

HORIZONTAL CONTROL POINTS				
Point	Northing	Easting	Elevation	Description
1	343360.2676	374995.2944	258.34	Set Rbr/AC: CP-1
2	343528.1157	375001.6703	263.29	Set Rbr/AC: CP-2
3	344246.0309	375010.9456	267.02	Set Rbr/AC: CP-3
4	344546.1678	375003.9395	258.82	Set Rbr/AC: CP-4
553	343824.9384	375088.0482	270.62	Fd BC/Conc: GPS OPMDGL
701	342867.8066	375051.4925		Fd AM: 1/4 S12/13*T13N R3W
702	340227.8931	375069.1668		Fd BC: C1/4 S13*T13N R3W
703	342865.5664	374389.5773		Fd AC[MofA]: Boundary Ave & Idaho St
704	342874.6936	376373.0991		Fd BC[BLM]: E 1/16*T13N R3W
705	343257.6636	373135.4394		Fd BC[BLM]: AP2 S12*T13N R3W
706	343622.3835	373960.6124		Fd BC[BLM]: AP3 S12*T13N R3W
707	344453.3882	374533.7163		Fd Rbr/PC[8535-S]:
708	344602.9863	374878.1648		Fd BC[BLM]: AP6 S12*T13N R3W
710	344844.2590	374943.9158		Fd BC[BLM]: AP7 S12*T13N R3W
711	345240.2949	374582.8599		Fd FncPost[BLM]: AP8 S12*T13N R3W
712	344994.5245	377683.9638		Fd BC: L1 L7 L2 L8 S12 S7*T13N R3W R2W
713	344840.4366	377334.4752		Fd BC: L1 L3 L2 S12*T13N R3W
714	342881.1502	377694.3816		Fd AM[2066]: S12 S7 S13 S18*T13N R3W R2W
715	345521.4122	377681.5531		Fd BC[TNH]: 1/4 S12 S7*T13N R3W R2W
716	344406.9939	374426.9496		Fd FncPost[BLM]: AP5 S12*T13N R3W
717	344063.0766	374266.9633		Fd BC[BLM]: AP4 S12*T13N R3W

VERTICAL CONTROL POINTS				
Point	Northing	Easting	Elevation	Description
553	343825	375088	270.62	Fd BC/Conc: GPS OPMDGL
601	342820	374780	252.18	Fd BC[GAAB]: GAAB 10 BC in Bldg Wall

1

CP-1

Set 2" ALCAP on 5/8" x 30" Rebar, 0.2' Below Ground

2

CP-2

Set 2" ALCAP on 5/8" x 30" Rebar, 0.2' Below Ground

3

CP-3

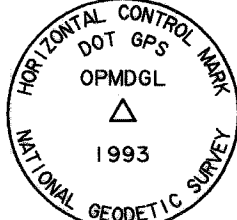
Set 2" ALCAP on 5/8" x 30" Rebar, 0.2' Below Ground

4

CP-4

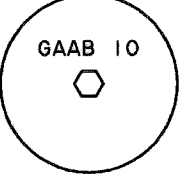
Set 2" ALCAP on 5/8" x 30" Rebar, 0.1' Below Ground

553



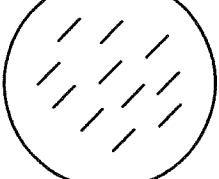
Found 3 3/4" Brass Cap set in the sidewalk at the SE corner of the Glenn Highway bridge.

601



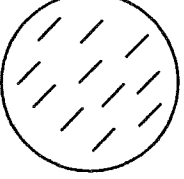
Found 2 1/2" Brass Cap Set Vertically NW Corner of Old KFC Building

701



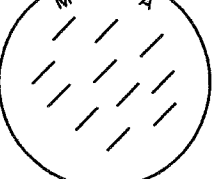
Found 3 1/4" Aluminum Cap in Monument Case, 0.3' Below Pavement

702



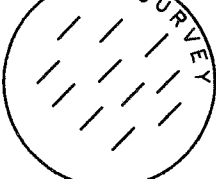
Found 2 1/2" Brass Cap in Monument Case, 0.5' Below Pavement

703



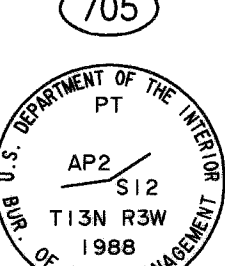
Found 3 1/4" Aluminum Cap in Monument Case, 0.6' Below Pavement

704



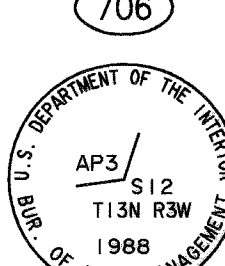
Found 3 1/4" Brass Cap 1.0' Below Pavement

705




Found 3 1/4" Brass Cap Flush with Ground

706



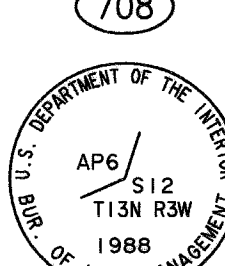
Found 3 1/4" Brass Cap Flush with Ground

707



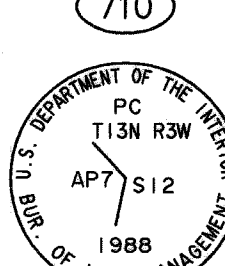
Found 1 1/4" Yellow Plastic Cap 0.2' Above Ground

708



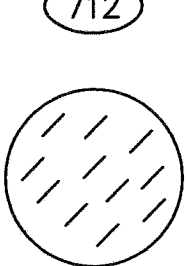
Found 3 1/4" Brass Cap 0.3' Below Ground

710



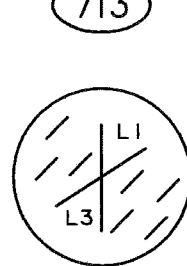
Found 3 1/4" Brass Cap Flush with Ground

712



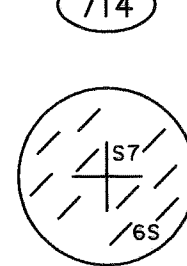
Found 2 1/2" Brass Cap in Monument Case, 0.8' Below Pavement

713



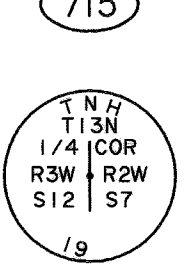
Found 2 1/2" Brass Cap in Monument Case, 0.7' Below Pavement

714



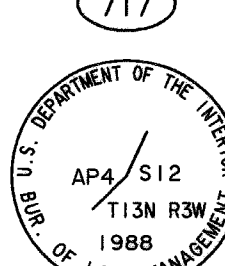
Found 2 1/2" Aluminum Cap Flush with Ground

715

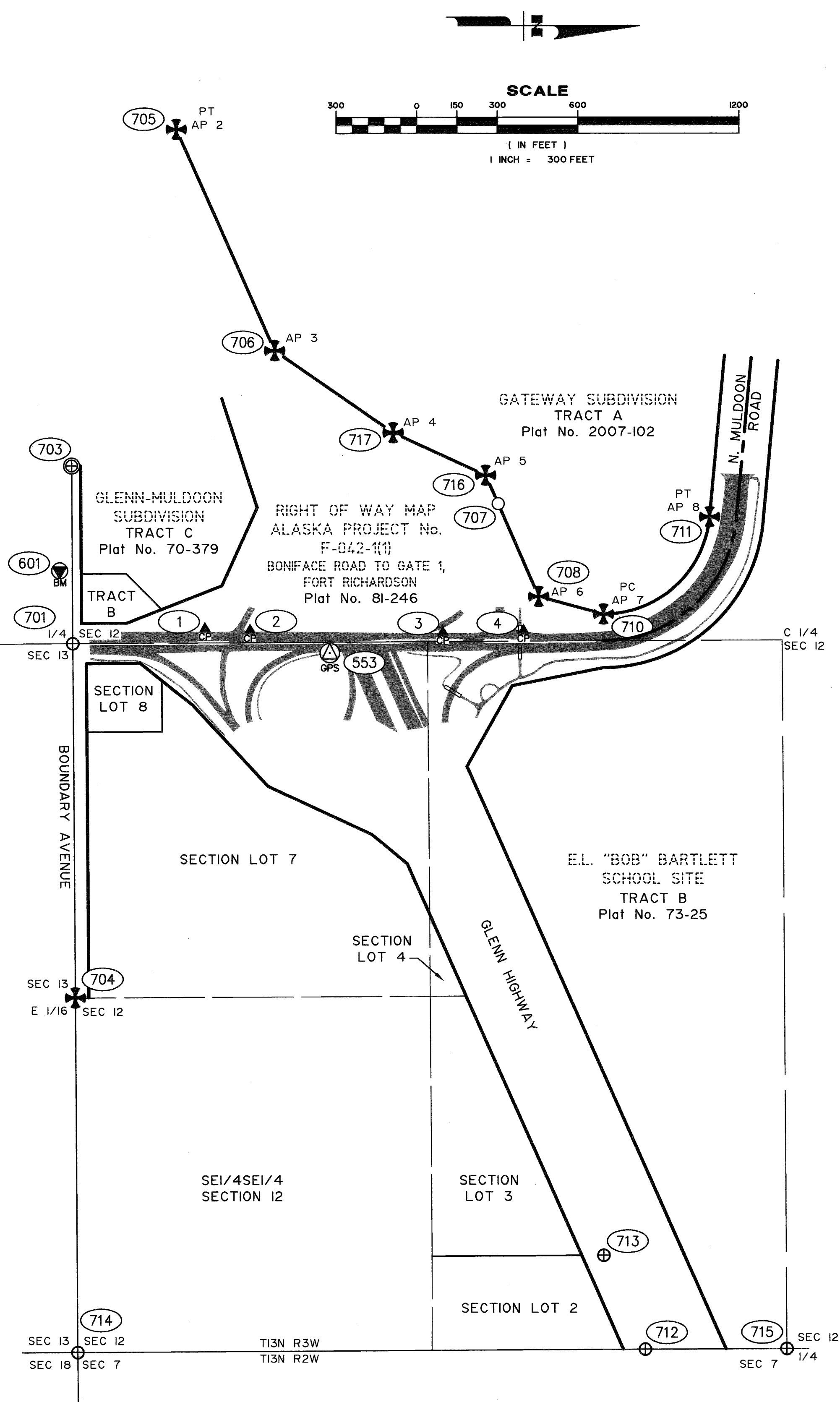


Found 2" Brass Cap 0.1' Below Ground

717



Found 3 1/4" Brass Cap 0.1' Below Ground



#### HORIZONTAL CONTROL

Coordinate System:  
This project is located entirely within the Anchorage Bowl 2000 adjustment, a local surface grid coordinate system, expressed in U.S. Survey Feet, developed by the Alaska Department of Transportation.

Basis of Coordinates:  
The Basis of Coordinates is NGS Station "OMALLEY", located near the intersection of the New Seward Highway and O'Malley Road. Said station has Anchorage Bowl 2000 coordinates of 303,939.2310 N., 353,362.5446 E.

Basis of Bearings:  
The Basis of Bearings is a local plane bearing between NGS Station "OMALLEY" and NGS Station "LOOP 2 USE RM 3 1964". NGS Station "LOOP 2 USE RM 3 1964" bears N 01°43'26.4" E a distance of 49,488.45 U.S. Survey Feet from NGS Station "OMALLEY". NGS Station "LOOP 2 USE RM 3 1964" has Anchorage Bowl 2000 coordinates of 353,405.2778 N., 354,851.3982 E.

Translation Parameters:  
To convert the local Bowl 2000 coordinates to NAD83 (92) Alaska State Plane, Zone 4, coordinates, expressed in U.S. Survey Feet;  
translate using +2,296,868.6878' N., +1,312,517.4904' E., and scale using 0.9998910192.

#### VERTICAL CONTROL

The Vertical Datum is the Municipality of Anchorage (M.O.A.) Vertical Datum 1972 N.G.S. Adjustment. The Basis of Vertical Control is M.O.A. Bench Mark "GAAB 10", Elevation = 252.18 feet. BM "GAAB 10" is a 2 1/2 inch Brass Cap and bolt set vertically, facing north, at the northwest corner of an unoccupied commercial building (previously occupied by a Kentucky Fried Chicken outlet). See M.O.A. Benchmark Book pages D-6 and M-18. Project elevations were determined by differential level loops, performed by R&M Consultants, Inc., between Benchmark "GAAB 10" and the project control points.

The elevation of all project control points must be field verified before being used.

#### NOTES








- The field survey was performed by R&M Consultants, Inc. (R&M) between November 28, 2012 and April 24, 2013. Field survey information is located in R&M field book No. 1766.06 pages 1 through 59.
- All dimensions and coordinates shown hereon are in U. S. Survey Feet.
- Horizontal control points were established using networked static GPS methods. The network was adjusted and transformed to the Anchorage Bowl 2000 coordinate system using a simultaneous least squares adjustment constrained to the record ADOT&PF coordinates for Survey Control Point No. 553.
- Background mapping is shown for orientation purposes only.

#### SURVEYOR'S CERTIFICATE

I hereby certify that I am properly Registered and Licensed to practice Land Surveying in the State of Alaska, and that this drawing represents a survey made by me or under my direct supervision, and that the monuments shown hereon actually exist as described, and that all dimensions and other details are correct to the extent shown hereon.

James S. Robar LS-6095 July 31, 2013 Date

#### LEGEND

-  GPS Control Point
-  BLM Monument
-  Primary Monument
-  Secondary Monument
-  Survey Control Point
-  M.O.A. Benchmark
-  Survey Point Number

Anchorage Recording District  
State Business - No Fee  
This survey does not constitute a subdivision  
as defined by AS 40.15.900

STATE OF ALASKA  
DEPARTMENT OF TRANSPORTATION  
&  
PUBLIC FACILITIES  
Survey Control Diagram  
Record of Survey  
AKSAS Project No. 54713

HSIP 2012: Glenn Hwy and Muldoon Road  
Interchange Improvements

Located within: Section 12, T13N, R3W, Seward Meridian, Alaska

DRAWN	JSR	DATE	5/20/2013	SCALE	1"=300'
CHECKED	GND	DATE	5/20/2013	SHEET	1 OF 1