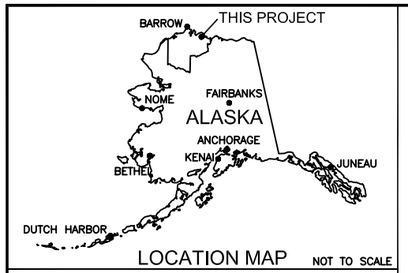
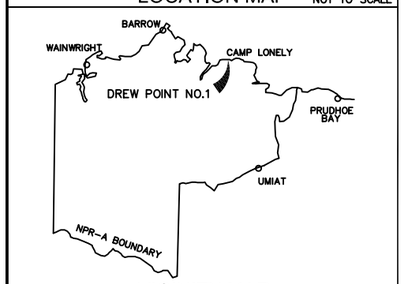


LOCATION MAP NOT TO SCALE



VICINITY MAP NOT TO SCALE

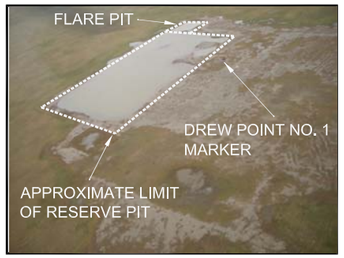


PHOTO 1 - AERIAL VIEW OF RESERVE PIT.

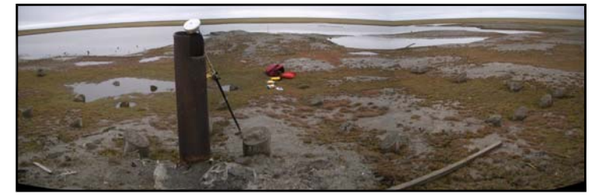
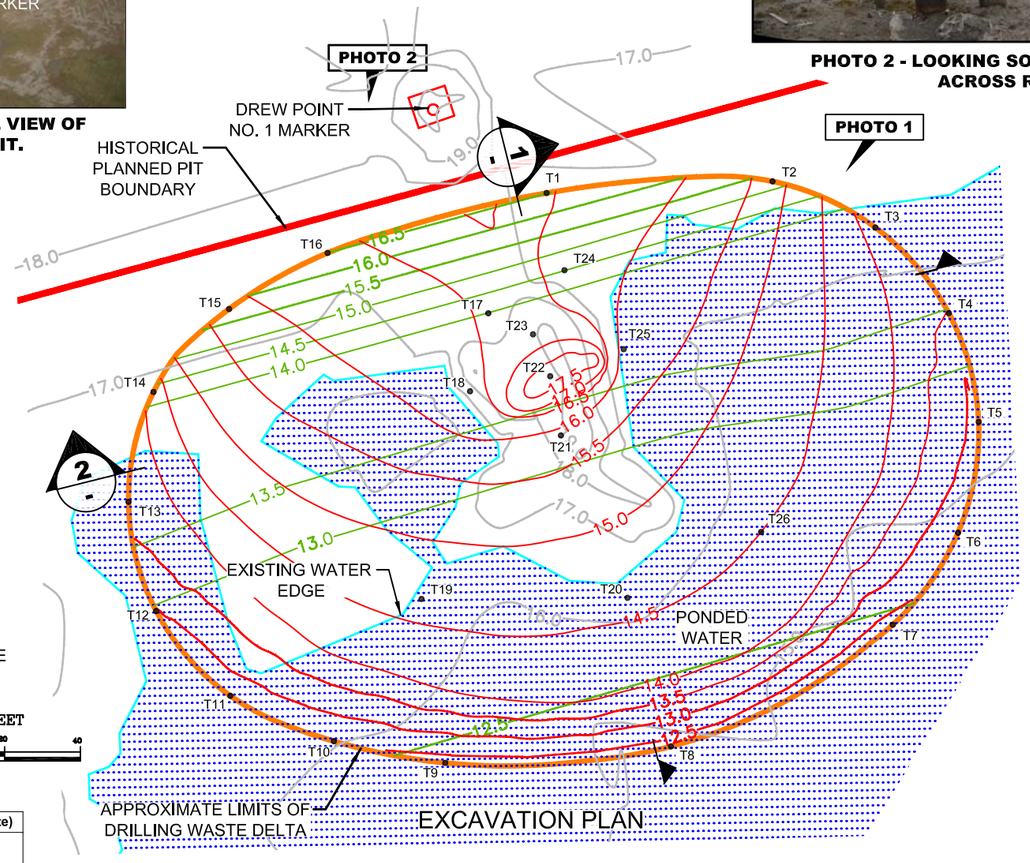
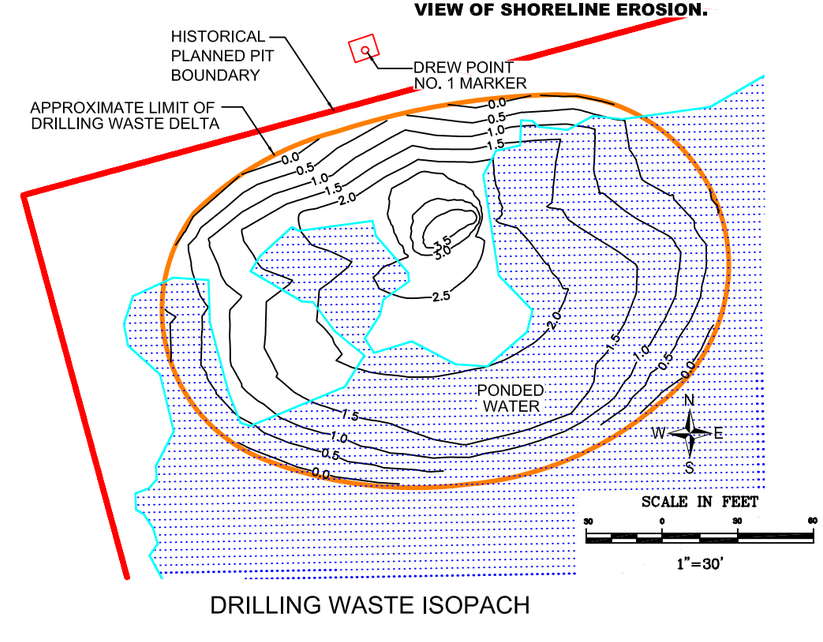


PHOTO 2 - LOOKING SOUTH FROM WELL MARKER ACROSS RESERVE PIT.

PHOTO 3 - AERIAL VIEW OF RESERVE PIT, WITH VIEW OF SHORELINE EROSION.



EXCAVATION PLAN



DRILLING WASTE ISOPACH

Survey and Control Notes:

1. Survey information is based on physical survey performed by F.R. Bell and Associates, August 26, 2005.
2. Coordinates are Alaska State Plane, Zone 5, NAD 27.
3. Elevations were derived from published CORS Ellipsoidal values and applying GEOID99 undulations to all observed Ellipsoid heights.
4. Survey Control Point MI050211A, N 6172095.74, E 512548.65, 17.26 Feet, MSL.
5. Survey Control Point MI050211B, N 6171820.63, E 511522.81, 16.55 Feet, MSL.
4. Survey Control Point MI050211C, N 6171316.53, E 512464.77, 16.81 Feet, MSL.

Construction notes:

1. Do not disturb areas outside the former drill site footprint.
2. Existing well marker to be left undisturbed.

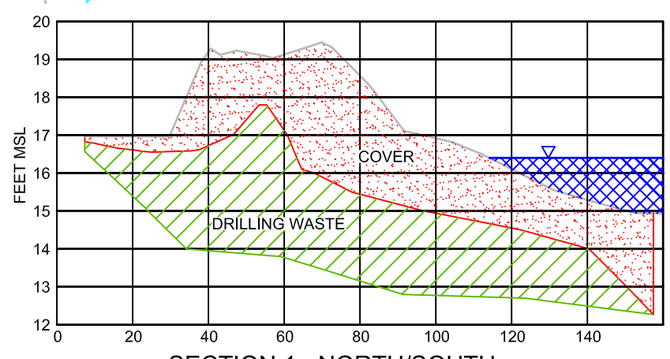
General notes:

1. Quantities are approximate.
2. Extent of drilling waste interpreted from site investigation activities performed by MACTEC Engineering and Consulting April 2006, and geophysical investigation performed by the U.S. Geological Survey August 2005.
3. Green contours represent bottom of drilling waste.
   Red contours represent top of drilling waste.
   Grey contours represent existing ground, including pond bottom.

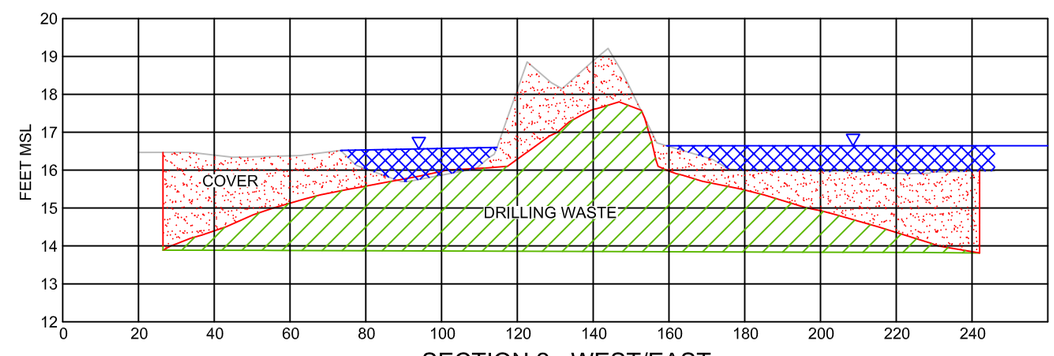
Volume Summary (Within drilling waste delta footprint, Volume represents in-place estimate)	
Drilling Waste	1350 CY
Cover Material	1470 CY
Ice	390 CY

Construction Control Point	Northing	Easting	Existing Surface Elev.	Top Drilling Waste Elev.	Bottom Drilling Waste Elev.
T1	6171475.66	512030.91	16.8		16.5
T2	6171478.73	512090.56	16.7		15.2
T3	6171466.55	512117.71	16.3		13.9
T4	6171443.96	512137.08	15.7		13.5
T5	6171415.27	512144.97	15.2		12.8
T6	6171386.01	512139.52	14.9		12.6
T7	6171361.74	512122.29	14.8		12.5
T8	6171329.63	512063.76	14.9		12.4
T9	6171325.28	512004.19	15.7		12.5
T10	6171330.99	511974.78	16.0		12.6
T11	6171342.99	511947.45	16.4		12.8
T12	6171365.35	511927.87	16.5		13.0
T13	6171394.17	511920.58	16.4		13.7
T14	6171423.16	511927.16	16.8		14.3
T15	6171445.05	511947.11	17.4		15.8
T16	6171459.85	511973.13	17.4		16.5
T17	6171443.92	512015.53	17.5	16.6	14.0
T18	6171423.35	512010.72	17.5	16.3	13.7
T19	6171368.54	511997.91	16.4	14.6	12.8
T20	6171368.84	512052.29	16.3	14.6	12.7
T21	6171411.69	512034.70	18.8	15.9	13.3
T22	6171427.31	512031.88	18.8	17.8	13.7
T23	6171438.37	512027.34	19.0	16.9	13.8
T24	6171455.28	512035.64	16.8	16.3	14.5
T25	6171434.46	512051.27	16.6	15.9	13.7
T26	6171386.22	512087.54	15.6	14.5	12.7

Plan Prepared By: MACTEC Engineering & Consulting



SECTION 1 - NORTH/SOUTH



SECTION 2 - WEST/EAST

SCALE: 1" = VARIES	DRAWN: MSF	
THIS BAR IS 1" AT FULL SIZE:	DESIGNED: WME	
PROJECT NO.: 4034060006	CHECKED: BDL & WTH	

MARSHCREEK

Marsh Creek, LLC
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Anchorage, Alaska 99507
(907) 258-0050
www.marshcreekllc.com

EXCAVATION PLAN AND ISOPACH

DREW POINT No. 1

BUREAU OF LAND MANAGEMENT

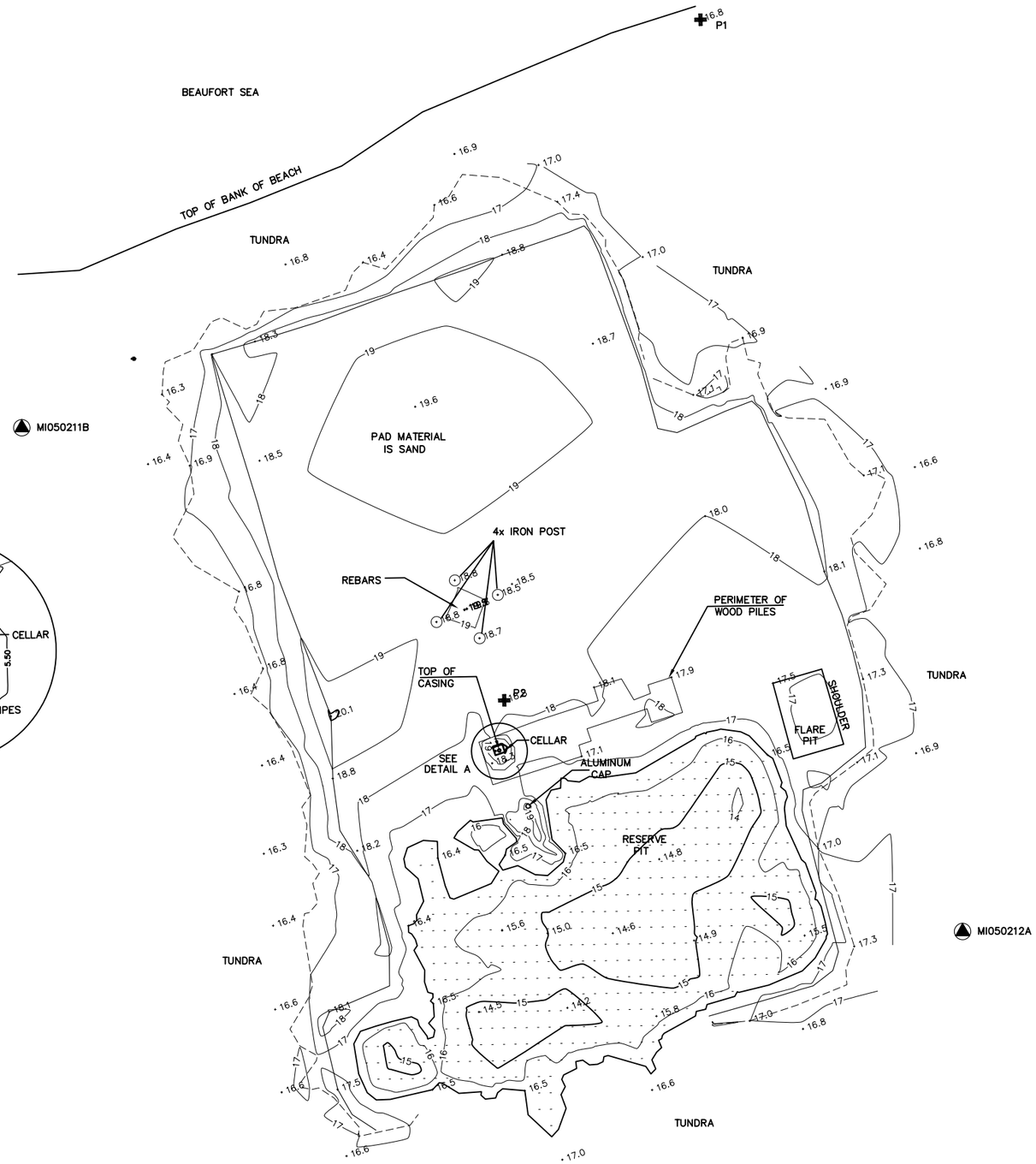
NPRA, ALASKA

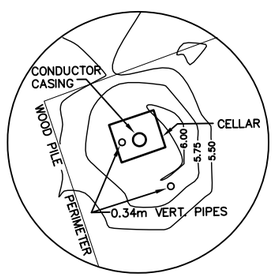
DRAWING: 1 OF 1

SHEET: 1 OF 1

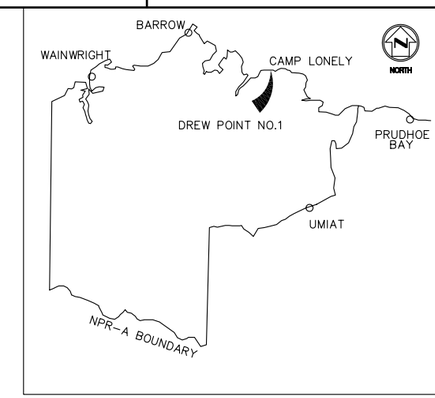
DATE: 1-04-2007

P:\Group\BLM2004_Delivery Orders\T004_Shoreline Reserve Pits\Marsh Creek Volume Calcs\FINAL Vol Calcs\06 Drew Pt No1 exp 25 nad27\Drew Point Excavation Plan, 1=20, 01/03/07 at 10:06 by cab
LAYOUT: Layout1





DETAIL A
1:250



VICINITY MAP
NTS

GRID

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

POINT	NORTH	EAST	ELEV
MI050211A	6,172,095.74	512,548.65	17.26
MI050211B	6,171,820.63	511,522.81	16.55
MI050212A	6,171,316.53	512,464.77	16.81
P1	6,172,228.95	512,202.41	16.80
P2	6,171,547.82	512,005.87	18.76
ALUM. CAP	6,171,441.91	512,029.68	19.57
WELL	6,171,497.70	512,000.88	6.256

NOTES

1. COORDINATES ARE ALASKA STATE PLANE, ZONE 5, NAD 27.
2. ELEVATIONS WERE DERIVED FROM PUBLISHED CORS ELLIPSOIDAL VALUES AND APPLYING GEOID99 UNDULATIONS TO ALL OBSERVED ELLIPSOID HEIGHTS
3. REF. FIELDBOOK MI0502 P. 11–17
4. CONTOUR INTERVAL IS 1 FOOT.
5. CONTOURS WITHIN RESERVE PIT ARE BATHYMETRIC
6. WELL POSITION ABOVE WAS TAKEN AT TOP OF CONDUCTOR CASING

RESERVE PIT (WATER VOLUME)

VOLUME CALC'S

GRID CALC	3622 CY.
COMPOSITE CALC	3623 CY.
SECTION CALC	3623 CY.
AVERAGE	3623 CY.

LEGEND

- CONTROL POINT
- PHOTO PANEL
- GRAVEL TOE
- GRAVEL SHOULDER
- RESERVE PIT

REFERENCE DRAWINGS	NO.	DATE	REVISION	BY	CHK	APPD	NO.	DATE	REVISION	BY	CHK	APPD
	0	6/2/06	ALASKA STATE PLANE ZONE 5 NAD 27	JJ	RFA							

MARSHCREEK

ENGINEERING RECORD		DATE
DRN:	JACOBS	6/2/06
DSGN:		
CHK:	ALLISON	6/2/06
APP:		
APP:		
SCALE:	1"= 60'	

F. Robert Bell and Associates
ENGINEERS AND LAND SURVEYORS
801 W. FIREWEED LANE
ANCHORAGE, ALASKA 99503

TITLE OF DRAWING:
MARSH CREEK GOV'T SERVICES
DREW POINT No. 1
TOPOGRAPHIC SURVEY

WORK PACKAGE	DRAWING NUMBER	REV	SHEET
	FRB06 MC 02–00	0	001
MODULE:			OF 1