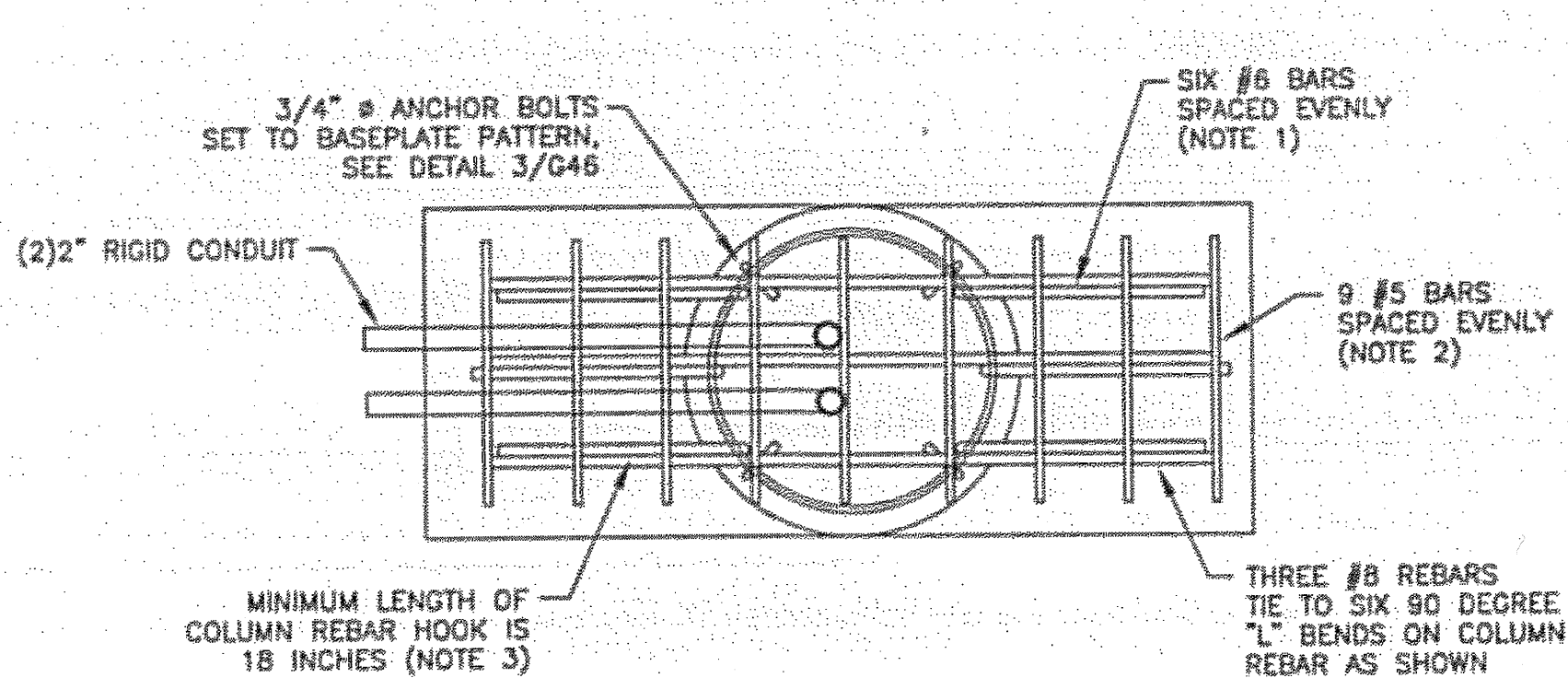
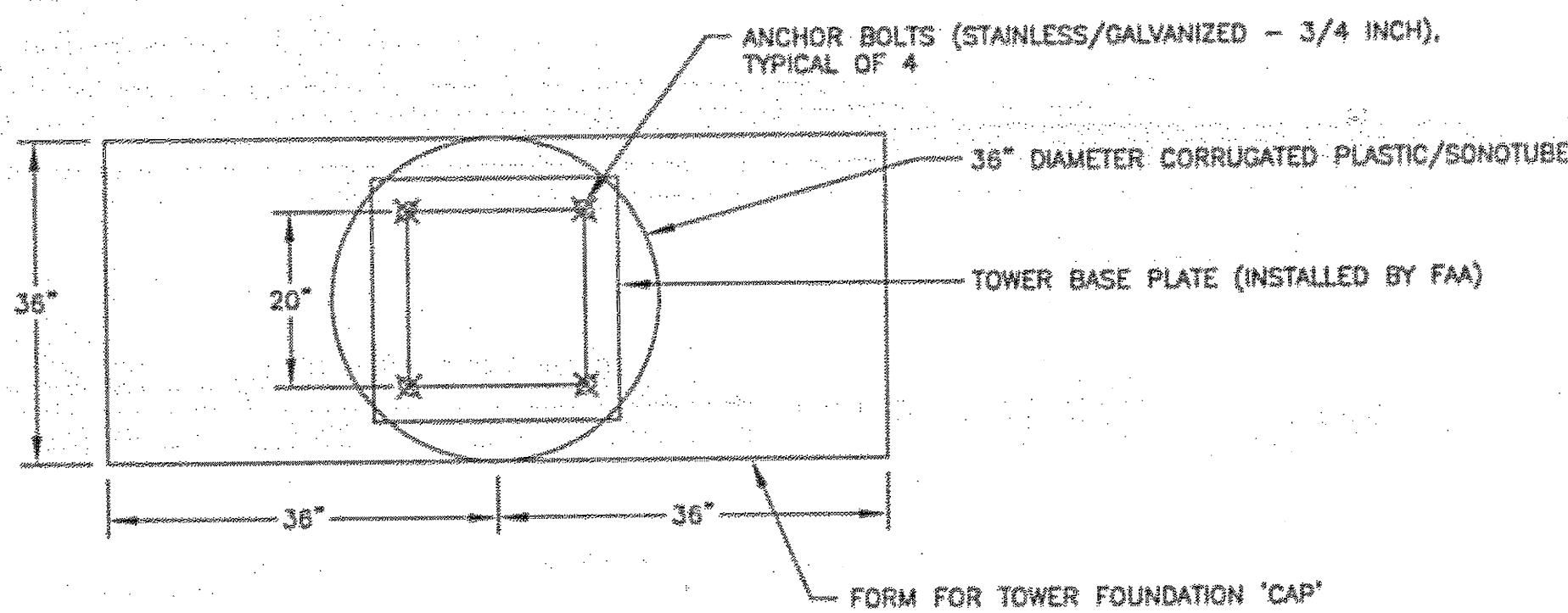


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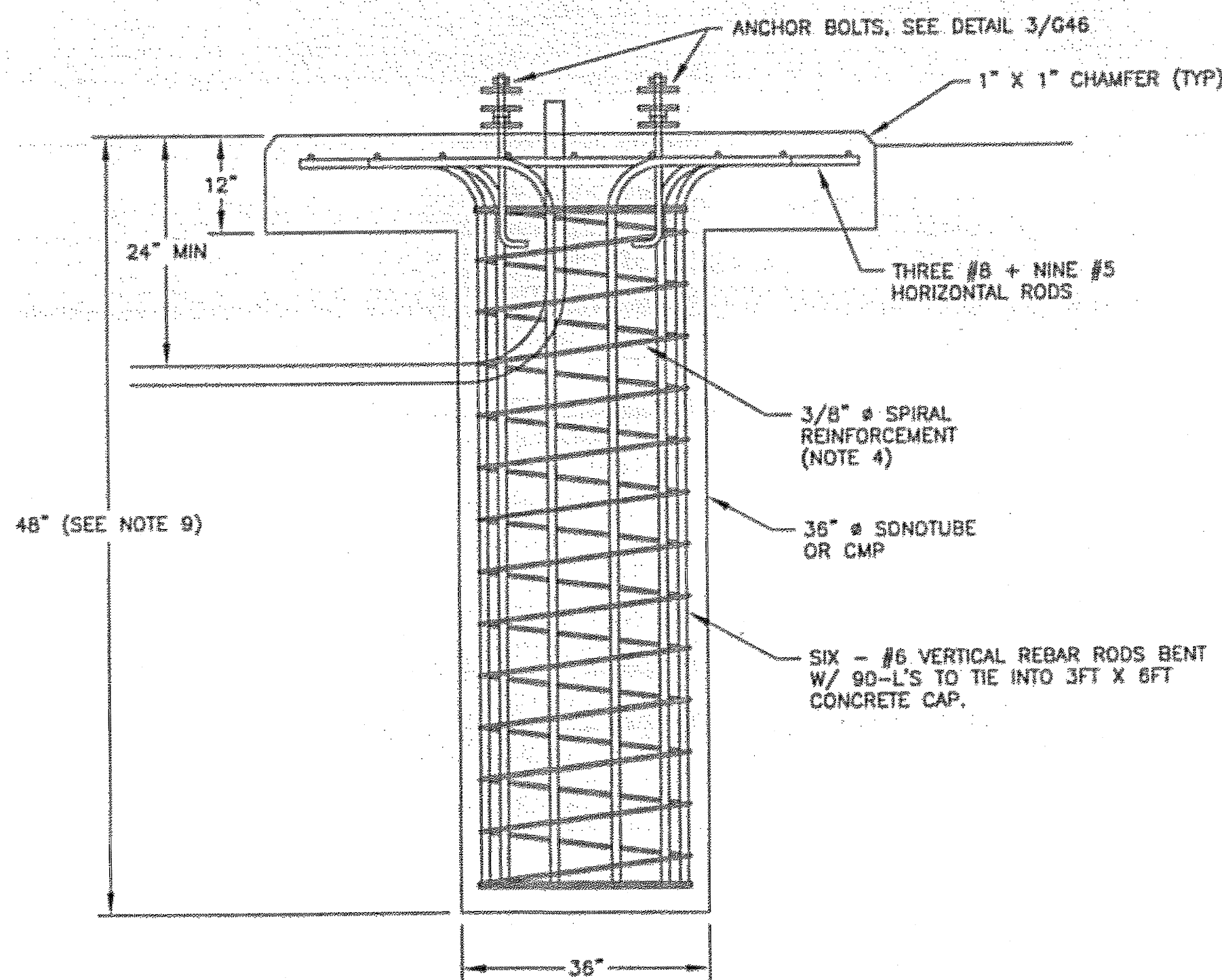
- #6 VERTICAL COLUMN REINFORCEMENT WITH 6" ϕ BENDS TO FORM 90-"L" HOOKS.
- PROVIDE A MINIMUM OF 2" CLEAR COVER OVER ALL REINFORCING STEEL AND CONDUITS.
- MINIMUM DEVELOPMENT LENGTH ASSUMES GRADE 40 REINFORCING STEEL.
- CLEAR SPACING BETWEEN SPIRALS SHALL NOT EXCEED THREE INCHES NOR BE LESS THAN 1 INCH. ANCHORAGE OF OF SPIRAL REINFORCEMENT SHALL BE PROVIDED BY 1-1/2 EXTRA TURNS OF SPIRAL BAR OR WIRE AT THE EACH END OF A SPIRAL UNIT.
- CONDUIT PENETRATIONS THROUGH CONCRETE FOUNDATION ARE USED AS FOLLOWS:
A) ONE INCH CONDUIT SWEEP - POWER.
B) ONE INCH CONDUIT SWEEP - COMMUNICATIONS.
- WIND SENSOR TOWER IS EXISTING AND IS TO BE INSTALLED BY FAA. ANCHOR BOLT PATTERN IS 20-INCH SPACING - SQUARE PATTERN OF 4 3/4 INCH ANCHOR BOLTS AS SHOWN. VERIFY SPACING OF WITH EXISTING EQUIPMENT. A PLYWOOD TEMPLATE IS SUGGESTED IN ORDER TO PROPERLY PLACE ANCHOR BOLTS. VERTICALLY STUB UP ANCHOR BOLTS APPROXIMATELY 4-INCHES OUT OF CONCRETE SURFACE.
- POUR SLAB CAP SUCH THAT ITS LONG AXIS IS PARALLEL TO THE RUNWAY.
- FOR THE REPRESENTATIVE CONCRETE FOUNDATION SHOWN:
A. CONCRETE STRENGTH = 3000 PSI @ 28 DAYS. (MIN.)
B. SECURELY PLACE ANCHOR BOLTS PRIOR TO PLACING CONCRETE. TIE TO REINFORCEMENT.
C. PLACE ALL CONCRETE ON UNDISTURBED SOIL OR COMPACTED BACKFILL. BACKFILL TO BE COMPACTED TO 92%
D. DEPTH OF CONCRETE PIER = 4 FT IN SAND/GRAVEL OR BELOW FROST LEVEL.
E. REINFORCEMENT STEEL PER ASTM A615, GR. 60, TIE WIRE TO BE 16 GAUGE OR LARGER ANNEALED IRON.
F. ALL ANCHORAGE BOLTS AND PLATES TO BE HOT- DIPPED GALV. AFTER FABRICATION. COLD-GALV SPRAY TO BE APPLIED AFTER INSTALLATION TO ALL FASTENING HARDWARE AFTER INSTALLATION COMPLETED.
- FOUNDATION EXCAVATION SHALL BE DUG AND BACKFILLED WITH NON-FROST SUSCEPTIBLE MATERIAL OR AUGERED AT INDICATED DIAMETER.
- REBAR IS BENT AT THE TOP AND WIRE-TIED WITH THE HORIZONTAL CROSS-SUPPORT REBAR.



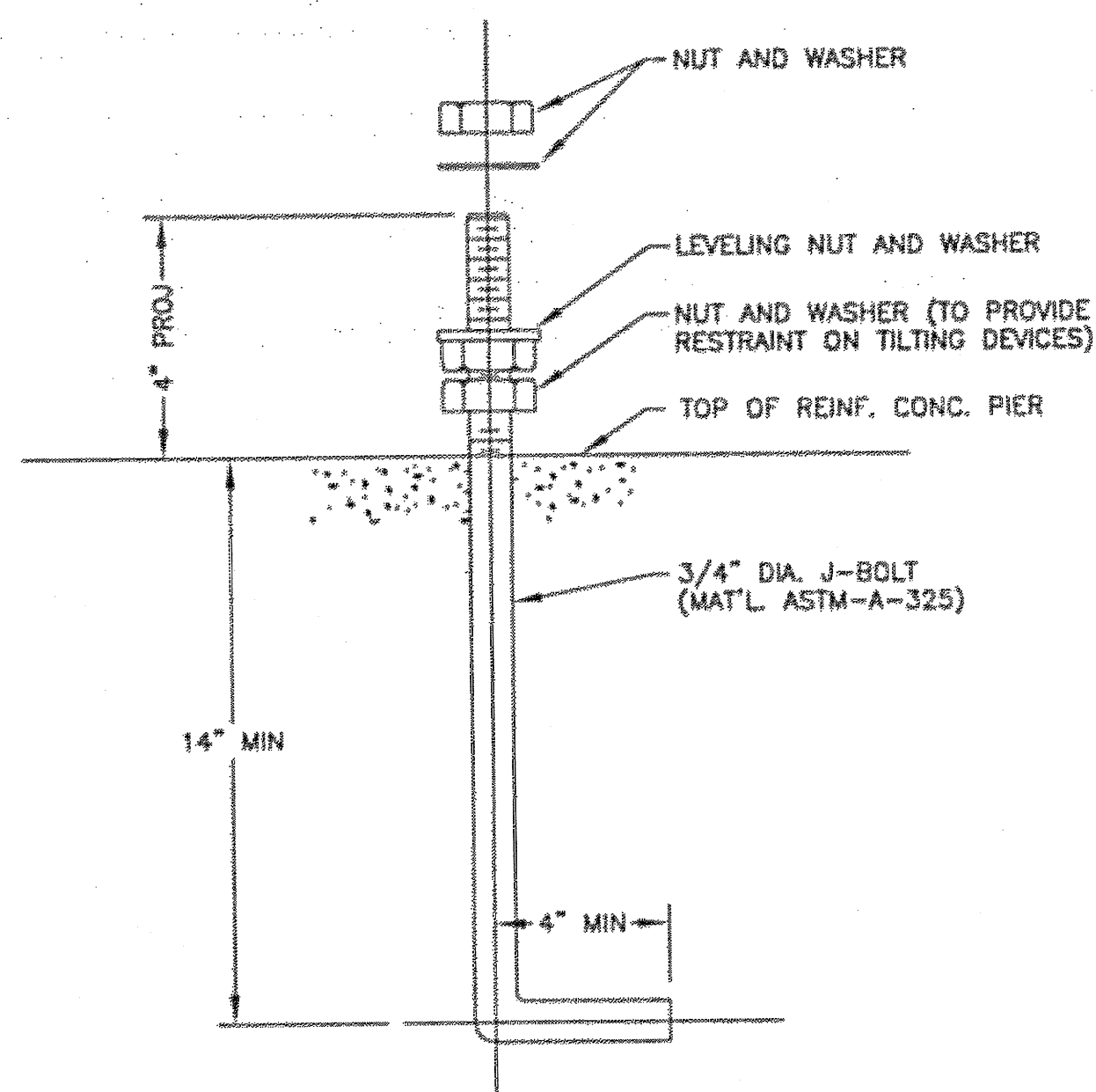
2 REINFORCING PLAN
G46 N.T.S.



1 FOUNDATION PLAN
G46 N.T.S.



4 FOUNDATION SECTION
G46 N.T.S.



3 ANCHOR BOLT DETAIL
G46 N.T.S.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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ATTACHMENT NUMBER

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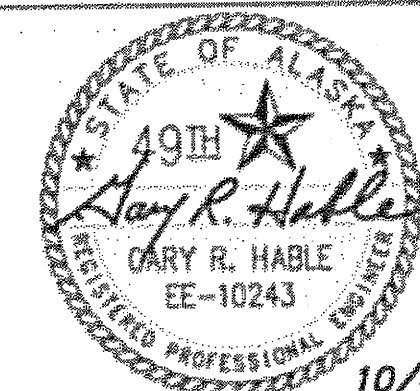
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

F420 WIND SENSOR FOUNDATION DETAILS

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

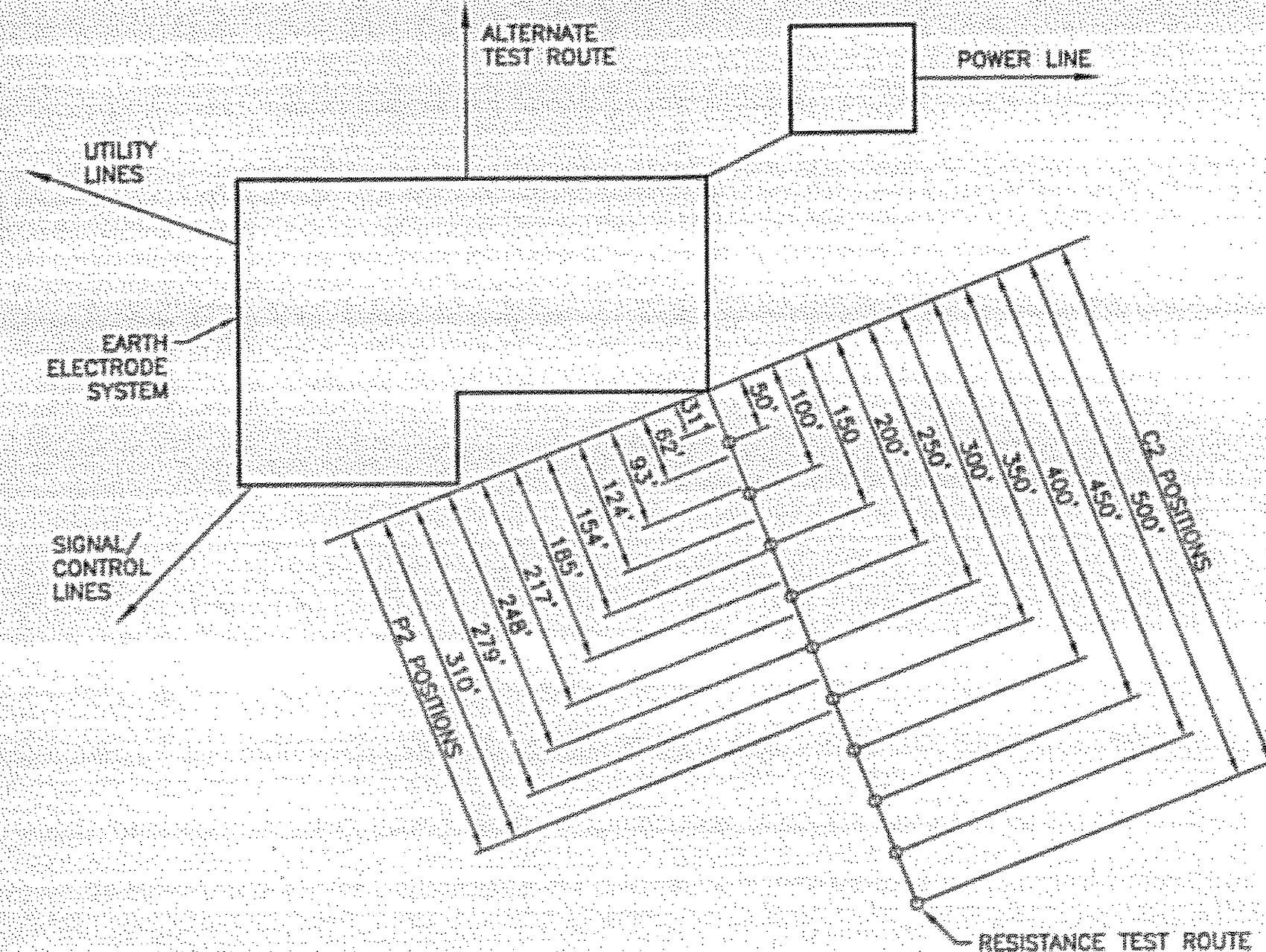
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

F420 WIND SENSOR
FOUNDATION
DETAILS

PROJECT DESIGNATION
AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G46	131

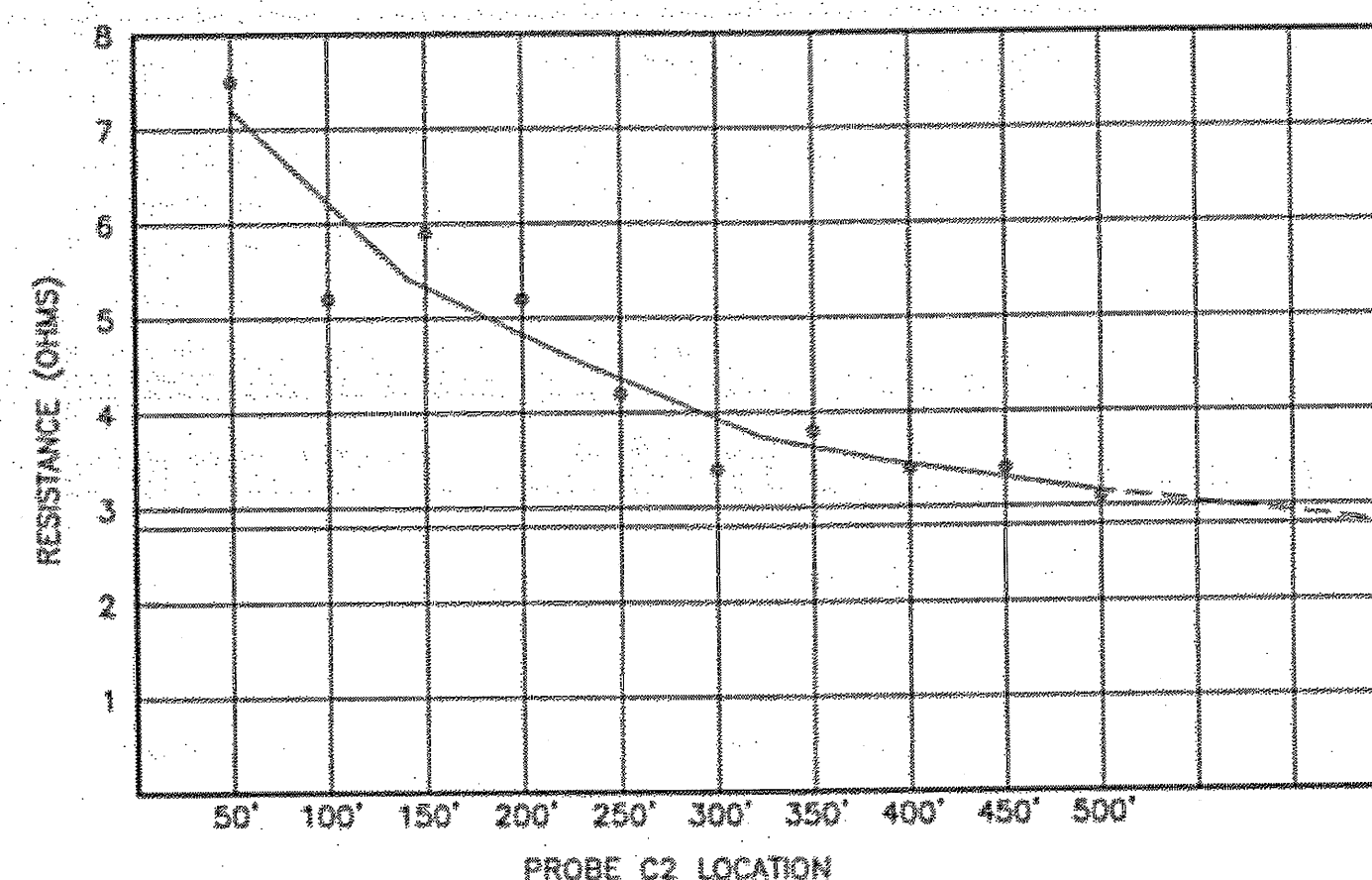
See attached Electrical Asbuilts



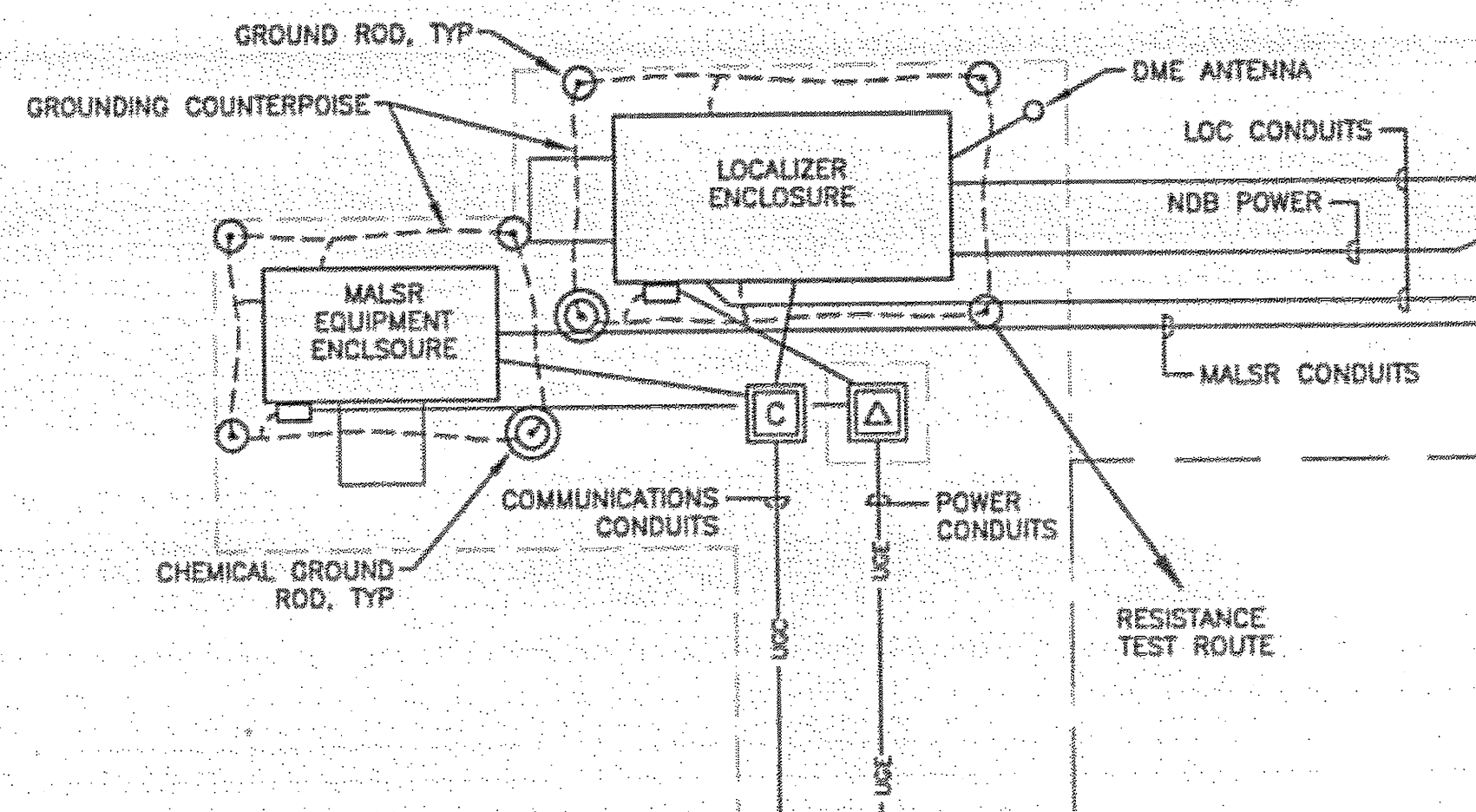
1 TYPICAL FACILITY TEST ROUTE
G47 N.T.S.

C2 PROBE DISTANCE	P2 PROBE DISTANCE (0.62xC2)	RESISTANCE METER READING (OHMS)
50'	31'	7.5
100'	62'	5.2
150'	93'	5.9
200'	124'	5.2
250'	154'	4.2
300'	185'	3.4
350'	217'	3.8
400'	248'	3.4
450'	279'	3.4
500'	310'	3.1

DEPTH OF REFERENCE RODS
RESISTANCE = 2.8 OHMS



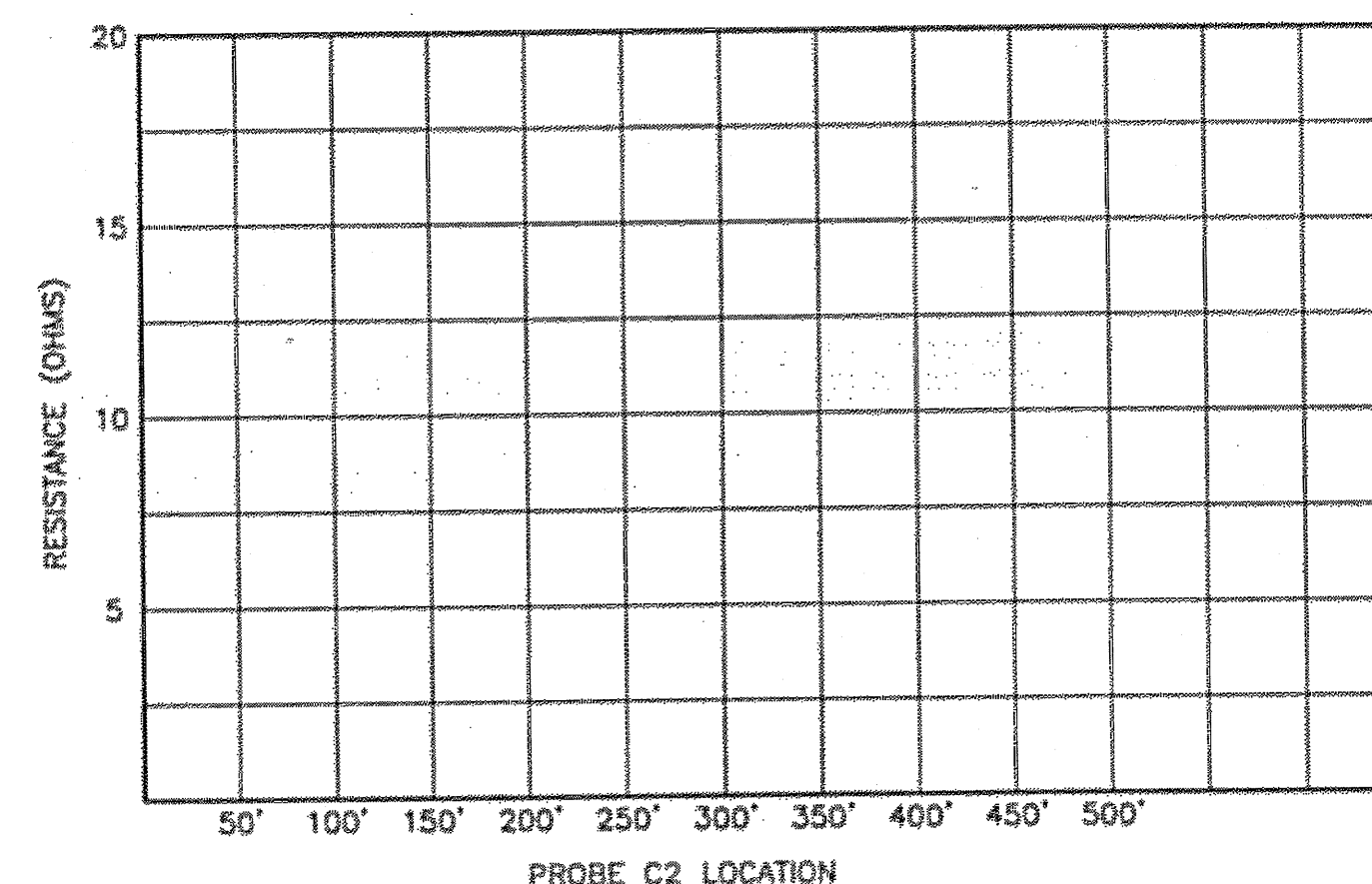
2 SAMPLE MEASUREMENT WORKSHEET
G47 N.T.S.



3 FACILITY TEST ROUTE
G47 N.T.S.

C2 PROBE DISTANCE	P2 PROBE DISTANCE (0.62xC2)	RESISTANCE METER READING (OHMS)
50'	31'	
100'	62'	
150'	93'	
200'	124'	
250'	154'	
300'	185'	
350'	217'	
400'	248'	
450'	279'	
500'	310'	

DEPTH OF REFERENCE RODS
RESISTANCE =



4 MEASUREMENT WORKSHEET
G47 N.T.S.

NOTES:

1. AN FAA REPRESENTATIVE SHALL BE PRESENT TO MONITOR AND/OR VERIFY THE EARTH ELECTRODE RESISTANCE TEST.
2. THE CIVIL CONTRACTOR, WITH THE ASSISTANCE OF A QUALIFIED ELECTRICIAN, SHALL PREPARE A NEAT SKETCH OF THE NEW FACILITY GROUND SYSTEM SIMILAR TO THAT SHOWN IN DETAIL 3. THIS SKETCH TOGETHER WITH THE RESISTANCE MEASUREMENT WORKSHEET (DETAIL 4) WILL BECOME PART OF THE PERMANENT FACILITY FILE. THREE COPIES WILL BE PROVIDED TO THE RESIDENT ENGINEER.
3. MEASURE THE RESISTANCE OF THE ELECTRODE SYSTEM WITH AN INSTRUMENT DESIGNED FOR THE PURPOSE USING THE FALL OF POTENTIAL METHOD (SUCH AS THE BIDDLE NULL BALANCE EARTH TESTER). PROCEED AS FOLLOWS:
 - A. CONNECT THE TERMINALS MARKED C1 AND P1 TOGETHER AND CONNECT THEM TO THE ELECTRODE UNDER TEST.
 - B. POSITION THE C2 PROBE ALONG A LINE WITH MAXIMIZES THE DISTANCE FROM THE ELECTRODE UNDER TEST AND FROM THE OTHER BURIED MATERIALS SUCH AS UTILITY PIPES, POWER AND SIGNAL CABLES, FUEL TANKS, ETC. IN CHOOSING THE DIRECTION FOR PLACEMENT OF THE C2 PROBE, EXAMINE THE CONFIGURATION OF THE ELECTRODE SYSTEM FOR THE FACILITY AND DETERMINE THE LOCATION OF ALL SUCH BURIED MATERIALS AS ILLUSTRATED IN DETAIL 1 (FOR LONG SYSTEM SUCH AS ALS, THE C2 PROBE LINE SHOULD BE RUN 90° TO ALS). KEEP C2 AND P2 LEADS SEPARATED AS FAR AS POSSIBLE.
 - C. POSITION THE C2 PROBE AT DISTANCES AS SHOWN IN DETAIL 4. RECORD THE METER READINGS FOR EACH C2 AND P2 PROBE POSITION (NOTE THAT THE P2 POSITIONS ARE 62% OF THE C2 POSITIONS). IT MAY NOT BE NECESSARY TO PLOT THE FULL 500'. PLOT ENOUGH POINTS TO ACCURATELY DETERMINE WHERE RESISTANCE CURVE LEVELS OFF.
 - D. NEXT PLOT ON THE GRAPH AS MANY RECORDED RESISTANCE READINGS VERSUS THE CORRESPONDING C2 PROBE POSITIONS AS NECESSARY TO DETERMINE WHERE CURVE LEVELS OFF (DETAIL 4).
 - E. THE TRUE VALUE OF RESISTANCE CAN BE ESTIMATED BY EXTRAPOLATING THE CURVE TO ITS ASYMPTOTIC VALUE.

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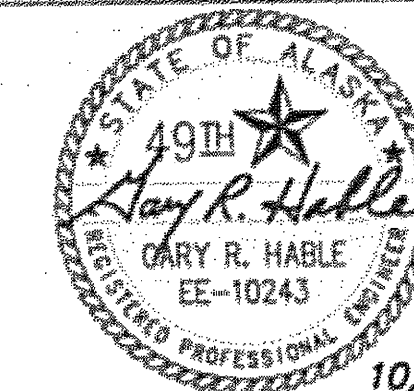
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

LOCALIZER GROUND TESTING

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

LOCALIZER
GROUND TESTING

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

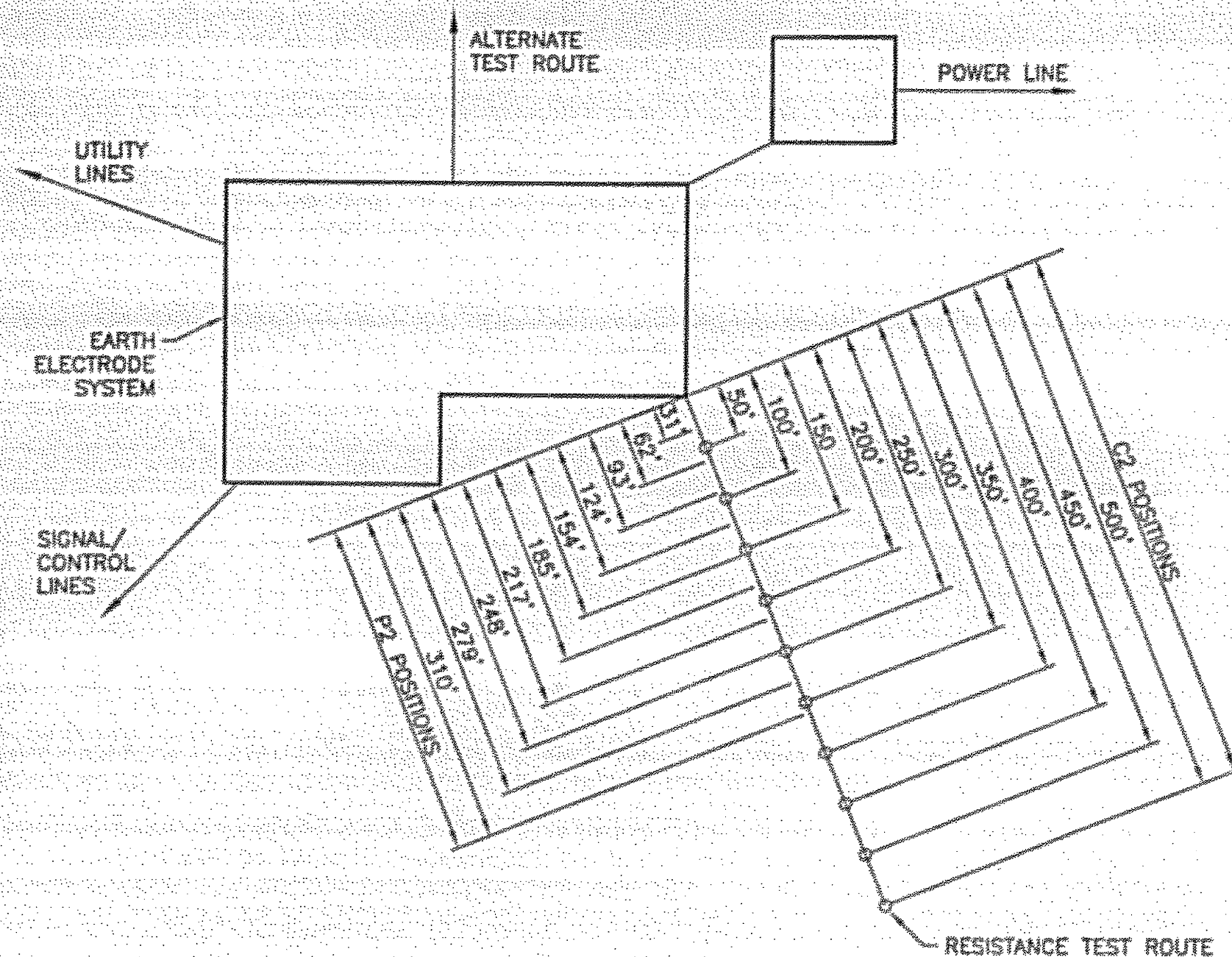
STATE YEAR
ALASKA 2006

SHEET NUMBER TOTAL SHEETS

G47 131

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

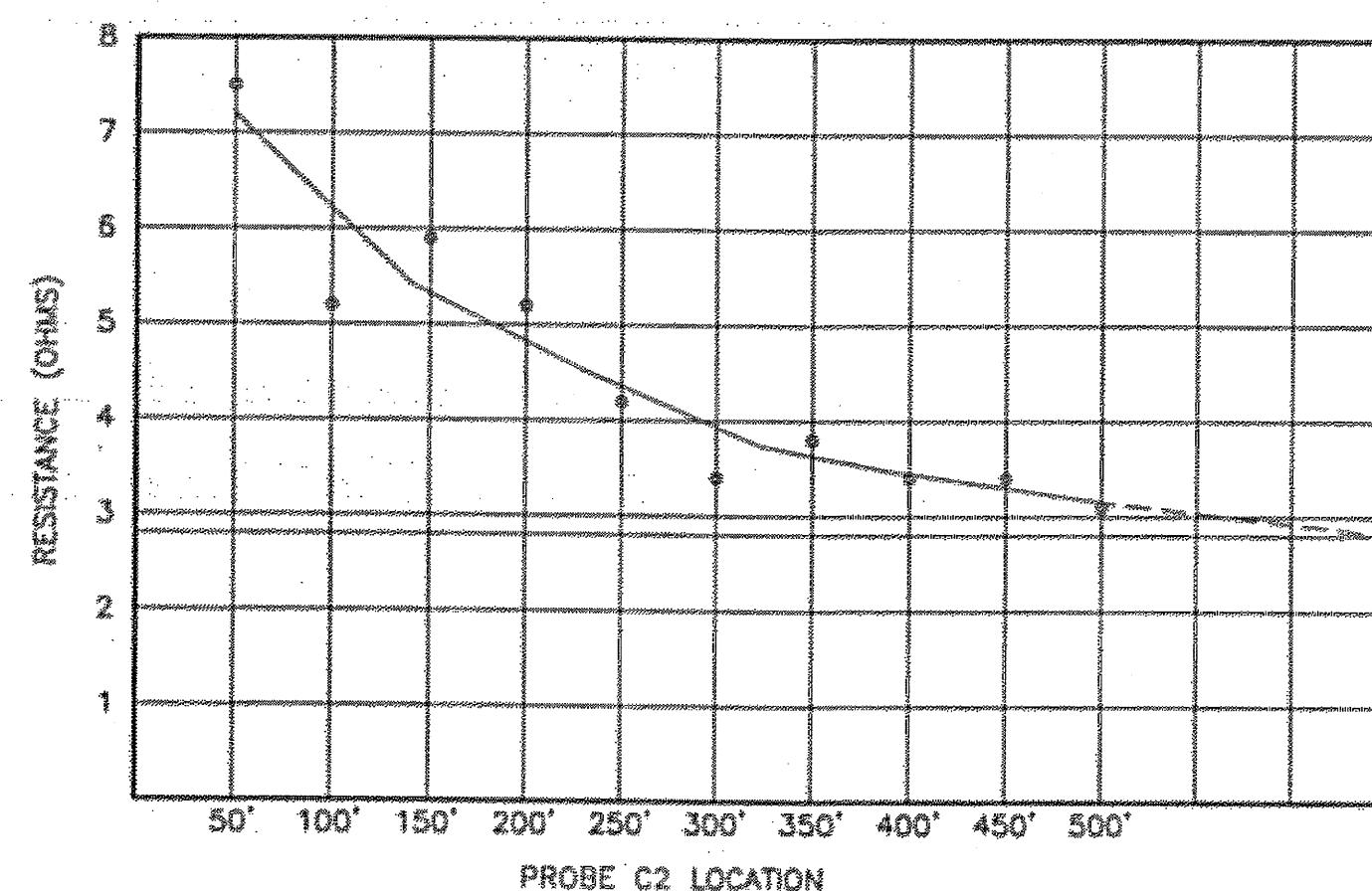
See attached Electrical Asbuilts



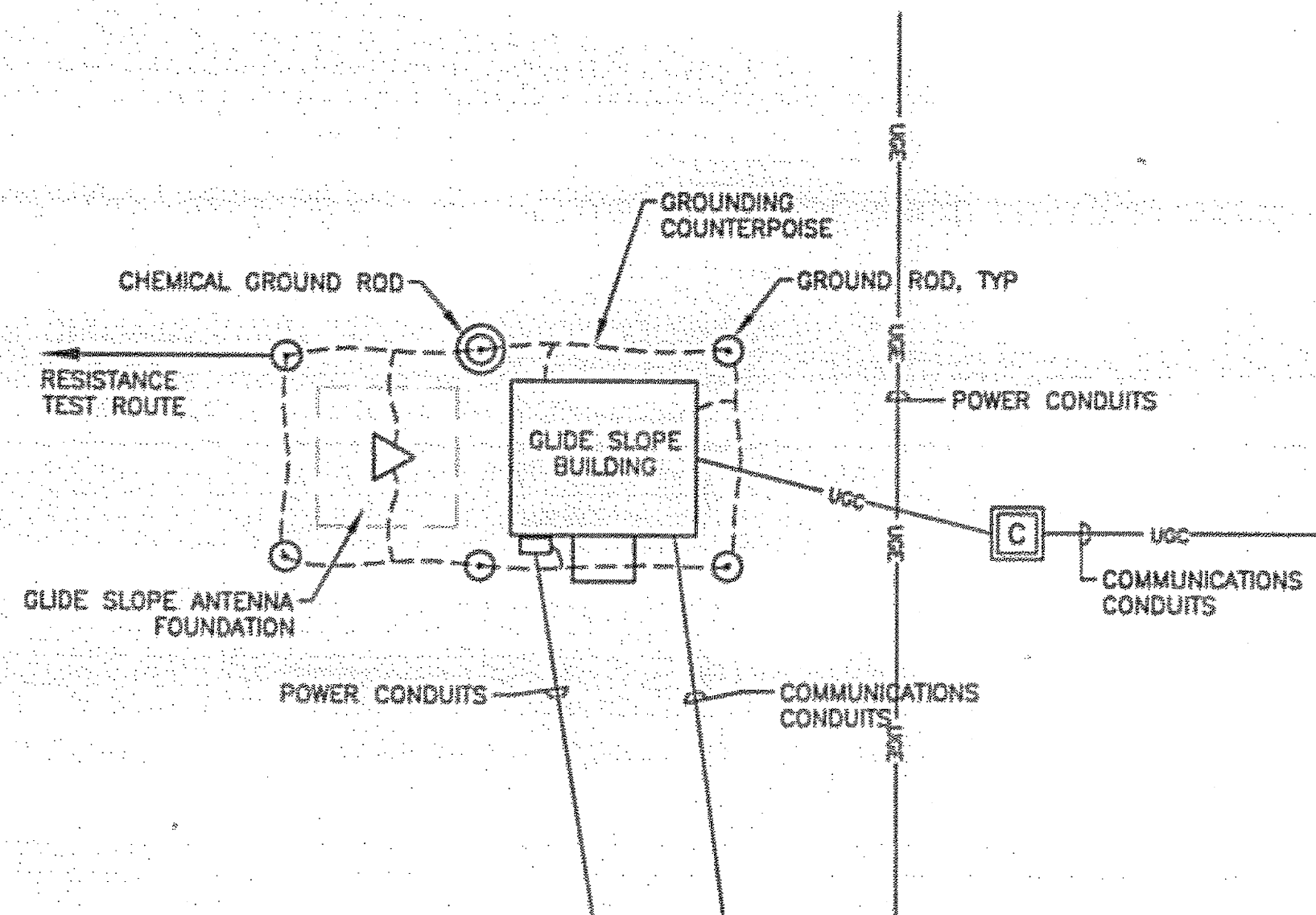
1 TYPICAL FACILITY TEST ROUTE
G48 N.T.S.

C2 PROBE DISTANCE	P2 PROBE DISTANCE (0.62xC2)	RESISTANCE METER READING (OHMS)
50'	31'	7.5
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450'	279'	3.4
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DEPTH OF REFERENCE RODS
RESISTANCE = 2.8 OHMS



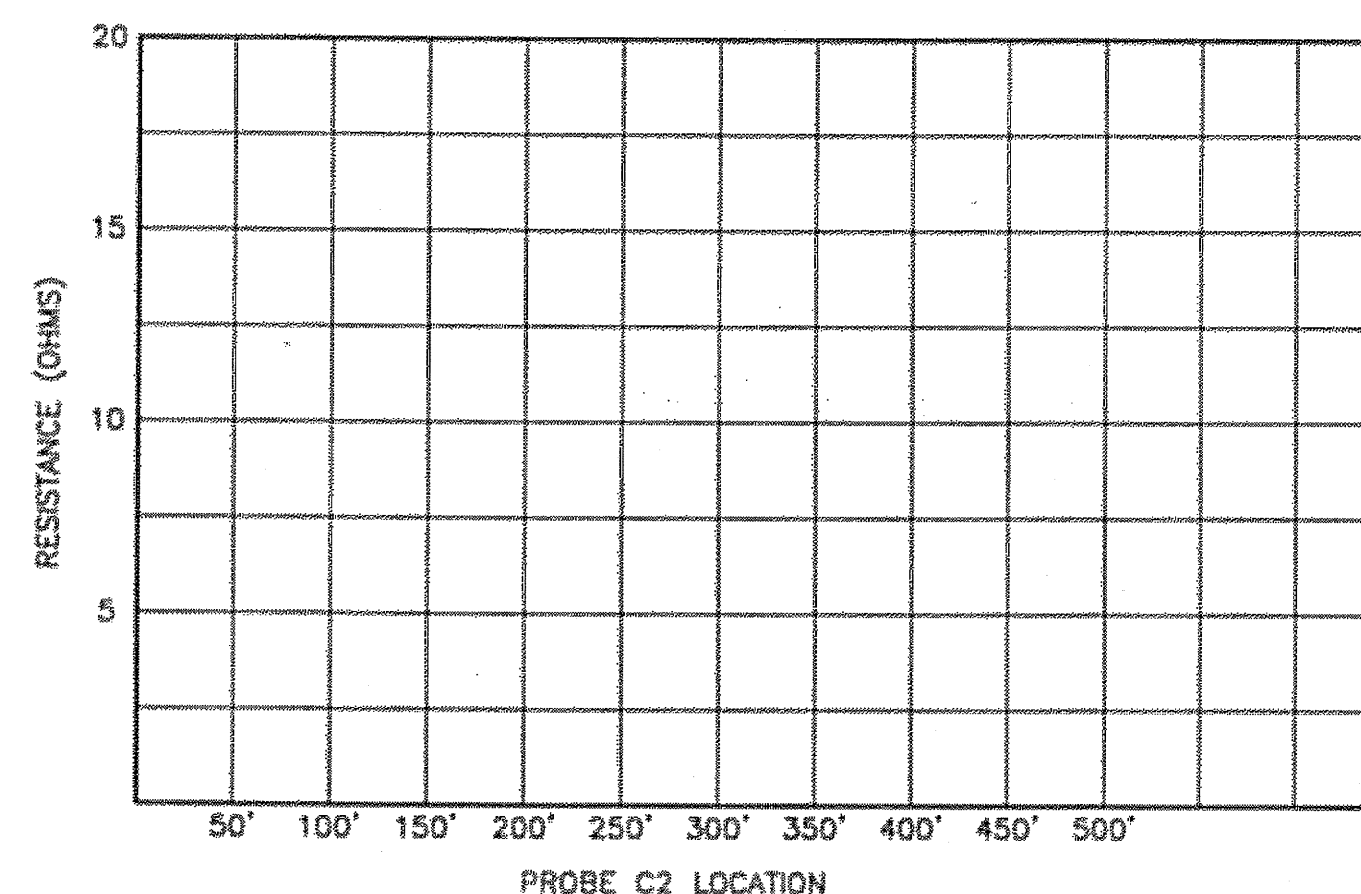
2 SAMPLE MEASUREMENT WORKSHEET
G48 N.T.S.



3 FACILITY TEST ROUTE
G48 N.T.S.

C2 PROBE DISTANCE	P2 PROBE DISTANCE (0.62xC2)	RESISTANCE METER READING (OHMS)
50'	31'	
100'	62'	
150'	93'	
200'	124'	
250'	154'	
300'	185'	
350'	217'	
400'	248'	
450'	279'	
500'	310'	

DEPTH OF REFERENCE RODS
RESISTANCE =



4 MEASUREMENT WORKSHEET
G48 N.T.S.

NOTES:

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DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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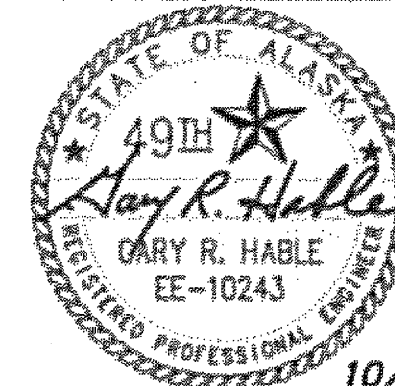
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

GLIDE SLOPE GROUND TESTING

PREPARED BY: USKH INC.

CHECKED BY: GRH



10/4/06

DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

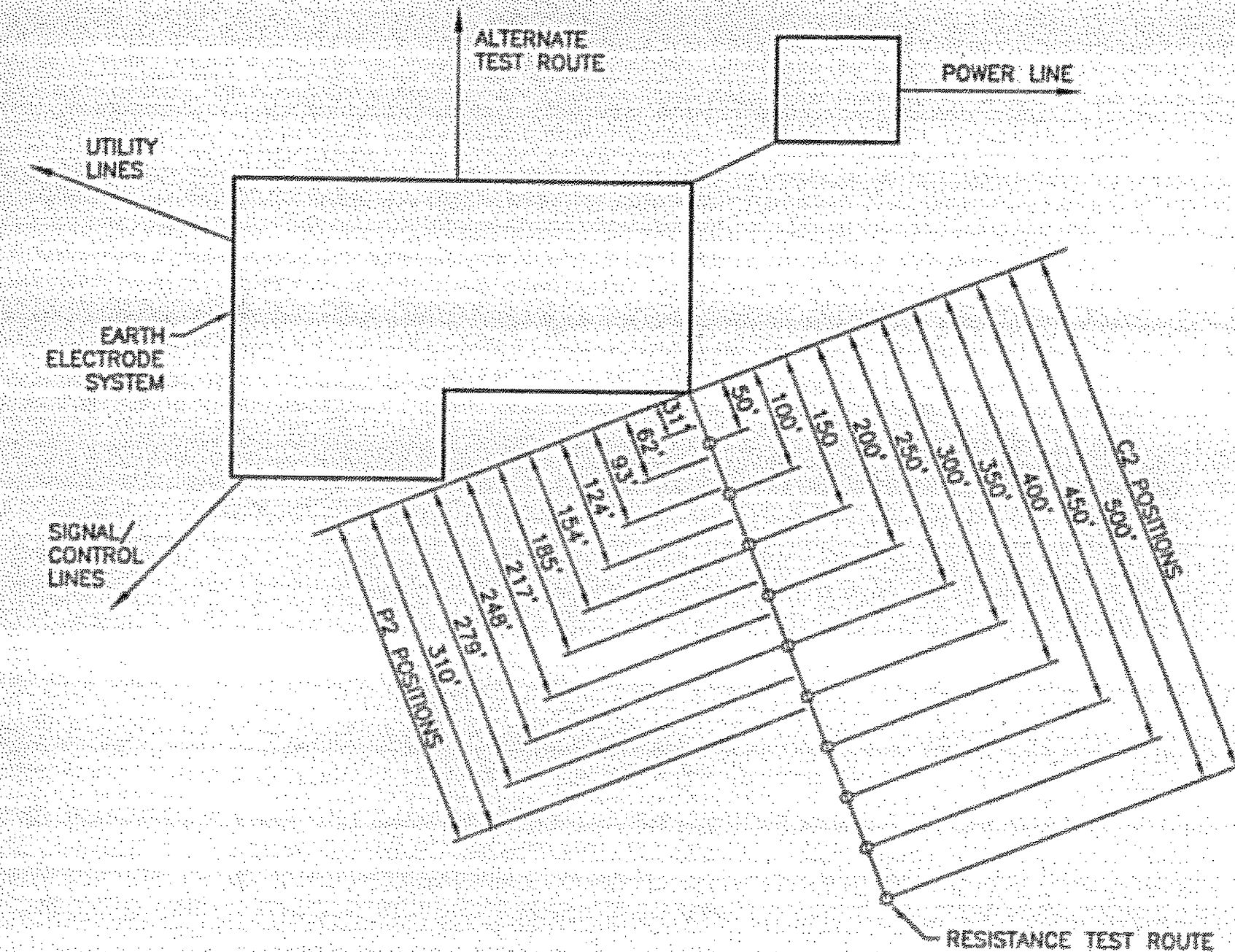
GLIDE SLOPE
GROUND TESTING

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G48	131

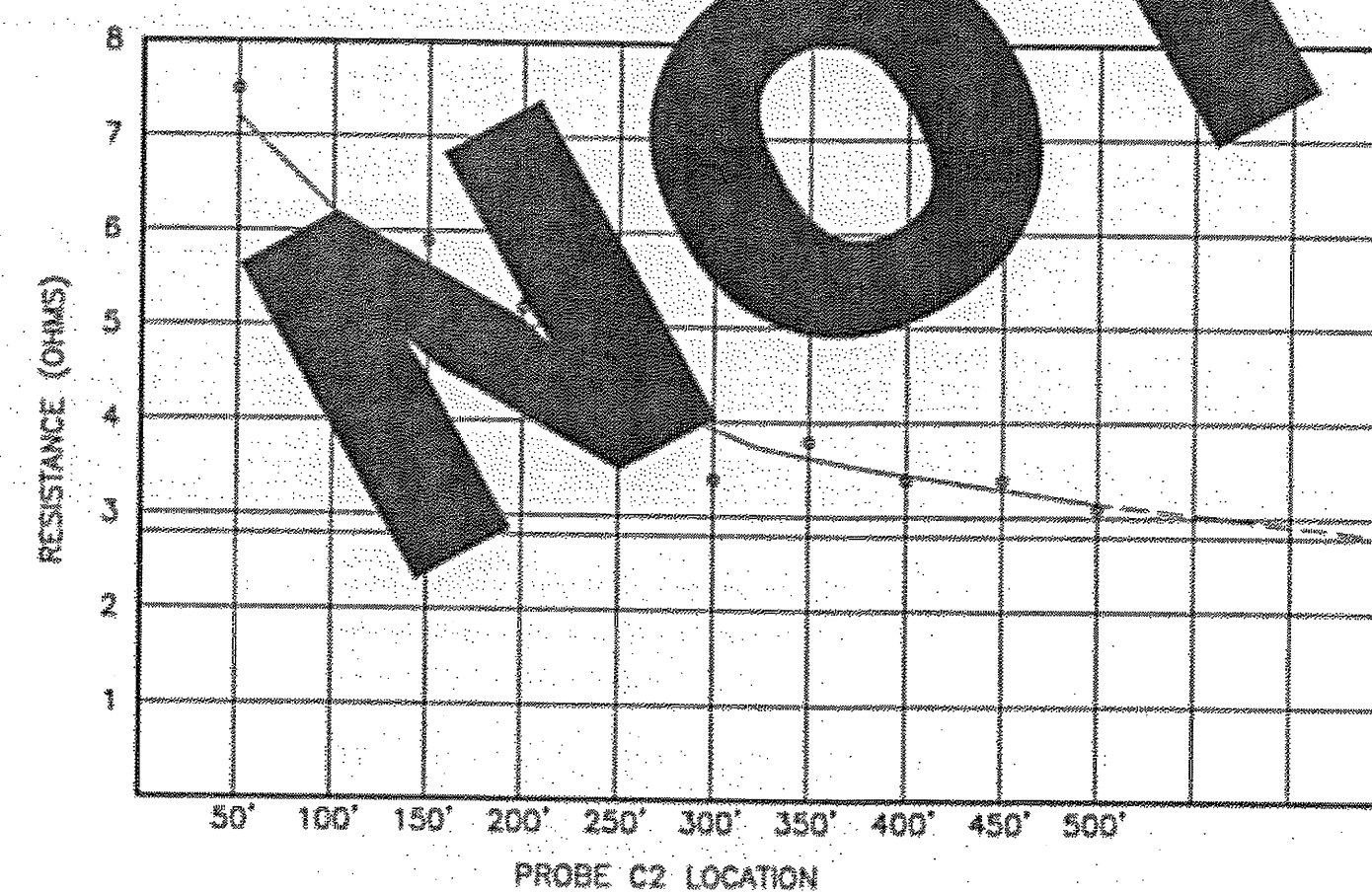
See attached Electrical Asbuilts



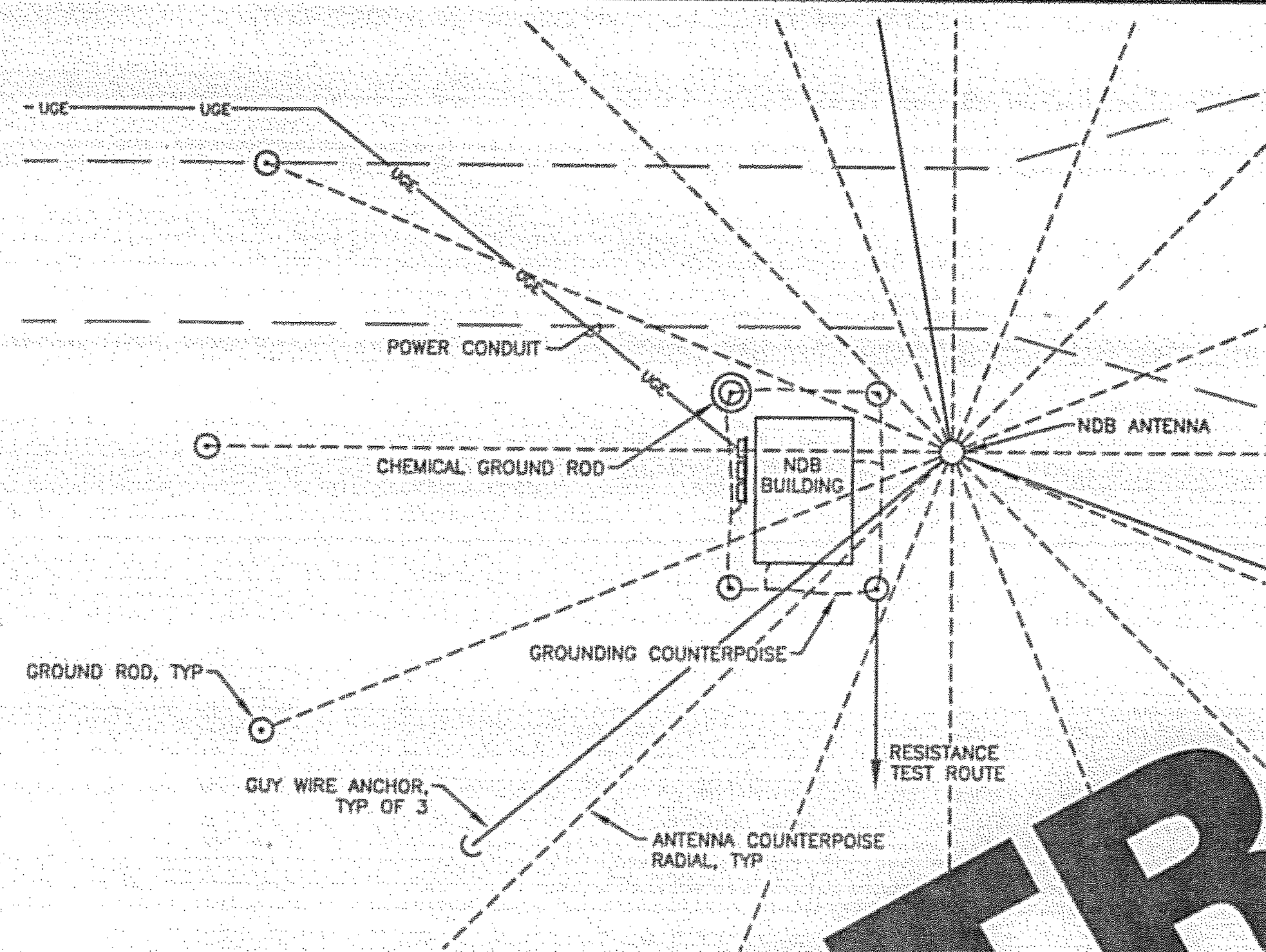
1 TYPICAL FACILITY TEST ROUTE
G49 N.T.S.

C2 PROBE DISTANCE	P2 PROBE DISTANCE (0.62x C2)	RESISTANCE METER READING (OHMS)
50'	31'	7.5
100'	62'	5.2
150'	93'	5.9
200'	124'	5.2
250'	154'	4.2
300'	185'	3.4
350'	217'	3.8
400'	248'	3.4
450'	279'	3.4
500'	310'	3.1

DEPTH OF REFERENCE ROD
RESISTANCE = 2.8 OHMS



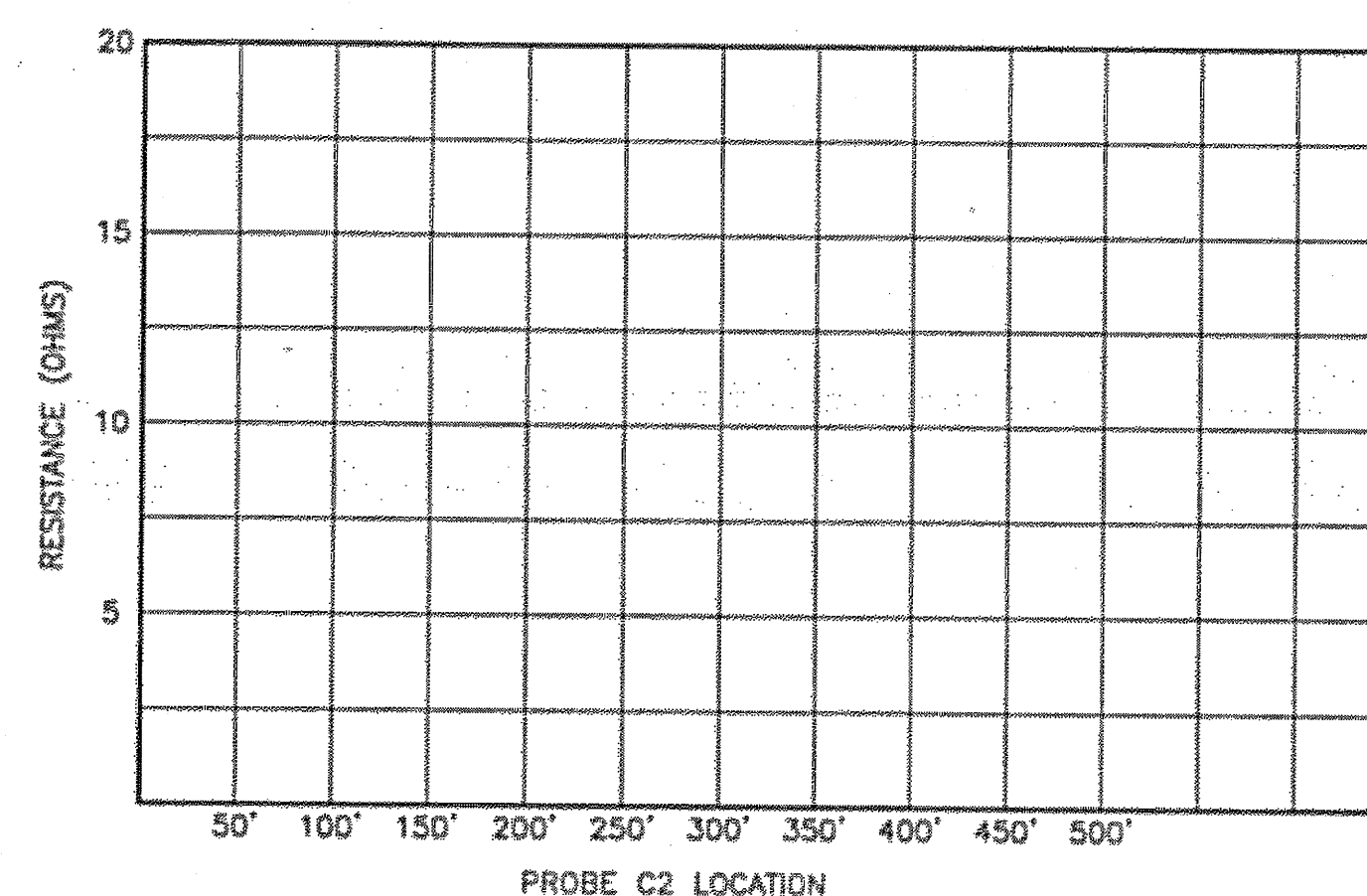
2 SAMPLE MEASUREMENT WORKSHEET
G49 N.T.S.



3 FACILITY TEST ROUTE
G49 N.T.S.

C2 PROBE DISTANCE	P2 PROBE DISTANCE (0.62x C2)	RESISTANCE METER READING (OHMS)
50'	31'	
100'	62'	
150'	93'	
200'	124'	
250'	154'	
300'	185'	
350'	217'	
400'	248'	
450'	279'	
500'	310'	

DEPTH OF REFERENCE RODS
RESISTANCE =



4 MEASUREMENT WORKSHEET
G49 N.T.S.

NOTES:

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2. THE CIVIL CONTRACTOR, WITH THE ASSISTANCE OF A QUALIFIED ELECTRICIAN, SHALL PREPARE A NEAT SKETCH OF THE NEW FACILITY GROUND SYSTEM SIMILAR TO THAT SHOWN IN DETAIL 3. THIS SKETCH TOGETHER WITH THE RESISTANCE MEASUREMENT WORKSHEET (DETAIL 4) WILL BECOME PART OF THE PERMANENT FACILITY FILE. THREE COPIES WILL BE PROVIDED TO THE RESIDENT ENGINEER.
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 - A. CONNECT THE TERMINALS MARKED C1 AND P1 TOGETHER AND CONNECT THEM TO

THE FACILITY AND DETERMINE THE LOCATION OF ALL SUCH BURIED METALS. THEN PROBE AS NEAR AS POSSIBLE FROM THESE MATERIALS. DETAIL 1 SHOWS THE GROUND SYSTEM SUCH AS ALS. THE PROBE SHOULD BE RUN TO THE ALS. KEEP C2 AND P2 LEADS SEPARATED AS FAR AS POSSIBLE. IN DETAIL 4, RECORD THE MET. READINGS FOR EACH C2 AND P2 PROBE POSITION (NOTE THAT THE POSITIONS ARE NOT OF THE C2 POSITIONS). IT MAY NOT BE NECESSARY TO PLOT THE 500' PLOT ENOUGH POINTS TO ACCURATELY DEFINE THE RESISTANCE CURVE LEVELS OFF. PLOT THE CURVE WITH MANY RECORDED RESISTANCE READINGS. WHERE THE CURVE LEVELS OFF (DETAIL 4). THE VALUE OF RESISTANCE CAN BE ESTIMATED BY EXTRAPOLATING TO ITS ASYMPTOTIC VALUE.

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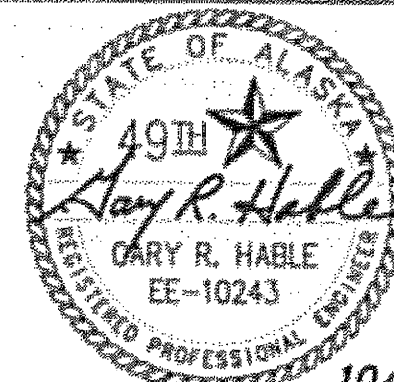
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

NDB GROUND TESTING

PREPARED BY: USKH INC.

CHECKED BY: GRH



10/4/06

DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

NDB
GROUND TESTING

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

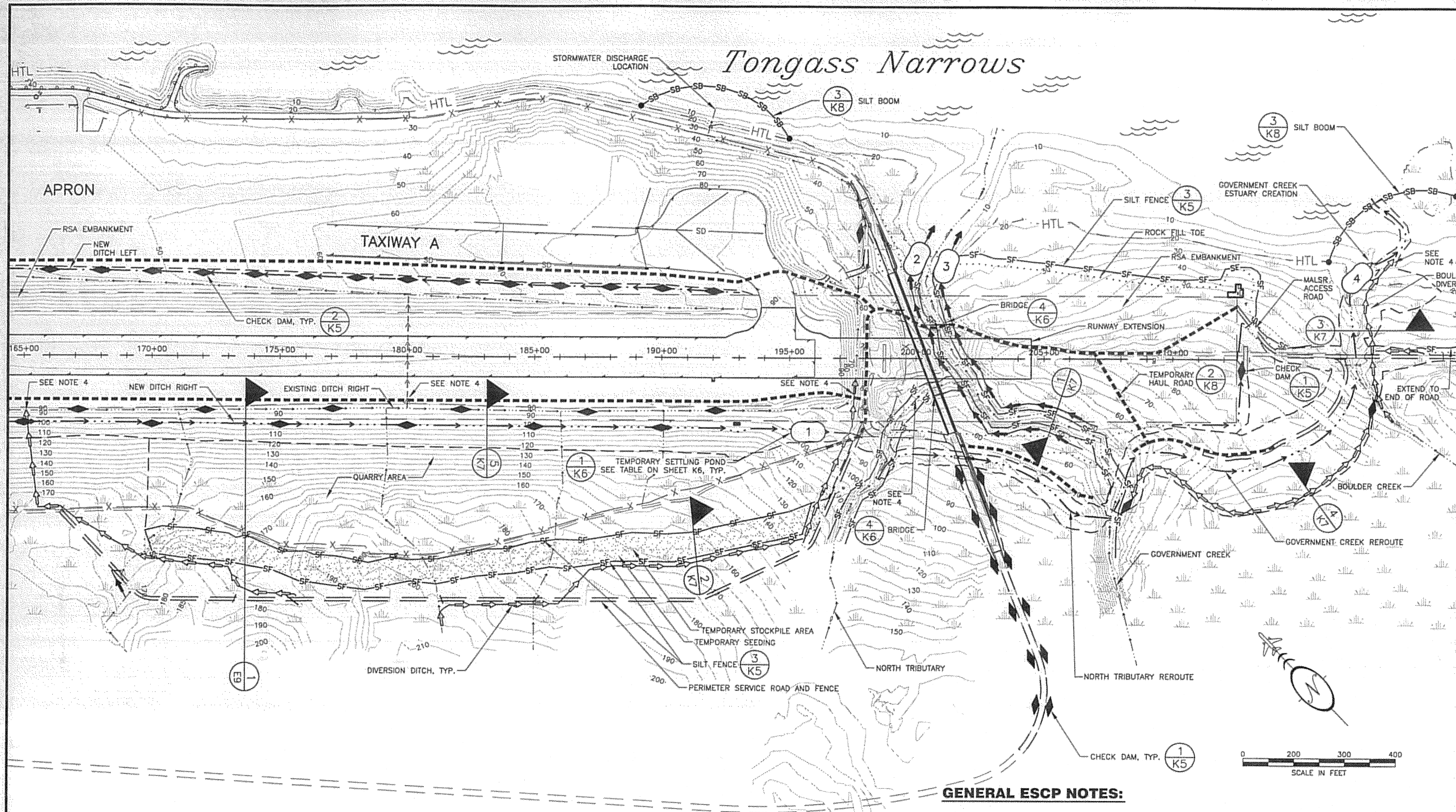
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS

G49

131

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

See attached Electrical Asbuilts



LEGEND			
	NEW CULVERT		EXISTING STREAM / DITCH
	CHECK DAM		NEW STREAM / DITCH / CREEK REROUTE
	SILT FENCE		INTERCEPTION DITCH
	SILT BOOM		DIVERSION DITCH
	HIGH TIDE LINE		FISH STREAM
	TEMPORARY SETTLING POND		WETLANDS
	HAUL ROUTE		

GENERAL ESCP NOTES:

- SEE APPENDIX F FOR THE ENVIRONMENTAL PERMITS AND COMMITMENTS FOR FURTHER DETAILS AND REQUIREMENTS.
- THE CONTRACTOR SHALL USE THIS EROSION AND SEDIMENT CONTROL PLAN (ESCP) TO DEVELOP STORM WATER POLLUTION PREVENTION PLANS (SWPPP) FOR EACH OF THE STAGES SHOWN ON SHEETS A6 THROUGH A9. NO EARTHWORK WILL BE ALLOWED ON A SPECIFIC STAGE UNTIL THE SWPPP COVERING THAT SPECIFIC STAGE HAS BEEN IMPLEMENTED AND APPROVED BY THE ENGINEER.
- APPENDIX C OF THE CONTRACT DOCUMENT INCLUDES AN ESCP NARRATIVE THAT THE CONTRACTOR MAY USE FOR DEVELOPING A SWPPP.
- SETTLING PONDS ARE INTENDED TO TREAT ONLY STORM WATER RUNOFF COMING FROM DISTURBED AREAS. STORM WATER COMING FROM OUTSIDE THE PROJECT LIMITS, UNDISTURBED AREAS AND BASE FLOWS ARE TO BE ROUTED THROUGH EXISTING DRAINAGE CHANNELS AND AROUND SETTLING PONDS. USE TEMPORARY DITCHING AND PIPING AS NECESSARY TO MEET THIS INTENT.
- THE ENGINEER MAY DIRECT THE CONTRACTOR TO PROVIDE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED TO PREVENT SEDIMENT FROM ENTERING WATERS OF THE U.S. THESE ADDITIONAL CONTROL MEASURES MAY INCLUDE, BUT ARE NOT LIMITED TO:
 - TEMPORARY SEEDING OF EXPOSED SLOPES
 - ADDING OF FLOCCULANTS IN SEDIMENTATION PONDS
 - APPLICATION OF SOIL STABILIZATION POLYMER TO ROADS OR EXPOSED SLOPES.
 - BENTONITE CLAY AND OTHER SOIL SEALERS
 - ADDITION OF AGGREGATE BASE COURSE MATERIALS TO HAUL ROADS
 - VEHICLE TRACKING ENTRANCE/EXIT
 - DEWATERING SILT BAG
 - CONSTRUCTION TIMING AND SEQUENCING TO MINIMIZE EXPOSURE OF EXPOSED SLOPES

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:
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ADDENDUM NUMBER

ATTACHMENT NUMBER

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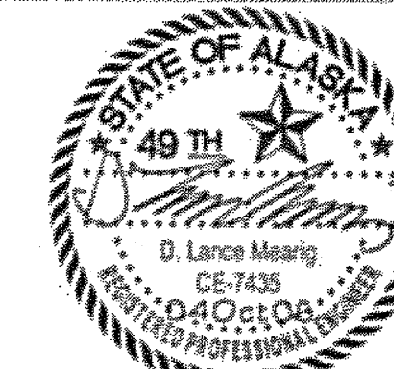
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

EROSION & SEDIMENT CONTROL PLAN
STAGE 1

PREPARED BY: USKH-INC.

CHECKED BY: DLM



DESIGNED BY: NCL

DRAWN BY: WJP

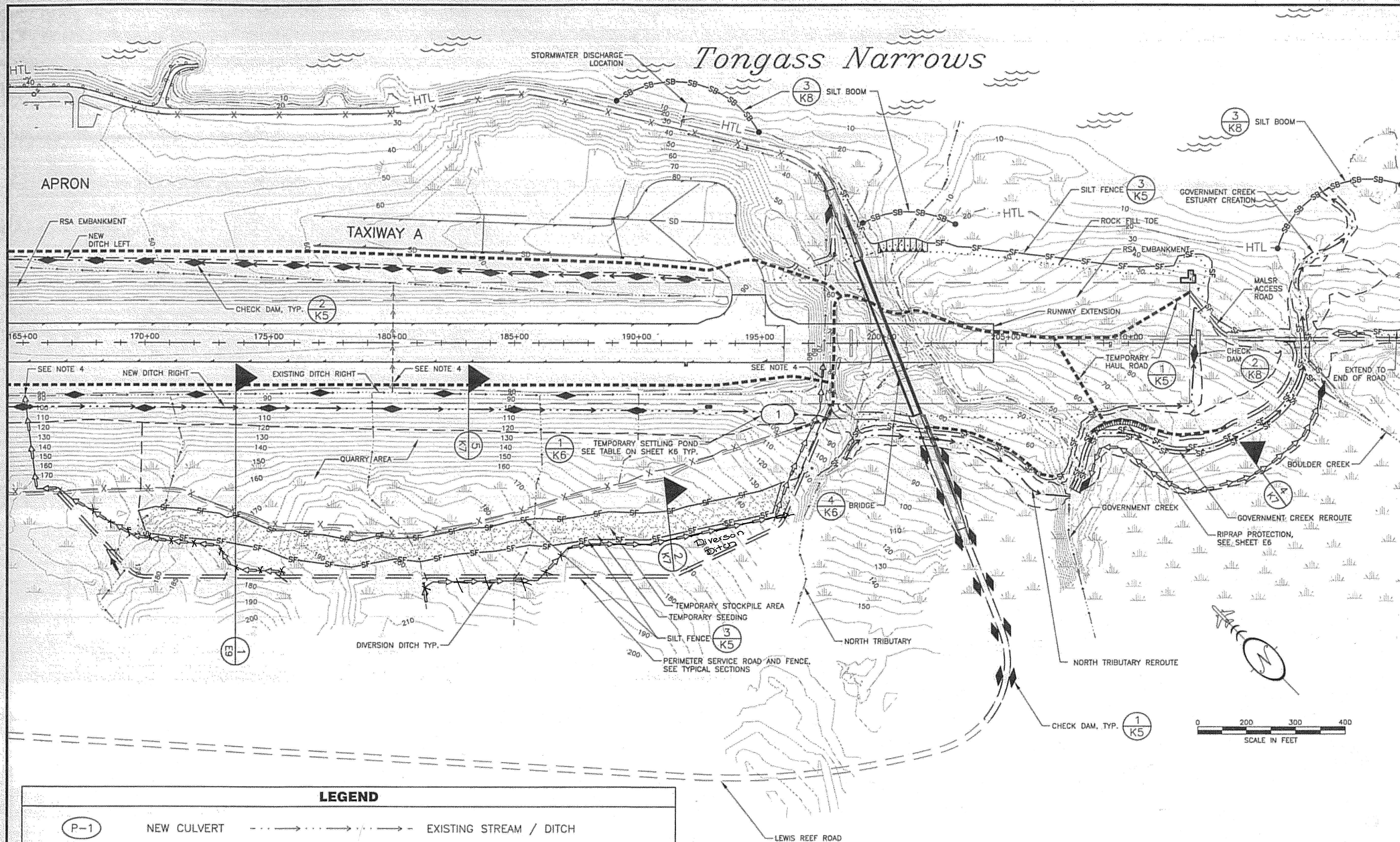
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

EROSION &
SEDIMENT
CONTROL PLAN
STAGE 1

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
K1	131



LEGEND			
(P-1)	NEW CULVERT	---	EXISTING STREAM / DITCH
◆	CHECK DAM	---	NEW STREAM / DITCH / CREEK REROUTE
—SF—SF—	SILT FENCE	—>—>—>—	INTERCEPTION DITCH
—SB—SB—	SILT BOOM	—◇—◇—◇—	DIVERSION DITCH
---HTL---	HIGH TIDE LINE	—X—X—X—	FISH STREAM
(1)	TEMPORARY SETTLING POND	—X—X—X—	WETLANDS
.....	HAUL ROUTE		

NOTE:
SEE SHEET K1 FOR GENERAL NOTES.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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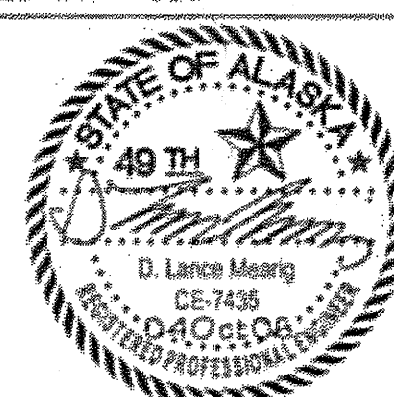
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

EROSION & SEDIMENT CONTROL PLAN
STAGE 2

PREPARED BY: USKH, INC.

CHECKED BY: DLM



DESIGNED BY: NCL

DRAWN BY: WJP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

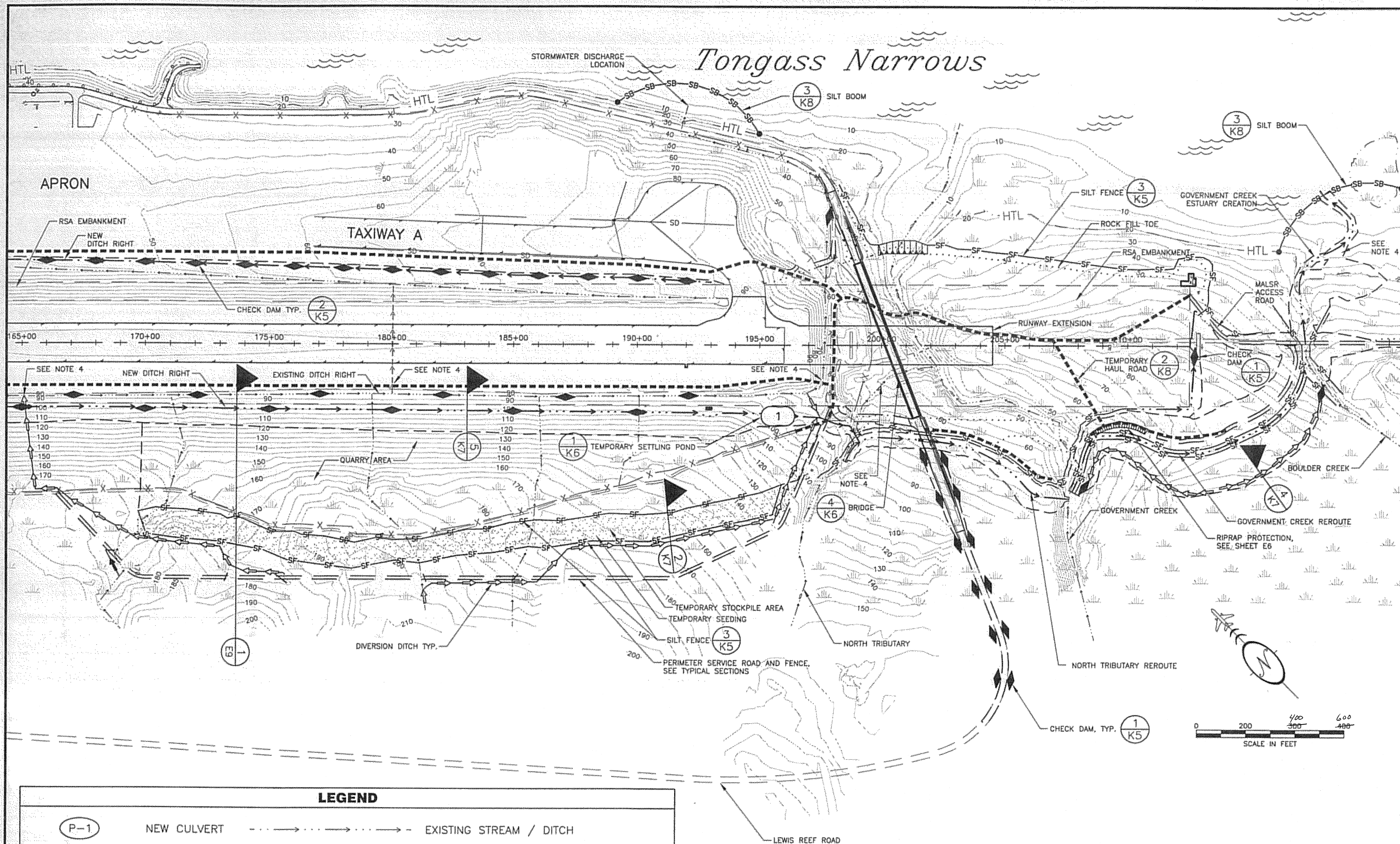
**EROSION & SEDIMENT CONTROL PLAN
STAGE 2**

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
K2	131

1168
310
1478



LEGEND			
(P-1)	NEW CULVERT	---	EXISTING STREAM / DITCH
◆	CHECK DAM	---	NEW STREAM / DITCH / CREEK REROUTE
SF	SILT FENCE	→→→→	INTERCEPTION DITCH
SB	SILT BOOM	◆◆◆◆	DIVERSION DITCH
HTL	HIGH TIDE LINE	⋈	FISH STREAM
1	TEMPORARY SETTLING POND	⋈	WETLANDS
-----	HAUL ROUTE		

NOTE:
SEE SHEET K1 FOR GENERAL NOTES.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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ADDENDUM NUMBER

ATTACHMENT NUMBER

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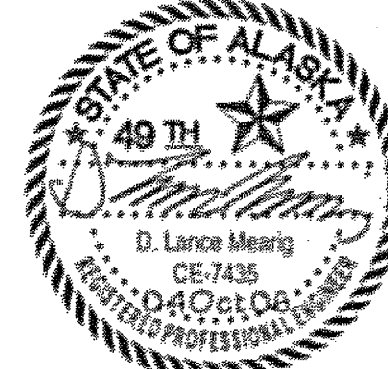
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

EROSION & SEDIMENT CONTROL PLAN
STAGE 3-7

PREPARED BY: USKH INC.

CHECKED BY: DLM



DESIGNED BY: NCL

DRAWN BY: WJP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

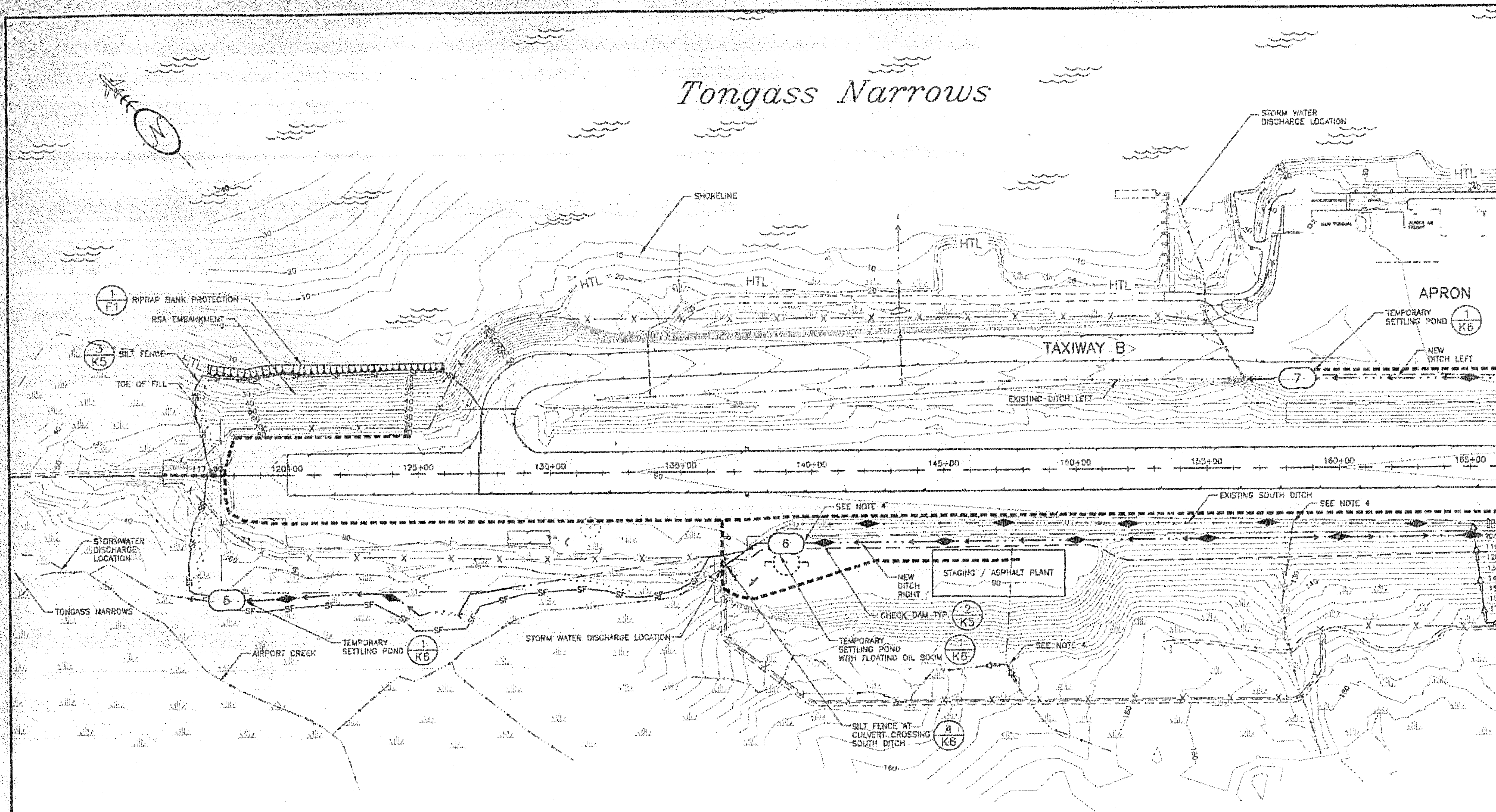
EROSION &
SEDIMENT
CONTROL PLAN
STAGE 3-7

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS

K3 131



LEGEND			
(P-1)	NEW CULVERT	--->--->--->---	EXISTING STREAM / DITCH
◆	CHECK DAM	--->--->--->---	NEW STREAM / DITCH / CREEK REROUTE
—SF—SF—	SILT FENCE	→→→→→	INTERCEPTION DITCH
—SB—SB—	SILT BOOM	→→→→→	DIVERSION DITCH
---HTL---	HIGH TIDE LINE	⋈	FISH STREAM
(1)	TEMPORARY SETTLING POND	⋈	WETLANDS
-----	HAUL ROUTE		



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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
 RUNWAY SAFETY AREA EXPANSION
 & RUNWAY OVERLAY
 PROJECT NO. 68306

EROSION & SEDIMENT CONTROL PLAN
 STAGES 1-7

PREPARED BY: USKH INC.
 CHECKED BY: DLM

DESIGNED BY: NCL
 DRAWN BY: WJP

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

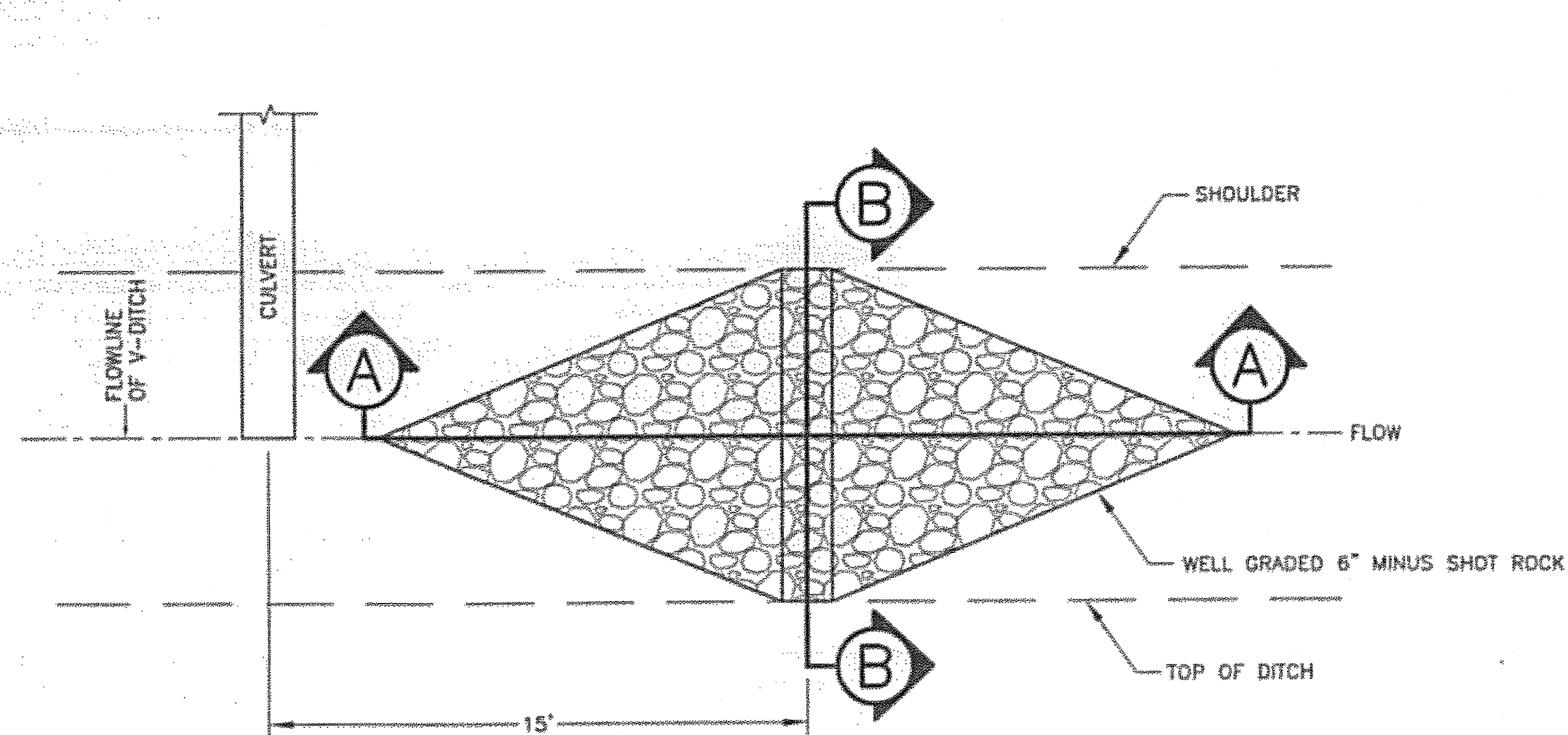
**EROSION
& SEDIMENT
CONTROL PLAN
STAGES 1-7**

PROJECT DESIGNATION

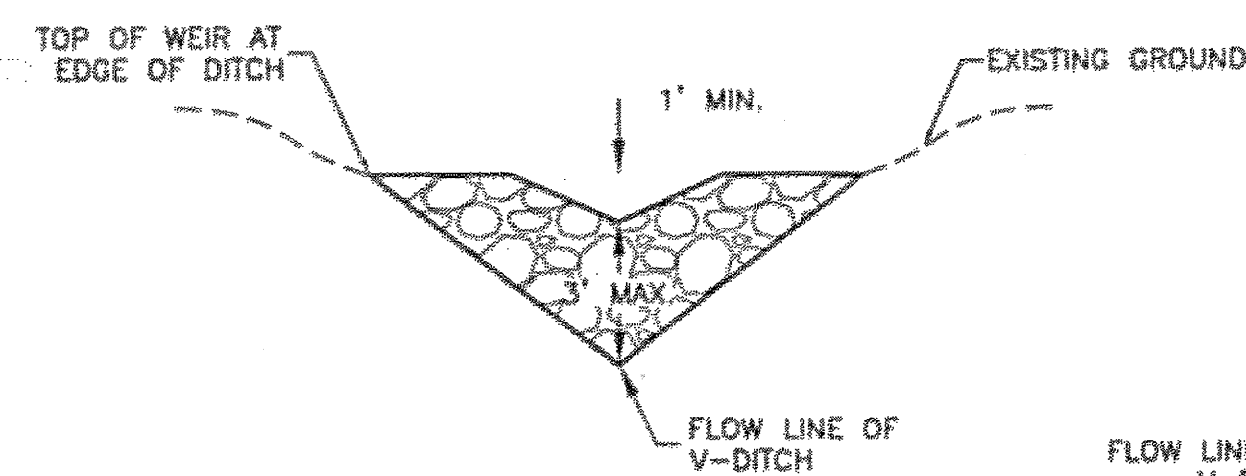
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STATE	YEAR
ALASKA	2006

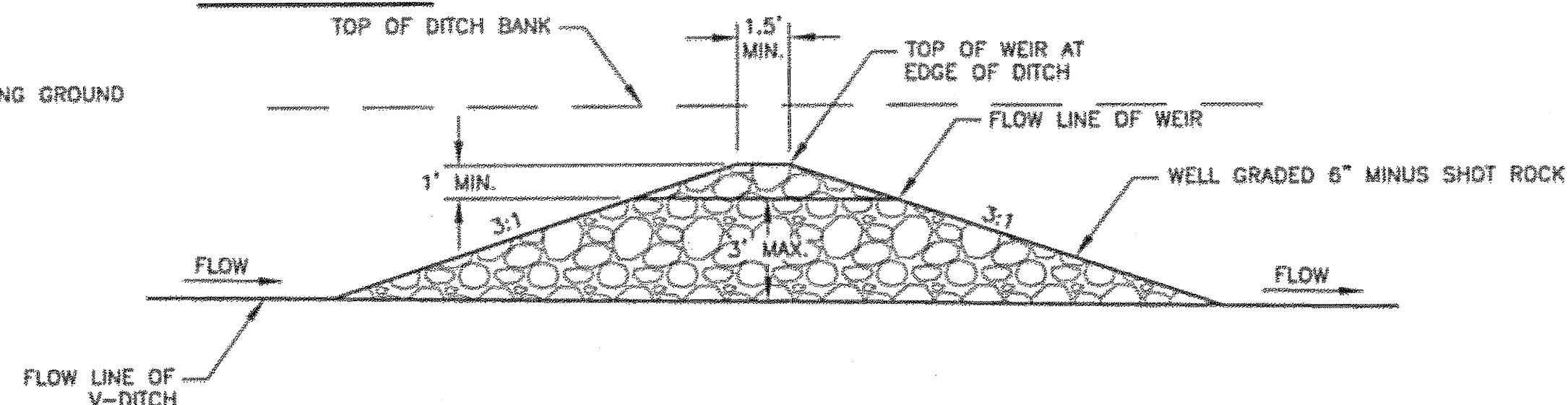
SHEET NUMBER	TOTAL SHEETS
K4	131



PLAN VIEW

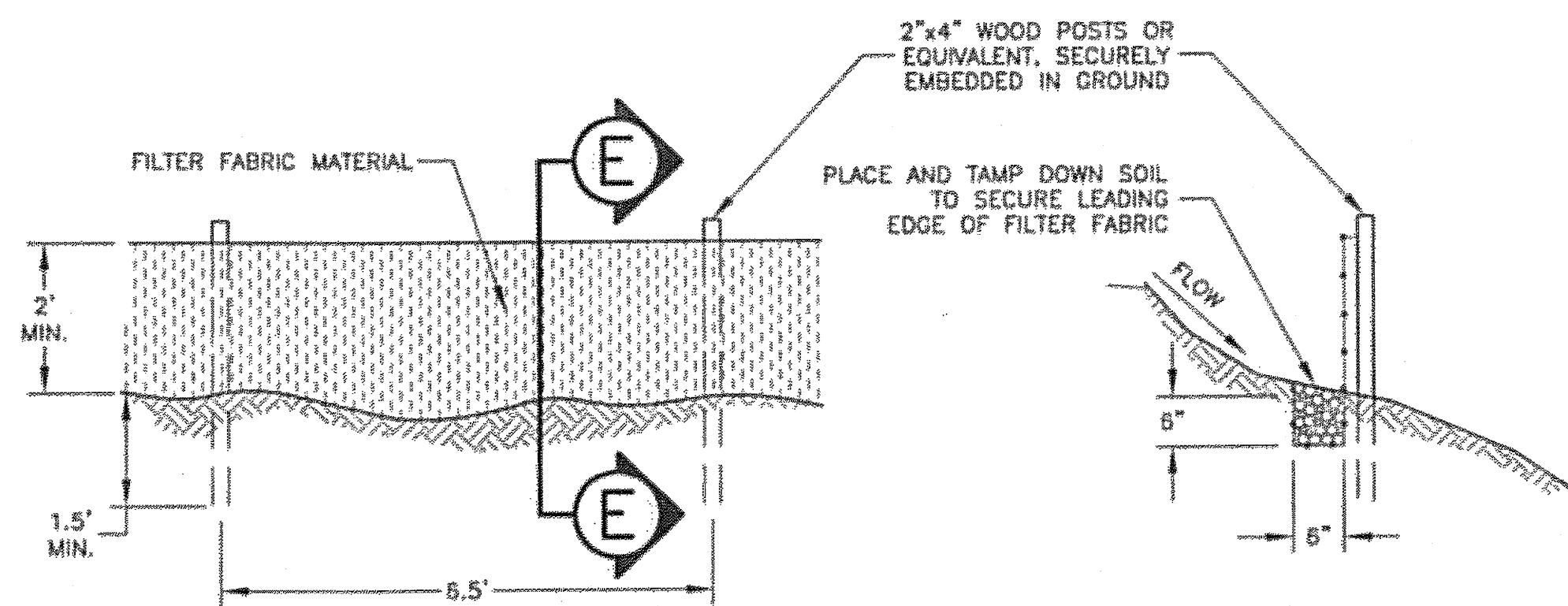


SECTION B-B



SECTION A-A

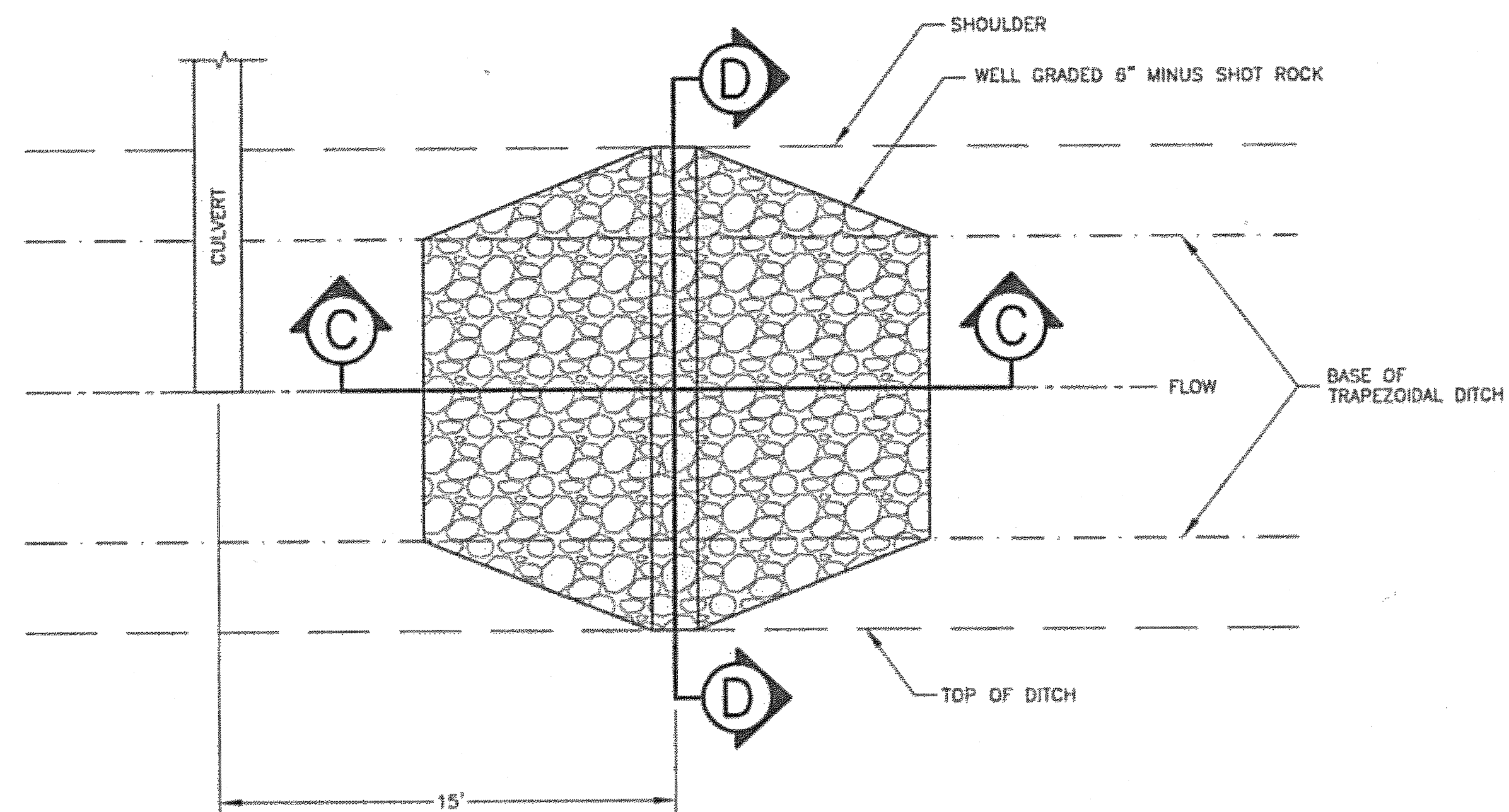
1 V-DITCH CHECK DAM DETAILS
K5 N.T.S.



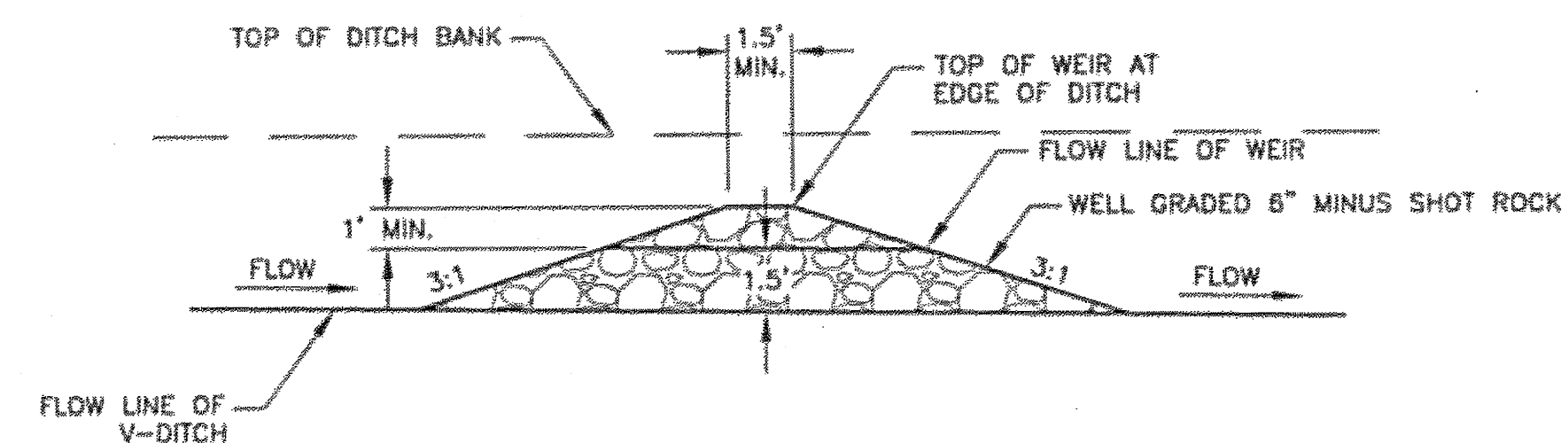
ELEVATION

SECTION E-E

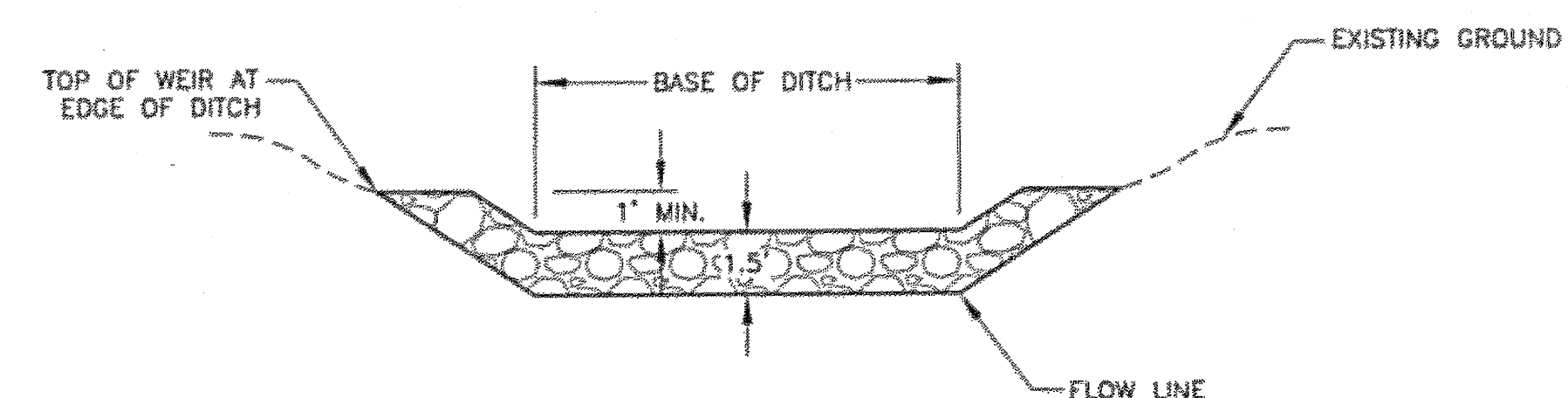
3 SILT FENCE DETAILS
K5 N.T.S.



PLAN VIEW



SECTION C-C



SECTION D-D

2 TRAPEZOIDAL DITCH CHECK DAM DETAILS
K5 N.T.S.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

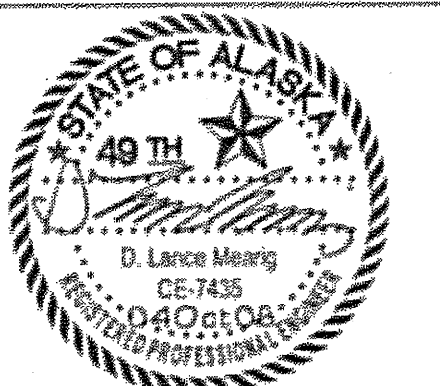
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

EROSION & SEDIMENT CONTROL DETAILS

PREPARED BY: USKH INC.

CHECKED BY: DLM



DESIGNED BY: NCL

DRAWN BY: WJP

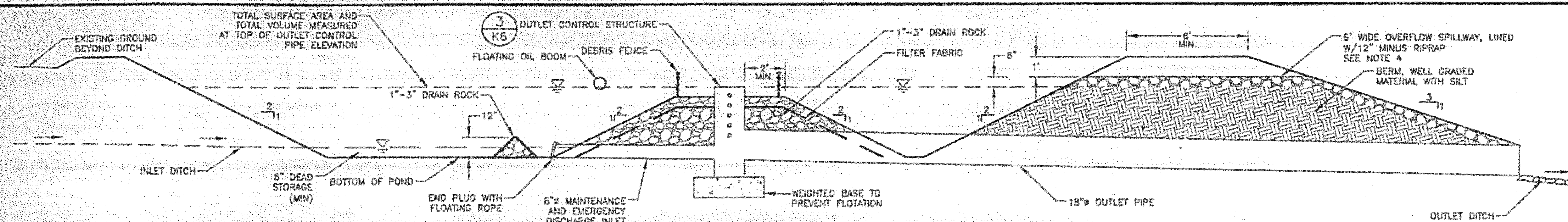
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

EROSION & SEDIMENT CONTROL DETAILS

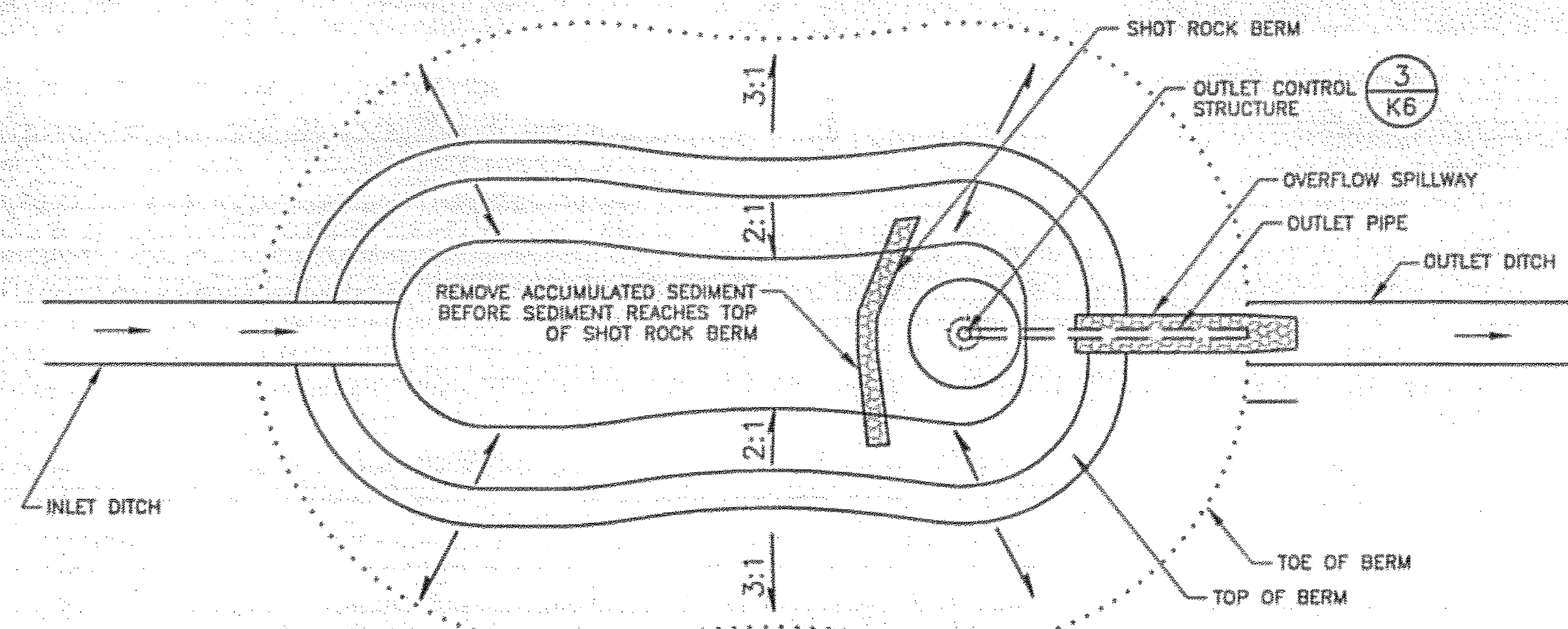
PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

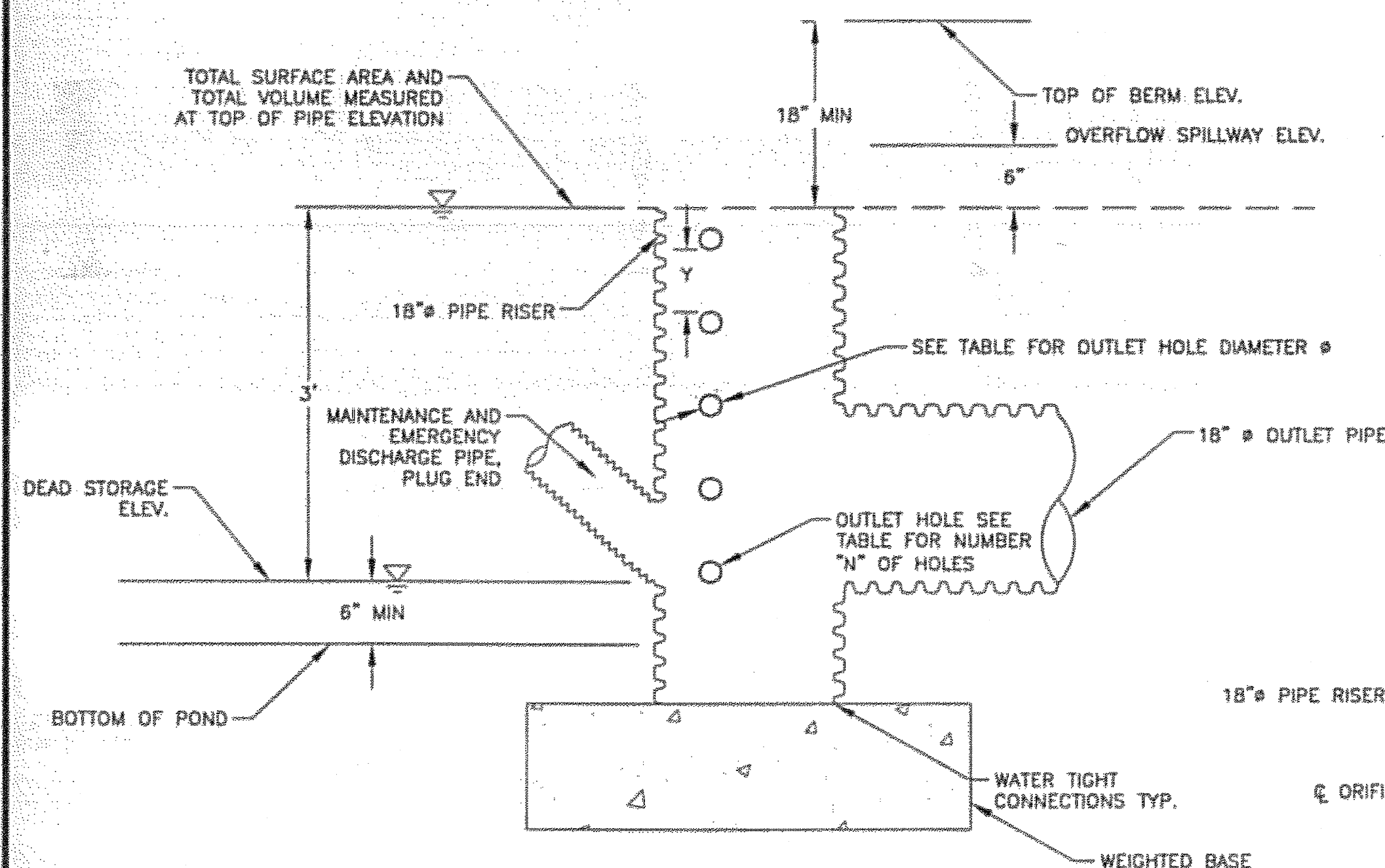
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
K5	131



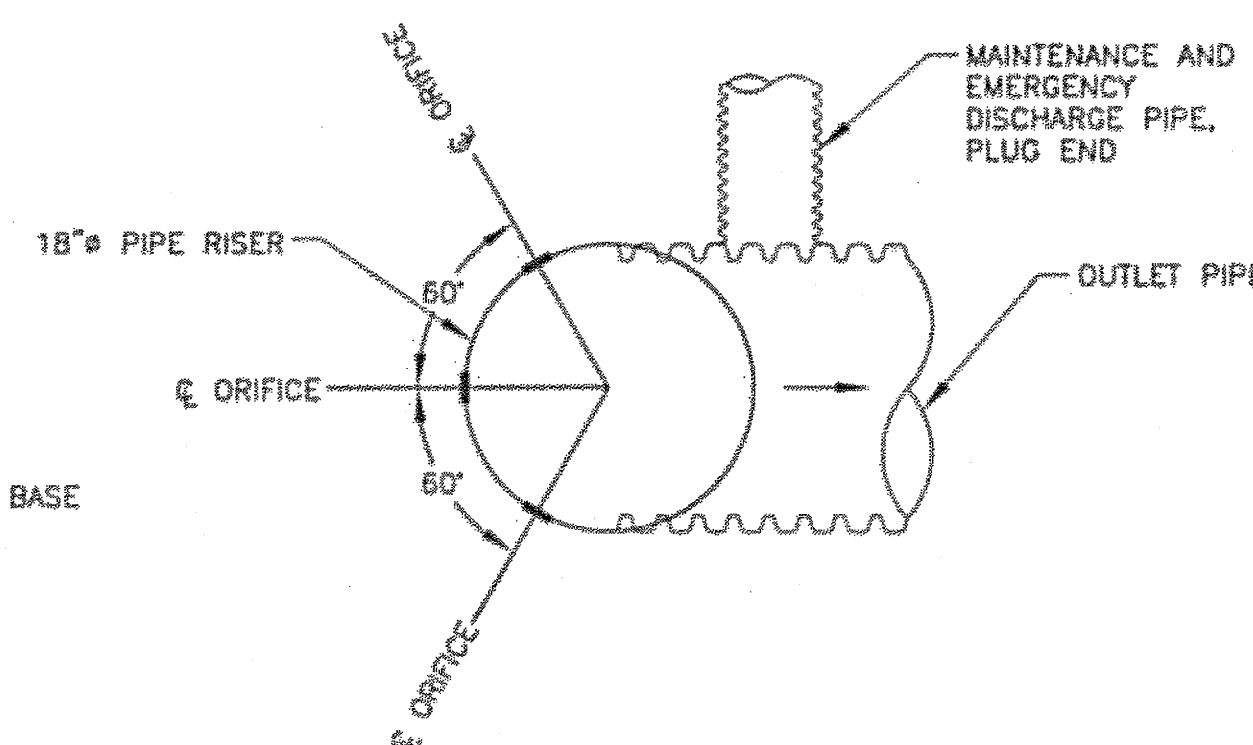
1 TYPE-I TEMPORARY SETTLING POND - SECTION
K6 N.T.S.



2 TYPE-I TEMPORARY SETTLING POND - PLAN
K6 N.T.S.



3 OUTLET CONTROL STRUCTURE
K6 N.T.S.

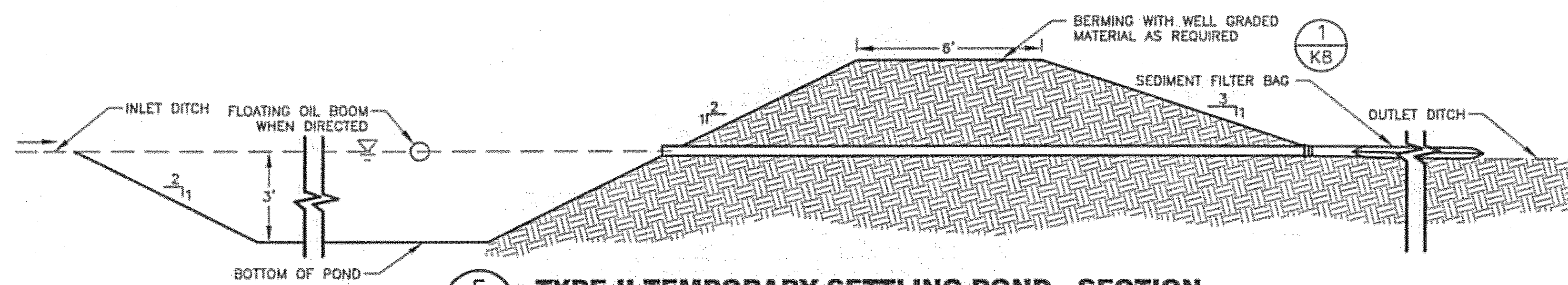


4 PLAN VIEW OF OUTLET CONTROL
K6 N.T.S.

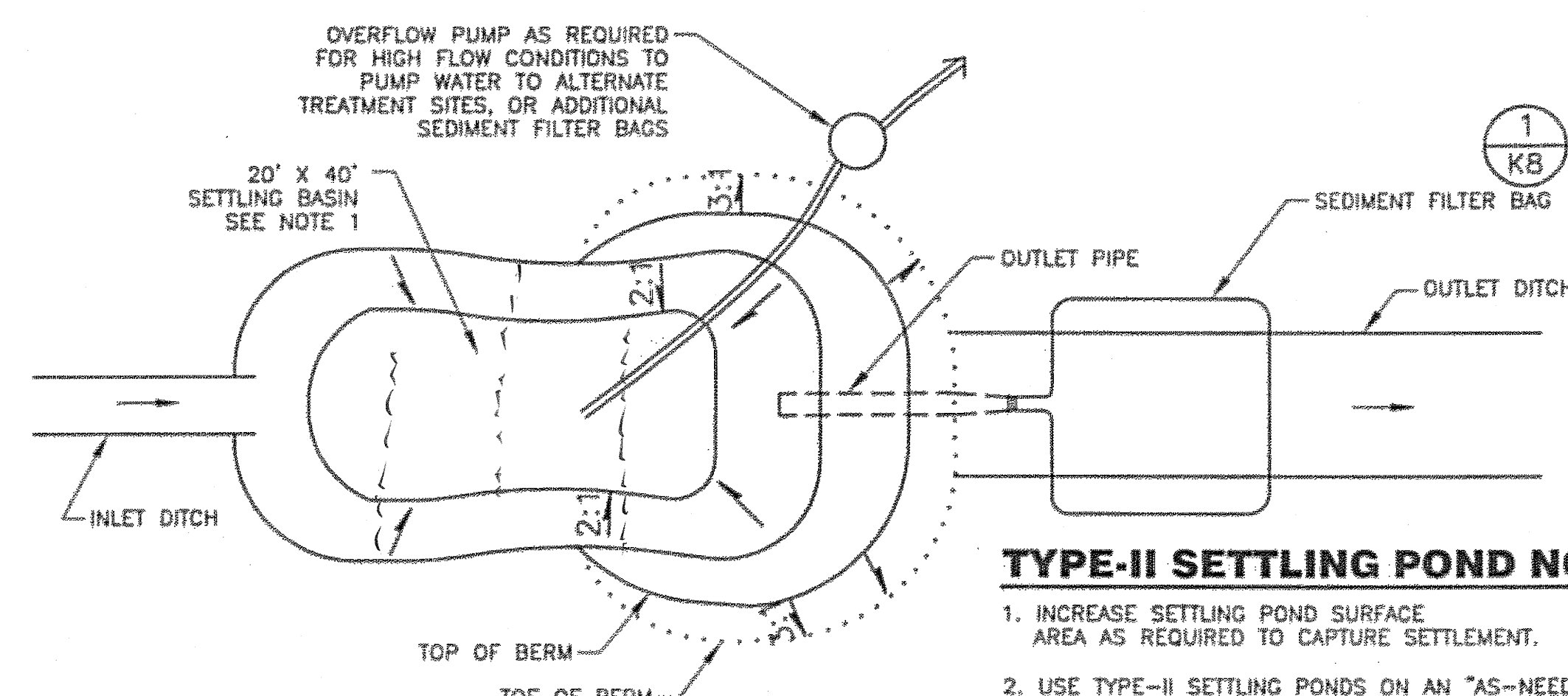
TYPE-I SETTLING POND TABLE										
POND #	DRAINAGE BASIN AREA (ACRES)	DESIGN FLOW (CFS) SEE NOTE 1	SETTLING POND SIZE, SEE NOTE 2			OUTLET HOLE PATTERN, SEE NOTE 3				
			MIN. SURFACE AREA (S.F.)	VOLUME (C.F.)	WIDTH ±	LENGTH ±	DIAMETER Ø (INCH)	N (EACH)	Y (INCHES)	TOTAL SURFACE AREA OF OUTLET HOLES (S.F.)
1	26.1	33	52,700	145,100	160	320	2	15	6	0.33
2	6.9	8	13,400	34,200	80	160	1	15	7.5	0.08
3	10.5	17	27,100	76,800	120	230	1.5	15	7.0	0.18
4	16.5	19	29,500	80,000	120	240	1.5	15	7.0	0.18
5	16.9	20	32,000	90,800	130	250	1.5	18	5.0	0.22
6	30.5	35	55,300	159,400	170	330	2	18	4.5	0.39
7	39.3	50	80,200	229,300	200	400	2	24	2.5	0.52

TYPE-I SETTLING POND NOTES:

1. DESIGN FLOW BASED ON 2 YEAR, 24 HOUR STORM
2. SETTLING POND SURFACE AREA BASED ON SETTLING OUT A 20 MICRON PARTICLE
3. OUTLET HOLE PATTERN BASED ON 40 HOUR DRAWDOWN TIME
4. DESIGN CALCULATIONS INDICATE THAT APPROXIMATELY ONE-HALF OF THE FLOW FROM THE DESIGN STORM WILL FLOW OVER THE SPILLWAY



5 TYPE-II TEMPORARY SETTLING POND - SECTION
K6 N.T.S.



TYPE-II SETTLING POND NOTES:

1. INCREASE SETTLING POND SURFACE AREA AS REQUIRED TO CAPTURE SETTLEMENT.
2. USE TYPE-II SETTLING PONDS ON AN "AS-NEEDED" BASIS AND WHEN DIRECTED BY THE ENGINEER.

6 TYPE-II TEMPORARY SETTLING POND - PLAN
K6 N.T.S.

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Wed, 04/Oct/06 08:45AM bpaddock
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

EROSION & SEDIMENT CONTROL DETAILS

PREPARED BY: USKH INC.

CHECKED BY: DLM

DESIGNED BY: NCL

DRAWN BY: JRH, WJP

STATE OF ALASKA
49th
D. Lance Meier
CE-7435
REGISTERED PROFESSIONAL ENGINEER

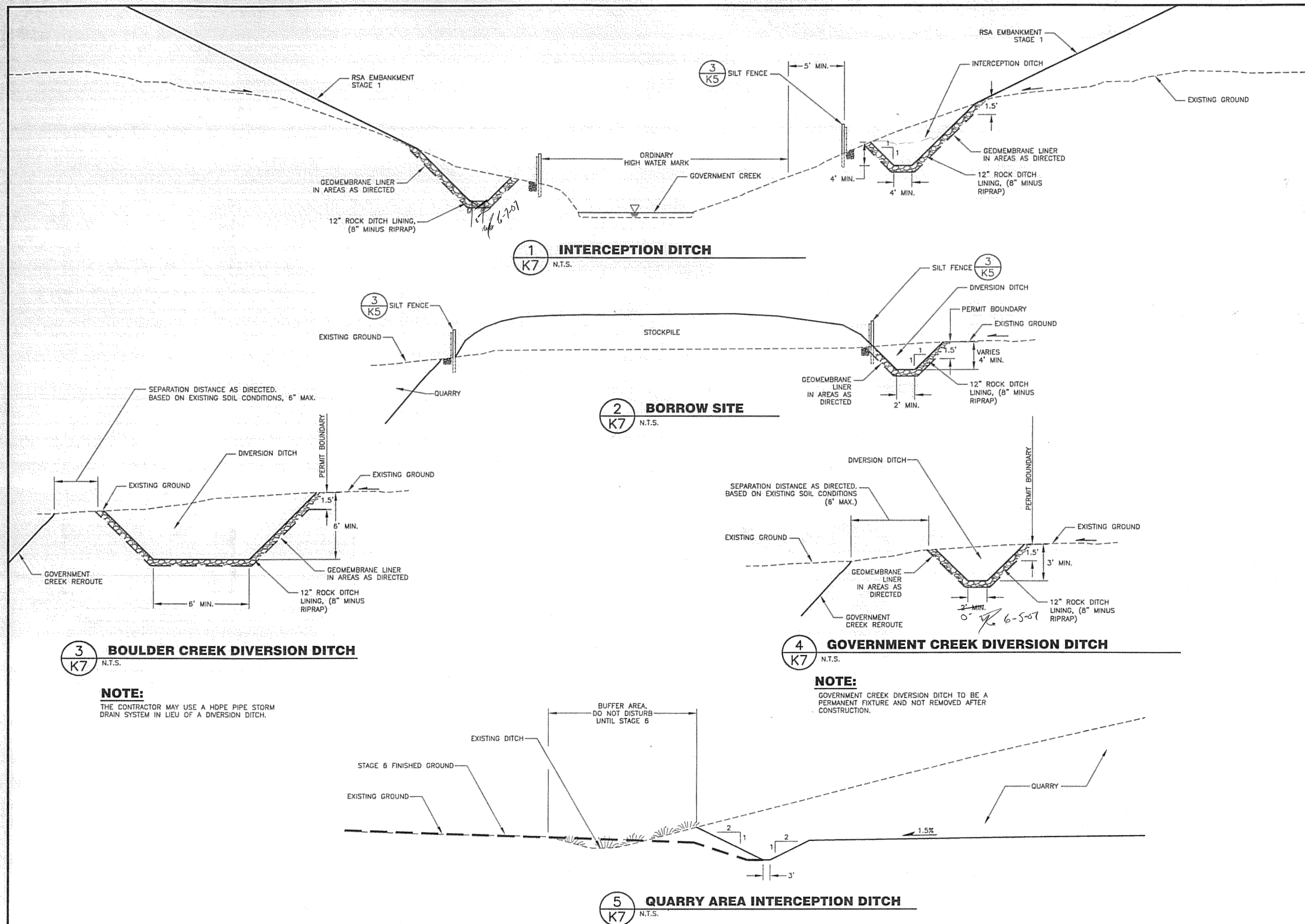
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

EROSION & SEDIMENT CONTROL DETAILS

PROJECT DESIGNATION
AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006

SHEET NUMBER	TOTAL SHEETS
K6	131

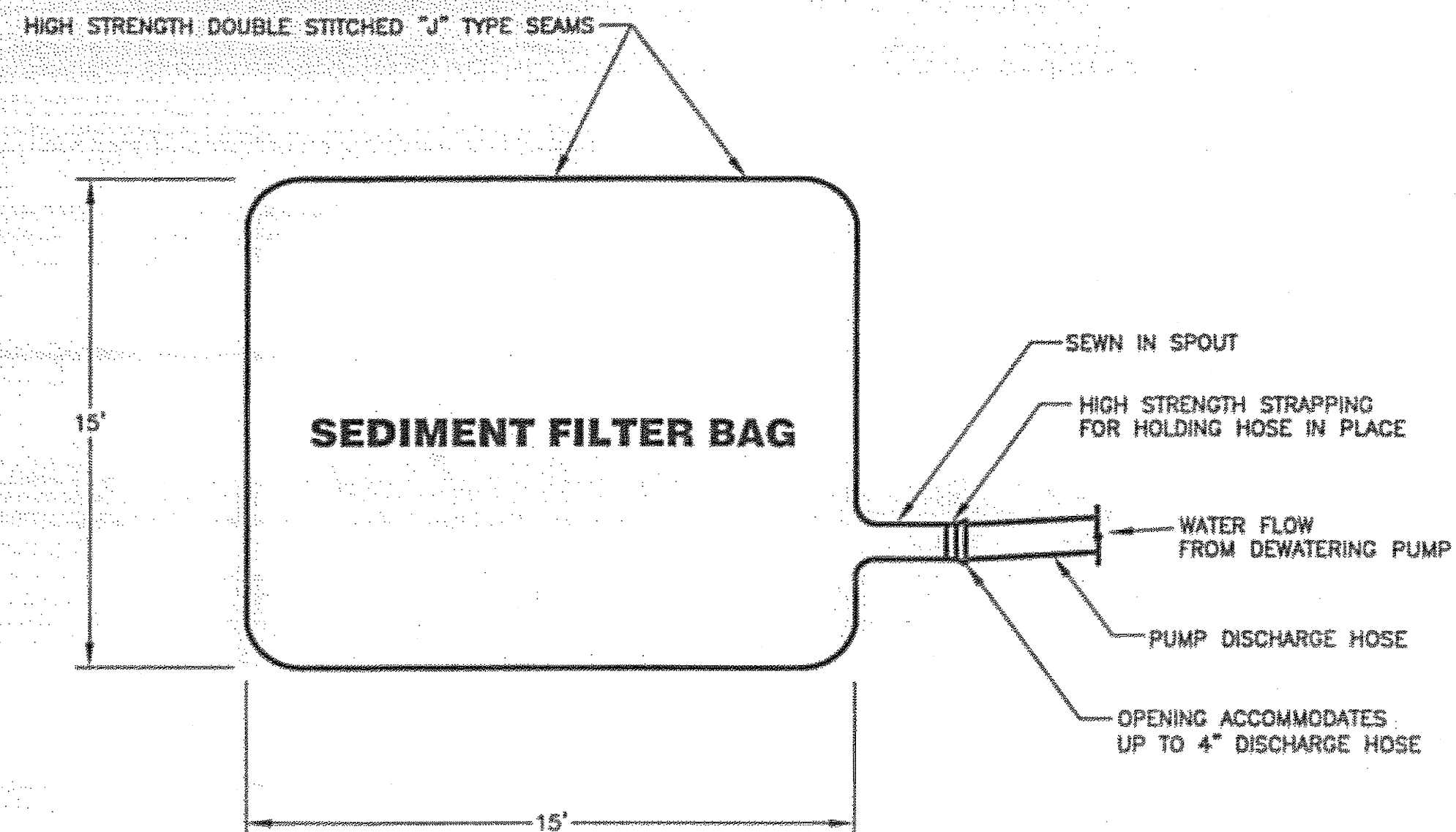


NOTE:
THE CONTRACTOR MAY USE A HDPE PIPE STORM DRAIN SYSTEM IN LIEU OF A DIVERSION DITCH.

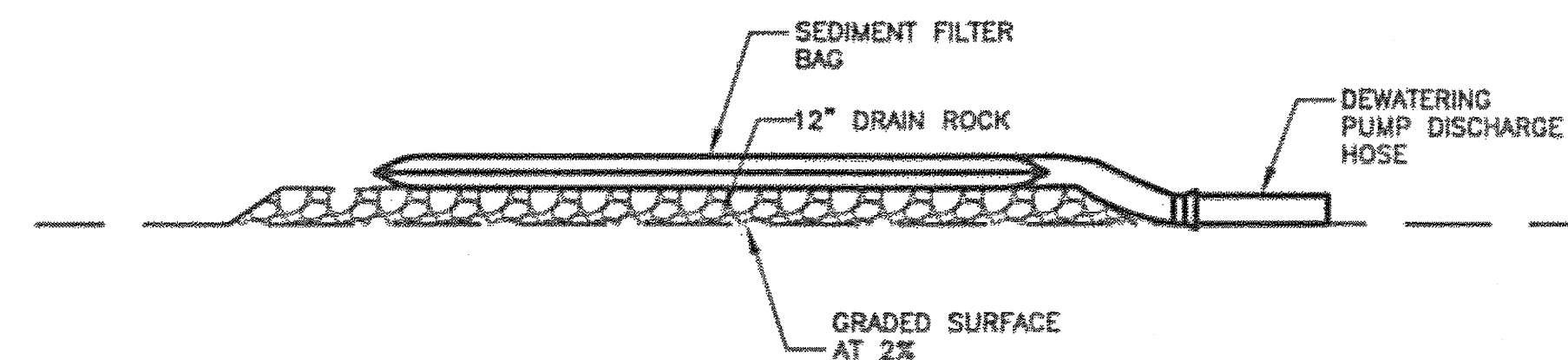
NOTE:
GOVERNMENT CREEK DIVERSION DITCH TO BE A PERMANENT FIXTURE AND NOT REMOVED AFTER CONSTRUCTION.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: I:\823400\Draws\C\Sheets\K07.dwg Wed, 04/Oct/06 08:45AM bpaddock TAB: K07		
ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION
KETCHIKAN AIRPORT RUNWAY SAFETY AREA EXPANSION & RUNWAY OVERLAY PROJECT NO. 68306		
EROSION & SEDIMENT CONTROL DETAILS		
PREPARED BY: USKH INC.		
CHECKED BY: DLM		
DESIGNED BY: NCL		
DRAWN BY: WJP		
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION		
EROSION & SEDIMENT CONTROL DETAILS		
PROJECT DESIGNATION		
AIP NO. 3-02-0144-1606		
STATE	YEAR	
ALASKA	2006	
SHEET NUMBER	TOTAL SHEETS	
K7	131	



TOP VIEW



SIDE VIEW

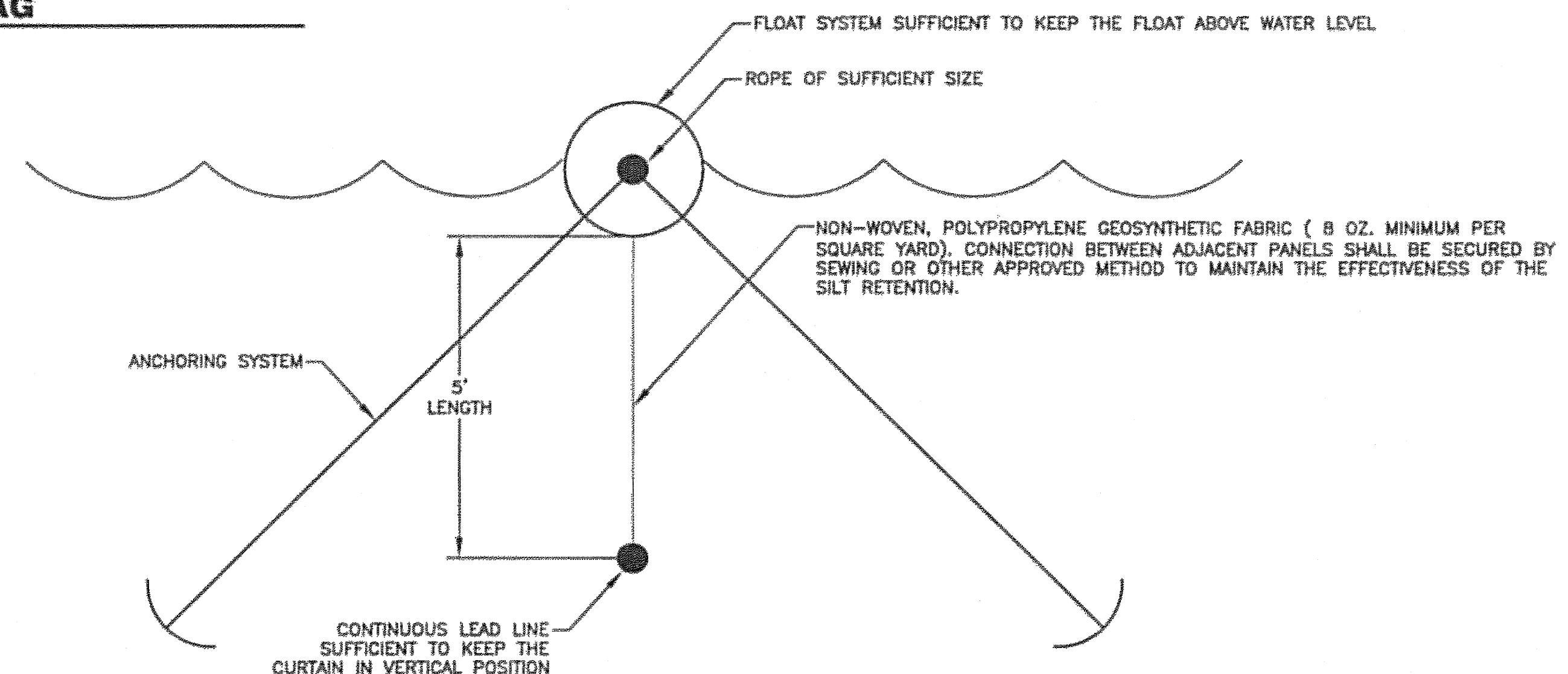
SEDIMENT FILTER BAG NOTES:

1. SEDIMENT FILTER BAG TO BE USED IN EXCAVATION AREAS WHERE DEWATERING IS REQUIRED AND AS DIRECTED.
2. REPLACE BAG WHEN 50% FULL OR BECOMES CLOGGED.

1
K8

SEDIMENT FILTER BAG

N.T.S.



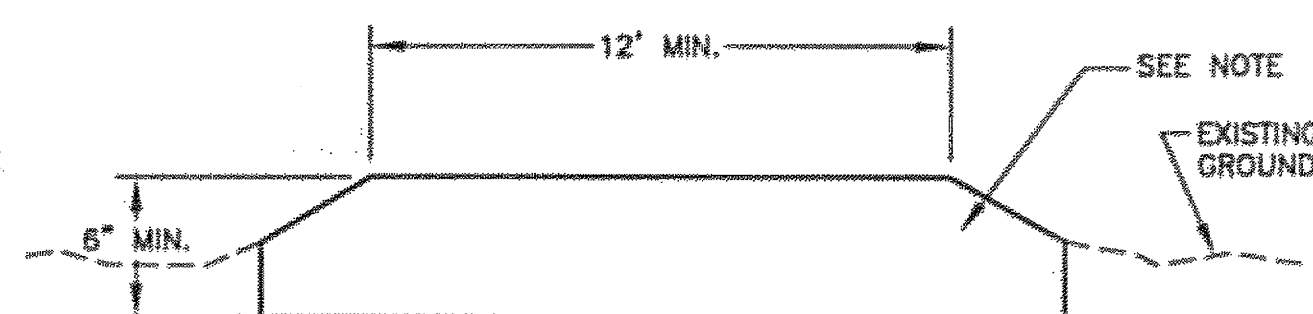
SILT BOOM NOTES:

1. BEFORE GROUND DISTURBING ACTIVITIES, INCLUDING EXCAVATION OR EMBANKMENT OCCURS AT THE PROJECT SITE, THE CONTRACTOR SHALL INSTALL A SILT CONTAINMENT BOOM TO ISOLATE THE WORK SITE FROM TONGASS NARROWS. THE BOOM SHALL EXTEND FROM BANK TO BANK AND SHALL RISE & FALL WITH THE TIDES.
2. THE BOOM SHALL BE MAINTAINED 24 HOURS PER DAY BY THE CONTRACTOR AND UPON REMOVAL, SHALL BE THE PROPERTY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL SUBMIT AN ANCHORING PLAN FOR DEPARTMENT REVIEW. THE ANCHORING SYSTEM MUST BE STAMPED BY AN ENGINEER REGISTERED IN THE STATE OF ALASKA. THE BOOM SHALL BE SECURED SUFFICIENTLY TO WITHSTAND WIND, SEAS, PROPELLER WASH, AND TIDAL FORCES REASONABLY EXPECTED AT THE SITE.
4. THE BOOM SHALL REMAIN IN PLACE UNTIL EMBANKMENT CONSTRUCTION AND DRAINAGE CONDUITS IS COMPLETE, AND WATER QUALITY IS DEEMED ACCEPTABLE BY THE ENGINEER.

3
K8

SILT BOOM

N.T.S.



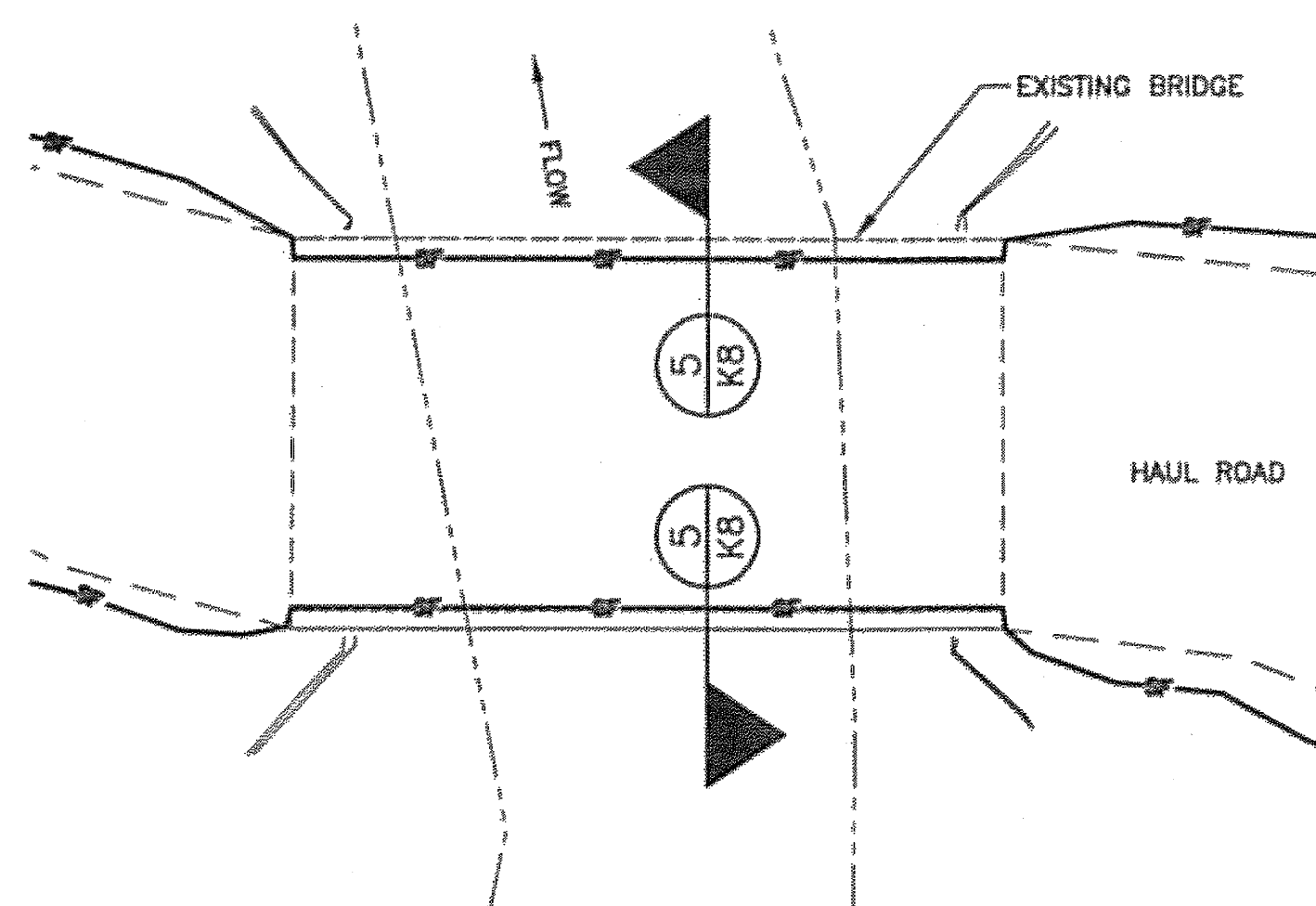
NOTE:

CRUSHED AGGREGATE BASE COURSE OR SIMILAR APPROVED MATERIAL THAT WILL NOT DEGRADE UNDER CONSTRUCTION TRAFFIC.

2
K8

TEMPORARY HAUL ROUTE DETAIL

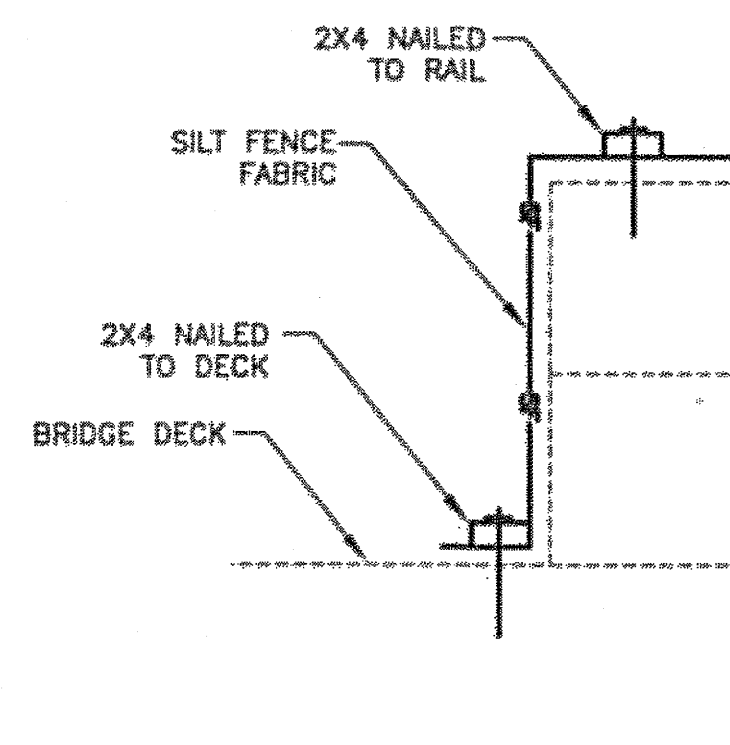
N.T.S.



4
K8

PLAN VIEW OF SILT FENCE CROSSING BRIDGE

N.T.S.



5
K8

DETAIL OF SILT FENCE ATTACHMENT TO BRIDGE

N.T.S.

NOTE:

SIMILAR FUNCTIONING SILT FENCE TO BE USED ON NORTH TRIBUTARY BRIDGE AND CULVERT CROSSING SOUTH DITCH

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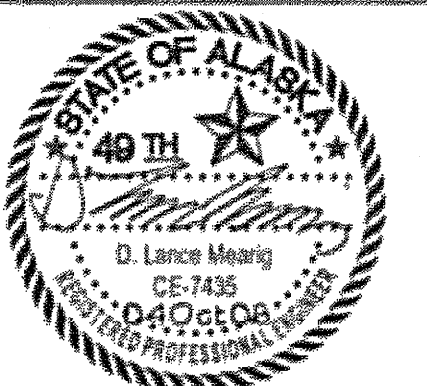
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

EROSION AND
SEDIMENT
CONTROL DETAILS

PREPARED BY: USKH INC.

CHECKED BY: DLM



DESIGNED BY: NCL

DRAWN BY: JRH

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

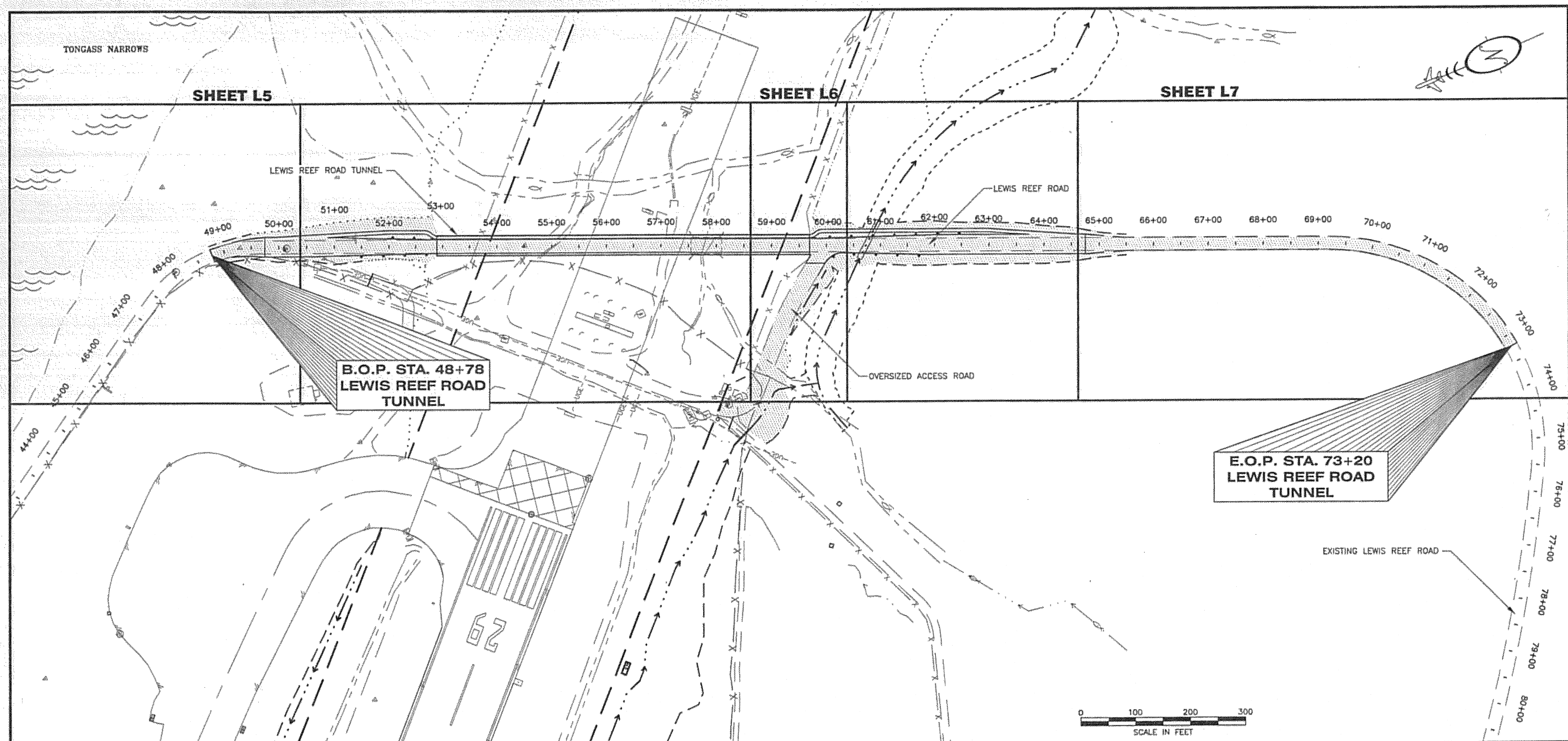
**EROSION AND
SEDIMENT
CONTROL DETAILS**

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
K8	131

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



GENERAL NOTES:

1. ITEMS SHOWN ON SHEETS L1 - L19 ARE PAID FOR UNDER (ITEM 5-146a TUNNEL - PER Lump Sum) UNLESS, LABELED (RSA ITEM).
2. TOPOGRAPHIC SURVEY INFORMATION IS NOT AVAILABLE FROM LRR STA 8+00 TO LRR STA 28+00. FIELD VERIFY EXISTING CONDITIONS INCLUDING UNDERGROUND UTILITIES.

ABBREVIATIONS

CRT	CONTROLLED RELEASE TERMINAL
NOM.	NOMINAL
OSAR	OVERSIZED ACCESS ROAD
SCH	SCHEDULE
SSP	STRUCTURAL STEEL PLATE

LEWIS REEF ROAD INDEX

SHEET NO.	DESCRIPTION
L1	SHEET LAYOUT & SHEET INDEX
L2-L3	TYPICAL SECTIONS
L4	SUMMARY TABLES
L5-L7	TUNNEL PLAN & PROFILE
L8	OVERSIZED ACCESS ROAD PLAN & PROFILE
L9	GRADING & UTILITY PLAN
L10-12	DETAILS
L13	SIGNING & STRIPING PLAN
L14	TUNNEL LIGHTING PLAN
L15	TUNNEL LIGHTING DETAILS
L16	FIRE PROTECTION STAND PIPE
L17-L19	WATERLINE PLAN & PROFILE

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

A-1	D-01.02	D-04.21	D-22.01	D-24.00	D-35.00
G-00.01	G-04.06S	G-04.07W	G-10.01	G-20.10	G-25.20W
I-81.00	S-00.10	S-05.01	S-20.10	S-30.03	

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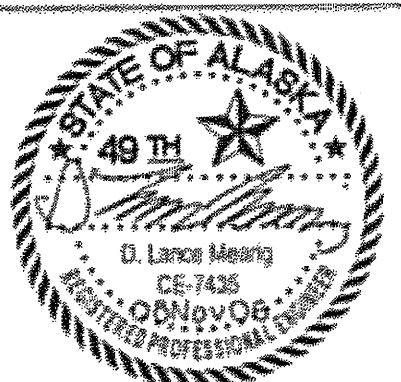
No.	DATE	DESCRIPTION

LEWIS REEF ROAD TUNNEL
PROJECT NO. 67858

SHEET LAYOUT & SHEET INDEX

PREPARED BY: USKH INC.

CHECKED BY: DLM



DESIGNED BY: NCL

DRAWN BY: WJP

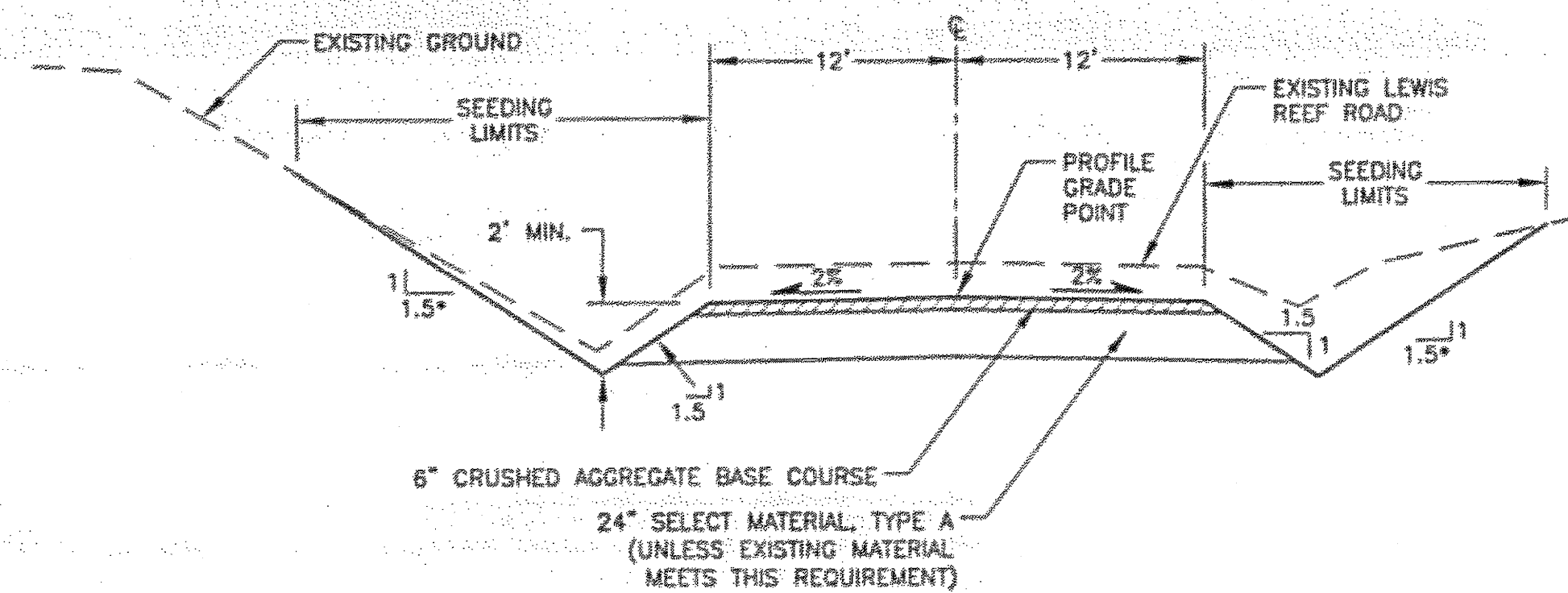
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

SHEET LAYOUT & SHEET INDEX

PROJECT DESIGNATION

68456

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
L1	131



LEWIS REEF ROAD REGRADING TYPICAL SECTION

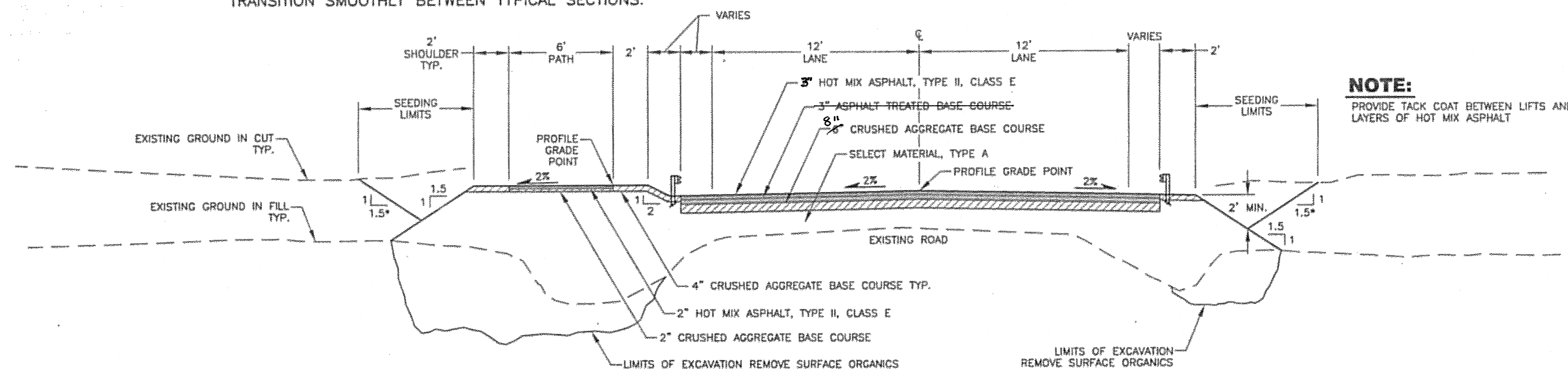
N.T.S.

LRR STA. 48+77 TO LRR STA. 49+00
LRR STA. 65+50 TO LRR STA. 73+50

NOTE:

TRANSITION SMOOTHLY BETWEEN TYPICAL SECTIONS.

*SLOPE TABLE		
MATERIAL	CUT	FILL
GRANULAR SOILS	1.5:1	1.5:1
SOFT GROUND	0.5:1	N/A
ROCK	1.25:1	1.5:1
SILT	1.5:1	N/A



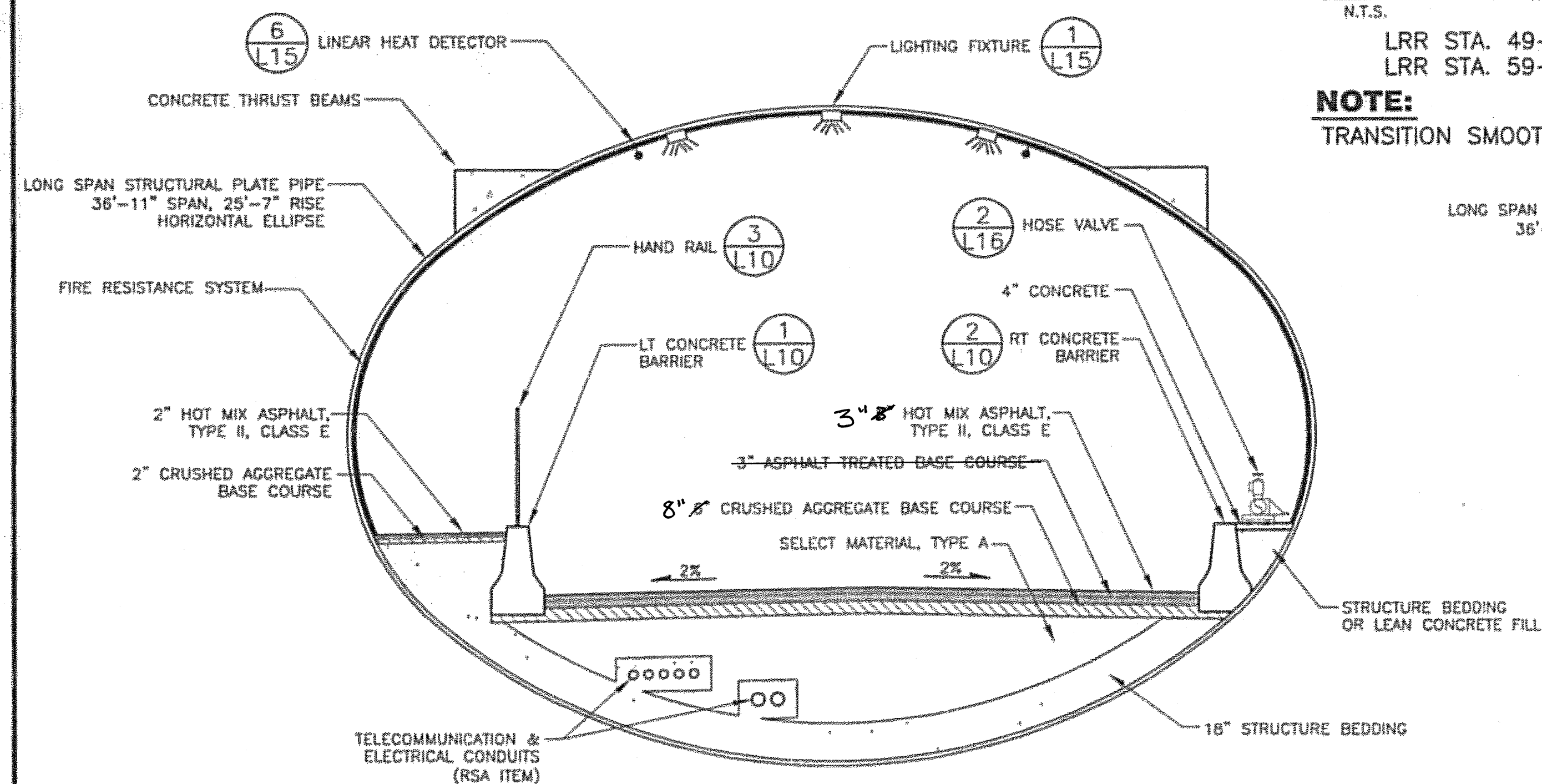
LEWIS REEF ROAD TYPICAL SECTION

N.T.S.

LRR STA. 49+75 TO LRR STA. 52+89
LRR STA. 59+69 TO LRR STA. 64+75

NOTE:

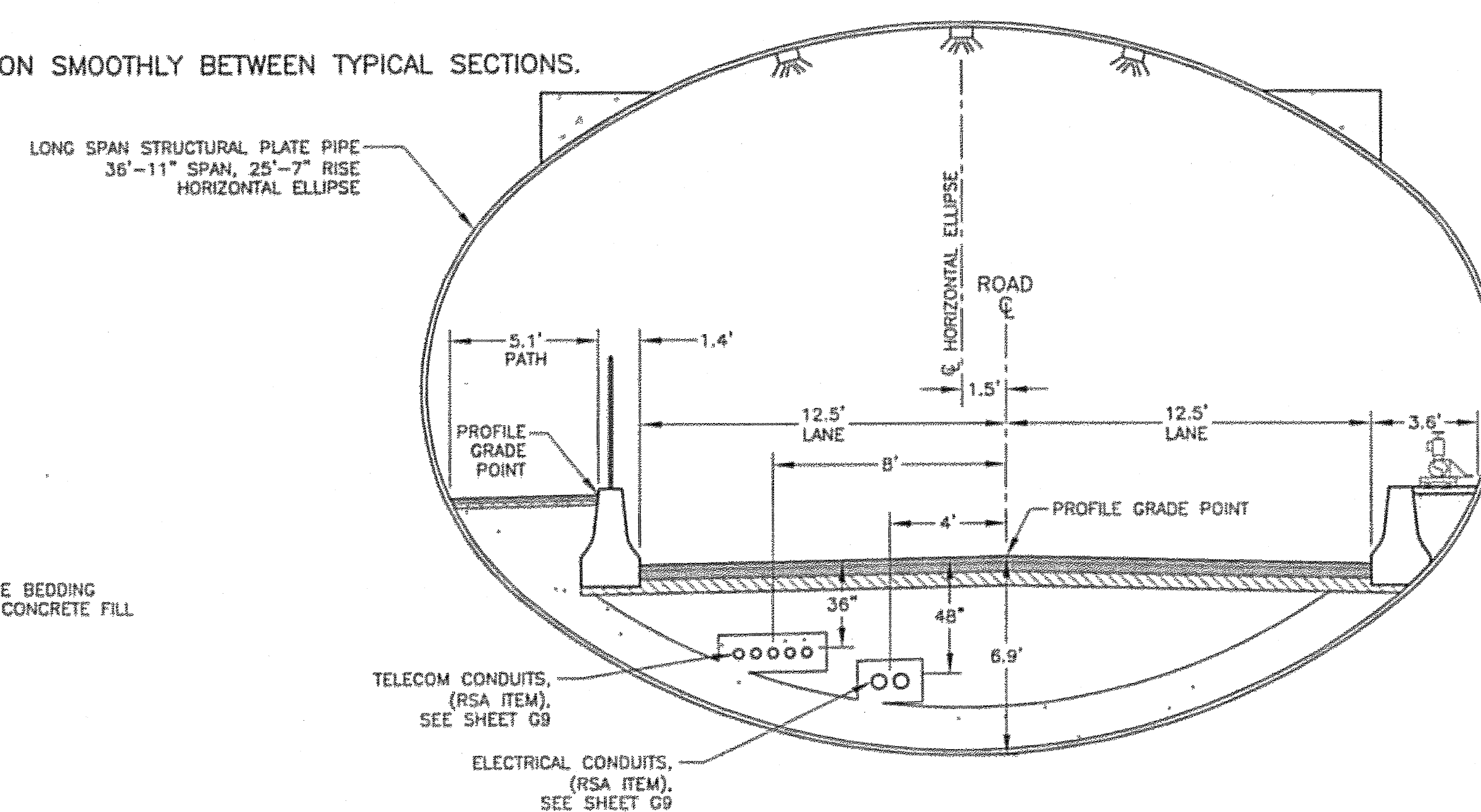
TRANSITION SMOOTHLY BETWEEN TYPICAL SECTIONS.



TUNNEL ROAD STRUCTURAL SECTION

N.T.S.

LRR STA. 52+89 TO LRR STA. 59+69



TUNNEL ROAD TYPICAL SECTION

N.T.S.

LRR STA. 52+89 TO LRR STA. 59+69

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PATH:
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Thu, 09/Nov/06 11:41AM bpaddock
TAB: L02

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

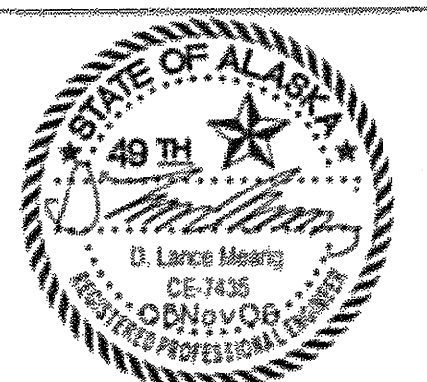
No.	DATE	DESCRIPTION

LEWIS REEF ROAD TUNNEL
PROJECT NO. 67858

LEWIS REEF ROAD TUNNEL
TYPICAL SECTIONS

PREPARED BY: USKH INC.

CHECKED BY: DLM



DESIGNED BY: NCL

DRAWN BY: WJP

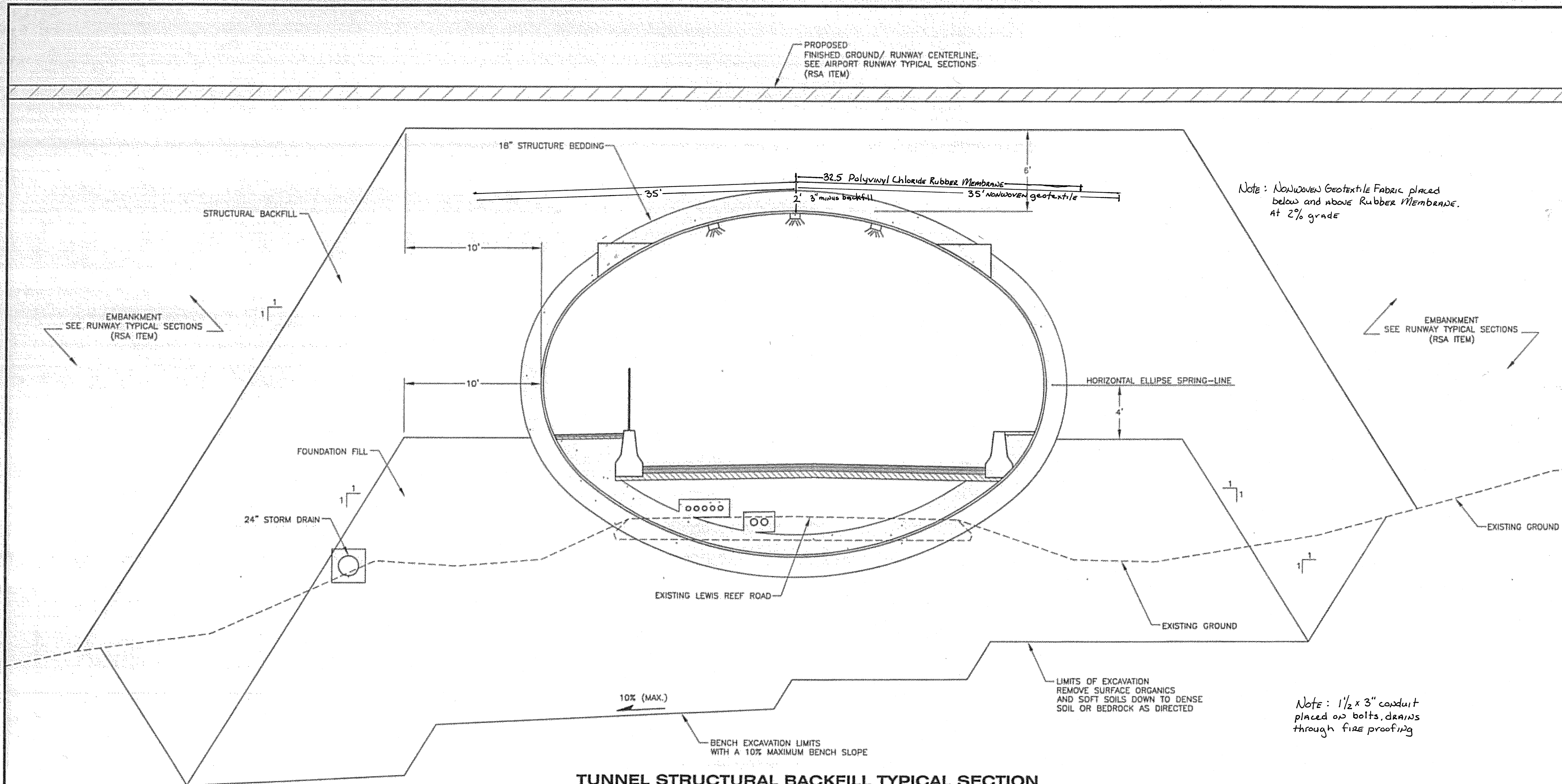
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

LEWIS REEF ROAD TUNNEL TYPICAL SECTIONS

PROJECT DESIGNATION

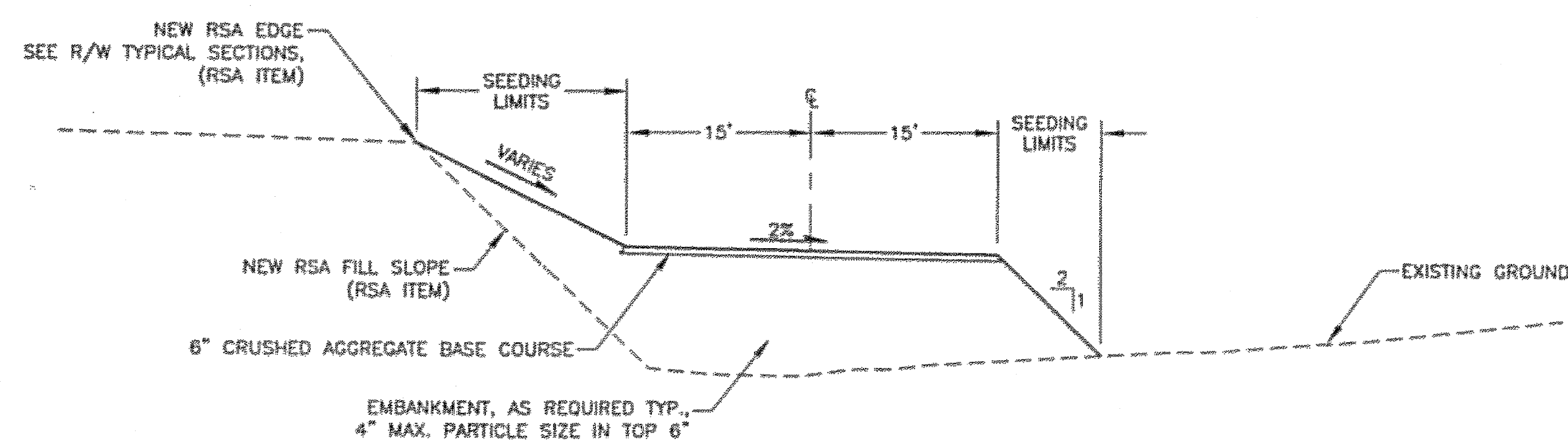
68456

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
L2	131



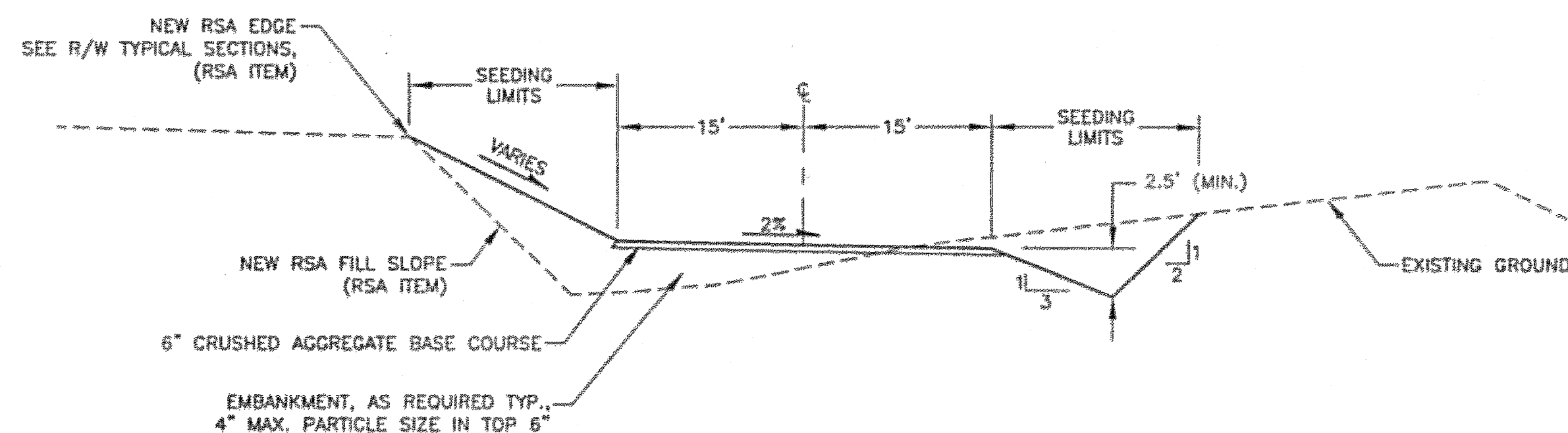
TUNNEL STRUCTURAL BACKFILL TYPICAL SECTION

N.T.S. LRR STA. 52+89 TO LRR STA. 59+69



OVERSIZED ACCESS ROAD TYPICAL FILL SECTION

N.T.S. STA. OSAR 3+50 TO STA. OSAR 5+50



OVERSIZED ACCESS ROAD TYPICAL CUT SECTION

N.T.S. STA. OSAR 5+50 TO STA. OSAR 7+00

NOTE:

FOR OSAR STA. 7+00 TO OSAR STA. 7+13 SEE GRADING PLAN SHEET L9

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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ADDENDUM NUMBER

ATTACHMENT NUMBER

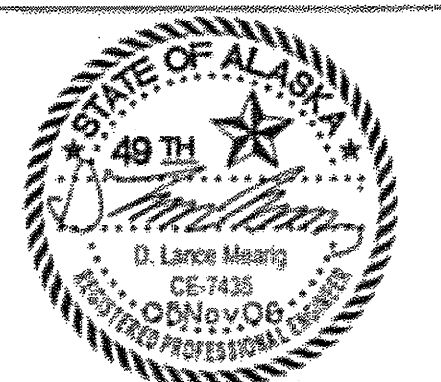
RECORD OF REVISIONS

No.	DATE	DESCRIPTION

LEWIS REEF ROAD TUNNEL
PROJECT NO. 67858

LEWIS REEF ROAD TUNNEL
TYPICAL SECTIONS

PREPARED BY: USKH INC.
CHECKED BY: DLM



DESIGNED BY: NCL
DRAWN BY: WJP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

LEWIS REEF ROAD TUNNEL TYPICAL SECTIONS

PROJECT DESIGNATION

68456

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
L3	131

BASIS OF ESTIMATES			
ITEM NO.	ITEM	UNIT	QUANTITY
201(3A)	CLEARING AND GRUBBING	ACRE	2
203(3)	UNCLASSIFIED EXCAVATION	C.Y.	34000
203(5)	SELECTED MATERIAL, TYPE A	C.Y.	7500
301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	2500
514(1)	LONG SPAN STRUCTURAL PLATE PIPE	LINEAR FOOT	680
514(2)	FOUNDATION FILL	C.Y.	26000
514(3)	STRUCTURAL BACKFILL	C.Y.	44000
514(4)	STRUCTURE BEDDING	C.Y.	5100
514(5)	FIRE RESISTANCE SYSTEM	LUMP SUM	ALL REQUIRED
603(2)	112" X 75" CSP ARCH	LINEAR FOOT	78
603(9A)	18" CORRUGATED ALUMINUM PIPE	LINEAR FOOT	113
603(9B)	24" CORRUGATED ALUMINUM PIPE	LINEAR FOOT	742
604(1)	STORM SEWER MANHOLE	EACH	6
606(1)	W-BEAM GUARD RAIL	LINEAR FOOT	538
606(9)	CONTROLLED RELEASE TERMINAL (CRT)	EACH	1
606(11)	EXTRUDER TERMINAL (ET-2000)	EACH	4
606(13)	GUARDRAIL/CONCRETE BARRIER CONNECTION	EACH	3
606(14)	CRASH CUSHION	EACH	1
614(1)	CONCRETE BARRIER	LINEAR FOOT	1384
615(1)	STANDARD SIGN	SQUARE FOOT	223
618(1)	SEEDING	ACRE	2
625(1)	PIPE HAND RAIL	LINEAR FOOT	702
627(1)	8 INCH DUCTILE IRON WATER CONDUIT, CLASS 350	LINEAR FOOT	2225
627(3)	INSTALL VALVE BOX	EACH	1
627(5)	FIRE HYDRANT INSTALLATION	EACH	3
627(9)	INSTALL 8 INCH GATE VALVE	EACH	1
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
660(2)	FLASHING BEACON SYSTEM COMPLETE	LUMP SUM	ALL REQUIRED
660(14)	TUNNEL LIGHTING SYSTEM COMPLETE	LUMP SUM	ALL REQUIRED
670(1)	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQUIRED
690(1)	FIRE STANDPIPE SYSTEM	LUMP SUM	ALL REQUIRED
691(1)	FIRE ALARM SYSTEM	LUMP SUM	ALL REQUIRED
P-152f	EMBANKMENT	C.Y.	2000
P-320b	ASPHALT TREATED BASE	TON	800
P-401a	HOT MIX ASPHALT, TYPE II, CLASS E	TON	650
P-401c	ASPHALT CEMENT PG 64-28	TON	33

NOTE: ALL ABOVE ITEMS ARE SUBSIDIARY TO PAY ITEM S-146A

602(3) LONG SPAN STRUCTURAL PLATE PIPE - LINEAR FOOT							
BEGIN				END			
STATION	OFFSET (FT)	BOTTOM OF STRUCTURE	STATION	OFFSET (FT)	BOTTOM OF STRUCTURE	LENGTH	GRADE
LRR 52+89	1.5 LT	35.78	LRR 59+69	1.5 LT	56.18	680	3%

603(2) 112" X 75" CORRUGATED STEEL PIPE ARCH - LINEAR FOOT								
PIPE	INLET			OUTLET			LENGTH	GRADE
	STATION	OFFSET	INVERT	STATION	OFFSET	INVERT		
P-11	NT 4+46	-	58.19	NT 5+24	-	58.80	78	0.5%

603(9A) 18" CORRUGATED ALUMINUM PIPE - LINEAR FOOT					
PIPE NUMBER	LENGTH	INV. IN ELEVATION	INV. OUT ELEVATION	GRADE	REMARKS
SD-1	42	56.93	56.55	1%	
SD-2	31.2	56.45	56.17	2%	
SD-3	20	56.07	54.81	7.87%	
SD-6	20	37.65	33.71	24.63%	
TOTAL =	113				

NOTE:

LENGTH OF PIPE IS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
GRADES AND INVERT ELEVATIONS ARE CALCULATED FROM EDGE OF STRUCTURE TO EDGE OF STRUCTURE

603(9B) 24" CORRUGATED ALUMINUM PIPE - LINEAR FOOT					
PIPE NUMBER	LENGTH	INV. IN ELEVATION	INV. OUT ELEVATION	GRADE	REMARKS
SD-4	724	54.81	33.21	3.00%	8 GAUGE (0.164"), 2-2/3" X 1/2" CORRUGATIONS
SD-5	18	33.11	29	25.69%	8 GAUGE (0.164"), 2-2/3" X 1/2" CORRUGATIONS
TOTAL =	742				

24" CPP @ Sta. 51+00 Lewis Reef Rd.

NOTE:

LENGTH OF PIPE IS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
GRADES AND INVERT ELEVATIONS ARE CALCULATED FROM EDGE OF STRUCTURE TO EDGE OF STRUCTURE

604(1) STORM SEWER MANHOLE, TYPE 1 - EACH					
STRUCTURE NUMBER	STATION	OFFSET	TOP OF CASTING ELEVATION	TYPE OF CASTING	REMARKS
S-1	OSAR 6+90	23.6 RT.	60.93	FIFG	
S-2	LRR 59+73.5	12.5 RT.	63.06	GIFG	
S-3	LRR 59+90	15.0 LT.	63.21	FIFG	
S-4	LRR 59+90	35.0 LT.	63.00	FIFG	
S-5	LRR 52+66	35.0 LT.	43.00	FIFG	
S-6	LRR 52+66	15.0 LT.	41.65	FIFG	
TOTAL =	6				

FIFG = FIELD INLET FRAME & GRATE
GIFG = GUTTER INLET FRAME & GRATE

NOTE:

LOCATION IS TO CENTER OF FIELD INLET AND CENTER OF CASTING OF GUTTER INLET

625(1) PIPE HAND RAIL - LINEAR FOOT				
BEGIN	END	OFFSET	QUANTITY	REMARKS
LRR 52+77	LRR 59+79	LT.	702	

606(1) W-BEAM GUARDRAIL - LINEAR FOOT				
BEGIN	END	OFFSET	QUANTITY	REMARKS
LRR 51+10	LRR 52+89	RT.	129	ET-2000 TERMINAL
LRR 51+97	LRR 52+77	LT.	30	ET-2000 TERMINAL
LRR 59+83	LRR 62+00	RT.	120	CRT & ET-2000 TERMINALS
LRR 59+81	LRR 62+90	LT.	259	ET-2000 TERMINAL
		TOTAL =	538	

615(1) STANDARD SIGNING SUMMARY										
SIGN NO.	STATION	OFFSET		TYPE	FACING TRAFFIC	LEGEND	SIZE (IN.)		AREA S.F.	POST SIZE
		LT.	RT.				WD.	HT.		
1	LRR 32+50		X	R14-3	SB	NO HAZARDOUS MATERIAL	36	36	9	2.5
2	LRR 32+50		X	SPECIAL	SB	SPECIAL	120	36	30	
3	LRR 33+00		X	W12-2	SB	13' 3"	36	36	9	2.5
4	LRR 33+00		X	W16-2P	SB	2000 FT.	36	20	5	
5	LRR 45+64		X	R2-1	SB	20 M.P.H.	30	36	7.5	2.5
6	LRR 50+00	X		W1-1L	NB	CURVE LEFT	36	36	9	2.5
7	LRR 50+00	X		W13-1	NB	25 MPH	24	24	4	
8	LRR 52+89			W12-2P	SB	14 FT. 0 IN	78	24	13	2.5
9	LRR 52+89			W12-2P	SB	15 FT. 11 IN	78	24	13	2.5
10	LRR 59+69			W12-2P	NB	15 FT. 11 IN	78	24	13	2.5
11	LRR 59+69			W12-2P	NB	14 FT. 0 IN	78	24	13	2.5
12	LRR 59+20	X		R5-1	WB	DO NOT ENTER	36	36	9	2.5
13	LRR 67+00	X		R14-3	NB	NO HAZARDOUS MATERIAL	36	36	9	2.5
14	LRR 67+00	X		SPECIAL	NB	SPECIAL	120	36	30	
15	LRR 60+75	X		R2-1	NB	20 M.P.H.	30	36	7.5	2.5
16	LRR 52+74		17'	R8-10	SB	STOP HERE WHEN FLASHING	24	36	6	
17	LRR 59+95	17'		R8-10	NB	STOP HERE WHEN FLASHING	24	36	6	
18	LRR 51+00		X	W11-1	SB	BICYCLE	36	36	9	2.5
19	LRR 51+00		X	W16-1	SB	SHARE THE ROAD	24	30	6	
20	LRR 63+50	X		W11-1	NB	BICYCLE	36	36	9	2.5
21	LRR 63+50	X		W16-1	NB	SHARE THE ROAD	24	30	6	
									TOTAL	223

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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

LEWIS REEF ROAD TUNNEL
PROJECT NO. 67858

LEWIS REEF ROAD TUNNEL
SUMMARY TABLES

PREPARED BY: USKH INC.

CHECKED BY: DLM



DESIGNED BY: NCL

DRAWN BY: WJP

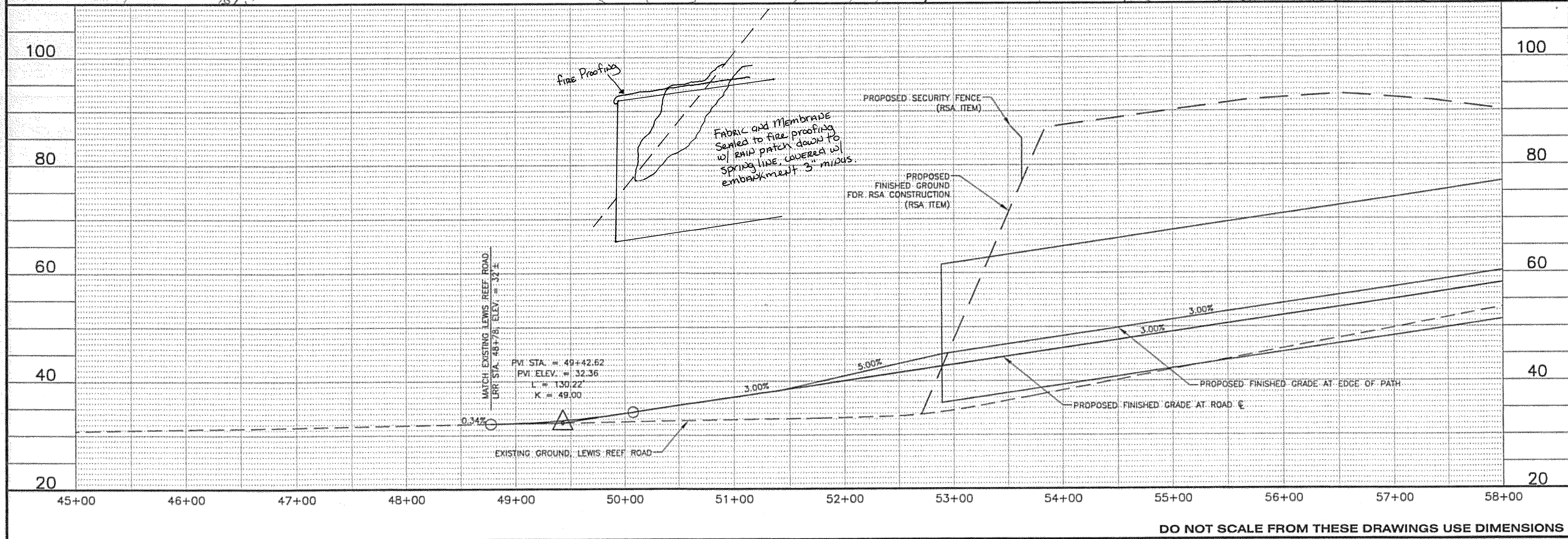
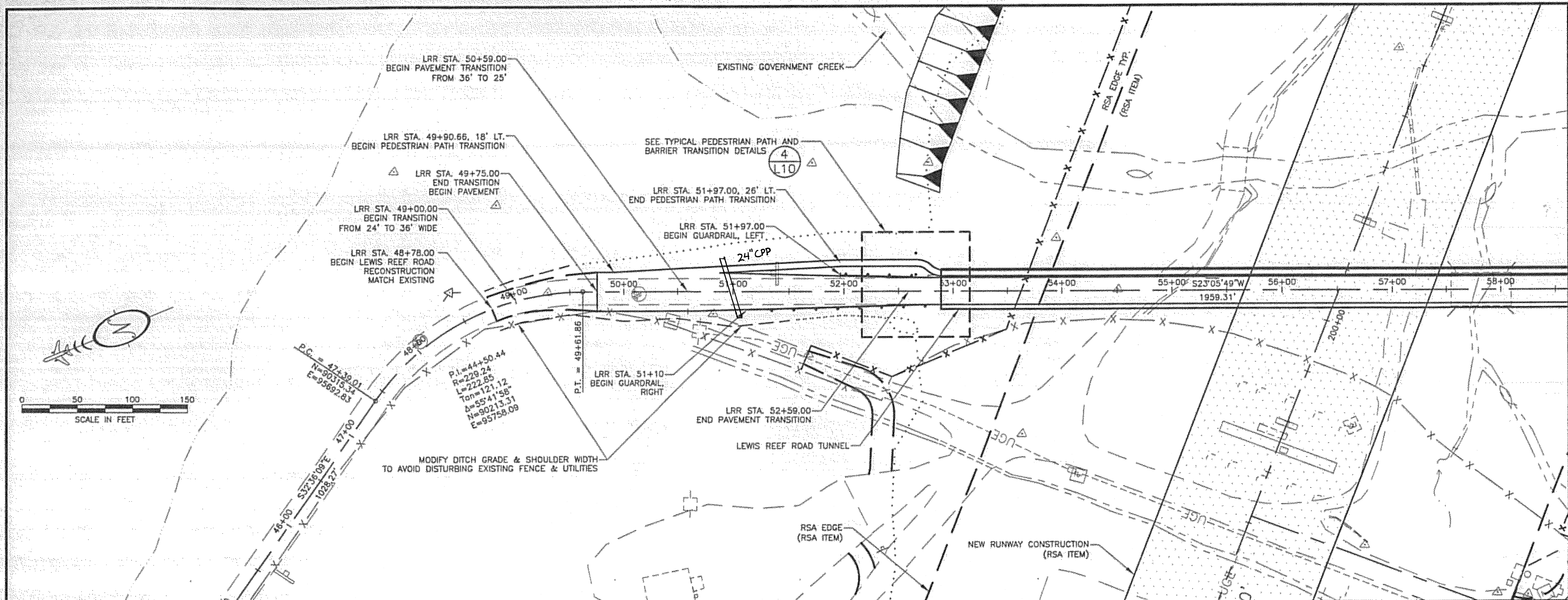
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

LEWIS REEF ROAD
TUNNEL
SUMMARY TABLES

PROJECT DESIGNATION

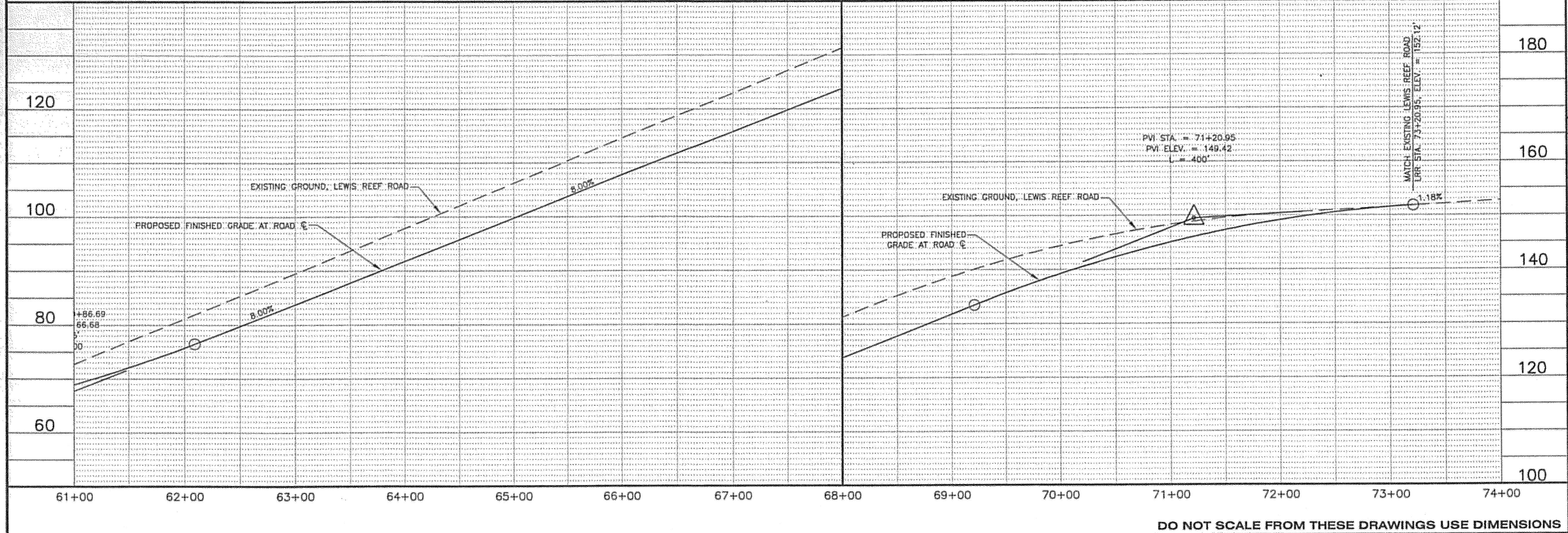
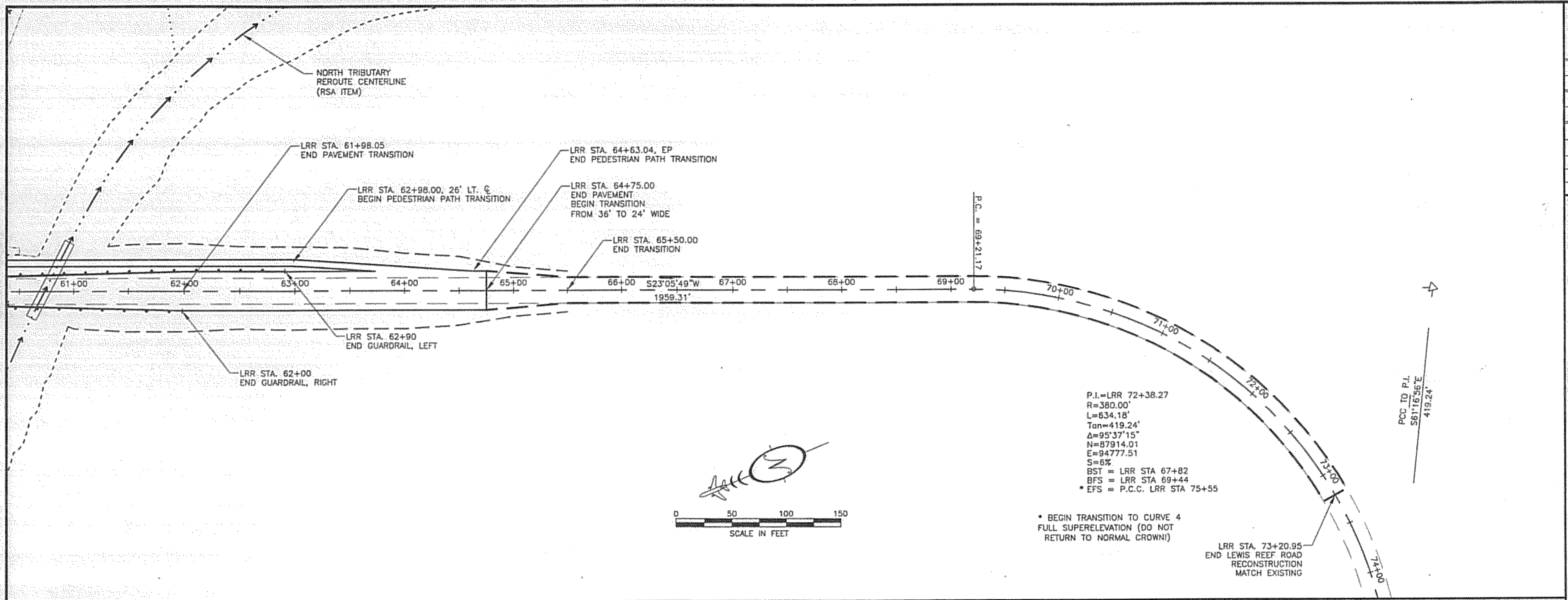
68456

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
L4	131



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ATTACHMENT NUMBER	
RECORD OF REVISIONS	
No.	DATE DESCRIPTION
LEWIS REEF ROAD TUNNEL PROJECT NO. 67858	
LEWIS REEF ROAD TUNNEL PLAN & PROFILE	
PREPARED BY: USKH INC.	
CHECKED BY: DLM	
DESIGNED BY: NCL	
DRAWN BY: WJP	
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION—SOUTHEAST REGION	
LEWIS REEF ROAD TUNNEL PLAN & PROFILE	
PROJECT DESIGNATION 68456	
STATE ALASKA	YEAR 2006
SHEET NUMBER L5	TOTAL SHEETS 131

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DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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TAB: L07

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

LEWIS REEF ROAD TUNNEL
PROJECT NO. 67858

LEWIS REEF ROAD TUNNEL
PLAN & PROFILE

PREPARED BY: USKH INC.
CHECKED BY: OLM

DESIGNED BY: NCL
DRAWN BY: WJP

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

LEWIS REEF ROAD
TUNNEL
PLAN & PROFILE

PROJECT DESIGNATION
68456

STATE	YEAR
ALASKA	2006

SHEET NUMBER	TOTAL SHEETS
L7	131

