



FOUND 3-1/4" BRASS CAP ON STAINLESS STEEL ROD INSIDE A PVC PIPE.

702

MERTARVIA

LS-7839

FOUND 3-1/4" ALUMINUM CAP

ON 2-1/2" ALUMINUM POST 0.7'

ABÓVE GRADE, ORANGE

CARSONITE MARKER 1' NORTH FROM MONUMENT.



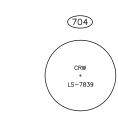
FOUND 3-1/4" BRASS CAP ON STAINLESS STEEL ROD 0.5' ABOVE GRADE. ORANGE CARSONITE MARKER 0.4' IN A SOUTHEASTERLY DIRECTION.



4

CRW
MERTARVIK
TR A
TR.O.W

FOUND 3-1/4" ALUMINUM CAP ON 2-1/2" ALUMINUM POST FLUSH WITH GRADE. ORANGE CARSONITE MARKER 1' NORTH FROM MONUMENT.



FOUND 1-1/4" YELLOW PLASTIC CAP ON 5/8" REBAR 0.2' ABOVE GRADE.

(551)

SET 9/16" STAINLESS STEEL

ROD 17' DEEP WITH A 36'

GREASE FILLED FIN SLEEVE

BEDED IN SAND, ALL OF WHICH SET INSIDE A 6" PVC

PIPE ENCASED IN CONCRETE, A LOGO CAP ADHERED TO THE PVC AND STAMPED

WITH THE FOLLOWING: "R&M

SURVEY MARK 2018". DATUM

POINT IS 0.2' BELOW RIM OF

CASE. ORANGE CARSONITE

MARKER SET NEARBY.

BASIS OF COORDINATES



(552)

SET 9/16" STAINLESS STEEL

ROD 15.7' DEEP WITH A 36'

GREASE FILLED FIN SLEEVE

BEDED IN SAND, ALL OF WHICH SET INSIDE A 6" PVC

PIPE ENCASED IN CONCRETE, A LOGO CAP ADHERED TO THE PVC AND STAMPED

WITH THE FOLLOWING: "R&N

FOUND 3-1/4" ALUMINUM CAP ON 5/8" ALUMINUM ROD 0.3' ABOVE GRADE.



(553)

SET 9/16" STAINLESS STEEL ROD 10.5' DEEP WITH A 36' GREASE FILLED FIN SLEEVE

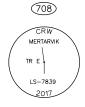
BEDED IN SAND, ALL OF WHICH SET INSIDE A 6" PVC

PIPE ENCASED IN CONCRETE A LOGO CAP ADHERED TO THE PVC AND STAMPED

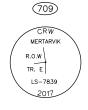
WITH THE FOLLOWING: "R&M CONSULTANTS, INC. EWU F,

SURVEY MARK 2018".

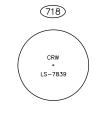
FOUND 3-1/4" ALUMINUM CAP ON 2-1/2" ALUMINUM POST 0.3" ABOVE GRADE AND SLIGHTLY LEANING IN A SOUTHERLY DIRECTION. ORANGE CARSONITE MARKER NEARBY.



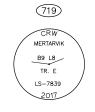
FOUND 3-1/4" ALUMINUM CAP ON 2-1/2" ALUMINUM POST 0.3' ABOVE GRADE AND SLIGHTLY LEANING IN A WESTERLY DIRECTION. ORANGE CARSONITE MARKER NEARBY.



FOUND 3-1/4" ALUMINUM CAP ON 2-1/2" ALUMINUM POST 0.2' ABOVE GRADE WITH ROCK CAIR'N SET AT BASE OF CAP. ORANGE CARSONITE MARKER NEARBY.



FOUND 1-1/4" YELLOW PLASTIC CAP ON 5/8" REBAR 0.3" ABOVE GRADE.



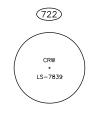
FOUND 3-1/4" ALUMINUM CAP ON 2-1/2" ALUMINUM POST 0.3' ABOVE GRADE. ORANGE CARSONITE MARKER NEARBY.



FOUND 3-1/4" ALUMINUM CAP ON 2-1/2" ALUMINUM POST 0.4' ABOVE GRADE. ORANGE CARSONITE MARKER NEARBY.



FOUND 3-1/4" ALUMINUM CAP ON 5/8" ALUMINUM ROD 1.0' ABOVE GRADE.



FOUND 1-1/4" YELLOW PLASTIC CAP ON 5/8" REBAR 0.3' ABOVE GRADE.

HORIZONTAL CONTROL STATEMENT

COORDINATE SYSTEM:
THIS PROJECT IS LOCATED ENTIRELY WITHIN THE "AK WEST COAST 2015" LOW DISTORTION PROJECTION (LDP), WHICH WAS DEVELOPED BY THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES (AKDOT&PF).

AK WEST COAST 2015 LDP DEFINITION:
LINEAR UNITS: U.S. SURVEY FEET (USFt)
DATUM: NADB3(2011) EPOCH 2010.0000
PROJECTION: TRANSVERSE MERCATOR
LATITUDE OF LOCAL ORIGIN: 61'00'00" NORTH (61.0')
LONGITUDE OF LOCAL ORIGIN: 165'30'00" WEST (-165.5')
FALSE NORTHING: 300,000.0000 USFt
FALSE EASTING: 400,000.0000 USFt
GRID SCALE FACTOR: 0.99999
SEMI-MAJOR AXIS (M): 6,378,137.0
INVERSE FLATTENING: 298.257222101

THE BASIS OF COORDINATES IS POINT NO. 551, A SET 9/16" STAINLESS STEEL ROD, ENCASED IN A 6" PVC PIPE WITH AN ALUMINUM LOGO CAP STAMPED "R&M CONSULTANTS, INC. EWU D, SURVEY MARK 2018". THE GEODETIC POSITION WAS ESTABLISHED BY AVERAGING SEVEN OPUS SOLUTIONS, ALL OF WHICH BASED UPON AT LEAST 8—HOURS OF STATIC GPS OBSERVATION TIME. SAID BASIS OF COORDINATES HAS THE FOLLOWING COORDINATES:

NAD83(2011) EPOCH 2010.0000 GEODETIC COORDINATES (AVERAGED): LAT.=60"48"47.12421" NORTH, LONG.=164"30"14.23504" WEST, FLLIPSOID HEIGHT = 366.94 USFt

PROJECT COORDINATES: N=233,020.6877 USFt E=577,847.1948 USFt

BASIS OF BEARINGS: PROJECT BEARINGS ARE AK WEST COAST 2015 LDP GRID BEARINGS.

NOTES

- 1. THE INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY PERFORMED BY R&M CONSULTANTS, INC. (R&M) AUGUST 16, 2018 THRU AUGUST 23, 2018. FIELD SURVEY INFORMATION CAN BE FOUND IN R&M FIELD BOOK NO. 2652 01 PAGES 1 THRU 26
- 2. HORIZONTAL POSITIONS OF CONTROL POINTS WERE DETERMINED BY A CONSTRAINED LEAST-SQUARES ADJUSTED GNSS NETWORK UTILIZING TRIMBLE R10 MULTI-FREQUENCY GNSS RECEIVERS IN TRIMBLE BUSINESS CENTER VER. 4.10.
- 3. ALL DIMENSIONS, COORDINATES, AND ELEVATIONS SHOWN HEREON ARE EXPRESSED IN U.S. SURVEY FEET, UNLESS OTHERWISE NOTED.
- 4. ALL COORDINATES AND DIMENSIONS SHOWN HEREON SHOULD BE VERIFIED IN THE FIELD BEFORE USE.
- 5. ALL RECORD DOCUMENTS SHOWN HEREON ARE RECORDED IN THE BETHEL RECORDING DISTRICT UNLESS NOTED OTHERWISE
- 6. SEE REFERENCE RECORDED IN BRISTOL BAY RECORDING DISTRICT: SURVEY CONTROL DIAGRAM, RECORD OF SURVEY MERTARVIK BARGE LANDING SITE, RECORDED AS PLAT NO. 2008-13.
- 7. SEE REFERENCES RECORDED IN BETHEL RECORDING DISTRICT: SURVEY CONTROL DIAGRAM, RECORD OF SURVEY MERTARVIK WATERFRONT DEVELOPMENT HYDROGRAPHIC SURVEY, RECORDED AS PLAT NO. 2012-36; RECORD OF SURVEY ADL 230403, MERTARVIK BARGE LANDING SITE PUBLIC ACCESS EASEMENT, RECORDED AS PLAT NO. 2013-13; RECORD OF SURVEY, MERTARVIK TOWNSITE SUBDIVISION SURVEY CONTROL, RECORDED AS PLAT NO. 2018-2; PLAT OF MERTARVIK TOWNSITE SUBDIVISION, RECORDED AS PLAT NO. 2018-7.
- 8. THE ERROR OF CLOSURE OF THIS SURVEY DOES NOT EXCEED 1:5000.
- 9. THE RIGHT OF WAY ACQUISITION FOR THE PARCELS SHOWN HEREON SHOULD BE FINALIZED BY THE END OF YEAR 2019.
- 10. THE CONSTRUCTION FOR THIS PROJECT SHOULD TENTATIVELY BE COMPLETED BY THE END OF YEAR 2021.
- 11. THE BOUNDARY LINE THAT WOULD HAVE BEEN CREATED BY THE SECOND STANDARD PARALLEL WITHIN THE MERTARVIK TOWNSITE WAS VACATED ON PLAT 2018-7 RECORDED IN THE BETHEL RECORDING DISTRICT.
- 12. THE BEARINGS SHOWN ARE LOCAL PLANE BEARINGS AS ORIENTED TO THE "AK WEST COAST 2015" LDP, UNLESS NOTED OTHERWISE. THE ROTATION ANGLE BETWEEN THE RECORD PLAT FOR THE MERTARVIK TOWNSITE RECORDED AS PLAT 2018-7 IN THE B.R.D., AND THE LOCAL PLANE LDP BEARINGS BETWEEN POINTS 721 AND 706 AS SHOWN HEREON IS 0°51'53" COUNTER-CLOCKWISE.

VERTICAL CONTROL STATEMENT

THE VERTICAL DATUM FOR THIS SURVEY IS NAVD88 (GEOID12B). THE BASIS OF VERTICAL CONTROL IS THE BASIS OF COORDINATES AS DESCRIBED ABOVE. THE ORTHOMETRIC HEIGHT FOR THIS POINT WAS ESTABLISHED BY AN AVERAGE OF SEVEN OPUS SOLUTIONS, ALL OF WHICH HAD A MINIMUM OF 8-HOURS OF STATIC GPS OBSERVATIONS. THE NAVD88 ORTHOMETRIC HEIGHT IS BASED UPON THE GEOID12B MODEL AND WAS AVERAGED AS 335.54 USFt.

PREVIOUS SURVEYS IN THE AREA USED THE MEAN LOWER LOW WATER (MLLW) DATUM WHICH WAS DETERMINED BY NINE DAYS OF TIDAL OBSERVATIONS BY R&M CONSULTANTS, INC. BETWEEN JUNE 9 AND JUNE 17, 2008. OBSERVATIONS WERE CORRELATED TO NOAA TIDE STATION "VILLAGE COVE 946-4212", LOCATED IN ST. PAUL ALASKA, AND PROCESSED BY JOHN OSWALD AND ASSOCIATES, LLC.

MHHW = 4.96' MHW = 4.81' MLW = 0.50' MLLW = 0.00'

MLLW ELEVATIONS CAN BE OBTAINED BY SUBTRACTING 0.72 FEET FROM THE NAVD88 (GEOID12B) ELEVATIONS. SEE RECORD OF SURVEY TITLED "MERTARVIK TOWNSITE SUBDIVISION — SURVEY CONTROL", RECORDED AS PLAT NO. 2018—2, IN THE BETHEL RECORDING DISTRICT.

STATE BUSINESS - NO FEE

STATE OF ALASKA



PREPARED BY:
R & M CONSULTANTS, INC.
9101 VANGUARD DRIVE
ANCHORAGE, ALASKA 99507
(907) 522-1707
CERTIFICATE OF AUTHORIZATION
No. AECC111

DEPARTMENT OF TRANSPORTATION &
PUBLIC FACILITIES
RIGHT-OF-WAY ACQUISITION PLAT

NEWTOK AIRPORT
PROJECT No. CFAPT00310/AIP 3-02-0194-XXX-20XX

LOCATED WITHIN PROTRACTED SECTIONS 1,2,3,10,11,12 T.8N., R.87W., & PROTRACTED SECTION 35 T.9.N., R86W., S.M. ALASKA BETHEL RECORDING DISTRICT

 DRAWN:
 CAW
 DATE:
 JANUARY 2019
 SHEET:
 3 OF 3

 CHECKED:
 BRM
 SCALE:
 N/A
 FILE NO.
 PAXXXXXXXXX