Terrain Assessment of the

Proposed Inuvik to Tuktoyaktuk Highway

Appendix A: Aerial Photograph Interpretation Results

October 2010

Prepared for: North Mackenzie District

Prepared by: Terrain Sciences Unit

Table 1 2009 Route

Notes: Yellow indicates ice-rich terrain that requires field verification.
Green indicates ice-rich terrain or areas of interest adjacent to the proposed highway.

ID	Comments	Length (m)	Latitude (dd)	Longitude (dd)
0		26	68.65095787910	-133.58018230500
1		45	68.65386385030	-133.57745168600
2		39	68.65588727180	-133.57585395500
3		30	68.67955044640	-133.57409386000
4		65	68.70657595740	-133.54675350500
5		39	68.76759510720	-133.53742382100
6		163	68.77694017920	-133.54530625200
7		124	68.82010576170	-133.55891803200
8	Hans Creek	169	68.86270902790	-133.55344689200
9		177	68.87566411450	-133.53321609800
10		690	68.90376148030	-133.50836223200
11		178	68.92039477140	-133.48600566600
12	Potential polygonal terrain	82	68.89562340900	-133.53768780600
13	Zed Cr. potential polygonal terrain	678	68.93870256610	-133.42951518000
14		192	68.94543626930	-133.41817654100
15		94	68.94972366460	-133.41769199300
16	Potential polygonal terrain	49	68.97107321420	-133.40248074100
17		82	68.98160052290	-133.38812736000
18	Potential polygonal terrain	54	68.98322513680	-133.38581768100
19		43	68.98367886040	-133.36936157600
20		66	68.99245479260	-133.35103546200
21		30	69.00006549390	-133.34869016500
22		103	69.00891190460	-133.33141803100
23	Undefined flowpath	369	69.01177652590	-133.31776908300
24		49	69.02262470970	-133.25732137500
25		73	69.03211351010	-133.24752456800
26		165	69.04132310040	-133.22296323500
27	Check likely more IW in area	152	69.04349662510	-133.21438878500
28	Potential ancient slumps (2)	371	69.04605734070	-133.20635785000
29		134	69.04582283120	-133.18990163200
30	Potential polygonal terrain	92	69.05300732210	-133.17165018800
31		190	69.05682806980	-133.16202717200
32		56	69.06299376040	-133.15645259000
33	Ancient slump 40 m north	50	69.06565186270	-133.15227753200
34		106	69.06882205530	-133.12799572300
35		523	69.07810821470	-133.11403285600
36		133	69.07342657390	-133.12735130100
37		247	69.08476130830	-133.04212715100
38		332	69.08598035590	-133.02540174100
39	Potential polygonal terrain	75	69.08912190610	-133.00276168000

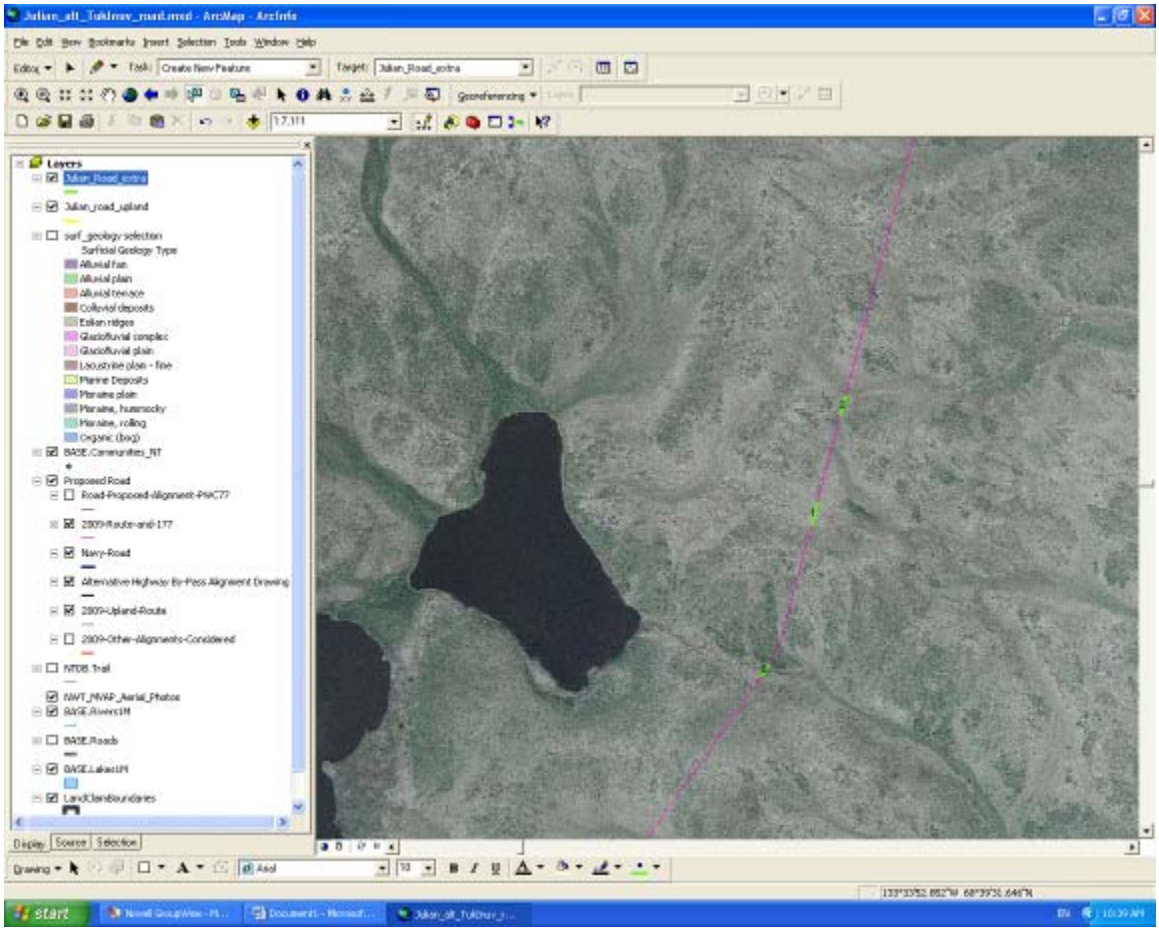
ID	Comments	Length (m)	Latitude (dd)	Longitude (dd)
40		182	69.09432558740	-132.99108482000
41		264	69.13135684150	-132.94511695500
42		60	69.14273320650	-132.93874038900
43	Potential polygonal terrain	38	69.14567481430	-132.93625727500
44		33	69.14769576910	-132.93346156400
45		129	69.15330840220	-132.93874607600
46		172	69.15515569190	-132.94311506900
47		101	69.15800917730	-132.94892249400
48		111	69.15685776680	-132.94722240600
49		293	69.16097481150	-132.94691856300
50		156	69.16564876820	-132.92954334100
51	Potential polygonal terrain	285	69.17099872140	-132.91994666200
52		103	69.18284845490	-132.90892574000
53		80	69.18499566250	-132.89759615900
54		93	69.19102307260	-132.88639156400
55		616	69.20475518050	-132.90307925700
56		183	69.22178291490	-132.89801716800
57		98	69.23303469330	-132.89654186700
58		165	69.27288555880	-132.90249948300
59	Ancient slump 60 m east	54	69.27859608310	-132.90715163300
60		260	69.30811045670	-132.98151221400
61		126	69.31127708780	-133.00053745700
62		214	69.32018053280	-133.01686703700
63		331	69.33616559590	-133.02843713200
64		379	69.34022599650	-133.02942015000
65		90	69.34408557600	-133.03764216500
66		159	69.34572834030	-133.04152643500
67	Potential polygonal terrain	124	69.34797892970	-133.03903645000
68		153	69.35096779680	-133.03299905300
69		119	69.36291514510	-133.04164782800
70		91	69.37351377180	-133.04405541600
71	Potential polygonal terrain	81	69.38344681500	-133.01928445800
72	Potential polygonal terrain	175	69.38685460520	-133.01837139400
73		68	69.39391947920	-133.03123372800
74		51	69.39704352020	-133.03182462400
75	Polygonal peatland	52	68.50785802980	-133.76756922300
76	Potential polygonal terrain	133	68.53474628190	-133.76558488500
77		167	68.56781213490	-133.74272830900
78	Potential polygonal terrain	980	68.54704201580	-133.75692472700
79		51	68.59513111590	-133.70451983000
80	Polygonal terrain near Noel Lake	133	68.59853251510	-133.69871408500
81	Potential drained lake	276	68.60200717240	-133.69296135200
82		287	68.62671055480	-133.66985310700
83		144	68.67623275470	-133.57162782700
84	Polygonal peatland	176	68.79416204970	-133.53603437000
88	Potential polygonal terrain	90	68.67955044640	-133.57409386000
89	Potential polygonal terrain	125	68.82010576170	-133.55891803200

Table 2 Upland Route

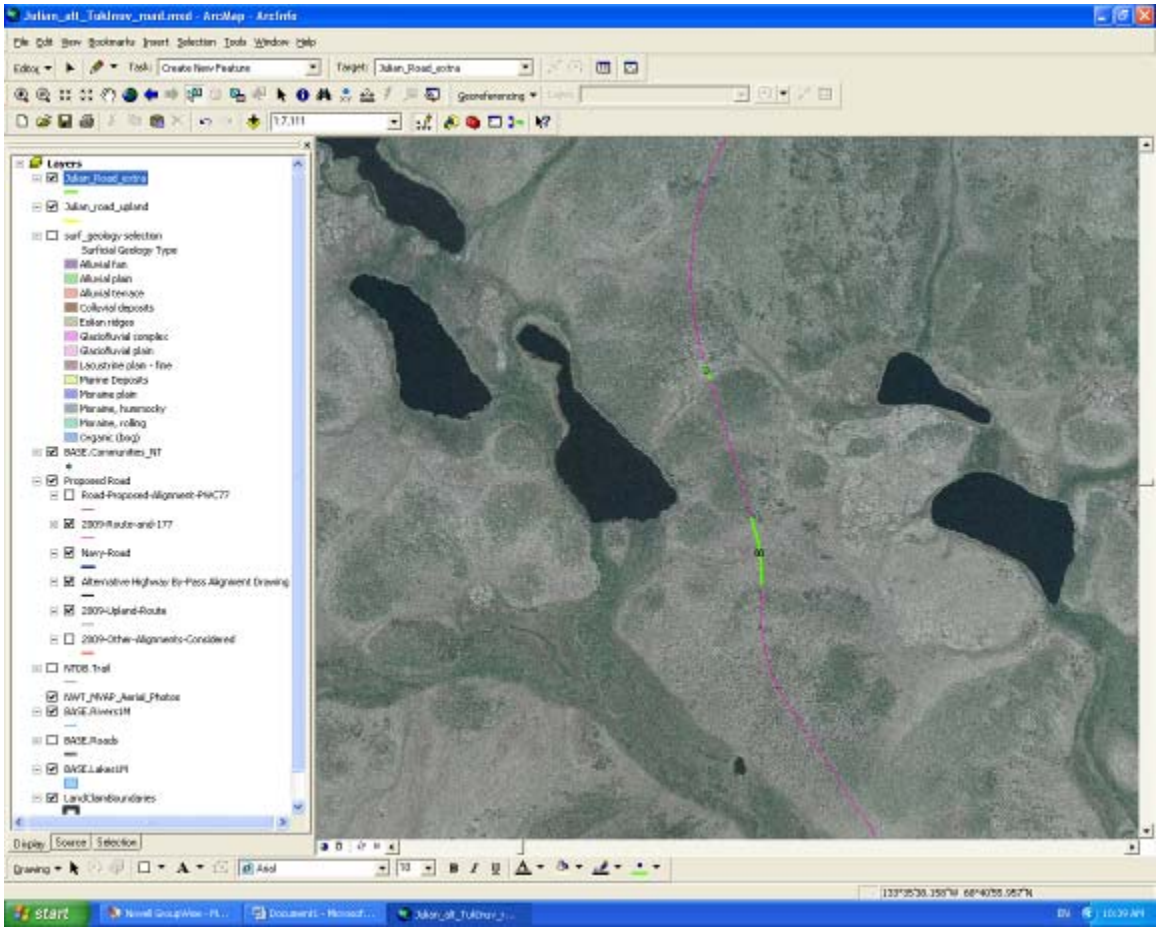
ID	Comments	Length (m)	Latitude (dd)	Longitude (dd)
0		126	68.98795804310	-133.39269393700
1		485	69.00287076900	-133.39397492100
2		283	69.02106855230	-133.38308821200
3		274	69.02415315220	-133.39283715000
4		48	69.02677414700	-133.39709400800
5		59	69.03858966590	-133.39852673700
6		64	69.06285443440	-133.39184938800
7	Potential polygonal terrain	57	69.09454630760	-133.35076467400
8		51	69.10534188210	-133.33662950500
9	Potential polygonal terrain	56	69.12070782350	-133.31238488500
10	good one to field check	317	69.21282871330	-133.06974841800
11	good one to field check	217	69.22046197370	-133.04721813400
12		345	69.23177838560	-133.04090982700
13		171	69.25507680730	-132.97293166300
14		125	69.26896047560	-132.91843361600

2009 Route Screen Shots

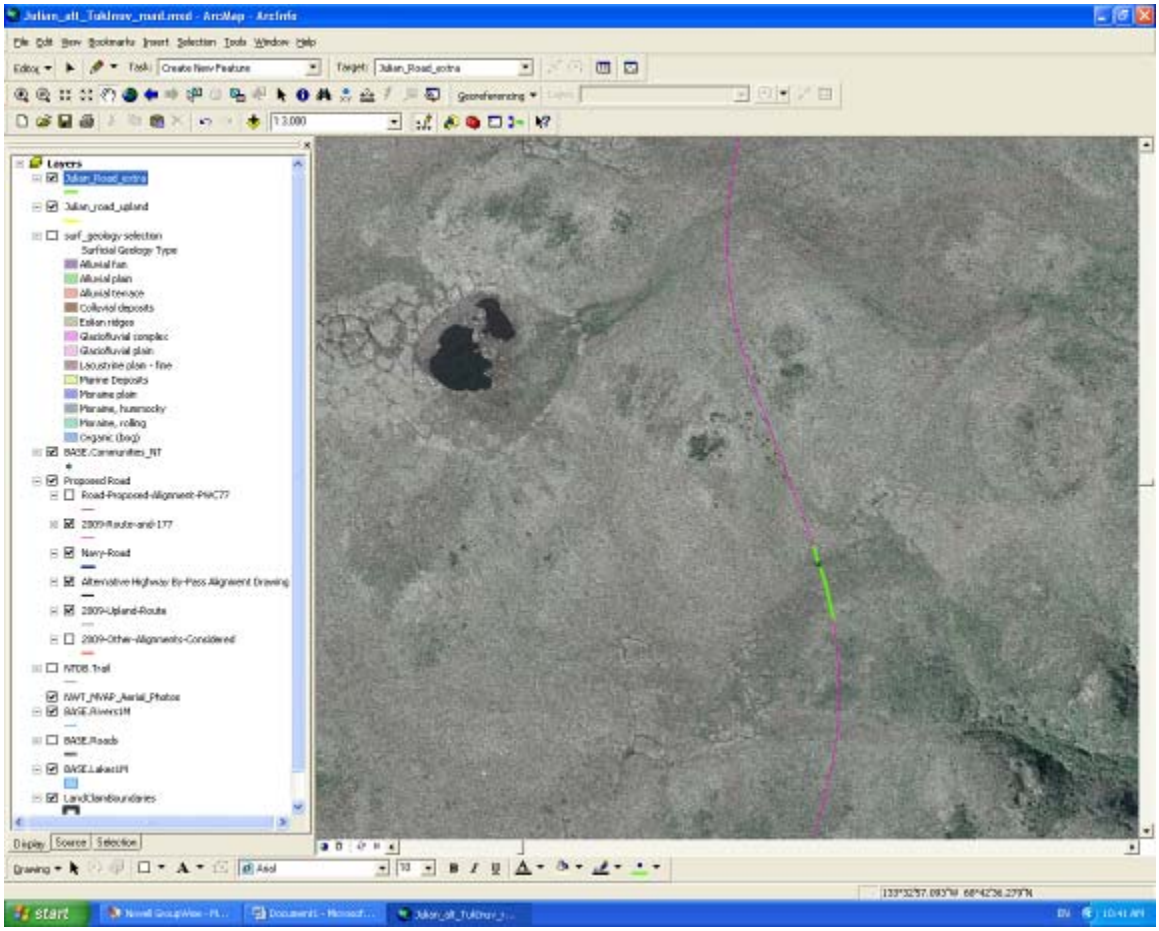
Notes: The map number refers to the corresponding map in Appendix B of the Project Description.

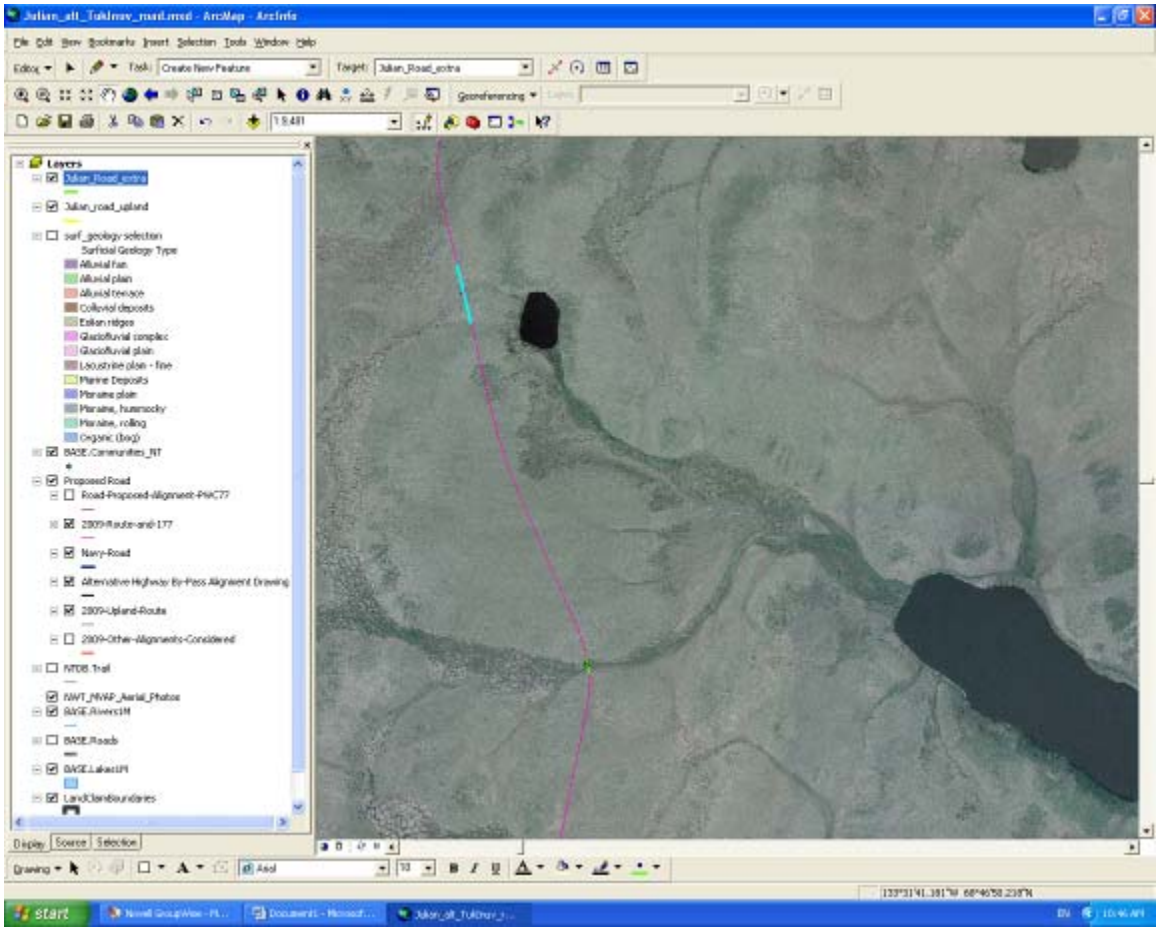


Sites 0, 1, 2. Map 06

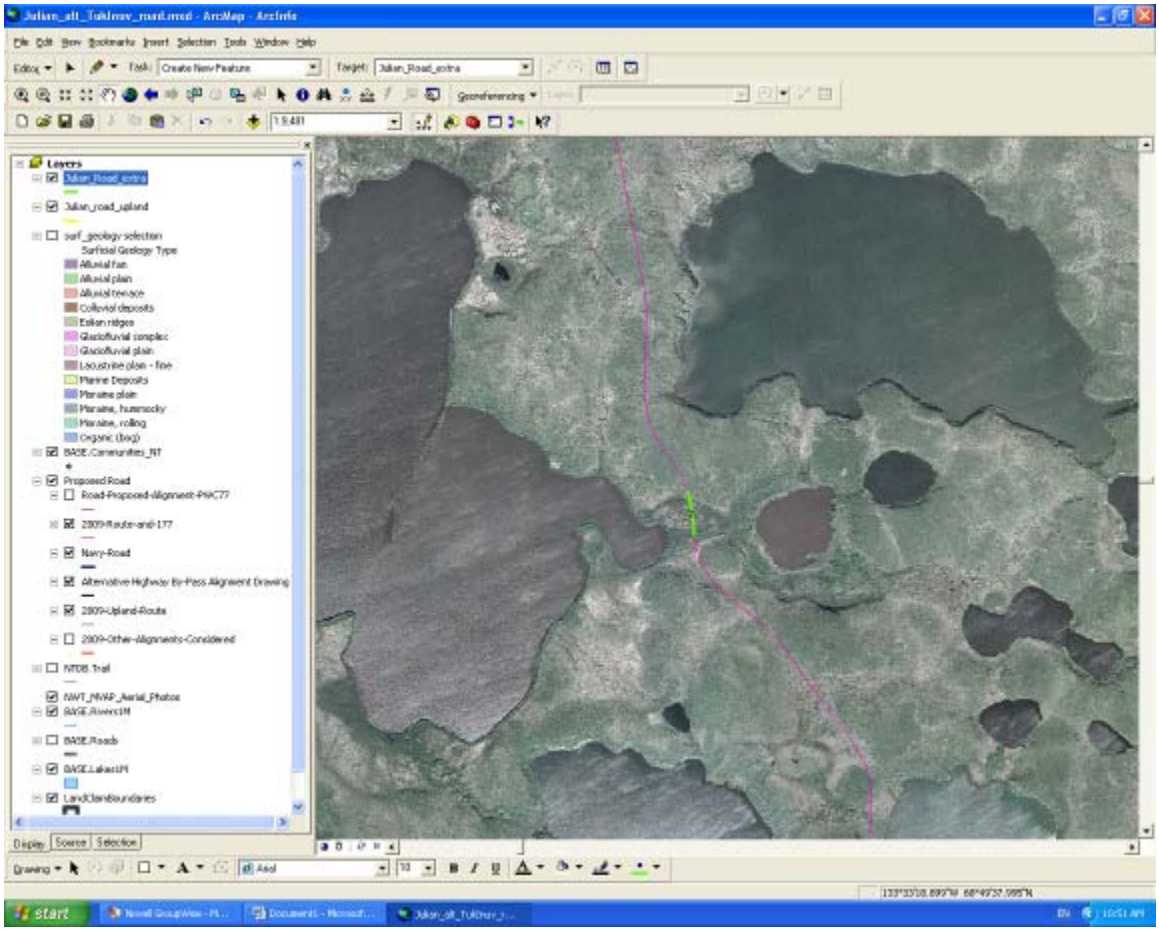


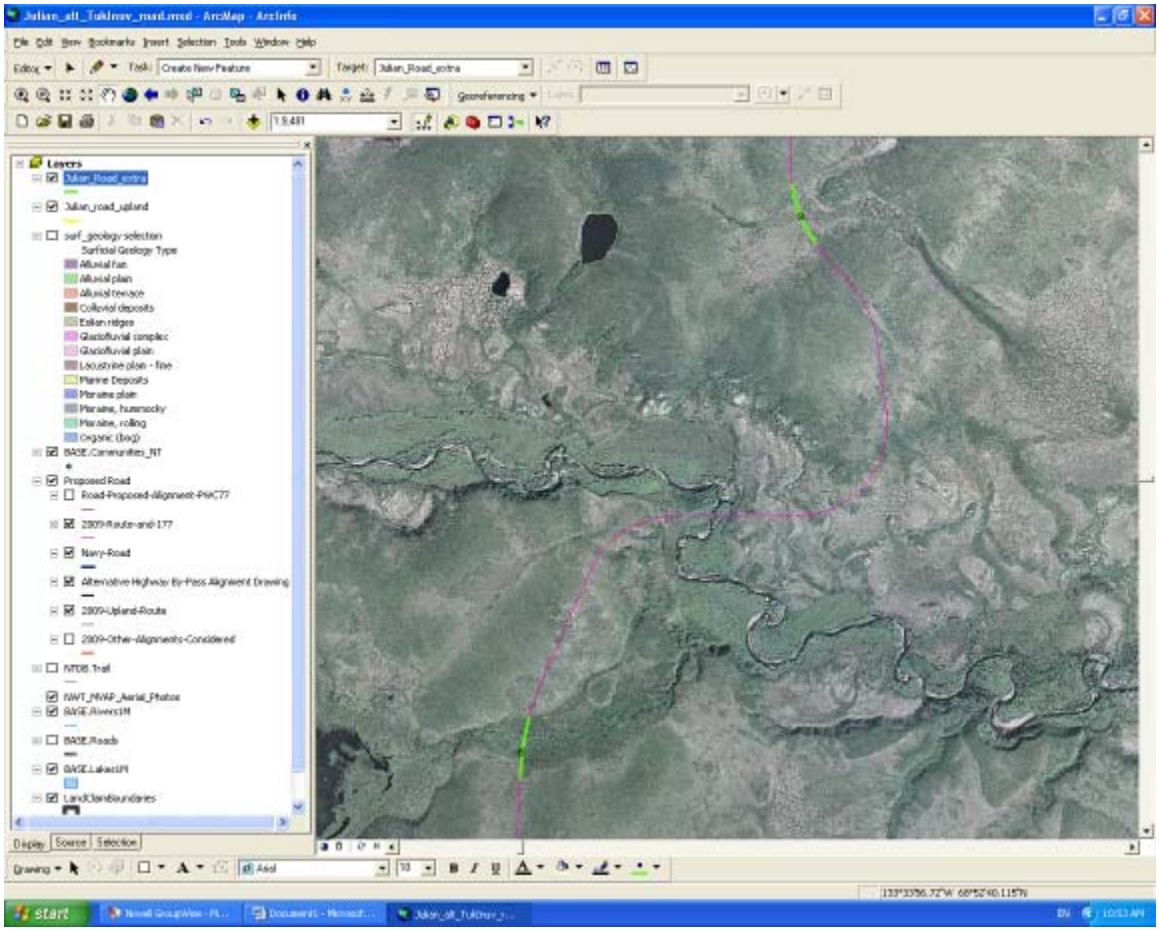
Sites 3, 83. Map 07


Layers
Julian_Road_extra
Julian_road_upland
surf_geology selection
Surficial Geology Type
Alluvial fan
Alluvial plain
Alluvial terrace
Colluvial deposits
Eskan ridges
Glaciofluvial complex
Glaciofluvial plain
Lacustrine plain - fine
Marine Deposits
Moraine plain
Moraine, hummocky
Moraine, rolling
Organic (bog)
BASE_Communities_NT
Proposed Road
Road-Proposed-Alignment-PHC77
2009-Route-and-177
Navy-Road
Alternative Highway By-Pass Alignment Drawing
2009-Upland-Route
2009-Other-Alignments-Considered
NTDB Trail
NWT_MVAP_Aerial_Photos
BASE_Rivers1M
BASE_Roads
BASE_Lakes1M
LandClaimBoundaries
Display
Source
Selection
Drawing
Arial
start
Site 4. Map 08

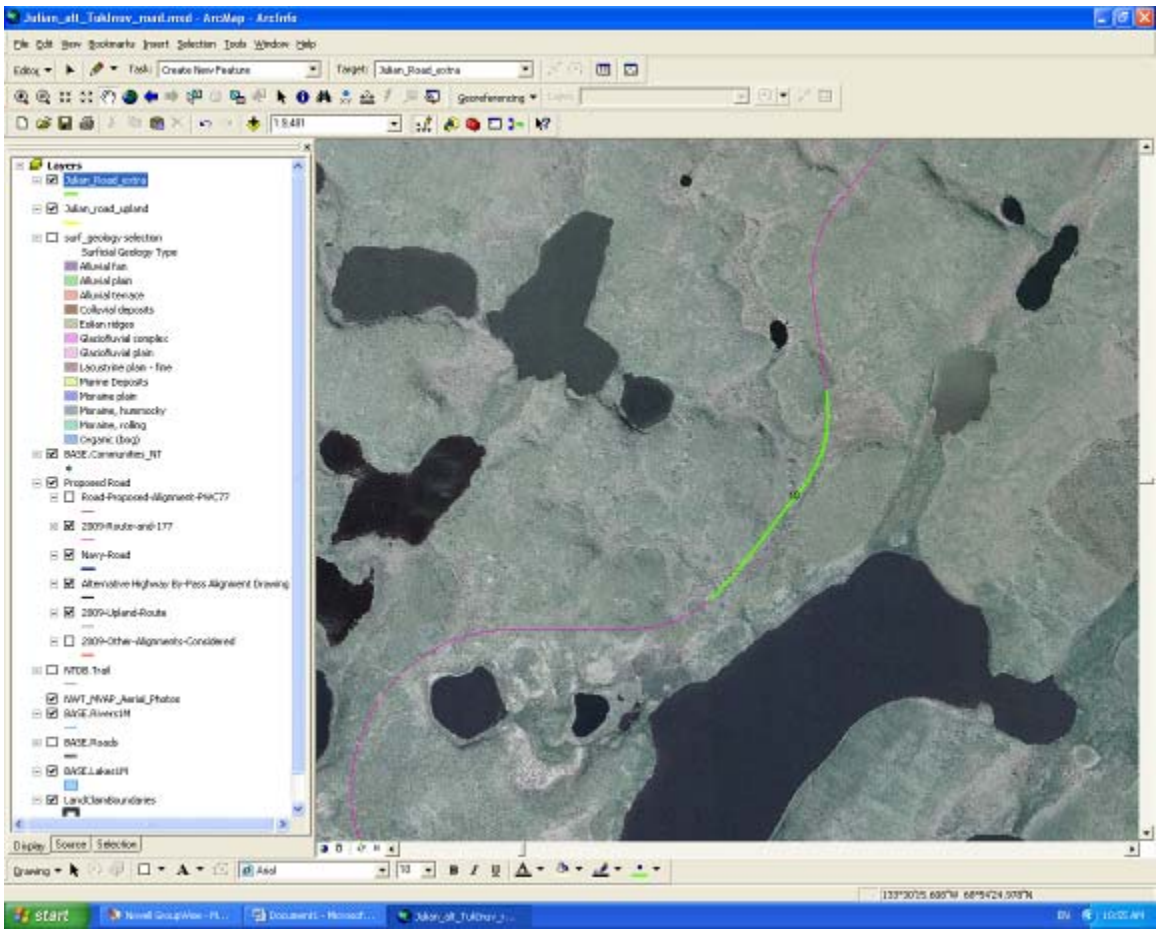


Sites 5, 6. Map 09

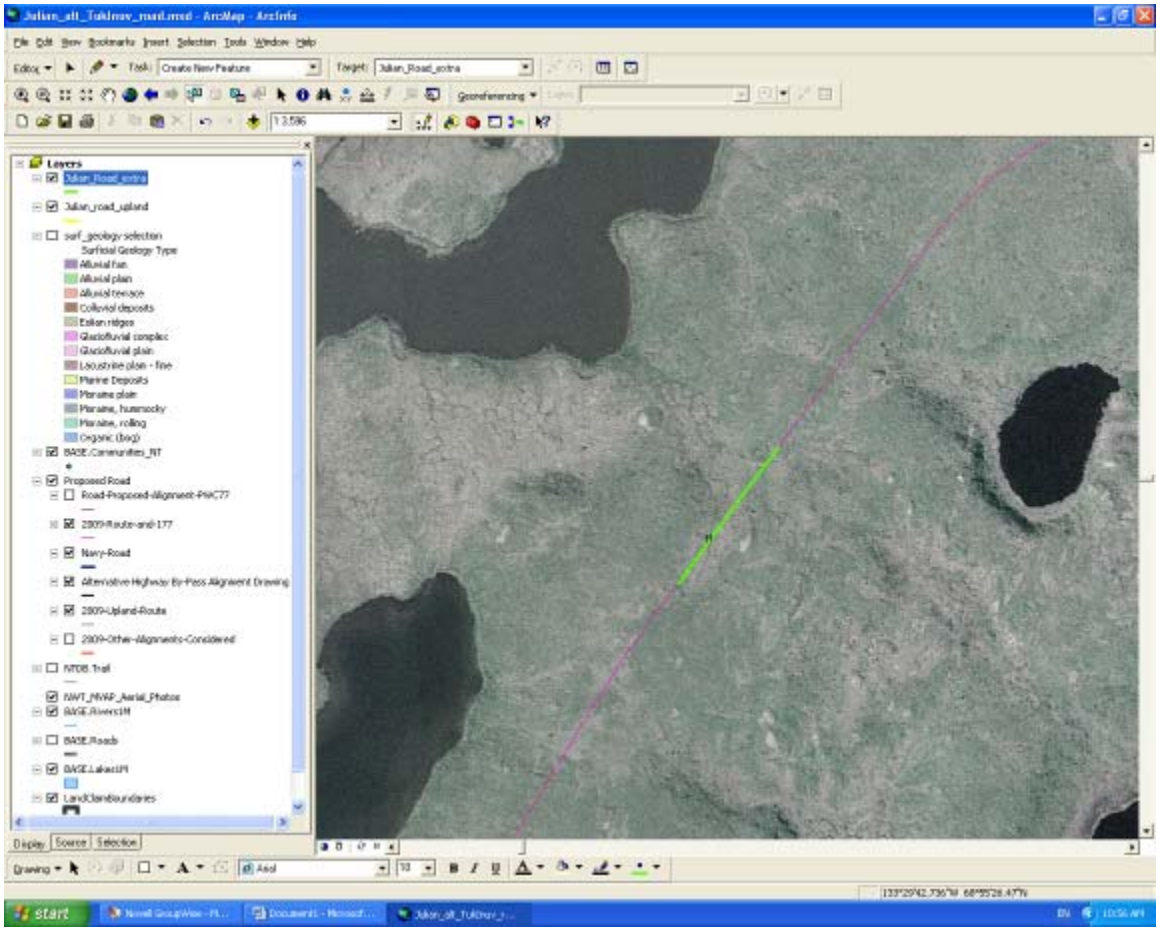

Layers
Julian_road_upland
surf_geology selection
Surficial Geology Type
Alluvial fan
Alluvial plain
Alluvial terrace
Colluvial deposits
Eskar ridges
Glaciofluvial complex
Glaciofluvial plain
Lacustrine plain - fine
Marine Deposits
Moraine plain
Moraine, hummocky
Moraine, rolling
Organic (bog)
Proposed Road
Navy-Road
2009-Upland-Route
NTDB Trail
Display
Source
Selection
Drawing
start
Site 7, Map 10



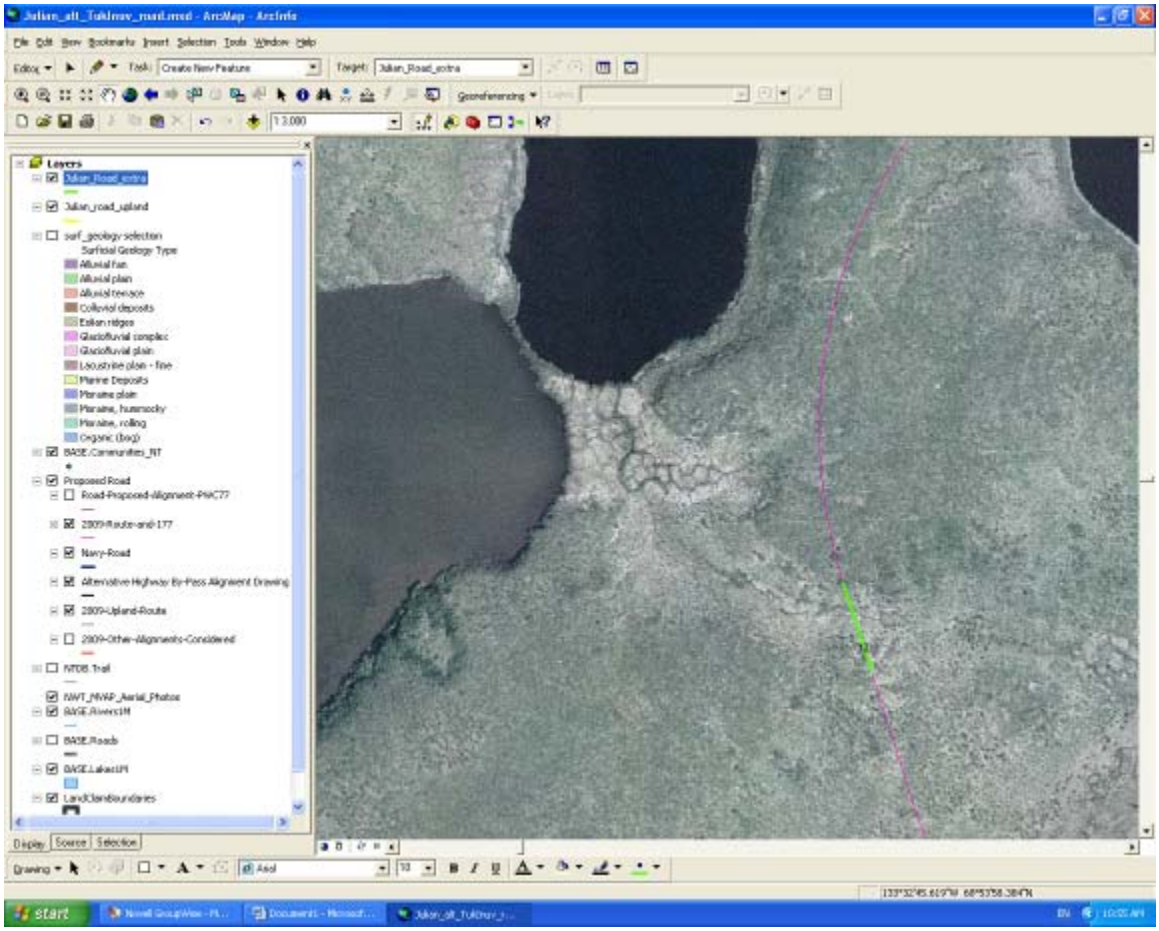
Sites 8, 9. Map 11



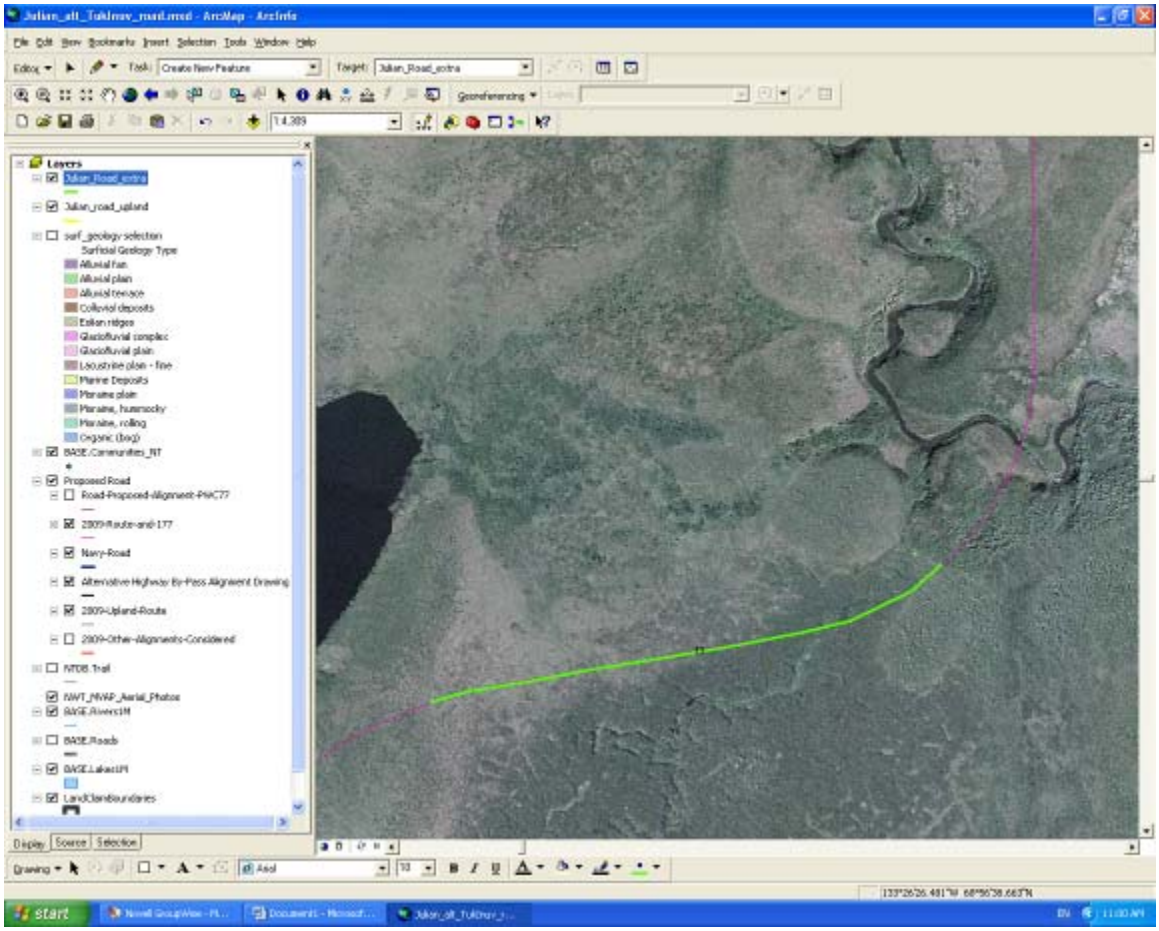
Site 10. Map 12



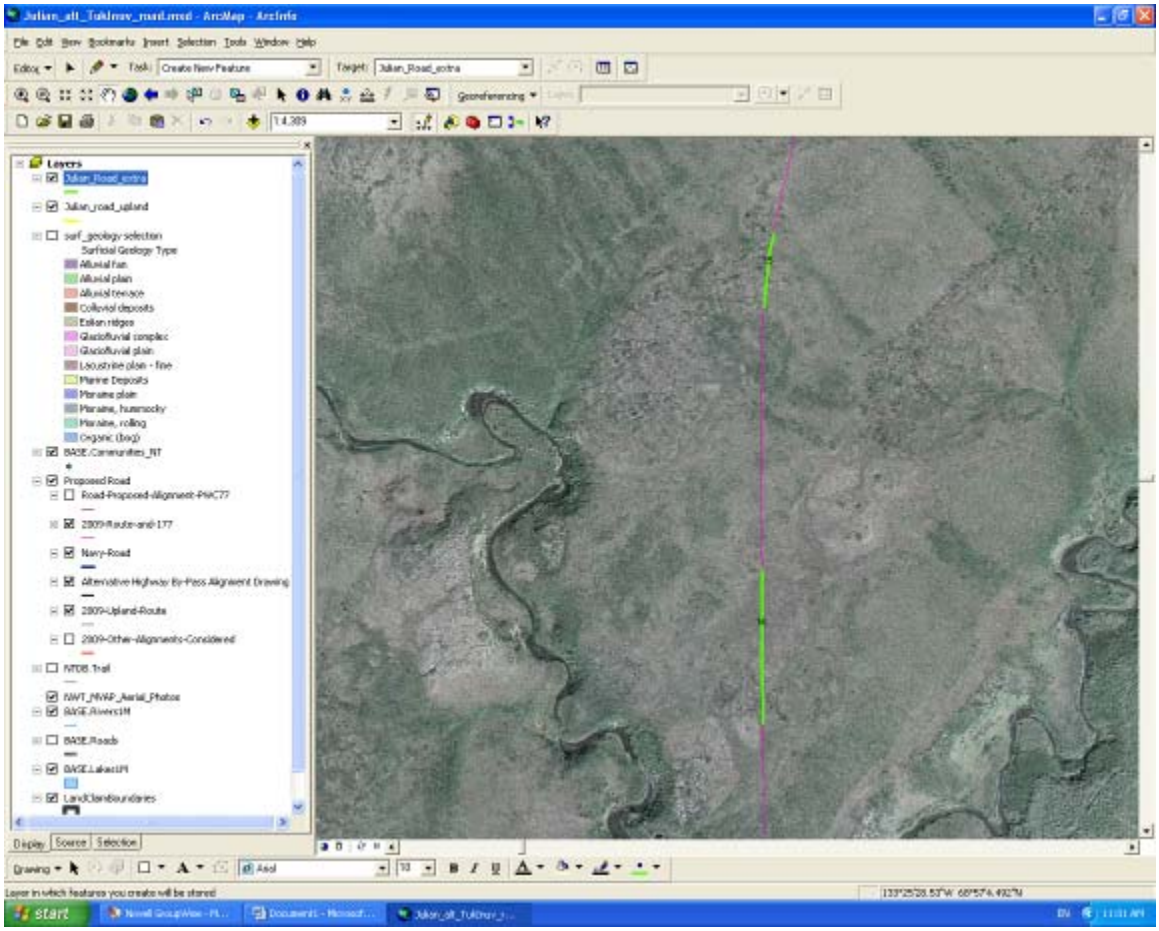
Site 11. Map 12



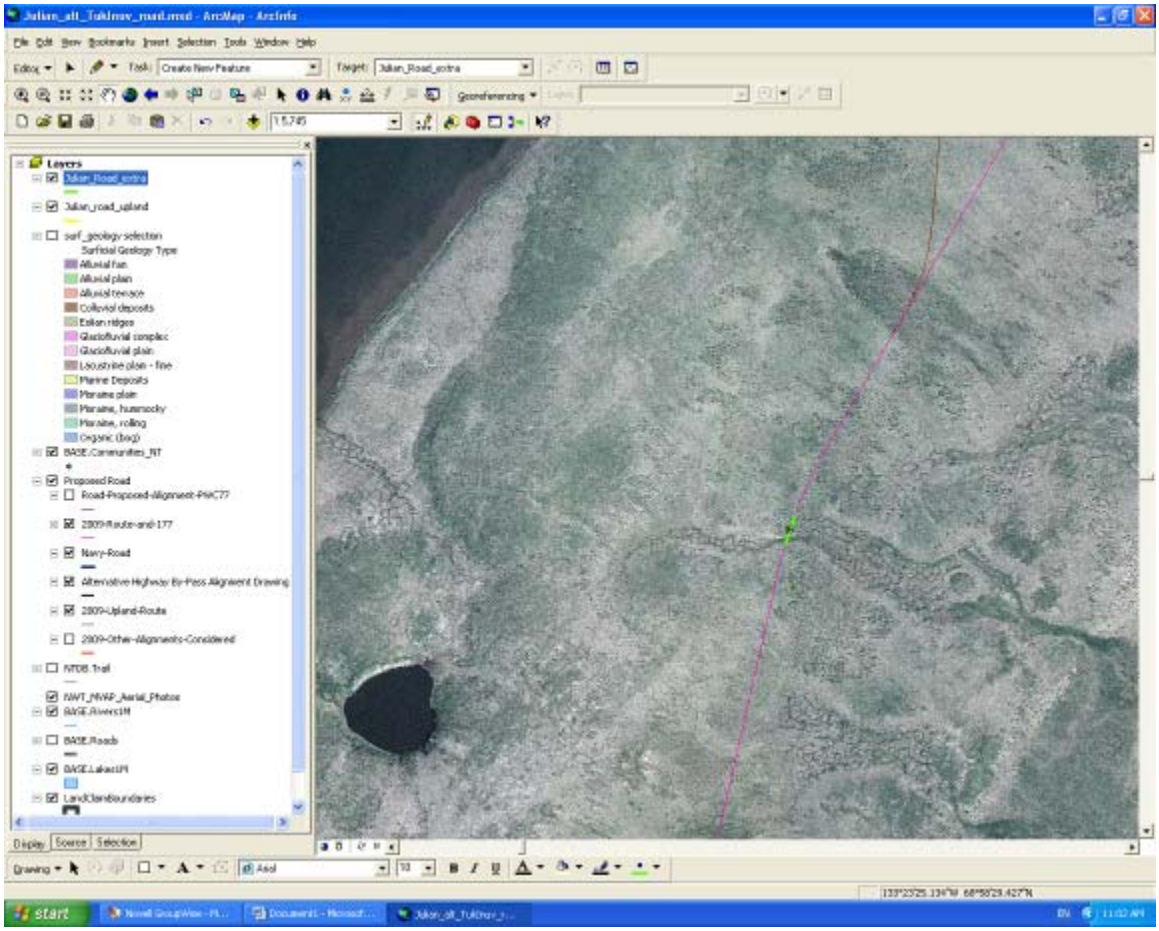
Site 12. Map 12



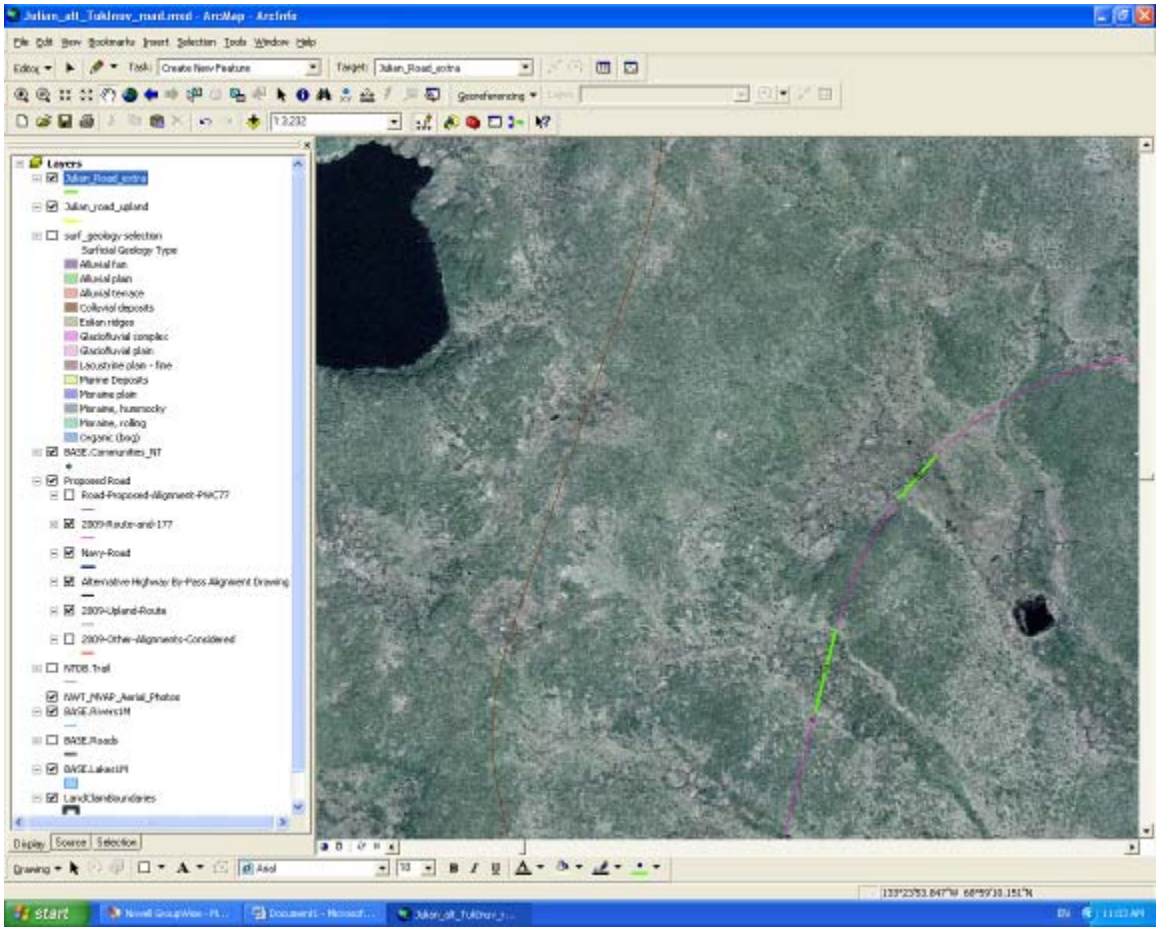
Site 13. Map 13



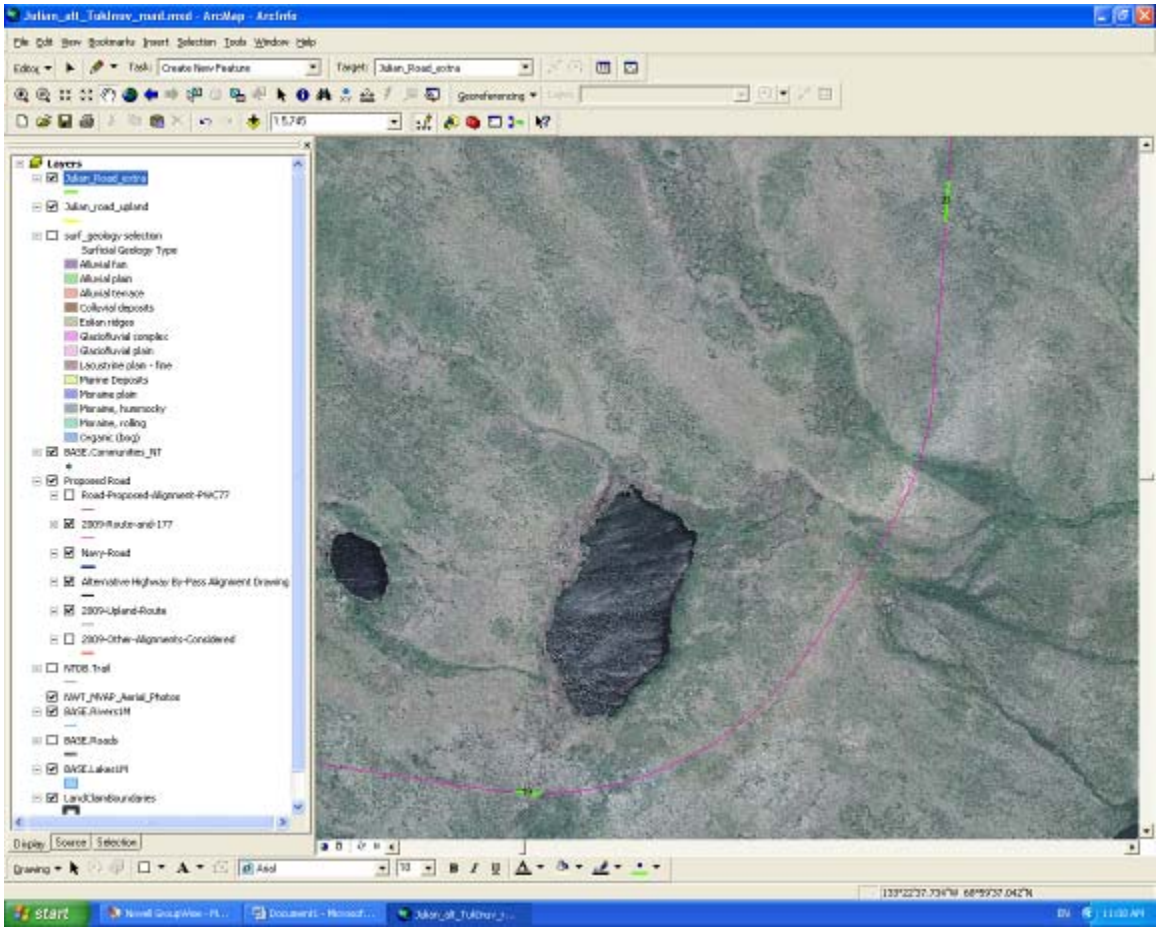
Sites 14, 15. Map 13



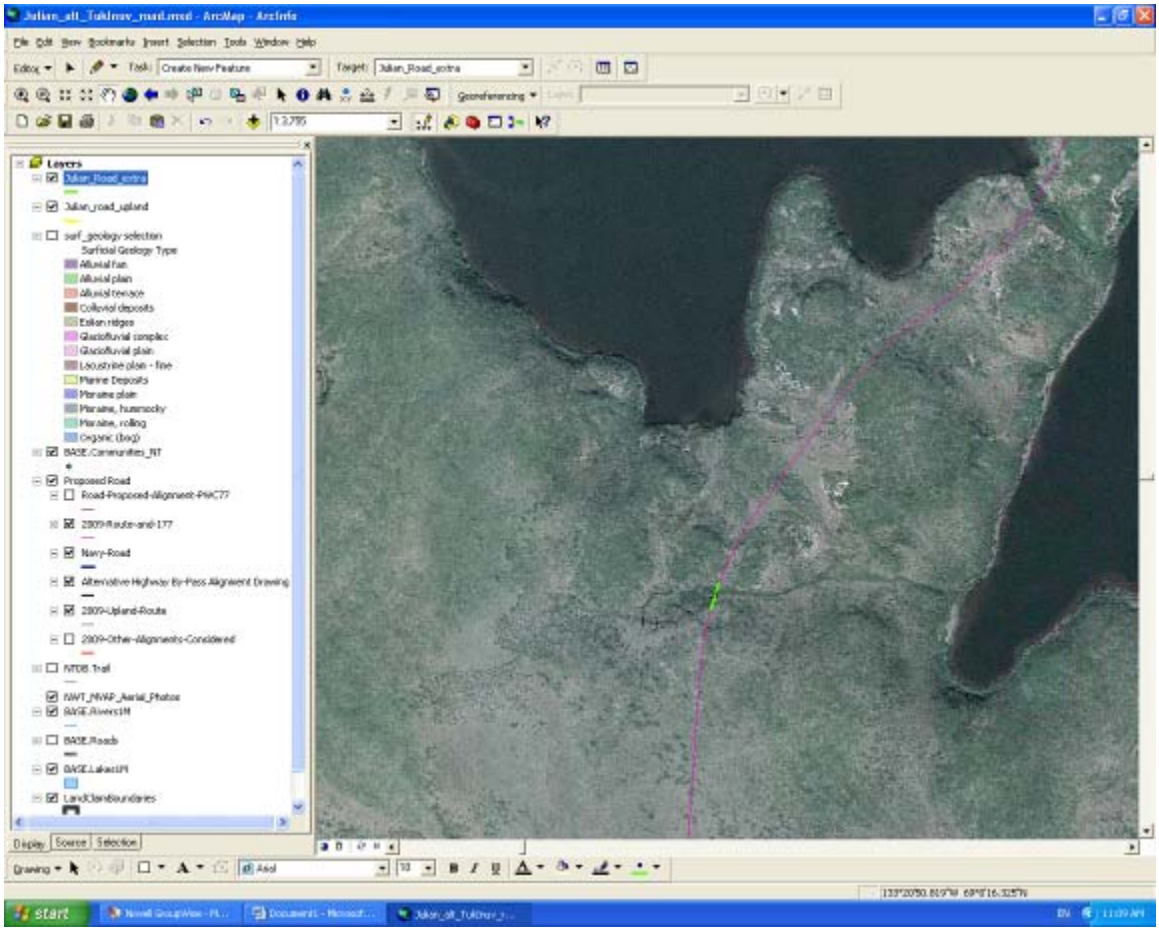
Site 16. Map 14



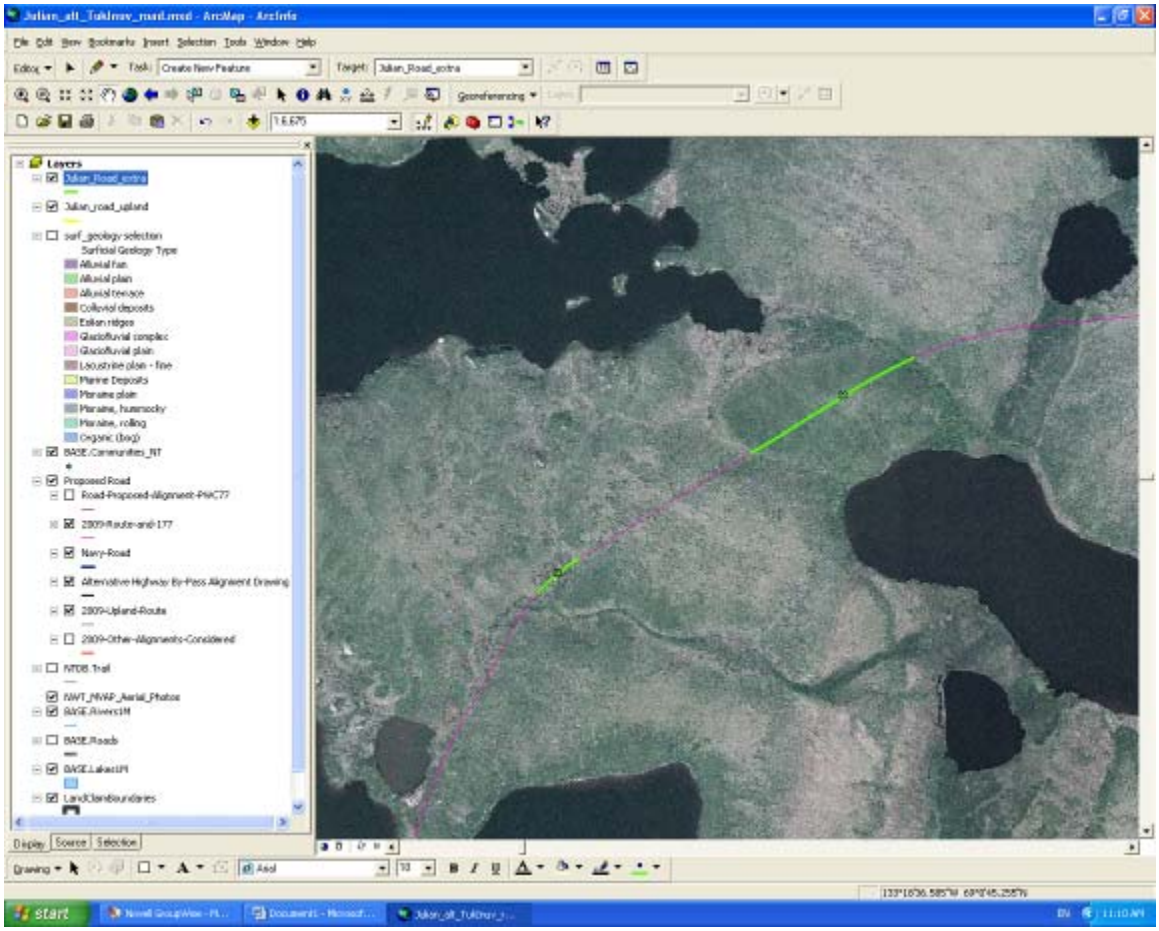
Sites 16, 17. Map 14



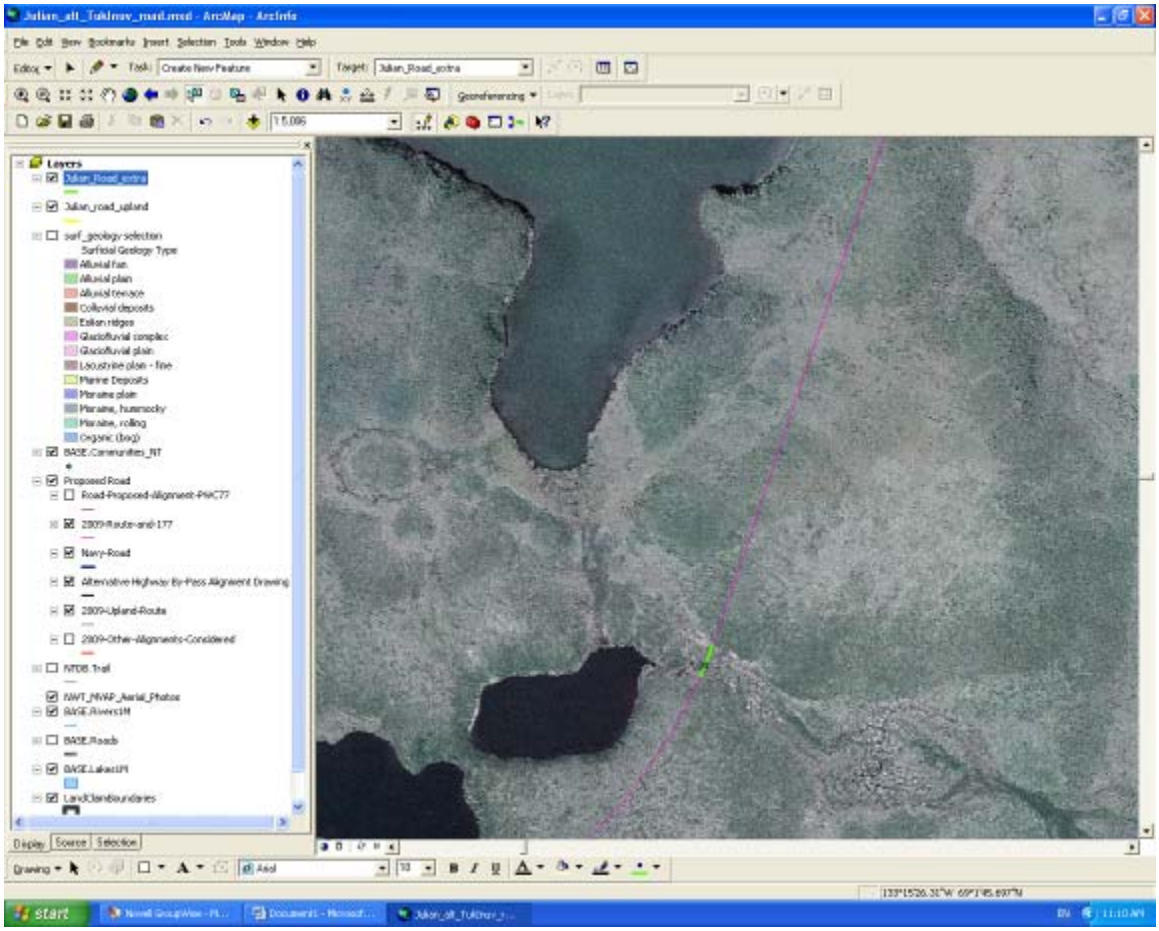
Sites 19, 20. Map 14



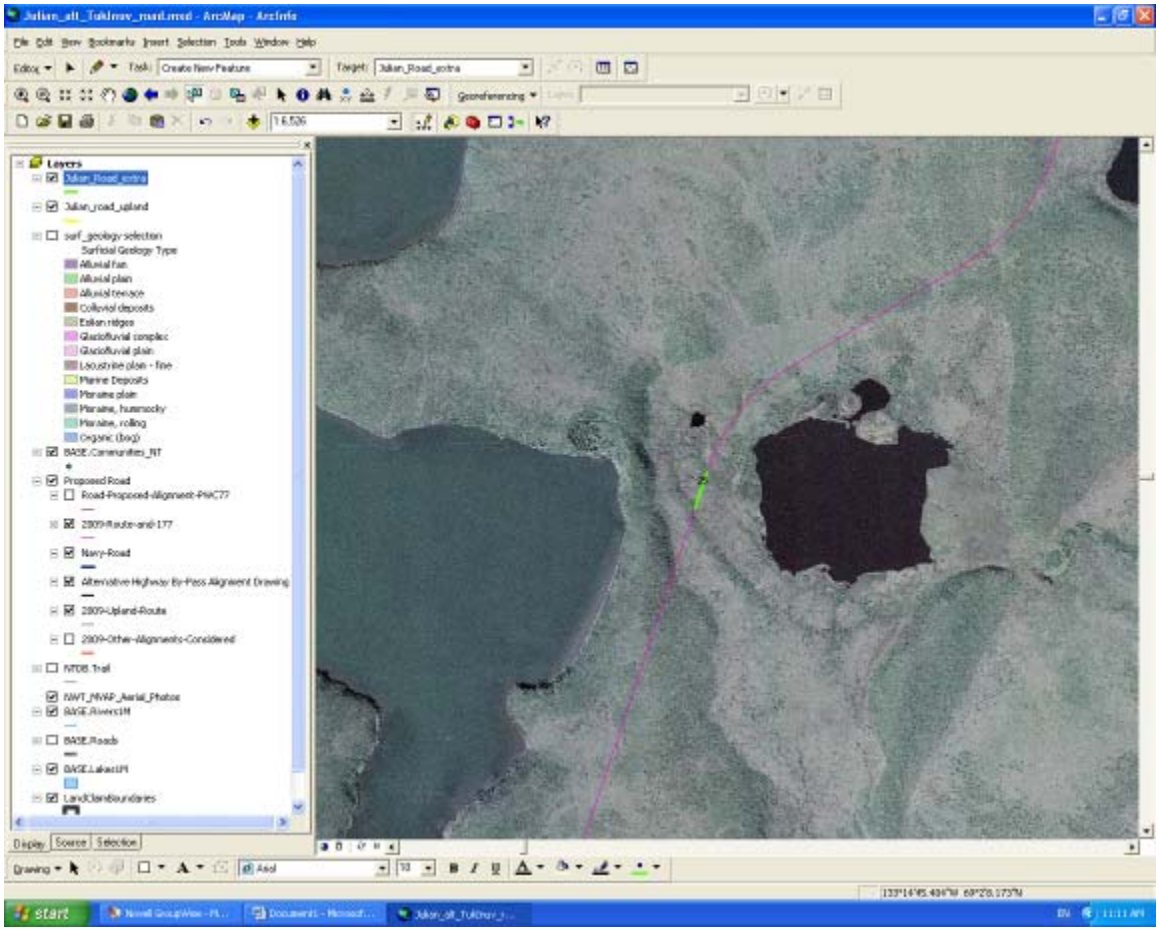
Site 21. Map 14



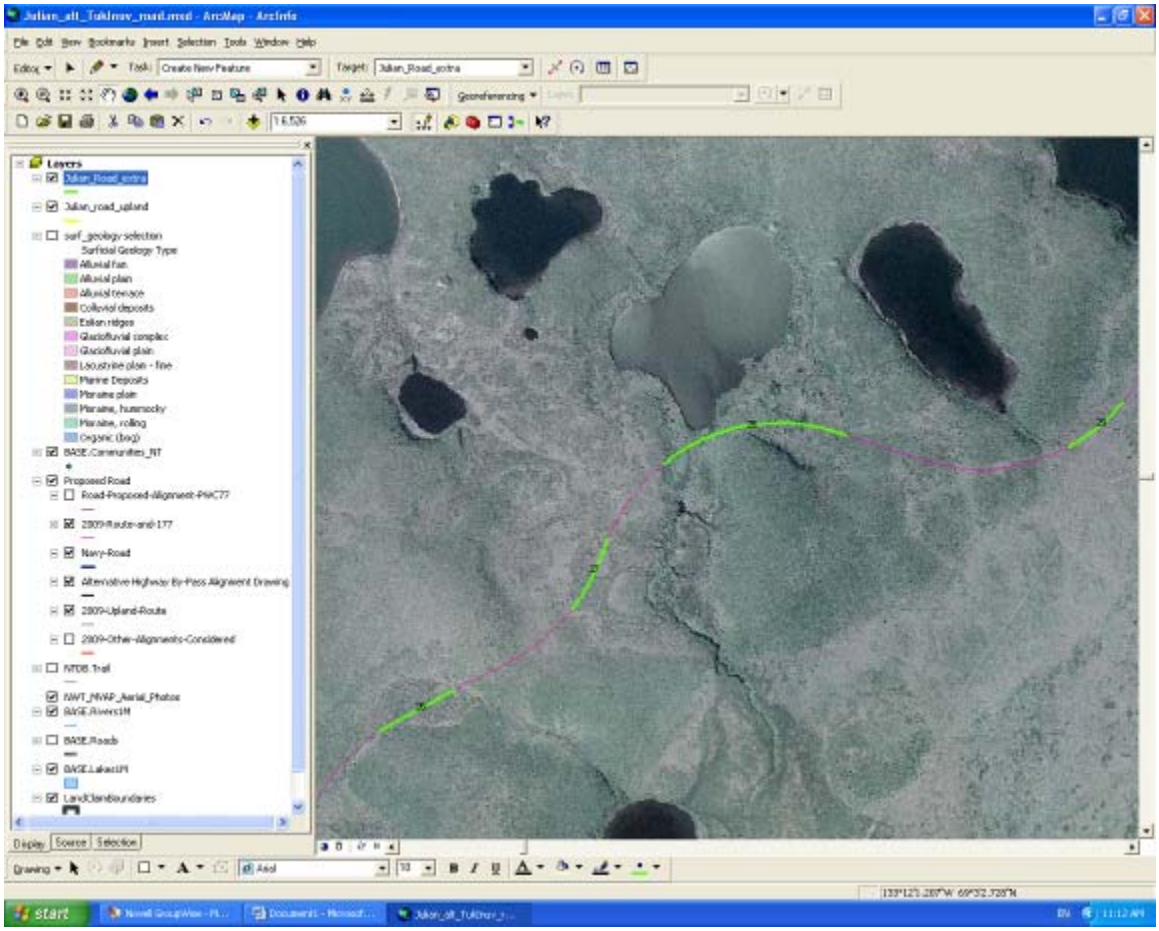
Sites 22, 23. Map 14



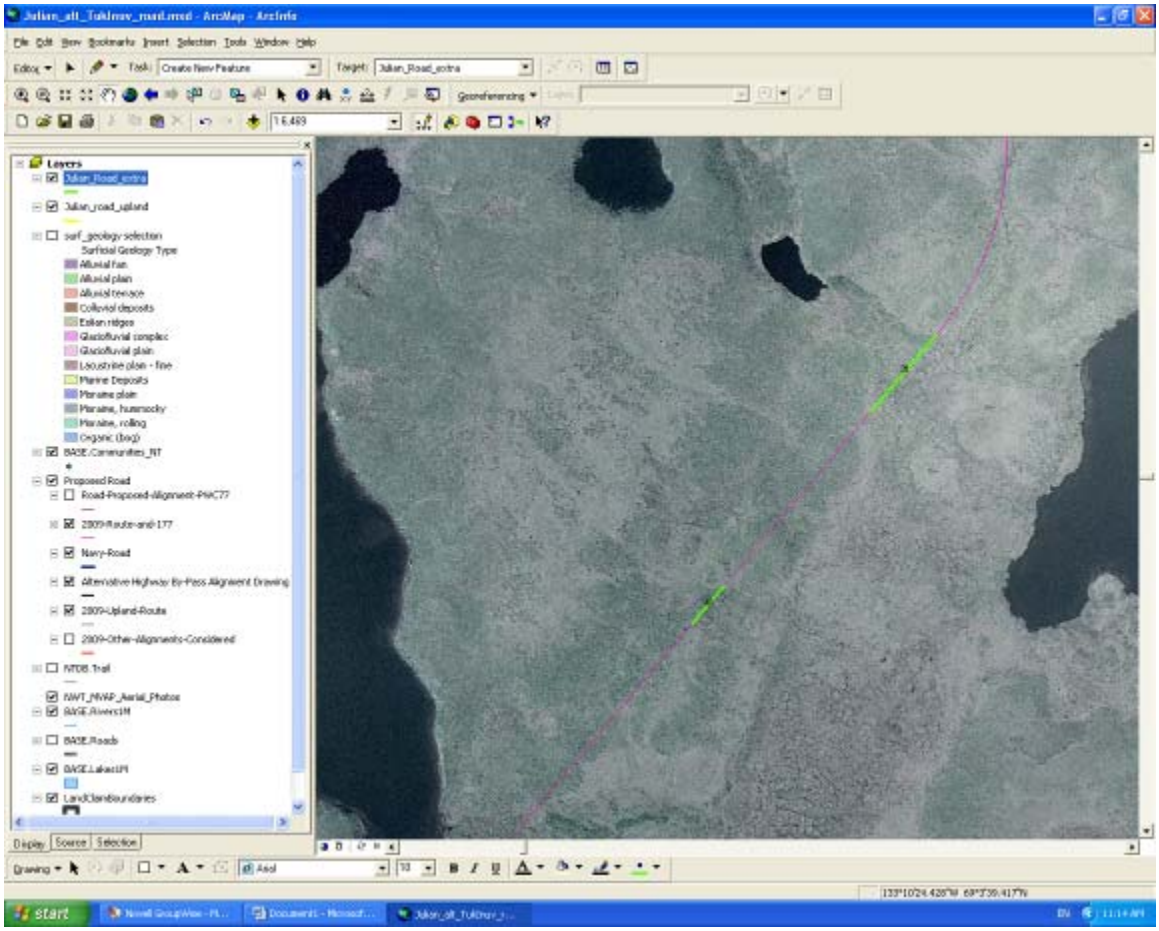
Site 24. Map 15



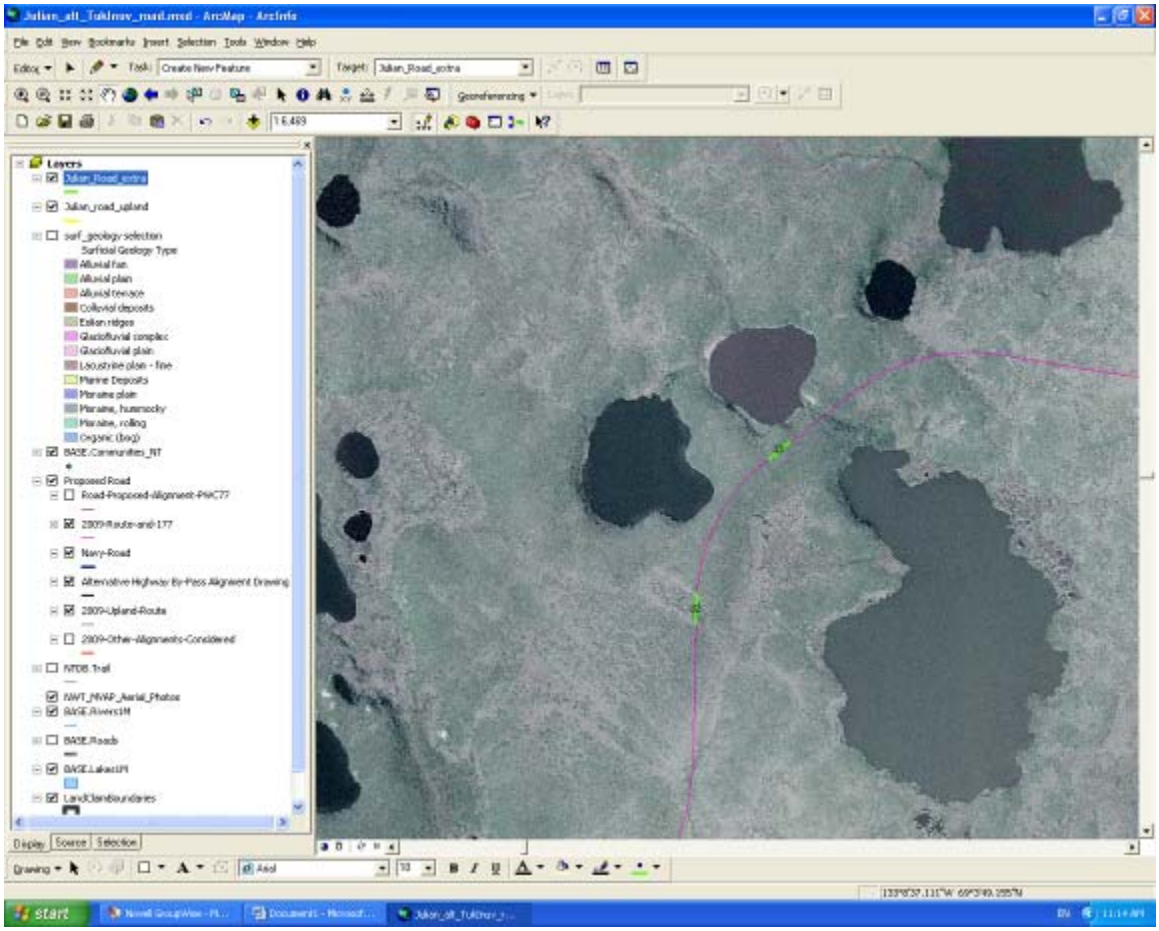
Site 25. Map 15



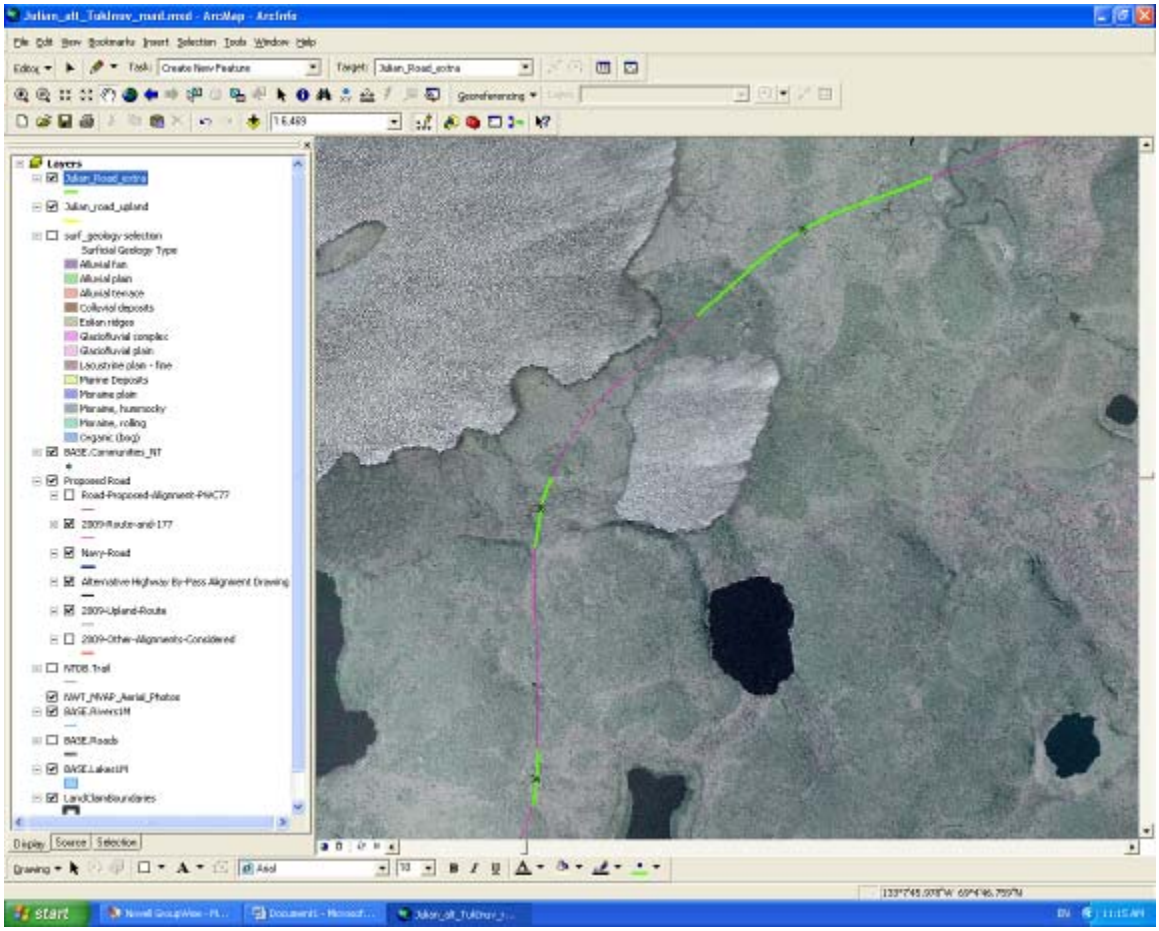
Sites 26, 27, 28, 29. Map 16



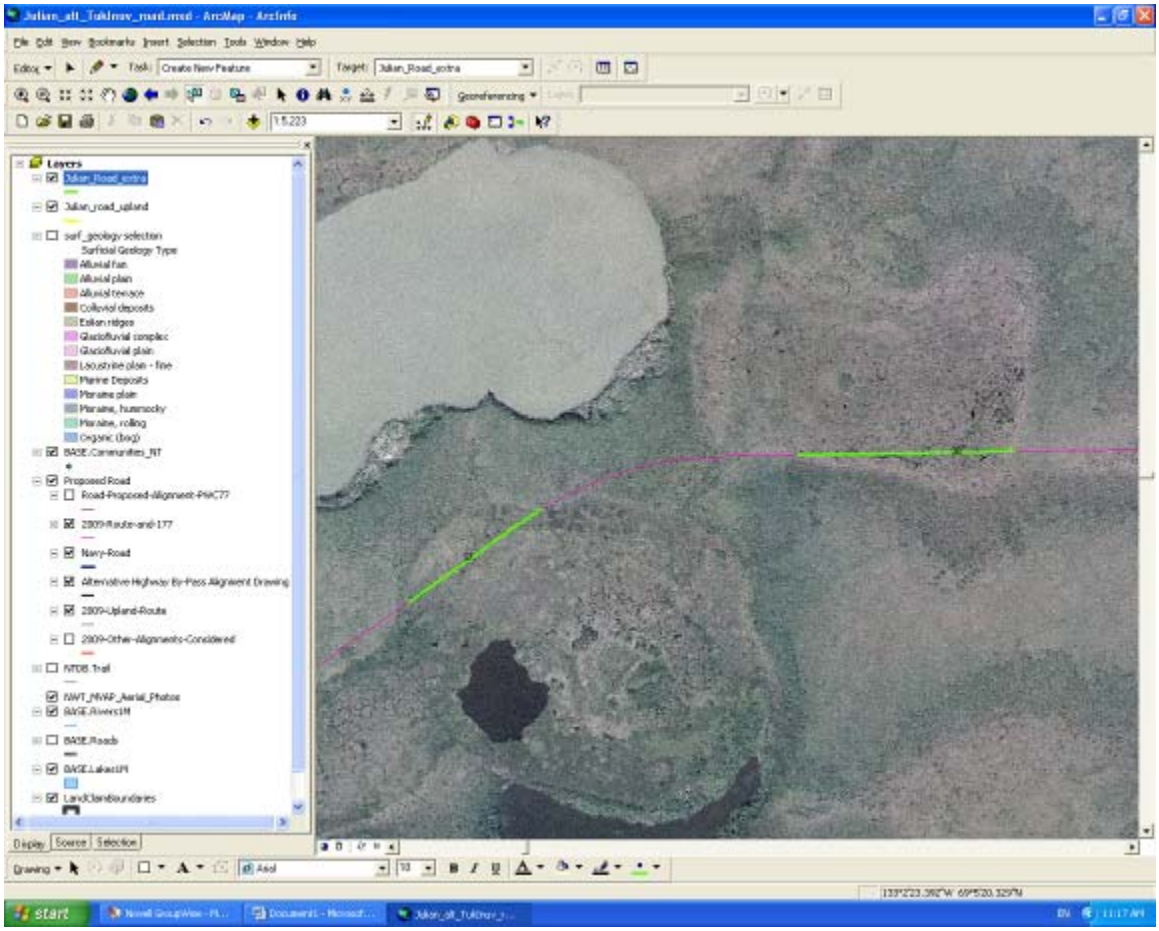
Sites 30, 31. Map 16



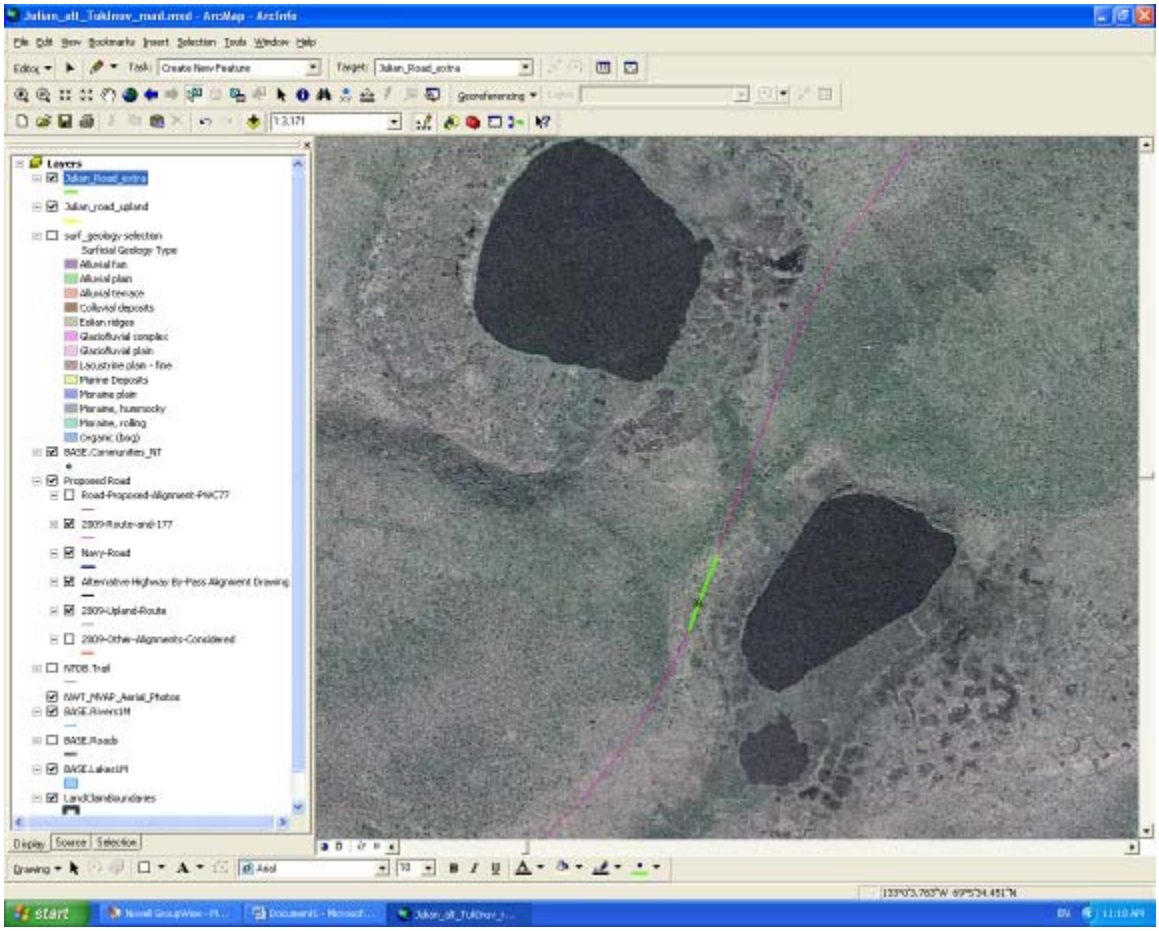
Sites 32, 33. Map 16



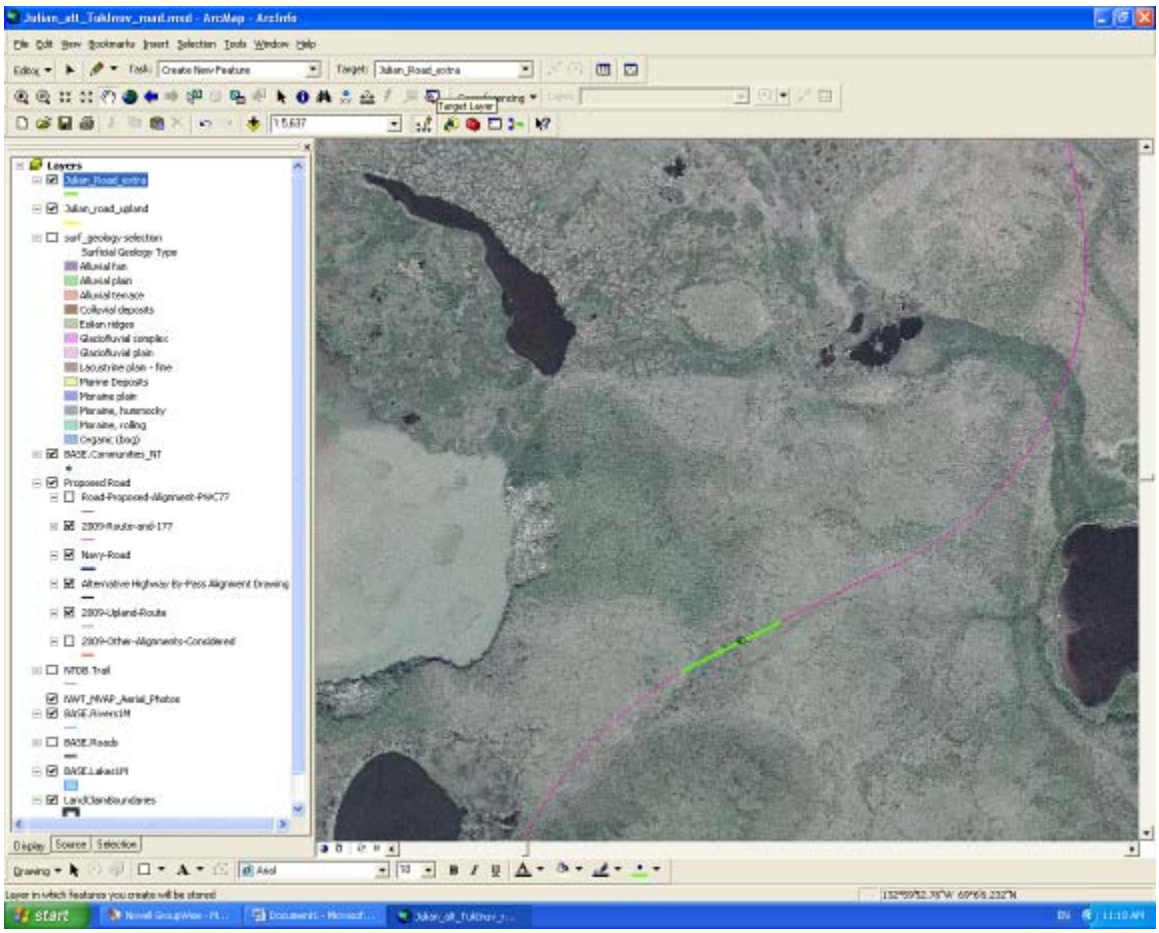
Sites 34, 36, 35. Maps 16 & 17



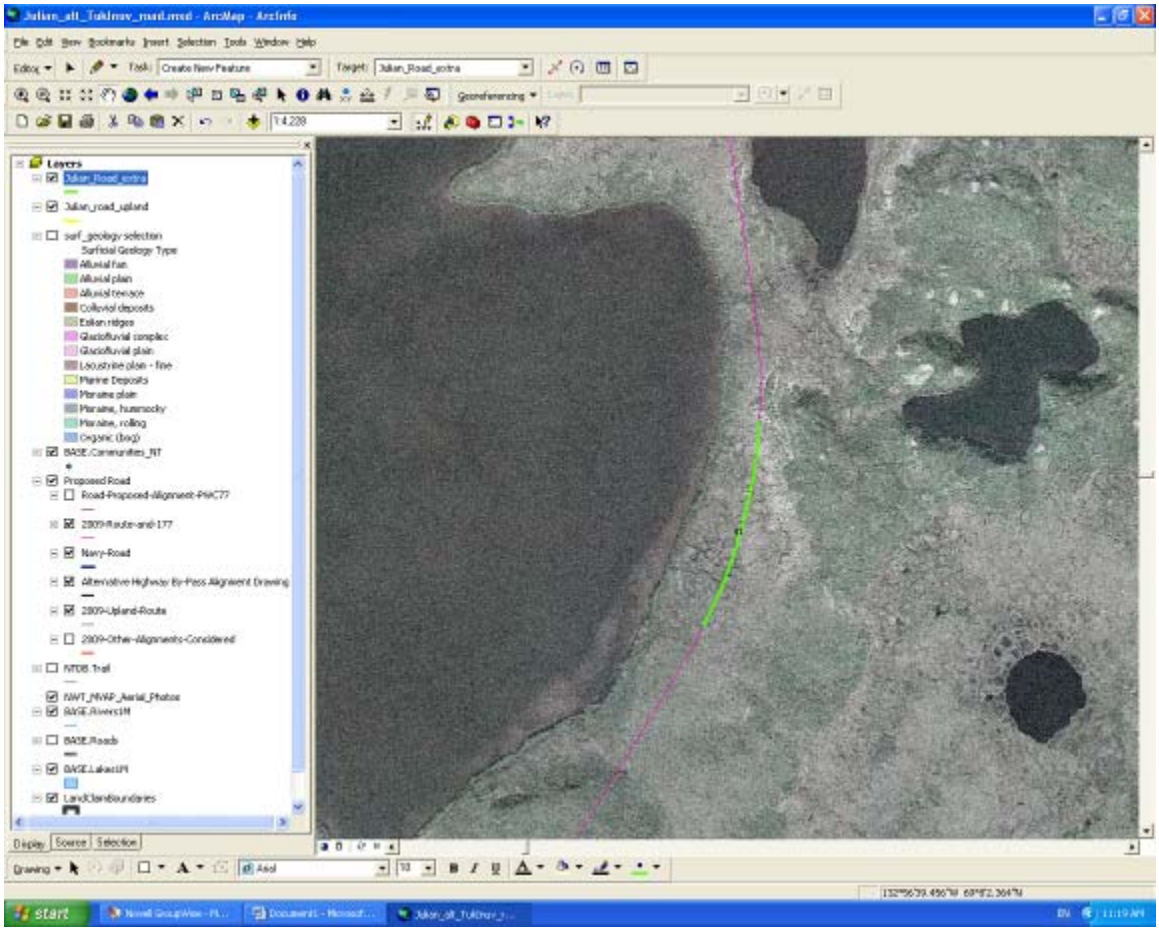
Sites 37, 38. Map 17



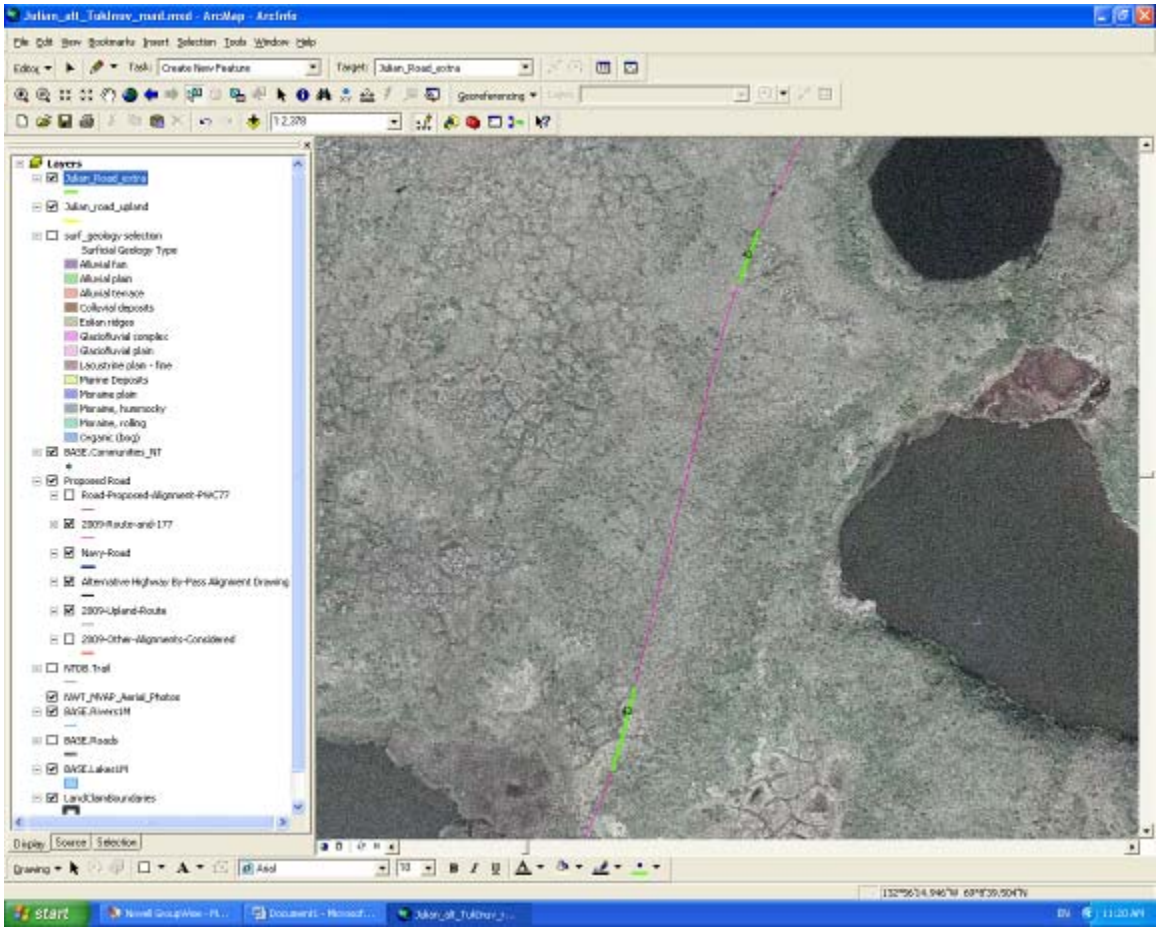
Site 39. Map 18



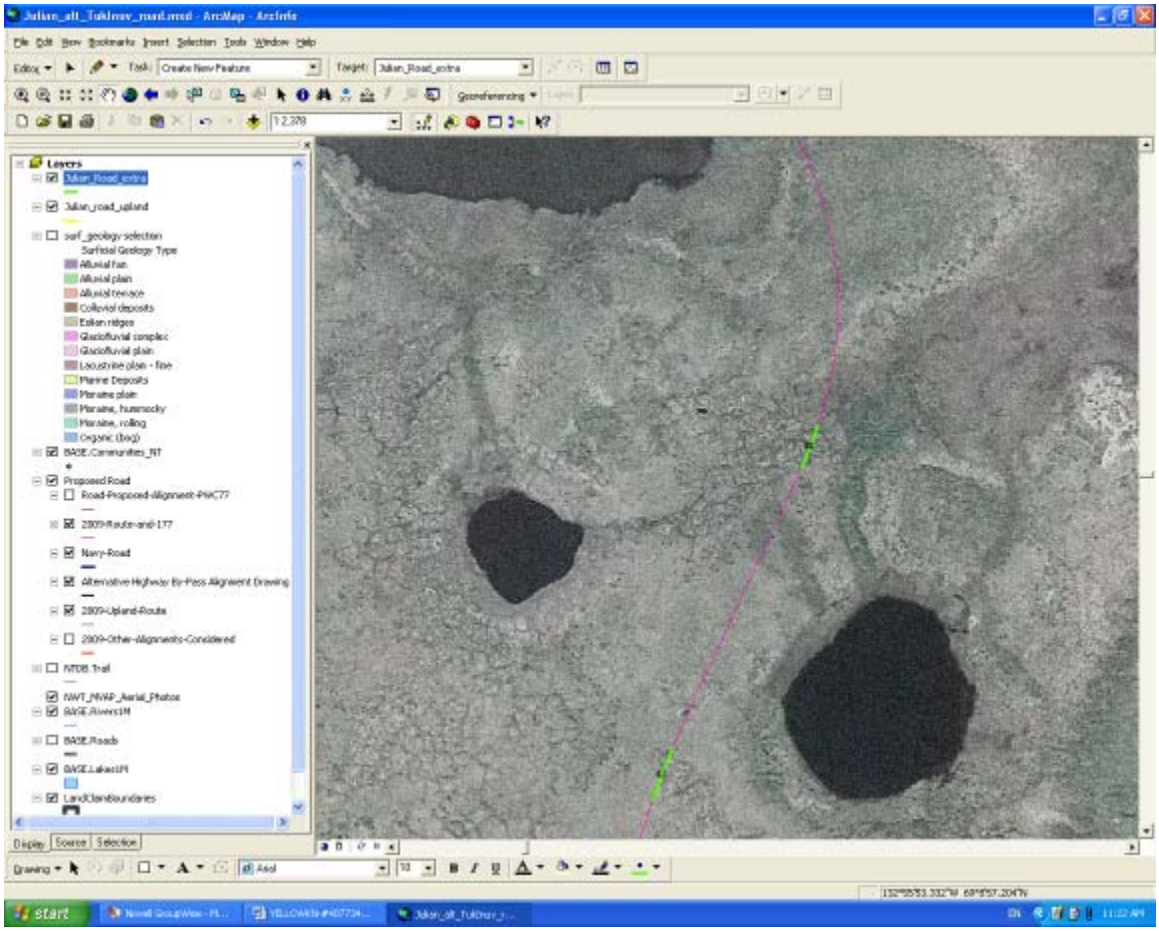
Site 40. Map 18



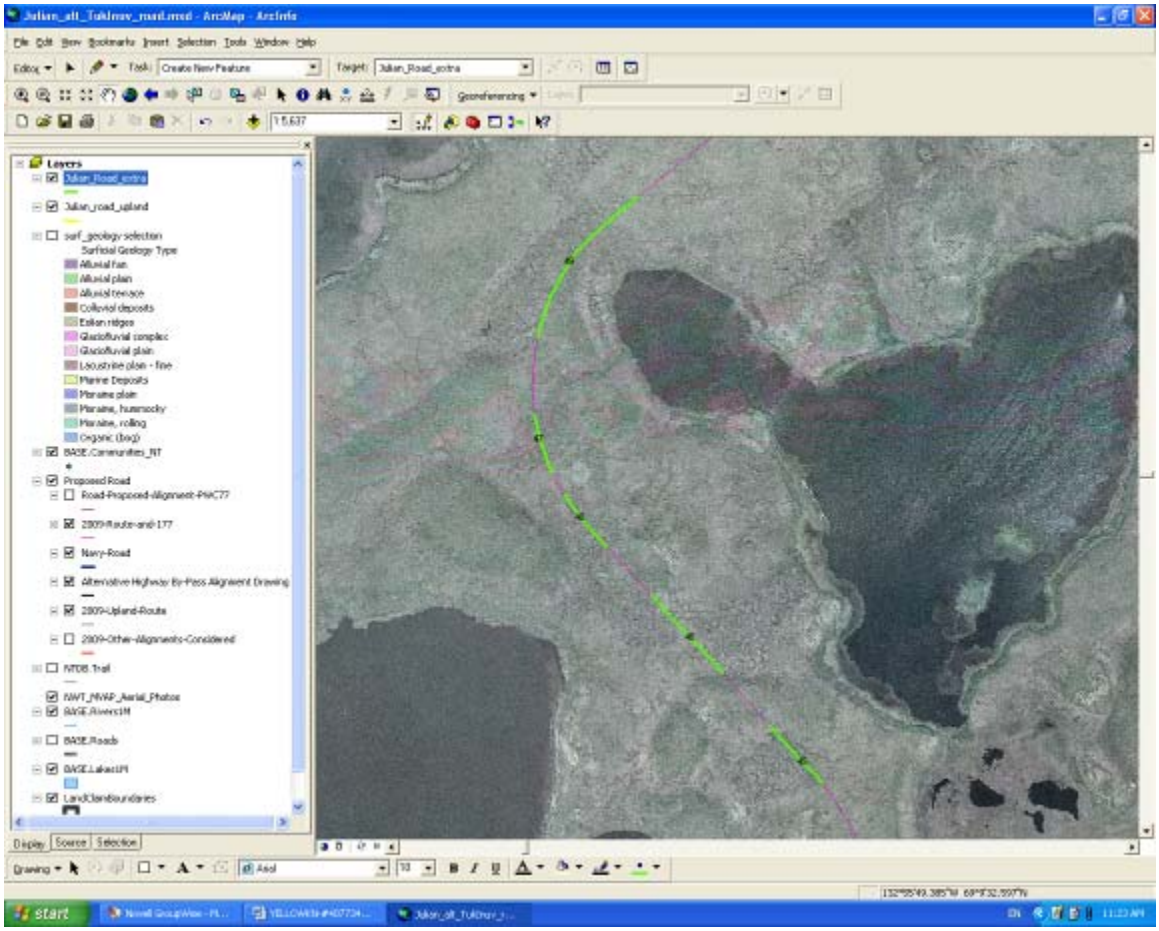
Site 41. Map 19



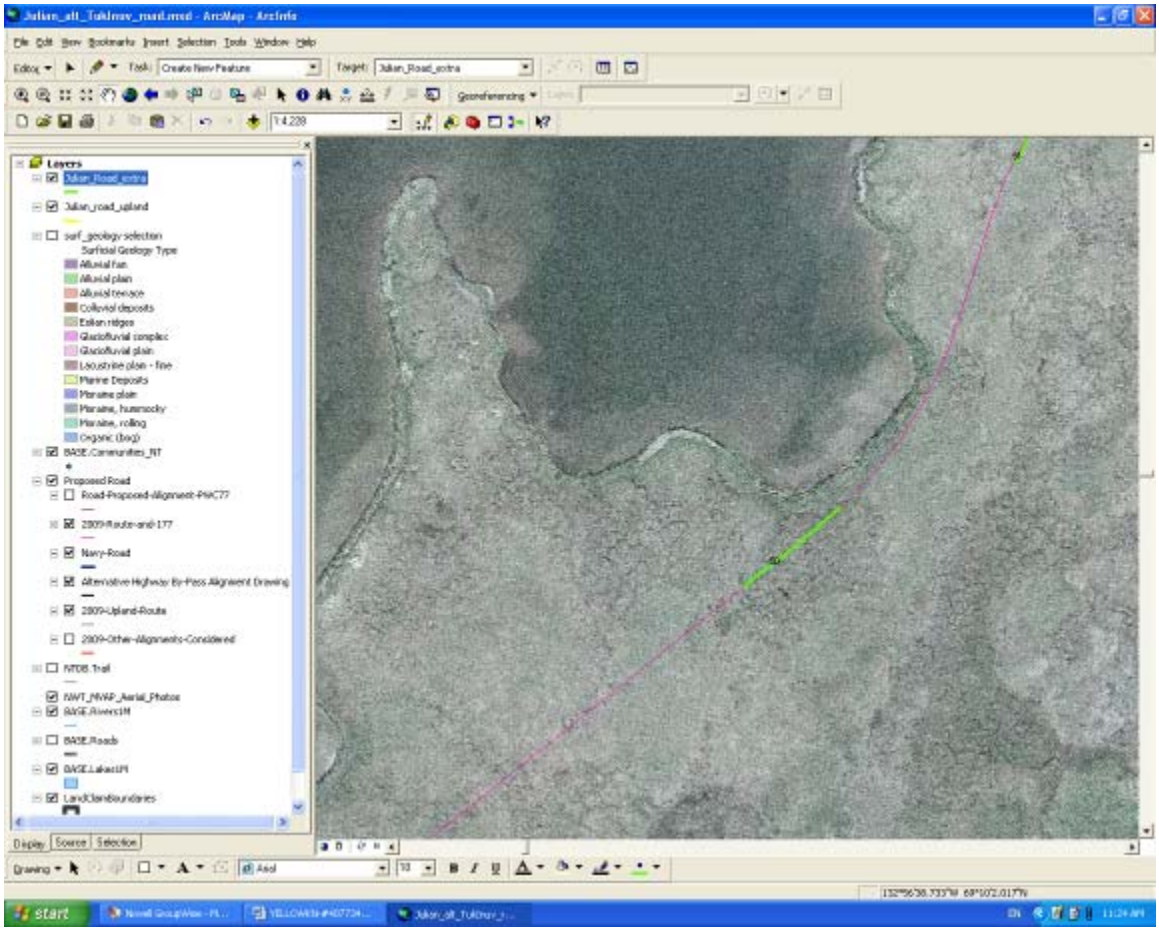
Sites 42, 43. Map 19



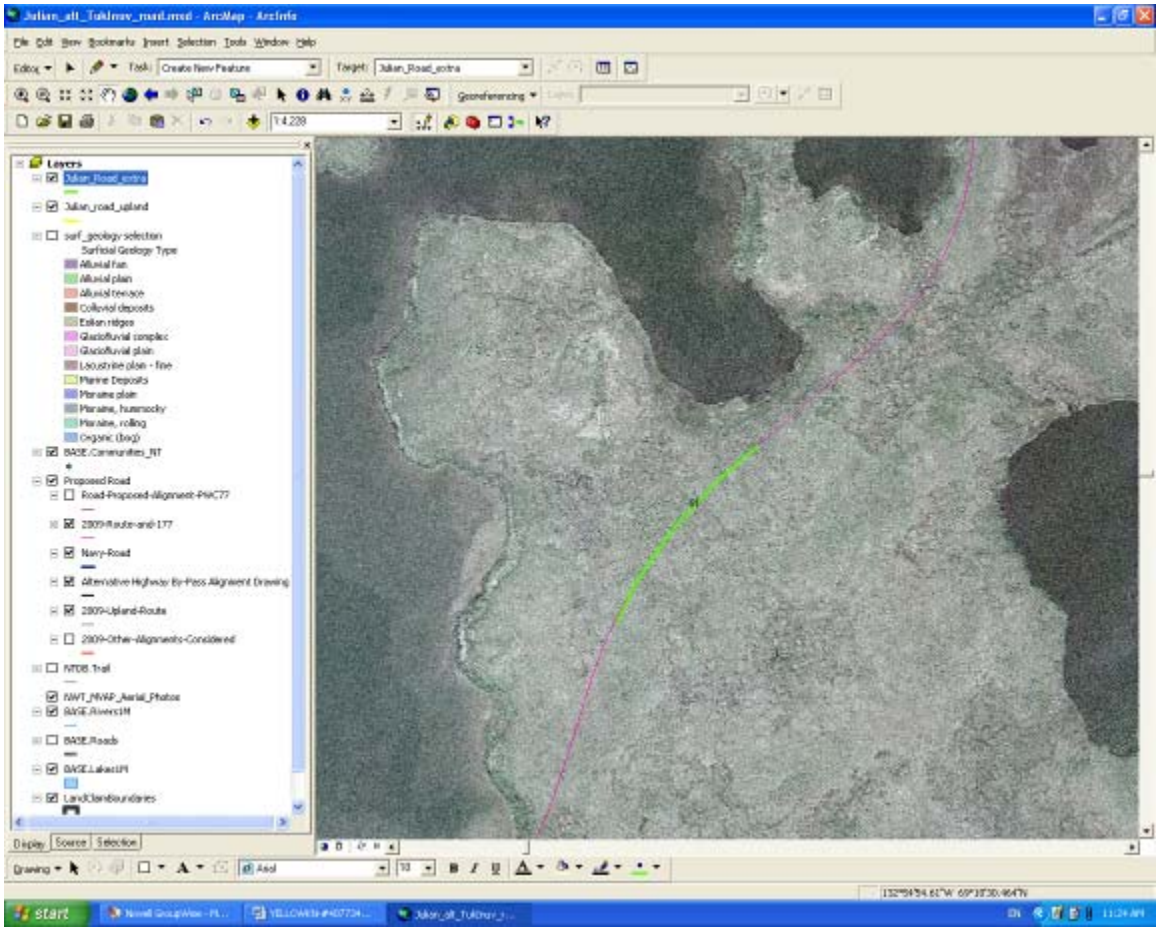
Sites 43, 44. Map 19



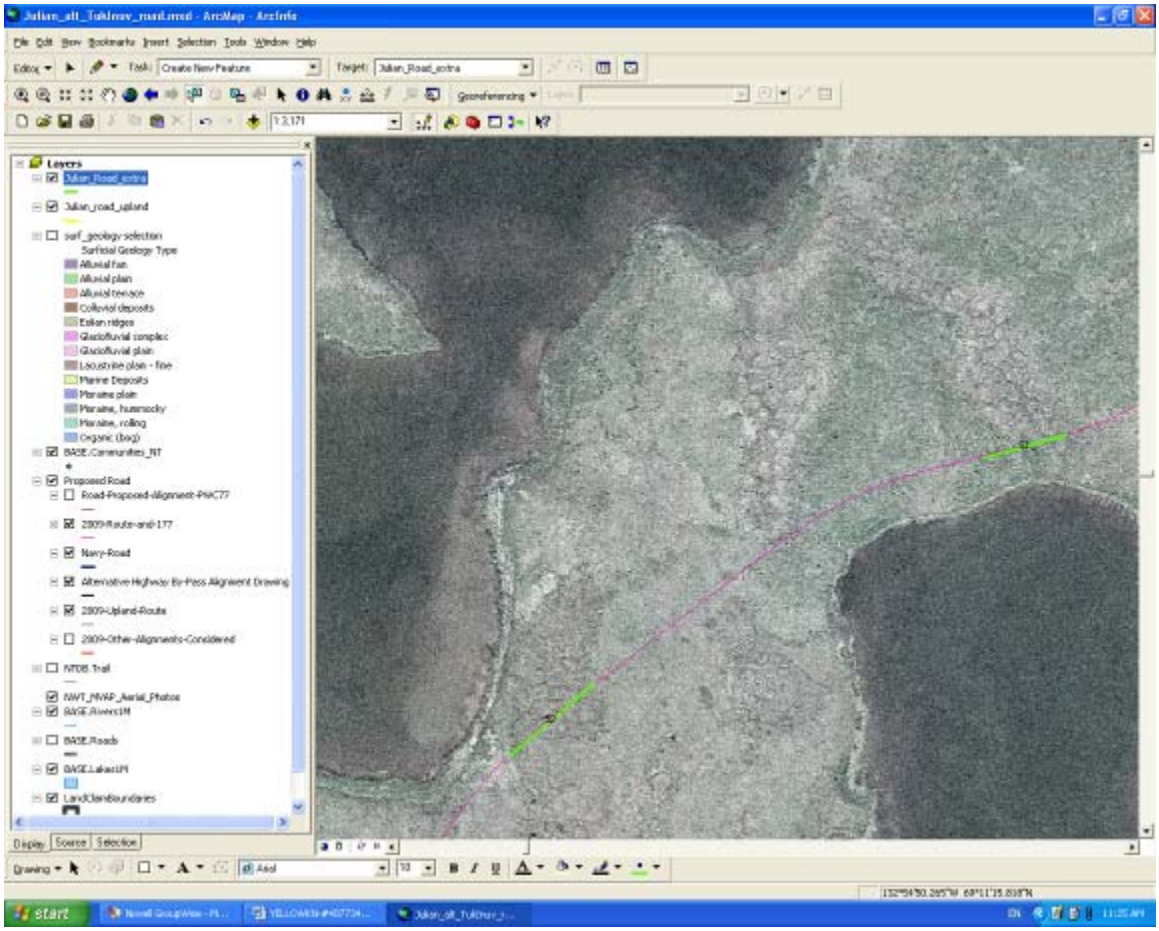
Sites 45, 46, 47, 48, 49. Map 19



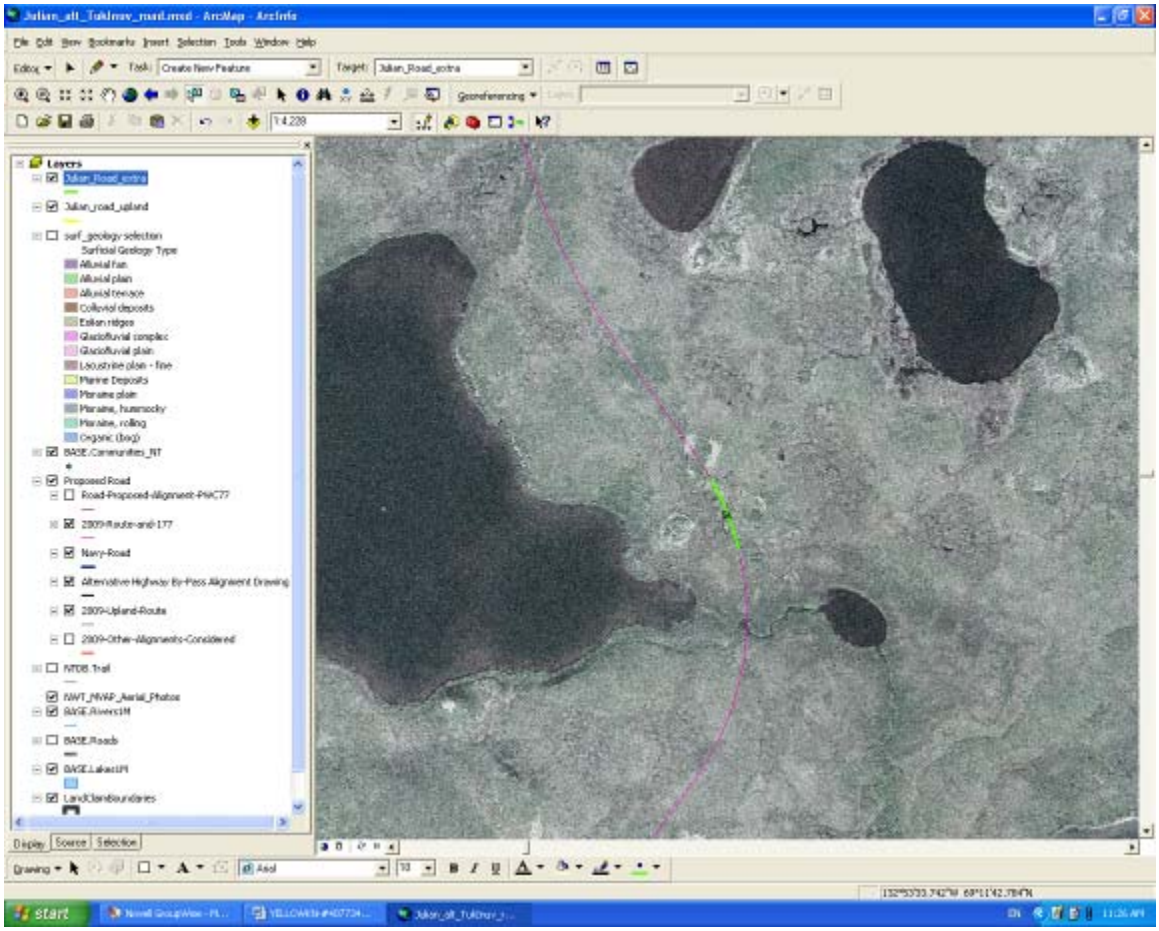
Sites 50, 51. Map 19



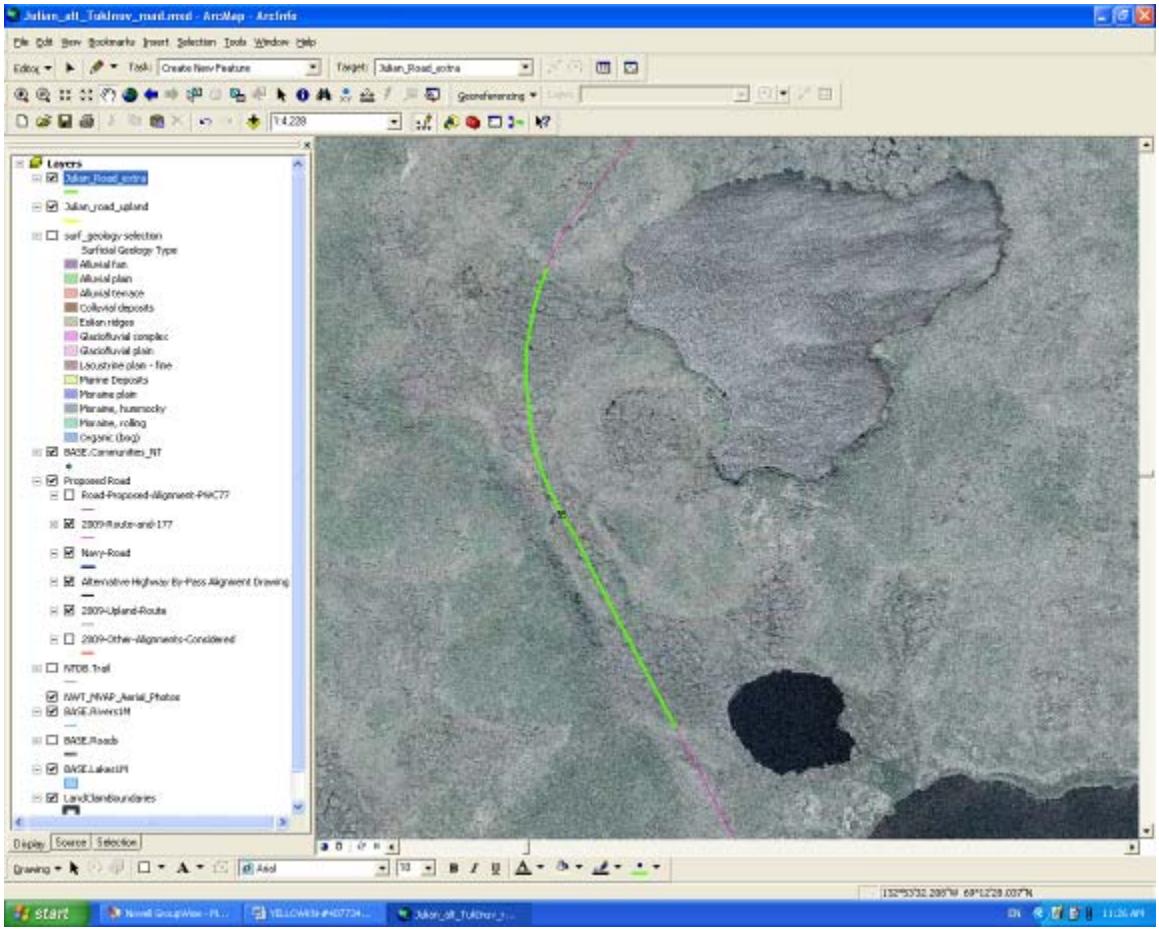
Site 51. Map 20



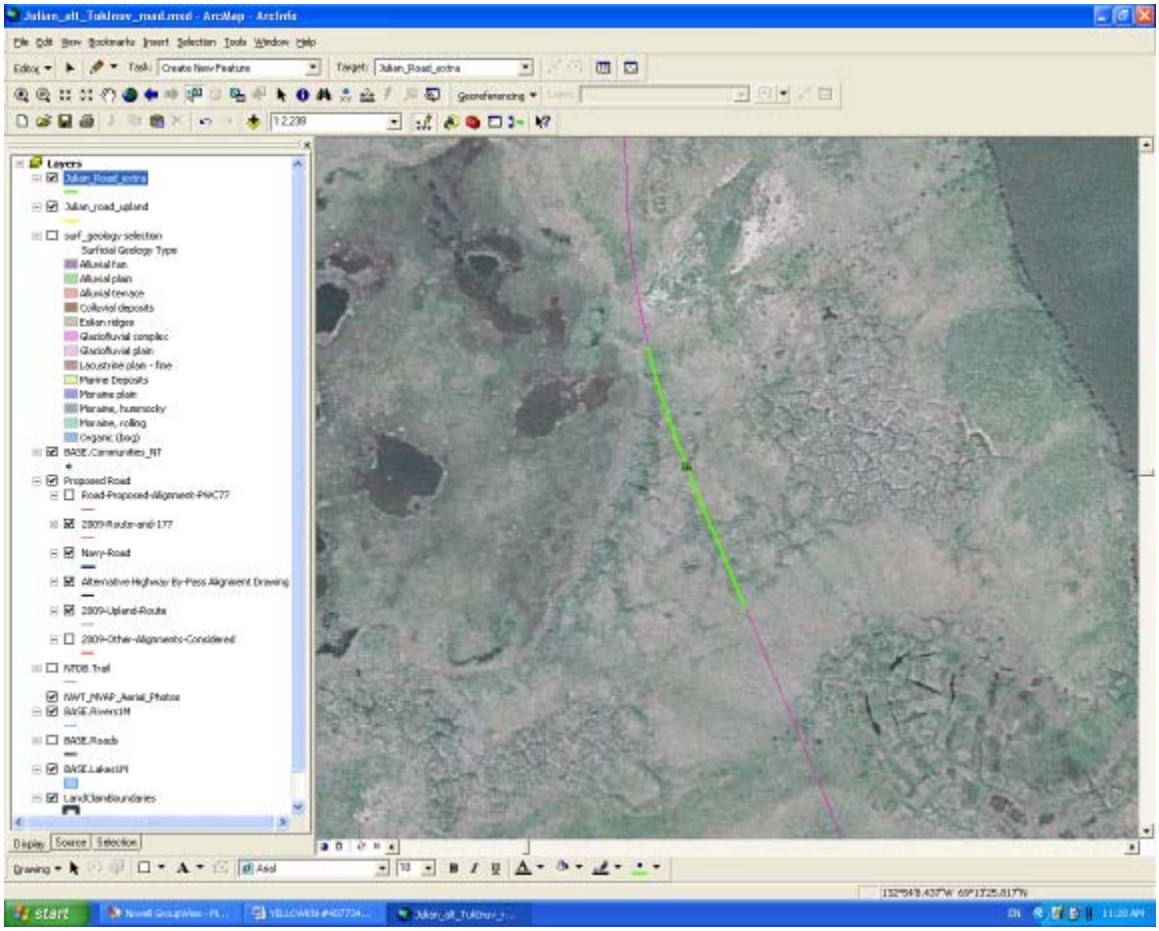
Sites 52, 53. Map 20



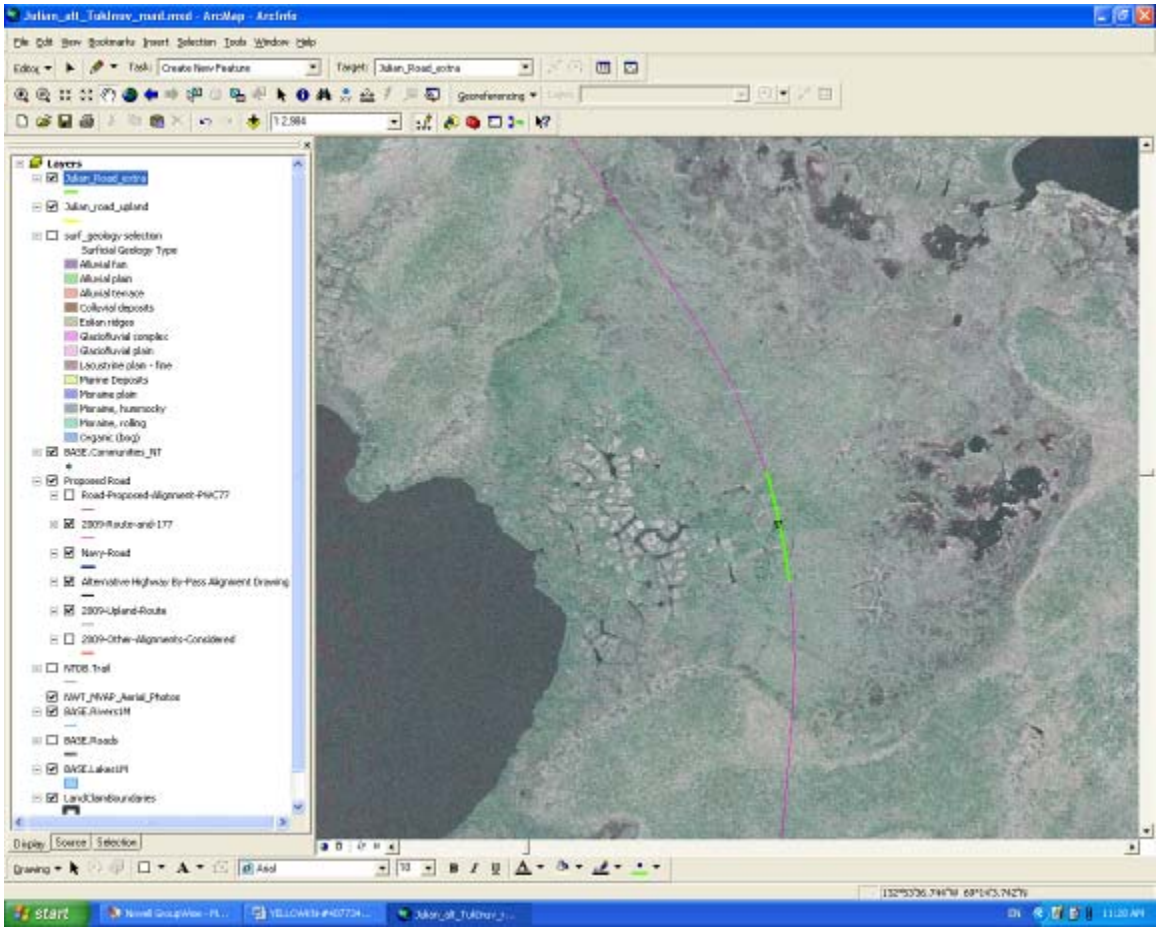
Site 54. Map 20



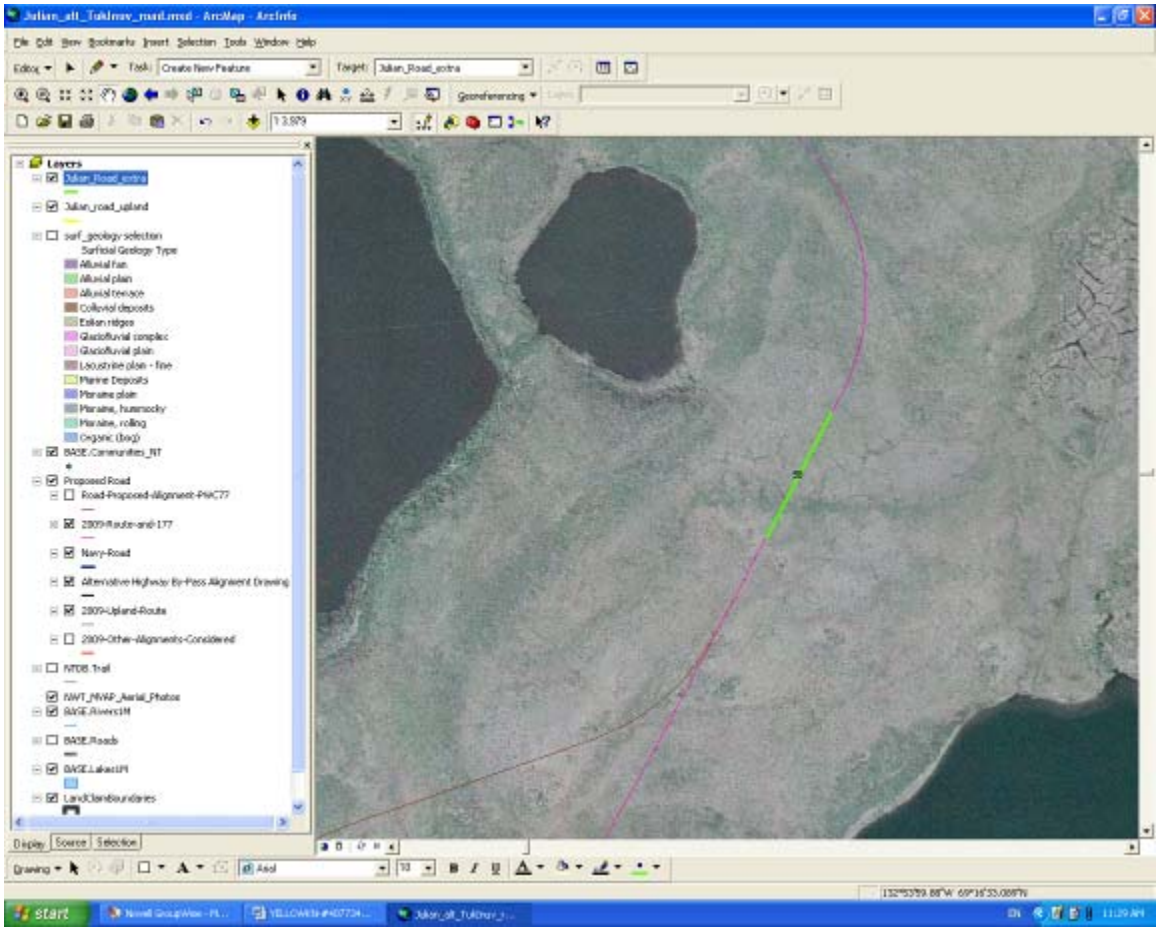
Site 55. Map 20



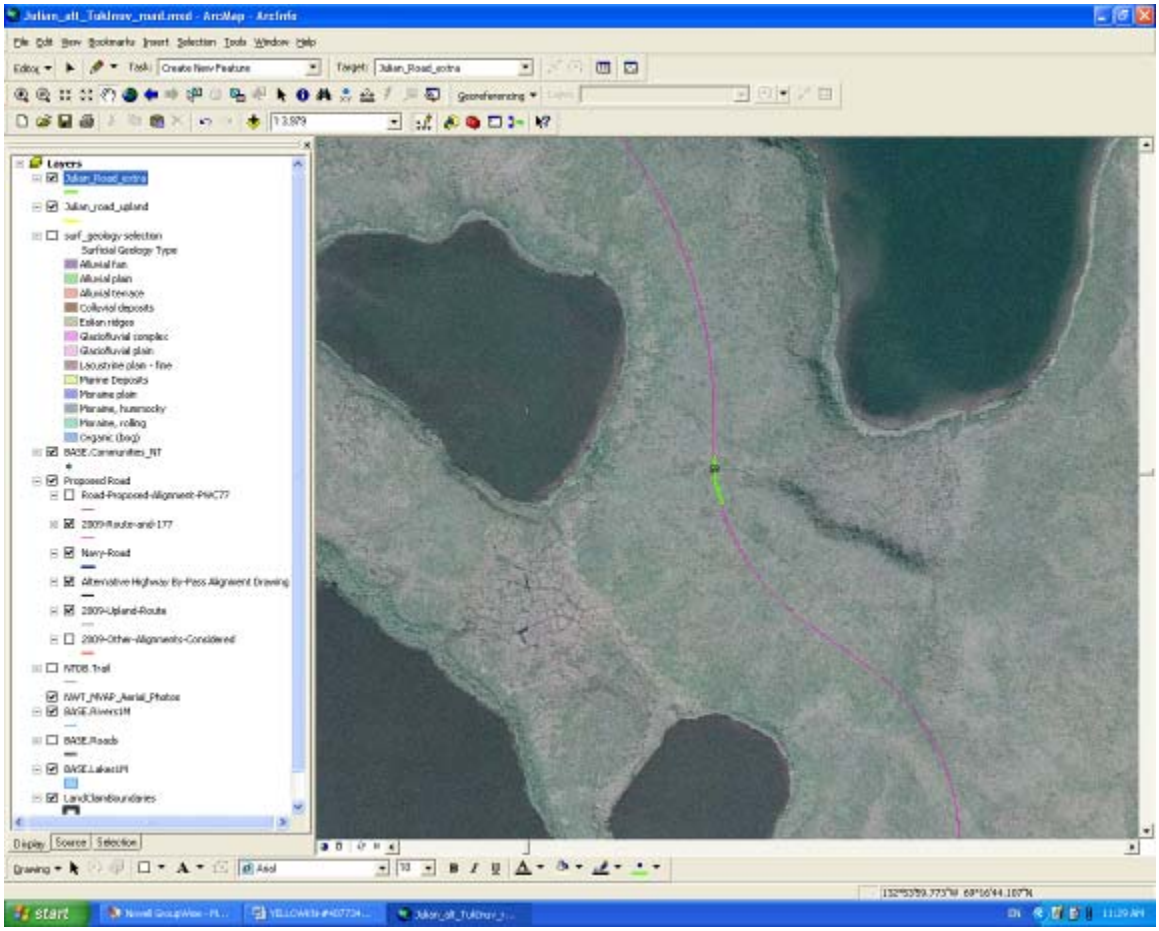
Site 56. Map 21



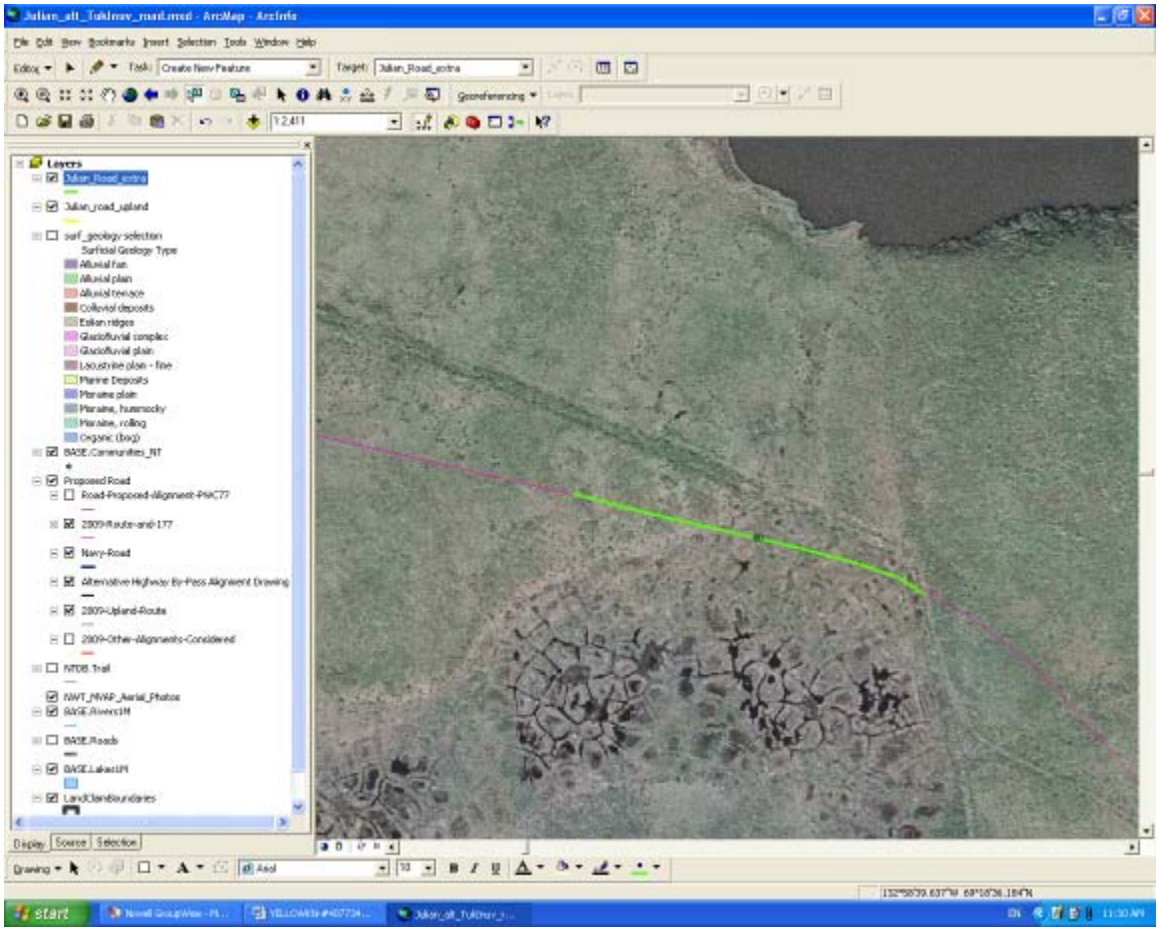
Site 57. Map 21



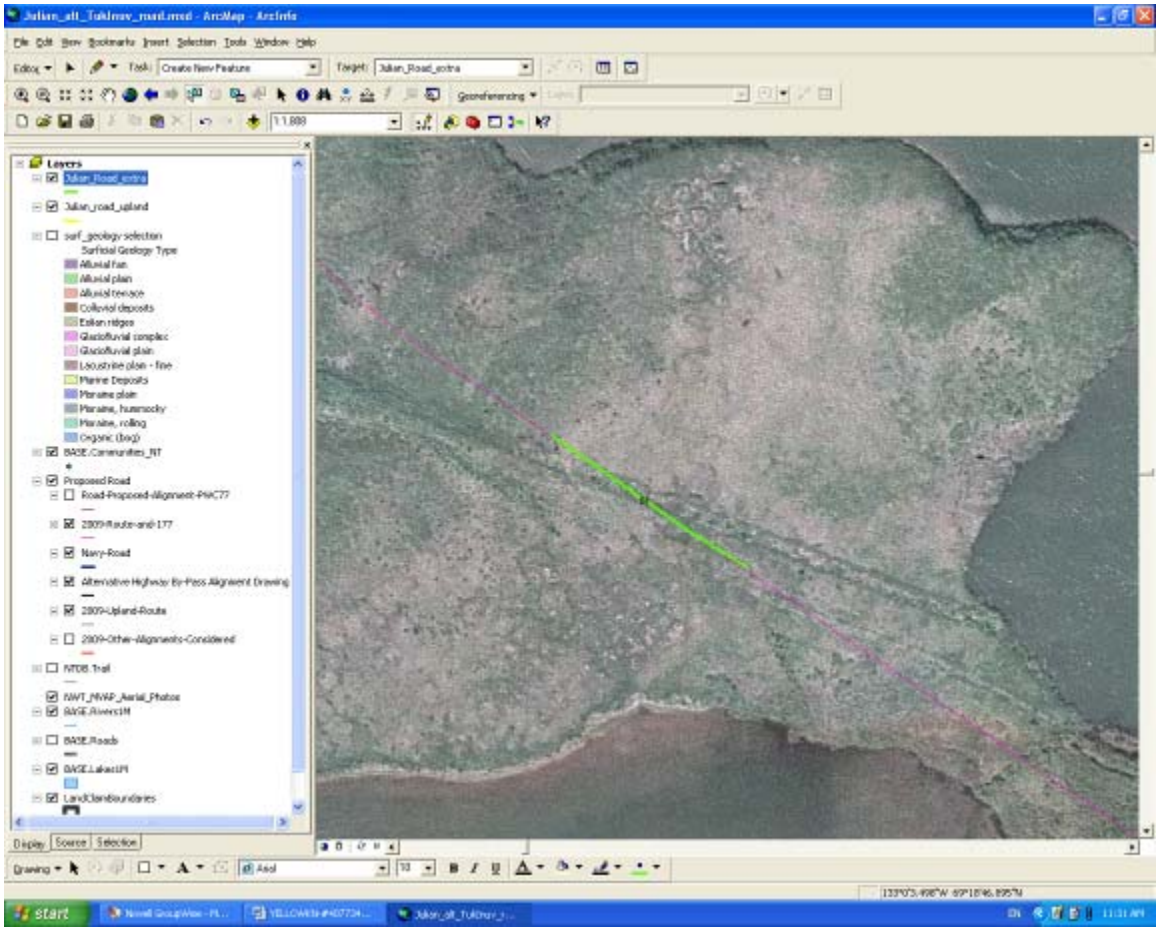
Site 58. Map 22



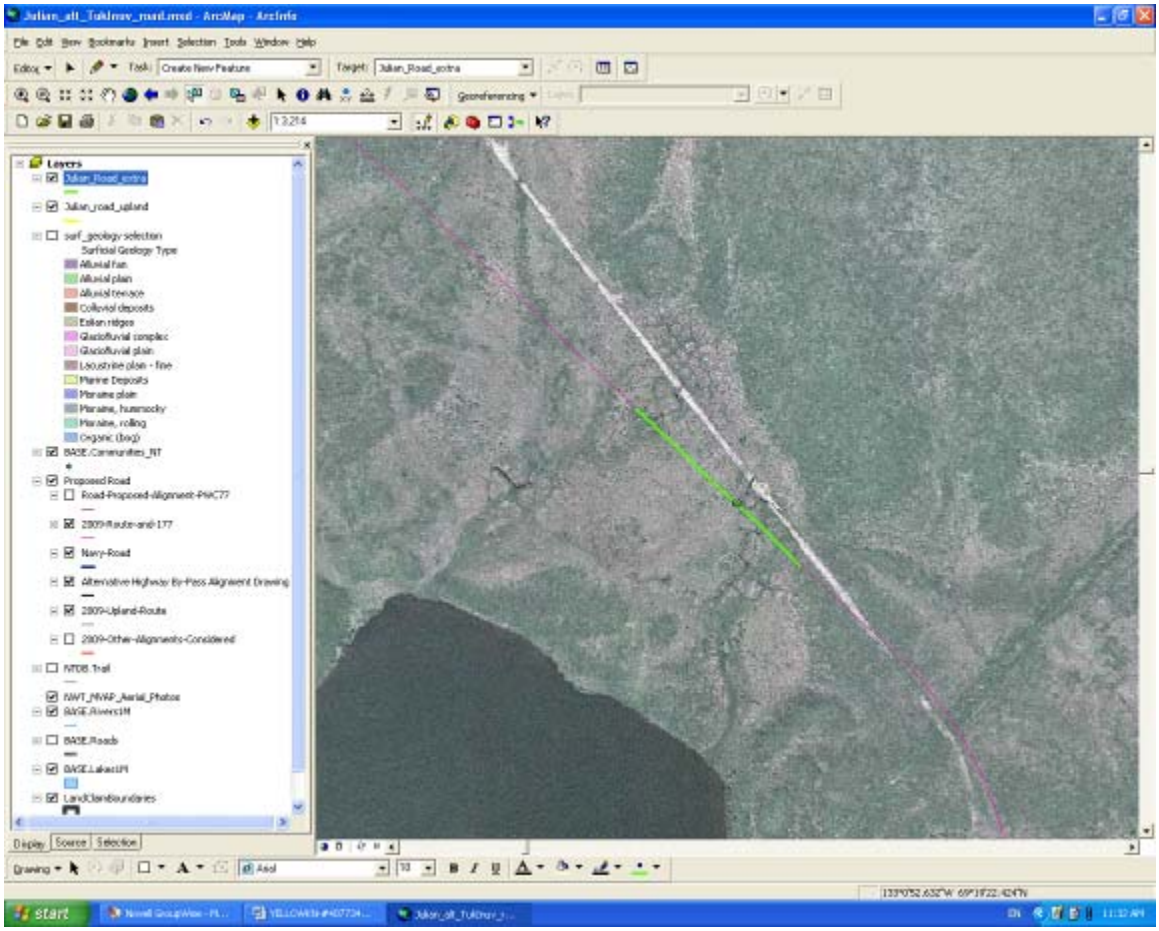
Site 59. Map 22



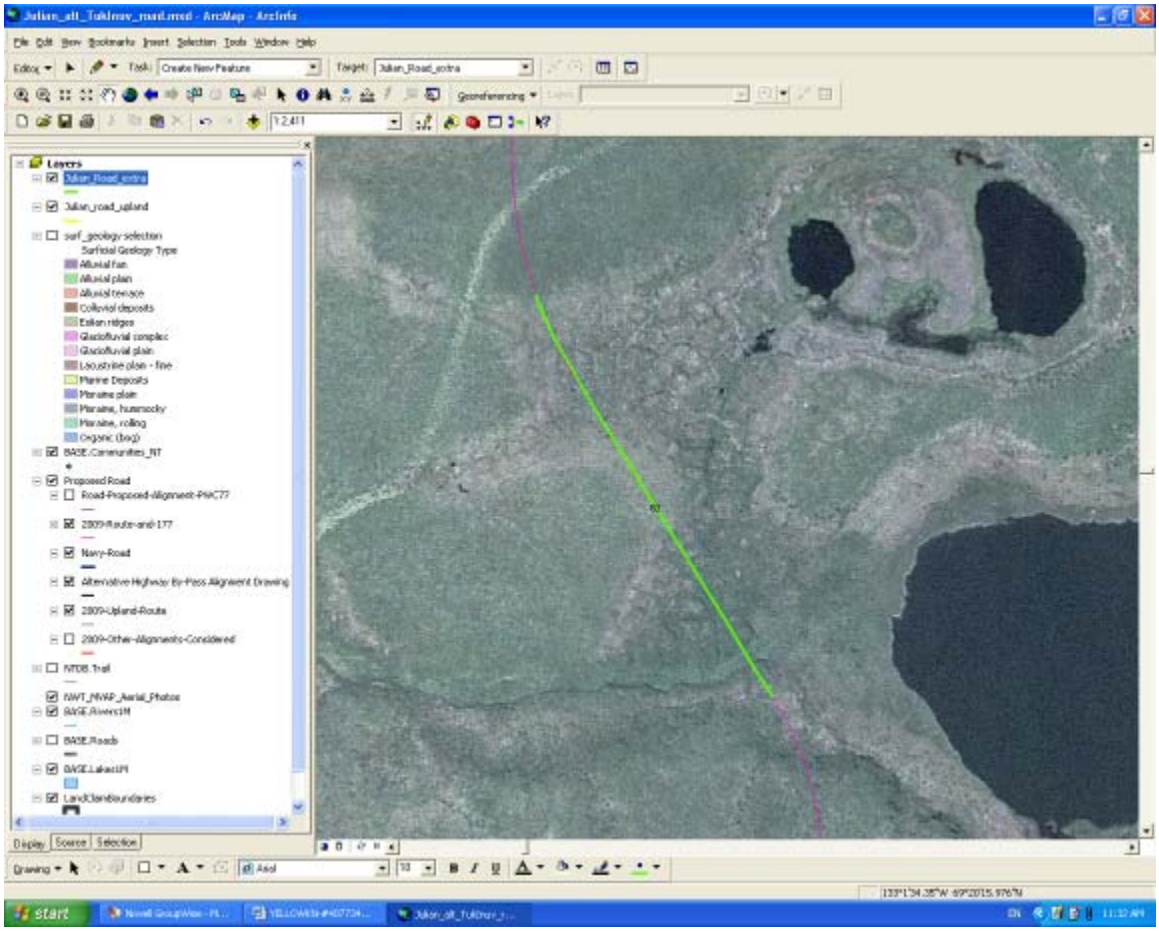
Site 60. Map 23



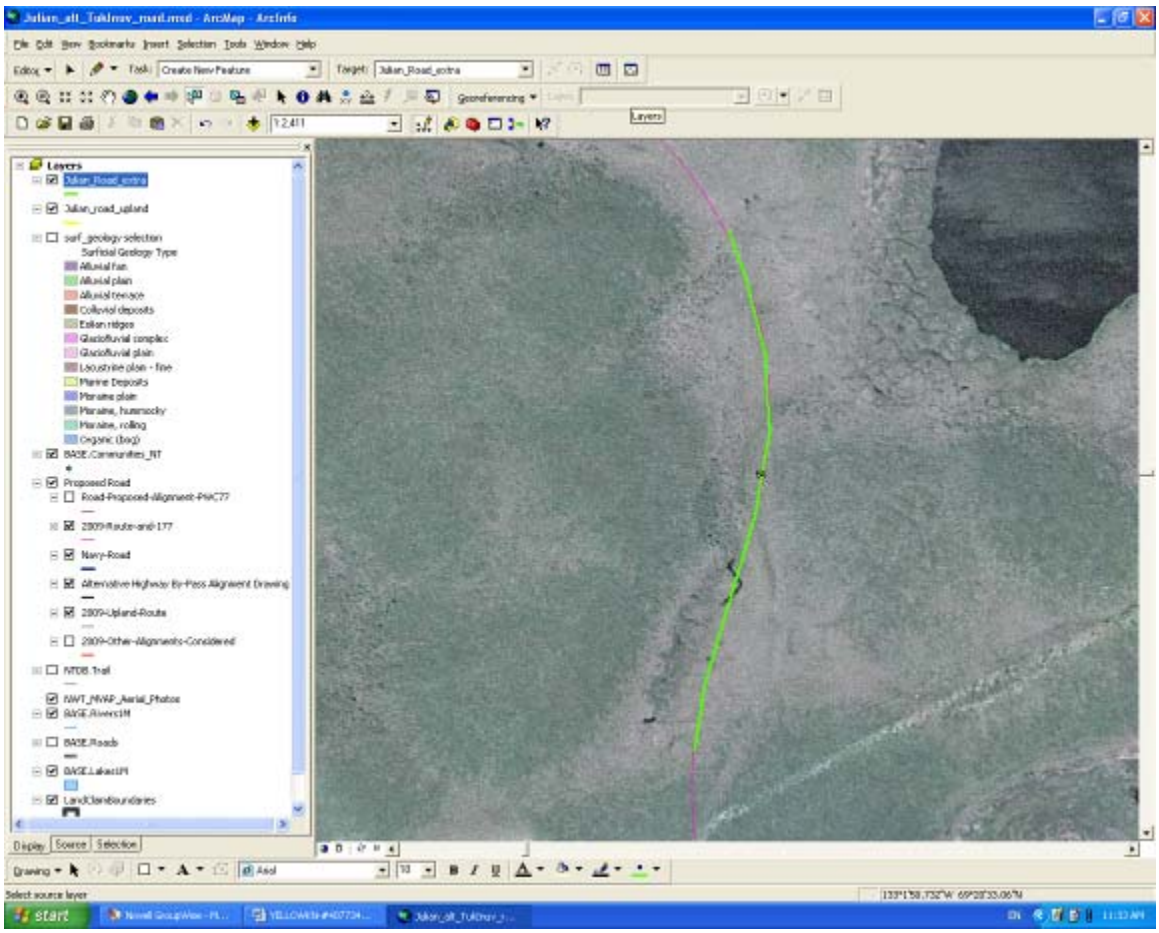
Site 61. Map 23



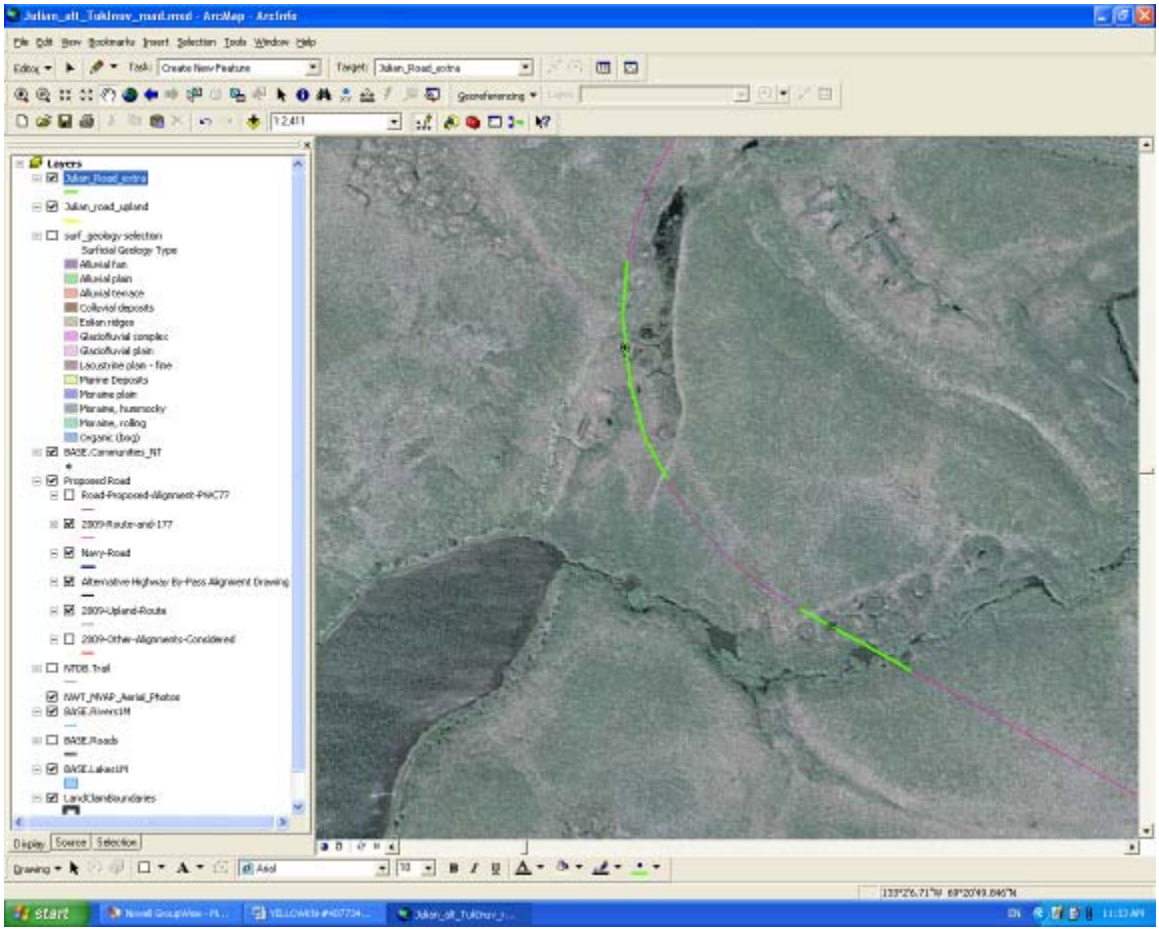
Site 62. Map 23



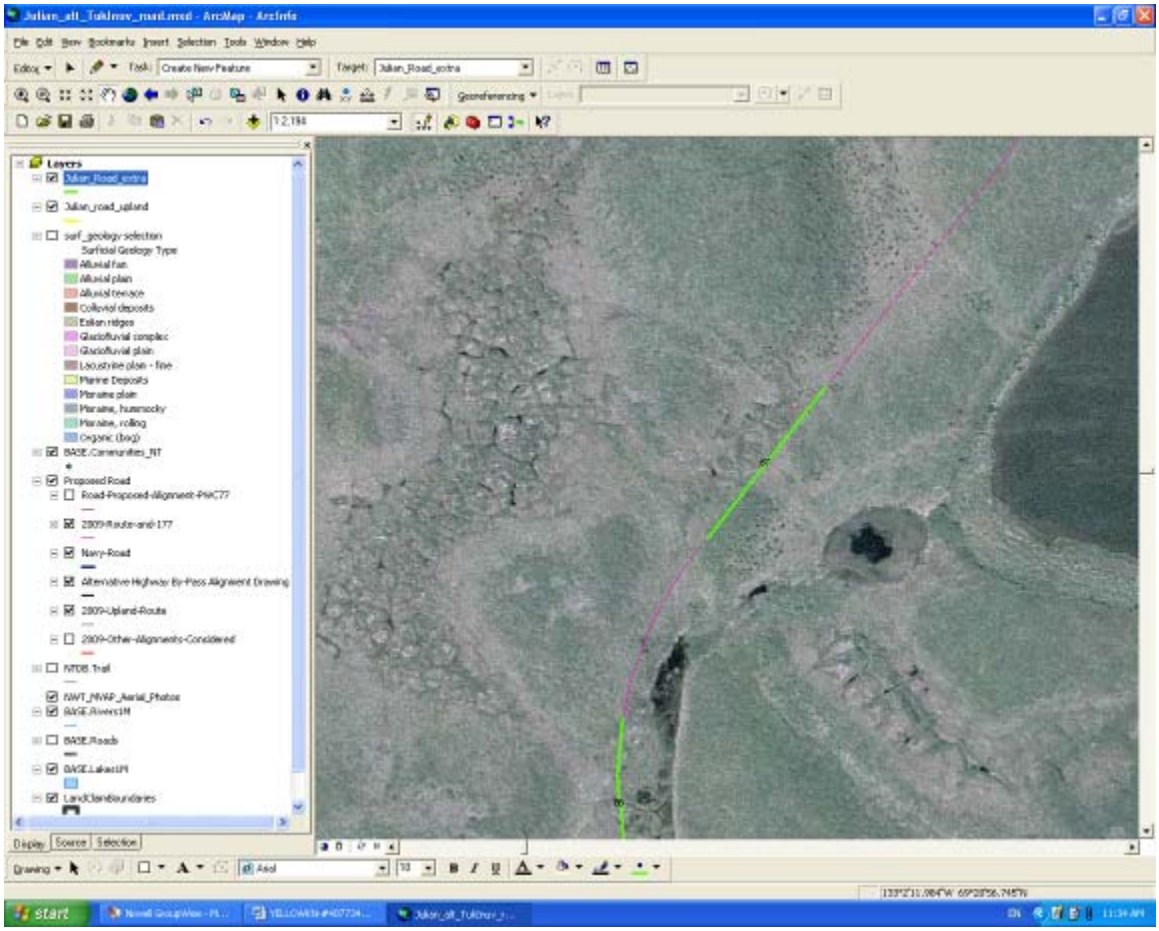
Site 63. Map 23



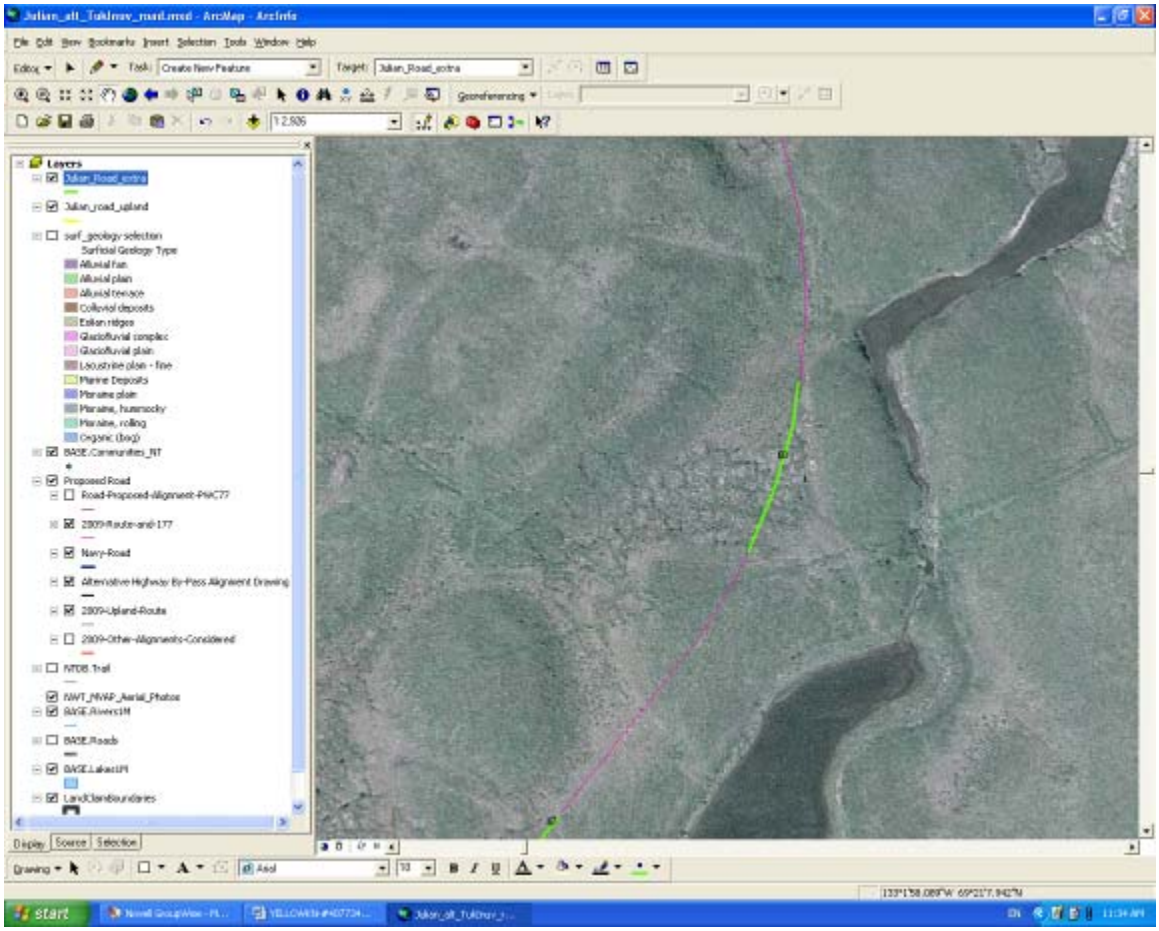
Site 64. Map 23



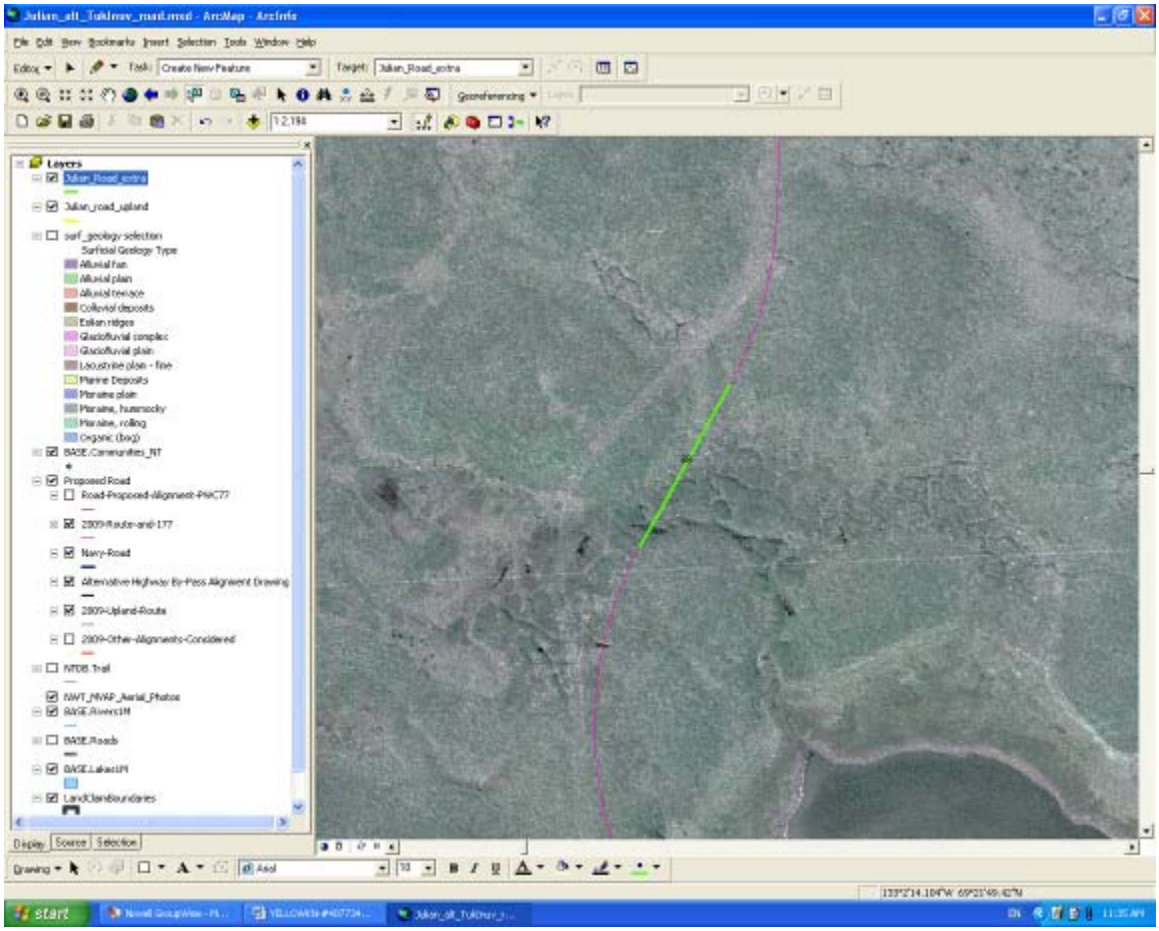
Sites 65, 66. Map 23



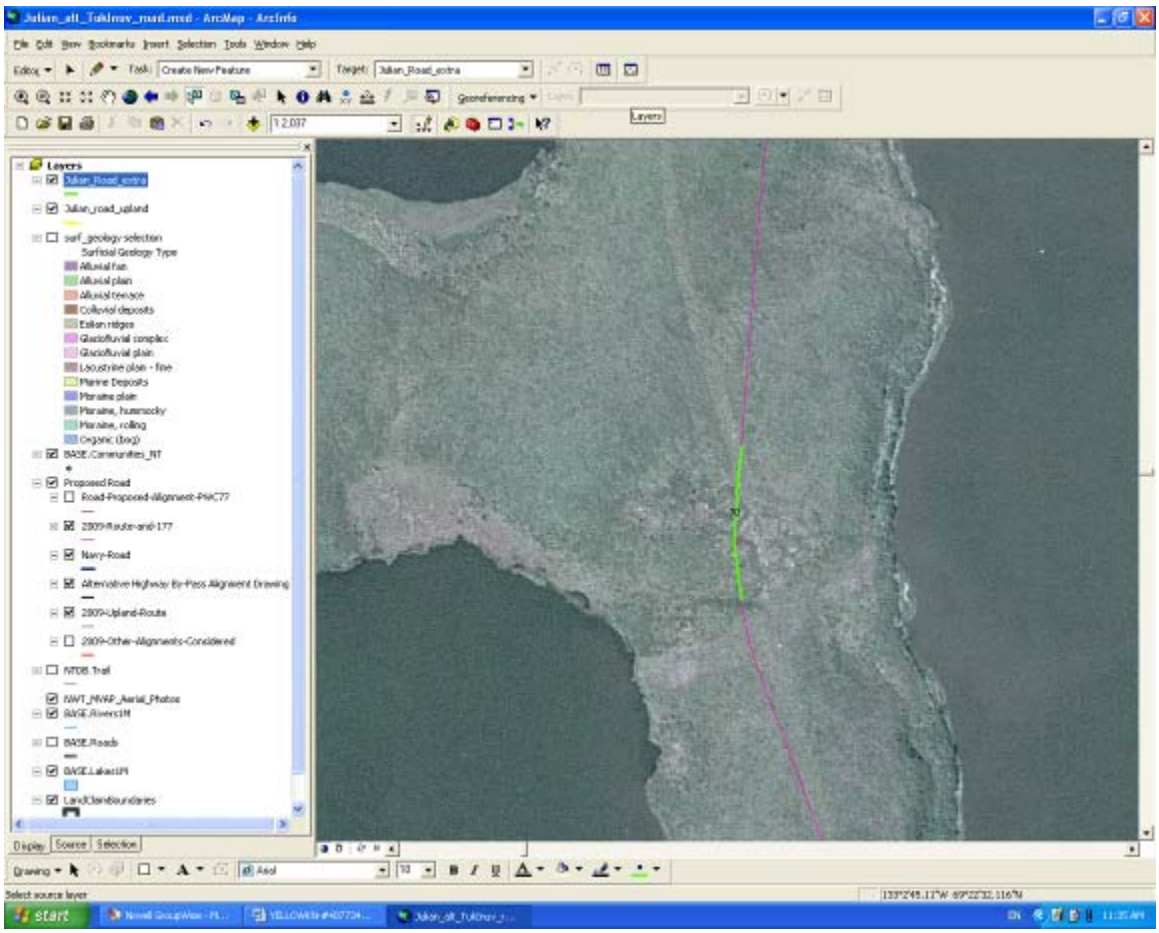
Sites 66, 67. Maps 23, 24



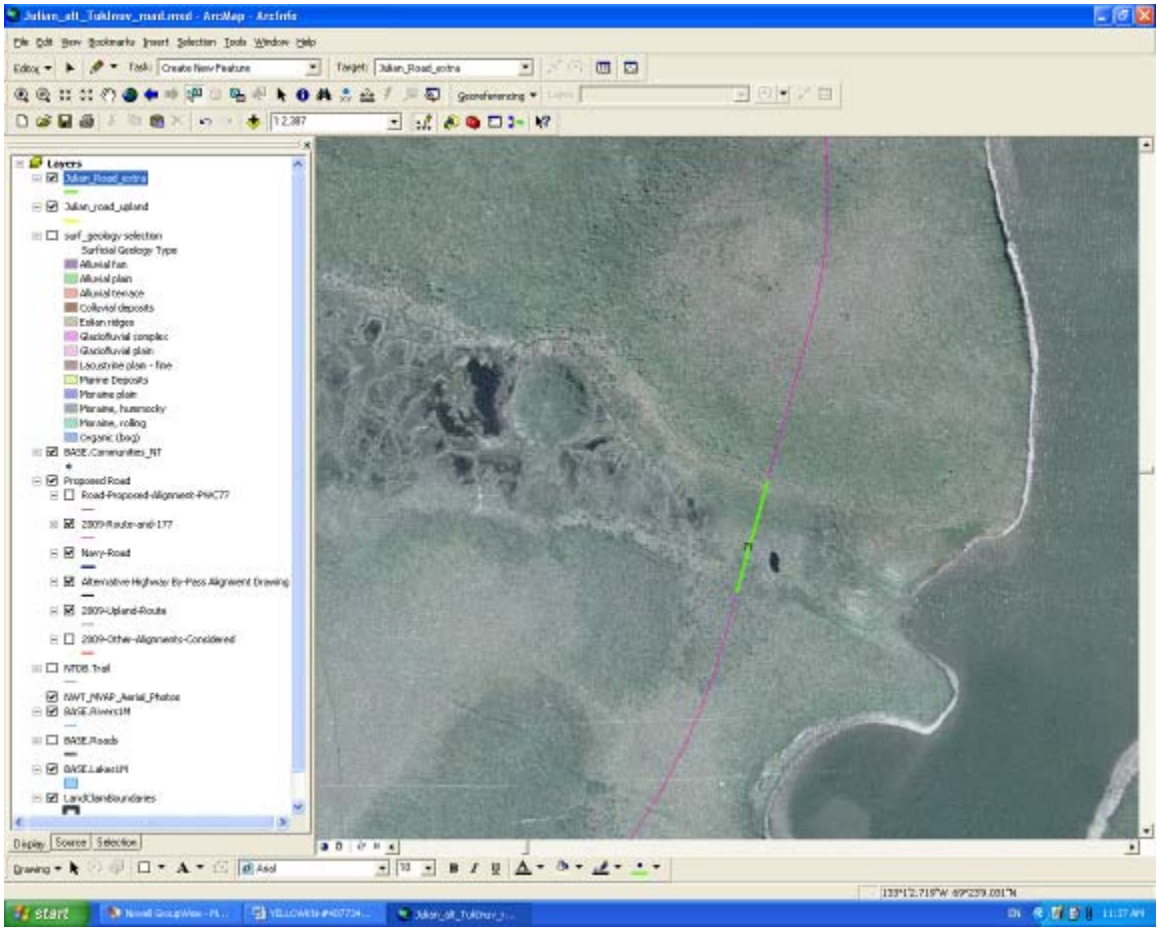
Sites 67, 68. Map 24



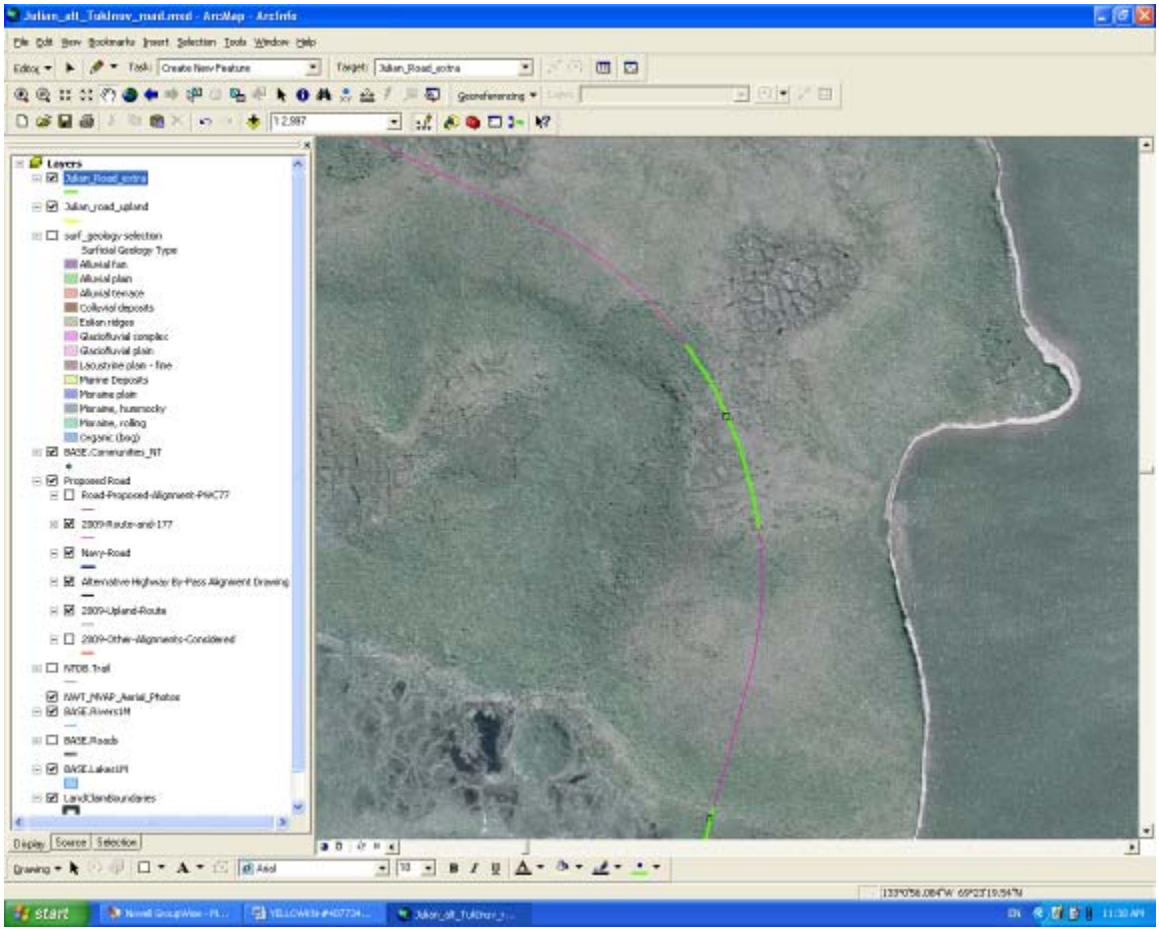
Site 69. Map 24



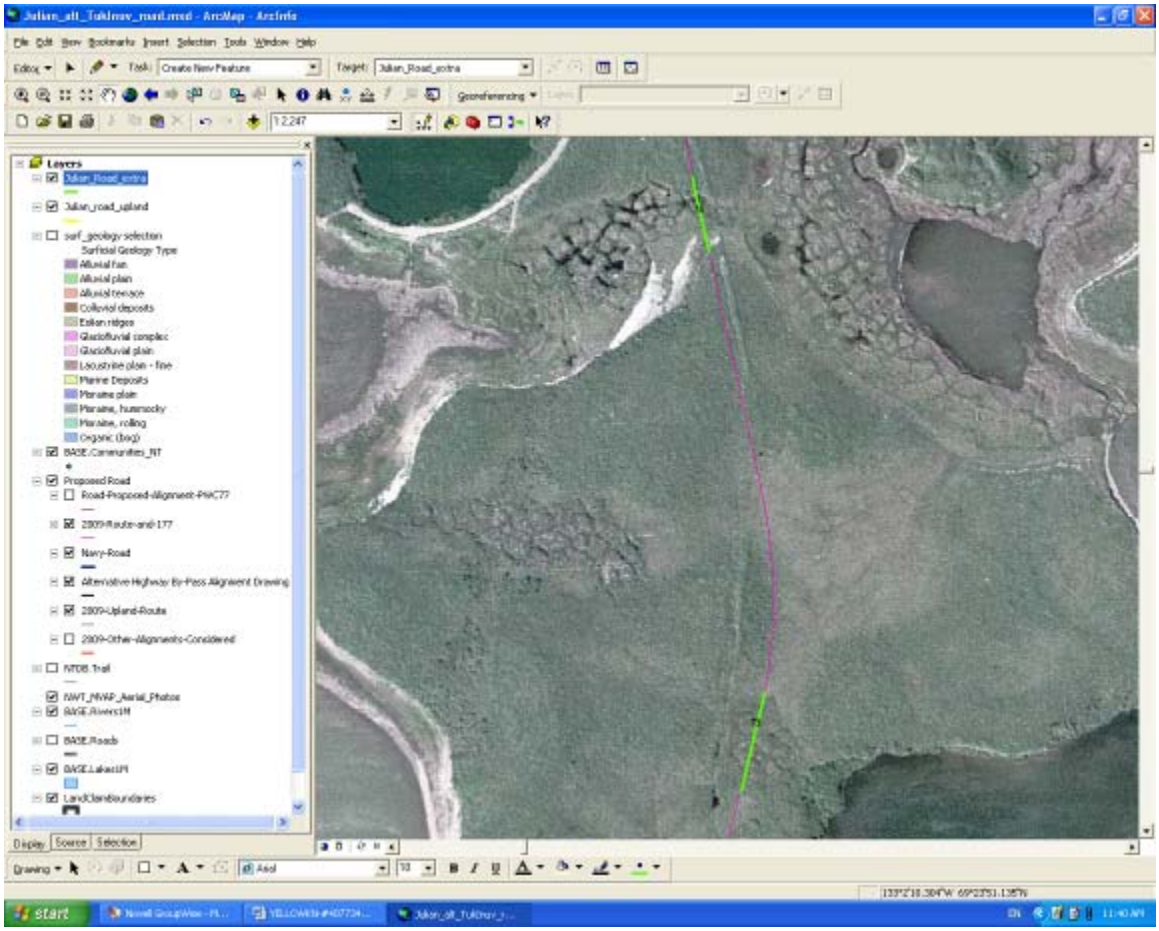
Site 70. Maps 24, 25



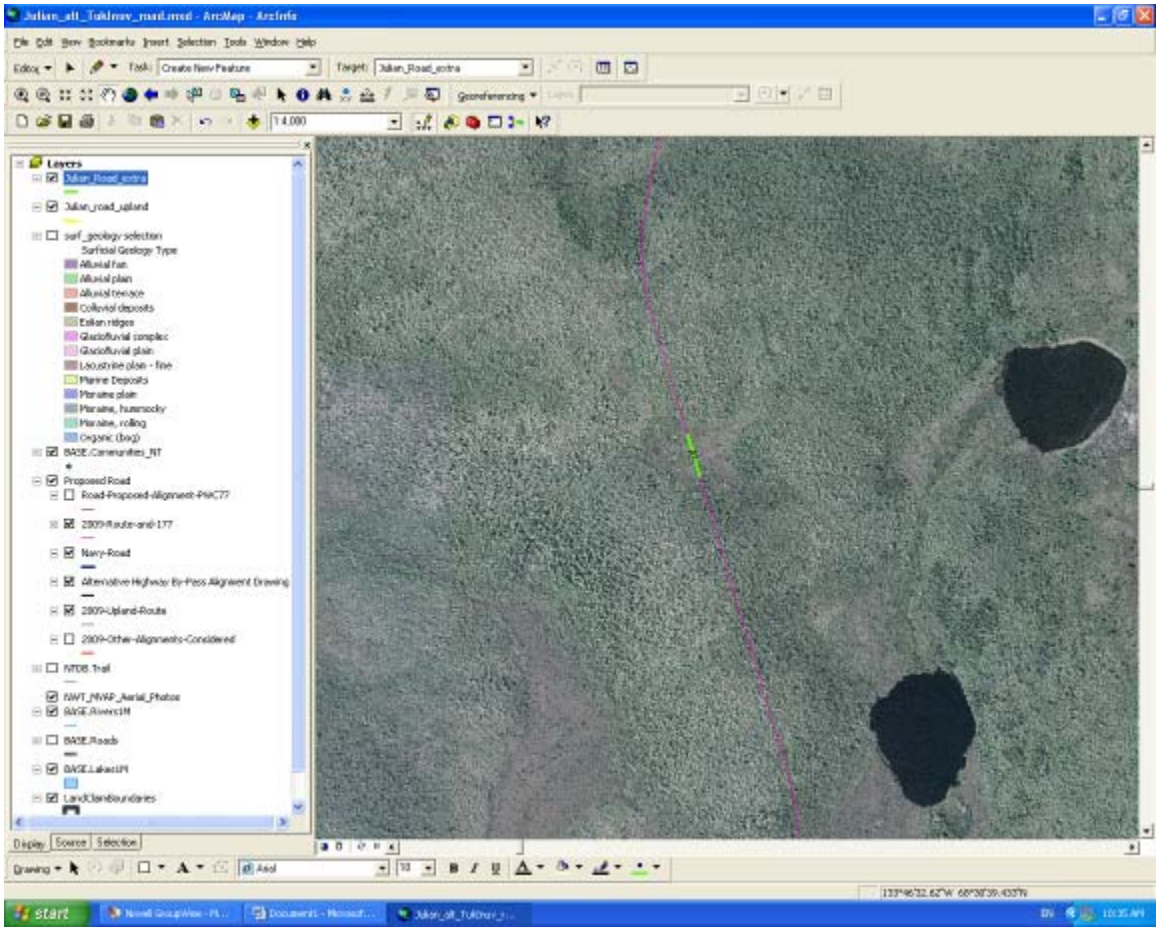
Site 71. Map 25



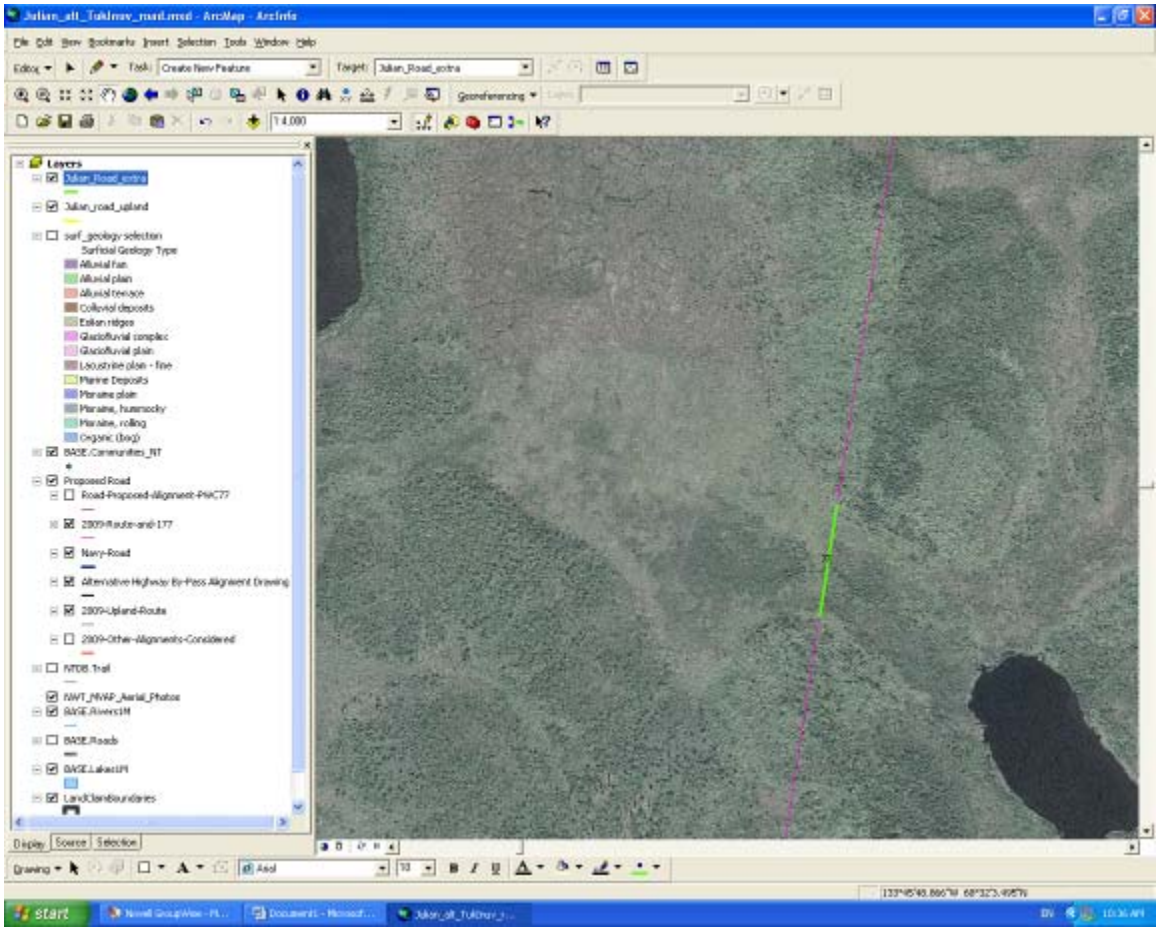
Sites 71, 72. Map 25



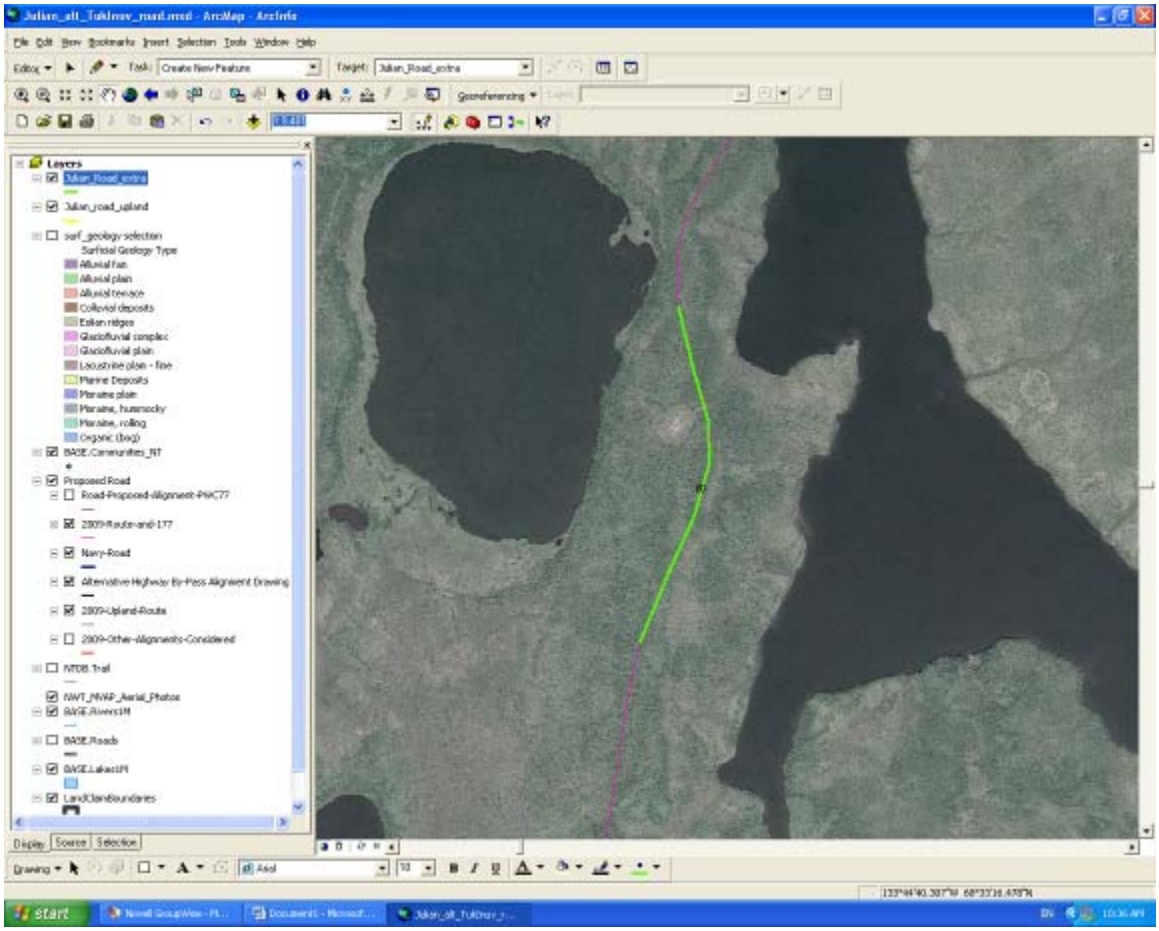
Sites 73, 74. Map 25



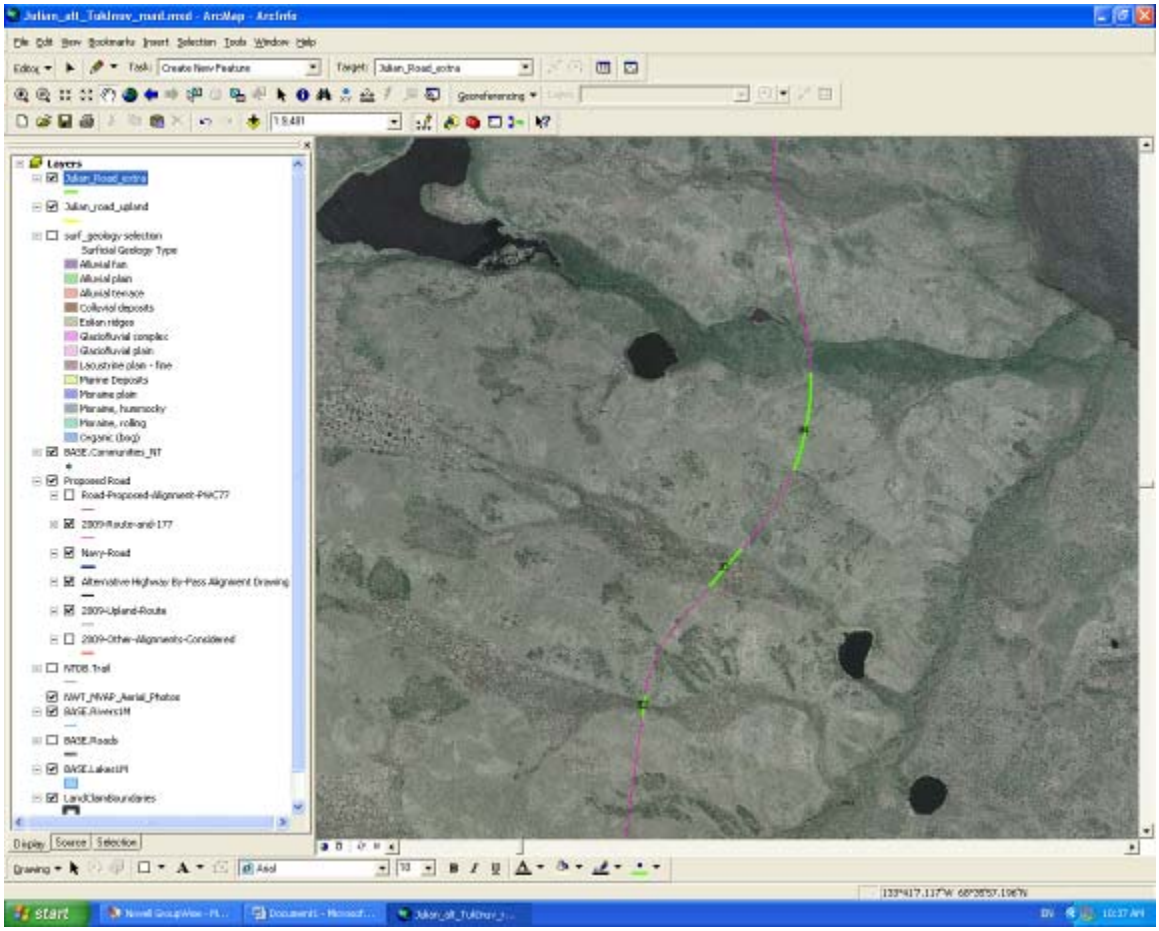
Site 75. Map 03



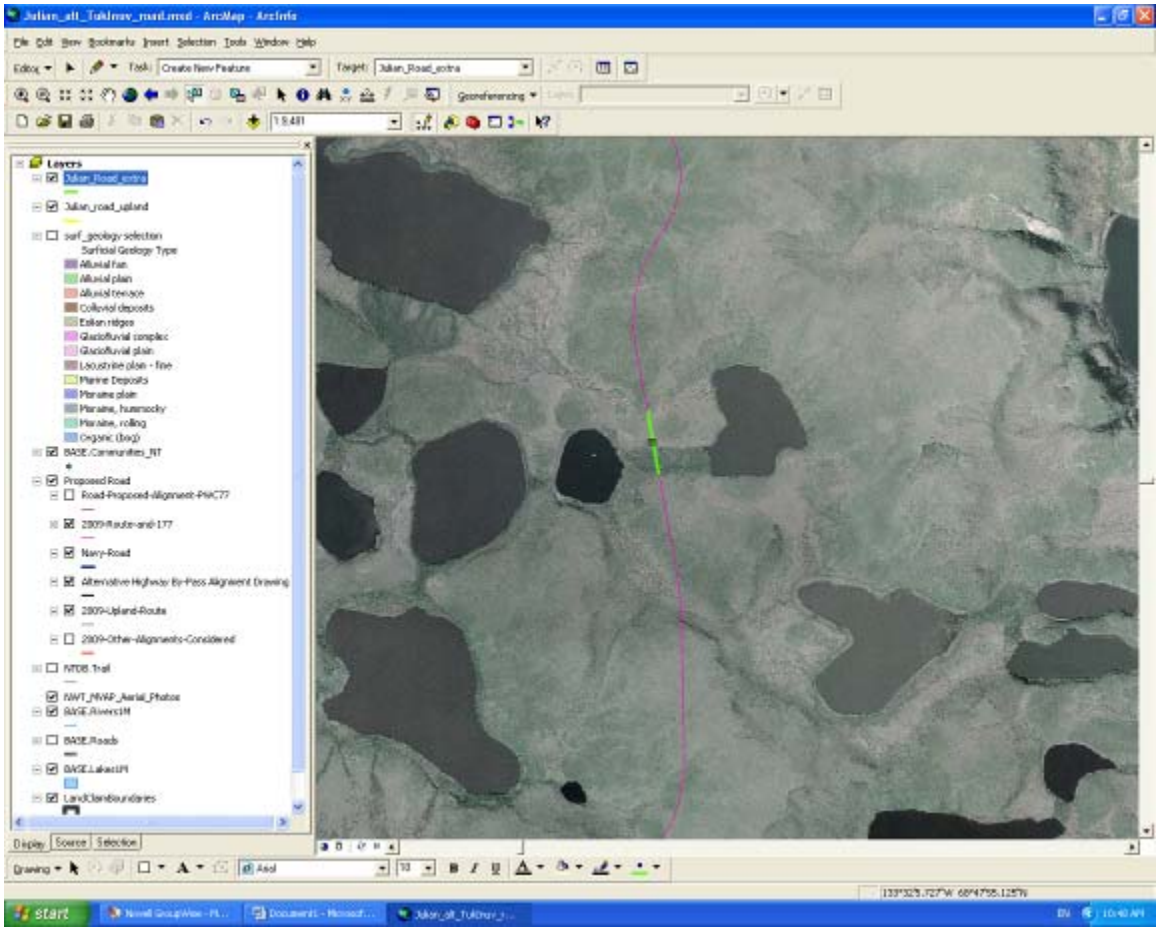
Site 77. Map 03



Site 80. Map 04

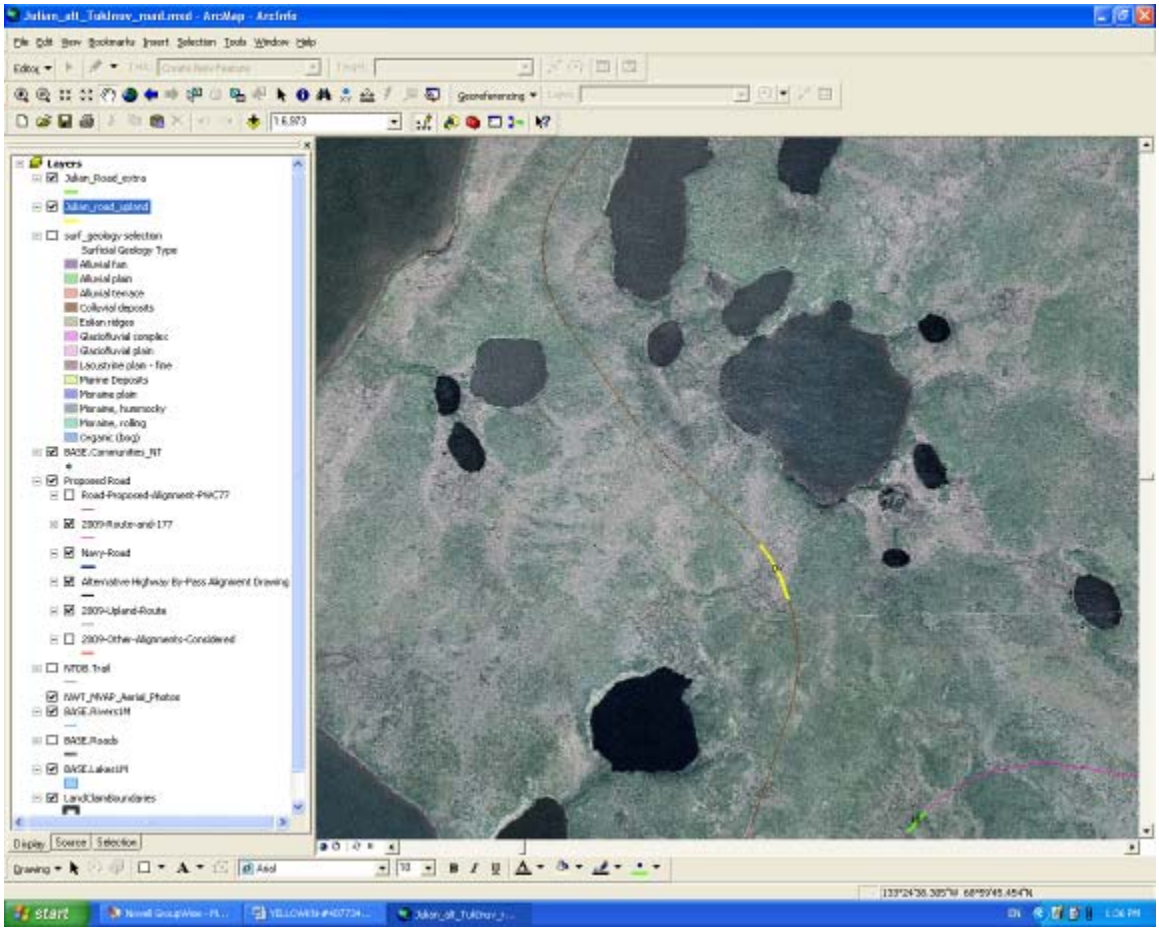


Sites 82, 83, 84. Map 05

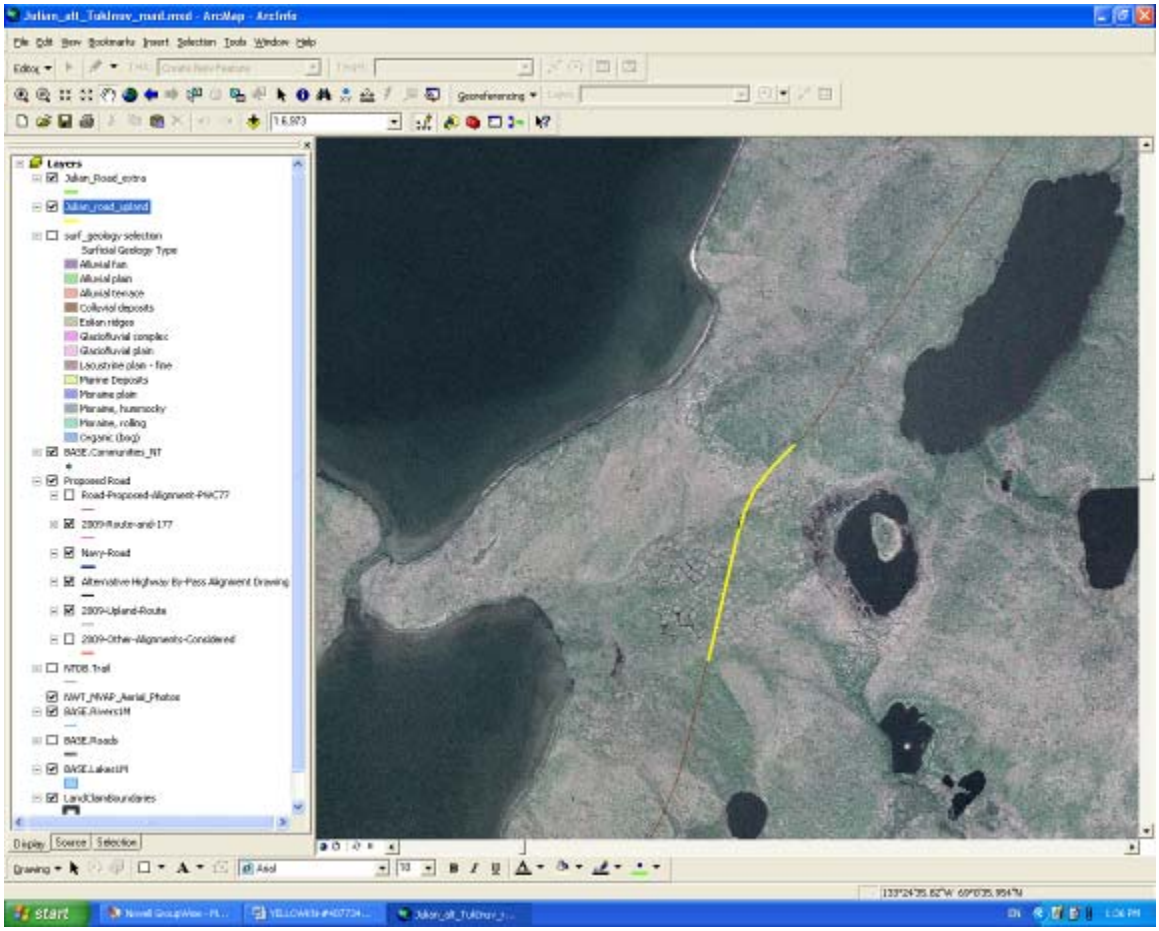


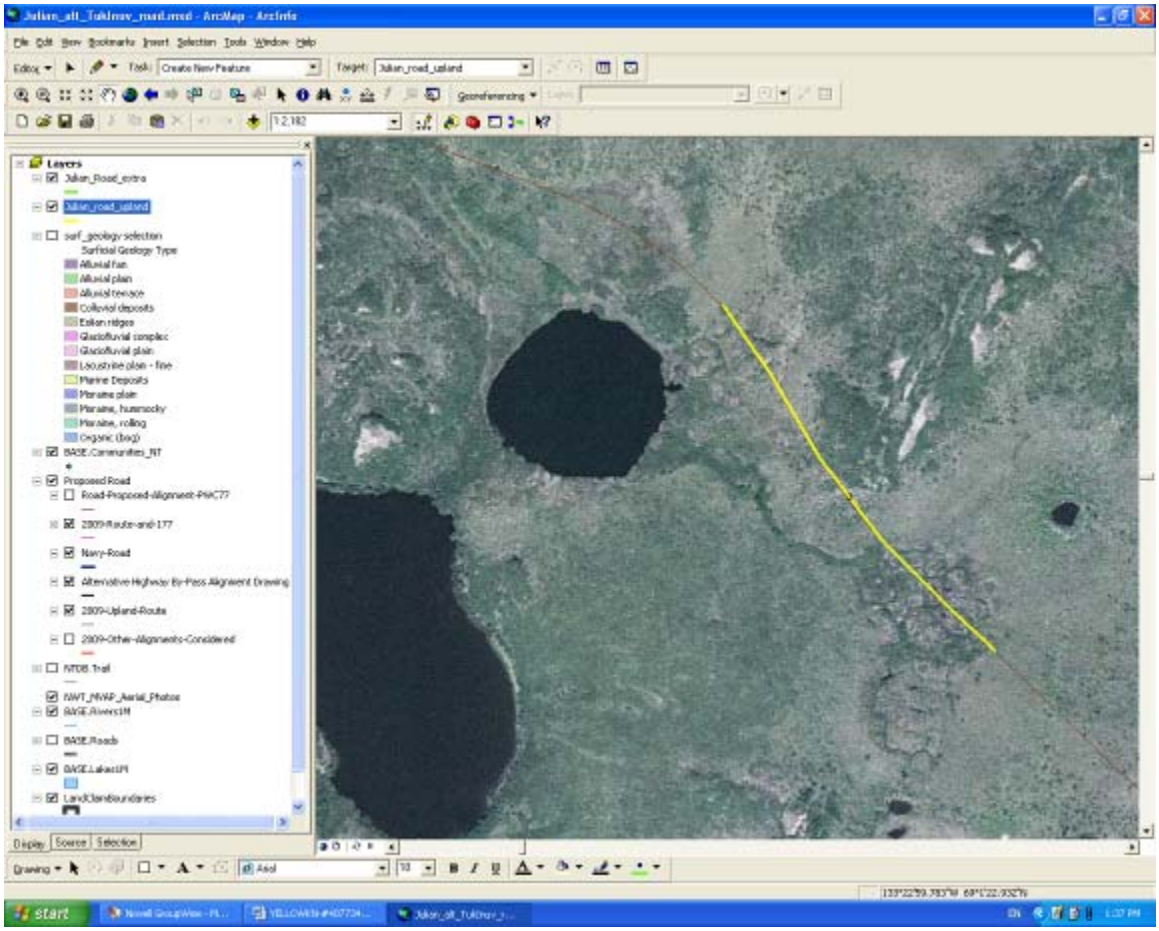
Site 89. Map 10

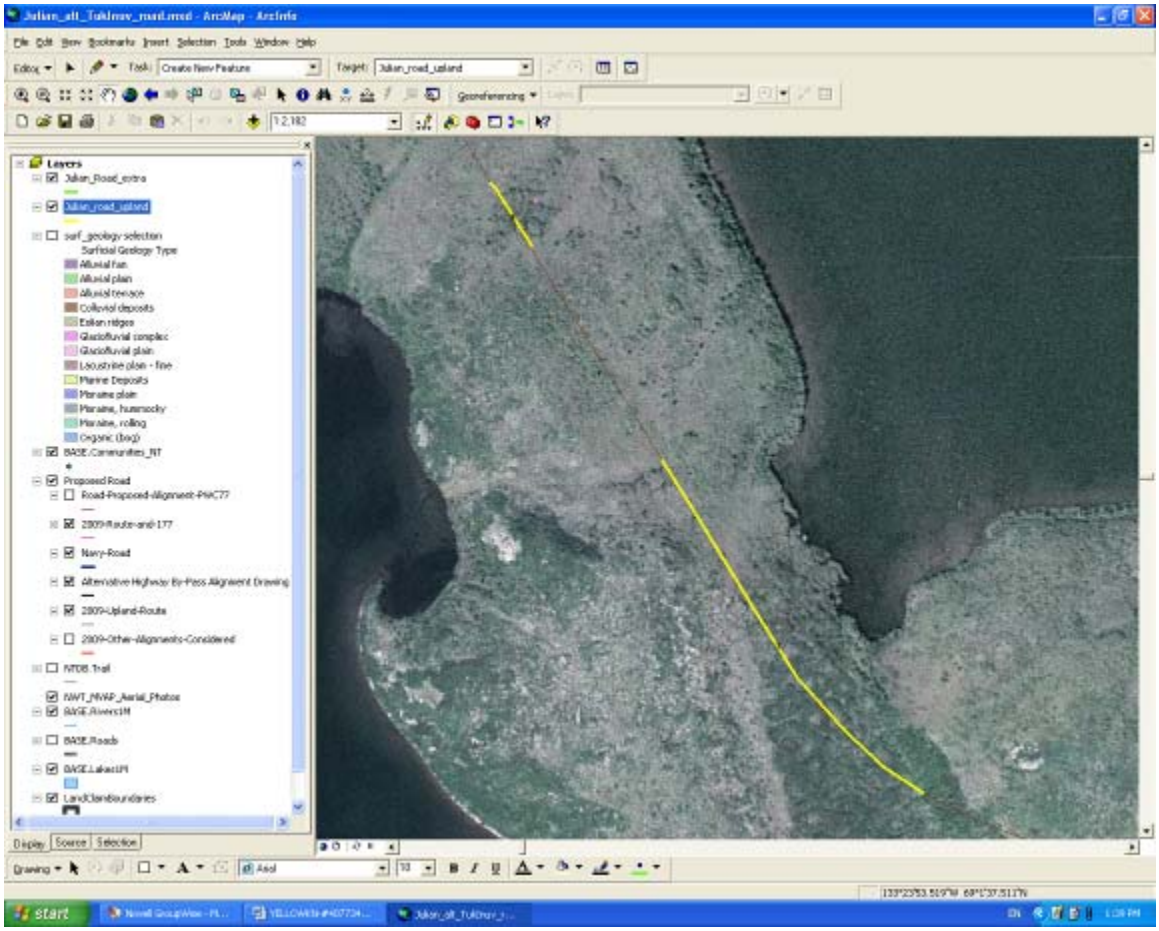
Upland Route Screen Shots



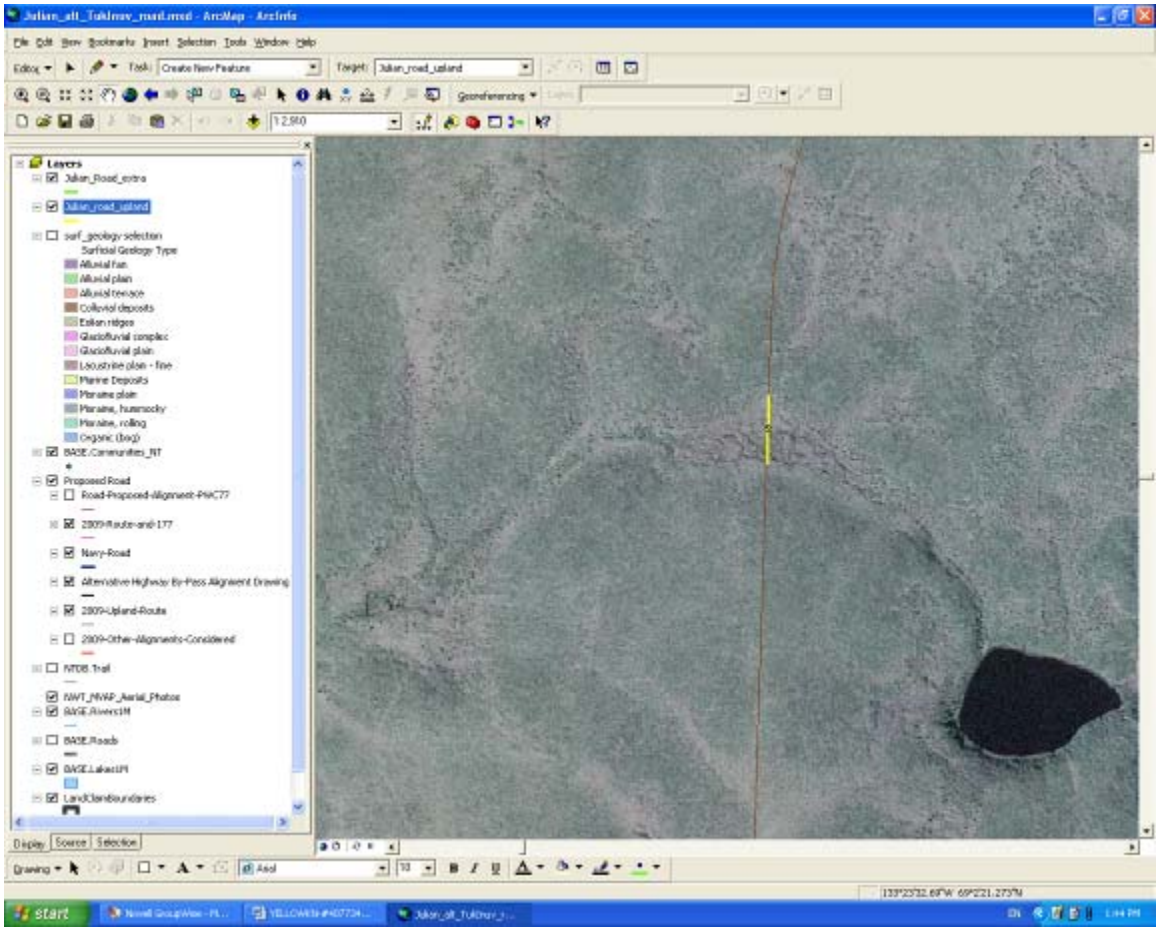
Site 0. Map 33

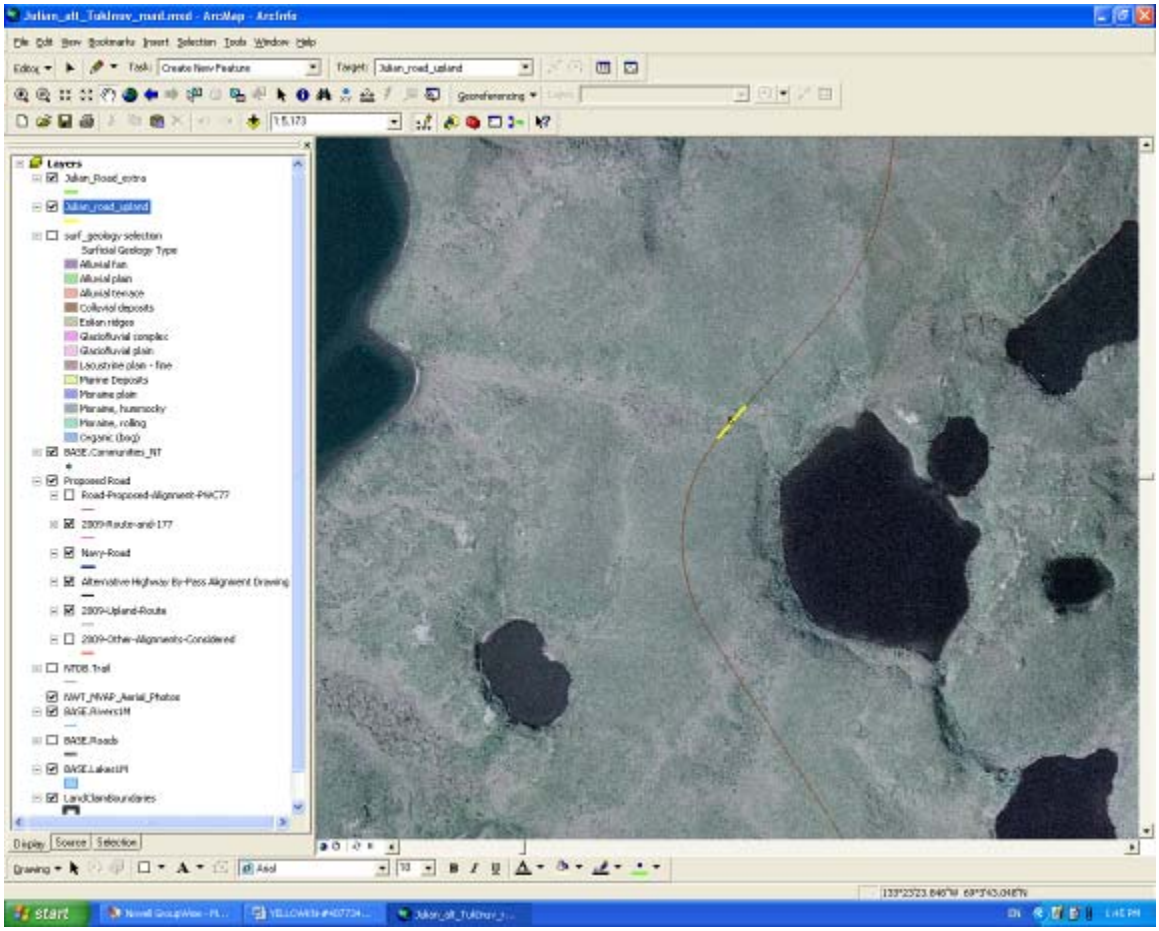

Layers
Julian_Road_extra
Julian_road_upland
surf_geology selection
Surficial Geology Type
Alluvial fan
Alluvial plain
Alluvial terrace
Colluvial deposits
Eskan ridges
Glaciofluvial complex
Glaciofluvial plain
Lacustrine plain - fine
Marine Deposits
Moraine plain
Moraine, hummocky
Moraine, rolling
Organic (bog)
BASE_Communities_NT
Proposed Road
Road-Proposed-Alignment-PHC77
2009-Route-and-177
Navy-Road
Alternative Highway By-Pass Alignment Drawing
2009-Upland-Route
2009-Other-Alignments-Considered
NTDB Trail
NWT_MVAP_Aerial_Photos
BASE_Rivers1M
BASE_Roads
BASE_Lakes1M
LandClaimBoundaries
Display
Source
Selection
Drawing
Arial
start
Site 1. Map 33

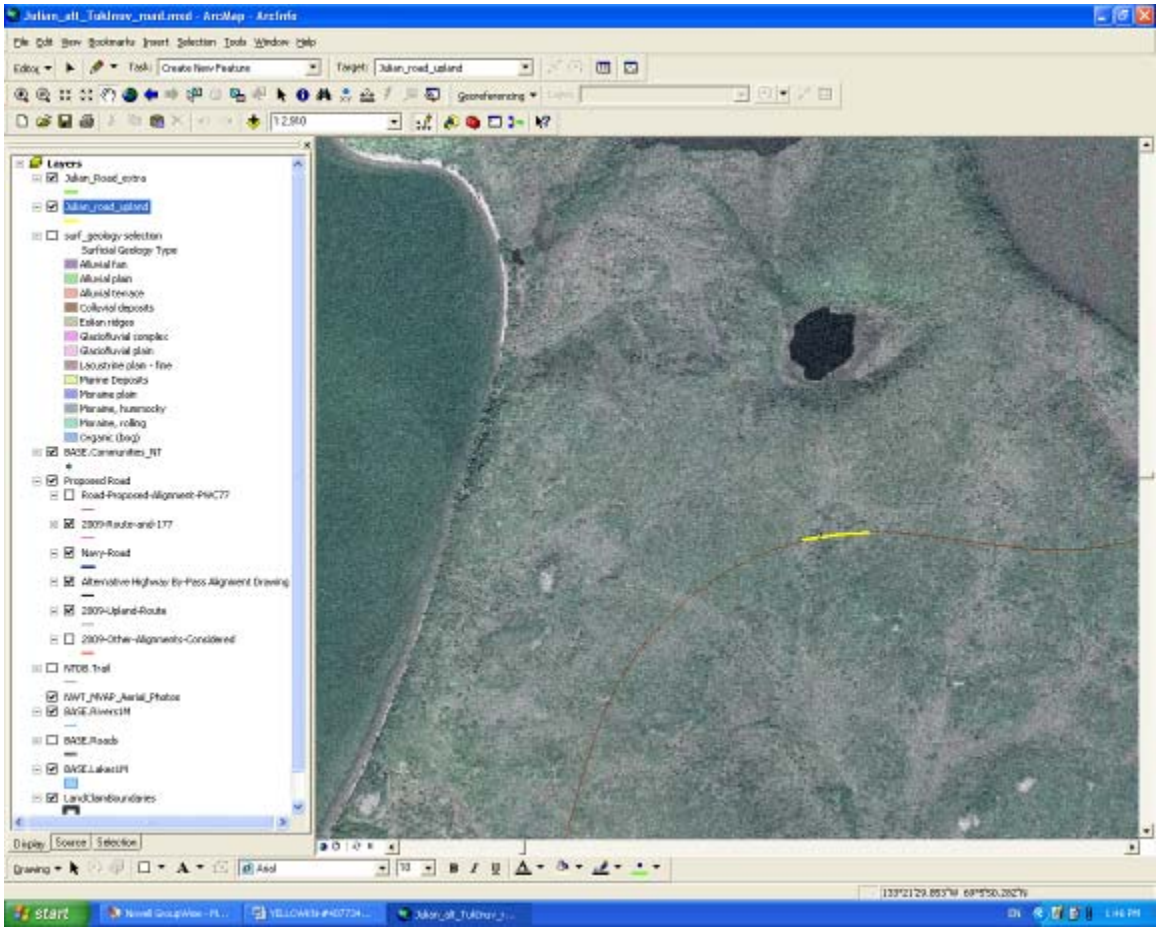

Layers
Julian_Road_extra
Julian_road_upland
surf_geology selection
Surficial Geology Type
Alluvial fan
Alluvial plain
Alluvial terrace
Colluvial deposits
Eolian ridges
Glaciofluvial complex
Glaciofluvial plain
Lacustrine plain - fine
Marine Deposits
Moraine plain
Moraine, hummocky
Moraine, rolling
Organic (bog)
BASE_Communities_NT
Proposed Road
Road-Proposed-Alignment-PHC77
2009-Route-and-177
Navy-Road
Alternative Highway By-Pass Alignment Drawing
2009-Upland-Route
2009-Other-Alignments-Considered
NTDB Trail
NWT_MVAP_Aerial_Photos
BASE_Rivers1M
BASE_Roads
BASE_Lakes1M
LandClaimBoundaries
Display
Source
Selection
Drawing
start
Site 2. Map 34

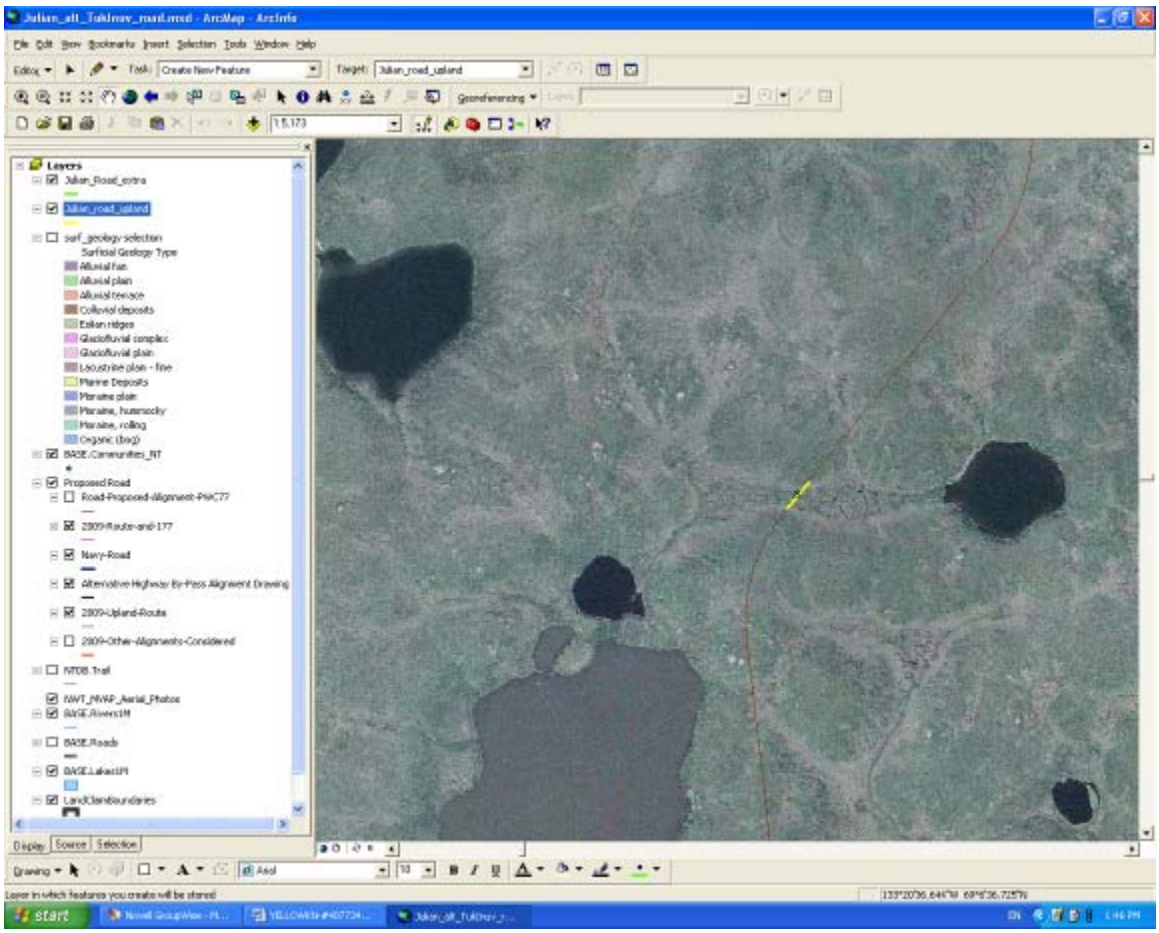


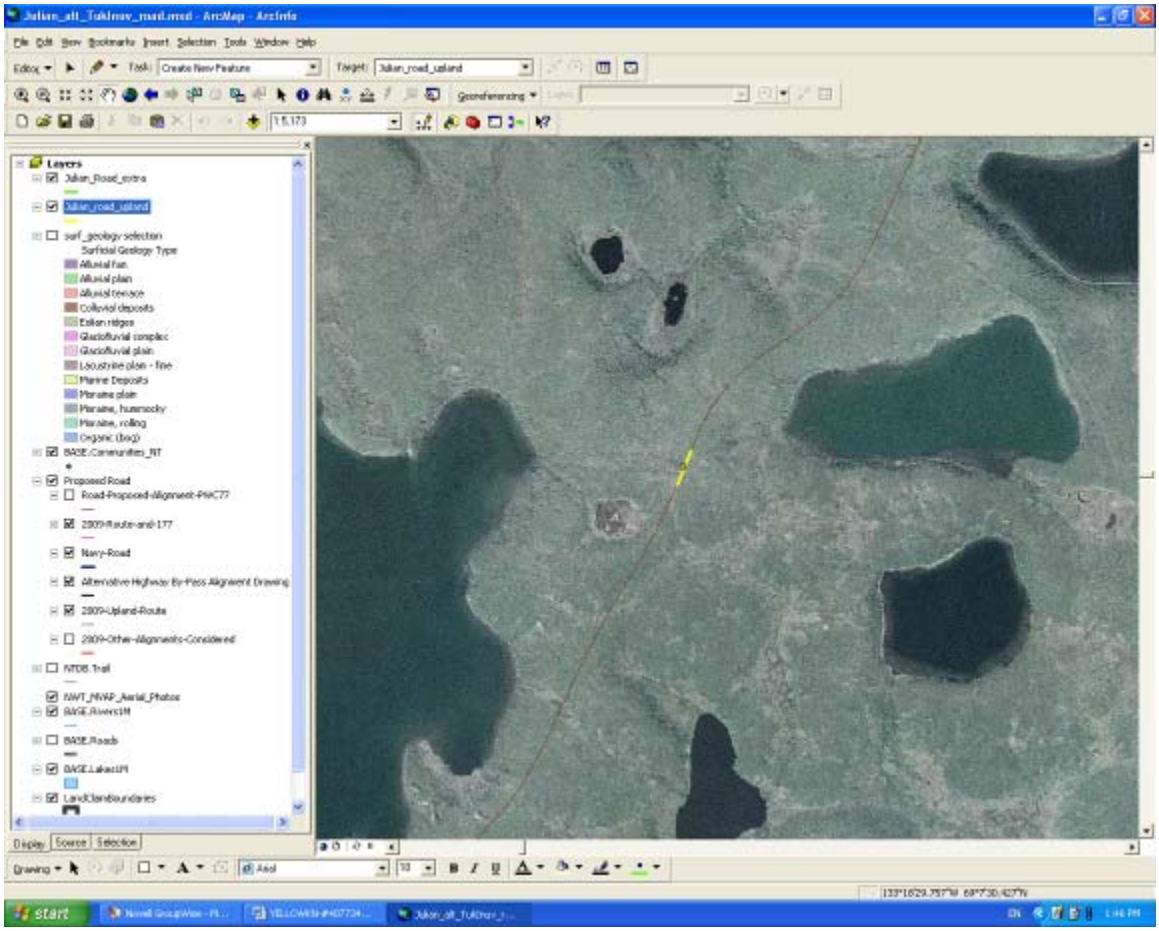
Sites 3, 4. Map 34

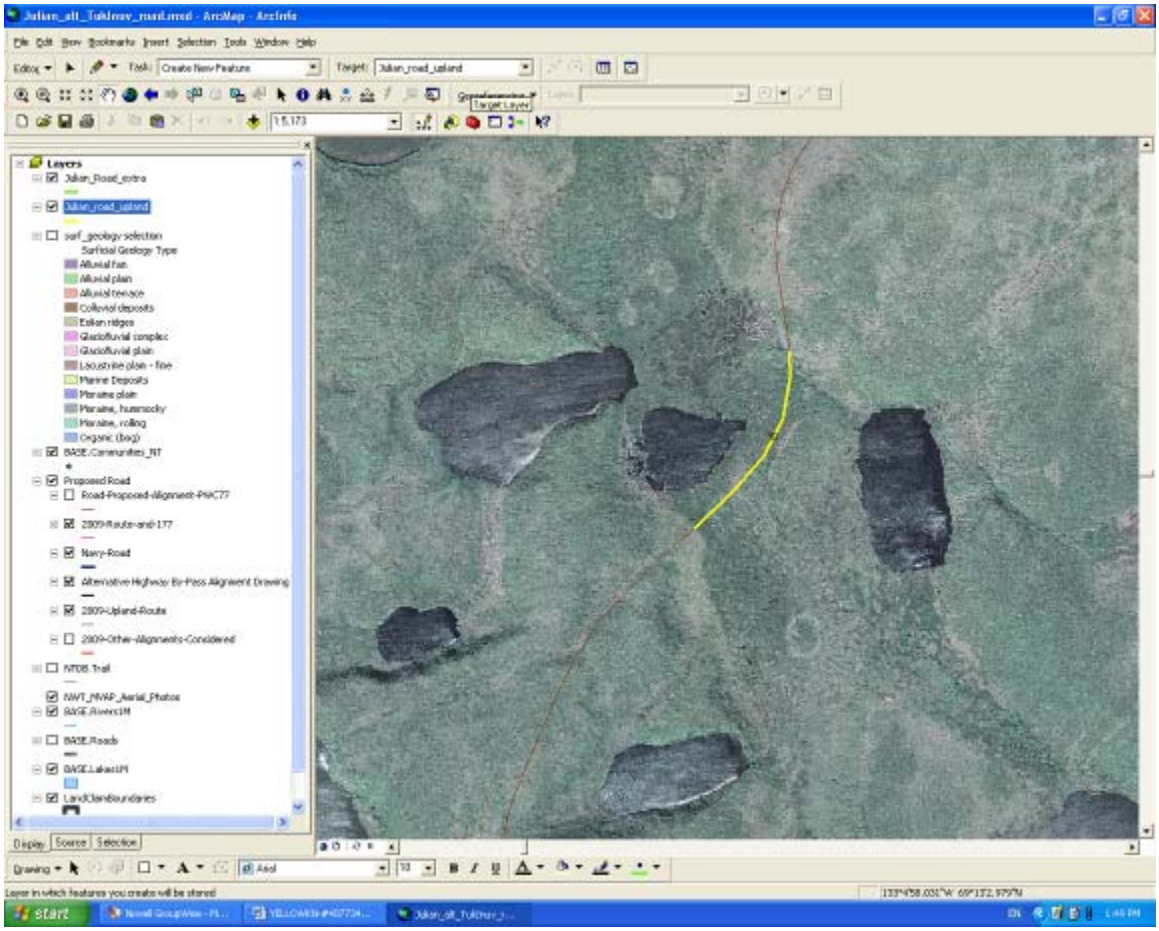

Layers
Julian_Road_extra
Julian_road_upland
surf_geology selection
Surficial Geology Type
Alluvial fan
Alluvial plain
Alluvial terrace
Colluvial deposits
Eskan ridges
Glaciofluvial complex
Glaciofluvial plain
Lacustrine plain - fine
Marine Deposits
Moraine plain
Moraine, hummocky
Moraine, rolling
Organic (bog)
BASE_Communities_NT
Proposed Road
Road-Proposed-Alignment-PHC77
2009-Route-and-177
Navy-Road
Alternative Highway By-Pass Alignment Drawing
2009-Upland-Route
2009-Other-Alignments-Considered
NTDB Trail
NWT_MVAP_Aerial_Photos
BASE_Rivers1M
BASE_Roads
BASE_Lakes1M
LandClaimBoundaries
Display
Source
Selection
Drawing
Arial
start
Site 5. Map 34


Layers
Julian_Road_extra
Julian_road_upland
surf_geology selection
Surficial Geology Type
Alluvial fan
Alluvial plain
Alluvial terrace
Colluvial deposits
Eskar ridges
Glaciofluvial complex
Glaciofluvial plain
Lacustrine plain - fine
Marine Deposits
Moraine plain
Moraine, hummocky
Moraine, rolling
Organic (bog)
BASE_Communities_NT
Proposed Road
Road-Proposed-Alignment-PWC77
2809-Route-and-177
Navy-Road
Alternative Highway By-Pass Alignment Drawing
2809-Upland-Route
2809-Other-Alignments-Considered
NTDB Trail
NWT_MVAP_Aerial_Photos
BASE_Rivers1M
BASE_Roads
BASE_Lakes1M
LandClaimBoundaries
Display
Source
Selection
Drawing
start
Site 6. Map 34

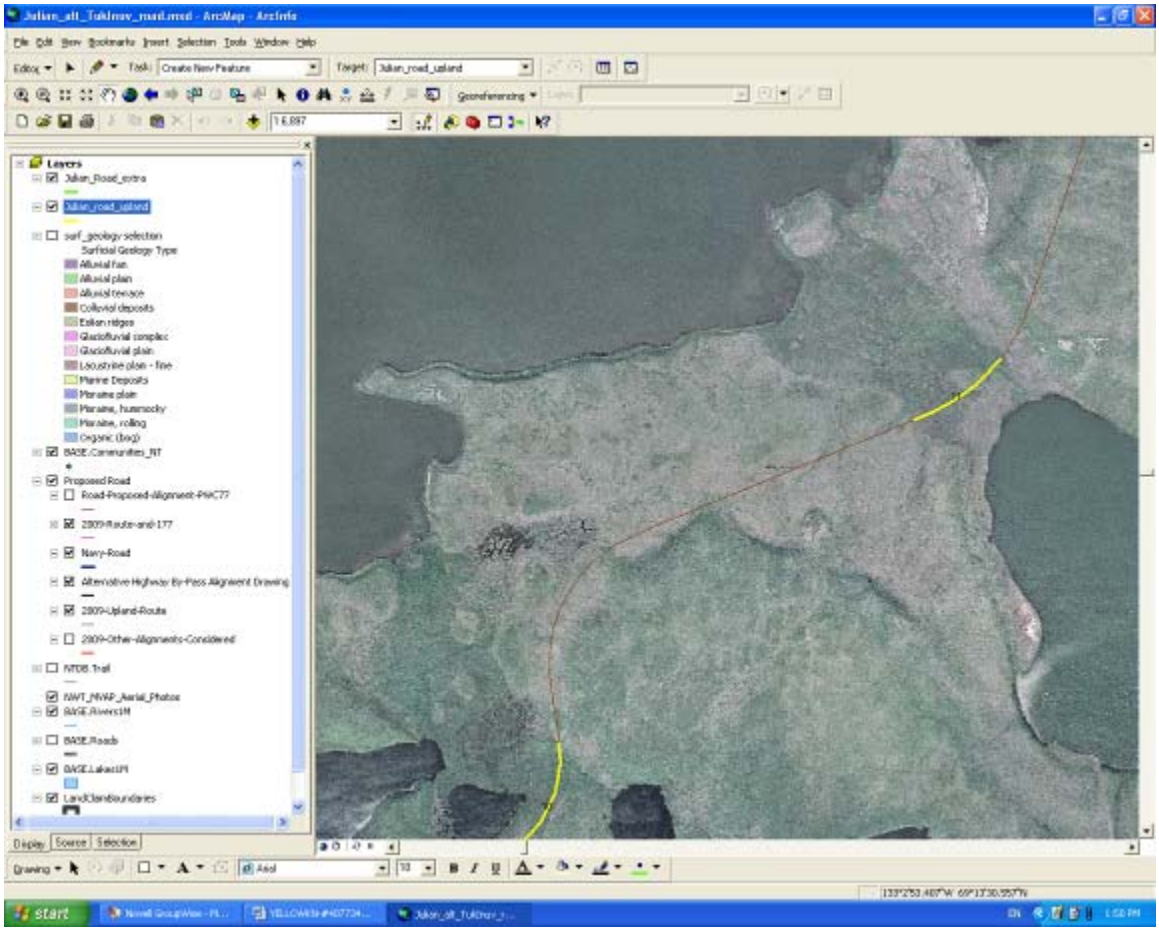

Layers
Julian_Road_extra
Julian_road_upland
surf_geology selection
Surficial Geology Type
Alluvial fan
Alluvial plain
Alluvial terrace
Colluvial deposits
Eskan ridges
Glaciofluvial complex
Glaciofluvial plain
Lacustrine plain - fine
Marine Deposits
Moraine plain
Moraine, hummocky
Moraine, rolling
Organic (bog)
BASE_Communities_NT
Proposed Road
Road-Proposed-Alignment-PWC77
2009-Route-and-177
Navy-Road
Alternative Highway By-Pass Alignment Drawing
2009-Upland-Route
2009-Other-Alignments-Considered
NTDB Trail
NWT_MVAP_Aerial_Photos
BASE_Rivers1M
BASE_Roads
BASE_Lakes1M
LandClaimBoundaries
Display
Source
Selection
Drawing
Arial
start
Site 7. Map 35


Layers
Julian_Road_extra
Julian_road_upland
surf_geology selection
Surficial Geology Type
Alluvial fan
Alluvial plain
Alluvial terrace
Colluvial deposits
Eolian ridges
Glaciofluvial complex
Glaciofluvial plain
Lacustrine plain - fine
Marine Deposits
Moraine plain
Moraine, hummocky
Moraine, rolling
Organic (bog)
BASE_Communities_NT
Proposed Road
Road-Proposed-Alignment-PHC77
2009-Route-and-177
Navy-Road
Alternative Highway By-Pass Alignment Drawing
2009-Upland-Route
2009-Other-Alignments-Considered
NTDB Trail
NWT_MVAP_Aerial_Photos
BASE_Rivers1M
BASE_Roads
BASE_Lakes1M
LandClaimBoundaries
Display
Source
Selection
Drawing
Arial
start
Site 8. Map 35

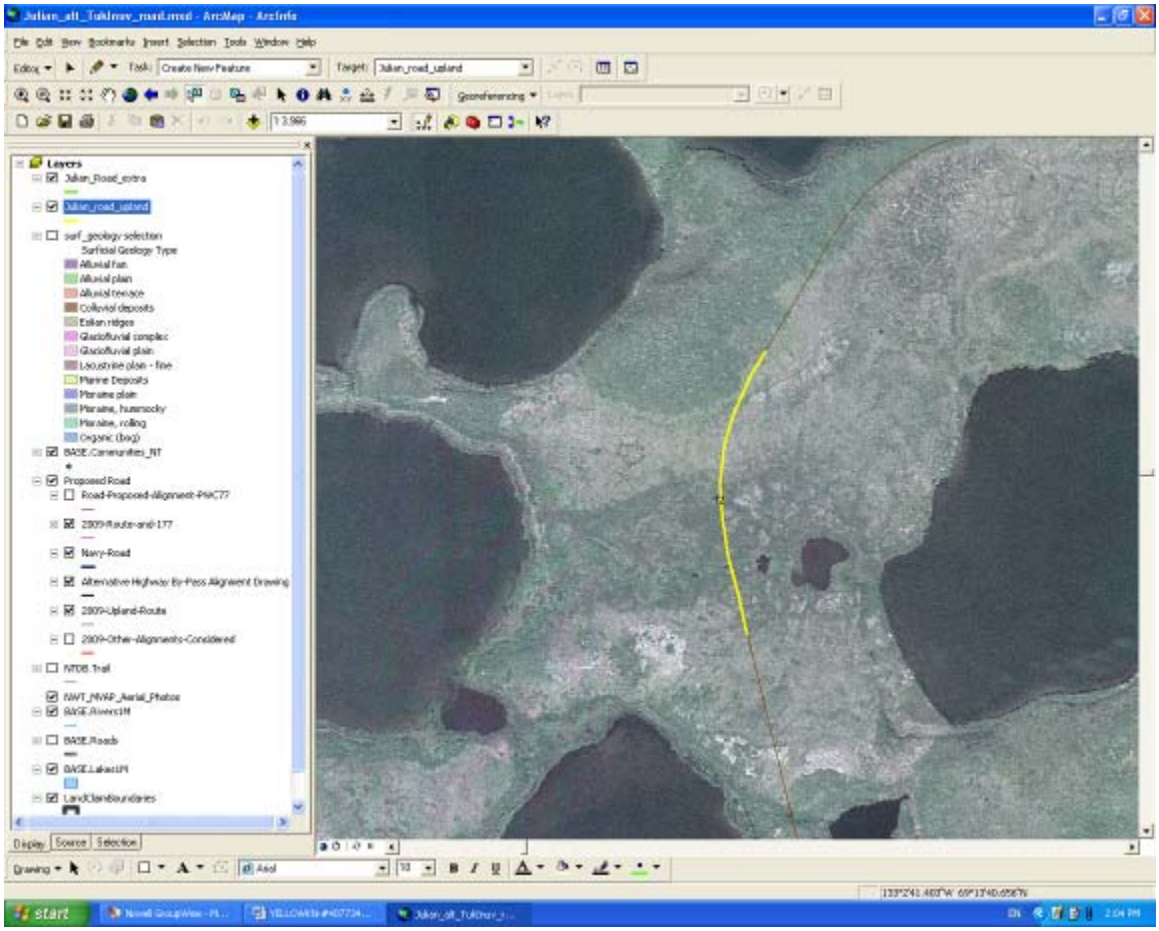

Layers
Julian_Road_extra
Julian_road_upland
surf_geology selection
Surficial Geology Type
Alluvial fan
Alluvial plain
Alluvial terrace
Colluvial deposits
Eskan ridges
Glaciofluvial complex
Glaciofluvial plain
Lacustrine plain - fine
Marine Deposits
Moraine plain
Moraine, hummocky
Moraine, rolling
Organic (bog)
BASE_Communities_NT
Proposed Road
Road-Proposed-Alignment-PHC77
2009-Route-and-177
Navy-Road
Alternative Highway By-Pass Alignment Drawing
2009-Upland-Route
2009-Other-Alignments-Considered
NTDB Trail
NWT_MVAP_Aerial_Photos
BASE_Rivers1M
BASE_Roads
BASE_Lakes1M
LandClaimBoundaries
Display
Source
Selection
Drawing
Arial
start
Site 9. Map 36



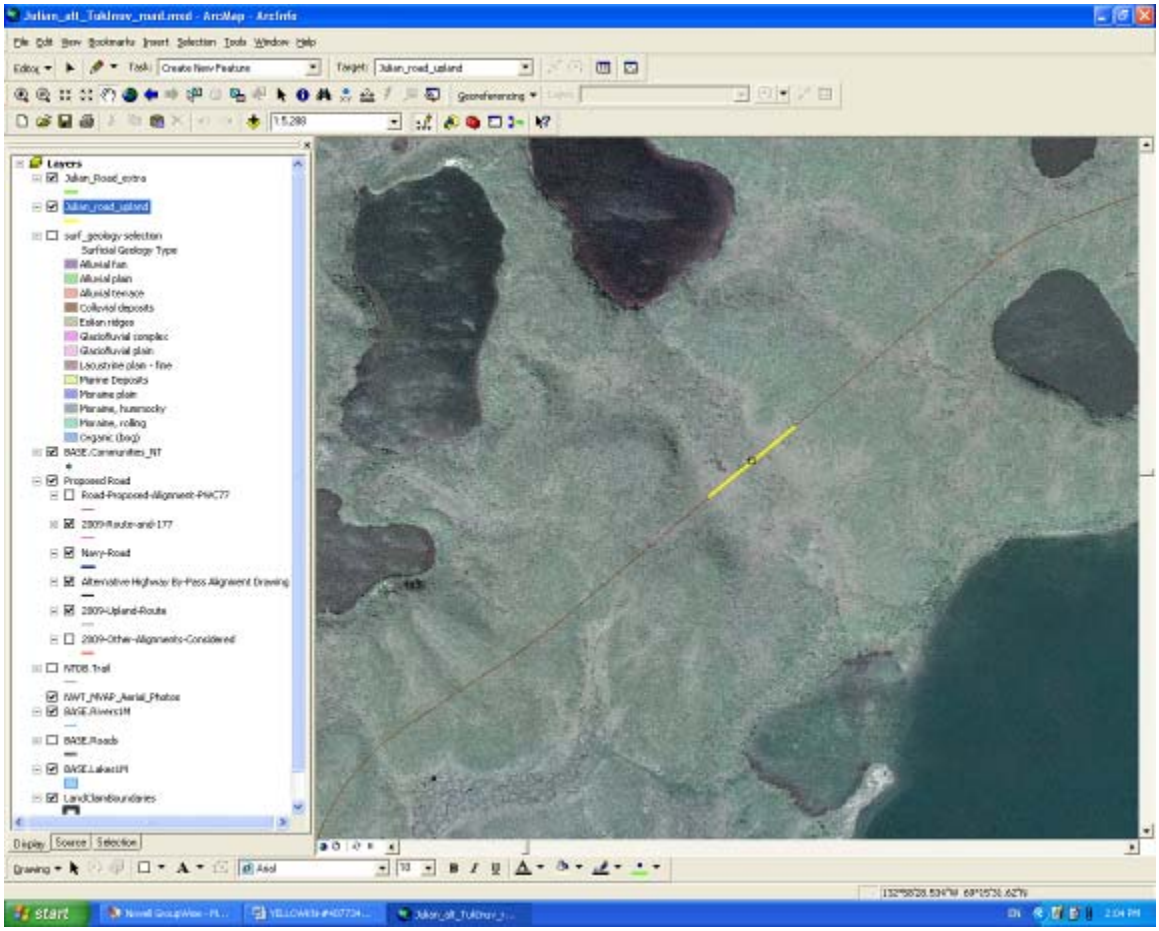
Site 10. Map 38



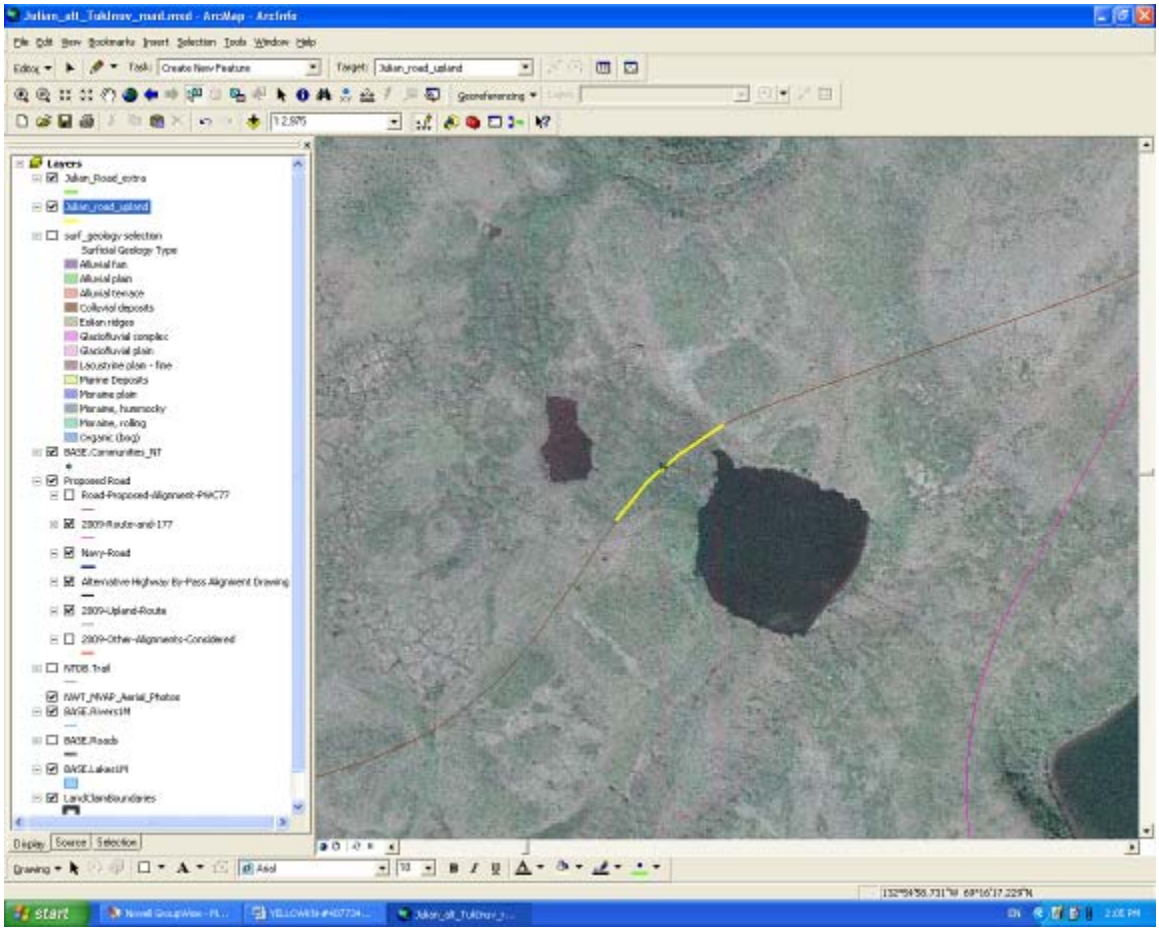
Sites 10, 11. Map 38



Site 12. Map 38



Site 13. Map 39



Site 14. Map 22