
**ALASKA CENTRAL REGION**
**LOCATION MAP**

August 22, 2016

The undersigned hereby certifies that this duplicated document is an exact and true copy of the original.

Cody Sutton

# CONSTRUCTION PLANS
# COLD BAY AIRPORT
## COLD BAY, ALASKA

# COLD BAY AIRPORT IMPROVEMENTS 2016

**MAIN RUNWAY REHABILITATION**
**PROJECT NO. Z537540000**
**A.I.P. No. 3-02-0065-011-2016**

**CROSSWIND IMPROVEMENTS**
**PROJECT NO. Z573290000**
**A.I.P. No. 3-02-0065-011-2016**

**AS-BUILT PLANS**

Initials: _____ Date: 2/21/18

Contractor: KNIK CONSTRUCTION

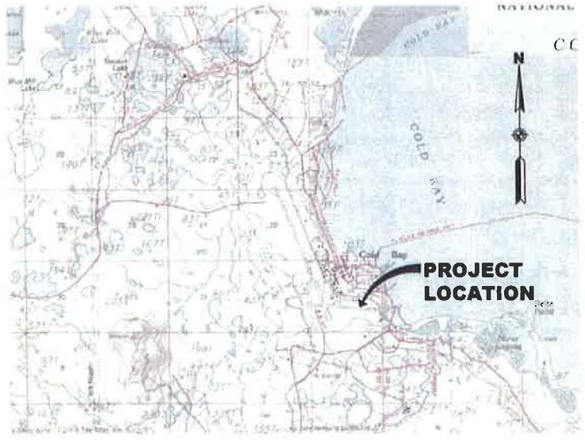
Date Started: 10/3/16

Date Completed: 10/18/17

Project Engineer*: (printed) KIM STEED

FOR Project Engineer* (signature) Jean Wolfgang

*I certify that revisions to these plans made during construction are noted in RED and therefore the plans are an accurate record of construction.*




**VICINITY MAP**

T57S, R86W, SECTIONS 23, 24, 25, 26, 35, & 36
SEWARD MERIDIAN
USGS COLD BAY, ALASKA
1" = 1 MILE

CONCUR Pat Cadell FOR — DATE 5/25/16
MICHAEL J. COFFEY — SOUTHCOAST REGION DIRECTOR

APPROVED — DATE 5/19/16
KENNETH M. MORTON, P.E. — REGIONAL PRECONSTRUCTION ENGINEER

APPROVED — DATE 5/17/16
WOLFGANG E. JUNGE, P.E. — DESIGN SECTION CHIEF

APPROVED Morgan P. Merritt — DATE 5/17/16
MORGAN P. MERRITT, P.E. — PROJECT MANAGER

| BY | DATE | REVISION |
|---|---|---|
| | | |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
COLD BAY AIRPORT IMPROVEMENTS 2016
PROJECT Nos. Z537540000 & Z573290000
AIP No. 3-02-0065-011-2016
TITLE SHEET

DATE: 5/13/2016
SHEET: 1 OF 97
AS-BUILT SHEET:

Designed By: MW
Drawn By: JMC
Checked By: EJG
Date Revised: 5/16/2016, 10:28 AM
Layout Name: TITLE
File Path and Name: \\Anchornet\A\Project\33160 001_C Cold Bay Crosswind Design Services\Civil\ACAD\33160_001_TITLE.dwg

Designed By: MM
Drawn By: JMC
Checked By: EJG

Date Revised: 5/16/2016, 10:28 AM
Layout Name: LEGEND & INDEX
File Path and Name: \\vm.rmnet\x\project\2316.01 DOT_C Cold Bay Crosswind Design Services\Civil\ACAD\2316.01-LEGEND & INDEX.dwg

## LEGEND

| PROPOSED | EXISTING | DESCRIPTION |
|---|---|---|
| | | EDGE OF EMBANKMENT |
| | | EDGE OF PAVEMENT |
| | | PAVEMENT REMOVAL |
| | | STAGING AREA |
| | | HAUL ROUTE |
| | | PAPI |
| | | SAWCUT |
| | | CUT SLOPE LIMITS |
| | | FILL SLOPE LIMITS |
| | | BUILDING |
| | | CULVERT |
| | | TOWER |
| | | RUNWAY LIGHT |
| | | TAXIWAY LIGHT |
| | | THRESHOLD LIGHT |
| | | R/W APPROACH LIGHT |
| | | R/W END LIGHT |
| | | U.G. ELECTRIC VAULT |
| | | U.G. ELECTRIC JUNCTION BOX |
| | | RUNWAY NAVAID SIGN |
| | | VASI |
| | | WIND SOCK |
| | | AIRPORT BOUNDARY |
| | | AIRPORT TRACT BOUNDARY |
| | | R/W CENTERLINE |
| | | BUILDING RESTRICTION LINE (BRL) |
| x x | x x | FENCE |
| | UE | UNDERGROUND ELECTRIC LINE |
| | UC | UNDERGROUND COMM. LINE |
| | F | FUEL LINE |
| | RSA | RUNWAY SAFETY AREA |
| | OFZ | OBSTACLE FREE ZONE |
| | OFA | OBJECT FREE AREA |

NOTES:

1. SEE ELECTRICAL SHEETS FOR ELECTRICAL LEGEND.

## ABBREVIATIONS

| | |
|---|---|
| AC | ASPHALT CEMENT |
| AIP | AIRPORT IMPROVEMENT PROGRAM |
| AOA | AIRPORT OPERATIONS AREA |
| AWOS | AUTOMATED WEATHER OBSERVATION SYSTEM |
| BM | BENCHMARK |
| BOP | BEGINNING OF PROJECT |
| BRL | BUILDING RESTRICTION LINE |
| CDB | COLD BAY AIRPORT |
| CL,℄ | CENTERLINE |
| COMM | COMMUNICATION |
| CSPP | CONSTRUCTION SAFETY PHASING PLAN |
| CY | CUBIC YARD |
| DOT&PF | STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES |
| EA | EACH |
| EG | EXISTING GROUND |
| ELEV | ELEVATION |
| EOP | EDGE OF PAVEMENT |
| ESCP | EROSION SEDIMENT CONTROL PLAN |
| EXIST | EXISTING |
| FAA | FEDERAL AVIATION ADMINISTRATION |
| FG | FINISH GRADE |
| FT | FEET |
| GAL | GALLON |
| GCP | GENERAL CONTRACT PROVISIONS |
| GPS | GLOBAL POSITIONING SYSTEM |
| H | HORIZONTAL |
| HMA | HOT MIX ASPHALT |
| IN | INCH |
| LB | POUNDS |
| LBC | LIGHT BAR CAN |
| LF | LINEAR FEET |
| LT | LEFT |
| M-GAL | THOUSAND GALLONS |
| MALSR | MEDIUM INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY INDICATOR LIGHTS |
| MAX | MAXIMUM |
| ME | MATCH EXISTING |
| MIN | MINIMUM |
| MPH | MILES PER HOUR |
| NAD83 | NORTH AMERICAN DATUM 83 |
| NAVD88 | NORTH AMERICAN VERTICAL DATUM 88 |
| NGS | NATIONAL GEODETIC SURVEY |
| NOTAM | NOTICE TO AIRMEN |
| N.T.S. | NOT TO SCALE |
| OFA | OBJECT FREE AREA |
| OFZ | OBSTACLE FREE ZONE |
| PACS | PRIMARY AIRPORT CONTROL STATION |
| PAPI | PRECISION APPROACH PATH INDICATOR |
| PC | POINT OF CURVATURE |
| PCC | PORTLAND CEMENT CONCRETE |
| PG | PROFILE GRADE |
| PI | POINT OF INTERSECTION |
| PVI | POINT OF VERTICAL INTERSECTION |
| R | RADIUS |
| RAP | RECYCLED ASPHALT PAVEMENT |
| RD | ROAD |
| REIL | RUNWAY END IDENTIFIER LIGHTS |
| REQ'D | REQUIRED |
| RPZ | RUNWAY PROTECTION ZONE |
| RSA | RUNWAY SAFETY AREA |
| RT | RIGHT |
| RVZ | RUNWAY VISIBILITY ZONE |
| RW | RUNWAY |
| SF | SQUARE FEET |
| STA | STATION |
| SY | SQUARE YARD |
| TW | TAXIWAY |
| TYP | TYPICAL |
| UG | UNDERGROUND |
| V | VERTICAL |
| VASI | VISUAL APPROACH SLOPE INDICATOR |
| W/ | WITH |

## INDEX

### PROJECT DRAWINGS



### PROJECT DRAWINGS



### APPENDIX DRAWINGS



| BY | DATE | REVISION |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| | | |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
COLD BAY AIRPORT IMPROVEMENTS 2016
PROJECT Nos. Z537540000 & Z573290000
AIP No. 3-02-0065-011-2016
LEGEND & INDEX

DATE: 5/13/2016
SHEET: 2 OF 97
AS-BUILT SHEET:

## SUMMARY ESTIMATE OF QUANTITIES

| ITEM | PAY ITEM | PAY UNIT | PARTICIPATING QUANTITY | NON–PARTICIPATING QUANTITY | TOTAL QUANTITY |
|---|---|---|---|---|---|
| D–701a | CPP SMOOTH INTERIOR PIPE, 24 INCH | LINEAR FOOT | 250 | | 250 |
| F–162a | 8–FOOT CHAIN–LINK FENCE | LINEAR FOOT | 1,400 | | 1,400 |
| F–162d | 27–FOOT SINGLE CANTILEVER GATE | EACH | 2 | | 2 |
| F–162f | 4–FOOT PEDESTRIAN GATE (W/KEYLESS LOCK) | EACH | 1 | | 1 |
| F–171a | POWER GATE OPERATOR SYSTEM | EACH | 2 | | 2 |
| G–100a | MOBILIZATION AND DEMOBILIZATION | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| G–115a | WORKER MEALS AND LODGING, OR PER DIEM | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| G–130a | FIELD OFFICE | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| G–130b | FIELD LABORATORY | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| G–130g | NUCLEAR TESTING EQUIPMENT STORAGE SHED | EACH | 1 | | 1 |
| G–130j | ENGINEERING COMMUNICATIONS | CONTINGENT SUM | ALL REQ'D | | ALL REQ'D |
| G–131a | ENGINEERING TRANSPORTATION (TRUCK) | EACH | 4 | | 4 |
| G–135a | CONSTRUCTION SURVEYING BY THE CONTRACTOR | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| G–135b | EXTRA THREE PERSON SURVEY PARTY | HOUR | 122 | | 122 |
| G–150a | EQUIPMENT RENTAL | HOUR | 98 | | 98 |
| G–300a | CPM SCHEDULING | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| G–700a | AIRPORT FLAGGER | CONTINGENT SUM | ALL REQ'D | | ALL REQ'D |
| G–705a | WATERING FOR DUST CONTROL | M–GAL | 3,900 | | 3,900 |
| G–710b | HIGHWAY FLAGGER | CONTINGENT SUM | ALL REQ'D | | ALL REQ'D |
| L–100b | REGULATOR. L–828 | EACH | 1 | | 1 |
| 3 L–100c(1) | HIGH INTENSITY RUNWAY EDGE AND THRESHOLD LIGHT, L–862 AND L–862E | EACH | 141 | | 141 |
| L–100c(2) | HIGH INTENSITY RUNWAY EDGE AND THRESHOLD LIGHT, L–862 AND L–862E. FIXTURE AND XFMR ONLY | EACH | 29 | | 29 |
| L–100e(1) | TAXIWAY EDGE LIGHT, L–861T | EACH | 101 | | 101 |
| L–100e(2) | TAXIWAY EDGE LIGHT, L–861T. FIXTURE AND XFMR ONLY | EACH | 7 | | 7 |
| L–100h | REMOVE EXISTING RUNWAY AND TAXIWAY LIGHT | EACH | 247 | | 247 |
| L–100k | FLUSH RUNWAY EDGE LIGHT, L–850c | EACH | 12 | | 12 |
| L–100n | AIRPORT SIGN, TYPE L–858 | EACH | 14 | | 14 |
| L–100r | TEMPORARY RUNWAY LIGHTING SYSTEM | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| L–100y | REMOVE AIRPORT SIGN | EACH | 16 | | 16 |
| L–100ap | SPARE PARTS | CONTINGENT SUM | ALL REQ'D | | ALL REQ'D |
| 3 L–107a | 8–FOOT LIGHTED WIND CONE, IN PLACE | EACH | 1 | | 1 |
| L–108a | UNDERGROUND CABLE #8 AWG, COPPER, 5kV FAA TYPE "C", L–824 | LINEAR FOOT | 51,986 | | 51,986 |
| L–108c | #6 BARE COPPER GROUND CONDUCTOR | LINEAR FOOT | 34,400 | | 34,400 |
| L–108g | GROUND ROD | EACH | 33 | | 33 |
| L–108h | UNDERGROUND CABLE #14 AWG, 2 CONDUCTOR, COPPER, 600 V, TYPE "SOOW–A/SOOW" | LINEAR FOOT | 601 | | 601 |
| L–108r | TEMPORARY JUMPER | LINEAR FOOT | 8,000 | | 8,000 |

## SUMMARY ESTIMATE OF QUANTITIES

| ITEM | PAY ITEM | PAY UNIT | PARTICIPATING QUANTITY | NON–PARTICIPATING QUANTITY | TOTAL QUANTITY |
|---|---|---|---|---|---|
| L–109d | INSTALLATION OF ELECTRICAL EQUIPMENT IN NEW OR EXISTING STRUCTURE | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| L–110a | 2–INCH RIGID STEEL CONDUIT | LINEAR FOOT | 3,409 | | 3,409 |
| L–110c | 2–INCH PVC CONDUIT | LINEAR FOOT | 32,357 | | 32,357 |
| L–132c | RELOCATE APPROACH LIGHTING AIDS | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| L–135a | RELOCATE POWER AND TELEPHONE | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| P–152a | UNCLASSIFIED EXCAVATION | CUBIC YARD | 36,890 | | 36,890 |
| P–152h(2) | BORROW MEASURED IN FINAL POSITION | CUBIC YARD | 33,800 | | 33,800 |
| P–152ag | DITCH LINEAR GRADING | LINEAR FOOT | 4,450 | | 4,450 |
| P–152ah | RSA SPECIAL GRADING | SQUARE YARD | 27,810 | | 27,810 |
| P–154b | SUBBASE COURSE | TON | 33,580 | 5,650 | 39,230 |
| P–157a | EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| P–157c | TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| P–157e | TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE | CONTINGENT SUM | ALL REQ'D | | ALL REQ'D |
| P–157f | WITHOLDING | CONTINGENT SUM | ALL REQ'D | | ALL REQ'D |
| P–161e | RECYCLED ASPHALT PAVEMENT PLACEMENT | CUBIC YARD | 9,520 | | 9,520 |
| P–162a | PAVEMENT COLD PLANING | SQUARE YARD | 203,700 | | 203,700 |
| P–165a | REMOVAL OF STRUCTURES | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| P–208c | CRUSHED AGGREGATE SURFACE COURSE | TON | 1,085 | 335 | 1,420 |
| 3 P–209b | CRUSHED AGGREGATE BASE COURSE | TON | 10,095 | 0 | 10,095 |
| P–310a | FOAMED ASPHALT STABILIZED BASE COURSE | SQUARE YARD | 14,650 | 4,950 | 19,600 |
| 3 P–310b | ASPHALT CEMENT | TON | 220 | 80 | 300 |
| 3 P–310c | PORTLAND CEMENT | TON | 130 | 50 | 180 |
| 3 P–401a | HOT MIX ASPHALT TYPE V, CLASS S | TON | 24,615 | 1,170 | 25,785 |
| P–401b | HOT MIX ASPHALT PRICE ADJUSTMENT | CONTINGENT SUM | ALL REQ'D | | ALL REQ'D |
| P–401c | ASPHALT CEMENT, PG 58–28 | TON | 1,365 | 65 | 1,430 |
| P–401e | ASPHALT MATERIAL PRICE ADJUSTMENT | CONTINGENT SUM | | ALL REQ'D | ALL REQ'D |
| P–603a | TACK COAT, STE–1 | TON | 78.8 | | 78.8 |
| P–620c | RUNWAY AND TAXIWAY PAINTING | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| P–620f | PAINTED MARKING REMOVAL | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| P–621a | SAW–CUT GROOVES | SQUARE YARD | 175,280 | | 175,280 |
| 3 P–640b | SEGMENTED CIRCLE (PANEL–TYPE) | LUMP SUM | ALL REQ'D | | ALL REQ'D |
| P–661a | STANDARD SIGN | SQUARE FOOT | 44 | | 44 |
| P–670a | HAZARD MARKER BARRIER, PLASTIC | EACH | 184 | | 184 |
| P–671a | RUNWAY CLOSURE MARKER, TEMPORARY ILLUMINATED PANEL | EACH | 5 | | 5 |
| 3 P–681a | GEOTEXTILE, SEPARATION | SQUARE YARD | 30,860 | 4,950 | 35,810 |

NOTES:
1. THIS SHEET IS A SUMMARY ESTIMATE OF QUANTITIES THAT COMBINES ITEMS FROM BOTH PROJECTS. THE MAIN RUNWAY REHABILITATION ESTIMATE CAN BE FOUND ON SHEET 4 AND THE CROSSWIND IMPROVEMENTS ESTIMATE IS ON SHEET 67.
2. SEE SHEET 20 FOR AREAS OF NON–PARTICIPATIING ITEMS.

DEVELOPED BY: **R&M CONSULTANTS, INC.**

| BY | DATE | REVISION |
|---|---|---|
| EJG | 6/20/16 | 3 REMOVED NIC & REVISED QUANTITIES |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
COLD BAY AIRPORT IMPROVEMENTS 2016
PROJECT Nos. Z537540000 & Z573290000
AIP No. 3-02-0065-011-2016
SUMMARY ESTIMATE OF QUANTITIES

DATE: 6/20/2016
SHEET: 3R OF 97
AS–BUILT SHEET:

Designed By: MM
Drawn By: JMC
Checked By: EJG
Date Revised: 6/20/2016, 10:58 AM
Layout Name: QUANT SUM
File Path and Name: \\rm.rmnet\x\project\2316.01 DOT_C Cold Bay Crosswind Design Services\Civil\ACAD\2316.01–QUANTITIES SUMMARY Addendum 3.dwg

## ESTIMATE OF QUANTITIES

| ITEM NO. | PAY ITEM | PAY UNIT | QUANTITY |
|---|---|---|---|
| D–701a | CPP SMOOTH INTERIOR PIPE, 24 INCH | LINEAR FOOT | 250 |
| F–162a | 8–FOOT CHAIN–LINK FENCE | LINEAR FOOT | 1,400 |
| F–162d | 27–FOOT SINGLE CANTILEVER GATE | EACH | 2 |
| F–162f | 4–FOOT PEDESTRIAN GATE (W/KEYLESS LOCK) | EACH | 1 |
| F–171a | POWER GATE OPERATOR SYSTEM | EACH | 2 |
| G–100a | MOBILIZATION AND 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 |
| G–130j | ENGINEERING COMMUNICATIONS | CONTINGENT SUM | ALL REQUIRED |
| G–131a | ENGINEERING TRANSPORTATION (TRUCK) | EACH | 3 |
| G–135a | CONSTRUCTION SURVEYING BY THE CONTRACTOR | LUMP SUM | ALL REQUIRED |
| G–135b | EXTRA THREE PERSON SURVEY PARTY | HOUR | 72 |
| G–150a | EQUIPMENT RENTAL | HOUR | 48 |
| G–300a | CPM SCHEDULING | LUMP SUM | ALL REQUIRED |
| G–700a | AIRPORT FLAGGER | CONTINGENT SUM | ALL REQUIRED |
| G–705a | WATERING FOR DUST CONTROL | M–GAL | 2,500 |
| G–710b | HIGHWAY FLAGGER | CONTINGENT SUM | ALL REQUIRED |
| L–100c(1) | HIGH INTENSITY RUNWAY EDGE AND THRESHOLD LIGHT, L–862 AND L–862E | EACH | 108 |
| L–100e(1) | TAXIWAY EDGE LIGHT, L–861T | EACH | 97 |
| L–100h | REMOVE EXISTING RUNWAY AND TAXIWAY LIGHT | EACH | 174 |
| L–100k | FLUSH RUNWAY EDGE LIGHT, L–850C | EACH | 10 |
| L–100n | AIRPORT SIGN, TYPE L–858 | EACH | 10 |
| L–100r | TEMPORARY RUNWAY LIGHTING SYSTEM | LUMP SUM | ALL REQUIRED |
| L–100y | REMOVE AIRPORT SIGN | EACH | 7 |
| L–100ap | SPARE PARTS | LUMP SUM | ALL REQUIRED |
| L–107a | 8–FOOT LIGHTED WIND CONE, IN PLACE | EACH | 1 (3) |
| L–108a | UNDERGROUND CABLE #8 AWG, COPPER, 5kV FAA TYPE "C", L–824 | LINEAR FOOT | 45,055 |
| L–108c | #6 BARE COPPER GROUND CONDUCTOR | LINEAR FOOT | 28,488 |
| L–108g | GROUND ROD | EACH | 26 |
| L–108h | UNDERGROUND CABLE #14 AWG, 2 CONDUCTOR, COPPER, 600 V, TYPE "SOOW–A/SOOW" | LINEAR FOOT | 441 |
| L–108r | TEMPORARY JUMPER | LINEAR FOOT | 8,000 |
| L–109d | INSTALLATION OF ELECTRICAL EQUIPMENT IN NEW OR EXISTING STRUCTURE | LUMP SUM | ALL REQUIRED |
| L–110a | 2–INCH RIGID STEEL CONDUIT | LINEAR FOOT | 1,959 |
| L–110c | 2–INCH PVC CONDUIT | LINEAR FOOT | 28,073 |
| L–135a | RELOCATE POWER AND TELEPHONE | LUMP SUM | ALL REQUIRED |
| P–152a | UNCLASSIFIED EXCAVATION | CUBIC YARD | 24,890 |
| P–152h(2) | BORROW MEASURED IN FINAL POSITION | CUBIC YARD | 5,200 |

## ESTIMATE OF QUANTITIES

| ITEM NO. | PAY ITEM | PAY UNIT | QUANTITY |
|---|---|---|---|
| P–152ag | DITCH LINEAR GRADING | LINEAR FOOT | 4,450 |
| P–152ah | RSA SPECIAL GRADING | SQUARE YARD | 27,810 |
| P–154b | SUBBASE COURSE | TON | 38,780 |
| P–157a | EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION | LUMP SUM | ALL REQUIRED |
| P–157c | TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL | LUMP SUM | ALL REQUIRED |
| P–157e | TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE | CONTINGENT SUM | ALL REQUIRED |
| P–161e | RECYCLED ASPHALT PAVEMENT PLACEMENT | CUBIC YARD | 6,720 |
| P–162a | PAVEMENT COLD PLANING | SQUARE YARD | 169,700 |
| P–165a | REMOVAL OF STRUCTURES | LUMP SUM | ALL REQUIRED |
| P–208c | CRUSHED AGGREGATE SURFACE COURSE | TON | 1,420 |
| P–209b | CRUSHED AGGREGATE BASE COURSE | TON | 10,095 (3) |
| P–310a | FOAMED ASPHALT STABILIZED BASE COURSE | SQUARE YARD | 18,600 |
| P–310b | ASPHALT CEMENT | TON | 300 (3) |
| P–310c | PORTLAND CEMENT | TON | 180 (3) |
| P–401a | HOT MIX ASPHALT TYPE V, CLASS S | TON | 24,765 |
| P–401b | HOT MIX ASPHALT PRICE ADJUSTMENT | CONTINGENT SUM | ALL REQUIRED |
| P–401c | ASPHALT CEMENT, PG 58–28 | TON | 1,365 |
| P–401e | ASPHALT MATERIAL PRICE ADJUSTMENT | CONTINGENT SUM | ALL REQUIRED |
| P–603a | TACK COAT, STE–1 | TON | 75 |
| P–620c | RUNWAY AND TAXIWAY PAINTING | LUMP SUM | ALL REQUIRED |
| P–620f | PAINTED MARKING REMOVAL | LUMP SUM | ALL REQUIRED |
| P–621a | SAW–CUT GROOVES | SQUARE YARD | 169,700 |
| P–640b | SEGMENTED CIRCLE (PANEL–TYPE) | LUMP SUM | ALL REQUIRED (3) |
| P–661a | STANDARD SIGN | SQUARE FOOT | 44 |
| P–670a | HAZARD MARKER BARRIER, PLASTIC | EACH | 100 |
| P–671a | RUNWAY CLOSURE MARKER, TEMPORARY ILLUMINATED PANEL | EACH | 3 |
| P–681a | GEOTEXTILE, SEPARATION | SQUARE YARD | 34,310 |

## ESTIMATING FACTORS

| ITEM NO. | PAY ITEM | ESTIMATING FACTOR |
|---|---|---|
| P–154b | SUBBASE COURSE | 145 LB/CF |
| P–209b | CRUSHED AGGREGATE BASE COURSE | 145 LB/CF |
| P–310a | FOAMED ASPHALT STABILIZED BASE COURSE | 140 LB/CF |
| P–310b | ASPHALT CEMENT | 2.5% BY WEIGHT OF P–310a |
| P–310c | PORTLAND CEMENT | 1.5% BY WEIGHT OF P–310a |
| P–401a | HOT MIX ASPHALT TYPE V, CLASS S | 150 LB/CF |
| P–401c | ASPHALT CEMENT, PG 58–28 | 5.5% BY WEIGHT OF P–401a |

Designed By: C. WILT
Drawn By: C. SLATTERY
Checked By: B. HANSON
Date Revised: 6/16/2016, 12:31 PM
Layout Name: QUANTITIES_(2)
File Path and Name: Q:\2A\61111\85CAD\Aviation\Design\SA11-AV-CV-QDB.dwg

STATE OF ALASKA 49TH
Brian R. Hanson
CE-11132
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |
| | | |
| | | |
| BRH | 6/15/2016 | WIND CONE AND SEGMENTED CIRCLE ADDED TO CONTRACT, ADJUSTED PAY ITEMS (3) |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
**COLD BAY, ALASKA**
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3–02–0065–011–2016
ESTIMATE OF QUANTITIES, ESTIMATING FACTORS, & SUMMARY TABLES

DATE: 6/16/2016
SHEET: 4R OF 97
AS–BUILT SHEET:

**PLAN PREPARED BY DOWL**

CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO DELINEATE A STAGING, STOCKPILE, AND DISPOSAL AREAS IN A PORTION OF TRACT 1 PARCEL B. PRESERVE AND PROTECT ANY EXISTING PROPERTY, FACILITIES, AND BUILDINGS, AVOID AREAS IN THIS TRACT ALREADY IN USE.

COLD BAY

BARANOV ROAD

GRUENING AVENUE

ROOSEVELT STREET

DESIGNATED HAUL ROUTE

ST. LOUIS ROAD

GLIDE SLOPE CRITICAL AREA

GLIDE SLOPE

ARFF BUILDING

NORTH APRON

SOUTH APRON

TW A

TW B

TW C

LOCALIZER CRITICAL AREA

RW 15 THRESHOLD STA. 104+10

RW 33 THRESHOLD STA. 2+30

SEE CONSTRUCTION SAFETY AND PHASING PLAN NOTES AND THE SPECIFICATIONS FOR RESTRICTIONS IN TRAVERSING RUNWAY.

## SCOPE OF PROJECT

1. RW 15/33 PAVEMENT REHABILIATATION
2. AEB TERMINAL BUILDING APRON AND TW CONSTRUCTION
3. RW 15/33 AND TW LIGHTING REPLACEMENT
4. ROOSEVELT STREET RECONSTRUCTION
5. AIRPORT FENCING RELOCATION
6. SEGMENTED CIRCLE /3
7. RSA REGRADING AND COMPACTION
8. EROSION PROTECTION

500 0 500 1000
SCALE IN FEET

## GENERAL NOTES

1. EXISTING GROUND CONTOURS ARE BASED ON A 2006 BASE MAP PROVIDED BY DOT&PF AND A 2012 TOPOGRAPHIC SURVEY PERFORMED BY DOWL.
2. SOILS INFORMATION IS DERIVED FROM SOILS INVESTIGATIONS PERFORMED BY DOT&PF AND A GEOTECHNICAL EXPLORATION PERFORMED BY DOWL IN 2012.
3. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE BASED ON APPROXIMATIONS FROM AIRPORT MAINTENANCE STAFF, DOWL FIELD SURVEY, AND AS-BUILT RECORDS PROVIDED BY DOT&PF.
4. VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION. RECORD LOCATIONS AND CHANGES TO UTILITIES IN SURVEY NOTES AND ON AS BUILT DRAWINGS.
5. ELEVATIONS SHOWN ARE TO PIPE INVERT, FLOW LINE, OR FINISH PAVEMENT SURFACE UNLESS OTHERWISE NOTED.

**PLAN PREPARED BY DOWL**

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER
6/16/16

| BY | DATE | REVISION |
|---|---|---|
| BRH | 6/15/2016 | WIND CONE AND SEGMENTED CIRCLE ADDED TO CONTRACT /3 |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PROJECT LAYOUT PLAN

DATE: 6/16/2016
SHEET: 5R OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised:
Layout Name: Project Layout Plan (5)
File Path and Name: O:\24\16111\ESDC\Aviation\Design\SC11-AV-AF-C081.dwg
6/16/2016, 12:45 PM

## LEGEND

- EDGE NEW ROAD
- PERIMETER FENCE
- TO BE DEMOLISHED
- TO BE RELOCATED BY OTHERS

## NOTES

1. SEE ELECTRICAL PLANS FOR ADDITIONAL UTILITY DEMOLITION.
2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES THAT THE LOCATE CALL CENTER DOES NOT LOCATE. THIS INCLUDES FAA, AND OTHER UTILITIES THAT MAY OR MAY NOT BE SHOWN ON THE PLANS.

GRUENING AVENUE
ROOSEVELT STREET
BARANOV AVENUE
BOROUGH DRIVE
ST. LOUIS ROAD

DEMO LIGHTS PER ELECTRICAL SHEETS

DEMO PAVEMENT AS REQUIRED FOR PLACEMENT OF NEW PAVEMENT

100 0 100 200
SCALE IN FEET

PLAN PREPARED BY DOWL

BEFORE YOU DIG CALL FOR FREE UNDERGROUND LOCATION

Locate Call Center of Alaska
Anchorage Area.....278-3121
Statewide.....800-478-3121
who will notify subscribed utilities only.
Other utilities need to be contacted individually.

As-Built

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
DEMOLITION PLAN

DATE: 5/3/2016
SHEET: 6 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised: 5/03/2016, 2:05 PM
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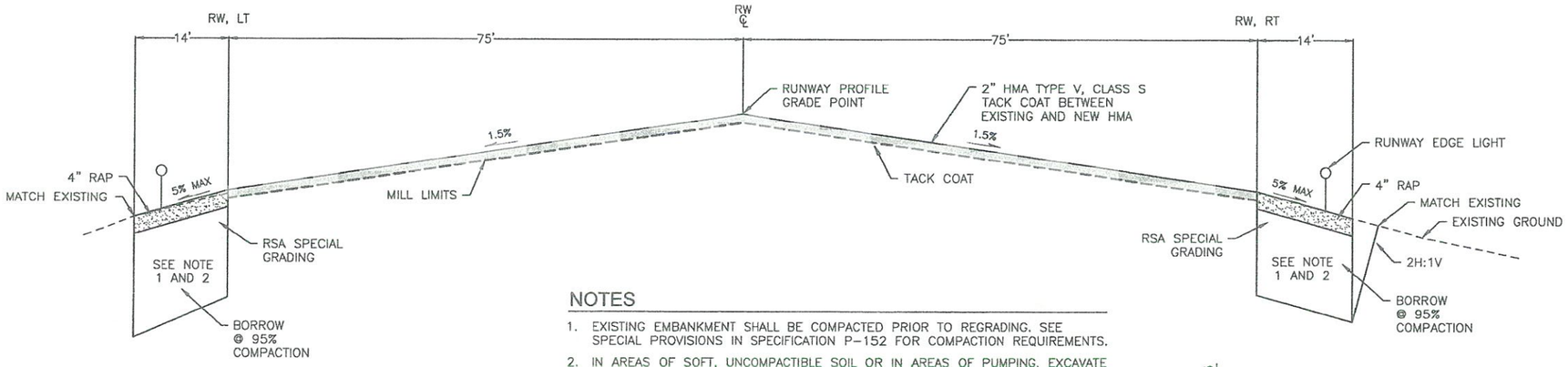
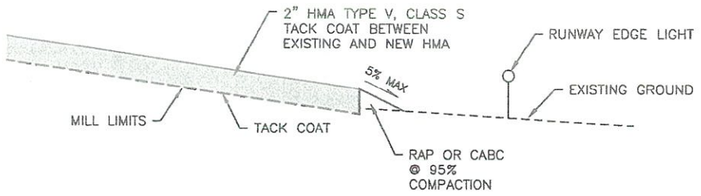


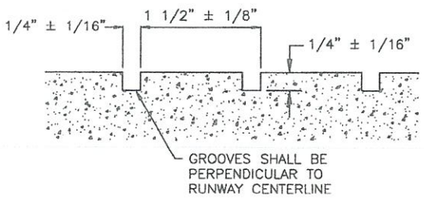

## NOTES

1. EXISTING EMBANKMENT SHALL BE COMPACTED PRIOR TO REGRADING. SEE SPECIAL PROVISIONS IN SPECIFICATION P-152 FOR COMPACTION REQUIREMENTS.
2. IN AREAS OF SOFT, UNCOMPACTIBLE SOIL OR IN AREAS OF PUMPING, EXCAVATE EXISTING MATERIAL TO A DEPTH OF 2 FEET AS DIRECTED BY THE ENGINEER.

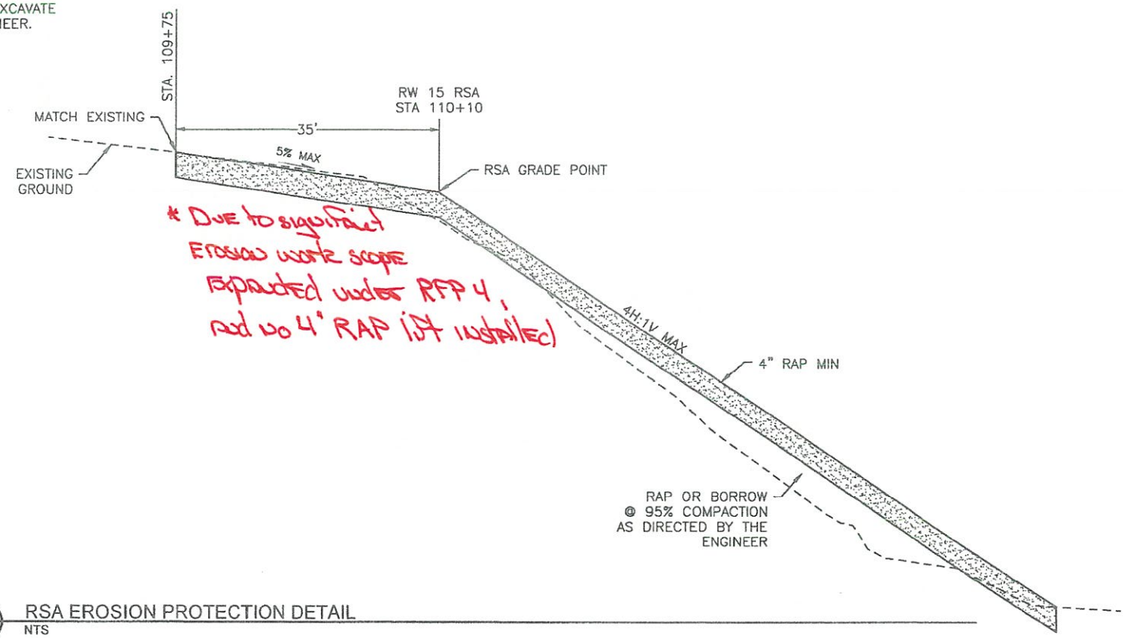
1/7 RUNWAY 15/33 RESURFACING
NTS




2/7 RUNWAY 15/33 PAVEMENT EDGE DETAIL
NTS

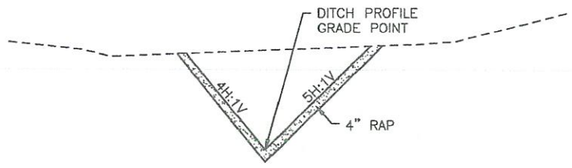



3/7 TYPICAL GROOVING SECTION
NTS




* Due to significant Erosion work scope Expected under RFP 4, add no 4" RAP (if installed)

4/7 RSA EROSION PROTECTION DETAIL
NTS




5/7 SPECIAL DITCH
NTS

RUNWAY STA. 45+93.50 TO 79+50.00 220'RT
DITCH STA. 445+93.50 TO 479+50.00

As-Built

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER
5/4/16

| BY | DATE | REVISION |
|---|---|---|

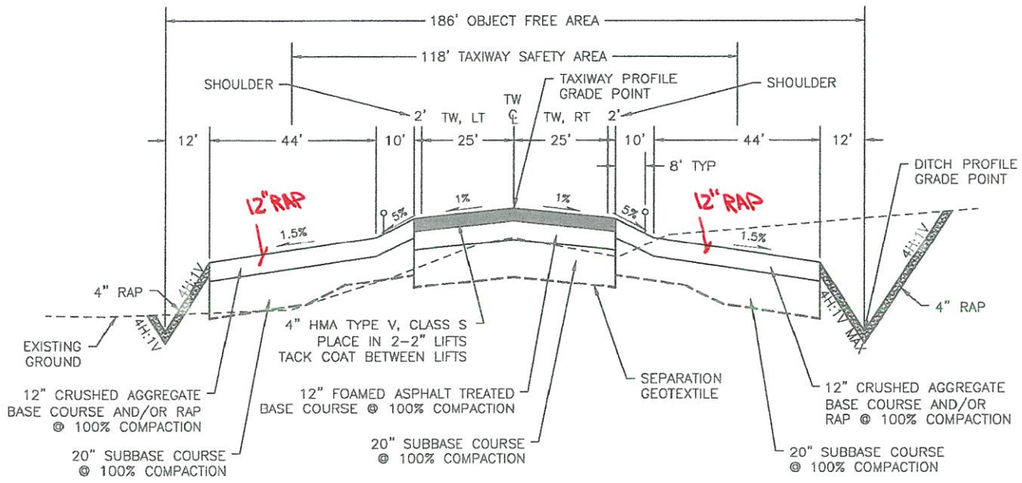
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
TYPICAL SECTIONS AND DETAILS

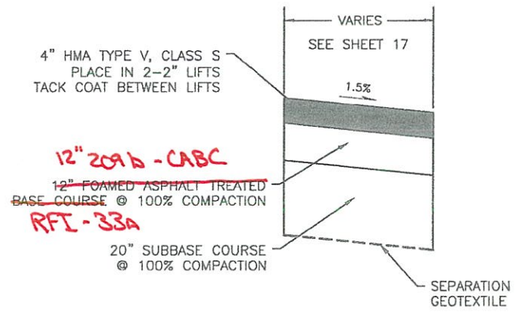
DATE: 5/3/2016
SHEET: 7 OF 97
AS-BUILT SHEET:

PLAN PREPARED BY DOWL

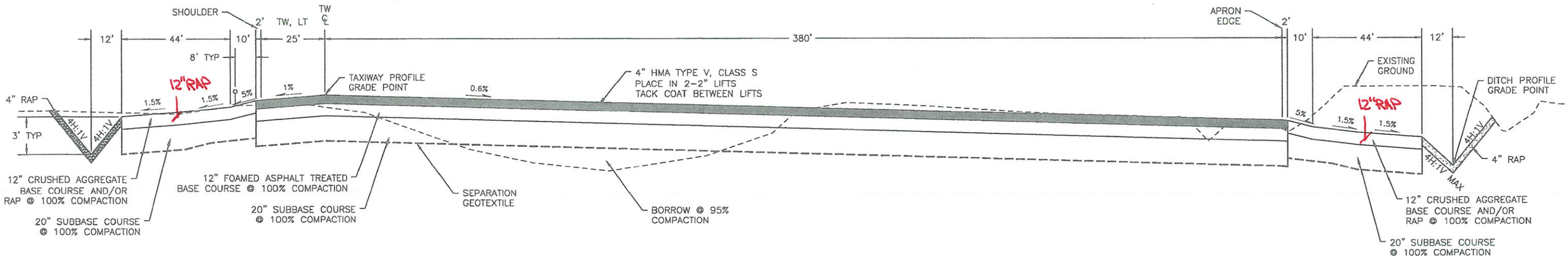
Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised: 5/03/2016, 2:06 PM
Layout Name: Typical Sections and Details (2)
File Path and Name: Q:\AK\61111\GEOMO\Working\Design\SA11-AV-DT-C08.dwg




1/8 TAXIWAY TYPICAL SECTION
NTS
TW D STA. 400+74.80 TO 405+80.00




3/8 RUNWAY 33 PAVED SHOULDER
NTS
RW 15-33 STA. 2+69.21' TO 5+30.28', 75.0' RT
RW 15-33 STA. 2+69.21' TO 5+30.28', 75.0' LT




2/8 APRON TYPICAL SECTION
NTS
TW STA. 405+80.00 TO 409+25.00

As-Built

Date Revised: 5/03/2016, 2:06 PM
Layout Name: Typical Sections and Details (8)
File Path and Name: C:\2x\101111\ESCADD\Aviation\Design\SA11-AV-07-CDB.dwg
Designed By: C. WILT
Drawn By: C. SJATTEN
Checked By: B. HANSON

STATE OF ALASKA 49TH Brian R. Hanson CE 11132 REGISTERED PROFESSIONAL ENGINEER

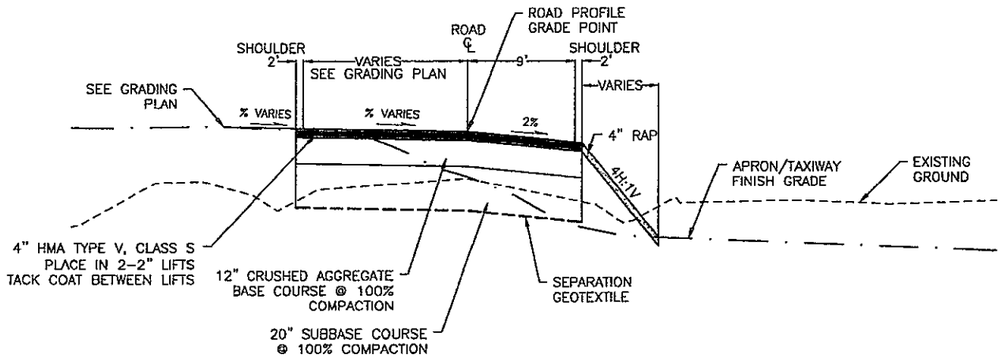
| BY | DATE | REVISION |
|---|---|---|

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
TYPICAL SECTIONS AND DETAILS

DATE: 5/3/2016
SHEET: 8 OF 97
AS-BUILT SHEET:

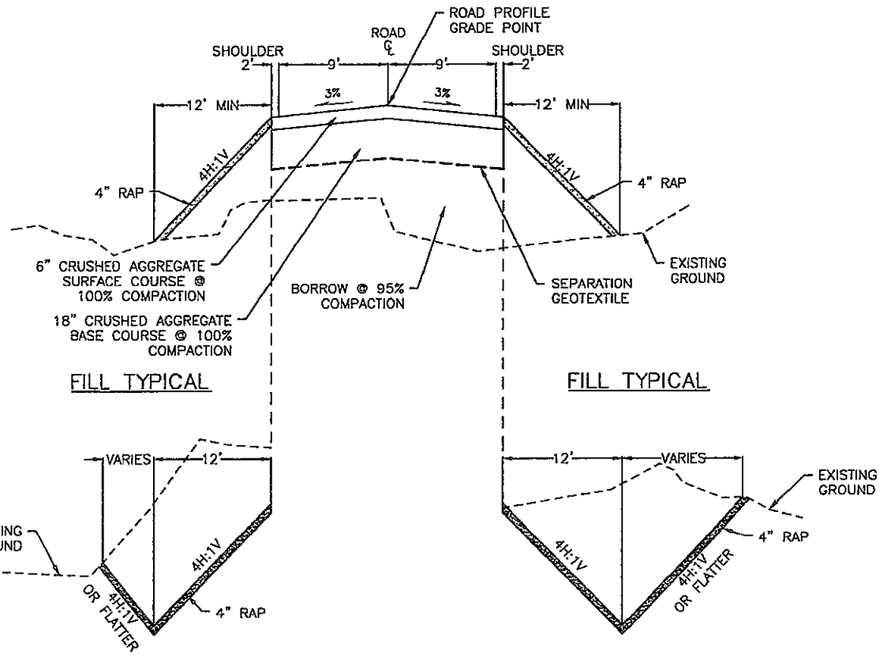
PLAN PREPARED BY DOWL




1/9 ACCESS ROAD PAVED APPROACHES TYPICAL SECTION

NTS

ST. LOUIS ROAD STA. 608+82 TO 610+00
BARANOV AVENUE STA. 300+00 TO 301+00

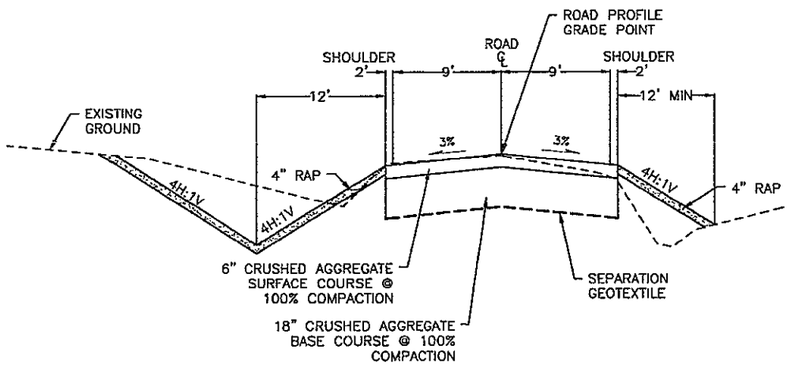



CUT EXCEPTION

ROOSEVELT STREET STA. 500+45.00' TO 502+15.00' LT
ROOSEVELT STREET STA. 512+27.40' TO 512+90.44' LT

CUT EXCEPTION

ROOSEVELT STREET STA. 500+30' TO 503+65' RT



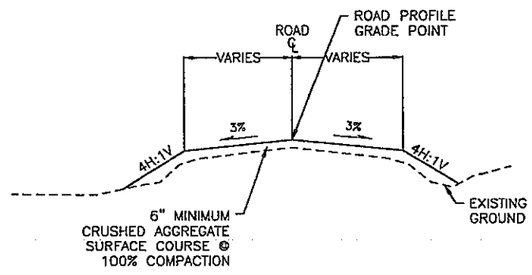

2/9 ACCESS ROAD GRAVEL TYPICAL SECTION

NTS

ST. LOUIS ROAD STA. 610+00 TO 611+74.82
BARANOV AVENUE STA. 301+00 TO 303+21

3/9 ROOSEVELT STREET TYPICAL SECTION

NTS




4/9 SIDE ROADS AND TRUESDELL DRIVE TYPICAL SECTION

NTS

As-Built

PLAN PREPARED BY DOWL

STATE OF ALASKA 49TH
Brian K. Hanson
CE 11135
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
TYPICAL SECTIONS
AND DETAILS

DATE: 5/3/2016
SHEET: 9 OF 97
AS-BUILT SHEET:

Date Revised: 5/03/2016 2:06 PM
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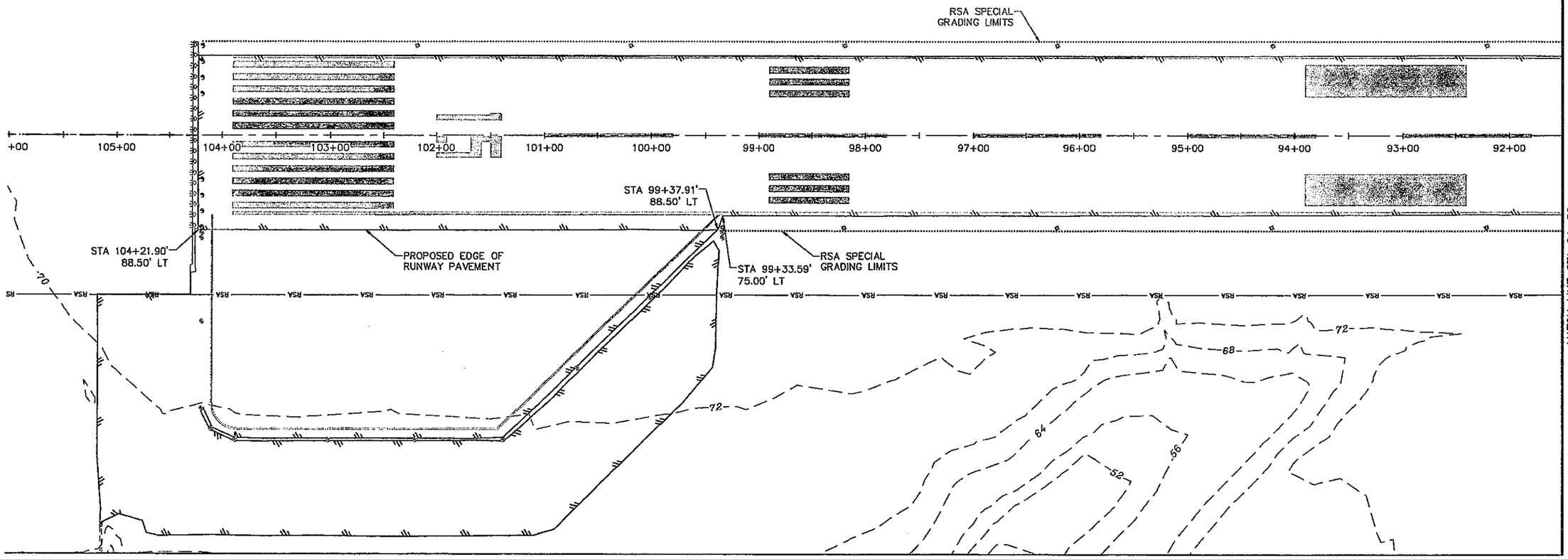
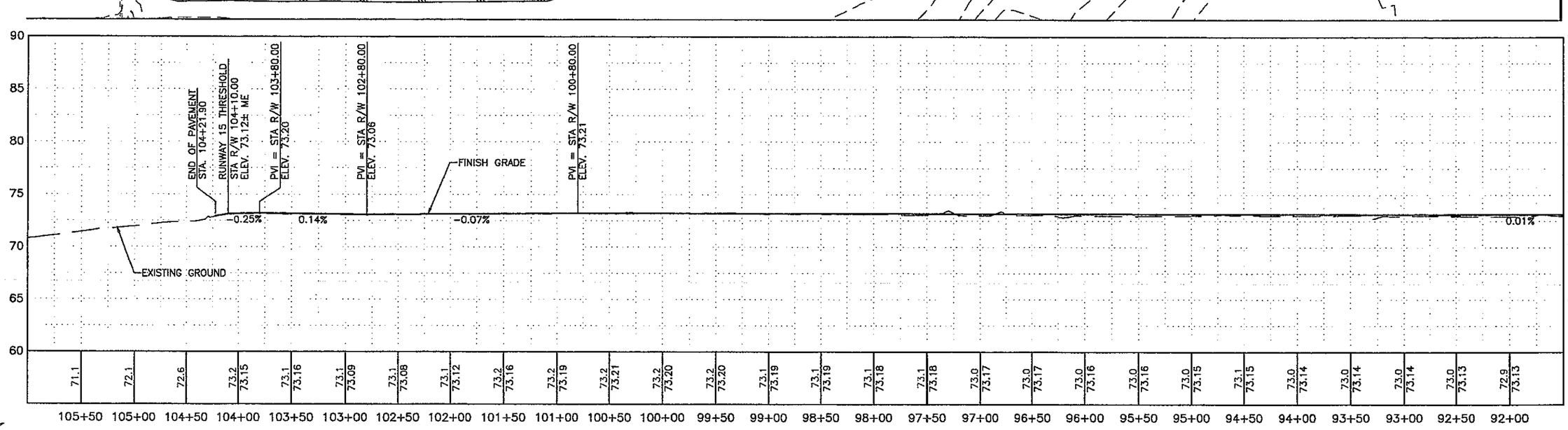
Designed By: C. WILT
Drawn By: C. SLATTERY
Checked By: B. HANSON

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SCALE IN FEET
1H:10V

As-Built

PLAN PREPARED BY DOWL

STATE OF ALASKA
10TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
RUNWAY

DATE: 5/3/2016
SHEET: 10 OF 97
AS-BUILT SHEET:

Designed By: L. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

Date Revised: 5/03/2016, 2:07 PM
Layout Name: 25x36 (10)
File Path and Name: D:\24VB1111\ESGN\Madison\Design\SC11-AN-AF-C081.dwg
SC11-AN-AF-C081.dwg

GLIDE SLOPE CRITICAL AREA

DITCH LINEAR GRADING

RSA SPECIAL GRADING LIMITS

MATCH LINE STA 91+50

MATCH LINE STA 77+00

RSA SPECIAL GRADING LIMITS

PROPOSED EDGE OF RUNWAY PAVEMENT

91+00 90+00 89+00 88+00 87+00 86+00 85+00 84+00 83+00 82+00 81+00 80+00 79+00 78+00 77

72 68 64 60 56

PVI = STA R/W 83+00.00
ELEV. 73.04

PVI = STA R/W 77+00.00
ELEV. 74.03

FINISH GRADE

EXISTING GROUND

SPECIAL DITCH
RW STA. 79+50.00 220'RT
STA. 479+50.00
ELEV 66.32'

EXISTING 36" CULVERT
STA. 79+46.78 196.98'RT
BOP=64.87'±

SPECIAL DITCH
RW STA. 79+33.71 220'RT
STA. 479+33.71
ELEV 66.07'

-0.17%

-0.10%

1.52%

RIGHT DITCH PROFILE

90 85 80 75 70 65 60

| 91+00 | 90+50 | 90+00 | 89+50 | 89+00 | 88+50 | 88+00 | 87+50 | 87+00 | 86+50 | 86+00 | 85+50 | 85+00 | 84+50 | 84+00 | 83+50 | 83+00 | 82+50 | 82+00 | 81+50 | 81+00 | 80+50 | 80+00 | 79+50 | 79+00 | 78+50 | 78+00 | 77+50 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 73.0 | 73.1 | 73.1 | 73.1 | 73.0 | 73.1 | 73.1 | 73.1 | 73.1 | 73.0 | 73.0 | 73.0 | 73.0 | 73.0 | 73.0 | 73.0 | 73.0 | 73.1 | 73.1 | 73.2 | 73.3 | 73.4 | 73.4 | 73.5 | 73.5 | 73.5 | 73.7 | 73.9 |
| 73.12 | 73.11 | 73.11 | 73.10 | 73.10 | 73.09 | 73.09 | 73.08 | 73.08 | 73.07 | 73.07 | 73.06 | 73.06 | 73.06 | 73.05 | 73.05 | 73.04 | 73.12 | 73.21 | 73.29 | 73.37 | 73.45 | 73.54 | 73.62 | 73.70 | 73.78 | 73.87 | 73.95 |

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SCALE IN FEET
1H:10V

As-Built

PLAN PREPARED BY DOWL

STATE OF ALASKA · 49TH · Brian R. Hanson · CE 11132 · REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
RUNWAY

DATE: 5/3/2016
SHEET: 11 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised: 5/03/2016, 2:07 PM
Layout Name: Plan and Profile Runway (11)
File Path and Name: O:\24\61111\05CAD\Wellen\Design\SC11-AW-RF-C081.dwg
SC11-AW-RF-C081.dwg

DITCH LINEAR GRADING

STA 475+00 (approximate)
"Special Ditch" terminated
per 5/10/17 memo.

RSA

PAVEMENT TO BE REMOVED

RSA SPECIAL GRADING LIMITS

MATCH LINE STA 77+00

MATCH LINE STA 62+50

77+00 76+00 75+00 74+00 73+00 72+00 71+00 70+00 69+00 68+00 67+00 66+00 65+00 64+00 63+00

PROPOSED EDGE OF RUNWAY PAVEMENT

PAVEMENT TO BE REMOVED

RSA SPECIAL GRADING LIMITS

70 72 76 80

PVI = STA R/W 77+00.00
ELEV. 74.03

SPECIAL DITCH
RW STA. 76+50.00 220'RT
STA. 476+50.00
ELEV 66.35'

PVI = STA R/W 70+00.00
ELEV. 77.06

FINISH GRADE

EXISTING GROUND

-0.43%

-0.41%

0.10%

RIGHT DITCH PROFILE

95 90 85 80 75 70 65

74.3 74.25 74.5 74.46 74.6 74.68 74.8 74.90 75.0 75.11 75.2 75.33 75.4 75.55 75.6 75.76 75.8 75.98 76.1 76.20 76.3 76.41 76.6 76.63 76.9 76.85 77.0 77.06 77.3 77.28 77.5 77.49 77.7 77.71 77.9 77.92 78.1 78.14 78.3 78.35 78.6 78.57 78.7 78.78 78.9 79.00 79.1 79.21 79.4 79.43 79.5 79.64 79.8 79.86 80.0 80.07

76+50 76+00 75+50 75+00 74+50 74+00 73+50 73+00 72+50 72+00 71+50 71+00 70+50 70+00 69+50 69+00 68+50 68+00 67+50 67+00 66+50 66+00 65+50 65+00 64+50 64+00 63+50 63+00

50 0 50 100
SCALE IN FEET
1H:10V

As-Built

PLAN PREPARED BY DOWL

STATE OF ALASKA
49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER
5/31/17

| BY | DATE | REVISION |
|---|---|---|

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
RUNWAY

DATE: 5/3/2016
SHEET: 12 OF 97
AS-BUILT SHEET:

| | |
|---|---|
| Designed By: | C. WILT |
| Drawn By: | C. SLATEN |
| Checked By: | B. HANSON |
| Date Revised: | 5/03/2016, 2:07 PM |
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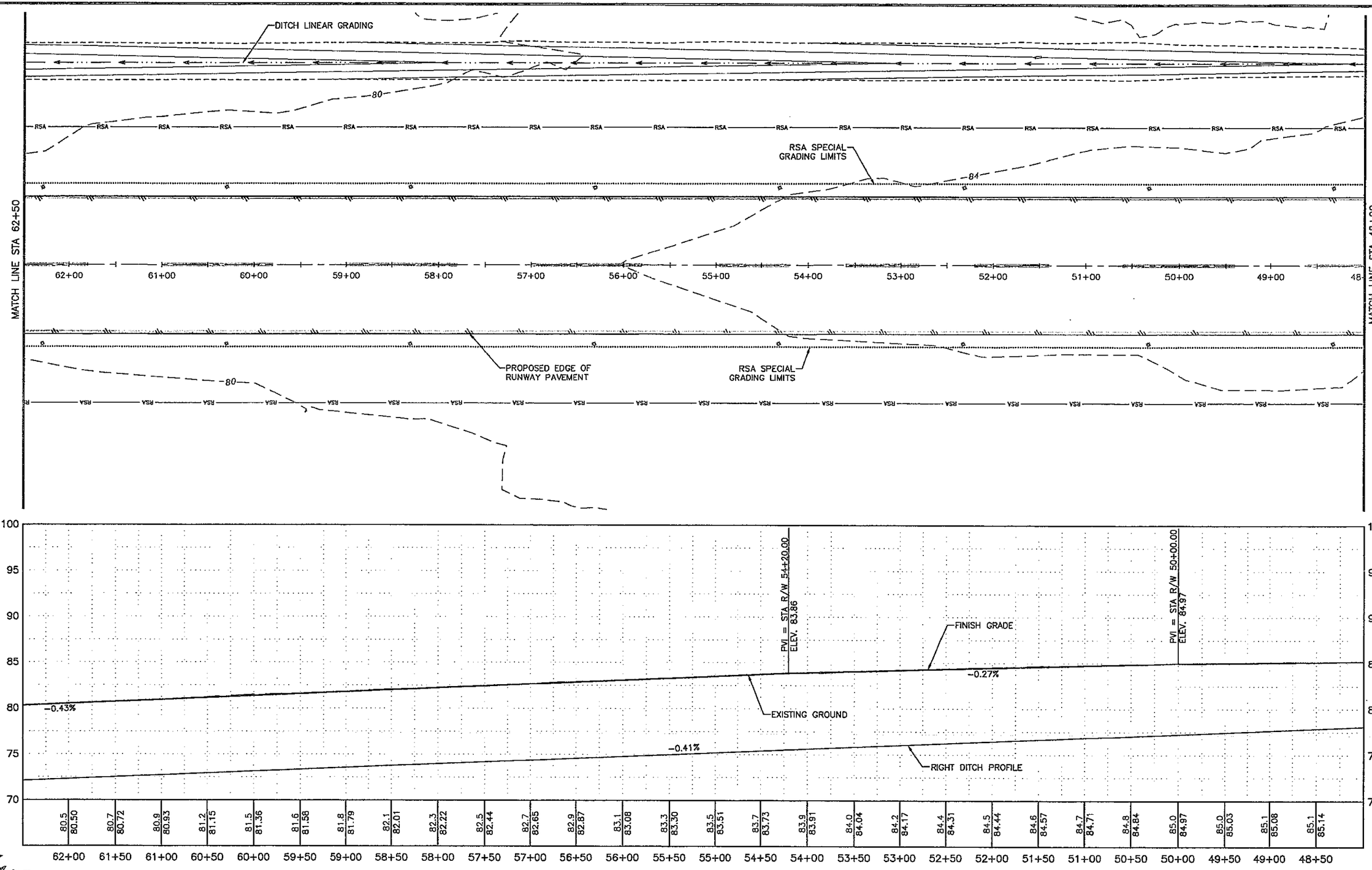


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SCALE IN FEET
1H:10V

As-Built

PLAN PREPARED BY DOWL

Date Revised:
Layout Name: Plan and Profile Runway (13)
File Path and Name: G:\24\61111\65ADV\Aviation Design\3611-AV-AP-C0811.dwg
Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
5/03/2016, 2:08 PM

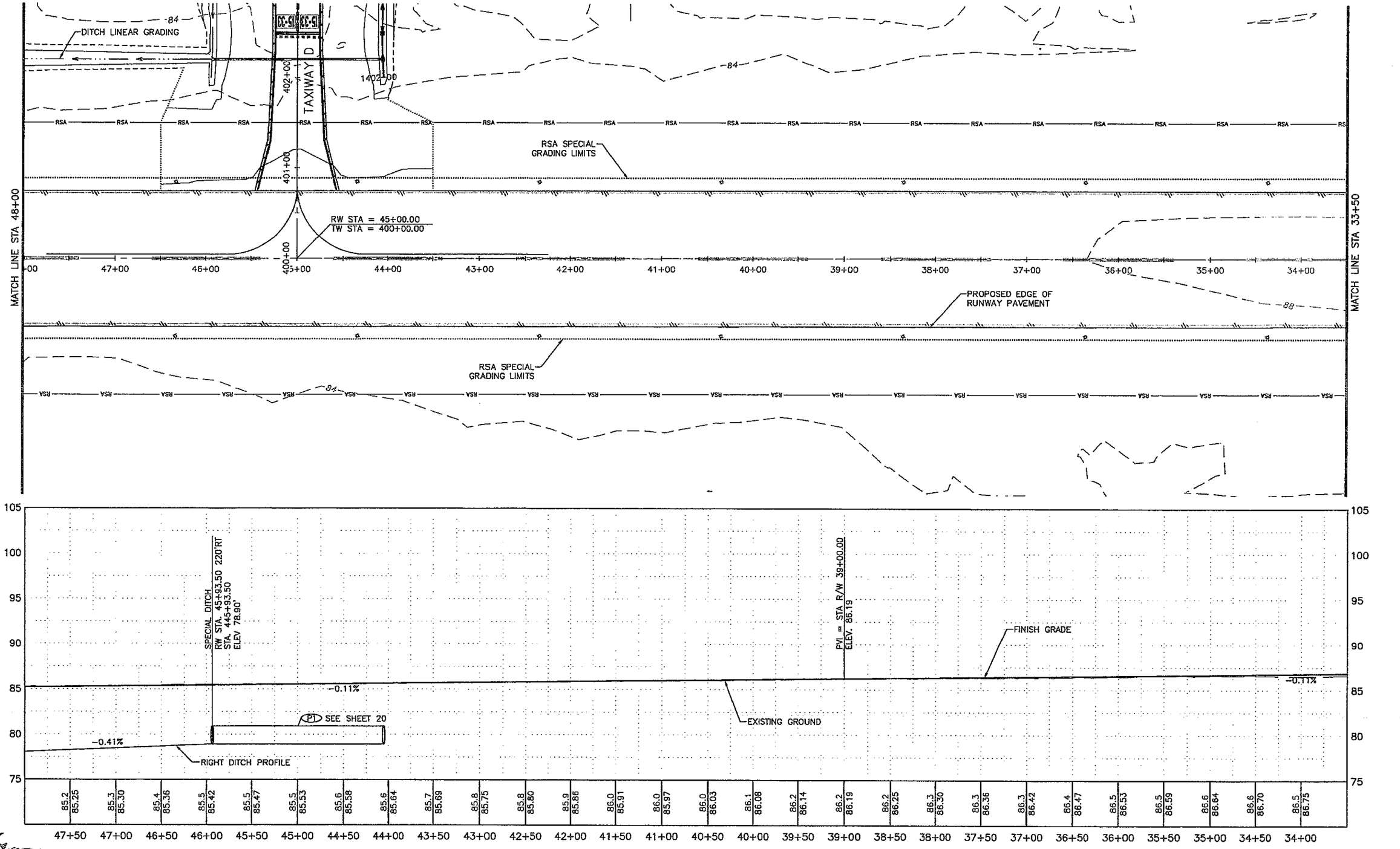
Erica R. Hansen
CE 11132
5/2/16
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
RUNWAY

DATE: 5/3/2016
SHEET: 13 OF 97
AS-BUILT SHEET:

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SCALE IN FEET
1H:10V

As-Built

PLAN PREPARED BY DOWL

STATE OF ALASKA
49TH
Brian R. Henson
CE 11132
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
RUNWAY

DATE: 5/3/2016
SHEET: 14 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTERY
Checked By: B. HANSON
Date Revised:
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| Designed By: | C. WILT |
|---|---|
| Drawn By: | C. SLATTEN |
| Checked By: | B. HANSON |

| Date Revised: | 5/03/2016, 2:08 PM |
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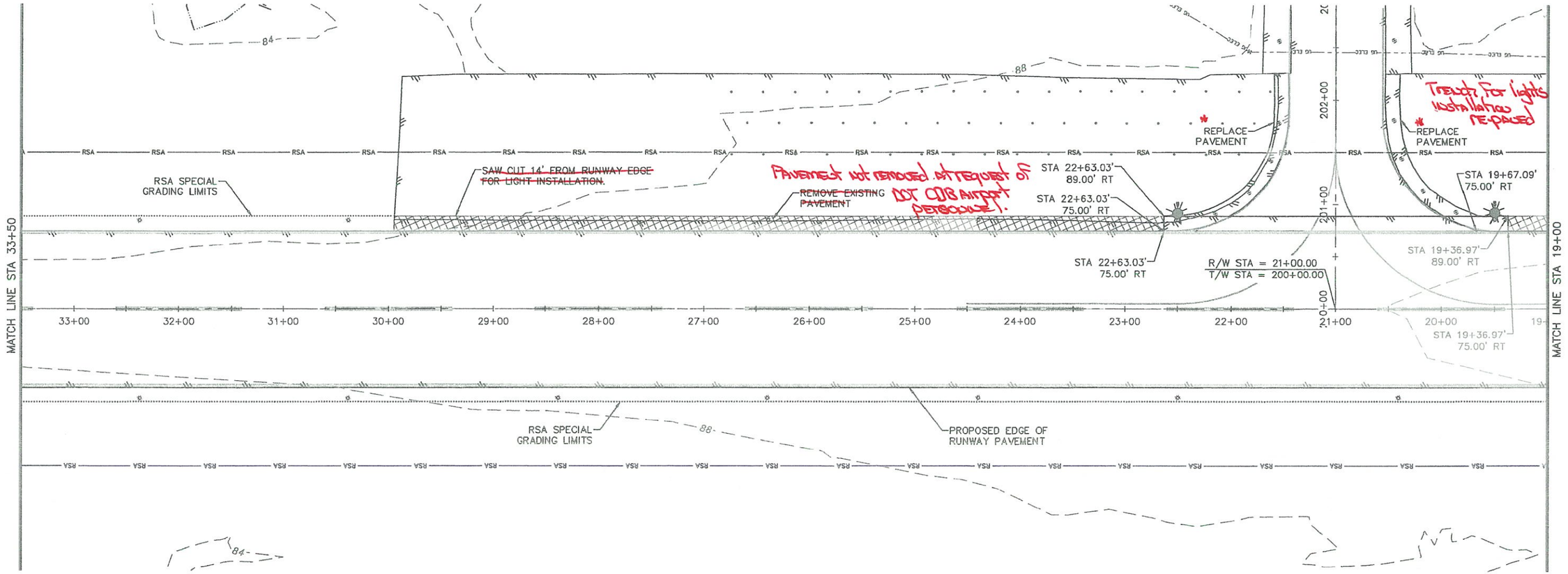
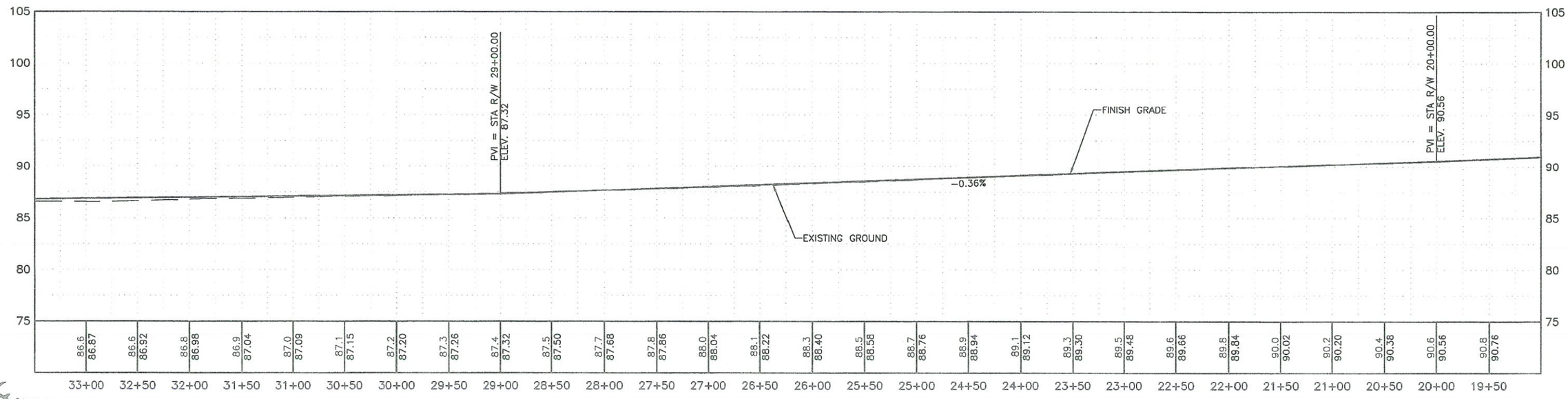
| Layout Name: | Plan and Profile Runway (1:1) |
| File Path and Name: | Q:\24\61111\65040\Aviation\Design\SC11-AV-AF-C081.dwg |




As-Built

50 0 50 100
SCALE IN FEET
1H:10V

PLAN PREPARED BY DOWL

STATE OF ALASKA · 49TH · Brian R. Hanson · CE-11132 · PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
RUNWAY

DATE: 5/3/2016
SHEET: 15 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

Date Revised: 5/03/2016, 2:09 PM
Layout Name: Plan and Profile Runway (16)
File Path and Name: Q:\24\61111\65CAD\Aviation\Design\SC11-AV-AF-C0B1.dwg

MATCH LINE STA 19+00

MATCH LINE STA 5+50

LOCALIZER CRITICAL AREA

STA 13+39.16'
89.00' RT

~~PAVEMENT NOT REMOVED AT REQUEST OF DOT C0B AIRPORT MANAGER~~

~~SAW CUT 14' FROM RUNWAY EDGE FOR LIGHT INSTALLATION~~

~~REMOVE EXISTING PAVEMENT~~

RSA SPECIAL GRADING LIMITSS

STA 14+48.36'
75.00' RT

SEE GRADING PLAN SHEET 20

STA 8+76.75'
89.00' RT

RSA SPECIAL GRADING LIMITS

~~PAVEMENT NOT REMOVED AT REQUEST OF DOT C0B AIRPORT MANAGER~~

STA 8+42.29'
75.00' RT

RW 15-33 STA = 11+07.72
RW 8-26 STA = 49+02.46

STA 10+49.30'
75.00' LT

RSA SPECIAL GRADING LIMITS

STA 12+42.26'
75.00' LT

STA 12+35.52'
89.00' LT

STA 10+65.90'
89.00' LT

~~RSA SPECIAL GRADING LIMITS~~

~~PAVEMENT NOT REMOVED AT REQUEST OF DOT C0B AIRPORT MANAGER~~

PROPOSED EDGE OF RUNWAY PAVEMENT

PVI = STA R/W 13+00.00
ELEV. 93.40

PVI = STA R/W 8+00.00
ELEV. 93.55

FINISH GRADE

-0.41%

-0.05%

-0.02%

EXISTING GROUND

| 18+50 | 18+00 | 17+50 | 17+00 | 16+50 | 16+00 | 15+50 | 15+00 | 14+50 | 14+00 | 13+50 | 13+00 | 12+50 | 12+00 | 11+50 | 11+00 | 10+50 | 10+00 | 9+50 | 9+00 | 8+50 | 8+00 | 7+50 | 7+00 | 6+50 | 6+00 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 91.2 | 91.17 | 91.4 | 91.37 | 91.6 | 91.57 | 91.8 | 91.77 | 92.0 | 91.98 | 92.3 | 92.18 | 92.5 | 92.38 | 92.6 | 92.59 | 92.8 | 92.79 | 92.9 | 92.99 | 93.1 | 93.19 | 93.2 | 93.40 | 93.3 | 93.42 | 93.4 | 93.45 | 93.5 | 93.47 | 93.6 | 93.50 | 93.6 | 93.52 | 93.6 | 93.55 | 93.6 | 93.57 | 93.6 | 93.60 | 93.6 | 93.62 | 93.6 | 93.65 | 93.7 | 93.66 | 93.7 | 93.67 | 93.6 | 93.68 | 93.6 | 93.70 |

50 0 50 100
SCALE IN FEET
1H:10V

As-Built

PLAN PREPARED BY DOWL

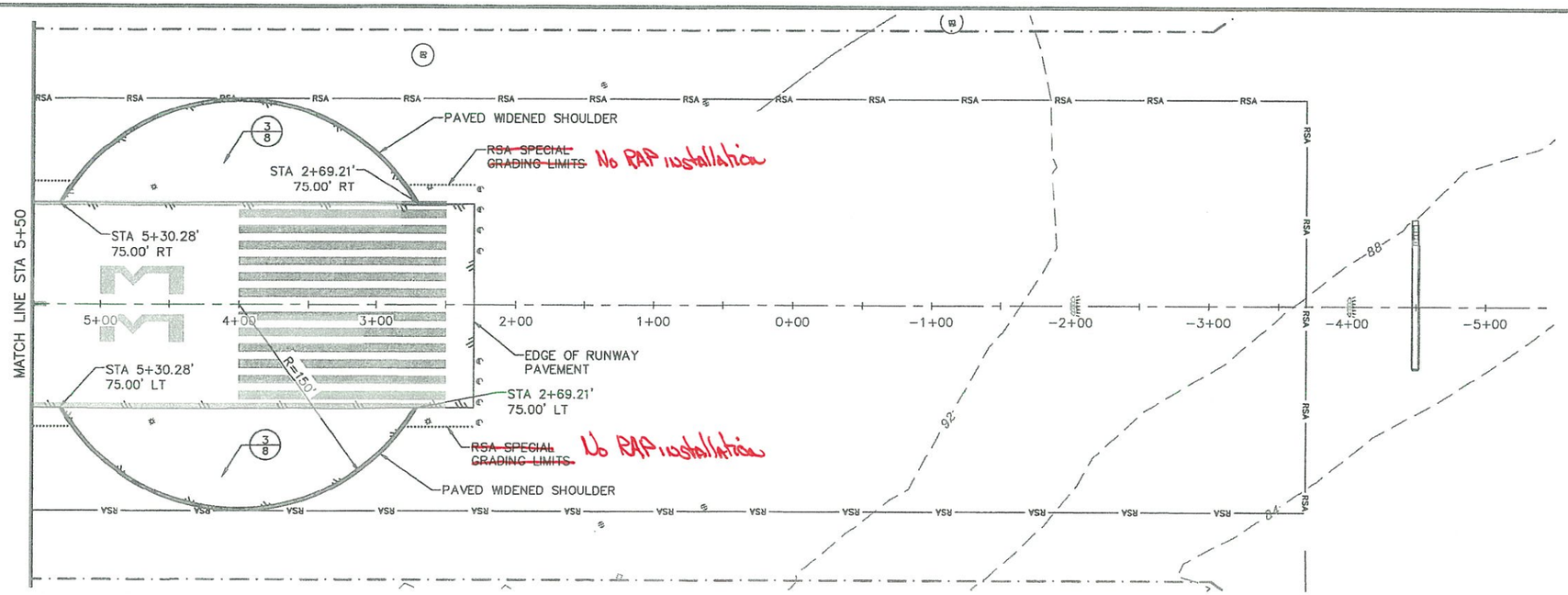
STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
PROFESSIONAL ENGINEER
5/4/16

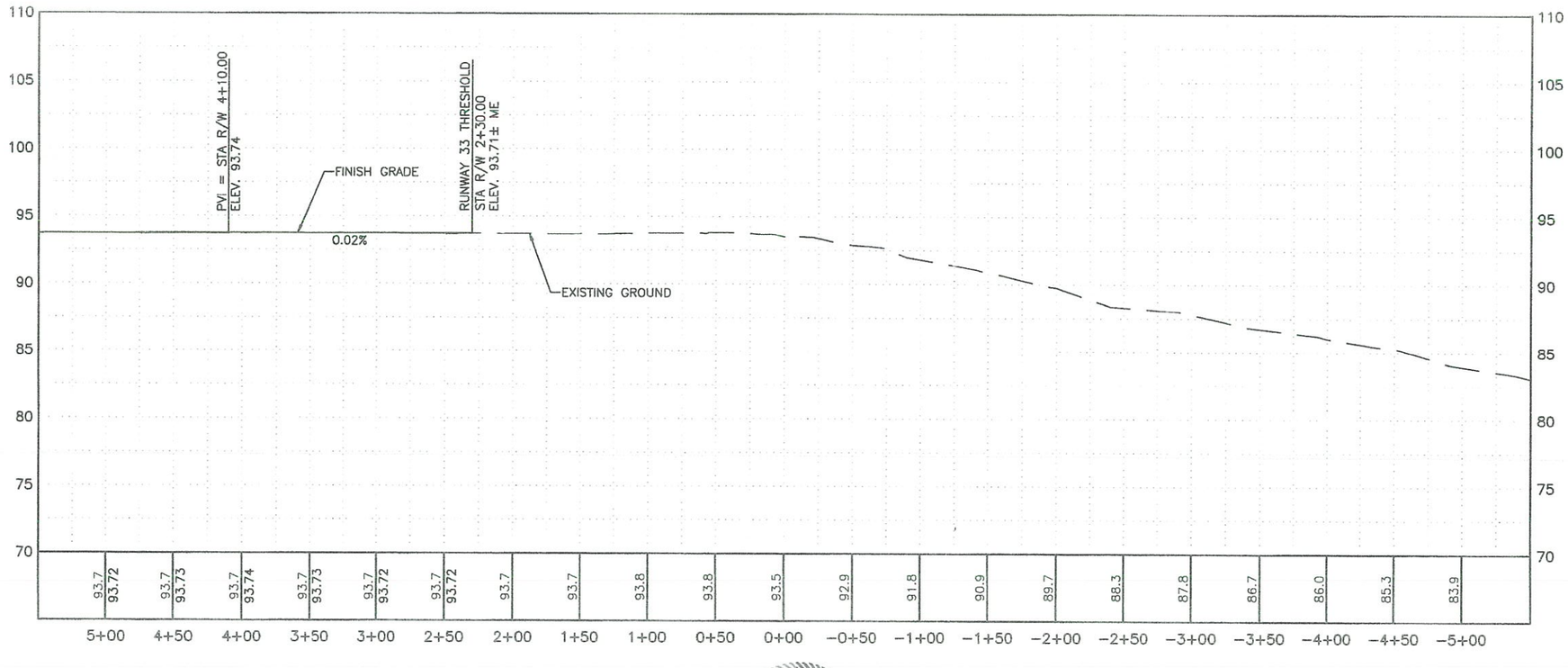
| BY | DATE | REVISION |
|---|---|---|

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
RUNWAY

DATE: 5/3/2016
SHEET: 16 OF 97
AS-BUILT SHEET:




As-Built

50 0 50 100
SCALE IN FEET
1H:10V

PLAN PREPARED BY DOWL

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
5/3/16
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

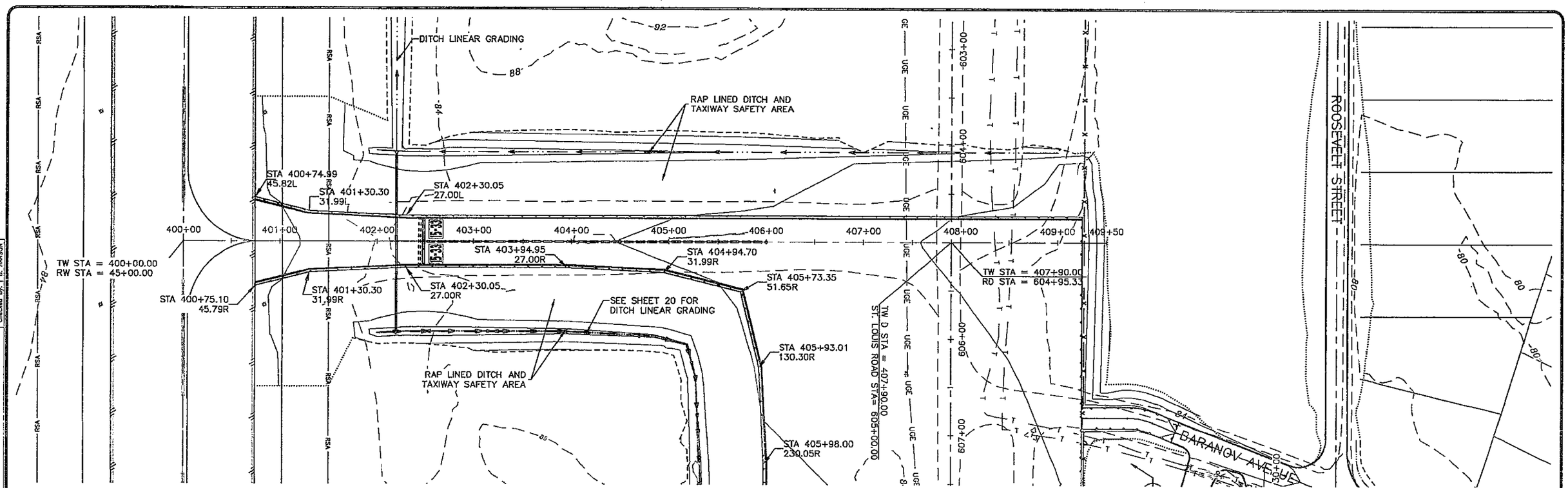
**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
RUNWAY

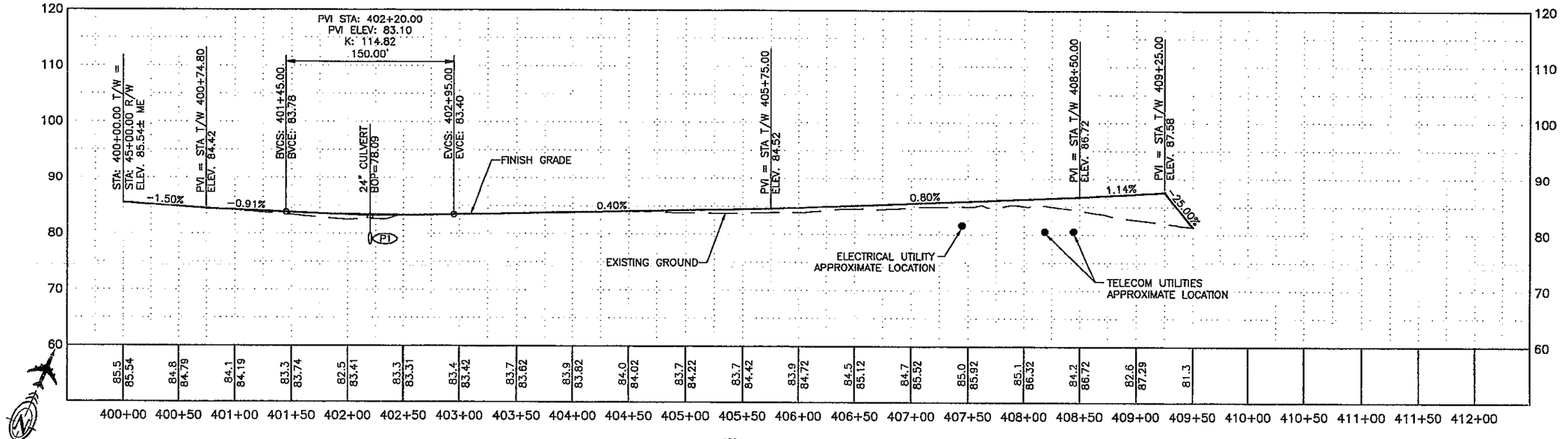
DATE: 5/3/2016
SHEET: 17 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised: 5/03/2016, 3:37 PM
Layout Name: Plan_and_Profile_Runway (17)
File Path and Name: Q:\24\61111\05CAO\Aviation\Design\SC11-AV-RC001.dwg

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

Date Revised: 5/03/2016, 2:09 PM
Layout Name: Plan and Profile Taxiway (1st)
File Path and Name: D:\2A\61111\65250\Aviation\Design\SC11-AV-AP-0091.dwg




50 0 50 100
SCALE IN FEET
1H:5V

PLAN PREPARED BY DOWL

As-Built

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER
5/3/16

| BY | DATE | REVISION |
|---|---|---|

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
TAXIWAY D

DATE: 5/3/2016
SHEET: 18 OF 97
AS-BUILT SHEET:

STA 109+75.0

35.0'

150.0'

109+00

EROSION PROTECTION AREA. STABILIZE WITH A MINIMUM OF 4 INCHES OF RAP AS DIRECTED BY THE ENGINEER.

* Work deemed unnecessary & not performed

UNCLASSIFIED EXCAVATION OF CONCRETE RUBBLE. STABILIZE WITH A MINIMUM OF 4 INCHES OF RAP AS DIRECTED BY THE ENGINEER.

112+00 111+00 108+00 107+00 106+00 105+00 104+00 103+00 102+00 101+00 100+00 99+00

374.7'

EROSION PROTECTION AREA. UNCLASSIFIED EXCAVATION FILL. STABILIZE WITH A MINIMUM OF 4 INCHES OF RAP AS DIRECTED BY THE ENGINEER.

* Due to significant erosion work scope expanded under RFP 4, Add 6" 4" RAP that was installed

100.3'

STA 105+13.85
475.0' (L)

STA 105+22.12
483.0' (L)

STA 104+76.80
506.3' (L)

STA 104+00
475.0' (L)

STA 104+00
498.8' (L)

RSA OFA

As-Built

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY DOWL

| | | |
|---|---|---|
| Designed By: | C. WILT | |
| Drawn By: | C. SLATTEN | |
| Checked By: | B. HANSON | |

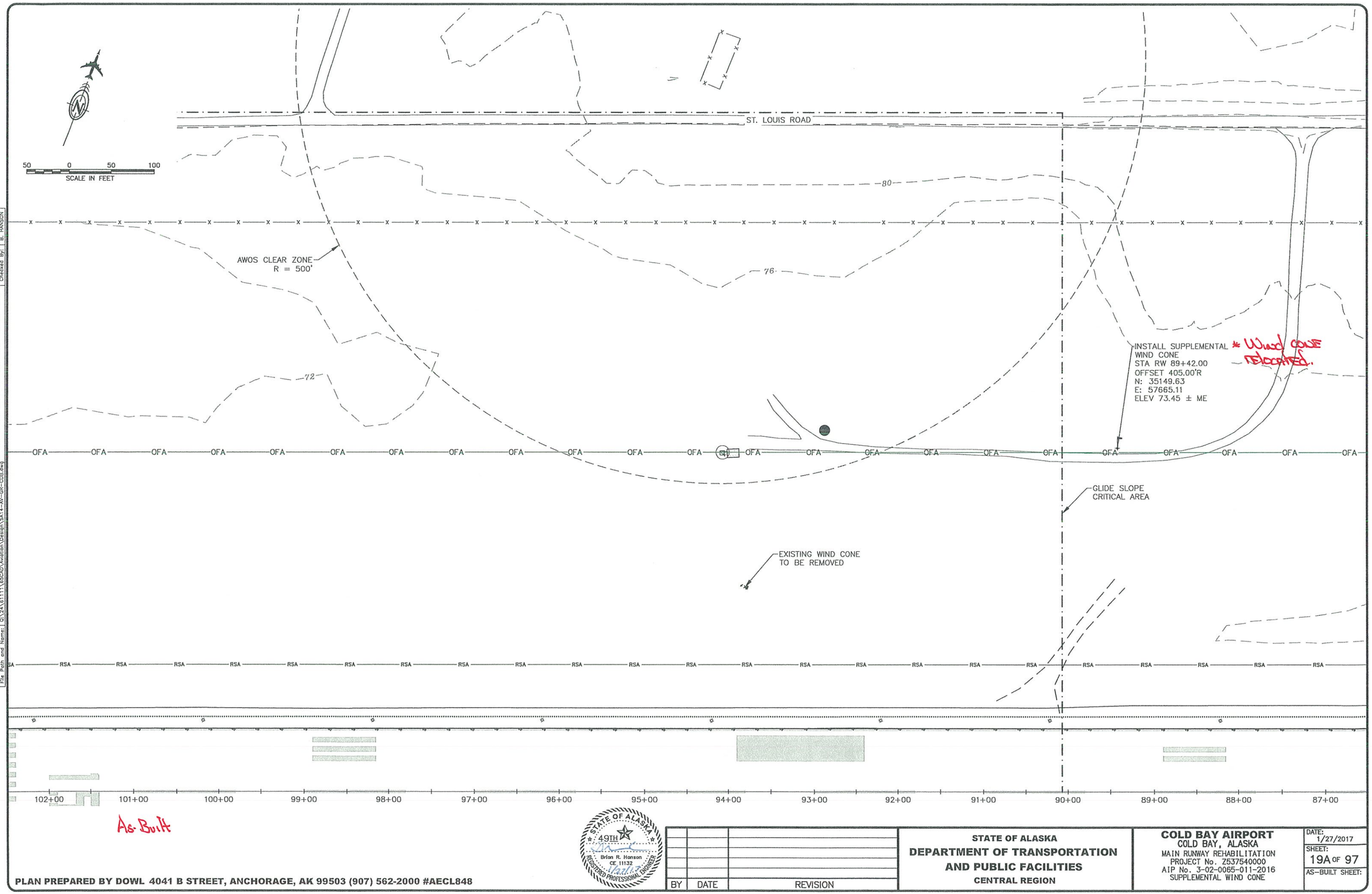
| | |
|---|---|
| Date Revised: | 5/17/2016, 11:25 AM |
| Layout Name: | RSA_EROS_GR (19) |
| File Path and Name: | C:\CAD\11111\05CAD\Aviation\Design\SA114-AV-GR-CDB.dwg |

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
GRADING PLAN - RW 15 END RSA
EROSION PROTECTION

DATE: 5/17/2016
SHEET: 19 OF 97
AS-BUILT SHEET:




As-Built

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised: 1/27/2017, 12:25 PM
Layout Name: RSA_E05S_GR_19A1
File Path and Name: C:\24\161118\CADD\Aviation\Design\SA14-AV-GR-CDB.dwg

PLAN PREPARED BY DOWL 4041 B STREET, ANCHORAGE, AK 99503 (907) 562-2000 #AECL848

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
SUPPLEMENTAL WIND CONE

DATE: 1/27/2017
SHEET: 19A OF 97
AS-BUILT SHEET:

| | |
|---|---|
| Designed By: | C. WILT |
| Drawn By: | C. SLATTEN |
| Checked By: | B. HANSON |

| | |
|---|---|
| Date Revised: | 4/13/2017, 2:05 PM |
| Layout Name: | Drainage_Apron (20R) |
| File Path and Name: | Q:\24\6\1111\65CAD\Aviation\Design\SA14-AV-GR-CDB.dwg |

ROOSEVELT STREET

BARANOV AVENUE

ST. LOUIS ROAD

No Drainage / Ditch Lining / Ditch constructed. Work not performed to maintain access road to revetments

Revetment

| ID | TYPE | LENGTH | INLET | ELEV. | OUTLET | ELEV. | DIA. (IN) |
|---|---|---|---|---|---|---|---|
| PIPE–(3) | CPP | 80 | 447+75 | 78.16 | 448+15 | 77.84 | 24 |
| PIPE–(4) | CPP | 80 | 451+60 | 76.58 | 452+40 | 76.26 | 24 |

FF ELEV: 86.40'

ELEV:86.46'
N:30976.08
E:59828.25

ELEV:85.00'
N:30893.12
E:59779.80

LIMIT OF NON–PARTICIPATING WORK

ELEV:84.04'
N:30791.16
E:59765.46

ELEV:80.88'
N:30765.41
E:59887.87

ELEV:80.31'
N:30734.34
E:59807.14

ELEV:80.04'
N:30713.87
E:59753.95

RFI#5

DITCH LINEAR GRADING

SEE GRADING PLAN SHEET 21

ELEV: 79.59'
N: 30833.33
E: 59462.08

ELEV: 78.91
N: 30702.11
E: 59512.57

ELEV:80.03'
N:30917.22

ELEV: 79.86' E:59424.88
N:30945.87
E:59404.76

ELEV: 79.09'
N:30631.45
E:59539.76

ELEV: 78.00'
N: 30673.38
E: 59437.90

ELEV: 80.88'
N: 30661.01
E: 59405.47

RFI#5

ELEV: 79.70'
N:30941.60
E:59370.01

ELEV: 79.35'
N:30912.96
E:59282.82

DITCH LINEAR GRADING

STA RW 452+25.00
OFFSET 23.76R
ELEV 80.66 ± ME

STA RW 451+75.00
OFFSET 27.38R
ELEV 81.24 ± ME

ELEV: 76.58
N: 31553.46
E: 58850.67

STA RW 448+40.00
OFFSET 20.00R
ELEV 81.51 ± ME

STA RW 447+90.00
OFFSET 20.00R
ELEV 81.33 ± ME

ELEV: 78.16
N: 31194.15
E: 58988.93

P4

P3

P1

-4:1

453+00 452+00 451+00 450+00 449+00 448+00 447+00 446+00 445+50

ELEV: 76.26
N: 31625.40
E: 58822.99

STA RW 451+75.00
OFFSET 26.01L
ELEV 81.07 ± ME

ELEV: 77.84
N: 31266.09
E: 58961.25

STA RW 447+90.00
OFFSET 20.00L
ELEV 81.35 ± ME

BP: 445+50.00

STA RW 452+25.00
OFFSET 24.64L
ELEV 80.82 ± ME

STA RW 448+40.00
OFFSET 20.00L
ELEV 81.34 ± ME

ELEV:78.88'
N:30854.93
E:59132.00

ELEV:79.00'
N:30842.06
E:59102.98

409+50 409+00 408+00 407+00 406+00 405+00 404+00 403+00 402+00 401+00

SEE GRADING PLAN SHEET 22

PIPE TABLE

| ID | TYPE | LENGTH | INLET | ELEV. | OUTLET | ELEV. | DIA. (IN) |
|---|---|---|---|---|---|---|---|
| Pipe – (1) | CPP | 188 | 402+20 94 R | 78.90 | 402+20 94 L | 78.90 | 24 |
| Pipe – (2) | CPP | 58 | 609+48 29 L | 80.31 | 609+48 29 R | 80.04 | 24 |

RFI#2&3 RFI#2&3

50 0 50 100
SCALE IN FEET

As-Built

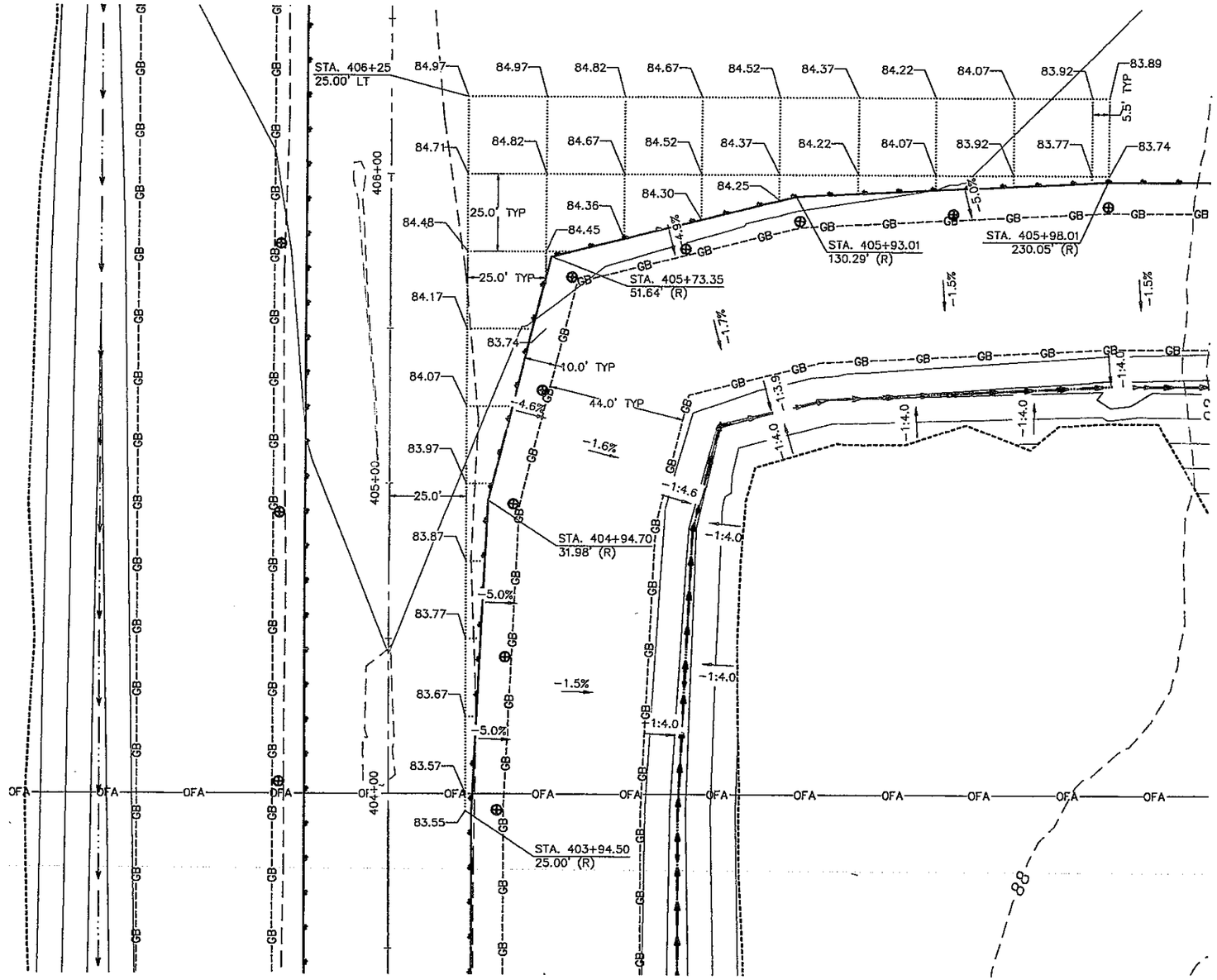
PLAN PREPARED BY DOWL 4041 B STREET, ANCHORAGE, AK 99503 (907) 562-2000 #AECL848

| BY | DATE | REVISION |
|---|---|---|
| DOWL | 4/12/2017 | REVETMENT GRADING AND CULVERT ADDED |
| | | DITCH GRADE AND CULVERT CHANGES |
| DOWL | 10/08/2016 | PIPE STATION CORRECTIONS RFI#2&3 |
| BRH | 6/15/2016 | PIPE TYPE CORRECTED /3\ |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
DRAINAGE AND GRADING PLAN
APRON

DATE: 4/13/2017
SHEET: 20R OF 97
AS-BUILT SHEET:




TAXIWAY / APRON TRANSITION GRADING

| Date Revised: | 5/03/2016, 2:11 PM |
|---|---|
| Layout Name: | Grading Apron (2) |
| File Path and Name: | C:\KAM\11 DESIGN\Addition Design\SAIT-ANT-GR-CDB.dwg |

| Designed By: | C. WILT |
|---|---|
| Drawn By: | C. SLATTEN |
| Checked By: | B. HANSON |

20 0 20 40
SCALE IN FEET

PLAN PREPARED BY DOWL

As Built

STATE OF ALASKA 49TH
Orion R. Hanson
EE 11132
REGISTERED PROFESSIONAL ENGINEER
5/5/16

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
GRADING PLAN
TAXIWAY/APRON

DATE: 5/3/2016
SHEET: 21 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

Date Revised: 5/03/2016, 2:12 PM
Layout Name: Grading Apron (22)
File Path and Name: Q:\24-0111 (SCAD)\Action\Design\SA11-AV-GR-C08.dwg

84

-1:4.0

-1.5%

403+00

83.07 83.07 82.54 82.54 82.55 82.55 5.5' 83.33 83.08 83.08

-1.5%

-5.0%

83.16 83.16 -1:4.1

82.62 82.62

402+00 83.41

-1.5%

-1.5%

83.30 83.55 83.30 82.74 82.74

-7.0%

-9.0%

82.92 82.92

82.29±ME 82.26 82.41 82.78 83.49 83.74 83.49 82.41 82.78 82.41 82.67 82.92

RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA RSA

82.28

25.0' TYP

82.86±ME 82.89 82.92 82.95 83.14 83.71 83.96 83.71 82.90 83.10 83.35 83.47±ME

83.14

25.0' TYP

83.42±ME 83.58 83.61 83.64 83.74 84.15 401+00 84.19 84.19 83.78 83.67 83.79 83.97 83.98±ME

84.21±ME 84.57±ME

84.26±ME 84.30±ME 84.32±ME 84.34±ME 84.38±ME 84.41±ME 84.41±ME 84.41±ME 84.44±ME 84.48±ME 84.52±ME

400+00 45+00

48+00 47+00 46+00 44+00 43+00 42+00

As-Built

20 0 20 40
SCALE IN FEET

PLAN PREPARED BY DOWL

STATE OF ALASKA 49TH Brian R. Hansen CE 11132 REGISTERED PROFESSIONAL ENGINEER 5/3/16

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
GRADING PLAN
TAXIWAY

DATE: 5/3/2016
SHEET: 22 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

Date Revised: 5/03/2016, 2:12 PM
Layout Name: Grading_Runway_(23)
File Path and Name: G:\2AK\61111\05DOT\Aviation\Design\SN14-AV-GR-C0B.dwg

RSA

91.97 91.93±ME 92.14 92.04±ME 92.28 92.69±ME 92.94±ME 93.23±ME 93.57±ME 93.41±ME 93.72±ME SAW CUT LINE 93.10±ME 92.73±ME 92.60±ME 92.59±ME 92.63±ME

75.0' 89.0' TYP 75.0'

-1.0% -1.1% -0.7% -0.1% -0.4% -0.2% -0.5% -0.9% -1.2%

92.95 93.09 93.23 93.30 93.39 93.53 93.64 93.61 93.56 93.58 93.57 93.60

14+00 13+00 12+00 11+00 10+00 9+00

47+00 48+00

-1.3% -1.2% -1.1% -0.9% -0.5% -0.6% -0.3% -0.9% -1.0% -1.2% -1.2%

50.0' TYP 75.0' TYP

91.88 92.10 92.29 92.56 92.58±ME 92.89±ME 93.12±ME 93.12±ME 92.97±ME SAW CUT LINE 92.90±ME 93.00±ME 92.86 92.78 92.75 92.68

55+00

As-Built

20 0 20 40
SCALE IN FEET

PLAN PREPARED BY DOWL

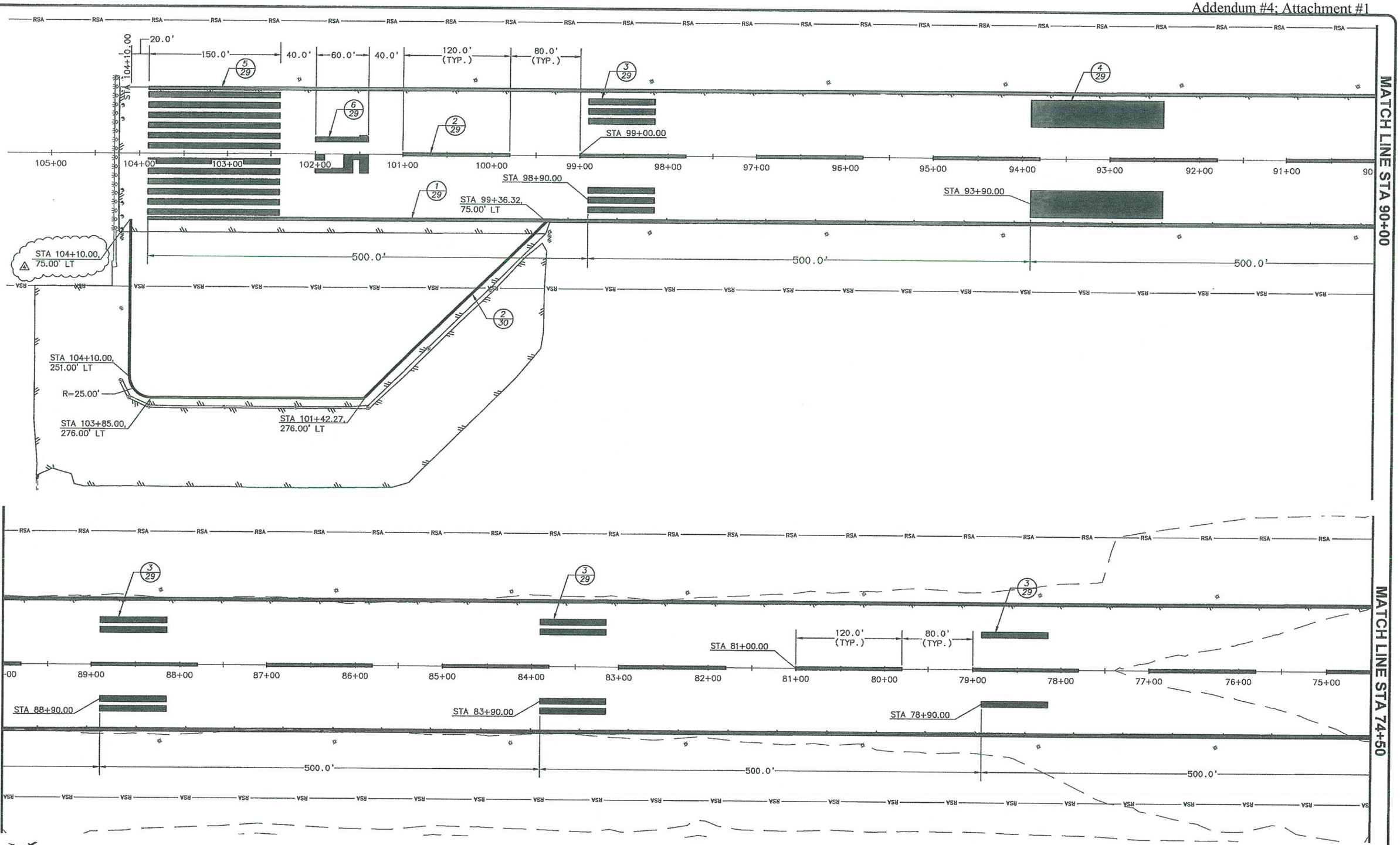
STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER
5/31/16

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
GRADING PLAN
RUNWAY INTERSECTION

DATE: 5/3/2016
SHEET: 23 OF 97
AS-BUILT SHEET:




Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

Date Revised:
Layout Name: 6/22/2016, 10:09 AM
File Path and Name: Marking Plan Runway (24)
C:\24\611111\ESDA\Aviation\Design\SA11-AV-SG-CD8.dwg

50 0 50 100
SCALE IN FEET

## NOTES

1. MARKING PLAN ESTABLISHED PER FAA AC 150/5340-1L AND FAA AC 150/5300-13A-CHANGE 1.

As-Built

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER

PLAN PREPARED BY DOWL 4041 B STREET, ANCHORAGE, AK 99503-(907) 562-2000 #AECL848

| | | |
|---|---|---|
| BH | 6/22/16 | ⚠ REVISED CALLOUT |
| BY | DATE | REVISION |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
MARKING PLAN
RUNWAY

DATE: 6/22/2016
SHEET: 24R OF 97
AS-BUILT SHEET:

MATCH LINE STA 74+50

MATCH LINE STA 59+00

RSA

3/29

1/29

2/29

74+00 73+00 72+00 71+00 70+00 69+00 68+00 67+00 66+00 65+00 64+00 63+00 62+00 61+00 60+00 59+

STA 73+90.00

STA 67+00.00

120.0' (TYP.)

80.0' (TYP.)

MATCH LINE STA 59+00

MATCH LINE STA 43+50

402+00

401+00

400+00

RW STA = 45+00.00

TW STA = 400+00.00

58+00 57+00 56+00 55+00 54+00 53+00 52+00 51+00 50+00 49+00 48+00 47+00 46+00 45+00 44+00

STA 57+00.00

120.0' (TYP.)

80.0' (TYP.)

80.0'

60.0'

80.0'

60.0'

80.0'

80.0' (TYP.)

120.0' (TYP.)

STA 49+40.00

As-Built

NOTES

1. MARKING PLAN ESTABLISHED PER FAA AC 150/5340-1L AND FAA AC 150/5300-13A-CHANGE 1.

50 0 50 100

SCALE IN FEET

PLAN PREPARED BY DOWL

STATE OF ALASKA 49TH Orion P. Hanson CE 11132 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0085-011-2016
MARKING PLAN
RUNWAY

DATE: 5/3/2016
SHEET: 25 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

Date Revised: 5/03/2016, 2:13 PM
Layout Name: Modified Plan Runway (25)
File Path and Name: C:\24\611\11\ESCADV\Aviation\Design\SA11-AV-SG-C03.dwg

MATCH LINE STA 43+50

MATCH LINE STA 28+00

RSA

1/29

2/29

43+00 42+00 41+00 40+00 39+00 38+00 37+00 36+00 35+00 34+00 33+00 32+00 31+00 30+00 29+00 28+

STA 32+60.00

120.0' (TYP.)

80.0' (TYP.)

MATCH LINE STA 28+00

MATCH LINE STA 15+00

202+00

201+00

200+00

1/29

2/29

4/30

4/30

R/W STA = 21+00.00
T/W STA = 200+00.00

27+00 26+00 25+00 24+00 23+00 22+00 21+00 20+00 19+00 18+00 17+00 16+00 15

STA 18+60.00

120.0' (TYP.)

80.0' (TYP.)

As-Built

50 0 50 100
SCALE IN FEET

## NOTES

1. MARKING PLAN ESTABLISHED PER FAA AC 150/5340-1L AND FAA AC 150/5300-13A-CHANGE 1.

PLAN PREPARED BY DOWL

STATE OF ALASKA
BRIAN R. HANSON
CE 11132
5/3/16
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
MARKING PLAN
RUNWAY

DATE: 5/3/2016
SHEET: 26 OF 97
AS-BUILT SHEET:

Date Revised: 5/03/2016, 2:14 PM
Layout Name: Marking Plan Runway (26)
File Path and Name: C:\24\161111\GSDOV\Aviation\Design\SA11-AV-SG-CDR.dwg

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

MATCH LINE STA 15+00

STA 14+24.34

RSA

120.00' (TYP.) | 80.0' (TYP.) | 120.0' (TYP.) | 40.0' | 60.0' | 40.0' | 150.0' | 20.0'

4/29 | 1/29 | 2/29 | 7/29 | 5/29 | 2/30

14+00 | 13+00 | 12+00 | 11+00 | 10+00 | 9+00 | 8+00 | 7+00 | 6+00 | 5+00 | 4+00 | 3+00 | 2+00 | 1+00 | 0+00

RW 15-33 STA = 11+07.72
RW 8-26 STA = 49+02.46

1/30 | 1/30 | 2/30

STA 2+29.96

1000.0'

STA 12+50.00

STA 7+91.32

STA 7+91.32

As-Built

NOTES

1. MARKING PLAN ESTABLISHED PER FAA AC 150/5340-1L AND FAA AC 150/5300-13A-CHANGE 1.

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY DOWL

STATE OF ALASKA
49TH
Brian S. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER
5/5/16

| BY | DATE | REVISION |
|---|---|---|

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
MARKING PLAN
RUNWAY

DATE: 5/3/2016
SHEET: 27 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised:
Layout Name: Marking Plan Runway (27)
File Path and Name: Q:\2AV61111\65CAD\Aviation\Design\SA11-AV-SG-CDB.dwg

SA11-AV-SG-CDB.dwg

ROOSEVELT STREET

N71°32'49.40"E
80.40'

BARANOV AVENUE

ST. LOUIS ROAD

STA 409+24.50,
25.00' LT

STA 409+24.50,
55.00' RT

STA 409+25.00,
242.68' RT

STA 409+05.00,
380.00' RT

STA 408+25.00,
242.68' RT

STA 408+00.00,
23.50' LT

STA 408+00.00,
55.00' RT

STA 408+25.00,
378.50' RT

TW D STA = 407+90.00
ST. LOUIS ROAD STA= 605+00.00

STA 406+01.00
END (6)

Extracted TW
& marking
terminated @
150' per RFI 31
Encl
STA 404.01

STA 405+96.24,
130.00' RT

STA 406+22.43,
380.00' RT

STA 405+75.00,
50.00' RT

STA 404+95.00,
30.00' RT

STA 403+95.00,
25.00' RT

33-15 | 33-15

STA 402+51.00

STA 402+50.00

STA 402+30.00,
25.00' LT

STA 402+30.00,
25.00' RT

STA 401+30.00,
30.00' LT

STA 401+30.00,
30.00' RT

STA 400+74.80,
43.75' LT

STA 400+74.80,
43.75' RT

RW STA = 45+00.00
TW STA = 400+00.00
R=75.00'

200.0'

600+00 601+00 602+00 603+00 604+00 606+00 607+00 608+00 609+00 610+00 611+00 612+00

409+50 409+00 408+00 407+00 406+00 405+00 404+00 403+00 402+00 401+00 400+00

49+00 48+00 47+00 46+00 45+00 44+00 43+00 42+00 41+00 40+00 39+00 38+00 37+00 36+00 35+00 34+00 33+00 32+00

UGE OFA RSA

60 0 60 120
SCALE IN FEET

NOTES

1. MARKING PLAN ESTABLISHED PER FAA AC 150/5340-1L AND FAA AC 150/5300-13A-CHANGE 1.

As-Built

PLAN PREPARED BY DOWL

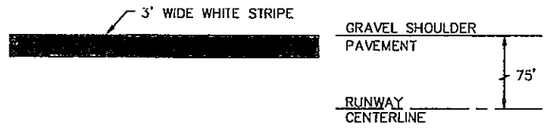
| Date Revised: | 5/03/2016, 2:14 PM |
|---|---|
| Designed By: | C. WILT |
| Drawn By: | C. SLATTEN |
| Checked By: | B. HANSON |
| Layout Name: | Marking Plan, Apron and Taxiway (28) |
| File Path and Name: | Q:\2016\011\ASDA\Vendor\Usa11-AV-SC-CDB.dwg |

| BY | DATE | REVISION |
|---|---|---|

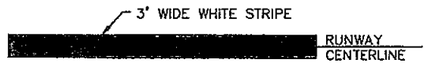
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
MARKING PLAN
APRON AND TAXIWAY

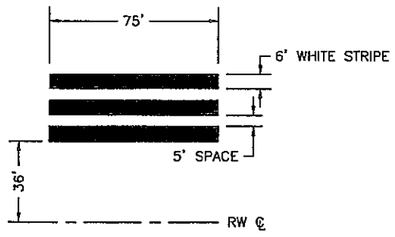
DATE: 5/3/2016
SHEET: 28 OF 97
AS-BUILT SHEET:



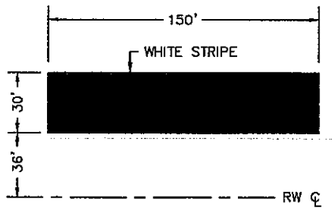

1/29 RUNWAY EDGE MARKING
NTS



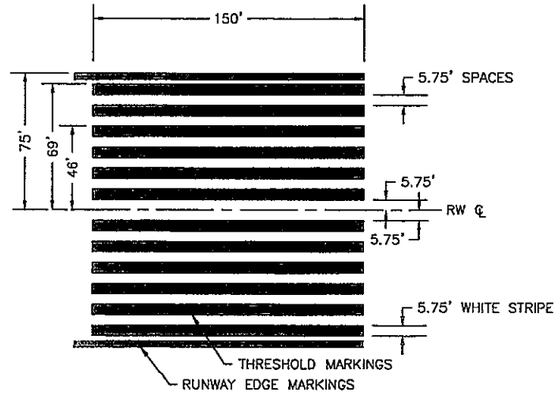

2/29 RUNWAY CENTERLINE MARKING
NTS



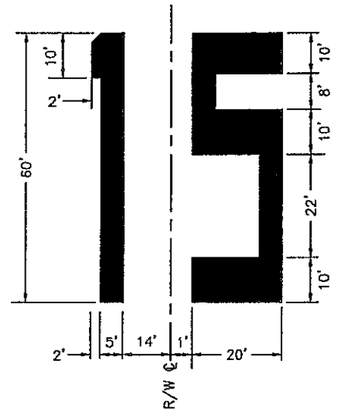

3/29 TOUCHDOWN ZONE MARKER
NTS



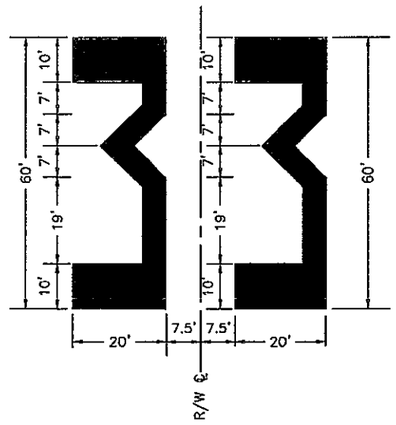

4/29 AIMING POINT MARKER RUNWAY
NTS




5/29 THRESHOLD MARKING
NTS




6/29 RUNWAY NUMBERS - 15
NTS




7/29 RUNWAY NUMBERS - 33
NTS

As-Built

NOTES

1. MARKING PLAN ESTABLISHED PER FAA AC 150/5340-1L AND FAA AC 150/5300-13A--CHANGE 1.

STATE OF ALASKA
49TH
Brian R. Hanson
CE 11322
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

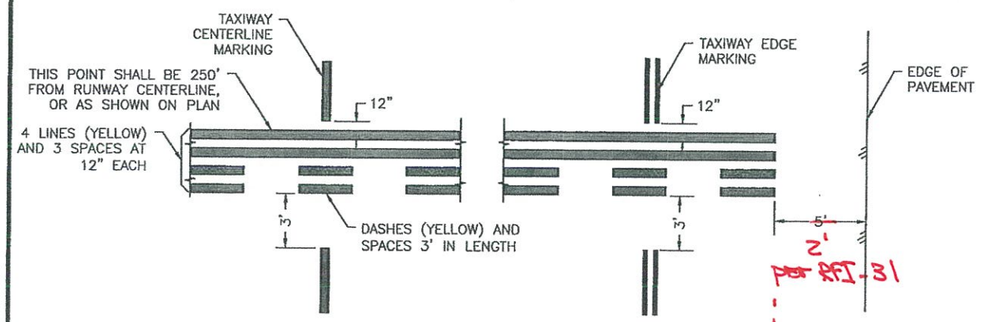
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2015
MARKING DETAILS

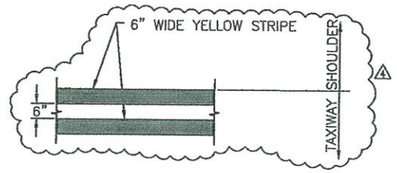
DATE: 5/3/2016
SHEET: 29 OF 97
AS-BUILT SHEET:

PLAN PREPARED BY DOWL

Date Revised: 5/03/2015, 2:16 PM
Layout Name: Marking Details (2)
File Path and Name: O:\AK\011\1\6500\Aviation Design\SA11-AK-05-006.dwg
Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

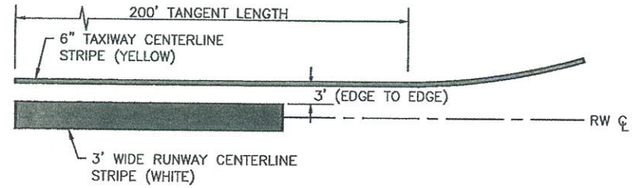



1/30 ENHANCED RUNWAY HOLDING POSITION MARKING
NTS

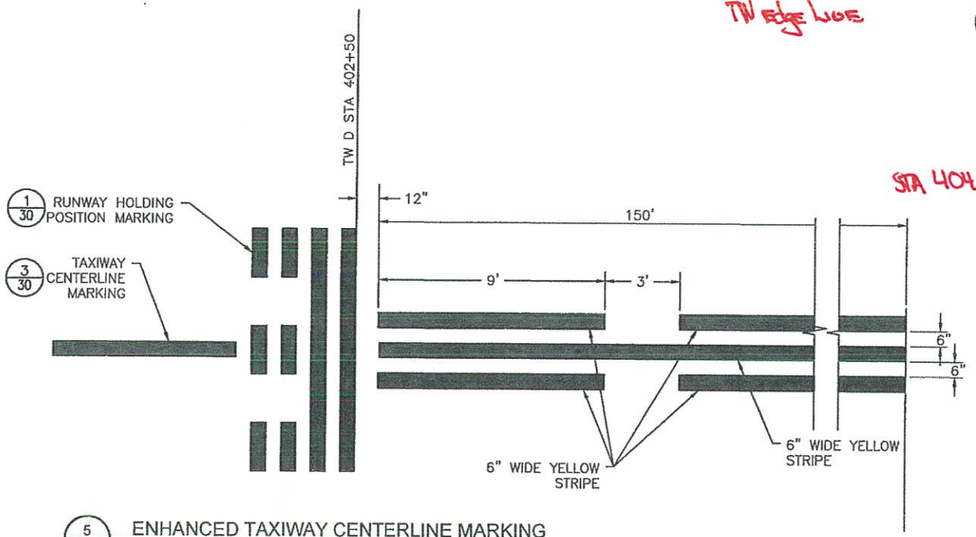



2/30 CONTINUOUS TAXIWAY EDGE MARKING
NTS

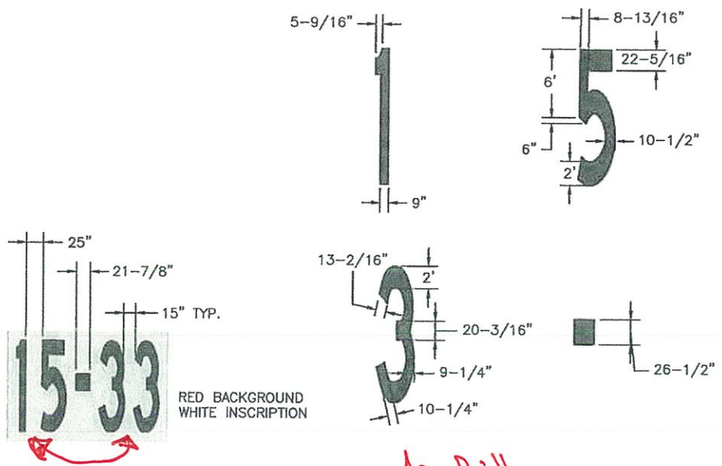

3/30 TAXIWAY CENTERLINE MARKING
NTS




4/30 TAXIWAY CENTERLINE TO RUNWAY CENTERLINE OFFSET
NTS

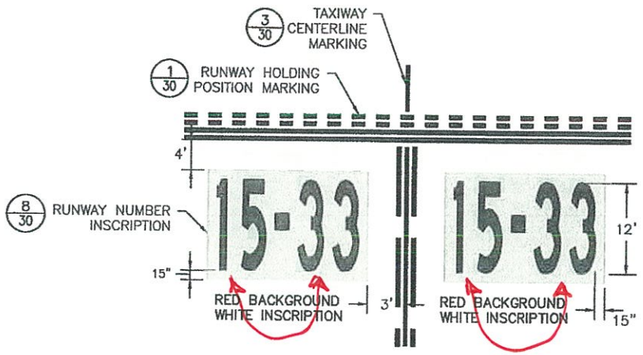



5/30 ENHANCED TAXIWAY CENTERLINE MARKING
NTS




8/30 RUNWAY NUMBER INSCRIPTION DETAIL
NTS


6/30 LEASE LOT BOUNDARY
NTS




7/30 SURFACE PAINTED HOLDING POSITION SIGN
NTS

## MARKING NOTES

1. TAXIWAY EDGE DIMENSIONS ARE TO THE OUTSIDE EDGE OF DOUBLE LINES. RUNWAY EDGE DIMENSIONS ARE TO THE OUTSIDE EDGE OF LINE. THESE OUTSIDE LINES COINCIDE WITH THE EDGE OF STRUCTURAL PAVEMENT UNLESS NOTED OTHERWISE.
2. REFLECTIVE MEDIA SHALL BE APPLIED TO ALL STRIPES AND MARKINGS AS SPECIFIED IN THE SPECIFICATIONS.
3. MARKING PLAN ESTABLISHED PER FAA AC 150/5340-1L AND FAA AC 150/5300-13A-CHANGE 1.

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

Date Revised: 6/22/2016, 10:14 AM
Layout Name: Marking Details (30)
File Path and Name: Q:\24\0111\SDSDO\Aviation\Design\S11-AV-3T-C08.dwg


| BY | DATE | REVISION |
|---|---|---|
| BH | 6/22/16 | ⚠ CLARIFYING DIMENSION |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
MARKING DETAILS
TAXIWAY D

DATE: 6/22/2016
SHEET: 30R OF 97
AS-BUILT SHEET:

PLAN PREPARED BY DOWL 4041 B STREET, ANCHORAGE, AK 99503-(907) 562-2000 #AECL848

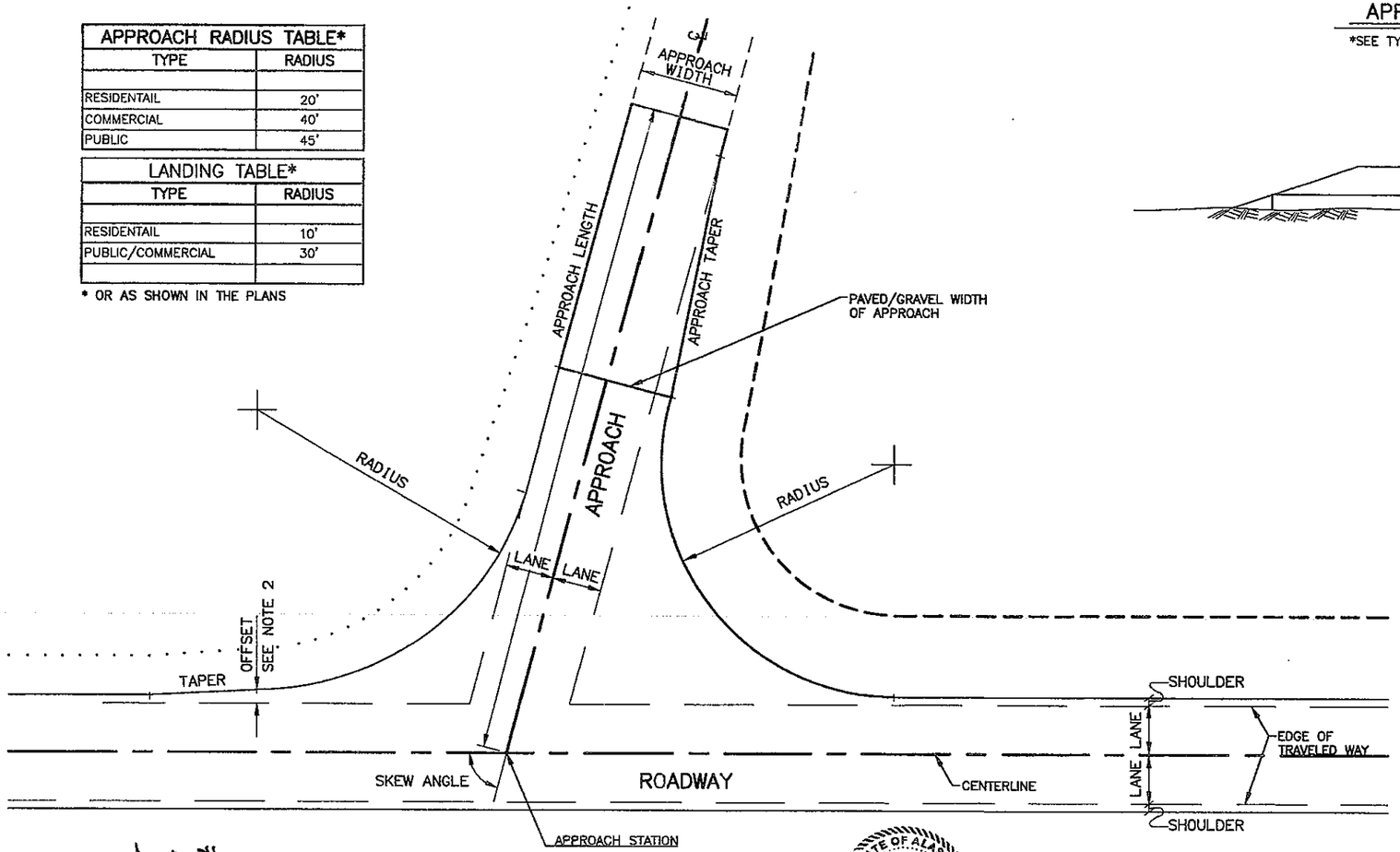
## NOTES

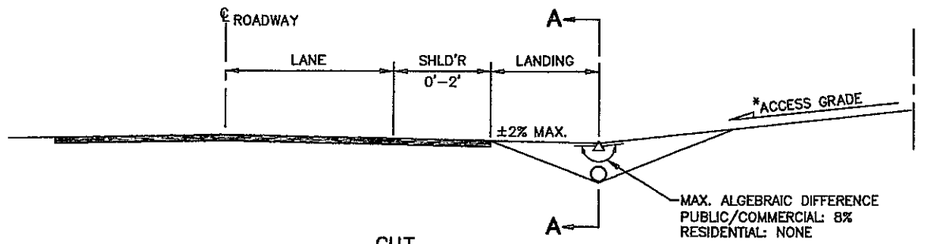
1. THE TAPER OFFSET FROM TRAVELED WAY = ASSIGNED VALUE OR SHOULDER WIDTH WHICHEVER IS LARGER. TAPER WILL BE 10 FEET IN LENGTH FOR EACH FOOT OF OFFSET.
2. THE PAVED PORTION OF THE APPROACH STRUCTURAL SECTION SHALL BE CONSTRUCTED OF THE SAME MATERIAL AS THE ROADWAY STRUCTURAL SECTION UNLESS A SEPARATE TYPICAL SECTION IS INCLUDED IN THE PLANS COVERING APPROACHES.
3. PAVE TO THE END OF THE RADIUS RETURN UNLESS OTHERWISE INDICATED.
4. APPROACH VERTICAL CURVE REQUIREMENTS:
   CREST – 2 1/2" MAXIMUM IN A 10–FOOT CHORD
   SAG – 2" MAXIMUM IN A 10–FOOT CHORD
5. PAVEMENT LIMITS AT APPROACH SHALL BE TO RADIUS RETURN.

| APPROACH RADIUS TABLE* | |
|---|---|
| TYPE | RADIUS |
| | |
| RESIDENTAIL | 20' |
| COMMERCIAL | 40' |
| PUBLIC | 45' |

| LANDING TABLE* | |
|---|---|
| TYPE | RADIUS |
| | |
| RESIDENTAIL | 10' |
| PUBLIC/COMMERCIAL | 30' |
| | |

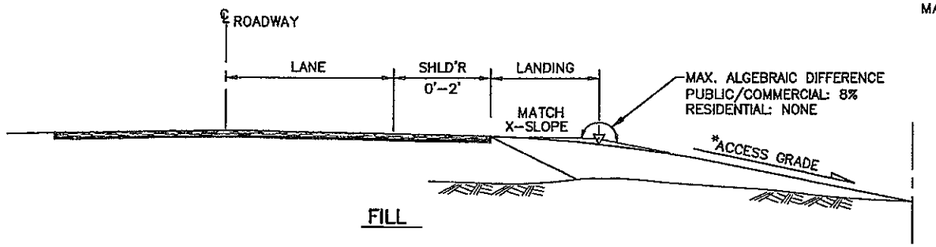
* OR AS SHOWN IN THE PLANS




CUT

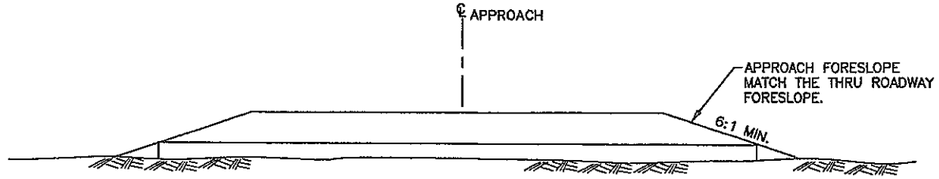
*ACCESS SLOPE MAX. 15%




FILL

## APPROACH PROFILES

*SEE TYPICALS FOR SHOULDER WIDTHS




SECTION A–A

## APPROACH TYPICAL

As-Built

PLAN PREPARED BY DOWL

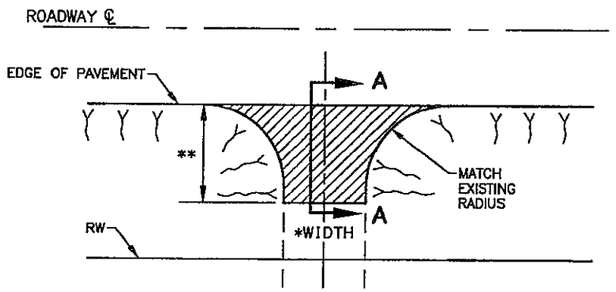
| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PAVED AND UNPAVED DRIVEWAY DETAILS

DATE: 5/3/2016
SHEET: 31 OF 97
AS–BUILT SHEET:

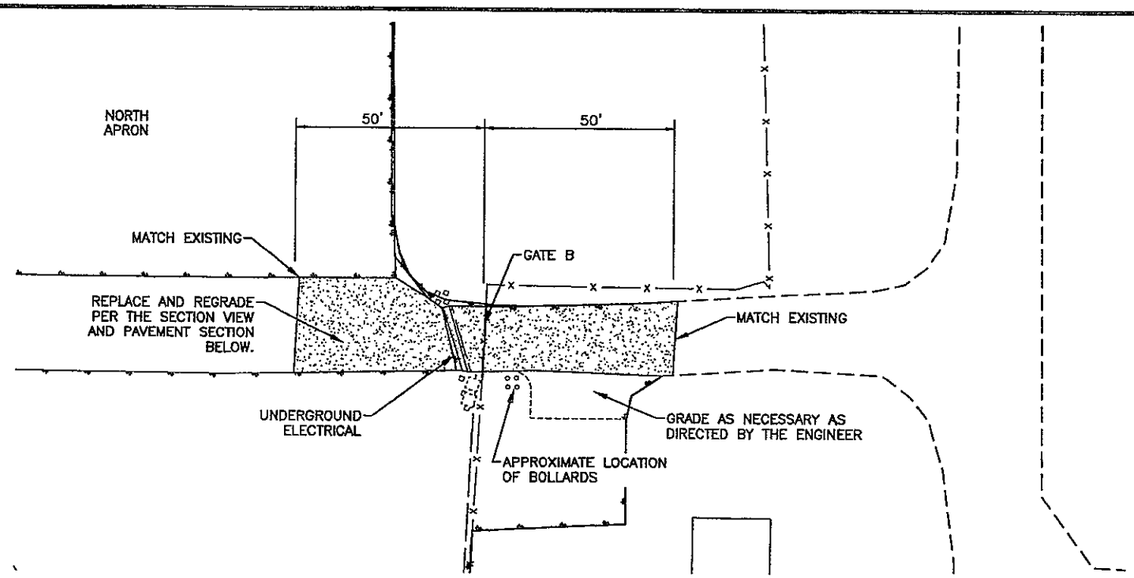
| | |
|---|---|
| Designed By: | C. WILT |
| Drawn By: | C. SLATTEN |
| Checked By: | B. HANSON |
| Date Revised: | 5/03/2016, 2:16 PM |
| Layout Name: | Driveway Details (31) |
| File Path and Name: | G:\24\61111\65040\Weldon\Design\SA11-AV-01-008.dwg |




## APPROACH PLAN VIEW

* MATCH EXISTING WIDTH OR AS DIRECTED BY THE ENGINEER.
** PAVE TO RADIUS RETURN OR 20 FEET, WHICHEVER IS GREATER.

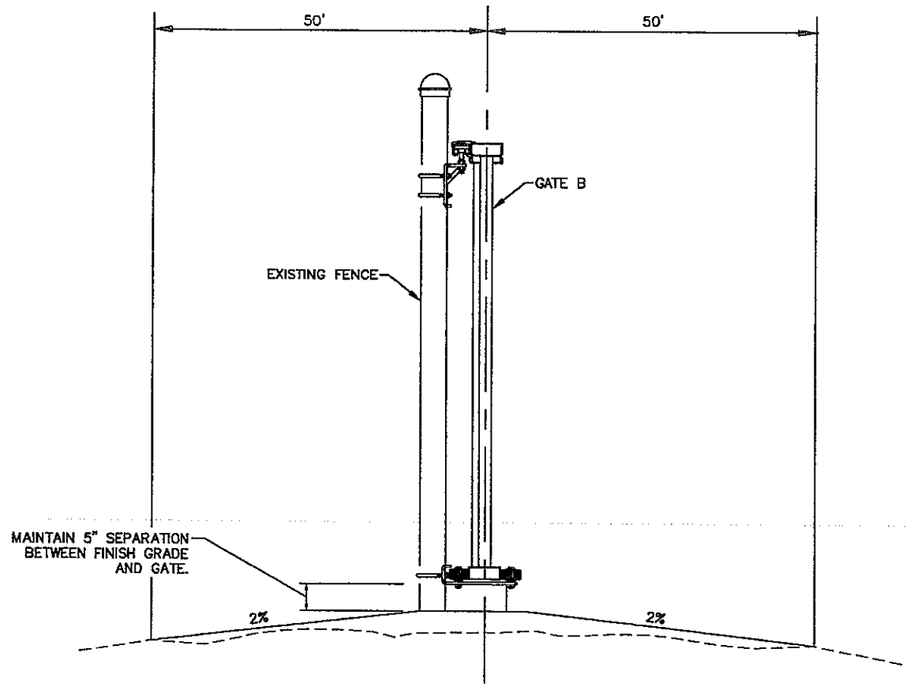
WHERE EXISTING APPROACHES ARE PAVED INTO THE RIGHT OF WAY, EXTEND NEW PAVEMENT TO MATCH EXISTING.



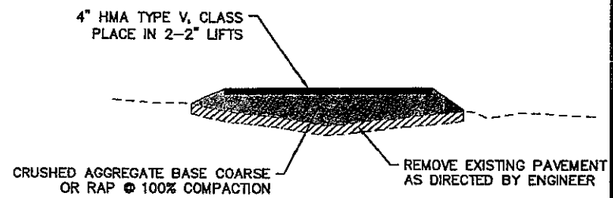

## PAVEMENT REPAIR GRADING PLAN VIEW
SCALE: 1":20'




## SECTION A–A FOR APPROACH




## SECTION VIEW




## PAVEMENT SECTION

As-Built

PLAN PREPARED BY DOWL

| Designed By: | C. WILT |
|---|---|
| Drawn By: | C. SLATTEN |
| Checked By: | B. HANSON |

| Date Revised: | 5/03/2016, 4:00 PM |
|---|---|
| Layout Name: | Gravel Details (32) |
| File Path and Name: | G:\2A\61111\650400\Aviation\Design\SA11-AV-01-008.dwg |

| BY | DATE | REVISION |
|---|---|---|

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
GRAVEL TO PAVEMENT DETAILS

DATE: 5/3/2016
SHEET: 32 OF 97
AS-BUILT SHEET:

ROOSEVELT STREET

BARANOV AVENUE

ST. LOUIS ROAD

PI FENCE
N 31611.40
E 59585.91

FENCE

CONNECT TO
EXISTING FENCE
N 31519.18
E 59346.24

PI FENCE
N 31009.60
E 59817.48

PI FENCE
N 31034.80
E 59807.79

27' WIDE POWER-OPERATED
SINGLE CANTILEVER GATE
N 31021.84
E 59811.70
FOR GATE OPERATOR
DETAIL SEE (2/54)

4' WIDE SINGLE SWING GATE
WITH KEYLESS ENTRY
N 30998.40
E 59821.79

PI FENCE
N 30955.60
E 59838.26

PI FENCE
N 30830.00
E 59884.45

PI FENCE
N 30726.72
E 59924.18

2" HDPE 6' (APPROXIMATE)
from outside of
FENCE on
E. Side

New Load Centers

27' WIDE POWER-OPERATED
SINGLE CANTILEVER GATE
N 30678.24
E 59798.20
FOR GATE OPERATOR
DETAIL SEE (2/54)

2" HDPE
2' (APPROXIMATE)
from inside
of FENCE
on N. Side

FENCE

CONNECT TO
EXISTING FENCE
N 30599.40
E 59593.30

Gate Operator

27 ' WIDE POWER-OPERATED
SINGLE CANTILEVER GATE

BARANOV AVENUE

(4) GRC/HDPE
ducts

4' WIDE SINGLE
SWING GATE
WITH KEYLESS ENTRY

AEB
TERMINAL
BUILDING

SEE GATE DETAILS
SHEET 35

9.0'

27.0'

10.0'

43.9'

(1/33) GATE INSTALLATION LAYOUT - BARANOV AVENUE
NTS

SEE GATE DETAILS
SHEET 35

9.0'

27 ' WIDE POWER-OPERATED
SINGLE CANTILEVER GATE

27.0'

ST. LOUIS ROAD

13.5'

Gate Operator

(2/33) GATE INSTALLATION LAYOUT - ST. LOUIS ROAD
NTS

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY DOWL

As-Built

NOTES

1. NORTHING AND EASTING OF THE GATE CALLOUTS INDICATE CENTER POINT OF THE NEW GATE.

STATE OF ALASKA
40TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
FENCING PLAN

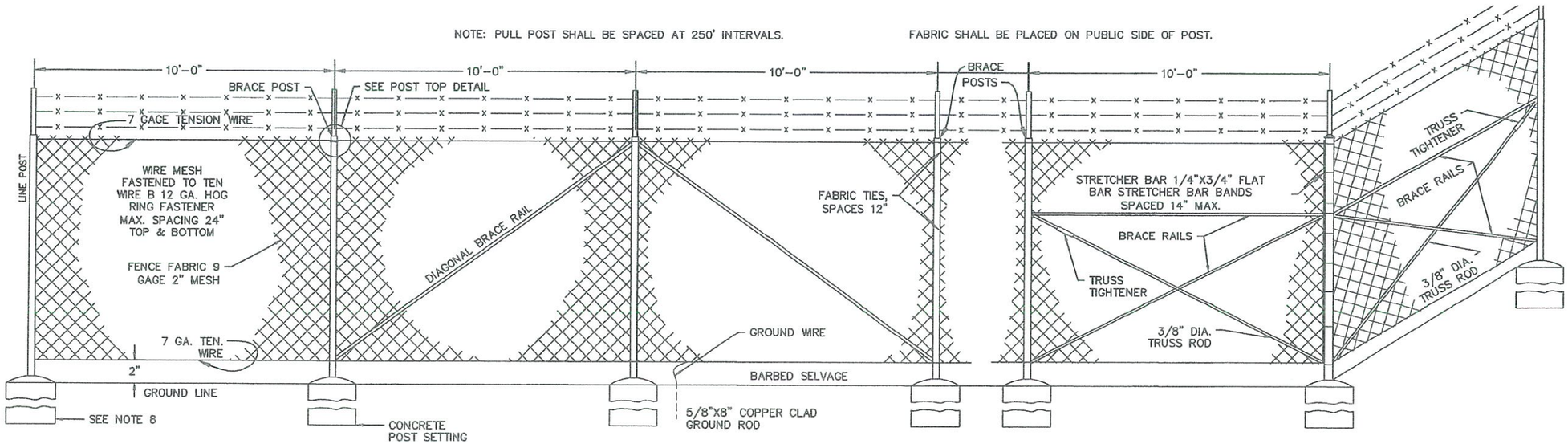
DATE: 5/11/2016
SHEET: 33 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

Date Revised: 5/11/2016, 8:21 AM
Layout Name: Fencing Plan (33)
File Path and Name: C:\24-01111\05\ASDN\Aviation\Design\SC11-AW-AF-02B1.dwg

NOTE: PULL POST SHALL BE SPACED AT 250' INTERVALS.

FABRIC SHALL BE PLACED ON PUBLIC SIDE OF POST.

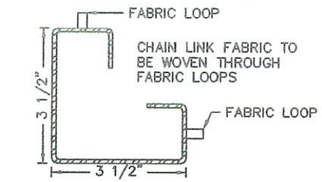



## NOTES:

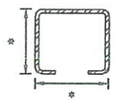
1. POSTS SHALL BE SPACED EQUAL DISTANCES APART. MAXIMUM SPACING SHALL BE 10 FEET UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. POST TOPS SHALL BE SECURELY FASTENED TO POST.
3. BRACE RAILS AND TRUSS RODS SHALL BE SECURELY FASTENED TO POST WITH BRACE BANDS WITH THREADED TAKE-UP ADAPTER FOR TRUSS RODS.
4. GROUND WIRE SHALL BE ATTACHED TO FENCE FABRIC BY MEANS OF A SPLIT BOLT.
5. FABRIC SHALL BE STRETCHED TO A SMOOTH UNIFORM APPEARANCE.
6. DETAILS SHOWN INDICATE GENERAL DESIGN AND DIMENSIONS MAY VARY AMONG MANUFACTURERS.
7. FOR FENCE GATE DETAILS, SEE STANDARD DRAWING CHAIN LINK FENCE GATE.
8. LINE POST SHALL BE SET IN CONCRETE UNLESS SHOWN OTHERWISE ON THE PLANS.

* Line post driven to 5' Embedment.

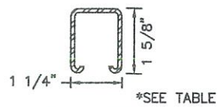
TYPICAL FENCE SECTION




ROLL FORMED POST

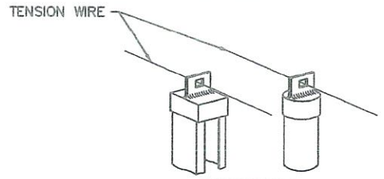



C POST

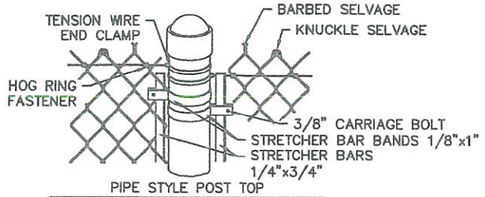



ROLL FORMED BRACE

TYPICAL PULL POST



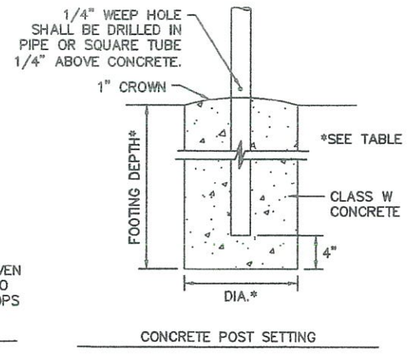

LINE POST TOPS




PIPE STYLE POST TOP

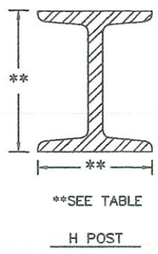

ROLL FORMED POST TOP

TYPICAL CORNER OR TERMINAL POST




CONCRETE POST SETTING

| FABRIC HEIGHT | POST | | | | | | | | | | | | | | TOP OR BRACE RAIL | | | | | | ALTERNATE POST | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | END-CORNER-PULL | | | | | | | | LINE-BRACE | | | | | | | | | | | | LINE-BRACE | |
| | PIPE | | SQUARE TUBE | | ROLL FORMED | | FOOTING | | PIPE | | C POST | | FOOTING | | PIPE | | ROLL FORMED | | H POST | | H POST | |
| | SIZE | WT/FT. | SIZE | WT/FT. | SIZE | WT/FT. | DEPTH | DIA. | SIZE | WT/FT. | SIZE | WT/FT. | DEPTH | DIA. | SIZE | WT/FT. | SIZE | WT/FT. | SIZE | WT/FT. | SIZE | WT/FT. |
| 3' | 2" | 3.65 # | 2" X 2" | 4.31 # | 3 1/2"X3 1/2" | 4.84 # | 40" | 10" | 1 1/2" | 2.72 # | 1 7/8"X1 5/8" | 2.28 # | 28" | 10" | 1 1/4" | 2.27 # | 1 5/8" | 1.35 # | 1 1/2"X 1 5/16" | 2.27 # | 1 7/8"X1 5/8" | 2.72 # |
| 4' | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " |
| 5' | 2" | 3.65 # | 2" X 2" | 4.31 # | 3 1/2"X3 1/2" | 4.84 # | 40" | 10" | 1 1/2" | 2.72 # | 1 7/8"X1 5/8" | 2.28 # | 28" | 10" | " | " | " | " | " | " | 1 7/8"X1 5/8" | 2.72 # |
| 6' | 2 1/2" | 5.79 # | 2 1/2"X2 1/2" | 5.59 # | 3 1/2"X3 1/2" | 4.84 # | 48" | 15" | 2" | 3.65 # | 2 1/4"X1 45/64" | 2.64 # | 40" | 12" | " | " | " | " | " | " | 2 1/4"X2" | 4.1 # |
| 7' | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " | " |
| 8' | 2 1/2" | 5.79 # | 2 1/2"X2 1/2" | 5.59 # | 3 1/2"X3 1/2" | 4.84 # | 48" | 15" | 2" | 3.65 # | 2 1/4"X1 45/64" | 2.64 # | 40" | 12" | " | " | " | " | " | " | 2 1/4"X2" | 4.1 # |




**SEE TABLE

H POST

1/34 CHAIN LINK FENCE DETAILS

NTS

As-Built

PLAN PREPARED BY DOWL

STATE OF ALASKA 49TH — Brian R. Thorson CE 11132 — 5/3/16 — REGISTERED PROFESSIONAL ENGINEER

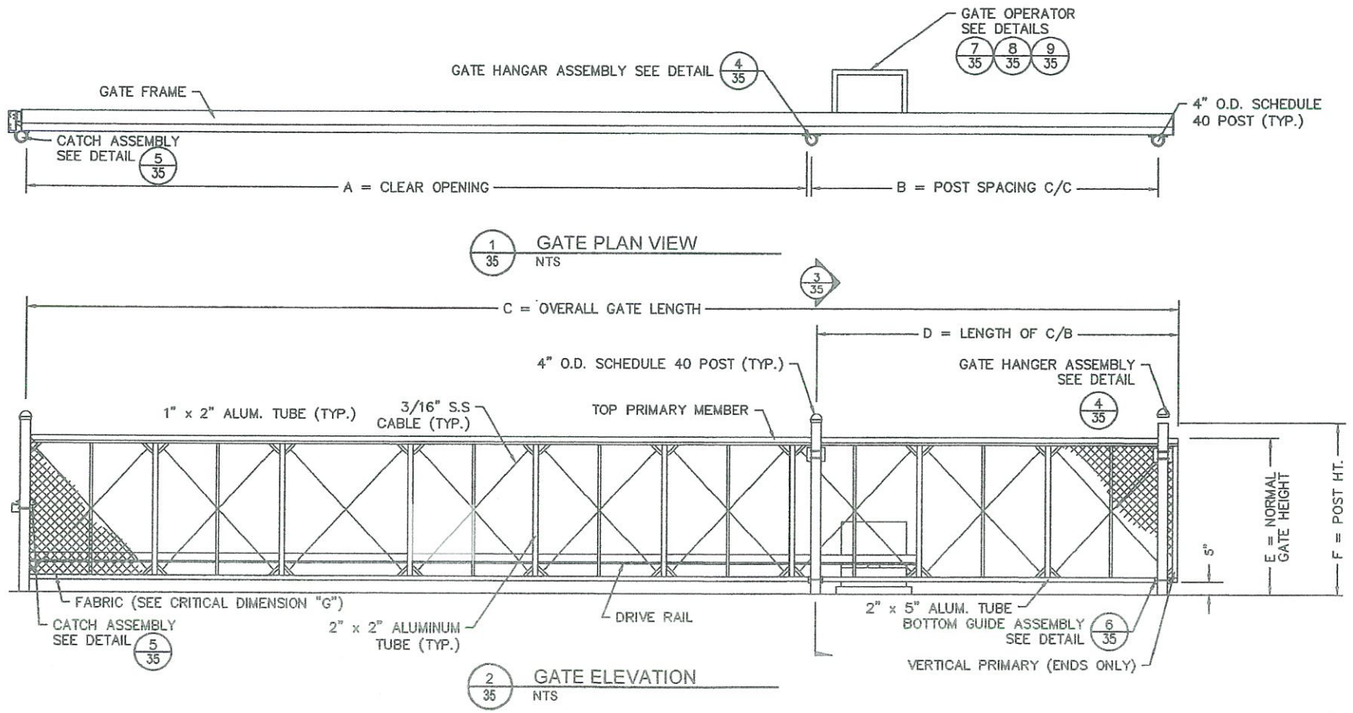
| BY | DATE | REVISION |
|---|---|---|

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
FENCING DETAILS

DATE: 5/3/2016
SHEET: 34 OF 97
AS-BUILT SHEET:

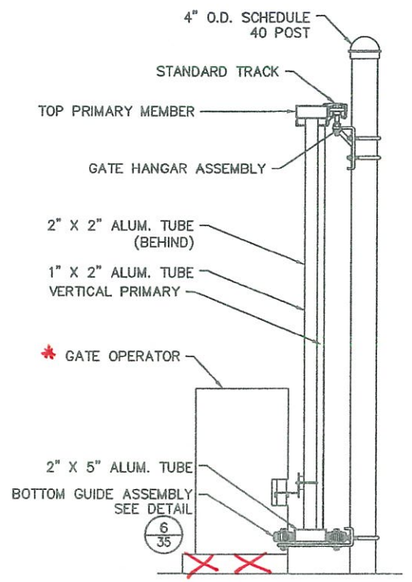
Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised:
Layout Name: Fencing Details (34)
File Path and Name: Q:\Z41111650\AD\Written\Design\SA11-AV-DT-CDB.dwg
5/03/2016, 2:18 PM



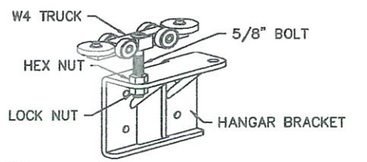

1/35 GATE PLAN VIEW
NTS

2/35 GATE ELEVATION
NTS

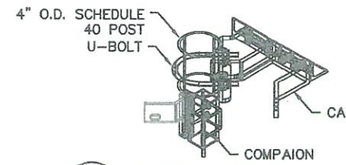
NOTE:
1. FOR NON-MOTORIZED FENCE GATES OMIT GATE OPERATOR ASSEMBLY FROM DETAILS 1/35 AND 2/35



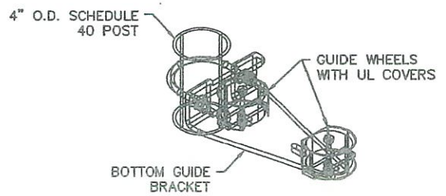

3/35 ASSEMBLY SECTION
NTS




4/35 GATE HANGAR ASSEMBLY
NTS

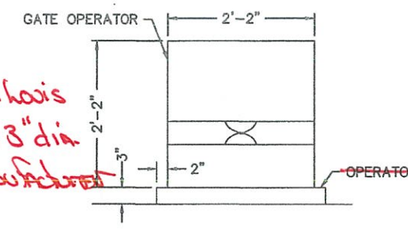



5/35 CATCH ASSEMBLY
NTS

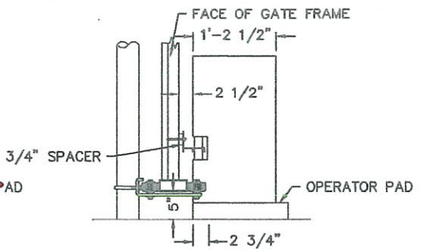



6/35 BOTTOM GUIDE ASSEMBLY
NTS

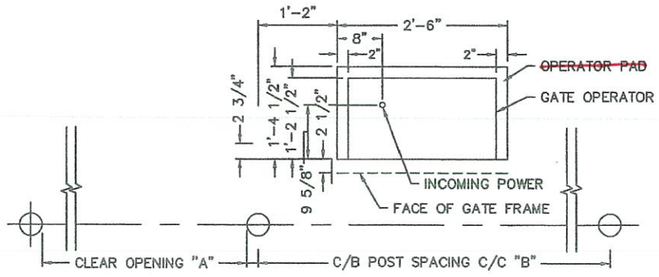
* Gate operator for Barrow Avenue & St. Louis Road installed on (2) 3" dia. steel posts per manufacturer instructions




7/35 OPERATOR FRONT ELEVATION
NTS




8/35 OPERATOR SIDE ELEVATION
NTS




9/35 OPERATOR PLAN AND POST LAYOUT
NTS

NOTES:
1. ALL FITTINGS PROVIDED FOR 4" O.D. SCHEDULE 40 POSTS. OTHER SIZES AVAILABLE UPON REQUEST.
2. GATE ELEVATION IS VIEWED FROM THE OUTSIDE OF THE SECURE AREA LOOKING IN.
3. THIS GENERIC DRAWING SHOWS TYPICAL GATE. GATE MANUFACTURED MAY NOT BE EXACTLY AS SHOWN.
4. FOR ADDITIONAL GATE OPERATOR INSTALLATION REQUIREMENTS, SEE SPECIFICATIONS SECTION F-171 POWER GATE OPERATORS.

| CRITICAL DIMENSION CHART | |
|---|---|
| A | CLEAR OPENING |
| B | COUNTERBALANCE POST SPACING C/C |
| C | OVERALL GATE LENGTH |
| D | COUNTERBALANCE LENGTH |
| E | NOMINAL GATE HEIGHT |
| F | POST HEIGHT |
| G | FABRIC HEIGHT |

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised:
Grid Name:
File Path and Name: O:\ZAK\61111.65\ADO\Aviation\Design\SA11-AV-DT-CDB.dwg
5/03/2016, 2:18 PM

As-Built

PLAN PREPARED BY DOWL

STATE OF ALASKA 49TH STATE Brian R. Hanson 11137 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 2537540000
AIP No. 3-02-0065-011-2016
GATE DETAILS

DATE: 5/3/2016
SHEET: 35 OF 97
AS-BUILT SHEET:

| | | | |
|---|---|---|---|
| Date Revised: | 5/03/2016, 2:18 PM | Designed By: | C. WILT |
| Layout Name: | Road Plan and Profile-Roosevelt (36) | Drawn By: | C. SLATTEN |
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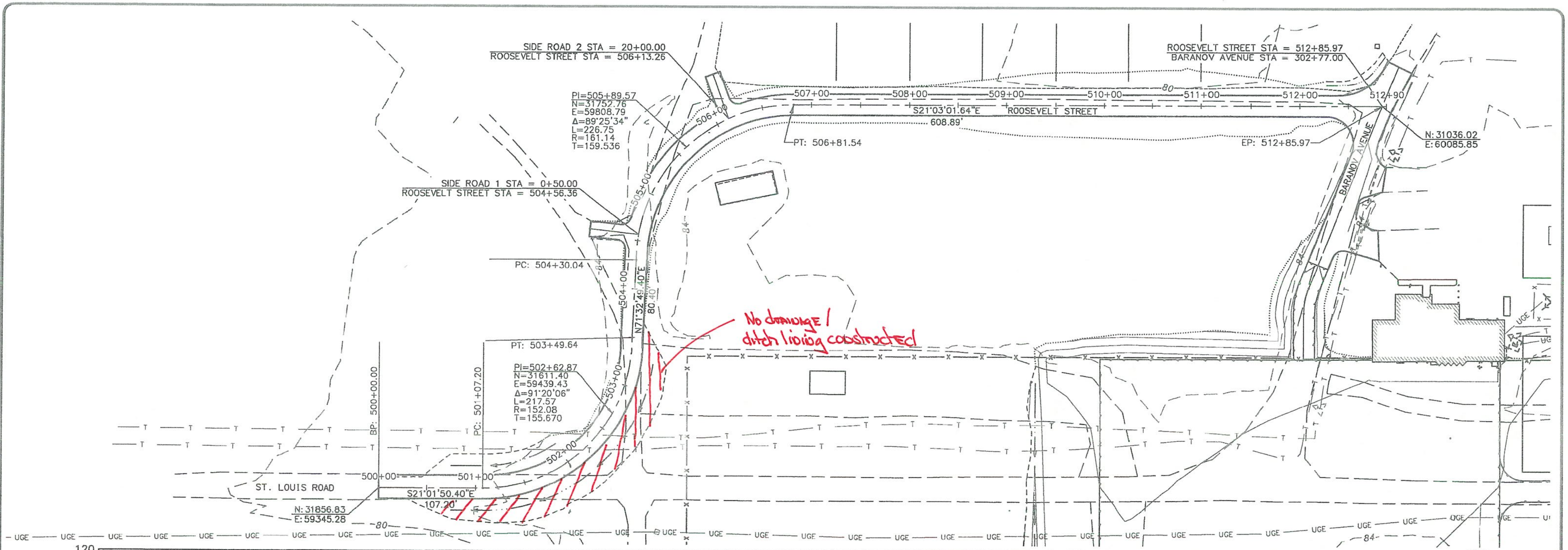
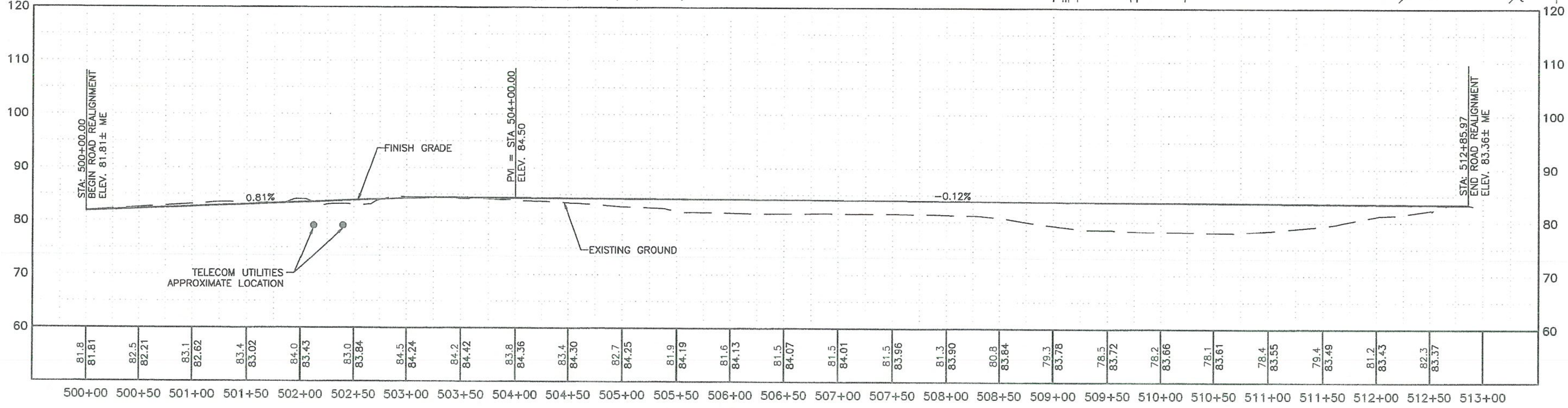


No drainage / ditch lining constructed



50 0 50 100
SCALE IN FEET
1H:10V

As-Built

PLAN PREPARED BY DOWL

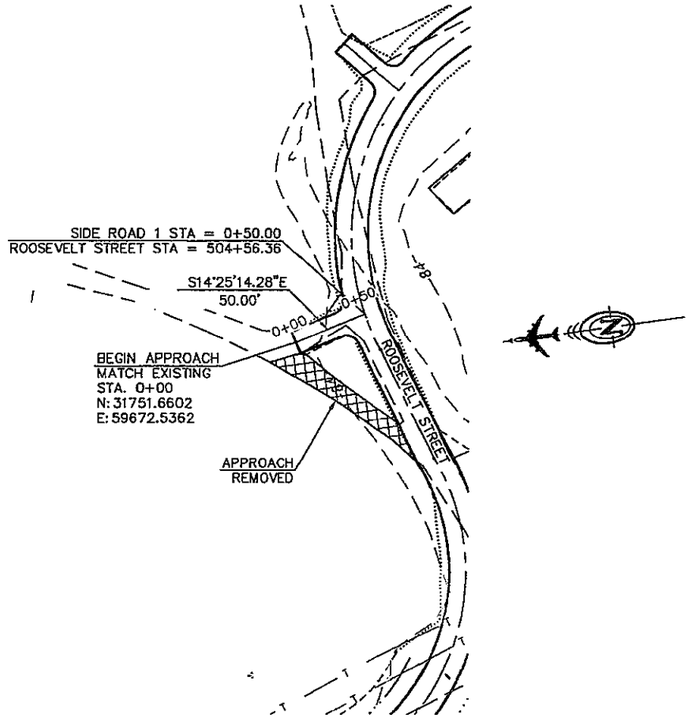
Brian P. Hanson
CE 11132
5/3/16

| BY | DATE | REVISION |
|---|---|---|

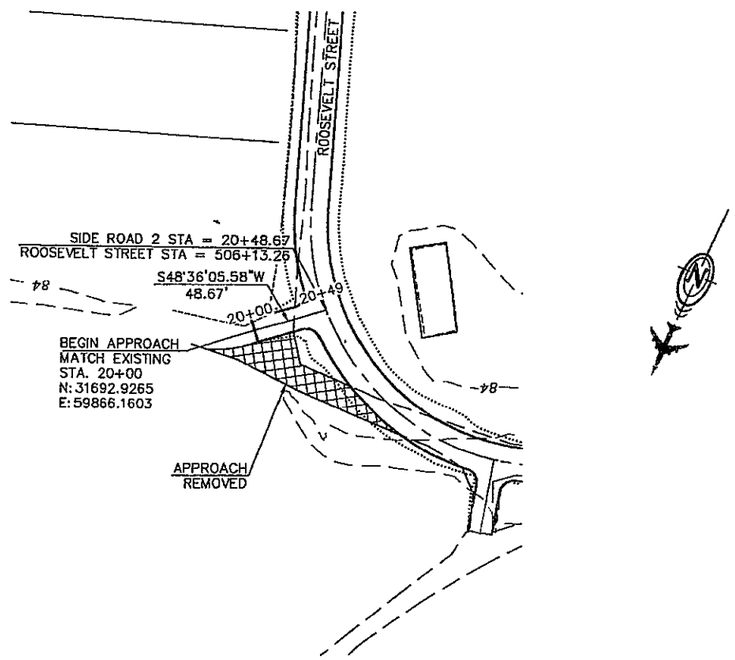
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
ROOSEVELT STREET

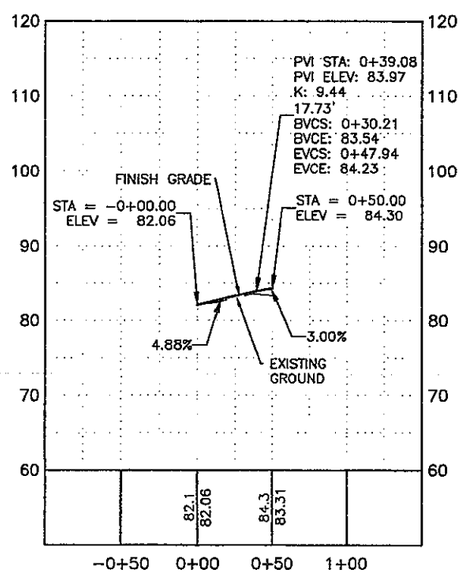
DATE: 5/3/2016
SHEET: 36 OF 97
AS-BUILT SHEET:

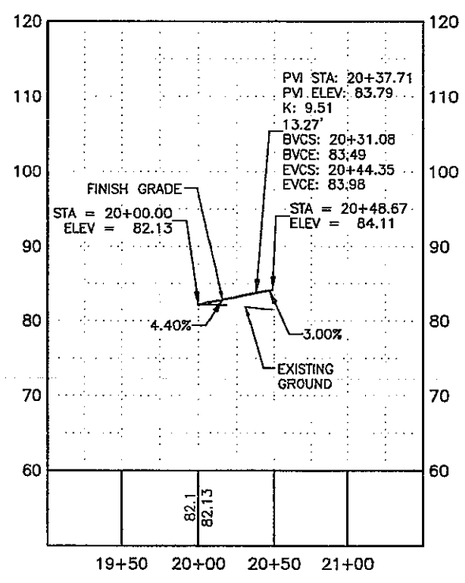



SIDE ROAD 1




SIDE ROAD 2

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SCALE IN FEET
1H:10V

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STATE OF ALASKA
49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
SIDE ROADS

DATE: 5/3/2016
SHEET: 37 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised: 5/03/2016, 2:19 PM
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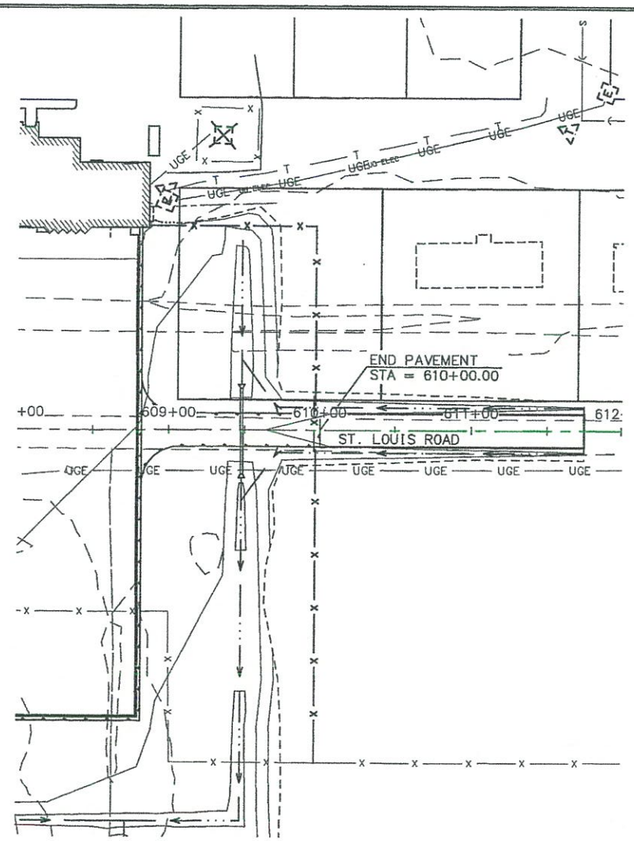


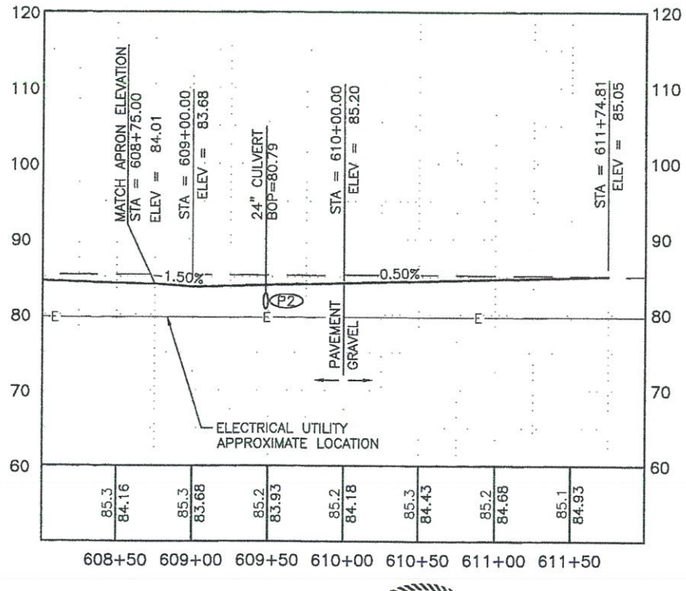


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SCALE IN FEET
1H:10V

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As-Built

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
ST. LOUIS ROAD

DATE: 5/10/2016
SHEET: 38 OF 97
AS-BUILT SHEET:

| | |
|---|---|
| Designed By: | C. WILT |
| Drawn By: | C. SLATTEN |
| Checked By: | B. HANSON |
| Date Revised: | 5/10/2016, 11:34 AM |
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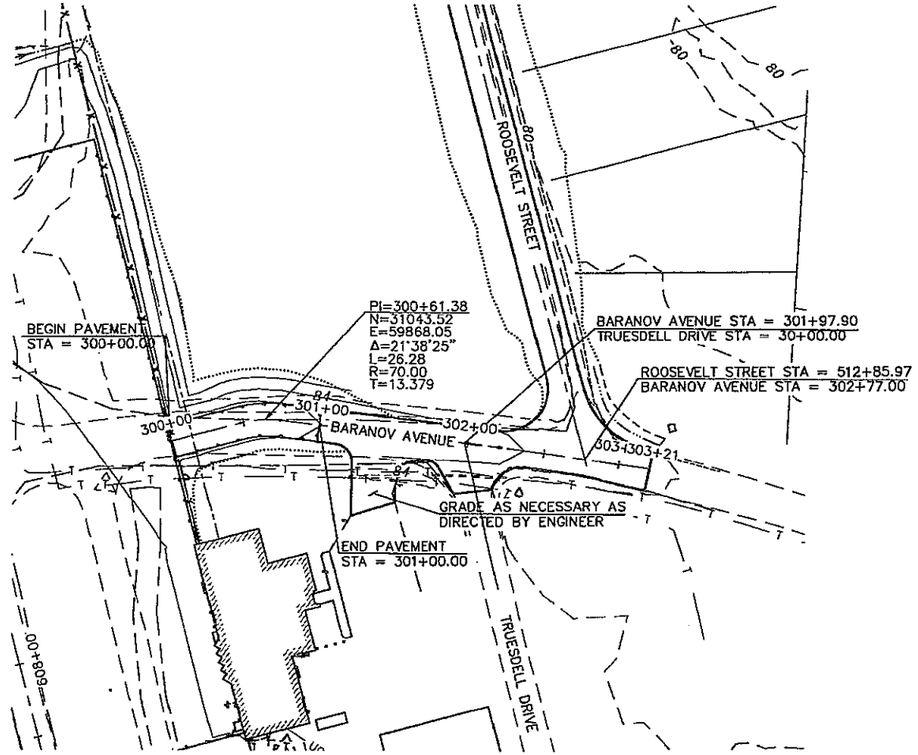
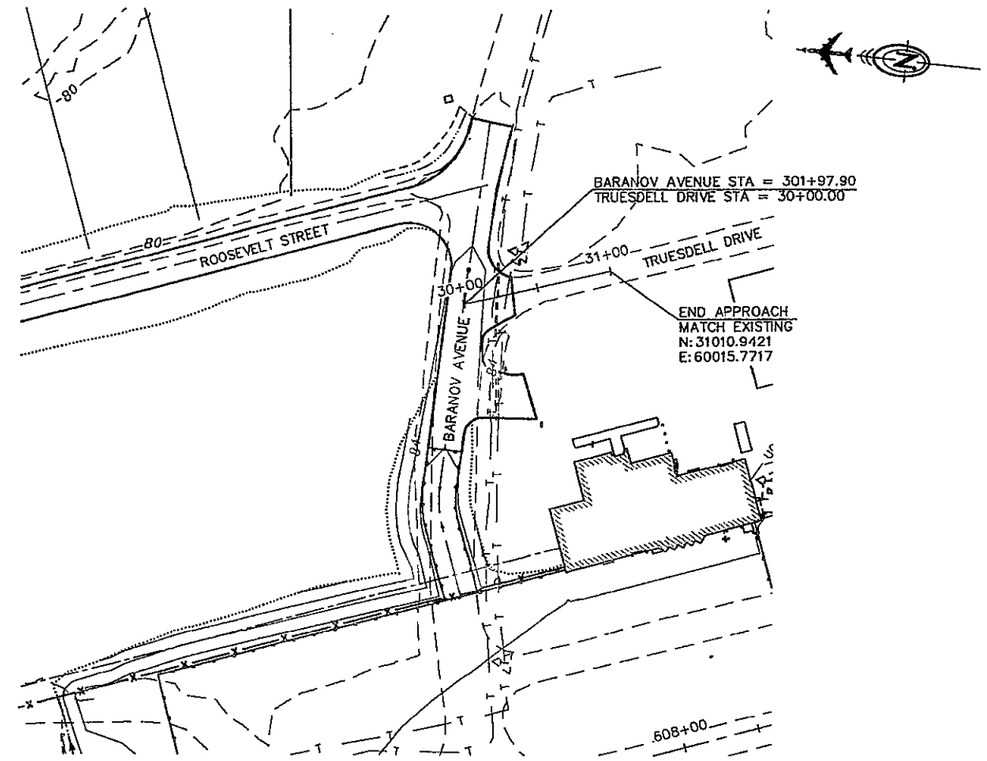
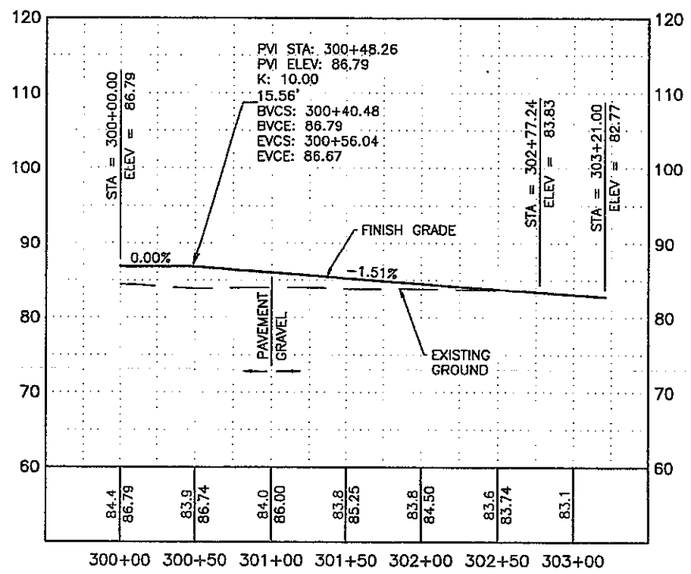
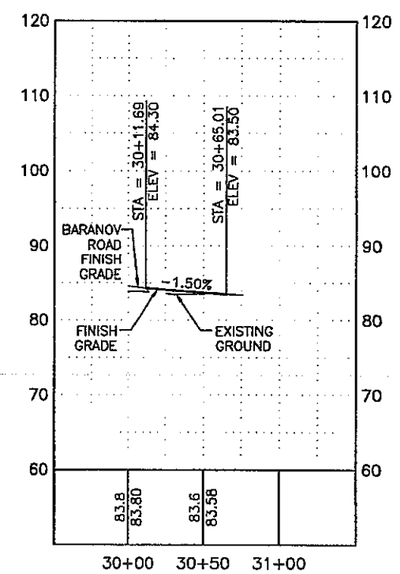



BARANOV ROAD




TRUESDELL DRIVE




50 0 50 100
SCALE IN FEET
1H:10V

PLAN PREPARED BY DOWL

As-Built

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER
5/3/16

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
PLAN AND PROFILE
BARANOV ROAD

DATE: 5/3/2016
SHEET: 39 OF 97
AS-BUILT SHEET:

| | Designed By: | C. WILT |
|---|---|---|
| | Drawn By: | C. SLATTEN |
| | Checked By: | B. HANSON |

Date Revised:
Layout Name: Road Plan and Profile-Baranov (39)
File Path and Name: Q:\24\61111\65CAD\Aviation\Design\SC11-AV-COB1.dwg
5/03/2016, 2:20 PM

GRUENING AVENUE

S48°36'05.58"W
48.84'

STOP R1-1

STA. 506+05
22.7' LT

306+00

307+00 308+00 309+00 310+00 311+00 312+00 512+90

S21°03'01.64"E
608.89'

ROOSEVELT STREET

SPEED LIMIT 25 R2-1

STA. 511+77
14.7' LT

STOP R1-1

STA. 512+42
17.4' RT

BARANOV AVENUE

STOP R1-1

STA. 504+45
22.0' LT

304+00

N71°32'49.40"E
80.40'

305+00

502+00

500+00 501+00

S21°01'50.40"E
107.20'

600+00 601+00 602+00 603+00 604+00

ST. LOUIS ROAD

606+00 607+00 608+00 609+00

UGE

TW D STA = 407+90.00
ST. LOUIS ROAD STA= 605+00.00

40 0 40 80
SCALE IN FEET

As-Built

PLAN PREPARED BY DOWL

STATE OF ALASKA 49TH
Brian R. Hanson
CE 11132
REGISTERED PROFESSIONAL ENGINEER
5/3/16

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
SIGN PLAN
ROOSEVELT STREET

DATE: 5/3/2016
SHEET: 40 OF 97
AS-BUILT SHEET:

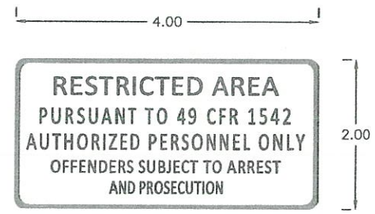
Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON

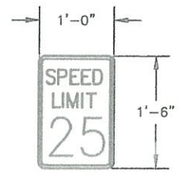
Date Revised:
Layout Name:
File Path and Name: D:\AVIATION\DSC4D\Working\Design\SA11-AW-SG-COB.dwg

5/03/2016, 2:21 PM
Roadcell, Street_Sign_Plan (40)

| WORK AREA | POST NO. | NORTHING | EASTING | TYPE | LEGEND | SIZE (FT) WIDTH | SIZE (FT) HEIGHT | AREA (FT2) | SIGN FACES | POST NO, SIZE, & TYPE | THICKNESS (in) FRAMED YES | THICKNESS (in) FRAMED NO | REMARK | QUANTITY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROOSEVELT STREET | 1 | 59708.45 | 31778.21 | R1-1 | STOP | 2.50 | 2.50 | 6.25 | W, S, N | SEE CBJ STANDARD 127A | | 0.125 | | 1 |
| ROOSEVELT STREET | 2 | 59857.36 | 31687.05 | R1-1 | STOP | 2.50 | 2.50 | 6.25 | W, S, N | SEE CBJ STANDARD 127A | | 0.125 | | 1 |
| ROOSEVELT STREET | 3 | 60058.72 | 31147.53 | R2-1 | SPEED LIMIT 25 | 2.00 | 2.50 | 5.00 | E | 2.5"X2.5", PT | | 0.125 | | 1 |
| ROOSEVELT STREET | 4 | 60052.08 | 31075.33 | R1-1 | STOP | 2.50 | 2.50 | 6.25 | W, S, N | SEE CBJ STANDARD 127A | | 0.125 | | 1 |
| FENCE PLAN | N/A | N/A | N/A | ALUMINUM | RESTRICTED AREA PURSUANT TO 49 CFR 1542 AUTHORIZED PERSONNEL ONLY OFFENDERS SUBJECT TO ARREST AND PROSECUTION | 4.00 | 2.00 | 8.00 | VARIES | N/A | | 0.125 | TO BE PLACED EVERY 300 FEET ON PUBLIC SIDE OF FENCE. | 5 |
| GATES | N/A | N/A | N/A | ALUMINUM | GATE EE WARNING - AUTHORIZED ACCESS ONLY ACCESS CARD REQUIRED - ONE VEHICLE AT A TIME STOP & WAIT TO ENSURE GATE CLOSES AFTER ENTRY REPORT MECHANICAL FAILURE IMMEDIATELY TO AIRPORT MAINTENANCE, SECURITY, OR TOWER FINES IN EXCESS OF $10,000 POSSIBLE FOR NON-COMPLIANCE | 3.00 | 2.00 | 6 | VARIES | N/A | | 0.125 | WHITE LETTERING AND BORDER ON RED BACKGROUND. INSTALL PROPER GATE SIGN (GATE NAME) ON PUBLIC SIDE OF EACH CORRESPONDING GATE AND BACK-TO-BACK WITH SIGN BELOW. | * 3 |

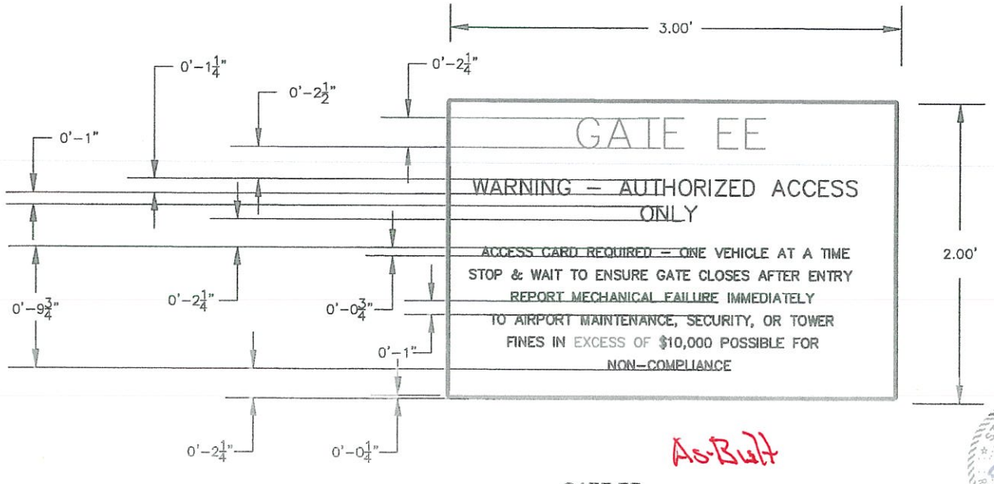
PERMANENT FENCE SECURITY SIGN




R2-1

* (2) Signs for (2) gates with 3rd sign turned over to DOT Airport M & O.




GATE EE

As-Built

NOTES

1. ALL TEXT CENTERED VERTICALLY ON SIGN PANEL
2. ALL ALUMINUM PANELS

STATE OF ALASKA
BRIAN R. HANSON
CE 11138
5/3/16
PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

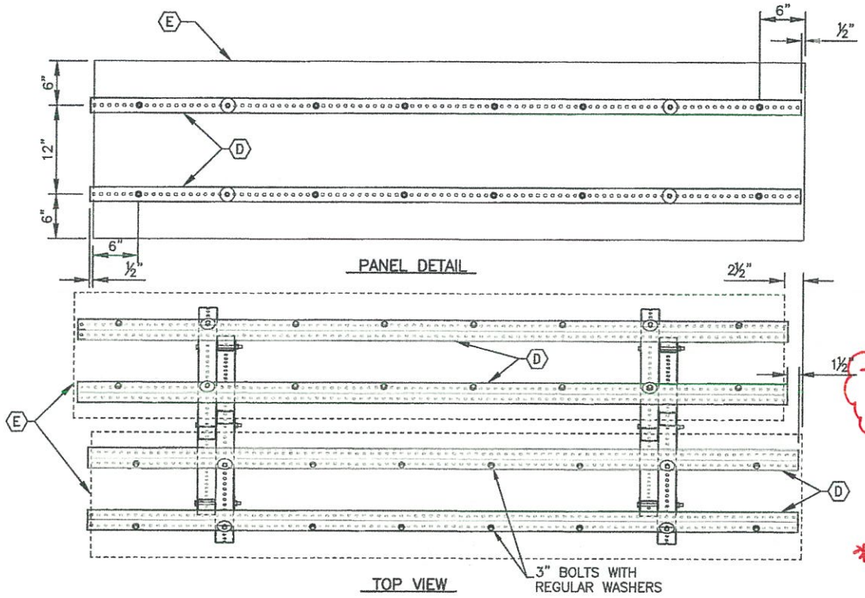
COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
SIGN DETAILS
ROOSEVELT STREET

DATE: 5/3/2016
SHEET: 41 OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised: 5/03/2016, 2:22 PM
Layout Name: Sign Details (41)
File Path and Name: Q:\2A\61111\650AD\Aviation\Design\SA11-AV-GT-CDB.dwg

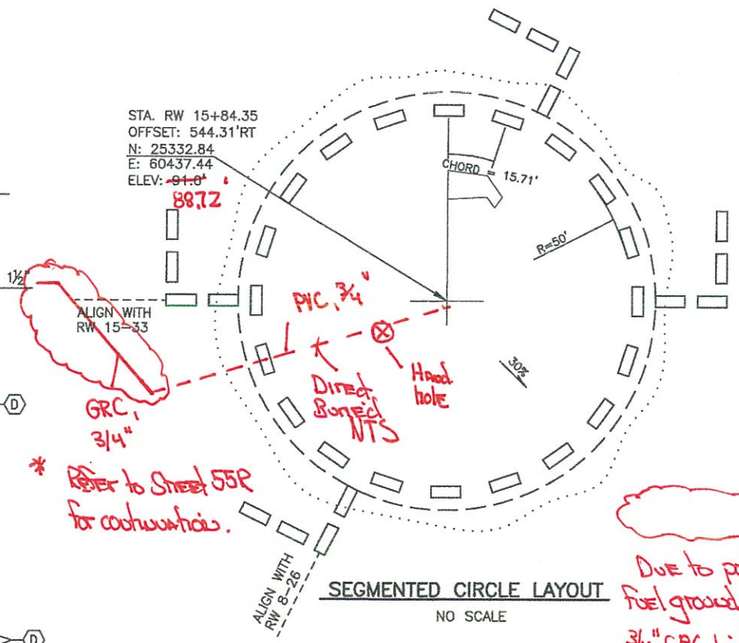
PLAN PREPARED BY DOWL

| PIECE | DESCRIPTION | QUANTITY |
|---|---|---|
| (A) | 2-1/2" SQ GALV STEEL PERF TUBE, 60", NOTCHED | 2 |
| (B) | 2-1/2" SQ GALV STEEL PERF TUBE, 76-1/2" | 4 |
| (C) | 2-1/2" SQ GALV STEEL PERF TUBE, 19-1/2" | 4 |
| (D) | 2" SQ GALV STEEL PERF TUBE, 96" | 4 |
| (E) | 24" X 96" X 0.08" - 0.09" THICK ALUMINUM 6061-T6 OR 5052-H36/38 | 2 |
| | 3/8" X 3" GALV. BOLT, NUT | 24 |
| | 3/8" X 5" GALV. BOLT, NUT | 4 |
| | 3/8" X 6" GALV. BOLT, NUT | 16 |
| | 3/8" GALV. REGULAR WASHER | 48 |
| | 3/8" X 2" DIA. S.S. FENDER WASHER | 40 |
| | 24" X 96" REFLECTIVE SHEETING | 2 |




## DESIGN NOTES:

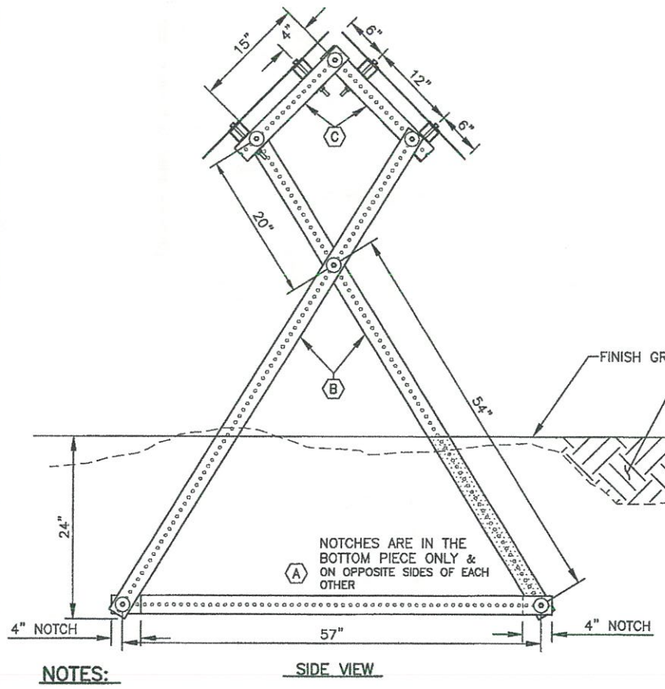
SEGMENTED CIRCLE PANELS:
DESIGN REFERENCE: FAA AC 150/5345-27E; AC 150/5340-5D; ALASKA DOT ITEM: P-640B

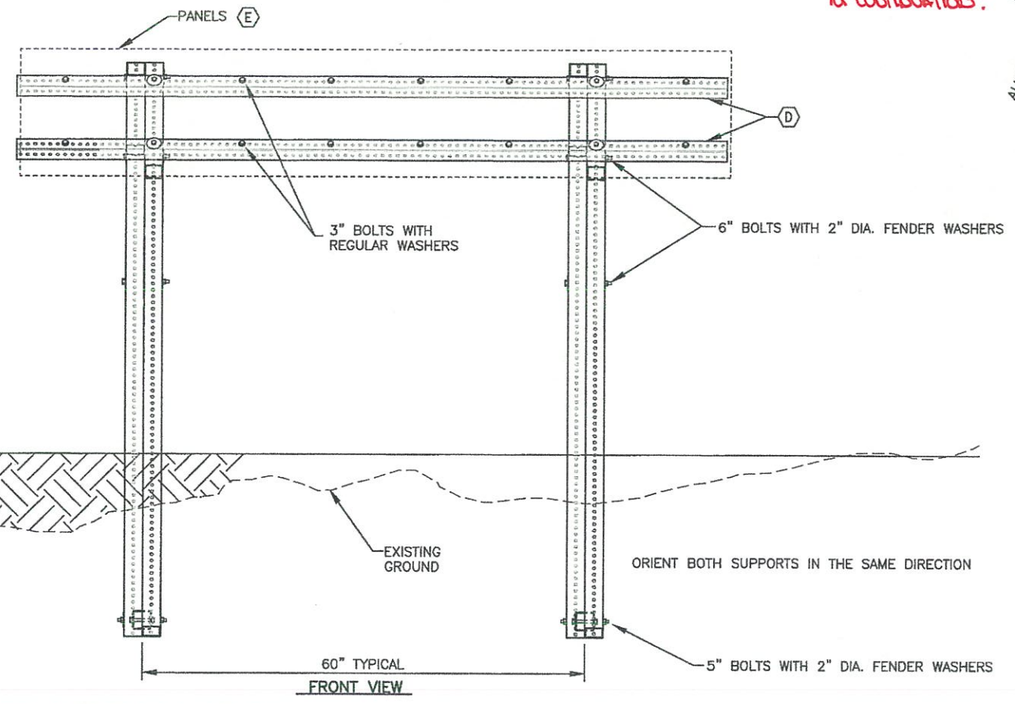



## SEGMENTED CIRCLE LAYOUT

NO SCALE

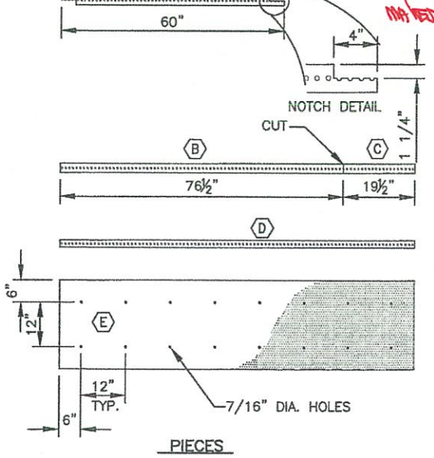
Due to potential fuel/ground contamination 3/4" GRC laid on OG & covered w/ embankment material




## SEGMENTED CIRCLE PANEL ASSEMBLY

NO SCALE




PIECES

## NOTES:

1. CRITICAL ASSEMBLY DIMENSIONS ARE BETWEEN HOLES.
2. PAINT ALL CUT EDGES WITH COLD GALVANIZING.
3. APPLY REFLECTIVE FILM TO PANELS BEFORE ASSEMBLY.
4. LEVEL ASSEMBLY BEFORE BACKFILLING.
5. STEEL PERF TUBE SHALL BE 12-GAGE STEEL, GALVANIZED, WITH 7/16-INCH HOLES PUNCHED OR DRILLED ON ALL SIDES ON 1-INCH CENTERS.

As-Built

**PLAN PREPARED BY DOWL**

STATE OF ALASKA 49TH
Brian R. Hanson
CE, 11132
REGISTERED PROFESSIONAL ENGINEER

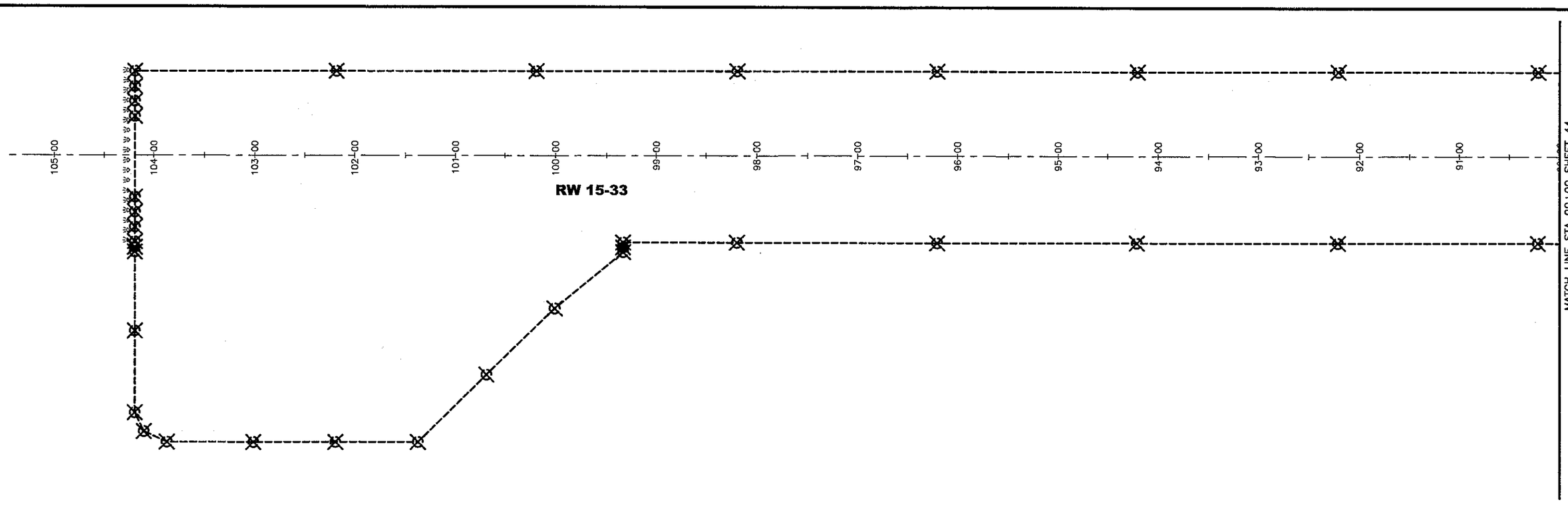
| BY | DATE | REVISION |
|---|---|---|
| BRH | 6/15/2016 | WIND CONE AND SEGMENTED CIRCLE ADDED TO CONTRACT/3 |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. Z537540000
AIP No. 3-02-0065-011-2016
SEGMENTED CIRCLE DETAIL

DATE: 6/16/2016
SHEET: 42R OF 97
AS-BUILT SHEET:

Designed By: C. WILT
Drawn By: C. SLATTEN
Checked By: B. HANSON
Date Revised:
Layout Name: Segmented_Circle_Detail_(42)
File Path and Name: C:\Z\4\16\11\05240\Written Design\SA11-AW-DT-CDB.dwg
6/16/2016, 12:37 PM




| | | |
|---|---|---|
| Designed By: | DMH | |
| Drawn By: | GMV | |
| Checked By: | MJL | |
| Date Revised: | 5/16/2016, 3:56 PM | |
| Layout Name: | D1 | |
| File Path and Name: | Z:\G0039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_01-D6.dwg | |

## DEMOLITION GENERAL NOTES:

1. LIGHT BASES, HANDHOLES, SIGN BASES, WIRE AND RACEWAYS SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL STATUTES.
2. DIRECT BURIED WIRE AND EMPTY CONDUIT SHALL BE ABANDONED IN PLACE. ABANDONED WIRING AND CONDUIT RUNS EXPOSED DURING EXCAVATION SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. THIS WORK SHALL BE SUBSIDIARY TO EXCAVATION AND NO SEPARATE PAYMENT WILL BE MADE.
3. LIGHT FIXTURES, SIGNS, AND TRANSFORMERS TO BE OFFERED TO STATE FIELD MAINTENANCE PERSONNEL. EQUIPMENT DEEMED OF NO SALVAGE VALUE SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
4. REMOVAL OF EXISTING CONDUCTORS AND GROUND WIRE SHALL BE SUBSIDIARY TO ITEM L-108a AND NO SEPARATE PAYMENT WILL BE MADE.
5. THE CONTRACTOR SHALL RESTORE GRADE AND FINISH SURFACES DISTURBED BY THE REMOVAL OF STRUCTURES. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE.

## DEMOLITION SHEET NOTES:

(1) REMOVE RUNWAY EDGE LIGHTS, THRESHOLD LIGHTS, TURN AROUND TAXIWAY LIGHTS, TRANSFORMERS, AND UNUSED WIRING.

(2) REMOVE SIGN, SIGN BASE, ADJACENT HANDHOLE, TRANSFORMER, AND UNUSED WIRING. CUT UNUSED CONDUIT 12" MINIMUM BELOW GRADE AND ABANDON IN PLACE.

(3) EXISTING TO BE MAINTAINED AND WORKED AROUND.

(4) MAINTAIN EXISTING CIRCUITRY AS NEEDED FOR TEMPORARY LIGHTING. VERIFY SEQUENCE WITH CIVIL. COORDINATE WITH RUNWAY 8-26 WORK. WHEN TEMPORARY LIGHTING IS NO LONGER NEEDED , REMOVE UNUSED CONDUCTORS AND ABANDON UNUSED CONDUIT IN PLACE. SEE SHEETS 53, 79, 82 FOR ADDITIONAL REQUIREMENTS. THIS WORK SHALL BE SUBSIDIARY TO PAY ITEM L-100h AND NO SEPARATE PAYMENT WILL BE MADE.

(5) REVERSE TEMPORARY THRESHOLD LIGHTS TO MATCH PROJECT PHASING.

## DEMOLITION LEGEND:

RW – RUNWAY
TW – TAXIWAY
R-1 – RW 15-33 CIRCUIT
R-2 – RW 8-26 CIRCUIT
T-1 – TW A, TW B, TW C, TW D CIRCUIT
VASI – VISUAL APPROACH SLOPE INDICATOR
XFMR – TRANSFORMER

- EXISTING UNDERGROUND FUEL LINE (TO BE MAINTAINED)
- EXISTING UNDERGROUND COMMUNICATION (TO BE MAINTAINED)
- EXISTING UNDERGROUND ELECTRIC (TO BE MAINTAINED)
- EXISTING UNDERGROUND CONDUIT
- EXISTING DUCT BANK (TO REMAIN)
- NEW 2" PVC CONDUIT. HASH MARKS INDICATE NUMBER OF #8 AWG. 5KV AIRPORT CABLES TYPE "C" PLUS ONE #6 BARE COPPER GROUND CONDUCTOR.
- EXISTING RUNWAY OR TAXIWAY LIGHT AND BASE (TO BE REMOVED) (1)
- EXISTING TAXIWAY LIGHT (TO REMAIN)
- EXISTING RUNWAY EDGE LIGHT (TO REMAIN)
- EXISTING HANDHOLE (TO REMAIN)
- EXISTING HANDHOLE (TO BE REMOVED)
- EXISTING ELECTRIC MANHOLE (TO REMAIN)
- EXISTING AIRPORT SIGN (TO REMAIN)
- EXISTING AIRPORT SIGN AND BASE (TO BE REMOVED) SHALL BE PAID AT THE UNIT PRICE UNDER L-100y
- EXISTING VASI
- EXISTING WIND CONE (TO BE REMOVED)

As-Built

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH MICHAEL J. LOVE 05/16/2016 EE-5818 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
**COLD BAY, ALASKA**
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
RUNWAY 15-33
LIGHTING DEMOLITION PLAN

DATE: 05/16/2016
SHEET: 43 OF 97
AS-BUILT SHEET:

MATCH LINE STA 90+00 SHEET 43

90+00 89+00 88+00 87+00 86+00 85+00 84+00 83+00 82+00 81+00 80+00 79+00 78+00 77+00 76+00 75+00

RW 15-33

MATCH LINE STA 74+50

MATCH LINE STA 74+50

74+00 73+00 72+00 71+00 70+00 69+00 68+00 67+00 66+00 65+00 64+00 63+00 62+00 61+00 60+00 59+00

RW 15-33

MATCH LINE STA 59+00 SHEET 45

As-Built

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5815
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
CENTRAL REGION

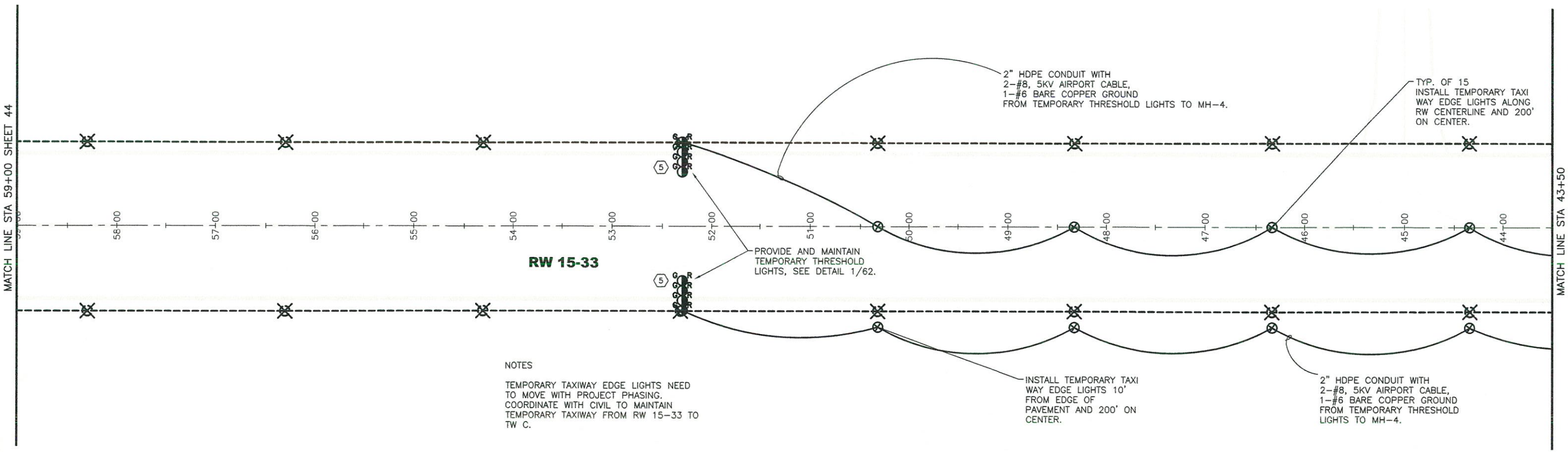
**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
RUNWAY 15-33
LIGHTING DEMOLITION PLAN

DATE: 05/16/2016
SHEET: 44 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 5/16/2016, 3:55 PM
Layout Name: D2
File Path and Name: Z:\09039GBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_D1-D6.dwg

MATCH LINE STA 59+00 SHEET 44

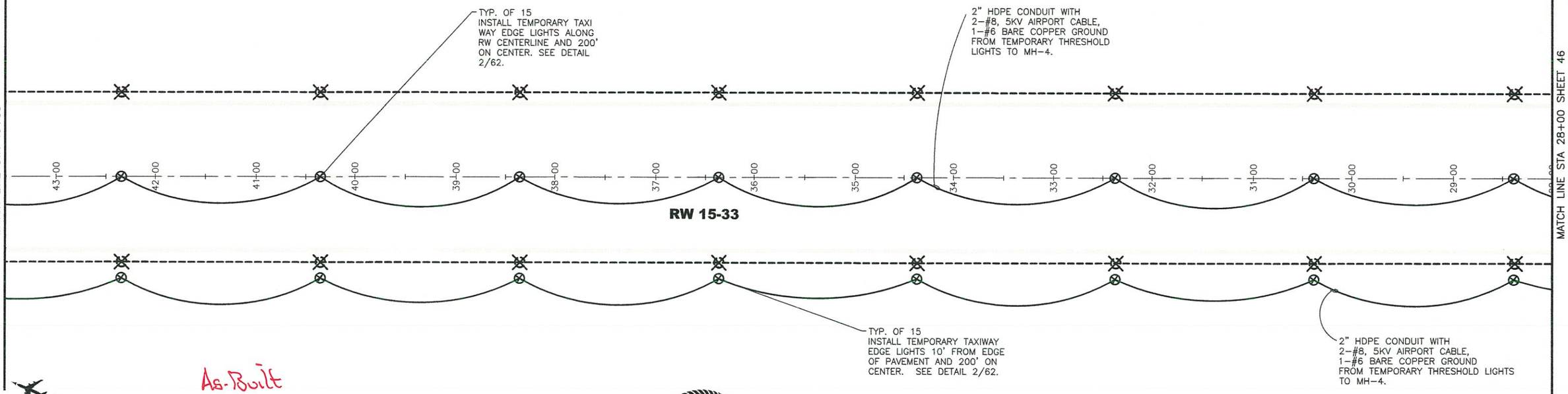



MATCH LINE STA 43+50

NOTES

TEMPORARY TAXIWAY EDGE LIGHTS NEED TO MOVE WITH PROJECT PHASING. COORDINATE WITH CIVIL TO MAINTAIN TEMPORARY TAXIWAY FROM RW 15–33 TO TW C.

MATCH LINE STA 43+50




MATCH LINE STA 28+00 SHEET 46

As-Built

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

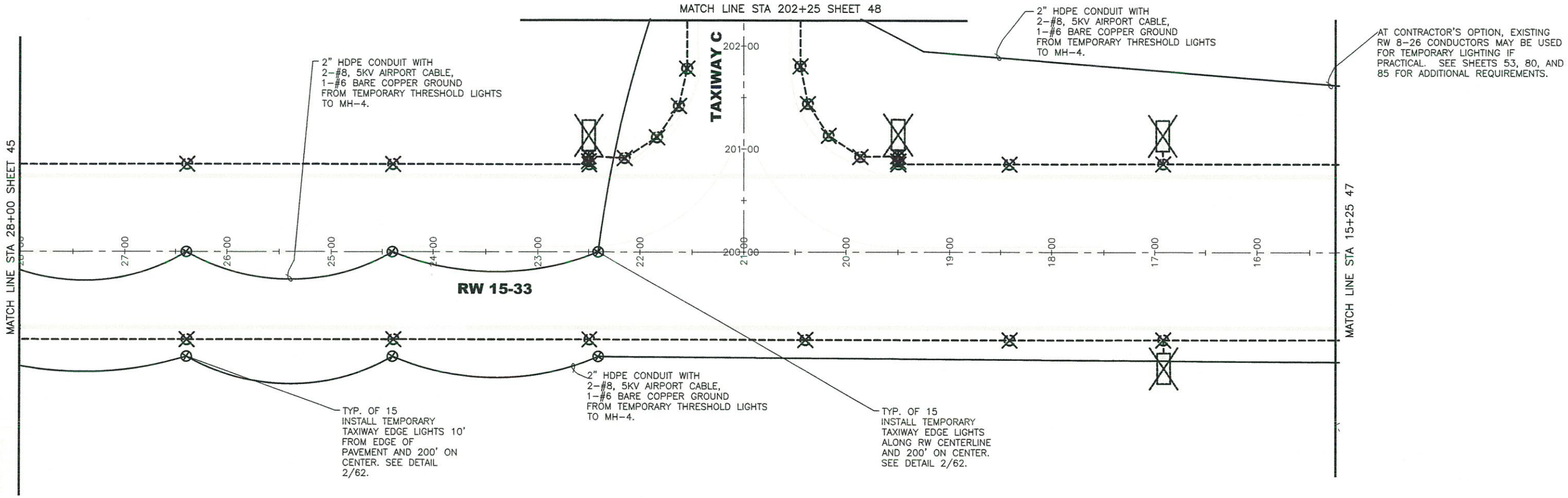
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
RUNWAY 15-33
LIGHTING DEMOLITION PLAN

DATE: 05/16/2016
SHEET: 45 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 5/16/2016, 3:56 PM
Layout Name: D3
File Path and Name: Z:\09039CBA – Cold Bay Airport Improv\2013 – Runway 15-33\E-Working\Drawings\09039_01-D5.dwg




NOTES

TEMPORARY TAXIWAY EDGE LIGHTS NEED TO MOVE WITH PROJECT PHASING. COORDINATE WITH CIVIL TO MAINTAIN TEMPORARY TAXIWAY FROM RW 15-33 TO TW C.

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

As-Built

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2015
EE-5618
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
RUNWAY 15-33
LIGHTING DEMOLITION PLAN

DATE: 05/16/2016
SHEET: 46 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised:
Layout Name: D4
File Path and Name: Z:\09039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_D1-D6.dwg
5/16/2016, 3:56 PM

= No Light = no light installed by others for removal

MH-7

AT CONTRACTOR'S OPTION, EXISTING RW 8-26 CONDUCTORS MAY BE USED FOR TEMPORARY LIGHTING IF PRACTICAL. SEE SHEETS 53, 80, AND 85 FOR ADDITIONAL REQUIREMENTS.

No Light

RW 8-26

No Light

1 light only

No Light

1 light only

No Light

2-#8, 5KV AIRPORT CABLE, 1-#6 BARE COPPER GROUND FROM TEMPORARY THRESHOLD LIGHTS TO MH-4. UTILIZE EXISTING DUCT BANK CROSSING.

MATCH LINE STA 15+25 SHEET 46

RW 15-33

No Light

RW 8-26

REMOVE EXISTING VASI EQUIPMENT AND OFFER TO FAA. REMOVE CONCRETE FOUNDATIONS, J-BOXES, AND WIRING BACK TO CB, SEE SHEET 53R, APPROXIMATE STA 16+10, 277' LT. REMOVE UNUSED ABOVE GRADE CONDUIT. CUT UNUSED CONDUIT 12" MINIMUM BELOW GRADE AND ABANDON IN PLACE. THIS WORK SHALL BE SUBSIDIARY TO PAY ITEM L-132c AND NO SEPARATE PAYMENT WILL BE MADE.

5

RFP-6, Sheets 53R & 93R for RW 15/33 PAPI install

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/03/2017
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| MBA | 05/03/17 | ADD RW 33 PAPI /5 |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
RUNWAY 15-33
LIGHTING DEMOLITION PLAN

DATE: 05/03/2017
SHEET: 47R OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL
Date Revised: 5/03/2017, 3:02 PM
Layout Name: DSR
File Path and Name: Z:\09039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_01-06.dwg

Designed By: DMH
Drawn By: GMV
Checked By: MJL
Date Revised:
Layout Name: D6
File Path and Name: Z:\09039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_D1-D6.dwg
6/16/2016, 1:25 PM

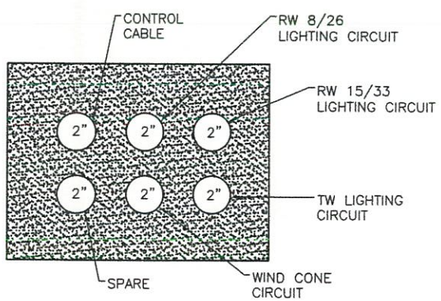
DEMO 60A ENCLOSED CB FOR WIND CONE CIRCUIT DISCONNECT. DEMO WIND CONE CIRCUIT STEP UP XFMR. REUSE EXISTING CONDUIT AND WIRES FOR WIND CONE CIRCUIT. THIS WORK SHALL BE SUBSIDIARY TO L-107a AND NO SEPARATE PAYMENT WILL BE MADE. (3)

EXISTING PLUG CUTOUTS LOCATED ON MEZZANINE IN ARFF BUILDING. SEE SHEET 39.

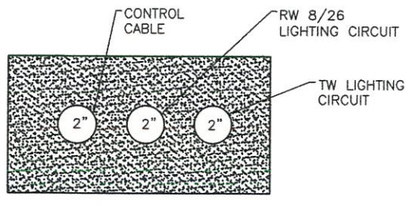
VERIFY ROUTING

MH-3

1/48




1/48 EXISTING DUCTBANK SECTION 1
NTS




2/48 EXISTING DUCTBANK SECTION 2
NTS

209+44.02
209+00
208+00
207+00
206+00
205+00
204+00
203+00

TAXIWAY C

R-1(2)
R-2(2)
T-1(2)

REMOVE RUNWAY AND TAXIWAY HOME RUN CONDUCTORS FROM PLUG CUTOUTS TO MH-7. THIS WORK SHALL BE SUBSIDIARY TO L-108a AND NO SEPARATE PAYMENT WILL BE MADE. REMOVE RW 8-26 HOMERUN CONDUCTORS WHILE RW 8-26 IS CLOSED. UTILIZE THIS CONDUIT FOR NEW RW 15-33 CONDUCTORS TO MINIMIZE OUTAGE TIME. SIMILAR PROCEDURE FOR TW CIRCUIT.

2" HDPE CONDUIT WITH 2-#8, 5KV AIRPORT CABLE, 1-#6 BARE COPPER GROUND FROM TEMPORARY THRESHOLD LIGHTS TO MH-4. CONNECT TEMPORARY JUMPERS TO CIRCUIT R-1 IN MH-4 FOR CONTINUATION OF CIRCUIT. ALL TEMPORARY AND PERMANENT 5KV CONNECTIONS SHALL BE MADE USING L-823 CONNECTORS

MH-4 (EL)

MH-5 (EL)

MH-2 (EL)

MH-6 (EL)

R-2(2) T-1(2)

REMOVE EXISTING WIND CONE, FOUNDATION, HANDHOLE, AND 2-#10 AWG, 1-#10 BARE CU GROUND FROM WIND CONE BACK TO MH-2. DEMO TRANSFORMER IN MH-2. EXISTING CONDUIT TO BE ABANDONED IN PLACE. THIS WORK SHALL BE SUBSIDIARY TO ITEM L-107a AND NO SEPARATE PAYMENT WILL BE MADE. (3)

MH-6 never located & appears not previously installed

2" HDPE CONDUIT WITH 2-#8, 5KV AIRPORT CABLE, 1-#6 BARE COPPER GROUND FROM TEMPORARY THRESHOLD LIGHTS TO MH-4. UTILIZE EXISTING DUCT BANK CROSSINGS AT TW C AND RW 15-33, APPROXIMATE STATION 13+90. AT CONTRACTOR'S OPTION, EXISTING DUCT BANK SOUTH OF MH-5 MAY BE UTILIZED, IF PRACTICAL, FOR TEMPORARY JUMPERS.

2/48

MATCH LINE STA 202+25 SHEET 46

MATCH LINE STA 15+25 SHEET 47

As-Built

500 0 500 1000
SCALE IN FEET

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

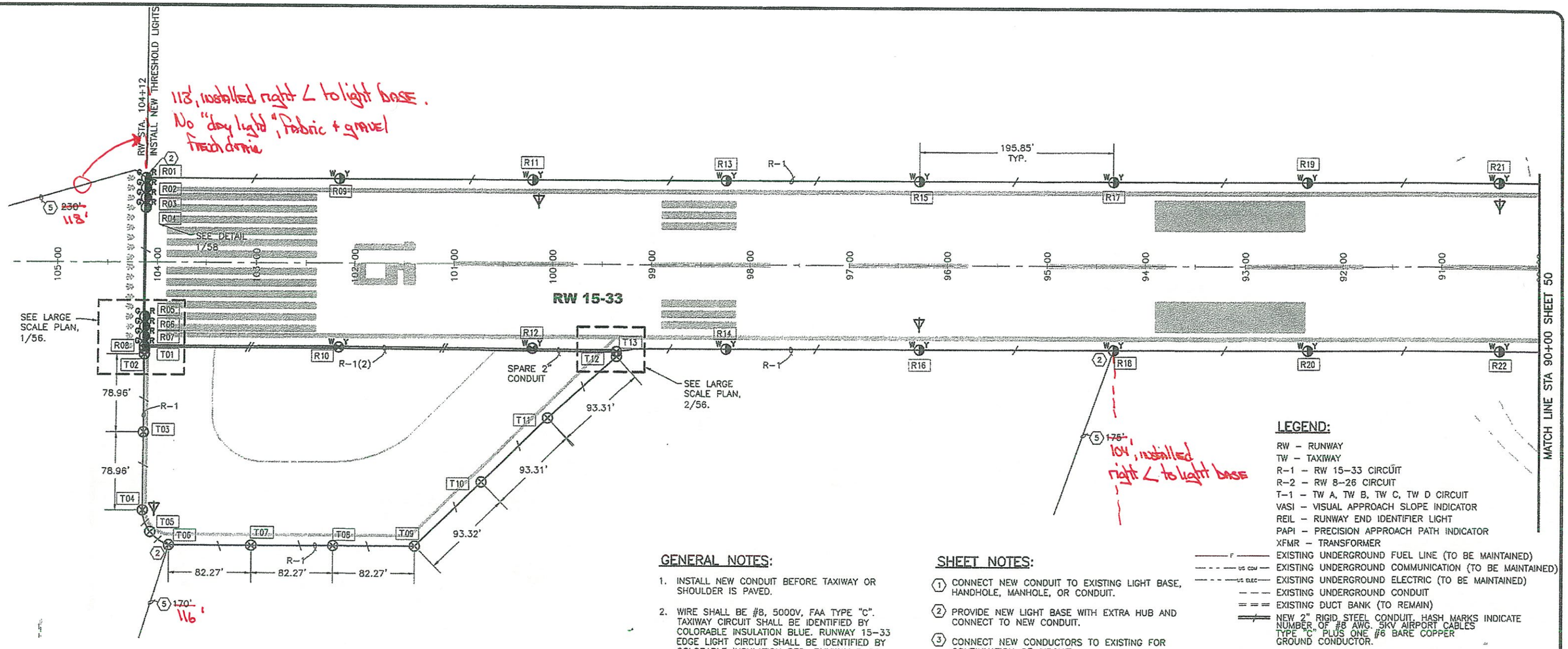
STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| GMV | 06/13/16 | WIND CONE AND RELATED WORK ADDED TO CONTRACT. (3) |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
TAXIWAY C
LIGHTING DEMOLITION PLAN

DATE: 05/16/2016
SHEET: 48R OF 97
AS-BUILT SHEET:




| LIGHT SCHEDULE | | | | | | |
|---|---|---|---|---|---|---|
| NUMBER | SYMBOLS | LOCATION | LIGHT DETAILS | | | |
| | | | LIGHT COLOR | LAMP WATTAGE | F.A.A. NUMBER | XFMR WATTAGE |
| 61 | ○ | RW EDGE LIGHT | WHITE | 150 | L862 | 150 |
| 31 | Y◐W | RW CAUTION ZONE LIGHT | YELLOW/WHITE | 150 | L862 | 150 |
| 16 | R◐G | RW THRESHOLD LIGHT | RED/GREEN | 200 | L862E | 200 |
| 10 | Y⊗W | RW FLUSH EDGE LIGHT | YELLOW/WHITE | (2)105 | L850C | 200 |
| 97 | ⊗ | TAXIWAY EDGE LIGHT | BLUE | 15 | L861T | 10/15 |

ALL TRANSFORMERS 6.6A/6.6A

## GENERAL NOTES:

1. INSTALL NEW CONDUIT BEFORE TAXIWAY OR SHOULDER IS PAVED.
2. WIRE SHALL BE #8, 5000V, FAA TYPE "C". TAXIWAY CIRCUIT SHALL BE IDENTIFIED BY COLORABLE INSULATION BLUE. RUNWAY 15–33 EDGE LIGHT CIRCUIT SHALL BE IDENTIFIED BY COLORABLE INSULATION RED. RUNWAY 8–26 EDGE LIGHT CIRCUIT SHALL BE IDENTIFIED BY BLACK INSULATION.
3. CONTRACTOR SHALL RESTORE LIGHTING CONTROL AND POWER CIRCUITS, TO THE SATISFACTION OF THE AIRPORT MANAGER, ONE HOUR PRIOR TO SUNSET.
4. CIRCUITS PASSING THROUGH LIGHT BASE SHALL NOT REQUIRE SERVICE LOOPS IF CABLE IS NOT INCIDENTAL TO THAT LIGHT'S CIRCUITRY.
5. PROVIDE LIGHT BASES WITH HUB CONFIGURATIONS AS SHOWN IN THE PLANS.
6. ALL BOLTS, NUTS, AND THREADED SURFACES SHALL BE COATED WITH ANTI–SIEZE PER SPECIFICATIONS.

## SHEET NOTES:

1. CONNECT NEW CONDUIT TO EXISTING LIGHT BASE, HANDHOLE, MANHOLE, OR CONDUIT.
2. PROVIDE NEW LIGHT BASE WITH EXTRA HUB AND CONNECT TO NEW CONDUIT.
3. CONNECT NEW CONDUCTORS TO EXISTING FOR CONTINUATION OF CIRCUIT.
4. EXISTING TO BE MAINTAINED AND WORKED AROUND.
5. INSTALL 2" PVC CONDUIT DRAINS TO DAYLIGHT AS SHOWN OR AS DIRECTED BY THE ENGINEER. APPROXIMATE LENGTH AS NOTED. COVER END WITH 1/4" STAINLESS STEEL RODENT SCREEN. ATTACH WITH STAINLESS STEEL BAND CLAMPS.

## LEGEND:

RW – RUNWAY
TW – TAXIWAY
R–1 – RW 15–33 CIRCUIT
R–2 – RW 8–26 CIRCUIT
T–1 – TW A, TW B, TW C, TW D CIRCUIT
VASI – VISUAL APPROACH SLOPE INDICATOR
REIL – RUNWAY END IDENTIFIER LIGHT
PAPI – PRECISION APPROACH PATH INDICATOR
XFMR – TRANSFORMER

- EXISTING UNDERGROUND FUEL LINE (TO BE MAINTAINED)
- EXISTING UNDERGROUND COMMUNICATION (TO BE MAINTAINED)
- EXISTING UNDERGROUND ELECTRIC (TO BE MAINTAINED)
- EXISTING UNDERGROUND CONDUIT
- EXISTING DUCT BANK (TO REMAIN)
- NEW 2" RIGID STEEL CONDUIT. HASH MARKS INDICATE NUMBER OF #8 AWG. 5KV AIRPORT CABLES TYPE "C" PLUS ONE #6 BARE COPPER GROUND CONDUCTOR.
- NEW 2" PVC CONDUIT. HASH MARKS INDICATE NUMBER OF #8 AWG. 5KV AIRPORT CABLES TYPE "C" PLUS ONE #6 BARE COPPER GROUND CONDUCTOR.
- EXISTING ELECTRIC MANHOLE (TO REMAIN)
- EXISTING RW EDGE LIGHT (TO REMAIN)
- EXISTING TAXIWAY EDGE LIGHT (TO REMAIN)
- EXISTING HANDHOLE (TO REMAIN)
- NEW RUNWAY THRESHOLD LIGHT – HIGH INTENSITY
- NEW RUNWAY EDGE LIGHT – HIGH INTENSITY
- NEW FLUSH RUNWAY EDGE LIGHT – HIGH INTENSITY
- NEW TAXIWAY EDGE LIGHT
- NEW HANDHOLE, L–867B
- NEW 3/4" X 10' GROUND ROD
- XXX LIGHT FIXTURE NUMBER
- X SIGN NUMBER – SEE SIGN SCHEDULE, SHEET 60
- NEW SIGN
- EXISTING VASI
- NEW LIGHTED WIND CONE

As-Built

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH Michael J. Love MICHAEL J LOVE 05/16/2016 EE-9116 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3–02–0065–011–2013
RUNWAY 15–33
LIGHTING PLAN

DATE: 05/16/2016
SHEET: 49 OF 97
AS–BUILT SHEET:

Date Revised: 5/16/2016, 3:57 PM
Layout Name: E1
File Path and Name: Z:\AK\0035\DA - Cold Bay Airport Improv\2013 - Runway 15-33\E - Working\Drawings\00035_E1-E7.dwg
Designed By: DMM
Drawn By: DMM
Checked By: MJL

MATCH LINE STA 90+00 SHEET 49

R23 R25 R27 R29 R31 R33 R35 R37

195.85' TYP.

R-1

89+00 88+00 87+00 86+00 85+00 84+00 83+00 82+00 81+00 80+00 79+00 78+00 77+00 76+00 75+00

RW 15-33

R24 R26 R28 R30 R32 R34 R36 R38

R-1

(5) 140' 104', installed right ∠ angle to light base

(2)

(5) 170' 120', installed right ∠ angle to light base

(5) 140' 129' installed right ∠ angle to light base

MATCH LINE STA 74+50

R39 R41 R43 R45 R47 R49 R51 R53

195.85 TYP.

R-1

74+00 73+00 72+00 71+00 70+00 69+00 68+00 67+00 66+00 65+00 64+00 63+00 62+00 61+00 60+00

RW 15-33

R40 R42 R44 R46 R48 R50 R52 R54

(5) 145' 124', installed right ∠ angle to light base.

124', installed right ∠ angle to light base

(5) 430' 82', installed right ∠ light base. No "day light" fabric & gravel "touch down"

MATCH LINE STA 59+00 SHEET 51

As-Built

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49 TH MICHAEL J. LOVE 05/16/2016 EE-5918 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
RUNWAY 15-33
LIGHTING PLAN

DATE: 05/16/2016
SHEET: 50 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 5/16/2016, 3:57 PM
Layout Name: E2
File Path and Name: Z:\G0039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\C-Working\Drawings\00039_E1-E7.dwg

MATCH LINE STA 59+00 SHEET 50

MATCH LINE STA 401+50 SHEET 54

MATCH LINE STA 43+50

MATCH LINE STA 43+50

MATCH LINE STA 28+00 SHEET 52

RW 15-33

RW 15-33

~~170'~~ 124'

~~160'~~ 124', installed right ∠ angle to light base

195.85' TYP.

~~300'~~ 124', installed right ∠ angle to light base

SEE LARGE SCALE PLAN, 3/56.

~~395'~~ 99', installed right ∠ angle to light base. No "day light", fabric & gravel "Trench detail"

~~325'~~ 132', installed right ∠ angle to light base. No "day light", fabric & gravel "Trench detail"

~~200'~~ 72', installed right ∠ angle to light base. No "day light", fabric & gravel "Trench detail"

~~325'~~ 82', installed right ∠ angle to light base. No "day light, fabric & gravel "Trench detail"

As-Built

SCALE IN FEET

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH MICHAEL J. LOVE 05/16/2016 EE-5318 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
RUNWAY 15-33
LIGHTING PLAN

DATE: 05/16/2016
SHEET: 51 OF 97
AS-BUILT SHEET:

Date Revised: 5/16/2016, 7:57 PM
Layout Name: E3
File Path and Name: Z:\D0039SBA - Cold Bay Airport Improv\2013 - Runway 15-33\VE-Working\Drawings\D0039_E1-E7.dwg
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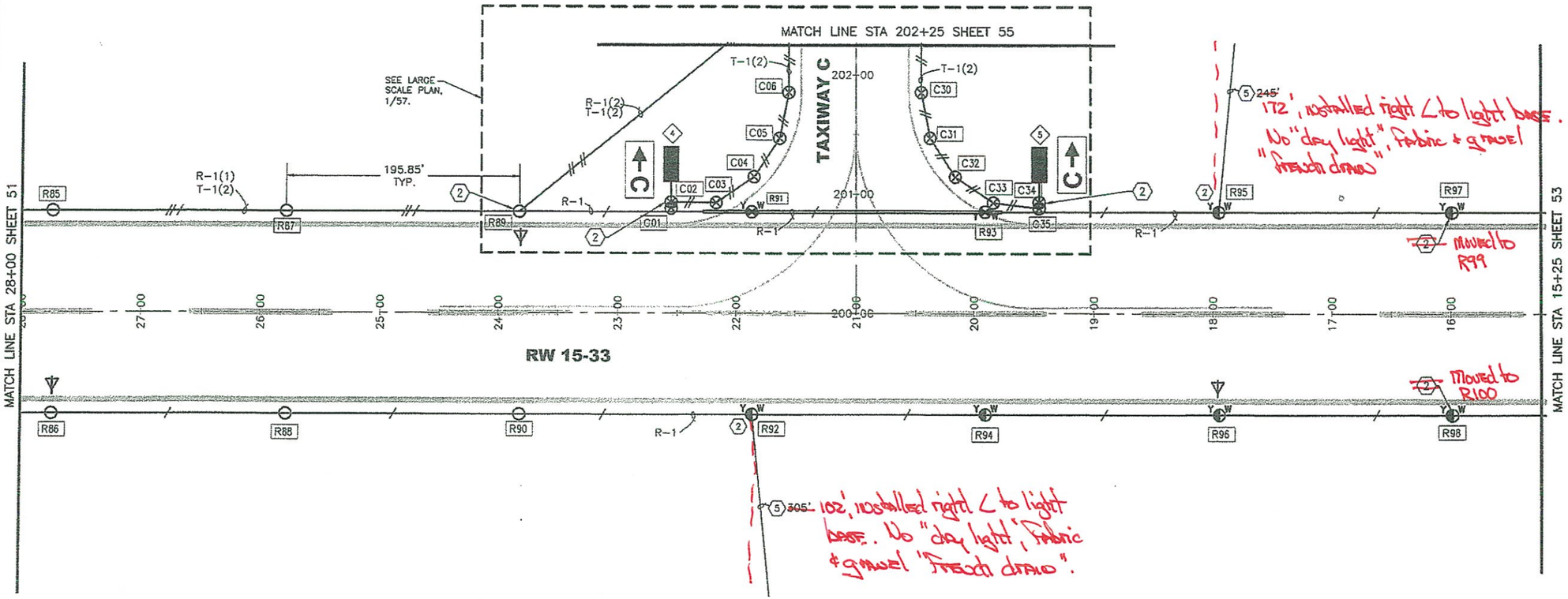
Drawn By: DMW
Checked By: MJL




| Designed By: | DMH |
|---|---|
| Drawn By: | GMV |
| Checked By: | MJL |

| Date Revised: | 5/16/2016, 3:57 PM |
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| File Path and Name: | Z:\09039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_E1-E7.dwg |

50 0 50 100
SCALE IN FEET

As-Built

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

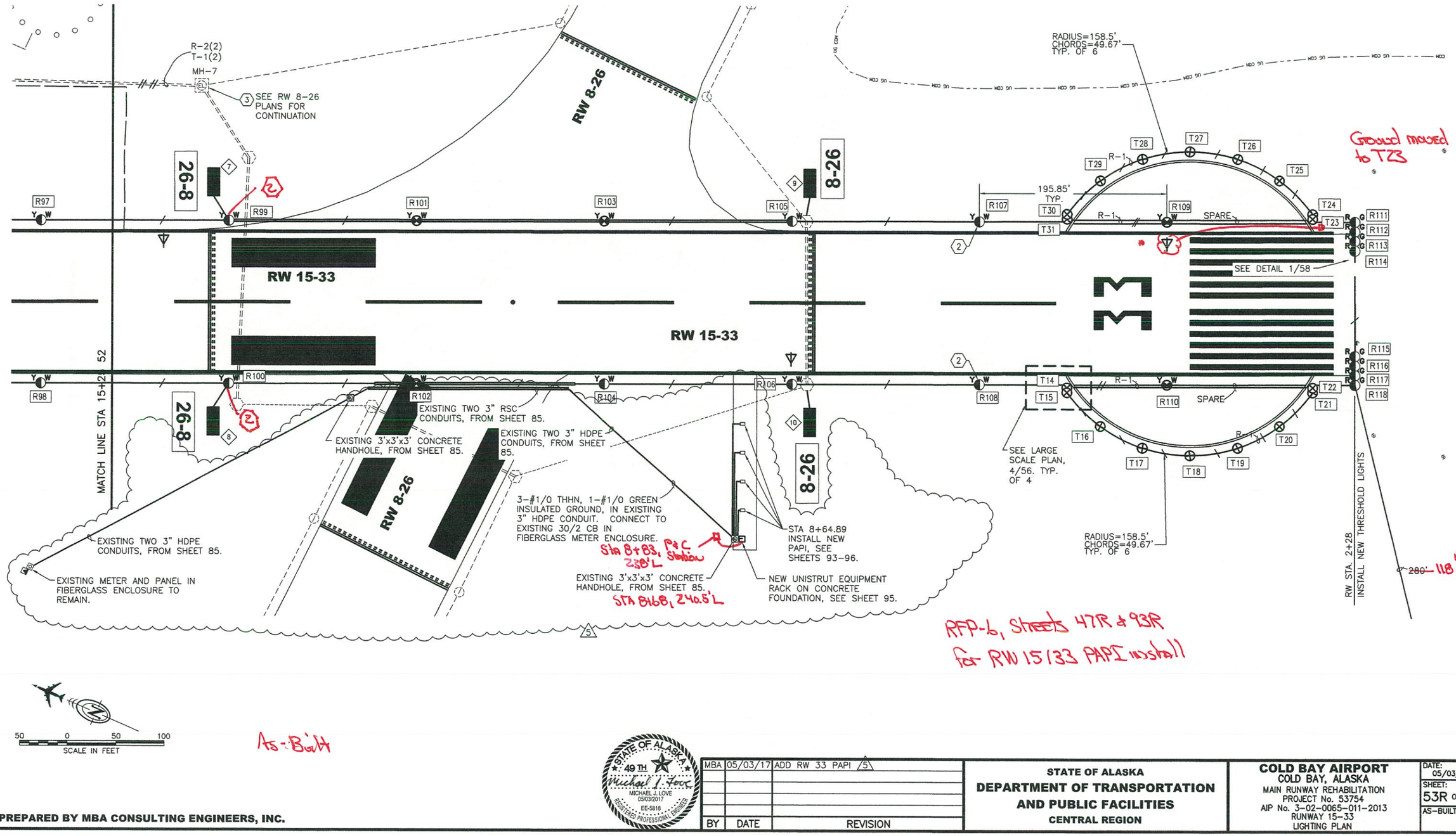
STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-6918
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
RUNWAY 15-33
LIGHTING PLAN

DATE: 05/16/2016
SHEET: 52 OF 97
AS-BUILT SHEET:




Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 5/03/2017, 3:01 PM
Layout Name: ESR
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STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/03/2017
EE-5818
REGISTERED PROFESSIONAL ENGINEER

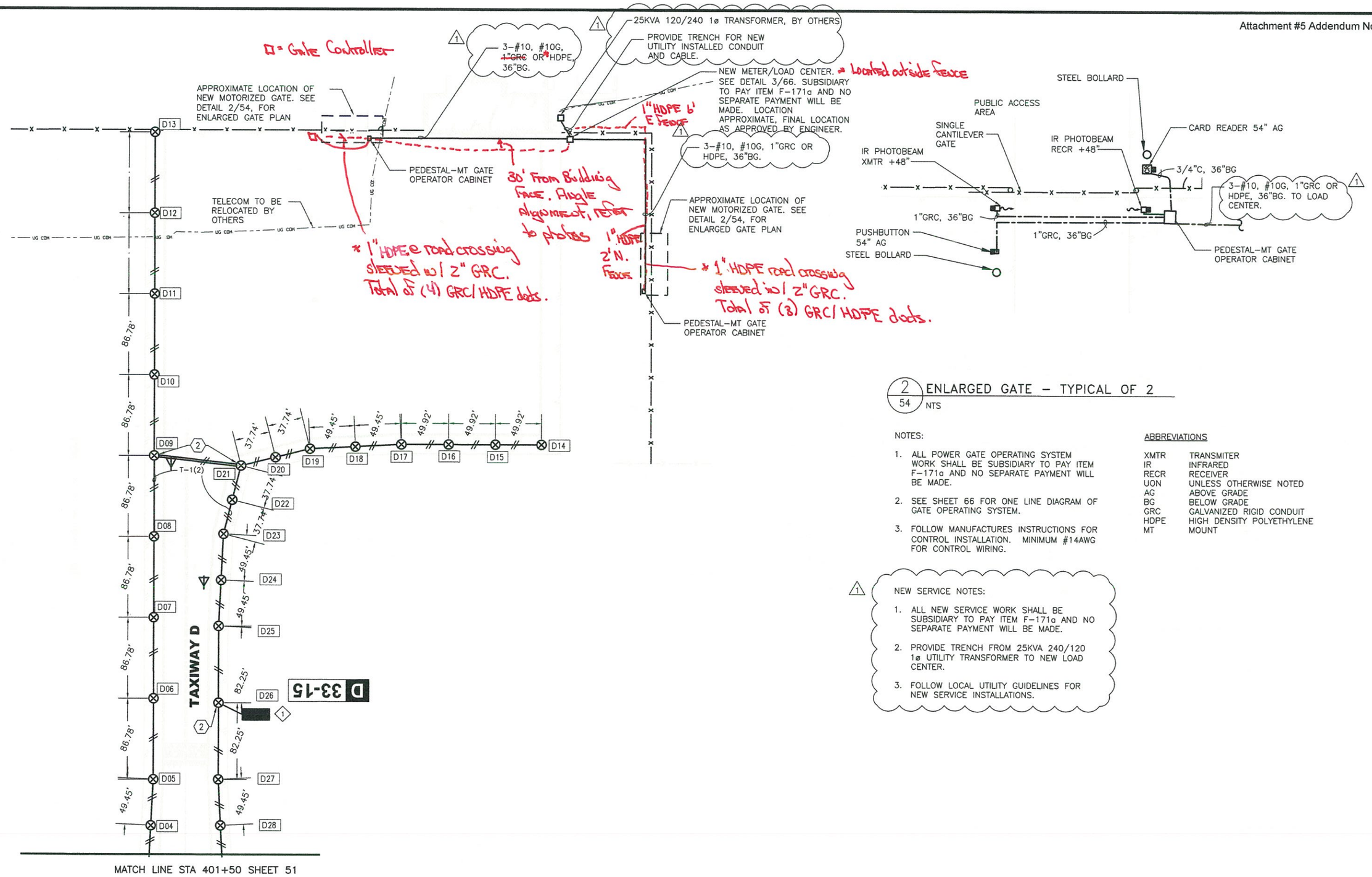
| BY | DATE | REVISION |
|---|---|---|
| MBA | 05/03/17 | ADD RW 33 PAPI /5 |

**PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.**

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
RUNWAY 15-33
LIGHTING PLAN

DATE: 05/03/2017
SHEET: 53R OF 97
AS-BUILT SHEET:




2/54 ENLARGED GATE – TYPICAL OF 2
NTS

NOTES:

1. ALL POWER GATE OPERATING SYSTEM WORK SHALL BE SUBSIDIARY TO PAY ITEM F-171a AND NO SEPARATE PAYMENT WILL BE MADE.
2. SEE SHEET 66 FOR ONE LINE DIAGRAM OF GATE OPERATING SYSTEM.
3. FOLLOW MANUFACTURES INSTRUCTIONS FOR CONTROL INSTALLATION. MINIMUM #14AWG FOR CONTROL WIRING.

ABBREVIATIONS

| | |
|---|---|
| XMTR | TRANSMITER |
| IR | INFRARED |
| RECR | RECEIVER |
| UON | UNLESS OTHERWISE NOTED |
| AG | ABOVE GRADE |
| BG | BELOW GRADE |
| GRC | GALVANIZED RIGID CONDUIT |
| HDPE | HIGH DENSITY POLYETHYLENE |
| MT | MOUNT |

△1 NEW SERVICE NOTES:

1. ALL NEW SERVICE WORK SHALL BE SUBSIDIARY TO PAY ITEM F-171a AND NO SEPARATE PAYMENT WILL BE MADE.
2. PROVIDE TRENCH FROM 25KVA 240/120 1ø UTILITY TRANSFORMER TO NEW LOAD CENTER.
3. FOLLOW LOCAL UTILITY GUIDELINES FOR NEW SERVICE INSTALLATIONS.

50 0 50 100
SCALE IN FEET

1/54 TAXIWAY LIGHTING PLAN
NTS

As-Built

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH MICHAEL J. LOVE 06/08/2016 EE-5818 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| GMV | 06/08/16 | NEW UTILITY SERVICE DETAILS ADDED △1 |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
TAXIWAY D LIGHTING PLAN

DATE: 05/16/2016
SHEET: 54R OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL
Date Revised: 6/08/2016, 10:15 AM
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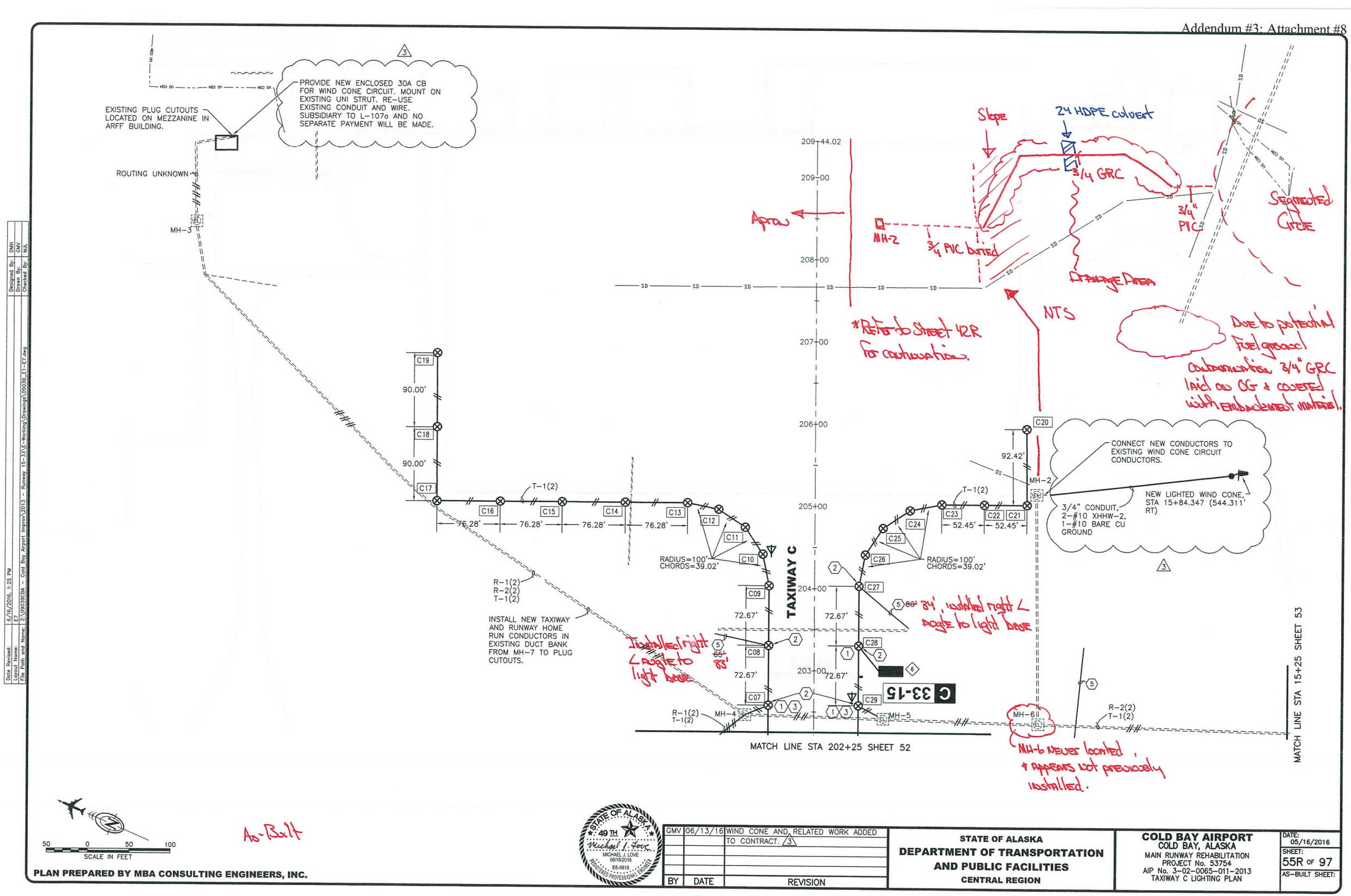


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|---|---|
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| Drawn By: | GMV |
| Checked By: | MJL |
| Date Revised: | 5/16/2016, 1:25 PM |
| Layout Name: | E7 |
| File Path and Name: | Z:\09039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\D9039_E1-E7.dwg |

50 0 50 100
SCALE IN FEET

As-Built

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

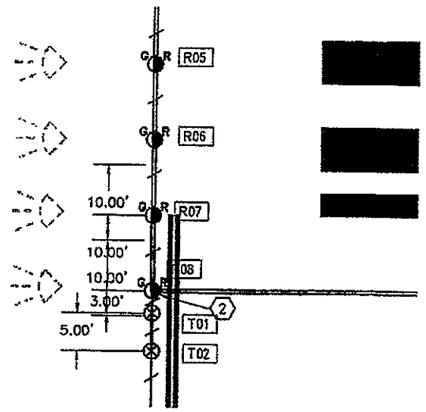
STATE OF ALASKA 49TH
MICHAEL J. LOVE
06/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| GMV | 06/13/16 | WIND CONE AND RELATED WORK ADDED TO CONTRACT. 3 |

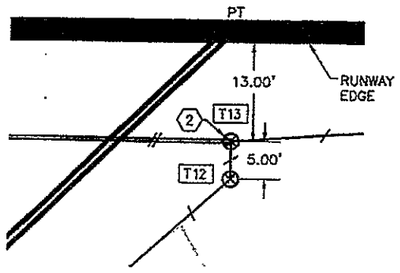
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
TAXIWAY C LIGHTING PLAN

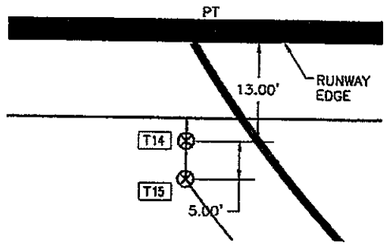
DATE: 05/16/2016
SHEET: 55R OF 97
AS-BUILT SHEET:



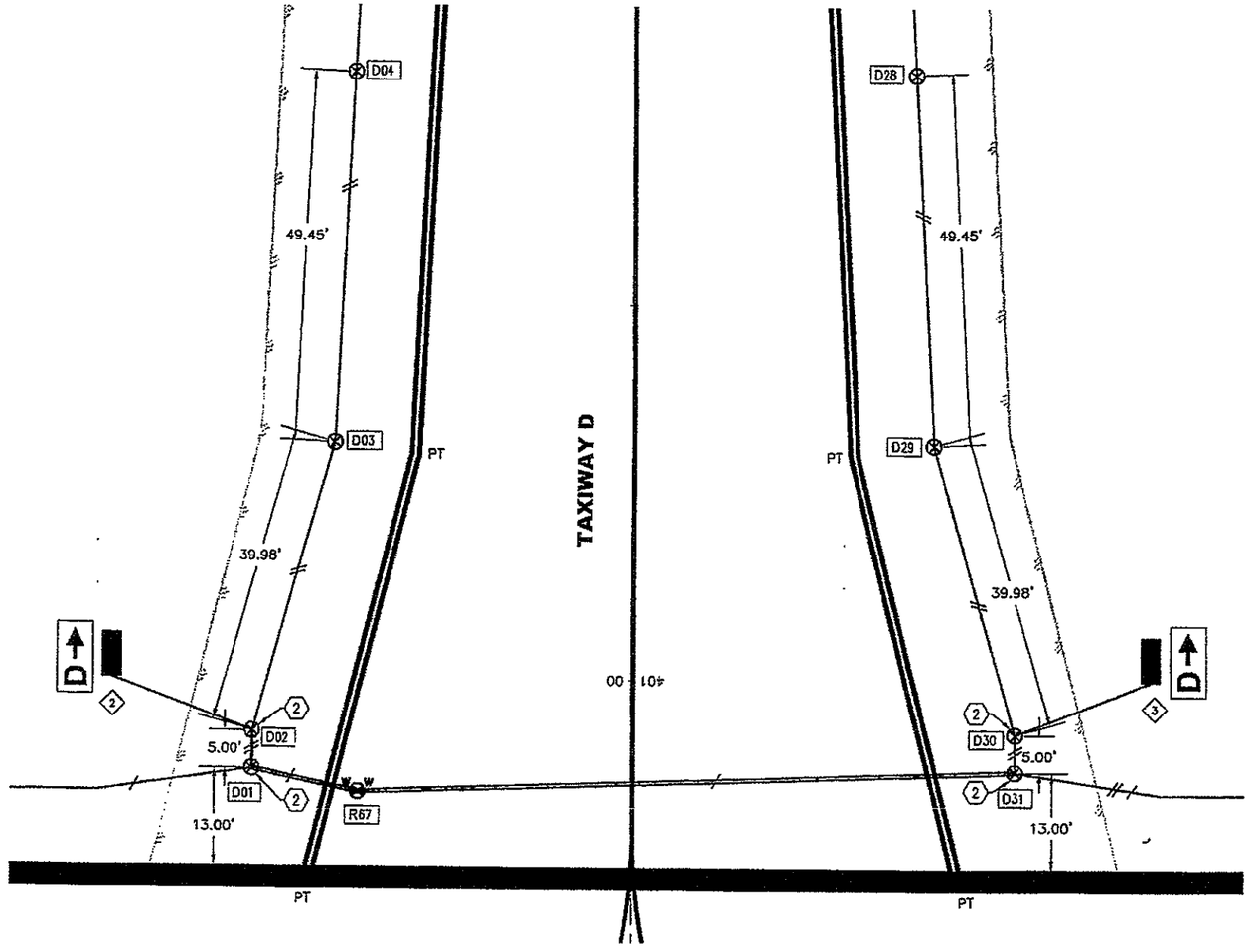

1/56 LARGE SCALE PLAN – RW 15 THRESHOLD




2/56 LARGE SCALE PLAN – RW 15 TURNAROUND




4/56 LARGE SCALE PLAN – RW 33 TURNAROUND




3/56 LARGE SCALE PLAN – TW D ENTRANCE

10 0 10 20
SCALE IN FEET

As-Built

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH MICHAEL J. LOVE 05/16/2016 EE-5818 REGISTERED PROFESSIONAL ENGINEER

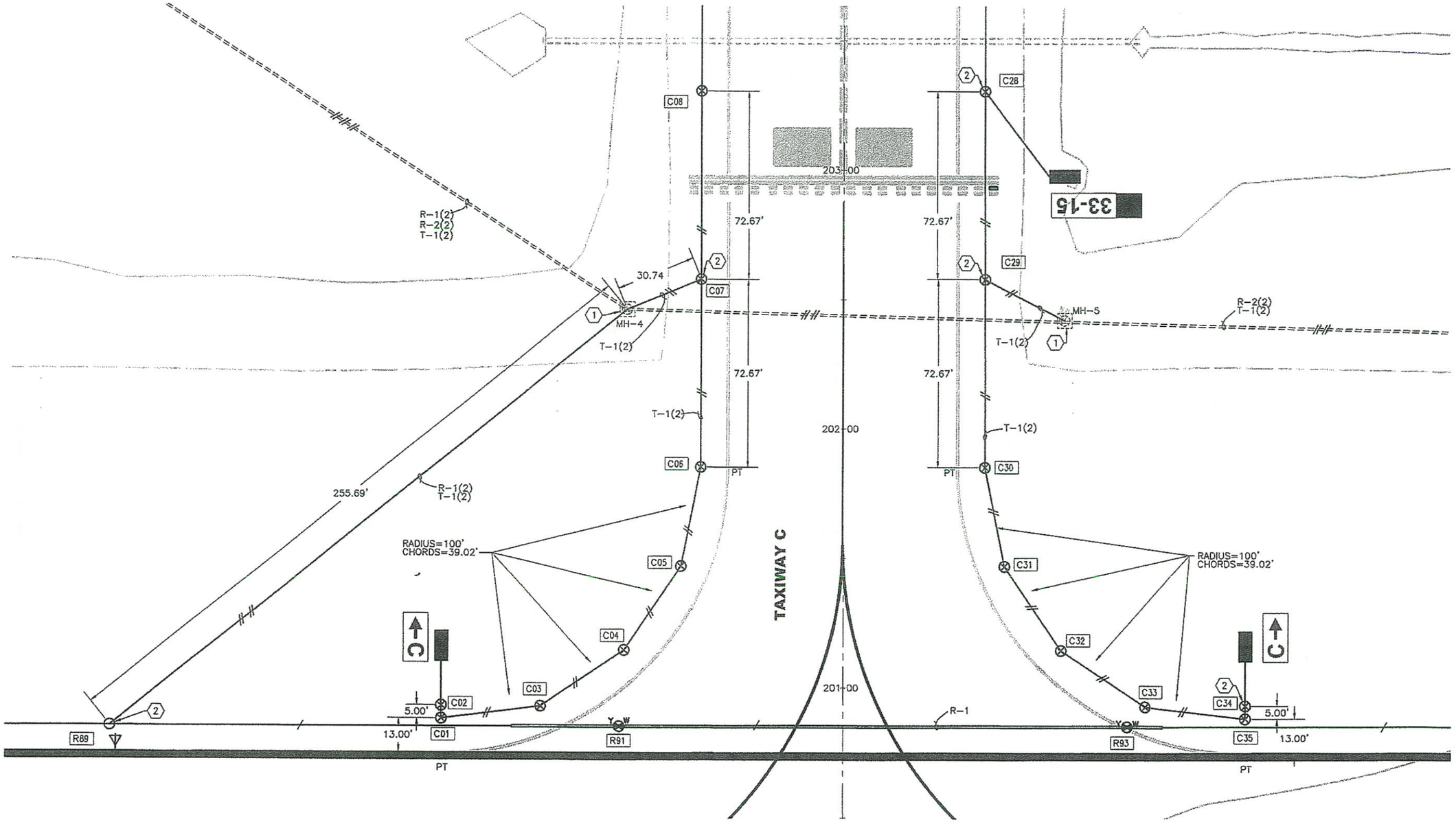
| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
ENLARGED PLANS

DATE: 05/16/2016
SHEET: 56 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL
Date Revised: 5/16/2016, 3:55 PM
Layout Name: D3
File Path and Name: Z:\0003\SDA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\00039_ED-ED.dwg




3/57 LARGE SCALE PLAN – TW C ENTRANCE

20 0 20 40
SCALE IN FEET

As-Built

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5515
REGISTERED PROFESSIONAL ENGINEER

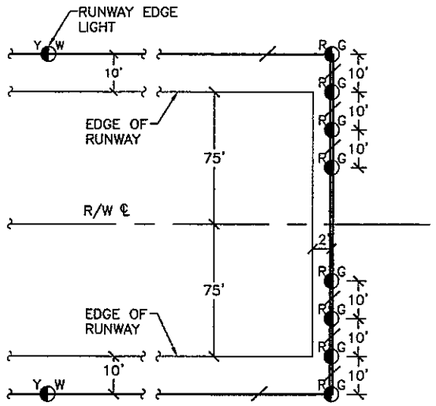
| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

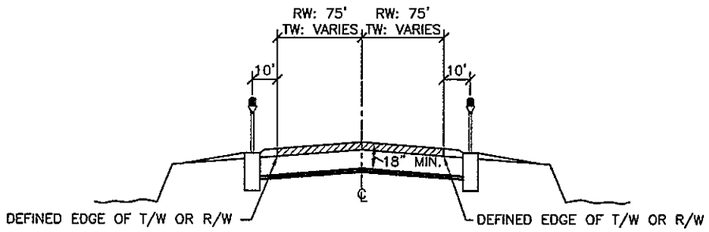
COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
ENLARGED PLAN

DATE: 05/16/2016
SHEET: 57 OF 97
AS-BUILT SHEET:

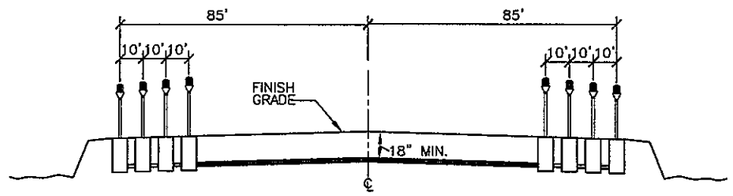
Designed By: DMH
Drawn By: CMW
Checked By: MJL
Date Revised:
Layout Name: E9
File Path and Name: Z:\G0039CBA – Cold Bay Airport Improv\2013 – Runway 15-33\E-Working\Drawings\G0039_E8-E9.dwg
5/16/2016, 3:58 PM




## 1 58 R/W THRESHOLD LIGHTING DETAIL
NTS

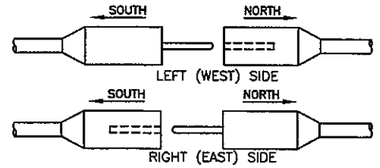



TAXIWAY OR RUNWAY

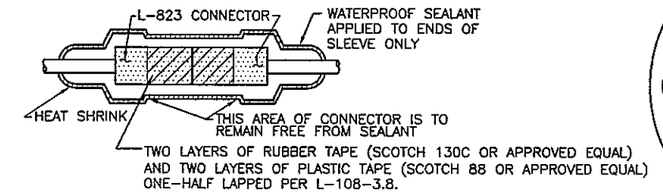



RUNWAY THRESHOLD

## 2 58 TYPICAL LIGHTING SECTIONS
NTS

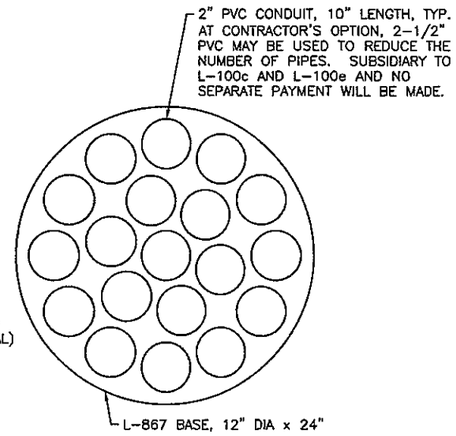



## ORIENTATION OF L–823 CABLE CONNECTION IN LIGHT BASE DETAIL




1. 5 kV CONDUCTORS SHALL BE PENCILED USING A PENCILING TOOL MANUFACTURED FOR USE ON #8, 5 kV, TYPE C AIRPORT CABLE, RIPLEY WS 49 OR APPROVED EQUAL.
2. CONNECTORS SHALL BE CRIMPED USING A RATCHET TYPE CRIMPING TOOL PER MANUFACTURER'S RECOMMENDATION. EACH CRIMP SHALL BE MADE WITH TWO CRIMPS, ROTATED 90°.

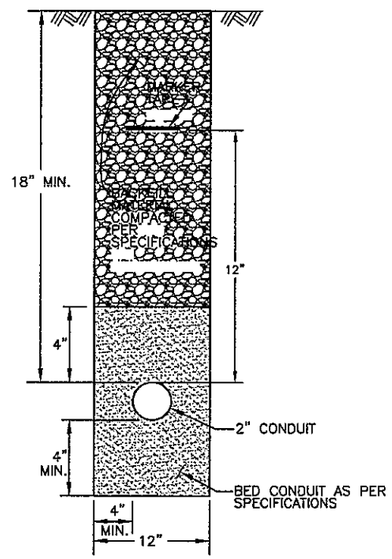
## 3 58 L–823 CONNECTOR
NTS



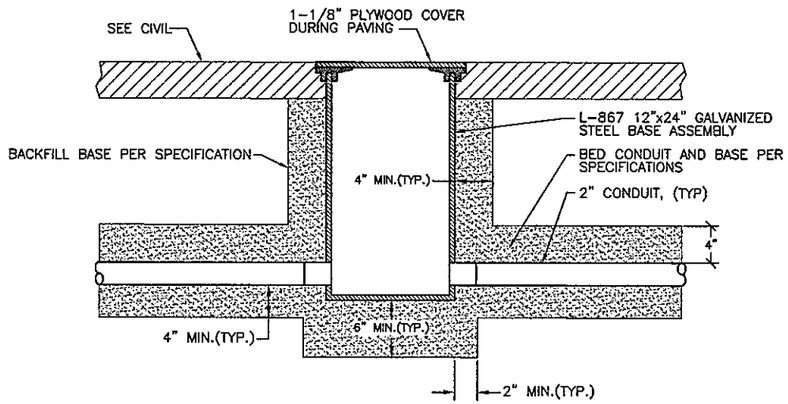

## 4 58 TRANSFORMER PLATFORM DETAIL
NTS

EDGE LIGHT NOTES:

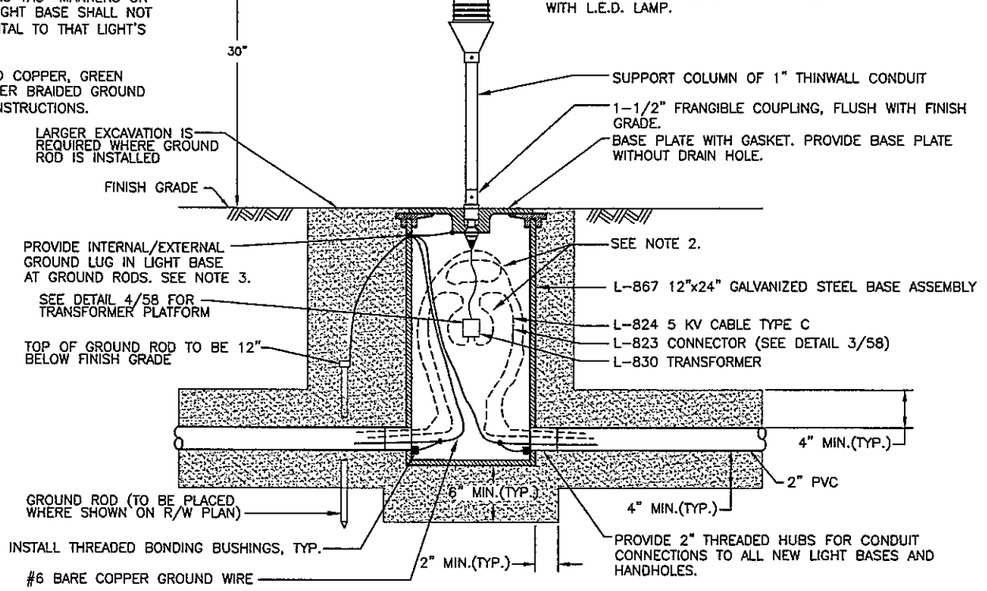
1. NEW BASE ASSEMBLIES SHALL BE TYPE L–867, CLASS I, SIZE B.
2. CABLES AND GROUND STRAPS SHALL HAVE SUFFICIENT SLACK TO ALLOW CONNECTORS TO BE DRAWN 36" ABOVE FINISHED GRADE. ALL CABLES SHALL BE TAGGED 6" FROM CONNECTOR WITH "FLAG TAG" MARKERS OR APPROVED EQUAL. CIRCUITS PASSING THROUGH LIGHT BASE SHALL NOT REQUIRE SERVICE LOOPS IF CABLE IS NOT INCIDENTAL TO THAT LIGHT'S CIRCUITRY.
3. GROUND FIXTURE WITH MINIMUM #6 AWG STRANDED COPPER, GREEN INSULATED CONDUCTOR OR WITH EQUIVALENT COPPER BRAIDED GROUND STRAP. BOND TO FIXTURE PER MANUFACTURER'S INSTRUCTIONS.




## 5 58 CONDUIT TRENCH DETAIL
NTS




## 6 58 L–867 BASE DETAIL DURING PAVING
NTS




## 7 58 L–867 BASE WITH LIGHT
NTS

Designed By: GMH
Drawn By: GMV
Checked By: MJL
Date Revised:
Layout Name: 5/16/2016, 3:38 PM, Layout1
File Path and Name: Z:\G8039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\G8039_E10.dwg

STATE OF ALASKA
49TH
MICHAEL J. LOVE
05/16/2016
EE-5815
REGISTERED PROFESSIONAL ENGINEER

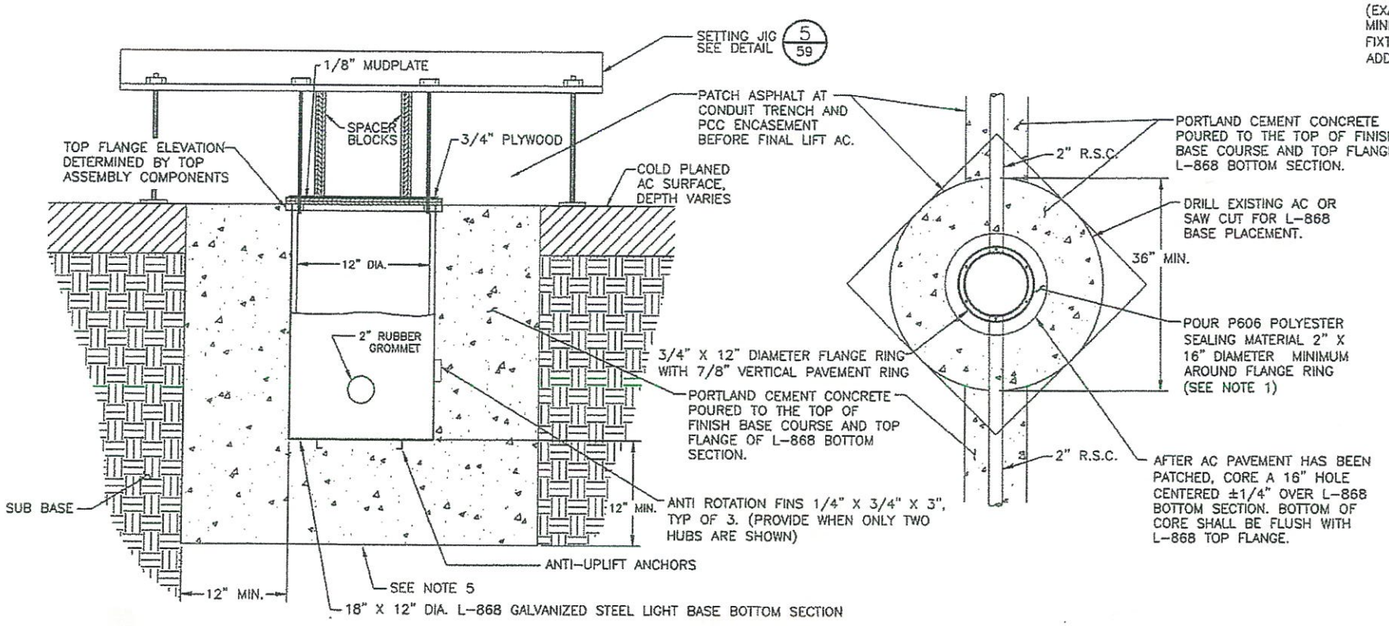
PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

| BY | DATE | REVISION |
|---|---|---|

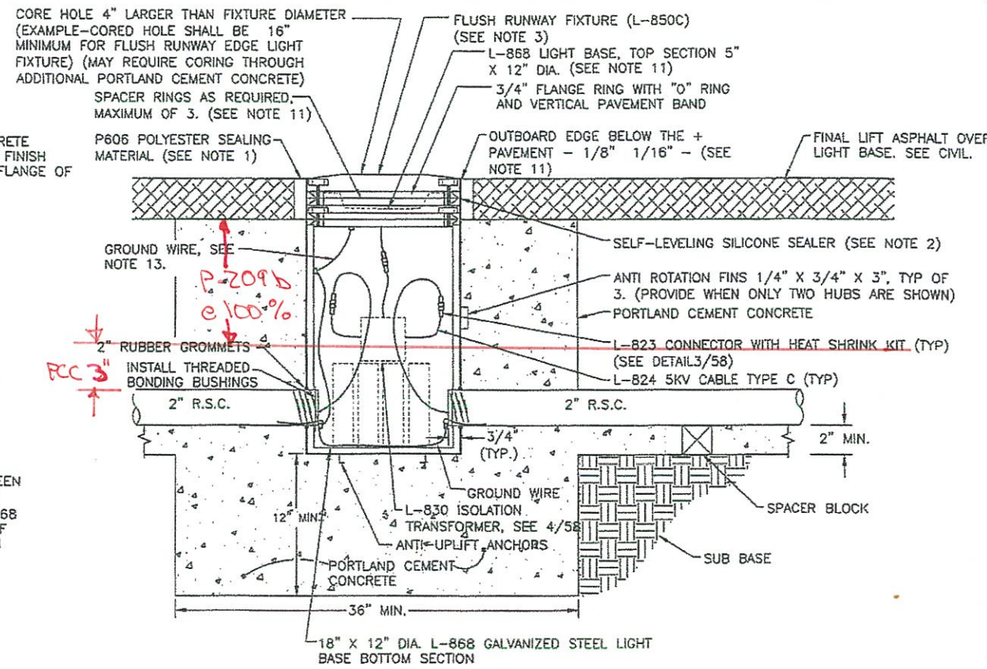
STATE OF ALASKA
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
CENTRAL REGION

**COLD BAY AIRPORT**
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3–02–0065–011–2013
LIGHTING DETAILS

DATE: 05/16/2016
SHEET: 58 OF 97
AS–BUILT SHEET:




1/59 NEW LIGHT BASE INSTALLATION – SECTION
NTS



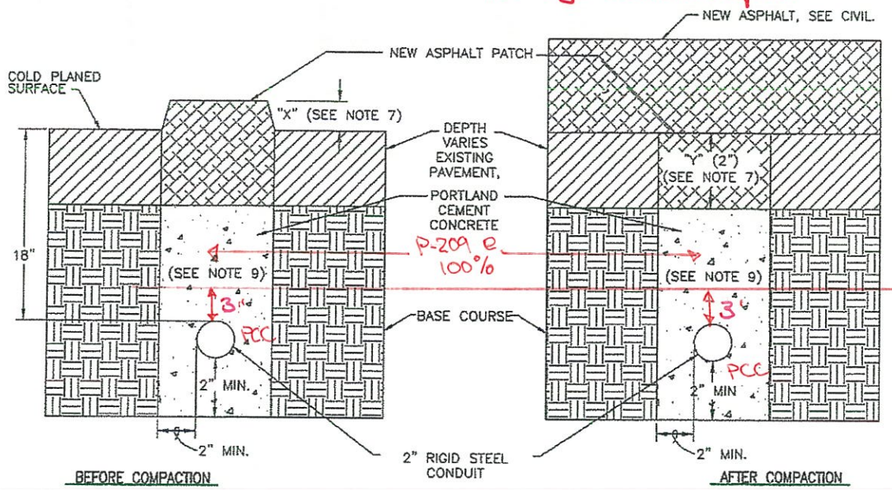

3/59 NEW LIGHT BASE ASSEMBLY
NTS

2/59 NEW LIGHT BASE INSTALLATION – PLAN VIEW
NTS

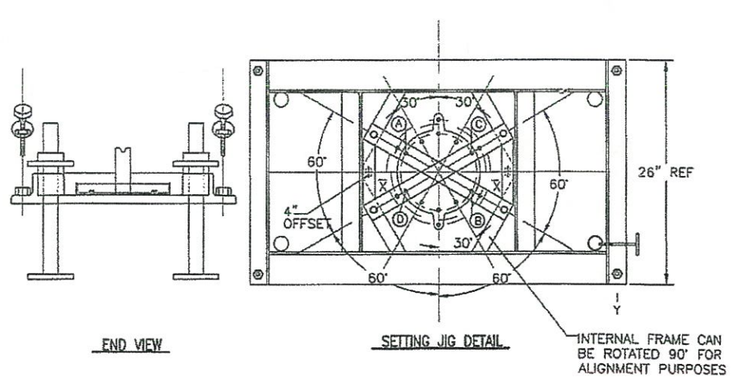
NOTES:

1) POLYESTER SEALING MATERIAL SHALL BE BITUPLASTIC MATERIALS MEETING SECTION P-606. SURFACE SHALL BE COMPLETELY CLEAN AND DRY BEFORE INSTALLING.
2) SELF-LEVELING SILICONE SEALER SHALL BE GE BRAND RTV 118 OR APPROVED EQUAL.
3) FIXTURE SHALL BE A FLUSH MOUNT MODEL AND INSTALLATION SHALL BE A DRY-TYPE SYSTEM.
4) CONDUIT SYSTEM SHALL BE INSTALLED AT THE SAME GRADE AS THE RUNWAY AND SLOPED TO DRAIN TO THE LOW SPOTS AND DRAINS WHERE SHOWN.
5) BOTTOM OF CORED HOLE SHALL BE COMPACTED BEFORE CONCRETE IS POURED.
6) A THIRD HUB FOR A CONDUIT DRAIN SHALL BE PROVIDED WHERE SHOWN ON PLANS.
7) HEIGHT OF "X" MAY VARY DEPENDING ON FIELD CONDITIONS. HEIGHT OF "X" SHALL EQUAL 1/4" PER 1" OF COMPACTED DEPTH "Y".
8) SETTING JIG FOR FIXTURE SHALL BE FROM JAQUITH INDUSTRIES INC. OR APPROVED EQUAL AND SHALL BE SUBSIDIARY TO THE CONTRACT.
9) CONCRETE SHALL MEET THE REQUIREMENTS FOR STRUCTURAL CONCRETE (ITEM P-610).
10) ALL CONDUIT SHALL BE INSTALLED BEFORE FINAL PAVING OPERATION BEGINS. NEW FLUSH FIXTURE BOTTOM SECTION SHALL BE INSTALLED BEFORE FINAL LIFT ASPHALT.
11) CONTRACTOR SHALL INSTALL ONE 3/8" SPACER RING FOR FUTURE ADJUSTMENT AND ANY OTHER SPACER RINGS AS REQUIRED TO MEET FINAL ELEVATION. UNDER NO CONDITION SHALL THE TOP SECTION BE REDUCED TO LESS THAN 5". ALL MATERIALS REQUIRED SHALL BE SUBSIDIARY TO ITEM L-100k AND NO SEPARATE PAYMENT WILL BE MADE.
12) CABLES AND GROUND STRAPS SHALL HAVE SUFFICIENT SLACK TO ALLOW CONNECTORS TO BE DRAWN 36" ABOVE FINISHED GRADE. ALL CABLES SHALL BE TAGGED 6" FROM CONNECTOR WITH "FLAG TAG" MARKERS OR APPROVED EQUAL. CIRCUITS PASSING THROUGH LIGHT BASE SHALL NOT REQUIRE SERVICE LOOPS IF CABLE IS NOT INCIDENTAL TO THAT LIGHT'S CIRCUITRY.
13) GROUND FIXTURE WITH MINIMUM #6 AWG STRANDED COPPER, GREEN INSULATED CONDUCTOR OR WITH EQUIVALENT COPPER BRAIDED GROUND STRAP. BOND TO FIXTURE PER MANUFACTURER'S INSTRUCTIONS.

* Refer to 6/20/17 Brad Hawkins / Doug Hawke e-mail allowing re-design concrete depth.




4/59 CONDUIT TRENCH THROUGH EXISTING PAVEMENT
NTS




5/59 SETTING JIG
NTS

As-Built

STATE OF ALASKA 49TH MICHAEL J. LOVE 05/16/2016 EE-5918 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

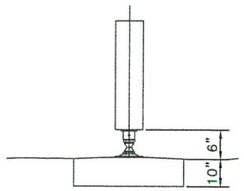
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
FLUSH LIGHTING DETAILS

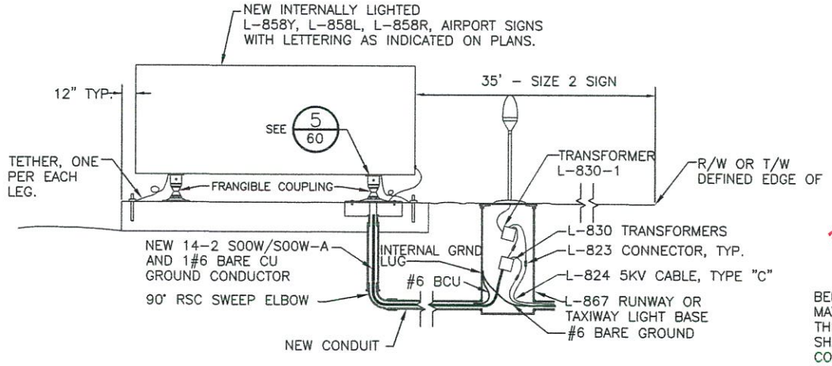
DATE: 05/16/2016
SHEET: 59 OF 97
AS-BUILT SHEET:

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

Designed By: DMH
Drawn By: DMV
Checked By: MJL
Date Plotted: 5/16/2016, 3:58 PM
Layout Name:
File Path and Name: Z:\0903\CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working Drawings\090339_E11.dwg

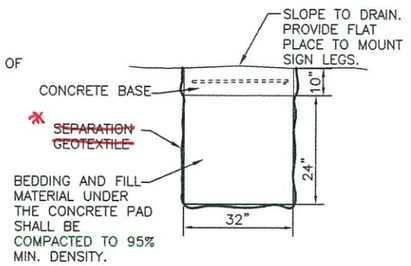



1/60 SIDE VIEW
NTS

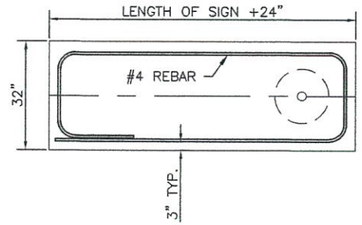



2/60 FRONT VIEW
NTS

## L-858 SIGN DETAILS

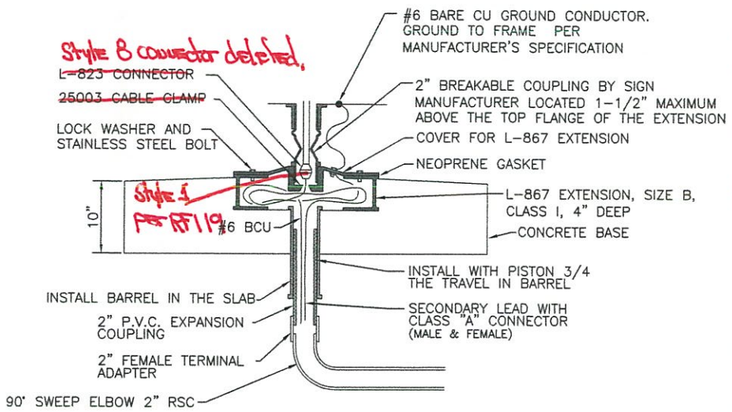



3/60 CONCRETE BASE SIDE VIEW
NTS

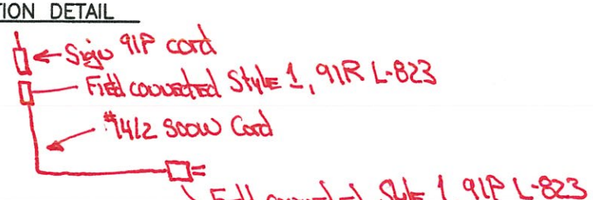



4/60 CONCRETE BASE PLAN
NTS

* Geo-textile deleted
Excavated Spec.




5/60 ELECTRICAL CONNECTION DETAIL
NTS




As Built

New detail per RFI 19

## SIGN SCHEDULE

| SIGN No. | SIDE | PANEL | TYPE | PURPOSE | LEGEND | LEGEND COLOR | FACE COLOR | STATIONING | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | L-858R | MANDATORY INSTRUCTION SIGN | 33-15 | WHITE | RED | TW D 403+00.00 (60.00 RT) | |
| | 2 | 2 | L-858L | TAXIWAY LOCATION SIGN | D | YELLOW | BLACK | | |
| 2 | 1 | 1 | L-858Y | RUNWAY EXIT SIGN | ← D | BLACK | YELLOW | TW D 401+10.00 (71.55 LT) | |
| | 2 | | | | | | | | |
| 3 | 1 | 1 | L-858Y | RUNWAY EXIT SIGN | D → | BLACK | YELLOW | TW D 401+10.00 (71.55 RT) | |
| | 2 | | | | | | | | |
| 4 | 1 | 1 | L-858Y | RUNWAY EXIT SIGN | ← C | BLACK | YELLOW | TW C 201+10.00 (155.00 LT) | |
| | 2 | | | | | | | | |
| 5 | 1 | 1 | L-858Y | RUNWAY EXIT SIGN | C → | BLACK | YELLOW | TW C 201+10.00 (155.00 RT) | |
| | 2 | | | | | | | | |
| 6 | 1 | 1 | L-858R | MANDATORY INSTRUCTION SIGN | 33-15 | WHITE | RED | TW C 203+00.00 (80.00 RT) | |
| | 2 | 2 | L-858L | TAXIWAY LOCATION SIGN | C | YELLOW | BLACK | | |
| 7 | 1 | 1 | L-858R | MANDATORY INSTRUCTION SIGN | 26-8 | WHITE | RED | RW 15-33 14+24.34 (110.00 RT) | |
| | 2 | | | | | | | | |
| 8 | 1 | 1 | L-858R | MANDATORY INSTRUCTION SIGN | 26-8 | WHITE | RED | RW 15-33 14+24.34 (110.00 LT) | |
| | 2 | | | | | | | | |
| 9 | 1 | 1 | L-858R | MANDATORY INSTRUCTION SIGN | 8-26 | WHITE | RED | RW 15-33 7+91.32 (110.00 RT) | |
| | 2 | | | | | | | | |
| 10 | 1 | 1 | L-858R | MANDATORY INSTRUCTION SIGN | 8-26 | WHITE | RED | RW 15-33 7+91.32 (110.00 LT) | |
| | 2 | | | | | | | | |

NOTES:

1. ALL NEW SIGNS - LED, SIZE 2, STYLE 2 AND 3, CLASS 2, MODE 3.
2. ALL CIRCUITS 6.6 A
3. PROVIDE NEW TRANSFORMERS, SECONDARY WIRING, AND GROUNDING. TRANSFORMER WATTAGE SIZE PER MANUFACTURER'S SPECIFICATION.
4. ATTACH SIGNS TO CONCRETE BASE IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTION.
5. THE CONTRACTOR SHALL CERTIFY THE CONCRETE BASE IS CONSTRUCTED TO MEET THE SPECIFICATION P610. CONCRETE BASE SHALL BE LEVEL AND PERPENDICULAR TO RW OR TW CENTERLINE.
6. CONDUIT SHALL MEET THE SPECIFICATION L-110.
7. CABLE AND CONDUCTORS SHALL MEET THE SPECIFICATION L-108.
8. BEDDING, BACK FILL AND FINISH GRADE RESTORATION SHALL BE SUBSIDIARY TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE.
9. ALL CABLES PASSING THROUGH BASE SHALL HAVE SUFFICIENT SLACK TO ALLOW CONNECTORS TO BE DRAWN 3' ABOVE FINISHED GRADE. ALL CABLES SHALL BE TAGGED.
10. SUSPEND TRANSFORMER AND CONNECTOR IN UPPER HALF OF BASE SEE DETAIL 4/58.
11. SIGNS TO BE INSTALLED SO THAT THE FACE IS PERPENDICULAR TO THE CENTERLINE OF RUNWAY OR TAXIWAY.
12. STATION AND OFFSET REFER TO THE EDGE OF THE SIGN NEAREST THE RUNWAY OR TAXIWAY. SEE DETAIL 2/60.
13. OFFSETS LISTED IN THE SIGN SCHEDULE ARE FROM THE CENTERLINE OF THE RUNWAY OR TAXIWAY.
14. SIGN PANELS ARE NUMBERED STARTING WITH THE PANEL CLOSEST TO THE RUNWAY OR TAXIWAY EDGE.

STATE OF ALASKA 49TH MICHAEL J. LOVE 05/16/2016 REGISTERED PROFESSIONAL ENGINEER EE-5818

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

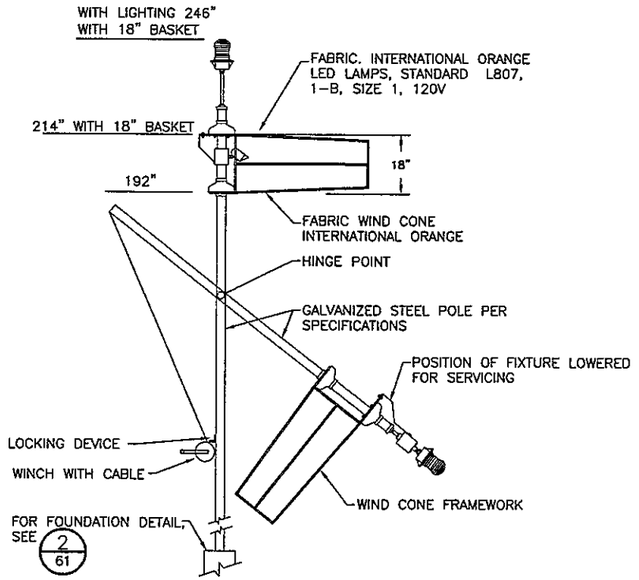
| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
SIGN DETAILS

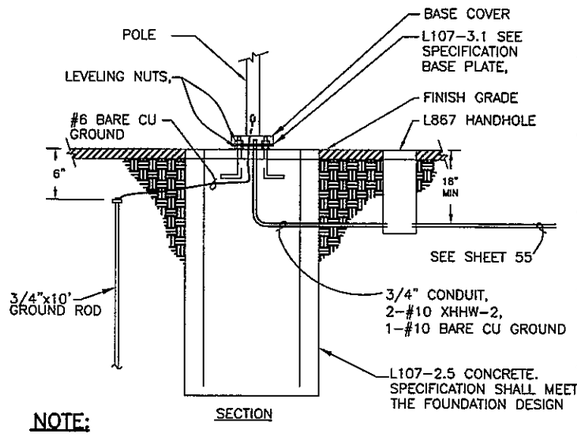
DATE: 05/16/2016
SHEET: 60 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL
Date Revised: 5/16/2016, 3:59 PM
Layout Name: E12
File Path and Name: Z:\09039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\E12.dwg




INTERNALLY LIGHTED L807 WIND CONE.

1/61 L807 LIGHTED WIND CONE DETAIL
NTS




SECTION

**NOTE:**

1. MANUFACTURER'S SHOP DRAWINGS. VERIFY ANCHOR BOLT SIZE, BOLT CIRCLE, AND FOUNDATION SIZE WITH

2/61 L807 WIND CONE POLE BASE DETAIL
NTS

3

As-Built

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/10/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

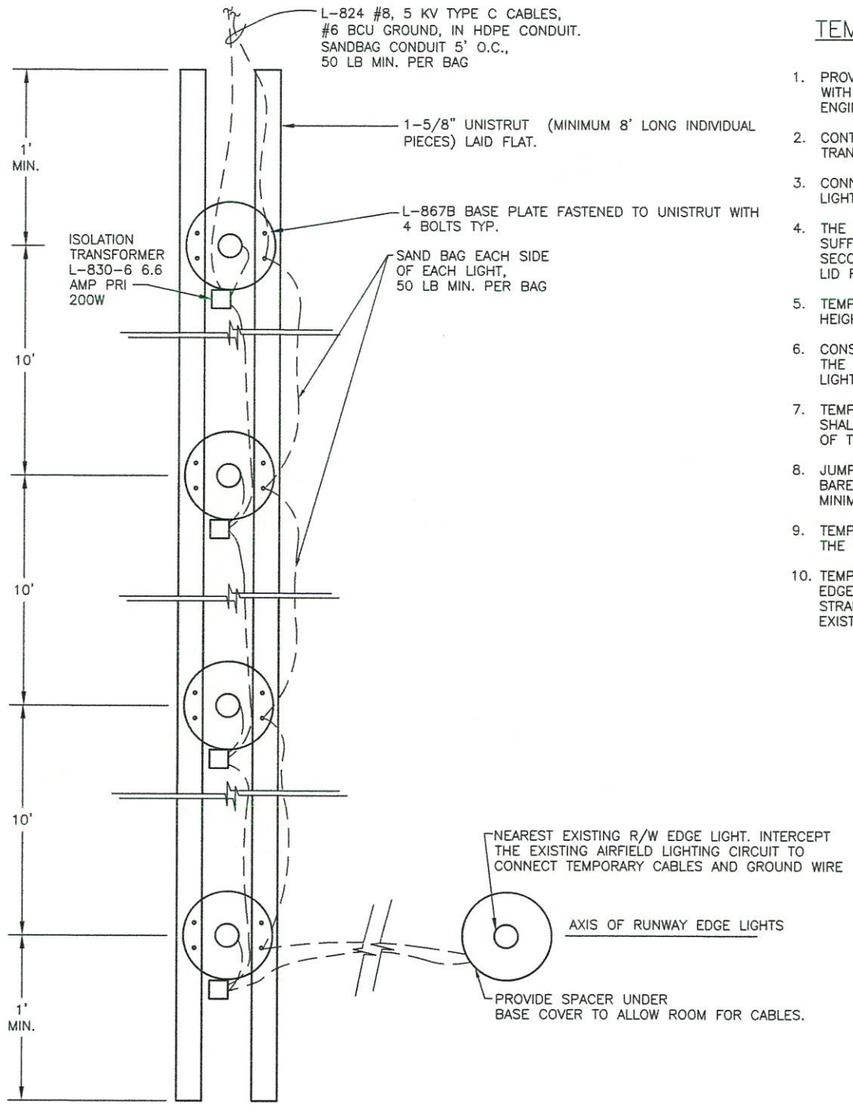
| BY | DATE | REVISION |
|---|---|---|
| GMV | 06/13/16 | WIND CONE AND RELATED WORK ADDED TO CONTRACT. 3 |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
WIND CONE DETAILS

DATE: 05/16/2016
SHEET: 61R OF 97
AS-BUILT SHEET:

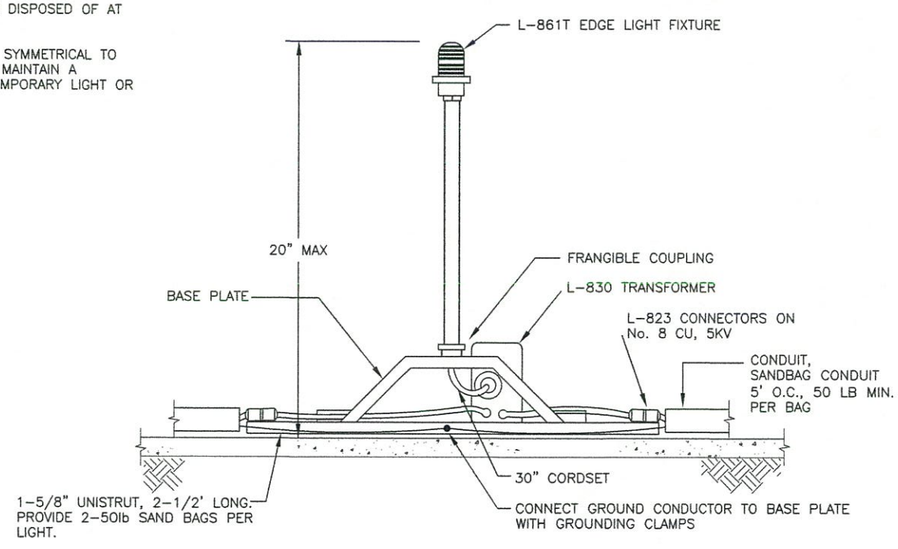
Designed By: DMH
Drawn By: GMV
Checked By: MJL
Date Revised: 6/15/2016, 1:26 PM
Layout Name: E13
File Path and Name: E:\09039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_E13.dwg




1 / 62 TEMPORARY THRESHOLD LIGHT BAR
NTS

## TEMPORARY LIGHTING NOTES:

1. PROVIDE 2 TEMPORARY THRESHOLD LIGHT BARS IN ACCORDANCE WITH THE PROJECT SAFETY PLAN AND AS DIRECTED BY THE ENGINEER.
2. CONTRACTOR MAY USE AT HIS DISCRETION FIXTURES AND TRANSFORMERS REMOVED FROM THE PROJECT.
3. CONNECT TEMPORARY THRESHOLD LIGHT BARS TO EXISTING EDGE LIGHT CIRCUIT.
4. THE TEMPORARY LIGHT FIXTURES SHALL HAVE CORD SETS OF SUFFICIENT LENGTH TO ALLOW CONNECTION TO TRANSFORMER SECONDARY REMOTE FROM THE AREA UNDERNEATH THE L-867B LID FOR THE TEMPORARY THRESHOLD
5. TEMPORARY LIGHT FIXTURES SHALL BE L-862E (200W), THE SAME HEIGHT: 20"
6. CONSTRUCTION, INSTALLATION, MAINTENANCE AND DEMOLITION OF THE TEMPORARY THRESHOLD LIGHT BARS AND TEMPORARY EDGE LIGHTS SHALL BE SUBSIDIARY TO PAY ITEM L-100r.
7. TEMPORARY THRESHOLD LIGHT BARS AND TEMPORARY EDGE LIGHTS SHALL BE OFFERED TO THE STATE FOR SALVAGE AT COMPLETION OF THE PROJECT.
8. JUMPERS SHALL BE RUN IN HDPE CONDUIT WITH A SEPARATE #6 BARE COPPER GROUND. SAND BAG CONDUIT 5' O.C., 50 LB MINIMUM PER SAND BAG.
9. TEMPORARY JUMPERS SHALL BE SALVAGED OR DISPOSED OF AT THE DIRECTION OF THE ENGINEER.
10. TEMPORARY EDGE LIGHTS SHALL BE LAID OUT SYMMETRICAL TO EDGE LIGHTS ON OPPOSITE SIDE OF RUNWAY. MAINTAIN A STRAIGHT LINE WITH PREVIOUSLY INSTALLED TEMPORARY LIGHT OR EXISTING EDGE LIGHT.




2 / 62 TEMPORARY EDGE LIGHT DETAIL
NTS

As-Built

STATE OF ALASKA
49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
TEMPORARY LIGHTING DETAILS

DATE: 05/16/2016
SHEET: 62 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL
Date Revised: 5/16/2016, 3:59 PM
Layout Name: E14
File Path and Name: Z:\09039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_E14.dwg

| NUMBER | COLOR | TYPE | LAMP | XFMR | STATION | OFFSET | | CIRCUIT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| R 1 | G/R | L-862E | 200 | 200 | 104+12.00 | 85 R | RW 15-33 | R-1 | |
| R 2 | G/R | L-862E | 200 | 200 | 104+12.00 | 75 R | RW 15-33 | R-1 | |
| R 3 | G/R | L-862E | 200 | 200 | 104+12.00 | 65 R | RW 15-33 | R-1 | |
| R 4 | G/R | L-862E | 200 | 200 | 104+12.00 | 55 R | RW 15-33 | R-1 | |
| R 5 | G/R | L-862E | 200 | 200 | 104+12.00 | 55 L | RW 15-33 | R-1 | |
| R 6 | G/R | L-862E | 200 | 200 | 104+12.00 | 65 L | RW 15-33 | R-1 | |
| R 7 | G/R | L-862E | 200 | 200 | 104+12.00 | 75 L | RW 15-33 | R-1 | |
| R 8 | G/R | L-862E | 200 | 200 | 104+12.00 | 85 L | RW 15-33 | R-1 | |
| R 9 | W/Y | L-862 | 150 | 150 | 102+16.16 | 85 R | RW 15-33 | R-1 | |
| R 10 | W/Y | L-850C | (2)105 | 200 | 102+16.16 | 85 L | RW 15-33 | R-1 | |
| R 11 | W/Y | L-862 | 150 | 150 | 100+20.31 | 85 R | RW 15-33 | R-1 | |
| R 12 | W/Y | L-850C | (2)105 | 200 | 100+20.31 | 85 L | RW 15-33 | R-1 | |
| R 13 | W/Y | L-862 | 150 | 150 | 98+24.46 | 85 R | RW 15-33 | R-1 | |
| R 14 | W/Y | L-862 | 150 | 150 | 98+24.46 | 85 L | RW 15-33 | R-1 | |
| R 15 | W/Y | L-862 | 150 | 150 | 96+28.62 | 85 R | RW 15-33 | R-1 | |
| R 16 | W/Y | L-862 | 150 | 150 | 96+28.62 | 85 L | RW 15-33 | R-1 | |
| R 17 | W/Y | L-862 | 150 | 150 | 94+32.77 | 85 R | RW 15-33 | R-1 | |
| R 18 | W/Y | L-862 | 150 | 150 | 94+32.77 | 85 L | RW 15-33 | R-1 | |
| R 19 | W/Y | L-862 | 150 | 150 | 92+36.93 | 85 R | RW 15-33 | R-1 | |
| R 20 | W/Y | L-862 | 150 | 150 | 92+36.93 | 85 L | RW 15-33 | R-1 | |
| R 21 | W/Y | L-862 | 150 | 150 | 90+41.08 | 85 R | RW 15-33 | R-1 | |
| R 22 | W/Y | L-862 | 150 | 150 | 90+41.08 | 85 L | RW 15-33 | R-1 | |
| R 23 | W/Y | L-862 | 150 | 150 | 88+45.23 | 85 R | RW 15-33 | R-1 | |
| R 24 | W/Y | L-862 | 150 | 150 | 88+45.23 | 85 L | RW 15-33 | R-1 | |
| R 25 | W/Y | L-862 | 150 | 150 | 86+49.39 | 85 R | RW 15-33 | R-1 | |
| R 26 | W/Y | L-862 | 150 | 150 | 86+49.39 | 85 L | RW 15-33 | R-1 | |
| R 27 | W/Y | L-862 | 150 | 150 | 84+53.54 | 85 R | RW 15-33 | R-1 | |
| R 28 | W/Y | L-862 | 150 | 150 | 84+53.54 | 85 L | RW 15-33 | R-1 | |
| R 29 | W/W | L-862 | 150 | 150 | 82+57.69 | 85 R | RW 15-33 | R-1 | |
| R 30 | W/W | L-862 | 150 | 150 | 82+57.69 | 85 L | RW 15-33 | R-1 | |
| R 31 | W/W | L-862 | 150 | 150 | 80+61.85 | 85 R | RW 15-33 | R-1 | |
| R 32 | W/W | L-862 | 150 | 150 | 80+61.85 | 85 L | RW 15-33 | R-1 | |
| R 33 | W/W | L-862 | 150 | 150 | 78+66.00 | 85 R | RW 15-33 | R-1 | |
| R 34 | W/W | L-862 | 150 | 150 | 78+66.00 | 85 L | RW 15-33 | R-1 | |
| R 35 | W/W | L-862 | 150 | 150 | 76+70.16 | 85 R | RW 15-33 | R-1 | |
| R 36 | W/W | L-862 | 150 | 150 | 76+70.16 | 85 L | RW 15-33 | R-1 | |
| R 37 | W/W | L-862 | 150 | 150 | 74+74.31 | 85 R | RW 15-33 | R-1 | |
| R 38 | W/W | L-862 | 150 | 150 | 74+74.31 | 85 L | RW 15-33 | R-1 | |
| R 39 | W/W | L-862 | 150 | 150 | 72+78.46 | 85 R | RW 15-33 | R-1 | |
| R 40 | W/W | L-862 | 150 | 150 | 72+78.46 | 85 L | RW 15-33 | R-1 | |
| R 41 | W/W | L-862 | 150 | 150 | 70+82.62 | 85 R | RW 15-33 | R-1 | |
| R 42 | W/W | L-862 | 150 | 150 | 70+82.62 | 85 L | RW 15-33 | R-1 | |
| R 43 | W/W | L-862 | 150 | 150 | 68+86.77 | 85 R | RW 15-33 | R-1 | |
| R 44 | W/W | L-862 | 150 | 150 | 68+86.77 | 85 L | RW 15-33 | R-1 | |
| R 45 | W/W | L-862 | 150 | 150 | 66+90.92 | 85 R | RW 15-33 | R-1 | |
| R 46 | W/W | L-862 | 150 | 150 | 66+90.92 | 85 L | RW 15-33 | R-1 | |
| R 47 | W/W | L-862 | 150 | 150 | 64+95.08 | 85 R | RW 15-33 | R-1 | |
| R 48 | W/W | L-862 | 150 | 150 | 64+95.08 | 85 L | RW 15-33 | R-1 | |
| R 49 | W/W | L-862 | 150 | 150 | 62+99.23 | 85 R | RW 15-33 | R-1 | |
| R 50 | W/W | L-862 | 150 | 150 | 62+99.23 | 85 L | RW 15-33 | R-1 | |
| R 51 | W/W | L-862 | 150 | 150 | 61+03.39 | 85 R | RW 15-33 | R-1 | |
| R 52 | W/W | L-862 | 150 | 150 | 61+03.39 | 85 L | RW 15-33 | R-1 | |
| R 53 | W/W | L-862 | 150 | 150 | 59+07.54 | 85 R | RW 15-33 | R-1 | |
| R 54 | W/W | L-862 | 150 | 150 | 59+07.54 | 85 L | RW 15-33 | R-1 | |
| R 55 | W/W | L-862 | 150 | 150 | 57+11.69 | 85 R | RW 15-33 | R-1 | |
| R 56 | W/W | L-862 | 150 | 150 | 57+11.69 | 85 L | RW 15-33 | R-1 | |
| R 57 | W/W | L-862 | 150 | 150 | 55+15.85 | 85 R | RW 15-33 | R-1 | |
| R 58 | W/W | L-862 | 150 | 150 | 55+15.85 | 85 L | RW 15-33 | R-1 | |
| R 59 | W/W | L-862 | 150 | 150 | 53+20.00 | 85 R | RW 15-33 | R-1 | |

| NUMBER | COLOR | TYPE | LAMP | XFMR | STATION | OFFSET | | CIRCUIT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| R 60 | W/W | L-862 | 150 | 150 | 53+20.00 | 85 L | RW 15-33 | R-1 | |
| R 61 | W/W | L-862 | 150 | 150 | 51+24.16 | 85 R | RW 15-33 | R-1 | |
| R 62 | W/W | L-862 | 150 | 150 | 51+24.16 | 85 L | RW 15-33 | R-1 | |
| R 63 | W/W | L-862 | 150 | 150 | 49+28.31 | 85 R | RW 15-33 | R-1 | |
| R 64 | W/W | L-862 | 150 | 150 | 49+28.31 | 85 L | RW 15-33 | R-1 | |
| R 65 | W/W | L-862 | 150 | 150 | 47+32.46 | 85 R | RW 15-33 | R-1 | |
| R 66 | W/W | L-862 | 150 | 150 | 47+32.46 | 85 L | RW 15-33 | R-1 | |
| R 67 | W/W | L-850C | (2)105 | 200 | 45+36.62 | 85 R | RW 15-33 | R-1 | |
| R 68 | W/W | L-862 | 150 | 150 | 45+36.62 | 85 L | RW 15-33 | R-1 | |
| R 69 | W/W | L-862 | 150 | 150 | 43+40.77 | 85 R | RW 15-33 | R-1 | |
| R 70 | W/W | L-862 | 150 | 150 | 43+40.77 | 85 L | RW 15-33 | R-1 | |
| R 71 | W/W | L-862 | 150 | 150 | 41+44.92 | 85 R | RW 15-33 | R-1 | |
| R 72 | W/W | L-862 | 150 | 150 | 41+44.92 | 85 L | RW 15-33 | R-1 | |
| R 73 | W/W | L-862 | 150 | 150 | 39+49.08 | 85 R | RW 15-33 | R-1 | |
| R 74 | W/W | L-862 | 150 | 150 | 39+49.08 | 85 L | RW 15-33 | R-1 | |
| R 75 | W/W | L-862 | 150 | 150 | 37+53.23 | 85 R | RW 15-33 | R-1 | |
| R 76 | W/W | L-862 | 150 | 150 | 37+53.23 | 85 L | RW 15-33 | R-1 | |
| R 77 | W/W | L-862 | 150 | 150 | 35+57.39 | 85 R | RW 15-33 | R-1 | |
| R 78 | W/W | L-862 | 150 | 150 | 35+57.39 | 85 L | RW 15-33 | R-1 | |
| R 79 | W/W | L-862 | 150 | 150 | 33+61.54 | 85 R | RW 15-33 | R-1 | |
| R 80 | W/W | L-862 | 150 | 150 | 33+61.54 | 85 L | RW 15-33 | R-1 | |
| R 81 | W/W | L-862 | 150 | 150 | 31+65.69 | 85 R | RW 15-33 | R-1 | |
| R 82 | W/W | L-862 | 150 | 150 | 31+65.69 | 85 L | RW 15-33 | R-1 | |
| R 83 | W/W | L-862 | 150 | 150 | 29+69.85 | 85 R | RW 15-33 | R-1 | |
| R 84 | W/W | L-862 | 150 | 150 | 29+69.85 | 85 L | RW 15-33 | R-1 | |
| R 85 | W/W | L-862 | 150 | 150 | 27+74.00 | 85 R | RW 15-33 | R-1 | |
| R 86 | W/W | L-862 | 150 | 150 | 27+74.00 | 85 L | RW 15-33 | R-1 | |
| R 87 | W/W | L-862 | 150 | 150 | 25+78.15 | 85 R | RW 15-33 | R-1 | |
| R 88 | W/W | L-862 | 150 | 150 | 25+78.15 | 85 L | RW 15-33 | R-1 | |
| R 89 | W/W | L-862 | 150 | 150 | 23+82.31 | 85 R | RW 15-33 | R-1 | |
| R 90 | W/W | L-862 | 150 | 150 | 23+82.31 | 85 L | RW 15-33 | R-1 | |
| R 91 | Y/W | L-850C | (2)105 | 200 | 21+86.46 | 85 R | RW 15-33 | R-1 | |
| R 92 | Y/W | L-862 | 150 | 150 | 21+86.46 | 85 L | RW 15-33 | R-1 | |
| R 93 | Y/W | L-850C | (2)105 | 200 | 19+90.62 | 85 R | RW 15-33 | R-1 | |
| R 94 | Y/W | L-862 | 150 | 150 | 19+90.62 | 85 L | RW 15-33 | R-1 | |
| R 95 | Y/W | L-862 | 150 | 150 | 17+94.77 | 85 R | RW 15-33 | R-1 | |
| R 96 | Y/W | L-862 | 150 | 150 | 17+94.77 | 85 L | RW 15-33 | R-1 | |
| R 97 | Y/W | L-862 | 150 | 150 | 15+98.92 | 85 R | RW 15-33 | R-1 | |
| R 98 | Y/W | L-862 | 150 | 150 | 15+98.92 | 85 L | RW 15-33 | R-1 | |
| R 99 | Y/W | L-862 | 150 | 150 | 14+03.08 | 85 R | RW 15-33 | R-1 | |
| R 100 | Y/W | L-862 | 150 | 150 | 14+03.08 | 85 L | RW 15-33 | R-1 | |
| R 101 | Y/W | L-850C | (2)105 | 200 | 12+07.23 | 85 R | RW 15-33 | R-1 | |
| R 102 | Y/W | L-850C | (2)105 | 200 | 12+07.23 | 85 L | RW 15-33 | R-1 | |
| R 103 | Y/W | L-850C | (2)105 | 200 | 10+11.38 | 85 R | RW 15-33 | R-1 | |
| R 104 | Y/W | L-862 | 150 | 150 | 10+11.38 | 85 L | RW 15-33 | R-1 | |
| R 105 | Y/W | L-862 | 150 | 150 | 8+15.54 | 85 R | RW 15-33 | R-1 | |
| R 106 | Y/W | L-862 | 150 | 150 | 8+15.54 | 85 L | RW 15-33 | R-1 | |
| R 107 | Y/W | L-862 | 150 | 150 | 6+19.69 | 85 R | RW 15-33 | R-1 | |
| R 108 | Y/W | L-862 | 150 | 150 | 6+19.69 | 85 L | RW 15-33 | R-1 | |
| R 109 | Y/W | L-850C | (2)105 | 200 | 4+23.85 | 85 R | RW 15-33 | R-1 | |
| R 110 | Y/W | L-850C | (2)105 | 200 | 4+23.85 | 85 L | RW 15-33 | R-1 | |
| R 111 | R/G | L-862E | 200 | 200 | 2+28.00 | 85 R | RW 15-33 | R-1 | |
| R 112 | R/G | L-862E | 200 | 200 | 2+28.00 | 75 R | RW 15-33 | R-1 | |
| R 113 | R/G | L-862E | 200 | 200 | 2+28.00 | 65 R | RW 15-33 | R-1 | |
| R 114 | R/G | L-862E | 200 | 200 | 2+28.00 | 55 R | RW 15-33 | R-1 | |
| R 115 | R/G | L-862E | 200 | 200 | 2+28.00 | 55 L | RW 15-33 | R-1 | |
| R 116 | R/G | L-862E | 200 | 200 | 2+28.00 | 65 L | RW 15-33 | R-1 | |
| R 117 | R/G | L-862E | 200 | 200 | 2+28.00 | 75 L | RW 15-33 | R-1 | |
| R 118 | R/G | L-862E | 200 | 200 | 2+28.00 | 85 L | RW 15-33 | R-1 | |

| NUMBER | COLOR | TYPE | LAMP | XFMR | STATION | OFFSET | | CIRCUIT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| C 1 | Blue | L-861T | LED | 10/15 | 200+91.68 | L155.65 | TW C | T-1 | |
| C 2 | Blue | L-861T | LED | 10/15 | 200+93.00 | L155.65 | TW C | T-1 | |
| C 3 | Blue | L-861T | LED | 10/15 | 200+93.00 | L117.01 | TW C | T-1 | |
| C 4 | Blue | L-861T | LED | 10/15 | 201+14.39 | L84.57 | TW C | T-1 | |
| C 5 | Blue | L-861T | LED | 10/15 | 201+46.83 | L62.89 | TW C | T-1 | |
| C 6 | Blue | L-861T | LED | 10/15 | 201+85.10 | L55.28 | TW C | T-1 | |
| C 7 | Blue | L-861T | LED | 10/15 | 202+57.76 | L55.28 | TW C | T-1 | |
| C 8 | Blue | L-861T | LED | 10/15 | 203+30.43 | L55.28 | TW C | T-1 | |
| C 9 | Blue | L-861T | LED | 10/15 | 204+03.10 | L55.28 | TW C | T-1 | |
| C 10 | Blue | L-861T | LED | 10/15 | 204+41.36 | L62.89 | TW C | T-1 | |
| C 11 | Blue | L-861T | LED | 10/15 | 204+73.8 | L84.57 | TW C | T-1 | |
| C 12 | Blue | L-861T | LED | 10/15 | 204+95.48 | L117.01 | TW C | T-1 | |
| C 13 | Blue | L-861T | LED | 10/15 | 205+03.09 | L155.65 | TW C | T-1 | |
| C 14 | Blue | L-861T | LED | 10/15 | 205+03.09 | L231.57 | TW C | T-1 | |
| C 15 | Blue | L-861T | LED | 10/15 | 205+03.09 | L307.85 | TW C | T-1 | |
| C 16 | Blue | L-861T | LED | 10/15 | 205+03.09 | L384.14 | TW C | T-1 | |
| C 17 | Blue | L-861T | LED | 10/15 | 205+03.09 | L460.42 | TW C | T-1 | |
| C 18 | Blue | L-861T | LED | 10/15 | 205+93.09 | L460.42 | TW C | T-1 | |
| C 19 | Blue | L-861T | LED | 10/15 | 206+83.09 | L460.42 | TW C | T-1 | |
| C 20 | Blue | L-861T | LED | 10/15 | 205+95.52 | R258.59 | TW C | T-1 | |
| C 21 | Blue | L-861T | LED | 10/15 | 205+3.10 | R259.61 | TW C | T-1 | |
| C 22 | Blue | L-861T | LED | 10/15 | 205+3.10 | R207.16 | TW C | T-1 | |
| C 23 | Blue | L-861T | LED | 10/15 | 205+3.10 | R154.72 | TW C | T-1 | |
| C 24 | Blue | L-861T | LED | 10/15 | 204+95.49 | R116.45 | TW C | T-1 | |
| C 25 | Blue | L-861T | LED | 10/15 | 204+73.81 | R84.01 | TW C | T-1 | |
| C 26 | Blue | L-861T | LED | 10/15 | 204+41.37 | R62.33 | TW C | T-1 | |
| C 27 | Blue | L-861T | LED | 10/15 | 204+3.10 | R54.72 | TW C | T-1 | |
| C 28 | Blue | L-861T | LED | 10/15 | 203+30.43 | R54.72 | TW C | T-1 | |
| C 29 | Blue | L-861T | LED | 10/15 | 202+57.76 | R54.72 | TW C | T-1 | |
| C 30 | Blue | L-861T | LED | 10/15 | 201+85.10 | R54.72 | TW C | T-1 | |
| C 31 | Blue | L-861T | LED | 10/15 | 201+46.83 | R62.33 | TW C | T-1 | |
| C 32 | Blue | L-861T | LED | 10/15 | 201+14.39 | R84.01 | TW C | T-1 | |
| C 33 | Blue | L-861T | LED | 10/15 | 200+93.00 | R116.45 | TW C | T-1 | |
| C 34 | Blue | L-861T | LED | 10/15 | 200+93.00 | R154.72 | TW C | T-1 | |
| C 35 | Blue | L-861T | LED | 10/15 | 200+88.10 | R154.72 | TW C | T-1 | |

| NUMBER | COLOR | TYPE | LAMP | XFMR | STATION | OFFSET | | CIRCUIT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| T 1 | Blue | L-861T | LED | 10/15 | 104+12.00 | L88.00 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 2 | Blue | L-861T | LED | 10/15 | 104+12.00 | L93.00 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 3 | Blue | L-861T | LED | 10/15 | 104+12.00 | L171.96 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 4 | Blue | L-861T | LED | 10/15 | 104+12.00 | L250.92 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 5 | Blue | L-861T | LED | 10/15 | 104+4.18 | L272.82 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 6 | Blue | L-861T | LED | 10/15 | 103+84.96 | L285.92 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 7 | Blue | L-861T | LED | 10/15 | 103+2.69 | L285.92 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 8 | Blue | L-861T | LED | 10/15 | 102+20.43 | L285.92 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 9 | Blue | L-861T | LED | 10/15 | 101+38.16 | L285.92 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 10 | Blue | L-861T | LED | 10/15 | 100+71.37 | L220.74 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 11 | Blue | L-861T | LED | 10/15 | 100+4.59 | L155.57 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 12 | Blue | L-861T | LED | 10/15 | 99+35.41 | L93.00 | RW 15-33 | R-1 | RW 15 TURNAROUND |
| T 13 | Blue | L-861T | LED | 10/15 | 99+35.41 | L88.00 | RW 15-33 | R-1 | RW 15 TURNAROUND |

| NUMBER | COLOR | TYPE | LAMP | XFMR | STATION | OFFSET | CIRCUIT | REMARKS |
|---|---|---|---|---|---|---|---|---|
| T 14 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 15 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 16 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 17 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 18 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 19 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 20 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 21 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 22 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 23 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 24 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 25 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 26 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 27 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 28 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 29 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 30 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |
| T 31 | Blue | L-861T | LED | 10/15 | | RW 15-33 | R-1 | RW 33 TURNAROUND |

| NUMBER | COLOR | TYPE | LAMP | XFMR | STATION | OFFSET | | CIRCUIT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| D 1 | Blue | L-861T | LED | 10/15 | 400+88.00 | L50.81 | TW D | T-1 | |
| D 2 | Blue | L-861T | LED | 10/15 | 400+93.00 | L50.81 | TW D | T-1 | |
| D 3 | Blue | L-861T | LED | 10/15 | 401+31.47 | L39.94 | TW D | T-1 | |
| D 4 | Blue | L-861T | LED | 10/15 | 401+80.86 | L37.47 | TW D | T-1 | |
| D 5 | Blue | L-861T | LED | 10/15 | 402+30.25 | L35.00 | TW D | T-1 | |
| D 6 | Blue | L-861T | LED | 10/15 | 403+17.03 | L35.00 | TW D | T-1 | |
| D 7 | Blue | L-861T | LED | 10/15 | 404+03.81 | L35.00 | TW D | T-1 | |
| D 8 | Blue | L-861T | LED | 10/15 | 404+90.59 | L35.00 | TW D | T-1 | |
| D 9 | Blue | L-861T | LED | 10/15 | 405+77.37 | L35.00 | TW D | T-1 | |
| D 10 | Blue | L-861T | LED | 10/15 | 406+64.15 | L35.00 | TW D | T-1 | |
| D 11 | Blue | L-861T | LED | 10/15 | 407+50.93 | L35.00 | TW D | T-1 | |
| D 12 | Blue | L-861T | LED | 10/15 | 408+37.71 | L35.00 | TW D | T-1 | |
| D 13 | Blue | L-861T | LED | 10/15 | 409+24.50 | L35.00 | TW D | T-1 | |
| D 14 | Blue | L-861T | LED | 10/15 | 405+90.00 | R380.00 | TW D | T-1 | |
| D 15 | Blue | L-861T | LED | 10/15 | 405+90.00 | R330.08 | TW D | T-1 | |
| D 16 | Blue | L-861T | LED | 10/15 | 405+90.00 | R280.17 | TW D | T-1 | |
| D 17 | Blue | L-861T | LED | 10/15 | 405+90.00 | R230.25 | TW D | T-1 | |
| D 18 | Blue | L-861T | LED | 10/15 | 405+87.53 | R180.86 | TW D | T-1 | |
| D 19 | Blue | L-861T | LED | 10/15 | 405+85.06 | R131.48 | TW D | T-1 | |
| D 20 | Blue | L-861T | LED | 10/15 | 405+75.90 | R94.86 | TW D | T-1 | |
| D 21 | Blue | L-861T | LED | 10/15 | 405+66.75 | R58.25 | TW D | T-1 | |
| D 22 | Blue | L-861T | LED | 10/15 | 405+30.13 | R49.09 | TW D | T-1 | |
| D 23 | Blue | L-861T | LED | 10/15 | 404+93.52 | R39.94 | TW D | T-1 | |
| D 24 | Blue | L-861T | LED | 10/15 | 404+44.13 | R37.47 | TW D | T-1 | |
| D 25 | Blue | L-861T | LED | 10/15 | 403+94.75 | R35.00 | TW D | T-1 | |
| D 26 | Blue | L-861T | LED | 10/15 | 403+12.50 | R35.00 | TW D | T-1 | |
| D 27 | Blue | L-861T | LED | 10/15 | 402+30.25 | R35.00 | TW D | T-1 | |
| D 28 | Blue | L-861T | LED | 10/15 | 401+80.86 | R37.47 | TW D | T-1 | |
| D 29 | Blue | L-861T | LED | 10/15 | 401+31.47 | R39.94 | TW D | T-1 | |
| D 30 | Blue | L-861T | LED | 10/15 | 400+93.00 | R50.81 | TW D | T-1 | |
| D 31 | Blue | L-861T | LED | 10/15 | 400+88.00 | R50.81 | TW D | T-1 | |

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised:
Layout Name: E15
File Path and Name: Z:\09039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E_Working\Drawings\09039_E15.dwg
5/16/2016, 3:59 PM

A. Bolf

STATE OF ALASKA
49 TH
Michael J. Love
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

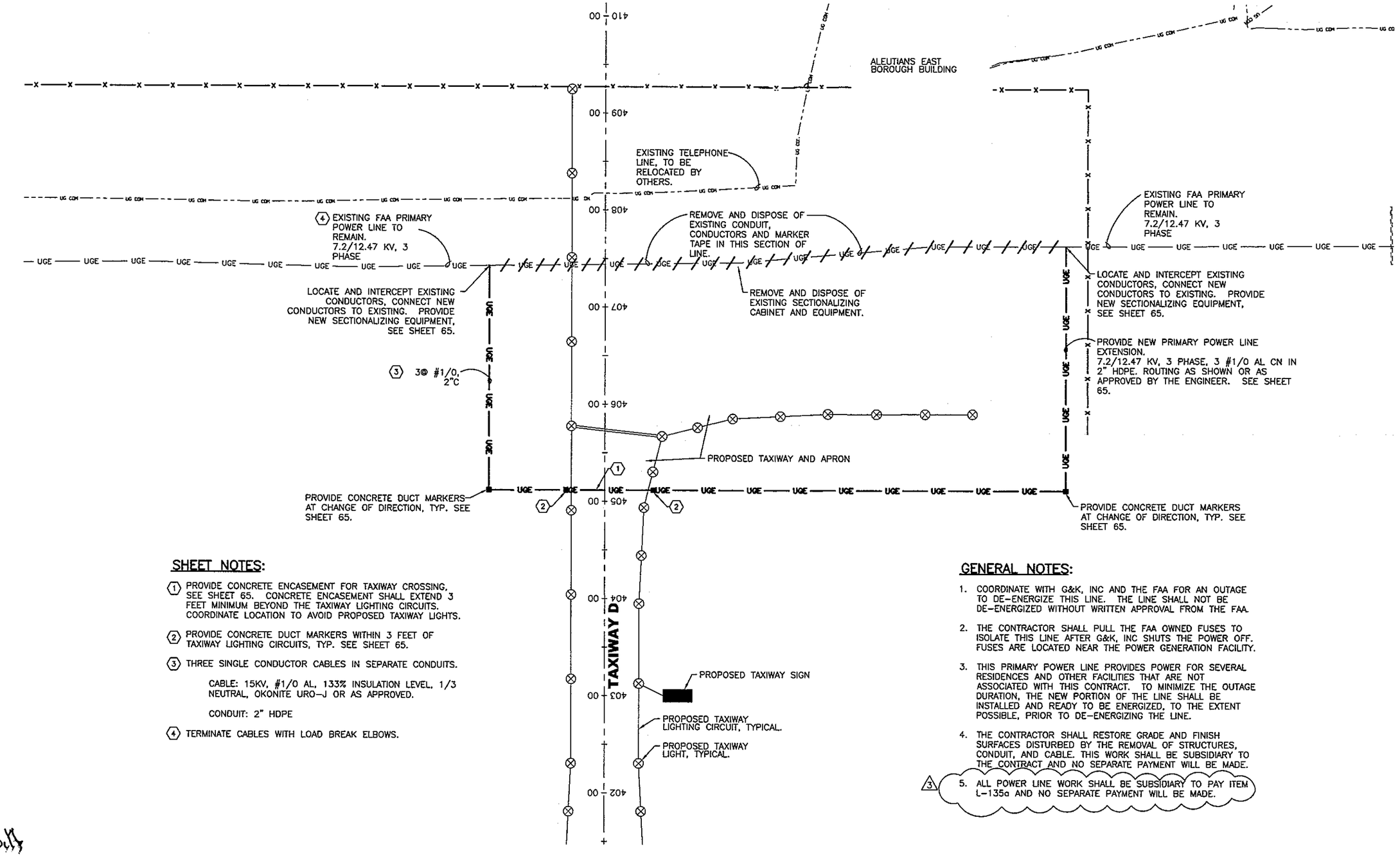
PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
RUNWAY 15-33
EDGE LIGHT SCHEDULES

DATE: 05/16/2016
SHEET: 63 OF 97
AS-BUILT SHEET:




## SHEET NOTES:

1. PROVIDE CONCRETE ENCASEMENT FOR TAXIWAY CROSSING, SEE SHEET 65. CONCRETE ENCASEMENT SHALL EXTEND 3 FEET MINIMUM BEYOND THE TAXIWAY LIGHTING CIRCUITS. COORDINATE LOCATION TO AVOID PROPOSED TAXIWAY LIGHTS.
2. PROVIDE CONCRETE DUCT MARKERS WITHIN 3 FEET OF TAXIWAY LIGHTING CIRCUITS, TYP. SEE SHEET 65.
3. THREE SINGLE CONDUCTOR CABLES IN SEPARATE CONDUITS.

   CABLE: 15KV, #1/0 AL, 133% INSULATION LEVEL, 1/3 NEUTRAL, OKONITE URO-J OR AS APPROVED.

   CONDUIT: 2" HDPE
4. TERMINATE CABLES WITH LOAD BREAK ELBOWS.

## GENERAL NOTES:

1. COORDINATE WITH G&K, INC AND THE FAA FOR AN OUTAGE TO DE-ENERGIZE THIS LINE. THE LINE SHALL NOT BE DE-ENERGIZED WITHOUT WRITTEN APPROVAL FROM THE FAA.
2. THE CONTRACTOR SHALL PULL THE FAA OWNED FUSES TO ISOLATE THIS LINE AFTER G&K, INC SHUTS THE POWER OFF. FUSES ARE LOCATED NEAR THE POWER GENERATION FACILITY.
3. THIS PRIMARY POWER LINE PROVIDES POWER FOR SEVERAL RESIDENCES AND OTHER FACILITIES THAT ARE NOT ASSOCIATED WITH THIS CONTRACT. TO MINIMIZE THE OUTAGE DURATION, THE NEW PORTION OF THE LINE SHALL BE INSTALLED AND READY TO BE ENERGIZED, TO THE EXTENT POSSIBLE, PRIOR TO DE-ENERGIZING THE LINE.
4. THE CONTRACTOR SHALL RESTORE GRADE AND FINISH SURFACES DISTURBED BY THE REMOVAL OF STRUCTURES, CONDUIT, AND CABLE. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE.
3. 5. ALL POWER LINE WORK SHALL BE SUBSIDIARY TO PAY ITEM L-135a AND NO SEPARATE PAYMENT WILL BE MADE.

As-Built

50 0 50 100
SCALE IN FEET

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH MICHAEL J. LOVE 05/20/2016 EE-5816 REGISTERED PROFESSIONAL ENGINEER

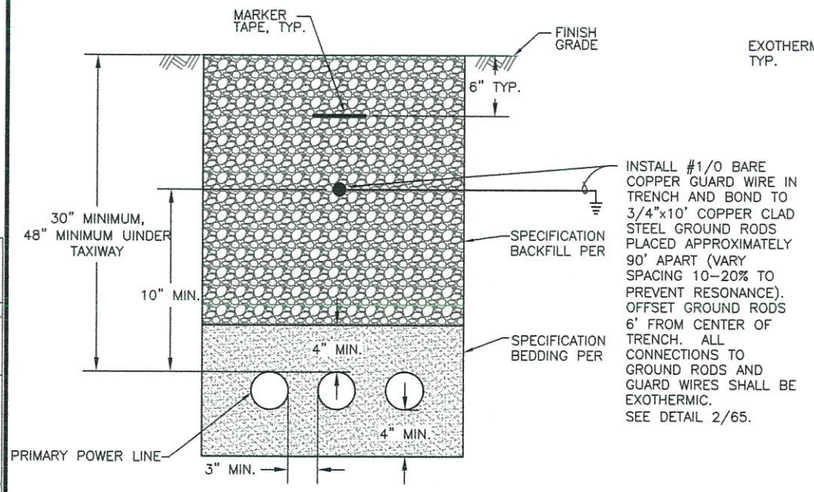
| BY | DATE | REVISION |
|---|---|---|
| DMH | 06/20/16 | PAY ITEM CLARIFICATION. 3 |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

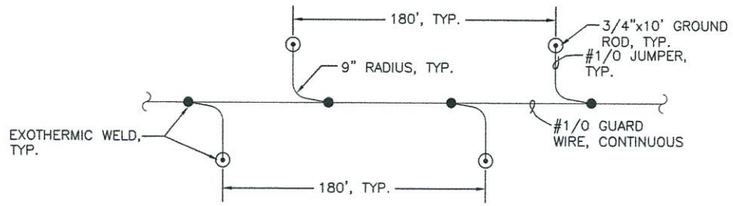
COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
FAA PRIMARY POWER LINE RELOCATION PLAN

DATE: 05/16/2016
SHEET: 64R OF 97
AS-BUILT SHEET:

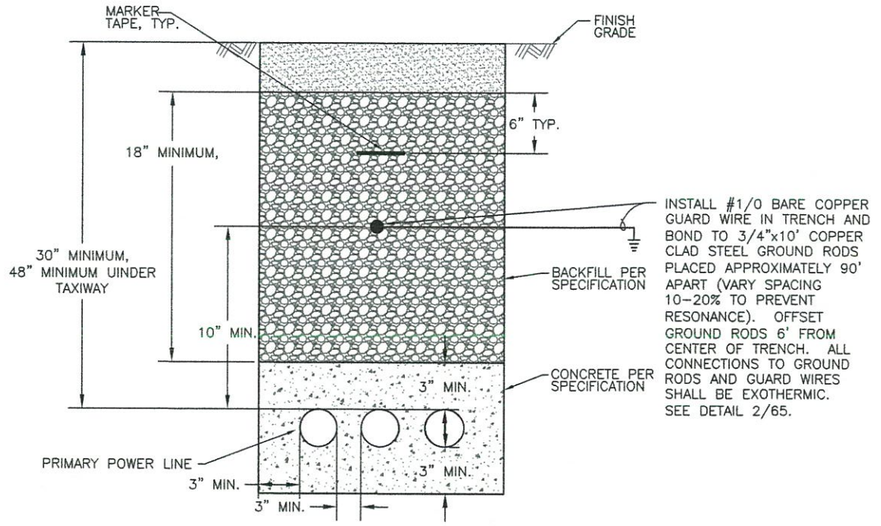
Designed By: DMH
Drawn By: GMY
Checked By: MJL
Date Revised: 6/20/2016, 1:26 PM
Layout Name: E16
File Path and Name: K:\09039R06A - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_E16.dwg




1/65 TRENCH DETAIL
NTS



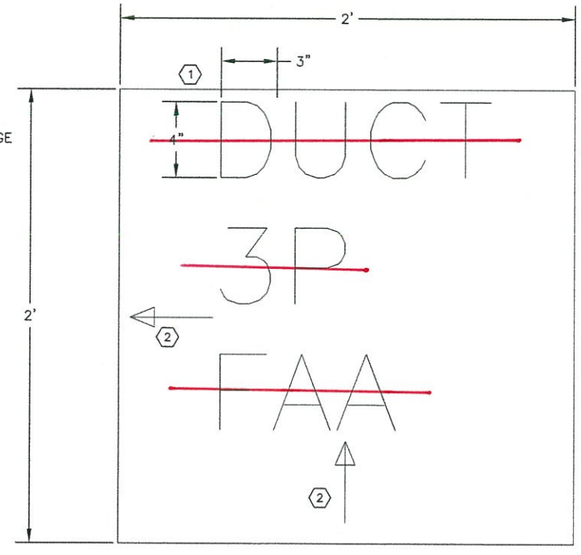

2/65 GUARD WIRE DETAIL
NTS




3/65 CONCRETE ENCASEMENT DETAIL
NTS

NOTES:

1. ARROW TO SHOW DIRECTION OR CHANGE IN DIRECTION OF DUCT.
2. LETTER TO BE 4" TALL 3" WIDE AND PRESSED 1/2" DEEP.
3. MARKER TO MEET FAA SPEC FAA-C-1391D 5.13

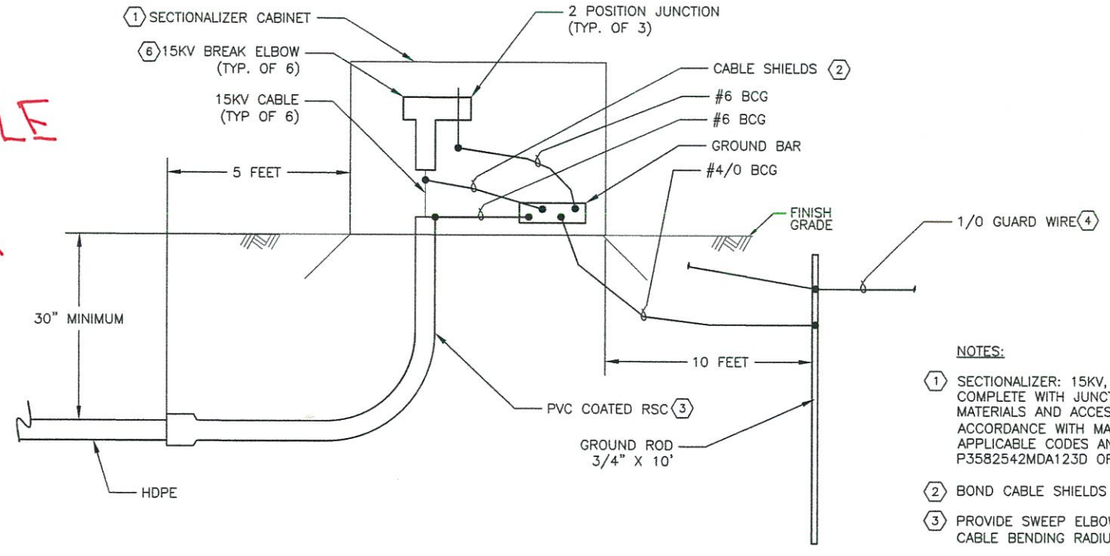



CABLE

FAA

3P

4/65 CONCRETE DUCT MARKER DETAIL
3" = 1'-0"




5/65 SECTIONALIZER DETAIL
NTS

NOTES:

1. SECTIONALIZER: 15KV, 3PH, 200A, FIBERGLASS ENCLOSURE, COMPLETE WITH JUNCTIONS, ELBOWS, PARKING STANDS, OTHER MATERIALS AND ACCESSORIES AS REQUIRED. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, APPLICABLE CODES AND STANDARDS, HUBBEL MODEL P3582542MDA123D OR AS APPROVED.
2. BOND CABLE SHIELDS PER MANUFACTURER'S INSTRUCTIONS.
3. PROVIDE SWEEP ELBOW WITH RADIUS GREATER THAN MINIMUM CABLE BENDING RADIUS, 24" SWEEP RADIUS MINIMUM.
4. MAINTAIN 10' SEPARATION BETWEEN GUARD WIRE AND SECTIONALIZER ENCLOSURE.
5. BOND ALL NON-CURRENT CARRYING METALLIC EQUIPMENT TO GROUND BAR WITH #6 BARE COPPER WIRE.
6. PROVIDE LOAD BREAK ELBOWS FOR INCOMING POWER CABLES (3 TOTAL). SEE SITE PLAN.

As-Built

STATE OF ALASKA
49 TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
PRIMARY POWER LINE DETAILS

DATE: 05/16/2016
SHEET: 65 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL
Date Revised: 5/16/2016, 4:00 PM
Layout Name: E17
File Path and Name: Z:\09039CBA - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_E17.dwg

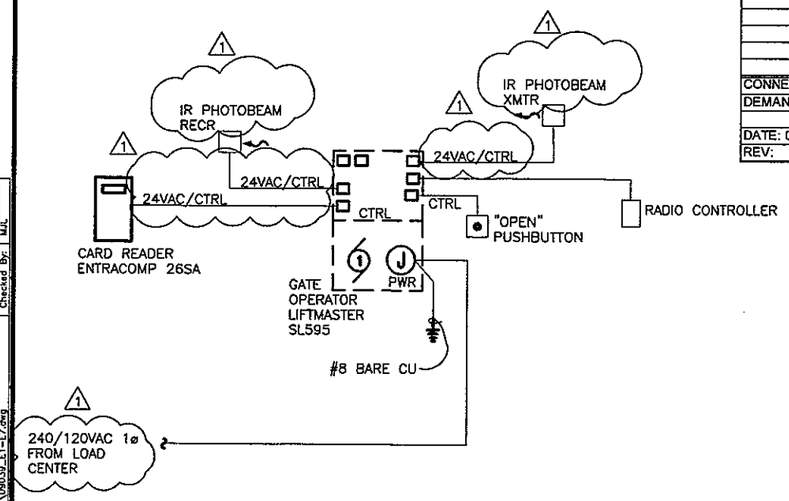
**PANEL: LOADCENTER**
PROJECT: COLD BAY AIRPORT

MOUNTING: ☒ SURFACE ☐ FLUSH — MAINS: ☐ LUGS ☒ CB

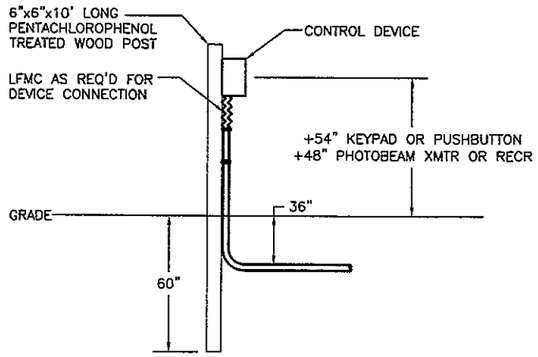
OPTIONS: ☐ FEEDTHRU ☐ SHUNT TRIP ☐ ISO GND BAR ☐ SUBFEED LUG ☐ SUBFEED BRKR ☒ SOLID NEUTRAL

VOLTAGE: 240/120 VOLT — 1 PHASE 3 WIRE — 100 A MAIN CB — 10k AIC

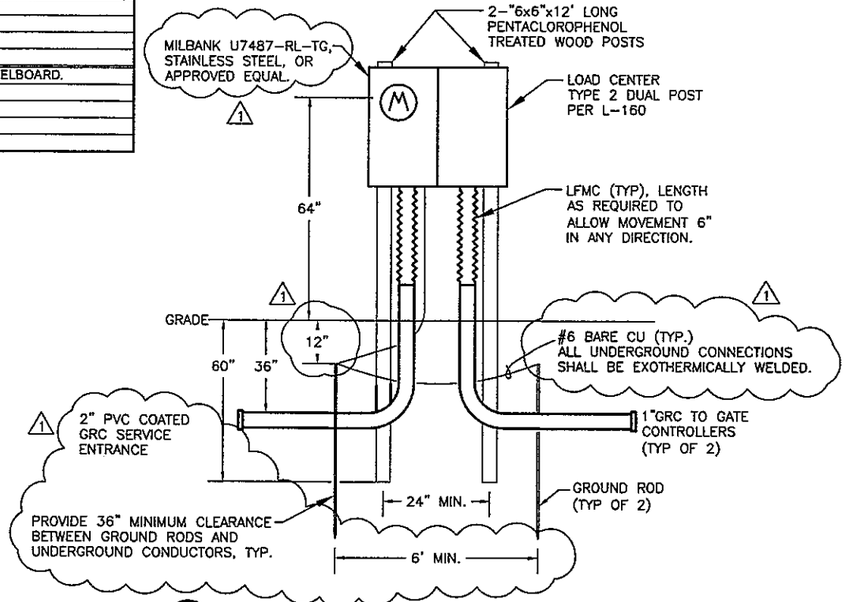
| CIRCUIT DESCRIPTION | KVA | AMP / P | CKT | CKT | AMP / P | KVA | CIRCUIT DESCRIPTION |
|---|---|---|---|---|---|---|---|
| GATE #1 CONTROLLER #1 | 1.9 | 20 / 2 | 1 | 2 | 20 / 2 | 1.9 | GATE #2 CONTROLLER |
| | | / | 3 | 4 | / | | |
| | | / | 5 | 6 | / | | |
| | | / | 7 | 8 | 20 / 1 | | SPARE |
| | | / | 9 | 10 | / | | |
| | | / | 11 | 12 | / | | |
| CONNECTED LOAD: | | 3.8 KVA | 16 | A | REMARKS: COMBINATION METER AND PANELBOARD. | | |
| DEMAND LOAD: | | 4.3 KVA | 18 | A | IN NEMA 4X ENCLOSURE | | |
| DATE: 05-26-2016 | | | | | | | |
| REV: | | | | | | | |




1/66 ONE-LINE DIAGRAM – TYP OF 2




2/66 GATE CONTROL DEVICE MOUNTING — NTS




3/66 LOAD CENTER ELEVATION — NTS

SEQUENCE OF OPERATIONS:

(1) CARD READER: ACTIVATION OF CARD READER OPENS GATE FOR PRESET TIME.

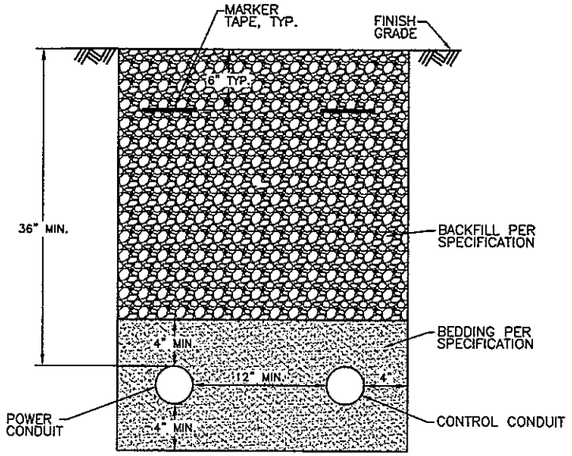
(2) RADIO CONTROL: ACTIVATION OF RADIO CONTROL OPENS GATE FOR PRESET TIME.

(3) PHOTOBEAM: IF GATE IS CLOSING AND PHOTOBEAM IS BROKEN, GATE RETURN TO OPEN POSITION.

(4) PUSHBUTTON: WHEN OPERATED, GATE OPENS FOR PRESET TIME. TIMER STARTS WHEN PUSHBUTTON IS RELEASED.

ABBREVIATIONS

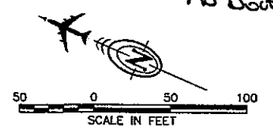
| | |
|---|---|
| XMTR | TRANSMITER |
| IR | INFRARED |
| RECR | RECEIVER |
| UON | UNLESS OTHERWISE NOTED |
| AG | ABOVE GRADE |
| BG | BELOW GRADE |
| GRC | GALVANIZED RIGID CONDUIT |
| HDPE | HIGH DENSITY POLYETHYLENE |
| MT | MOUNT |




4/66 CONDUIT TRENCH DETAIL — NTS

NOTES:

1. ALL EQUIPMENT, MATERIALS AND CONNECTIONS SHALL BE SUITABLE FOR OUTDOOR USE.
   - 1.1. PANELBOARD ENCLOSURES: NEMA 4X STAINLESS STEEL.
   - 1.2. METER BASE ENCLOSURE: NEMA 3R STAINLESS STEEL.
   - 1.3. PUSHBUTTON ENCLOSURE: NEMA 4X.
   - 1.4. MOUNTING HARDWARE: STAINLESS STEEL.
2. PROVIDE GATE OPERATOR WITH HEATER KIT, CARD READER, RADIO CONTROL, PUSH BUTTON, PHOTO BEAM TRANSMITTER, AND PHOTO BEAM RECEIVER.
3. INSTALL GATE OPERATORS, CARD READER, AND OTHER EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, APPLICABLE CODES AND STANDARDS.
4. PROGRAM GATE OPERATORS AS REQUIRED FOR PROPER OPERATION IN ACCORDANCE WITH SEQUENCE OF OPERATIONS. VERIFY TIME DELAYS AND OTHER SETTINGS WITH AIRPORT MAINTENANCE PERSONNEL.
5. COORDINATE WITH UTILITY TO PROVIDE 120/240V 1ø 3W SERVICE. COMPLY WITH UTILITY REQUIREMENTS FOR SERVICE ENTRANCE.
6. PROVIDE SIGN READING "OPEN GATE" ADJACENT TO PUSHBUTTON.
7. PROVIDE CONCRETE FOUNDATIONS FOR CONTROLLERS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SUBMIT FOUNDATION DESIGN FOR APPROVAL.
8. ALL EQUIPMENT SHALL BE AS SPECIFIED OR APPROVED EQUAL.




PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH — MICHAEL J. LOVE 06/08/2016 EE-5818 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| GMV | 06/08/16 | NEW UTILITY SERVICE DETAILS ADDED /1 |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
MAIN RUNWAY REHABILITATION
PROJECT No. 53754
AIP No. 3-02-0065-011-2013
GATE DETAILS

DATE: 05/16/2016
SHEET: 66R OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL
Date Revised: 6/08/2016, 10:15 AM
Layout Name: E6 (2)
File Path and Name: Z:\09039\09039 - Cold Bay Airport Improv\2013 - Runway 15-33\E-Working\Drawings\09039_E1-E7.dwg

EXISTING EDGE OF EMBANKMENT

PROTECT EXISTING UTILITIES NOT SCHEDULED FOR REMOVAL, TYP

REMOVE EXISTING THRESHOLD LIGHTS, TYP SEE ELECTRICAL

PROTECT EXISTING UTILITIES NOT SCHEDULED FOR REMOVAL, TYP

REMOVE EXISTING LIGHTS, SEE ELECTRICAL

EXISTING LIGHT BASE TO REMAIN

23+00 RFI-38

STA ~~21+50.00~~ 74.3'RT±

EXISTING MARKINGS, SEE NOTE 4

20+00

15+00

10+00

EXISTING LIGHT BASE TO REMAIN

SAWCUT EXISTING PAVEMENT

23+00 RFI-38

STA ~~21+50.00~~ 75.3'LT±

REMOVE EDGE LIGHT, TYP SEE ELECTRICAL

EXISTING PAVEMENT EDGE/ LIMITS OF AC PAVEMENT REMOVAL

REMOVE EXISTING VASI, SEE ELECTRICAL SHEETS

REMOVE SIGN, TYP SEE ELECTRICAL

EXISTING UNDERGROUND COMM LINE, PROTECT IN PLACE

## RUNWAY 26 DEMOLITION

REMOVE EXISTING THRESHOLD LIGHTS, SEE ELECTRICAL

STA 71+60.00 75.3'RT±

EXISTING MARKINGS SEE NOTE 4

70+00

SAWCUT EXISTING PAVEMENT

EDGE OF EXISTING PAVEMENT

EXISTING LIGHT BASES TO REMAIN, TYP, SEE ELECTRICAL

STA 71+60.00 173.7'LT±

As-Built

50 0 50 100

## RUNWAY 8 DEMOLITION

### LEGEND

REMOVE EXISTING ±4" THICK AC PAVEMENT AND PROCESS FOR USE AS RAP.

### NOTES:

1. PAVEMENT THICKNESS WAS DETERMINED FROM DOT&PF AS-BUILTS. PAVEMENT THICKNESS MAY VARY FROM THAT SHOWN ON PLANS.
2. LOCATIONS OF UTILITIES SHOWN ARE APPROXIMATE AND DEPTHS ARE UNKNOWN. OBTAIN FIELD LOCATES PRIOR TO DEMOLITION.
3. (5) REMOVING EXISTING AC PAVEMENT AND PROCESS AS RAP IS PAID FOR UNDER ITEM P-162, PAVEMENT COLD PLANING.
4. REMOVE ALL EXISTING PAVEMENT MARKINGS ON RUNWAY 8-26. SEE CSPP SHEETS FOR TEMPORARY MARKING REQUIRED FOR PHASED OPENINGS/CLOSURES.

DEVELOPED BY: **R&M CONSULTANTS, INC.**

STATE OF ALASKA 49TH — Evan J. Griffith, III CE 10003 6-23-16 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| EJG | 6/23/16 | (5) REVISED NOTE |

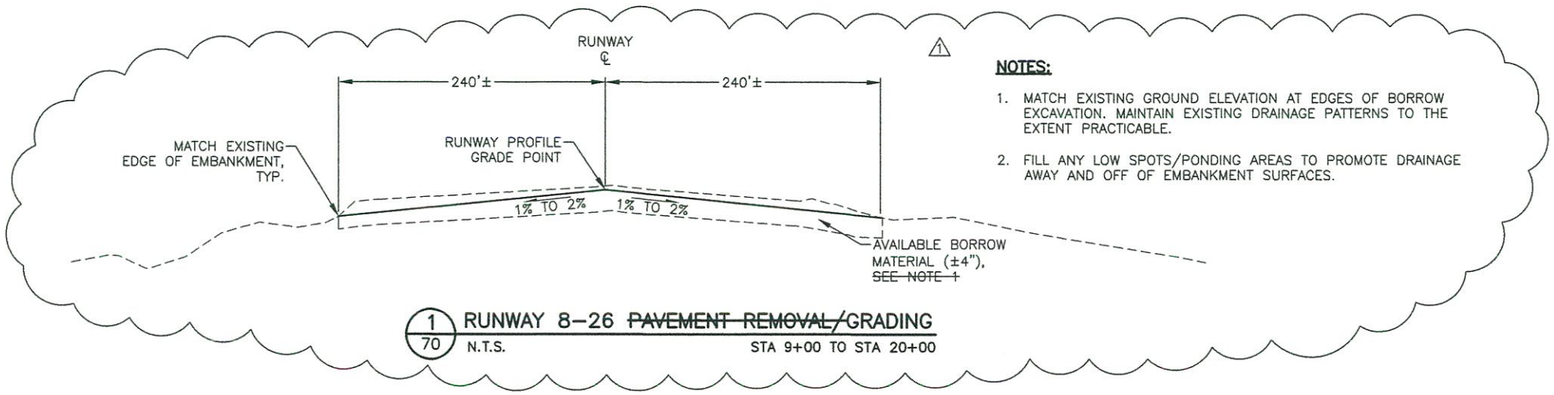
**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-011-2016
DEMOLITION PLAN

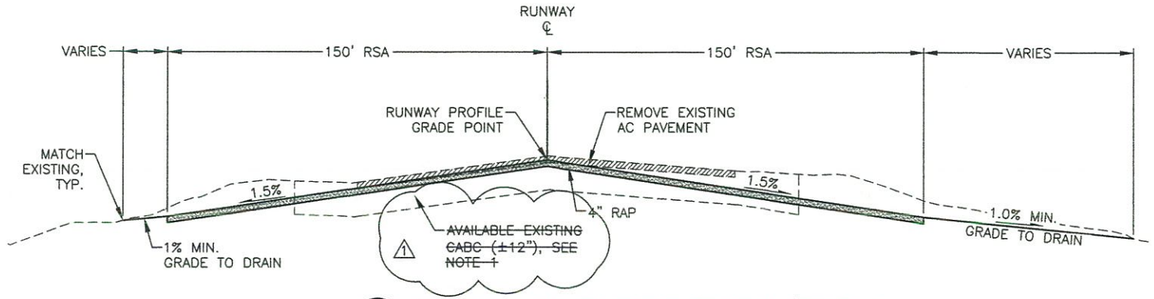
DATE: 6/23/2016
SHEET: 69R OF 97
AS-BUILT SHEET:

Designed By: MM
Drawn By: JMC
Checked By: EJG

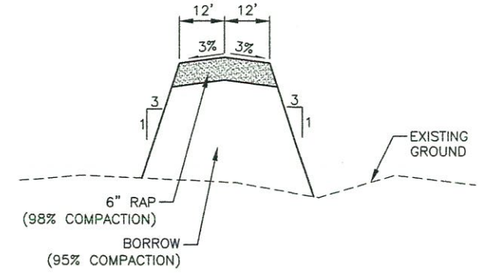
Date Revised: 6/23/2016, 10:59 AM
Layout Name: Layout1
File Path and Name: \\vm.rmnet\x\project\2316.01 001_C Cold Bay Crosswind Design Services\Civil\ACAD\2316.01_Border.dwg




1/70 RUNWAY 8–26 ~~PAVEMENT REMOVAL/~~GRADING
N.T.S. STA 9+00 TO STA 20+00



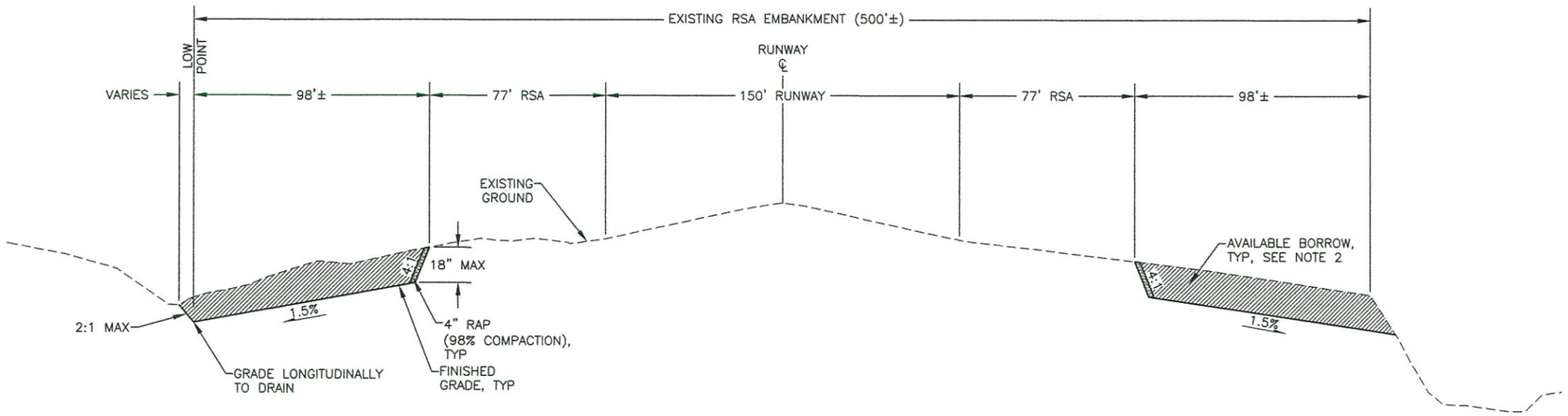

2/70 RUNWAY 8–26 PAVEMENT REMOVAL/GRADING
N.T.S. STA 20+00.00 TO STA 21+50.00




3/70 SERVICE ROAD SECTION
N.T.S.

**NOTES:**

1. CABC SHOWN PER AS–BUILT PLANS. CABC CAN BE USED FOR FOAMED AC AGGREGATE AND/OR SUBBASE AS APPROVED BY THE ENGINEER. BACKFILL AS REQUIRED WITH BORROW AND GRADE TO DRAIN AS SHOWN.
2. OBTAIN UTILITY LOCATES PRIOR TO ANY EXCAVATIONS DURING THIS PROJECT.




4/70 RUNWAY 8–26 AVAILABLE BORROW MATERIAL
N.T.S.

RW 8–26 STA 8+86 TO STA 28+43, LT
RW 8–26 STA 30+05 TO STA 45+30, LT
RW 8–26 STA 50+79 TO STA 67+92, LT
RW 8–26 STA 13+16 TO STA 35+91, RT
RW 8–26 STA 53+61 TO STA 65+67, RT
RW 8–26 STA 66+17 TO STA 71+60, RT

Borrow areas completely or partially backfilled due to UG electrical conflict

As-Built

STATE OF ALASKA 49TH — Evan J. Griffith, III, CE 10003, 6-01-17, REGISTERED PROFESSIONAL ENGINEER

DEVELOPED BY: **R&M CONSULTANTS, INC.**

| BY | DATE | REVISION |
|---|---|---|
| EJG | 06/01/17 | REVISED TYPICAL 1/70 FOR NEW FG PROFILE |

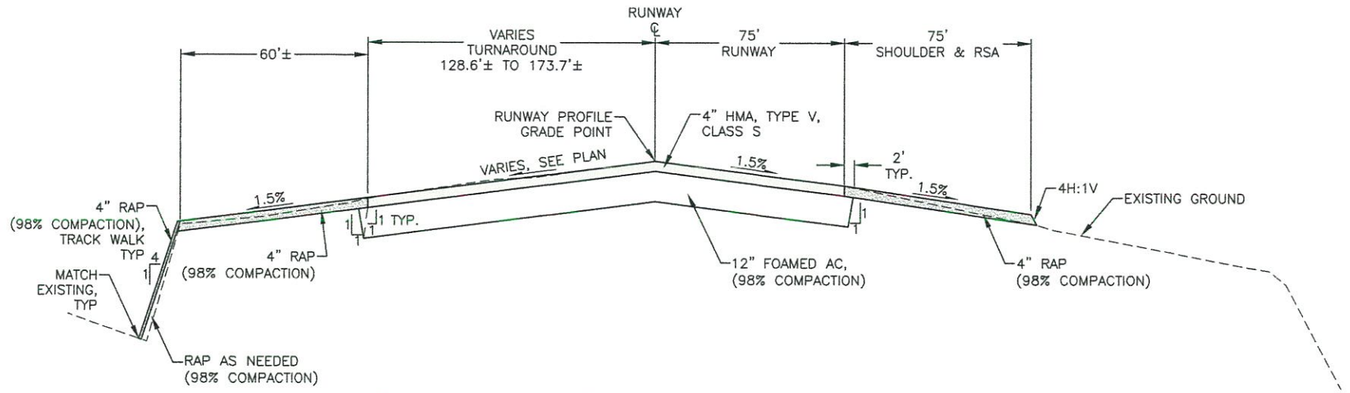
**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3–02–0065–011–2016
TYPICAL SECTIONS

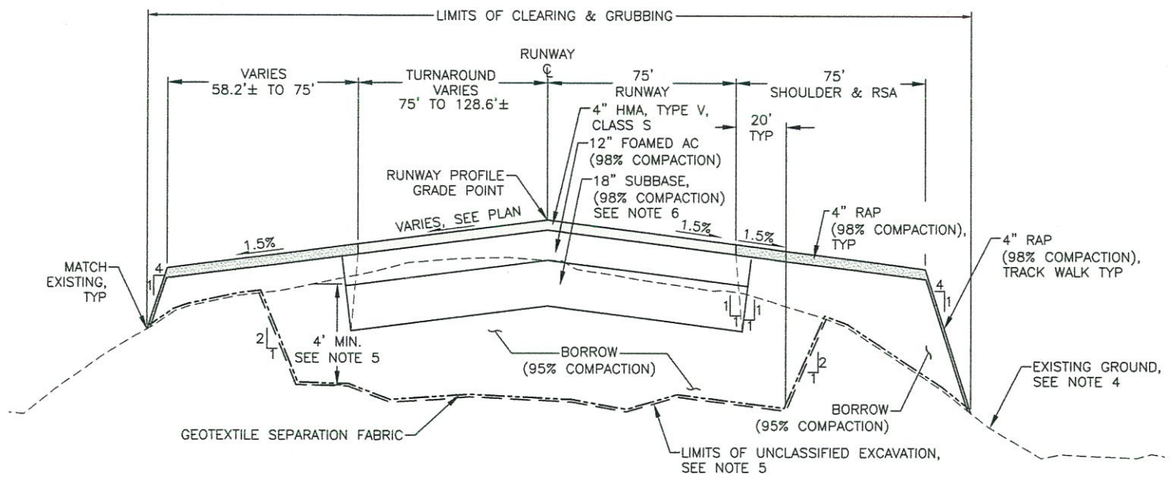
DATE: 6/01/2017
SHEET: 70R OF 97
AS–BUILT SHEET:

Designed By: MJM
Drawn By: JMC
Checked By: EJG

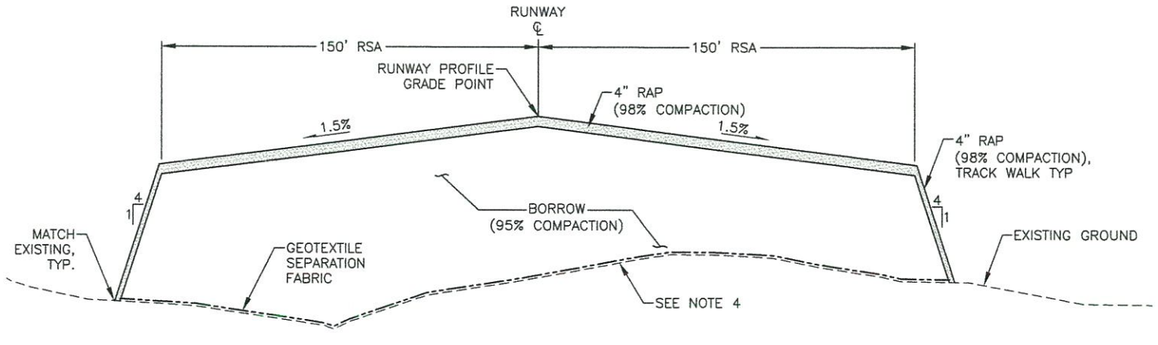
Date Revised:
Layout Name: 6/01/2017, 3:38 PM TYP SEC
File Path and Name: \\vm.rmnet\x2\project\2316.01 001_C Cold Bay Crosswind Design Services\Civil\ACAD\2316.01-TYPICAL SECTIONS.dwg




1/71 RUNWAY 8–26 EXTENSION
N.T.S. STA 71+60.00 TO STA 71+79.27




2/71 RUNWAY 8–26 EXTENSION
N.T.S. STA 71+79.27 TO STA 72+00.00




3/71 RUNWAY 8–26 RSA
N.T.S. STA 72+00.00 TO STA 75+00.00

**NOTES:**

1. USE TACK COAT BETWEEN ALL LIFTS AND LAYERS OF HMA.
2. APPLY HMA JOINT ADHESIVE TO ALL HMA JOINTS IN THE FINAL LIFT.
3. DO NOT DISTURB THE TUNDRA MAT, EXCEPT WHERE CLEARING AND GRUBBING IS INDICATED. EQUIPMENT IS PROHIBITED FROM WORKING DIRECTLY ON THE TUNDRA, EXCEPT WHEN THE SURFACE IS FROZEN.
4. THE IN–SITU SOILS MAY EXHIBIT POOR AND DIFFICULT FOUNDATION SOIL CONDITIONS. THE SHALLOW NATIVE SOILS ARE EXPECTED TO PUMP, SOFTEN, AND/OR LIQUEFY WHEN SUBJECTED TO HEAVY WHEEL LOADS, NUMEROUS VEHICLE PASSES, AND/OR HIGH FREQUENCY VIBRATIONS.
   A. PLACE THE FIRST LIFT OF BORROW BETWEEN 2.5' AND 3' THICK OVER GEOTEXTILE SEPARATION FABRIC USING LOW–GROUND PRESSURE DOZERS.
   B. COMPACT ALL SUBSEQUENT LIFTS OF BORROW FILL TO AT LEAST 95 PERCENT OF THE MAXIMUM UNIT WEIGHT.
   C. THE UNDISTURBED GROUND SURFACE BELOW THE NEW RSA EMBANKMENT IS ESTIMATED TO SETTLE APPROXIMATELY 16" WITHIN THE FIRST FEW MONTHS FOLLOWING PLACEMENT OF THE FILL. PRIOR TO PROJECT COMPLETION, PLACE ADDITIONAL FILL TO MEET THE DESIGN FINISHED GRADE ELEVATIONS.
5. PRIOR TO BACKFILL OPERATIONS, INSPECT ALL EXCAVATIONS TO VERIFY SUITABILITY OF SUBSURFACE CONDITIONS. LIMITS OF UNCLASSIFIED EXCAVATION ARE ESTIMATED TO BE 4' BELOW EXISTING GROUND, OR AS DIRECTED BY ENGINEER.
6. SUBBASE MAY BE SCARIFIED FROM EXISTING CRUSHED AGGREGATE BASE COURSE UNDER RUNWAY 26 PAVEMENT REMOVAL AREA.

As-Built

DEVELOPED BY: **R&M CONSULTANTS, INC.**

STATE OF ALASKA 49TH
Evan J. Griffith, III
CE 10003
5-13-16
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3–02–0065–011–2016
TYPICAL SECTIONS

DATE: 5/13/2016
SHEET: 71 OF 97
AS–BUILT SHEET:

Designed By: MM
Drawn By: JMC
Checked By: EJG
Date Revised: 5/16/2016, 10:29 AM
Layout Name: TYP_SEC (2)
File Path and Name: \\vm.rmnet\v\project\2316.01 DOT_C Cold Bay Crosswind Design Services\Civil\ACAD\2316.01-TYPICAL SECTIONS.dwg

| | |
|---|---|
| Designed By: | MM |
| Drawn By: | JMC |
| Checked By: | EJG |
| Date Revised: | 5/16/2016, 10:31 AM |
| Layout Name: | AVAILABLE MATERIAL SOURCE |
| File Path and Name: | \\vm.rmnet\x\project\2316.01 001_C Cold Bay Crosswind Design Services\Civil\ACAD\2316.01-RW 8 RSA.dwg |

PROPOSED PAPI, TYP

AVAILABLE MATERIAL SOURCE LIMITS STA 71+60± 152'RT

AVAILABLE MATERIAL SOURCE LIMITS STA 66+17± 152'RT

AVAILABLE MATERIAL SOURCE LIMITS STA 65+67± 152'RT

4/70

AVAILABLE MATERIAL SOURCE LIMITS STA 53+61± 152'RT

SOUTH APRON

TW B

TW A

AVAILABLE MATERIAL SOURCE LIMITS STA 35+91± 152'RT

AVAILABLE MATERIAL SOURCE LIMITS STA 13+16± 152'RT

RSA

RUNWAY 15-33

RUNWAY 8-26

0+85+00 75+00 70+00 65+00 60+00 55+00 50+00 45+00 40+00 35+00 30+00 25+00 20+00 15+00 10+00 5+00

RUNWAY SAFETY AREA

EDGE OF EXISTING EMBANKMENT

AVAILABLE MATERIAL SOURCE LIMITS STA 67+92± 152'LT

TYP.

AVAILABLE MATERIAL SOURCE LIMITS STA 50+79± 152'LT

AVAILABLE MATERIAL SOURCE LIMITS STA 45+30± 152'LT

AVAILABLE MATERIAL SOURCE LIMITS STA 30+05± 152'LT

AVAILABLE MATERIAL SOURCE LIMITS STA 28+43± 152'LT

EXISTING WINDCONE (APPROXIMATE LOCATION)

PROPOSED PAPI, TYP

AVAILABLE MATERIAL SOURCE LIMITS STA 8+86± 152'LT

Borrow areas completely or partially backfilled due UG electrical conflict

As-Built

**LEGEND**

AVAILABLE BORROW, SEE NOTE 1

PAVEMENT REMOVAL AND EXISTING CABC SOURCE, SEE NOTE 2 AND SECTIONS 1/70 & 2/70

50 0 80 160

DEVELOPED BY: **R&M CONSULTANTS, INC.**

**NOTES:**

1. EXISTING EMBANKMENT OUTSIDE 152 FEET FROM THE RUNWAY CENTERLINE, LEFT OR RIGHT, IS AVAILABLE FOR USE AS BORROW FILL WHERE CALLED IN THIS PLAN SET OR MAY BE PROCESSED FOR SUBBASE COURSE PER THE PROJECT SPECIFICATIONS AND THE ENGINEER.
2. EXISTING CABC (UP TO 12" BELOW AC PAVEMENT AND 25' BEYOND PAVEMENT EDGE) IS AVAILABLE FOR USE AS FOAMED AC AGGREGATE AND SUBBASE PER ENGINEER APPROVAL. REFERENCE COLD BAY AIRPORT CROSSWIND RUNWAY RECONSTRUCTION AS-BUILT PLANS, DATED 1/21/09, AND PROVIDED AS ADDITIONAL INFORMATION.

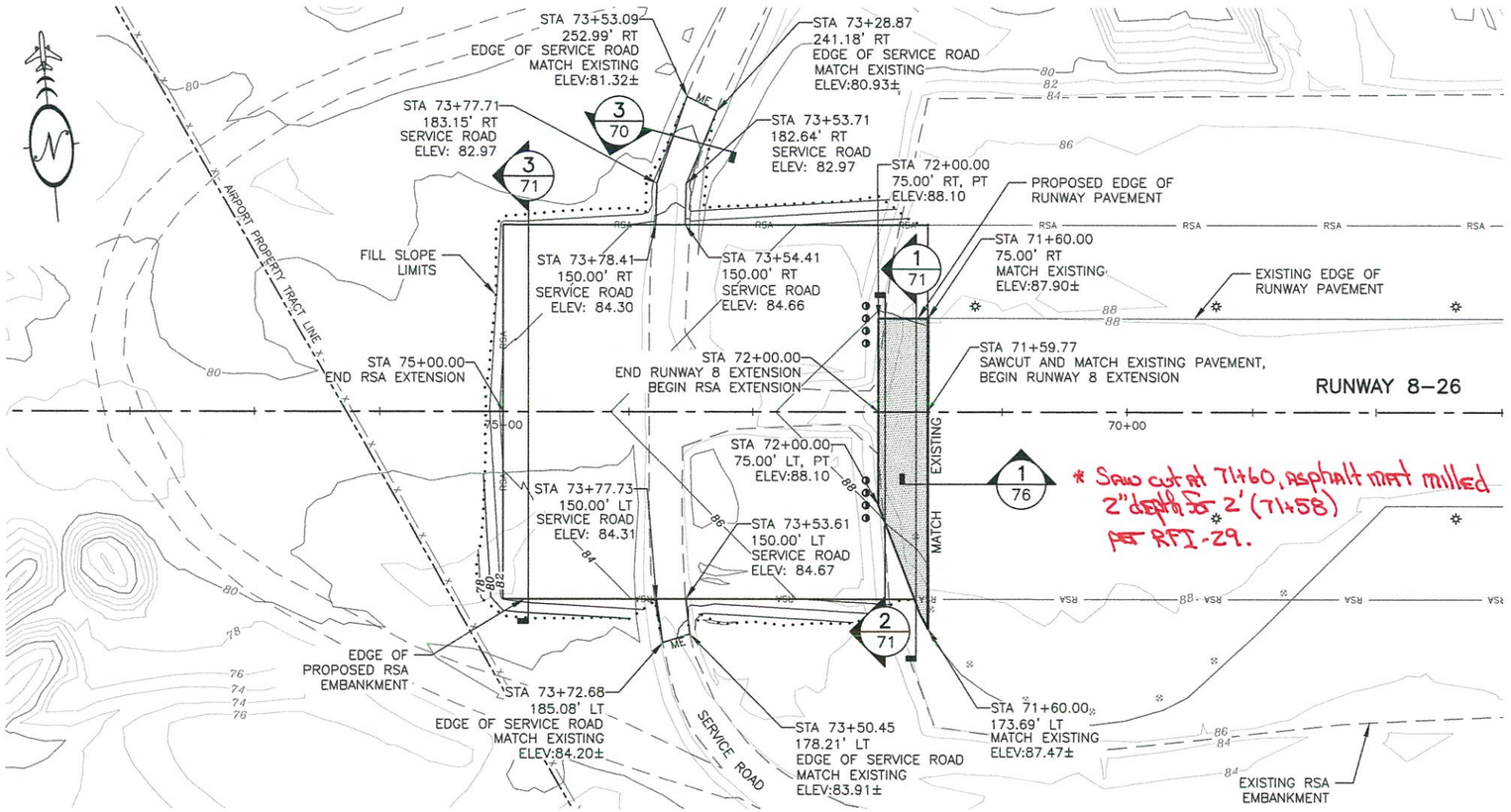
STATE OF ALASKA 49 TH Evan J. Griffith, III CE 10003 5-13-16 REGISTERED PROFESSIONAL ENGINEER

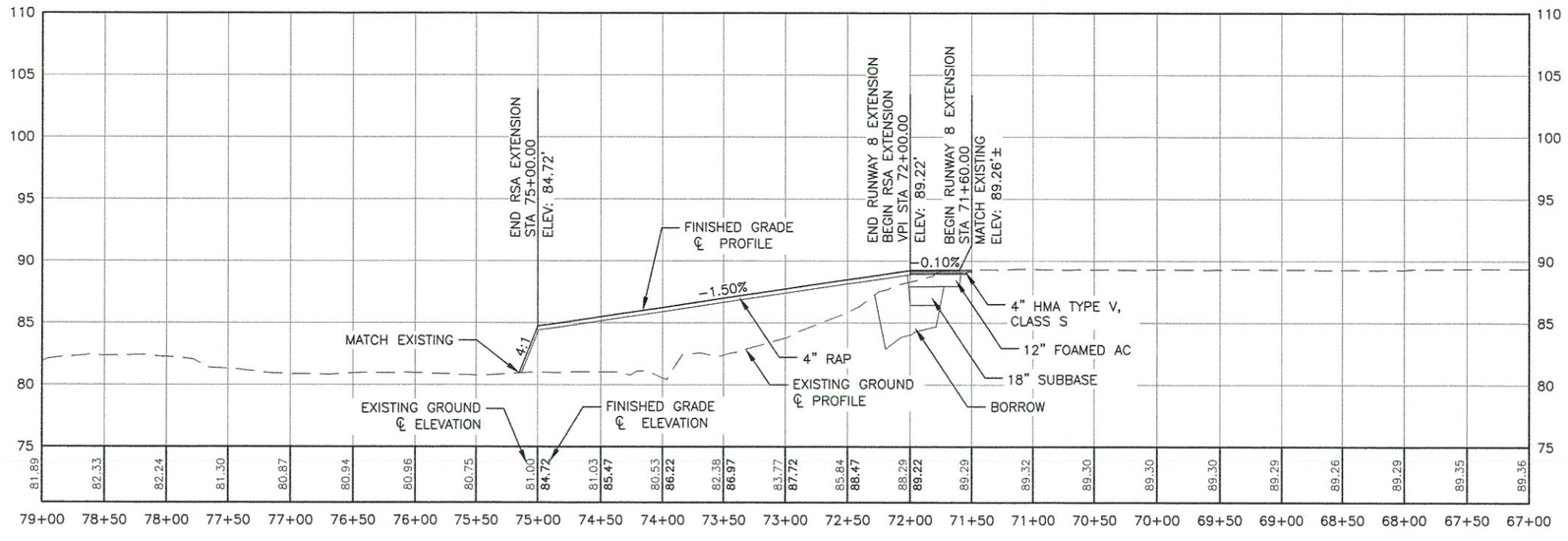
| BY | DATE | REVISION |
|---|---|---|
| | | |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-011-2016
AVAILABLE MATERIAL SOURCE

DATE: 5/13/2016
SHEET: 72 OF 97
AS-BUILT SHEET:




NOTES:

1. SEE ELECTRICAL SHEETS FOR LIGHTING LAYOUT.
2. GROOVE NEW RUNWAY PAVEMENT BETWEEN STA 71+50.00 TO STA 72+00.00. SEE DETAIL 2/76.

As-Built

VERTICAL SCALE 6 0 6 12

HORIZONTAL SCALE 60 0 60 120

DEVELOPED BY: **R&M CONSULTANTS, INC.**

STATE OF ALASKA 49TH Evan J. Griffith, III CE 10003 5-13-16 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-011-2016
PLAN & PROFILE

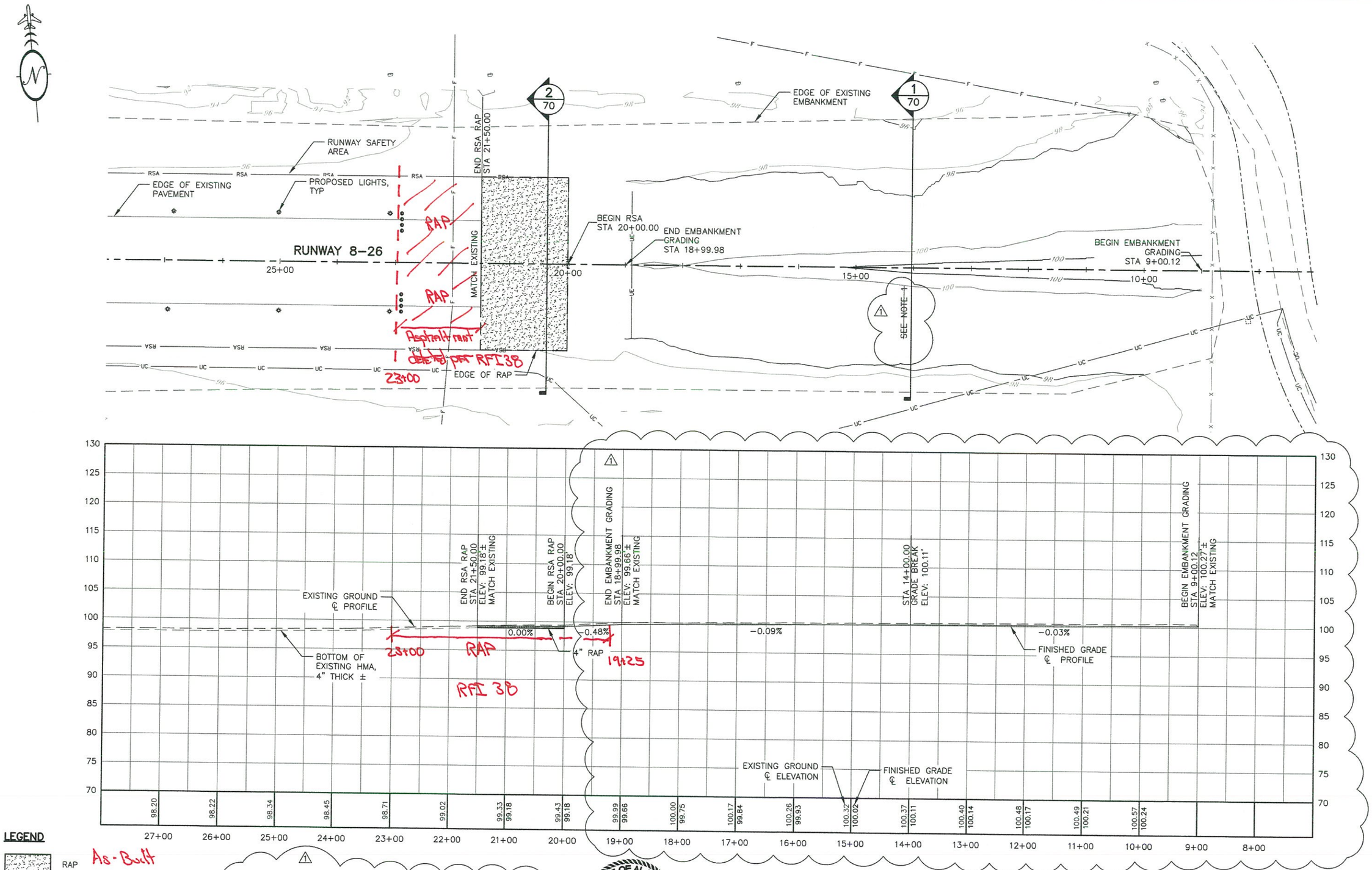
DATE: 5/13/2016
SHEET: 73 OF 97
AS-BUILT SHEET:

Designed By: MM
Drawn By: JMC
Checked By: EJG

Date Revised:
Layout Name: P&P
File Path and Name: \\vm.rmnet\x\project\2316.01 DOT_C Cold Bay Crosswind Design Services\Civil\ACAD\2316.01--P&P.dwg
5/16/2016, 10:31 AM

Designed By: MM
Drawn By: JMC
Checked By: EJG

Date Revised: 6/01/2017 3:39 PM
Layout Name: RW 26 RSA
File Path and Name: \\vm.rmnet\x2\project\2316.01 DOT_C Cold Bay Crosswind Design Services\Civil\ACAD\2316.01-RW 26 RSA.dwg




**LEGEND**

RAP As-Built

8 0 8 16
VERTICAL SCALE
80 0 80 160
HORIZONTAL SCALE

DEVELOPED BY: **R&M CONSULTANTS, INC.**

**NOTE:**

1. ~~AFTER PAVEMENT AND CABC REMOVAL, BACKFILL WITH BORROW (95% COMPACTION) AND REGRADE PER PROFILE AND TYPICAL SECTION REQUIREMENTS. GRADE CROWN TO DRAIN.~~

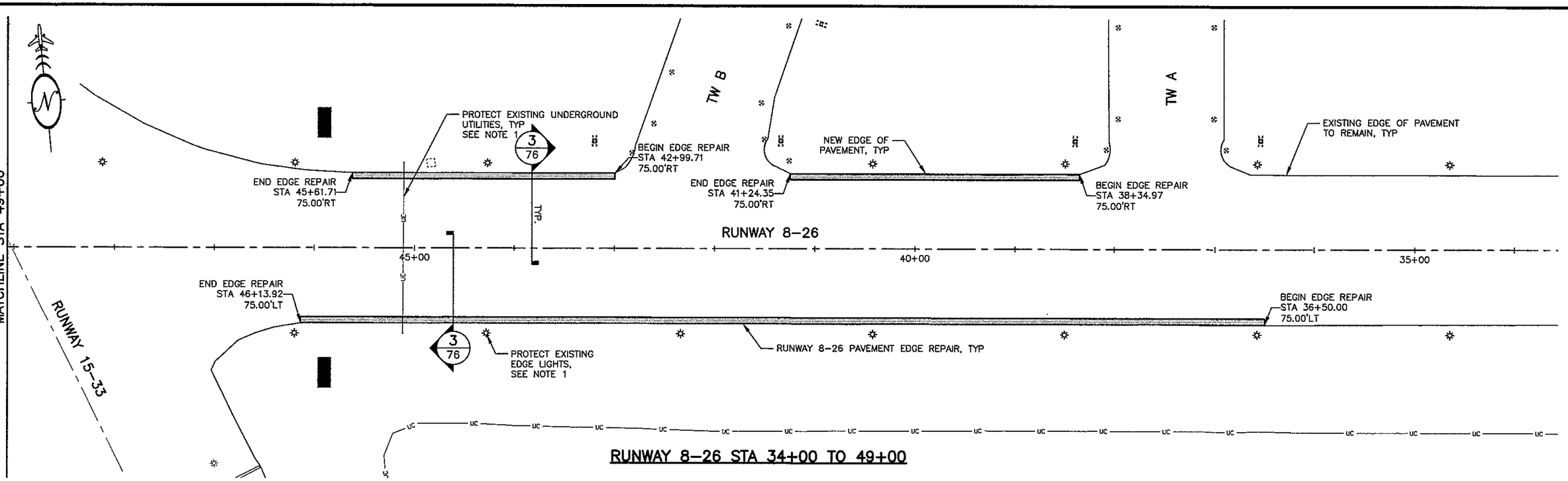
STATE OF ALASKA 49TH
Evan J. Griffith, III
CE 10003
6-01-17
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |
| | | |
| | | |
| | | |
| EJG | 06/01/17 | REVISED PROFILE TO PERMIT 4" BORROW REMOVAL |

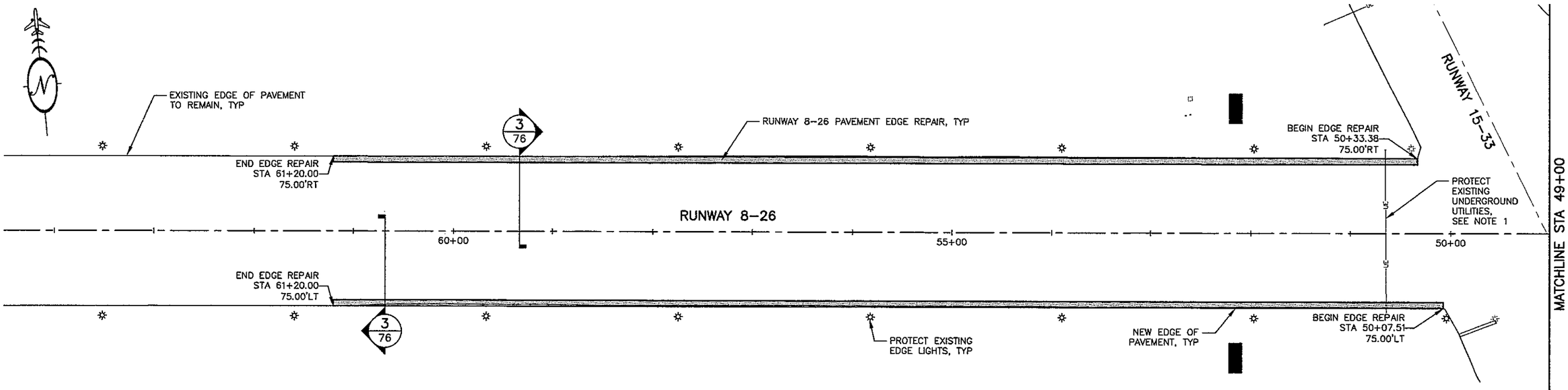
**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-011-2016
PLAN & PROFILE

DATE: 6/01/2017
SHEET: 74R OF 97
AS-BUILT SHEET:




RUNWAY 8-26 STA 34+00 TO 49+00




RUNWAY 8-26 STA 49+00 TO 64+00

As-Built

**LEGEND**

PAVEMENT EDGE REPAIR

50 0 50 100

DEVELOPED BY: **R&M CONSULTANTS, INC.**

NOTES:

1. PROTECT ALL EXISTING UTILITIES, EDGE LIGHTS, SIGNS, NAVAIDS, ETC NOT SCHEDULED FOR REMOVAL DURING THIS PROJECT. SEE ELECTRICAL PLANS. CALL FOR UTILITY LOCATES BEFORE YOU DIG.
2. GROOVE ALL NEW RUNWAY PAYMENT PER DETAIL 2/76.

STATE OF ALASKA 49TH Evan J. Griffith, III CE 10003 5-13-16 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

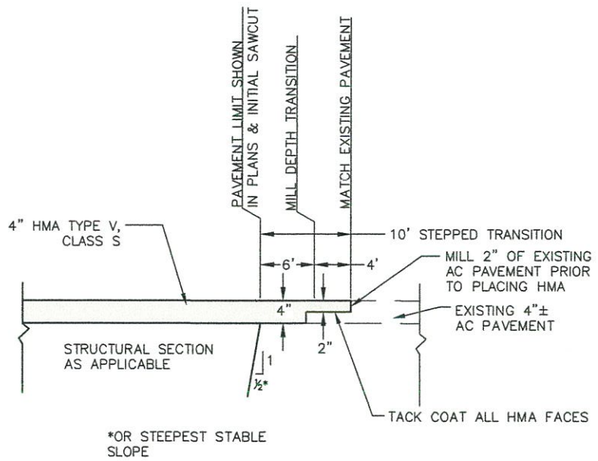
**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-011-2016
PAVEMENT EDGE REPAIR

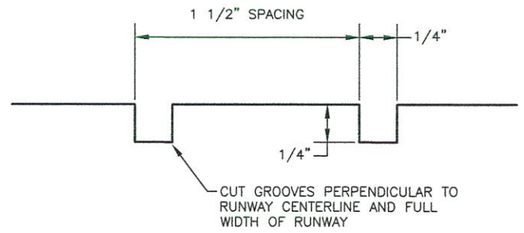
DATE: 5/13/2016
SHEET: 75 OF 97
AS-BUILT SHEET:

Designed By: WJK
Drawn By: JMC
Checked By: CJG

Date Revised: 5/16/2016, 10:32 AM
Layout Name: EDGE
File Path and Name: \\rm.mnet\v2\proj\ect\2316.01 DOT_C Cold Bay Crosswind Design Services\Civil\CADD\2316.01-EDGE REPAIR.dwg

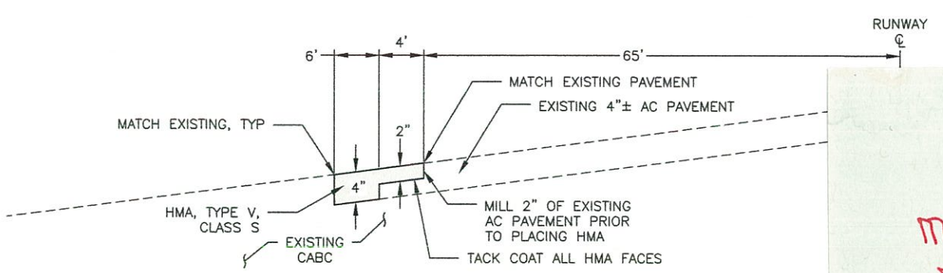



1/76 CUT AND MATCH DETAIL
N.T.S.




NOTE: GROOVE ALL NEW RUNWAY PAVEMENT

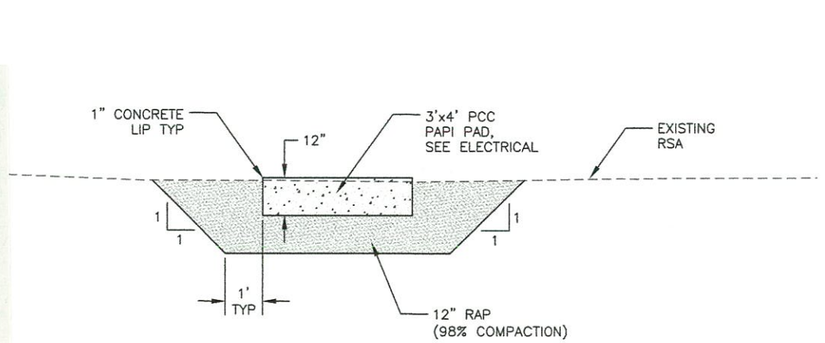
2/76 PAVEMENT GROOVING
N.T.S.




NOTE: PRIOR TO PAVING, GRADE AND COMPACT EXISTING CABC (98% COMPACTION).

3/76 RUNWAY 8–26 PAVEMENT EDGE REPAIR
N.T.S. RW 8–26 STA 36+50 TO STA 61+20, LT (EXCLUDING RW 15–33)
RW 8–26 STA 38+34.91 TO STA 61+20, RT (EXCLUDING TW B & RW 15–33

Marty's As-Built
of stations & widths




4/76 PAPI PAD TYPICAL SECTION
N.T.S

NOTE: PAPI STATION, OFFSET AND ELEVATION, REFERENCE CENTER OF FIRST CONCRETE PAD, SEE ELECTRICAL SHEETS FOR OFFSET AND LIGHT BEAM ELEVATION DETAILS.

| PAPI LOCATIONS | | |
|---|---|---|
| | STATION | OFFSET |
| 29+68 | ~~29+80~~ | 126.5'LT |
| 65+90 | ~~65+92~~ | 126.5'RT |

As-Built

STATE OF ALASKA 49TH — Evan J. Griffith, III CE 10003 5-13-16 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

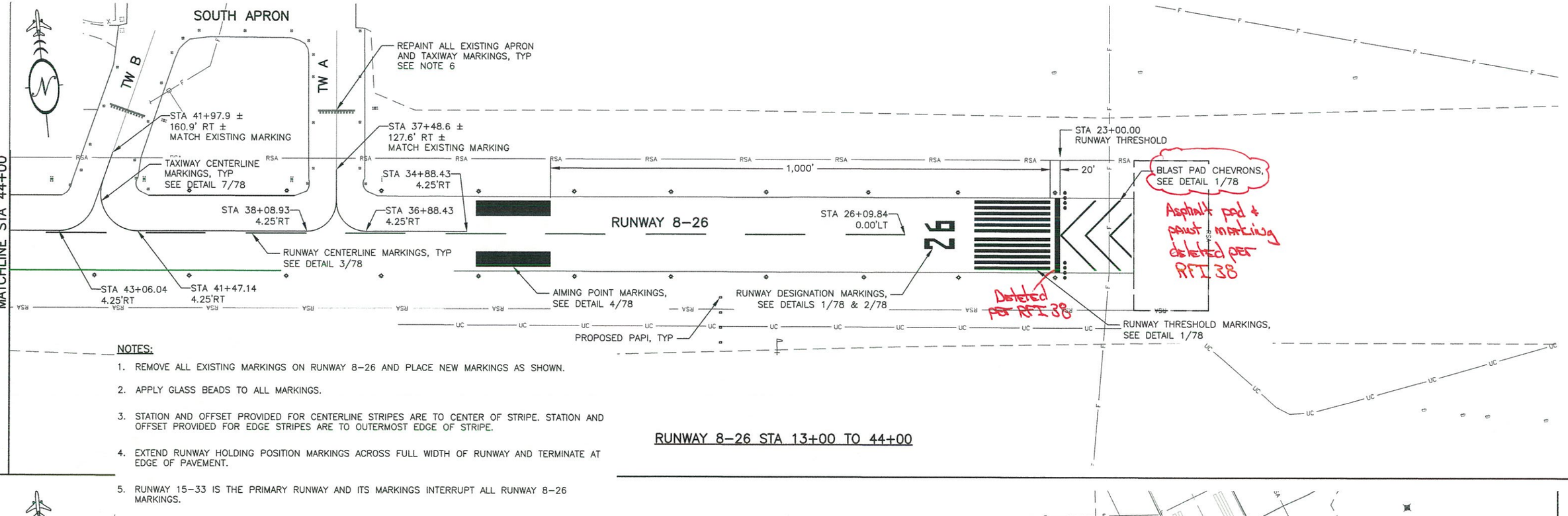
DEVELOPED BY: **R&M CONSULTANTS, INC.**

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3–02–0065–011–2016
DETAILS

DATE: 5/13/2016
SHEET: 76 OF 97
AS–BUILT SHEET:

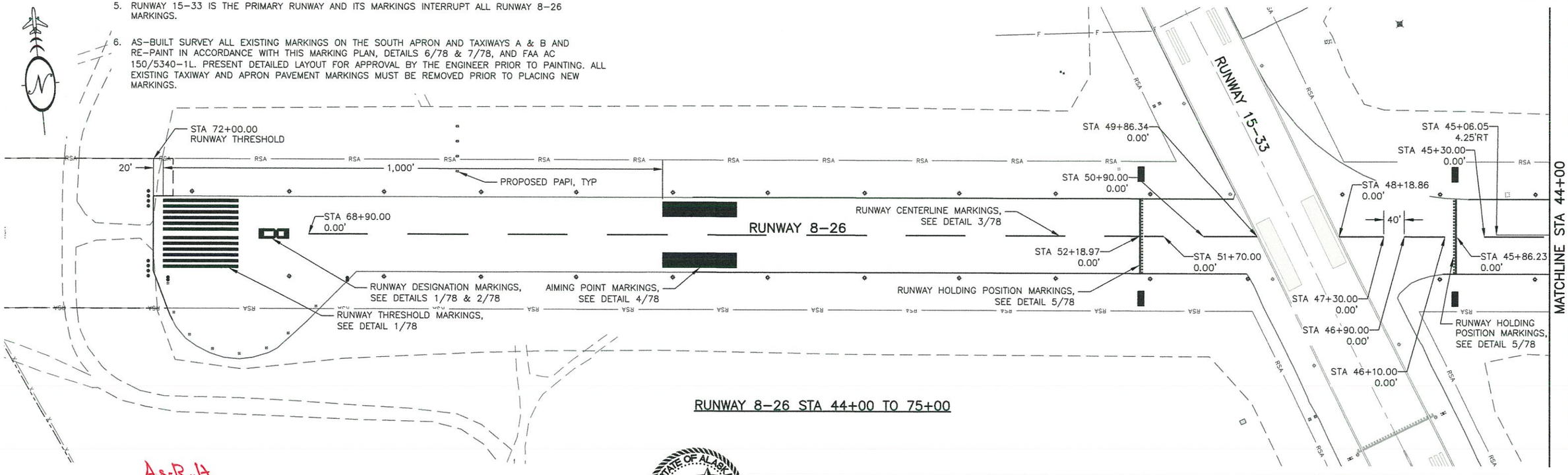
Designed By: MM
Drawn By: JMC
Checked By: EJG
Date Revised:
Layout Name: PAVE_DET
File Path and Name: \\rm.rmnet\X\project\Z316.01 DOT_C Cold Bay Crosswind Design Services\Civil\ACAD\Z316.01_DETAILS.dwg
5/16/2016, 10:32 AM




RUNWAY 8-26 STA 13+00 TO 44+00

NOTES:

1. REMOVE ALL EXISTING MARKINGS ON RUNWAY 8-26 AND PLACE NEW MARKINGS AS SHOWN.
2. APPLY GLASS BEADS TO ALL MARKINGS.
3. STATION AND OFFSET PROVIDED FOR CENTERLINE STRIPES ARE TO CENTER OF STRIPE. STATION AND OFFSET PROVIDED FOR EDGE STRIPES ARE TO OUTERMOST EDGE OF STRIPE.
4. EXTEND RUNWAY HOLDING POSITION MARKINGS ACROSS FULL WIDTH OF RUNWAY AND TERMINATE AT EDGE OF PAVEMENT.
5. RUNWAY 15-33 IS THE PRIMARY RUNWAY AND ITS MARKINGS INTERRUPT ALL RUNWAY 8-26 MARKINGS.
6. AS-BUILT SURVEY ALL EXISTING MARKINGS ON THE SOUTH APRON AND TAXIWAYS A & B AND RE-PAINT IN ACCORDANCE WITH THIS MARKING PLAN, DETAILS 6/78 & 7/78, AND FAA AC 150/5340-1L. PRESENT DETAILED LAYOUT FOR APPROVAL BY THE ENGINEER PRIOR TO PAINTING. ALL EXISTING TAXIWAY AND APRON PAVEMENT MARKINGS MUST BE REMOVED PRIOR TO PLACING NEW MARKINGS.




RUNWAY 8-26 STA 44+00 TO 75+00

As-Built

100 0 100 200

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STATE OF ALASKA 49TH Evan J. Griffith, III CE 10003 5-13-16 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-011-2016
MARKING PLAN

DATE: 5/13/2016
SHEET: 77 OF 97
AS-BUILT SHEET:

Designed By: MM
Drawn By: JMC
Checked By: EJG

Date Revised: 5/16/2016, 10:33 AM
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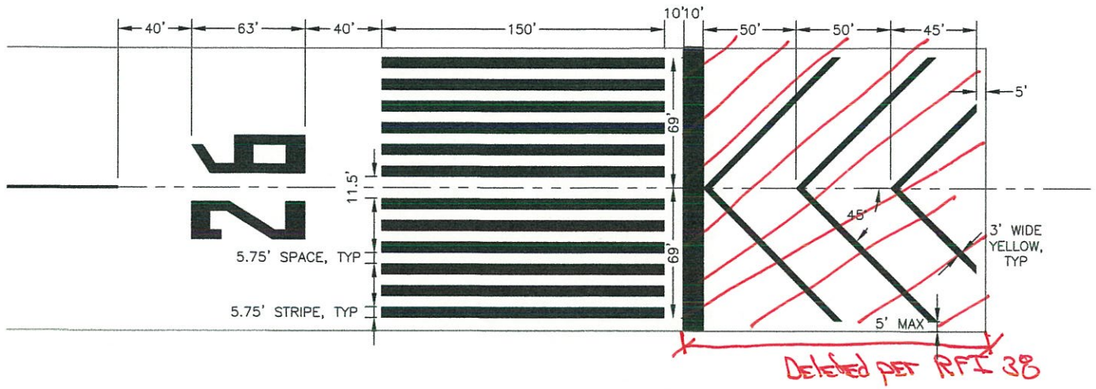
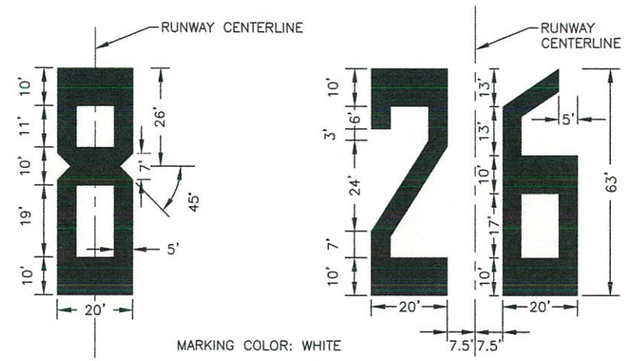
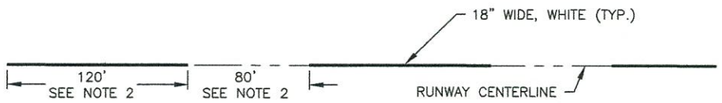
File Path and Name: \\rm.rmnet\v2\project\2316.01 DOT_C Cold Bay Crosswind Design Services\Civil\ACAD\2316.01-MARKING PLAN.dwg



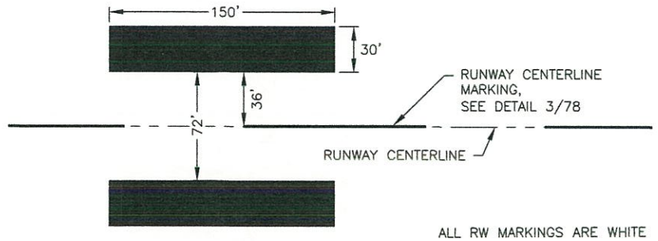

1/78 RUNWAY DESIGNATION AND THRESHOLD MARKINGS
N.T.S



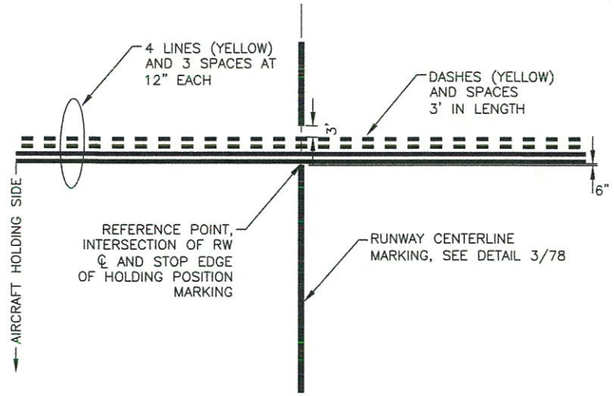

2/78 RUNWAY DESIGNATION MARKINGS
N.T.S



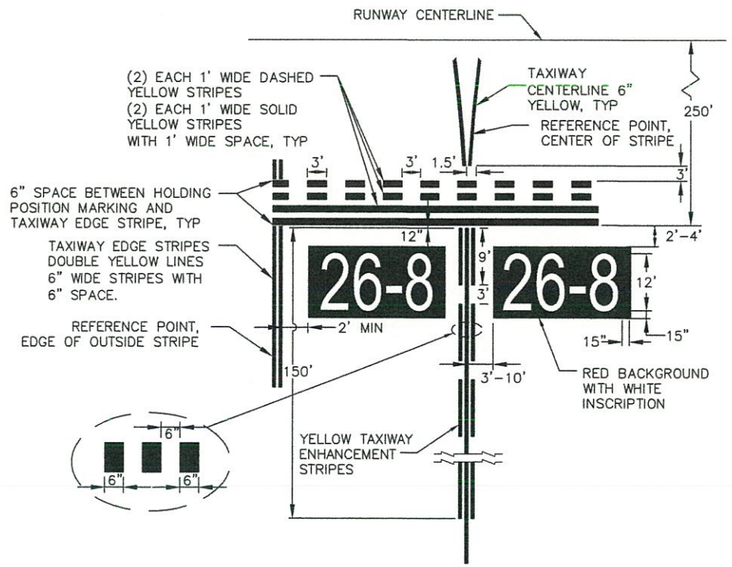

3/78 RUNWAY CENTERLINE MARKINGS
N.T.S




4/78 AIMING POINT MARKINGS
N.T.S

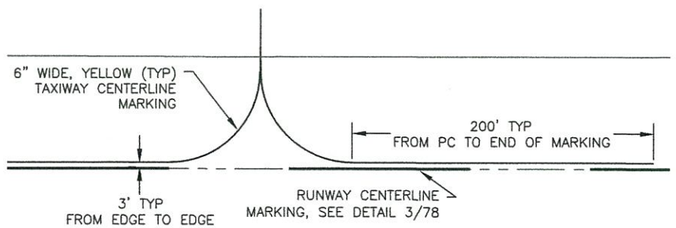



5/78 RUNWAY HOLDING POSITION MARKINGS
N.T.S




As-Built

6/78 HOLDING POSITION AND ENHANCED TAXIWAY CENTERLINE MARKINGS
N.T.S




7/78 TAXIWAY CENTERLINE MARKING
N.T.S

NOTES:

1. ENSURE ALL MARKINGS CONFORM TO FAA AC 150/5340-1L AND 150/5300-13A, OR CURRENT EDITIONS.
2. SEE MARKING PLAN FOR THE LAYOUT OF THE RUNWAY CENTERLINE STRIPES AND GAPS NEAR THE RUNWAY MIDPOINT. REDUCED STRIPES MUST BE AT LEAST 80 FEET BUT NO MORE THAN 120 FEET IN LENGTH, AND REDUCED GAPS MUST BE AT LEAST 40 FEET BUT NO MORE THAN 80 FEET IN LENGTH.
3. ALL CENTERLINE MARKINGS ARE MEASURE TO THE CENTER OF THE STRIPE, EDGE MARKINGS ARE TO THE OUTSIDE EDGE OF OUTER MOST STRIPE.

STATE OF ALASKA 49TH — Evan J. Griffith, III CE 10003 5-13-16 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

DEVELOPED BY: **R&M CONSULTANTS, INC.**

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-011-2016
MARKING DETAILS

DATE: 5/13/2016
SHEET: 78 OF 97
AS-BUILT SHEET:

Designed By: MM
Drawn By: JMC
Checked By: EJG

Date Revised: 5/16/2016, 10:33 AM
Layout Name: MARK DET
File Path and Name: \\rm.rmnet\x\project\2316.01 DOT_C Cold Bay Crosswind Design Services\Civil\ACAD\2316.01_DETAILS.dwg

Designed By: DMH
Drawn By: GMV
Checked By: NJL

Date Revised: 5/16/2016, 3:50 PM
Layout Name: D1
File Path and Name: Z:\1503008C - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\01-05.dwg

## DEMOLITION GENERAL NOTES:

1. LIGHT BASES, HANDHOLES, SIGN BASES, REIL FOUNDATIONS, PAPI FOUNDATIONS, VASI FOUNDATIONS, WIRE AND RACEWAYS SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL STATUTES.
2. DIRECT BURIED WIRE AND EMPTY CONDUIT SHALL BE ABANDONED IN PLACE. ABANDONED WIRING AND CONDUIT RUNS EXPOSED DURING EXCAVATION SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. THIS WORK SHALL BE SUBSIDIARY TO EXCAVATION AND NO SEPARATE PAYMENT WILL BE MADE.
3. LIGHT FIXTURES, SIGNS, AND TRANSFORMERS TO BE OFFERED TO STATE FIELD MAINTENANCE PERSONNEL. EQUIPMENT DEEMED OF NO SALVAGE VALUE SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
4. REMOVE EXISTING RUNWAY 8–26 REGULATOR AND 5 KV WIRING TO EXISTING PLUG CUTOUT, EXISTING CONDUIT TO BE REUSED. LOCATED ON MEZZANINE IN ARFF BUILDING, SEE SHEET 89. REGULATOR TO BE OFFERED TO STATE FIELD MAINTENANCE PERSONNEL. IF REGULATOR IS DEEMED OF NO SALVAGE VALUE BY THE STATE, IT WILL BECOME THE PROPERTY OF THE CONTRACTOR.
5. REMOVAL OF EXISTING CONDUCTORS AND GROUND WIRE SHALL BE SUBSIDIARY TO ITEM L–108a AND NO SEPARATE PAYMENT WILL BE MADE.
6. THE CONTRACTOR SHALL RESTORE GRADE AND FINISH SURFACES DISTURBED BY THE REMOVAL OF STRUCTURES. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE.

## DEMOLITION SHEET NOTES:

(1) REMOVE RUNWAY EDGE LIGHTS, THRESHOLD LIGHTS, TURN AROUND TAXIWAY LIGHTS, TRANSFORMERS, AND UNUSED WIRING.

(2) REMOVE SIGN, SIGN BASE, ADJACENT HANDHOLE, TRANSFORMER, AND UNUSED WIRING. CUT UNUSED CONDUIT 12" MINIMUM BELOW GRADE, SEAL WITH DUCT SEAL, AND ABANDON IN PLACE.

(3) REMOVE LIGHT FIXTURE AND TRANSFORMER ONLY, EXISTING LIGHT BASE, CONDUIT, AND 5KV WIRING TO REMAIN. THIS WORK SHALL BE SUBSIDIARY TO PAY ITEMS L–100c(2) AND L–100e(2) AND NO SEPARATE PAYMENT WILL BE MADE.

(4) REMOVE CONCRETE REIL FOUNDATION AND J–BOX. CUT CONDUIT 12" MINIMUM BELOW GRADE, SEAL WITH DUCT SEAL, AND ABANDON IN PLACE. PAID UNDER ITEM P–165a.

(5) REMOVE CONCRETE PAPI FOUNDATIONS AND J–BOX. CUT CONDUIT 12" MINIMUM BELOW GRADE, SEAL WITH DUCT SEAL, AND ABANDON IN PLACE. PAID UNDER ITEM P–165a.

(6) REMOVE EXISTING VASI EQUIPMENT AND OFFER TO FAA. REMOVE CONCRETE FOUNDATIONS, J–BOXES, AND WIRING BACK TO CB. REMOVE EXISTING RADIO CONTROLLER, RELAY AND UNUSED ABOVE GRADE CONDUIT. CUT UNUSED CONDUIT 12" MINIMUM BELOW GRADE AND ABANDON IN PLACE. THIS WORK SHALL BE SUBSIDIARY TO PAY ITEM L–132c AND NO SEPARATE PAYMENT WILL BE MADE.

(7) EXISTING TO BE MAINTAINED AND WORKED AROUND.

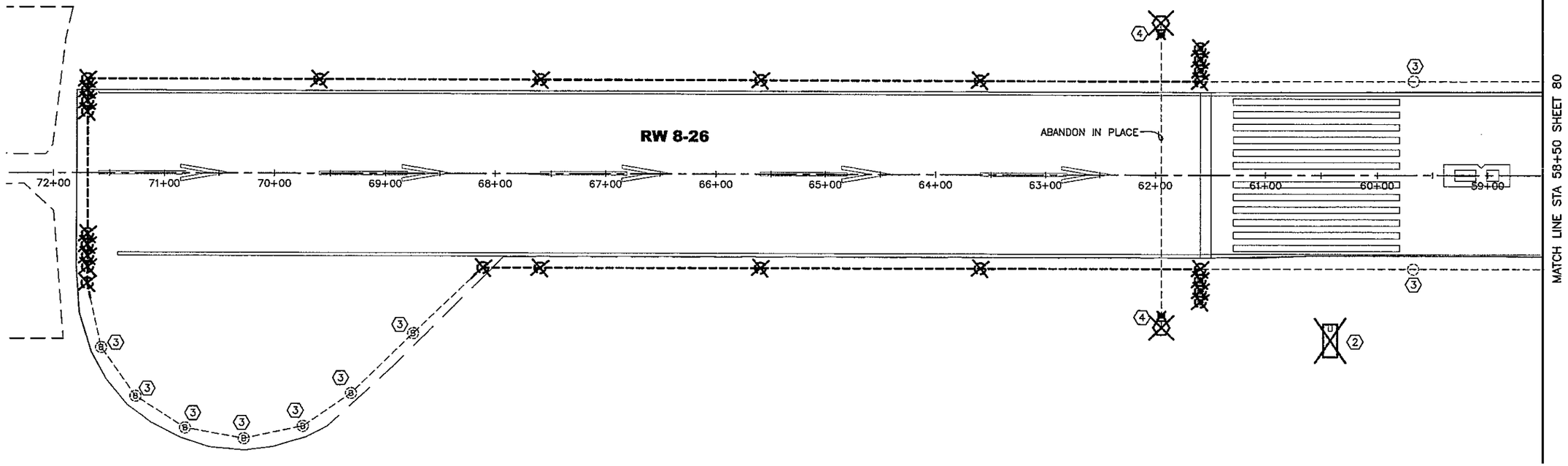
(8) RESTORE RW 8–26 CONDUIT RUN AFTER REMOVAL OF EDGE LIGHT BASE. EXISTING CONDUIT IS HDPE, MAKE CONNECTIONS USING WATERTIGHT BUTT WELDS. THIS WORK SHALL BE SUBSIDIARY TO PAY ITEM L–100h AND NO SEPARATE PAYMENT WILL BE MADE.

(9) MAINTAIN EXISTING CIRCUITRY AS NEEDED FOR TEMPORARY LIGHTING. VERIFY SEQUENCE WITH CIVIL. COORDINATE WITH RUNWAY 8–26 WORK. WHEN TEMPORARY LIGHTING IS NO LONGER NEEDED , REMOVE UNUSED CONDUCTORS AND ABANDON UNUSED CONDUIT IN PLACE. SEE SHEETS 53, 80, 85 FOR ADDITIONAL REQUIREMENTS. THIS WORK SHALL BE SUBSIDIARY TO PAY ITEM L–100h AND NO SEPARATE PAYMENT WILL BE MADE.

## DEMOLITION LEGEND:

RW – RUNWAY
TW – TAXIWAY
R–1 – RW 15–33 CIRCUIT
R–2 – RW 8–26 CIRCUIT
T–1 – TW A, TW B, TW C, TW D CIRCUIT
VASI – VISUAL APPROACH SLOPE INDICATOR
XFMR – TRANSFORMER

- F — EXISTING UNDERGROUND FUEL LINE (TO BE MAINTAINED)
- UC — EXISTING UNDERGROUND COMMUNICATION (TO BE MAINTAINED)
- UC ELEC — EXISTING UNDERGROUND ELECTRIC (TO BE MAINTAINED)
- EXISTING UNDERGROUND CONDUIT
- EXISTING DUCT BANK (TO REMAIN)
- EXISTING RUNWAY OR TAXIWAY LIGHT AND BASE (TO BE REMOVED) (1)
- EXISTING TAXIWAY LIGHT (TO REMAIN)
- EXISTING RUNWAY EDGE LIGHT (TO REMAIN)
- EXISTING HANDHOLE (TO REMAIN)
- EXISTING ELECTRIC MANHOLE (TO REMAIN)
- EXISTING AIRPORT SIGN (TO REMAIN)
- EXISTING AIRPORT SIGN AND BASE (TO BE REMOVED) SHALL BE PAID AT THE UNIT PRICE UNDER L–100y
- EXISTING VASI
- EXISTING METER BASE (TO REMAIN)
- EXISTING TRANSFORMER (TO REMAIN)
- EXISTING QUAZITE J–BOX (TO BE REMOVED)
- EXISTING PAPI OR REIL FOUNDATION (TO BE REMOVED)
- EXISTING WIND CONE (TO BE REMOVED)




As-Built

50 0 50 100

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH — MICHAEL J. LOVE 05/16/2016 EE-5818 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3–02–0065–XXX
RW 8–26
LIGHTING DEMOLITION PLAN

DATE: 05/16/2016
SHEET: 79 OF 97
AS–BUILT SHEET:

| | |
|---|---|
| Designed By: | DMH |
| Drawn By: | GMV |
| Checked By: | MJL |

| | |
|---|---|
| Date Revised: | 5/16/2016, 3:50 PM |
| Layout Name: | D2 |
| File Path and Name: | Z:\15030CBC - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\D1-05.dwg |

N

APPROXIMATE LOCATION OF EXISTING METER BASE AND TRANSFORMER TO REMAIN. (6)

EXISTING VASI (6)

6 EXISTING VASI

REMOVE CONDUCTORS AND GROUND WIRE, SEE SHEET 85.

RW 8-26

RW 15-33

EH 1 EH 2 EH 3 EH 4 EH 5 EH 6 EH 7 EH 8

MH-7

MATCH LINE STA 58+50 SHEET 79

MATCH LINE STA 43+50 SHEET 81

58+00 57+00 56+00 55+00 54+00 53+00 52+00 51+00 50+00 49+00 48+00 47+00 46+00 45+00 44+00

= No light = no light installed by others for removal

No light

No light

No light

No light

Actual location

No light

As-Built

50 0 50 100

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

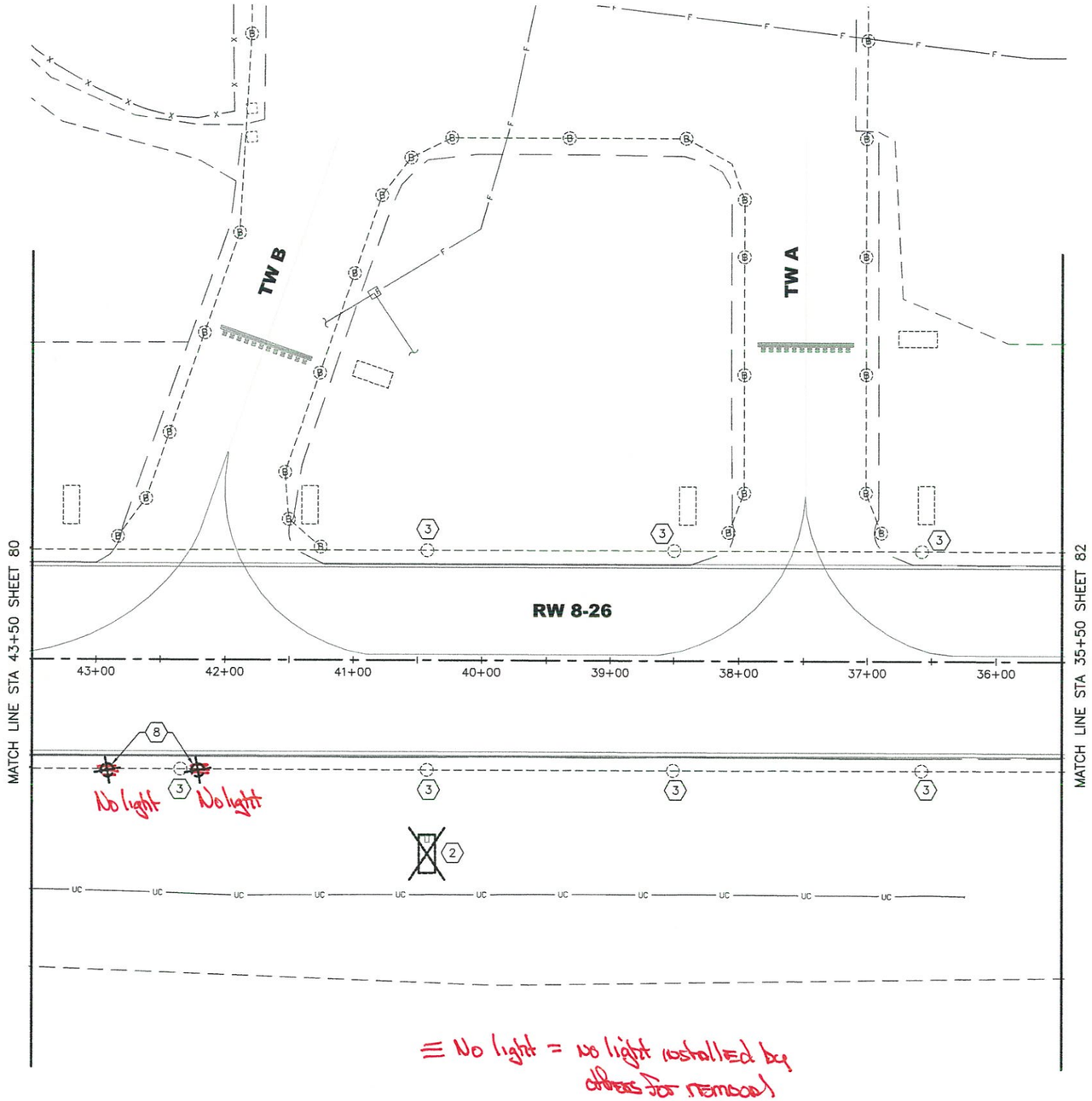
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
RW 8-26
LIGHTING DEMOLITION PLAN

DATE: 05/16/2016
SHEET: 80 OF 97
AS-BUILT SHEET:

| Designed By: | DMH |
|---|---|
| Drawn By: | GMV |
| Checked By: | MJL |

| Date Revised: | 5/16/2016, 3:50 PM |
|---|---|
| Layout Name: | 03 |
| File Path and Name: | Z:\15530CBC - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\01-05.dwg |




≡ No light = no light installed by others for removal

As-Built

50 0 50 100

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

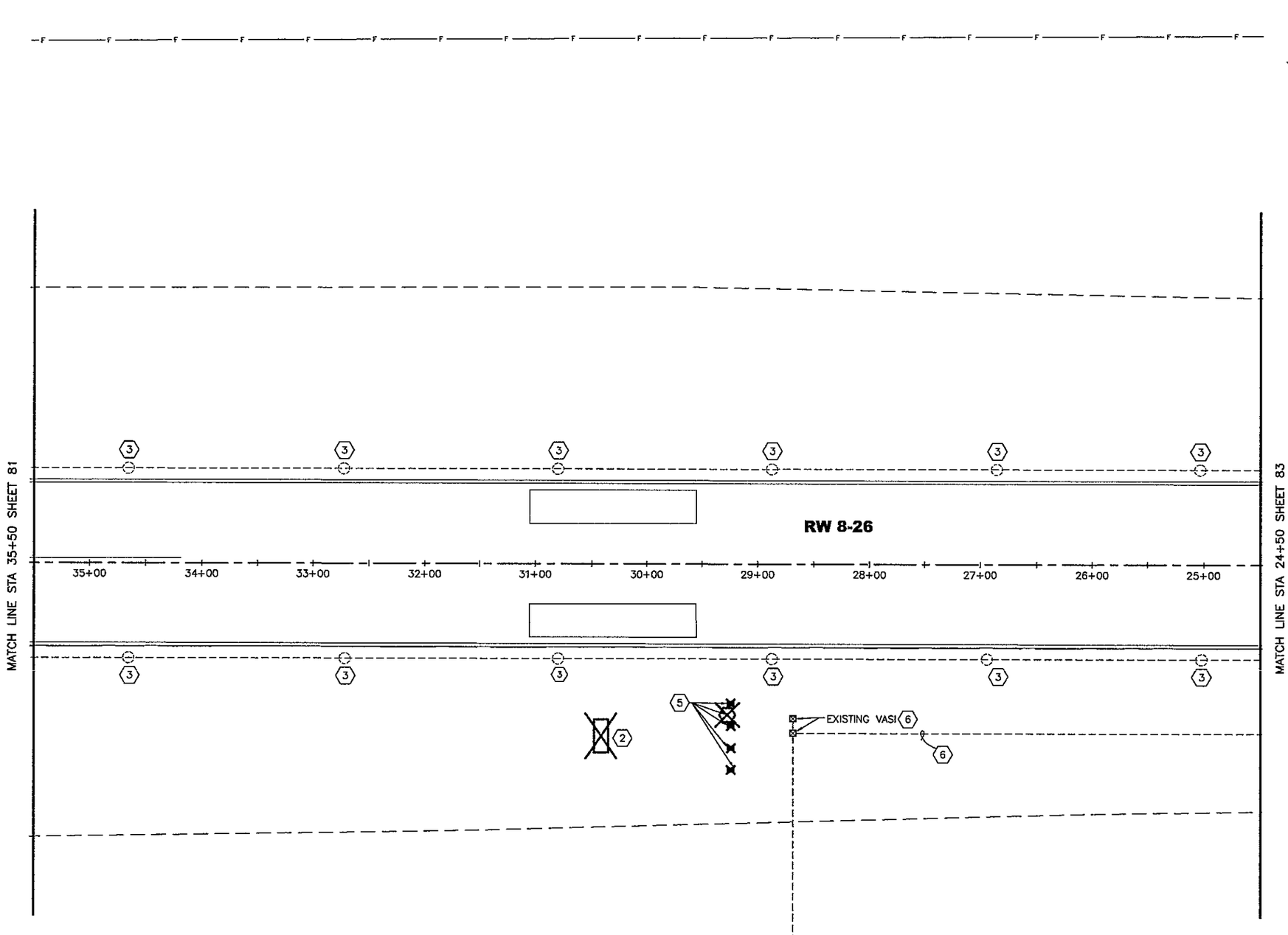
STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
RW 8-26
LIGHTING DEMOLITION PLAN

DATE: 05/16/2016
SHEET: 81 OF 97
AS-BUILT SHEET:




As-Built

50 0 50 100

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
06/08/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| DMH | 06/08/16 | METER LOCATION AND WIND CONE 1 |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
RW 8-26
LIGHTING DEMOLITION PLAN

DATE: 05/16/2016
SHEET: 82R OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GW
Checked By: MJL

Date Revised: 6/08/2016, 2:45 PM
Layout Name: D4
File Path and Name: Z:\16035086 - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\01-05.dwg

Attachment #8 Addendum No. 1

MATCH LINE STA 24+50 SHEET 82

RW 8-26

24+00 23+00 22+00 21+00 20+00 19+00 18+00 17+00 16+00 15+00 14+00 13+00 12+00 11+00 10+00 9+00

No light

= No light = No light installed by others for reference.

EXISTING VASI (6)

EXISTING WIND CONE TO REMAIN. (1)

As-Built

50 0 50 100

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH MICHAEL J. LOVE 06/08/2016 EE-5818 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| DMH | 06/08/16 | METER LOCATION AND WIND CONE (1) |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
RW 8-26
LIGHTING DEMOLITION PLAN

DATE: 05/16/2016
SHEET: 83R OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 6/08/2016, 2:45 PM
Layout Name: D5
File Path and Name: Z:\15030C8C - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\D1 - D5.dwg

## GENERAL NOTES:

1. INSTALL NEW CONDUIT BEFORE RUNWAY OR SHOULDER IS PAVED.
2. WIRE SHALL BE #8, 5000V, FAA TYPE "C". TAXIWAY CIRCUIT SHALL BE IDENTIFIED BY COLORABLE INSULATION BLUE. RUNWAY 15–33 EDGE LIGHT CIRCUIT SHALL BE IDENTIFIED BY COLORABLE INSULATION RED. RUNWAY 8–26 EDGE LIGHT CIRCUIT SHALL BE IDENTIFIED BY BLACK INSULATION.
3. EXISTING RUNWAY 8–26 LIGHT BASES ARE HDPE, FILLED WITH GILSULATE INSULATION. EXISTING RUNWAY 8–26 CONDUIT IS 2" HDPE.
4. CONNECT HDPE CONDUIT TO DISSIMILAR CONDUIT USING ELECTROFUSION COUPLING OR POLYCAM ADAPTER.
5. CONTRACTOR SHALL RESTORE LIGHTING CONTROL AND POWER CIRCUITS, TO THE SATISFACTION OF THE AIRPORT MANAGER, ONE HOUR PRIOR TO SUNSET.
6. CIRCUITS PASSING THROUGH LIGHT BASE SHALL NOT REQUIRE SERVICE LOOPS IF CABLE IS NOT INCIDENTAL TO THAT LIGHT'S CIRCUITRY.
7. PROVIDE LIGHT BASES WITH HUB CONFIGURATIONS AS SHOWN IN THE PLANS.
8. PROVIDE A NEW 15 KW, CLASS 1, STYLE 2, 5–STEP, FERRORESONANT REGULATOR WITH DIGITAL POWER METER TO INDICATE TRUE RMS OUTPUT CURRENT, VOLTAGE, VA, AND WATTS. INPUT VOLTAGE: 208V, OUTPUT CURRENT: 6.6A. PROVIDE WITH FACTORY INSTALLED INPUT FUSES. MOUNT IN LOCATION OF EXISTING RUNWAY 8–26 REGULATOR ON MEZZANINE IN ARFF BUILDING. REUSE EXISTING CIRCUIT. SEE SHEET 89. PROVIDE NEW 5 kV WIRING FROM NEW REGULATOR TO EXISTING PLUG CUTOUT. REUSE EXISTING CONDUIT. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
9. ALL BOLTS, NUTS, AND THREADED SURFACES SHALL BE COATED WITH ANTI–SIEZE PER SPECIFICATIONS.
10. ALL WORK AND MATERIALS, INCLUDING, BUT NOT LIMITED TO, FOUNDATIONS, HANDHOLES, CONDUIT AND WIRE, EQUIPMENT AND MOUNTING STRUCTURE, ASSOCIATED WITH THE PAPI SYSTEMS SHALL BE SUBSIDIARY TO PAY ITEM L–132c AND NO SEPARATE PAYMENT WILL BE MADE.

## SHEET NOTES:

1. CONNECT NEW CONDUIT TO EXISTING LIGHT BASE, HANDHOLE, MANHOLE, OR CONDUIT.
2. PROVIDE NEW LIGHT BASE WITH EXTRA HUB AND CONNECT TO NEW CONDUIT.
3. CONNECT NEW CONDUCTORS TO EXISTING FOR CONTINUATION OF CIRCUIT.
4. EXISTING TO BE MAINTAINED AND WORKED AROUND.
5. PROVIDE NEW FIXTURE AND TRANSFORMER PER DETAIL 6/90. EXISTING LIGHT BASE TO BE REUSED. RESTORE GILSULATE INSULATION AND MAINTAIN WATERTIGHT INTEGRITY OF LIGHT BASE. THIS WORK SHALL BE PAID UNDER ITEMS L–100c(2) AND L–100e(2).
6. INSTALL 2" PVC CONDUIT DRAINS TO DAYLIGHT AS SHOWN OR AS DIRECTED BY THE ENGINEER, SLOPE TO DRAIN. APPROXIMATE LENGTH AS NOTED. COVER END WITH 1/4" STAINLESS STEEL RODENT SCREEN. ATTACH WITH STAINLESS STEEL BAND CLAMPS. THIS WORK SHALL BE PAID UNDER ITEM L–110c. ALL WORK AND MATERIALS SHALL BE SUBSIDIARY TO PAY ITEM L–110c AND NO SEPARATE PAYMENT WILL BE MADE.

## LEGEND:

- EXISTING UNDERGROUND FUEL LINE (TO BE MAINTAINED)
- EXISTING UNDERGROUND COMMUNICATION (TO BE MAINTAINED)
- EXISTING UNDERGROUND ELECTRIC (TO BE MAINTAINED)
- EXISTING UNDERGROUND CONDUIT
- EXISTING DUCT BANK
- NEW 2" RIGID STEEL CONDUIT. HASH MARKS INDICATE NUMBER OF #8 AWG. 5KV AIRPORT CABLES TYPE "C" PLUS ONE #6 BARE COPPER GROUND CONDUCTOR.
- NEW 2" PVC CONDUIT. HASH MARKS INDICATE NUMBER OF #8 AWG. 5KV AIRPORT CABLES TYPE "C" PLUS ONE #6 BARE COPPER GROUND CONDUCTOR.
- NEW 3'x3'x3' ELECTRIC MANHOLE
- EXISTING ELECTRIC MANHOLE (TO REMAIN)
- EXISTING RW EDGE LIGHT (TO REMAIN)
- EXISTING TW EDGE LIGHT (TO REMAIN)
- EXISTING HANDHOLE (TO REMAIN)
- NEW RUNWAY THRESHOLD LIGHT – HIGH INTENSITY
- NEW RUNWAY EDGE LIGHT – HIGH INTENSITY
- NEW FLUSH RUNWAY EDGE LIGHT – HIGH INTENSITY
- NEW TAXIWAY EDGE LIGHT
- NEW HANDHOLE, L–867B
- NEW 3/4" X 10' GROUND ROD
- LIGHT FIXTURE NUMBER
- SIGN NUMBER – SEE SIGN SCHEDULE, SHEET 92
- NEW SIGN
- EXISTING VASI
- EXISTING METER BASE (TO REMAIN)
- EXISTING TRANSFORMER (TO REMAIN)

RW STA. 72+10 INSTALL NEW THRESHOLD LIGHTS

NEW UNISTRUT EQUIPMENT RACK ON CONCRETE FOUNDATION, SEE SHEET 95.

P&C Station 65+64,236'R

65+80,236'R (approximate)

STA 65+90 INSTALL NEW PAPI, SEE SHEET 93.

STA 65+90 is LHA 4.5'x3' concrete foundation ℄.

3" HDPE CONDUIT WITH 3–#2/0 THHN, 1–#2/0 GREEN INSULATED GROUND,

NEW 3'x3'x3' CONCRETE HANDHOLE, TYP. SEE DETAIL 3/95.

63+37,221'R (approximate)

3" HDPE CONDUIT WITH 3–#2/0 THHN, 1–#2/0 GREEN INSULATED GROUND,

RW – RUNWAY
TW – TAXIWAY
R–1 – RW 15–33 CIRCUIT
R–2 – RW 8–26 CIRCUIT
T–1 – TW A, TW B, TW C, TW D CIRCUIT
VASI – VISUAL APPROACH SLOPE INDICATOR
REIL – RUNWAY END IDENTIFIER LIGHT
PAPI – PRECISION APPROACH PATH INDICATOR
XFMR – TRANSFORMER
LHA – LAMP HOUSING ASSEMBLY

100'
71'@1%
88.01'
192.50' TYP.
10.00' TYP.
SEE DETAIL 1/90

**RW 8-26**

72+00 71+00 70+00 69+00 68+00 67+00 66+00 65+00 64+00 63+00 62+00 61+00 60+00 59+00

MATCH LINE STA 59+00 SHEET 85

81', installed right ⊥ to light base. No "day light" fabric & gravel "French drain".

70.7'@1%

3' 2"HDPE w/ Stay-Lock connector

SPARE 2" CONDUIT

75.6'@1% 74'

SEE ENLARGED PLAN, 1/88.

81', installed right ⊥ to light base. No "day light" fabric & gravel "French Drain".

71.1'@0.5%

3' 2"HDPE w/ Stay-Lock connector

50 0 50 100

### LIGHT SCHEDULE

| NUMBER | SYMBOLS | LOCATION | LIGHT DETAILS: LIGHT COLOR | LAMP WATTAGE | F.A.A. NUMBER | XFMR WATTAGE | REMARKS |
|---|---|---|---|---|---|---|---|
| 5 | ○ | R/W EDGE LIGHT | WHITE/WHITE | 150 | L862 | 150 | FULL INSTALL |
| 2 | ○ (5) | R/W EDGE LIGHT | WHITE/WHITE | 150 | L862 | 150 | FIXTURE/XFMR ONLY |
| 1 | ⊠ | FLUSH R/W EDGE LIGHT | WHITE/WHITE | (2) 105 | L850C | 200 | FULL INSTALL |
| 10 | W◐Y | R/W CAUTION ZONE LIGHT | YELLOW/WHITE | 150 | L862 | 150 | FULL INSTALL |
| 29 | W◐Y Y◐W (5) | R/W CAUTION ZONE LIGHT | YELLOW/WHITE | 150 | L862 | 150 | FIXTURE/XFMR ONLY |
| 1 | W⊠Y | FLUSH R/W CAUTION ZONE LIGHT | YELLOW/WHITE | (2) 105 | L850C | 200 | FULL INSTALL |
| 16 | R◐G | R/W THRESHOLD LIGHT | RED/GREEN | 200 | L862E | 200 | FULL INSTALL |
| 4 | ⊗ | TAXIWAY EDGE LIGHT | BLUE | 15 VA LED | L861T | 10/15 | FULL INSTALL |
| 7 | ⊗ (5) | TAXIWAY EDGE LIGHT | BLUE | 15 VA LED | L861T | 10/15 | FIXTURE/XFMR ONLY |

ALL TRANSFORMERS 6.6A/6.6A

As-Built

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH — Michael J. Love — MICHAEL J. LOVE 06/20/2016 EE-6818 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| DMH | 06/20/16 | PAY ITEM CLARIFICATION. 3 |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3–02–0065–XXX
RW 8–26
LIGHTING PLAN

DATE: 05/16/2016
SHEET: 84R OF 97
AS–BUILT SHEET:

Designed By: DMH
Drawn By: DMH
Checked By: MJL
Date Revised: 6/20/2016, 1:26 PM
Layout Name: E1
File Path and Name: Z:\15030CBC – Cold Bay Airport Crosswind Runway Improvements\E–Working\Drawings\E1–E4.dwg

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 5/16/2016, 3:50 PM
Layout Name: E2
File Path and Name: Z:\15030CBC - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\E1-E4.dwg

MATCH LINE STA 59+00 SHEET 84

MATCH LINE STA 44+00 SHEET 86

RW 8-26

RW 15-33

3" HDPE CONDUIT WITH 3-#2/0 THHN, 1-#2/0 GREEN INSULATED GROUND,

3'x3'x3' CONCRETE HANDHOLE. SEE DETAIL 3/95.

RSA Edge

51+80, 233'R (approximate)

EXISTING METER BASE AND TRANSFORMER TO REMAIN

2-3" HDPE CONDUIT (SPARE)

(2)3" HDPE

3'x3'x3' pullbox

e 13+60, 136'L (approximate)

XHHW-2 2/0 insolated wire from meter base to pullbox. RFI-42

3'X3'X3' MINIMUM SIZE. RATED FOR 100,000 LB WHEEL LOAD WITHIN RSA.

~~229'@1%~~ Duct deleted due to UG Feeder conflict

2'

15-33

2"PVC to EH1 pullbox full length

EH1

RSC e 12+41.90'L (2)3" RSC

35'

RSC e 50+40 (2")

RSC SWEEP

(3) hubs Filled w/ flowing insulating material for watertight system

2" HDPE w/ Shur-Lock connector

2'

192.50'

2" RSC e 46+63

2" HDPE w/ 2" Shur-Lock connector

2" RSC e 46+61

2" PVC to EH2 full length

2" RSC e 49+47

10+62.90'L (2)3" RSC

RSC SWEEP No sweep, HDPE connection allowed transition

PROVIDE CONCRETE DUCT MARKER

2-3" GALVANIZED RIGID STEEL CONDUIT, RUN IN TRENCH WITH RUNWAY 15-33 EDGE LIGHT CIRCUIT. 24" BURY DEPTH, PROVIDE 12" HORIZONTAL CLEARANCE FROM AIRFIELD LIGHTING CONDUITS.

2-3" HDPE CONDUIT (SPARE)

(2)3" HDPE

EH2

UG Transformer met Feeder

8" Steel HH

!!

~~85.8'@0.5%~~ 84', installed right L to light base. No "daylight", fabric & gravel trench drain"

Existing 2" HDPE w/ new 2" PVC duct

NEW 2" ~~PVC~~ CONDUIT WITH 2-#8, 5KV AIRPORT CABLES, 1-#6 BARE COPPER GROUND. CONNECT TO EXISTING TW CIRCUIT.

MH-7

T-1(2)

R-2(2)

Existing 2" HDPE, assumed alignment

NEW 2-#8, 5KV AIRPORT CABLES, 1-#6 BARE COPPER GROUND IN EXISTING CONDUIT. CONNECT TO EXISTING RW 8-26 CIRCUIT.

Existing 2" HDPE

Shur-Lock Connector

33-15

43' 2" PVC

6' PVC to 2" HDPE

2" PVC 20' ℄ to EP

"B126 Home Run"

192.50'

2' 2" PVC

2" HDPE w/ 2" Shur-Lock connector

3' 2" PVC

128' 2" PVC

4' 2" PVC

2" HDPE w/ Shur-Lock connector

(3) hubs

Duct deleted

Direct buried wire

33-15

EH3

EH4

EH5

EH6

EH7

EH8

Field Switch

3'x3'x3' CONCRETE HANDHOLE. SEE DETAIL 3/95.

C 8+68, 240.5'L

Note: All stations are approximate locations as determined by PE.

As-Built

50 0 50 100

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
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| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
RW 8-26
LIGHTING PLAN

DATE: 05/16/2016
SHEET: 85 OF 97
AS-BUILT SHEET:

| Designed By: | DMH |
|---|---|
| Drawn By: | GMV |
| Checked By: | MJL |

| Date Revised: | 5/16/2016, 3:50 PM |
|---|---|
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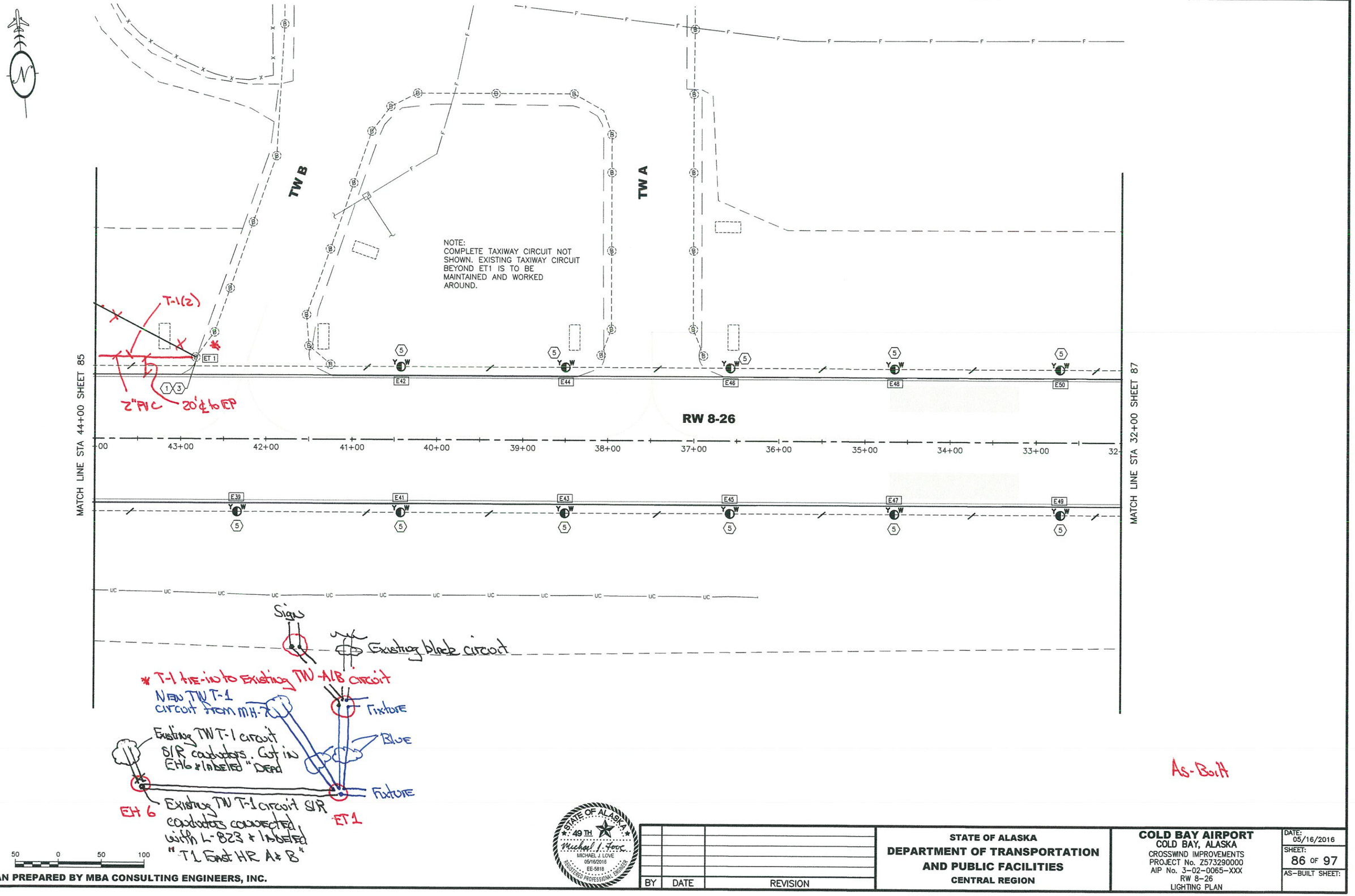


As-Built

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STATE OF ALASKA 49TH MICHAEL J. LOVE 05/16/2016 EE-5818 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
RW 8-26
LIGHTING PLAN

DATE: 05/16/2016
SHEET: 86 OF 97
AS-BUILT SHEET:

Attachment #9 Addendum No. 1

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 6/09/2016, 2:46 PM
Layout Name: E4
File Path and Name: Z:\1503008C - Cold Bay Airport Crosswind Runway Improvements\C-Working\Drawings\E1-E4.dwg

MATCH LINE STA 32+00 SHEET 86

RW 8-26

31+00 30+00 29+00 28+00 27+00 26+00 25+00 24+00 23+00 22+00 21+00 20+00 19+00 18+00

RW STA 22+90
INSTALL NEW THRESHOLD LIGHTS

185' @ 1.2%
172'
Installed right ⊥ to light base
No daylight" Fabric + gravel "French drains"

SEE DETAIL 1/90

E52 E54 E56 E58 E60 E61 E62 E63 E64

E51 E53 E55 E57 E59 E65 E66 E67 E68

STA 29+68
INSTALL NEW PAPI, SEE SHEET 93.

UG telephone line, buried 3.5' & offset 4' N of LHA "2 ℄.

* STA 29+68 is LHA 4.5'x3' concrete foundation ℄.

PtC Station

29+82, 208'L

29+65, 208'L

28+67, 205'L

NEW 3'x3'x3' CONCRETE HANDHOLE, TYP. SEE DETAIL 3/95.

3" HDPE CONDUIT WITH 3-#2 THHN, 1-#2 GREEN INSULATED GROUND,

Existing HH demo.

NEW UNISTRUT EQUIPMENT RACK ON CONCRETE FOUNDATION, SEE SHEET 95.

2" HDPE existing utilized from meter base to concrete 3'x3'x3' box

EXISTING METER BASE AND TRANSFORMER TO REMAIN

HH = hand hole

72', installed ⊥ to light base. No "daylight", fabric & gravel "French drains"

As-Built

50 0 50 100

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

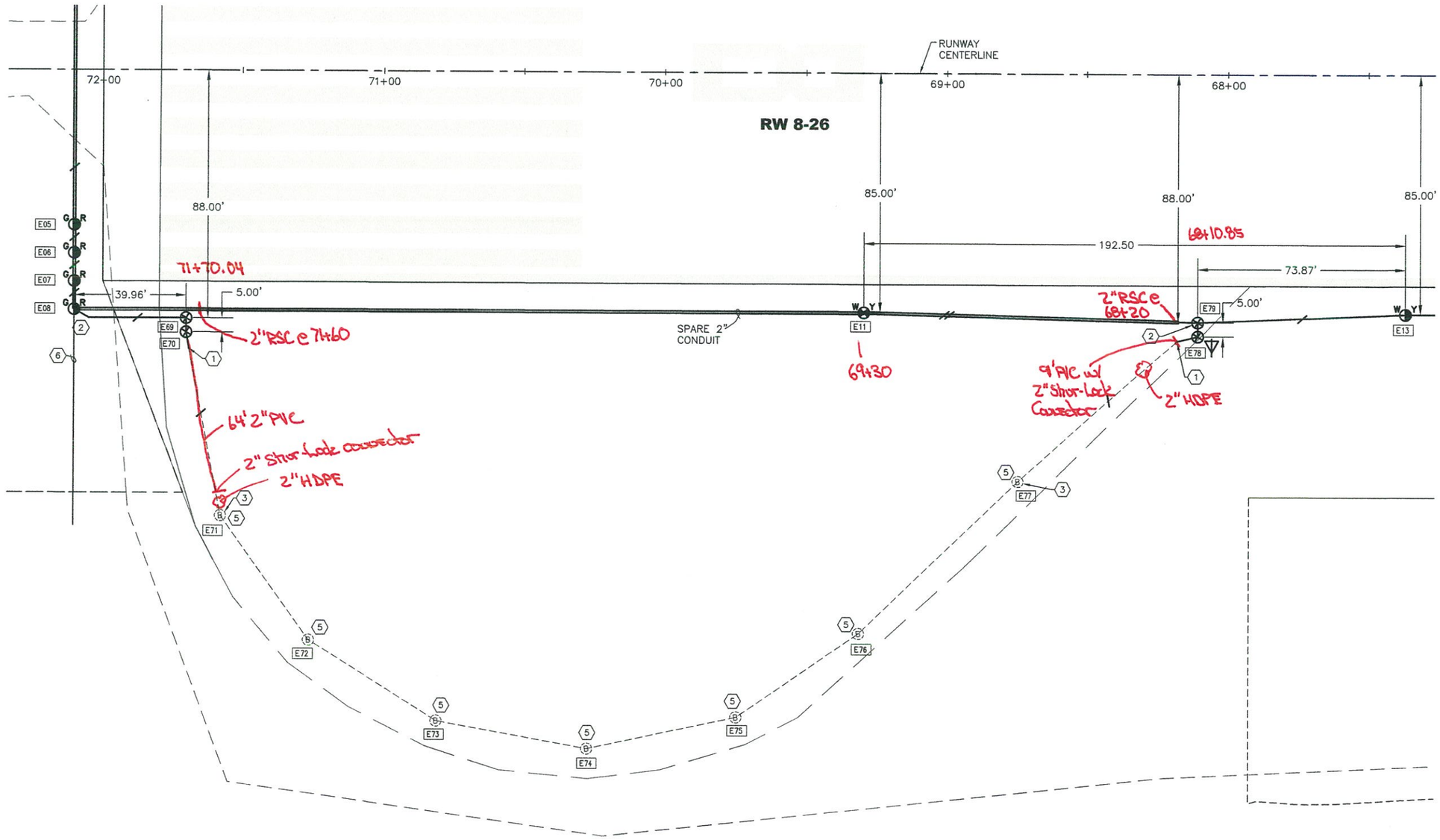
STATE OF ALASKA 49TH
Michael J. Love
MICHAEL J. LOVE
06/08/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| DMH | 06/08/16 | METER LOCATION AND WIND CONE 1 |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
RW 8-26
LIGHTING PLAN

DATE: 05/16/2016
SHEET: 87R OF 97
AS-BUILT SHEET:




1/88 ENLARGED PLAN – RW 8 TURNAROUND

As-Built

20 0 20 40

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH MICHAEL J LOVE 05/16/2016 EE-5818 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

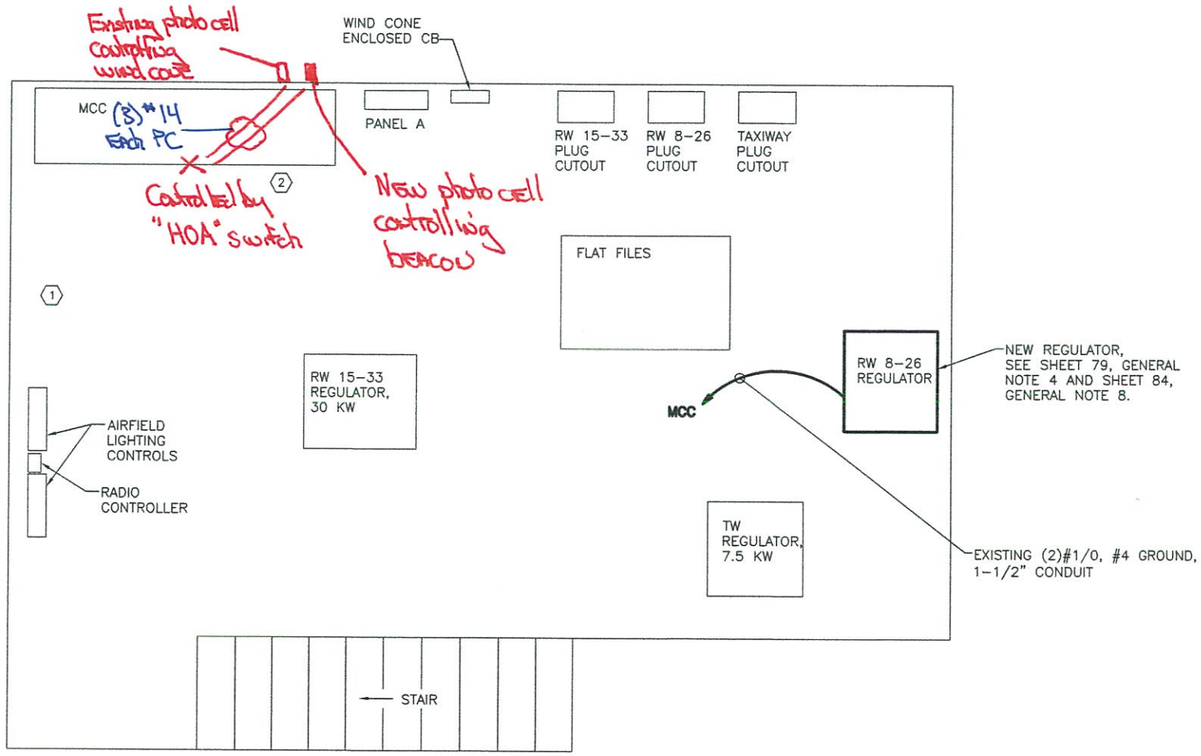
COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
RW 8-26
ENLARGED PLAN

DATE: 05/16/2016
SHEET: 88 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL

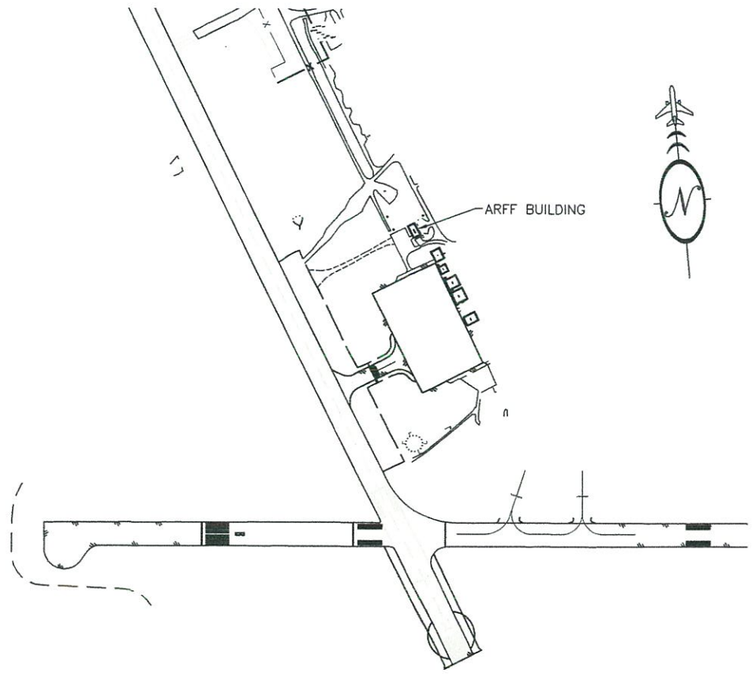
Date Revised: 5/16/2016, 3:51 PM
Layout Name: E5
File Path and Name: Z:\15030CBC - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\E5.dwg

NTS




1/89 EXISTING MEZZANINE PLAN – LOCATED IN ARFF BUILDING
NTS

NOTE: ALL EXISTING TO REMAIN UNLESS NOTED OTHERWISE.




2/89 KEY PLAN
NTS

NOTES:

1. PROVIDE NEW ROOF MOUNTED PHOTO CELL(S). CONNECT TO ROTATING BEACON AND WIND CONE CIRCUITS. PROVIDE SEPARATE PHOTO CELLS FOR ROTATING BEACON AND WIND CONE CIRCUITS, OR PROVIDE A SINGLE PHOTO CELL WITH RELAY CONTROLS AS REQUIRED. THIS WORK SHALL BE PAID UNDER ITEM L–109d.
2. HOA SWITCHES ARE LOCATED IN THE MCC ADJACENT TO BEACON AND WIND CONE CONTRACTORS.

SEQUENCE OF OPERATIONS:

HOA IN "ON" POSITION:
BEACON/WIND CONE ARE ON.

HOA IN "OFF" POSITION:
BEACON/WIND CONE ARE OFF.

HOA IN "AUTO" POSITION:
BEACON/WIND CONE ARE ON IN DARKNESS OR WHEN RADIO CONTROL IS ACTIVATED.

As-Built

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

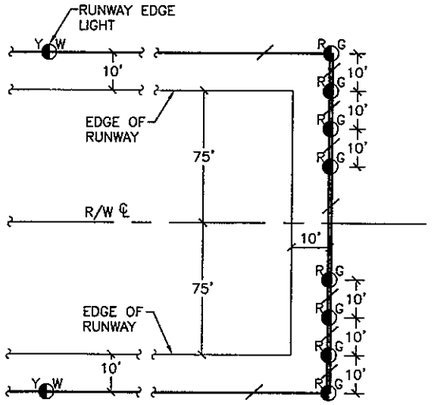
**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3–02–0065–XXX
PARTIAL FLOOR PLAN – ARFF BLDG.

DATE: 05/16/2016
SHEET: 89 OF 97
AS–BUILT SHEET:

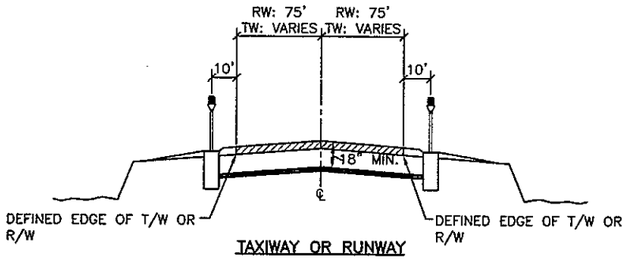
**PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.**

Designed By: DMH
Drawn By: GMV
Checked By: MJL

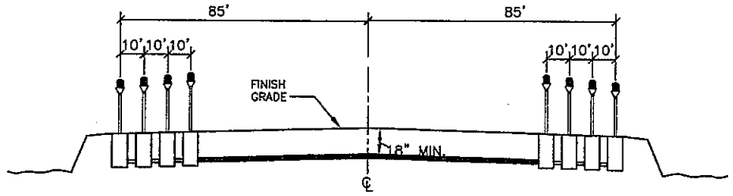
Date Revised:
Layout Name: E6
File Path and Name: Z:\15035\CBC – Cold Bay Airport Crosswind Runway Improvements\E–Working\Drawings\E6.dwg 5/16/2016, 3:51 PM




1 / 90 NTS **R/W THRESHOLD LIGHTING DETAIL**

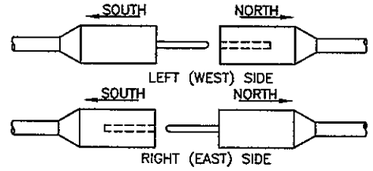



**TAXIWAY OR RUNWAY**

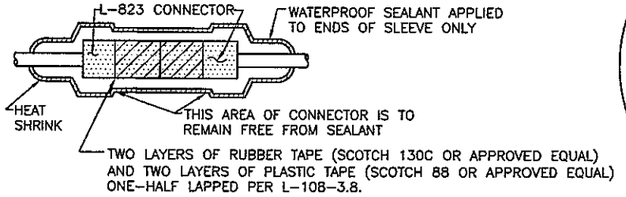



**RUNWAY THRESHOLD**

2 / 90 NTS **TYPICAL LIGHTING SECTIONS**

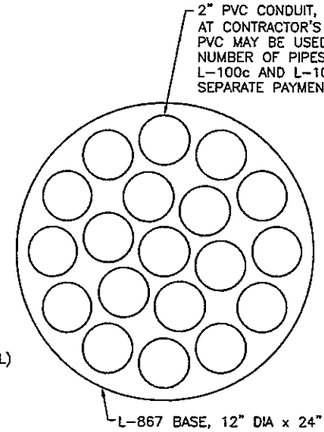



**ORIENTATION OF L-823 CABLE CONNECTION IN LIGHT BASE DETAIL**




1. 5 kV CONDUCTORS SHALL BE PENCILED USING A PENCILING TOOL MANUFACTURED FOR USE ON #8, 5 kV, TYPE C AIRPORT CABLE, RIPLEY WS 49 OR APPROVED EQUAL.
2. CONNECTORS SHALL BE CRIMPED USING A RATCHET TYPE CRIMPING TOOL PER MANUFACTURER'S RECOMMENDATION. EACH CRIMP SHALL BE MADE WITH TWO CRIMPS, ROTATED 90°.

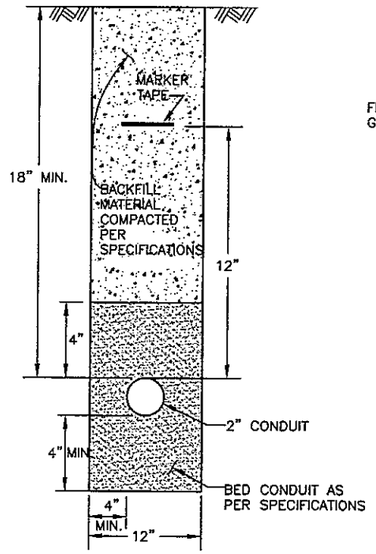
3 / 90 NTS **L-823 CONNECTOR**




4 / 90 NTS **TRANSFORMER PLATFORM DETAIL**

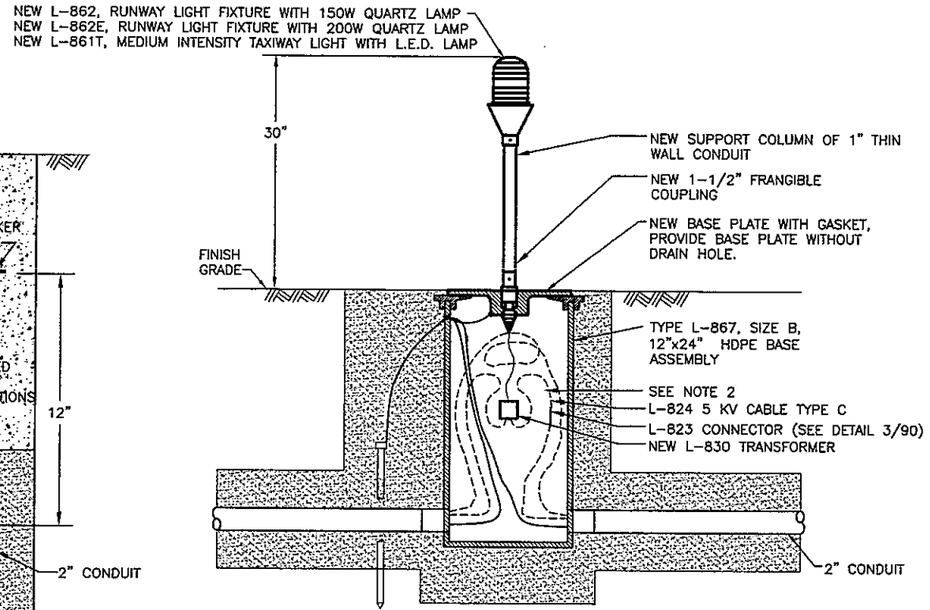
**EDGE LIGHT NOTES:**

1. NEW BASE ASSEMBLIES SHALL BE TYPE L-867, CLASS I, SIZE B.
2. CABLES AND GROUND STRAPS SHALL HAVE SUFFICIENT SLACK TO ALLOW CONNECTORS TO BE DRAWN 36" ABOVE FINISHED GRADE. ALL CABLES SHALL BE TAGGED 6" FROM CONNECTOR WITH "FLAG TAG" MARKERS OR APPROVED EQUAL. CIRCUITS PASSING THROUGH LIGHT BASE SHALL NOT REQUIRE SERVICE LOOPS IF CABLE IS NOT INCIDENTAL TO THAT LIGHT'S CIRCUITRY.
3. GROUND FIXTURE WITH MINIMUM #6 AWG STRANDED COPPER, GREEN INSULATED CONDUCTOR OR WITH EQUIVALENT COPPER BRAIDED GROUND STRAP. BOND TO FIXTURE PER MANUFACTURER'S INSTRUCTIONS.



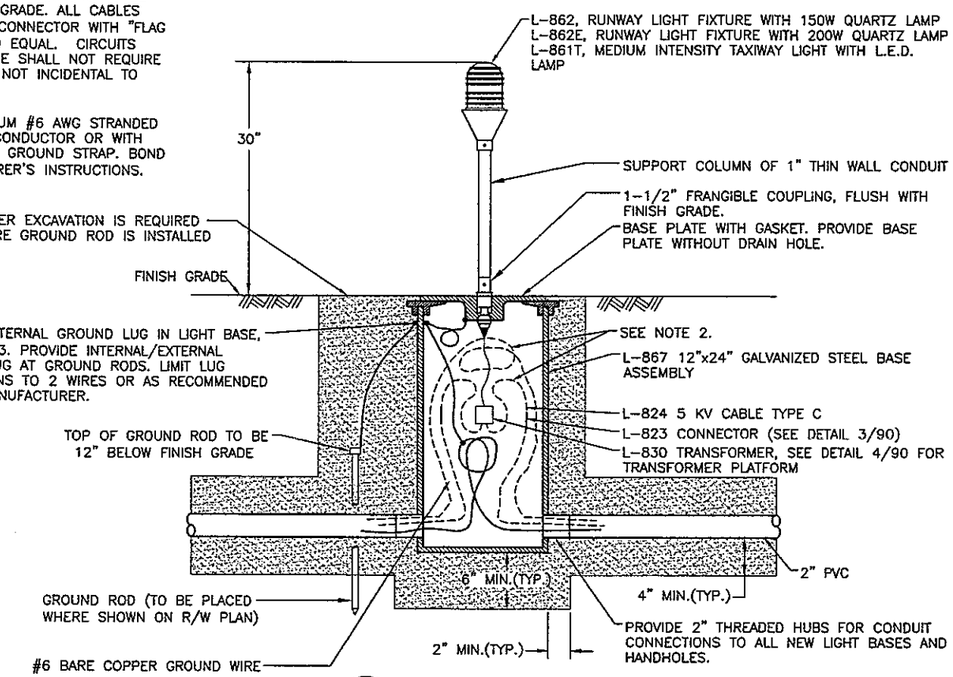

5 / 90 NTS **CONDUIT TRENCH DETAIL**

As-Built




NOTE: ALL EXISTING EXCEPT AS NOTED.

6 / 90 NTS **NEW LIGHT FIXTURE ON EXISTING BASE**




7 / 90 NTS **L-867 BASE WITH LIGHT**

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

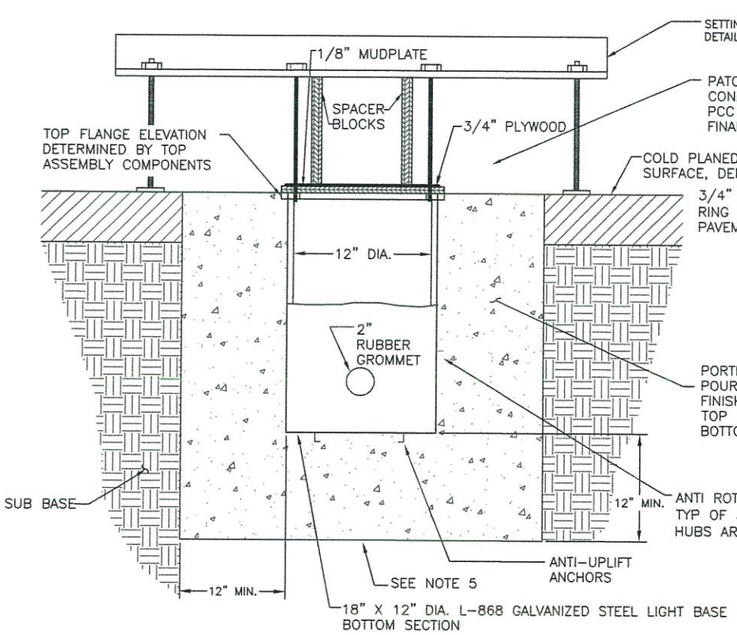
**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
LIGHTING DETAILS

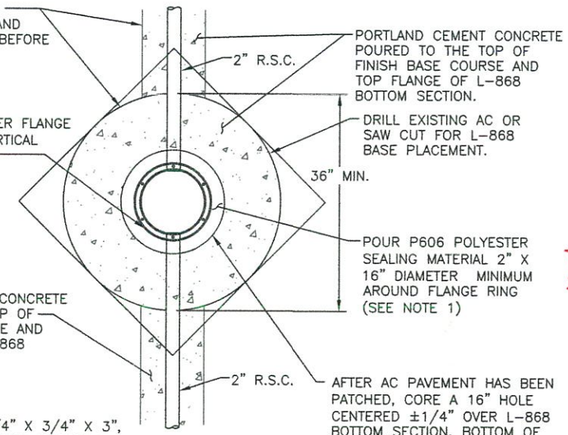
DATE: 05/16/2016
SHEET: 90 OF 97
AS-BUILT SHEET:

**PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.**

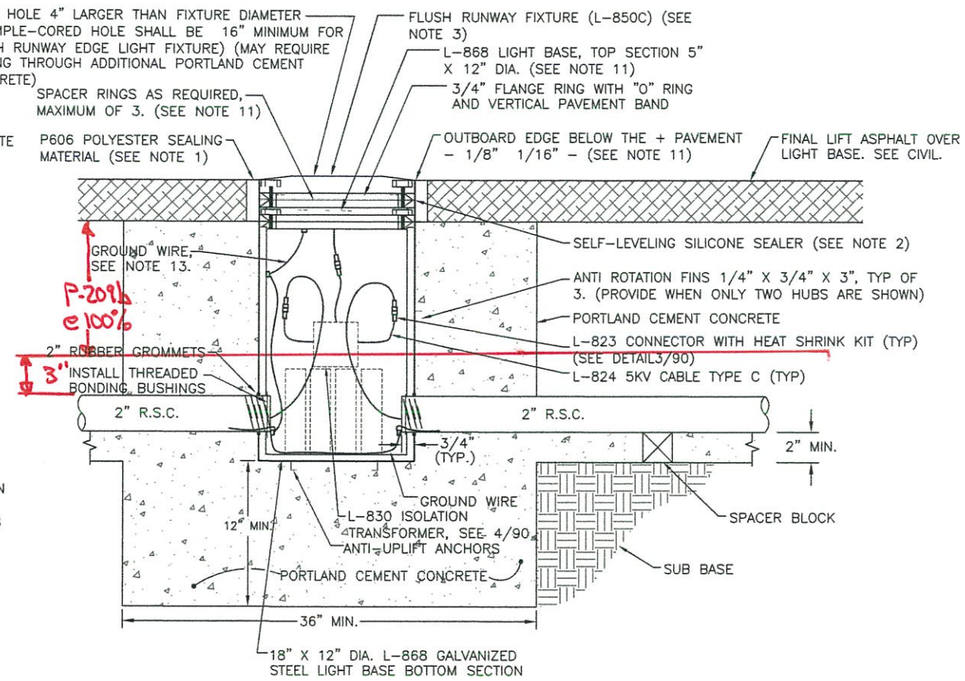
Designed By: DMH
Drawn By: CMV
Checked By: MJL
Date Revised: 5/16/2016, 3:52 PM
Layout Name: ZX 150306C
File Path and Name: C:\Working Drawings\E-Working Drawings\Cold Bay Airport Crosswind Runway Improvements\E-Working Drawings\E7.dwg




1/91 NEW LIGHT BASE INSTALLATION – SECTION
NTS

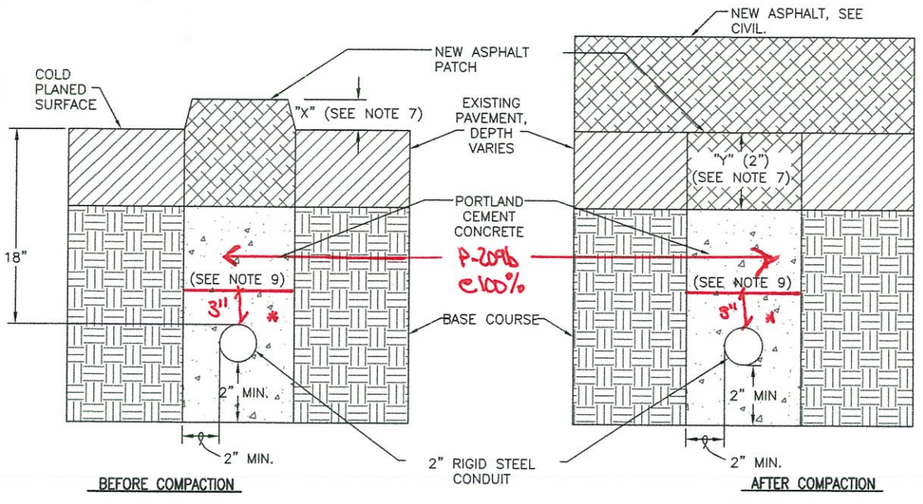



2/91 NEW LIGHT BASE INSTALLATION – PLAN VIEW
NTS




3/91 NEW LIGHT BASE ASSEMBLY
NTS

As-Built

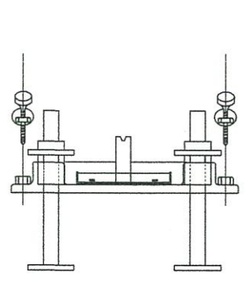



4/91 CONDUIT TRENCH THROUGH EXISTING PAVEMENT
NTS

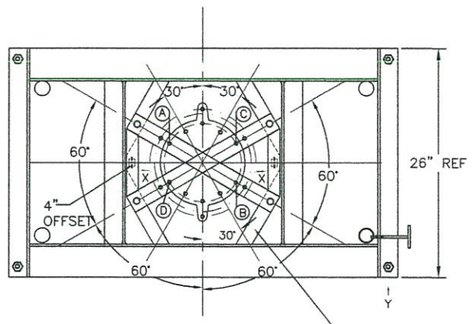
* Refer to 6/20/17 Brian Hanson / Doug Handle E-mail allowing TE-design concrete depth.

NOTES:

1) POLYESTER SEALING MATERIAL SHALL BE BITUPLASTIC MATERIALS MEETING SECTION P-606. SURFACE SHALL BE COMPLETELY CLEAN AND DRY BEFORE INSTALLING.
2) SELF-LEVELING SILICONE SEALER SHALL BE GE BRAND RTV 118 OR APPROVED EQUAL.
3) FIXTURE SHALL BE A FLUSH MOUNT MODEL AND INSTALLATION SHALL BE A DRY-TYPE SYSTEM.
4) CONDUIT SYSTEM SHALL BE INSTALLED AT THE SAME GRADE AS THE RUNWAY AND SLOPED TO DRAIN TO THE LOW SPOTS AND DRAINS WHERE SHOWN.
5) BOTTOM OF CORED HOLE SHALL BE COMPACTED BEFORE CONCRETE IS POURED.
6) A THIRD HUB FOR A CONDUIT DRAIN SHALL BE PROVIDED WHERE SHOWN ON PLANS.
7) HEIGHT OF "X" MAY VARY DEPENDING ON FIELD CONDITIONS. HEIGHT OF "X" SHALL EQUAL 1/4" PER 1" OF COMPACTED DEPTH "Y".
8) SETTING JIG FOR FIXTURE SHALL BE FROM JAQUITH INDUSTRIES INC. OR APPROVED EQUAL AND SHALL BE SUBSIDIARY TO THE CONTRACT.
9) CONCRETE SHALL MEET THE REQUIREMENTS FOR STRUCTURAL CONCRETE (ITEM P-610).
10) ALL CONDUIT SHALL BE INSTALLED BEFORE FINAL PAVING OPERATION BEGINS. NEW FLUSH FIXTURE BOTTOM SECTION SHALL BE INSTALLED BEFORE FINAL LIFT ASPHALT.
11) CONTRACTOR SHALL INSTALL ONE 3/8" SPACER RING FOR FUTURE ADJUSTMENT AND ANY OTHER SPACER RINGS AS REQUIRED TO MEET FINAL ELEVATION. UNDER NO CONDITION SHALL THE TOP SECTION BE REDUCED TO LESS THAN 5". ALL MATERIALS REQUIRED SHALL BE SUBSIDIARY TO ITEM L-100k AND NO SEPARATE PAYMENT WILL BE MADE.
12) CABLES AND GROUND STRAPS SHALL HAVE SUFFICIENT SLACK TO ALLOW CONNECTORS TO BE DRAWN 36" ABOVE FINISHED GRADE. ALL CABLES SHALL BE TAGGED 6" FROM CONNECTOR WITH "FLAG TAG" MARKERS OR APPROVED EQUAL. CIRCUITS PASSING THROUGH LIGHT BASE SHALL NOT REQUIRE SERVICE LOOPS IF CABLE IS NOT INCIDENTAL TO THAT LIGHT'S CIRCUITRY.
13) GROUND FIXTURE WITH MINIMUM #6 AWG STRANDED COPPER, GREEN INSULATED CONDUCTOR OR WITH EQUIVALENT COPPER BRAIDED GROUND STRAP. BOND TO FIXTURE PER MANUFACTURER'S INSTRUCTIONS.



END VIEW




SETTING JIG DETAIL

5/91 SETTING JIG
NTS

STATE OF ALASKA 49 TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

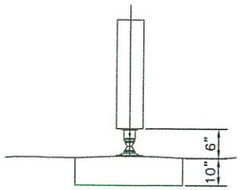
**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
FLUSH LIGHTING DETAILS

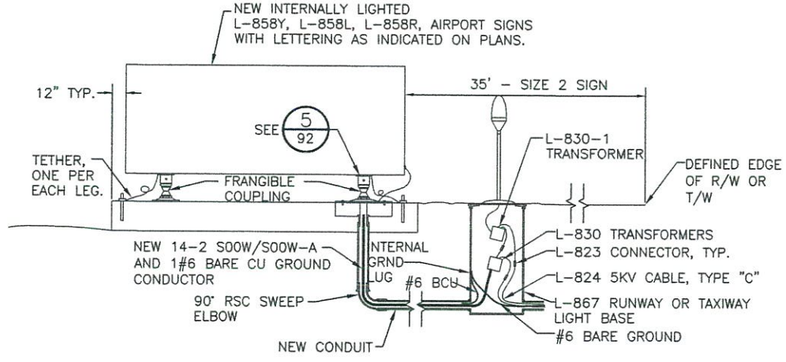
DATE: 05/16/2016
SHEET: 91 OF 97
AS-BUILT SHEET:

**PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.**

Designed By: DMH
Drawn By: GMV
Checked By: MJL
Date Revised: 5/16/2016, 3:52 PM
Signed Name:
File Path and Name: Z:\15030CBC - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\EE.dwg

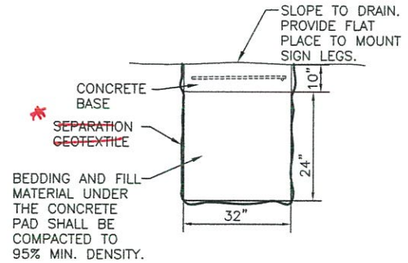



1 / 92 SIDE VIEW
NTS

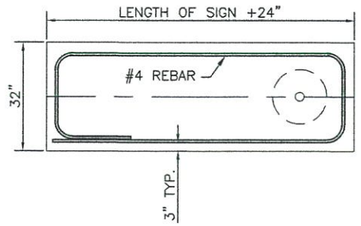



2 / 92 FRONT VIEW
NTS

## L-858 SIGN DETAILS

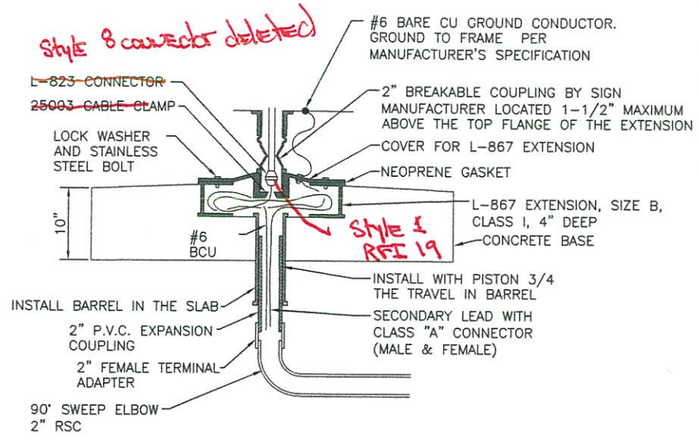



3 / 92 CONCRETE BASE SIDE VIEW
NTS

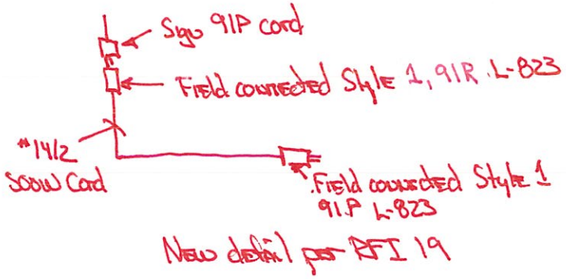



4 / 92 CONCRETE BASE PLAN
NTS

*Geo textile deleted
Excavation base




5 / 92 ELECTRICAL CONNECTION DETAIL
NTS




## SIGN SCHEDULE

| SIGN No. | SIDE | PANEL | TYPE | PURPOSE | LEGEND | LEGEND COLOR | FACE COLOR | STATIONING | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| 11 | 1 | 1 | L-858R | MANDATORY INSTRUCTION SIGN | 15-33 | WHITE | RED | RW 8-26 52+18.97 (110.00 RT) | |
| | 2 | | | | | | | | |
| 12 | 1 | 1 | L-858R | MANDATORY INSTRUCTION SIGN | 15-33 | WHITE | RED | RW 8-26 52+18.97 (110.00 LT) | |
| | 2 | | | | | | | | |
| 13 | 1 | 1 | L-858R | MANDATORY INSTRUCTION SIGN | 33-15 | WHITE | RED | RW 8-26 45+86.04 (110.00 RT) | |
| | 2 | | | | | | | | |
| 14 | 1 | 1 | L-858R | MANDATORY INSTRUCTION SIGN | 33-15 | WHITE | RED | RW 8-26 45+86.04 (110.00 LT) | |
| | 2 | | | | | | | | |

NOTES:

1. ALL NEW SIGNS – LED, SIZE 2, STYLE 2 AND 3, CLASS 2, MODE 3.
2. ALL CIRCUITS 6.6 A
3. PROVIDE NEW TRANSFORMERS, SECONDARY WIRING, AND GROUNDING. TRANSFORMER WATTAGE SIZE PER MANUFACTURER'S SPECIFICATION.
4. ATTACH SIGNS TO CONCRETE BASE IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTION.
5. THE CONTRACTOR SHALL CERTIFY THE CONCRETE BASE IS CONSTRUCTED TO MEET THE SPECIFICATION P610. CONCRETE BASE SHALL BE LEVEL AND PERPENDICULAR TO RW OR TW CENTERLINE.
6. CONDUIT SHALL MEET THE SPECIFICATION L-110.
7. CABLE AND CONDUCTORS SHALL MEET THE SPECIFICATION L-108.
8. BEDDING, BACK FILL AND FINISH GRADE RESTORATION SHALL BE SUBSIDIARY TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE.
9. ALL CABLES PASSING THROUGH BASE SHALL HAVE SUFFICIENT SLACK TO ALLOW CONNECTORS TO BE DRAWN 3' ABOVE FINISHED GRADE. ALL CABLES SHALL BE TAGGED.
10. SUSPEND TRANSFORMER AND CONNECTOR IN UPPER HALF OF BASE SEE DETAIL 4/90.
11. SIGNS TO BE INSTALLED SO THAT THE FACE IS PERPENDICULAR TO THE CENTERLINE OF RUNWAY OR TAXIWAY.
12. STATION AND OFFSET REFER TO THE EDGE OF THE SIGN NEAREST THE RUNWAY OR TAXIWAY. SEE DETAIL 2/92.
13. OFFSETS LISTED IN THE SIGN SCHEDULE ARE FROM THE CENTERLINE OF THE RUNWAY OR TAXIWAY.
14. SIGN PANELS ARE NUMBERED STARTING WITH THE PANEL CLOSEST TO THE RUNWAY OR TAXIWAY EDGE.

STATE OF ALASKA 49 TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

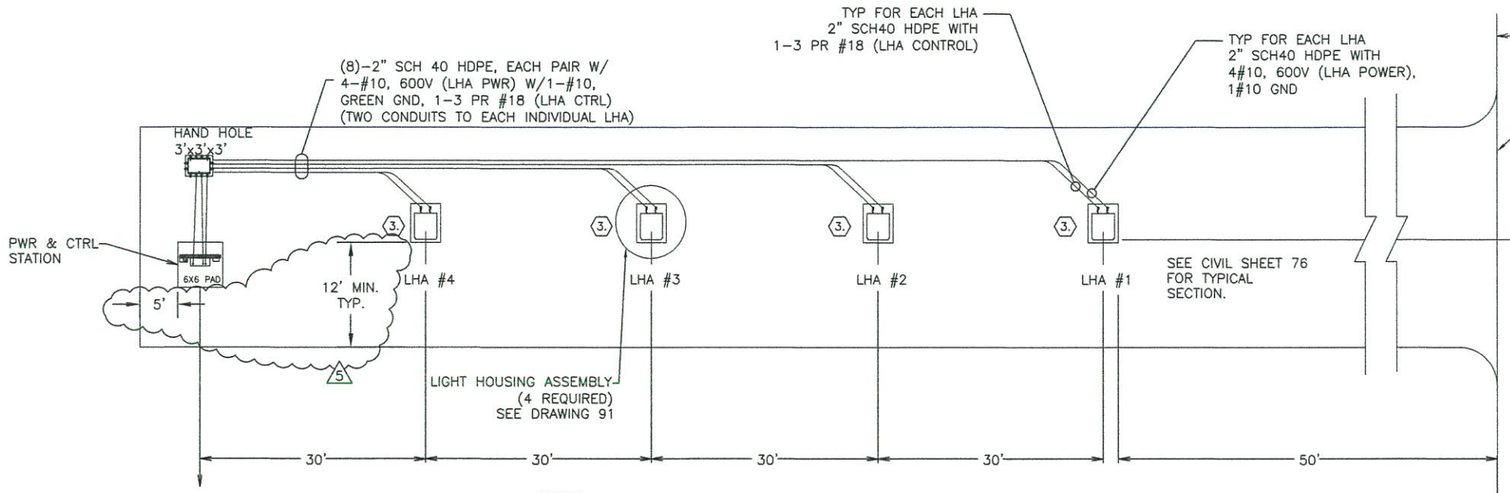
COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
SIGN DETAILS

DATE: 05/16/2016
SHEET: 92 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 5/16/2016, 3:52 PM
Layout Name: Z573290000 – Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\E8.dwg
File Path and Name: Z:\15030\08C – Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\E8.dwg

NOTES:
LHA'S, PAPI P&C CONTROL CABINET, A/G RECEIVER/CONTROLER , AND ANTENNA ARE FAA FURNISHED, CONTRACTOR INSTALLED. ALL OTHER EQUIPMENT AND MATERIALS ARE CONTRACTOR FURNISHED AND INSTALLED.



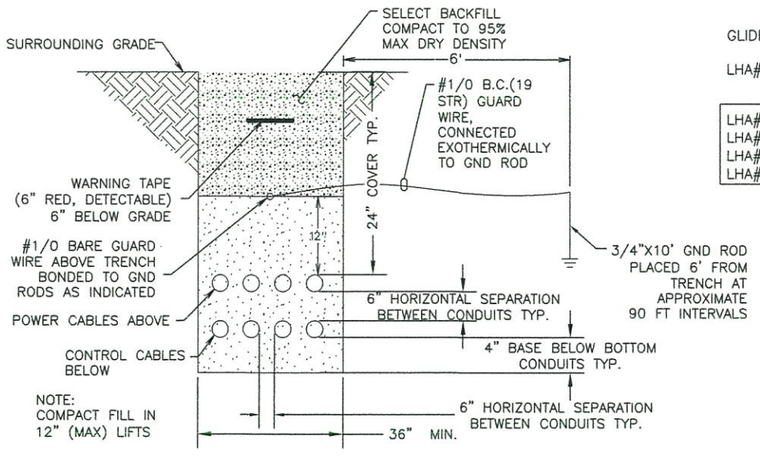

PAPI installation station is ℄ of 4.5' (L) concrete foundation, not front of LHA as shown above.

NOTES:

1. INSTALLATION TOLERANCES FOR SEPARATION BETWEEN LHA'S AND DISTANCE BETWEEN LHA #1 AND EDGE OF RUNWAY IS +/-2 INCHES.
2. THE FRONT FACE OF EACH LHA SHALL BE IN A LINE PERPENDICULAR TO THE RUNWAY CENTERLINE +/- 1 INCH.
3. ~~FOR RW 08 ROTATE THE FOUNDATION AND EACH LHA 5° CLOCKWISE.~~ ALL PAPI FOUNDATIONS AND LHA'S TO BE PARALLEL TO THE RUNWAY CENTERLINE.
4. VERIFY AIMING ANGLES WITH FAA PRIOR TO INSTALLATION.

RFP-6, Sheets 47R & 53R for RW 15/33 PAPI install

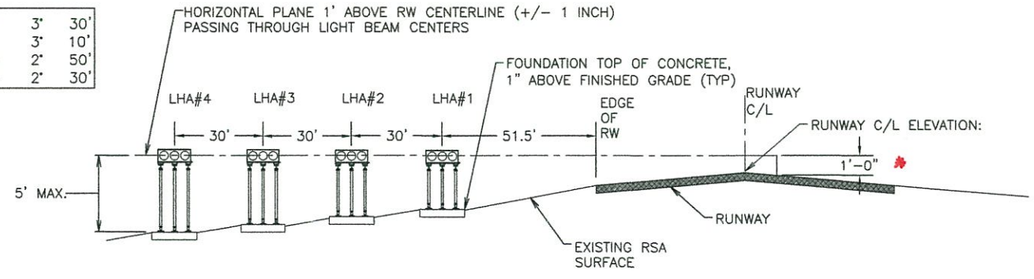
1/93 PAPI PLAN VIEW
NTS




2/93 PAPI TRENCH DETAIL
NTS

GLIDE PATH: 3°

| LHA# | AIMING ANGLE |
|---|---|
| LHA#1 | 3° 30' |
| LHA#2 | 3° 10' |
| LHA#3 | 2° 50' |
| LHA#4 | 2° 30' |




3/93 PAPI ELEVATION (VIEW ON APPROACH)
NTS


As-Built

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/03/2017
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| MBA | 05/03/17 | REVISE PAPI DETAILS /5 |

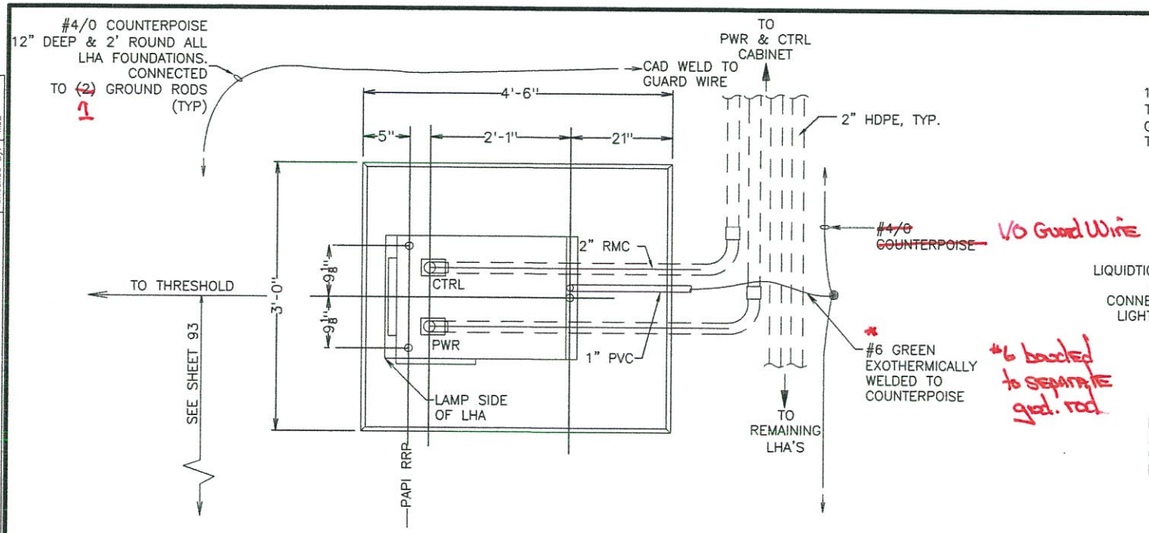
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
PAPI DETAILS

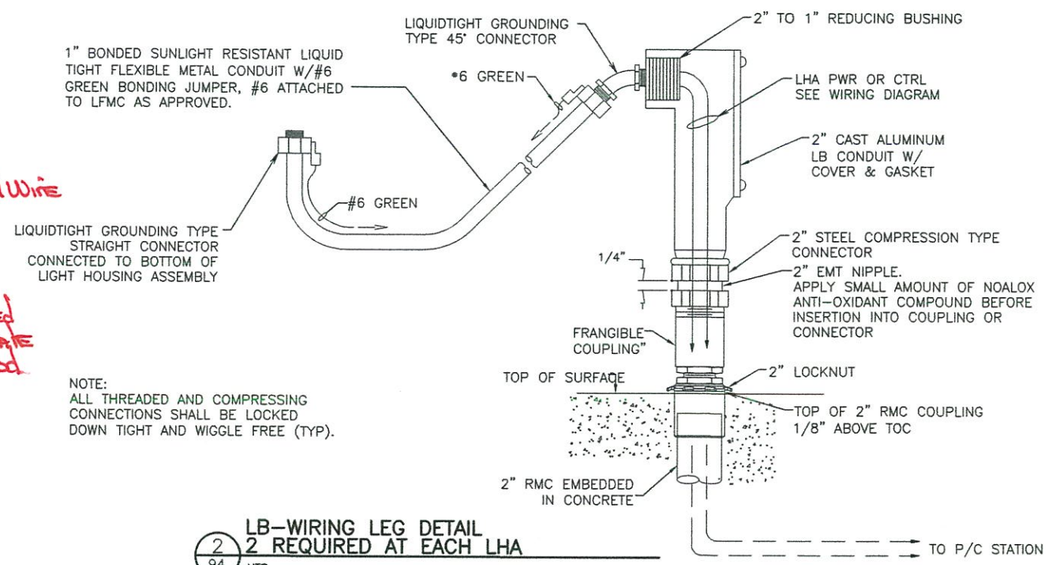
DATE: 05/03/2017
SHEET: 93R OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 5/03/2017, 3:17 PM
Layout Name: E10
File Path and Name: Z:\1503008C - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\E10.dwg

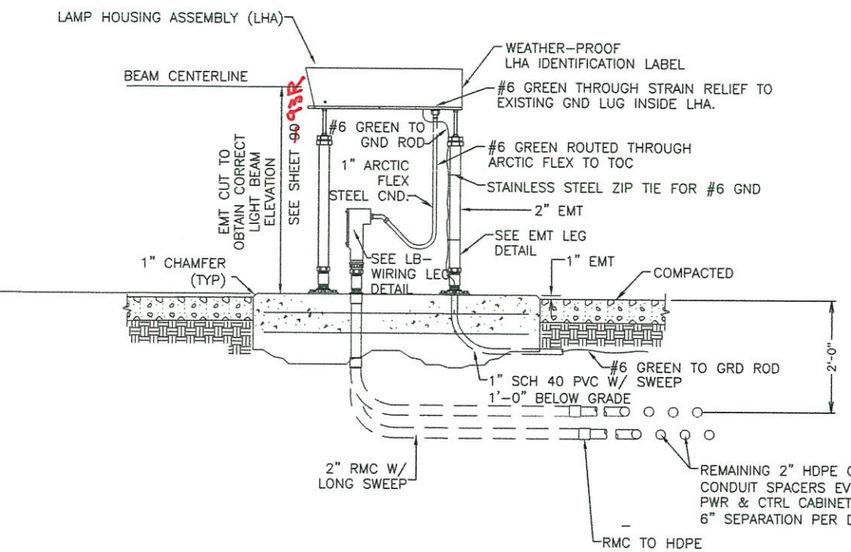



1/94 LIGHT HOUSING ASSEMBLY PLAN VIEW
NTS

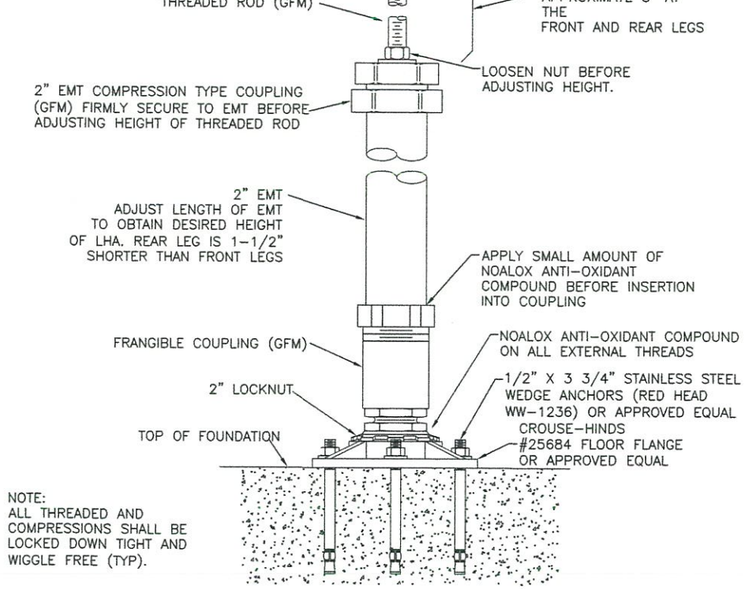



NOTE:
ALL THREADED AND COMPRESSING CONNECTIONS SHALL BE LOCKED DOWN TIGHT AND WIGGLE FREE (TYP).

2/94 LB-WIRING LEG DETAIL
2 REQUIRED AT EACH LHA
NTS




3/94 LIGHT HOUSING ASSEMBLY ELEVATION VIEW
NTS




NOTE:
ALL THREADED AND COMPRESSIONS SHALL BE LOCKED DOWN TIGHT AND WIGGLE FREE (TYP).

4/94 EMT LEG DETAIL
3 REQUIRED AT EACH LHA
NTS




5/94 TYPICAL LHA
IDENTIFICATION LABEL
NTS

NOTES:

1. EACH LHA IS IDENTIFIED BY ITS NUMBER AND AIMING ANGLE SEE SHEET 90 FOR AIMING ANGLE OF EACH LHA.
2. LABELS ARE MADE OF WEATHER-PROOF MATERIAL WITH 7/16" HIGH WHITE LETTERS ON A BLACK BACKGROUND. LABELS TO BE APPROVED BY THE PROJECT ENGINEER.
3. LABELS ARE ATTACHED TO THE LHA'S WITH SELF TAPPING SCREWS, AS APPROVED

As-Built

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

**PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.**

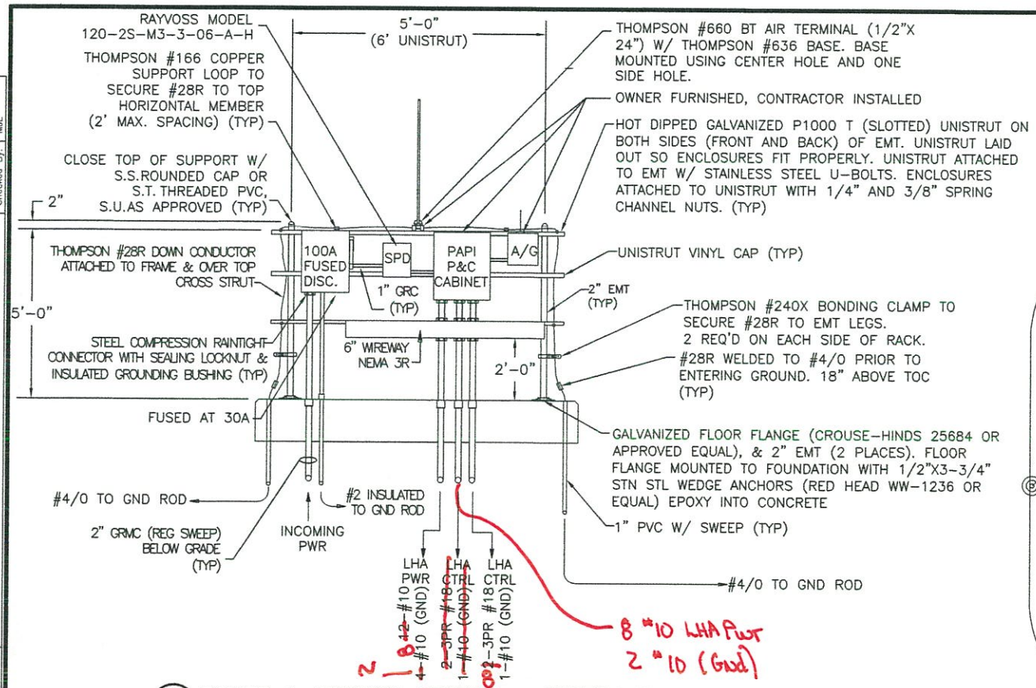
**STATE OF ALASKA**
**DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES**
**CENTRAL REGION**

**COLD BAY AIRPORT**
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
PAPI DETAILS

DATE: 05/16/2016
SHEET: 94 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised:
Layout Name: 5/16/2016, 3:52 PM
File Path and Name: E11 1503008C – Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\E11.dwg

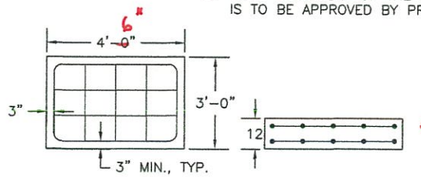



1/95 POWER & CONTROL STATION – FRONT VIEW

NTS – OPPOSITE SIDE COMPONENTS NOT SHOWN

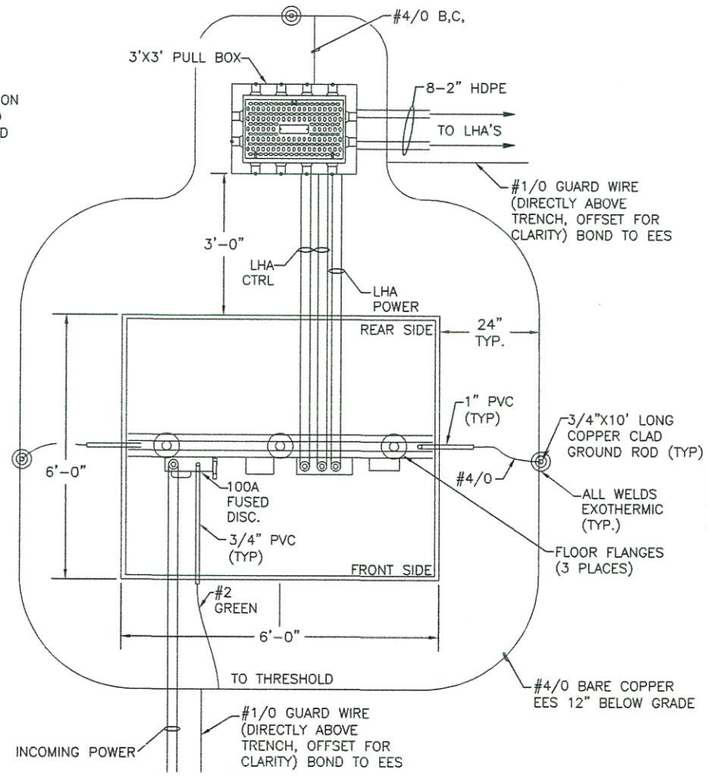
NOTES:

1. ALL THREADED AND COMPRESSION CONNECTIONS SHALL BE LOCKED DOWN TIGHT AND WIGGLE FREE (TYP).
2. FINAL PLACEMENT OF THE COMPONENTS ON RACT IS TO BE APPROVED BY PROJECT ENGINEER.



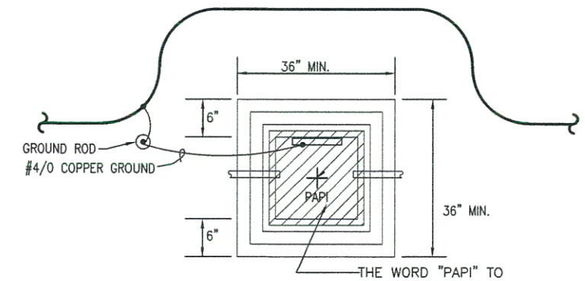

LHA FOUNDATION

NTS

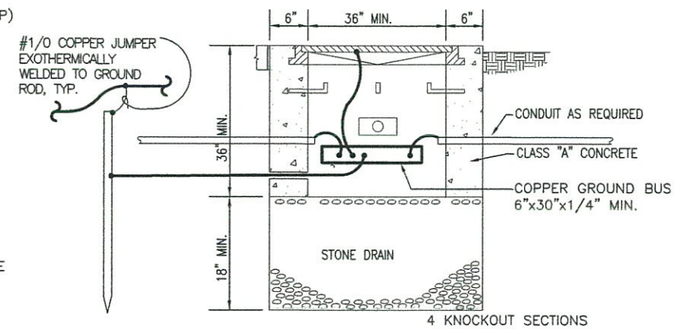



2/95 POWER & CONTROL STATION PLAN VIEW

NTS



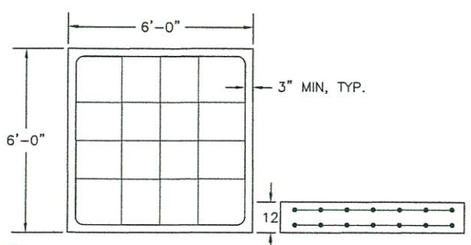

PLAN




SECTION

3/95 3'X3'X3' HANDHOLE

NTS




4/95 REBAR LAYOUT

NTS

NOTES:

1. COORDINATE REBAR LAYOUT WITH LOCATION OF FLOOR FLANGES AND PENETRATIONS
2. #4 REBAR @ 12" O.C. EACH WAY, 3" MINIMUM FROM EDGE OF CONCRETE, TYP.

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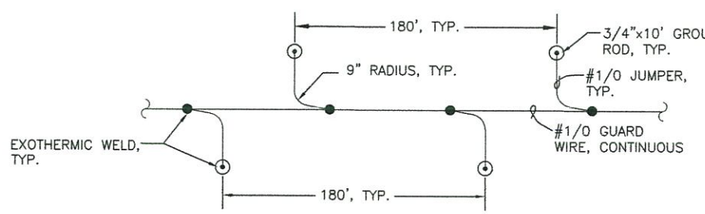
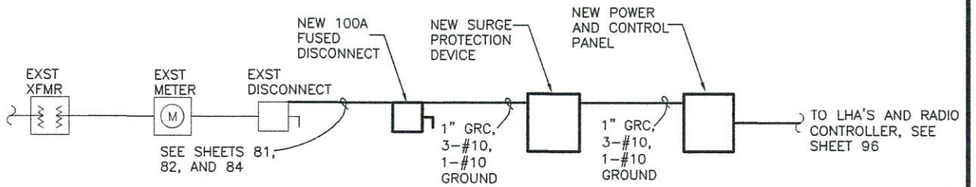



5/95 GUARD WIRE DETAIL

NTS




6/95 ONE-LINE DIAGRAM

NTS

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH MICHAEL J. LOVE 05/16/2016 EE-5818 REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

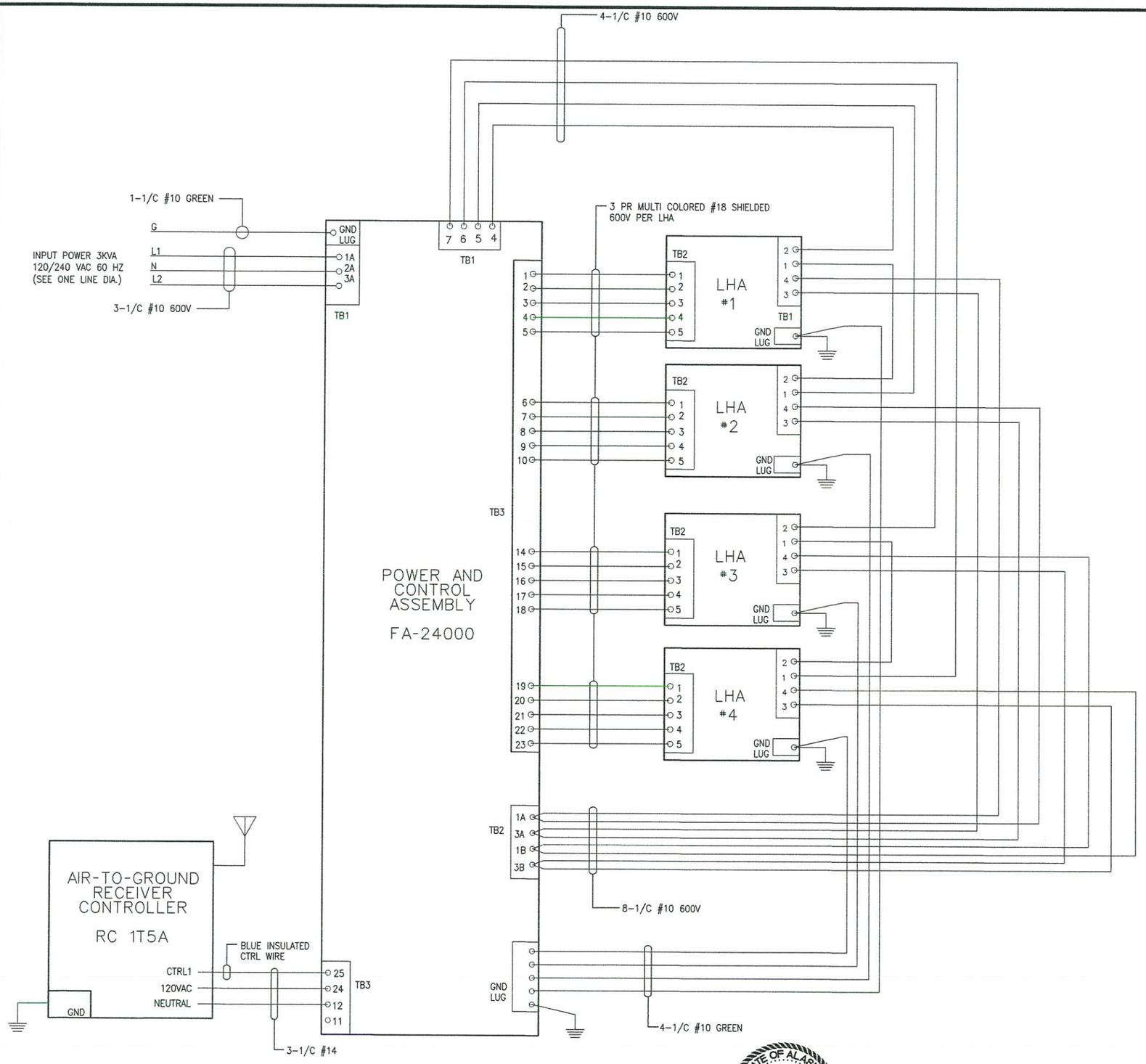
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
PAPI DETAILS

DATE: 05/16/2016
SHEET: 95 OF 97
AS-BUILT SHEET:

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 5/16/2016, 3:53 PM
Last Saved by: EZ
File Path and Name: Z:\15030CBC - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\EZ.dwg




NOTES:

1. ALL ELECTRICAL WORKING SHALL BE IN COMPLIANCE WITH FAA-STD-019e, FAA-C-1217f, AND THE NEC.
2. UNLESS OTHERWISE INDICATED, ALL POWER CONDUCTORS TO BE INSTALLED BELOW GRADE SHALL BE TYPE THWN-W 600V. CONTROL CABLE SHALL BE SHIELDED, FILLED RODENT RESISTANT COMPLIANT WITH REA SPECIFICATION PE-39 AND SUITABLE FOR DIRECT BURIAL (BELDON 105 183 123 OR EQUAL). CONDUCTORS NO. 10 AWG AND SMALLER SHALL BE SOLID. CONDUCTORS NO. 8 AWG AND LARGER SHALL BE STRANDED (UNLESS INDICATED OTHERWISE). COLOR CODING OF THE CONDUCTOR'S INSULATION SHALL BE CONTINUOUS, EXCEPT THAT FOR CONDUCTORS NO.4 AWG AND LARGER MAY BE COLOR CODED WITH TAPE. HALF LAPPED FOR A MINIMUM LENGTH OF 3 INCHES, EVERY 3 FEET WHERE ACCESSIBLE (PULL BOXES CABINETS, ETC.)
3. ALL RMC INSTALLED BELOW GRADE IS COATED PER 1217f USING SCOTCHRAP 50 OR EQUIVALENT.
4. UNLESS OTHERWISE INDICATED, ALL HDPE SHALL BE SCHEDULE 40 AND ALL BENDS SHALL BE LONG SWEEP (24" MIN RADIUS FOR 2" HDPE).
5. UNDERGROUND CONDUITS SHALL BE INSTALLED SO THAT NO WATER CAN BE TRAPPED IN THE RACEWAY (WATER MUST BE ABLE TO DRAIN OUT OF ONE END).
6. ALL METALLIC NON-CURRENT CARRYING PARTS OF ELECTRICAL EQUIPMENT SHALL BE GROUNDED WITH AN EQUIPMENT GROUNDING CONDUCTOR WHETHER OR NOT SHOWN ON THE DRAWINGS.
7. AN EQUIPMENT GROUNDING CONDUCTOR (GREEN INSULATED) SHALL ACCOMPANY THE WIRES IN EACH CONDUIT WHETHER OR NOT SHOWN ON THESE DRAWINGS. EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED AS SHOWN OR PER NEC TABLE 250.122 (2011 NEC), WHICHEVER IS LARGER.
8. INSTALL AN INSULATED GROUNDING BUSHING AT THE ENDS OF GRMC. ATTACH A BONDING JUMPER FROM THE BUSHING TO THE EQUIPMENT GROUND PER FAA-STD-019e.
9. INSTALL #1/0 BARE COPPER GUARD WIRE ABOVE CABLE TRENCH AND BOND TO 3/4"X10' COPPER CLAD GROUND RODS PLACED APPROXIMATELY 90' APART (VARY SPACING 10-20% TO PREVENT RESONANCE). ALL CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC.
10. CABLE TAGGING IN PULLBOXES SHALL BE PER FAA-C-1391C, 5.11.1 OR AS APPROVED. ELSE WHERE CONDUCTOR IDENTIFICATION SHALL BE PROVIDED WITHIN EACH ENCLOSURE WHERE A TAP, SPLICE OR TERMINATION IS MADE, USE APPROVED WEATHER PROOF SHRINK EMBOSSED LABELS TO CONDUCTORS AT TERMINATION POINTS. AT A MINIMUM, IDENTIFY EACH CONDUCTOR WITH THE NUMBER OF THE PIN OR LUG AND TERMINAL BLOCK ON WHICH IT TERMINATES.
11. ABSOLUTELY NO SPLICES EXCEPT WHERE APPROVED. ALL SPLICES SHALL BE INSULATED TO A LEVEL EQUAL TO THAT OF THE FACTORY INSULATED CONDUCTORS. COMPRESSION CONNECTORS SHALL BE USED TO SPLICE CONDUCTORS NO.8 AWG AND LARGER. BELOW GRADE SPLICE SHALL BE MADE ONLY IN PULL BOXES AND HANDHOLE AS APPROVED. UNLESS OTHERWISE INDICATED, SPLICES SHALL BE COVERED WITH RUBBER SPLICING TAPE / HEAVY-WALL, SELF-SEALING, HEAT-SHRINKABLE TUBING / AND SKOTCHKOTE ELECTRICAL COATING. SPLICES SHALL BE MADE TOTALLY WATERPROOF.
12. USE SHIELD BOND CONDUCTORS (3M PART #4460S) TO GROUND THE OVERALL SHIELD OF THE CONTROL CABLE AT EACH END. UNUSED EXTRA CONTROL WIRES SHALL BE TIED TOGETHER AND CONNECTED TO GROUND AT EACH END.
13. MAINTAIN AT LEAST A SIX INCH SEPARATION BETWEEN POWER AND CONTROL CONDUITS WHERE POSSIBLE.
14. A PEDESTAL LUG FOR 8 CONDUCTORS (ILSCO PED-8-250) SHALL BE INSTALLED TO THE BACK PLATE IN THE POWER AND CONTROL CABINET TO ACCOMMODATE ADDITIONAL GROUND WIRES IF NEEDED.
15. IDENTIFY EACH CONTROL CABLE THAT ENTERS THE POWER & CONTROL CABINET ACCORDING TO THE LHA WHERE IT TERMINATES USING PRINTED HEAT SHRINK LABELS.

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 5/16/2016, 3:53 PM
Layout Name: E1
File Path and Name: Z:\15030CBC - Cold Bay Airport Crosswind Runway Improvements\E-Working\Drawings\E13.dwg

As-Built

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
PAPI DETAILS

DATE: 05/16/2016
SHEET: 96 OF 97
AS-BUILT SHEET:

| NUMBER | COLOR | TYPE | LAMP | XFMR | STATION | OFFSET | | CIRCUIT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|
| E 1 | G/R | L-862E | 200 | 200 | 72+10.00 | 85.00 R | R/W 8-26 | R-2 | |
| E 2 | G/R | L-862E | 200 | 200 | 72+10.00 | 75.00 R | R/W 8-26 | R-2 | |
| E 3 | G/R | L-862E | 200 | 200 | 72+10.00 | 65.00 R | R/W 8-26 | R-2 | |
| E 4 | G/R | L-862E | 200 | 200 | 72+10.00 | 55.00 R | R/W 8-26 | R-2 | |
| E 5 | G/R | L-862E | 200 | 200 | 72+10.00 | 55.00 L | R/W 8-26 | R-2 | |
| E 6 | G/R | L-862E | 200 | 200 | 72+10.00 | 65.00 L | R/W 8-26 | R-2 | |
| E 7 | G/R | L-862E | 200 | 200 | 72+10.00 | 75.00 L | R/W 8-26 | R-2 | |
| E 8 | G/R | L-862E | 200 | 200 | 72+10.00 | 85.00 L | R/W 8-26 | R-2 | |
| E 9 | | | | | 71+22.50 | 85.00 L | R/W 8-26 | R-2 | Not Used |
| E 10 | W/Y | L-862 | 150 | 150 | 71+22.50 | 85.00 R | R/W 8-26 | R-2 | |
| E 11 | W/Y | L-850C | (2)10S | 200 | 69+30.00 | 85.00 L | R/W 8-26 | R-2 | |
| E 12 | W/Y | L-862 | 150 | 150 | 69+30.00 | 85.00 R | R/W 8-26 | R-2 | |
| E 13 | W/Y | L-862 | 150 | 150 | 67+37.50 | 85.00 L | R/W 8-26 | R-2 | |
| E 14 | W/Y | L-862 | 150 | 150 | 67+37.50 | 85.00 R | R/W 8-26 | R-2 | |
| E 15 | W/Y | L-862 | 150 | 150 | 65+45.00 | 85.00 L | R/W 8-26 | R-2 | |
| E 16 | W/Y | L-862 | 150 | 150 | 65+45.00 | 85.00 R | R/W 8-26 | R-2 | |
| E 17 | W/Y | L-862 | 150 | 150 | 63+52.50 | 85.00 L | R/W 8-26 | R-2 | |
| E 18 | W/Y | L-862 | 150 | 150 | 63+52.50 | 85.00 R | R/W 8-26 | R-2 | |
| E 19 | W/Y | L-862 | 150 | 150 | 61+60.00 | 85.00 L | R/W 8-26 | R-2 | |
| E 20 | W/Y | L-862 | 150 | 150 | 61+60.00 | 85.00 R | R/W 8-26 | R-2 | |
| E 21 | W/Y | L-862 | 150 | 150 | 59+67.50 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 22 | W/Y | L-862 | 150 | 150 | 59+67.50 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 23 | W/Y | L-862 | 150 | 150 | 57+75.00 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 24 | W/Y | L-862 | 150 | 150 | 57+75.00 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 25 | W/Y | L-862 | 150 | 150 | 55+82.50 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 26 | W/Y | L-862 | 150 | 150 | 55+82.50 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 27 | W/Y | L-862 | 150 | 150 | 53+90.00 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 28 | W/Y | L-862 | 150 | 150 | 53+90.00 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 29 | W/W | L-862 | 150 | 150 | 51+97.50 | 85.00 L | R/W 8-26 | R-2 | |
| E 30 | W/W | L-862 | 150 | 150 | 51+97.50 | 85.00 R | R/W 8-26 | R-2 | |
| E 31 | W/W | L-862 | 150 | 150 | 50+05.00 | 85.00 L | R/W 8-26 | R-2 | |
| E 32 | | | | | 50+05.00 | 85.00 R | R/W 8-26 | R-2 | Not Used |
| E 33 | | | | | 48+12.50 | 85.00 L | R/W 8-26 | R-2 | Not Used |
| E 34 | W/W | L-850C | (2)10S | 200 | 48+12.50 | 85.00 R | R/W 8-26 | R-2 | |
| E 35 | W/W | L-862 | 150 | 150 | 46+20.00 | 85.00 L | R/W 8-26 | R-2 | |
| E 36 | W/W | L-862 | 150 | 150 | 46+20.00 | 85.00 R | R/W 8-26 | R-2 | |
| E 37 | W/W | L-862 | 150 | 150 | 44+27.50 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 38 | W/W | L-862 | 150 | 150 | 44+27.50 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 39 | Y/W | L-862 | 150 | 150 | 42+35.00 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 40 | Y/W | | | | 42+35.00 | 85.00 R | R/W 8-26 | R-2 | Not Used |
| E 41 | Y/W | L-862 | 150 | 150 | 40+42.50 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 42 | Y/W | L-862 | 150 | 150 | 40+42.50 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 43 | Y/W | L-862 | 150 | 150 | 38+50.00 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 44 | Y/W | L-862 | 150 | 150 | 38+50.00 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 45 | Y/W | L-862 | 150 | 150 | 36+57.50 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 46 | Y/W | L-862 | 150 | 150 | 36+57.50 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 47 | Y/W | L-862 | 150 | 150 | 34+65.00 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 48 | Y/W | L-862 | 150 | 150 | 34+65.00 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 49 | Y/W | L-862 | 150 | 150 | 32+72.50 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 50 | Y/W | L-862 | 150 | 150 | 32+72.50 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 51 | Y/W | L-862 | 150 | 150 | 30+80.00 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 52 | Y/W | L-862 | 150 | 150 | 30+80.00 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 53 | Y/W | L-862 | 150 | 150 | 28+87.50 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 54 | Y/W | L-862 | 150 | 150 | 28+87.50 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 55 | Y/W | L-862 | 150 | 150 | 26+95.00 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 56 | Y/W | L-862 | 150 | 150 | 26+95.00 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 57 | Y/W | L-862 | 150 | 150 | 25+02.50 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 58 | Y/W | L-862 | 150 | 150 | 25+02.50 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 59 | Y/W | L-862 | 150 | 150 | 23+10.00 | 85.00 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 60 | Y/W | L-862 | 150 | 150 | 23+10.00 | 85.00 R | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 61 | R/G | L-862E | 200 | 200 | 22+90.00 | 85.00 R | R/W 8-26 | R-2 | |
| E 62 | R/G | L-862E | 200 | 200 | 22+90.00 | 75.00 R | R/W 8-26 | R-2 | |
| E 63 | R/G | L-862E | 200 | 200 | 22+90.00 | 65.00 R | R/W 8-26 | R-2 | |
| E 64 | R/G | L-862E | 200 | 200 | 22+90.00 | 55.00 R | R/W 8-26 | R-2 | |
| E 65 | R/G | L-862E | 200 | 200 | 22+90.00 | 55.00 L | R/W 8-26 | R-2 | |
| E 66 | R/G | L-862E | 200 | 200 | 22+90.00 | 65.00 L | R/W 8-26 | R-2 | |
| E 67 | R/G | L-862E | 200 | 200 | 22+90.00 | 75.00 L | R/W 8-26 | R-2 | |
| E 68 | R/G | L-862E | 200 | 200 | 22+90.00 | 85.00 L | R/W 8-26 | R-2 | |
| | | | | | | | | | |
| | | | | | | | | | |
| E 69 | Blue | L-861T | 15 | 10/15 | 71+70.04 | 88.00 L | R/W 8-26 | R-2 | |
| E 70 | Blue | L-861T | 15 | 10/15 | 71+70.04 | 93.00 L | R/W 8-26 | R-2 | |
| E 71 | Blue | L-861T | 15 | 10/15 | 71+57.52 | 157.99 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 72 | Blue | L-861T | 15 | 10/15 | 71+26.36 | 202.05 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 73 | Blue | L-861T | 15 | 10/15 | 70+80.63 | 230.47 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 74 | Blue | L-861T | 15 | 10/15 | 70+27.41 | 240.16 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 75 | Blue | L-861T | 15 | 10/15 | 69+74.45 | 228.80 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 76 | Blue | L-861T | 15 | 10/15 | 69+31.05 | 198.97 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 77 | Blue | L-861T | 15 | 10/15 | 68+74.65 | 144.72 L | R/W 8-26 | R-2 | Fixture and Transformer Only |
| E 78 | Blue | L-861T | 15 | 10/15 | 68+10.85 | 93.00 L | R/W 8-26 | R-2 | |
| E 79 | Blue | L-861T | 15 | 10/15 | 68+10.85 | 88.00 L | R/W 8-26 | R-2 | |

Designed By: DMH
Drawn By: GMV
Checked By: MJL

Date Revised: 5/16/2016, 3:53 PM
Style Name: EQ
File Path and Name: Z:\1530086 - Cold Bay Airport Crosswind Runway Improvements\C-Working\Drawings\EL4.dwg

As-Built

PLAN PREPARED BY MBA CONSULTING ENGINEERS, INC.

STATE OF ALASKA 49TH
MICHAEL J. LOVE
05/16/2016
EE-5818
REGISTERED PROFESSIONAL ENGINEER

| BY | DATE | REVISION |
|---|---|---|
| | | |

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

COLD BAY AIRPORT
COLD BAY, ALASKA
CROSSWIND IMPROVEMENTS
PROJECT No. Z573290000
AIP No. 3-02-0065-XXX
RW 8-26
EDGE LIGHT SCHEDULES

DATE: 05/16/2016
SHEET: 97 OF 97
AS-BUILT SHEET: