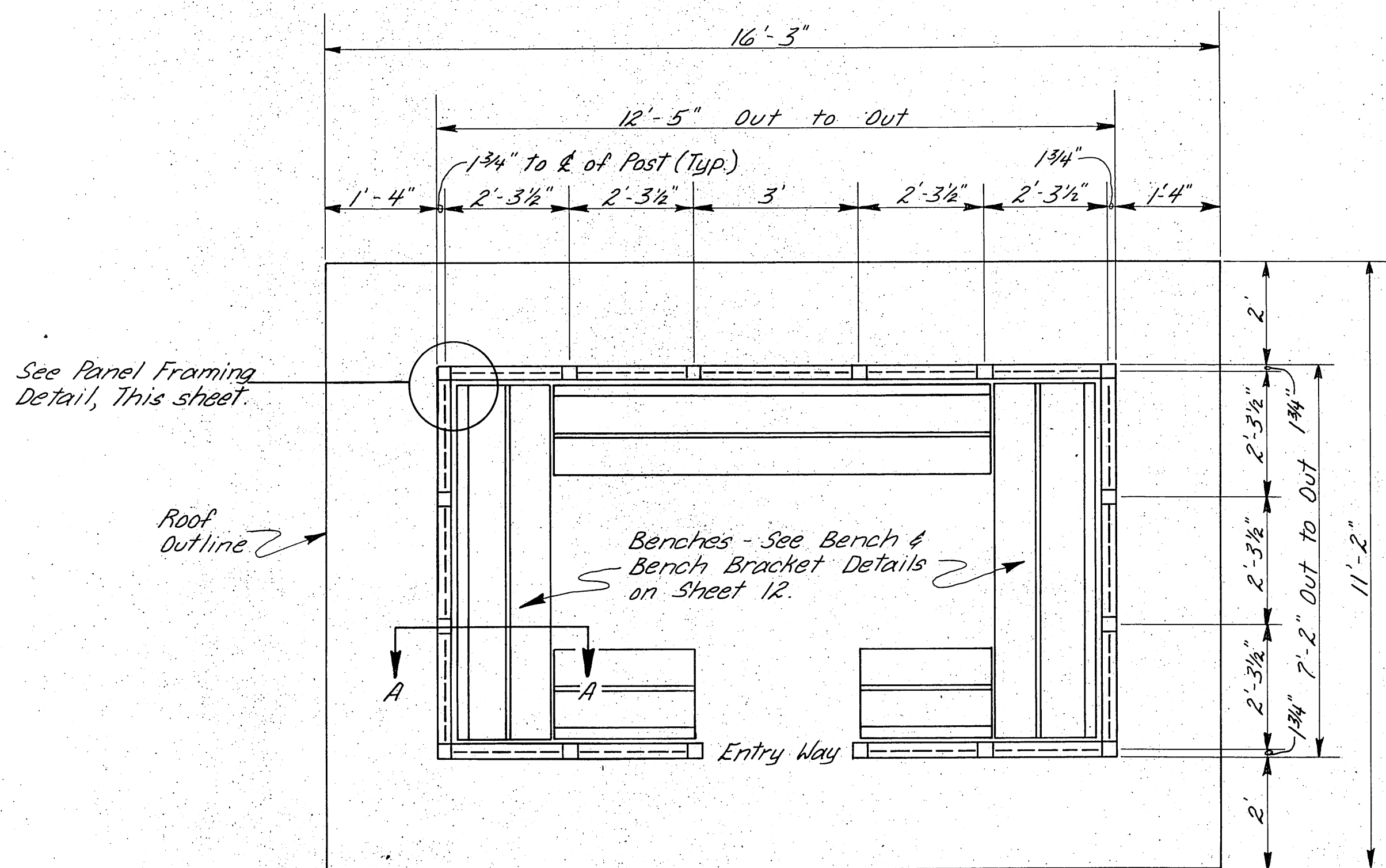
REFLECTIVE MARKER SUMMARY			
SYMBOL	NO. REQ'D	LOCATION	COLOR
•	16 12	Threshold	Green
○	26 23	Runway	White
●	11 13	Taxiway	Yellow
Extras	7 11	4 - RUNWAY 2 - TAXIWAY 1 - THRESHOLD	WHITE YELLOW GREEN
Total	63 64		



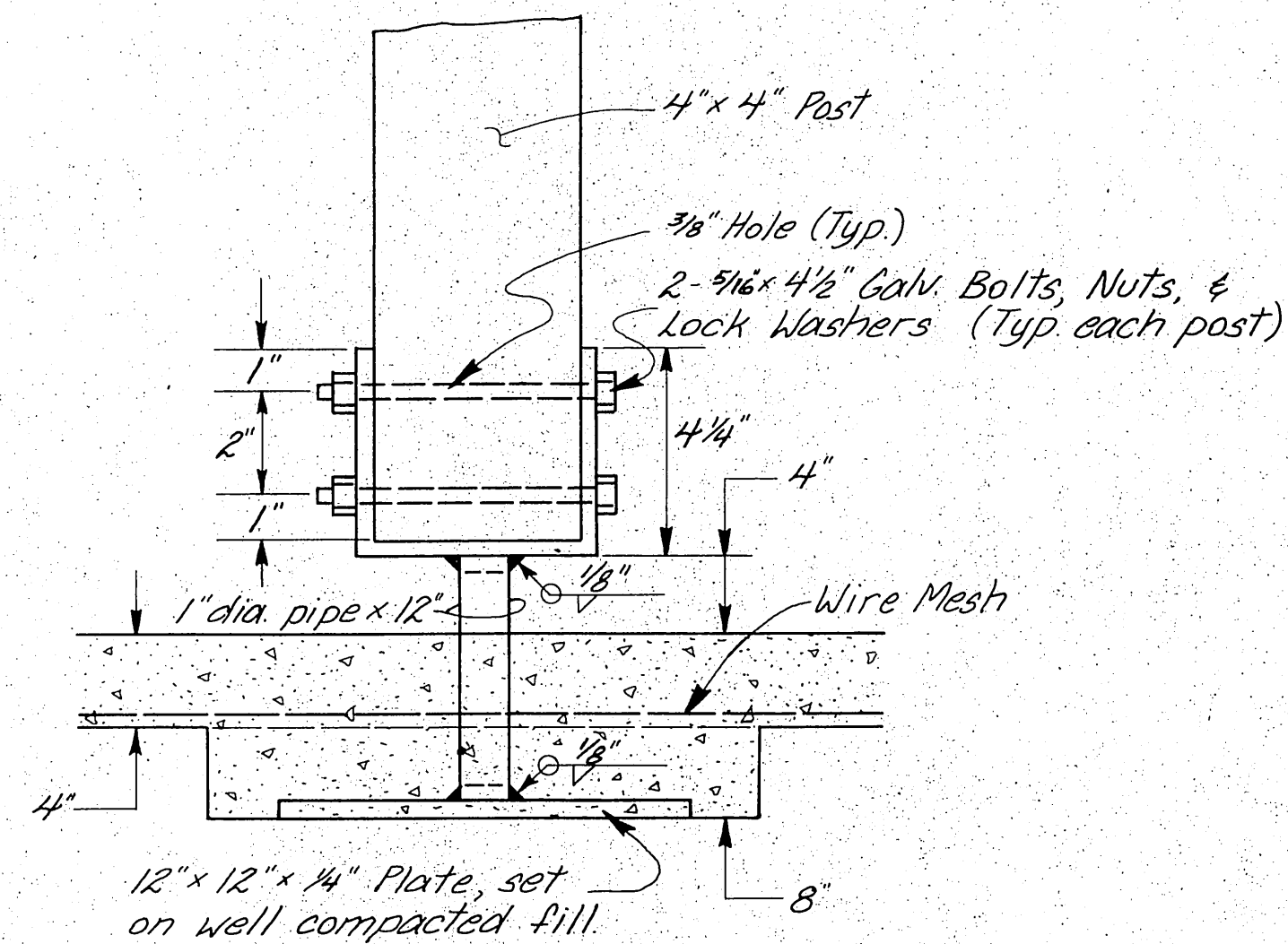
STATE OF ALASKA
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S.E. REGION, DIVISION OF AVIATION DESIGN & CONSTRUCTION
Klawock Airport A.I.P. No.
A.D.A.P. 6-02-0154-02-3-02-0154-01
REFLECTIVE MARKER PLAN

APPROVED <i>William A. Locher</i>		WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER	
APPROVED <i>William L. Baumgartner</i>		WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER	
BY	DATE	CHANGE	SCALE
REVISIONS		DESIGNED	DRAWN
		CHECKED	DATE
			SHEET 10 OF 20

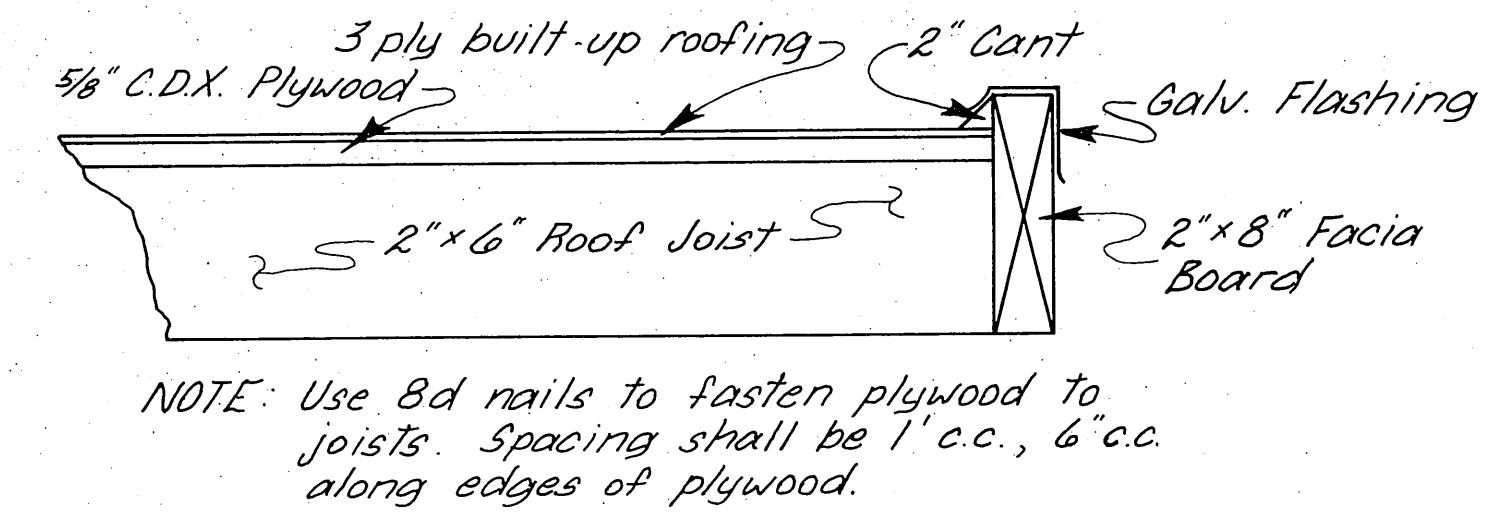
PLAN VIEW



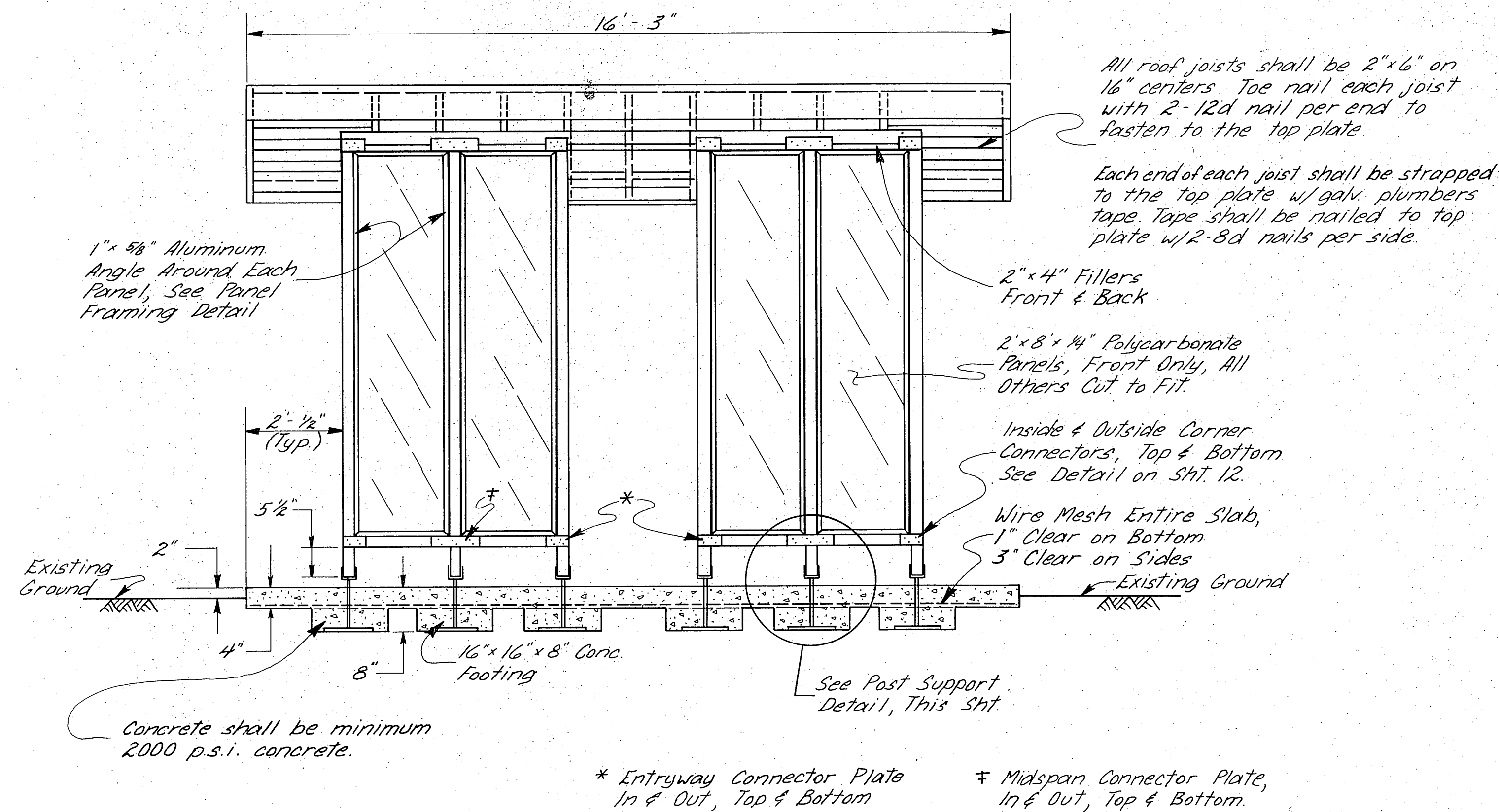
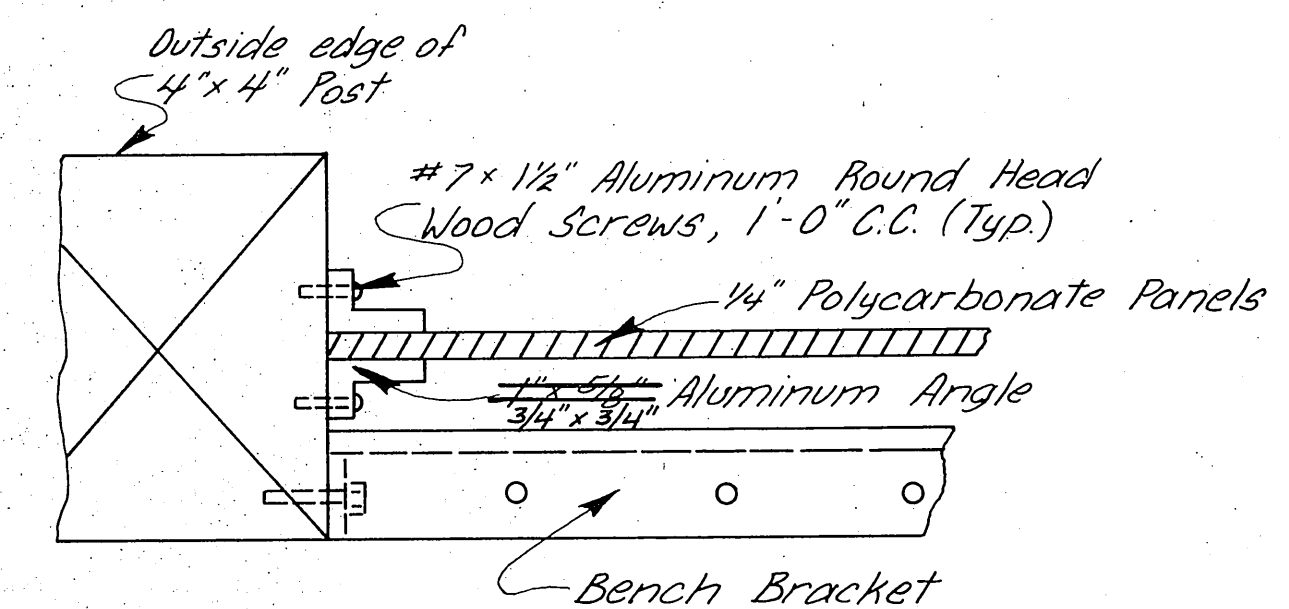
POST SUPPORT DETAIL



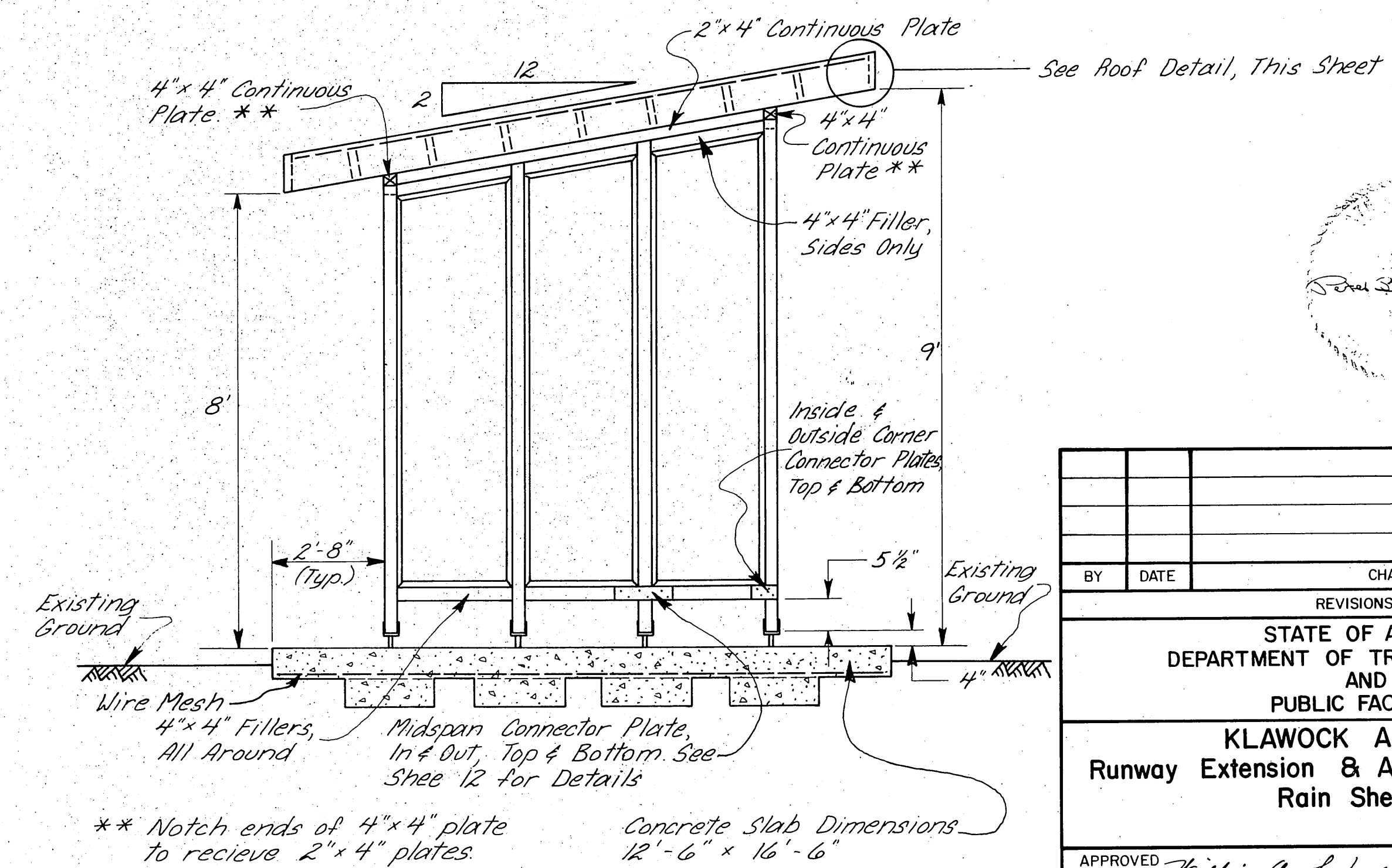
ROOF DETAIL
TYPICAL ALL SIDES



PANEL FRAMING DETAIL



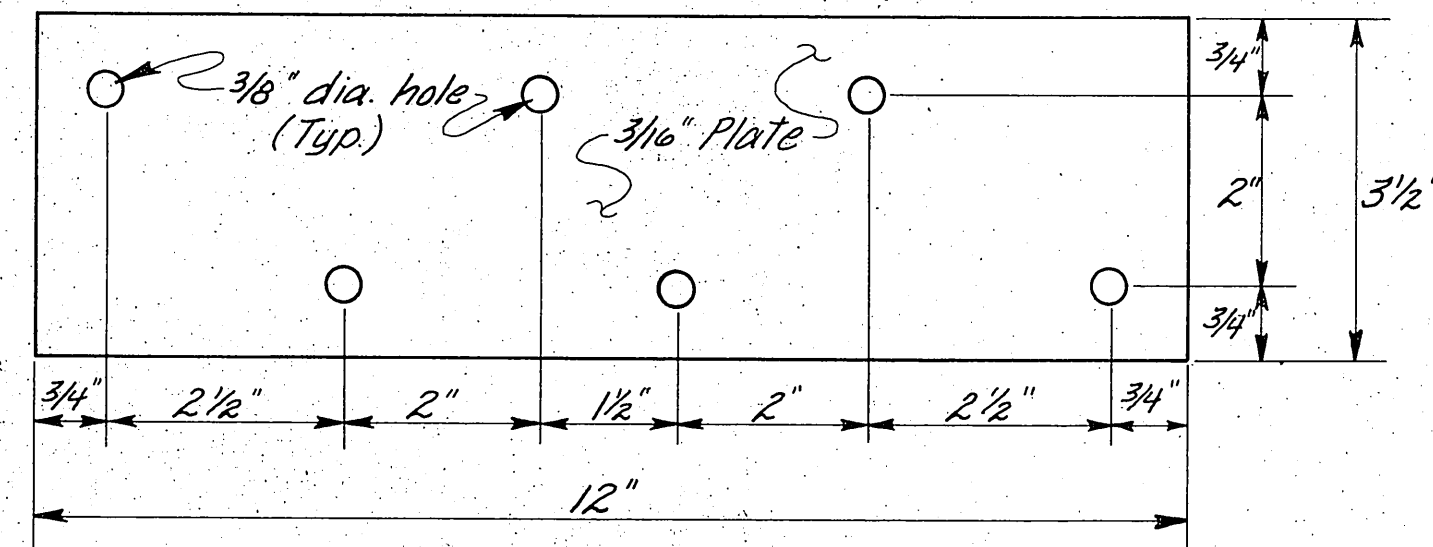
FRONT VIEW



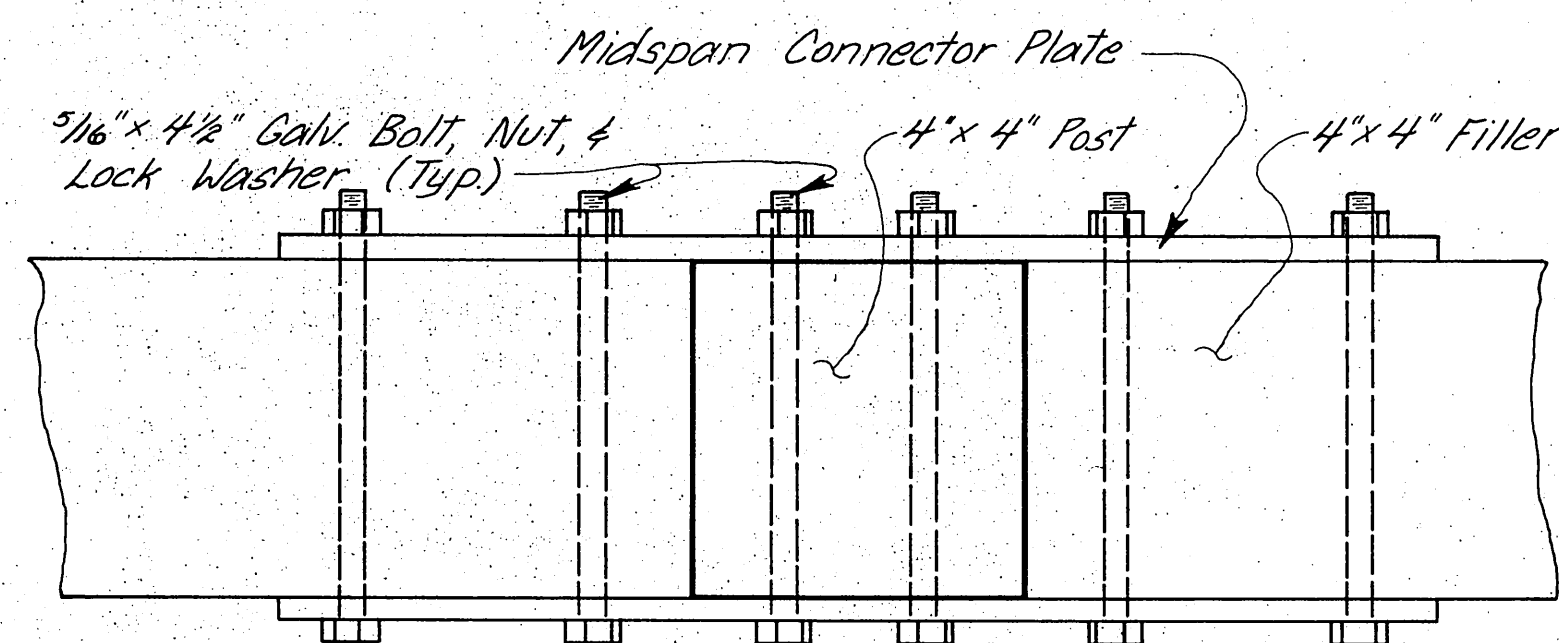
SIDE VIEW

BY	DATE	CHANGE			
REVISIONS					
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES KLAWOCK AIRPORT Runway Extension & Apron Improvements Rain Shelter					
APPROVED <i>William A. Locher</i> WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER APPROVED <i>William L. Baumgartner</i> WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER					
SCALE	DESIGNED		DRAWN		SHEET 11 OF 20
NONE	CHECKED <i>JB</i>		DATE 6-6-82		

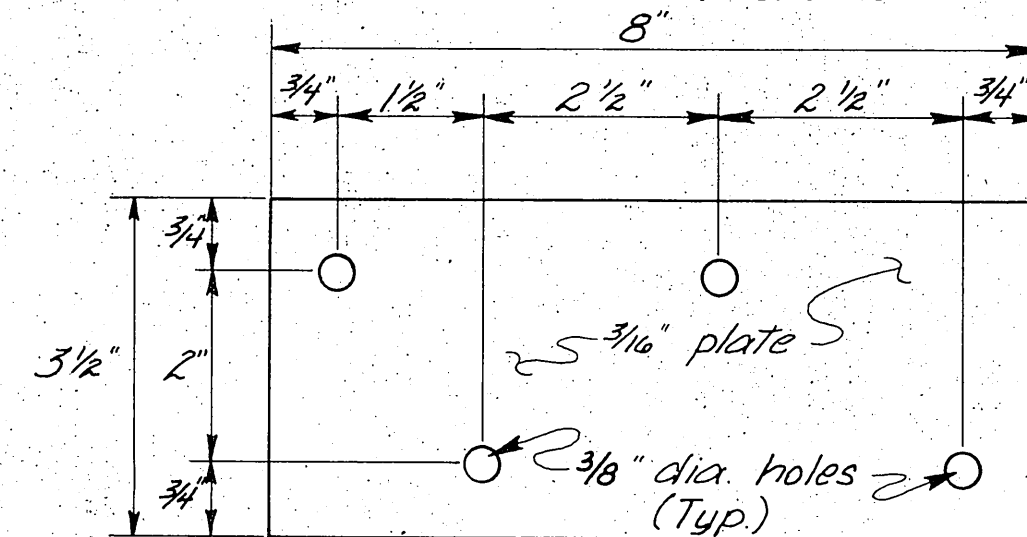
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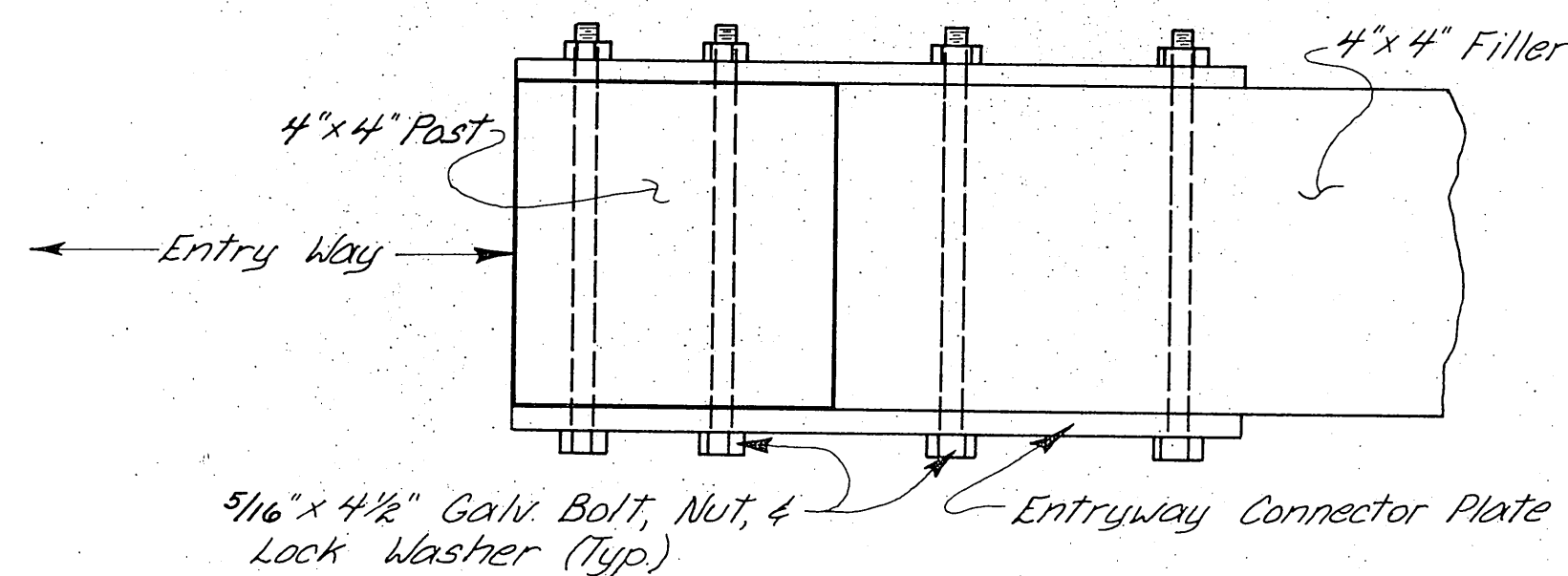
MIDSPAN CONNECTOR PLATE DETAIL



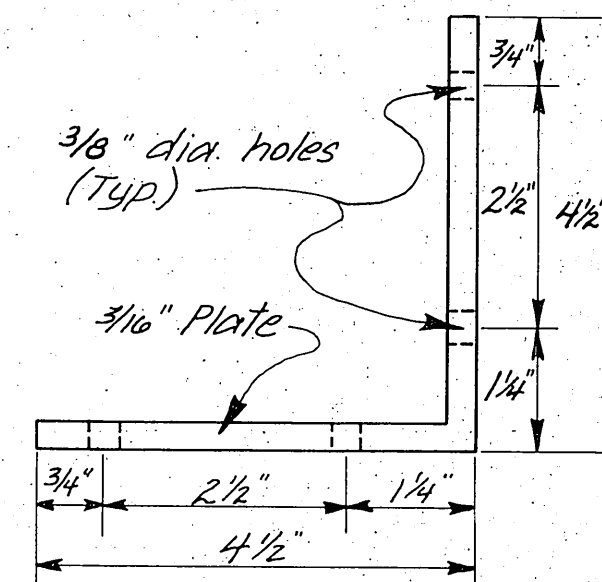
OUTSIDE CORNER AND ENTRYWAY CONNECTOR PLATE



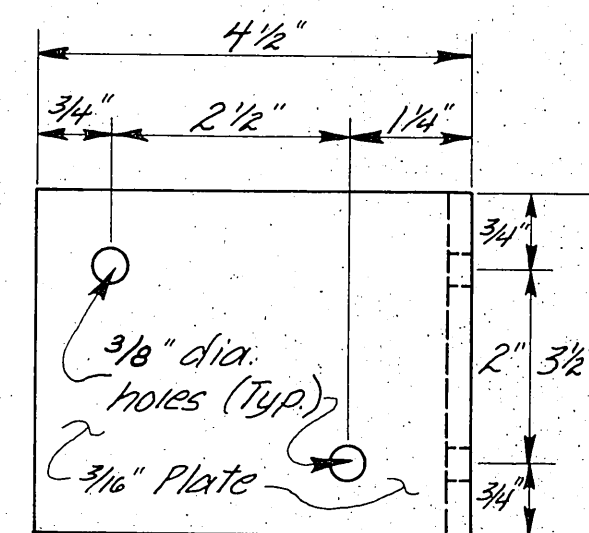
ENTRYWAY CONNECTOR PLATE DETAIL



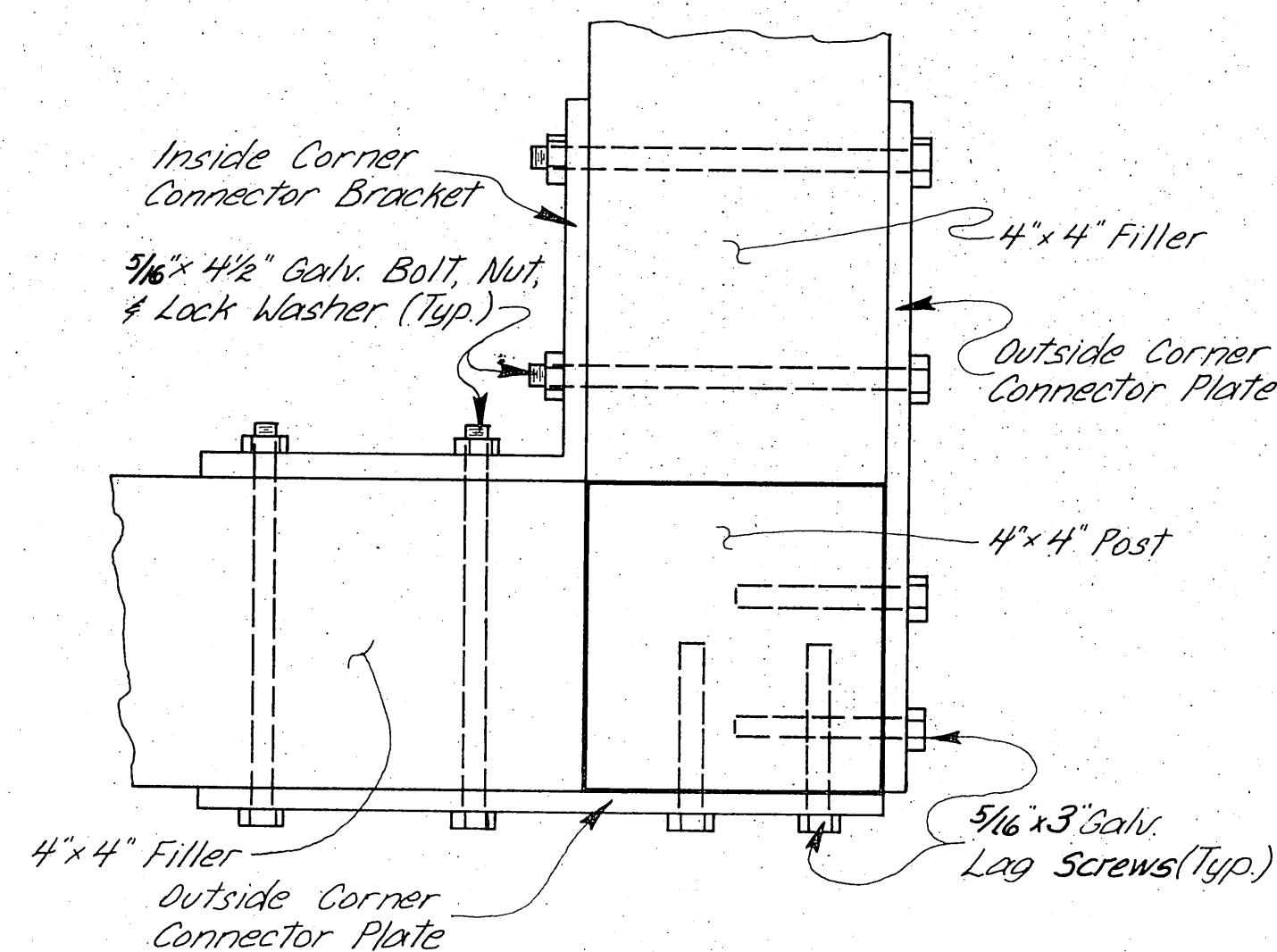
INSIDE CORNER BRACKET



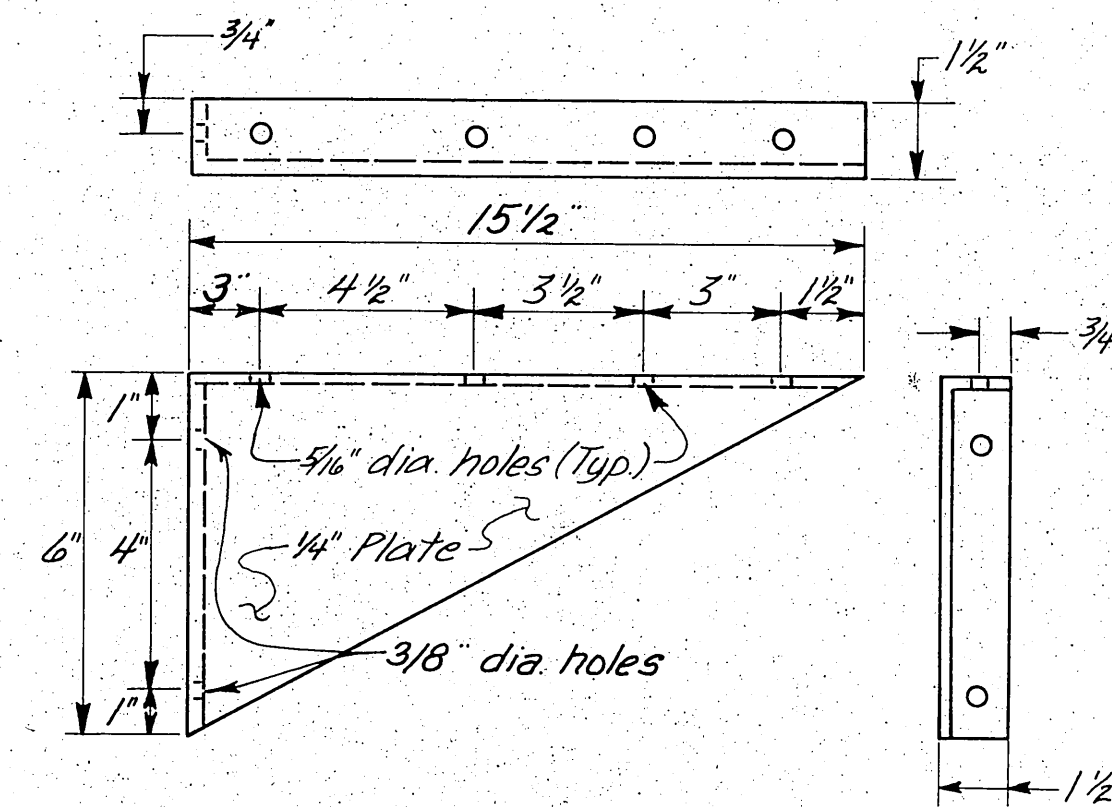
INSIDE CORNER BRACKET SIDE VIEW



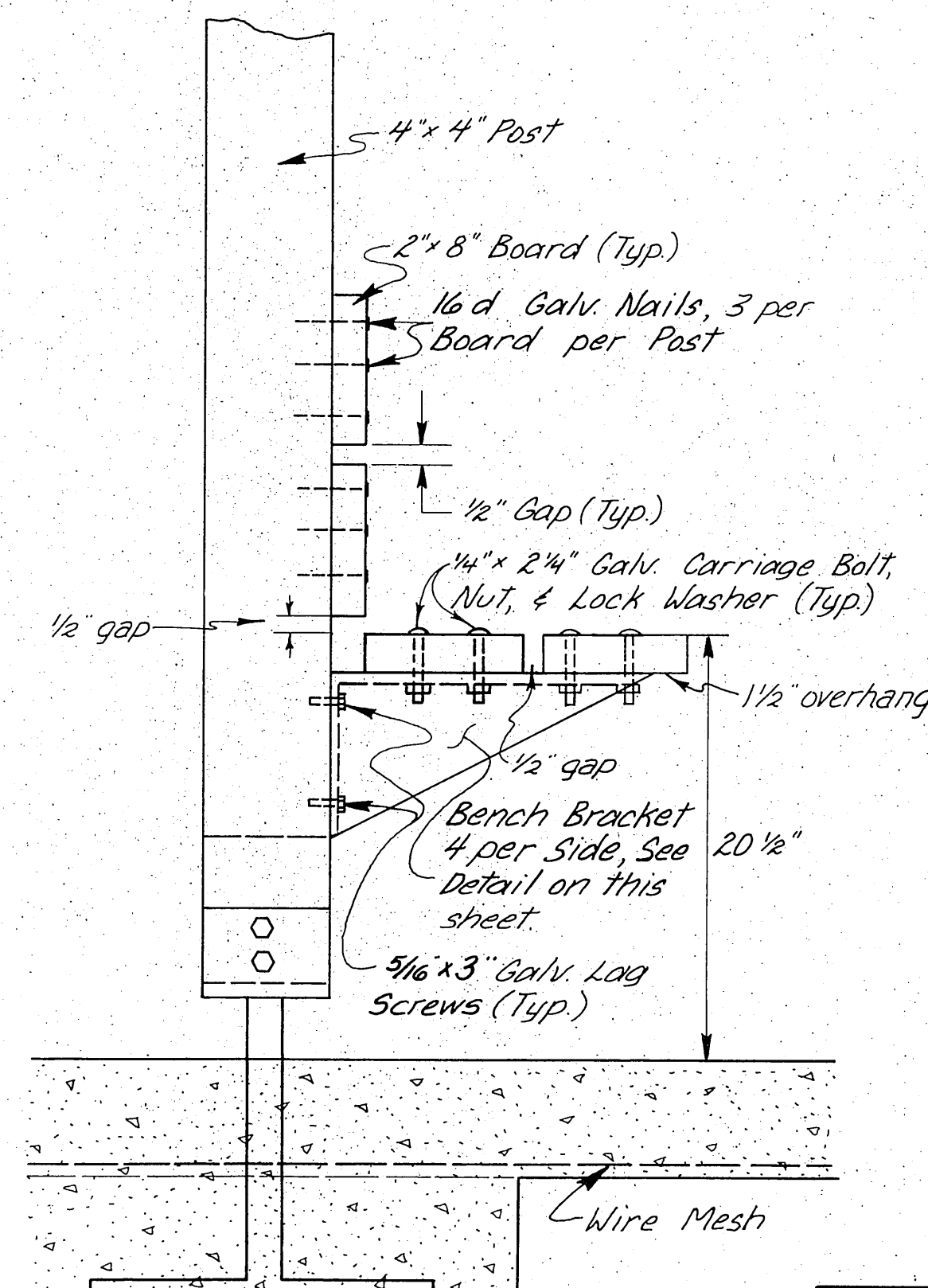
OUTSIDE CORNER CONNECTOR PLATE AND INSIDE CORNER BRACKET DETAIL



BENCH BRACKET



SECTION A-A BENCH DETAIL

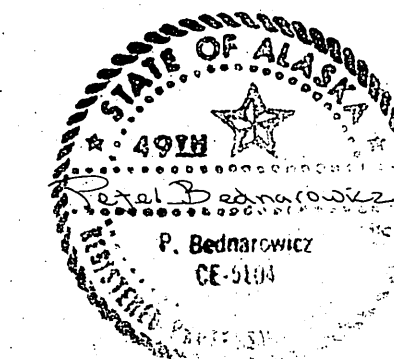


ESTIMATE OF QUANTITIES

ITEM	QUANTITY
Post Supports	16 ea.
5/16" x 4 1/2" Galv. Bolts, Nuts, & Lock Washers	200 ea.
4" x 4"	280 b.m.
2" x 4"	30 b.m.
2" x 6"	160 b.m.
2" x 8"	260 b.m.
4" x 8' x 5/8" CDX Plywood	6 shts.
15 Lbs. Roof Felt	1-600 sq. roll
Tar	2-100# blocks
Galv. Flashing	60 l.f.
4" x 8' x 1/4" Clear Polycarbonate Panels	8 shts.
1" x 9/8" x 1/4" Aluminum Angle	575 l.f.
3 1/2" x 8" Outside Corner & Entryway Connector Plates	24 ea.
3 1/2" x 12" Midspan Connector Plates	40 ea.
Inside Corner Connector Brackets	8 ea.
Bench Brackets	16 ea.
5/16" x 3" Galv. Lag Screws	64 ea.
1/4" x 2 1/4" Galv. Carriage Bolts, Nuts, & Lock Washers	64 ea.
#7 x 1 1/2" Aluminum Round Head Wood Screws	700 ea.
1 1/2" Roof Drain	1 ea.
16 d Galv. Nails	5 lb.
Portland Cement Concrete	3.24 cy
6" x 6" No. 10 Welded Wire Mesh	22.9 sq. yd.
Galv. Plumbers Tape or Joist Strap	28 ea.
8 d Galv. Nails	6 lbs
Excavation	1.6 c.y.

GENERAL NOTES

- All lumber shall be S-4-S, Douglas Fir or Hemlock, & shall be construction grade no. 1 or better.
- Sizing of the polycarbonate panels for expansion shall be in accordance with the manufacturers specifications.
- All wood shall be stained with linseed oil base semi-transparent stain. Stain specifications, manufacturers application recommendations, & color samples shall be submitted to the engineer for approval prior to the application of any stain.
- ~~Approved equal rain shelter building (prefabricated or like designs) may be used, subject to approval by the Aviation Design Engineer.~~
- Post supports, bench brackets, & connector plates shall be shop fabricated & shall receive two coats of metal paint prior to installation.
- Pre-drill all holes for all bolts.

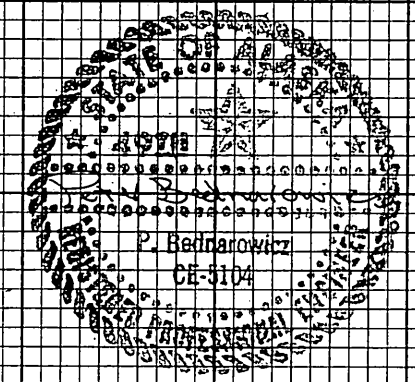
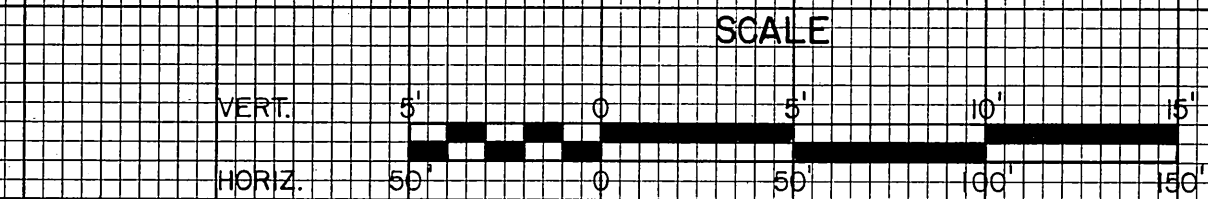
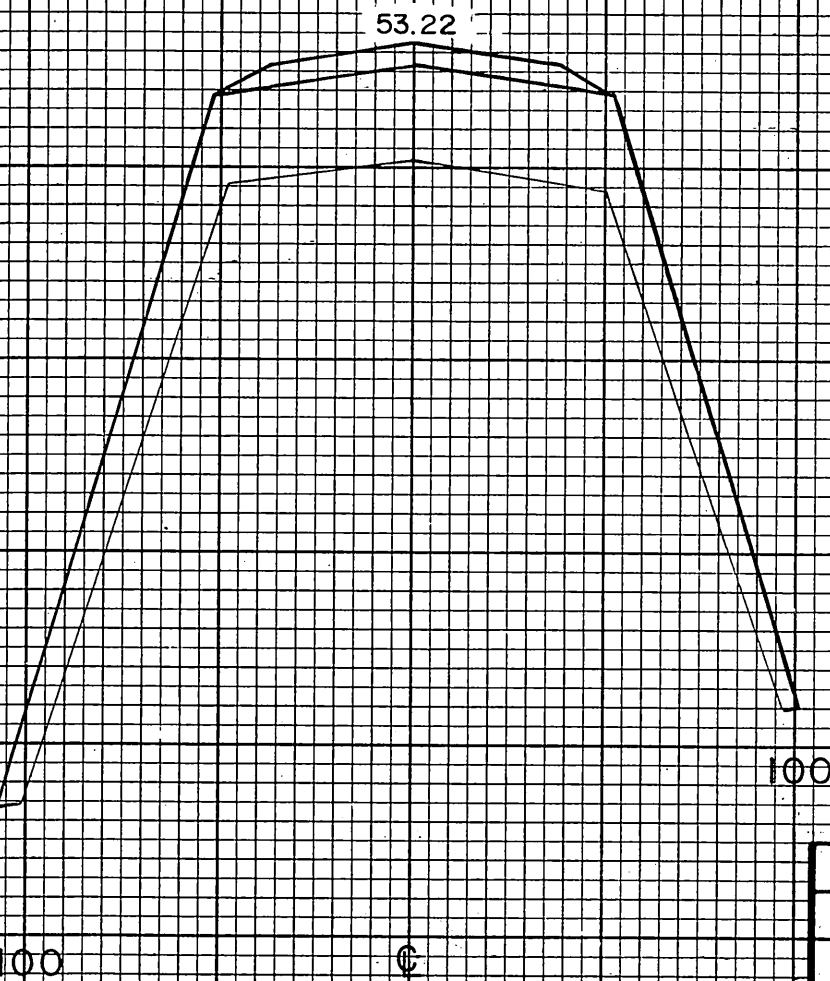
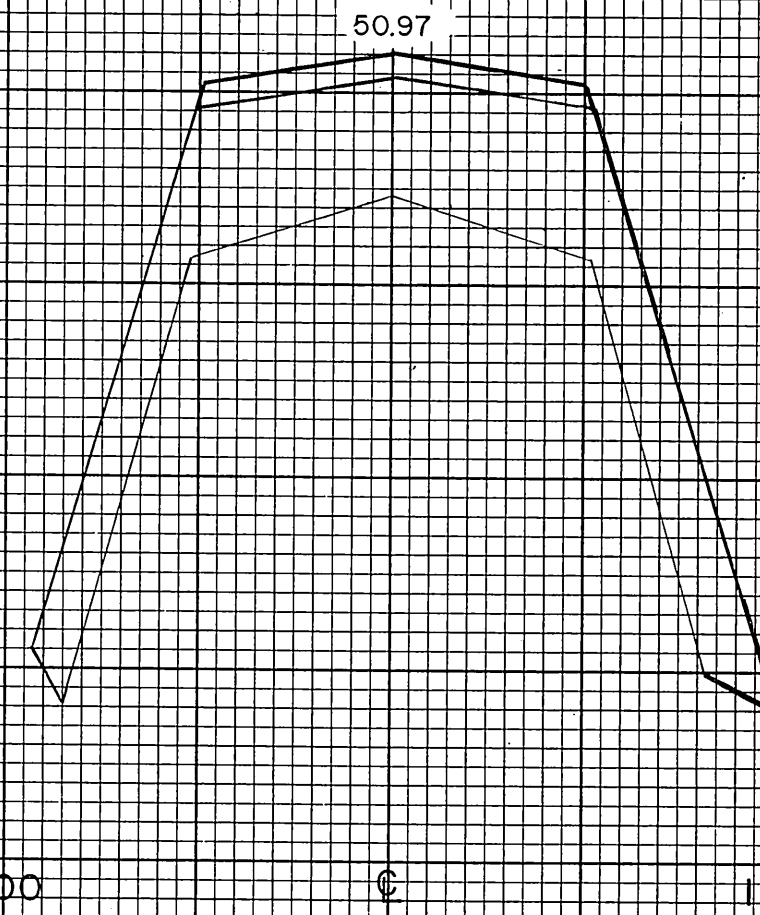
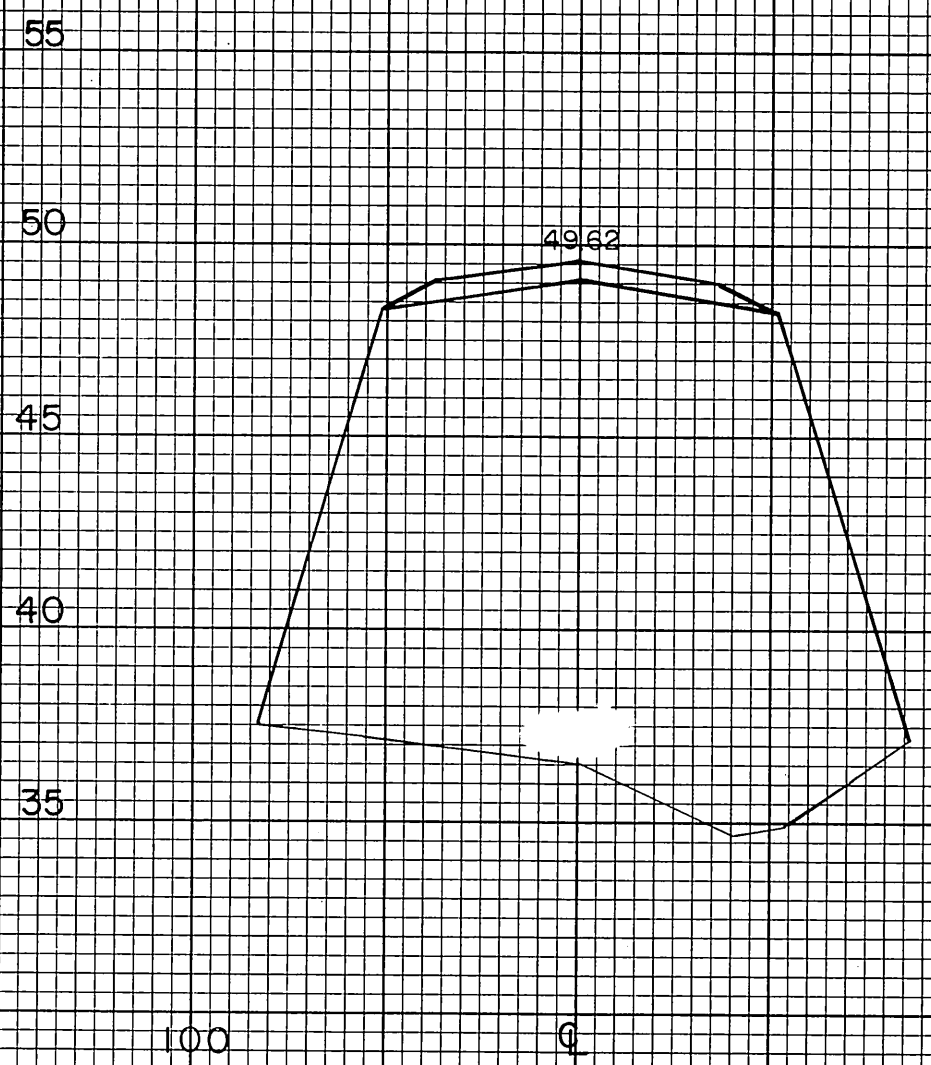
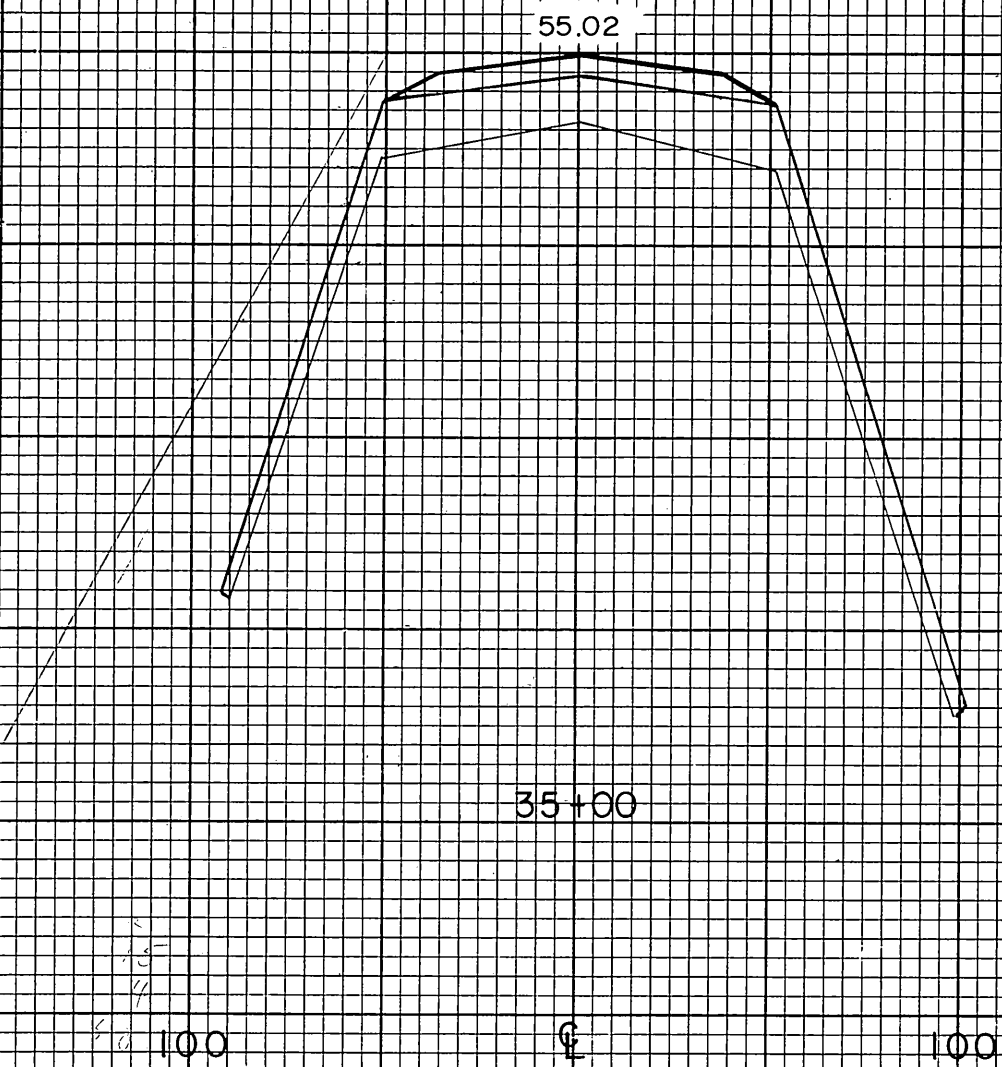
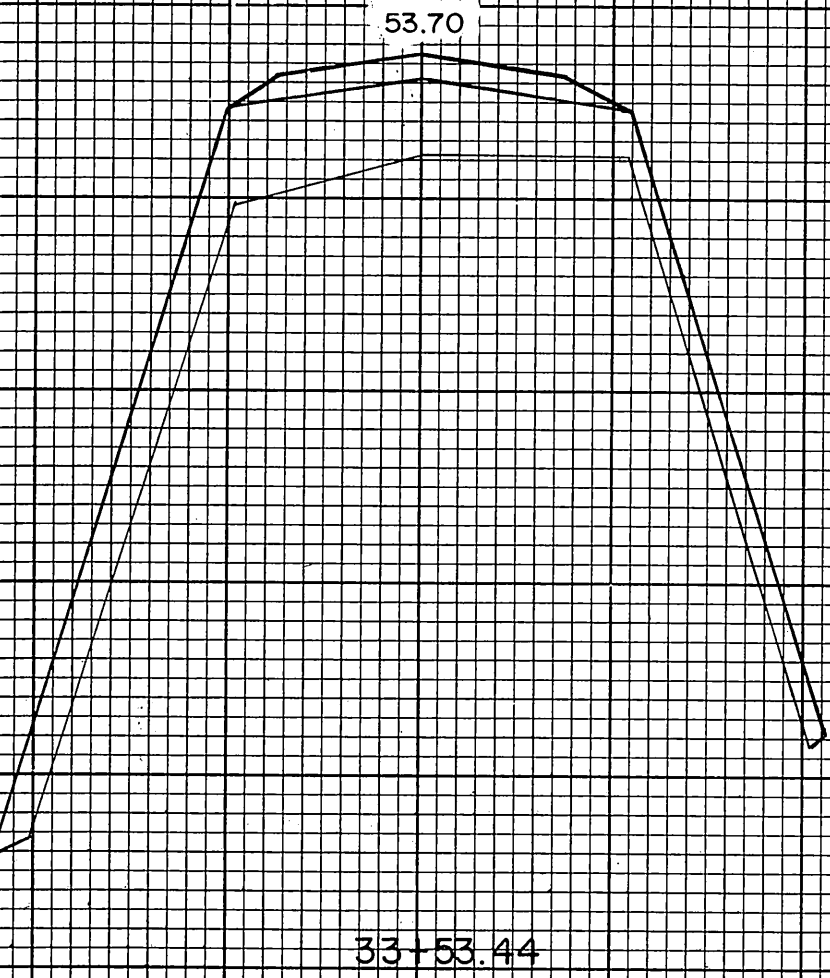
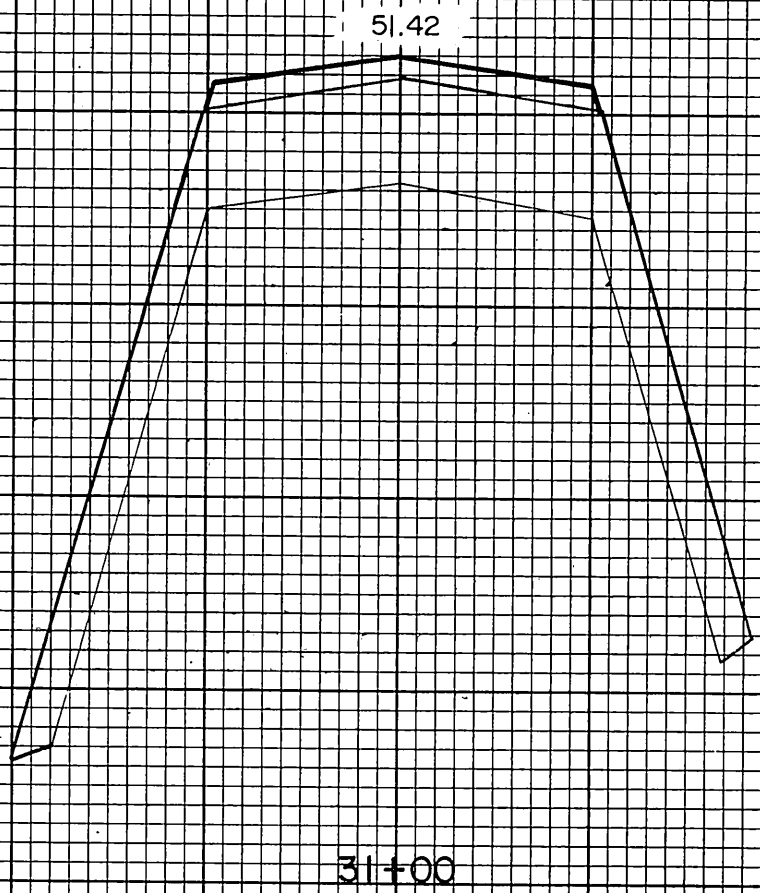
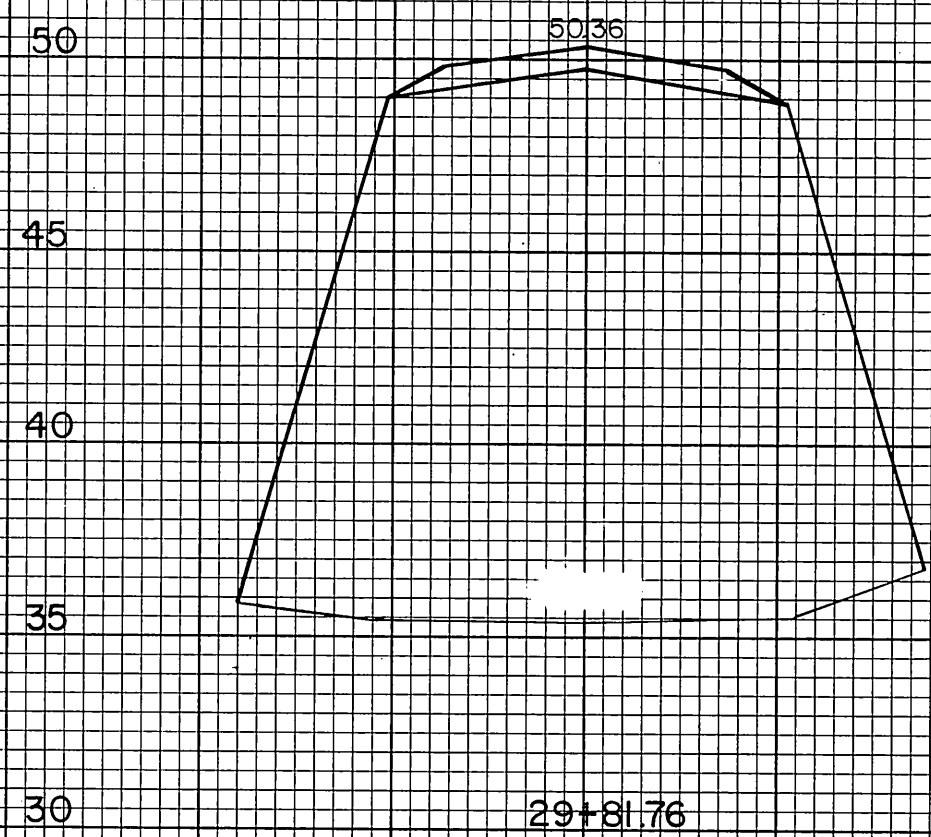
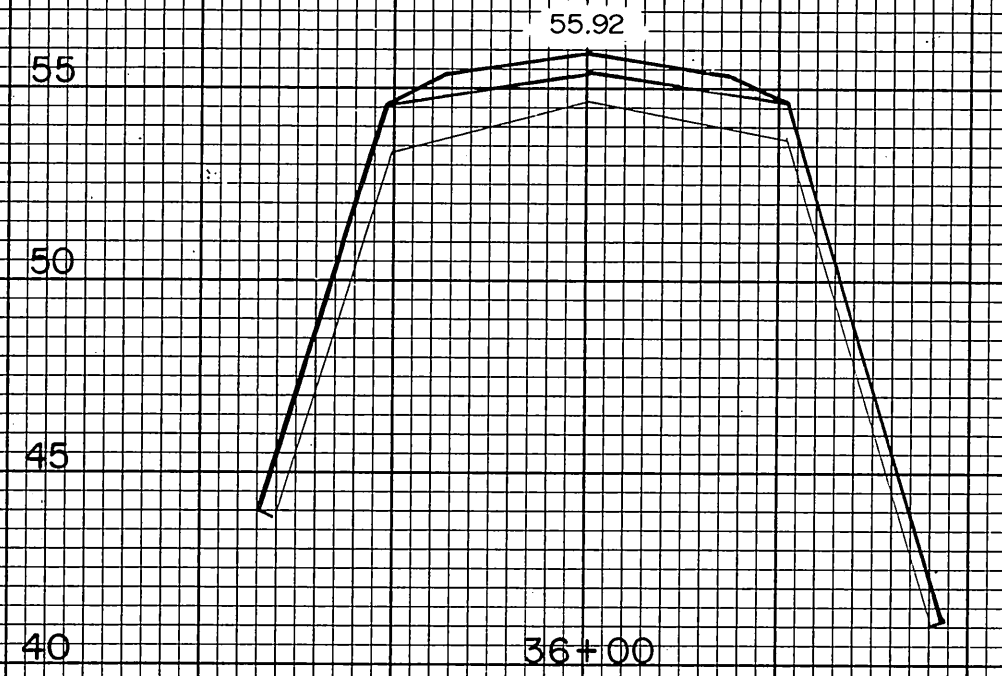
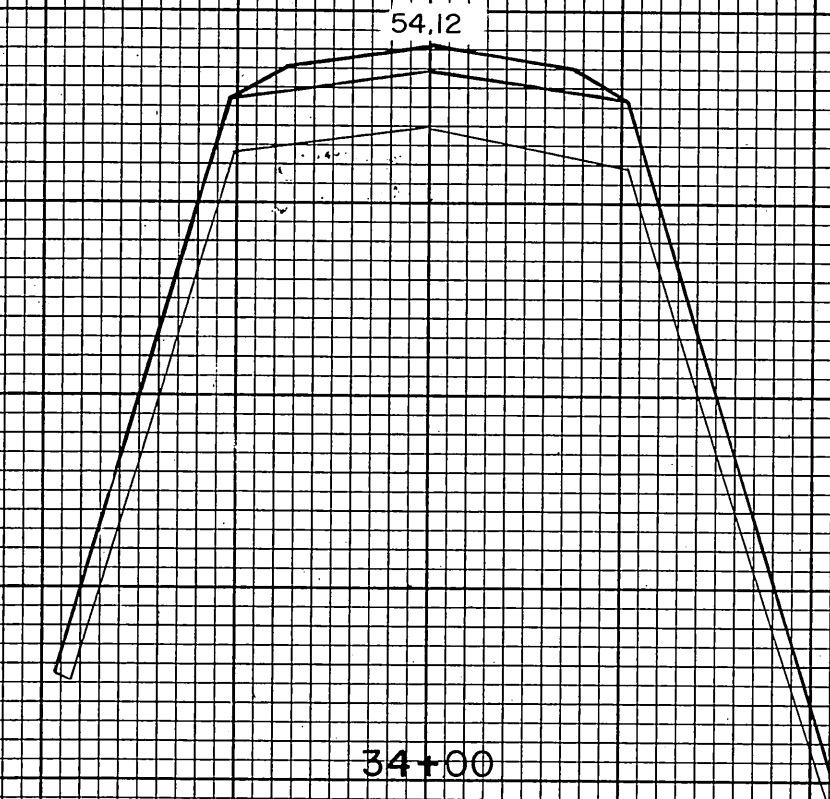
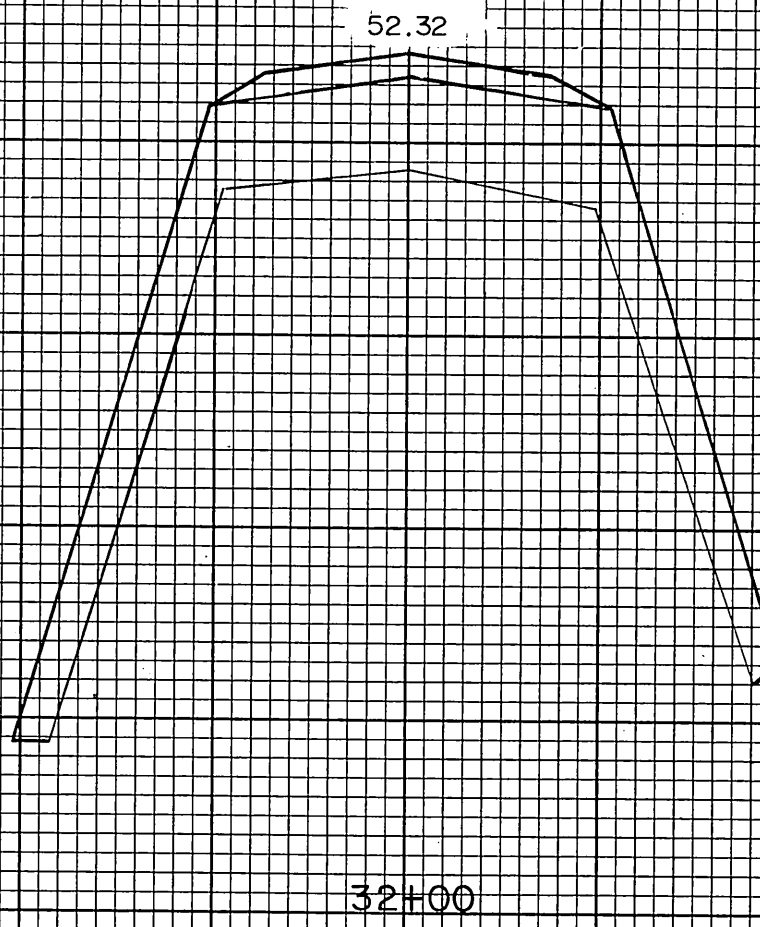
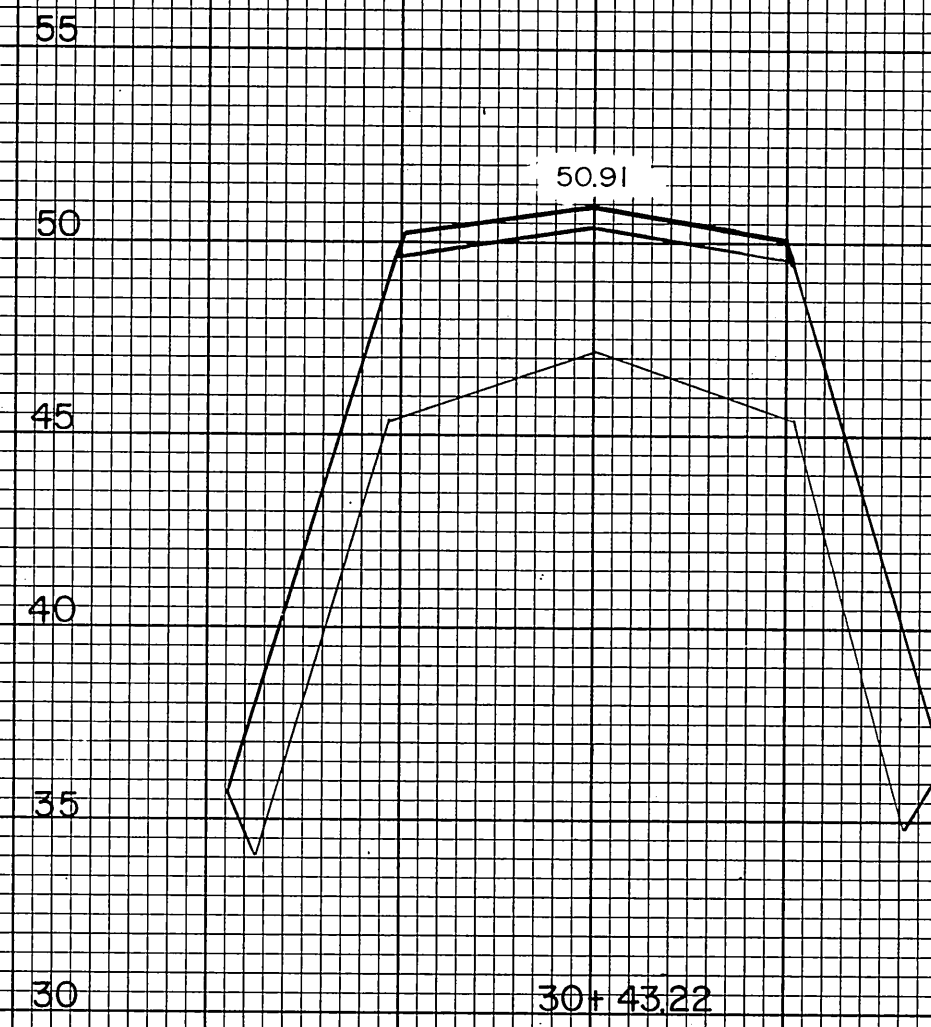


STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES Klawock Airport Runway Extension & Apron Improvements Rain Shelter			
APPROVED	<i>William A. Locher</i> WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER		
APPROVED	<i>William L. Baumgartner</i> WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER		
SCALE	DESIGNED	DRAWN	SHEET 12 OF 20
NONE	CHECKED	DATE	6-6-82

BY	DATE	CHANGE
REVISIONS		

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLotted TEMPLATE AREAS CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLotted TEMPLATE AREAS CHECKED	BY	DATE

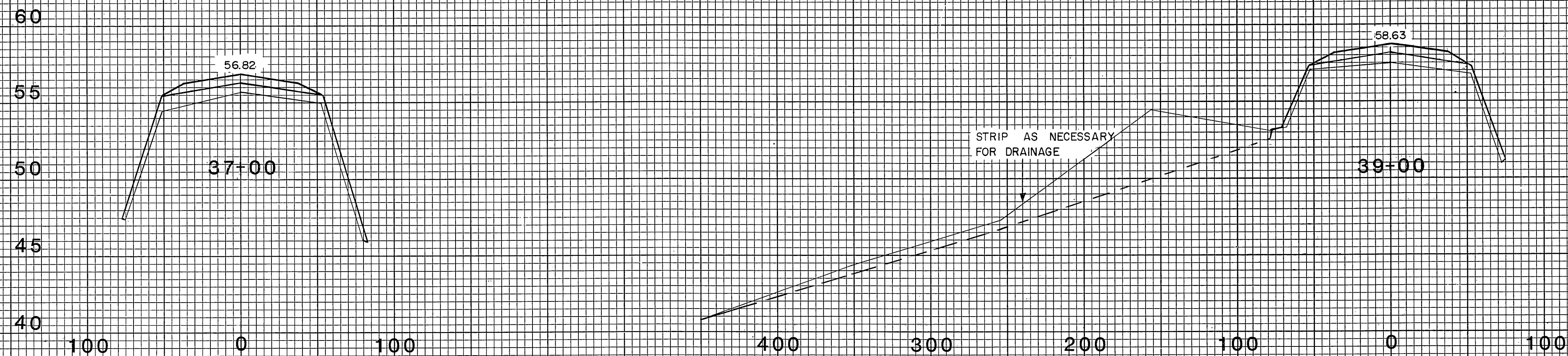
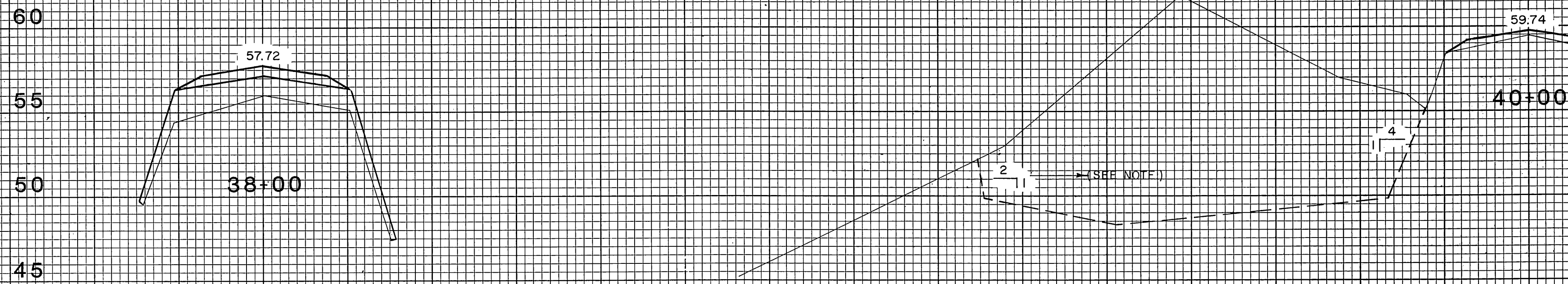
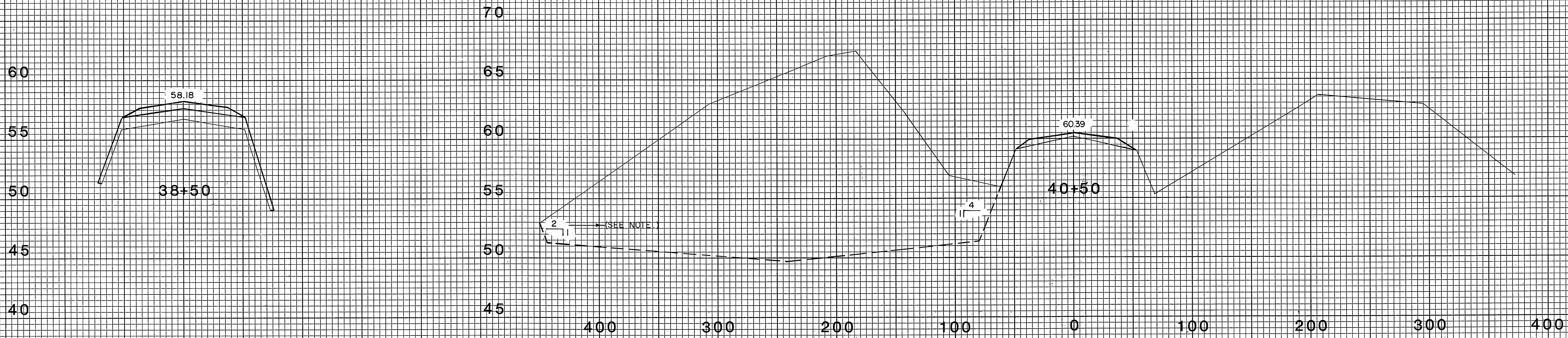


BY	DATE	CHANGE

 ROBERTSON & ASSOCIATES CONSULTING ENGINEERS 2820 "C" ST. SUITE 2 ANCHORAGE, AK 99503 PHONE, (907) 277-1438	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DIVISION OF AVIATION-DESIGN AND CONSTRUCTION	
Klawock Airport ADAP 6-02-0154-02 RUNWAY SECTIONS STA. 29+00 TO STA. 36+00	
APPROVED <i>William A. Locher</i> WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER	APPROVED <i>William L. Baumgartner</i> WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER
SCALE AS SHOWN	DESIGNED ML, J.S. CHECKED J.S.
DATE 8-27-81	
SHEET 13 OF 20	

FINAL SURVEY	NOTE BOOK NO.	BY	DATE	SURVEYED	PLOTTER	CHECKED	AREAS CHECKED

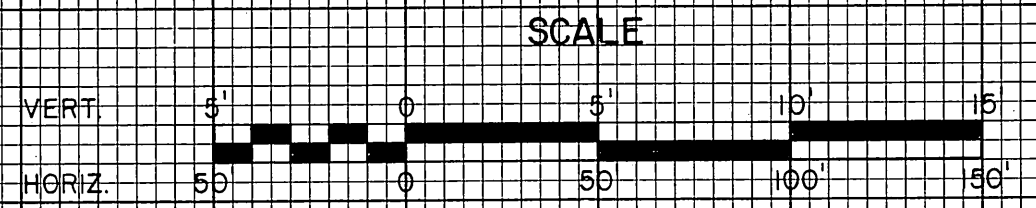
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--- EXCAVATION LIMITS OF BORROW PIT NO. 1

CONTRACTOR TO MINE AREA TO MAKE MOST EFFECTIVE USE OF MATERIAL. PIT TO BE MINED SO AS TO PERMIT SURFACE DRAINAGE AT ALL TIMES.

NOTE: 2:1 SLOPES IN NORMAL BORROW EXCAVATION
1/4:1 SLOPES IN ROCK



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ANCHORAGE, AK 99503
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF AVIATION-DESIGN AND CONSTRUCTION

KLAWOCK AIRPORT
ADAP 6-02-0154-02
RUNWAY SECTIONS
STA 37+00 TO STA. 40+50

APPROVED *William A. Locher*
WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER

APPROVED *William L. Baumgartner*
WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER

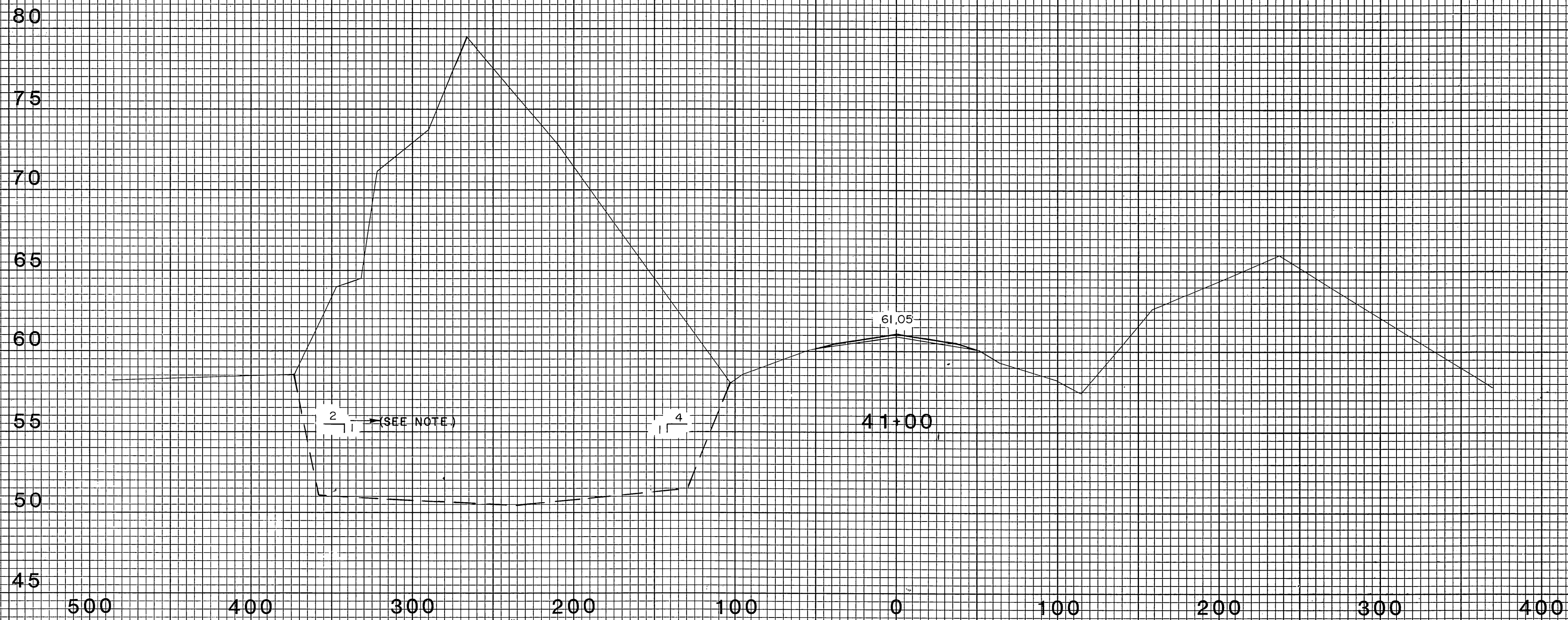
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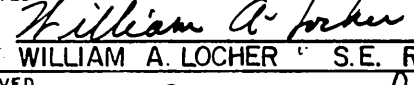
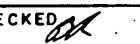
REVISIONS

SHEET 14 OF 20

FINAL SURVEY	DATE
NO.	
BY	
SURVEYED	
PLOTTED	
REPLATE	
AREAS CHECKED	

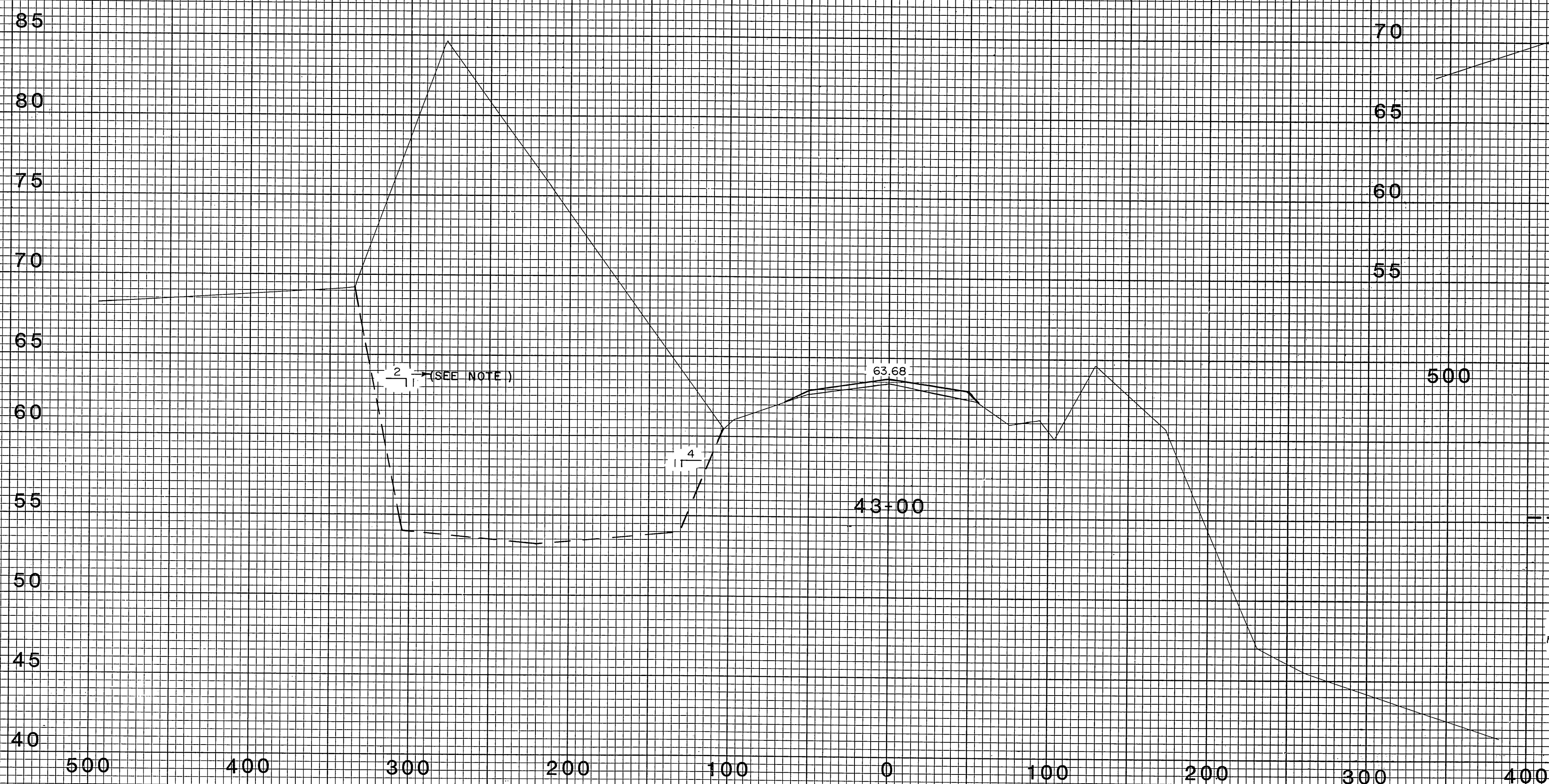
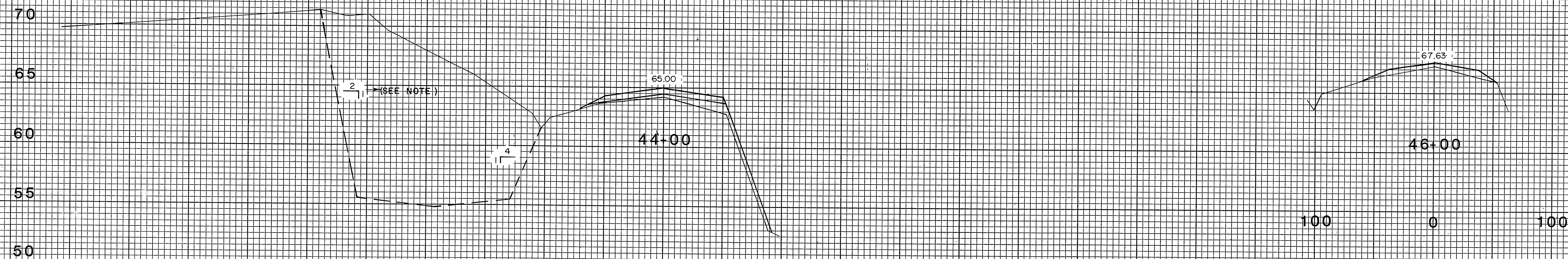
ORIGINAL SURVEY	DATE
NO.	
BY	
SURVEYED	
PLOTTED	
REPLATE	
AREAS CHECKED	



 ROBERTSON & ASSOCIATES CONSULTING ENGINEERS 2820 "C" ST. SUITE 2 ANCHORAGE, AK 99503 PHONE: (907) 277-1438	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DIVISION OF AVIATION-DESIGN AND CONSTRUCTION	
Klawock Airport ADAP 6-02-0154-02 RUNWAY SECTIONS STA. 41+00 TO STA. 42+00	
APPROVED  WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER	APPROVED  WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER
SCALE AS SHOWN	DESIGNED ML, JS. CHECKED  DATE 8-27-81
BY DATE CHANGE REVISIONS	DRAWN JS., B SHEET 15 OF 20

DATE	BY	SURVEYED	PLOTTED	TEMP.	AREAS	AREAS
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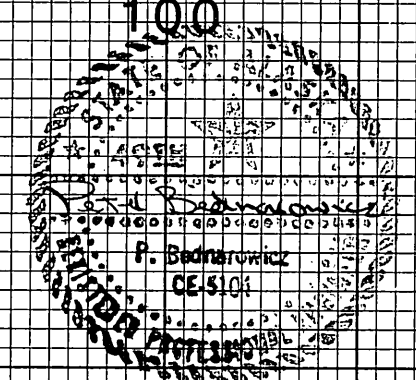
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		NO.	NO.	NO.	NO.	NO.



NOTE: 2:1 SLOPES IN NORMAL BORROW
EXCAVATION
1/4:1 SLOPES IN ROCK

EXCAVATION LIMITS OF BORROW PIT NO. 1

CONTRACTOR TO MINE AREA TO MAKE
MOST EFFECTIVE USE OF MATERIAL.
PIT TO BE MINED SO AS TO PERMIT
SURFACE DRAINAGE AT ALL TIMES.



ROBERTSON & ASSOCIATES
CONSULTING ENGINEERS
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ANCHORAGE, AK 99503
PHONE: (907) 277-1438

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF AVIATION-DESIGN AND CONSTRUCTION

Klawock Airport
ADAP 6-02-0154-02
RUNWAY SECTIONS
STA. 43+00 TO STA. 46+00

APPROVED: *William A. Locher*
WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER
APPROVED: *William L. Baumgartner*
WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER

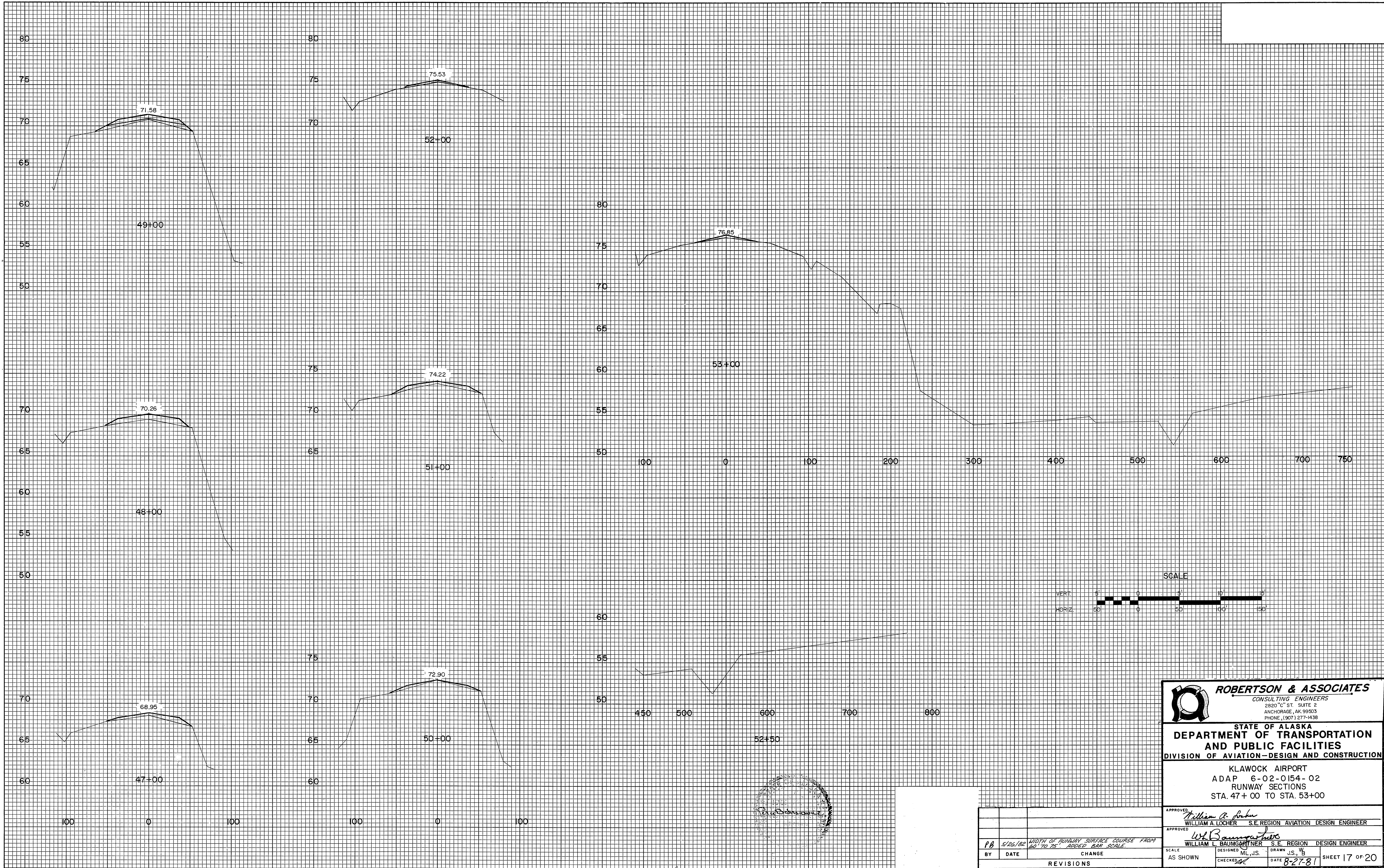
SCALE: AS SHOWN
DESIGNED: ML, J.S.
DRAWN: J.S., M.
CHECKED: *[Signature]*
DATE: 8-27-81

SHEET 16 OF 20

REVISIONS
PB 5/26/82 WIDTH OF RUNWAY SURFACE COURSE FROM 60 TO 75' ADDED BATH SHALE
BY DATE CHANGE

FINAL SURVEY	DATE	
	BY	
	SURVEYED	
	TEMPLATE	
	AREAS CHECKED	
NO.		

ORIGINAL SURVEY	DATE	
	BY	
	SURVEYED	
	TEMPLATE	
	AREAS CHECKED	
NO.		



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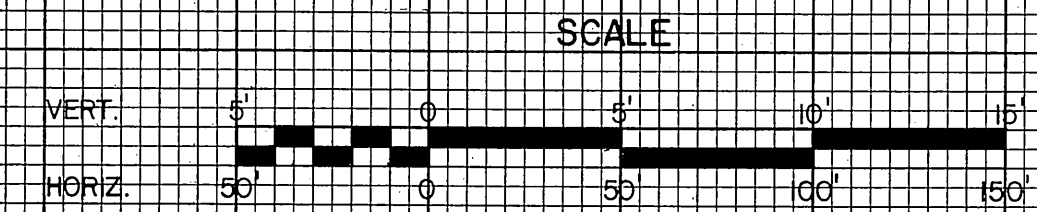
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
DIVISION OF AVIATION-DESIGN AND CONSTRUCTION

KLAWOCK AIRPORT
ADAP 6-02-0154-02
RUNWAY SECTIONS
STA. 47+00 TO STA. 53+00

APPROVED	<i>William A. Locher</i>	WILLIAM A. LOCHER	S.E. REGION AVIATION DESIGN ENGINEER
APPROVED	<i>W. L. Baumgartner</i>	WILLIAM L. BAUMGARTNER	S.E. REGION DESIGN ENGINEER
SCALE	AS SHOWN	DESIGNED	ML, J.S.
CHECKED	<i>ML</i>	DATE	8-27-81

BY	DATE	REVISIONS
PB	5/26/82	WIDTH OF RUNWAY SURFACE COURSE FROM 60 TO 75' ADAPED R&P SCALE

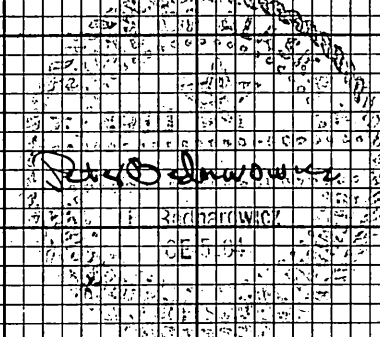
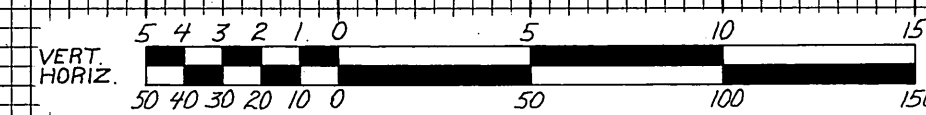
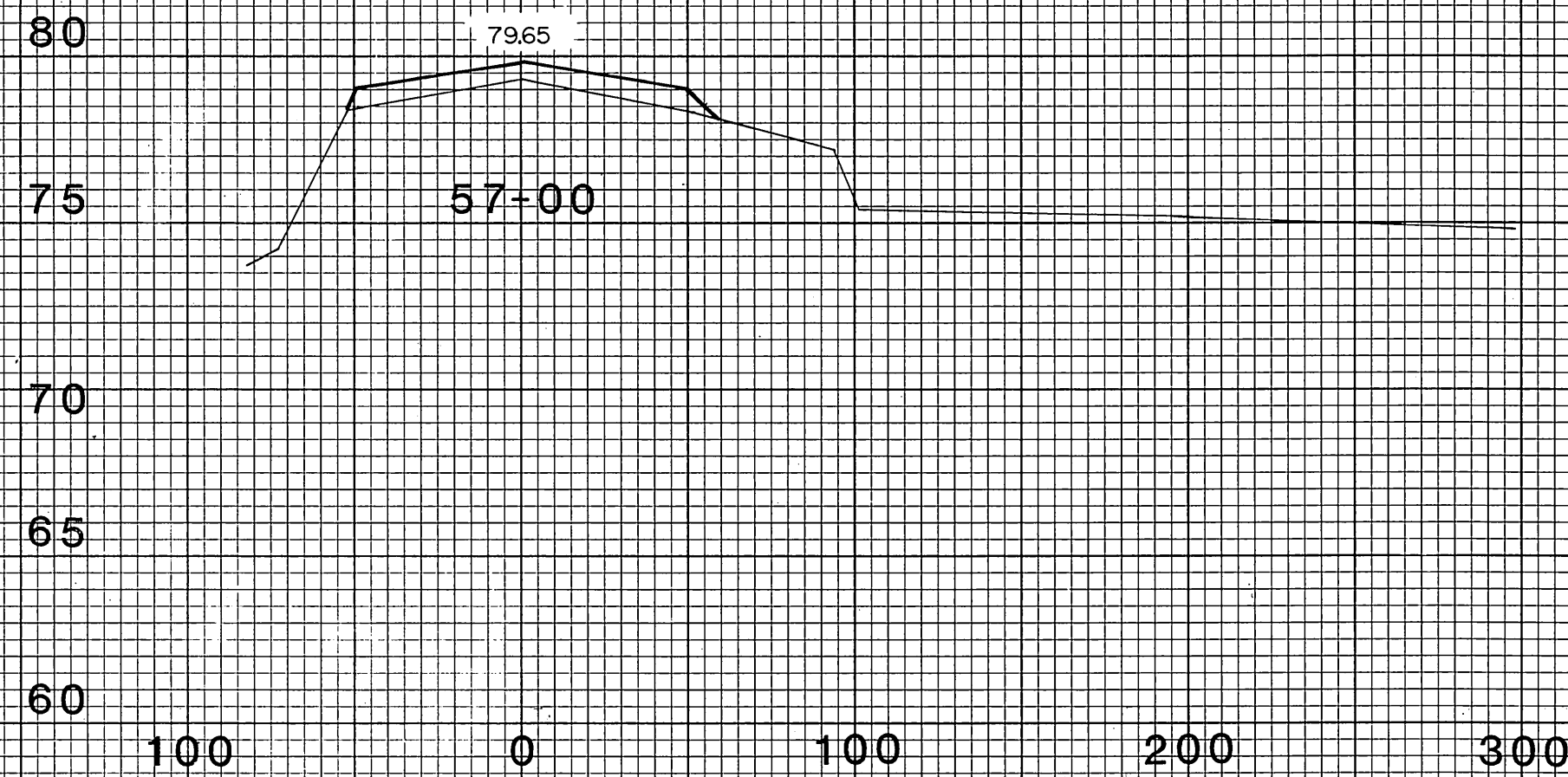
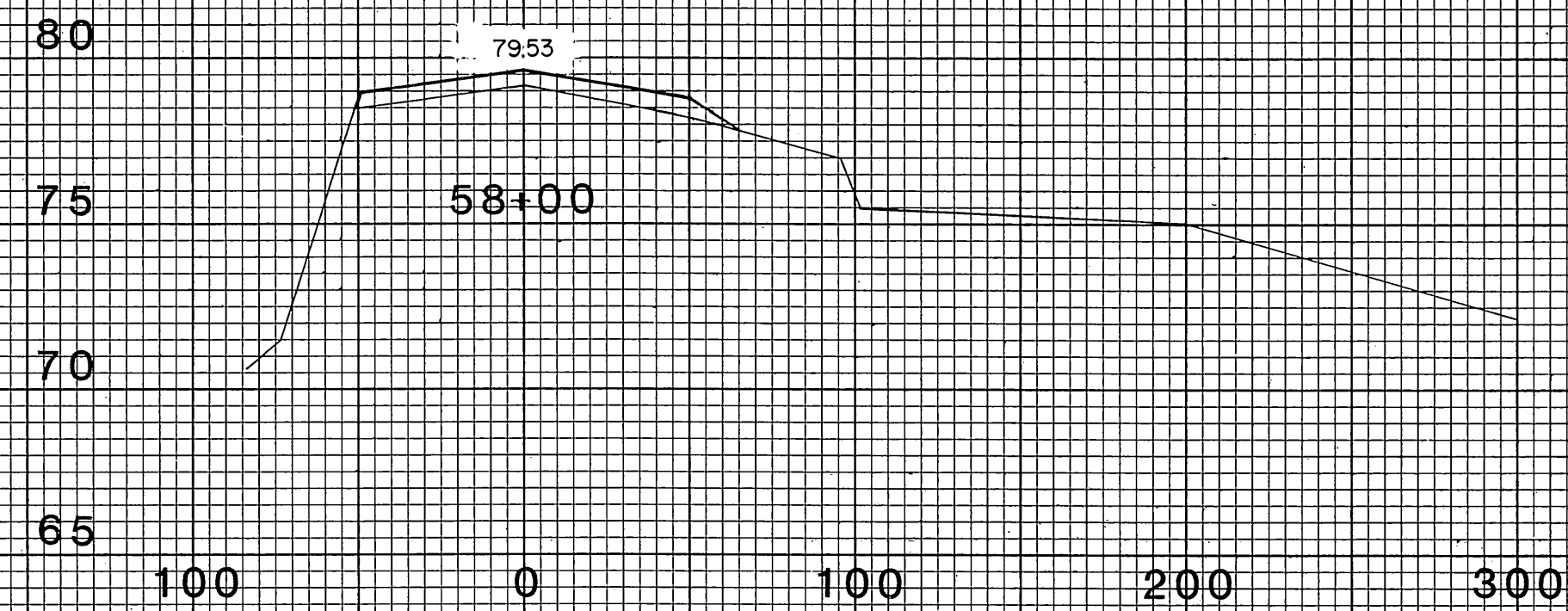
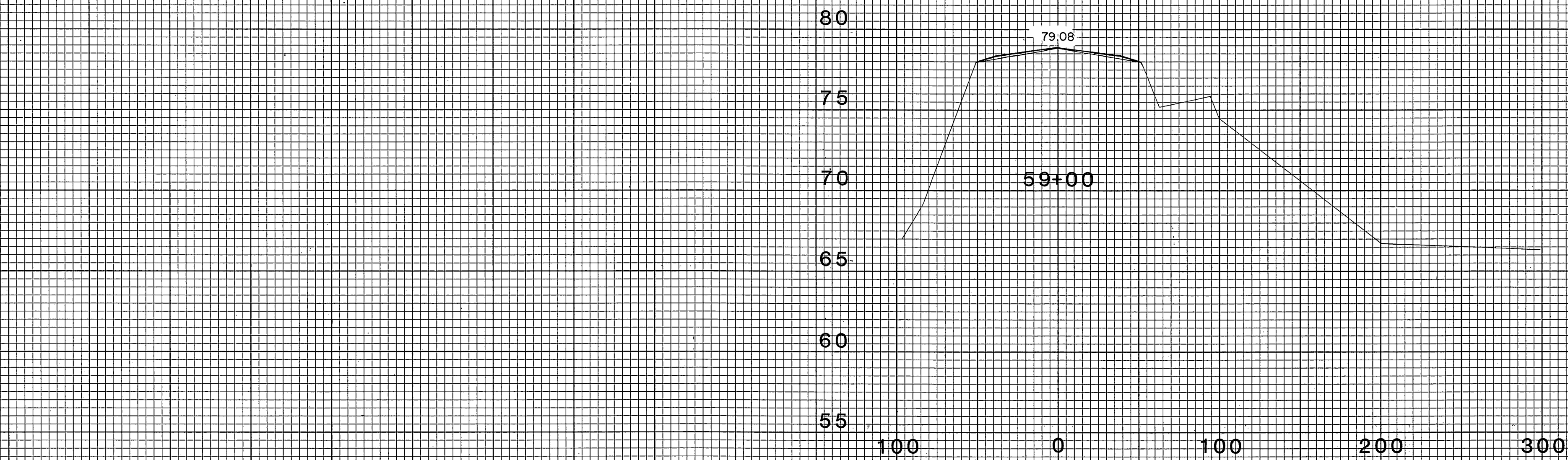
ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
NO.	AREAS CHECKED _____		



 ROBERTSON & ASSOCIATES CONSULTING ENGINEERS 2820 "C" ST. SUITE 2 ANCHORAGE, AK 99503 PHONE (907) 277-1438			
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DIVISION OF AVIATION—DESIGN AND CONSTRUCTION			
KLAWOCK AIRPORT ADAP 6-02-0154-02 RUNWAY SECTIONS STA. 54+00 TO STA. 56+00			
APPROVED <i>William A. Locher</i> WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER			
APPROVED <i>William L. Baumgartner</i> WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER			
SCALE	DESIGNED	DRAWN	
AS SHOWN	ML, J.S.	J.S., W.	
	CHECKED <i>M</i>	DATE 8-27-81	SHEET 18 OF 20

FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE
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ORIGINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREAS CHECKED	BY	DATE
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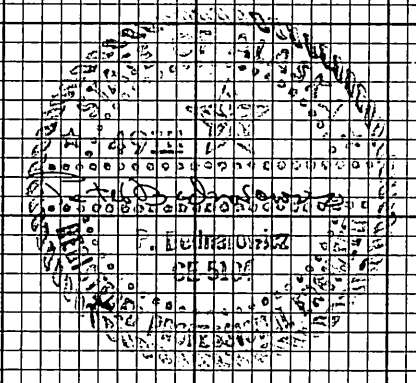
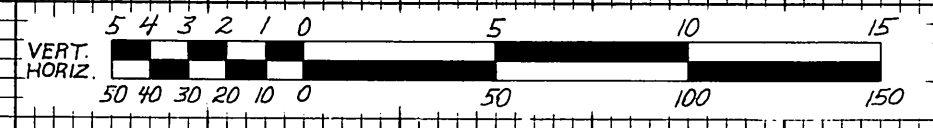
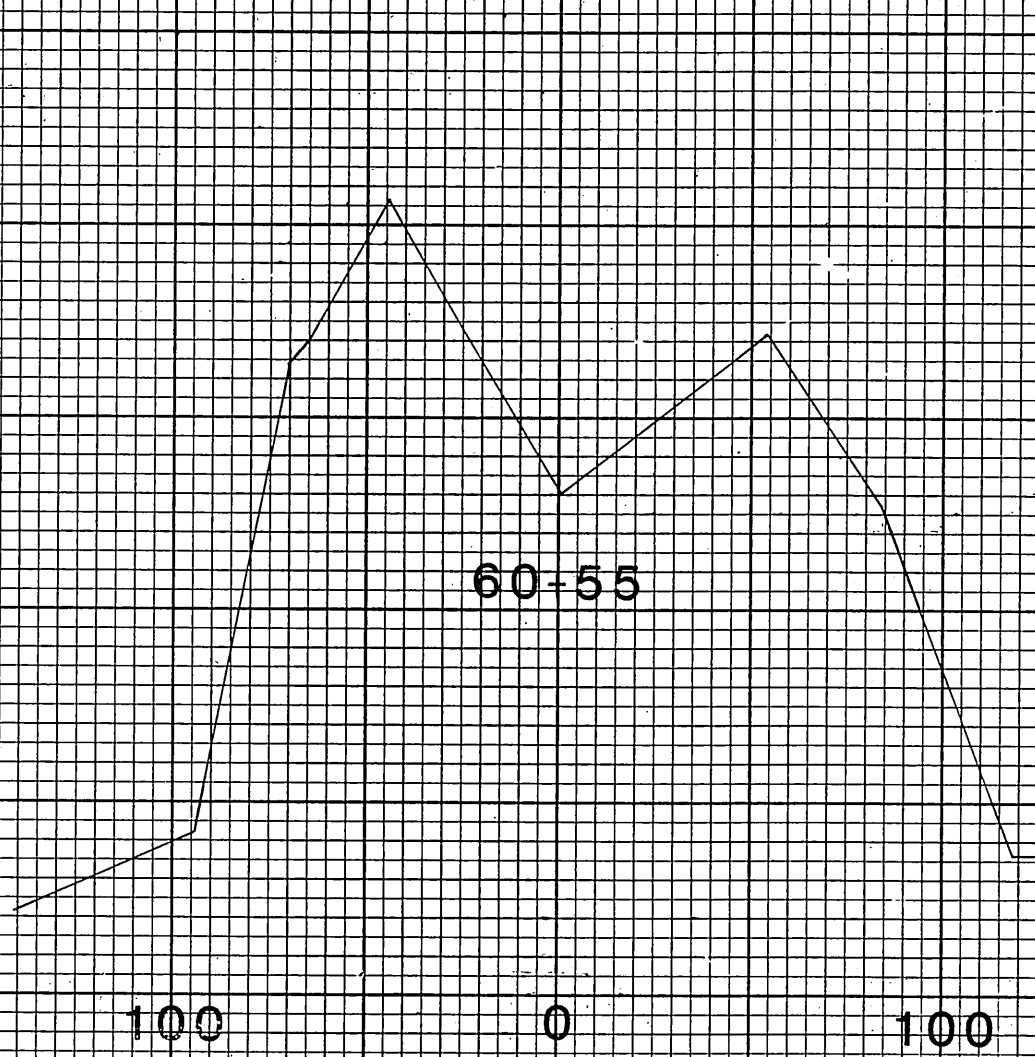
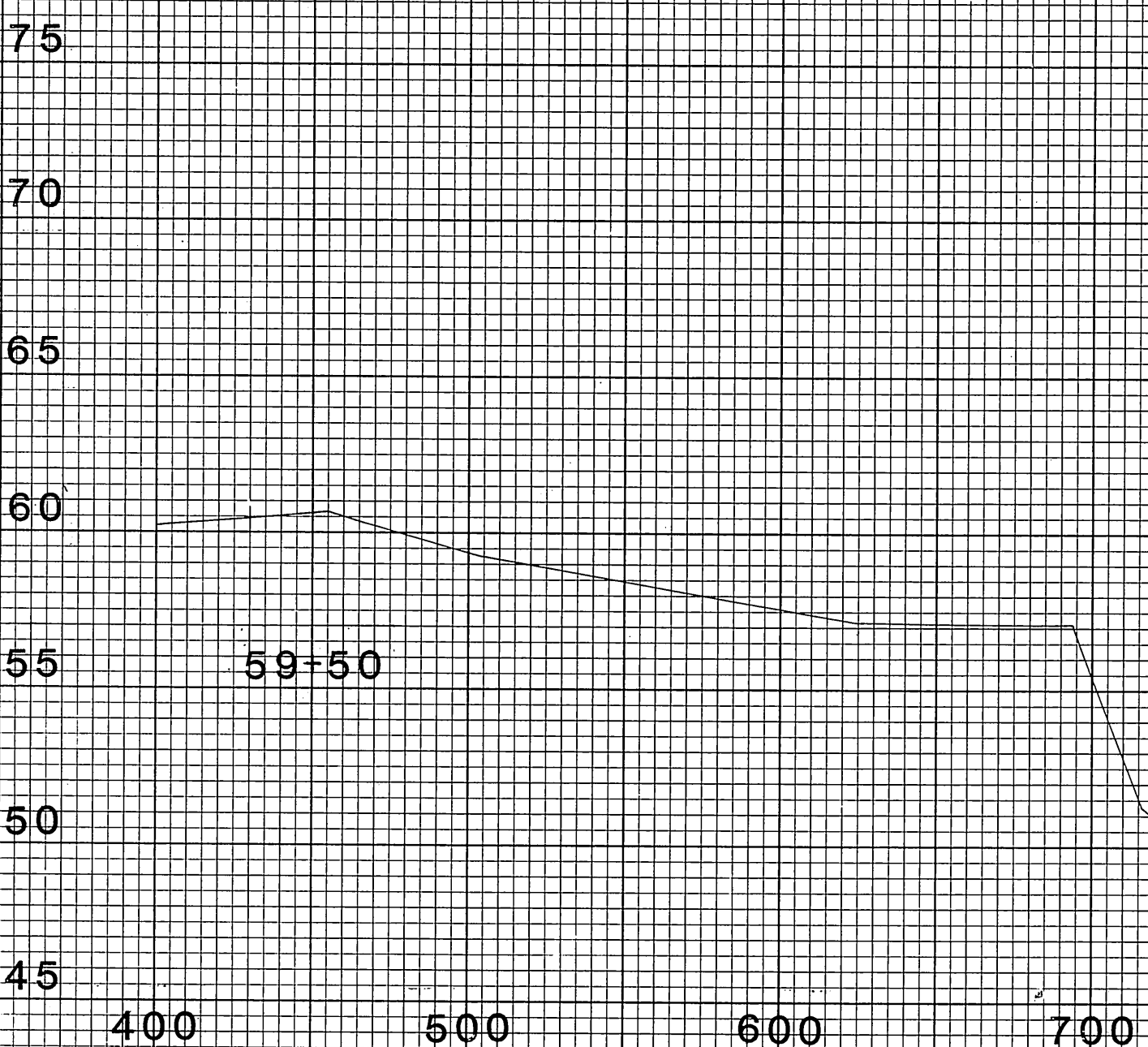
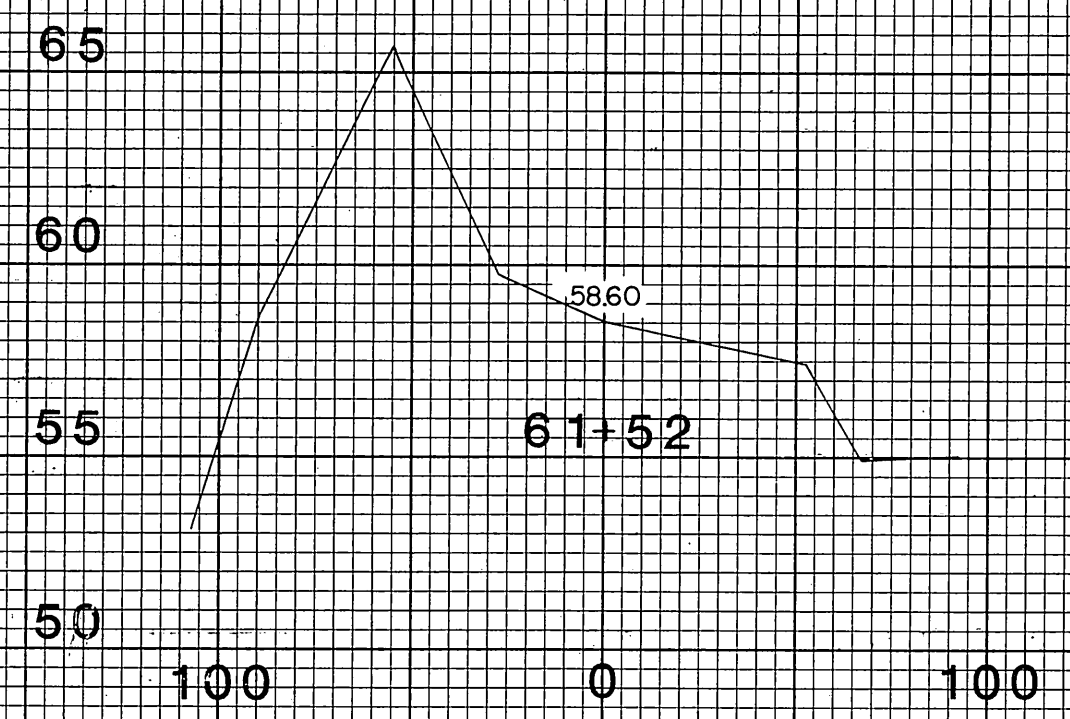
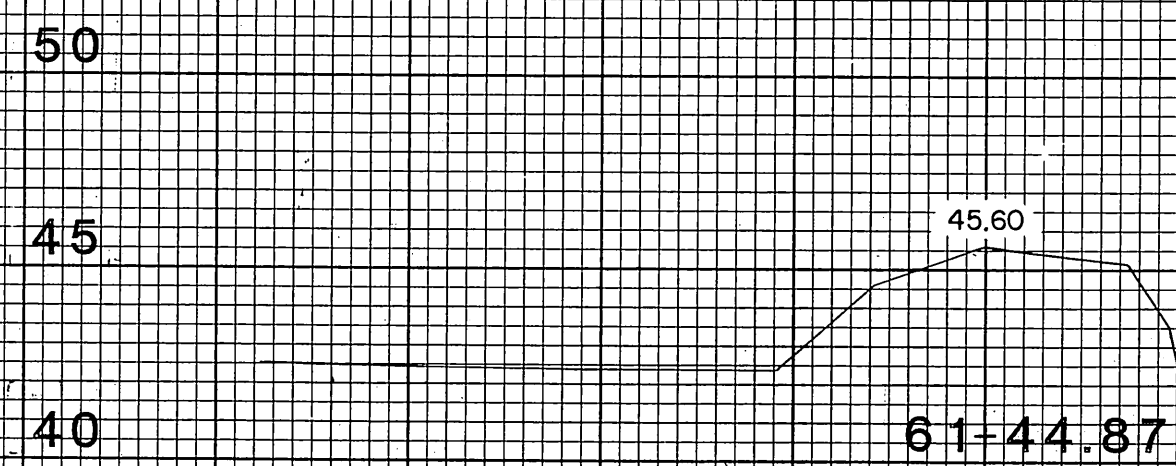
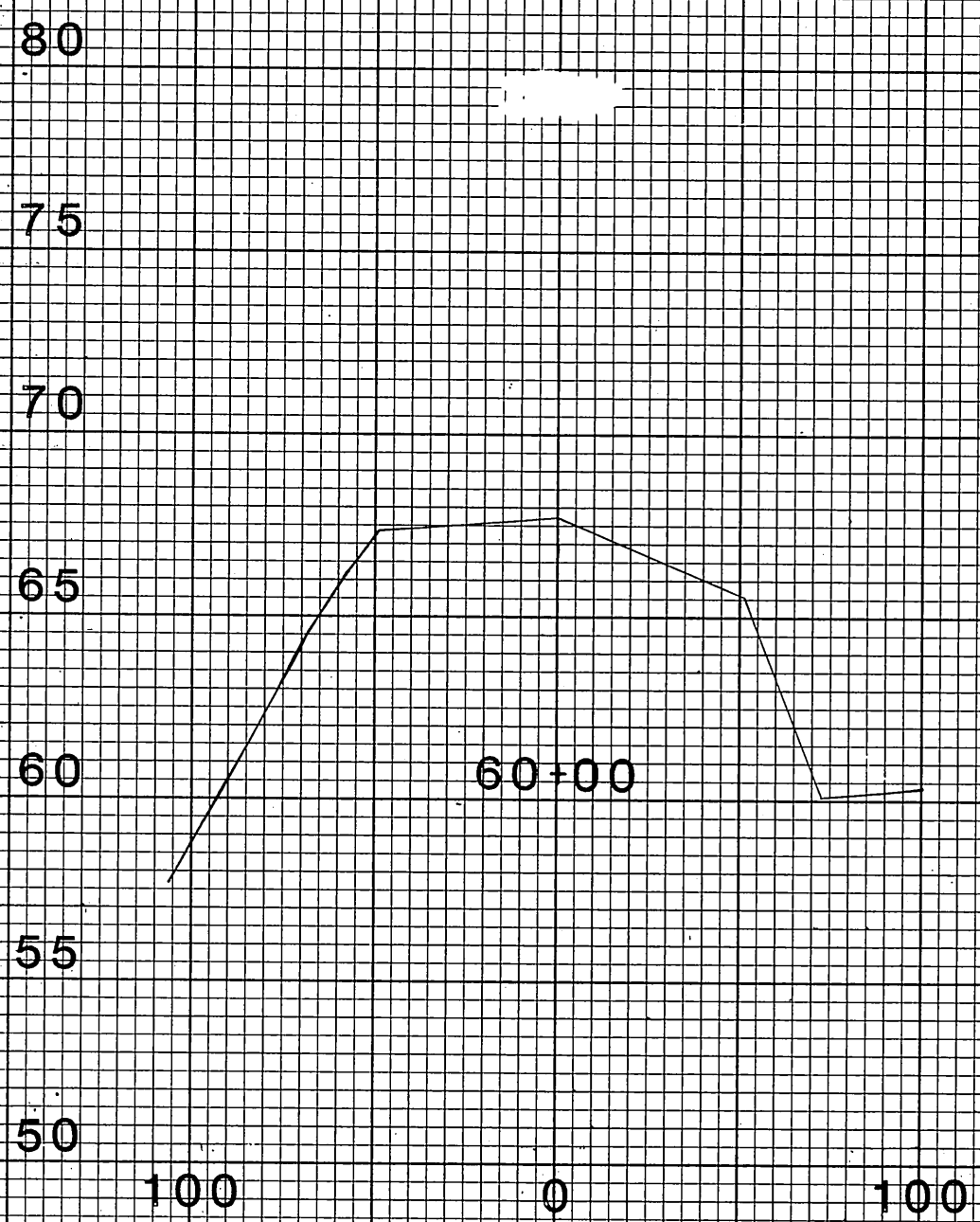


 ROBERTSON & ASSOCIATES CONSULTING ENGINEERS 2820 "C" ST. SUITE 2 ANCHORAGE, AK 99503 PHONE (907) 277-1438			
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DIVISION OF AVIATION-DESIGN AND CONSTRUCTION			
KLAWOCK AIRPORT ADAP 6-02-0154-02 RUNWAY SECTIONS STA. 57+00 TO STA. 59+00			
APPROVED	<i>William A. Locher</i> WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER		
APPROVED	<i>William L. Baumgartner</i> WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER		
SCALE	DESIGNED	ML, U.S.	DRAWN
AS SHOWN	CHECKED	DATE	8-27-81
SHEET 19 OF 20			

BY	DATE	CHANGE
PB	5/26/82	WIDTH OF RUNWAY SURFACE COURSE FROM 60 TO 75. ADDED 8-27-81.
REVISIONS		

FINAL SURVEY	BY	DATE
NO. _____	_____	_____
NOTE BOOK	_____	_____
NO. _____	_____	_____
SURVEYED	_____	_____
PLOTTED	_____	_____
TEMPLATE	_____	_____
AREAS	_____	_____
CHECKED	_____	_____

ORIGINAL SURVEY	BY	DATE
NO. _____	_____	_____
NOTE BOOK	_____	_____
NO. _____	_____	_____
SURVEYED	_____	_____
PLOTTED	_____	_____
TEMPLATE	_____	_____
AREAS	_____	_____
CHECKED	_____	_____



ROBERTSON & ASSOCIATES CONSULTING ENGINEERS 2820 "C" ST. SUITE 2 ANCHORAGE, AK 99503 PHONE (907) 277-1438	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES DIVISION OF AVIATION-DESIGN AND CONSTRUCTION	
Klawock Airport ADAP 6-02-0154-02 RUNWAY SECTIONS STA. 59+50 TO STA. 61+52	
APPROVED WILLIAM A. LOCHER S.E. REGION AVIATION DESIGN ENGINEER	APPROVED WILLIAM L. BAUMGARTNER S.E. REGION DESIGN ENGINEER
SCALE AS SHOWN	DESIGNED ML, J.S. DRAWN JS, W.B. DATE 8-27-81 SHEET 20 OF 20

BY	DATE	REVISIONS
PB	5/26/82	REMOVED ADDED FULL OVER EXIST. GROUND SECTIONS. ADDED BAR SCALE