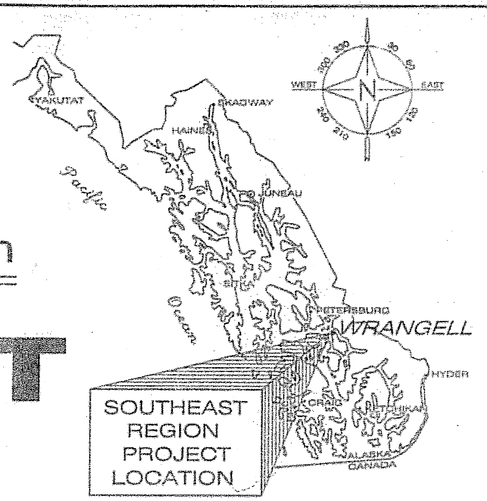
State of Alaska
Department of Transportation and Public Facilities
Design and Engineering Services Division-S.E. Region

WRANGELL AIRPORT
RUNWAY OVERLAY/RSA & SEAPLANE HAULOUT REPLACEMENT

PROJECT NO. 68167
AIP NO. 3-02-0323-1105



AS-BUILT DWG

CONTRACTOR - WILDER CONSTRUCTION

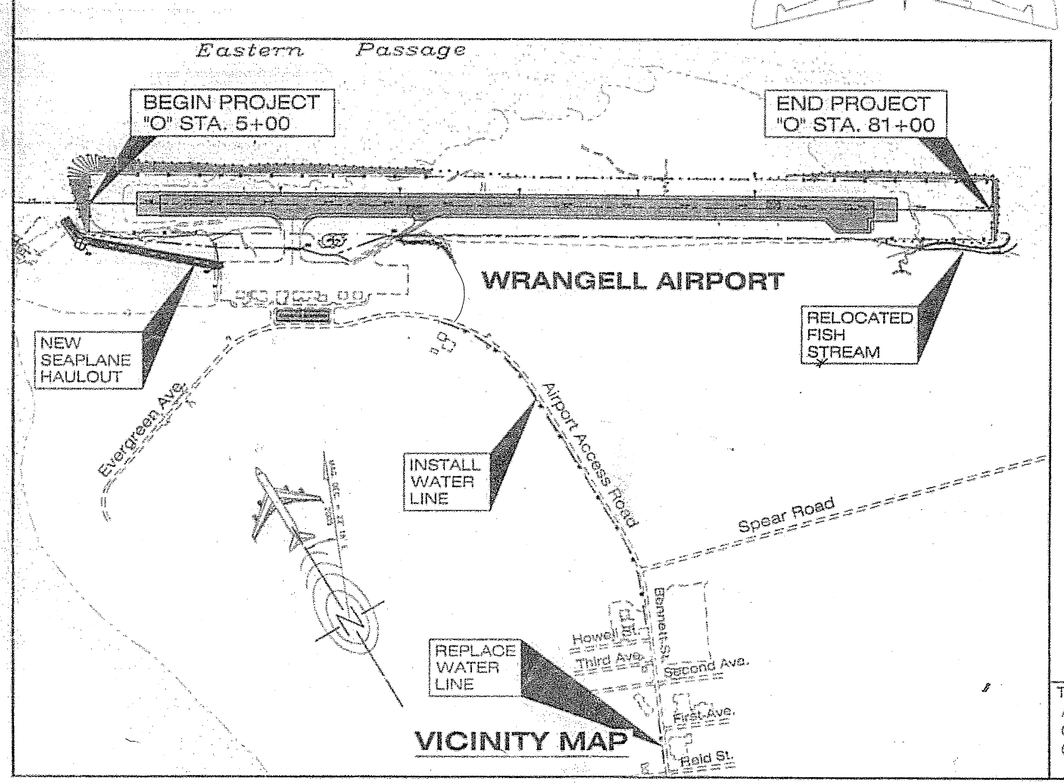
PROJ. ENGR - TINA BERGAM

START DATE - SEPT 10 2006

END DATE - AUG. 21, 2009

DESIGN DESIGNATION

AIRPORT REFERENCE CODE.....	C-III
AIRPORT TYPE.....	COMMERCIAL SERVICE
RUNWAY CATEGORY.....	TRANSPORT
AIRPORT REFERENCE POINT..... (ARP Coordinates - NAD '83)	Latitude N 56° 29' 03.6" Longitude W 132° 22' 11.4"
RUNWAY 10 / 28 DIMENSION.....	6000 FT x 150 FT
RUNWAY 10 / 28 ELEVATION.....	44.4 FT (MSL)
NEW RSA DIMENSION.....	7600 FT X 500 FT
RUNWAY/TAXIWAY SURFACE.....	ASPHALT CONCRETE
RUNWAY LIGHTING.....	HIGH INTENSITY RUNWAY LIGHTING (HIRL)
TAXIWAY LIGHTING.....	MEDIUM INTENSITY TAXIWAY LIGHTING (MITL)
FAA APPROACH AIDS.....	VISUAL APPROACH SLOPE INDICATOR RUNWAY END IDENTIFIER LIGHTS PRECISIONS RUNWAY MARKINGS LOCALIZER BEACON



THE FOLLOWING HIGHWAY STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1	D-01.02	M-16.01	T-21.02
C-03.10	D-04.21	S-00.10	
C-04.12	M-13.01	S-05.01	

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A3	PROJECT LAYOUT PLAN
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C1	ESTIMATE OF QUANTITIES
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J5-J6	TRAFFIC CONTROL PLANS
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L1-L3	MARKING LAYOUT PLAN & DETAILS
L4-L5	SEGMENTED CIRCLE DETAILS
M1-M3	QUARRY RECLAMATION PLAN & DETAILS
P1	PROPERTY PLAN
T1-T5	EROSION & SEDIMENT CONTROL PLAN & DETAILS
W1-W5	WATERLINE PLANS & DETAILS
W6-W7	P.R.V. MECHANICAL & TELEMENTRY

PATH: O:\Wrg\68167\Planset\A1_Tsht.dwg
Mon, 03/Apr/06 03:26PM lrobertson

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES DIVISION--S.E. REGION

STATE OF ALASKA — Neil D. Osburn — CE-11014 — REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA — L. Pat Carroll — CE-9356 — REGISTERED PROFESSIONAL ENGINEER

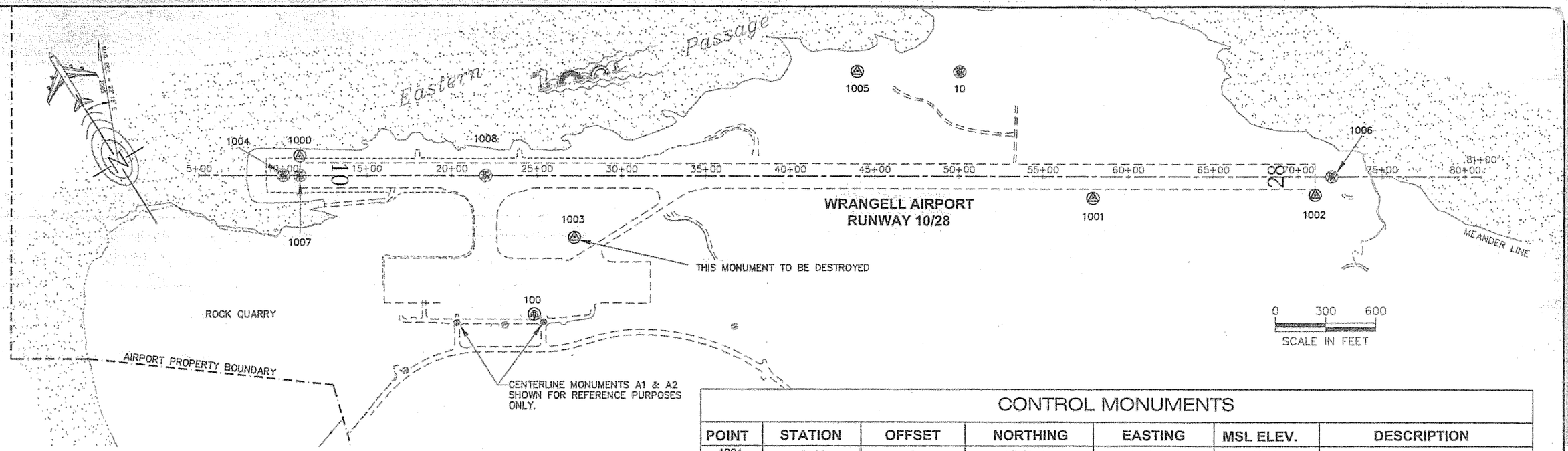
APPROVED: 4/6/06 — 4/6/06
PATRICK J. KEMP, P.E.
REGIONAL PRECONSTRUCTION ENGINEER — DATE

APPROVED: 4/7/06
MALCOLM A. MENZIES, P.E.
DIRECTOR, S.E. REGION — DATE

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER — DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	AIP NO. 3-02-0323-1105	2006	A1	69



HORIZONTAL CONTROL:

THE BASIS OF HORIZONTAL CONTROL IS THE NGS SECONDARY AIRPORT CONTROL STATION WRG–D WITH A PUBLISHED NAD83(1992) POSITION OF:
N 56° 28' 47.22595"
W 132° 21' 26.76798"

LOCAL COORDINATES FOR THIS POINT :
N 300,000.0000'
E 300,000.0000'

CONVERGENCE ANGLE = +1° 04' 53"
SCALE FACTOR = 0.99991097

BASIS OF BEARING FOR THIS PROJECT IS THE GEODETIC BEARING OF N 56–27–02 W FROM NGS STATION WRG–D TO NGS STATION WRG–C. THIS BEARING WAS DERIVED GPS AND CONVENTIONAL MEASUREMENTS BETWEEN WRG–D AND WRG–C.

VERTICAL CONTROL:

THE BASIS OF VERTICAL CONTROL IS THE N.O.S. BENCHMARK "BM–5" WITH A 2001 PUBLISHED VALUE OF 57.69' ABOVE MLLW. THIS IS NOS TIDAL SERIES 9451205.
HTTP://WWW.CO–OPS.NOS.NOAA.GOV/BENCHMARKS/BENCHMARKS_OLD/9451204.HTML
STATIC GPS SESSIONS WERE RUN BETWEEN AIRPORT CONTROL AND 3 N.O.S. BENCHMARKS DOWNTOWN. ELEVATIONS DERIVED ARE ORTHOMETRIC BASED ON GEOID '99. THE CONTROL NETWORK WAS THEN ADJUSTED TO MSL BASED AT BM#5 AT 49.39' ABOVE MSL. TIES TO BM 1204A WERE WITHIN 0.01' WHILE TIES AT BM#6 WERE WITHIN 0.11' ATTRIBUTED TO TREE COVER AT THAT BM.
FOR THIS AIRPORT PROJECT, MEAN SEA LEVEL (MSL) IS THE PREFERRED DATUM. ALL GRIDS AND ELEVATIONS ARE BASED ON THE MLS DATUM. PACS AND SACS ON SITE ALL HAVE VALID MSL ELEVATIONS. USE WRG–D AS THE LOCAL BASIS OF VERTICAL AT 43.59' ABOVE MSL.

MLLW RELATES TO MSL BY –8.3FT, OR RATHER ADD 8.3FT TO ALL ELEVATIONS TO GET BACK TO MLLW.

CONTROL MONUMENTS

POINT	STATION	OFFSET	NORTHING	EASTING	MSL ELEV.	DESCRIPTION
1004	10+00	0	303271.7778	294848.6625	26.54	GPS_BC3"_100'OFF_RW10
1000	10+98.21	116.57 LT	303320.1599	294993.2070	26.21	GPS_BC1"_NOS_WRG–C
1007	10+98.51	0.04 RT	303220.4473	294932.7382	27.28	GPS_REBAR1"_END_RW10
1008	21+99.94	0.02 RT	302646.9226	295873.0658	33.62	GPS_CL_MON_INT_RW/TAXIWAY
100	24+86.22	829.97 RT	301789.3006	295685.2908	30.77	TBM_"WAP"_2"BC_MSL!
1003	27+23.25	368.91 RT	302059.4837	296127.7385	38.70	GPS_BC3.5"_NOS_WRG–F
1005	43+94.26	627.01 LT	302039.5850	298072.9259	36.28	GPS_BC3.5"_NOS_WRG–E
10	50+01.72	626.44 LT	301722.7791	298591.2239	36.96	GPS_BC2"_WRG–10
1001	57+92.92	130.45 RT	300664.5969	298872.5601	40.95	GPS_BC2"_NOS_WRG–B
1002	71+01.52	110.74 RT	300000.0000	300000.0000	43.59	GPS_BC1"_NGS_WRG–D
1006	71+99.75	0	300043.3945	300141.5251	44.38	GPS_BC3"_100'OFF_RW28

CONTROL MONUMENT NOTE:

IF ANY PAIR OF CONTROL POINTS DISAGREES FROM PUBLISHED VALUE BY MORE THAN 1:10,000 HORIZONTALLY OR VERTICALLY THEN A THIRD NETWORK POINT MUST BE TIED TO ASCERTAIN WHICH POINT IS IN ERROR OR HAS BEEN DISTURBED.

WHETHER LISTED OR NOT, ALL MONUMENTS OR PROPERTY MARKERS OR ACCESSORIES WHICH WILL BE DISTURBED OR BURIED SHALL BE REFERENCED PRIOR TO BEING DISTURBED AND RE–ESTABLISHED IN THEIR ORIGINAL POSITION AND A RECORD OF MONUMENT FORM IN ACCORDANCE WITH A.S.34.65.040 SHALL BE SUBMITTED TO THE CONSTRUCTION ENGINEER FOR REVIEW PRIOR TO RECORDING. COORDINATE VALUES LISTED ARE FOR INFORMATIONAL PURPOSES AND SHOULD BE USED TO RESET MONUMENTS ONLY AS A LAST RESORT.

NOS/NGS MONUMENTS ARE NOT TO BE DISTURBED WITH THE EXCEPTION OF NGS STATION WRG–F. ℄ MONUMENTS SHALL BE REFERENCED & REPLACED, IF ABSOLUTELY NECESSARY.

LOCAL TIDAL RANGES

EXTREME HIGHWATER (EHW)	=	13.27'
HIGH TIDE LINE (HTL)	=	11.40'
MEAN HIGH WATER	=	6.78'
MEAN LOWER LOW WATER (MLLW)	=	–8.30'
EXTREME LOW WATER (ELW)	=	–13.40'

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. KEOPPLE
STATE OF ALASKA – 49 TH – Timothy Reed No. 10813 – REGISTERED PROFESSIONAL ENGINEER – 4/6/06
DESIGNED BY: T. REED
DRAWN BY: R.S./L.R.
PATH: Q:\Wrg\68167\Planset\A2_ControlPlan.dwg
TAB: A2 Mon, 03/Apr/06 03:28PM lrobertson

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

SURVEY CONTROL PLAN

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			AIP NO. 3-02-0323-1105	2006	A2	69

B.O.P.
STA. "O" 5+00.00

E.O.P.
STA. "O" 81+00.00

EASTERN PASSAGE

LOCALIZER CRITICAL AREA (LCA)

NEW ROAD DEVELOPMENT FOR WASTE DISPOSAL @ MAXIMUM CAPACITY

CONTAMINATED WASTE SITE - REMOVED & REMEDIATED

WRANGELL AIRPORT

EAGLE NEST NEVER LOCATED REMOVED FROM MONITORING

EVERGREEN/STIKINE HIGHWAY

AIRPORT ACCESS ROAD

HALF MILE EAGLE TREE BOUNDRY

AIRPORT PROPERTY BOUNDARY

SPEAR ROAD

Howell St.

Third Ave.

Second Ave.

First Ave.

Reid St.

BENNETT STREET

Zimovia Strait

0 300 600
SCALE IN FEET

NOTE:

1) REFER TO SAFETY PLAN ON SHEET J-1 FOR AIRPORT OPERATIONAL CONSTRUCTION GUIDELINES.

LEGEND

- (A) RUNWAY SAFETY AREA (RSA); 500' x 7600' & RIPRAP SLOPE PROTECTION
- (B) RUNWAY OVERLAY/STRIPING/GROOVING; 150' x 6000'
- (C) RUNWAY SHOULDER PAVING; 25' x 6000' EACH SIDE
- (D) INSTALL RUNWAY SIGNING, CONSTRUCT NEW SEGMENTED CIRCLE & WINDCONE
- (E) CONSTRUCT 100' x 250' AIRCRAFT TURNAROUND
- (F) RELOCATE STREAM
- (G) OBSTRUCTION MITIGATION/QUARRY MINING, & SURFACE GRADING
- (H) SEAPLANE HAULOUT ROAD
- (J) NEW DRAINAGE DITCH/SURFACE GRADING
- (K) RUNWAY SETTLEMENT REPAIR
- (L) CONSTRUCT 3,600 LF WATER LINE
- (M) WATER TANK REMOVAL
- (N) REPLACE RUNWAY LIGHTING
- (O) REMOVE & RECONSTRUCT FENCE
- (P) PARKING LOT PAVING/STRIPING
- (Q) SPECIAL GRADING AREAS
- (R) RE-ALIGN SERVICE ROAD
- (S) 200' X 200' BLAST PAD PAVING
- (T) REPAIR JET HARDSTAND AREA
- (U) UTILITY RE-LOCATION
- (V) TEMPORARY WASTE DISPOSAL AREA/ EXISTING WASTE STOCKPILE
- (W) SHELL MIDDEN
- (X) EXISTING BARGE LANDING FACILITY
- (Y) RUNWAY-10 EMBANKMENT CONSTRUCTION

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL

STATE OF ALASKA · 49th · Joel D. Osburn CE-11014 · REGISTERED PROFESSIONAL ENGINEER

4/6/06

DESIGNED BY: M.T./J.O.
DRAWN BY: R.S./L.R./R.C.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

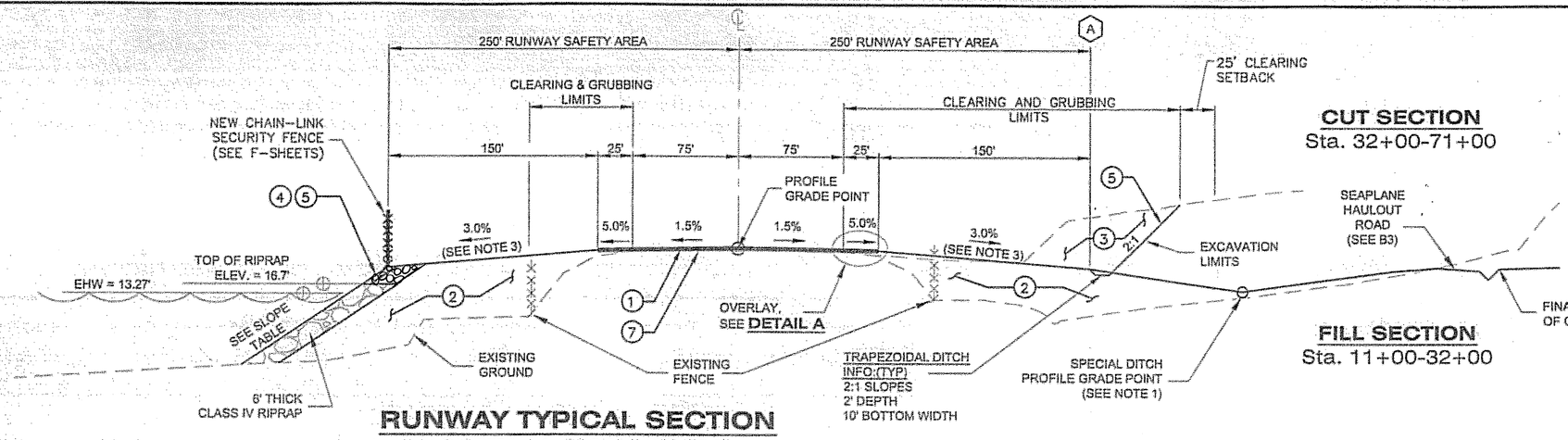
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

PROJECT LAYOUT PLAN

PATH: O:\Wrg\68167\Planset\A3_LayoutPlan.dwg
TAB: A3 Mon, 03/Apr/06 03:29PM lrobertsen

REVISIONS NO.	DATE	DESCRIPTION

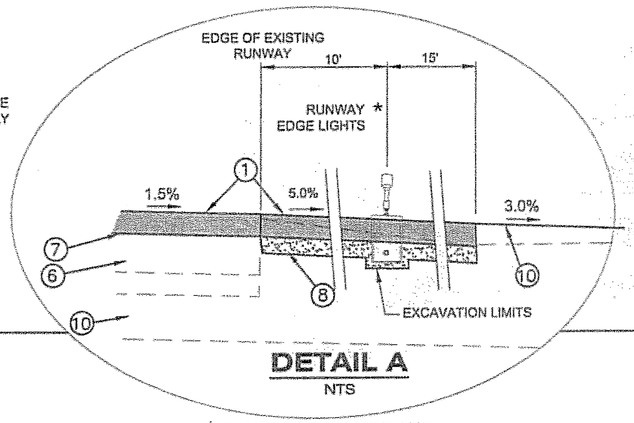
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	A3	69



RUNWAY TYPICAL SECTION

"O" STA. 11+00 - 71+00

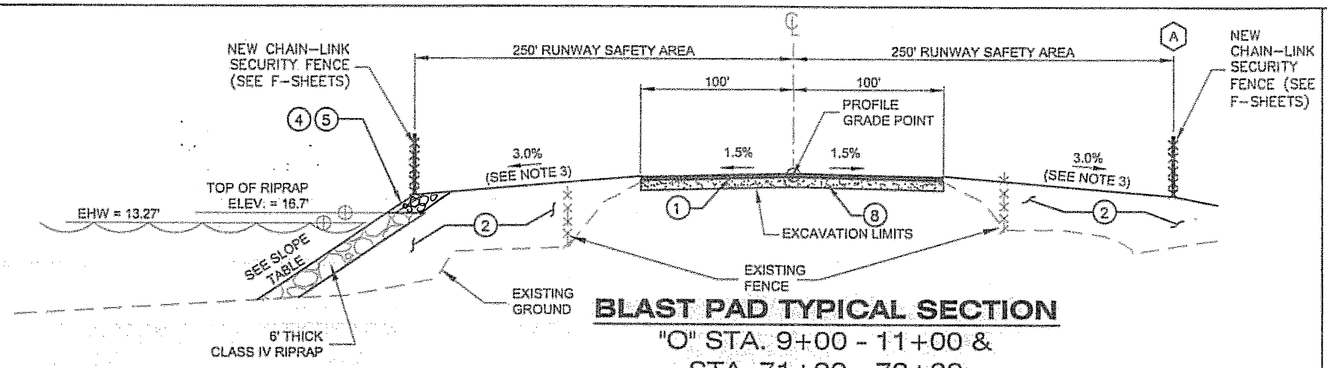
(Except Where Modified by Other Typical Sections)



DETAIL A

NTS

* SEE K-SHEETS FOR LIGHT-BASE INSTALLATION DETAIL

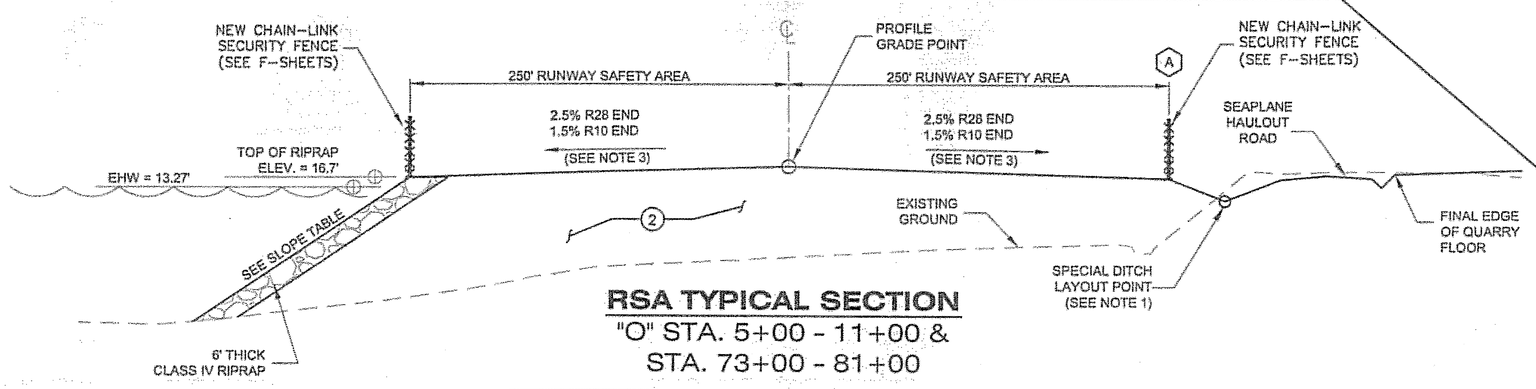


BLAST PAD TYPICAL SECTION

"O" STA. 9+00 - 11+00 &

STA. 71+00 - 73+00

TRANSITION GRADES WITHIN FIRST 50 FEET OF BLAST PAD



RSA TYPICAL SECTION

"O" STA. 5+00 - 11+00 &

STA. 73+00 - 81+00

Legend

(1) 3" HOT MIX ASPHALT TYPE II, CLASS E	(6) 8" HOT MIX ASPHALT	(X) REFERENCE POINT FOR PARTIAL CROSS SECTIONS.
(2) BORROW EMBANKMENT	(7) BITUMINOUS TACK COAT	(#) EXISTING
(3) UNCLASSIFIED EXCAVATION	(8) 4" CRUSHED AGGREGATE BASE COURSE	(#) PROPOSED
(4) 12" WASTE MATERIAL (OPTIONAL)	(9) FLUFF BLASTING	
(5) SEED & MULCH (SEE NOTE 2)	(10) CRUSHED AGG. BASE COURSE	
	(11) 4" HOT MIX ASPHALT TYPE II, CLASS E	

GENERAL TYPICAL SECTION NOTES:

1. SEE SHEETS E1 AND E2 FOR PLAN VIEWS. SEE SHEET E3 FOR END OF RUNWAY PROFILES. REFER TO G SHEETS FOR SPECIAL DITCH LAYOUT DATA.
2. ALL SOIL CONSTRUCTION SLOPES SHALL BE SEEDED AND MULCHED. MATTING MAY BE REQUIRED FOR SOIL SLOPES STEEPER THAN 2:1, AS DIRECTED BY THE ENGINEER. ALL SOIL SLOPES 2:1(H:V) OR STEEPER WILL BE EVALUATED BY THE ENGINEER FOR SLOPE STABILIZATION MEASURES. SHOT ROCK SLOPES SHALL NOT BE SEEDED. CO #9 MODIFIES SLOPES STEEPER THAN 2:1 TO BE COVERED WITH SHOT ROCK
3. REFER TO SUBSECTION 152-2.6 OF THE SPECIFICATIONS FOR FINISHED RSA SURFACING REQUIREMENTS.

SLOPE TABLE

STATION FROM	STATION TO	OFFSET	SLOPE
5+00	63+00	LT	~~2:1~~
63+50	81+00	LT	2:1

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE Joe Berg Date 5/1/09

CHECKED BY: P. CARROLL

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: M.T./J.O.
DRAWN BY: L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

RUNWAY 10/28 TYPICAL SECTIONS

PATH: Q:\Wrg\68167\Planset\B1-B4Typ.dwg
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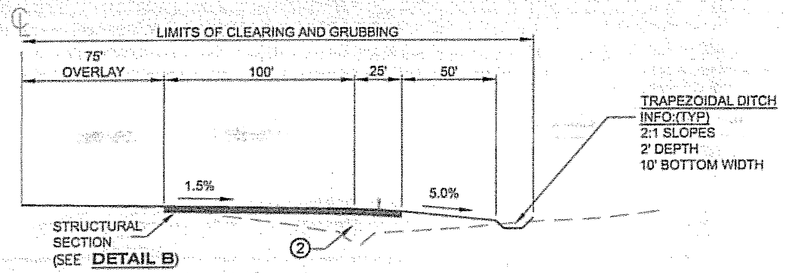
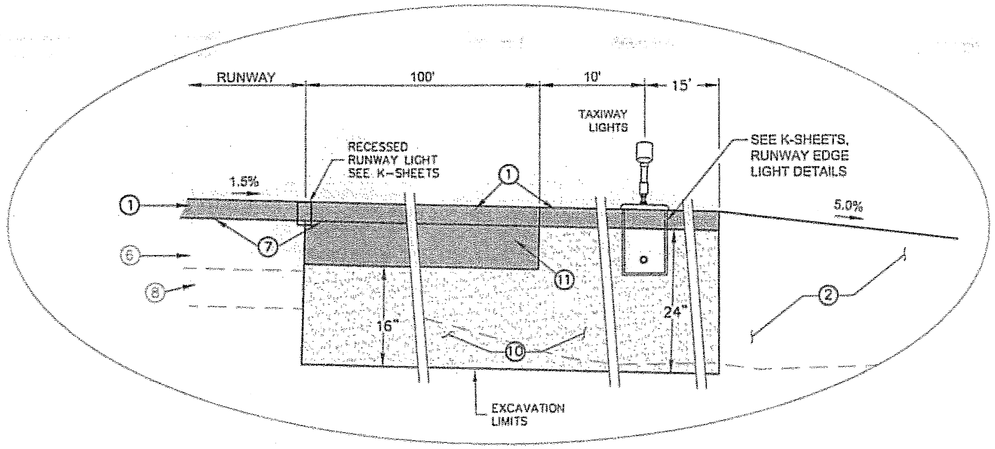
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			AIP NO. 3-02-0323-1105	2006	B1	69



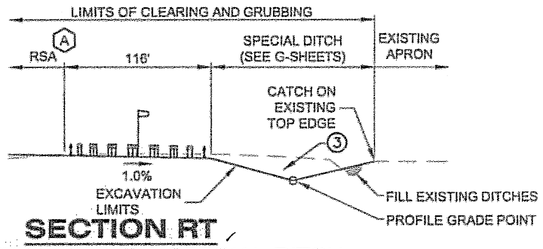
SECTION RT

AIRPLANE TURNAROUND
"O" STA. 68+50 TO 71+00



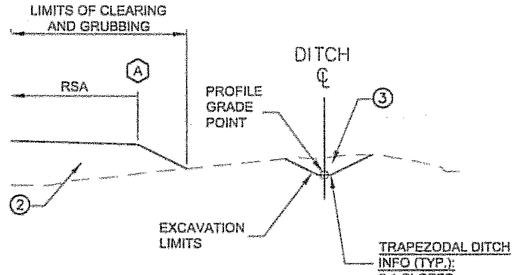
DETAIL B

AIRPLANE TURNAROUND
STRUCTURAL SECTION
NTS



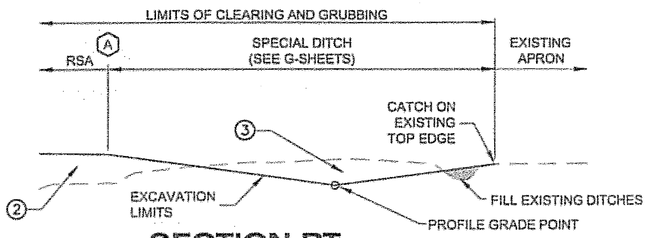
SECTION RT

SEGMENTED CIRCLE & SPECIAL DITCH
"O" STA. 24+50 TO 25+50
* SEE G-SHEETS FOR LAYOUT INFORMATION



SECTION RT

SPECIAL DITCH
"O" STA. 71+50 TO 75+00
* SEE G-SHEETS FOR LAYOUT INFORMATION



SECTION RT

SPECIAL DITCH
"O" STA. 16+00 TO 30+00
* SEE G-SHEETS FOR LAYOUT INFORMATION

Legend

1. 3" HOT MIX ASPHALT TYPE II, CLASS E
2. BORROW EMBANKMENT
3. UNCLASSIFIED EXCAVATION
4. 12" WASTE MATERIAL (OPTIONAL)
5. SEED & MULCH (SEE NOTE 2, B1)
6. 8" HOT MIX ASPHALT
7. BITUMINOUS TACK COAT
8. 4" CRUSHED AGGREGATE BASE COURSE
9. FLUFF BLASTING
10. CRUSHED AGG. BASE COURSE
11. 7" HOT MIX ASPHALT TYPE II, CLASS E

(X) REFERENCE POINT FOR PARTIAL CROSS SECTIONS.
(#) EXISTING
(#) PROPOSED

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/9/06

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: M.T.J.J.O.
DRAWN BY: L.R./R.G.

STATE OF ALASKA
Joel D. Osburn
CE-11014
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4/6/06

STATE OF ALASKA
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S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

MISCELLANEOUS TYPICAL SECTIONS

PATH: O:\Wrg\68167\Planset\B1-B4Typ.dwg
TAB: B2 Mon, 03/Apr/06 03:29PM frobertson

REVISIONS NO.	DATE	DESCRIPTION

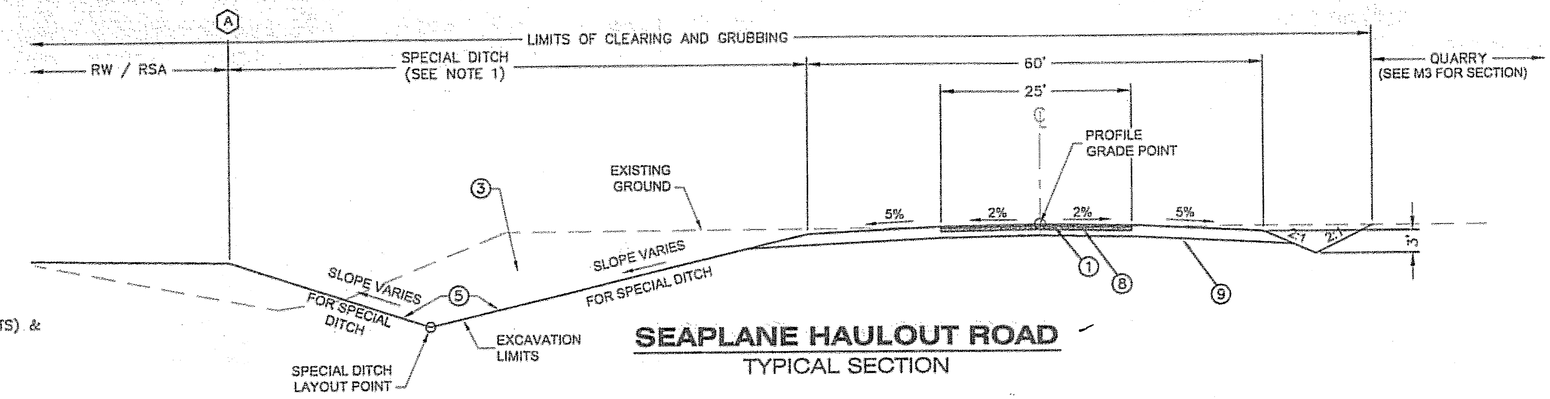
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	B2	69

NOTES:

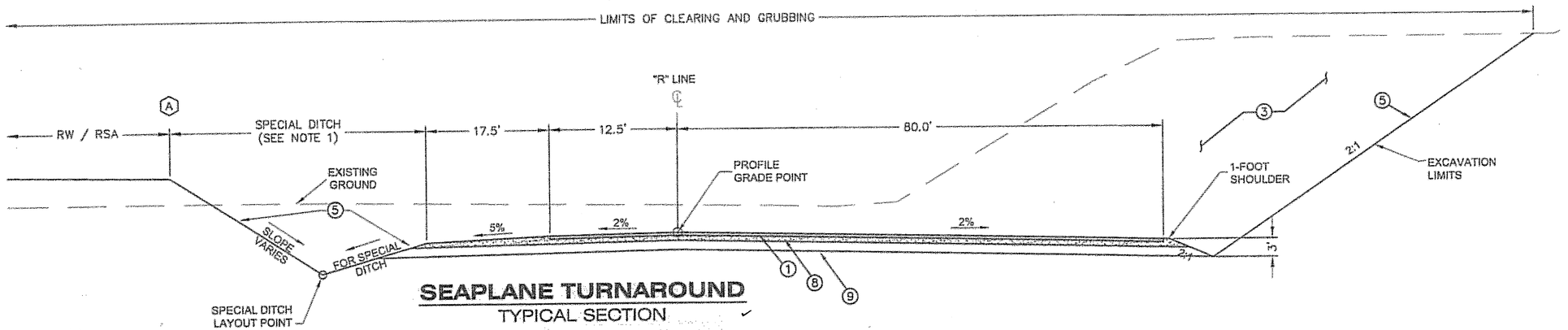
1. REFERENCE THE FOLLOWING FOR LAYOUT INFORMATION:

   ~SPECIAL DITCHES: G-SHEETS
   ~SEAPLANE HAULOUT: E10-12-SHEETS
   ~QUARRY RECLAMATION PLAN: M-SHEETS

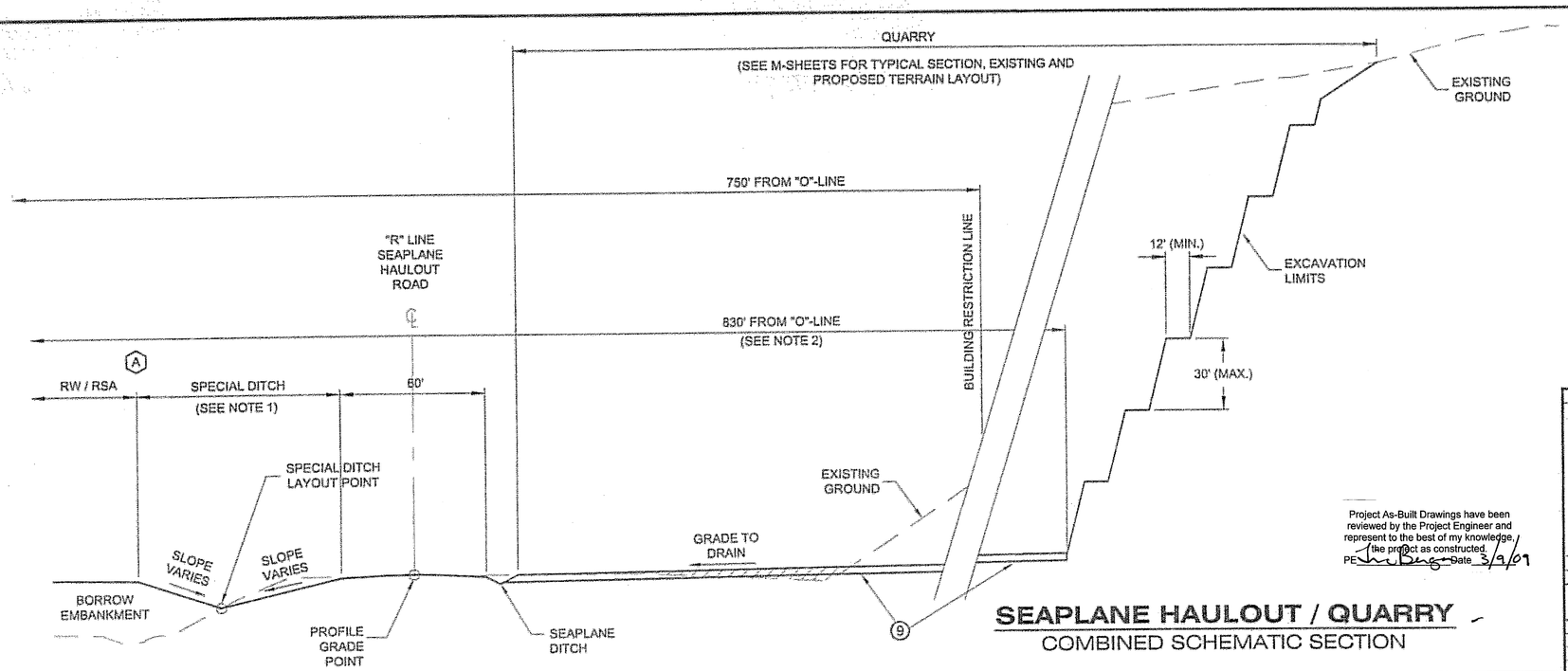
2. THE QUARRY SHALL BE DEVELOPED ACCORDING TO THE PLANS (M-SHEETS) & SPECIFICATIONS



SEAPLANE HAULOUT ROAD
TYPICAL SECTION



SEAPLANE TURNAROUND
TYPICAL SECTION



SEAPLANE HAULOUT / QUARRY
COMBINED SCHEMATIC SECTION

Legend

1. 3" HOT MIX ASPHALT TYPE II, CLASS E
2. BORROW EMBANKMENT
3. UNCLASSIFIED EXCAVATION
4. 12" WASTE MATERIAL (OPTIONAL)
5. SEED & MULCH (SEE NOTE 2, B1)
6. 8" HOT MIX ASPHALT
7. BITUMINOUS TACK COAT
8. 4" CRUSHED AGGREGATE BASE COURSE
9. 18" FLUFF BLASTING
10. CRUSHED AGG. BASE COURSE

X REFERENCE POINT FOR PARTIAL CROSS SECTIONS.

(#) EXISTING (#) PROPOSED

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/9/07

CHECKED BY: P. CARROLL

STATE OF ALASKA
Joel O. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: M.T./J.O.
DRAWN BY: L.R./R.G.

PATH: G:\Wrg\68167\Planset\B1-B4Typ.dwg
TAB: B3 Tue, 04/Apr/06 10:03AM jdosburn

REVISIONS

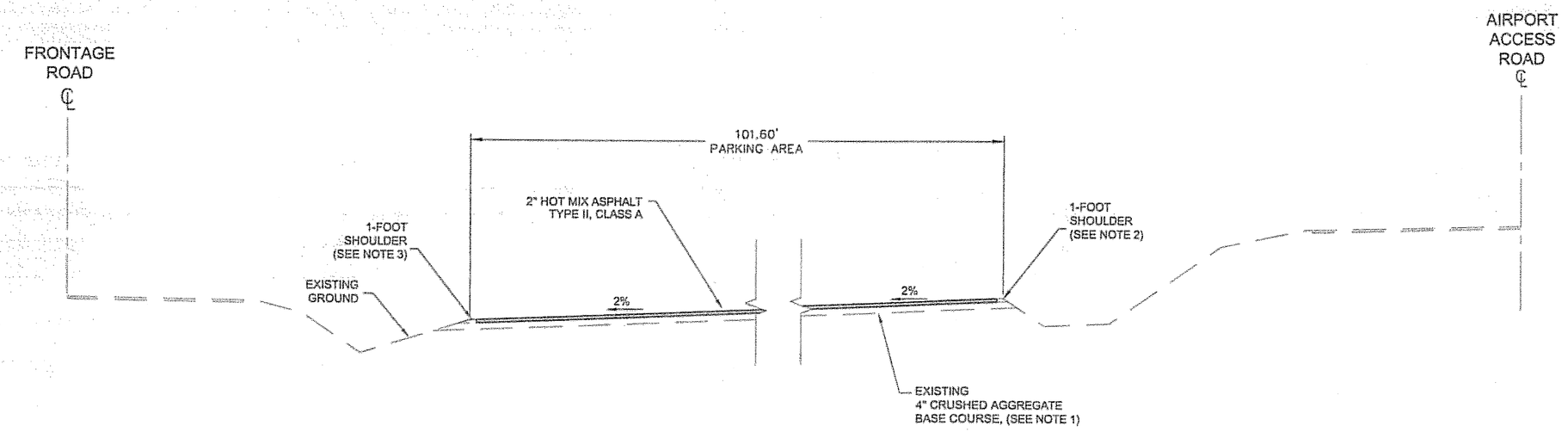
NO.	DATE	DESCRIPTION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

MISCELLANEOUS TYPICAL SECTIONS

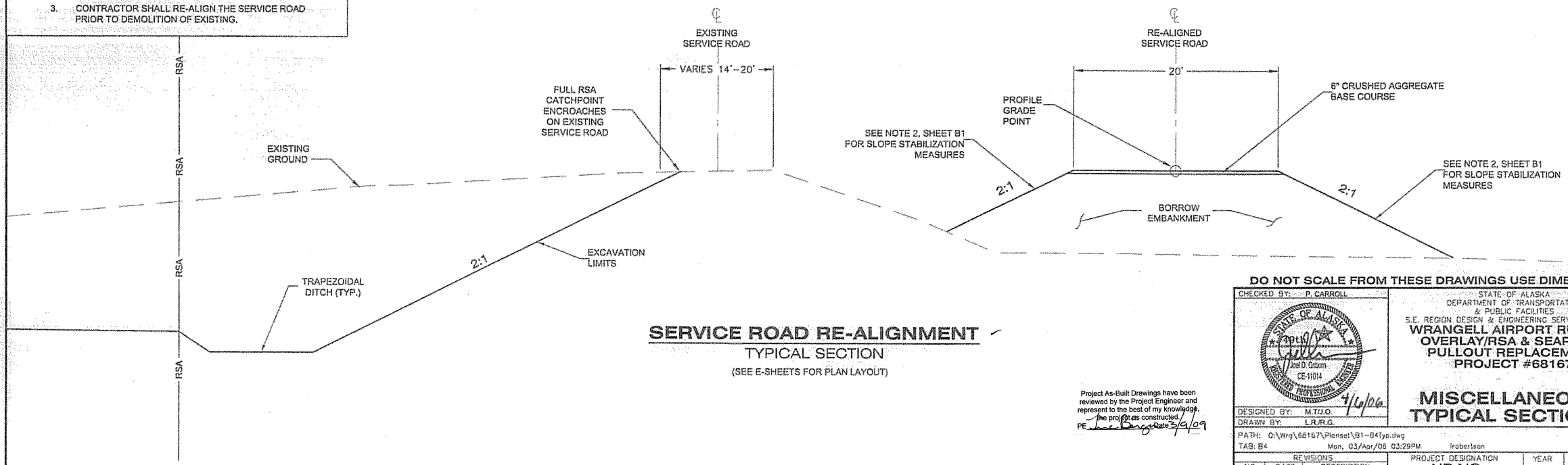
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	B3	69



AIRPORT PARKING LOT
TYPICAL SECTION
(SEE E-SHEETS FOR PLAN LAYOUT)

NOTES

1. GRADE EXISTING SURFACE, ADD MATERIAL AND COMPACT PARKING LOT AS NECESSARY PRIOR TO ASPHALT PAVING. WORK TO BE DONE TO THE SATISFACTION OF THE ENGINEER.
2. PULL EXCESS GRADING MATERIAL TO THE SHOULDERS, THEN SHAPE AND COMPACT THE CRUSHED ASPHALT BASE MATERIAL AS SHOWN ON THE TYPICAL SECTION.
3. CONTRACTOR SHALL RE-ALIGN THE SERVICE ROAD PRIOR TO DEMOLITION OF EXISTING.



SERVICE ROAD RE-ALIGNMENT
TYPICAL SECTION
(SEE E-SHEETS FOR PLAN LAYOUT)

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE _____ Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: M.T/J.O.
DRAWN BY: L.R./R.G.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY
OVERLAY/RSA & SEAPLANE
PULLOUT REPLACEMENT
PROJECT #68167

MISCELLANEOUS TYPICAL SECTIONS

PATH: O:\Wrg\68167\Planset\B1-B4Typ.dwg
TAB: B4 Mon, 03/Apr/06 03:29PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	B4	69

ESTIMATE OF QUANTITIES

Item No.	Item	Pay Unit	Quantity	
P-151c	Clearing & Grubbing	Acre	~~30~~	8.664
P-152a	Unclassified Excavation	Cubic Yard	~~345,000~~	130,596.2
P-152h	Borrow Embankment	Cubic Yard	~~1,350,000~~	1,181,581
P-152j	Pre-Blast Survey	Each	~~5~~	6
P-152k	Surface Grading CO #9	~~CYVM~~ CY	~~25,000~~	114,835
P-155a	Runway-10 Embankment Construction	Lump Sum	All Required	
P-157a	Erosion and Pollution Control Administration	Lump Sum	All Required	
P-157b	Temporary Erosion & Pollution Control	Contingent Sum	All Required	
P-157e	Silt Fence	Linear Foot	~~1,000~~	1,386
P-157f	Temporary Check Dam	Each	~~10~~	14
P-158a	Stream Relocation	Lump Sum	All Required	
P-165a	Removal & Disposal of Existing Structures	Lump Sum	All Required	
P-180a	Riprap Class II	Cubic Yard	~~2,400~~	2,224
P-180b	Riprap, Class IV	Cubic Yard	~~98,000~~	54,889.5
P-191a	Geotextile, Separation	Square Yard	~~1,500~~	350
P-209b	Crushed Aggregate Base Course	Ton	~~14,500~~	15,365.38
P-401a	Hot Mix Asphalt Type II, Class E	Ton	~~28,000~~	28,907.83
P-401b	Hot Mix Asphalt Price Adjustment	Contingent Sum	All Required	81,953.05
P-401c	Asphalt Cement [PG 64-28]	Ton	~~1,765~~	1569.76
P-603a	Bituminous Tack Coat	Ton	~~67~~	34.09
P-605a	Joint Sealing Filler	Linear Foot	~~275~~	∅
P-620a	Runway and Taxiway Painting	Lump Sum	All Required	
P-630b	Pavement Grooving	Lump Sum	All Required	
P-640b	Segmented Circle (Panel-Type)	Lump Sum	All Required	
P-660a	Install 12-Inch Water Main	Linear Foot	~~3,655~~	3,629
P-660b	Pressure Reducing Valve	Each	1	
P-660c	Telemetry System Complete	Lump Sum	All Required	
P-670a	Concrete Sidewalk, 4 inches thick	Square Yard	~~165~~	241
P-670b	Curb Ramp	Each	~~2~~	3
P-675b	Curb and Gutter, Type 1	Linear Foot	365	396.8
F-162a	8-Foot Chain-Link Fence	Linear Foot	8,250	8304
F-162c	13-foot Double Swing Gate	Each	1	
F-162g	Swing Gate Relocation	Each	1	
F-162h	Double Swing Gate Relocation	Each	~~1~~	2
D-701a	Corrugated Aluminum Pipe, 36 Inch	Linear Foot	~~210~~	229
D-701d	Corrugated Aluminum Pipe, 48 Inch	Linear Foot	~~355~~	349
T-901a	Seeding	Acre	~~13~~	20.495
T-908b	Rolled Matting	Lump Sum	~~All Required~~	
L-100c	High Intensity Runway Edge and Threshold Light, L-862 and L-862E	Each	~~72~~	73
L-100e	Taxiway Edge Light, L-861T	Each	~~24~~	28
L-100f	Wind Cone Handhole, L-867, Size D	Each	10	
L-100h	Remove existing Runway and Taxiway Light	Each	~~88~~	92
L-100k	Flush Runway Edge Light, L-850c	Each	4	
L-100n	Airport Sign, Type L-858	Each	~~5~~	9
L-100o	FAA Power Work	Lump Sum	All Required	
L-100p	Telephone Cable Work	Lump Sum	All Required	
L-107b	12-foot Lighted Wind Cone, in place	Each	2	
L-108a	Underground Cable # 8 AWG, copper, 5kV FAA type "B" or type "C" (as specified on Plans), L-824	Linear Foot	~~13,000~~	15,337
L-108c	#6 Insulated Copper Ground Conductor	Linear Foot	~~14,000~~	13,590
L-108g	Ground Rod	Each	2	

ESTIMATE OF QUANTITIES (cont'd.)

Item No.	Item	Pay Unit		
L-110a	2 inch Rigid Steel Conduit	Linear Foot	~~1,160~~	630
L-110c	2-inch HDPE Conduit	Linear Foot	~~12,250~~	13,300
G-100a	Mobilization & Demobilization	Lump Sum	All Required	
G-115a	Worker Meals and Lodging, or Per Diem	Lump Sum	All Required	
G-130a	Field Office	Lump Sum	All Required	
G-130b	Field Laboratory	Lump Sum	All Required	
G-130g	Nuclear Testing Equipment Storage Shed	Each	~~1~~	0
G-131a	Engineering Transportation	Lump Sum	All Required	
G-135a	Construction Surveying by the Contractor	Lump Sum	All Required	
G-135b	Three Person Survey Party	Hour	~~100~~	6.02
G-135c	Monuments by the Contractor	Lump Sum	All Required	
G-140b	Traffic Maintenance	Lump Sum	All Required	
G-140c	Traffic Price Adjustment	Contingent Sum	All Required	
G-140d	Traffic Control	Contingent Sum	All Required	
G-140e	Flagging	Contingent Sum	All Required	
G-160a	Eagle Monitoring	Hour	~~200~~	146.5
G-200a	Contractor Quality Control Program	Lump Sum	All Required	
G-704a	Hazardous Area Barrier	Each	25	
M-420a	Launching Ramp	Lump Sum	All Required	

UPDATED 4/6/2006

BASIS OF ESTIMATE

Item No.	Item	Estimating Factor
P-152h	Borrow Embankment - Subsidence Quantity	250,000 c.y.
-	Useable Excavation (includes existing Waste Stockpile)	260,000 c.y.
P-209b	Crushed Aggregate Base Course	1.96 ton/cy
P-603a	Bituminous Tack Coat	0.05 gal/s.y.
P-603a	Bituminous Tack Coat	243 gal/ton
P-401a	Hot Mix Asphalt Mixture	117 lb/sy/in
P-401c	Hot Mix Asphalt Material [PG 64-28]	6% of Item P-401a
P-401c	Hot Mix Asphalt Material [PG 64-28]	237 gal/ton

UPDATED 4/6/2006

Zimovia Highway Pavement Repair CO #1	L.S.	28,500.00	1.00	$28,500.00
Crafco Joint Adhesive CO #1	L.S.	24,000.00	1.00	$24,000.00
Temporary X Closures CO #1	L.S.	10,322.49	1.00	$10,322.49
Rock Excavation	C.Y.	7.50	151,130.00	$1,133,475.00
Removal & Disposal of Existing Structures CO #2	L.S.	627,881.00	1.00	$627,881.00
Contaminated Waste Disposal Site CO #3	L.S.	12,484.00	1.00	$12,484.00
Non-par Off-site Disposal CO #3	L.S.	2,445.00	1.00	$2,445.00
Informational Sign CO #4	Each	237.00	1.00	$237.00
Seaplane Ramp Modifications CO #4	L.S.	9,974.00	1.00	$9,974.00
12" Water Main Modifications CO #5	L.S.	28,138.64	1.00	$28,138.64
Slope Reconstruction / Drainage Ditching CO#6	L.S.	46,293.18	1.00	$46,293.18
Taxiway A Closure CO #7	L.S.	11,693.04	1.00	$11,693.04
Taxiway B Culvert Modification CO#7	L.S.	9,911.43	1.00	$9,911.43
Electrial Modifications CO#8	L.S.	9,561.00	1.00	$9,561.00
Completion Electrical Punchlist CO#8	L.S.	7,912.33	-1.00	-$7,912.33
Runway Painting Modifications CO#9	L.S.	14,280.00	1.00	$14,280.00
Project Right Rock Slope CO#9	L.S.	50,000.00	1.00	$50,000.00

New Items Established by Change Order

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

PE _____ Date 7/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY:

STATE OF ALASKA · 19th · Joe D. Osburn · CE-11014 · REGISTERED PROFESSIONAL ENGINEER

4/7/06

DESIGNED BY: F. ECHEVERRIA

DRAWN BY:

PATH: Q:\Wrg\68167\Planset\C_0-Sums.dwg

TAB: C (1) Fri, 07/Apr/06 09:48AM jdosburn

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

ESTIMATE OF QUANTITIES

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			AIP NO. 3-02-0323-1105	2006	C1	69

P-165 REMOVAL AND DISPOSAL OF EXISTING STRUCTURES

ITEM	ESTIMATED QUANTITY	UNIT
PAVEMENT	1000	SQUARE YARD
CHAIN-LINK FENCE	5875	LINEAR FOOT
SEGMENTED CIRCLE	1	EACH
WINDCONE	2	EACH
BARGE LOADING FACILITY*	1	EACH
473,000 GAL. STEEL WATER TANK	1	EACH

UPDATED 1/17/2006

*BARGE LOADING FACILITY AND STEEL WATER TANK BECOME PROPERTY OF CONTRACTOR.

F-162g FENCE GATE RE-LOCATION SUMMARY

GATE NO.	TYPE	FROM STA.	FROM OFF.	TO STA.	TO OFF.	REMARKS
1	8' x 8' SWING GATE	15+50	121 LT	16+00	250 LT	
2	8' x 6' DOUBLE SWING GATE	15+56	156 RT	-	-	
3	8' x 8' DOUBLE SWING GATE	73+27	84 RT	81+00	125 RT	
4	8 x 8 DOUBLE SWING GATE	64+75	250 RT			

UPDATED 03/30/2006

D-701 CULVERT PIPE SUMMARY

PIPE NO.	TYPE	DIAMETER (in)	LENGTH (ft)	INLET STA.	INLET OFF.	INLET INV.	OUTLET STA.	OUTLET OFF.	OUTLET INV.	SLOPE	REMARKS
P-1	CAP	36	120	"R" 13+05.7	36 RT	12.6	"R" 12+10.8	36 RT	11.1	1.3%	SEAPLANE TURNAROUND
P-2	CAP	36	90	"R" 24+25.6	39 RT	17.0	"R" 24+04.2	47 RT	13.0	4.4%	SEAPLANE HAULOUT ROAD
P-3	CAP	48	175	"O" 22+85.4	384 RT	20.2	"O" 21+12.2	375 RT	19.7	0.3%	TAXIWAY A
P-4	CAP	48	180	"O" 32+00.4	258 RT	27.6	"O" 30+00.4	290 RT	26.3	0.7%	TAXIWAY B
P-5	CAP	36	60	FIELD FIT / SLOPED TO DRAIN							

UPDATED 3/30/2006

NOTE:

1. CROSS CULVERT LOCATIONS GIVEN IN THIS TABLE ARE APPROXIMATE. FINAL CROSS CULVERT POSITIONS WILL BE DETERMINED BY THE ENGINEER AFTER EMBANKMENT CONSTRUCTION IS COMPLETE. THE LOCATIONS OF CROSS CULVERTS AND OTHER PROPOSED IMPROVEMENTS ARE SUBJECT TO MINOR FIELD REVISIONS BY THE ENGINEER.
2. SEE G-SHEETS FOR DRAINAGE PLANS & DETAILS.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Joe Osburn Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: R. SNYDER

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

MISCELLANEOUS SUMMARIES

PATH: Q:\Wrg\68167\Planset\C_D-Sums.dwg
TAB: D (1) Mon, 03/Apr/06 03:30PM trobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	D1	69

RUNWAY – 10 EMBANKMENT CONSTRUCTION AREA (REFER TO SECTION P-155 OF THE SPECIFICATIONS)

UNCLASSIFIED EXCAVATION = 10,000 C.Y.

EMBANKMENT = 585,000 C.Y.

B.O.P.
STA. "O" 5+00.00
N 303740.8861
E 294079.6916

LOCAL TIDAL RANGE
(MSL DATUM)
HTL = 11.40'
MHW = 6.78'
MLLW = -8.30'
ELW = -13.40'

0 80 160
SCALE IN FEET

BEGIN OVERLAY ON EXISTING PROFILE "O" STA. 9+00

SEE SHEET E4 FOR RSA EXTENSION PROFILE

REIL'S + VAULTS (DO NOT DISTURB)

PAPI, MANHOLE + VAULT. (DO NOT DISTURB)

RSA

10+00

S58°37'09"E

15+00

EXISTING SEAPLANE HAULOUT

EXISTING BARGE LOADING FACILITY

NEW SEAPLANE HAULOUT, SEE E-SHEETS FOR DETAILS

SPECIAL DITCHES SEE G-SHEETS

SEE H PIPE I

MATCH LINE

P-1

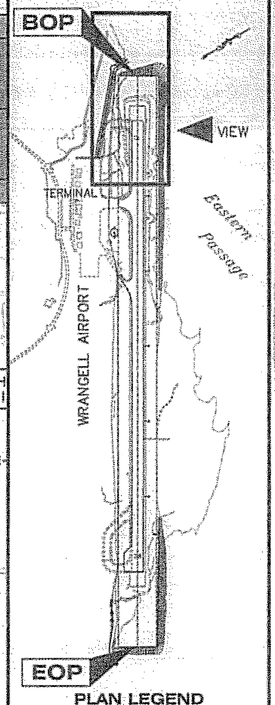
P-2

EXISTING PT. HIGHFIELD ROCK QUARRY
(SEE M-SHEETS FOR MINING PLAN)

EXISTING WATER TANK TO BE REMOVED

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE _____ Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



PLAN LEGEND

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ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: P. CARROLL

STATE OF ALASKA 49th Joel D. Osburn CE-11014 REGISTERED PROFESSIONAL ENGINEER 9/6/06

DESIGNED BY: J.O./ F.E.

DRAWN BY: R.S./L.R.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

RSA 10/28 PLAN VIEWS

PROJECT DESIGNATION	
AIP NO. 3-02-0323-1105	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
E1	69

PATH: O:\Wrg\68167\Planset\E1-E3Plan-68167.dwg
Thu, 06/Apr/06 11:20AM jdosburn
TAB: E2

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

UNCLASSIFIED EXCAVATION = 70,000 C.Y.
EMBANKMENT = 250,000 C.Y.

INSTALL RUNWAY DISTANCE TO GO SIGNS, SEE K-SHEETS FOR DETAILS

PAPI, MANHOLE + VAULT. (DO NOT DISTURB)

RSA

20+00 25+00 30+00 S58°37'09"E 35+00 40+00

TAXIWAY A TAXIWAY E

RUNWAY REPAIR, SEE H-SHEETS FOR DETAIL

ABANDON PIPE IN-PLACE

LIGHTED WINDCONE

INSTALL SEGMENTED CIRCLE, SEE L-SHEETS FOR DETAILS

SEE H-SHEETS FOR PIPE INSTALLATION DETAIL

P-4

SEE H-SHEETS FOR PAVEMENT TRANSITION TAPER DETAIL

ABANDON PIPE IN-PLACE

PIPE REMOVED & BACKFILLED

MATCH LINE

SEE H-SHEETS FOR PIPE INSTALLATION DETAIL

P-3

SLOPED TO DRAIN TO DITCH LINE

SERVICE ROAD RE-ALIGNMENT SEE SHEET-E8

MATCH LINE

SPECIAL DITCHES SEE G-SHEETS

JET HARDSTAND REPAIR SEE SHEET E-13

EXISTING/TEMPORARY WASTE MATERIAL STOCKPILE (APPROX. 40,000 C.Y.)

EXISTING WASTE MATERIAL STOCKPILE REMOVED

PARKING LOT PARKING/PAINT REVISED

AIRPORT ACCESS ROAD

PARKING LOT SEE E-9 SHEET

330'

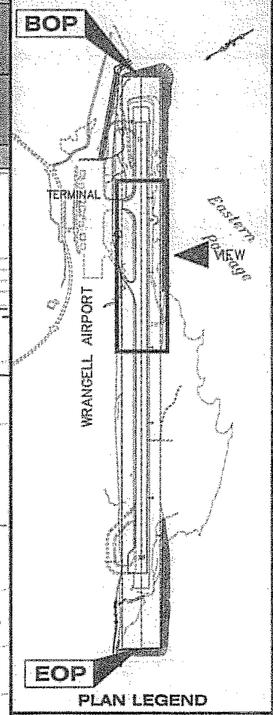
EAGLE NEST

ADOT&PF MAINTENANCE BUILDINGS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

0 80 160
SCALE IN FEET



PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA
49th
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: J.O./ F.E.

DRAWN BY: R.S./L.R.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

RSA 10/28 PLAN VIEWS

PROJECT DESIGNATION
AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
E2	69

RSA

UNCLASSIFIED
EXCAVATION = 150,000 C.Y.

EMBANKMENT = 10,000 C.Y.

INSTALL RUNWAY DISTANCE TO GO SIGNS; SEE K-SHEETS FOR DETAILS

MATCH EXISTING LOCALIZER ROAD

INSTALL LIGHTED WINDCONE, SEE K-SHEETS FOR DETAILS

HAUL ROAD ESTABLISHED TO ACCESS WASTE AREA.

RUNWAY REPAIR, SEE H-SHEETS FOR DETAIL

45+00 50+00 S58°37'09"E 55+00 60+00

PAPI, MANHOLE, & VAULT (DO NOT DISTURB)

MATCH LINE

RSA

MATCH LINE

RSA

P-5

36" CULVERT

HAUL ROAD ESTABLISHED TO ACCESS WASTE AREA

RSA

8'x8' DOUBLE SWING GATE

END OVERLAY ON EXISTING PROFILE "O" STA. 73+00

SALVAGE & REUSE EXISTING 8' X 8' GATE

E.O.P.
STA. "O" 81+00.00
N 299575.3120
E 300909.7342

SEE SHEET E4

65+00 S58°37'09"E 70+00 75+00 80+00

FOR RSA EXTENSION PROFILE

28 10

AIRPLANE TURN AROUND (SEE B-SHEETS FOR TYPICAL SECTION)

BEGIN AIRPLANE TURNAROUND "O" STA. 67+00, OFFSET: 75 RT.

REILS & VAULT (DO NOT DISTURB)

SHELL MIDDEN (SEE NOTE 1)

MATCH LINE

RSA

"O" STA. 68+00, OFFSET: 175 RT.

"O" STA. 70+50, OFFSET: 175 RT.

DITCHLINE NOT ESTABLISHED. LEFT IN NATURAL STATE AND FLOW.

RELOCATED FISH STREAM & SPECIAL DITCH. SEE E&G-SHEETS FOR LAYOUT PLAN; B-SHEETS FOR TYPICAL SECTIONS.

UNCLASSIFIED
EXCAVATION = 15,000 C.Y.

EMBANKMENT = 645,000 C.Y.

NOTES:
1. THE CONTRACTOR SHALL SCHEDULE AROUND ARCHAEOLOGICAL DIGGING IN THE SHELL MIDDEN. SEE APPENDIX B OF THE SPECIFICATIONS FOR MORE.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Date 4/9/09

0 80 160
SCALE IN FEET

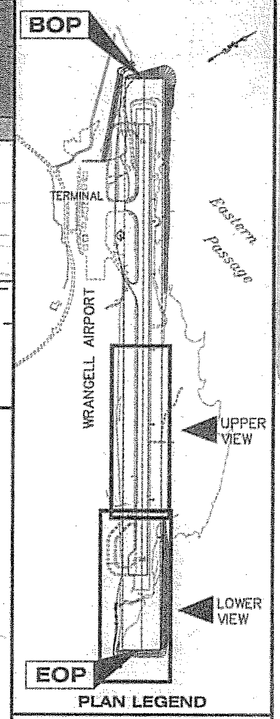
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: O:\Wrg\68167\Planset\E1-E3Plan-68167.dwg
Thu, 06/Apr/06 11:21AM jdosburn
TAB: E3

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA 49th
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

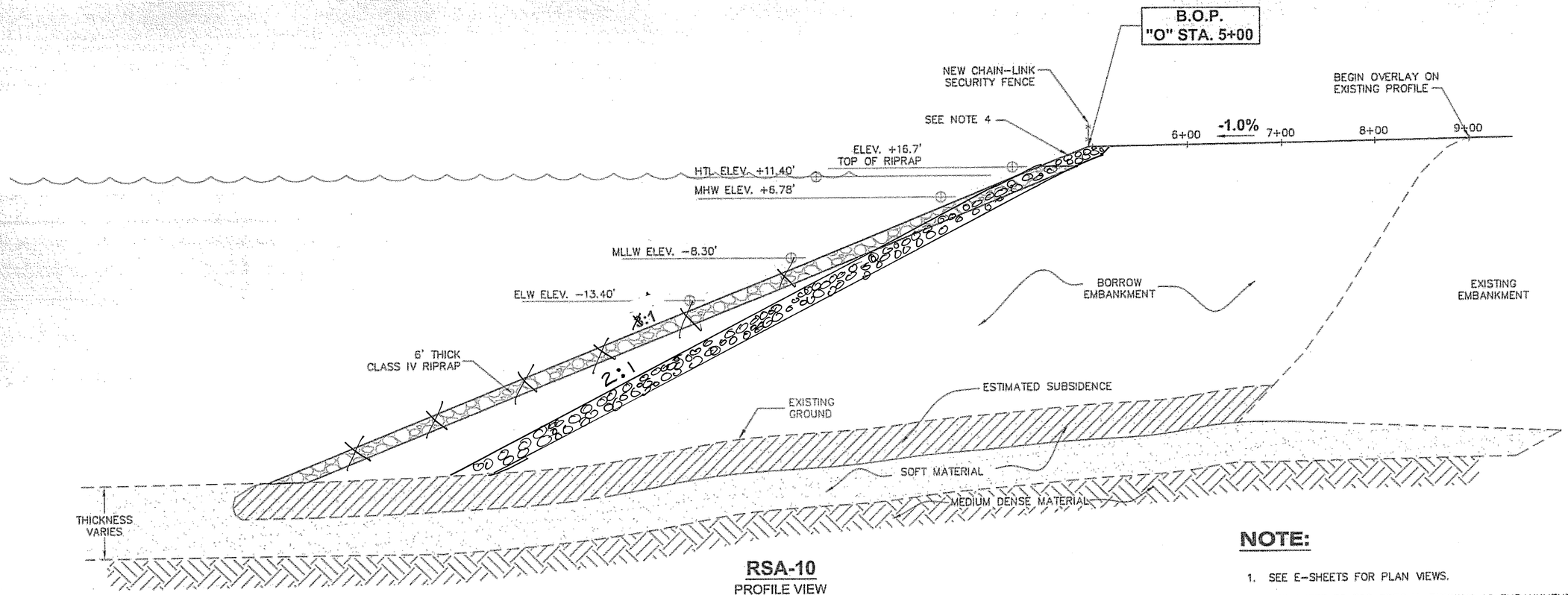
DESIGNED BY: J.O./ F.E.
DRAWN BY: R.S./L.R.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

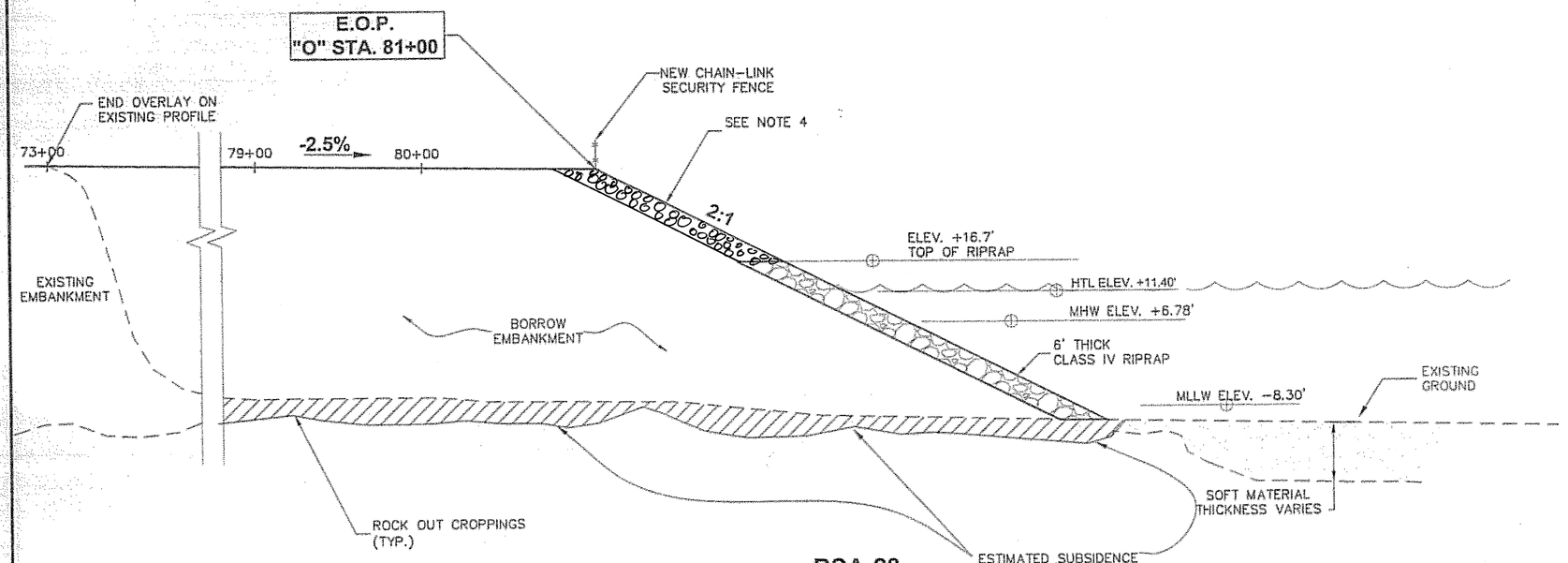
WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

RSA 10/28 PLAN VIEWS

PROJECT DESIGNATION	
AIP NO. 3-02-0323-1105	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
E3	69



RSA-10
PROFILE VIEW
NTS



RSA-28
PROFILE VIEW
NTS

NOTE:

1. SEE E-SHEETS FOR PLAN VIEWS.
2. SEE SHEET E5 FOR SPECIAL RUNWAY-10 EMBANKMENT CONSTRUCTION DETAILS.
3. SEE SECTION P-155 OF THE SPECIFICATIONS FOR RUNWAY-10 EMBANKMENT CONSTRUCTION GUIDELINES.
4. ALL SOIL CONSTRUCTION SLOPES SHALL BE SEEDED AND MULCHED. MATTING MAY BE REQUIRED FOR SOIL SLOPES STEEPER THAN 2:1, AS DIRECTED BY THE ENGINEER. ALL SOIL SLOPES 2:1(H:V) OR STEEPER WILL BE EVALUATED BY THE ENGINEER FOR SLOPE STABILIZATION MEASURES. SHOT ROCK SLOPES SHALL NOT BE SEEDED.

CO #9 ALLOWS SLOPES STEEPER THAN 2:1 TO BE STABILIZED WITH SHOT ROCK.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE [signature] Date 3/9/07

CHECKED BY: P. CARROLL
STATE OF ALASKA — 49TH — Joel D. Osburn CE-11014 REGISTERED PROFESSIONAL ENGINEER 4/6/06
DESIGNED BY: M.T./J.O.
DRAWN BY: R. SNYDER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

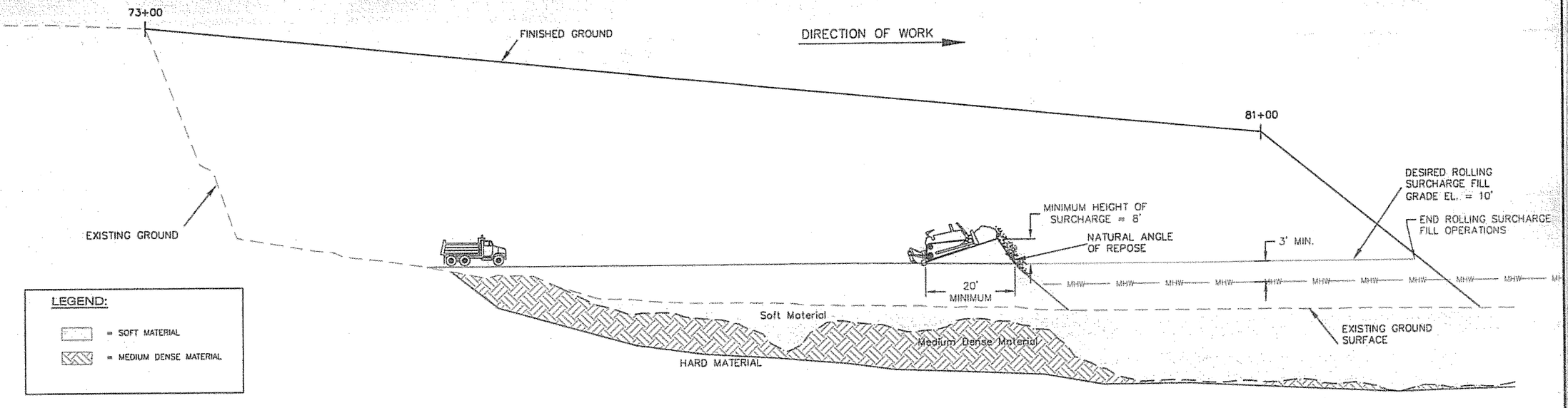
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

RSA EXTENSION PROFILES

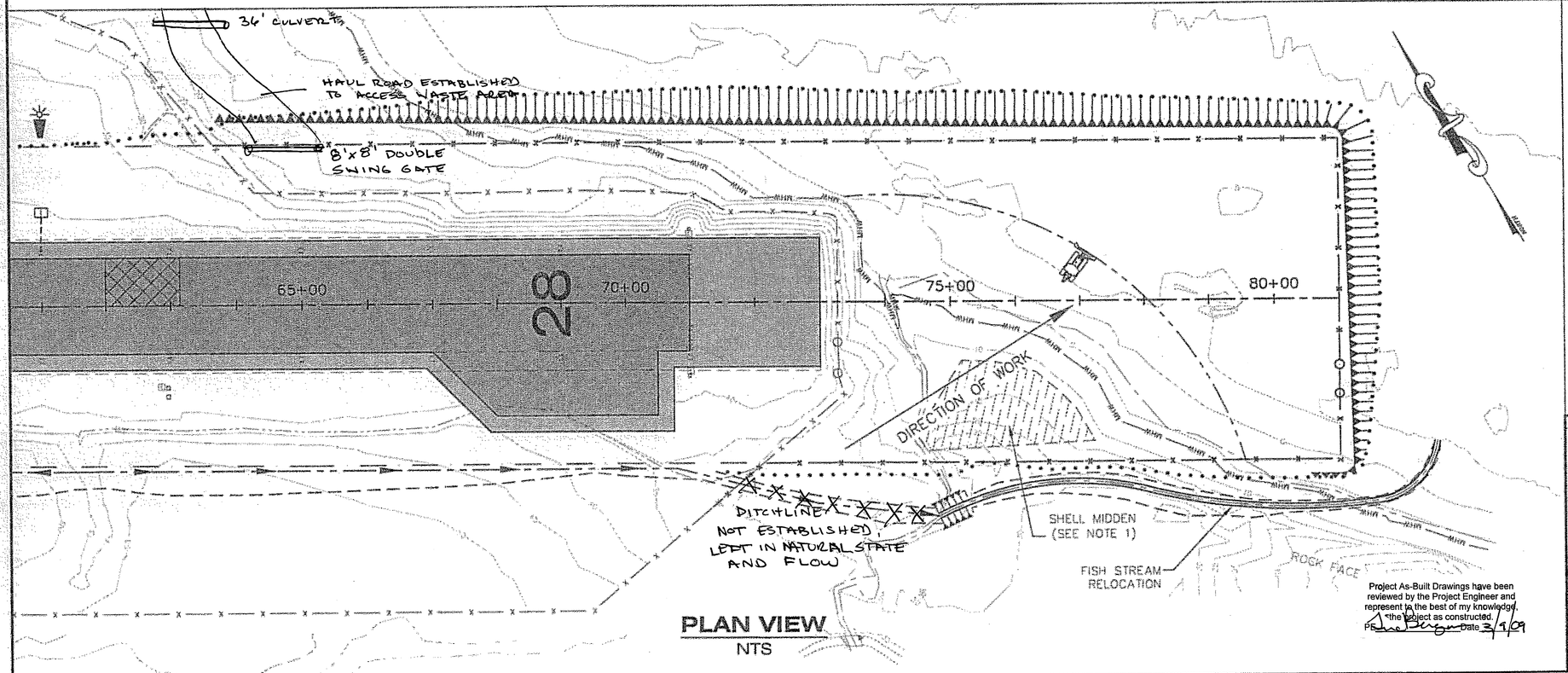
PATH: Q:\Wrg\68167\Planset\E4_RSAProfile.dwg
TAB: E3 Mon, 03/Apr/06 03:32PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	E4	69



PROFILE VIEW
NTS



PLAN VIEW
NTS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/9/09

NOTES:

1. RE-ALIGN STREAM PRIOR TO ROLLING SURCHARGE FILL PLACEMENT. AVOID THE ARCHEOLOGICAL SHELL MIDDEN SITE UNTIL IT IS CLEARED.
2. PLACE SURCHARGE FILL TO THE DESIRED GRADE AS SHOWN. ADDITIONAL FILL WILL BE PLACED ACCORDING TO SECTION P-152 OF THE SPECIFICATIONS.
3. WORK FROM SHALLOW TO DEEP WATERS.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: L.ROBERTSON

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

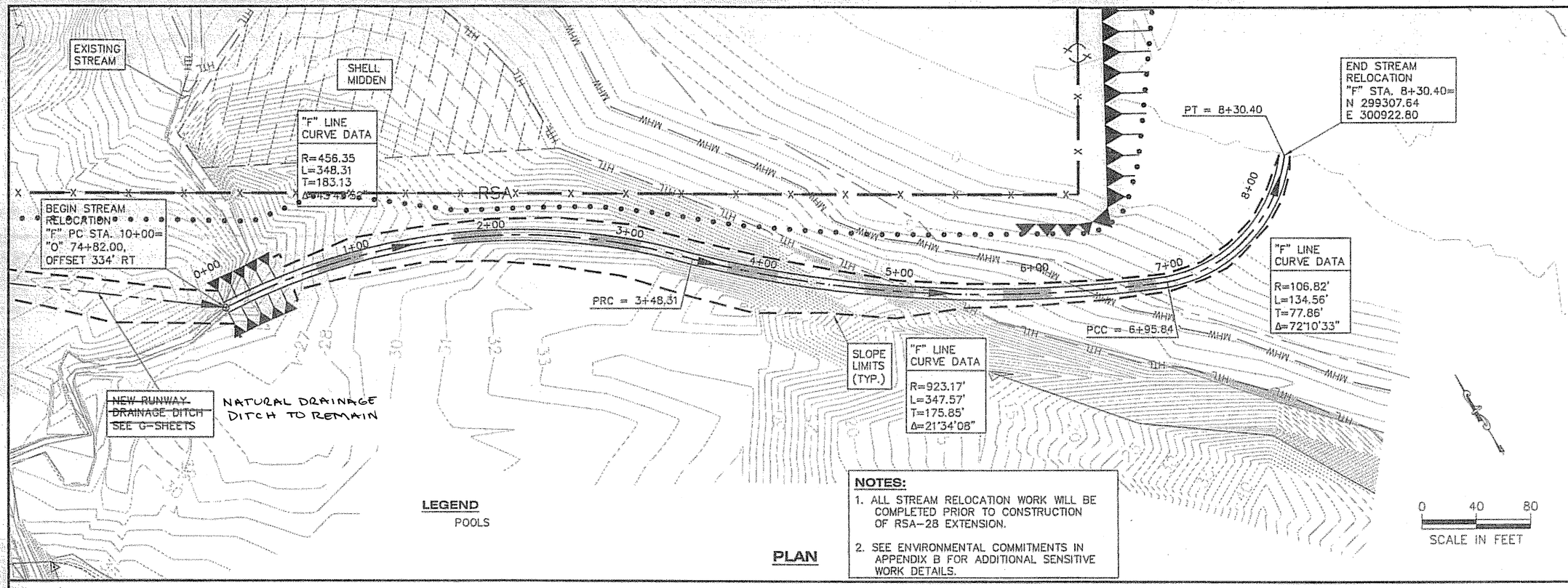
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

ROLLING SURCHARGE PLAN & PROFILE VIEWS

PATH: Q:\Wrg\68167\Planset\E5_Rolling Surcharge Fill.dwg
TAB: R28_SECTION_PLAN, 06/Apr/06 12:14PM jdosburn

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	E5	69



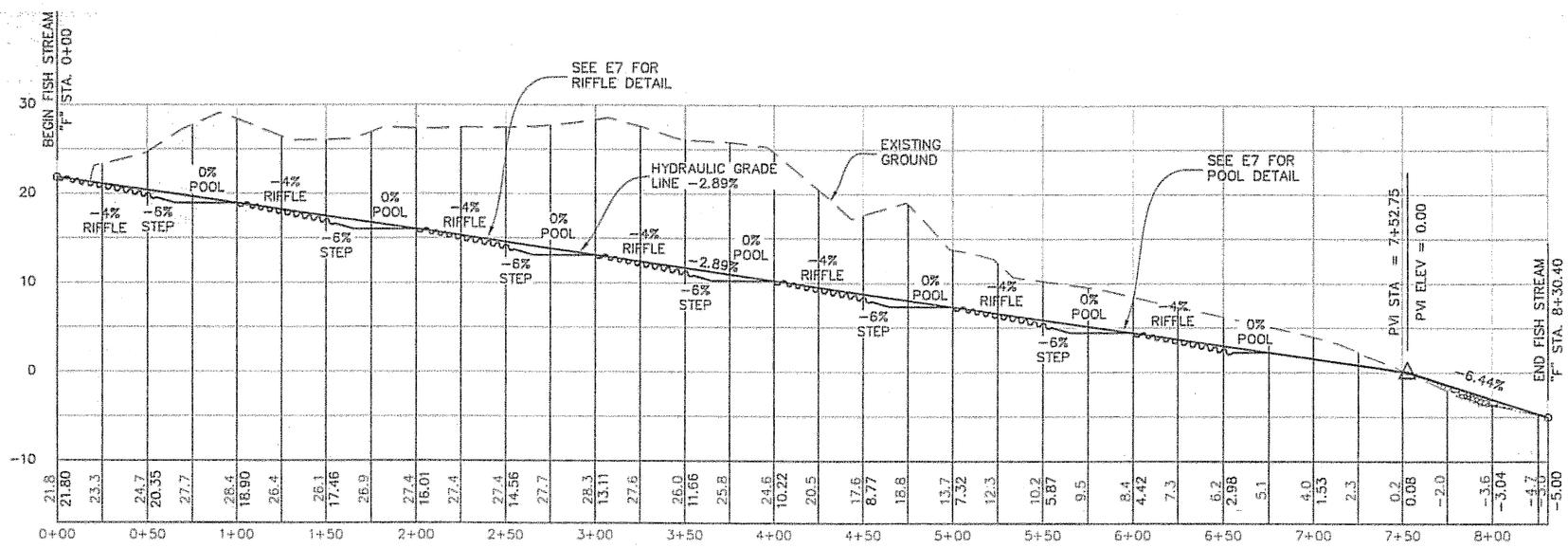
LEGEND

POOLS

PLAN

NOTES:

1. ALL STREAM RELOCATION WORK WILL BE COMPLETED PRIOR TO CONSTRUCTION OF RSA-28 EXTENSION.
2. SEE ENVIRONMENTAL COMMITMENTS IN APPENDIX B FOR ADDITIONAL SENSITIVE WORK DETAILS.



PROFILE

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/4/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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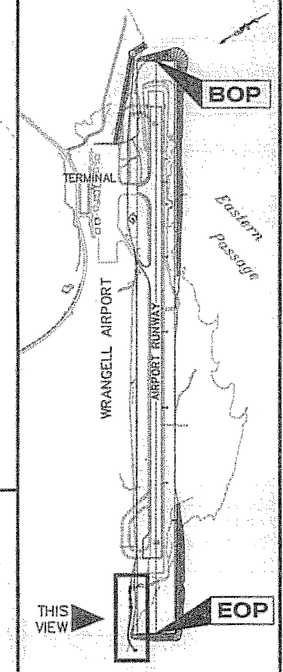
TAB: E6

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA 49TH Joel D. Osburn CE-11014 REGISTERED PROFESSIONAL ENGINEER 4/6/06

DESIGNED BY: F. ECHEVERRIA

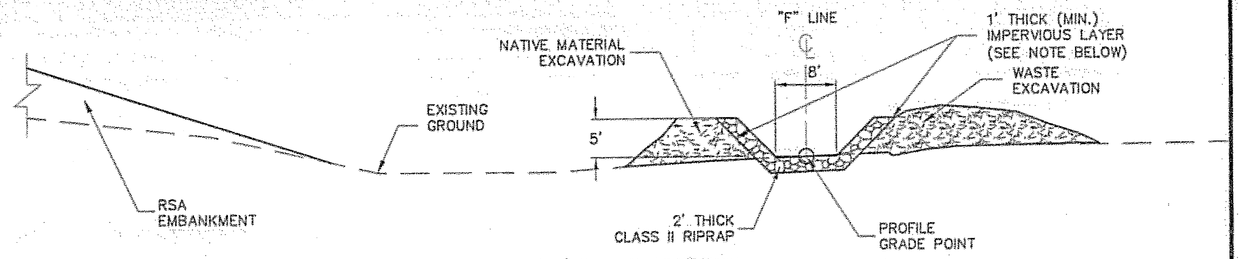
DRAWN BY: R.S./L.S.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

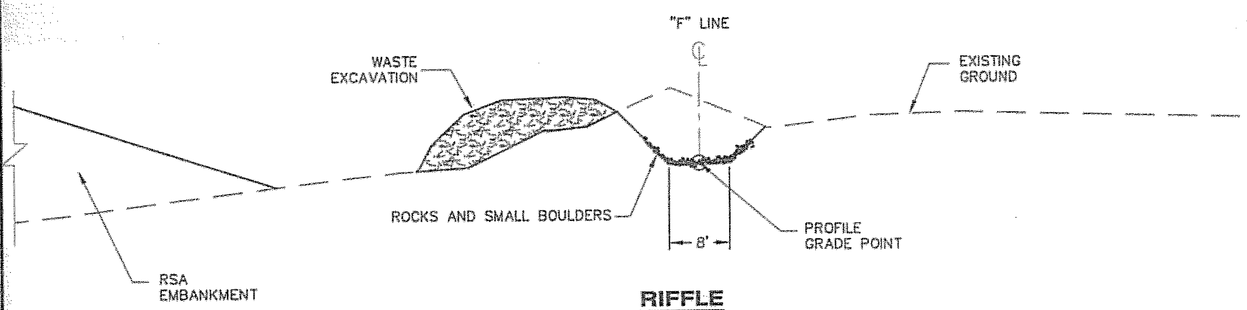
FISH STREAM PLAN & PROFILE

PROJECT DESIGNATION	
AIP NO. 3-02-0323-1105	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
E6	69

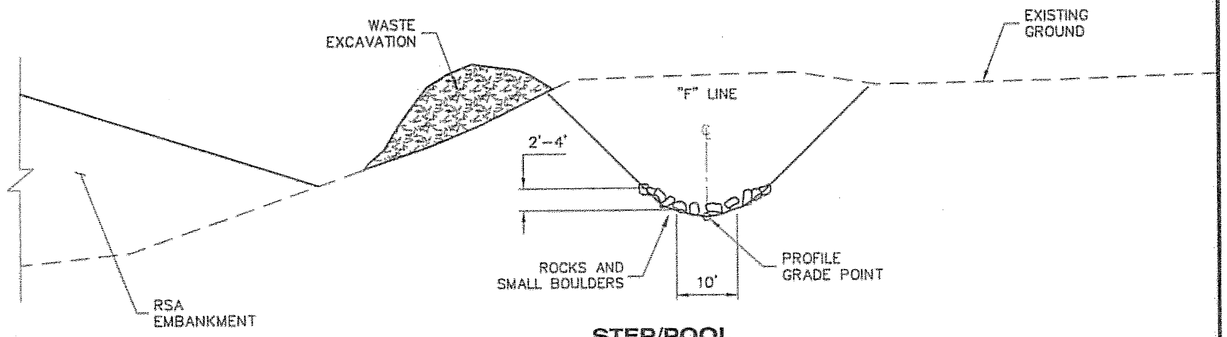


RIPRAP CHANNEL
"F" STA. 0+00 TO 0+50

NOTE:
IMPERVIOUS LAYER CONSISTS OF WASTE EXCAVATION CONTAINING SILT AND CLAY.



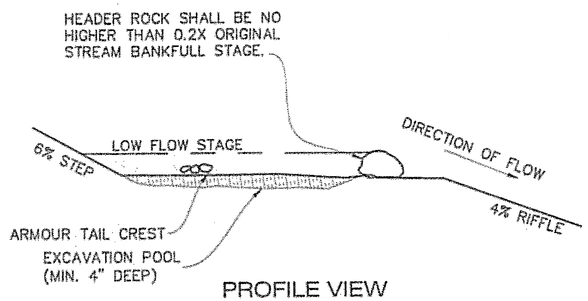
RIFFLE
"F" STA. 0+50 TO 8+30.40



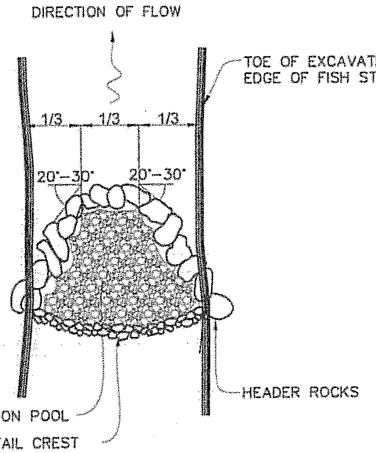
STEP/POOL
"F" STA. 0+50 TO 8+30.40

SLOPE TABLE	
FILL	2:1
CUT	1:1

FISH STREAM RELOCATION
TYPICAL SECTIONS



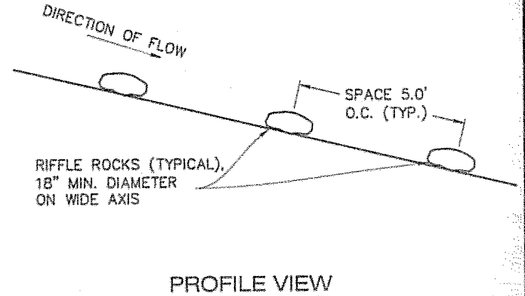
PROFILE VIEW



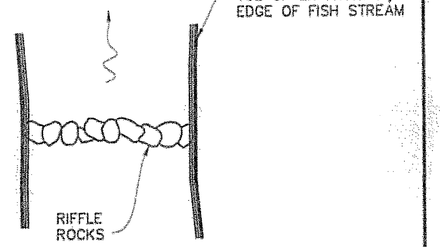
PLAN VIEW

POOL DETAIL

NOTE: HEADER ROCKS SHALL BE HAND SELECTED. MINIMUM ROCK SIZE SHALL BE 3--FEET ON SECONDARY (WIDE) AXIS.



PROFILE VIEW



PLAN VIEW

RIFFLE DETAIL

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [illegible] Date 3/9/09

CHECKED BY: P. CARROLL
STATE OF ALASKA 49TH
Joel D. Osburn CE-11014 REGISTERED PROFESSIONAL ENGINEER
4/6/06
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: R.S./L.S.
PATH: O:\Wrg\68167\Planset\E6-E7_StreamPlan.dgn
TAB: E7 Mon, 03/Apr/06 03:34PM lrobertson

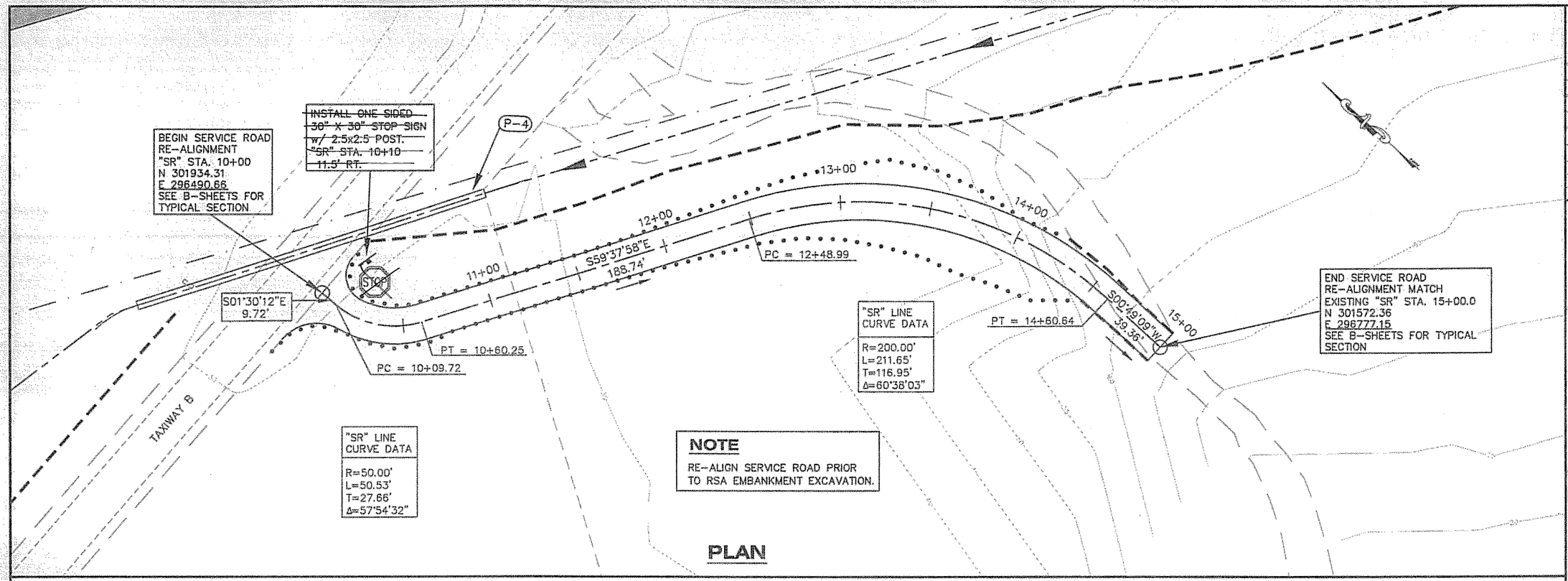
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

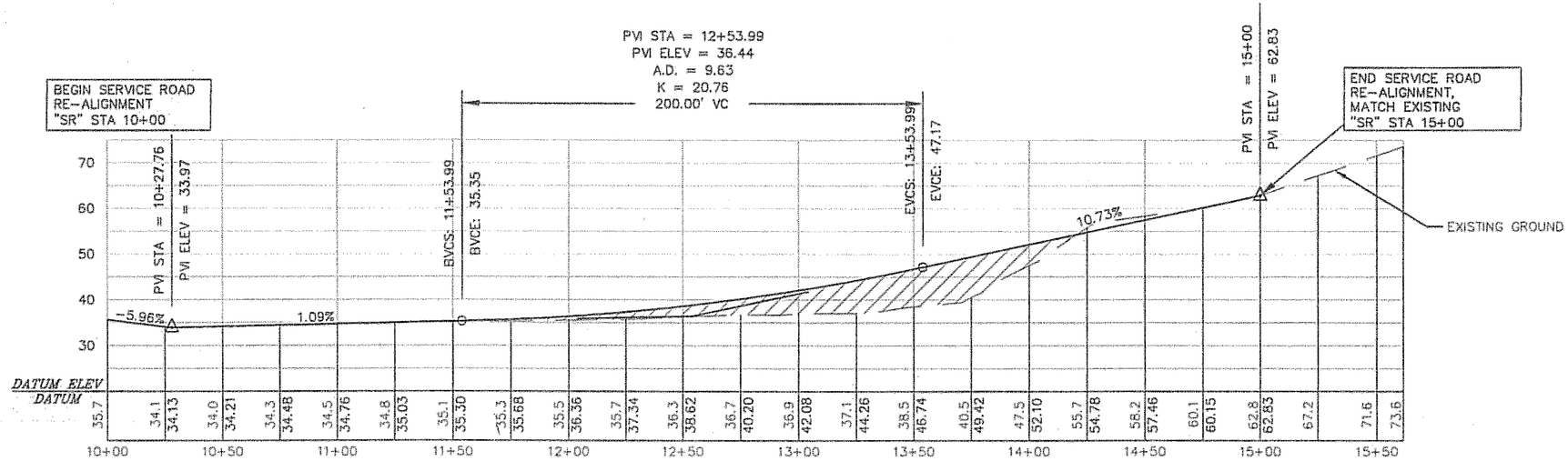
STREAM CHANNEL SECTIONS

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	E7	69



PLAN



PROFILE

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE _____ Date 2/4/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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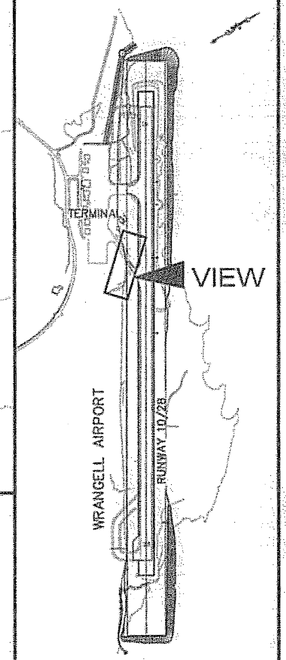
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: F. ECHEVERRIA

DRAWN BY: L.ROBERTSON

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

SERVICE ROAD RE-ALIGNMENT

PROJECT DESIGNATION

AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
E8	69

PRACTICAL RENT-A-CAR

ALASKA AIRLINES

SUNRISE AVIATION

BLUE BLDG

GATE

"A" LINE

A1
N 301986.68
E 29275.11
"A" STA. 11+35.11

STA. "A" 13+40, 14' RT.
PAVE 10' WIDE PEDESTRIAN PATH WITH 2' RADIUS (TYP)

STA. "A" 13+93, 34' RT.
MATCH EXISTING 24' WIDE PARKING ACCESS APRON

INSTALL BOLLARD
STA. 13+40, 19.5 RT.
SEE SHEET H1 FOR DETAILS

RUNWAY
10-28

A2
N 301722.65
E 295907.87
"A" STA. 16+42.06

STA. "A" 16+10.77,
30.73' RT

12+00 13+00 14+00 S58°37'08"E 15+00 16+00

SE

T

15'

18'

9'

15.2

24'

22'

101.6'

18'

18'

45° TYP.

19.3'

9' TYP.

15.2

27'

438.9'

PARKING PAINTING REVISED FOR STRAIGHT LINE PARKING. RED LINE NOT EXACT FOR EXAMPLE ONLY CHANGE REQUESTED BY M&O.

MAIN PARKING LOT

GRADED AREA

WRANGELL AIRPORT ACCESS ROAD

STA. "A" 11+75.91,
30.73' RT

STA. "A" 11+75.91,
132.41' RT

STA. "A" 16+10.77,
132.41' RT

LEGEND

- T TRANSFORMER
- SE SECTIONALIZING ENCLOSURE
- EXISTING BOLLARD
- PROPOSED BOLLARD

0 20 40
SCALE IN FEET

NOTES

1. GRADE EXISTING SURFACE, ADD MATERIAL AND COMPACT (AS NECESSARY) EXISTING PARKING LOT SURFACE PRIOR TO ASPHALT PAVING. WORK TO BE DONE TO THE SATISFACTION OF THE ENGINEER. SLOPE AWAY FROM ALL EXISTING FIXED APPERTANANCES.
2. LOCAL CONTROL DATA TAKEN FROM WRANGELL AIRPORT ACCESS ROAD RE-ALIGNMENT PROJECT. SHOWN FOR INFORMATIONAL PURPOSES ONLY.

AIRPORT PARKING LOT
LAYOUT PLAN

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: O:\Wrg\68167\Planset\E9_PARKING_LOT.dwg
Mon, 03/Apr/06 03:35PM lrobertson
TAB: E9

ADDENDUM NUMBER

ATTACHMENT NUMBER

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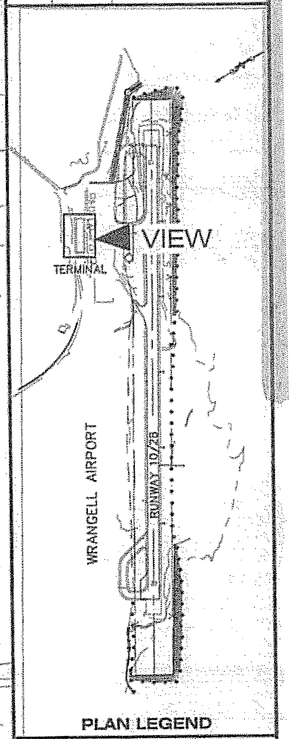


PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: F. ECHEVERRIA

DRAWN BY: L.R./R.G.

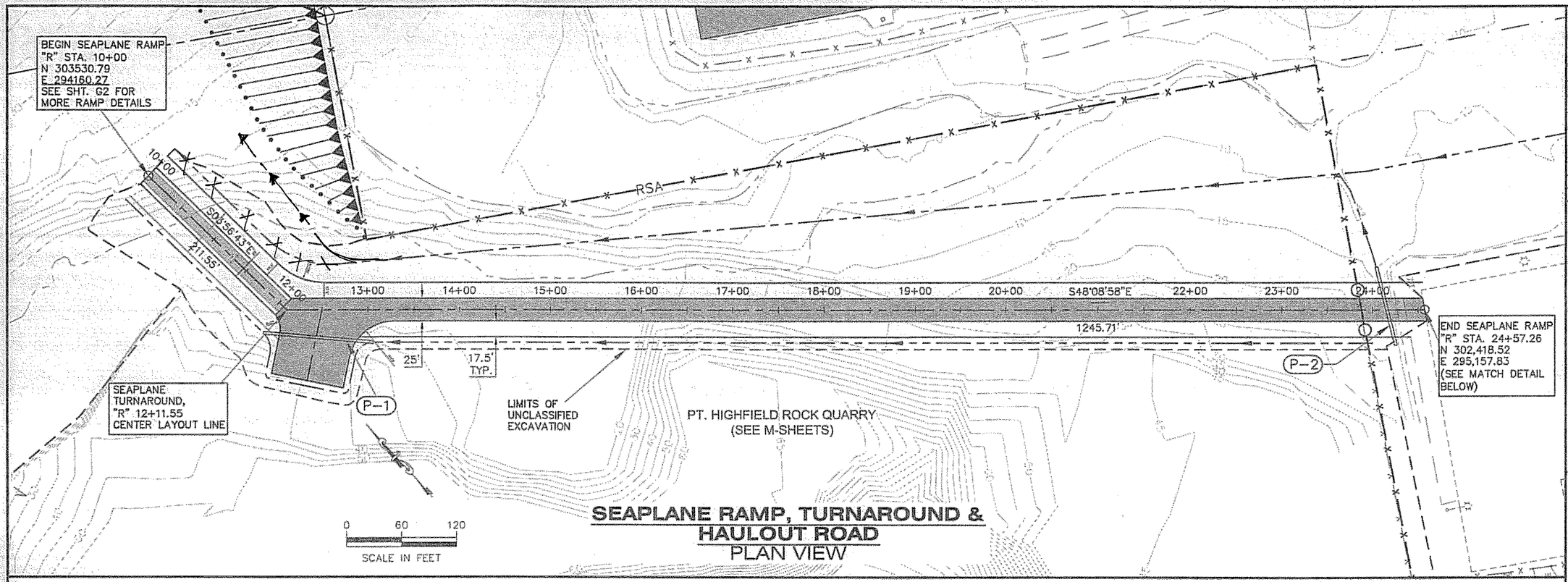
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

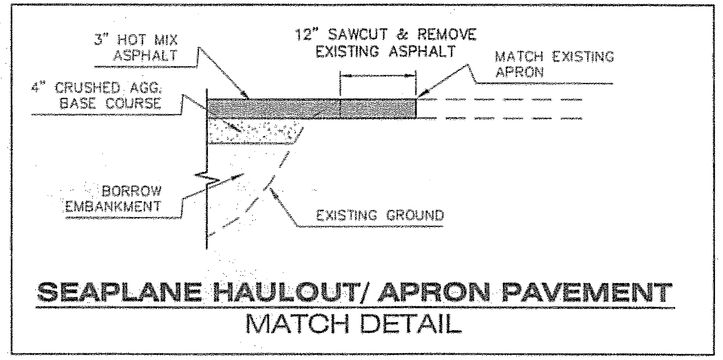
AIRPORT PARKING LOT

PROJECT DESIGNATION
AIP NO. 3-02-0323-1105

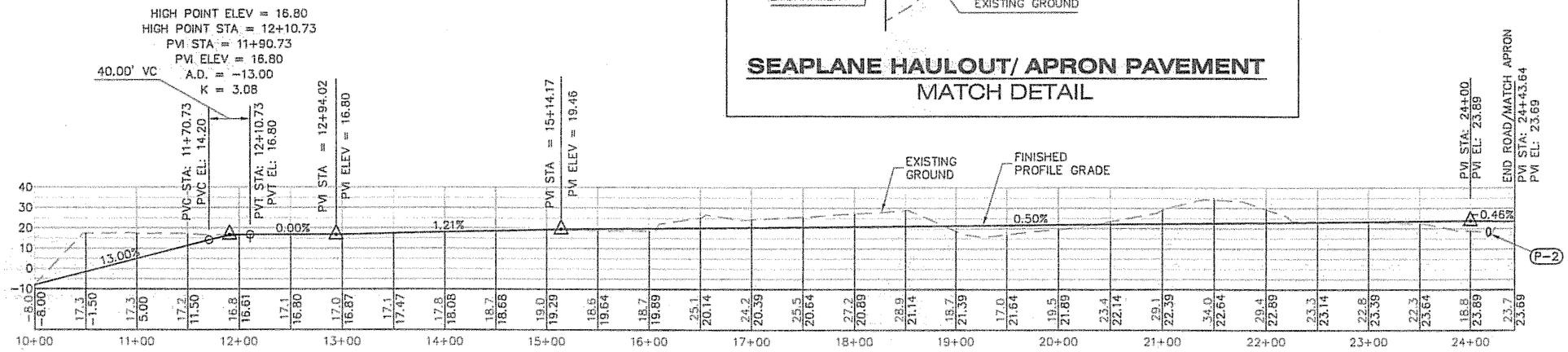
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
E9	69



SEAPLANE RAMP, TURNAROUND & HAULOUT ROAD
PLAN VIEW



SEAPLANE HAULOUT/ APRON PAVEMENT
MATCH DETAIL



SEAPLANE RAMP, TURNAROUND & HAULOUT ROAD
PROFILE VIEW

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:
C:\Documents and Settings\trobertson\Local Se
Mon, 03/Apr/06 03:54PM trobertson
TAB: E10

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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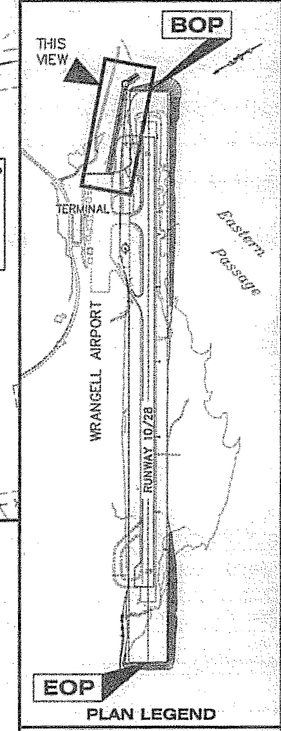


PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: F. ECHEVERRIA

DRAWN BY: R.S./L.R.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING
SERVICES DIVISION

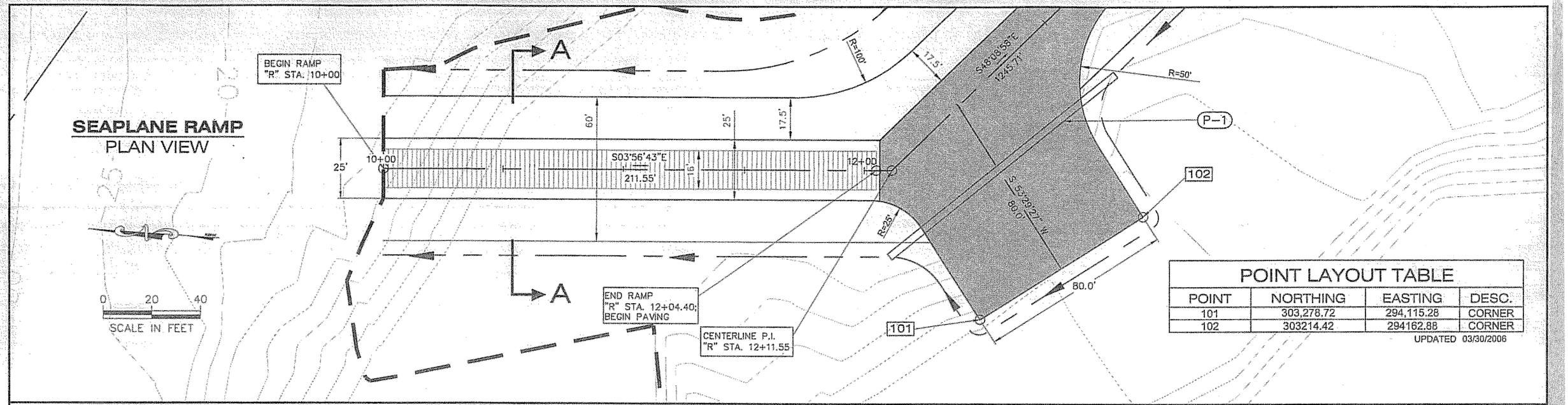
WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

SEAPLANE HAULOUT PLAN & PROFILE

PROJECT DESIGNATION
AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
E10	69

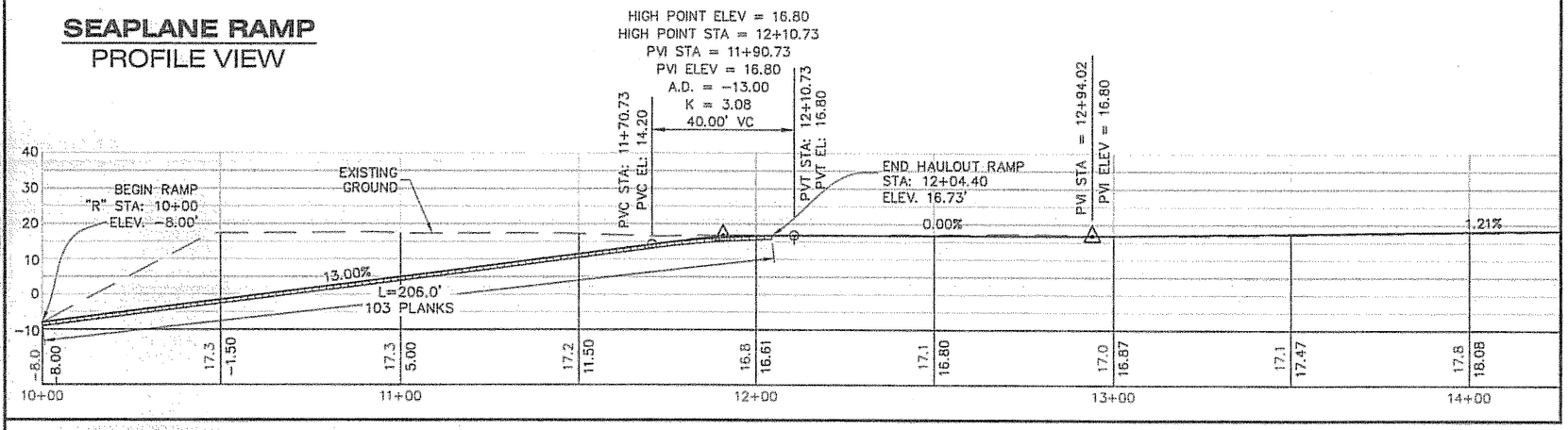
SEAPLANE RAMP
PLAN VIEW

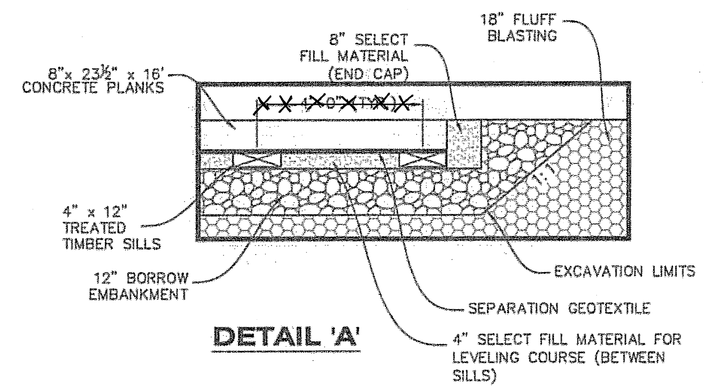


POINT LAYOUT TABLE			
POINT	NORTHING	EASTING	DESC.
101	303,278.72	294,115.28	CORNER
102	303214.42	294162.88	CORNER

UPDATED 03/30/2006

SEAPLANE RAMP
PROFILE VIEW

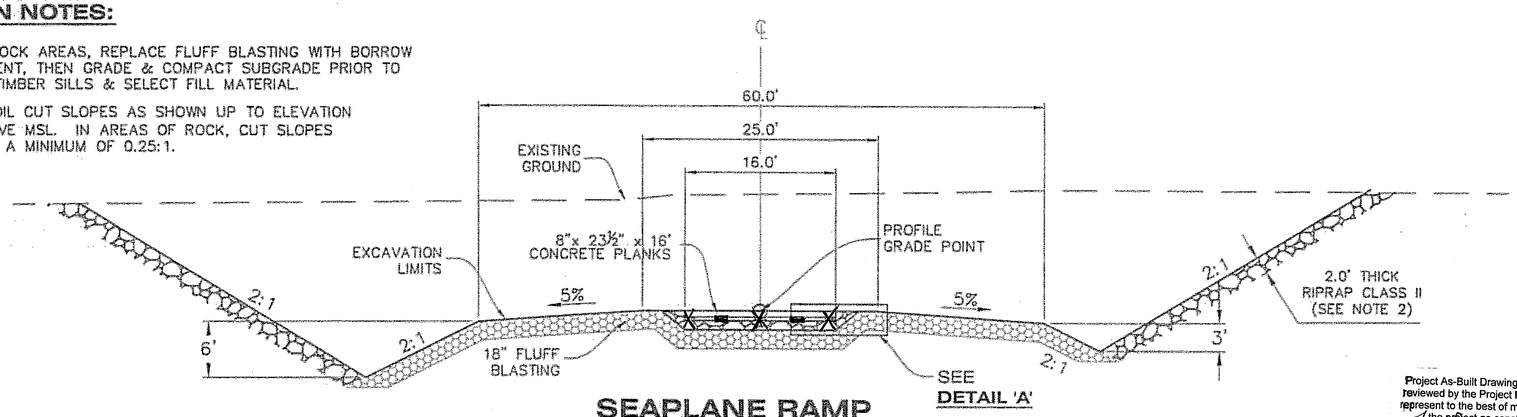




DETAIL 'A'

SECTION NOTES:

1. IN NON-ROCK AREAS, REPLACE FLUFF BLASTING WITH BORROW EMBANKMENT, THEN GRADE & COMPACT SUBGRADE PRIOR TO PLACING TIMBER SILLS & SELECT FILL MATERIAL.
2. ARMOR SOIL CUT SLOPES AS SHOWN UP TO ELEVATION 16.7' ABOVE MSL. IN AREAS OF ROCK, CUT SLOPES SHALL BE A MINIMUM OF 0.25:1.



SEAPLANE RAMP
SECTION A-A

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE [signature] Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: R.S./L.R./R.G.

STATE OF ALASKA
Joel D. Osburn
CE-11014
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

SEAPLANE RAMP PLAN, PROFILE & SECTION VIEWS

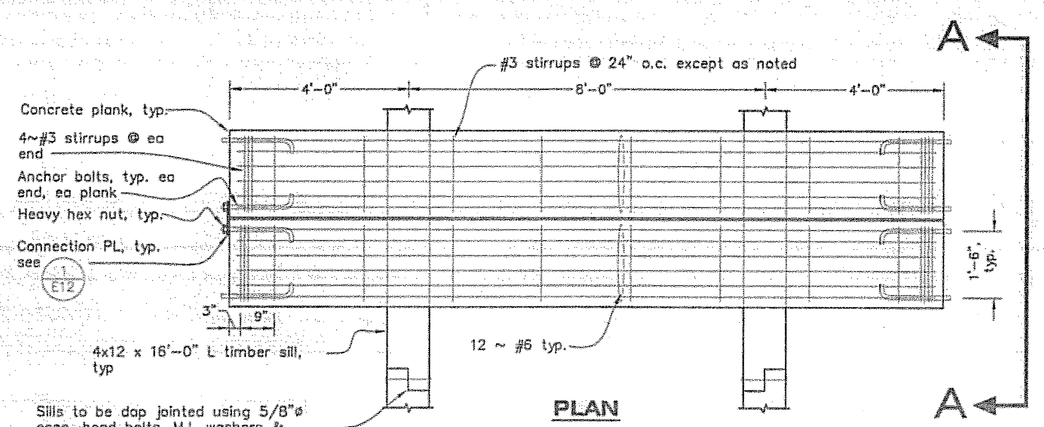
PATH: C:\Documents and Settings\lrobertson\Local Settings\Temp\AcPublish_2184\E10-12_Seaplane.dwg
TAB: E11 Mon, 03/Apr/06 03:54PM lrobertson

REVISIONS		
NO.	DATE	DESCRIPTION

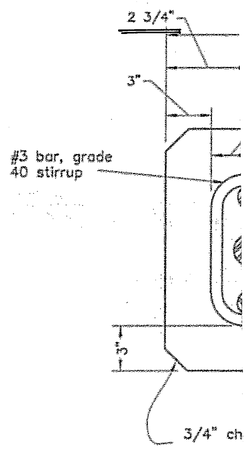
PROJECT DESIGNATION: AIP NO. 3-02-0323-1105 | YEAR: 2006 | SHEET NO.: E11 | TOTAL SHEETS: 69

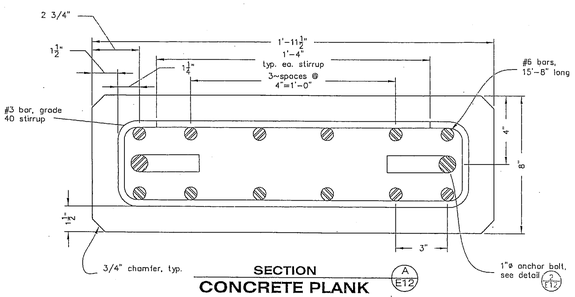
Addendum No. 1
Attachment No. 2

PLANK CHANGED BY ADDENDUM

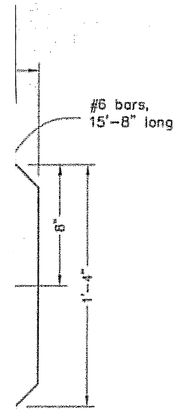


PLAN





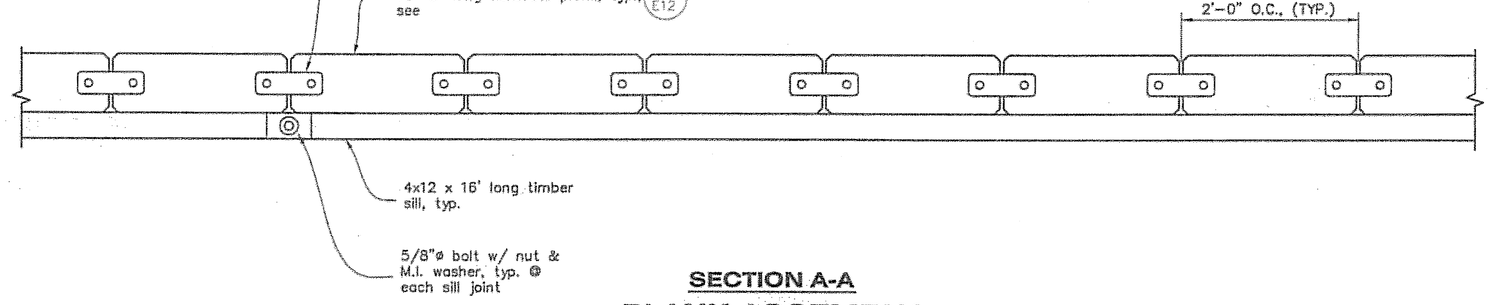
SECTION
CONCRETE PLANK (A/E12)



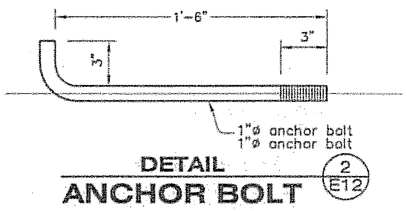
1"ø anchor bolt, see detail (2/E12)

NOTE:

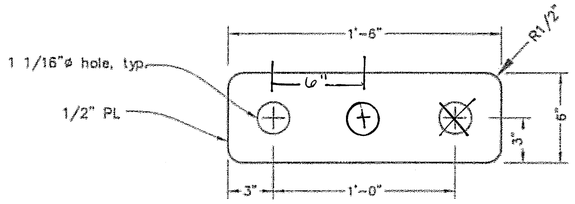
CONSTRUCT SEAPLANE HAULOUT RAMP ACCORDING TO THE PLANS AND SPECIFICATIONS AND SECTION S-420 OF THE SPECIFICATIONS.



SECTION A-A
PLANK ASSEMBLY



DETAIL
ANCHOR BOLT (2/E12)



PLAN
CONNECTION PLATE (1/E12)

THIS WAS NOT CORRECTED TO REFLECT PLANK CHANGE ∴ MODIFIED IN THE FIELD TO FIT

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: R.S./L.P.

STATE OF ALASKA
Joel D. Osburn
CE-11014
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

SEAPLANE RAMP DETAILS

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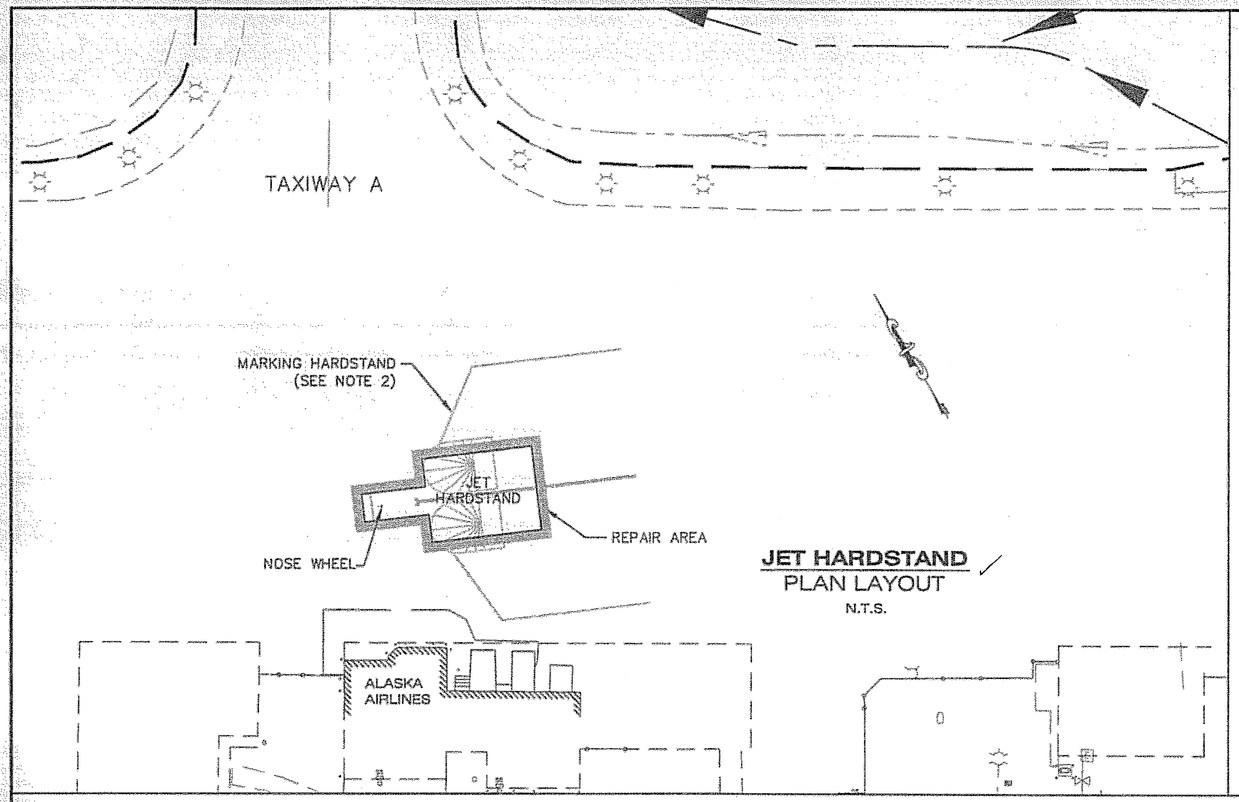
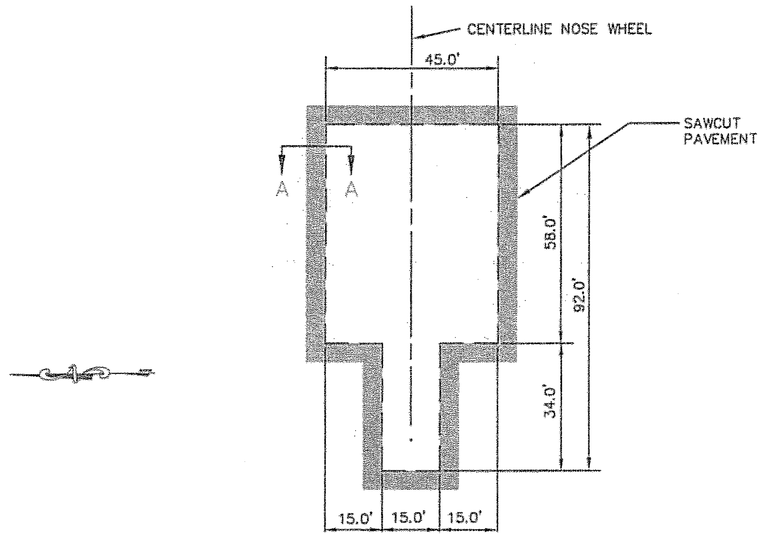
REVISIONS NO.	DATE	DESCRIPTION

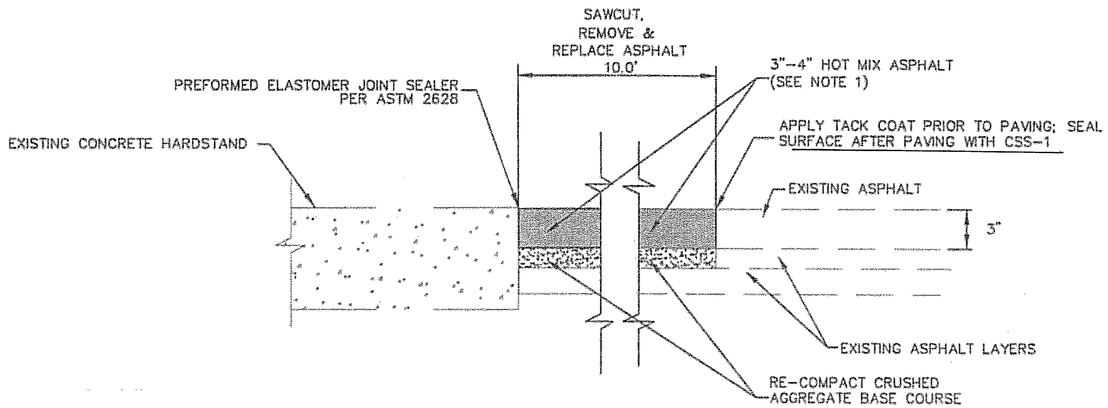
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	E12	69



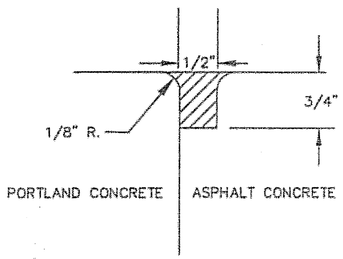
JET HARDSTAND
PLAN LAYOUT
N.T.S.



CONCRETE JET HARDSTAND
PLAN VIEW
N.T.S.



SECTION A-A
N.T.S.



JOINT SEALANT DETAIL
N.T.S.

NOT INSTALLED PER REQUEST OF M&O.

NOTES:

1. REMOVE AND REPLACE EXISTING ASPHALT FROM STRIP AROUND THE HARDSTAND AND PROVIDE SAW CUTS AT EXISTING CONCRETE PAVEMENT JOINTS OR AS DIRECTED BY THE ENGINNER. SLOPE ASPHALT STRIP TO MATCH HARDSTAND GRADE.
2. REMOVE AND REPLACE ALL HARDSTAND MARKINGS. SEE SHEET L5 FOR MARKING DETAILS.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 2/1/07

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: L. ROBERTSON

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

JET HARDSTAND REPAIR DETAILS

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REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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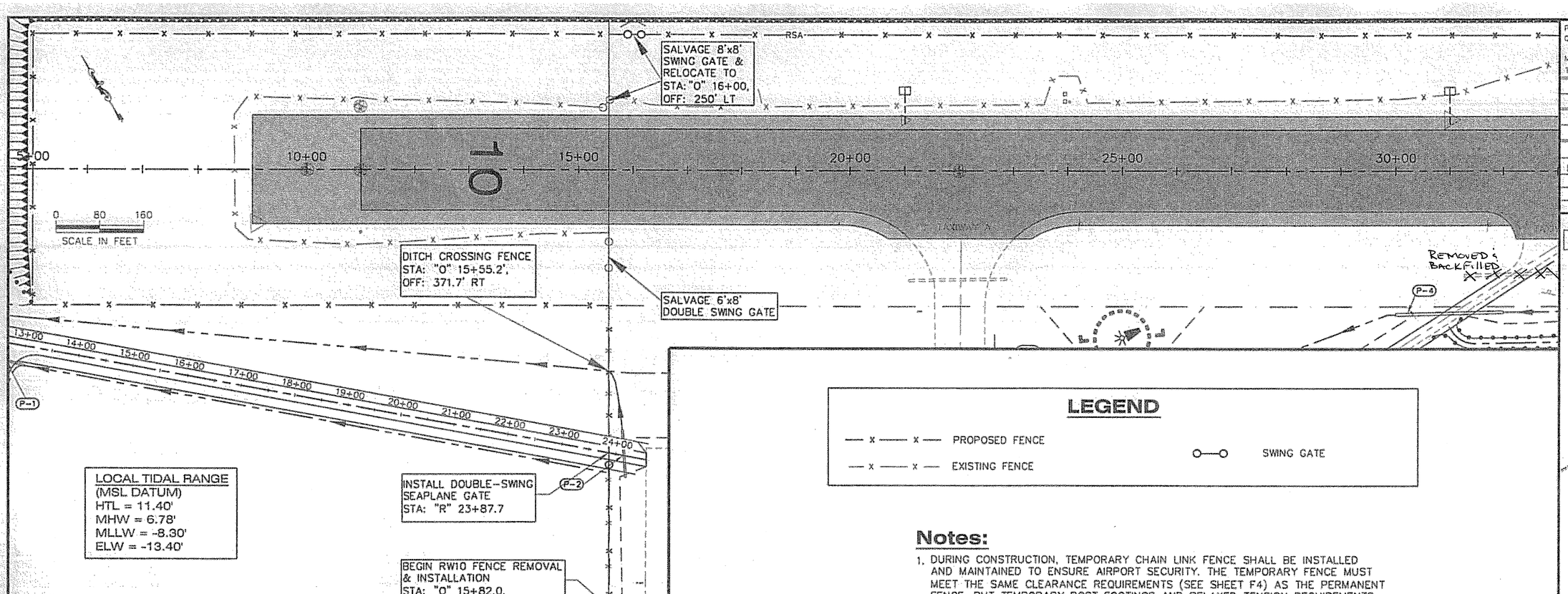

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TAB: F1

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: P. CARROLL

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: M.T./J.O.
DRAWN BY: L. ROBERTSON

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

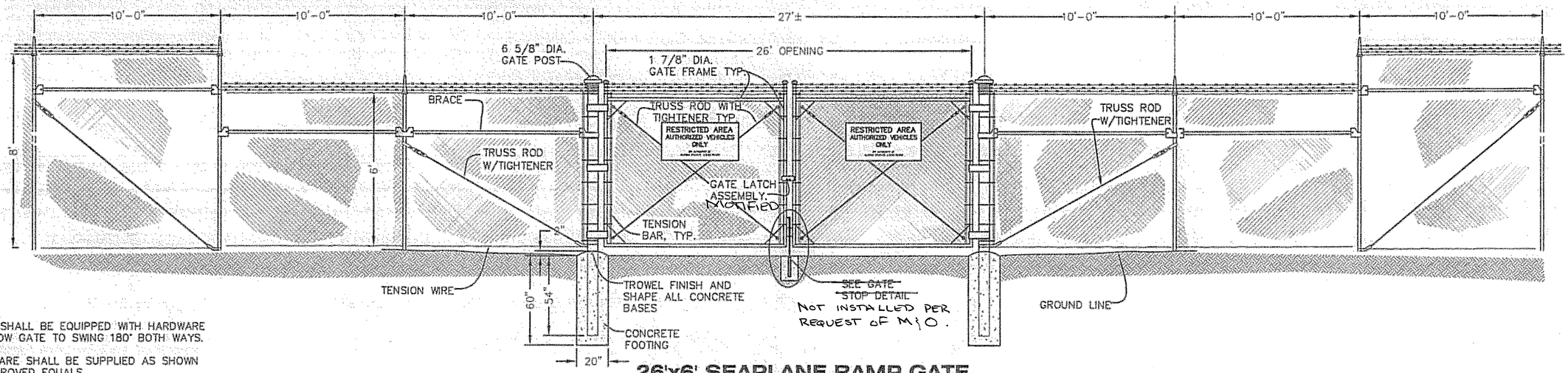
WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

RSA 10/28 FENCE PLAN

PROJECT DESIGNATION
AIP NO. 3-02-0323-1105

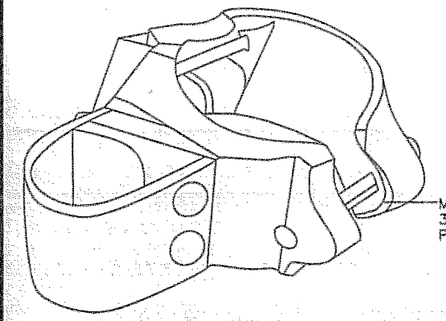
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
F1	69

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



NOTES:
1. GATES SHALL BE EQUIPPED WITH HARDWARE TO ALLOW GATE TO SWING 180° BOTH WAYS.
2. HARDWARE SHALL BE SUPPLIED AS SHOWN OR APPROVED EQUALS.

26'x6' SEAPLANE RAMP GATE



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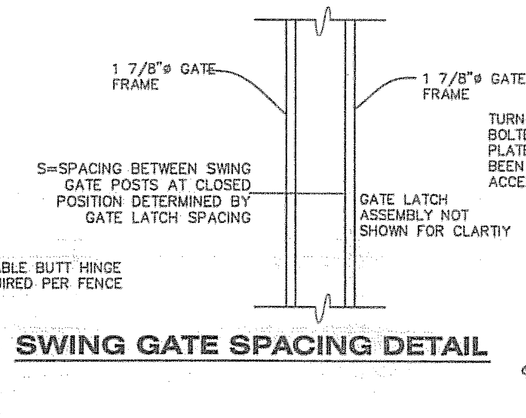
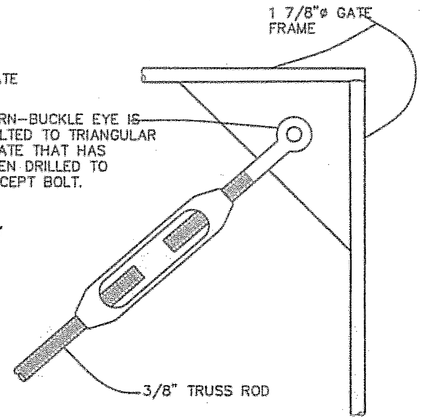
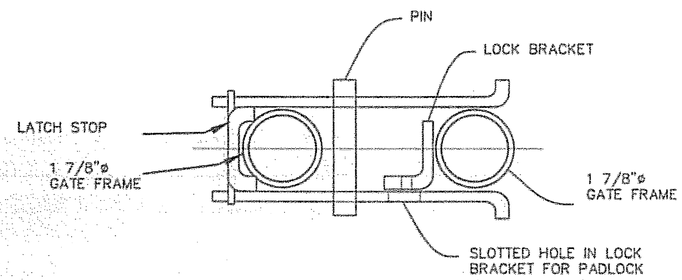


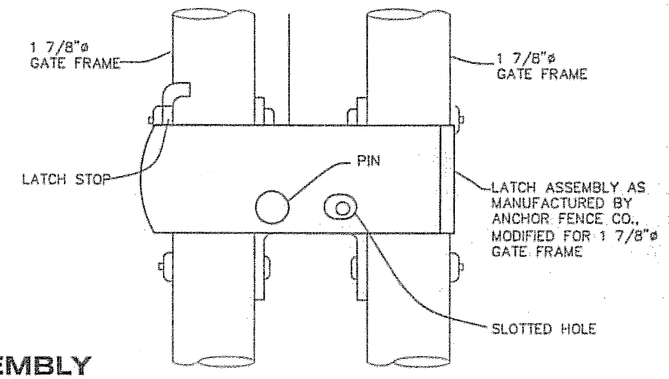
SWING GATE SPACING DETAIL



SWING GATE SPACING DETAIL

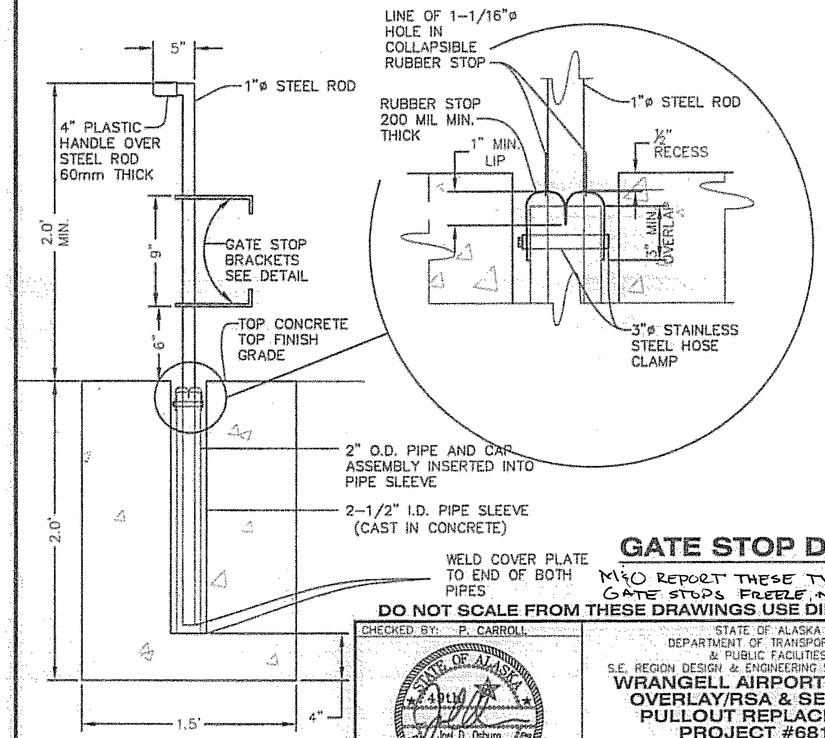


TOP VIEW



SIDE VIEW

GATE LATCH ASSEMBLY



GATE STOP DETAILS

M&O REPORT THESE TYPE OF GATE STOPS FREEZE, NOT WORK

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the Project as constructed.
PE [illegible] Date 3/9/09

CHECKED BY: P. CARROLL
DESIGNED BY: M. TAYLOR
DRAWN BY: L. ROBERTSON

STATE OF ALASKA
Joel D. Osburn CE-11014 Registered Professional Engineer 4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

FENCING DETAILS

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REVISIONS NO.	DATE	DESCRIPTION

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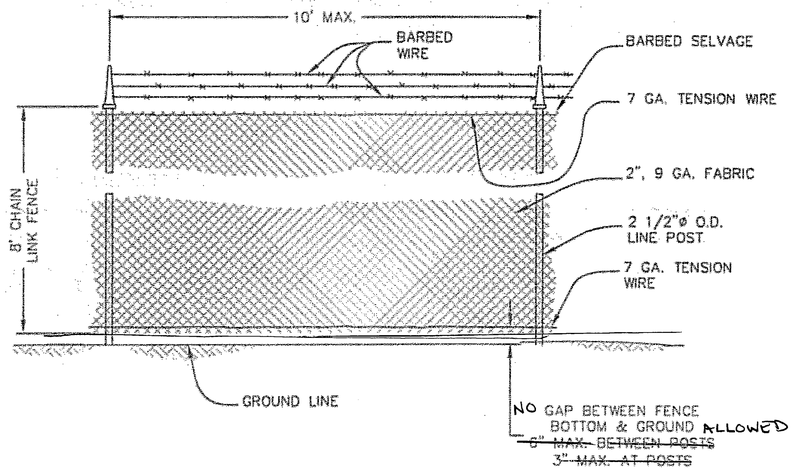
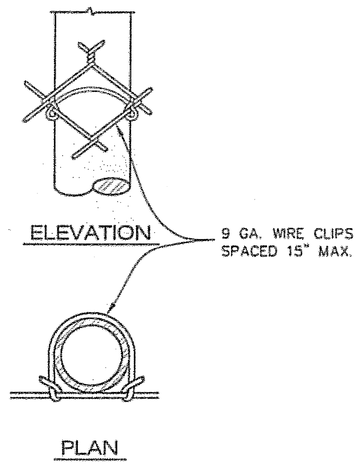
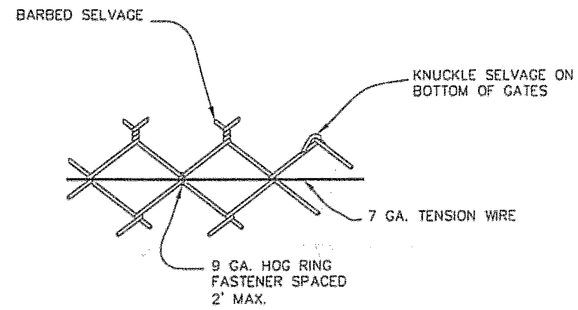
AIP NO. 3-02-0323-1105	2006	F2	69



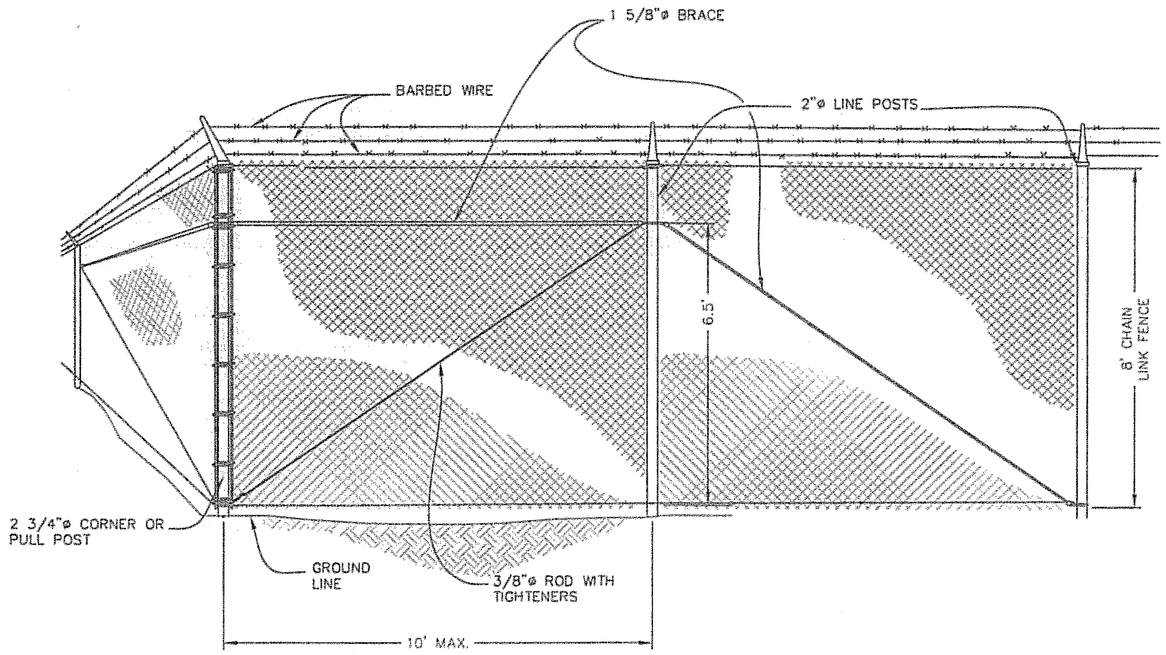
TYPICAL FENCE ELEVATION



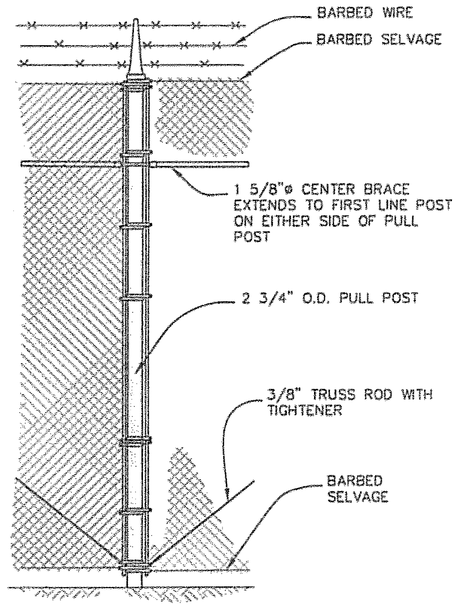
TYPICAL CONNECTION FABRIC TO LINE POSTS



TYPICAL CONNECTION FABRIC TO TENSION WIRE



TYPICAL CORNER TERMINAL



TYPICAL PULL POST DETAIL

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/1/07

CHECKED BY: P. CARROLL
DESIGNED BY: M.T./J.O.
DRAWN BY: D.S./R.S.

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

FENCING DETAILS

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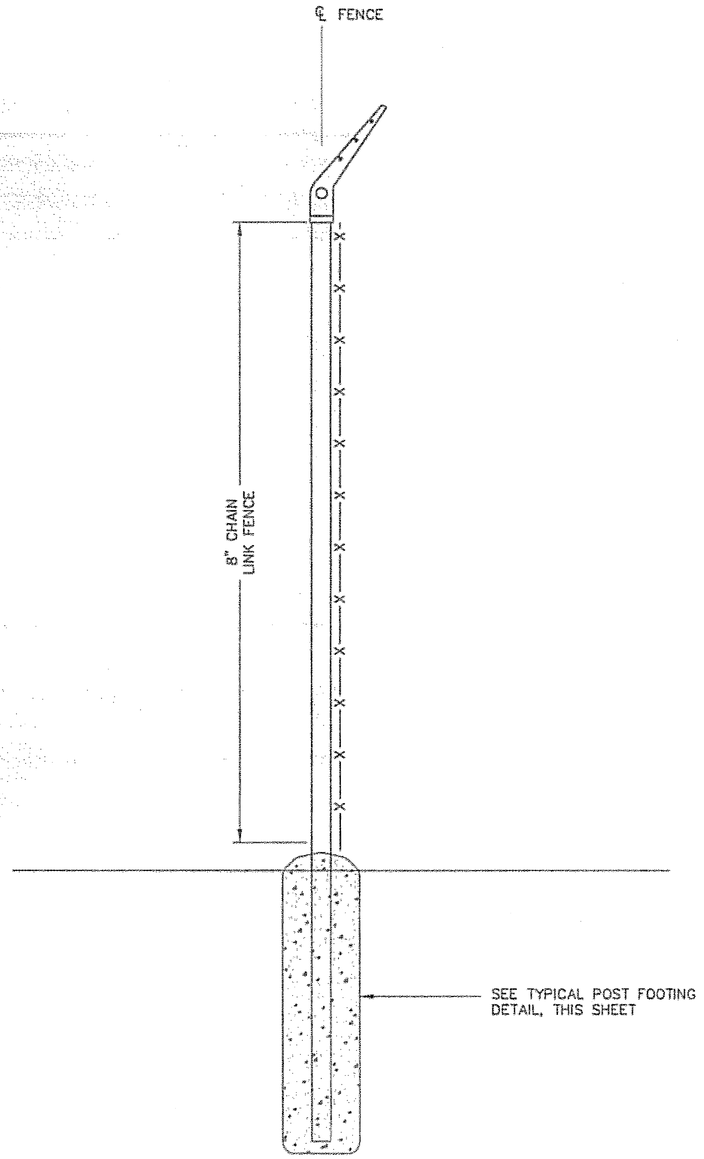
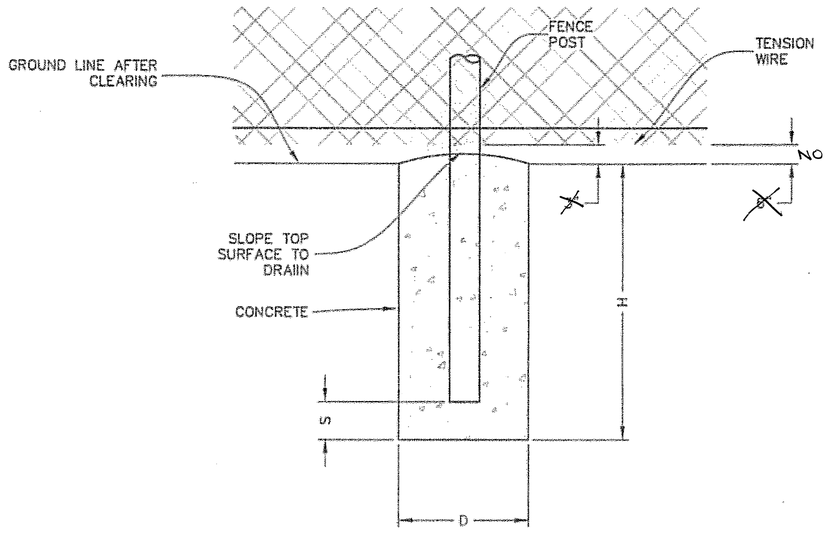
REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	F3	69



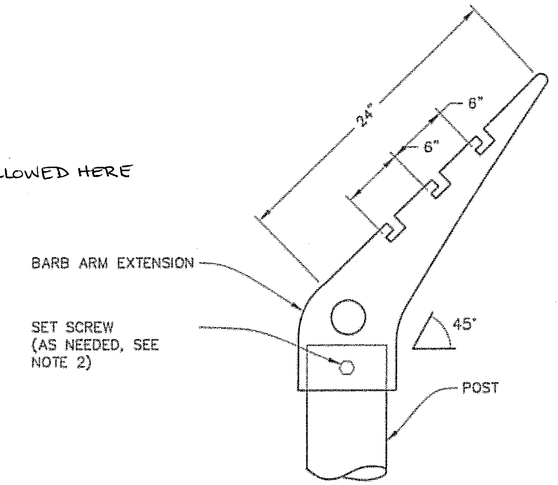
TYPICAL FENCE SECTION



TYPICAL POST FOOTING DETAIL

FOOTING DIMENSIONS				
POST (O.D.)	D	H	S	MINIMUM CONCRETE VOLUME
2 3/8"	12"	38"	2"	0.09 C.Y.
2 7/8"	20"	38"	2"	0.25 C.Y.
6 5/8"	20"	60"	6"	0.41 C.Y.

POST SIZE SUMMARY		
GATE POST (O.D.)	LINE POST (O.D.)	PULL POST, CORNER POST (O.D.)
6 5/8"	2 3/8"	2 7/8"



TYPICAL EYE-TOP BARB-TOP EXTENSION

FENCE NOTES:

1. FOOTINGS SHALL BEAR ON FIRM MINERAL SOILS OR ON BEDROCK. SHOTROCK MAY BE USED TO INCREASE STRENGTH OF SOIL AROUND POST FOOTINGS. SEE SECTION F-162 OF THE SPECIFICATIONS.
2. USE SET SCREW ON BARB-TOP EXTENSIONS, AS NEEDED, TO MAINTAIN BARB-WIRE TENSION WHEN FENCING CHANGES ELEVATION BETWEEN POSTS.
3. EACH POST FOOTING SHALL CONFORM TO SHOT ROCK EMBANKMENT, THE MINIMUM QUANTITY OF CONCRETE SHALL MEET NEAT LINE DIMENSIONS GIVEN.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE: [signature] Date: 3/9/09

CHECKED BY: P. CARROLL
STATE OF ALASKA · Joel D. Osburn · CE-11014 · REGISTERED PROFESSIONAL ENGINEER · 4/6/06
DESIGNED BY: M. TAYLOR
DRAWN BY: D.S./R.S.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

FENCING DETAILS

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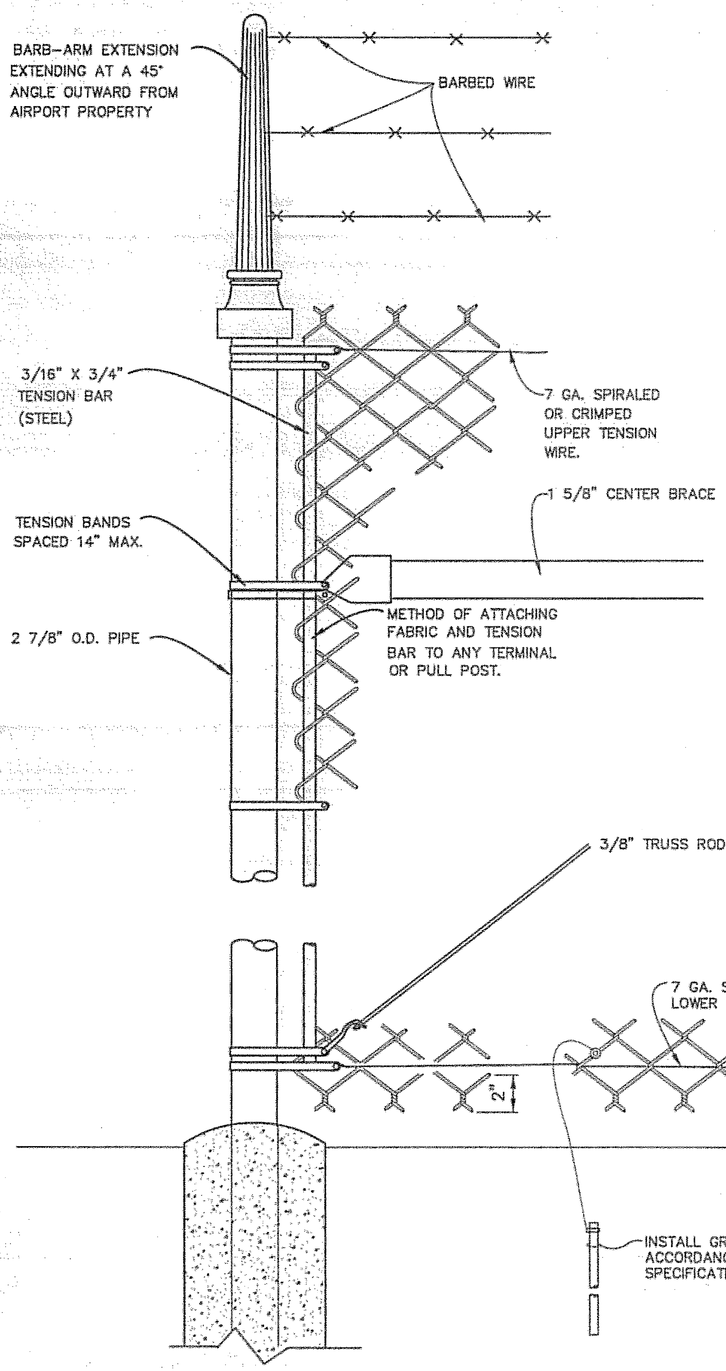
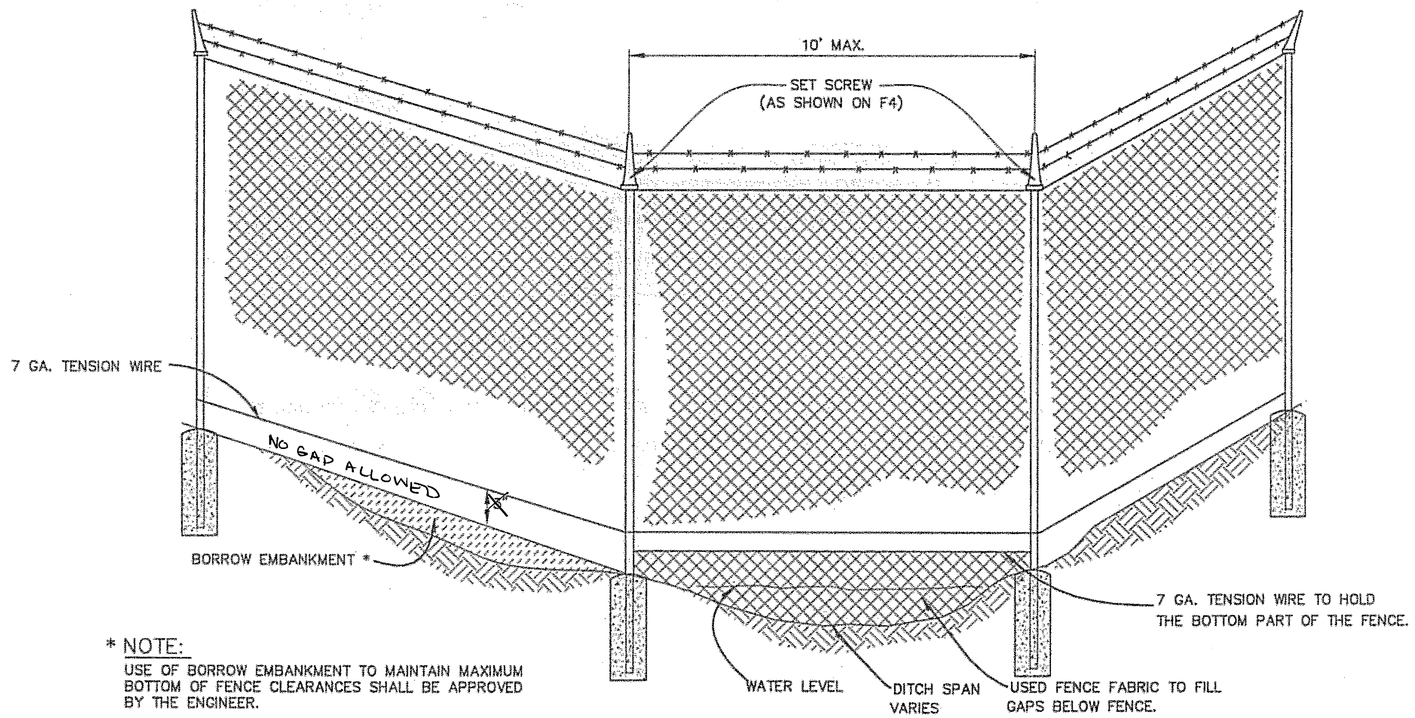
REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	F4	69



TERMINAL POST DETAIL



* NOTE:
USE OF BORROW EMBANKMENT TO MAINTAIN MAXIMUM BOTTOM OF FENCE CLEARANCES SHALL BE APPROVED BY THE ENGINEER.

DITCH CROSSING DETAIL

NOTES:

1. PLACE WHERE DIRECTED BY THE ENGINEER.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [illegible] Date 3/9/09

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: L. ROBERTSON
PATH: Q:\Wrg\68167\Planset\F1-F6Fenceplan.dwg
TAB: F5 Fri, 07/Apr/06 02:13PM jdosburn

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/7/06

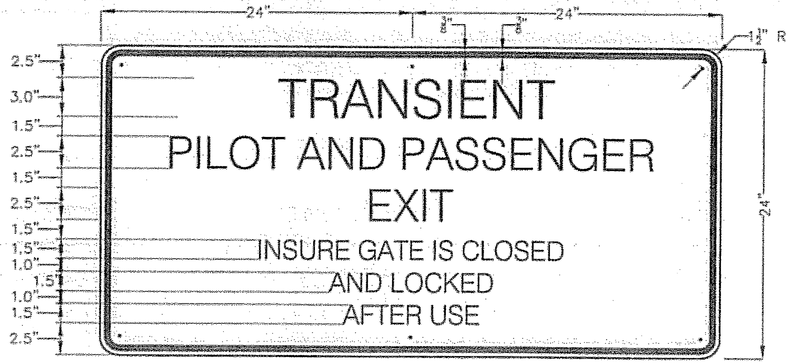
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

FENCING DETAILS

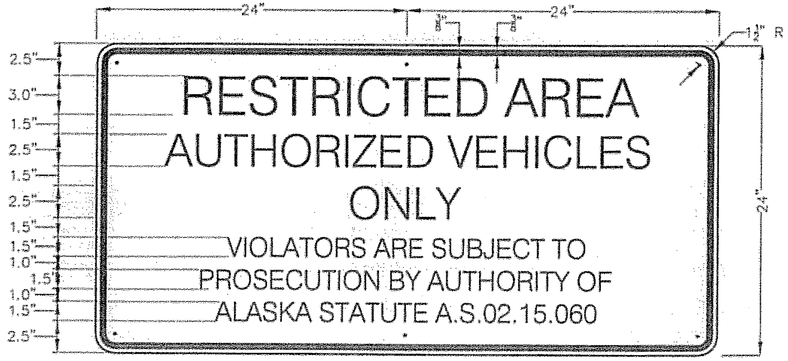
REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	F5	69



INFORMATIONAL SIGN

SIGN NO. 1

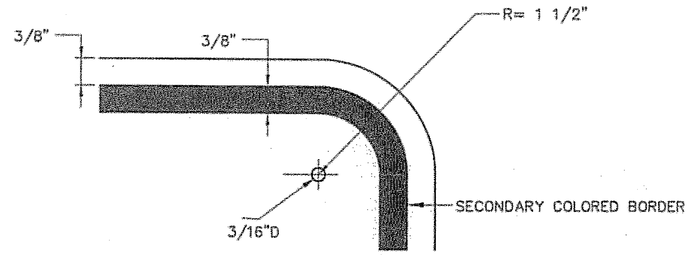


VEHICLE SIGN

SIGN NO. 3

BOUNDARY SIGN

SIGN NO. 2



CORNER DETAIL

NOTES:

1. RESTRICTED AREA SIGN PLATES SHALL HAVE RED REFLECTIVE SHEETING WITH WHITE LETTERING. THE INFORMATIONAL SIGNS SHALL HAVE YELLOW REFLECTIVE SHEETING WITH BLACK LETTERING AND STRIPING.
2. SIGN PLATES SHALL BE PLACED ON THE FENCE OR GATES, EXCEPT AS NOTED UNDER 6 BELOW, 4' ABOVE THE GROUND. (MEASURED TO BOTTOM OF SIGN)
3. "AUTHORIZED VEHICLES" SIGNS SHALL BE USED ON GATES FOR VEHICULAR ACCESS. "AUTHORIZED PERSONNEL" SIGNS SHALL BE USED ON GATES FOR PERSONNEL ACCESS.
4. BOTH SIGNS SHALL BE USED WHERE VEHICLE/ PERSONNEL COMBINATIONS OCCUR.
5. ALL AIRPORT SIGNS SHALL BE ATTACHED TO FENCE WITH 10 GA. STEEL WIRE. THE "PERSONNEL" SIGN PLATES SHALL BE PLACED EVERY 200' ALONG THE 8' CHAIN LINK FENCE.
6. THE "TRANSIENT PILOT AND PASSENGER" SIGN PLATES SHALL BE PLACED ON THE APRON SIDE OF FENCE IMMEDIATELY ADJACENT TO TRANSIENT PEDESTRIAN GATES.

SIGN SUMMARY

SIGN NO.	SIGN	NUMBER	AREA SQ. FT.	LOCATION
1	INFORMATIONAL	2	16	LOCATED BY PROJECT ENGINEER & AIRPORT SAFETY AND SECURITY OFFICER
2	BOUNDARY	48	384	1 EVERY 200' ON PERIMETER FENCE
3	VEHICLES	2	16	2 EACH ON DOUBLE SWING GATE
		TOTAL	416	

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Joel Berger Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: L. ROBERTSON

STATE OF ALASKA
Joel D. Osburn
CE-11014
PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

SECURITY FENCE SIGN DETAILS

PATH: O:\Wrg\68167\Planset\F1-F6Fenceplan.dwg
TAB: F6 Mon, 03/Apr/06 03:36PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	F6	69

B.O.P.
STA. "O" 5+00.00
N 303740.8861
E 294079.6916

CURVE DATA
R=70.00'
L=86.19'
T=45.98'
Δ=49°23'03"

END SPECIAL DITCH;
BEGIN TYPICAL
SEAPLANE DITCH
"R" STA. 11+41.3
OFFSET: 41' LT.=
N 303,392.60
E 294,210.90
EL.=7.18'

DITCH INTERSECTION
"R" STA. 23+63.0
OFFSET: 149.6 LT.=
N 302,623.95
E 295,190.63
EL.=15.72'

CONTINUE DITCH
"R" STA. 23+94.5
OFFSET: 152.5 LT.=
"O" STA. 15+91.8,
OFFSET: 375 RT.
N 302,644.09
E 295,157.73
EL.=15.94'

MATCH LINE

INVERT
ELEV.=11.1

P-1

INVERT
ELEV.=12.6

"R" STA. 12+68.6
OFFSET: 50.4 LT.=
N 303,319.27
E 294,250.94
EL.=8.21'

INVERT
ELEV.=16.4

P-2

INVERT
ELEV.=17.0

10+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00

0 80 160
SCALE IN FEET

NOTES:

1. SEE E10-E12 FOR SEAPLANE HAULOUT PLAN & DETAILS; B-SHEETS FOR TYPICAL SECTIONS.
2. USE PIPE INVERTS AS SPECIAL DITCH CONTROL. SEE D-SHEET FOR CULVERT PIPE SUMMARY.

PLAN VIEW

MATCH LINE

INVERT
ELEV.=19.7

P-3

INVERT
ELEV.=20.2

SLOPED TO
DRAIN TO
DITCH LINE

"O" STA. 24+50.0,
OFFSET: 430.7 RT.
N 302,149.01
E 295,862.40
EL.=21.60'

"O" STA. 25+50.0,
OFFSET: 430.7 RT.
N 302,096.94
E 295,947.78
EL.=22.40'

GRADE DITCH
TO DRAIN

"O" STA. 26+77.0,
OFFSET: 481.0 RT.
N 301,988.11
E 296,029.59
MATCH EXISTING PIPE
INVERT; EL.=26.99'

INVERT
ELEV.=26.3

P-4

INVERT
ELEV.=27.6

REMOVE CULVERT
& BACKFILLED

"O" STA. 29+84.7,
OFFSET: 265.3 RT.
N 302,372.92
E 295,602.33
EL.=22.16'

BEGIN TYPICAL DITCH
SECTION; SEE B-SHEETS
FOR TYPICALS

PLAN VIEW

0 80
SCALE IN FEET

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 2/4/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:
Q:\Wrg\68167\Planset\G1-G2_Special Ditches.d
Tue, 04/Apr/06 10:02AM jdosburn
TAB: G1

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

UPPER VIEW

LOWER VIEW

TERMINAL

Passion Passage

WRANGELL AIRPORT

RUNWAY 10/28

PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA
10th
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: F. ECHEVERRIA 4/6/06

DRAWN BY: L. ROBERTSON

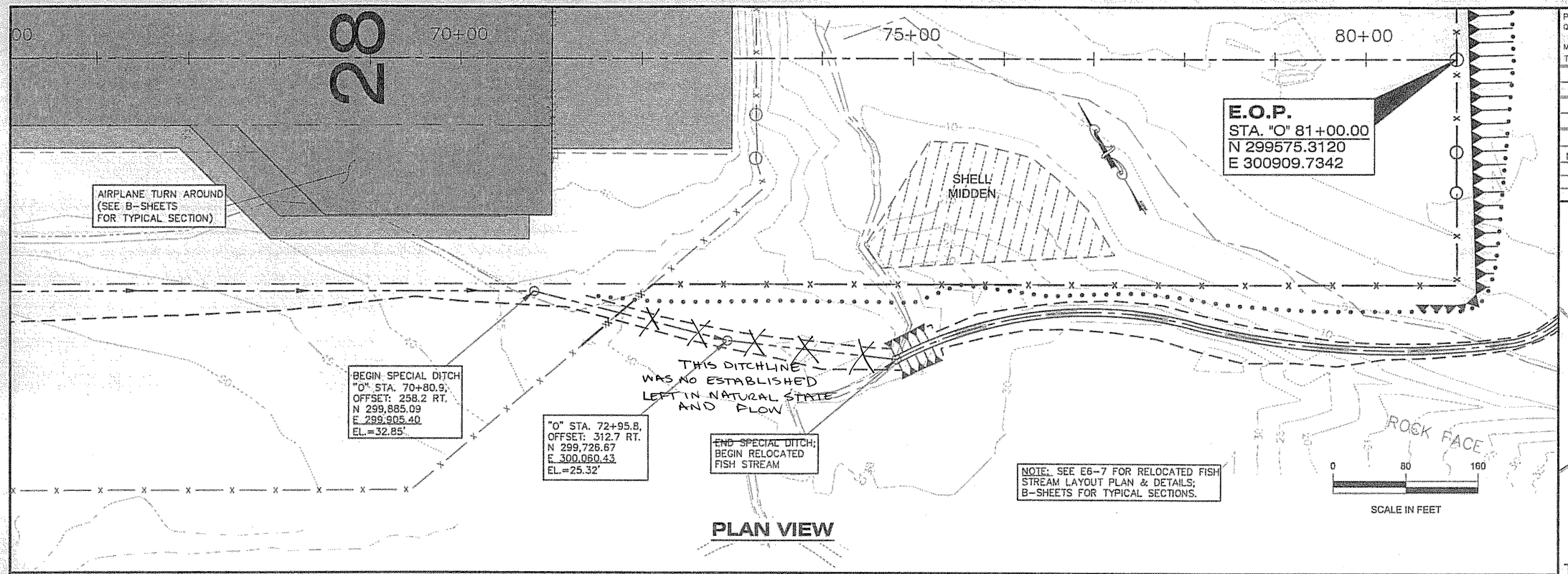
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

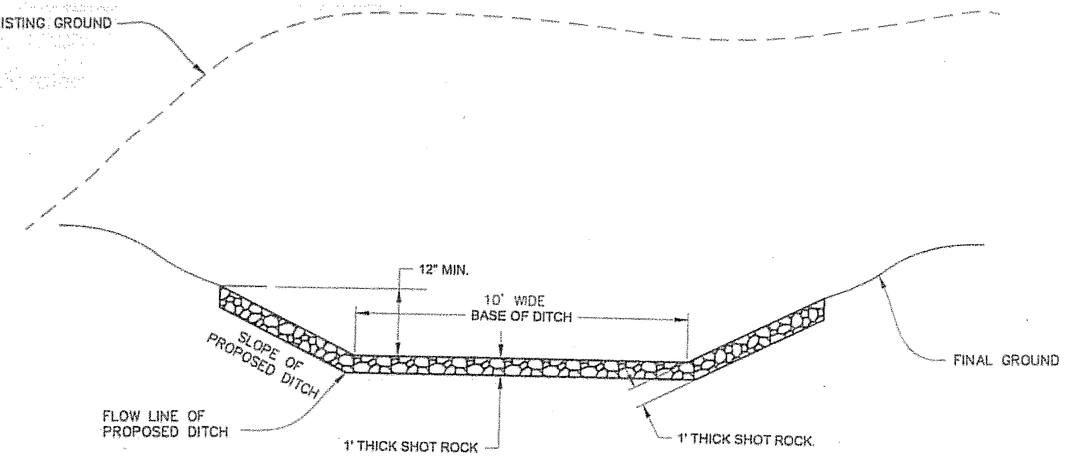
SPECIAL DITCH LAYOUT SHEET

PROJECT DESIGNATION
AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G1	69



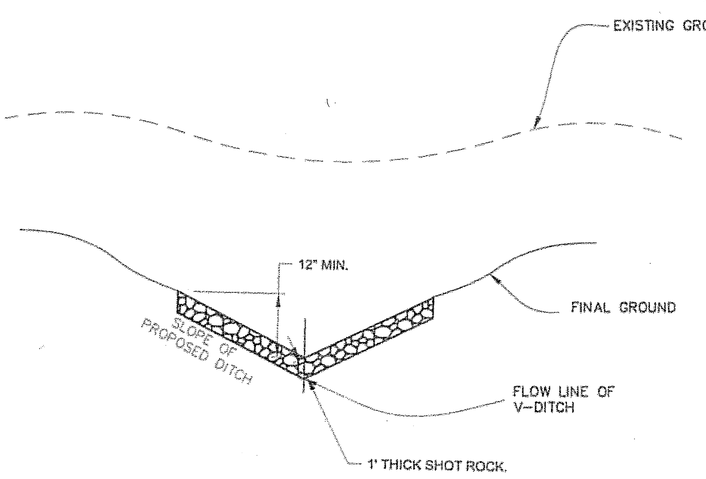
PLAN VIEW



TRAPEZOIDAL DITCH LINING
SECTION VIEW

NOTE:

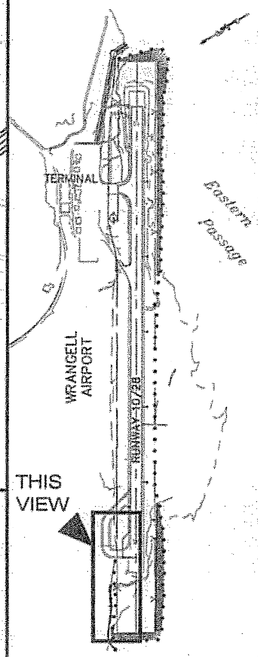
1. DITCH LINING SHALL ONLY BE PLACED ON NEW DITCHES IN AREAS OF SOIL EXCAVATION. THE INTENT IS TO REDUCE DITCH BANK EROSION.



V-DITCH LINING
SECTION VIEW

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Joe Berger Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



PLAN LEGEND

PATH: Q:\Wrg\68167\Planset\G1-G2_Special Ditches.t
Mon, 03/Apr/06 03:38PM lrobertson
TAB: G2

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: P. CARROLL

STATE OF ALASKA
49th
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

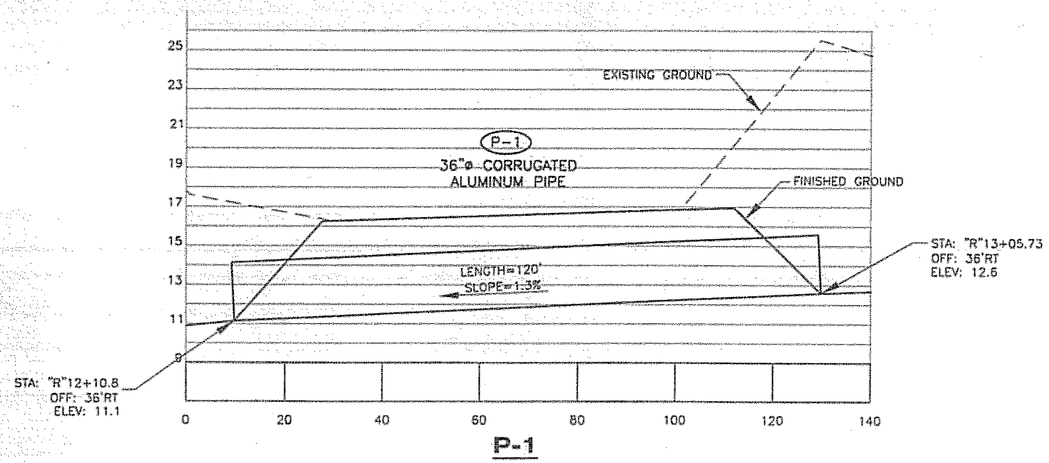
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: L. ROBERTSON

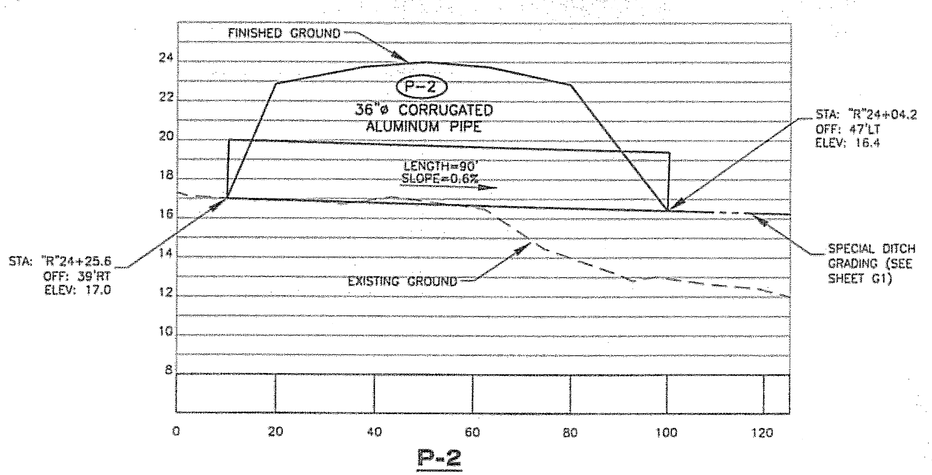
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING
SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

SPECIAL DITCH LAYOUT SHEET & DETAILS

PROJECT DESIGNATION	
AIP NO. 3-02-0323-1105	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G2	69





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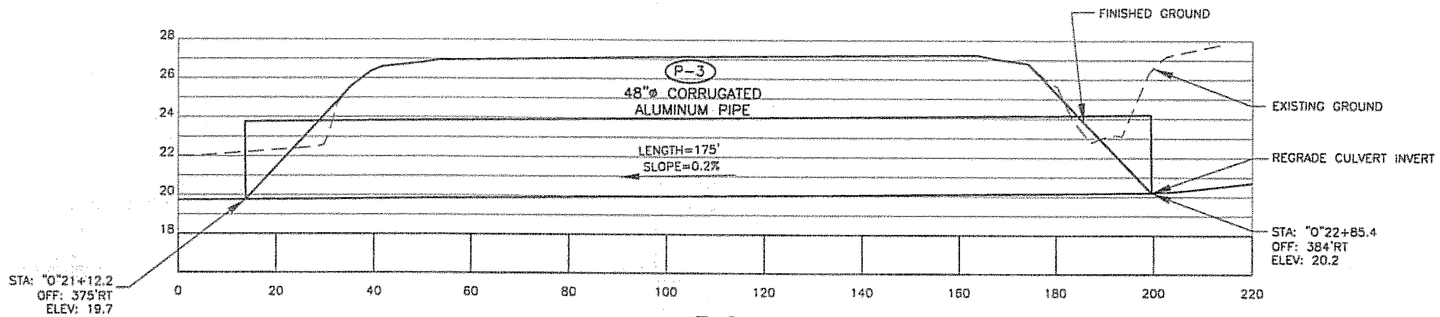
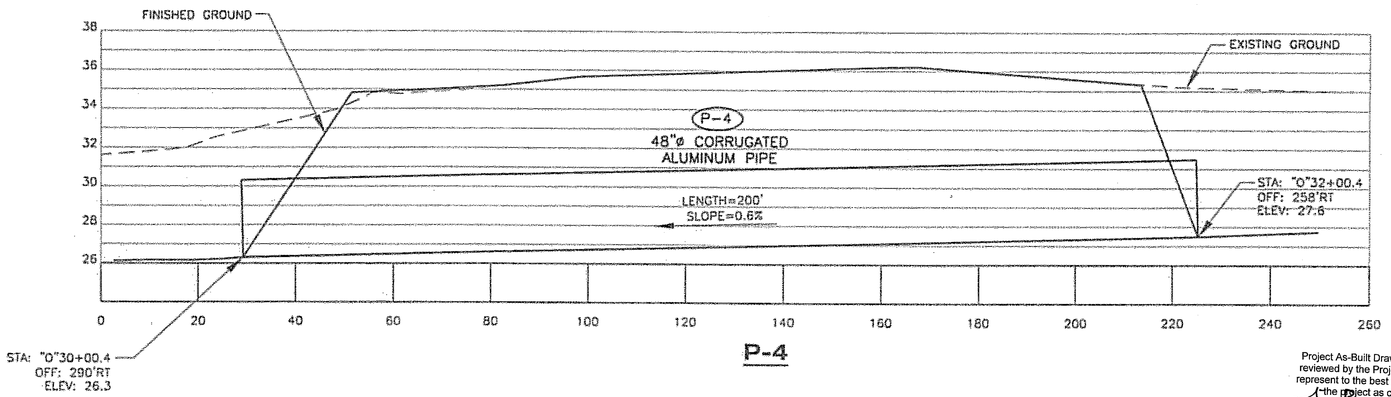




NOTES:

1. SEE SHEET D-1 CULVERT SUMMARY TABLE.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: R. SNYDER

STATE OF ALASKA
Joel D. Osburn
CE-11014
Registered Professional Engineer
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

Culvert Profiles

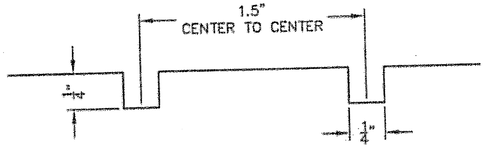
PATH: G:\Wrg\68167\Planset\G3_Drainage Profiles.dwg
TAB: G3 Mon, 03/Apr/06 03:38PM trobertson

REVISIONS NO.	DATE	DESCRIPTION

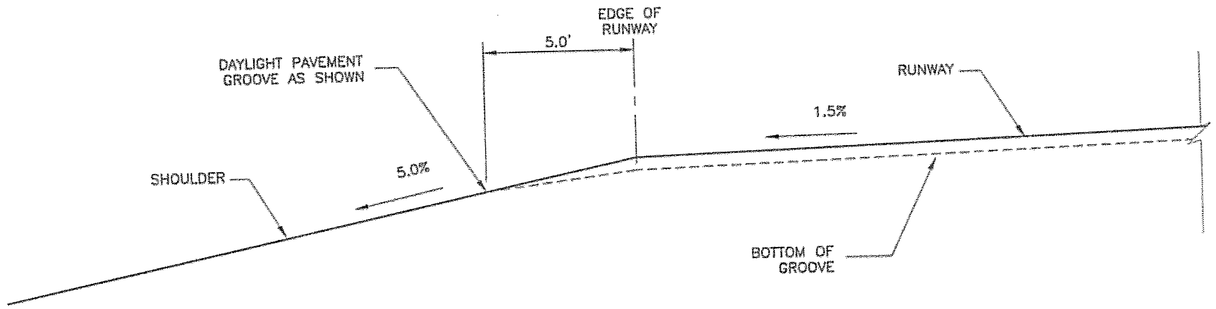
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	G3	69

PAVEMENT GROOVE NOTES:

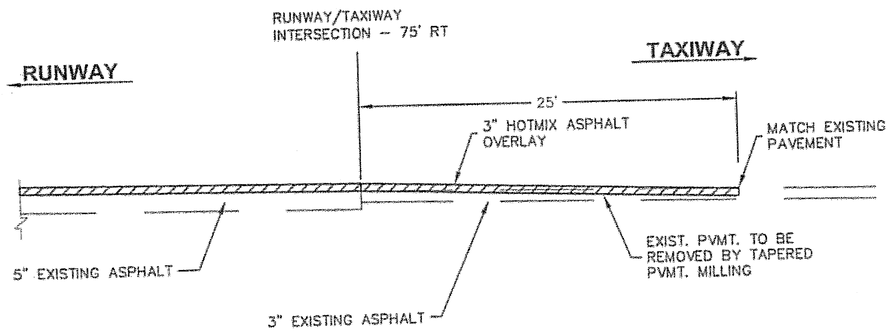
1. ALL NEW RUNWAY PAVEMENT WILL BE GROOVED. THE GROOVES WILL RUN PERPENDICULAR TO CENTERLINE.
2. SEE SECTION P-630 OF THE SPECS. FOR DETAILS OF THE GROOVING OPERATION.
3. GROOVES TO GO 5' BEYOND EDGE OF RUNWAY.



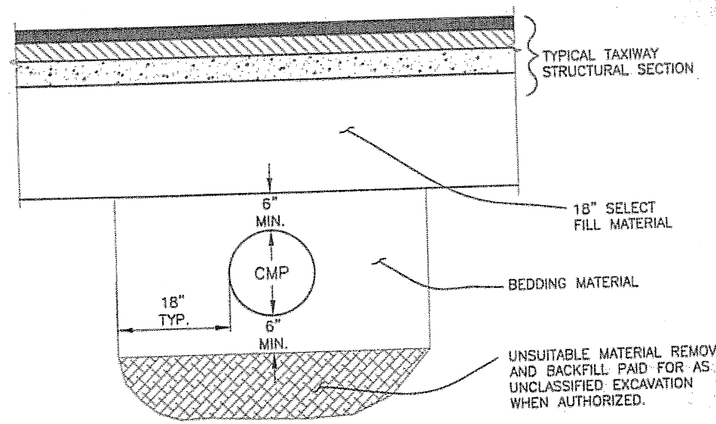
PAVEMENT GROOVE
SECTION VIEW



PAVEMENT GROOVE
DAYLIGHT DETAIL



RUNWAY TO TAXIWAY
TRANSITION TAPER



PIPE TRENCHING & BEDDING
TYPICAL SECTION

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/9/09

CHECKED BY: P. CARROLL
DESIGNED BY: M. TAYLOR
DRAWN BY: D.S. /R.S.
PATH: Q:\Wrg\68167\Planset\H1-2_MiscDetails.dwg
TAB: H1 Mon, 03/Apr/06 03:39PM lrobertson

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

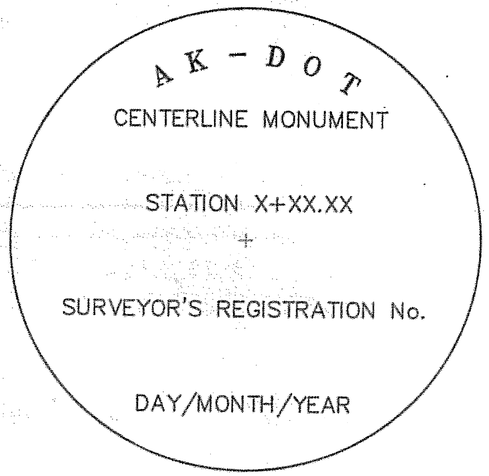
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

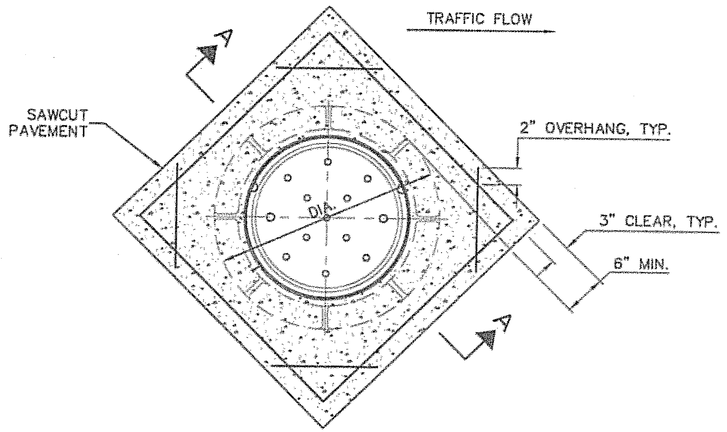
MISCELLANEOUS DETAILS

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	H1	69



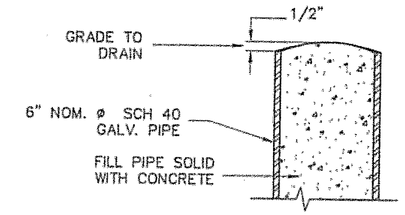
C/L MONUMENT CAP DETAIL



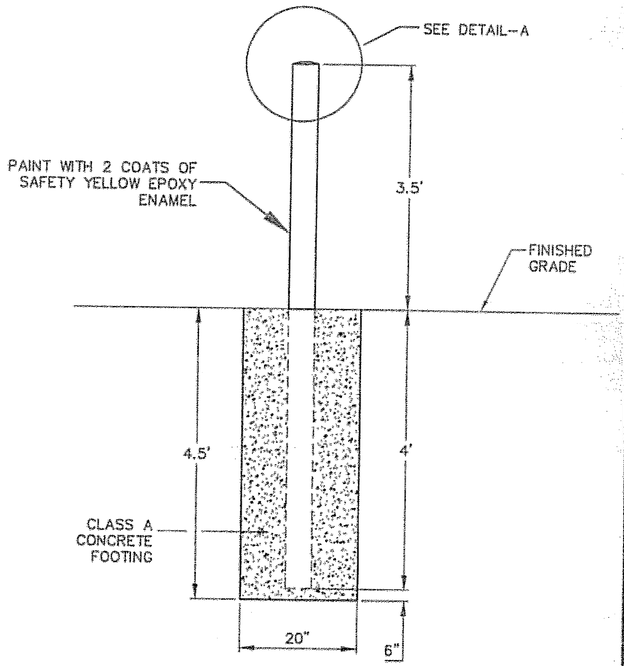
PLAN

MONUMENT NOTES:

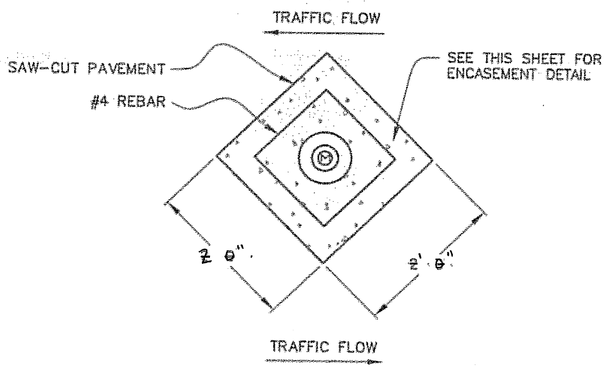
1. SEE SHEET A2 FOR CONTROL MONUMENT LOCATIONS.



DETAIL-A

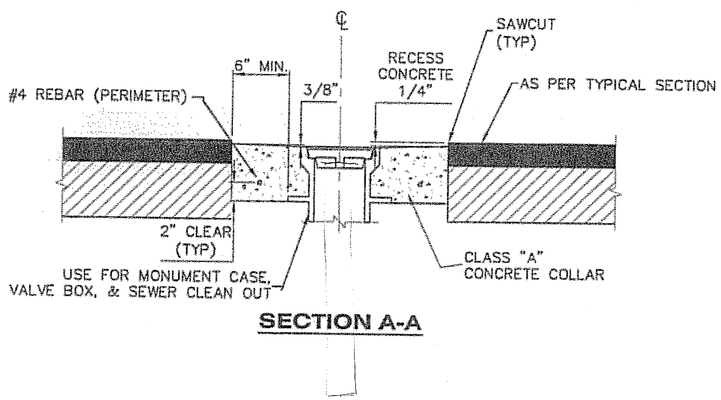


BOLLARD POST
SECTION VIEW
(SEE SHEET E9 FOR LAYOUT VIEW)



PLAN

MONUMENT ENCASEMENT DETAIL



SECTION A-A

CLASS A CONCRETE COLLAR ENCASEMENT DETAIL
REFER TO SHEET A2
FOR LOCATIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE L. Berger Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: M. TAYLOR
DRAWN BY: D.S. /R.S.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

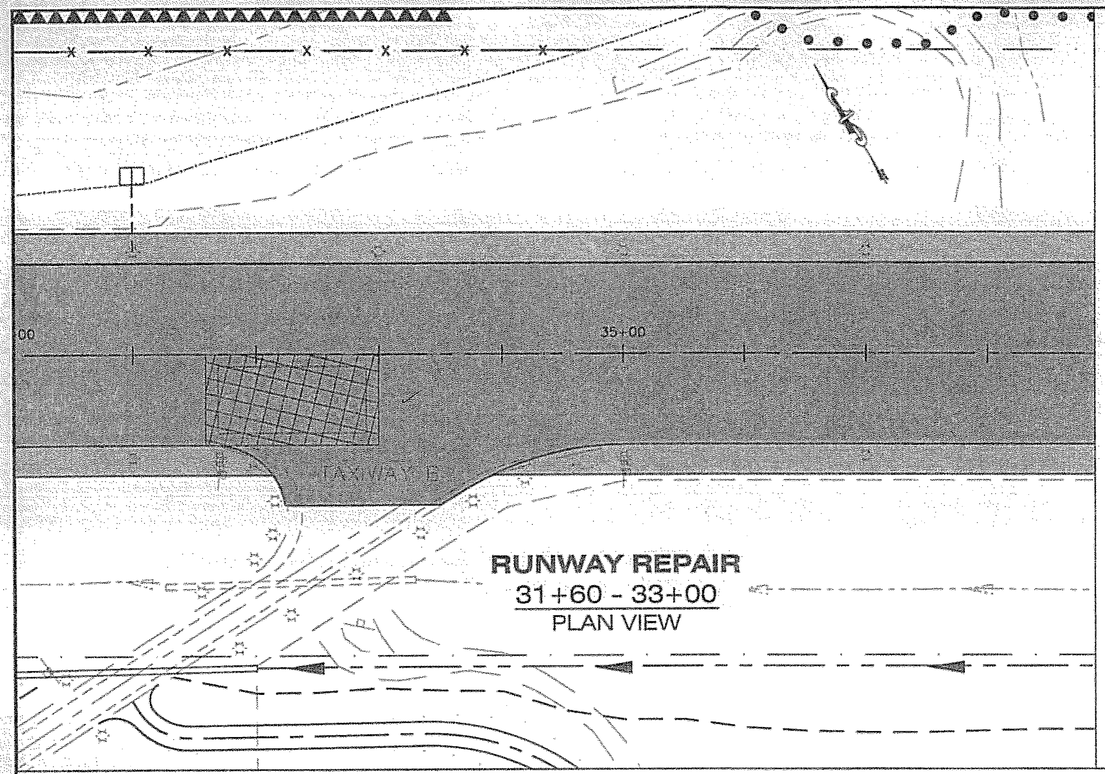
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

MISCELLANEOUS DETAILS

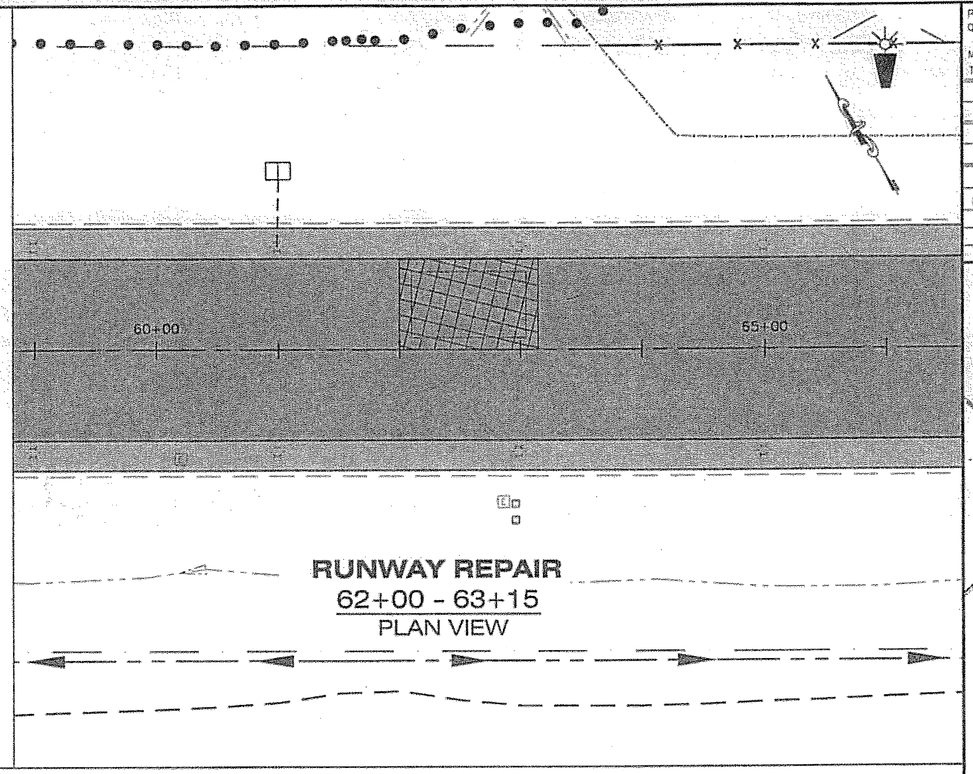
PATH: Q:\Wrg\68167\Planset\H1-2_MiscDetails.dwg
TAB: H2 Mon, 03/Apr/06 03:39PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION

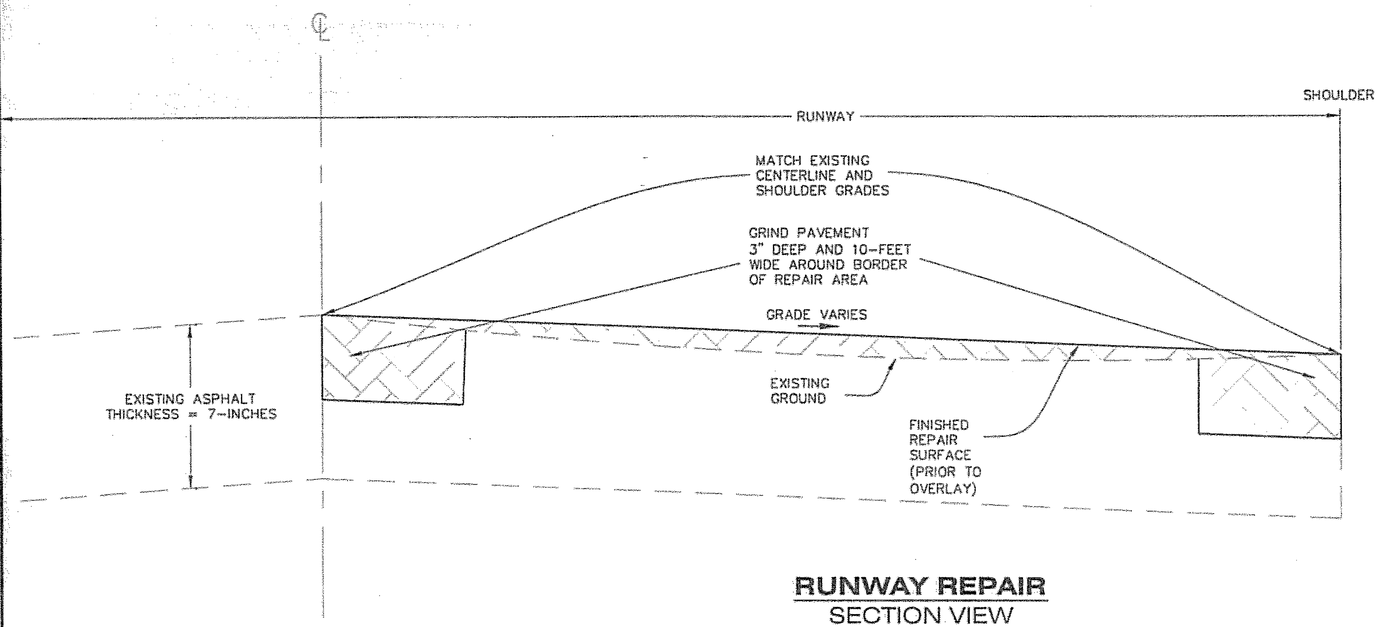
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	H2	69



RUNWAY REPAIR
31+60 - 33+00
PLAN VIEW



RUNWAY REPAIR
62+00 - 63+15
PLAN VIEW



RUNWAY REPAIR
SECTION VIEW
NTS

NOTES:

1. REMOVE AND REPLACE EXISTING ASPHALT FROM RUNWAY AS DIRECTED BY THE ENGINEER. THIS WORK MUST BE SCHEDULED WITHIN THE APPROVED CONSTRUCTION SEQUENCING PLAN (SEE SECTION 80 OF THE SPECIFICATIONS) TO AVOID CONFLICTS WITH ACTIVE RUNWAY USES.
2. PRIOR TO PLACING ASPHALT, SAWCUT EXISTING ASPHALT PAVEMENT TO THE DEPTH AND WIDTH SHOWN. SAWCUTTING IS NOT MEASURED FOR PAYMENT AND IS INCIDENTAL TO THE PAY ITEMS IN THE CONTRACT.
3. SLOPE REPAIRED ASPHALT SURFACE TO MATCH EXISTING RUNWAY GRADES, AS SHOWN.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Joe Berger Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

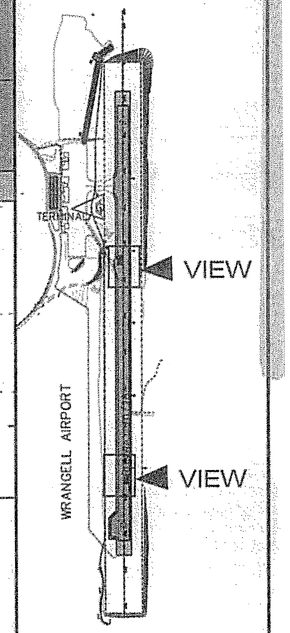
PATH: Q:\Wrg\68167\Planset\H3_RW_Pav_repair.dwg
Mon, 03/Apr/06 03:39PM lrobertson
TAB: H3

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA
Joel D. Osburn
CE-11014
PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: F. ECHEVERRIA

DRAWN BY: L.ROBERTSON

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

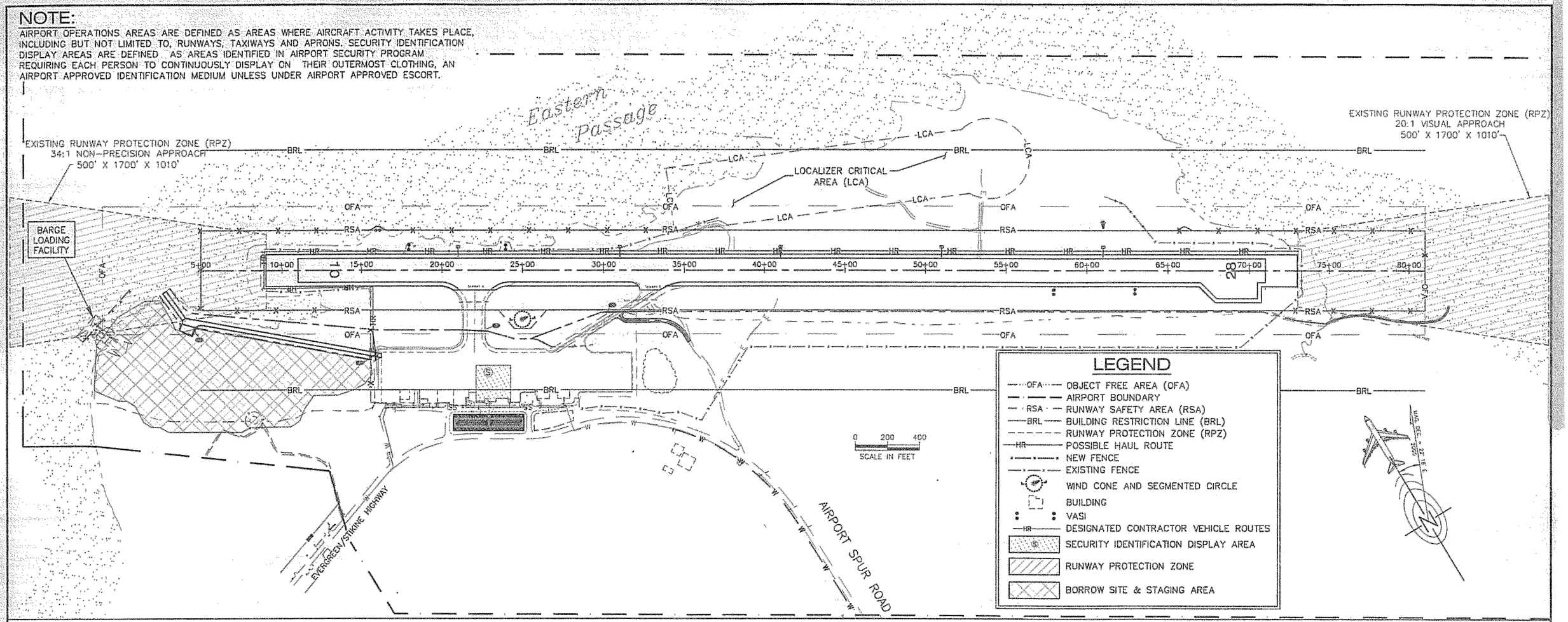
RUNWAY PAVEMENT REPAIR

PROJECT DESIGNATION
AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
H3	69

NOTE:

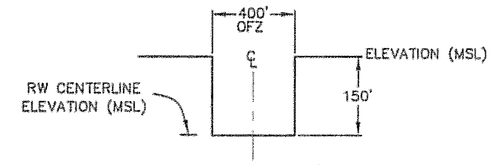
AIRPORT OPERATIONS AREAS ARE DEFINED AS AREAS WHERE AIRCRAFT ACTIVITY TAKES PLACE, INCLUDING BUT NOT LIMITED TO, RUNWAYS, TAXIWAYS AND APRONS. SECURITY IDENTIFICATION DISPLAY AREAS ARE DEFINED AS AREAS IDENTIFIED IN AIRPORT SECURITY PROGRAM REQUIRING EACH PERSON TO CONTINUOUSLY DISPLAY ON THEIR OUTERMOST CLOTHING, AN AIRPORT APPROVED IDENTIFICATION MEDIUM UNLESS UNDER AIRPORT APPROVED ESCORT.



SAFETY PLAN NOTES:

1. NO WORK (PERSONNEL OR EQUIPMENT) SHALL BE ALLOWED WITHIN 250' OF RUNWAY 10/28 CENTERLINE DURING OPERATIONS OF ANY AIRCRAFT DESIGN GROUP II (49-FOOT WING SPAN) OR LARGER. DURING SPRING/SUMMER SEASONS, THERE ARE (TYPICALLY) 1-2 DAILY NON-SCHEDULED OPERATIONS BY AIRCRAFT LARGER THAN DESIGN GROUP II. ALLOW 30 MINUTES BEFORE ARRIVAL AND 15 MINUTES AFTER DEPARTURE TO CONTINUE WORK.
2. NO EQUIPMENT MAY BE PARKED IN FRONT OF VASI'S, OR LOCALIZER ANTENNAS AS TO BLOCK VISUAL OR SIGNAL LANDING INFORMATION. ALL PERSONNEL AND EQUIPMENT MUST EXIT THE LOCALIZER CRITICAL AREAS PRIOR TO AIRCRAFT RUNWAY OPERATION.
3. WORK OUTSIDE 250' BOTH SIDES OF RUNWAY 10/28 CENTERLINE MAY BE PERFORMED AT ANY TIME DURING THE CONTRACT. PERFORM ALL WORK PER THE REQUIREMENTS OF SECTION 80 OF THE SPECIFICATIONS.
4. STORAGE OF MATERIALS AND PARKING OF EQUIPMENT WITHIN 250' OF BOTH SIDES OF THE RUNWAY AND WITHIN AIRCRAFT APRONS WILL NOT BE ALLOWED. ALL STORAGE OF ANY TYPE SHALL BE IN THE DESIGNATED STAGING AREAS.
5. TEMPORARY MARKINGS MUST BE MONITORED FREQUENTLY AND IMMEDIATE ACTION TAKEN TO CORRECT IMPROPER ASPECTS.
6. CONTRACTOR SHALL SUBMIT A CONSTRUCTION SEQUENCE PLAN TO THE ENGINEER FOR APPROVAL. ANY CHANGES TO THE CONSTRUCTION SEQUENCE PLAN MUST BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO COMMENCING WORK. THIS WORK WILL INCLUDE A REVIEW OF, AND POSSIBLE CHANGES TO, THE SAFETY PLAN.
7. CLOSURE OF RUNWAY 10-28 IS NOT PERMITTED. HALF-WIDTH RUNWAY CLOSURES ARE ALLOWED WITH A SAFETY PLAN SUBMITTED BY THE CONTRACTOR, COORDINATED WITH THE ENGINEER, AND APPROVED BY THE FAA & TSA.
8. FOR HALF-WIDTH RUNWAY CLOSURES, SEE SHEET J2 FOR GUIDELINES AND DETAILS.
9. CONSTRUCTION ACTIVITIES SHALL NOT TAKE PLACE WITHIN 25 FEET OF THE LOCALIZER CRITICAL AREA, UNLESS UNDER AUTHORIZATION BY FAA.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE J. Burga Date 3/9/09



RUNWAY 2-20 TYPICAL SECTION

OBSTACLE FREE ZONES

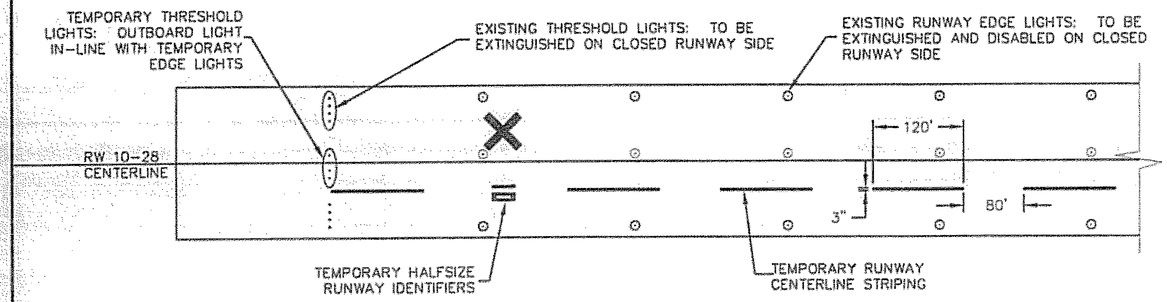
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION **WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167** **SAFETY PLAN**
DESIGNED BY: F. ECHEVERRIA	
DRAWN BY: L ROBERTSON	

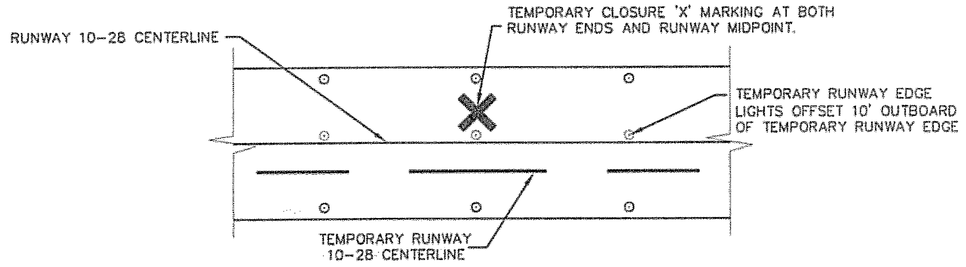
STATE OF ALASKA 49th Joel D. Osburn CE-11014 REGISTERED PROFESSIONAL ENGINEER 4/6/06

PATH: Q:\Wrg\68167\Planset\J1_J2Safety Plan.dwg
TAB: J1 Mon, 03/Apr/06 03:40PM lrobertson

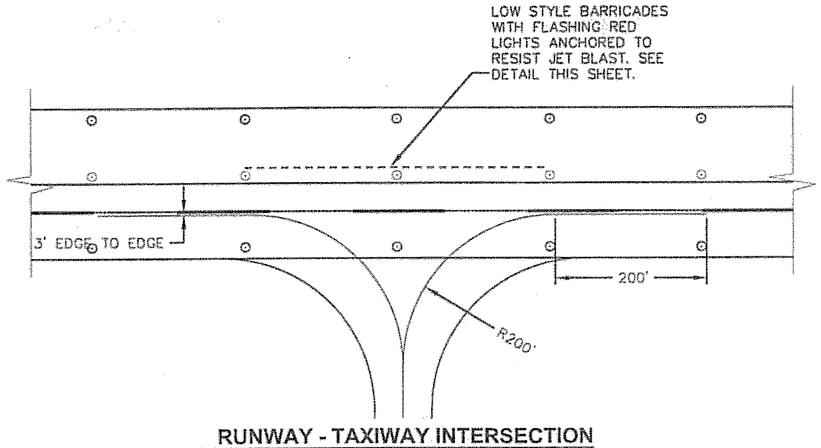
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			AIP NO. 3-02-0323-1105	2006	J1	69



RUNWAY END TYPICAL

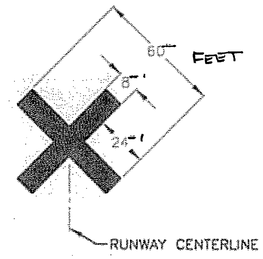


RUNWAY MIDPOINT

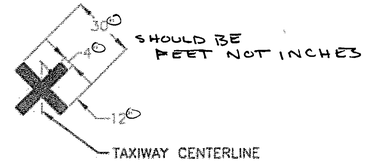


RUNWAY - TAXIWAY INTERSECTION

RW 10/28 HALF WIDTH CLOSURE



(A) CLOSED RUNWAY

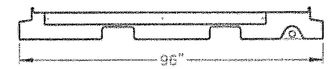


(B) CLOSED TAXIWAY

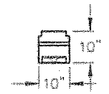
TEMPORARY CLOSURE MARKINGS

SAFETY PLAN NOTES:

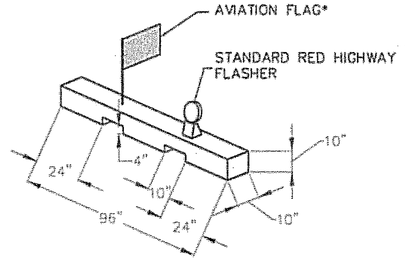
1. HALF-WIDTH RUNWAY CLOSURE IS REQUIRED, AND SHALL ONLY BE ALLOWED, FOR PAVING OPERATIONS.
2. FOR RUNWAY CLOSURE, "X" MARKINGS SHALL BE PLACED OVER NUMBERS AND AT ENDS AND MIDPOINT ON THE CLOSED PORTION. CONTRACTOR SHALL SUBMIT REVISED SAFETY PLAN FOR APPROVAL. TEMPORARY "X" MARKINGS MAY BE CONSTRUCTED OF WOOD OR PLASTIC (SEE DETAIL THIS SHEET). SECURELY ANCHORED IN PLACE WITH YELLOW COLORED SANDBAGS OR APPROVED MATERIAL.
3. BARRIERS SHALL BE IN PLACE TO LIMIT ACCESS TO THE CLOSED PORTION OF THE RUNWAY. BARRICADES SHALL BE OF THE LOW STYLE (LESS THAN 12") HIGH WHEN USED ADJACENT TO AN ACTIVE MOVEMENT AREA. THESE BARRICADES NEED TO BE DELINIATED AS SHOWN IN THE FIGURE. SPACING BETWEEN BARRIERS IS 8-FEET.
4. PHYSICALLY REMOVE ALL RUNWAY PAINTED MARKINGS THAT ARE NO LONGER NEEDED BY SAND BLASTING, CHEMICAL REMOVER OR BY OTHER MEANS. PAINTING OVER OR OTHERWISE MASKING TEMPORARY MARKINGS IS STRICTLY FORBIDDEN.
5. DISABLE AND PREVENT THE OPERATION OF RUNWAY EDGE LIGHTS, RUNWAY THRESHOLD LIGHTS, TAXIWAY EDGE LIGHTS, AND REILS WHICH FUNCTION IS TO IDENTIFY A CLOSED PORTION OF THE RUNWAY OR TAXIWAY.
6. AIRPORT MARKINGS MUST BE CLEARLY VISIBILE TO PILOTS, CONCISE AND NOT MISLEADING, CONFUSING OR DECEPTIVE. TEMPORARY MARKINGS MUST BE PAINTED TO PREVENT MOVEMENT FROM PROP WASH, JET BLAST, WING VORTICES, WIND CURRENTS OR WIND AND RAIN STORM SURGES. CONSTRUCTION MATERIALS MUST BE SUFFICIENT TO MINIMIZE DAMAGE TO AIRCRAFT THROUGH INADVERTENT CONTACT. TEMPORARY MARKINGS MUST BE MONITORED FREQUENTLY AND IMMEDIATE ACTION TAKEN TO CORRECT IMPROPER ASPECTS.



ELEVATION VIEW



SIDE VIEW



PREPARATION OF FLAG & FLASHER MOUNT DETAIL

HAZARDOUS AREA BARRIERS

*FLAGS SHALL ALTERNATE COLOR (ORANGE/WHITE) ON EACH BARRIER AS THEY ARE PLACED IN THE AIRPORT OPERATIONS AREA, IN SEQUENCE.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: L. ROBERTSON

STATE OF ALASKA, 49th, Joel D. Osburn, CE-11014, REGISTERED PROFESSIONAL ENGINEER, 4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

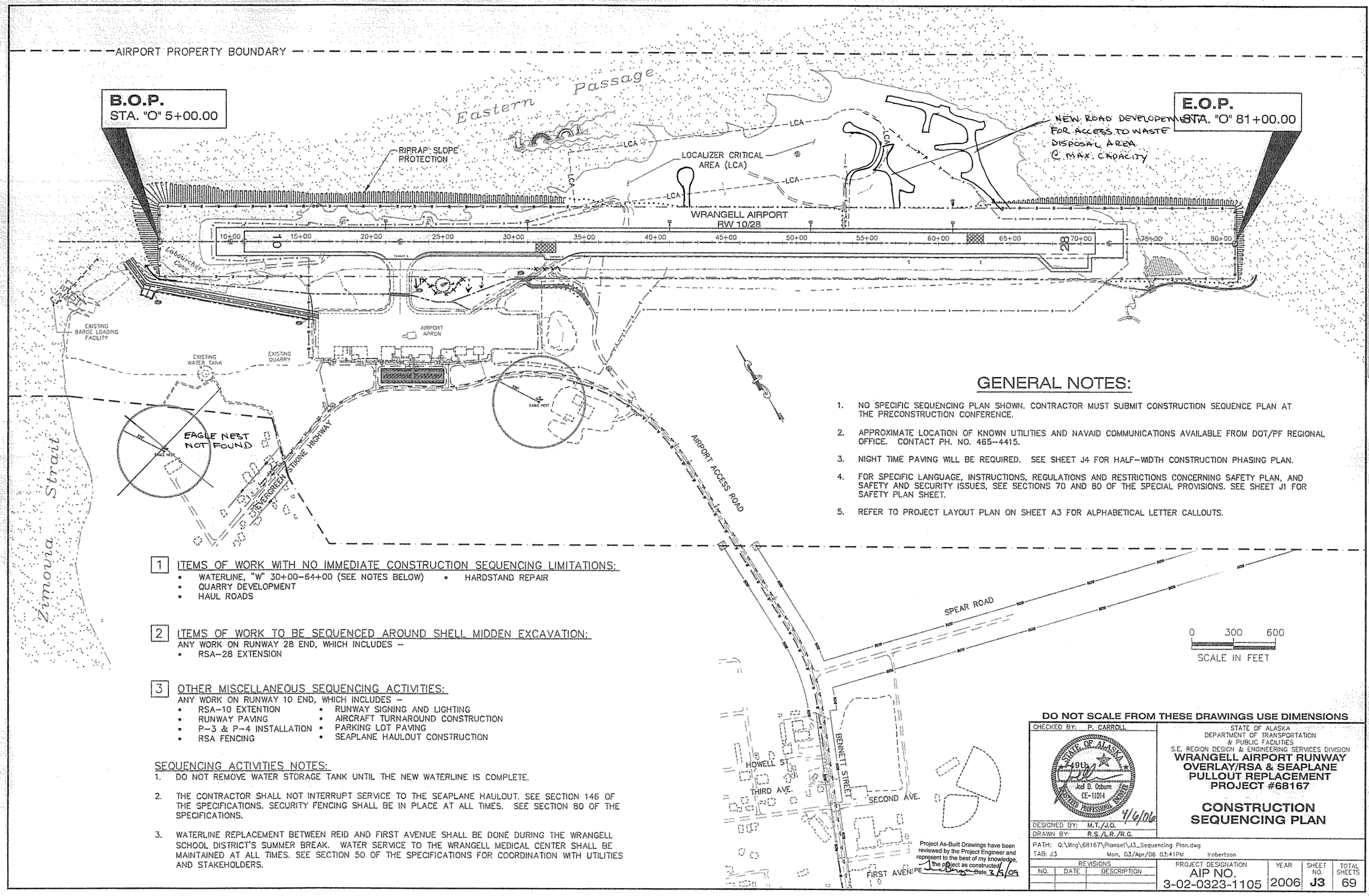
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

RUNWAY HALF-WIDTH CLOSURE SAFETY PLAN

PATH: O:\Wrg\68167\Planset\J1_J2Safety Plan.dwg
TAB: J2 Mon, 03/Apr/06 03:40PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	J2	69



GENERAL NOTES:

1. NO SPECIFIC SEQUENCING PLAN SHOWN. CONTRACTOR MUST SUBMIT CONSTRUCTION SEQUENCE PLAN AT THE PRECONSTRUCTION CONFERENCE.
2. APPROXIMATE LOCATION OF KNOWN UTILITIES AND NAVAID COMMUNICATIONS AVAILABLE FROM DOT/PF REGIONAL OFFICE. CONTACT PH. NO. 465-4415.
3. NIGHT TIME PAVING WILL BE REQUIRED. SEE SHEET J4 FOR HALF-WIDTH CONSTRUCTION PHASING PLAN.
4. FOR SPECIFIC LANGUAGE, INSTRUCTIONS, REGULATIONS AND RESTRICTIONS CONCERNING SAFETY PLAN, AND SAFETY AND SECURITY ISSUES, SEE SECTIONS 70 AND 80 OF THE SPECIAL PROVISIONS. SEE SHEET J1 FOR SAFETY PLAN SHEET.
5. REFER TO PROJECT LAYOUT PLAN ON SHEET A3 FOR ALPHABETICAL LETTER CALLOUTS.

1 ITEMS OF WORK WITH NO IMMEDIATE CONSTRUCTION SEQUENCING LIMITATIONS:

- WATERLINE, "W" 30+00-64+00 (SEE NOTES BELOW)
- QUARRY DEVELOPMENT
- HAUL ROADS
- HARDSTAND REPAIR

2 ITEMS OF WORK TO BE SEQUENCED AROUND SHELL MIDDEN EXCAVATION:

ANY WORK ON RUNWAY 28 END, WHICH INCLUDES -

- RSA-28 EXTENSION

3 OTHER MISCELLANEOUS SEQUENCING ACTIVITIES:

ANY WORK ON RUNWAY 10 END, WHICH INCLUDES -

- RSA-10 EXTENTION
- RUNWAY PAVING
- P-3 & P-4 INSTALLATION
- RSA FENCING
- RUNWAY SIGNING AND LIGHTING
- AIRCRAFT TURNAROUND CONSTRUCTION
- PARKING LOT PAVING
- SEAPLANE HAULOUT CONSTRUCTION

SEQUENCING ACTIVITIES NOTES:

1. DO NOT REMOVE WATER STORAGE TANK UNTIL THE NEW WATERLINE IS COMPLETE.
2. THE CONTRACTOR SHALL NOT INTERRUPT SERVICE TO THE SEAPLANE HAULOUT. SEE SECTION 146 OF THE SPECIFICATIONS. SECURITY FENCING SHALL BE IN PLACE AT ALL TIMES. SEE SECTION 80 OF THE SPECIFICATIONS.
3. WATERLINE REPLACEMENT BETWEEN REID AND FIRST AVENUE SHALL BE DONE DURING THE WRANGELL SCHOOL DISTRICT'S SUMMER BREAK. WATER SERVICE TO THE WRANGELL MEDICAL CENTER SHALL BE MAINTAINED AT ALL TIMES. SEE SECTION 50 OF THE SPECIFICATIONS FOR COORDINATION WITH UTILITIES AND STAKEHOLDERS.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/5/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: M.T./J.O.
DRAWN BY: R.S./L.R./R.G.

STATE OF ALASKA
Joel D. Osburn
CE-11014
49th
REGISTERED PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

CONSTRUCTION SEQUENCING PLAN

PATH: Q:\Wrg\68167\Planset\J3_Sequencing Plan.dag
TAB: J3 Mon, 03/Apr/06 03:41PM Irobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	J3	69

GENERAL PHASING NOTES:

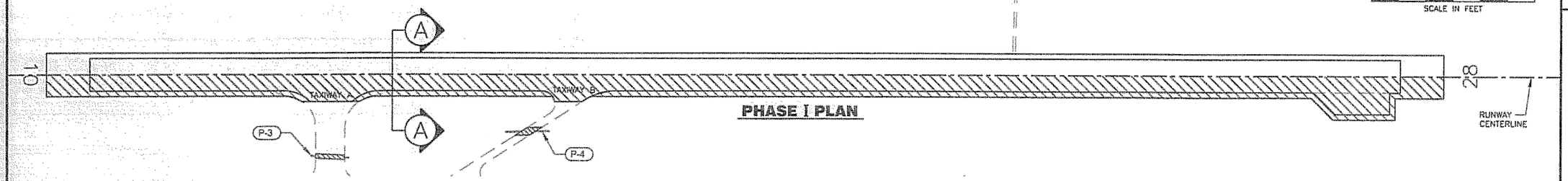
1. WHEN THE ACTIVE RUNWAY IS REDUCED TO HALF WIDTH (75') THE CORRESPONDING RUNWAY SAFETY AREA (RSA) IS REDUCED TO 400' WIDE CENTERED ON THE 75' WIDE ACTIVE RUNWAY. REFER TO AC: 150/5370-2E FOR RSA WIDTH DURING CONSTRUCTION.
2. KEEP ALL PEOPLE, EQUIPMENT AND MATERIALS OUTSIDE THE RUNWAY SAFETY AREA WHEN THE ACTIVE RUNWAY IS OPEN TO AIR OPERATIONS.
3. EQUIPMENT WILL NOT BE PERMITTED INSIDE OF AOA'S.
4. SEE SPECIFICATIONS FOR LIMITATIONS, OPERATIONAL SAFETY REQUIREMENTS, AND TEMPORARY LIGHTING REQUIREMENTS.
5. PROVIDE SUFFICIENT BALLAST ON TEMPORARY LIGHTING CONES TO WITHSTAND JET WASH.
6. A TRANSITION WEDGE WILL BE REQUIRED FOR AIRCRAFT MOVEMENT ACROSS A VERTICAL STOP >1 INCH. SEE DETAIL THIS SHEET.
7. NO SPECIFIC RUNWAY PAVEMENT PHASING PLAN SHOWN. CONTRACTOR MUST SUBMIT CONSTRUCTION SEQUENCE PLAN AT THE PRECONSTRUCTION CONFERENCE.

ACTIVE RUNWAY

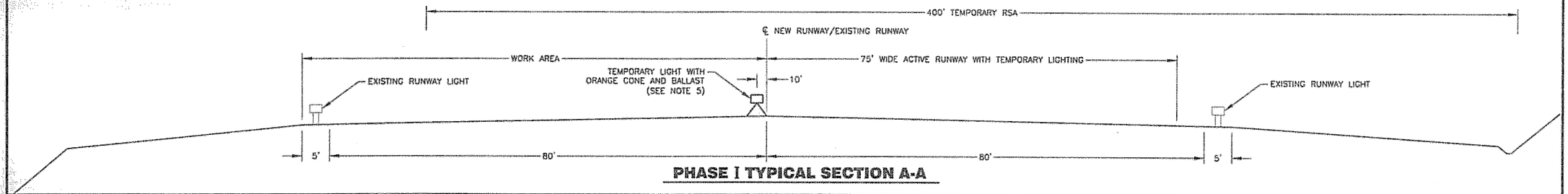
WORK AREA LIMITS

HAZARD MARKER BARRIER

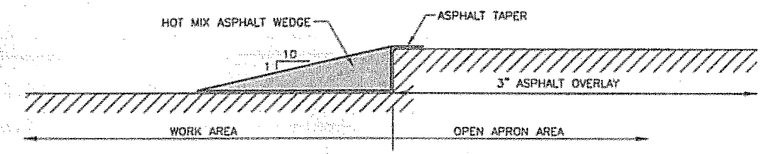
0 400 800 1200
SCALE IN FEET



PHASE I PLAN



PHASE I TYPICAL SECTION A-A



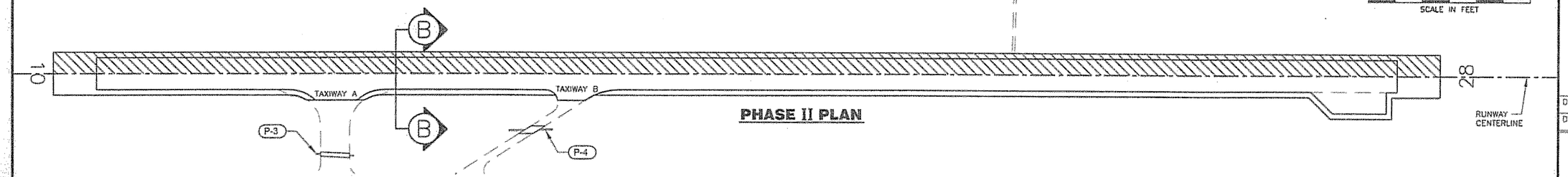
TRANSITION WEDGE DETAIL

ACTIVE RUNWAY

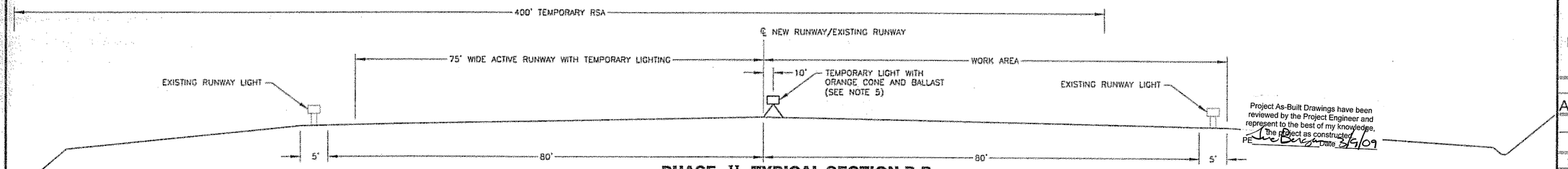
WORK AREA LIMITS

HAZARD MARKER BARRIER

0 400 800 1200
SCALE IN FEET



PHASE II PLAN



PHASE II TYPICAL SECTION B-B

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Q:\Wrg\68167\Planset\J3_Sequencing Plan.dwg
Tue, 04/Apr/06 10:10AM jdosburn
TAB: J4

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

WRG-AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE HAULOUT REPLACEMENT
AIP NO. 3-02-0323-1105 ~ 68167

RUNWAY HALF-WIDTH CLOSURE PHASING PLAN

PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA 49th
Joel D. Osburn CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: J. OSBURN

DRAWN BY: L. ROBERTSON

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

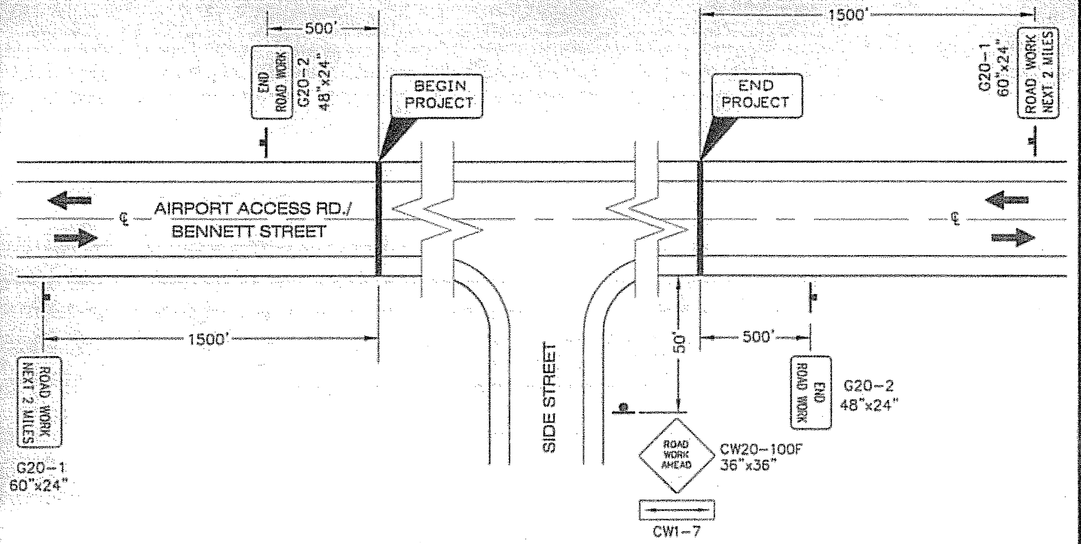
WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

RUNWAY HALF-WIDTH CLOSURE PHASING PLAN

PROJECT DESIGNATION
AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
J4	69

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Joe Berga Date 3/9/09



PERMANENT CONSTRUCTION SIGNING

Legend

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

FORMULAS FOR L (TAPER LENGTH)

40 MPH OR LESS $L = \frac{W \times S^2}{60}$

45 MPH OR GREATER $L = W \times S$

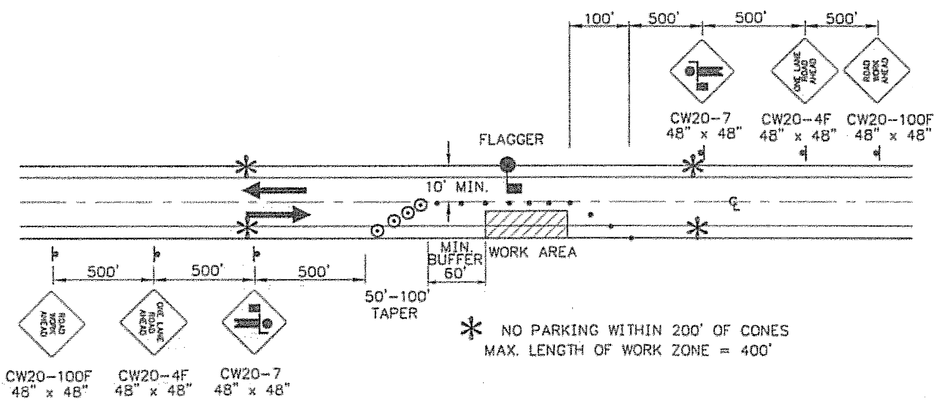
WHERE W= WIDTH OF OFFSET
S= POSTED SPEED LIMIT

DRUM OR CONE SPACING = S (IN FEET)

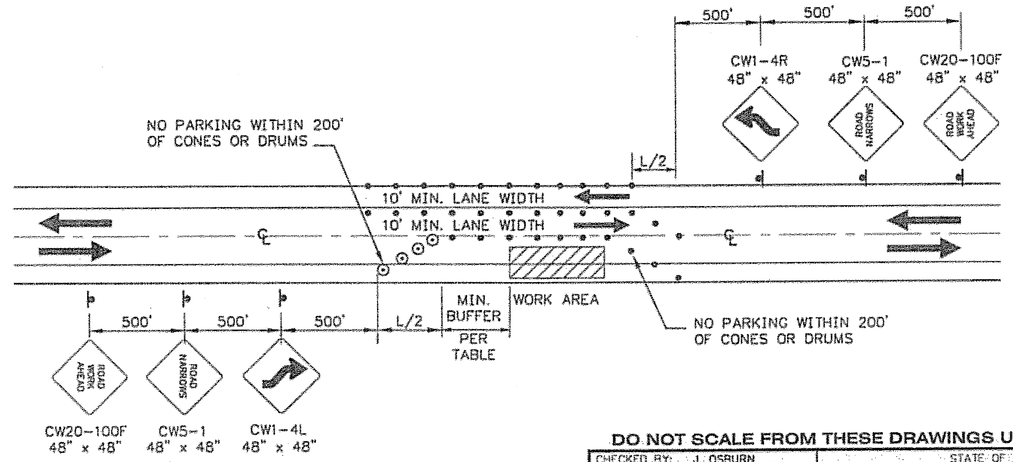
MIN. BUFFER	
S	LENGTH
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485

Traffic Control Notes:

1. A MINIMUM OF ONE LANE SHALL BE MAINTANED AT ALL TIMES, THROUGH ALL WORK AREAS.
2. TWO LANES SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORK HOURS. UNLESS AN APPROVED TRAFFIC CONTROL SIGNAL HAS BEEN INSTALLED.
3. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'-0".
4. CONSTRUCTION SIGNING SHALL BE IN PLACE ONLY WHEN THE CONDITIONS EXIST FOR WHICH THE SIGNS ARE INTENDED. CONSTRUCTION SIGNS SHALL BE PLACED SUCH THAT THEY DO NOT OBSCURE EXISTING TRAFFIC SIGNS.
5. WORK ZONE DOUBLE TRAFFIC FINES SIGNS SHALL BE USED AS DIRECTED BY THE ENGINEER AND PER STANDARD DRAWING C-04.12.
6. WARNING LIGHTS SHALL BE USED ON ALL CHANNELIZING DEVICES PLACED ALONG OR AROUND ROADWAY HAZARDS AS DIRECTED BY THE ENGINEER.
7. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. PLANS FOR CONFIGURATIONS NOT COVERED BY THE TCP SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. WHERE APPROPRIATE, THEY SHALL INCORPORATE APPLICABLE PORTIONS OF DETAILS ON THESE SHEETS.
8. MAXIMUM LENGTH OF CONSTRUCTION WITH ONE-LANE ROAD CLOSURE IS 1000'.
9. DURING WATERLINE CONSTRUCTION, ACCESS TO REID STREET WEST OF BENNETT STREET WILL BE VIA WEBBER STREET OR ST. MICHAELS STREET.



TWO LANE ROAD - SINGLE LANE CLOSURE
Single Flagger



TWO-WAY TRAFFIC

* SEE NOTE 6, THIS SHEET.

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: J. OSBURN
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: R. SNYDER

STATE OF ALASKA
Joel D. Osburn
CE-11014
ASSOCIATED PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

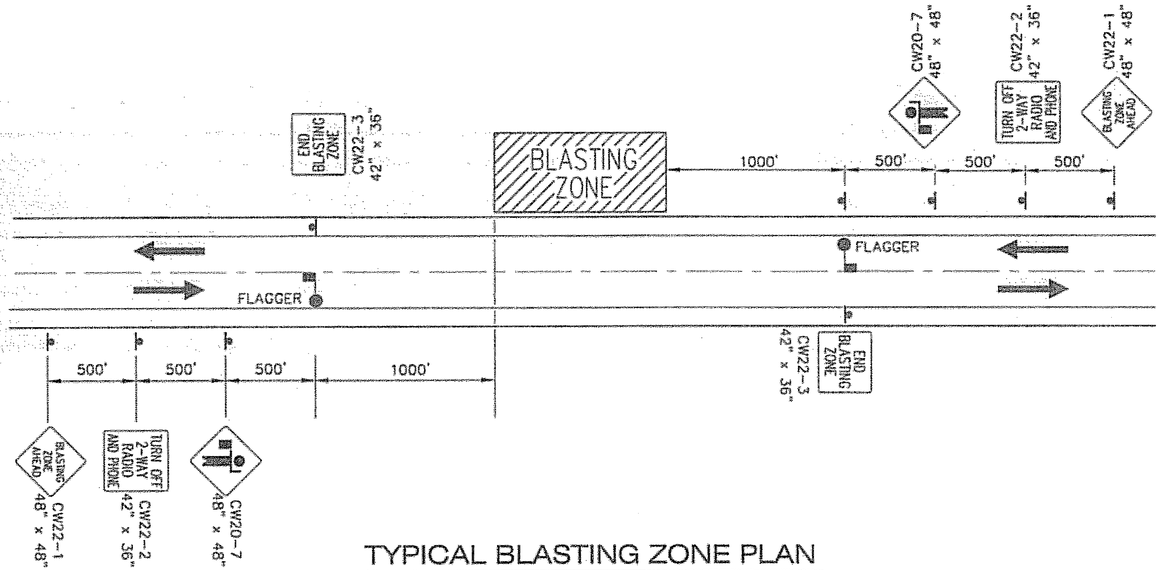
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

TRAFFIC CONTROL PLANS

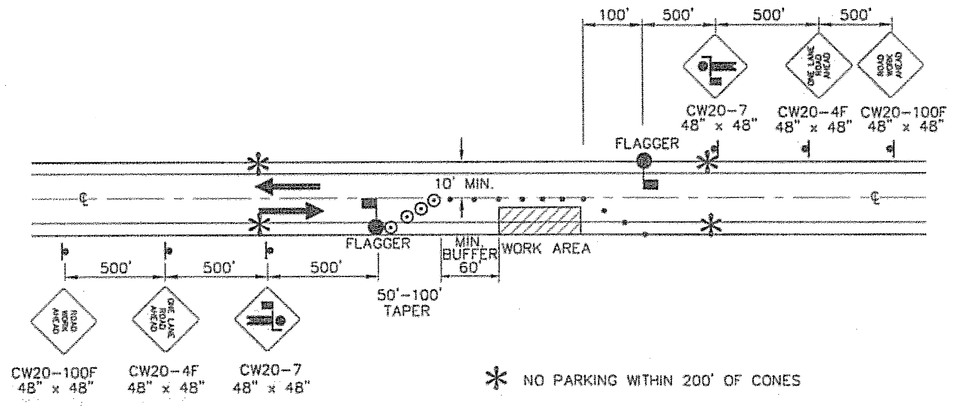
PATH: O:\Wrg\68167\Planset\J5_TCP.dwg
TAB: J5 Thu, 06/Apr/06 12:14PM jdosburn

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	J5	69



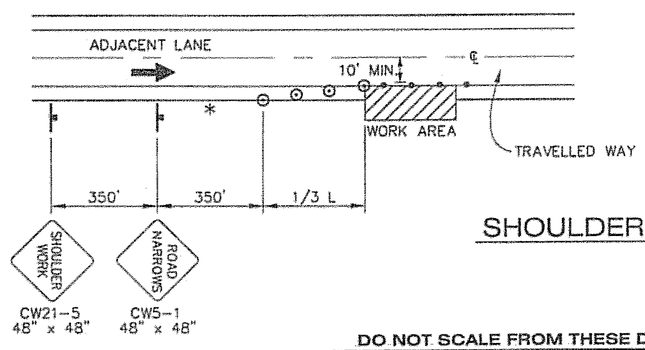
TYPICAL BLASTING ZONE PLAN



TWO LANE ROAD - SINGLE LANE CLOSURE
Double Flagger

Legend

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



SHOULDER WORK

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/9/09

CHECKED BY: J. OSBURN
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: R. SNYDER

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

PATH: O:\Wrg\68167\Planset\J5_TCP.dwg
TAB: J6 Mon, 03/Apr/06 03:41PM lrobertson

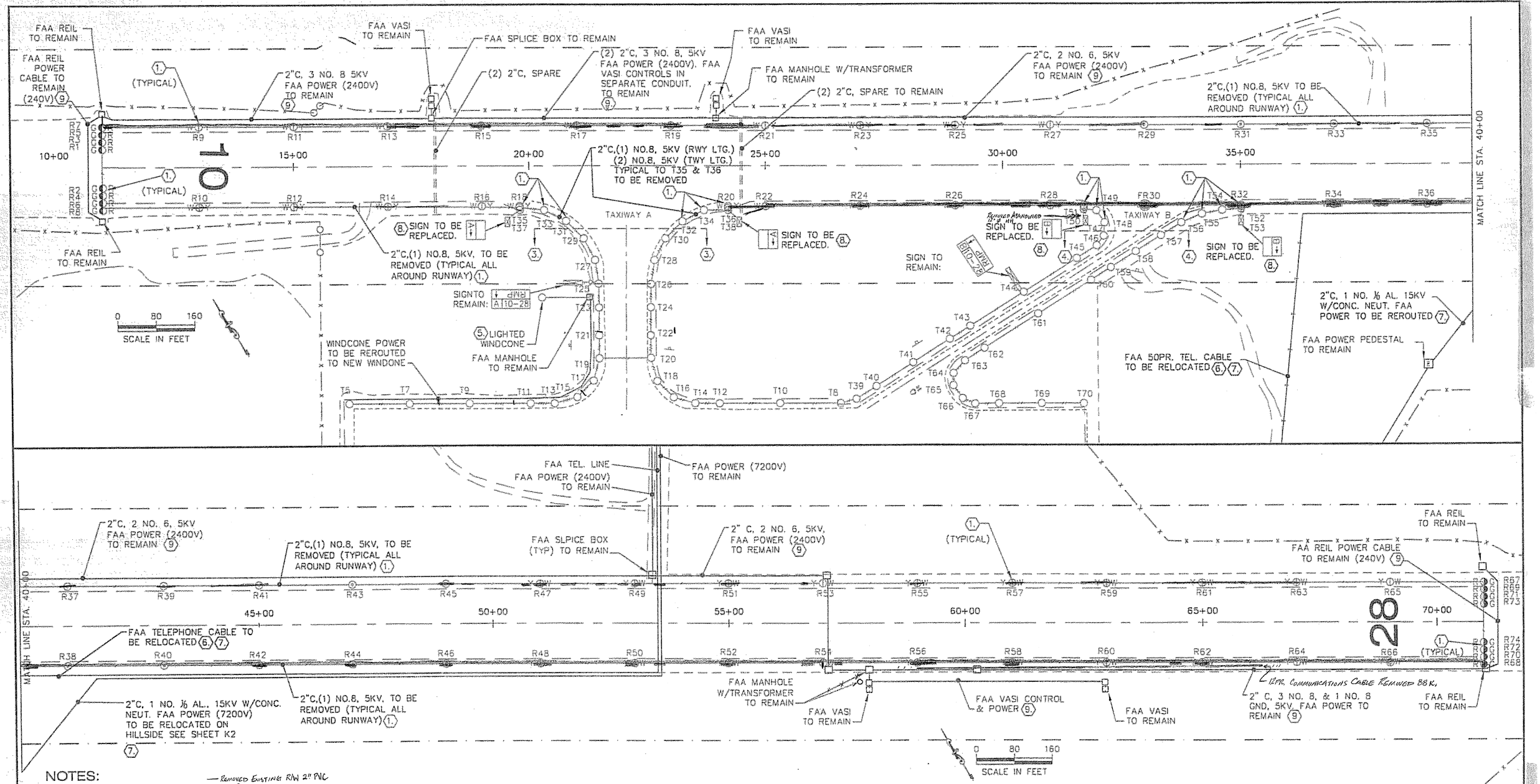
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

TRAFFIC CONTROL PLANS

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	J6	69



NOTES:

(1) REMOVE ALL RUNWAY LIGHTS INCLUDING LIGHT, BASE, TRANSFORMER, ETC., (R1–R74) INCLUDING THE CONDUIT AND CABLE BETWEEN THE LIGHTS. REMOVE TAXIWAY LIGHTS INCLUDING LIGHT, BASE, TRANSFORMER, ETC. T31–T38, T48–T56 INCLUDING THE CABLE AND CONDUIT BETWEEN THE LIGHTS.

(2) NOT USED

(3) ALL TAXIWAY LIGHTS ON TAXIWAY "A" SOUTH OF THE DASHED LINE ARE TO REMAIN. THE CONDUIT & CABLES FEEDING THEM INCLUDING THE RUNWAY LIGHTING CABLE PASSING THROUGH THEM IS TO REMAIN.

(4) ALL TAXIWAY LIGHTS ON TAXIWAY "B" SOUTH OF THE DASHED LINE ARE TO REMAIN. THE CONDUIT AND CABLES FEEDING THEM IS TO REMAIN.

(5) REMOVE LIGHTED WINDCONE. REUSE CIRCUIT TO POWER NEW WINDCONE. SEE SHEET K2. PROVIDE NEW CONDUIT & CONDUCTORS AS REQUIRED.

(6) 50PR FAA TELEPHONE CABLE. REPLACE PORTION AS SHOWN ON SHEET K2.

(7) REROUTE AND REPLACE PORTION OF FAA POWER & TELEPHONE CABLE AS SHOWN ON SHEET K2.

(8) REPLACE THIS SIGN INCLUDING BASE, CONDUIT & CONDUCTORS TO ADJACENT LIGHT.

(9) THE FAA POWER CONDUIT/CABLE IS IMMEDIATELY ADJACENT TO THE RUNWAY LIGHTING CONDUCTORS. DIG WITH EXTREME CAUTION. FAA POWER IS LIVE AT ALL TIMES. OPERATING VOLTAGE IS SHOWN WHERE KNOWN. DO NOT DAMAGE. IF DAMAGED, REPLACE FAA CABLE AND FAA EQUIPMENT TO THE SATISFACTION OF THE FAA AND ENGINEER.

— Removed Existing R/W 2" PVC See Table

— Removed Abandoned FAA Conductors with Existing R/W Lighting
Removed Abandoned FAA Communications Cable (12 PR)
See Table

LEGEND

G◐R	THRESHOLD EDGE LIGHT, GREEN 180° – RED 180°
⊙	RUNWAY EDGE LIGHT, WHITE 360°
◎	FLUSH RUNWAY EDGE LIGHT, WHITE
Y◑W	RUNWAY EDGE LIGHT, WHITE 180° – YELLOW 180°
Y◍W	FLUSH RUNWAY EDGE LIGHT, WHITE 180°–YELLOW 180°
○	TAXIWAY EDGELIGHT, BLUE 360°
□	HANDHOLE
———	CONDUIT W/ CONDUCTORS

LOCATIONS BASED UPON FAA DRAWINGS ONLY. FIELD VERIFY. OBTAIN FAA LOCATES PRIOR TO DIGGING

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the Project as constructed.
PE [signature] Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: M. MORRIS
DESIGNED BY: M.M.
DRAWN BY: L.ROBERTSON
PATH: G:\Wrg\68167\Planset\K1_Lighting.dwg
TAB: K1 Fri, 31/Mar/06 04:51PM lrobertson

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

EXISTING & DEMO RUNWAY & TAXIWAY ELECTRICAL PLAN

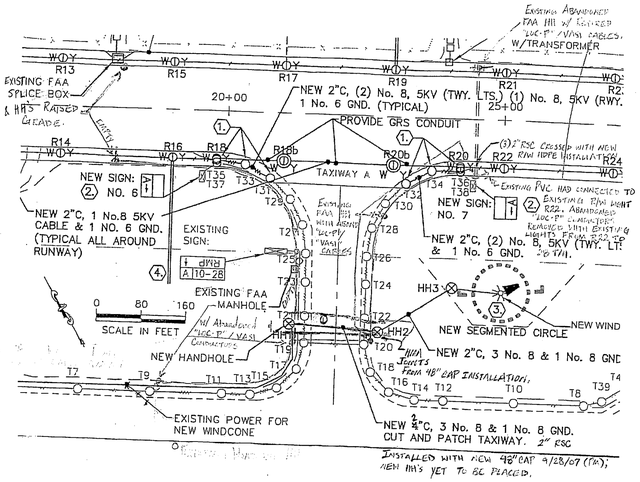
REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	K1	

2-107b 12' WIND CONE

10/2007 T/W A

EXISTING FAA & WINDCONE AS-BUILTS



① EXISTING FAA 2" RSC SEVERED & REMOVED DURING NEW 48" CULVERT CROSSING INSTALLATION. 1 x RSC REMOVED ON WEST SIDE T/W A; 1x RSC WITH ABANDONED "LOC-P"/ VASI" CABLES REMOVED ON EAST SIDE. REMOVED 9/28/07.

WRG Airport R/W Overlay/RSA Seaplane Pullout Replacement
AIP 3-02-0323-1105/68167

AS-BUILTS TABLE

EXISTING 2" PVC R/W Lighting Conduit Removed

Station to Station		L/R	Comments	Station to Station		L/R	Comments
11+00	11+10	LT		12+95	13+05	RT	
17+00	17+70	LT		15+00	15+05	RT	
18+90	19+10	LT		16+90	17+05	RT	
20+95	21+15	LT		17+20	18+35	RT	
21+60	21+90	LT		24+20	25+10	RT	
22+25	22+40	LT		26+85	27+05	RT	
22+95	23+13	LT		28+95	29+05	RT	
23+75	24+90	LT		30+10	30+70	RT	
25+05	27+30	LT		30+90	31+10	RT	
27+50	27+60	LT		31+70	93' RT		12" HH w/ abandoned cables, old sign feed?
28+13	28+23	LT		33+00	33+10	RT	
28+90	29+00	LT		34+80	35+10	RT	
29+30	30+00	LT		36+95	37+05	RT	
32+90	33+00	LT		37+90	38+10	RT	
34+25	34+85	LT		38+90	39+10	RT	
35+80	38+40	LT		39+85	41+05	RT	
38+80	39+10	LT		40+10	40+30	RT	
40+95	41+05	LT		44+95	45+05	RT	
42+95	43+10	LT		46+92	47+02	RT	
44+00	45+10	LT		48+95	49+05	RT	
48+95	49+05	LT		50+98	51+08	RT	
49+20	49+40	LT		52+92	53+02	RT	
50+70	50+80	LT		53+41	53+51	RT	
50+95	51+05	LT		54+90	55+05	RT	
51+40	51+70	LT		56+65	56+85	RT	
52+00	52+10	LT		57+15	57+30	RT	
52+70	52+80	LT		58+95	59+35	RT	
52+95	53+05	LT		60+95	61+05	RT	
53+45	53+55	LT		64+40	64+60	RT	
54+95	55+15	LT		64+95	65+05	RT	
56+50	56+70	LT					
58+95	59+05	LT					
60+95	61+10	LT					
62+50	63+05	LT					
64+10	67+00	LT					

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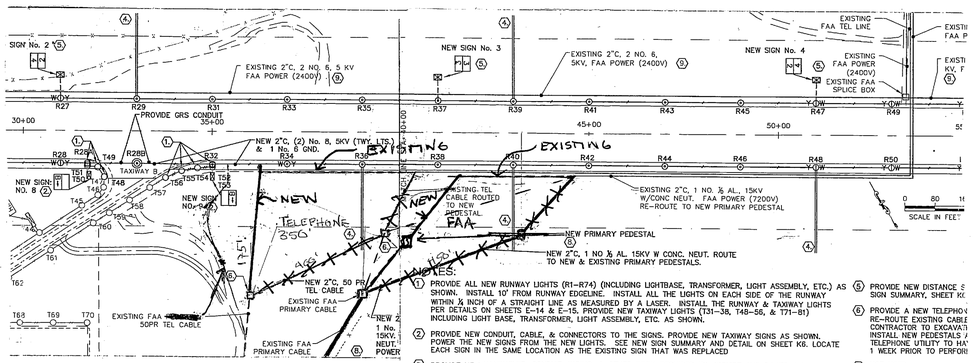

NOTES:

1. PROVIDE ALL NEW RUNWAY LIGHTS (R1–R74) (INCLUDING LIGHTBASE, TRANSFORMER, LIGHT ASSEMBLY, ETC.) AS SHOWN. INSTALL 10' FROM RUNWAY EDGELINE. INSTALL ALL THE LIGHTS ON EACH SIDE OF THE RUNWAY WITHIN ¼ INCH OF A STRAIGHT LINE AS MEASURED BY A LASER. INSTALL THE RUNWAY & TAXIWAY LIGHTS PER DETAILS ON SHEETS E-14 & E-15. PROVIDE NEW TAXIWAY LIGHTS (T31–38, T48–56, & T71–81) INCLUDING LIGHT BASE, TRANSFORMER, LIGHT ASSEMBLY, ETC. AS SHOWN.
2. PROVIDE NEW CONDUIT, CABLE, & CONNECTORS TO THE SIGNS. PROVIDE NEW TAXIWAY SIGNS AS SHOWN. POWER THE NEW SIGNS FROM THE NEW LIGHTS. SEE NEW SIGN SUMMARY AND DETAIL ON SHEET K6. LOCATE EACH SIGN IN THE SAME LOCATION AS THE EXISTING SIGN THAT WAS REPLACED
3. PROVIDE NEW HANDHOLES, CONDUIT, WIRING, & OTHER WORK REQUIRED TO PROVIDE AND POWER A NEW LIGHTED WINDCONE. INTERCEPT EXISTING WINDCONE CIRCUIT & EXTEND IT TO NEW WINDCONE IN SEGMENTED CIRCLE. TAP OFF EXISTING 120V POWER TO REIL AT RWY 28 TO POWER WINDCONE AT RWY 28. PROVIDE 5K HEAVY DUTY DISCONNECT AT REIL ENCLOSURE. MOUNT DISCONNECT ON SIDE OF REIL POWER ENCLOSURE. PROVIDE FRANGIBLE COUPLING IN CONDUIT. SEE WINDCONE DETAIL SHEET K5.
4. PROVIDE 2" EMPTY HDPE CONDUIT FROM THE LIGHT BASE AS SHOWN TO DAYLIGHT INTO THE DITCH OR EMBANKMENT. SLOPE THE CONDUIT AT 0.5% TO DRAIN. INSTALL CONDUIT NO DIFFERENTLY THAN CONDUIT ON REST OF PROJECT. TRANSITION TO GRS CONDUIT 10' BEFORE CONDUIT DAYLIGHTS. FIELD VERIFY CONDUIT LENGTH REQUIRED TO DAYLIGHT. PROVIDE GALV. MESH OVER END OF CONDUIT. SECURE WITH STAINLESS STEEL PIPE CLAMP. ADD THIRD OPENING TO LIGHT BASE FOR CONDUIT.
5. PROVIDE NEW DISTANCE S SIGN SUMMARY, SHEET K
6. PROVIDE A NEW TELEPHO RE-ROUTE EXISTING CABLE CONTRACTOR TO EXCAVAT INSTALL NEW PEDESTALS TELEPHONE UTILITY TO HA 1 WEEK PRIOR TO PERFOR
7. NOT USED
8. PROVIDE A NEW PRIMARY AREA. SEE DETAILS, SHEE EXISTING CONDUIT & CABL DAY PRIOR TO PERFORMIN
9. THE FAA POWER CONDUIT/ EXTREME CAUTION. FAA P DAMAGE. IF DAMAGED, RE ENGINEER.

WRG Airport R/W Overlay/RSA Seaplane Pullout Replacement

AIP 3-02-0323-1105/68167

Encountered Abandoned FAA Conductors

LOCATION			DESCRIPTION	COMMENTS
11+00		85-112 L	3 x No. 8	Active conductor/power transformer feed for REIL control removed. FAA Maintenance installs
11+00	23+13	85 L	3 x No. 8	antennae control to replace. **Removed** abandoned RW 10 VASI/REIL cables found in exisitng RW
23+75	24+50	85 L	3 x No. 8	lighting conduit.
24+50		85 L	20" HH	**Removed**, apparent abandoned FAA tie-in to existing R/W conduit.
25+00	57+00	85 R	2 x No. 6	**Removed** abandoned "LOC-P" cables. Conductors entered R/W circuit from preserved HH at 24+50, 90Rt via 2" PVC tapped into existing/removed R22 RW light can.
57+00		87 R	2" PVC	**Left in place,** contains 2-No. 6, 3-No.8 & bare Cu; from removed RW light can R54 toward VASI.
57+00	71+00	85 R	3x No. 8	**Removed** abandoned RW 28 VASI/REIL cables found in existing RW lighting conduit.

Encountered Abandoned FAA Communications Cable (12 pr.)

LOCATION			COMMENTS
34+18	34+60	97-103 R	Severed where crossed lighting conduit trench, T/W B east radius.
34+67	34+72	83-87 R	Severed where crossed lighting conduit trench, T/W B east radius.
53+45		81 R	Cut-off communication cable stub end found
57+11		83-87R	Severed where crossed lighting conduit trench
59+00	66+28	88 R	**Removed** abandoned 12 pr armored communications cable run.
67+00		88 R	Severed where crossed lighting conduit trench.
70+60		90.7 R	Severed where crossed lighting conduit trench.
71+04		87 R	Severed where crossed windcone conduit trench
57+00		88 L	Severed with excavation at light can.
61+00		88.5 L	Severed with excavation at light can.
63+00		89 L	Severed with excavation at light can.
67+00		87.5 L	Severed with excavation at light can.
71+04		90.6 L	Severed where crossed windcone conduit trench

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Sheet K1A

DRAINS STOP AFTER EXISTING RAP SLOPE
DRAIN INTO SHOT ROCK FIL

EXISTING FAA REIL
EXISTING FAA CABLE (240V) (9)
EXISTING FAA REIL
EXISTING FAA VASI
EXISTING 2"C, 3 NO. 8, 5KV, FAA POWER (2400V) WITH COUNTERPOISE GRD.
EXISTING 2"C, 3 NO. 8, 5KV, FAA POWER (2400V) WITH COUNTERPOISE GRD. NEW SIGN No. 1
EXISTING FAA SPLICE BOX
NEW THRESHOLD LIGHTS
NEW 2"C, 1 No.8 5KV CABLE & 1 NO. 6 GND. (TYPICAL ALL AROUND RUNWAY)
NEW SIGN: NO. 6
EXISTING SIGN:
NEW HANDHOLE
EXISTING POWER FOR NEW WINDCONE, HH
EXISTING EMPTY CONDUIT ACCESSIBLE VIA WIND CONE HH
NEW 2"C, (2) No. 8, 5KV (TWY. LTS.) (1) No. 8, 5KV (RWY. LTS.) & 1 No. 6 GND. (TYPICAL)
PROVIDE GRS CONDUIT
NEW 2"C, (2) No. 8, 5KV (TWY. LTS.) & 1 No. 6 GND.
NEW SIGN: NO. 7
NEW SEGMENTED CIRCLE
NEW WINDCONE
NEW 2"C, 3 No. 8 & 1 No. 8 GND.
NEW 2"C, 3 No. 8 & 1 No. 8 GND. CUT AND PATCH TAXIWAY
EXISTING FAA MANHOLE W/TRANSFORMER
EXISTING FAA VASI
NEW SIGN No. 2
NEW SIGN: NO. 8
NEW SIGN NO. 9
EXISTING SIGN:
EXISTING FAA PEDESTAL 50PR TEL CABLE
EXISTING 2"C, 2 NO. 6, 5 KV FAA POWER (2400V) w/ COUNTERPOISE GRD.
PROVIDE GRS CONDUIT
NEW 2"C, (2) No. 8, 5KV (TWY. LTS.) & 1 No. 6 GND.
SUMP INSTALLED
NEW 2"C, 50 PR TEL CABLE
EXISTING FAA PRIMARY CABLE
NEW 2"C, 1 No. 1/0 AL, 15KV. W/ CONC. NEUT. FAA POWER
EXISTING FAA PRIMARY CABLE
TAXIWAY A
TAXIWAY B
MATCH LINE STA. 40+00
SCALE IN FEET 0 80 160

NEW SIGN No. 3
EXISTING 2"C, 2 NO. 6, 5KV, FAA POWER (2400V) WITH COUNTERPOISE GRD.
NEW SIGN No. 4
EXISTING FAA POWER (2400V)
EXISTING FAA SPLICE BOX
EXISTING FAA TEL LINE
EXISTING FAA POWER (7200V)
EXISTING 2"C, 2 NO. 6, 5 KV, FAA POWER (2400V)
EXISTING FAA SPLICE BOX
NEW WINDCONE
NEW SIGN No. 5
DELETED THIS DRAIN. SOLID ROCK
NEW 2"C, 3 No. 8 & 1 No. 8 GND. (TYP)
NEW THRESHOLD LIGHTS
EXISTING FAA REIL
EXISTING TEL CABLE ROUTED TO NEW PEDESTAL.
EXISTING 2"C, 1 NO. 1/0 AL., 15KV W/CONC NEUT. FAA POWER (7200V) RE-ROUTE TO NEW PRIMARY PEDESTAL
SUMP INSTALLED
EXISTING FAA POC CONDUIT MARKER, 90° BEND
ABAND. 12PR COMMUNICATION CABLE STA 11,61R & STA 15,87R
EXISTING FAA VASI
EXISTING FAA VASI CONTROL & POWER
EXISTING FAA MANHOLE W/TRANSFORMER
EXISTING FAA SPLICE BOX RAISED TO GRADE
EXISTING FAA VASI
EXISTING 2"C, 3 NO.8, & 1 NO. 8 GND., 5KV, FAA POWER
EXISTING FAA REIL POWER (240V)
PROVIDE GRS CONDUIT
NEW TAXIWAY EDGE LIGHTS
NEW PRIMARY PEDESTAL
NEW 2"C, 1 NO 1/0 AL. 15KV W CONC. NEUT. ROUTE TO NEW & EXISTING PRIMARY PEDESTALS.
NEW DRAIN
EXISTING FAA REIL
MATCH LINE STA. 40+00
SCALE IN FEET 0 80 160

NOTES:

(1) PROVIDE ALL NEW RUNWAY LIGHTS (R1–R74) (INCLUDING LIGHTBASE, TRANSFORMER, LIGHT ASSEMBLY, ETC.) AS SHOWN. INSTALL 10' FROM RUNWAY EDGELINE. INSTALL ALL THE LIGHTS ON EACH SIDE OF THE RUNWAY WITHIN ½ INCH OF A STRAIGHT LINE AS MEASURED BY A LASER. INSTALL THE RUNWAY & TAXIWAY LIGHTS PER DETAILS ON SHEETS E-14 & E-15. PROVIDE NEW TAXIWAY LIGHTS (T31–38, T48–56, & T71–81) INCLUDING LIGHT BASE, TRANSFORMER, LIGHT ASSEMBLY, ETC. AS SHOWN.

(2) PROVIDE NEW CONDUIT, CABLE, & CONNECTORS TO THE SIGNS. PROVIDE NEW TAXIWAY SIGNS AS SHOWN. POWER THE NEW SIGNS FROM THE NEW LIGHTS. SEE NEW SIGN SUMMARY AND DETAIL ON SHEET K6. LOCATE EACH SIGN IN THE SAME LOCATION AS THE EXISTING SIGN THAT WAS REPLACED

(3) PROVIDE NEW HANDHOLES, CONDUIT, WIRING, & OTHER WORK REQUIRED TO PROVIDE AND POWER A NEW LIGHTED WINDCONE. INTERCEPT EXISTING WINDCONE CIRCUIT & EXTEND IT TO NEW WINDCONE IN SEGMENTED CIRCLE. TAP OFF EXISTING 120V POWER TO REIL AT RWY 28 TO POWER WINDCONE AT RWY 28. PROVIDE 30% HEAVY DUTY DISCONNECT AT REIL ENCLOSURE. MOUNT DISCONNECT ON SIDE OF REIL POWER ENCLOSURE. PROVIDE FRANGIBLE COUPLING IN CONDUIT. SEE WINDCONE DETAIL SHEET K5.

(4) PROVIDE 2" EMPTY HDPE CONDUIT FROM THE LIGHT BASE AS SHOWN TO DAYLIGHT INTO THE DITCH OR EMBANKMENT. SLOPE THE CONDUIT AT 0.5% TO DRAIN. INSTALL CONDUIT NO DIFFERENTLY THAN CONDUIT ON REST OF PROJECT. TRANSITION TO GRS CONDUIT 10' BEFORE CONDUIT DAYLIGHTS. FIELD VERIFY CONDUIT LENGTH REQUIRED TO DAYLIGHT. PROVIDE GALV. MESH OVER END OF CONDUIT. SECURE WITH STAINLESS STEEL PIPE CLAMP. ADD THIRD OPENING TO LIGHT BASE FOR CONDUIT. DRAINS INSTALLED @ +/- 5% UNDER HMA, (85 to 100' L/E)

(5) PROVIDE NEW DISTANCE SIGNS WHERE SHOWN. POWER FROM ADJACENT RUNWAY LIGHTS. SEE DETAIL SHEET K3 & SIGN SUMMARY, SHEET K6.

(6) PROVIDE A NEW TELEPHONE PEDESTAL AT THIS LOCATION. SPLICE NEW 50PR TELE CABLE TO EXISTING CABLE. RE-ROUTE EXISTING CABLE LOCATED NEXT TO RUNWAY TO THE NEW PEDESTAL. COORDINATE W/GENERAL CONTRACTOR TO EXCAVATE SAFETY AREA FROM EAST TO WEST. WHEN GENERAL REACHES EXISTING CABLE THEN INSTALL NEW PEDESTALS AND NEW CABLE IN THE EXCAVATED AREA AS SHOWN. COORDINATE WITH LOCAL TELEPHONE UTILITY TO HAVE THEM PERFORM THIS WORK. NOTIFY FAA 1 MONTH PRIOR TO DOING WORK AND AGAIN 1 WEEK PRIOR TO PERFORMING WORK. PAY LOCAL TELEPHONE COMPANY FOR THIS WORK.
— ENCOUNTERED ABANDONED COMMUNICATIONS CABLE, 12 PAIR,

(7) NOT USED

(8) PROVIDE A NEW PRIMARY PEDESTAL WHERE SHOWN AFTER GENERAL CONTRACTOR HAS EXCAVATED THE SAFETY AREA. SEE DETAILS, SHEET K8. PROVIDE NEW CONDUIT & CABLE BETWEEN EXISTING & NEW PEDESTALS. REROUTE EXISTING CONDUIT & CABLE NEXT TO RUNWAY TO NEW PEDESTAL. NOTIFY FAA 1 MONTH, 1 WEEK, AND AGAIN 1 DAY PRIOR TO PERFORMING WORK ON THEIR SYSTEM.

(9) THE FAA POWER CONDUIT/CABLE IS IMMEDIATELY ADJACENT TO THE RUNWAY LIGHTING CONDUCTORS. DIG WITH EXTREME CAUTION. FAA POWER IS LIVE AT ALL TIMES. OPERATING VOLTAGE IS SHOWN WHERE KNOWN. DO NOT DAMAGE. IF DAMAGED, REPLACE FAA CABLE AND FAA EQUIPMENT TO THE SATISFACTION OF THE FAA AND THE ENGINEER. — ENCOUNTERED LIVE FAA EQUIPMENT OR ABANDONED LEFT IN-PLACE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: M. MORRIS
DESIGNED BY: M.M.
DRAWN BY: I. ROBERTSON

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

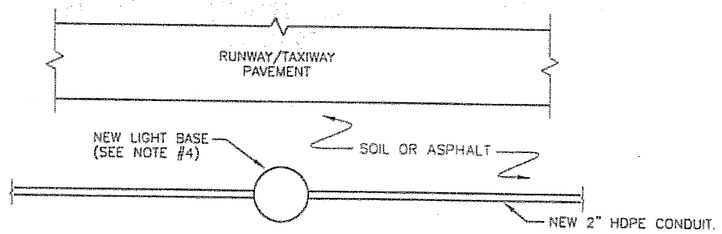
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

NEW RUNWAY & TAXIWAY ELECTRICAL PLAN

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/31/06

K2-K6Lighting.dwg
/Mar/06 04:56PM Irobertson

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	K2	

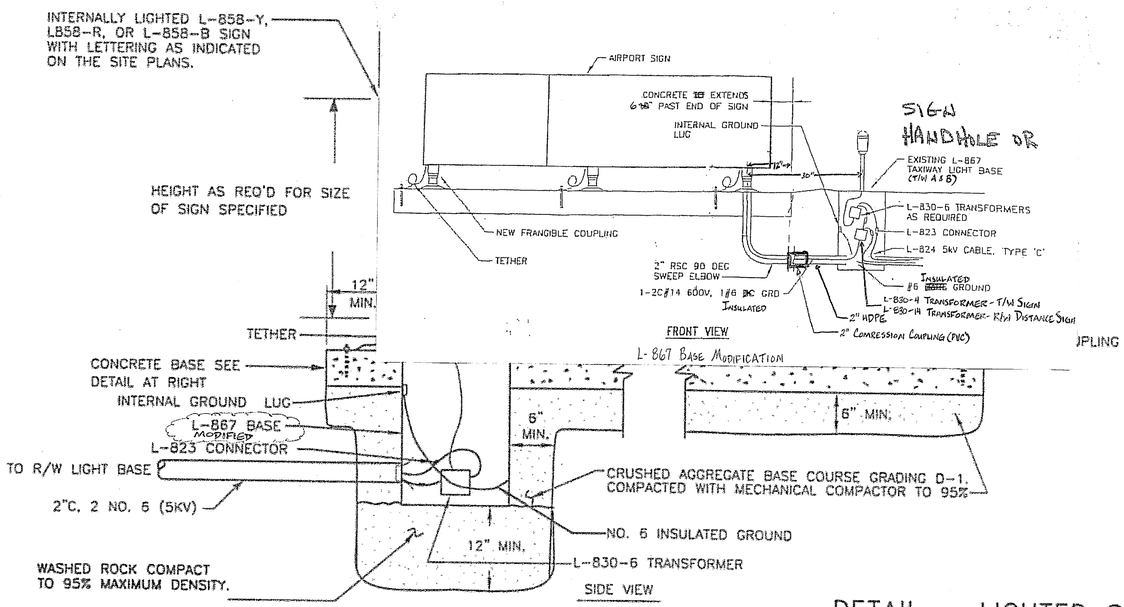


DETAIL: LIGHT BASE & CONDUIT INSTALLATION (TYP)

NO SCALE

NOTES:

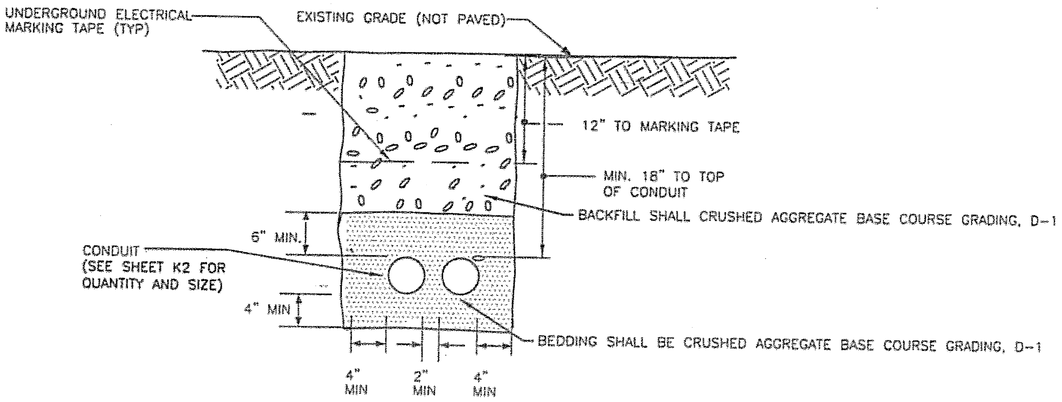
1. REMOVE THE EXISTING LIGHT BASES AND THE EXISTING CABLES.
2. WHERE THE LIGHTS ARE IN ASPHALT, CUT THE ASPHALT A MINIMUM OF 4.5' WIDE. IF MORE ROOM IS NEEDED TO PLACE THE LIGHT BASE, WIDEN THE ENTIRE CUT TO AT LEAST 18" WIDER THAN THE WIDTH OF THE EXCAVATION ON EACH SIDE OF THE TRENCH.
3. PATCH THE ASPHALT PER THE TRENCH DETAIL ON SHEET K7.
4. INSTALL THE NEW RUNWAY LIGHT BASES 10' FROM THE OUTSIDE EDGE OF THE RUNWAY EDGE LINE TO THE CENTER OF THE LIGHT LENS. INSTALL THE NEW TAXIWAY LIGHT BASES 10' FROM THE OUTSIDE EDGE OF THE TAXIWAY EDGE LINE TO THE CENTER OF THE LIGHT LENS.
5. INSTALL THE CONDUIT IN A STRAIGHT LINE BETWEEN THE LIGHT BASES.



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

DETAIL – LIGHTED SIGN

NO SCALE

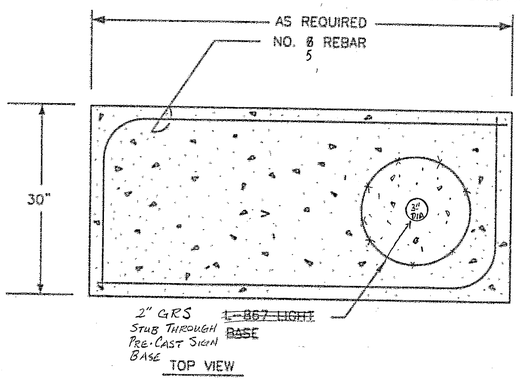


DETAIL: CONDUIT TRENCH WITH NO ASPHALT COVER

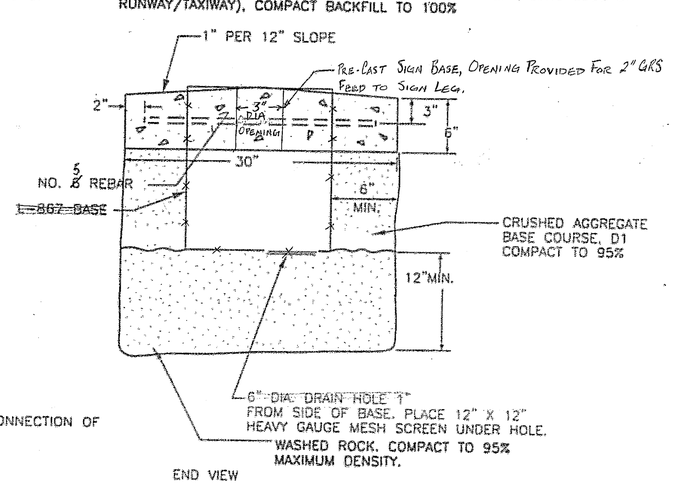
NO SCALE

NOTES:

1. THIS IS A TYPICAL TRENCH SECTION SHOWING MINIMUM DIMENSIONS AND REQUIRED MATERIALS. CONFIGURE ALL TRENCHES AS NECESSARY TO COMPLY WITH DIMENSIONS SHOWN.
2. BURY ALL CONDUIT AT 18" MINIMUM BELOW FINISH GRADE UNLESS OTHERWISE NOTED.
3. SLOPE CONDUIT AT 0.5% MIN. PER DETAIL ON SHEET K4.
4. TRENCH BEDDING AND BACKFILL TO BE COMPACTED TO 95% MAXIMUM DENSITY PER CIVIL SPECIFICATIONS.
5. SEE SHEETS K2 FOR NUMBER OF CONDUITS IN TRENCH.
6. WHERE TRENCHING THROUGH EXISTING ASPHALT, PATCH ASPHALT PER TRENCH DETAIL, SHEET K7.
7. BEDROCK MAY BE ENCOUNTERED DURING EXCAVATION. REMOVAL OF THE BEDROCK IS INCIDENTAL TO THE EXCAVATION AND PAID FOR UNDER THE BID ITEM FOR THE CONDUIT. THIS INCLUDES RIPPING OR DRILLING AND BLASTING AND ALL OTHER WORK REQUIRED TO REMOVE THE BEDROCK TO THE REQUIRED EXCAVATION DEPTH.
8. WHERE CONDUIT WILL BE COVERED WITH NEW ASPHALT (ALONG EDGE OF RUNWAY/TAXIWAY), COMPACT BACKFILL TO 100%



NOTES:
1. REFER TO HANDHOLE DETAIL ON SHEET K4 FOR CONNECTION OF CONDUITS TO L-867 BASE.



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [illegible] Date 3/9/06

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: M. MORRIS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

Mark Morris
EE-8613
3/31/06

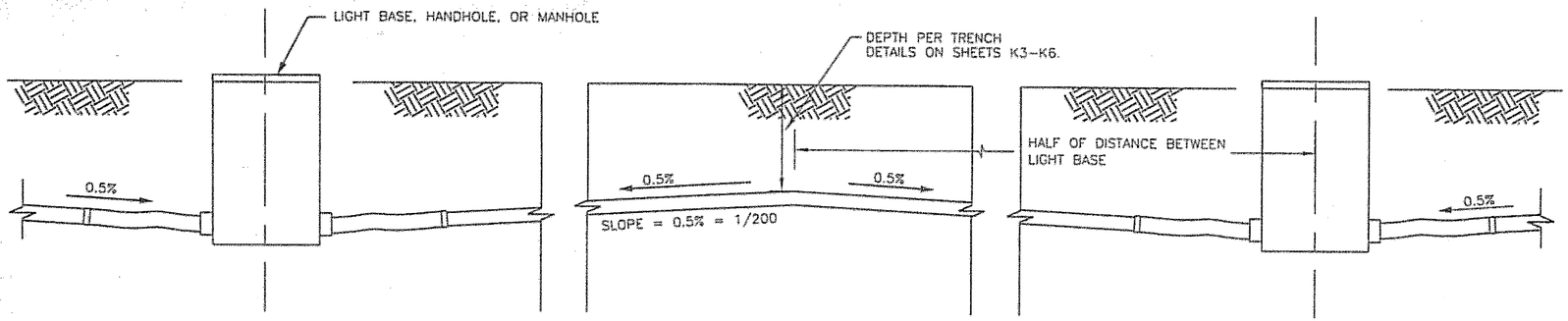
DESIGNED BY: M.M.
DRAWN BY: L.ROBERTSON

TRENCHING AND SIGN DETAILS

PATH: C:\Documents and Settings\lrobertson\Local Settings\Temp\AcPublish_1688\K2-K6Lighting.dwg
TAB: K3 Fri, 31/Mar/06 04:46PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION

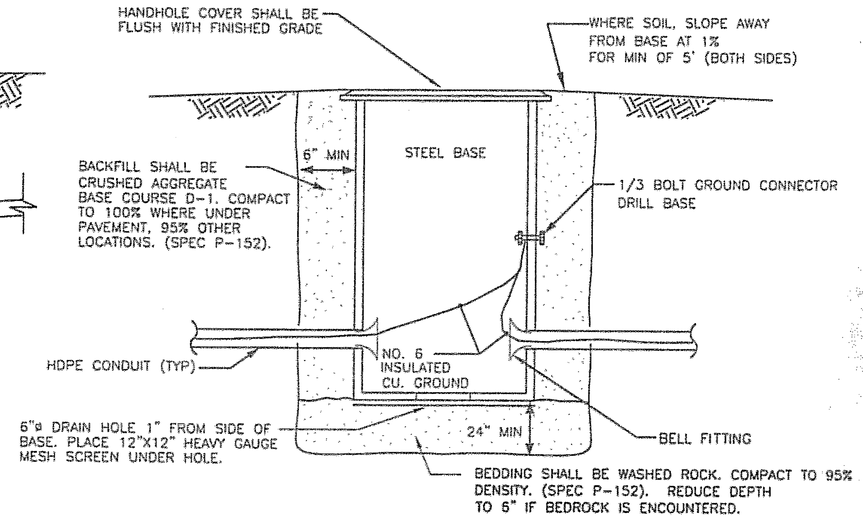
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	K3	



DETAIL: NEW CONDUIT INSTALLATION (TYP)

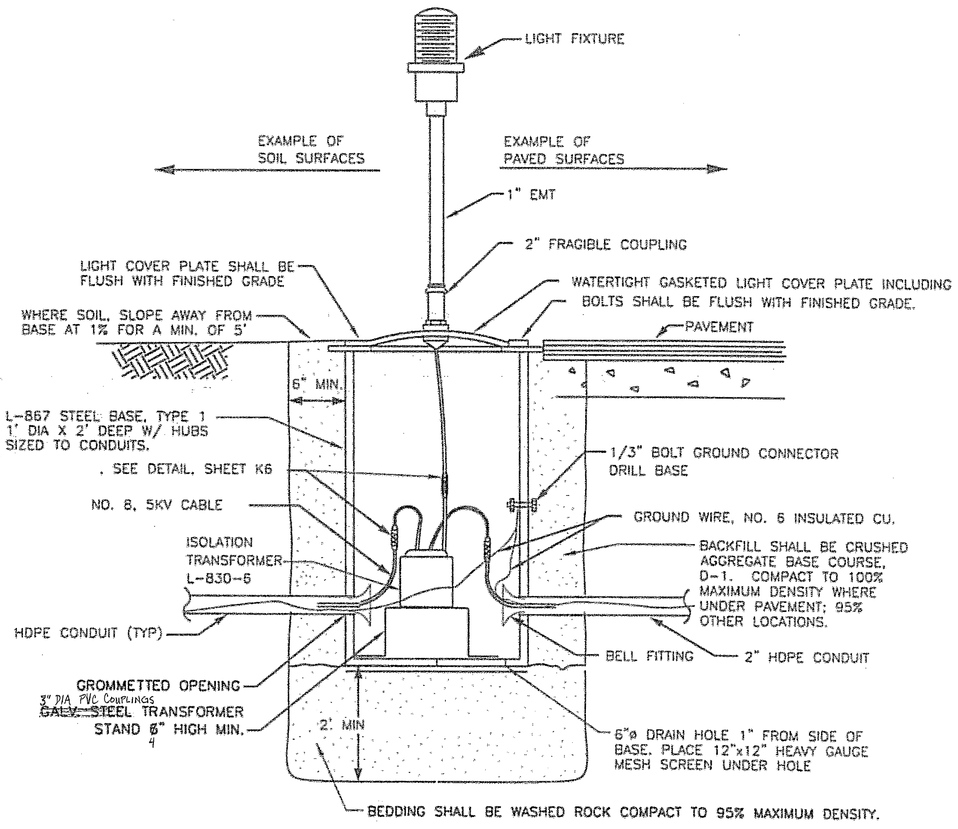
NO SCALE

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



DETAIL: HANDHOLE (TYP)

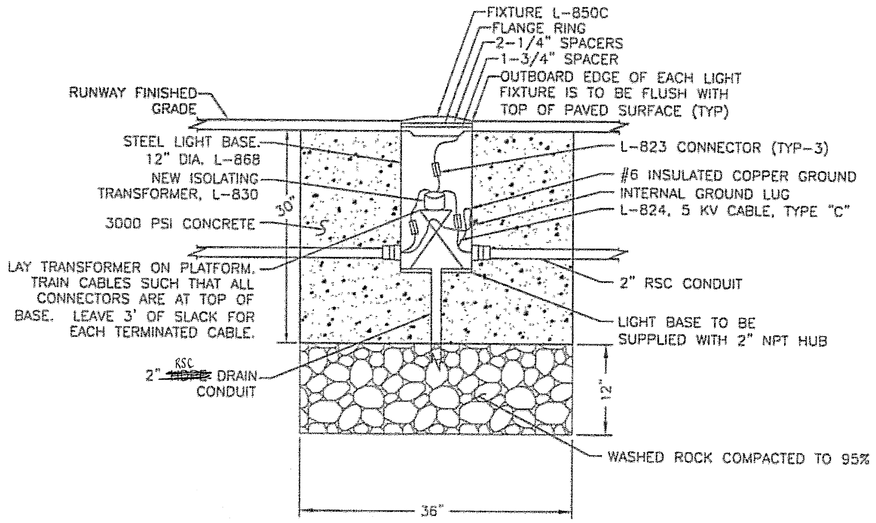
NO SCALE



DETAIL: TAXIWAY/RUNWAY EDGE LIGHT (TYP)

NO SCALE

NOTES:
1. PROVIDE WITH STAINLESS STEEL HARDWARE
2. IF BEDROCK IS ENCOUNTERED BELOW THE LIGHT BASE, THE BEDDING DEPTH MAY BE REDUCED FROM 24" TO 6".
3. PROVIDE THE NUMBER OF CONDUIT OPENINGS ON THE LIGHT BASE AS NECESSARY TO PERFORM THE WORK SHOWN ON THE DRAWINGS
4. RUNWAY EDGE LIGHT SHALL BE L-862 HIGH INTENSITY ELEVATED LIGHT WITH 2" FRANGIBLE COUPLING. ~~THE LIGHT SHALL HAVE A HINGED TOP WITH STAINLESS SNAP LOCK.~~ THE HEIGHT SHALL BE 24". THE LAMP SHALL BE 120W (200W FOR THRESHOLD LIGHT). LENS COLOR PER DRAWINGS.
5. TAXIWAY EDGE LIGHT SHALL BE LED (100,000 HR LIFE), L-861T. IT SHALL HAVE SAME OVERALL SILHOUETTE AS QUARTZ LIGHTS FOR A SIMILAR APPEARANCE. THE HEIGHT SHALL BE 24". THE LIGHT SHALL OPERATE AT 6.6A W/L-823 PLUG ASSEMBLY FOR CONNECTION TO A L-830 ISOLATION TRANSFORMER. IT SHALL CREATE NO INTERFERENCE WITH THE CONSTANT CURRENT REGULATOR DUE TO A SPECIAL CONVERTER. PROVIDE WITH HEATER.



NOTES:
LUMINIARE SHALL BE HIGH-STRENGTH ALUMINUM OPTICAL ASSEMBLY WITH DUCTILE IRON OUTER RING FOR SNOW PLOW PROTECTION; BEAM ORIENTATION SHALL BE ABLE TO BE EASILY CHANGED TO LEFT OR RIGHT TOE-IN; AND LUMINAIRE SHALL HAVE LONG LAMP LIFE.

FLUSH RUNWAY EDGE LIGHT DETAIL

NO SCALE

GENERAL NOTE FOR ALL DETAILS ON ALL K-SHEETS:

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

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: M. MORRIS
DESIGNED BY: M.M.
DRAWN BY: L.ROBERTSON

STATE OF ALASKA
Mark Morris
CE-8613
49th
PROFESSIONAL ENGINEER
3/31/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

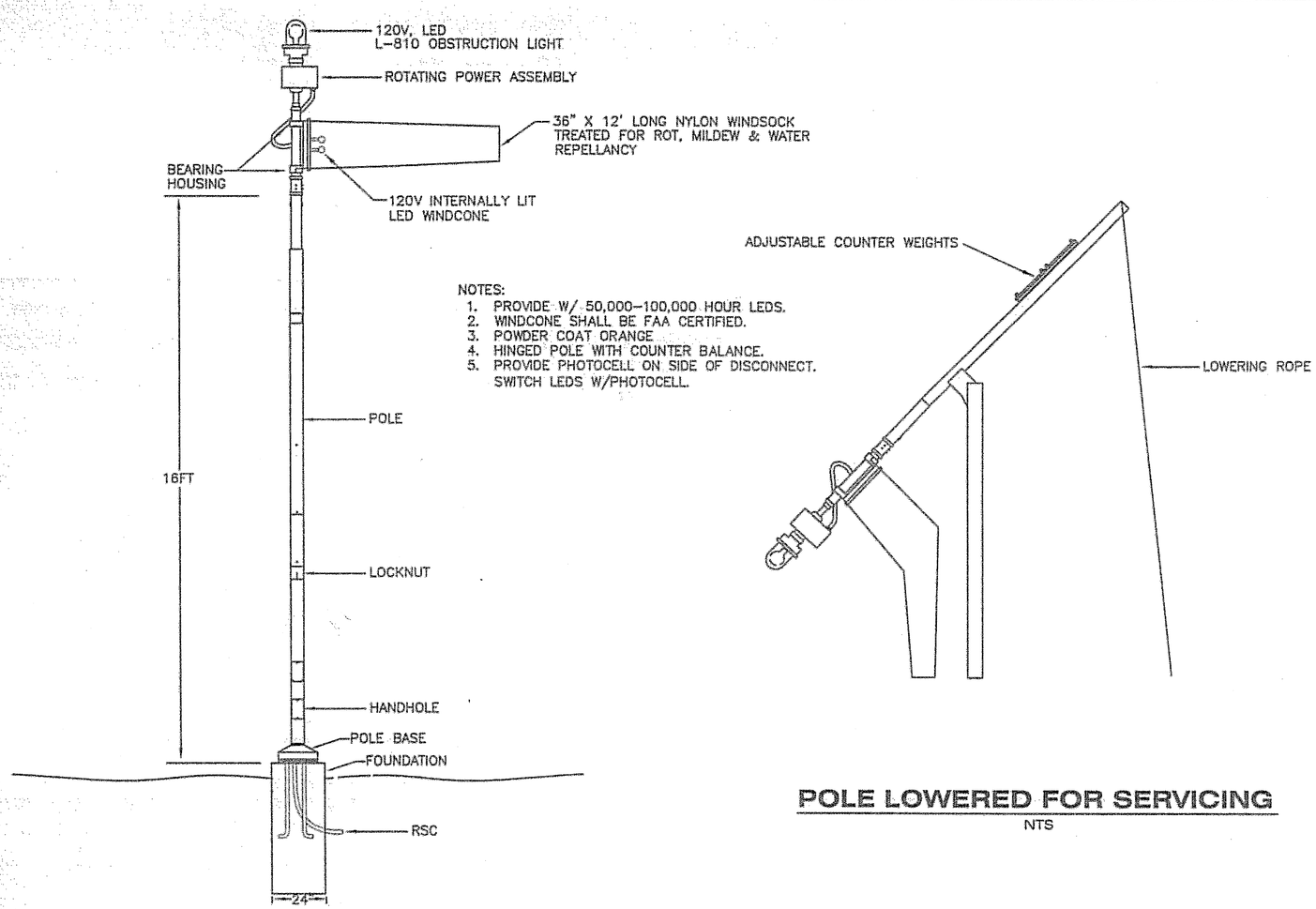
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

LIGHT BASE & HANDHOLE DETAILS

PATH: C:\Documents and Settings\lrobertson\Local Settings\Temp\AcPublish_1688\K2-K6Lighting.dwg
TAB: K4 Fri, 31/Mar/06 04:46PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	K4	



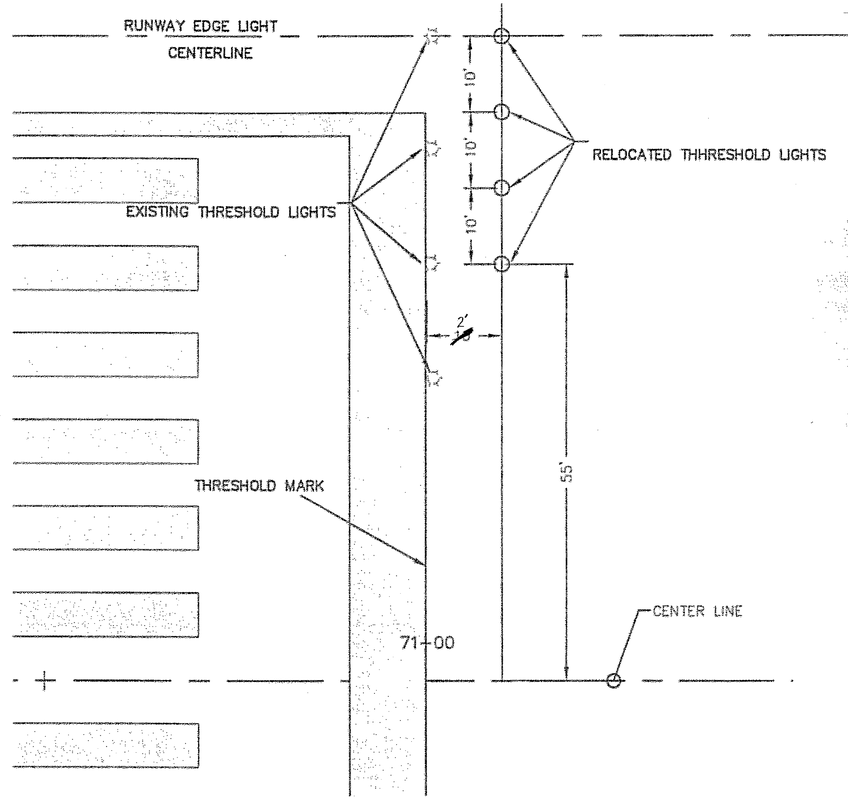
ELEVATION-WINDCONE (SIZE 2)

NTS

NOTES:
1. PROVIDE W/ 50,000-100,000 HOUR LEDS.
2. WINDCONE SHALL BE FAA CERTIFIED.
3. POWDER COAT ORANGE
4. HINGED POLE WITH COUNTER BALANCE.
5. PROVIDE PHOTOCELL ON SIDE OF DISCONNECT. SWITCH LEDS W/PHOTOCELL.

POLE LOWERED FOR SERVICING

NTS

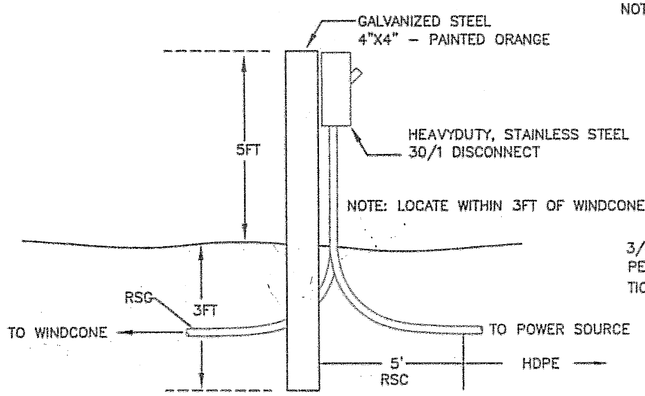


NOTE:

RELOCATE THE THRESHOLD LIGHTS AT BOTH ENDS OF THE RUNWAY ~~2~~ 2 FEET OUTSIDE THE THRESHOLD MARK AND SEPARATED 10 FEET O.C., AS SHOWN.

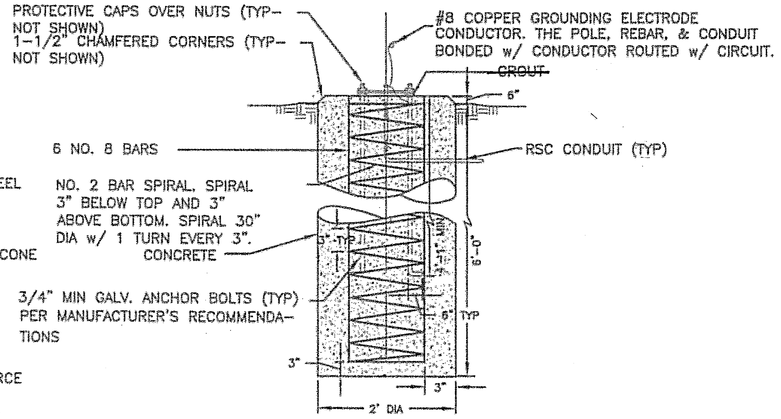
THRESHOLD LIGHTS RELOCATION DETAIL

NTS



ELEVATION-DISCONNECT

NTS



NOTES:
1. BACKFILL: CRUSHED AGGREGATE BASE COURSE D-1 COMPACTED TO 95% MODIFIED PROCTOR DENSITY.
2. ANCHOR BOLTS: ATSM-A36 w/ MINIMUM YIELD STRESS OF 36.0 KSI.

WINDCONE FOUNDATIONS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE JcBerger Date 3/9/09

CHECKED BY: M. MORRIS
DESIGNED BY: M.M.
DRAWN BY: R. SNYDER

STATE OF ALASKA
49th
Mark Morris
EE-8613
REGISTERED PROFESSIONAL ENGINEER
3/31/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

WINDCONE AND THRESHOLD LIGHT DETAILS

PATH: O:\Wrg\68167\Planset\K2-K6Lighting.dwg
TAB: K5 Fri, 31/Mar/06 04:53PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			AIP NO. 3-02-0323-1105	2006	K5	

NEW RUNWAY THRESHOLD EDGE LIGHT SCHEDULE

UNIT NO.	STATION	OFFSET	REMARKS
R7	~~11+00~~ 10+98	85' LT	#GREEN/RED LENS
R5	~~11+00~~ 10+98	75' LT	#GREEN/RED LENS
R3	~~11+00~~ 10+98	65' LT	#GREEN/RED LENS
R1	~~11+00~~ 10+98	55' LT	#GREEN/RED LENS
R2	~~11+00~~ 10+98	55' RT	#GREEN/RED LENS
R4	~~11+00~~ 10+98	65' RT	#GREEN/RED LENS
R6	~~11+00~~ 10+98	75' RT	#GREEN/RED LENS
R8	~~11+00~~ 10+98	85' RT	#GREEN/RED LENS
R67	~~71+00~~ 71+02	85' LT	#GREEN/RED LENS
R69	~~71+00~~ 71+02	75' LT	#GREEN/RED LENS
R71	~~71+00~~ 71+02	65' LT	#GREEN/RED LENS
R73	~~71+00~~ 71+02	55' LT	#GREEN/RED LENS
R74	~~71+00~~ 71+02	55' RT	#GREEN/RED LENS
R72	~~71+00~~ 71+02	65' RT	#GREEN/RED LENS
R70	~~71+00~~ 71+02	75' RT	#GREEN/RED LENS
R68	~~71+00~~ 71+02	85' RT	#GREEN/RED LENS

LENS ORIENTATION: # RED FACES RW MIDPOINT

NEW FLUSH RUNWAY EDGE LIGHTS SCHEDULE

UNIT NO.	TYPE	STATION	OFFSET	REMARKS
R18B	HIRL	RW 10-28 21+00	85' RT	**WHITE/YELLOW LENS
R20B	HIRL	RW 10-28 23+00	85' RT	**WHITE/YELLOW LENS
R28B	HIRL	RW 10-28 33+00	85' RT	WHITE LENS
R66	HIRL	RW 10-28 69+00	85' RT	**WHITE/YELLOW LENS

LENS ORIENTATION: ** YELLOW FACES RW MIDPOINT

NEW AIRCRAFT TURNAROUND TAXIWAY EDGE LIGHT SCHEDULE

UNIT NO.	TYPE	STATION	OFFSET	REMARKS
T71		RW 10-28 70+66 0	87.0' RT	BLUE LENS
T72		RW 10-28 70+66 0	(34) ~~148.5~~' RT	BLUE LENS
T73		RW 10-28 70+66 0	185.2' RT	BLUE LENS
T74		RW 10-28 70+11 0.2	185.2' RT	BLUE LENS
T75		RW 10-28 69+66 0.4	185.2' RT	BLUE LENS
T76		RW 10-28 69+11 0.6	185.2' RT	BLUE LENS
T77		RW 10-28 68+66 0.8	185.2' RT	BLUE LENS
T78		RW 10-28 68+11	185.2' RT	BLUE LENS
T79		RW 10-28 67+75 1	152.5 ~~160.0~~' RT	BLUE LENS
T80		RW 10-28 67+ ~~40~~ 37	119.7 ~~125.0~~' RT	BLUE LENS
T81		RW 10-28 67+00	87.0' RT	BLUE LENS

WIND CONE/SEGMENTED CIRCLE INSTALLATION

UNIT NO.	TYPE	STATION	OFFSET	REMARKS
WC	LIGHTED	RW 10-28 25+00	306' RT	
WC	LIGHTED	RW 10-28 61+00	300' LT	

NEW RUNWAY EDGE LIGHT SCHEDULE

UNIT NO.	TYPE	STATION	OFFSET	REMARKS
R10	HIRL	RW 10-28 13+00	85' RT	**WHITE/YELLOW LENS
R9	HIRL	RW 10-28 13+00	85' LT	**WHITE/YELLOW LENS
R12	HIRL	RW 10-28 15+00	85' RT	**WHITE/YELLOW LENS
R11	HIRL	RW 10-28 15+00	85' LT	**WHITE/YELLOW LENS
R14	HIRL	RW 10-28 17+00	85' RT	**WHITE/YELLOW LENS
R13	HIRL	RW 10-28 17+00	85' LT	**WHITE/YELLOW LENS
R16	HIRL	RW 10-28 19+00	85' RT	**WHITE/YELLOW LENS
R15	HIRL	RW 10-28 19+00	85' LT	**WHITE/YELLOW LENS
R17	HIRL	RW 10-28 21+00	85' LT	**WHITE/YELLOW LENS
R19	HIRL	RW 10-28 23+00	85' LT	**WHITE/YELLOW LENS
R22	HIRL	RW 10-28 25+00	85' RT	**WHITE/YELLOW LENS
R21	HIRL	RW 10-28 25+00	85' LT	**WHITE/YELLOW LENS
R24	HIRL	RW 10-28 27+00	85' RT	**WHITE/YELLOW LENS
R23	HIRL	RW 10-28 27+00	85' LT	**WHITE/YELLOW LENS
R26	HIRL	RW 10-28 29+00	85' RT	**WHITE/YELLOW LENS
R25	HIRL	RW 10-28 29+00	85' LT	**WHITE/YELLOW LENS
R28	HIRL	RW 10-28 31+00	85' RT	**WHITE/YELLOW LENS
R27	HIRL	RW 10-28 31+00	85' LT	**WHITE/YELLOW LENS
R29	HIRL	RW 10-28 33+00	85' LT	WHITE LENS
R32	HIRL	RW 10-28 35+00	85' RT	WHITE LENS
R31	HIRL	RW 10-28 35+00	85' LT	WHITE LENS
R34	HIRL	RW 10-28 37+00	85' RT	WHITE LENS
R33	HIRL	RW 10-28 37+00	85' LT	WHITE LENS
R36	HIRL	RW 10-28 39+00	85' RT	WHITE LENS
R35	HIRL	RW 10-28 39+00	85' LT	WHITE LENS
R38	HIRL	RW 10-28 41+00	85' RT	WHITE LENS
R37	HIRL	RW 10-28 41+00	85' LT	WHITE LENS
R40	HIRL	RW 10-28 43+00	85' RT	WHITE LENS
R39	HIRL	RW 10-28 43+00	85' LT	WHITE LENS
R42	HIRL	RW 10-28 45+00	85' RT	WHITE LENS
R41	HIRL	RW 10-28 45+00	85' LT	WHITE LENS
R44	HIRL	RW 10-28 47+00	85' RT	WHITE LENS
R43	HIRL	RW 10-28 47+00	85' LT	WHITE LENS
R46	HIRL	RW 10-28 49+00	85' RT	WHITE LENS
R45	HIRL	RW 10-28 49+00	85' LT	WHITE LENS
R48	HIRL	RW 10-28 51+00	85' RT	**WHITE/YELLOW LENS
R47	HIRL	RW 10-28 51+00	85' LT	**WHITE/YELLOW LENS
R50	HIRL	RW 10-28 53+00	85' RT	**WHITE/YELLOW LENS
R49	HIRL	RW 10-28 53+00	85' LT	**WHITE/YELLOW LENS
R52	HIRL	RW 10-28 55+00	85' RT	**WHITE/YELLOW LENS
R51	HIRL	RW 10-28 55+00	85' LT	**WHITE/YELLOW LENS
R54	HIRL	RW 10-28 57+00	85' RT	**WHITE/YELLOW LENS
R53	HIRL	RW 10-28 57+00	85' LT	**WHITE/YELLOW LENS
R56	HIRL	RW 10-28 59+00	85' RT	**WHITE/YELLOW LENS
R55	HIRL	RW 10-28 59+00	85' LT	**WHITE/YELLOW LENS
R58	HIRL	RW 10-28 61+00	85' RT	**WHITE/YELLOW LENS
R57	HIRL	RW 10-28 61+00	85' LT	**WHITE/YELLOW LENS
R60	HIRL	RW 10-28 63+00	85' RT	**WHITE/YELLOW LENS
R59	HIRL	RW 10-28 63+00	85' LT	**WHITE/YELLOW LENS
R62	HIRL	RW 10-28 65+00	85' RT	**WHITE/YELLOW LENS
R61	HIRL	RW 10-28 65+00	85' LT	**WHITE/YELLOW LENS
R64	HIRL	RW 10-28 67+00	85' RT	**WHITE/YELLOW LENS
R63	HIRL	RW 10-28 67+00	85' LT	**WHITE/YELLOW LENS
R65	HIRL	RW 10-28 69+00	85' LT	**WHITE/YELLOW LENS
R18	HIRL	RW 10-28 19+80	85' RT	**WHITE/YELLOW LENS
R20	HIRL	RW 10-28 24+20	85' RT	**WHITE/YELLOW LENS
R28A	HIRL	RW 10-28 31+70	85' RT	WHITE LENS

LENS ORIENTATION: ** YELLOW FACES RW MIDPOINT

NEW RUNWAY DISTANCE REMAINING SIGN SUMMARY

Sign No.	Sign Size	Sign Type	Front / Back	Legend	LEGEND FACING	Station	Offset
1	4	L-858B	FRONT BACK	5 1	NW SE	21+00	140 LEFT
2	4	L-858B	FRONT BACK	4 2	NW SE	31+00	140 LEFT
3	4	L-858B	FRONT BACK	3 3	NW SE	41+00	140 LEFT
4	4	L-858B	FRONT BACK	2 4	NW SE	51+00	140 LEFT
5	4	L-858B	FRONT BACK	1 5	NW SE	61+00	140 LEFT

NOTES:

1) ALL SIGNS ARE TO BE LIGHTED.
2) OFFSET DISTANCES ARE TO THE RUNWAY FACE OF THE SIGN.
3) IN NO CASE SHOULD THE DISTANCE FROM THE TOP OF THE SIGN TO GRADE EXCEED 60" ON THE SIDE NEAREST THE RUNWAY.
4) ALL SIGNS SHALL COMPLY WITH A/C 150/5345-44, BE INSTALLED PER A/C 150-5340-180& PER SPECIFICATIONS.
5) PROVIDE STYLE 3 SIGNS, POWER FROM THE RUNWAY LIGHTING CIRCUIT

NEW RUNWAY EXIT SIGN SIGN SUMMARY

Sign No.	Sign Size	Sign Type	Front / Back	Legend	LEGEND FACING	Station	Offset
6	1	L-858Y	FRONT BACK	A →	NW SE	19+ $\frac{8}{60}$	$\frac{5}{90}$ RIGHT
7	1	L-858Y	FRONT BACK	← A	NW SE	24+ $\frac{2}{50}$	$\frac{5}{90}$ RIGHT
8	1	L-858Y	FRONT BACK	B →	NW SE	31+70	$\frac{5}{90}$ RIGHT
9	1	L-858Y	FRONT BACK	← B	NW SE	35+00	$\frac{5}{90}$ RIGHT

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE J. Lubers Date 3/9/09

CHECKED BY: M. MORRIS
STATE OF ALASKA 49th Mark Morris EE-8613 REGISTERED PROFESSIONAL ENGINEER
3/31/06
DESIGNED BY: M.M.
DRAWN BY: L.ROBERTSON

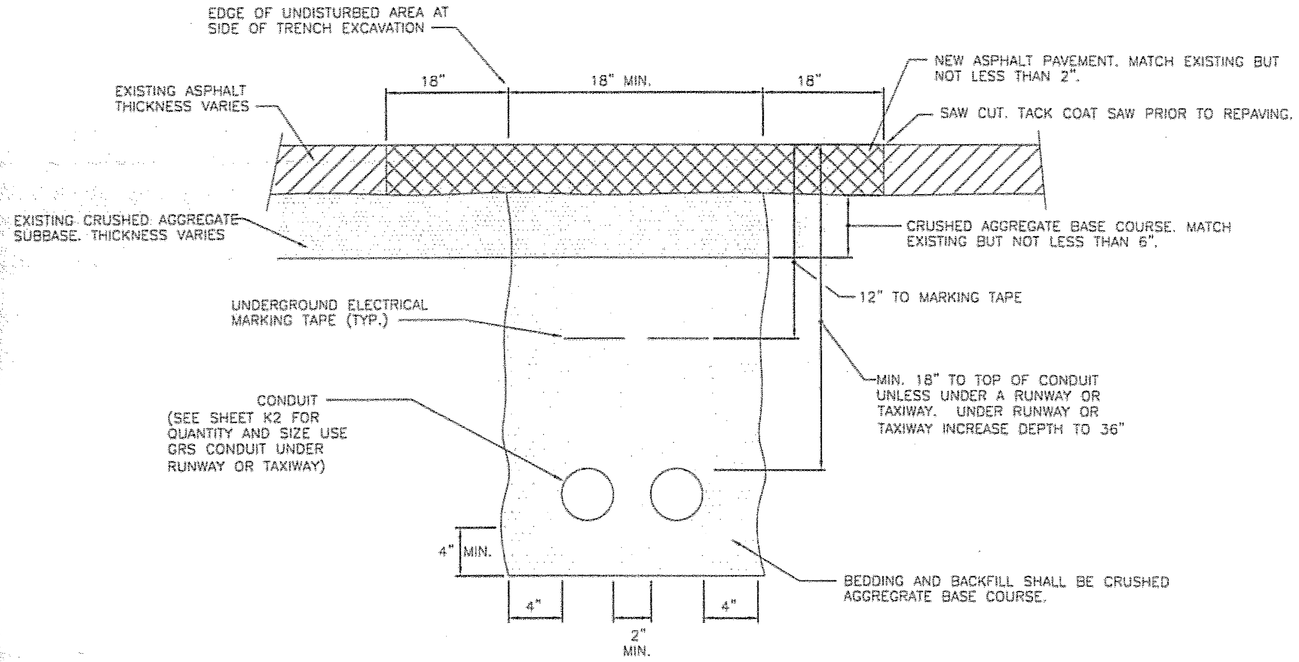
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

LIGHTING AND SIGN SUMMARY TABLES

PATH: C:\Documents and Settings\lrobertson\Local Settings\Temp\AcPublish_1888\K2-K6Lighting.dwg
TAB: K6 Fri, 31/Mar/06 04:47PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			AIP NO. 3-02-0323-1105	2006	K6	

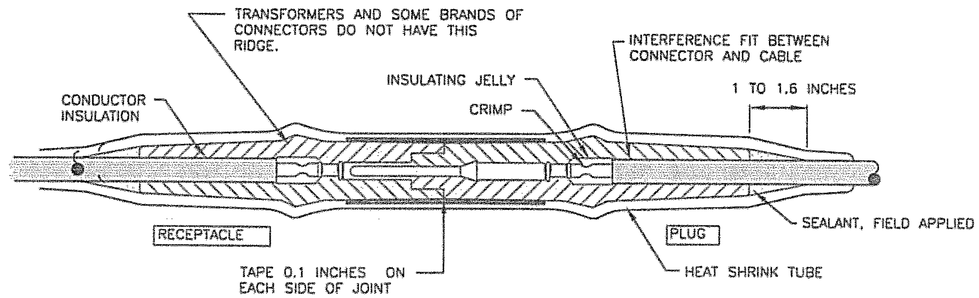


CONDUIT TRENCH WITHIN PAVED AREAS TO BE PACHED

NTS

NOTES:

1. THIS IS A TYPICAL TRENCH SECTION SHOWING MINIMUM DIMENSIONS AND REQUIRED MATERIALS. CONFIGURE ALL TRENCHES AS NECESSARY TO COMPLY WITH DIMENSIONS SHOWN.
2. BURY ALL CONDUIT AT 18" MINIMUM BELOW FINISH GRADE UNLESS OTHERWISE NOTED.
3. SLOPE CONDUIT AT 0.5% MIN. PER DETAIL ON SHEET K4.
4. TRENCH BEDDING AND BACKFILL TO BE COMPACTED TO 95% MAXIMUM DENSITY.
5. CRUSHED AGGREGATE BASE COURSE TO BE COMPACTED TO 100% MAXIMUM DENSITY FOR TOP 6".
6. SEE SHEET K2 FOR NUMBER OF CONDUITS IN TRENCH.
7. RETURN PAVEMENT TO THE CONDITION IT WAS IN PRIOR TO MAKING THE SAW CUT.



L-823 CONNECTOR WATERPROOFING DETAIL

NTS

NOTES

1. CLEAN THE CABLE THOROUGHLY 12 INCHES MIN. FROM THE END.
2. REMOVE INSULATION PER MANUFACTURERS INSTRUCTIONS. DO NOT NICK THE CONDUCTOR. UTILIZE PENCILING TOOL.
3. INSTALL PIN AND / OR RECEPTACLE WITH A CRIMPING TOOL WHICH MUST BE COMPLETELY CLOSED BEFORE THE TOOL MAY BE REMOVED.
4. BE SURE CABLE AND CONNECTOR FITTINGS ARE CLEAN. COAT THE CABLE INSULATION WITH INSULATING JELLY FROM THE CONNECTOR.
5. CAREFULLY INSERT CABLE INTO CONNECTOR TO THE PROPER DEPTH.
6. SLIP 16 INCH LENGTH OF HEAT SHRINK TUBING ON TRANSFORMER LEAD. RANCHER TAPE KIT OR APPROVED EQUAL.
7. COMPLETE CONNECTION BY MATING THE PLUG AND RECEPTACLE. CAUTION: BE SURE THE CABLE DOES NOT SLIP OUT WHEN THE CONNECTION IS MADE.
8. APPLY RUBBER TAPE AND VINYL TAPE ONE HALF LAPPED, 1.6 INCHES ON EACH SIDE OF JOINT.
9. ANY CONNECTOR WHICH IS CONTAMINATED BY DIRT OR OTHER DAMAGING MATERIAL SHALL BE REMOVED AND NOT REINSTALLED.
10. CLEAN CONNECTOR, HEAT SHRINK AND CABLE INSULATION WITH WAX OR GREASE SOLVENT TO REMOVE SURFACE SILICONE JELLY. MAINTAIN CLEANLINESS THROUGH INSTALLATION PROCESS.
11. APPLY SILICONE SEALANT THOROUGHLY AROUND THE CABLE INSULATION BENEATH ENTIRE LENGTH OF HEAT SHRINK. SEALANT SHALL BE RAYCHEM S-1052 (STRIPS), OR SILICONE, OR APPROVED EQUAL.
12. CENTER HEAT SHRINK OVER THE CONNECTOR. APPLY HEAT EVENLY BEGINNING AT THE CENTER AND WORKING AROUND CABLE TO ENDS. DO NOT OVER HEAT.
13. THE HEAT SOURCE SHALL BE ELECTRIC HEAT GUN OR A PROPANE TORCH WITH A FLAME SPREADER TO BE APPROVED BY THE ENGINEER.

INSTALLATION INSTRUCTIONS TO SUPPLEMENT THE MANUFACTURERS INSTRUCTIONS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 3/9/09

CHECKED BY: M. MORRIS
STATE OF ALASKA 49th PROFESSIONAL ENGINEER Mark Morris EE-8613
3/31/06
DESIGNED BY: M.M.
DRAWN BY: L.ROBERTSON

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

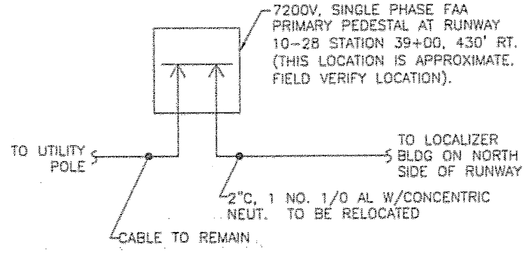
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

TRENCHING AND CONNECTION DETAILS

PATH: C:\Documents and Settings\lrobertson\Local Settings\Temp\AcPublish_1688\K2-K6Lighting.dwg
TAB: K7 Fri, 31/Mar/06 04:47PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	K7	



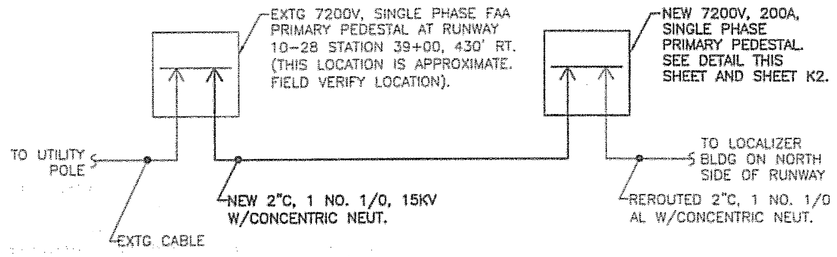
EXISTING FAA SINGLE LINE DIAGRAM

NO SCALE

NOTES:

1. THE EXISTING PEDESTAL IS A POWER DESIGN CABLE JUNCTION PEDESTAL, MODEL # CJP-10-33. POWER DESIGN CONTACT PHONE NO. 541-354-3222. WEB ADDRESS: WWW.POWERDESIGNINC.COM.

2. DISCONNECT THE CABLE THAT FEEDS POWER TO THE LOCALIZER FROM THE PEDESTAL. REROUTE THE CONDUIT AND CABLE TO THE NEW PEDESTAL. PROVIDE NEW LOAD BREAK ELBOWS.



NEW FAA SINGLE LINE DIAGRAM

NO SCALE

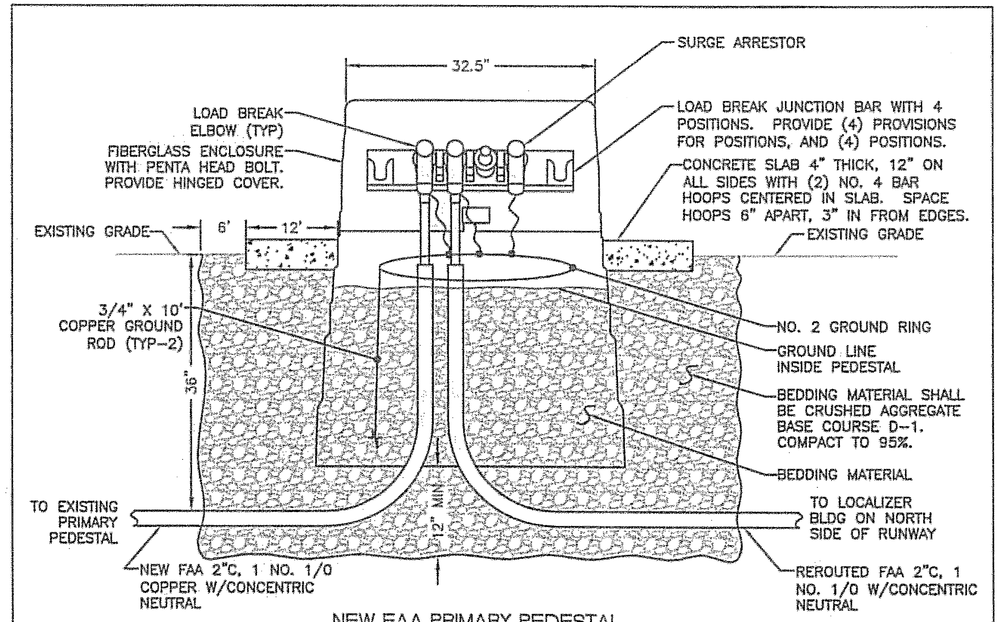
NOTES:

1. CONNECT THE NEW CABLE TO THE EXISTING PRIMARY PEDESTAL WITH A NEW LOAD BREAK ELBOW. THE EXISTING PEDESTAL IS SITTING ON A CONCRETE PAD. REUSE EXISTING CONDUIT IF NECESSARY TO ROUTE NEW CABLE INTO THE PEDESTAL.

2. PROVIDE A NEW PRIMARY PEDESTAL AS SHOWN. SEE DETAIL THIS SHEET AND ON SHEET K2. THE NEW PEDESTAL SHALL BE A POWER DESIGN CABLE JUNCTION PEDESTAL MODEL # CJP-10-33-L2-MG-2215 OR EQUAL. PROVIDE (4) POSITIONS, LOADBREAK JUNCTION, PARKING STAND WITH (2) POSITIONS, LOADBREAK ELBOWS, GROUNDING, ETC.

3. PROVIDE ALL NECESSARY MATERIALS AND LABOR TO ROUTE THE EXISTING FAA POWER CIRCUIT AS SHOWN ON THE DRAWINGS.

4. NOTIFY FAA ONE MONTH, ONE WEEK, AND AGAIN ONE DAY BEFORE PERFORMING WORK ON THEIR SYSTEM. COORDINATE WITH THEM BEFORE, DURING, AND AFTER PERFORMING THE WORK. COORDINATE FAA CONTACTS WITH ENGINEER.



NEW FAA PRIMARY PEDESTAL

NO SCALE

NOTES:

1. PROVIDE A NO. 2 GROUND RING INSIDE THE PEDESTAL. PROVIDE TWO GROUND RODS INSIDE THE PEDESTAL. BOND TO THE GROUND RING INSIDE THE PEDESTAL WITH (2) NO. 6 BONDING JUMPERS. BOND THE TWO NEUTRALS TO THE GROUND RING. USE IRREVERSIBLE TYPE CONNECTORS (BURNDY OR EQUAL) FOR ALL GROUNDING CONNECTIONS. ROUTE A NO. 2 BONDING CONDUCTOR FROM THE INTERNAL GROUND RING TO THE LOAD BREAK JUNCTION BAR. BOND A NO. 6 GROUNDING JUMPER FROM EACH ELBOW AND CABLE SHIELD ADAPER TO THE NO. 2 BONDING CONDUCTOR. BOND THE NO. 4 GROUNDING CONDUCTOR FOR THE SURGE ARRESTOR TO THE NO. 2 BONDING CONDUCTOR.

2. BURY CONDUIT PER TRENCH DETAIL, SHEETS K3 & K7. BURY FAA CONDUIT 36" BELOW GRADE.

3. LOCATE PEDESTAL OUTSIDE OF THE RUNWAY SAFETY AREA.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE _____ Date 3/31/06

CHECKED BY: M. MORRIS

STATE OF ALASKA
Mark Morris
EE-8613
REGISTERED PROFESSIONAL ENGINEER
3/31/06

DESIGNED BY: M.M.
DRAWN BY: L.ROBERTSON

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

PEDESTAL DETAILS

PATH: O:\Wrg\68167\Planset\K2-K6Lighting.dwg
TAB: K8 Fri, 31/Mar/06 04:49PM lrobertson

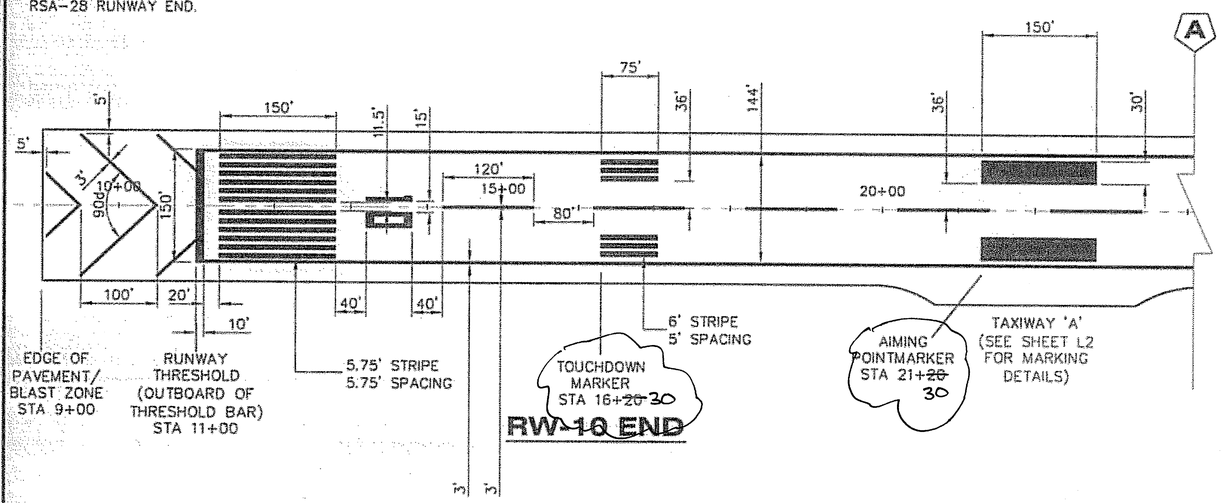
REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	K8	

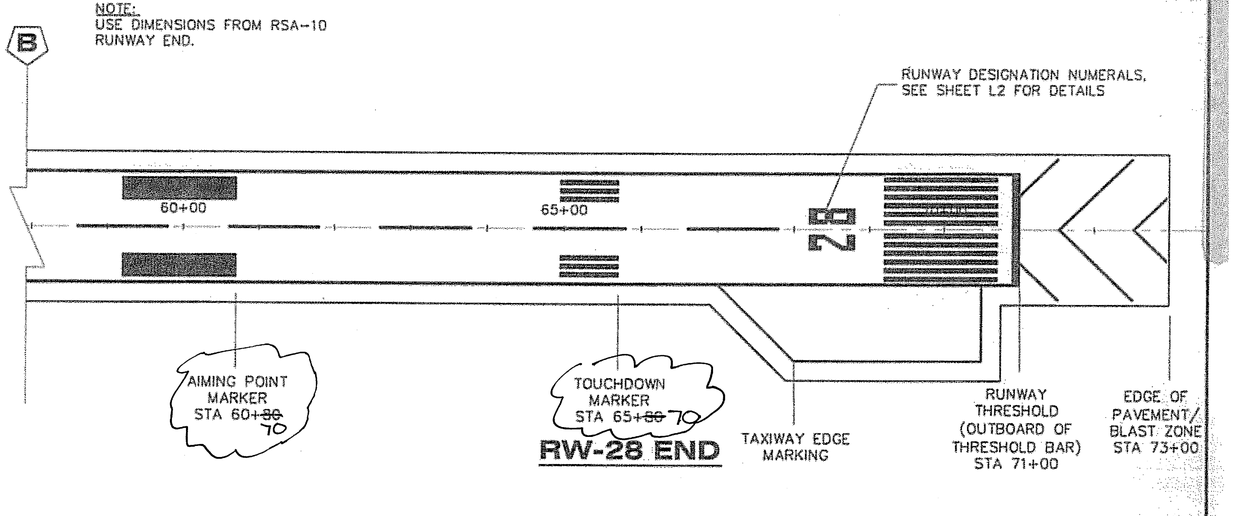
GENERAL NOTES

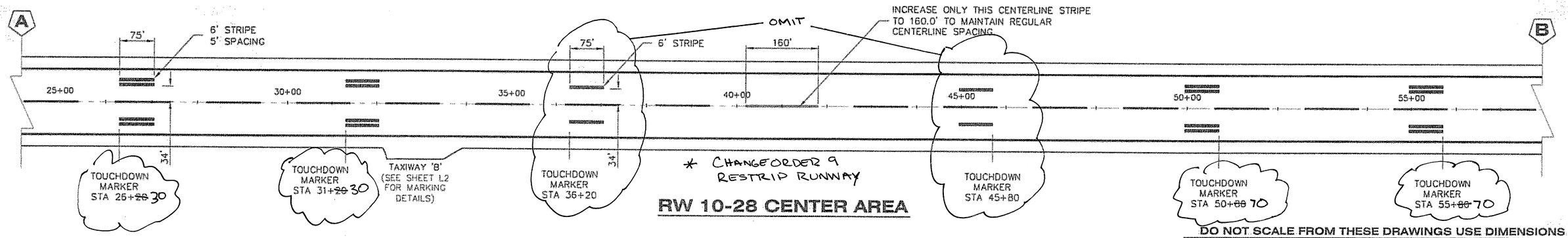
1. LAYOUT RUNWAY SPACING FROM BOTH ENDS TOWARDS CENTER.
2. ALL RUNWAY MARKINGS SHALL BE ACCOMPLISHED USING AVIATION WHITE COLORED PAINT, EXCEPT CHEVRONS AND RUNWAY HOLDING POSITION MARKINGS WHICH ARE YELLOW.
3. THE NUMERALS SHALL BE HORIZONTALLY SPACED 15 FEET APART SYMETRICAL ABOUT CENTERLINE.
4. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN FEET.
5. EXISTING RUNWAY SHALL BE FREE OF LOOSE OR FLAKING PAINT PRIOR TO RESTRIPING.
6. REMOVAL OF ANY EXISTING RUNWAY PAINT NOT COVERED BY NEW OVERLAY SHALL BE ACCOMPLISHED PRIOR TO PAINTING. SEE SPECIAL PROVISIONS FOR DETAILS OF REMOVAL AND PAYMENT FOR THIS WORK.
7. ALL STRIPING LAYOUT & MATERIALS TO CONFORM TO FAA ADVISORY CIRCULAR NO. 150/5340-1J, "STANDARDS FOR AIRPORT MARKINGS", AND APPLICABLE APPENDICES, CHANGES, AND UPDATES.

NOTE:
ALL DIMENSIONS ARE TYPICAL FOR RSA-28 RUNWAY END.



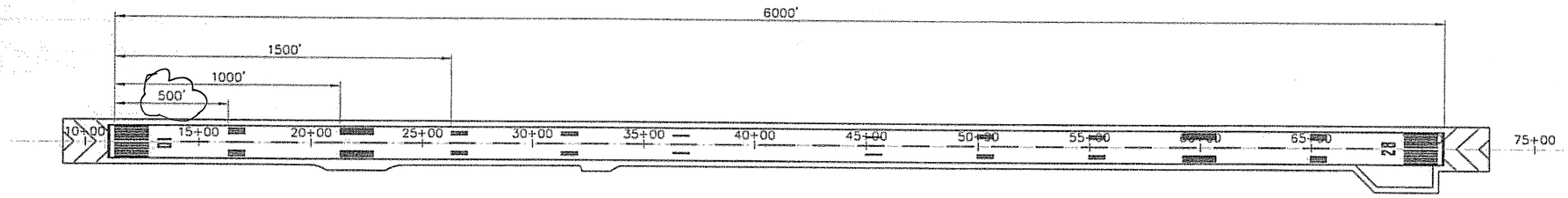
NOTE:
USE DIMENSIONS FROM RSA-10 RUNWAY END.





* CHANGEORDER 9
RESTRIP RUNWAY

RW 10-28 CENTER AREA



RUNWAY MARKER LAYOUT PLAN

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE L Berger Date 3/5/09

CHECKED BY: P. CARROLL
STATE OF ALASKA — 49th — Joel D. Osburn CE-11014 — REGISTERED PROFESSIONAL ENGINEER — 4/6/06
DESIGNED BY: M. TAYLOR
DRAWN BY: M.T./R.S.
PATH: G:\wrg\68167\Planset\L1-L3Marking.dwg
TAB: L1 Mon, 03/Apr/06 03:41PM lroberts0n

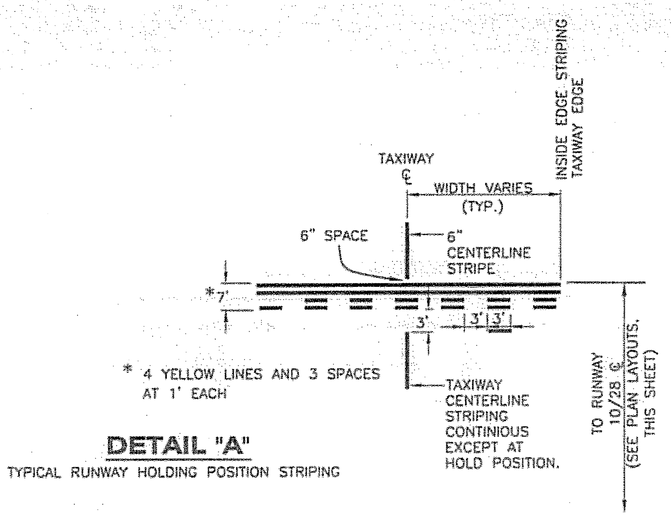
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

RSA 10-28 MARKING LAYOUT PLAN

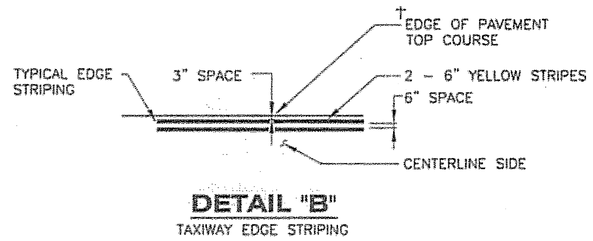
REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	L1	69



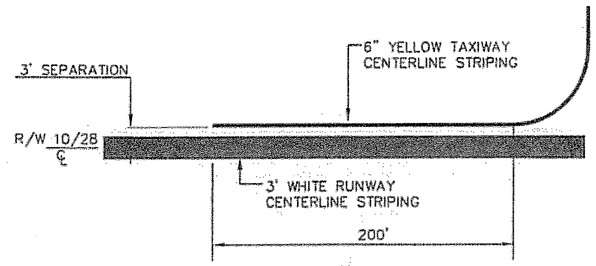
DETAIL "A"

TYPICAL RUNWAY HOLDING POSITION STRIPING



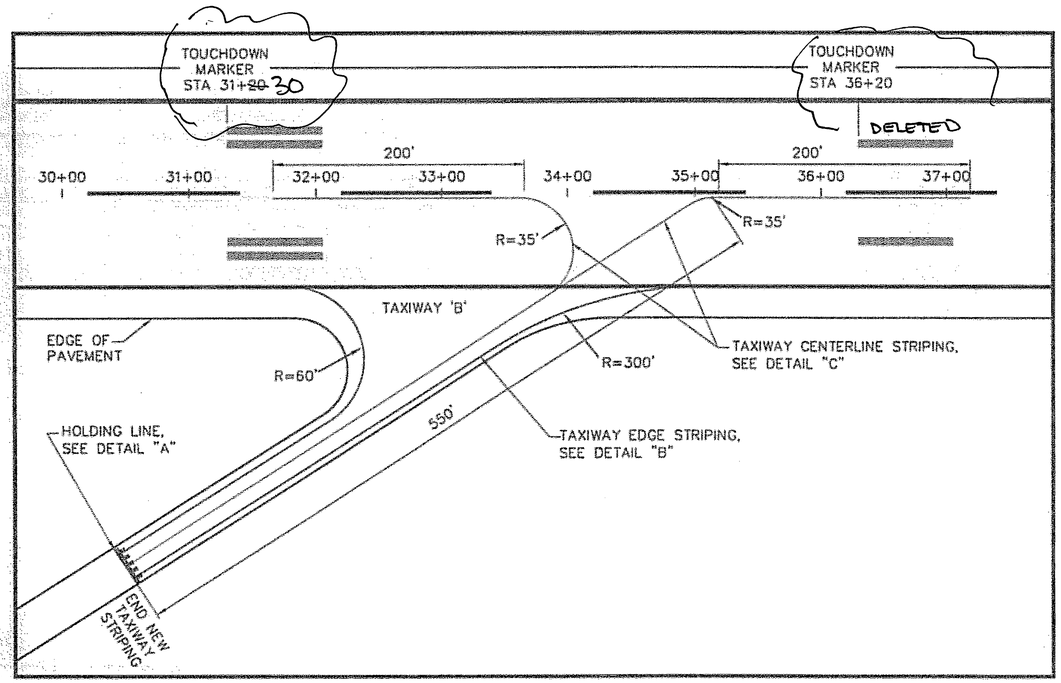
DETAIL "B"

TAXIWAY EDGE STRIPING

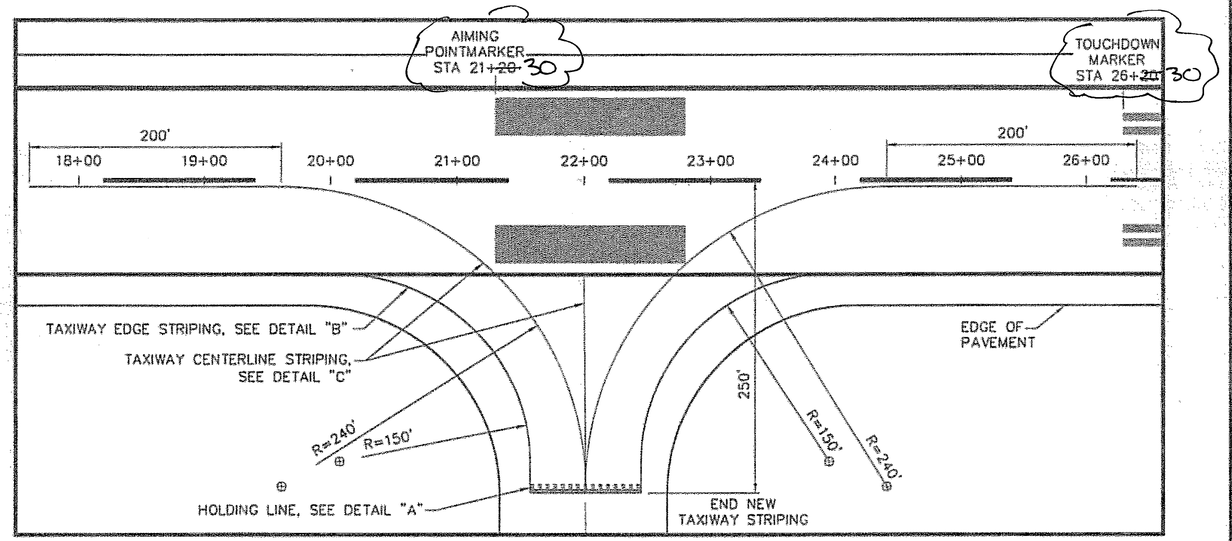


DETAIL "C"

RUNWAY – TAXIWAY STRIPING



TAXIWAY 'B' STRIPING PLAN



TAXIWAY 'A' STRIPING PLAN

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL

STATE OF ALASKA
49th
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: M. TAYLOR

DRAWN BY: R. SNYDER

PATH: Q:\Wrg\68167\Planset\L1-L3Marking.dwg

TAB: L2 Mon, 03/Apr/06 03:41PM lrobertson

REVISIONS		
NO.	DATE	DESCRIPTION

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

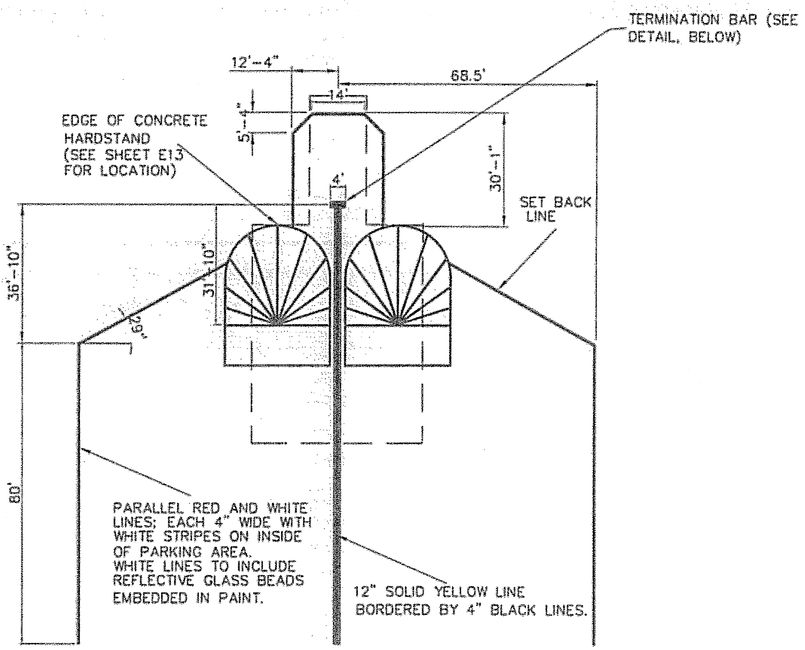
PE [signature] Date 3/9/09

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

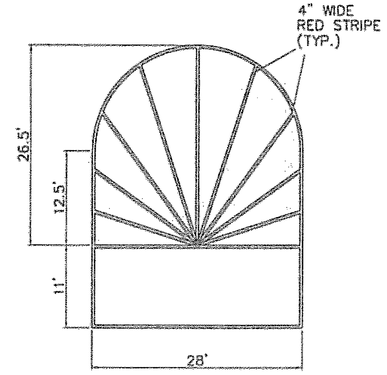
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

MARKING DETAILS

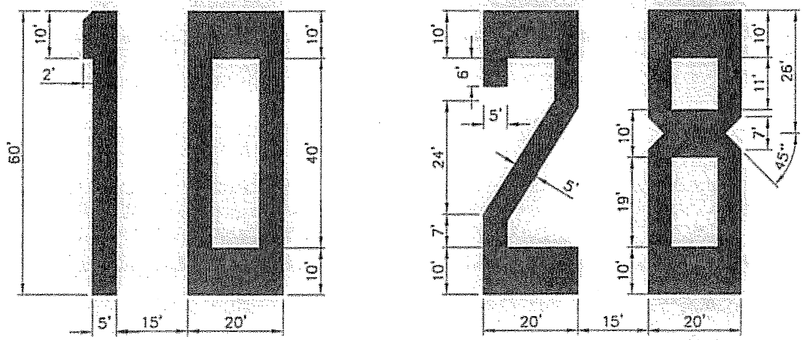
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	L2	69



HARDSTAND MARKING PLAN

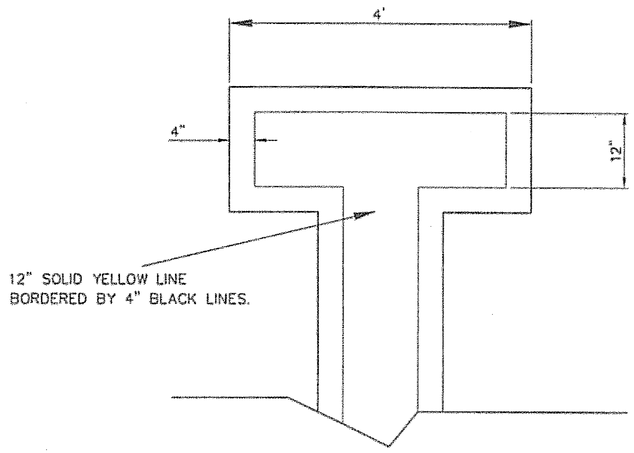


ENGINE INLET HAZARD ZONE DETAIL



RUNWAY DESIGNATOR NUMERAL DETAILS

(WHITE)



TERMINATION BAR (NOSEWHEEL MARK)

NOTE:

1. REMOVE AND REPLACE ALL HARDSTAND MARKINGS PER DETAILS, THIS SHEET. ALL STRIPING LAYOUT & MATERIALS TO CONFORM TO FAA ADVISORY CIRCULAR NO. 150/5340-1J, "STANDARDS FOR AIRPORT MARKINGS".
2. PAINT FOR YELLOW STRIPES SHALL BE METHYLMETHACRYLATE, TYPE 4 "DURASTRIPE" TRAFFIC PAINT WITH GLASS BEADS FOR REFLECTIVITY.
3. PAINT FOR RED STRIPES SHALL BE DESIGNED FOR TRAFFIC USE ON PORTLAND CEMENT PAVEMENT, AND APPROVED BY THE AIRPORT.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/9/09

CHECKED BY: P. CARROLL
DESIGNED BY: M. TAYLOR
DRAWN BY: R. SNYDER

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/10/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

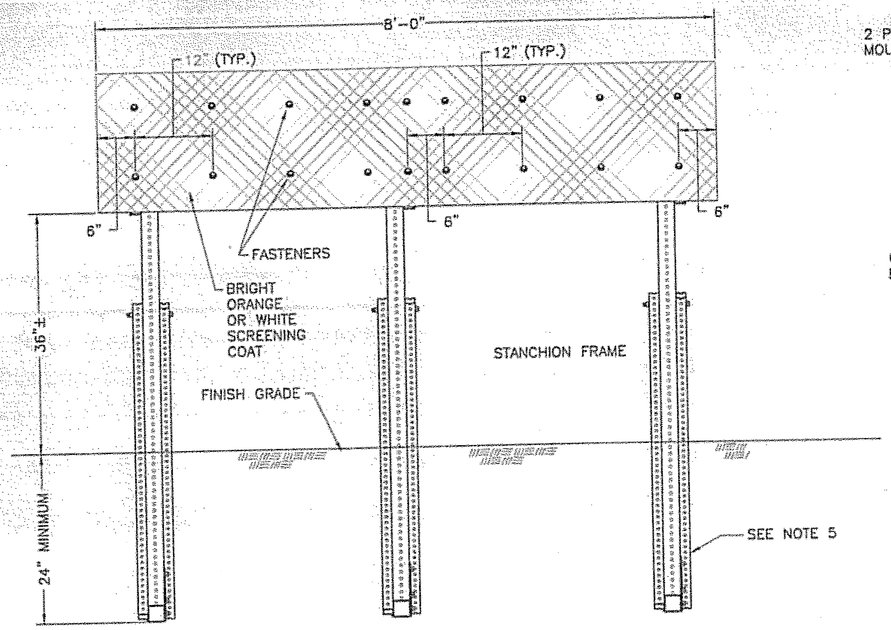
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

MARKING DETAILS

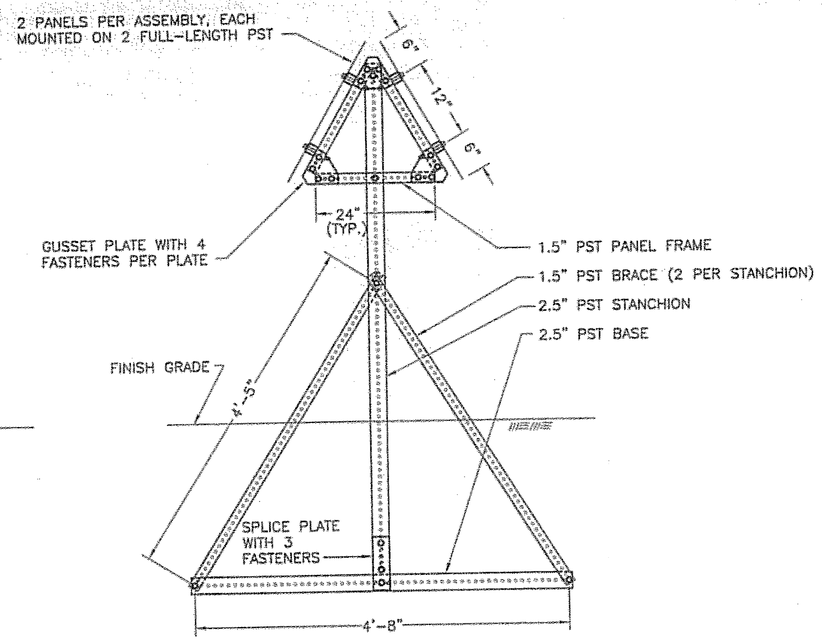
PATH: O:\Wrg\68167\Planset\L1-L3Marking.dwg
TAB: L3 Mon, 03/Apr/06 03:42PM lrobertson

REVISIONS		
NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	L3	69



FRONT VIEW DETAIL



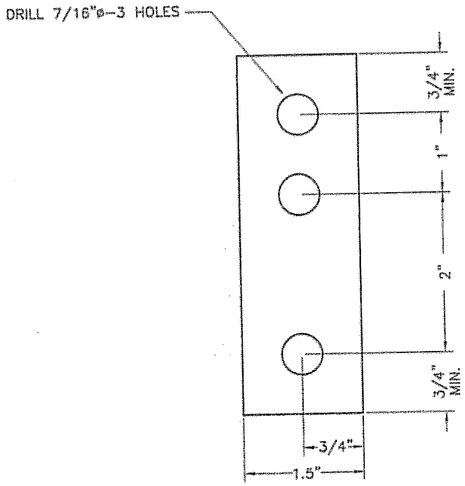
STANCHION FRAME SIDE VIEW

SEGMENTED CIRCLE PANELS

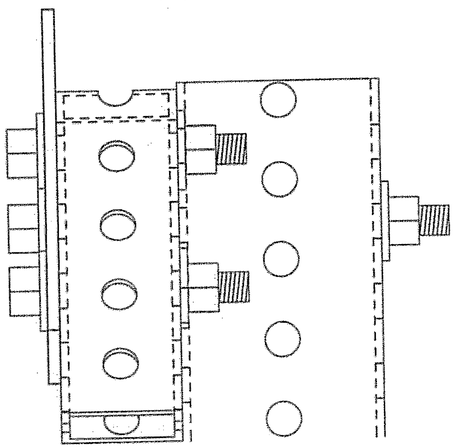
NTS

SEGMENTED CIRCLE NOTES:

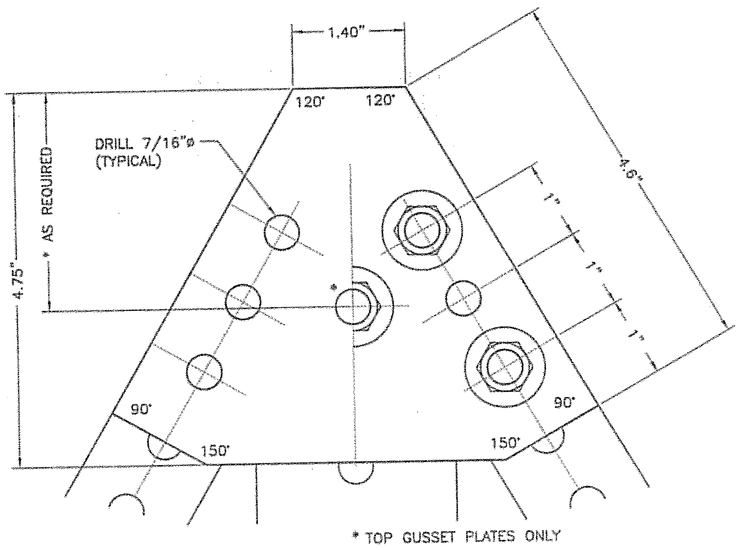
1. PERFORATED STEEL TUBING (PST) SHALL BE 1/8" THICK SQUARE, COLD ROLLED CARBON STEEL PER ASTM A 653, CORNER WELDED, GALVANIZED.
2. PLATES SHALL BE 1/4" STEEL, ASTM A 36, GALVANIZED.
3. FASTENERS SHALL BE 3/8" DIA. GALVANIZED GRADE 2 BOLTS WITH NUT AND 2 1" DIA. WASHERS EACH. LENGTH SHALL BE AS REQUIRED TO FASTEN MEMBERS.
4. PANELS SHALL BE 0.08 INCHES ALUMINUM WITH A BRIGHT ORANGE OR WHITE SCREEN COAT ON ONE SIDE.
5. SEE SHEET L5 FOR ALTERNATE FOOTING DETAIL.



SPLICE PLATE DETAIL



SIDE VIEW



FRONT VIEW

GUSSET PLATE DETAILS

NTS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE [signature] Date 3/5/09

CHECKED BY: P. CARROLL
DESIGNED BY: M. TAYLOR
DRAWN BY: D.S./R.S.

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

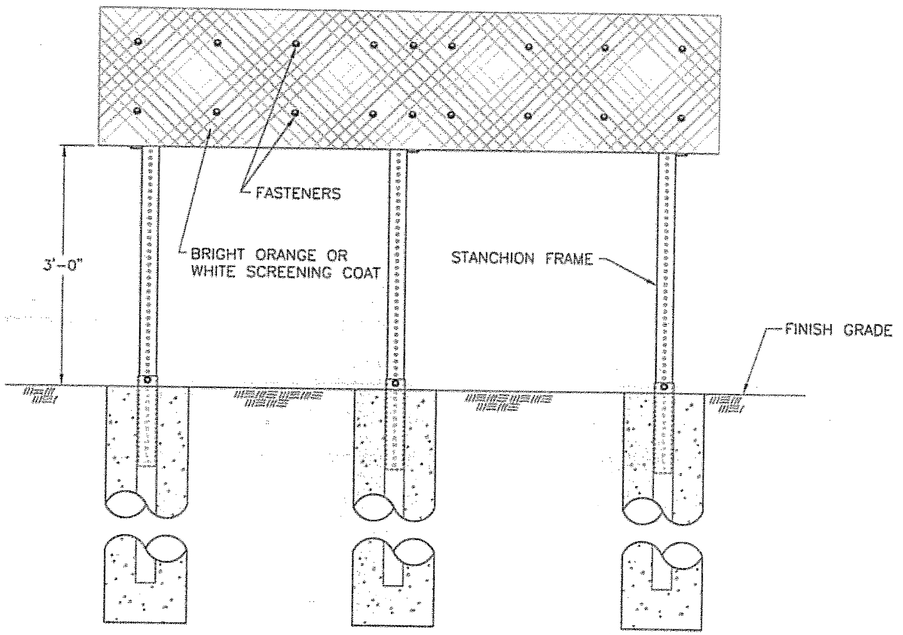
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

SEGMENTED CIRCLE DETAILS

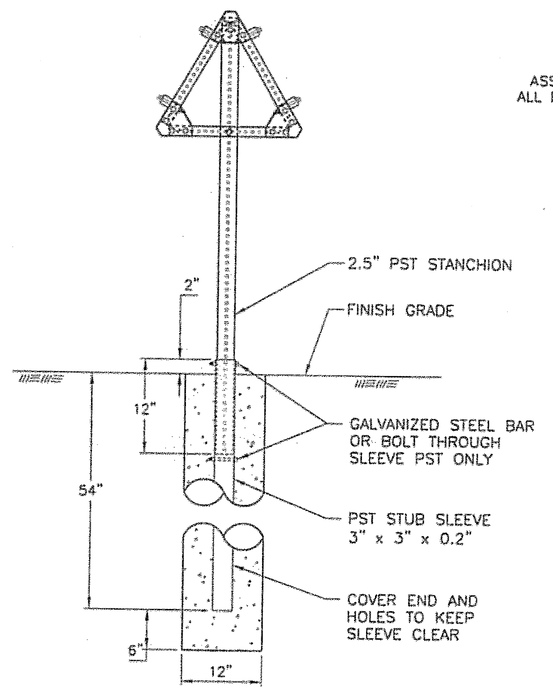
PATH: Q:\Wrg\68167\Planset\L4_SegCircle_Wdcons.dwg
TAB: L4 Mon, 03/Apr/06 03:46PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			AIP NO. 3-02-0323-1105	2006	L4	69



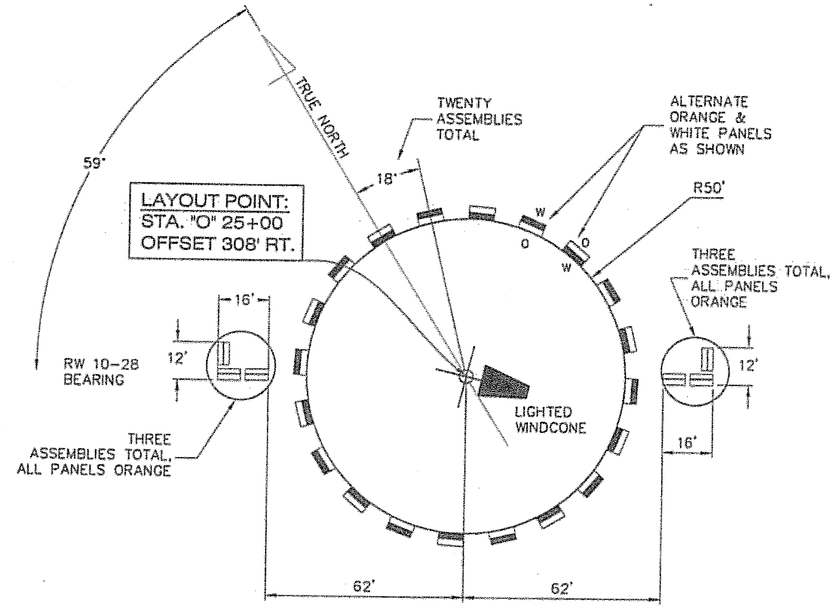
NOTE:
CONCRETE FOR FOOTINGS SHALL BE 5.0 SACK / CY, WITH AN F'_c = 2,500 psi.

FRONT VIEW DETAIL



STANCHION FRAME
SIDE VIEW

ALTERNATE FOOTING DETAIL
NTS NOT USED



SEGMENTED CIRCLE LAYOUT
NTS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE J. Berg Date 3/9/07

CHECKED BY: P. CARROLL
STATE OF ALASKA 19th Joel D. Osburn CE-11014 REGISTERED PROFESSIONAL ENGINEER 4/6/06
DESIGNED BY: M. TAYLOR
DRAWN BY: D.S. /R.S.
PATH: O:\Wrg\68167\Planset\L4_SegCircle_Wdcone.dwg
TAB: L5 Mon, 03/Apr/06 03:42PM lrobertson

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

SEGMENTED CIRCLE DETAILS

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	L5	69

QUARRY EXISTING GROUND
PLAN VIEW

-2+00 0+00 5+00 10+00 15+00 20+00

EXISTING BARGE LOADING FACILITY

12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00

DIRECTION OF QUARRY EXCAVATION

QUARRY AREA

AIRPORT APRON

AIRPORT APRON

TOE OF FINISHED QUARRY (830' OFFSET TO "O" LINE)

EXISTING WATER TANK TO BE REMOVED (AFTER WATERLINE COMPLETE IN-PLACE)

LIMITS OF PROPOSED QUARRY DEVELOPMENT (SEE SHEET M2)

APB N58°26'27"W 454.15'

EXISTING BEACON

N52°22'00"W 1448.49'

0 100 200
SCALE IN FEET

600' BLAST RADIUS

AIRPORT BOUNDRY

MEANDER LINE

CITY OF WRANGELL

EAGLE NEST NOT FOUND

EAGLE NEST

N13°25'00"E 445.44

EVERGREEN/STIKINE HIGHWAY

BLAST RADIUS OFFSET (600') (FOR PRE-BLAST SURVEYS)

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE _____ Date 3/9/09

NOTE:
EAGLE NEST WORK RESTRICTIONS REQUIRED. SEE SPECIAL PROVISIONS APPENDIX B ENVIRONMENTAL COMMITMENTS & PERMITS.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

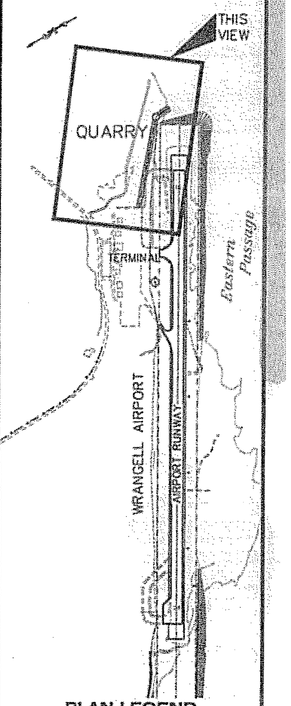
PATH:
Q:\Wrg\68167\Planset\M1-M3QuarryReclame-.
Mon, 03/Apr/06 03:43PM lrobertson
TAB: M1

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA
49th
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: T.M./F.E./J.O.

DRAWN BY: L. ROBERTSON

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

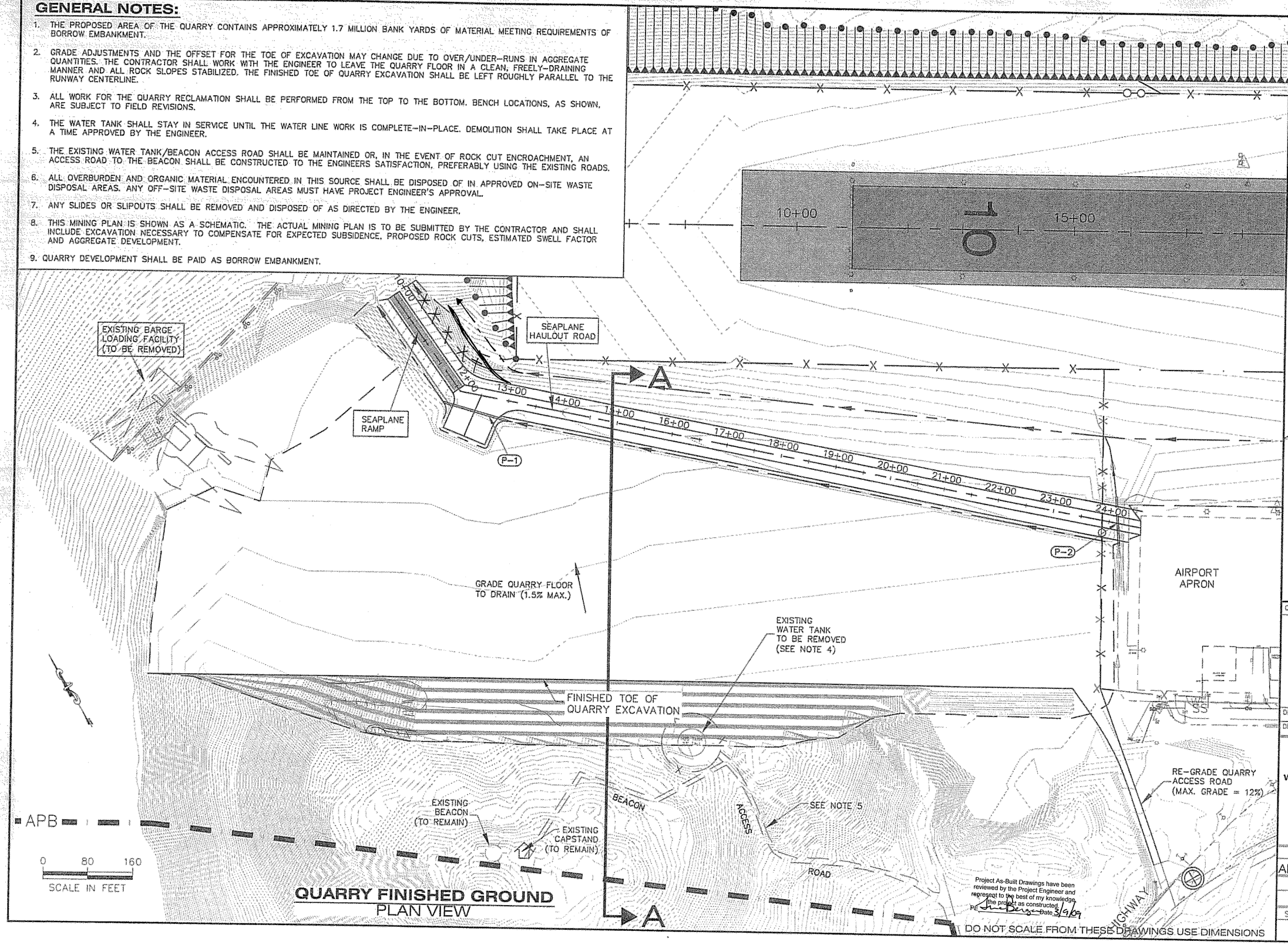
EXISTING QUARRY LAYOUT

PROJECT DESIGNATION
AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
M1	69

GENERAL NOTES:

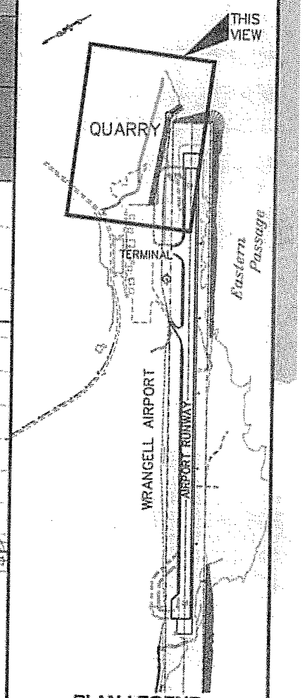
1. THE PROPOSED AREA OF THE QUARRY CONTAINS APPROXIMATELY 1.7 MILLION BANK YARDS OF MATERIAL MEETING REQUIREMENTS OF BORROW EMBANKMENT.
2. GRADE ADJUSTMENTS AND THE OFFSET FOR THE TOE OF EXCAVATION MAY CHANGE DUE TO OVER/UNDER-RUNS IN AGGREGATE QUANTITIES. THE CONTRACTOR SHALL WORK WITH THE ENGINEER TO LEAVE THE QUARRY FLOOR IN A CLEAN, FREELY-DRAINING MANNER AND ALL ROCK SLOPES STABILIZED. THE FINISHED TOE OF QUARRY EXCAVATION SHALL BE LEFT ROUGHLY PARALLEL TO THE RUNWAY CENTERLINE.
3. ALL WORK FOR THE QUARRY RECLAMATION SHALL BE PERFORMED FROM THE TOP TO THE BOTTOM. BENCH LOCATIONS, AS SHOWN, ARE SUBJECT TO FIELD REVISIONS.
4. THE WATER TANK SHALL STAY IN SERVICE UNTIL THE WATER LINE WORK IS COMPLETE-IN-PLACE. DEMOLITION SHALL TAKE PLACE AT A TIME APPROVED BY THE ENGINEER.
5. THE EXISTING WATER TANK/BEACON ACCESS ROAD SHALL BE MAINTAINED OR, IN THE EVENT OF ROCK CUT ENCROACHMENT, AN ACCESS ROAD TO THE BEACON SHALL BE CONSTRUCTED TO THE ENGINEERS SATISFACTION, PREFERABLY USING THE EXISTING ROADS.
6. ALL OVERBURDEN AND ORGANIC MATERIAL ENCOUNTERED IN THIS SOURCE SHALL BE DISPOSED OF IN APPROVED ON-SITE WASTE DISPOSAL AREAS. ANY OFF-SITE WASTE DISPOSAL AREAS MUST HAVE PROJECT ENGINEER'S APPROVAL.
7. ANY SLIDES OR SLIPOUTS SHALL BE REMOVED AND DISPOSED OF AS DIRECTED BY THE ENGINEER.
8. THIS MINING PLAN IS SHOWN AS A SCHEMATIC. THE ACTUAL MINING PLAN IS TO BE SUBMITTED BY THE CONTRACTOR AND SHALL INCLUDE EXCAVATION NECESSARY TO COMPENSATE FOR EXPECTED SUBSIDENCE, PROPOSED ROCK CUTS, ESTIMATED SWELL FACTOR AND AGGREGATE DEVELOPMENT.
9. QUARRY DEVELOPMENT SHALL BE PAID AS BORROW EMBANKMENT.



QUARRY FINISHED GROUND
PLAN VIEW

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE Joe Berger Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



PLAN LEGEND

PATH: G:\Wrg\68167\Plansel\M1-M3QuarryReclame~
Wed, 05/Apr/06 10:34AM jdosburn
TAB: M2

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: P. CARROLL

STATE OF ALASKA 49th Joel D. Osburn CE-11014 REGISTERED PROFESSIONAL ENGINEER 4/6/06

DESIGNED BY: T.M./F.E./J.O.
DRAWN BY: L. ROBERTSON

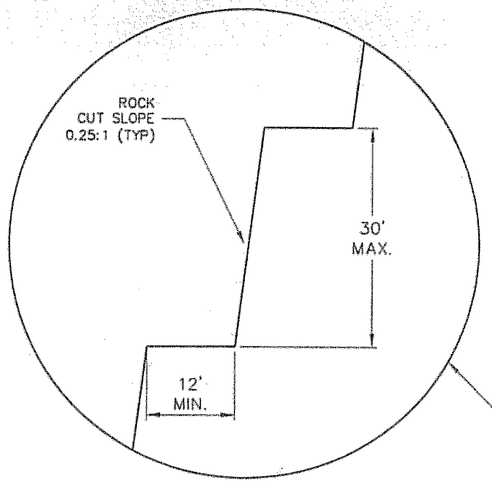
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

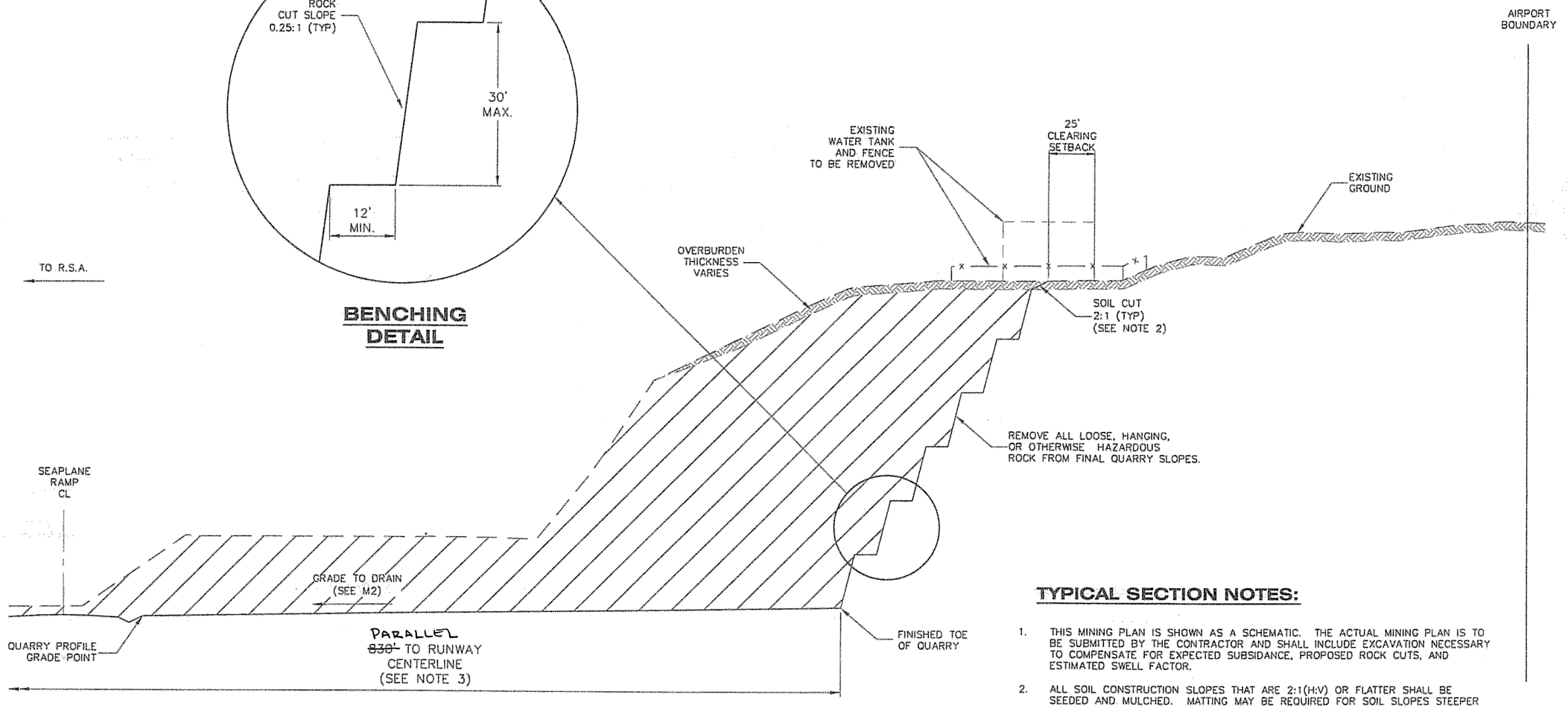
QUARRY RECLAMATION PLAN

PROJECT DESIGNATION
AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
M2	69



BENCHING DETAIL



SECTION A-A

MATERIAL TO BE REMOVED

TYPICAL SECTION NOTES:

1. THIS MINING PLAN IS SHOWN AS A SCHEMATIC. THE ACTUAL MINING PLAN IS TO BE SUBMITTED BY THE CONTRACTOR AND SHALL INCLUDE EXCAVATION NECESSARY TO COMPENSATE FOR EXPECTED SUBSIDANCE, PROPOSED ROCK CUTS, AND ESTIMATED SWELL FACTOR.
2. ALL SOIL CONSTRUCTION SLOPES THAT ARE 2:1(H:V) OR FLATTER SHALL BE SEEDED AND MULCHED. MATTING MAY BE REQUIRED FOR SOIL SLOPES STEEPER THAN 2:1, AS DIRECTED BY THE ENGINEER. ALL SOIL SLOPES 2:1(H:V) OR STEEPER WILL BE EVALUATED BY THE ENGINEER FOR SLOPE STABILIZATION MEASURES.
3. OFFSET TO FINISHED TOE OF QUARRY EXCAVATION MAY DIFFER DUE TO OVER/UNDER RUNS TO ORIGINAL EXCAVATION QUANTITIES. THE CONTRACTOR SHALL LEAVE IT ROUGHLY PARALLEL TO THE RUNWAY CENTERLINE.

QUARRY WAS NOT EXCAVATE TO 830' OFFSET OF RUNWAY

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 8/9/07

CHECKED BY: P. CARROLL
DESIGNED BY: M.T./F.E./J.O.
DRAWN BY: R. SNYDER

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

QUARRY SECTION VIEW

PATH: C:\Wrg\68167\Planset\M1-M3QuarryReclame~.dwg
TAB: M3 Mon, 03/Apr/06 03:43PM Irobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	M3	69

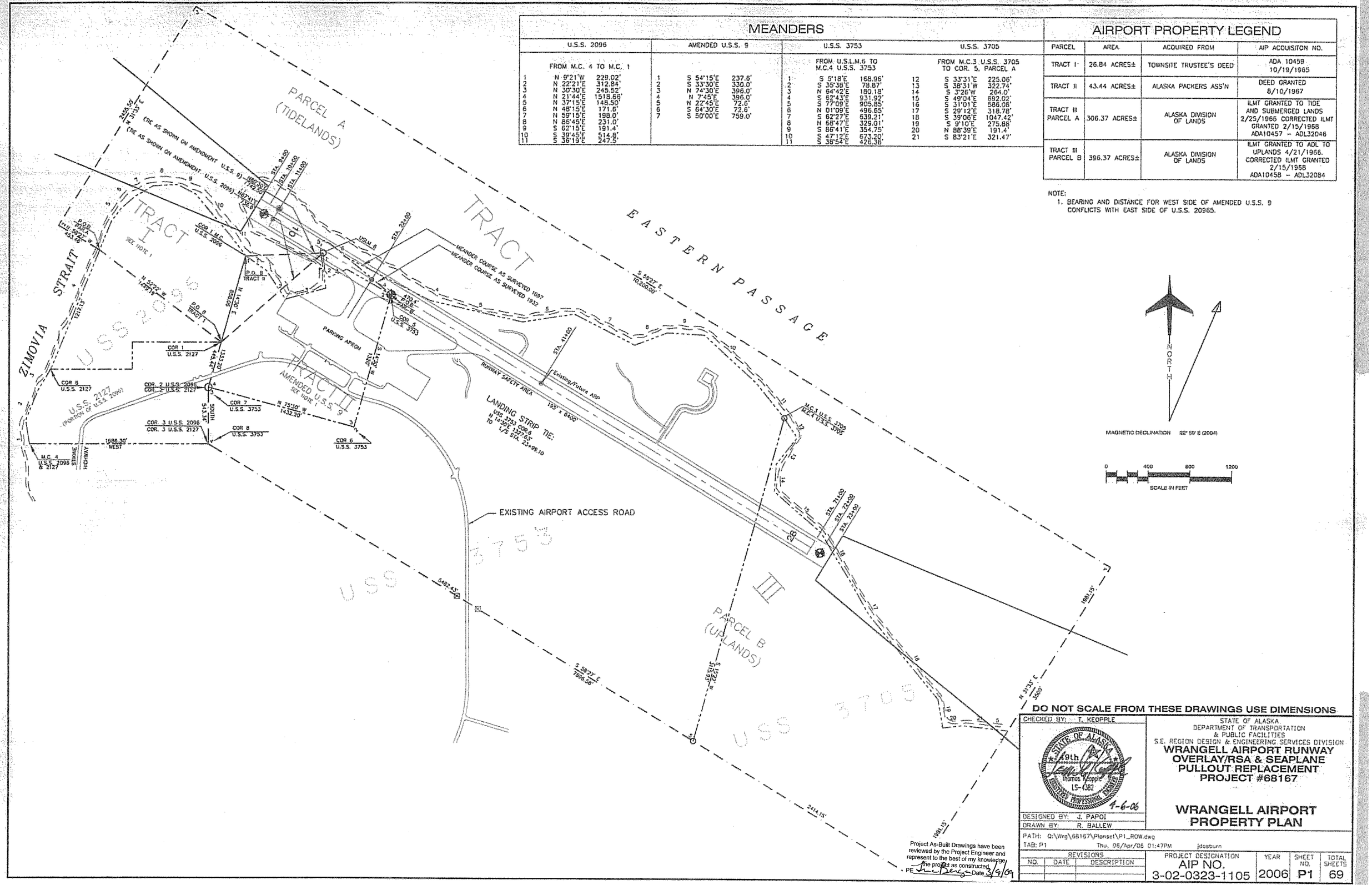
MEANDERS

U.S.S. 2096			AMENDED U.S.S. 9			U.S.S. 3753			U.S.S. 3705		
FROM M.C. 4 TO M.C. 1						FROM U.S.L.M.6 TO M.C.4 U.S.S. 3753			FROM M.C.3 U.S.S. 3705 TO COR. 5, PARCEL A		
1	N 9°21'W	229.02'	1	S 54°15'E	237.6'	1	S 5°18'E	168.96'	12	S 33°31'E	225.06'
2	N 22°21'E	312.84'	2	S 33°30'E	339.0'	2	S 35°38'E	78.87'	13	S 38°31'W	322.74'
3	N 30°30'E	245.52'	3	N 74°30'E	396.0'	3	N 64°42'E	180.18'	14	S 3°26'W	264.0'
4	N 21°44'E	1518.66'	4	N 7°45'E	396.0'	4	S 62°43'E	931.92'	15	S 49°04'E	692.02'
5	N 37°15'E	148.50'	5	N 22°45'E	72.6'	5	S 77°09'E	905.65'	16	S 31°01'E	586.06'
6	N 48°15'E	171.6'	6	S 64°30'E	72.6'	6	N 01°09'E	496.65'	17	S 29°12'E	318.78'
7	N 59°15'E	198.0'	7	S 50°00'E	759.0'	7	S 62°27'E	639.21'	18	S 39°06'E	1047.42'
8	N 86°45'E	231.0'				8	N 68°47'E	328.01'	19	S 9°10'E	275.88'
9	S 62°15'E	191.4'				9	S 86°41'E	354.75'	20	N 88°39'E	191.4'
10	S 39°45'E	514.8'				10	S 47°12'E	673.20'	21	S 83°21'E	321.47'
11	S 36°19'E	247.5'				11	S 38°54'E	426.36'			

AIRPORT PROPERTY LEGEND

PARCEL	AREA	ACQUIRED FROM	AIP ACQUISITON NO.
TRACT I	26.84 ACRES±	TOWNSITE TRUSTEE'S DEED	ADA 10459 10/19/1965
TRACT II	43.44 ACRES±	ALASKA PACKERS ASS'N	DEED GRANTED 8/10/1967
TRACT III PARCEL A	306.37 ACRES±	ALASKA DIVISION OF LANDS	ILMT GRANTED TO TIDE AND SUBMERGED LANDS 2/25/1966 CORRECTED ILMT GRANTED 2/15/1968 ADA10457 – ADL32046
TRACT III PARCEL B	396.37 ACRES±	ALASKA DIVISION OF LANDS	ILMT GRANTED TO ADL TO UPLANDS 4/21/1966. CORRECTED ILMT GRANTED 2/15/1968 ADA10458 – ADL32084

NOTE:
1. BEARING AND DISTANCE FOR WEST SIDE OF AMENDED U.S.S. 9 CONFLICTS WITH EAST SIDE OF U.S.S. 20965.



Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE _____ Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. KEOPPLE	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION
	WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167
DESIGNED BY: J. PAPOI	**WRANGELL AIRPORT PROPERTY PLAN**
DRAWN BY: R. BALLEW	
PATH: Q:\Wrg\68167\Planset\P1_ROW.dwg TAB: P1 Thu, 06/Apr/06 01:47PM jdasburn	

STATE OF ALASKA 49th REGISTERED PROFESSIONAL ENGINEER Thomas Keopple LS-4382 4-6-06

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			AIP NO. 3-02-0323-1105	2006	P1	69

LEGEND

- ROCK CHECK DAM
- SILT FENCE
- (P-1) PROPOSED CULVERT
- PROPOSED DITCH
- OVERLAND FLOW VECTOR

RIPRAP SLOPE PROTECTION

RSA

-2+00 0+00 5+00 10+00 15+00 20+00

10+00

0 80 160
SCALE IN FEET

DITCH SLOPE - 1%

SPECIAL DITCHES SEE G-SHEETS

15+00

20+00

(P-1)

(P-2)

FINISHED QUARRY FLOOR

APRON

GENERAL NOTES

1. WETLANDS AREAS OF DISTURBANCE AS THEY PERTAIN TO THIS PROJECT ARE IDENTIFIED IN THE ARMY CORP OF ENGINEERS SECTION 404 PERMIT FOR PLACEMENT OF FILL IN WETLANDS, AND AT CULVERT INSTALLATIONS. REFERENCE TO THIS DOCUMENT IS GIVEN IN APPENDIX B OF THE CONTRACT.
2. SEE THE ESCP NARRATIVE ATTACHED TO THE SPECIFICATIONS AS APPENDIX F, AND THE ENVIRONMENTAL COMMITMENTS IN APPENDIX B.
3. CONTRACTOR SHALL REMOVE ROCK CHECK DAMS JUST PRIOR TO CONNECTING NEW DITCHES TO EXISTING FISH STREAMS.
4. NEW CHANNELS SHALL BE APPROVED BY ENGINEER PRIOR TO CONNECTING THEM TO EXISTING STREAMS. PROVIDE ENGINEER ONE WEEK NOTICE TO ALLOW INSPECTION.
5. SEE SHEET A3 FOR EAGLE TREE LOCATIONS AND INFORMATIONAL NOTE.

PROPOSED TERRAIN

NOTE: CONTOURS IN THIS AREA DERIVED FROM

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE [illegible] Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: O:\Wrg\68167\Planset\T1-T4_ESCP.dwg
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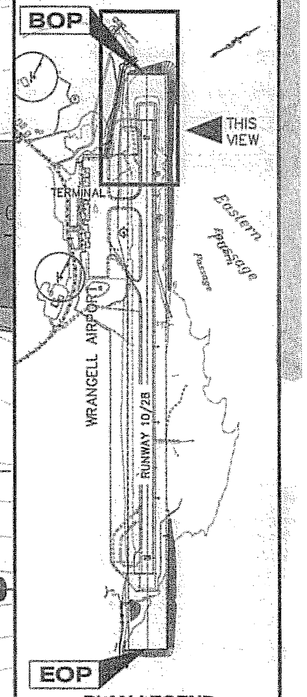
TAB: T1

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA 49th
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: M.T./J.O.

DRAWN BY: R.S./L.R.

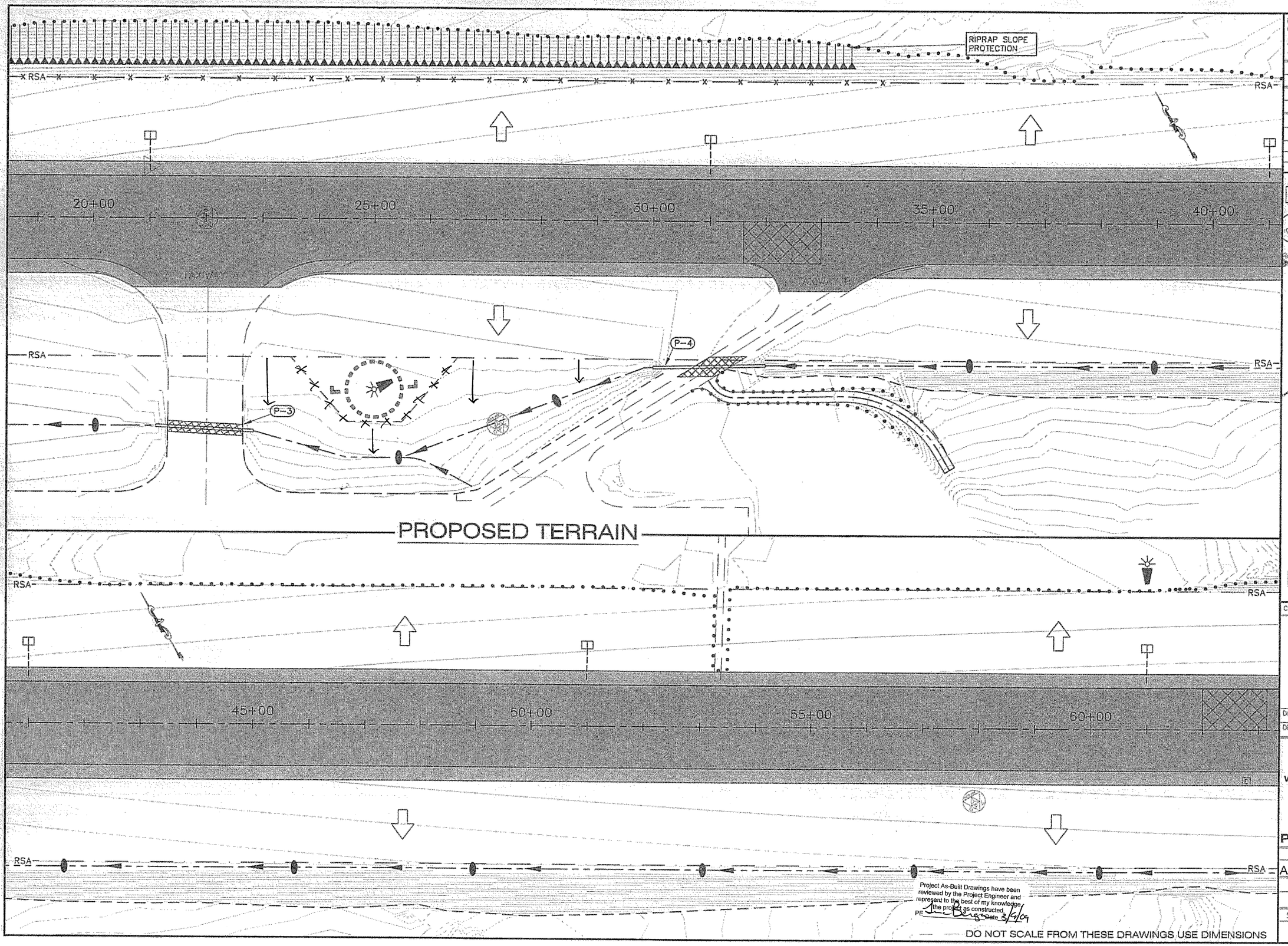
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

Erosion & Sediment Control Plan
PROPOSED TERRAIN

PROJECT DESIGNATION
AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
T1	69



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Wed, 05/Apr/06 10:35AM jdosburn

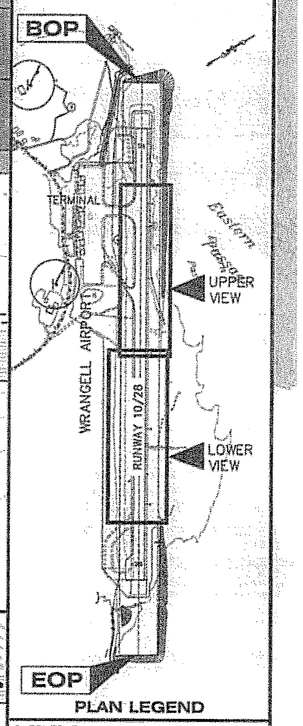
TAB: T2

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA
49th
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/4/06

DESIGNED BY: M.T./J.O.

DRAWN BY: R.S./L.R.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

Erosion & Sediment Control Plan

PROPOSED TERRAIN

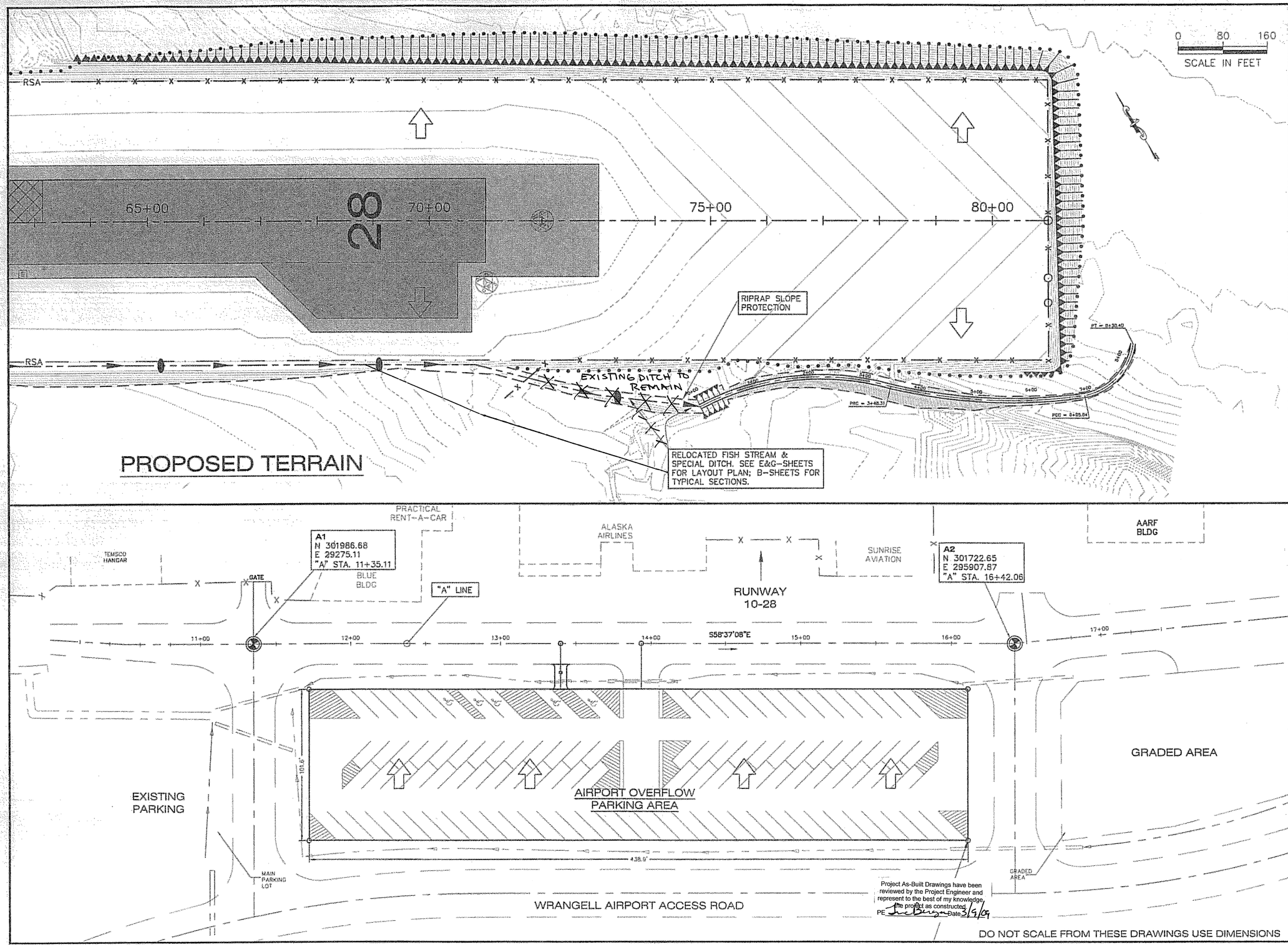
PROJECT DESIGNATION

AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
T2	69

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE [signature] Date 3/6/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



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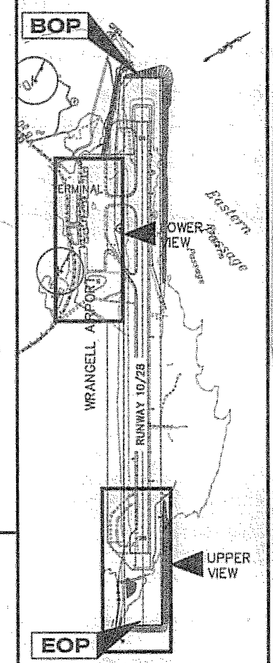
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA
49th
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

DESIGNED BY: M.T./J.O.

DRAWN BY: R.S./L.R.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

Erosion & Sediment Control Plan

PROPOSED TERRAIN

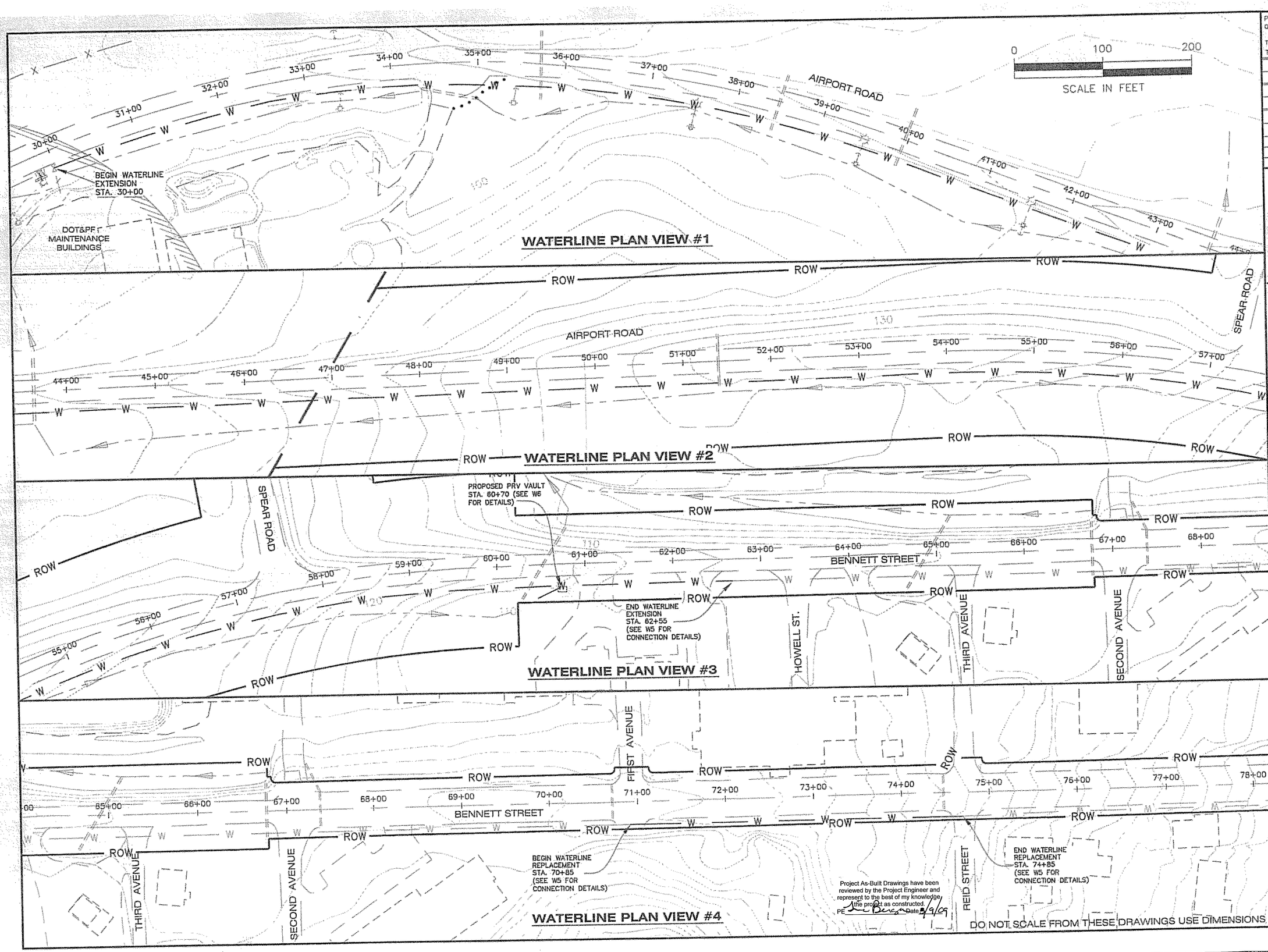
PROJECT DESIGNATION

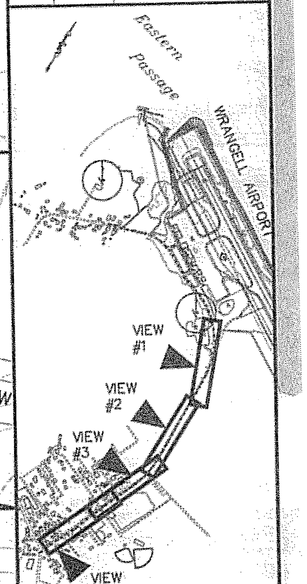
AIP NO. 3-02-0323-1105

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
T3	69

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Joe Burger Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS





PLAN LEGEND

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Tue, 04/Apr/06 02:56PM jdosburn
TAB: T4

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: P. CARROLL

STATE OF ALASKA 49th Joel D. Osburn CE-11014 REGISTERED PROFESSIONAL ENGINEER 4/6/06

DESIGNED BY: M.T./J.O.

DRAWN BY: R.S./L.R.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

Erosion & Sediment Control Plan

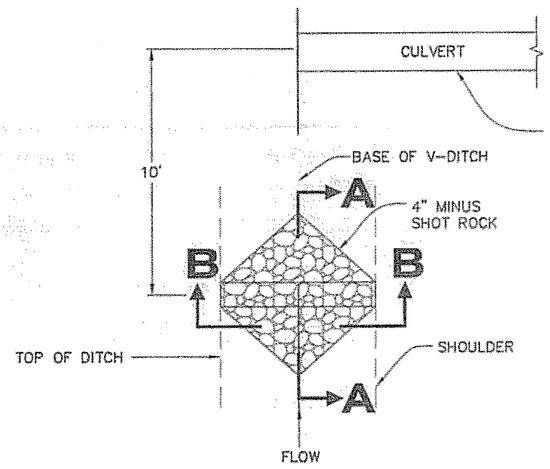
PROJECT DESIGNATION

AIP NO. 3-02-0323-1105

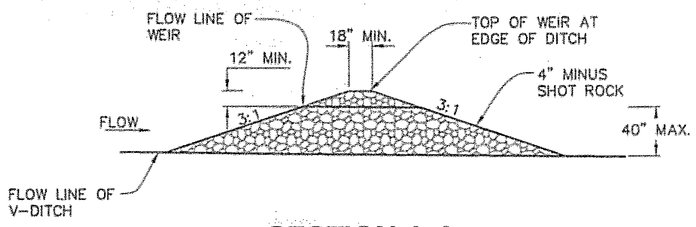
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
T4	69

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE [signature] Date 8/9/09

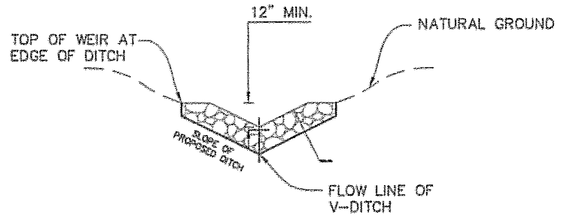
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



PLAN

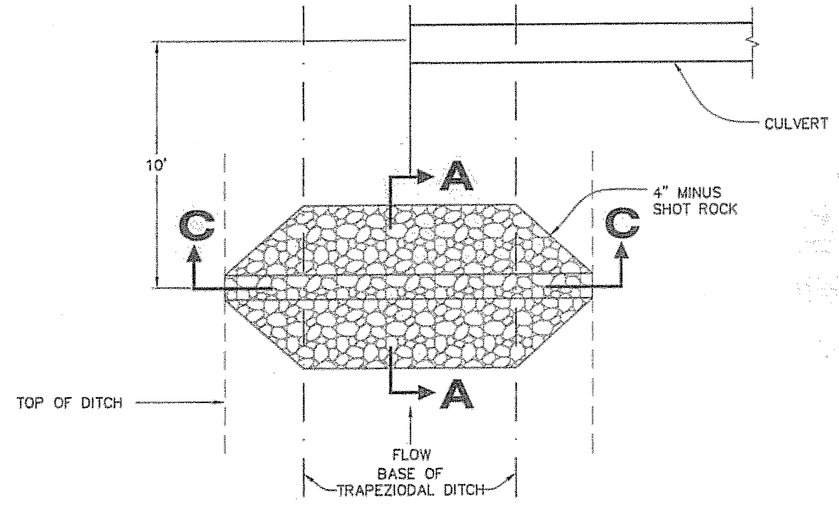


SECTION A-A

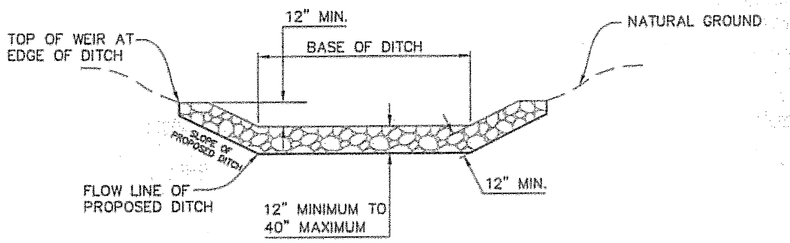


SECTION B-B

V-DITCH CHECK DAM

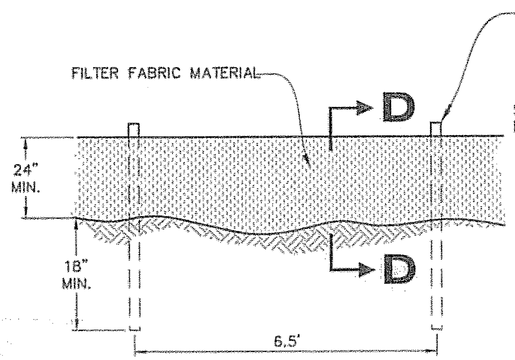


PLAN

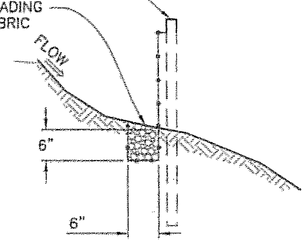


SECTION C-C

TRAPEZOIDAL DITCH CHECK DAM



ELEVATION



SECTION D-D

SILT FENCE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Joel Osburn Date 3/9/09

CHECKED BY: P. CARROLL
DESIGNED BY: J. OSBURN
DRAWN BY: R. SNYDER

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

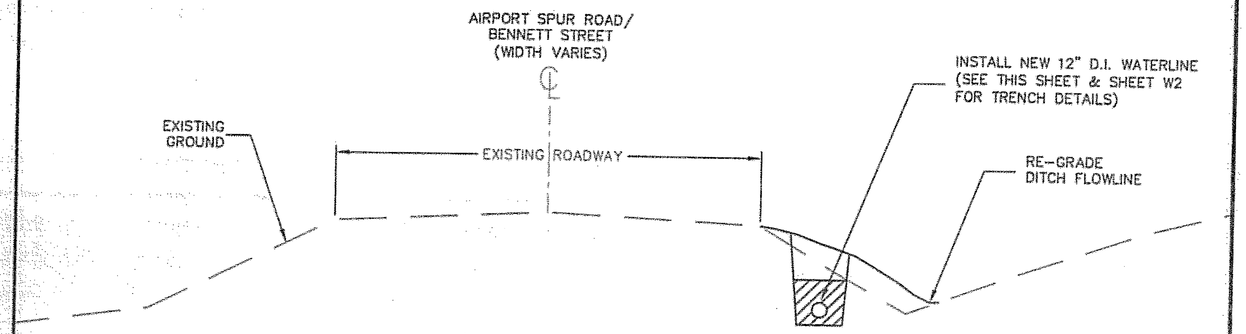
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

ESCP DETAILS

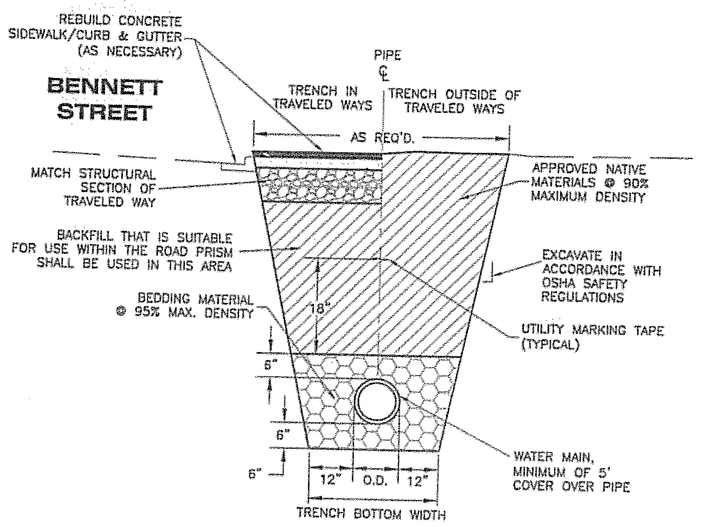
PATH: Q:\Wrg\68167\Planset\T5_ESCP_Details.dwg
TAB: T5 Mon, 03/Apr/06 03:46PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	T5	69



WATERLINE
TYPICAL SECTION
AIRPORT RD./BENNETT ST
N.T.S.



TRENCH DETAIL
1ST. AVE. TO REID ST.
N.T.S.

NOTES:

1. SEE SECTION 153 FOR BEDDING AND BACKFILL SPECIFICATIONS.
2. TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH LOCAL, STATE, AND OSHA REGULATIONS AND REQUIREMENTS. INDICATED SLOPE IS FOR PAY QUANTITY DETERMINATION ONLY FOR IMPORTED BACKFILL GRAVEL AND RESURFACING REQUIREMENTS.
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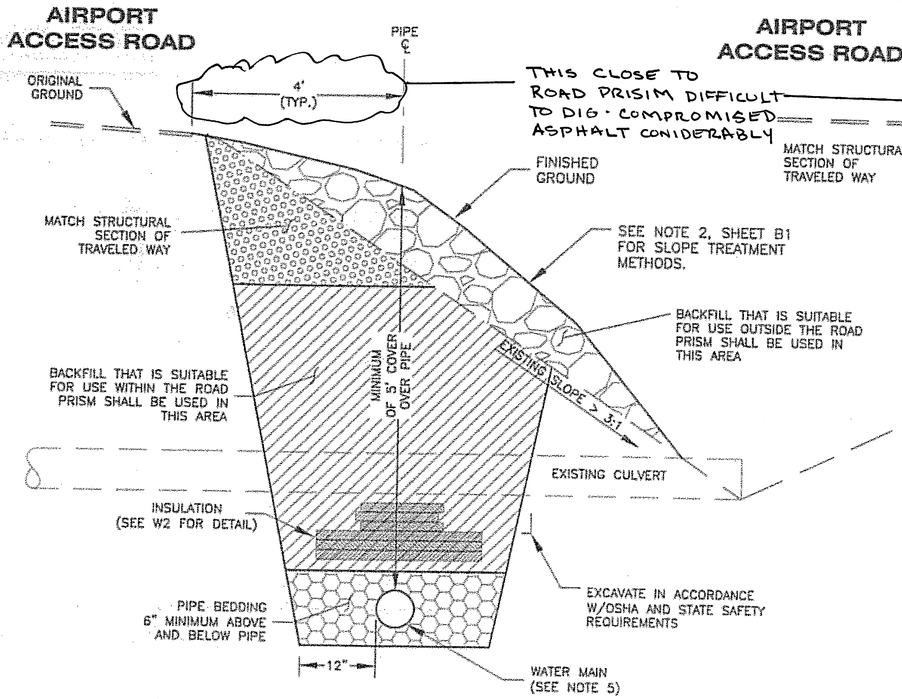
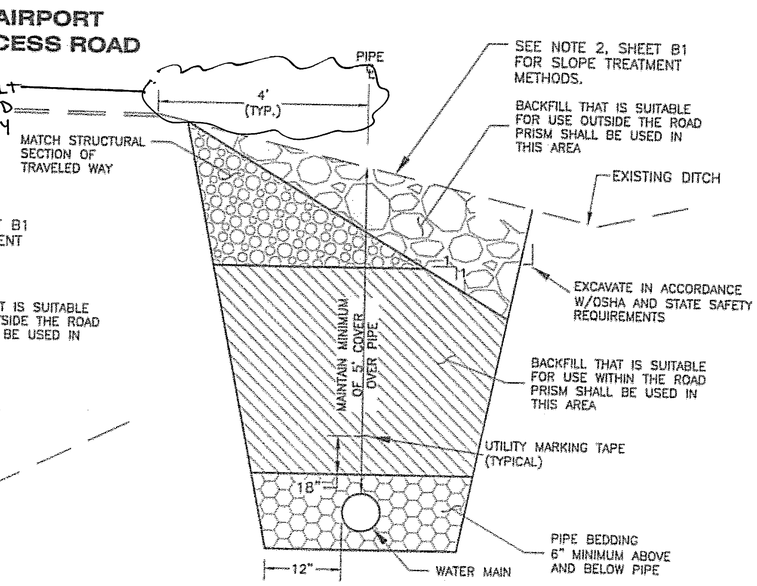
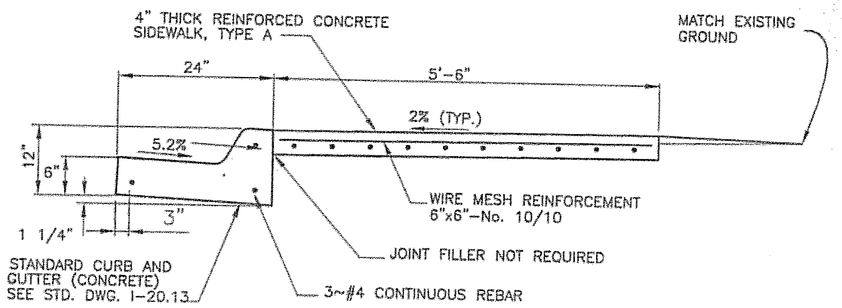
4. THE DITCH LINE, IF ONE EXISTS, SHALL BE RESHAPED IN SUCH A MANNER TO ALLOW POSITIVE DRAINAGE TO MATCH PRE-CONSTRUCTION CONDITIONS.
5. PROVIDE A MINIMUM OF 5-FEET OF EARTHEN COVER ABOVE THE NEW WATERLINE, AS SHOWN. RUN NEW WATERLINE BELOW (TYPICALLY) EXISTING CULVERTS, WHEN ENCOUNTERED (SEE DETAIL, THIS SHEET).



TRENCH DETAIL
AIRPORT RD./BENNETT ST
(>3:1 SLOPES/CULVERT CROSSINGS)
N.T.S.



TRENCH DETAIL
AIRPORT RD./BENNETT ST
(<3:1 SLOPES)
N.T.S.



SIDEWALK/CURB & GUTTER DETAIL
1ST AVE. TO REID ST.
N.T.S.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE Date 3/4/09

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVARRIA
DRAWN BY: D.S./R.S.

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

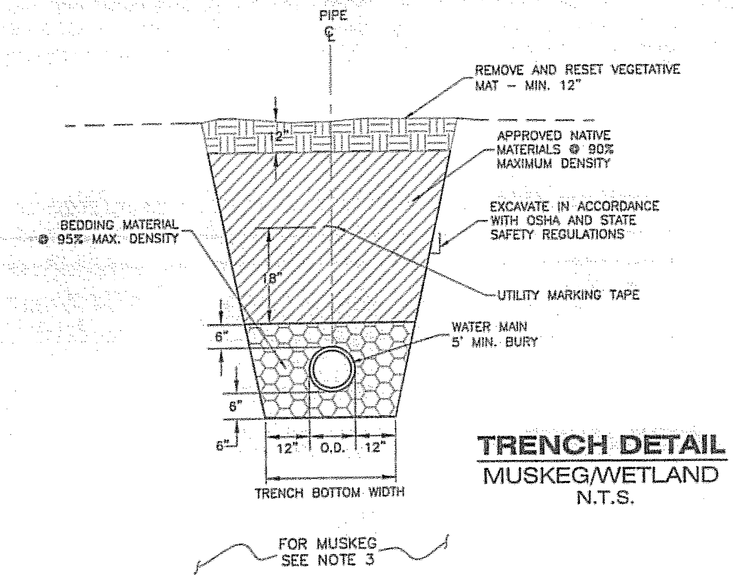
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

WATERLINE TYPICAL SECTION & TRENCH DETAILS

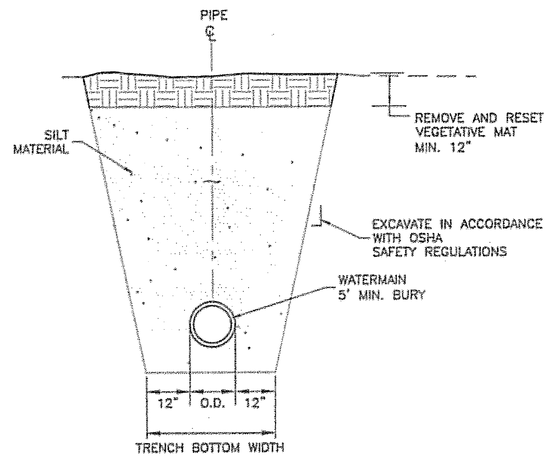
PATH: O:\Wrg\68167\Planset\W1_Typ & Trench Details.dwg
TAB: W1 Mon, 03/Apr/06 03:47PM trobertson

REVISIONS NO.	DATE	DESCRIPTION

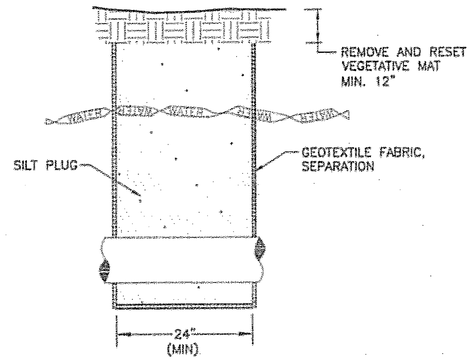
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	W1	69



TRENCH DETAIL
MUSKEG/WETLAND
N.T.S.



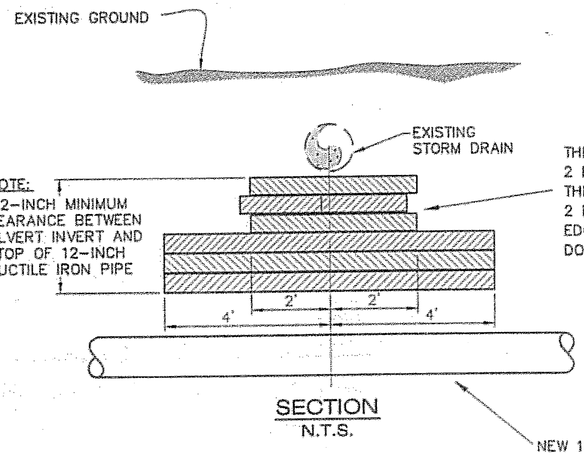
SECTION



SIDE VIEW

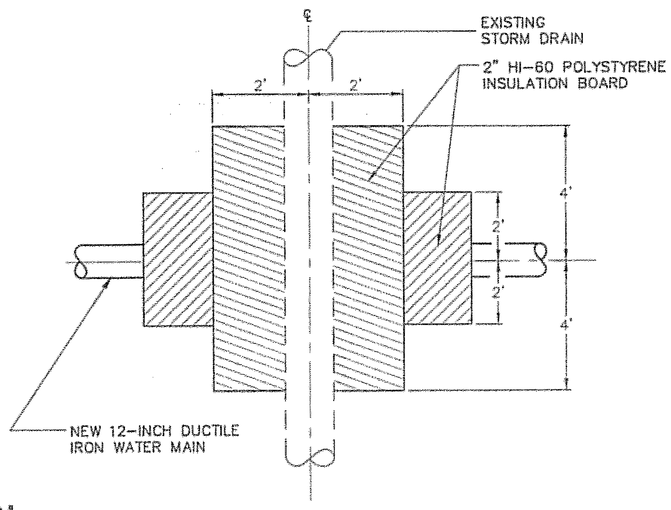
SILT PLUG
N.T.S.

NOTE:
SILT PLUG TO BE PLACED NEAR DOWN HILLSIDE END OF WETLANDS AREA



SECTION
N.T.S.

RIGID INSULATION
N.T.S.



PLAN
N.T.S.

NOTES:

1. SEE SECTION 153 FOR BEDDING AND BACKFILL SPECIFICATIONS.
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DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/9/09

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVARRIA
DRAWN BY: R. SNYDER

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/6/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

MISCELLANEOUS WATERLINE DETAILS

PATH: G:\Wrg\68167\Planset\W2_WaterlineDets.dwg
TAB: W2 Mon, 03/Apr/06 03:47PM trobertson

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	W2	69

PATH: Q:\Wrg\68167\Planset\W3-4_H2O-PLANS.dwg
Mon, 03/Apr/06 03:48PM lrobertson
TAB: W3

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

AIRPORT ACCESS ROAD

30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00 43+00 44+00

BEGIN CONNECTION 12" D.I. WATERLINE STA. 30+00

DOT&PF MAINTENANCE BUILDINGS

44+00 45+00 46+00 47+00 48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00

AIRPORT ACCESS ROAD

SPEAR ROAD

PROPOSED PRV VAULT STA. 60+70 (SEE W6 FOR DETAILS)

BENNETT STREET

NON EXISTING VALVE

EXISTING MAIN

55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00 63+00 64+00 65+00 66+00 67+00 68+00

NEW POLE INSTALLED POWER COMPANY NOT ALLOW TO PLACE ANTENNA ON THIER EXISTING POLE

END PROPOSED 12" D.I. WATERLINE STA. 62+55 (SEE W5 FOR CONNECTION DETAILS)

U.S. FOREST SERVICE BUILDINGS

HOWELL ST.

THIRD AVENUE

SECOND AVENUE

SENIOR APARTMENTS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE [signature] Date 5/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

RSA 10-28

Eastern Passage

UPPER VIEW

MIDDLE VIEW

LOWER VIEW

PLAN LEGEND

CHECKED BY: P. CARROLL

STATE OF ALASKA
Joel D. Osburn
CE-11014
REGISTERED PROFESSIONAL ENGINEER
4/10/06

DESIGNED BY: J.O./ F.E.

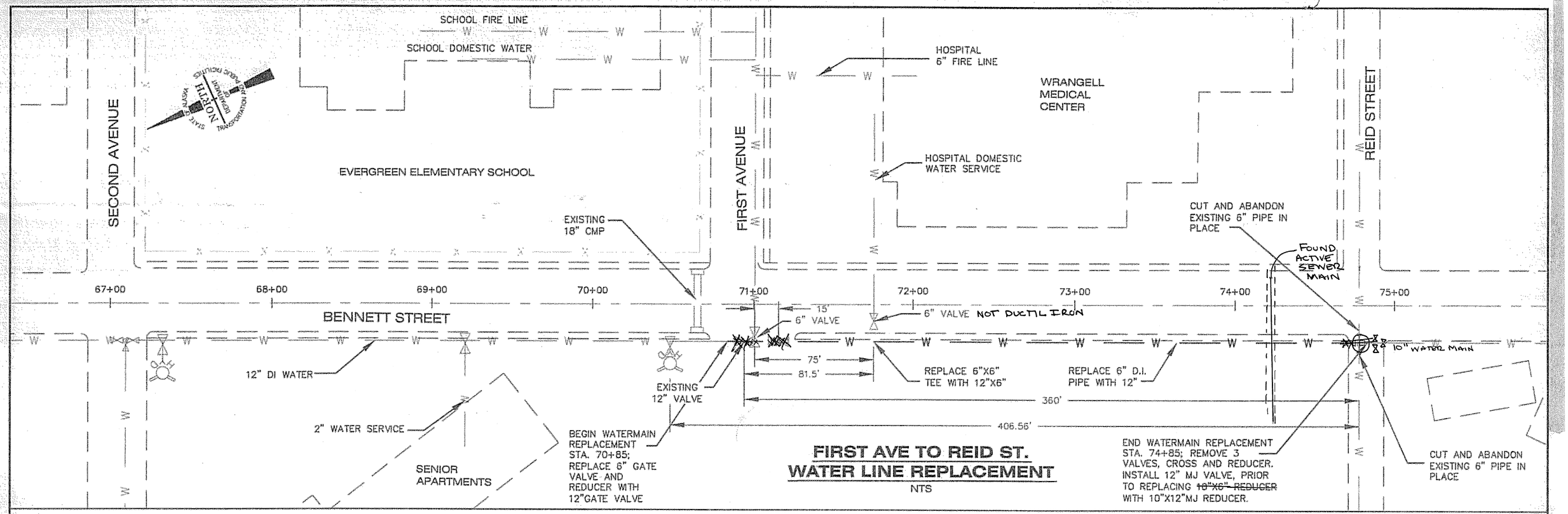
DRAWN BY: R.S./L.R.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

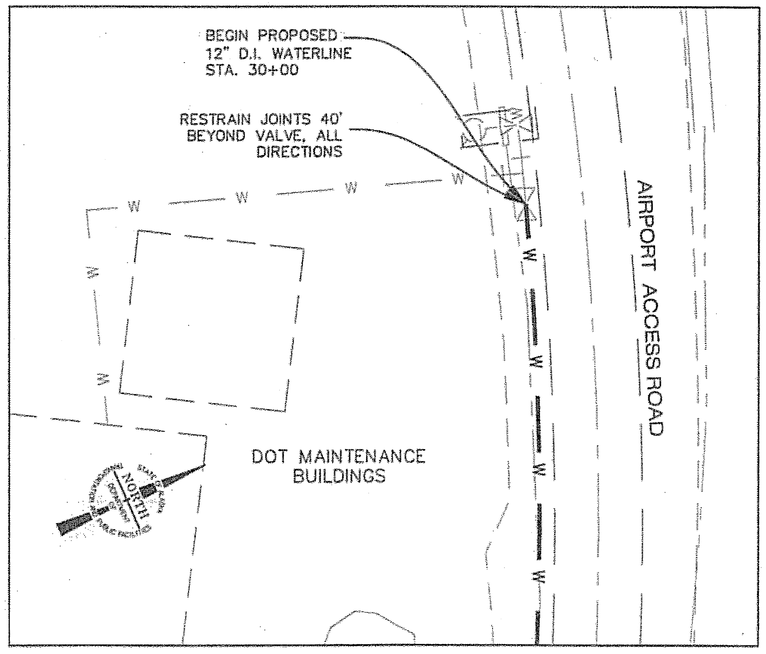
WATER LINE PLAN VIEW

PROJECT DESIGNATION	
AIP NO. 3-02-0323-1105	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
W3	69



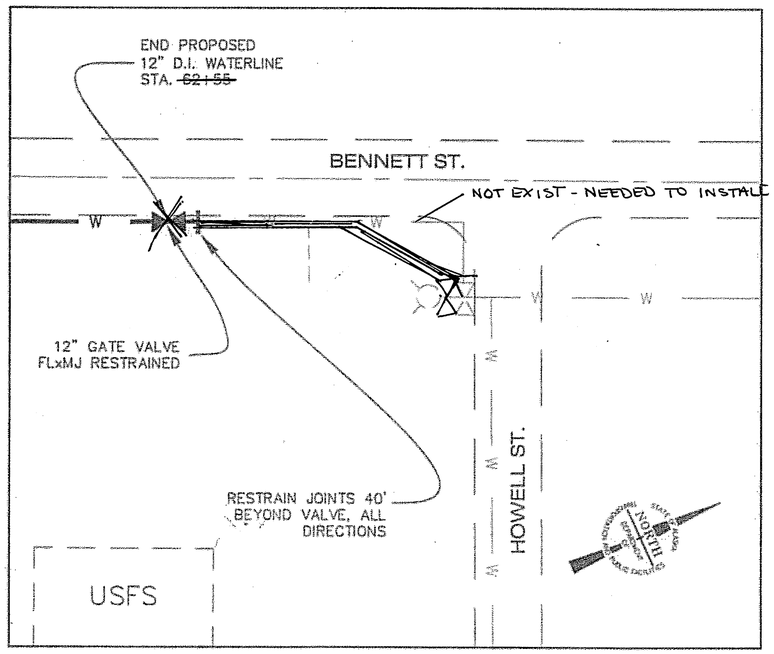
FIRST AVE TO REID ST. WATER LINE REPLACEMENT

NTS



BEGIN "WL" LINE

NTS



END "WL" LINE

NTS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge, the project as constructed.
PE _____ Date 3/9/09

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: P. CARROLL
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: D.S./R.S.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

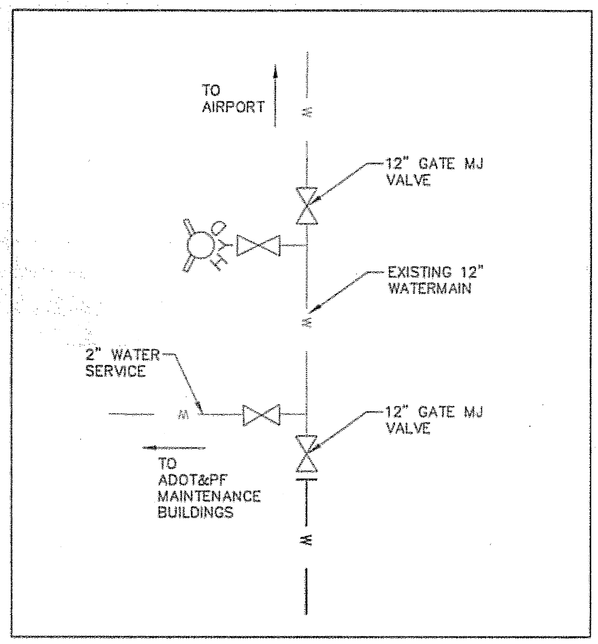
WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT PROJECT #68167

WATERLINE CONNECTION DETAILS

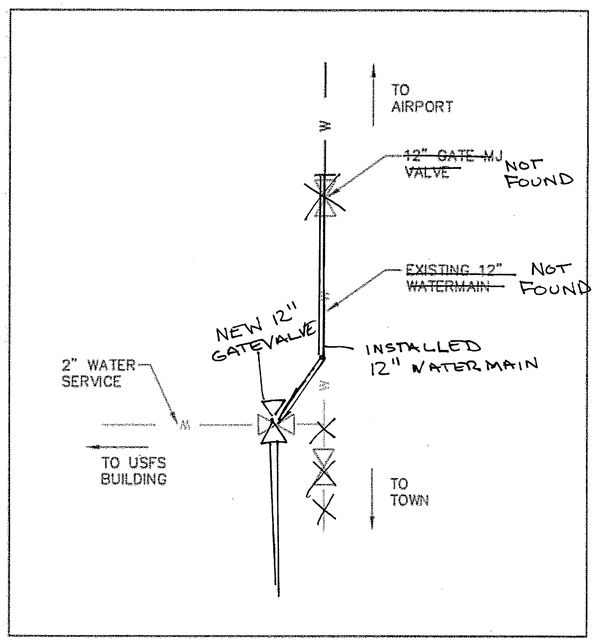
PATH: O:\Wrg\68167\Planset\W3-4_H20-PLANS.dwg
TAB: W4 Mon, 03/Apr/06 03:48PM lrobertson

REVISIONS NO.	DATE	DESCRIPTION

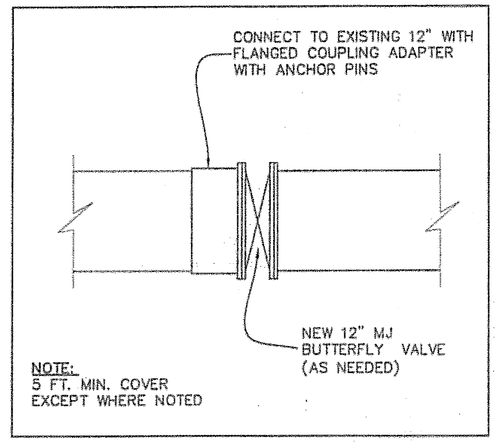
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AIP NO. 3-02-0323-1105	2006	W4	69



BEGIN WATERLINE EXTENSION:
STA. 30+00
NTS

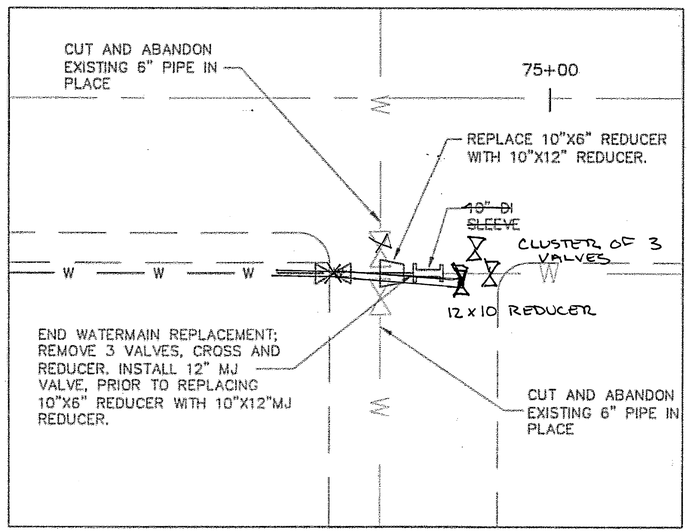


END WATERLINE EXTENSION:
STA. 62+55
NTS

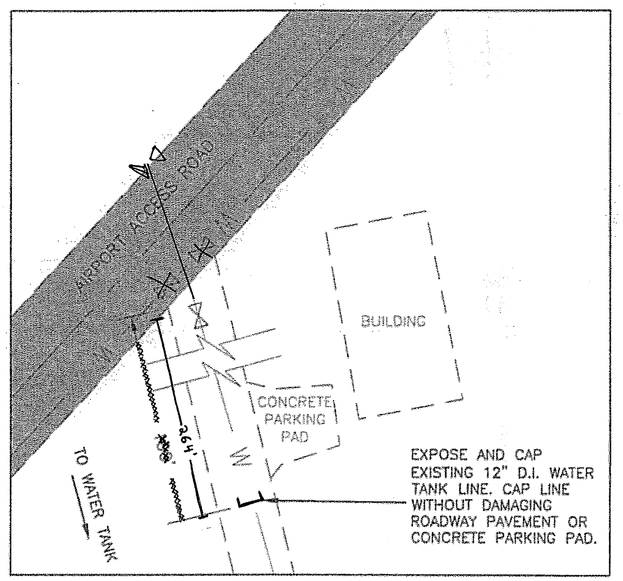


CONNECTION DETAIL
NTS

BEGIN WATERLINE REPLACEMENT:
STA. 70+85
NTS



END WATERLINE REPLACEMENT:
STA. 74+85
NTS



CAPPING OF THE WATER TANK SUPPLY LINE
NTS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As-Built Drawings have been reviewed by the Project Engineer and represent to the best of my knowledge the project as constructed.
PE [signature] Date 3/3/09

CHECKED BY: P. CARROLL
STATE OF ALASKA — 49th — Joel D. Osburn — CE-11014 — REGISTERED PROFESSIONAL ENGINEER — 4/6/06
DESIGNED BY: F. ECHEVERRIA
DRAWN BY: D.S./R.S.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
S.E. REGION DESIGN & ENGINEERING SERVICES DIVISION

WRANGELL AIRPORT RUNWAY OVERLAY/RSA & SEAPLANE PULLOUT REPLACEMENT
PROJECT #68167

WATERLINE CONNECTION DETAILS

PATH: G:\Wrg\68167\Planset\W3-4_H2O-PLANS.dwg
TAB: W5 Mon, 03/Apr/06 03:48PM trobertson

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			AIP NO. 3-02-0323-1105	2006	W5	69