

South Anchorage Substation Site Work

Presented to
Chugach Board of Directors
June 16, 2004

By Dora Gropp, Manager
Transmission & Special Projects

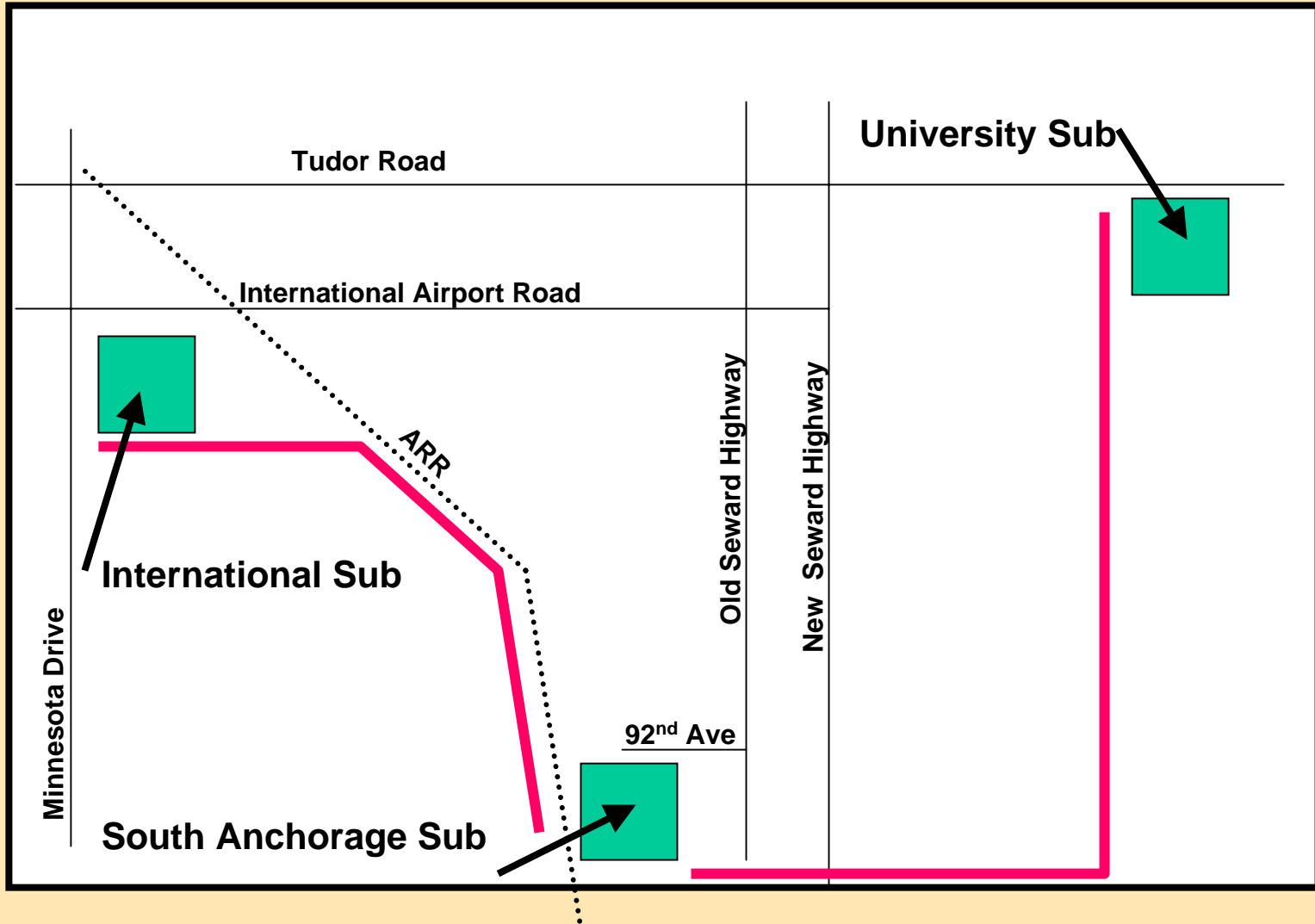
Topics

- Contract Award for the Site Work
- Site Selection History
- Costs
- Budget Status
- Schedule

Strategic Location

- Within 1 mile of Klatt substation
- South of Sand Lake Substation
- Industrial zoning
- Close to existing transmission and subtransmission lines
- Size - At least 4 acres

Project Map



Property Selected

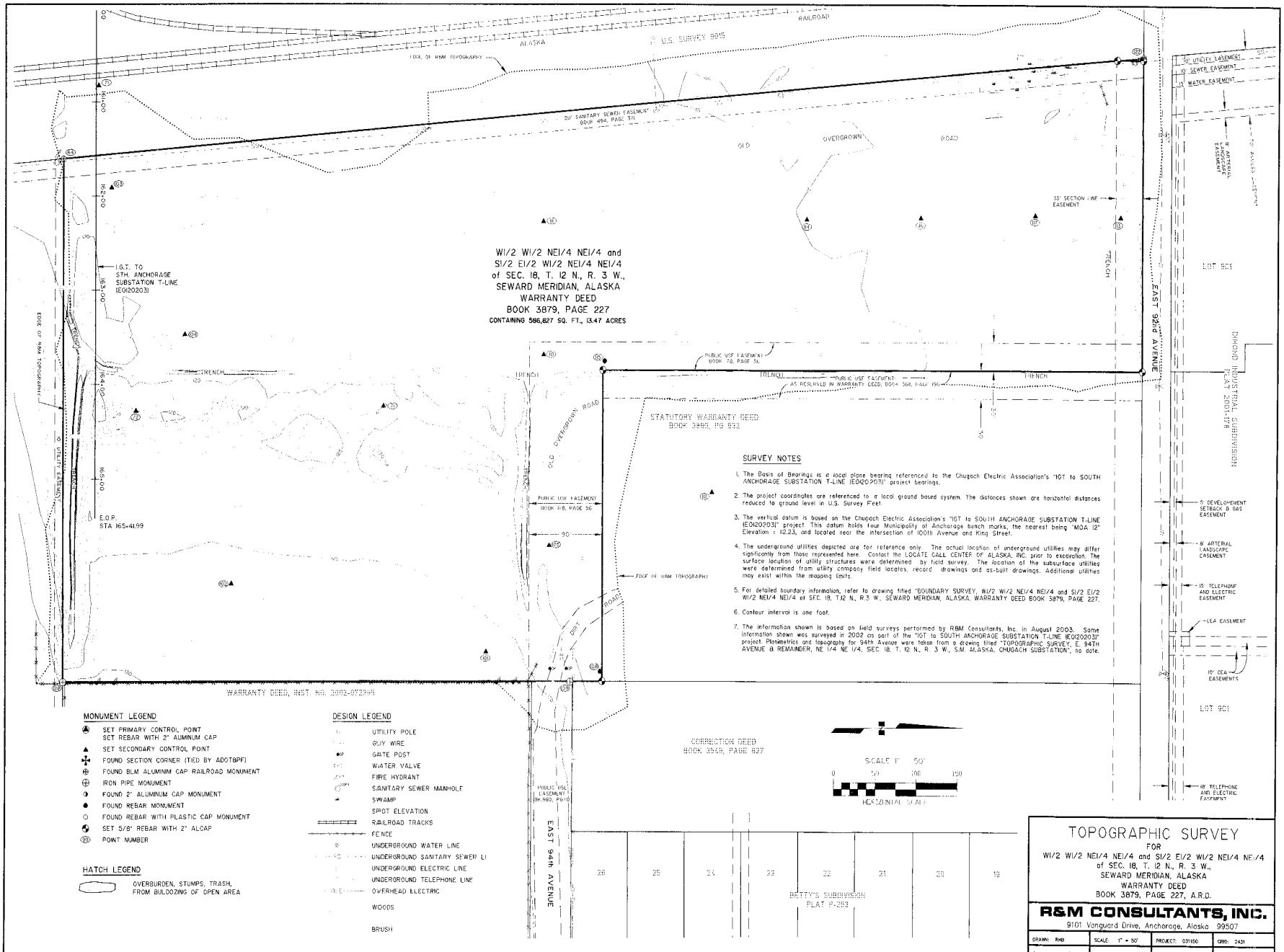
- 1.5 miles north of Klatt
- South of Sand Lake
- Frontage on the ARR
- Minimum new transmission construction
- Short 34kV connections
- Industrial zone > No conditional use permit
- 13.6 acres > 4 acres

Property Selected

(continued)

- Purchased in 2001 for \$1.8 million
- Price consistent with other parcels in the area
- Hazardous material site assessment performed
- Visual and walking site inspection performed

T:\36023-02\FIBO_L_SURVEY_P_44103\F_SIBBS_T-01.dwg, 09/29/03, at 13:17 by lfr
 2.5x11



W1/2 W1/2 NE1/4 NE1/4
 S1/2 E1/2 W1/2 NE1/4 NE1/4
 of SEC. 18, T. 12 N., R. 3 W.,
 SEWARD MERIDIAN, ALASKA
WARRANTY DEED
BOOK 3879, PAGE 227
 CONTAINING 586,827 SQ. FT., 13.47 ACRES

STATUTORY WARRANTY DEED
 BOOK 3889, PG 952

SURVEY NOTES

- The Basis of Bearings is a local plane bearing referenced to the Chugach Electric Association's '107 to SOUTH ANCHORAGE SUBSTATION T-LINE (E020203)' project bearings.
- The project coordinates are referenced to a local ground based system. The distances shown are horizontal distances reduced to ground level in U.S. Survey Feet.
- The vertical datum is based on the Chugach Electric Association's '107 to SOUTH ANCHORAGE SUBSTATION T-LINE (E020203)' project. This datum holds four Municipality of Anchorage bench marks, the nearest being 'MOA 12' Elevation = 112.25, and located near the intersection of 100th Avenue and King Street.
- The underground utilities depicted are for reference only. The actual location of underground utilities may differ significantly from those represented here. Contact the LOCAL TOLL CENTER OF ALASKA, INC. prior to excavation. The surface location of utility structures were determined by field survey. The location of the subsurface utilities were determined from utility company field notes, record drawings and as-built drawings. Additional utilities may exist within the mapped limits.
- For detailed boundary information, refer to drawing titled 'BOUNDARY SURVEY, W1/2 W1/2 NE1/4 NE1/4 and S1/2 E1/2 W1/2 NE1/4 NE1/4 of SEC. 18, T. 12 N., R. 3 W., SEWARD MERIDIAN, ALASKA, WARRANTY DEED BOOK 3879, PAGE 227.
- Contour interval is one foot.
- The information shown is based on field surveys performed by RBM Consultants, Inc. in August 2003. Some information shown was surveyed in 2000 as part of the '107 to SOUTH ANCHORAGE SUBSTATION T-LINE (E020203)' project. Planimetrics and topography for 94th Avenue were taken from a drawing titled 'TOPOGRAPHIC SURVEY, E. 94TH AVENUE & REMAINDER, NE 1/4 NE 1/4, SEC. 18, T. 12 N., R. 3 W., S.M. ALASKA, CHUGACH SUBSTATION', no date.

MONUMENT LEGEND

- ▲ SET PRIMARY CONTROL POINT
- ▲ SET REBAR WITH 2" ALUMINUM CAP
- ▲ SET SECONDARY CONTROL POINT
- ⊕ FOUND SECTION CORNER (TIED BY ADOT&PF)
- ⊕ FOUND BLM ALUMINUM CAP RAILROAD MONUMENT
- ⊕ IRON PIPE MONUMENT
- ⊕ FOUND 2" ALUMINUM CAP MONUMENT
- FOUND REBAR MONUMENT
- FOUND REBAR WITH PLASTIC CAP MONUMENT
- SET 5/8" REBAR WITH 2" ALCAP
- Ⓢ POINT NUMBER

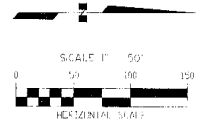
HATCH LEGEND

- OVERBURDEN, STUMPS, TRASH, FROM BULDOZING OF OPEN AREA

DESIGN LEGEND

- UTILITY POLE
- GUY WIRE
- GATE POST
- WATER VALVE
- FIRE HYDRANT
- SANITARY SEWER MANHOLE
- SWAMP
- SPOT ELEVATION
- RAILROAD TRACKS
- FENCE
- UNDERGROUND WATER LINE
- UNDERGROUND SANITARY SEWER LI
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- OVERHEAD ELECTRIC
- WOODS
- BRUSH

CORRECTION DEED
 BOOK 3848, PAGE 627



26	25	24	23	22	21	20	19
BETTY'S SUBDIVISION PLAT P-263							

TOPOGRAPHIC SURVEY

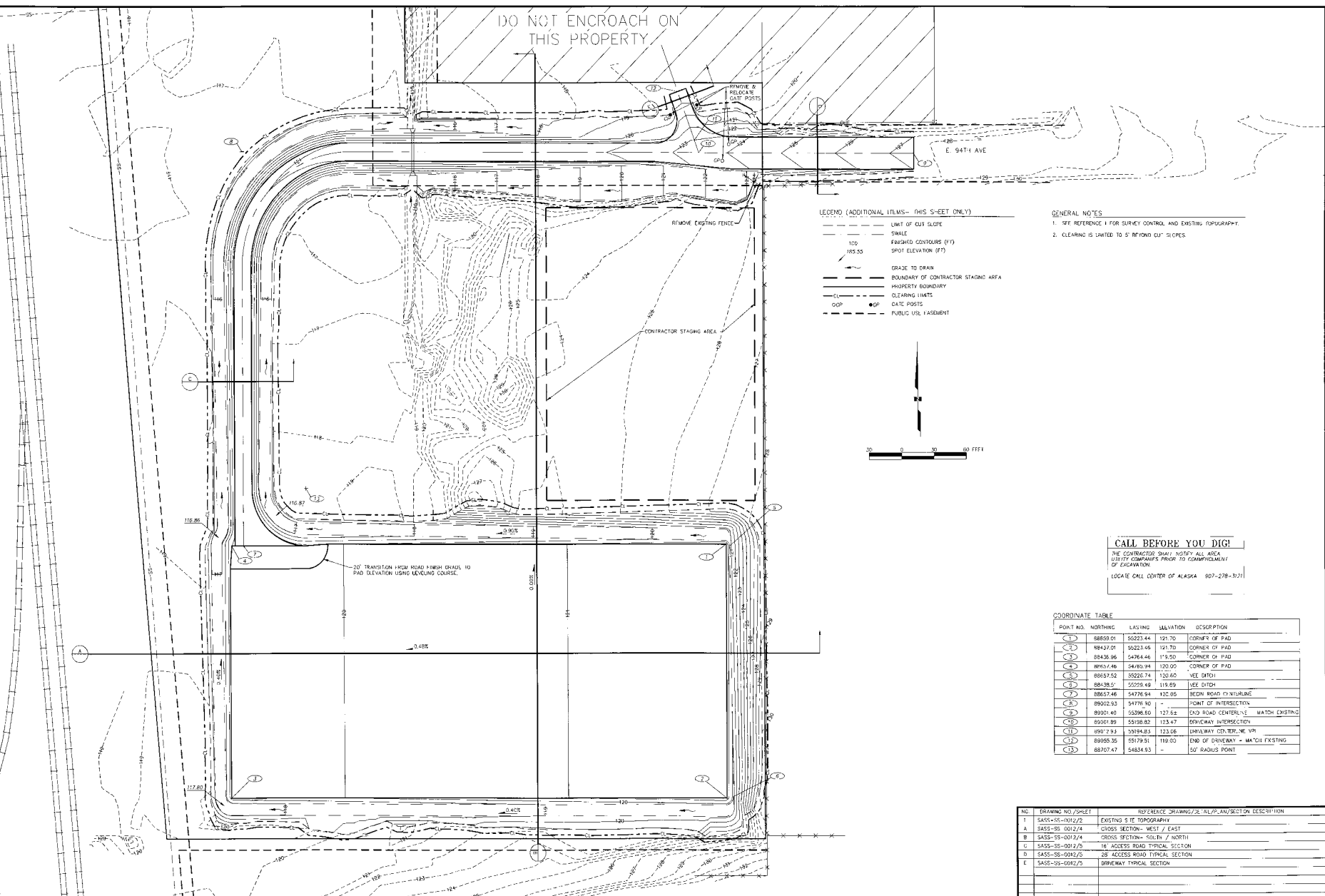
FOR
 W1/2 W1/2 NE1/4 NE1/4 and S1/2 E1/2 W1/2 NE1/4 NE1/4
 of SEC. 18, T. 12 N., R. 3 W.,
 SEWARD MERIDIAN, ALASKA
WARRANTY DEED
BOOK 3879, PAGE 227, A.R.D.

R&M CONSULTANTS, INC.
 9101 Vanguard Drive, Anchorage, Alaska 99507

DRAWN: RMB	SCALE: 1" = 50'	PROJECT: 03160	GRID: 243
CHECKED: RMB/LOS	FIELD BK: 417-1 & 2	DATE: 9-29-03	SHEET: 1 OF 1



DO NOT ENCRoACH ON THIS PROPERTY



LEGEND (ADDITIONAL ITEMS - THIS SHEET ONLY)

- LIMIT OF CUT SLOPE
- SWALE
- 1:10 FRESHED CONTOURS (1/1)
- 155.55 SPOT ELEVATION (FT)
- GRADE TO DRAIN
- BOUNDARY OF CONTRACTOR STAGING AREA
- PROPERTY BOUNDARY
- CLEARING LIMITS
- DATE 8/20/15
- PUBLIC UTIL. ASSESSMENT

GENERAL NOTES

1. SEE REFERENCE 1 FOR SURVEY CONTROL AND EXISTING TOPOGRAPHY.
2. CLEARING IS LIMITED TO 5' BEYOND CUT SLOPES.

CALL BEFORE YOU DIG!

THE CONTRACTOR SHALL NOTIFY ALL AREA UTILITY COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION.
 LOCATE CALL CENTER OF ALASKA 907-278-3121

COORDINATE TABLE

POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
(1)	88659.01	55223.44	121.70	CORNER OF PAD
(2)	88437.01	55223.46	121.70	CORNER OF PAD
(3)	88436.86	54784.46	115.55	CORNER OF PAD
(4)	88657.48	54782.94	120.00	CORNER OF PAD
(5)	88657.52	55226.74	120.60	VEE DITCH
(6)	88438.51	55059.49	119.69	VEE DITCH
(7)	88657.46	54776.94	120.05	BEGIN ROAD CENTERLINE
(8)	89002.93	54776.40	-	POINT OF INTERSECTION
(9)	89001.40	55286.60	127.64	END ROAD CENTERLINE - MATCH EXISTING
(10)	89001.80	55188.82	123.47	DRIVEWAY INTERSECTION
(11)	89012.93	55184.83	123.66	DRIVEWAY CENTERLINE VPI
(12)	89085.35	55179.51	119.00	END OF DRIVEWAY - MATCH EXISTING
(13)	88767.47	54834.93	-	50' RADIUS POINT

NO.	DRAWING NO./SHEET	REFERENCE DRAWING/SECTION/PLAN/SECTION	DESCRIPTION
1	SASS-SS-0012/2	EXISTING SITE TOPOGRAPHY	
A	SASS-SS-0012/4	CROSS SECTION - WEST / EAST	
B	SASS-SS-0012/4	CROSS SECTION - SOUTH / NORTH	
C	SASS-SS-0012/5	1E ACCESS ROAD TYPICAL SECTION	
D	SASS-SS-0012/5	2B ACCESS ROAD TYPICAL SECTION	
E	SASS-SS-0012/5	DRIVEWAY TYPICAL SECTION	

PROJECT: SOUTH ANCHORAGE SUBSTATION
 ENG./DESIGN: D. GROPP-CEA/D. HURLINGAME-EFS

NO. _____ RECORD REVISION _____ TECH./DRAWN BY _____ WP.# _____ H.O. APPROVAL _____ RECORD APPROVED _____ DATE _____

DATE: 8/12/2015
 DATE: 8/12/2015
 DATE: 8/12/2015

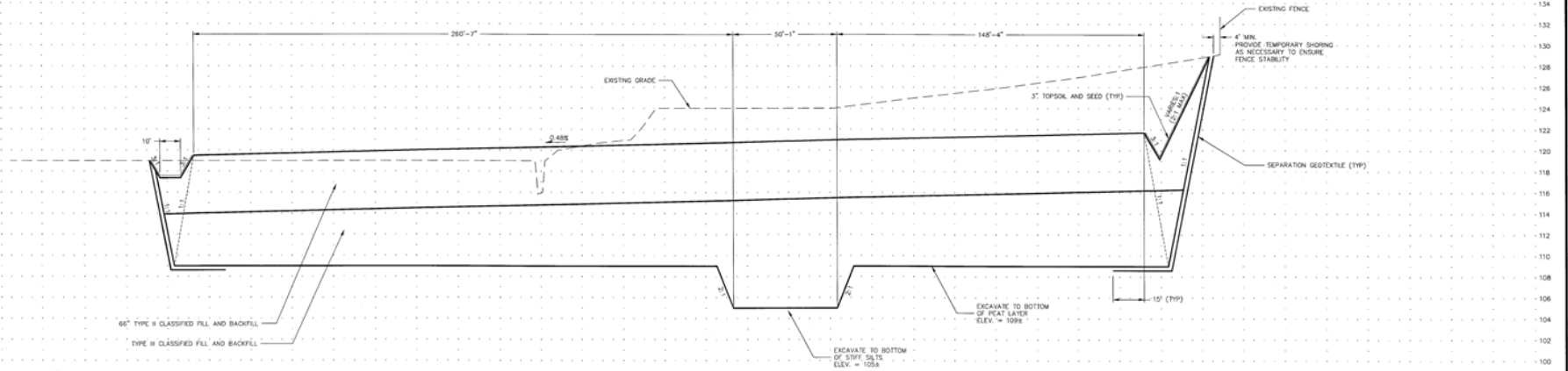
CHUGACH
 POWERING ALASKA'S FUTURE

Chugach Electric Association, Inc.
 6001 Westchester Station - P.O. Box 110000
 Anchorage, Alaska 99511-0000

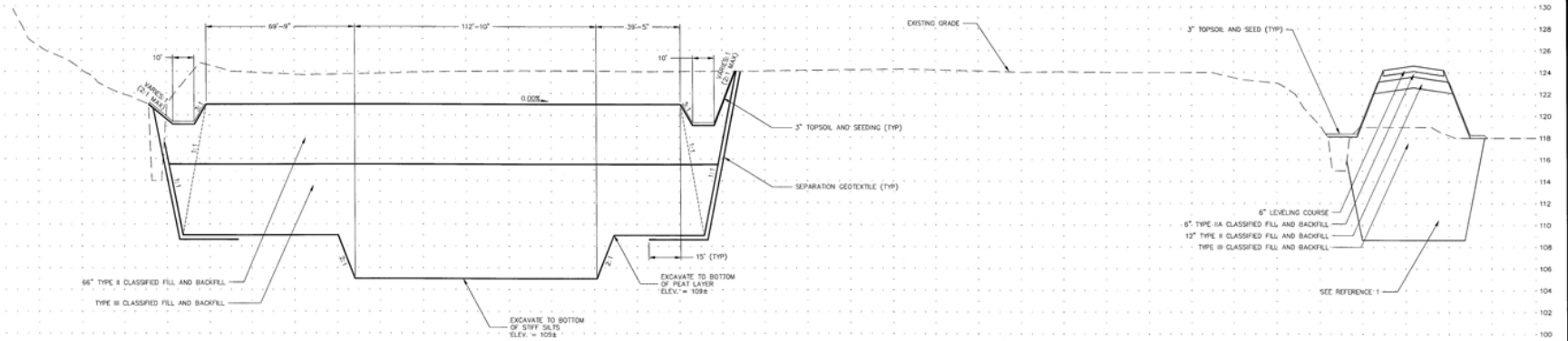
DRAWING NAME:
 SOUTH ANCHORAGE SUBSTATION
 SITE PLAN
 SUBSTATION PAD AND ACCESS ROAD

DRAWING NO. - PREVIOUS/REFERENCE: 10512-SS-0012_3.dwg
 NEW: SASS-SS-0012/E9320086

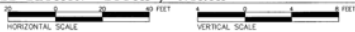
SHEET: 3 OF 3
 PAGE: 3



SS SECTION - WEST / EAST



SS SECTION - SOUTH / NORTH



NOTES:
1. BACKFILL FOUNDATIONS AS SHOWN ON FOUNDATION/STRUCTURAL DRAWINGS.

NO.	DRAWING NO./SHEET	REFERENCE DRAWING/DETAIL/PLAN/SECTION DESCRIPTION
1	SASS-SS-0012/2	16' ACCESS ROAD TYPICAL SECTION
A	SASS-SS-0012/3	CIVIL SITE PLAN
B	SASS-SS-0012/3	CIVIL SITE PLAN

SOUTH ANCHORAGE SUBSTATION		W.O. # E9320086	
ENGIN: D. GROPP-CEA/D. BURLINGAME-EPS			
DESIGNED BY/DATE	APPROVED BY/DATE	ENGINEER	DATE
DIRN. BY/DATE	CHKD BY/DATE		
CONSTRUCTION	OPERATION		
18/05-12-2004	08/05-12-2004		
	27/3/02		



NO.	RECORD REVISION	TECH/ DWN. BY	W.P.#	NO. APPROVED	RECORD APPROVED	DATE



Chugach Electric Association, Inc.
5601 Minnesota Drive - P.O. Box 196300
Anchorage, Alaska 99519-6300

DRAWING NAME:		SOUTH ANCHORAGE SUBSTATION	
		SITE PLAN	
		SUBSTATION PAD AND ACCESS ROAD CROSS SECTIONS	
DRAWING NO. - PREVIOUS/REFERENCE		SASS-SS-0012-4.dwg	
DRAWING NO.:		SASS-SS-0012/E9320086	
SHEET:		4 of 5	
PAGE:		7	

Bids Received

- Northstar Paving \$1,847,315
- Cullips \$1,899,981
- Isabelle \$1,989,215
- Construction Unltd. \$2,418,004
- Tam \$2,671,400
- Engineer's Estimate \$1,580,000 -
\$1,830,000

Project Budget

- 2004 CIP total project \$12,102,000
- 2003 Board approved project \$13,014,500
- 2004 Annual budget \$ 4,676,000
- Spent ITD \$ 2,711,734
- Committed \$ 2,004,957

Schedule

- Site Work complete August 30, 2004
- Construction bid award August 25, 2004
- Construction complete September 2005
- Commissioning Thru November 2005
- Energization December 2005