US Army Corps
of Engineers
Alaska District

RESURFACE LAURANCE ROAD

NORTH POLE, ALASKA

100%, 13 OCT 06

FTW

PN

INV. NO. W911KB-07-R-0002

STATE OF ALASKA
49TH
Micah K. Schoming
Micah K. Schoming
No. CE 10568
10-17-06
REGISTERED PROFESSIONAL ENGINEER

Drawing m:\03003.010 – L. Road\Civil_ACAD\1_Cover.dwg last saved on 10/12/2006 4:41 PM was plotted by RobC on 10/12/2006 7:12 PM

RESURFACE LAURANCE ROAD

NORTH POLE, ALASKA

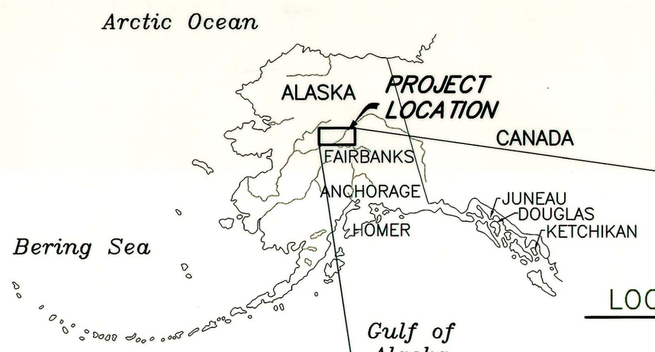
100% - FTW, 13 OCT 06
INV. NO. W911KB-07-R-0002
ALASKA DISTRICT U.S. ARMY CORPS OF ENGINEERS

SCHEDULE OF DRAWINGS

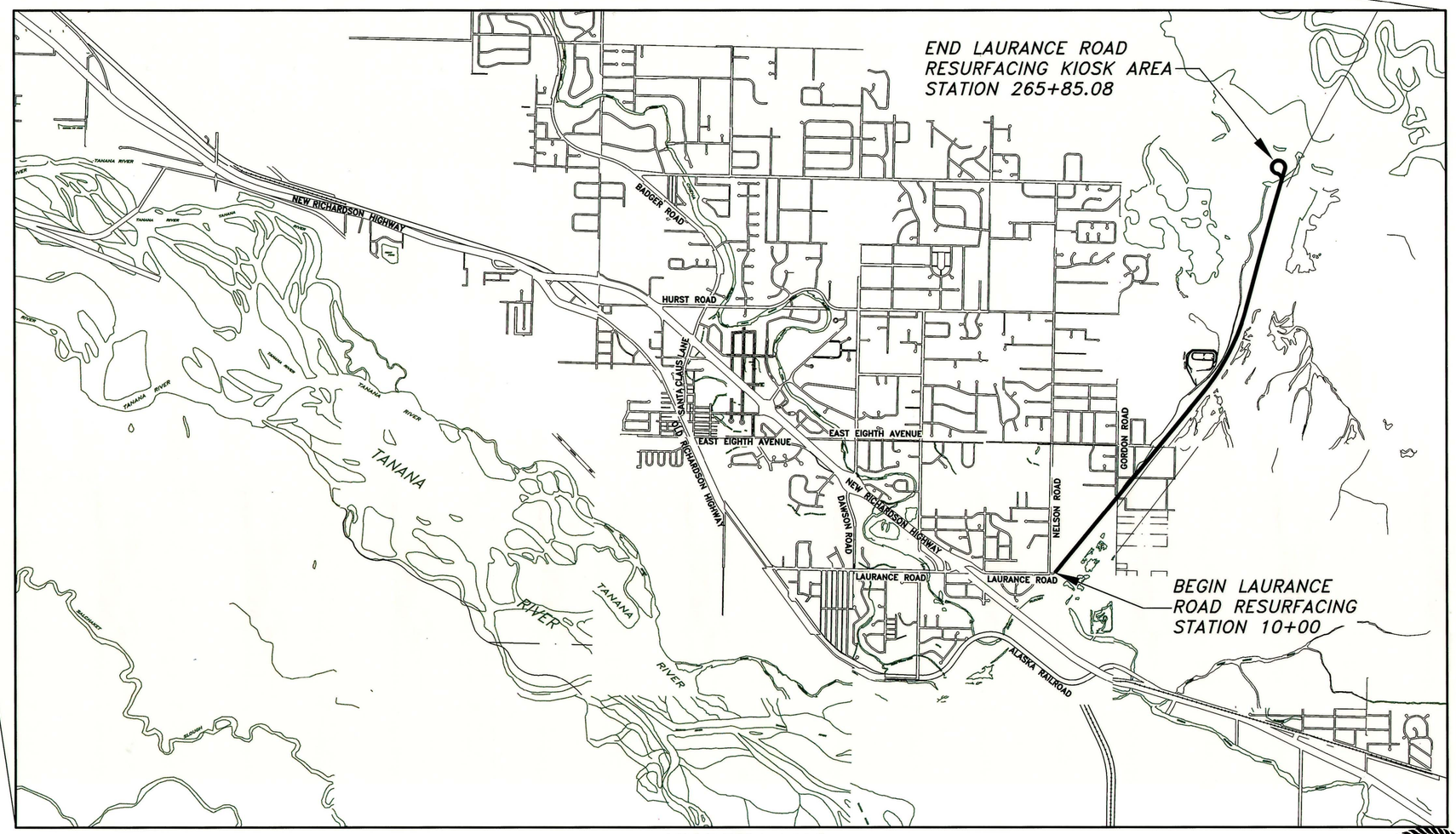
SHT	REF. NUM.	SHEET TITLE
1	G1.1	COVER SHEET
2	G2.1	INDEX SHEET
3	G2.2	VICINITY MAP
4	G2.3	GENERAL NOTES & LEGEND
5	V1.1	SURVEY CONTROL
6	C1.0	PROJECT OVERVIEW
7	C1.1	TYPICAL ROAD SECTIONS
8	C1.2	TYPICAL ROAD SECTIONS
9	C1.3	CIVIL DETAILS
10	C1.4	OPTIONAL CIVIL DETAILS
11	C1.5	OPTIONAL CIVIL DETAILS
12	C1.6	OPTION 2
13	C1.7	OPTION 3
14	C1.8	OPTION 4
15	C1.9	OPTION 5
16	C2.1	SCHEDULE
17	C3.1	PLAN AND PROFILE
18	C3.2	PLAN AND PROFILE
19	C3.3	PLAN AND PROFILE
20	C3.4	PLAN AND PROFILE
21	C3.5	PLAN AND PROFILE
22	C4.1	SIGNING AND STRIPING
23	C4.2	SIGNING AND STRIPING
24	C4.3	SIGNING AND STRIPING
25	C4.4	SIGNING AND STRIPING
26	C4.5	SIGNING AND STRIPING
27	C4.6	SIGNING AND STRIPING
28	C4.7	SIGNING AND STRIPING

STATE OF ALASKA
49TH
Micah Schoming
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

Drawing m:\03003.010 - L. Road\Civil_ACAD\2_Index.dwg last saved on 10/12/2006 4:17 PM was plotted by RobC on 10/12/2006 7:13 PM



LOCATION MAP
N.T.S.



VICINITY MAP

0.5 0 0.5 1
SCALE IN MILES

TNH

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO.
CONTRACTOR
CITY STATE
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

Sym	Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File:
Drawing #:
Section
Branch

Designed: MKS
Drawn: REH
Reviewed: MKS
Chief:
Submitted:
Chief:

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYON RYGAARD MUNSL INC.
P.O. BOX 240700, ANCHORAGE, AK 99524-0700
6100 DOWLING BLVD., ANCHORAGE, AK 99507-3650
(907) 349-3650 FAX (907) 349-3651

NORTH POLE, ALASKA

LAURANCE ROAD IMPROVEMENTS

VICINITY MAP

STATE OF ALASKA 49TH
Micah K. Schoming
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

Reference number:
G2.2
Sheet 3 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\3_Vic Map.dwg last saved on 10/12/2006 4:14 PM was plotted by RobC on 10/12/2006 7:13 PM

GENERAL NOTES

1. WORK THAT MAY AFFECT EXISTING PARK OPERATIONS MUST BE COORDINATED AND SCHEDULED WITH FAIRBANKS NORTH STAR BOROUGH OR COE PERSONNEL A MINIMUM OF 7 DAYS IN ADVANCE.
2. AT LEAST ONE LANE OF ALL ROADWAYS SHALL BE KEPT CLEAR AND ACCESSIBLE AT ALL TIMES, UNLESS APPROVED OTHERWISE BY FAIRBANKS NORTH STAR BOROUGH AND COE. IF BLOCKAGE IS APPROVED, NOTIFY THE FIRE DEPARTMENT HAVING JURISDICTION A MINIMUM OF 24 HOURS IN ADVANCE OF WORK.
3. THE CONTRACTOR SHALL FOLLOW ALL HOURS OF OPERATION AND REGULATIONS FOR NOISE AND DUST CONTROL AS DICTATED BY COE SPECS AND FNSB.
4. EXISTING GROUND CONTOURS ARE BASED ON SURVEYS COMPLETED IN 2005 AND 2006 BY KALEN AND ASSOCIATES.
5. CONTRACTOR SHALL INVESTIGATE POTENTIAL CONFLICTS WITH OTHER UTILITIES PRIOR TO CONSTRUCTION.
6. ALL WASTE MATERIAL SHALL BE DISPOSED OF PROPERLY BY THE CONTRACTOR, AT THE CONTRACTOR'S EXPENSE.
7. REMOVAL AND REUSE OF SITE FURNISHING IS AT THE CONTRACTOR'S CONVENIENCE. HE SHALL NOTIFY THE OWNER'S REPRESENTATIVE IN WRITING 5 DAYS PRIOR TO REINSTALLATION FOR EVALUATION AND ASSESSMENT OF REUSE ITEMS.
8. THIS PROJECT ADOPTS ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES STANDARD DETAILS WHERE ADDITIONAL INFORMATION IS NEEDED

ABBREVIATIONS LIST

AC	ASPHALT CONCRETE
ADOT&PF	ALASKA DEPT. OF TRANSPORTATION & PUBLIC FACILITIES
AK	ALASKA
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
BOP	BOTTOM OF PIPE
C&G	CURB AND GUTTER
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
COE	US ARMY CORPS OF ENGINEERS
CONC	CONCRETE
CPEP	CORRUGATED POLYETHYLENE PIPE
CY	CUBIC YARD
DBL	DOUBLE
DEMO	DEMOLISH
DIA	DIAMETER
E	EASTING
ELV	ELEVATION
EOP	EDGE OF PAVEMENT
EXIST	EXISTING
FL	FLOW LINE OF GUTTER
FT	FOOT/FEET
FH	FIRE HYDRANT
FNSB	FAIRBANKS NORTH STAR BOROUGH
GL	GUTTER LIP
HP	HIGH POINT
L	LENGTH
LP	LOW POINT
LT	LEFT
LF	LINEAR FEET
ME	MATCH EXISTING
N	NORTHING
NCHRP	NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM
NE	NORTHEAST
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
NW	NORTHWEST
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PRC	POINT OF REVERSE CURVATURE
PS	POINT OF SWITCH
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
R	RADIUS
RD	ROAD
RRP6	SURVEY CONTROL
RT	RIGHT
SCH	SCHEDULE
SE	SOUTHEAST
STA	STATION
TBC	TOP BACK OF CURB
TBD	TO BE DETERMINED
TBM	TEMPORARY BENCH MARK
TBC	TOP BACK OF CURB
U/G	UNDERGROUND
UON	UNLESS OTHERWISE NOTED ON PLANS

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		ROADS (PAVED)
		SIGN
FH		FIRE HYDRANT
		UTILITY POLE
		GUY
		LIGHT POLE
		STRUCTURES
		PROPERTY LINE
		GUARDRAIL
MW		MONITORING WELL
		BOLLARD
		FOUND MONUMENT
		CULVERT
		CONTOURS
		ASPHALT (SECTION)
		PULVERISED ASPHALT AND BASE COURSE MATERIAL

EXISTING	PROPOSED	DESCRIPTION
		TEST PIT
		UTILITY PEDESTAL
		UTILITY METER
		DRAINAGE DIRECTION
		DRAINAGE/DITCH SWALE
		TRAFFIC DIRECTION
		SIDEWALK
		GRAVEL SHOULDER
		PAINTED ACCESSIBLE SYMBOL
CP#		RECOVERED CENTERLINE MONUMENT
		2' VERTICAL CMP OVER 1' STEEL PIPE
		1' VERTICAL STEEL PIPE ON CONCRETE
		PIPE 2.5"–3.5" STEEL PIPE
		6"X6" STEEL POST
	A	HORIZONTAL CONTROL POINT

BEFORE YOU DIG
CALL FOR FREE
UNDERGROUND
LOCATION

Locate Call Center of Alaska
Anchorage Area.....278–3121
Statewide.....800–478–3121
who will notify subscribed utilities only.
Other utilities need to be contacted individually.

STATE OF ALASKA 49TH
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____
CONTRACTOR ____
CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR: ____ RESIDENT ENGINEER

Sym.	Action	Description	Date	Appvd

Designed: MKS
Drawn: REH
Reviewed: MKS
Chief, Section: ____
Submitted:
Chief, Branch: ____
Date: 10/13/06
Dwg. Scale: AS NOTED
Plot. Scale: HALF SIZE
File:
Drawing #:

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
911 W. 8TH AVE., STE. 300
ANCHORAGE, ALASKA 99501
TEL (907) 276-1757 FAX (907) 276-7569

NORTH POLE, ALASKA
LAURANCE ROAD IMPROVEMENTS
GENERAL NOTES & LEGEND

Reference number:
G2.3
Sheet 4 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\4_General Notes.dwg last saved on 10/12/2006 1:52 PM was plotted by RobC on 10/12/2006 7:14 PM

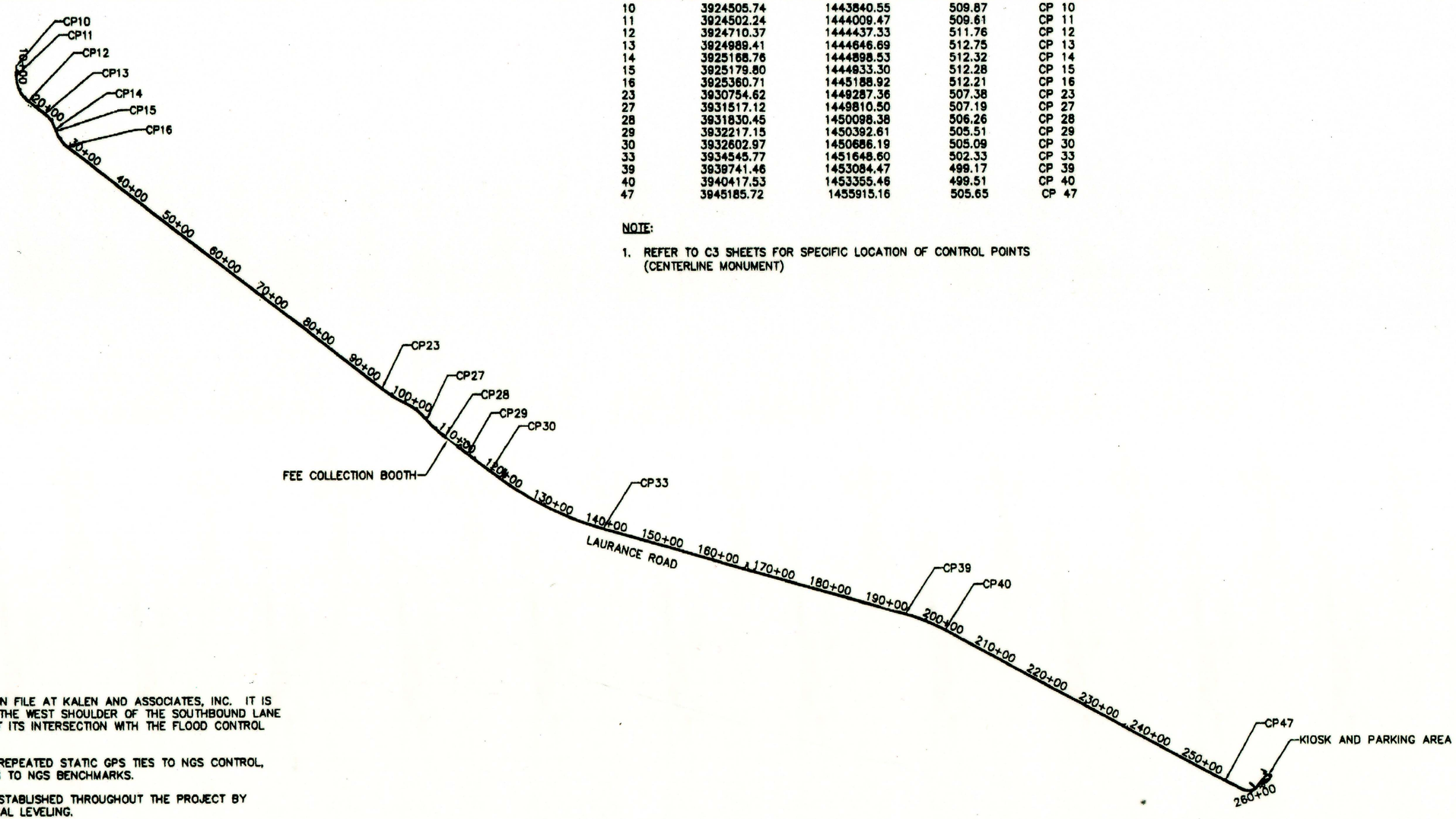
Horizontal and Vertical Control:
NAD83 Zone 3, NAVD88, U.S. Feet

Name	Northing	Easting	Elev.
RRP6	3922496.742	1442944.648	529.520

POINT ID	NORTHING	EASTING	ELEVATION	DESCRIPTION
10	3924505.74	1443840.55	509.87	CP 10
11	3924502.24	1444009.47	509.61	CP 11
12	3924710.37	1444437.33	511.76	CP 12
13	3924989.41	1444646.69	512.75	CP 13
14	3925168.76	1444898.53	512.32	CP 14
15	3925179.80	1444933.30	512.28	CP 15
16	3925360.71	1445188.92	512.21	CP 16
23	3930754.62	1449287.36	507.38	CP 23
27	3931517.12	1449810.50	507.19	CP 27
28	3931830.45	1450098.38	506.26	CP 28
29	3932217.15	1450392.61	505.51	CP 29
30	3932602.97	1450686.19	505.09	CP 30
33	3934545.77	1451648.60	502.33	CP 33
39	3939741.46	1453084.47	499.17	CP 39
40	3940417.53	1453355.46	499.51	CP 40
47	3945185.72	1455915.16	505.65	CP 47

NOTE:

1. REFER TO C3 SHEETS FOR SPECIFIC LOCATION OF CONTROL POINTS (CENTERLINE MONUMENT)



Notes:

1. RRP6 IS A CONTROL POINT ON FILE AT KALEN AND ASSOCIATES, INC. IT IS A RAILROAD SPIKE LOCATED ON THE WEST SHOULDER OF THE SOUTHBOUND LANE OF THE RICHARDSON HIGHWAY AT ITS INTERSECTION WITH THE FLOOD CONTROL DIKE.

2. RRP6 WAS ESTABLISHED BY REPEATED STATIC GPS TIES TO NGS CONTROL, AND BY DIFFERENTIAL LEVEL TIES TO NGS BENCHMARKS.

3. SECONDARY CONTROL WAS ESTABLISHED THROUGHOUT THE PROJECT BY STATIC GPS TIES AND DIFFERENTIAL LEVELING.

STATE OF ALASKA
49TH
PATRICK KALEN
HRS-1
10-2-08
REGISTERED PROFESSIONAL LAND SURVEYOR

CERTIFICATE OF REGISTERED LAND SURVEYOR

I, PATRICK H. KALEN, A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA, DO HEREBY CERTIFY THIS PLAT TO BE A TRUE AND CORRECT REPRESENTATION OF THE LANDS ACTUALLY SURVEYED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT THE DISTANCES, BEARINGS, AND COORDINATES ARE CORRECT.

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

Date 10/13/08
Dwg Status AS NOTED
File Size HALF SIZE

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

KALEN
& ASSOCIATES, INC.

NORTH POLE, ALASKA
LAURANCE ROAD IMPROVEMENTS
SURVEY CONTROL

Reference number:
V1.1

Sheet 8 of 48

Drawing M:\03003.010 - L. Road\CIV_ACAD\Survey control sheet - for Kalen.dwg last saved on 10/12/2008 10:24 AM was plotted by MikeS on 10/11/2008 4:32 PM

SPECIAL NOTES

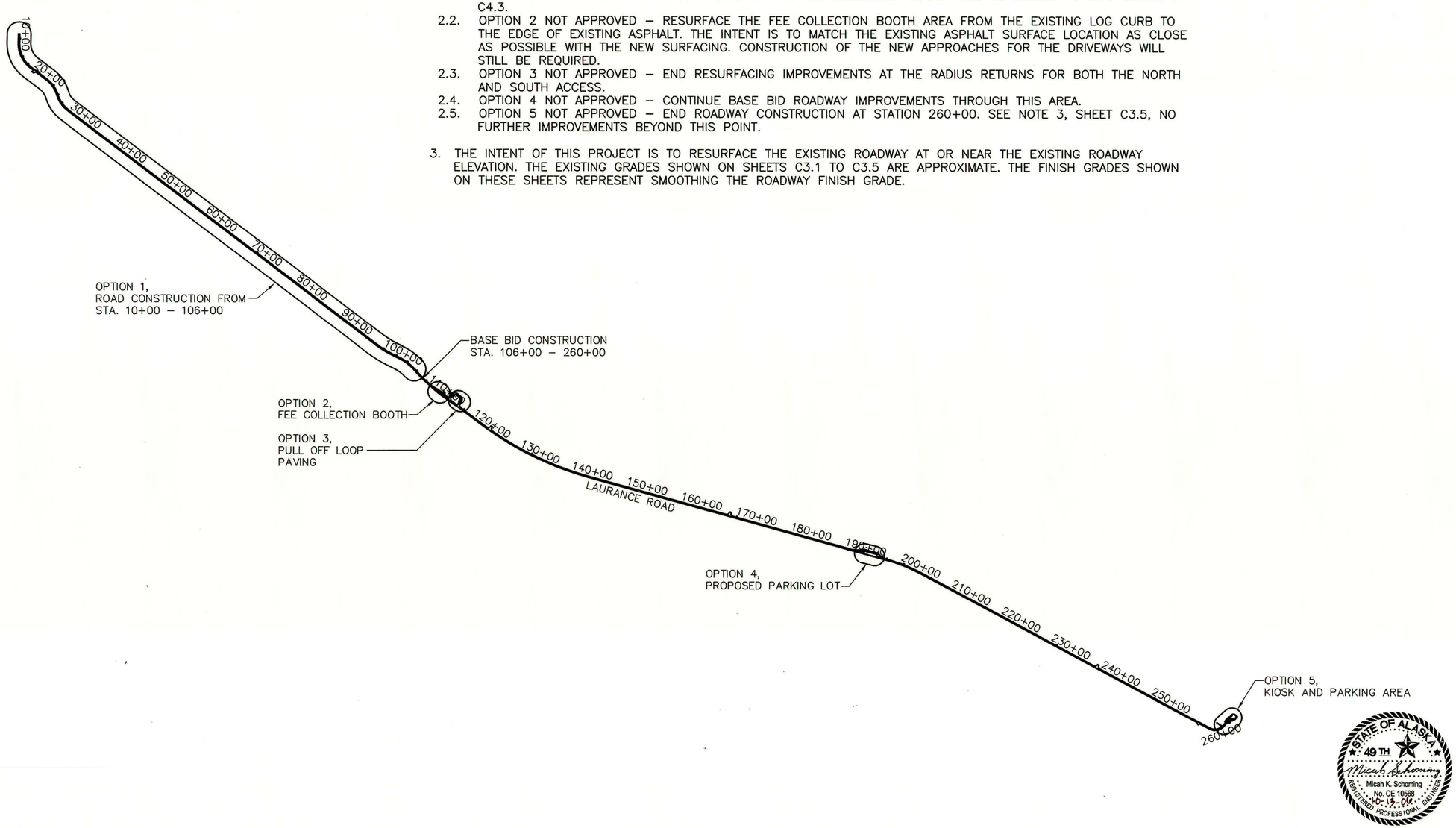
1. THIS PROJECT CONTAINS A BASE BID AND FIVE OPTIONS THE CONTRACTING OFFICER MAY ELECT TO APPROVE. THESE OPTIONS ARE INCORPORATED INTO THIS PLAN SET AND BRIEFLY DESCRIBED BELOW. REFER TO PLAN SHEETS AND SPECIFICATIONS FOR SPECIFIC INFORMATION.

   1.1. BASE BID – ROAD RESURFACING FROM STATION 106+00 TO 260+00.
   1.2. OPTION 1 – ROAD RESURFACING FROM STATION 11+04.55 TO STATION 106+00.
   1.3. OPTION 2 – FEE COLLECTION BOOTH IMPROVEMENTS.
   1.4. OPTION 3 – PAVED LOOP IMPROVEMENTS
   1.5. OPTION 4 – PARKING AREA IMPROVEMENTS
   1.6. OPTION 5 – KIOSK AREA PAVING & IMPROVEMENTS, STATION 260+00 TO 265+81.39

2. THE CONTRACTING OFFICER MAY ELECT NOT TO APPROVE OF ANY OF THE OPTIONS. WHEN OPTIONS ARE NOT APPROVED FOR CONSTRUCTION, MODIFICATIONS TO THIS TO THIS PLAN SET WILL BE REQUIRED AS DESCRIBED BELOW:

   2.1. OPTION 1 NOT APPROVED – BEGIN ROADWAY IMPROVEMENTS AT STATION 106+00. TRANSITION THE NEW ROADWAY SURFACING AT LEAST 20 FEET PRIOR TO STATION 106+00 IN ORDER TO BLEND NEW ASPHALT SURFACING TO EXISTING ROADWAY. THIS WILL BE THE SAME TRANSITION AS DESCRIBED ON SHEET C3.5. STRIPING OF THE TRANSITION AREA NORTH AND SOUTH SIDE OF THE FEE COLLECTION BOOTH WILL BE SIMILAR TO THAT SHOWN ON C4.3.
   2.2. OPTION 2 NOT APPROVED – RESURFACE THE FEE COLLECTION BOOTH AREA FROM THE EXISTING LOG CURB TO THE EDGE OF EXISTING ASPHALT. THE INTENT IS TO MATCH THE EXISTING ASPHALT SURFACE LOCATION AS CLOSE AS POSSIBLE WITH THE NEW SURFACING. CONSTRUCTION OF THE NEW APPROACHES FOR THE DRIVEWAYS WILL STILL BE REQUIRED.
   2.3. OPTION 3 NOT APPROVED – END RESURFACING IMPROVEMENTS AT THE RADIUS RETURNS FOR BOTH THE NORTH AND SOUTH ACCESS.
   2.4. OPTION 4 NOT APPROVED – CONTINUE BASE BID ROADWAY IMPROVEMENTS THROUGH THIS AREA.
   2.5. OPTION 5 NOT APPROVED – END ROADWAY CONSTRUCTION AT STATION 260+00. SEE NOTE 3, SHEET C3.5, NO FURTHER IMPROVEMENTS BEYOND THIS POINT.

3. THE INTENT OF THIS PROJECT IS TO RESURFACE THE EXISTING ROADWAY AT OR NEAR THE EXISTING ROADWAY ELEVATION. THE EXISTING GRADES SHOWN ON SHEETS C3.1 TO C3.5 ARE APPROXIMATE. THE FINISH GRADES SHOWN ON THESE SHEETS REPRESENT SMOOTHING THE ROADWAY FINISH GRADE.



US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____ CONTRACTOR ____ CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
"FIELD CONTRACTOR" "RESIDENT ENGINEER"

Sym	Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File: Section
Drawing #: Boom

Designed: JB/JS
Drawn: DRC
Reviewed: RWK
Staff Engineer: ____
Submitted: ____
Chief: ____

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

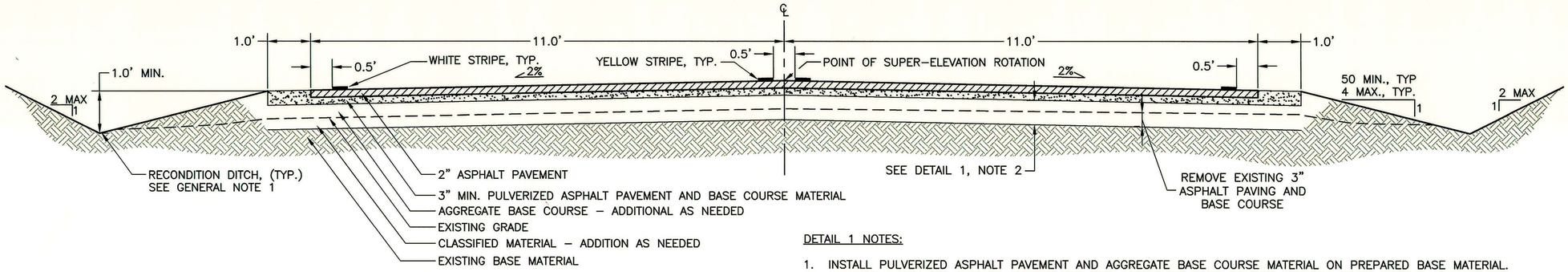
TRYCK NYMAN HAYES, INC.
810 N STREET, SUITE 100
ANCHORAGE, AK 99501-3367
TEL (907) 274-8860 FAX (907) 274-8861

NORTH POLE, ALASKA
LAURANCE ROAD IMPROVEMENTS
PROJECT OVERVIEW

STATE OF ALASKA 49TH
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

Reference number:
C1.0
Sheet 6 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\5a_Option Overview.dwg last saved on 10/12/2006 4:38 PM was plotted by RobC on 10/12/2006 4:47 PM

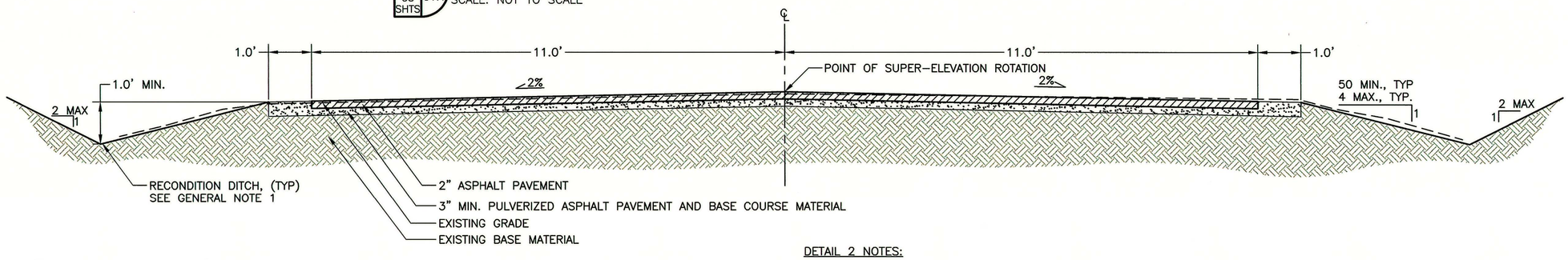


DETAIL 1 NOTES:

1. INSTALL PULVERIZED ASPHALT PAVEMENT AND AGGREGATE BASE COURSE MATERIAL ON PREPARED BASE MATERIAL.
2. CLASSIFIED MATERIAL MAY BE SUBSTITUTED FOR AGGREGATE BASE COURSE MATERIAL WHEN DEPTHS ARE GREATER THAN 8" FROM FINISH GRADE.
3. STRIPING WITHIN THIS DETAIL SHALL APPLY TO ALL OTHER DETAILS ON THIS SHEET

1 TYPICAL ROAD SECTION, FINAL GRADE ABOVE EXISTING GRADE

C3 SHTS C1.1 SCALE: NOT TO SCALE

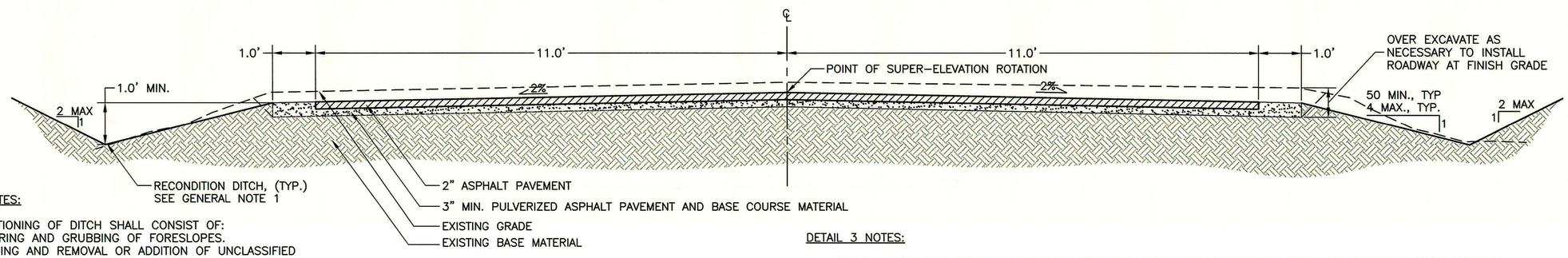


DETAIL 2 NOTES:

1. INSTALL PULVERIZED ASPHALT PAVEMENT AND AGGREGATE BASE COURSE MATERIAL ON PREPARED BASE MATERIAL.
2. ADD ADDITIONAL AGGREGATE BASE COURSE MATERIAL AS NEEDED TO MIX TO ATTAIN FINISH GRADE.

2 TYPICAL ROAD SECTION, FINAL GRADE APPROX. EQUAL TO EXISTING GRADE

C3 SHTS C1.1 SCALE: NOT TO SCALE



GENERAL NOTES:

1. RECONDITIONING OF DITCH SHALL CONSIST OF:
   - CLEARING AND GRUBBING OF FORESLOPES.
   - GRADING AND REMOVAL OR ADDITION OF UNCLASSIFIED MATERIAL TO FORM DITCHES AS INDICATED.
2. DITCH CONSTRUCTION MAY NOT BE NECESSARY IF SLOPE AND DEPTH OF EXISTING DITCH ADJACENT TO THE IMPROVED SHOULDER FOLLOWS THE GUIDELINES OF THE TYPICAL DETAIL.
3. DITCHES SHALL END AT STATION 256+50, PRIOR TO THE OUTLET WORKS APPROACH.
4. CONTRCATOR SHALL PROOF ROLL EXISTING BASE MATERIAL TO REMAIN TO DETERMINE SUITABILITY FOR NEW PAVEMENT. SOFT AREAS OR AREAS WHICH OTHERWISE DO NOT APPEAR TO BE SUITABLE SHALL BE BROUGHT TO THE CONTRACTING OFFICER'S ATTENTION.

DETAIL 3 NOTES:

1. INSTALL PULVERIZED ASPHALT PAVEMENT AND AGGREGATE BASE COURSE MATERIAL ON PREPARED BASE MATERIAL.
2. ADD ADDITIONAL AGGREGATE BASE COURSE MATERIAL AS NEEDED TO MIX TO ATTAIN FINISH GRADE.

3 TYPICAL ROAD SECTION, FINAL GRADE BELOW EXISTING GRADE

C3 SHTS C1.1 SCALE: NOT TO SCALE

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____ CONTRACTOR ____ CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR ____ RESIDENT ENGINEER ____

Sym	Action	Description	Date	Appvd

Designed: MKS
Drawn: REH
Reviewed: MKS
Chief: ____ Section
Submitted:
Chief: ____ Branch

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File:
Drawing #:

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
911 W. 8TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501-3408
TEL (907) 276-1287 FAX (907) 276-7569

NORTH POLE, ALASKA

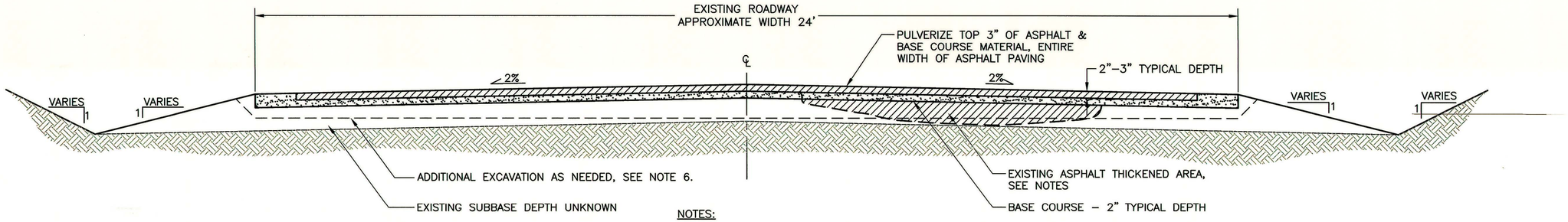
LAURANCE ROAD IMPROVEMENTS

TYPICAL ROAD SECTIONS

STATE OF ALASKA 49TH
Micah K. Schoming
Micah K. Schoming
No. CE 10568
10-12-06
REGISTERED PROFESSIONAL ENGINEER

Reference number:
C1.1
Sheet 7 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\6_Typ Sections.dwg last saved on 10/12/2006 4:41 PM was plotted by RobC on 10/12/2006 7:15 PM

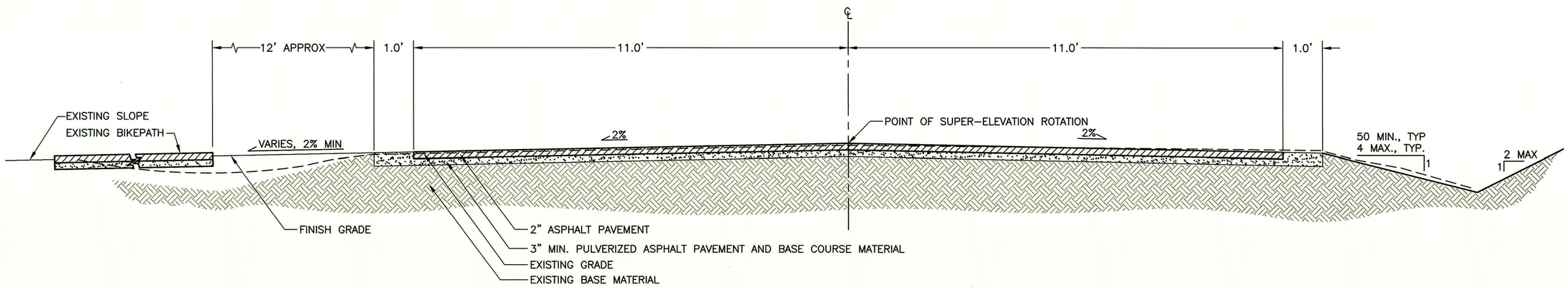


NOTES:

1. MINIMUM DEPTH OF ASPHALT PAVEMENT TO PULVERIZE TYPICALLY CONSISTS OF 2" OF ASPHALT AND 1" OF BASE COURSE MATERIAL.
2. PULVERIZED ASPHALT PAVEMENT AND BASE COURSE SHALL BE USED FOR THE NEW BASE COURSE MATERIAL.
3. ASPHALT THICKENED AREAS SHALL BE PULVERIZED EXACTLY AS THE TOP 3" OF THE ROAD SURFACE. PLACE PULVERIZED MATERIAL IN THE ORIGINAL THICKENED AREA.
4. PULVERIZED ASPHALT PAVING AND ASPHALT BASE COURSE MAY ONLY BE WINDROWED TO THE EXTENT THAT IT CAN BE SPREAD AND COMPACTED WITHIN 24 HOURS.
5. ADDITIONAL EXCAVATION BELOW THE TYPICAL 3" OF ASPHALT AND BASE COURSE MAY BE REQUIRED WHEN THE PROPOSED FINISH GRADE ELEVATION IS LOWER THAN THE EXISTING ROADWAY GRADE.
6. A GEOTECHNICAL REPORT WAS NOT COMPLETED AS PART OF THIS DESIGN TO DETERMINE SUBSURFACE DEPTHS OF SUBBASE AND OR OTHER SOIL MATERIAL.

1 ROAD DEMOLITION SECTION

C3 SHTS | C1.2 SCALE: NOT TO SCALE



NOTES:

1. REFER TO SHEET C1.1 FOR SUBSURFACE CONSTRUCTION REQUIREMENTS. ROADWAY SECTION WITH ADJACENT BIKE PATH SHALL BE THE SAME CONSTRUCTION AS SHOWN ON C1.1, FOR FINAL GRADE ABOVE EXISTING GRADE, FINAL GRADE APPROXIMATELY EQUAL TO EXISTING GRADE, AND FINAL GRADE BELOW EXISTING GRADE.

2 TYPICAL ROAD SECTION WITH ADJACENT BIKEPATH

C3 SHTS | C1.2 SCALE: NOT TO SCALE

STATE OF ALASKA 49TH
Micah K. Schoming
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____ CONTRACTOR ____ CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR ____ RESIDENT ENGINEER ____

Sym	Action	Description	Date	Approved

Designed: MKS
Drawn: REH
Reviewed: MKS
Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
Submitted: ____ File: ____
Chief: ____ Drawing #: ____

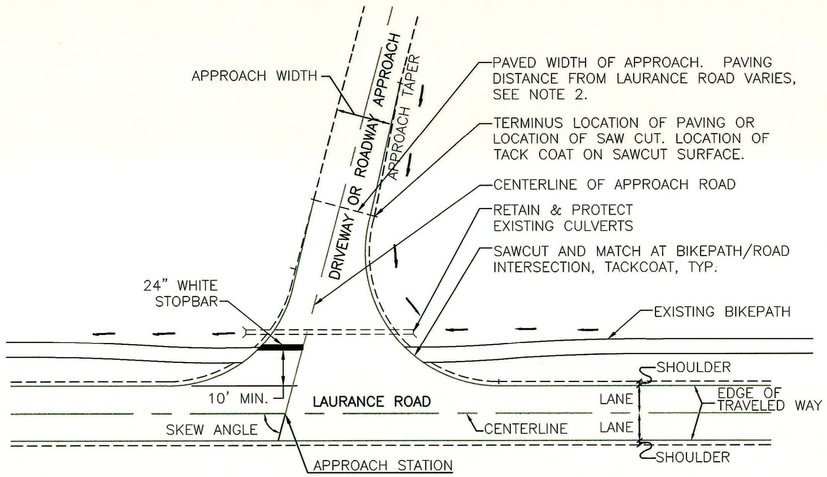
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
810 N. PLUM STREET, SUITE 202
LANSING, KS 66043
(913) 682-7505
W. WASHINGTON, SUITE 1000
CHICAGO, IL 60602

NORTH POLE, ALASKA
LAURANCE ROAD IMPROVEMENTS
TYPICAL ROAD SECTIONS

Reference number:
C1.2
Sheet 8 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\6_Typ Sections.dwg last saved on 10/12/2006 4:41 PM was plotted by RobC on 10/12/2006 7:15 PM

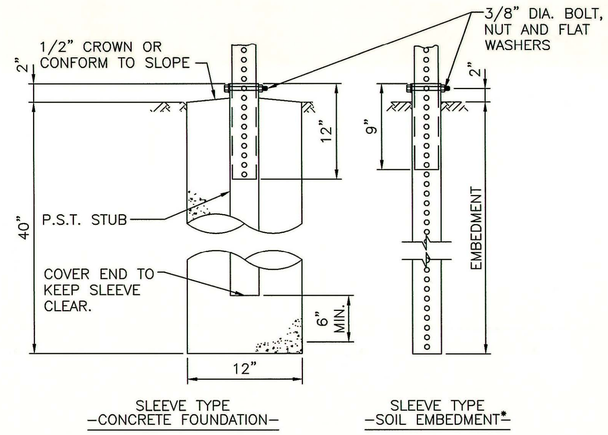


NOTES:

1. THE PAVED PORTION OF THE APPROACH STRUCTURAL SECTION SHALL BE CONSTRUCTED OF THE SAME MATERIAL AS THE ROADWAY STRUCTURAL SECTION UNLESS OTHERWISE NOTED.
2. PAVE TO THE END OF THE MOST DISTANT RADIUS RETURN UNLESS OTHERWISE INDICATED. SAW CUT PAVEMENT PERPENDICULAR TO RADIUS RETURN. APPLY TACK COAT TO SURFACE OF SAWCUT PRIOR TO PLACING NEW ASPHALT PAVEMENT.
3. APPROACH VERTICAL CURVE REQUIREMENTS:
   CREST – 2½" MAXIMUM IN A 10–FOOT CHORD
   SAG – 2" MAXIMUM IN A 10–FOOT CHORD

1 APPROACH DETAIL TYPICAL

C2.1 C1.3 SCALE: NOT TO SCALE



1. REFER TO ADOT&PF STANDARD DRAWING "SHEET ALUMINUM SIGN AND FRAMING" FOR LIGHT SIGN DETAILS.
2. TO MAINTAIN CRASHWORTHINESS, INSTALL NO MORE THAN THE NUMBER OF P.S.T.S OR WOOD POSTS SPECIFIED IN THE TABLES WITHIN 7' OF EACH OTHER.
3. DO NOT INSTALL WOOD POSTS LARGER THAN 6"X8" AS AN ALTERNATE.
4. USE LARGER POSTS THAN SHOWN ON THIS SHEET, WITH HINGES, FOR MULTIPLE SUPPORT SIGNS WHERE THE SUPPORTS ARE SEPARATED BY MORE THAN 7 FEET.

PERFORATED STEEL TUBES (P.S.T.) (12 ga. – .105" WALL THICKNESS)		
POST SIZE (INCH)	EMBEDMENT DEPTH	NO. OF P.S.T.S PERMITTED WITHIN 7 FT PATH
1 1/2" x 1 1/2"	3'–0"	2
1 3/4" x 1 3/4"	3'–0"	2
2" x 2"	3'–6"	2
2 1/4" x 2 1/4"	4'–0"	1
2 1/2" x 2 1/2"	4'–6"	1

* USE 3"x3"x3/16" STUB FOR 2 1/2"x2 1/2" PST APPLICATIONS.

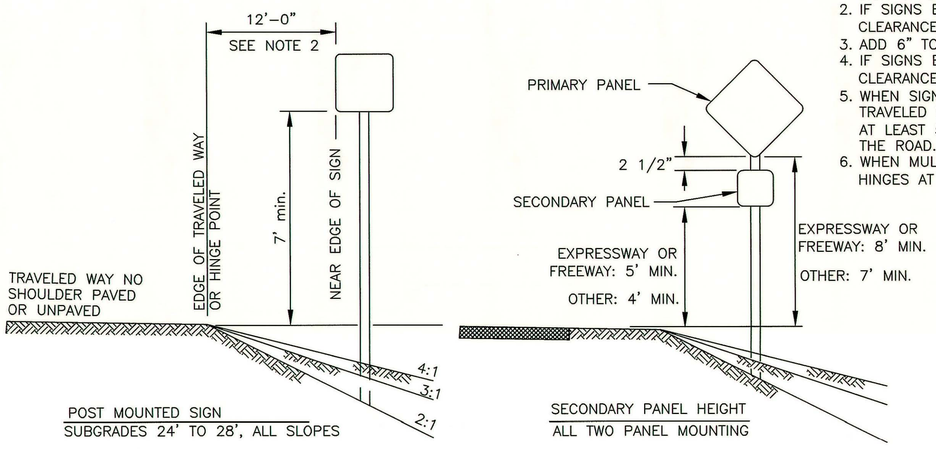
PERFORATED STEEL TUBE (PST) POSTS

NOTES:

1. DETAIL FOR NEW SIGN PLACEMENT AND EXISTING SIGNS RELOCATED DURING CONSTRUCTION, UNLESS OTHERWISE DIRECTED BY THE CONTRACTING OFFICER.
2. EXISTING SIGNS DO NOT NEED NEW FOUNDATIONS.

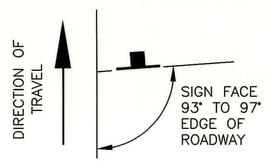
2 SIGN POST FOUNDATION DETAIL

C2.1 C1.3 SCALE: NOT TO SCALE



GENERAL NOTES:

1. UNLESS SHOWN OTHERWISE ON THE PLANS, THE STANDARD SIGN OFFSET IS 12'. THE MINIMUM IS 6'.
2. IF SIGNS EXTEND OVER SIDEWALKS, THE MINIMUM VERTICAL CLEARANCE IS 7'–0".
3. ADD 6" TO MOUNTING HEIGHT ON UNPAVED ROADS.
4. IF SIGNS EXTEND OVER BIKE PATHS, THE MINIMUM VERTICAL CLEARANCE IS 8' 0".
5. WHEN SIGNS ARE PLACED 30' OR MORE FROM THE EDGE OF TRAVELED WAY, MOUNT THEM WITH THE BOTTOM OF THE SIGN AT LEAST 5' ABOVE THE ROAD SURFACE AT THE NEAR EDGE OF THE ROAD.
6. WHEN MULTIPLE HINGED SIGN SUPPORTS ARE USED, MOUNT HINGES AT LEAST 7' ABOVE THE GROUND.

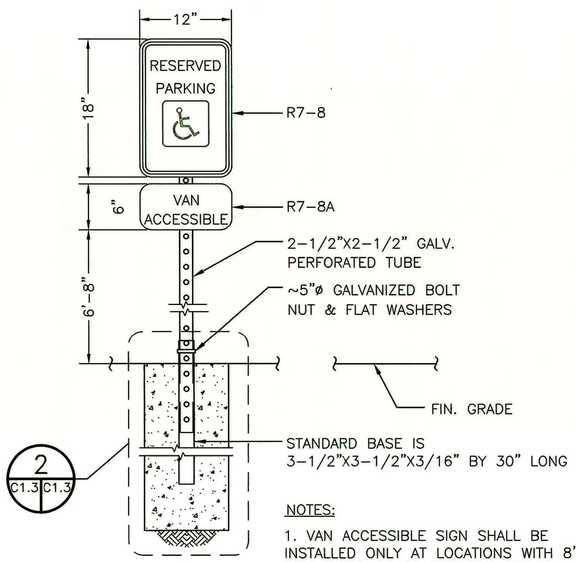


SIGN POSITIONING

NOTE: DETAIL FOR NEW SIGN PLACEMENT AND EXISTING SIGNS RELOCATED DURING CONSTRUCTION, UNLESS OTHERWISE DIRECTED BY THE CONTRACTING OFFICER.

3 TYPICAL SIGN PLACEMENT DETAIL

C2.1 C1.3 SCALE: NOT TO SCALE



NOTES:

1. VAN ACCESSIBLE SIGN SHALL BE INSTALLED ONLY AT LOCATIONS WITH 8' DELINEATED SPACE BETWEEN STALLS.

4 RESERVED PARKING

C2.1 C1.3 SCALE: NOT TO SCALE

STATE OF ALASKA 49TH Micah K. Schoming No. CE 10568 12-13-06 REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS ALASKA DISTRICT

CONTRACT NO. ____ CONTRACTOR ____ CITY ____ STATE ____ Recommended: ____ Approved: ____ Date: ____ PRIME CONTRACTOR ____ RESIDENT ENGINEER ____

Sym.	Action	Description	Date	Appvd

Designed: MKS Drawn: REH Reviewed: MKS Chief: Submitted: Date: 10/13/06 Dwg Scale: AS NOTED Plot Scale: HALF SIZE Section: File: Branch: Drawing #:

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC. 911 W. 8TH AVENUE, SUITE 300 ANCHORAGE, ALASKA 99501 907-272-5488 FAX (907) 274-0699

NORTH POLE, ALASKA

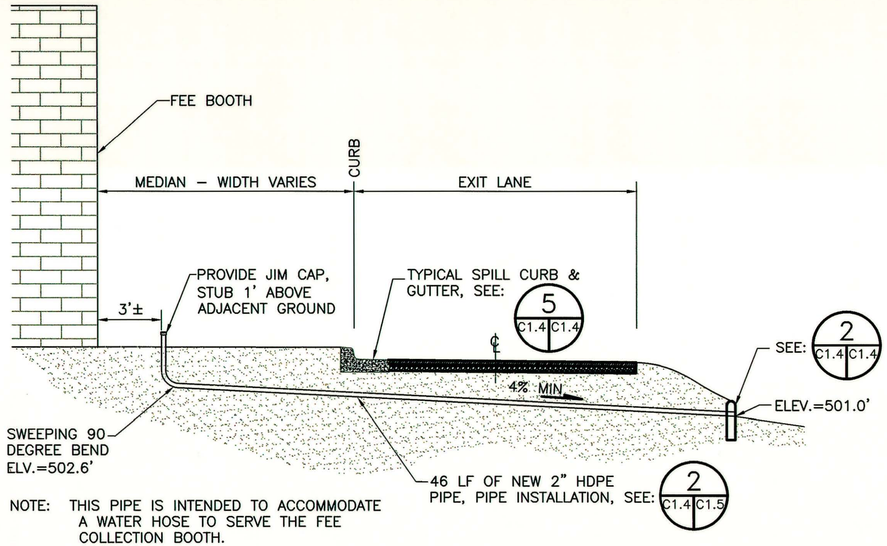
LAURANCE ROAD IMPROVEMENTS

CIVIL DETAILS

Reference number: C1.3

Sheet 9 of 28

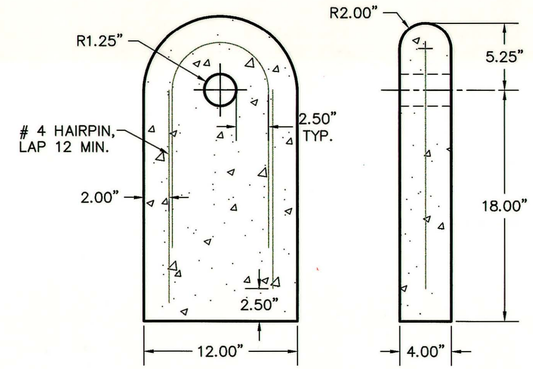
Drawing m:\03003.010 – L. Road\Civil_ACAD\6_Typ Sections.dwg last saved on 10/12/2006 4:41 PM was plotted by RobC on 10/12/2006 7:16 PM



NOTE: THIS PIPE IS INTENDED TO ACCOMMODATE A WATER HOSE TO SERVE THE FEE COLLECTION BOOTH.

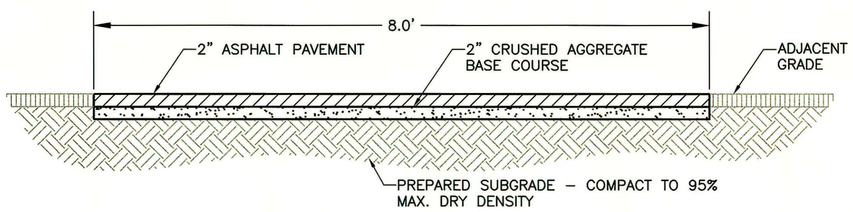
1 C1.6 C1.4 PIPE DETAIL – OPTION 2

SCALE: NOT TO SCALE



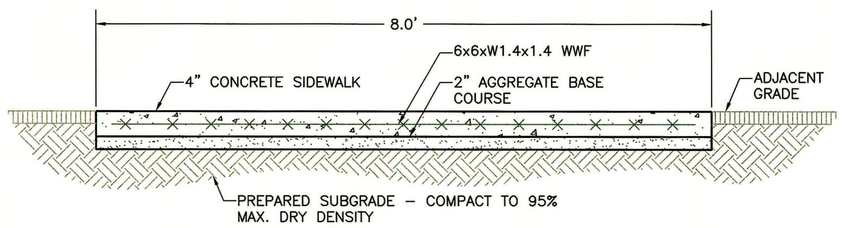
2 C1.4 C1.4 PIPE HEADWALL – OPTION 2

SCALE: NOT TO SCALE



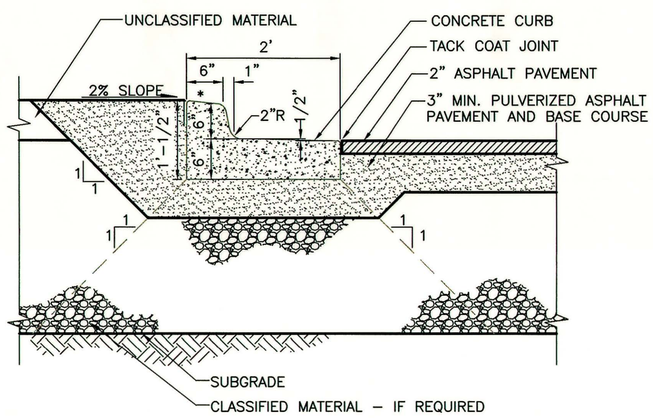
3 C1.8 C1.4 TYPICAL BIKEPATH SECTION – OPTION 4

SCALE: NOT TO SCALE



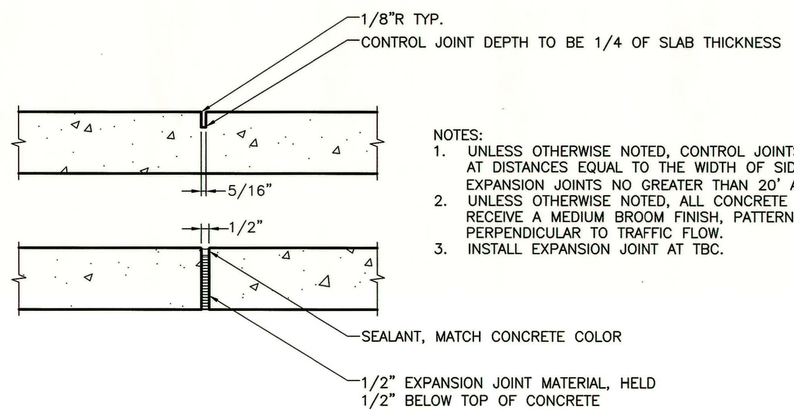
4 C1.6 C1.4 TYPICAL CONCRETE SIDEWALK SECTION – OPTION 2

SCALE: NOT TO SCALE



5 C1.6 C1.4 TYPICAL SPILL CURB & GUTTER – OPTION 2

SCALE: NOT TO SCALE



NOTES:
1. UNLESS OTHERWISE NOTED, CONTROL JOINTS SHALL OCCUR AT DISTANCES EQUAL TO THE WIDTH OF SIDEWALKS, WITH EXPANSION JOINTS NO GREATER THAN 20' APART.
2. UNLESS OTHERWISE NOTED, ALL CONCRETE FLATWORK TO RECEIVE A MEDIUM BROOM FINISH, PATTERN SHALL RUN PERPENDICULAR TO TRAFFIC FLOW.
3. INSTALL EXPANSION JOINT AT TBC.

6 C1.4 C1.4 TYPICAL EXPANSION & CONTROL JOINTS FOR CONCRETE SIDEWALK – OPTION 2

SCALE: NOT TO SCALE

STATE OF ALASKA 49TH Micah K. Schoming No. CE 10566 10-13-06 REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS ALASKA DISTRICT

CONTRACT NO. ____ CONTRACTOR ____ CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR ____ RESIDENT ENGINEER ____

Sym	Action	Description	Date	Appvd

Date: 10/13/06
Des. Scale: AS NOTED
Plot Scale: HALF SIZE
File: ____ Drawing #: ____
Section ____ Branch ____

Designed: MKS
Drawn: REH
Reviewed: MKS
Chief: ____
Submitted: ____
Chief: ____

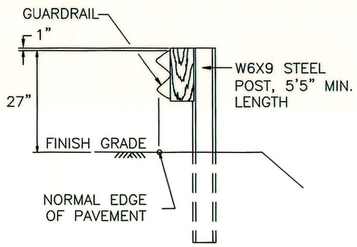
U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC. 911 W. 8TH AVENUE, SUITE 300 ANCHORAGE, ALASKA 99501-2029 PH (907) 276-1287 FAX (907) 276-7569

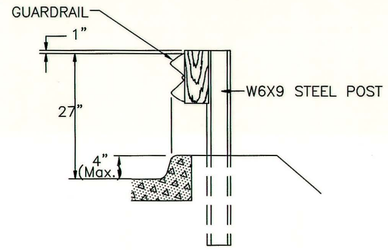
NORTH POLE, ALASKA
LAURANCE ROAD IMPROVEMENTS
OPTIONAL DETAILS

Reference number:
C1.4
Sheet 10 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\Typ_Approach.dwg last saved on 10/12/2006 2:01 PM was plotted by RobC on 10/12/2006 7:16 PM



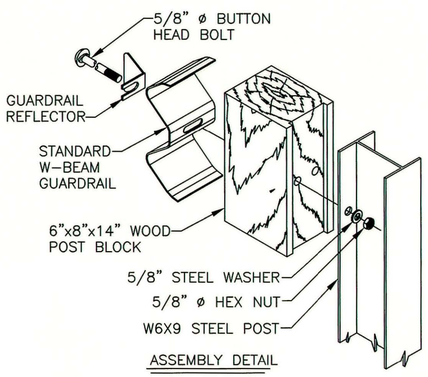
TYPE I POST INSTALLATION



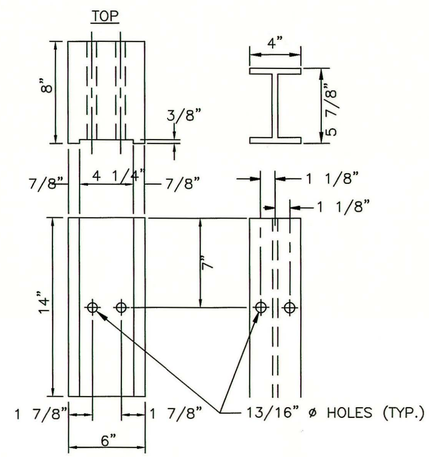
CURB DETAIL

TYPE III POST INSTALLATION

NOTE: CURB SHOULD NOT BE INSTALLED WITH GUARDRAIL WHEN THE SPEED LIMIT EXCEEDS 40 MPH.



ASSEMBLY DETAIL



BACK

6" x 8" WOOD BLOCK

FACE

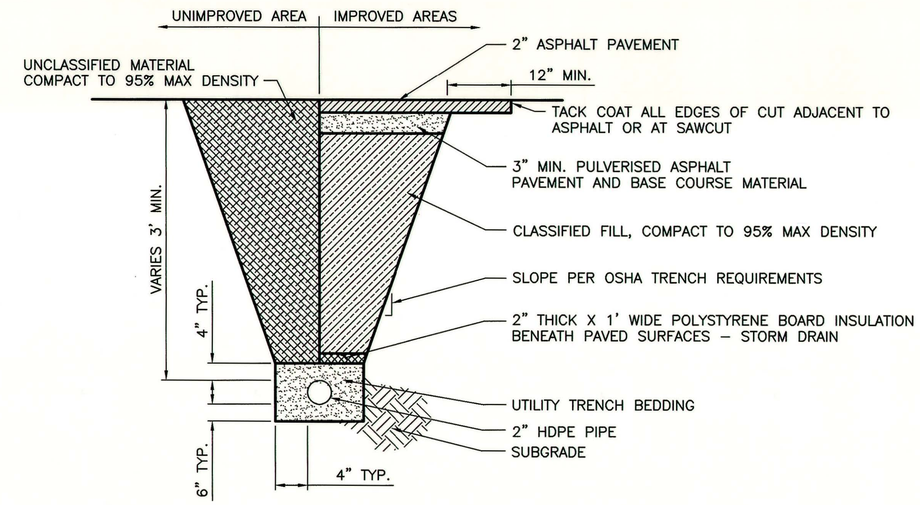
W6x9 STEEL POST

GENERAL NOTES:

1. GUARDRAIL REFLECTORS SHALL BE MOUNTED AT 50' CENTERS BEGINNING WITH THE FIRST POST. TYPE A REFLECTORS SHALL BE USED UNLESS SPECIFIED OTHERWISE ON PLANS.
2. ALL COVERED HARDWARE SHALL COMPLY WITH THE AASHTO/AGC/ARTBA "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE", LATEST EDITION.
3. SEE ADOT STANDARD DRAWING G-00, "STANDARD GUARDRAIL HARDWARE" FOR HARDWARE DETAILS.
4. MOUNT RAIL TO BLOCK WITH BOLT ON APPROACHING TRAFFIC SIDE OF BLOCK WEB.
5. TYPICAL POST SPACING IS 6'-3" CENTER TO CENTER.
6. THIS BARRIER IS ACCEPTABLE UNDER NCHRP 350, TL3.

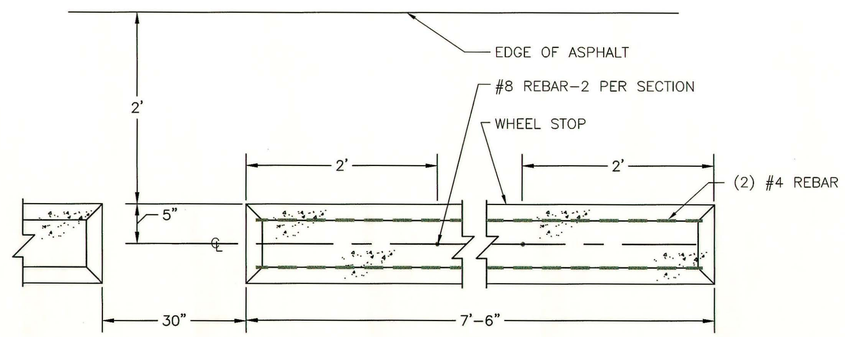
1 TYPICAL W BEAM GUARDRAIL DETAIL – OPTION 4

C1.8 C1.5 SCALE: NOT TO SCALE



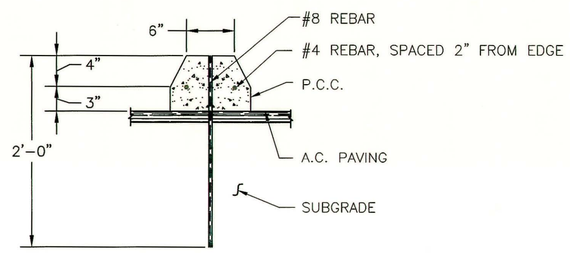
2 TRENCH SECTION – OPTION 2

C1.6 C1.5 SCALE: NOT TO SCALE



PLAN

N.T.S.



SECTION

N.T.S.

3 WHEEL STOP DETAIL – OPTIONS 3 & 5

C1.9 C1.5 SCALE: NOT TO SCALE

STATE OF ALASKA 49TH Micah K. Schoming No. CE 10568 10-13-06 REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS ALASKA DISTRICT

CONTRACT NO. | CONTRACTOR | CITY | STATE | Recommended: | Approved: | Date: | PRIME CONTRACTOR | RESIDENT ENGINEER

Sym. Action | Description | Date | Appvd

Date: 10/13/06 | Dwg. Scale: AS NOTED | Plot. Scale: HALF SIZE | File: | Drawing #:

Designed: MKS | Drawn: REH | Reviewed: MKS | Chief: | Submitted: | Chief: | Section | Branch

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ANCHORAGE, ALASKA

TRYON WYMAN MAYER, INC. 911 W. 8TH AVENUE, SUITE 300 ANCHORAGE, ALASKA 99501 907/279-5561 FAX 907/279-2345

NORTH POLE, ALASKA

LAURANCE ROAD IMPROVEMENTS

OPTIONAL DETAILS

Reference number: C1.5

Sheet 11 of 28

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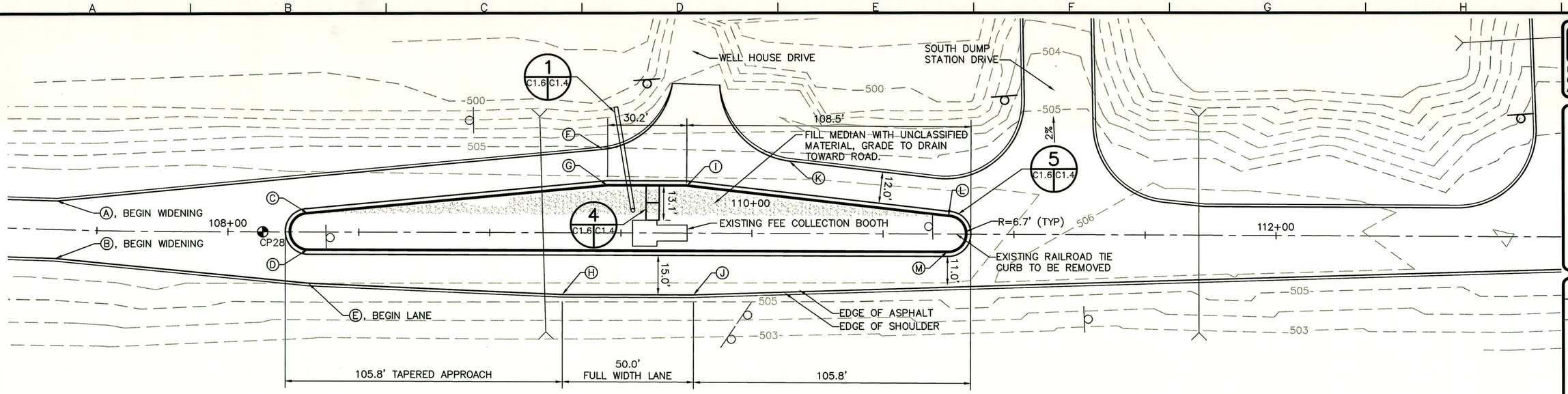


NOTES:
1. DEMO EXISTING RAILROAD TIE CURB, SIGNS, AND BOLLARDS IN PREPARATION FOR NEW MEDIAN IMPROVEMENTS.
2. DIMENSIONS ARE TO LIP OF GUTTER AND EDGE OF ASPHALT.
3. LEADERS ARE TO TOP BACK OF CURB OR EDGE OF ASPHALT.
4. CONCRETE SIDEWALK SHALL ABUT TOP OF CURB AND ABUT EXISTING FEE COLLECTION BOOTH STRUCTURE. CENTERLINE OF SIDEWALK SHALL MATCH CENTER OF DOOR ON BOOTH.

HORIZONTAL CONTROL POINT SCHEDULE – OPTION 2

POINT	STATION	OFFSET	ELEVATION	REMARKS
Ⓐ	107+34.52	11.00' LT	*	EOP
Ⓑ	107+34.46	11.00' RT	*	EOP
Ⓒ	108+30.68	7.03' LT	*	TBC
Ⓓ	108+30.68	6.49' RT	*	TBC
Ⓔ	108+30.68	19.49' RT	*	EOP
Ⓕ	109+42.68	31.29 LT	*	EOP
Ⓖ	109+45.01	18.08' LT	*	TBC
Ⓗ	109+27.71	23.49' RT	*	EOP
Ⓘ	109+75.01	18.05' LT	*	TBC
Ⓙ	109+77.71	23.49' RT	*	EOP
Ⓚ	110+14.53	27.70' LT	*	EOP
Ⓛ	110+75.00	6.82' LT	*	TBC
Ⓜ	110+74.74	6.49' RT	*	TBC

* HORIZONTAL CONTROL POINT NOTE:
REFER TO PLAN AND PROFILE SHEETS (C3 SERIES SHEETS) AND C1.1 FOR ASSOCIATED ELEVATIONS.

1 (C3.2 | C1.6) OPTION 2 – FEE COLLECTION BOOTH

SCALE: 1' = 20'

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1" = 20' HORZ.

STATE OF ALASKA 49TH
Micah K. Schoming
No. CE 10598
10-13-06
REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ___ CONTRACTOR ___ CITY ___ STATE ___
Recommended: ___ Approved: ___ Date: ___
PRIME CONTRACTOR ___ RESIDENT ENGINEER

Sym	Action	Description	Date	Appvd

Designed: ___
Drawn: REH
Reviewed: MKS
Chief ___ Section ___
Submitted: ___
Chief ___ Branch ___
Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File: ___
Drawing #: ___

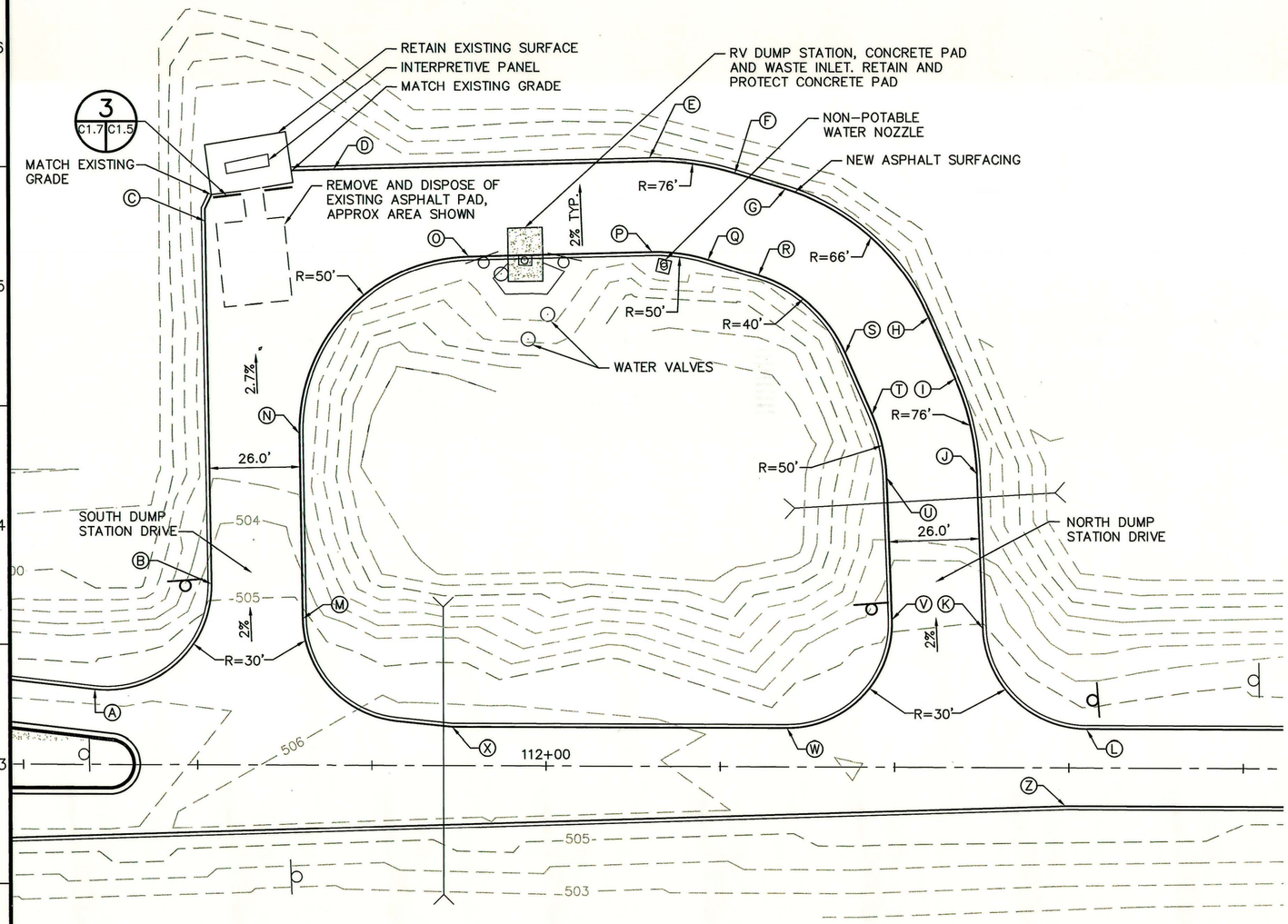
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
911 W. 8TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501
PH: (907) 274-5600 FAX: (907) 274-0699

NORTH POLE, ALASKA
LAURANCE ROAD IMPROVEMENTS
OPTION 2
FEE COLLECTION BOOTH

Reference number:
C1.6
Sheet 12 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\Booth_Parking_Dets.DWG last saved on 10/12/2006 3:37 PM was plotted by RobC on 10/12/2006 7:17 PM



NOTES:

1. REMOVE AND DISPOSE OF EXISTING WOOD WHEEL STOPS NEAR INTERPRETIVE PANEL.

HORIZONTAL CONTROL POINT SCHEDULE – OPTION 3				
POINT	STATION	OFFSET	ELEVATION	REMARKS
A	110+70.51	21.41' LT	*	EOP
B	111+03.85	51.79' LT	505.26'	EOP
C	111+01.88	155.85' LT	502.60'	EOP
D	111+38.75	170.83' LT	502.38'	EOP
E	112+29.39	173.46' LT	502.38'	EOP
F	112+53.90	170.14' LT	502.40'	EOP
G	112+68.39	165.70' LT	502.45'	EOP
H	113+09.45	129.10' LT	503.36'	EOP
I	113+17.15	111.53' LT	503.76'	EOP
J	113+23.49	84.03' LT	504.35'	EOP
K	113+25.24	39.81' LT	505.23'	EOP
L	113+55.21	11.00' LT	*	EOP
M	111+30.05	41.89' LT	505.45'	EOP
N	111+29.04	95.02' LT	504.37'	EOP
O	111+77.58	145.95' LT	503.10'	EOP
P	112+30.15	147.47' LT	502.90'	EOP
Q	112+46.27	145.29' LT	502.95'	EOP
R	112+60.74	140.85' LT	503.08'	EOP
S	112+85.65	118.66' LT	503.52'	EOP
T	112+93.34	101.09' LT	503.90'	EOP
U	112+97.51	83.00' LT	504.35'	EOP
V	112+99.12	42.18' LT	505.23'	EOP
W	112+69.15	11.00' LT	*	EOP
X	111+73.03	11.00' LT	*	EOP
Z	113+49.05	11.00' RT	*	EOP

* HORIZONTAL CONTROL POINT NOTE:
REFER TO PLAN AND PROFILE SHEETS (C3 SERIES SHEETS) AND C1.1 FOR ASSOCIATED ELEVATIONS

1 C3.2 C1.7 OPTION 3 – PAVED LOOP
SCALE: 1' = 20'

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1" = 20' HORZ.

STATE OF ALASKA 49TH
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____ CONTRACTOR ____ CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR ____ RESIDENT ENGINEER

Sym	Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
Designed: ____
Drawn: REH
Reviewed: MKS
Chief ____ Section ____
Submitted: ____
Chief ____ Branch ____
File: ____
Drawing #: ____

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
911 W. 8TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501
907 272-20-00 • FAX 907 276-7050

NORTH POLE, ALASKA
LAURANCE ROAD IMPROVEMENTS
OPTION 3
PAVED LOOP

Reference number:
C1.7
Sheet 13 of 28

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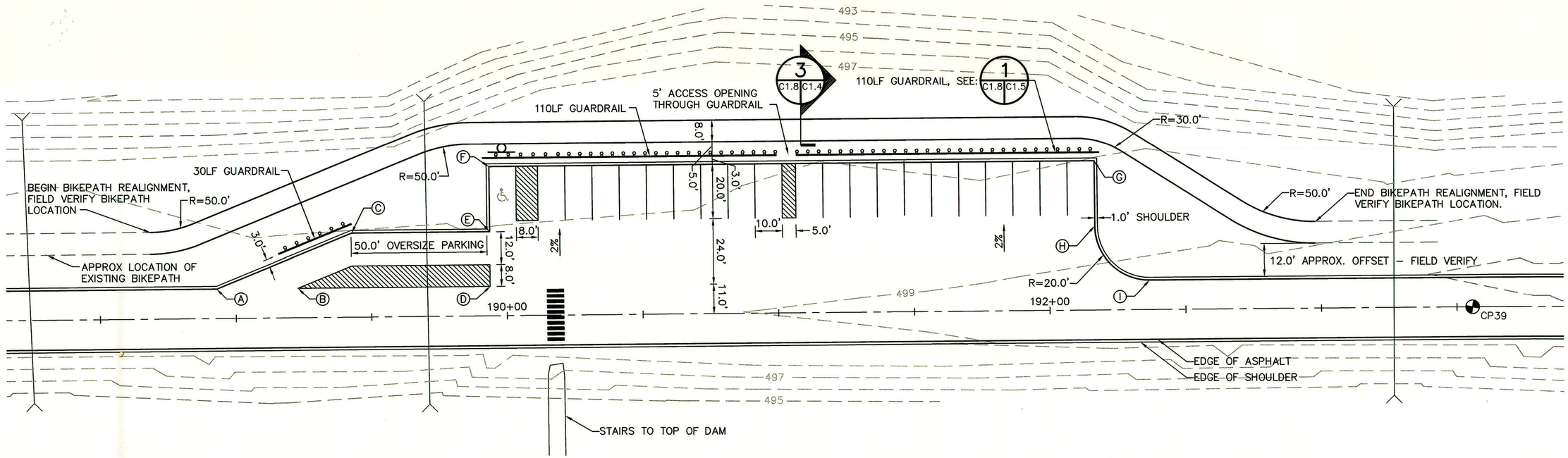


HORIZONTAL CONTROL POINT SCHEDULE OPTION 4				
POINT	STATION	OFFSET	ELEVATION	REMARKS
A	188+92.96	11.00' LT	*	EOP
B	189+22.96	11.00' LT	N/A	STRIPING
C	189+42.94	31.00' LT	498.10'	EOP
D	189+93.75	11.00' LT	N/A	STRIPING
E	189+93.75	31.00' LT	498.14'	EOP
F	189+93.74	55.00' LT	497.74'	EOP
G	192+16.74	55.00' LT	497.93'	EOP
H	192+16.75	31.00' LT	498.40'	EOP
I	192+36.75	11.00' LT	*	EOP

* HORIZONTAL CONTROL POINT NOTE:
REFER TO PLAN AND PROFILE SHEETS (C3 SERIES SHEETS) AND C1.1 FOR ASSOCIATED ELEVATIONS

NOTES:
1. CONTROL POINTS ARE TO EDGE OF ASPHALT, UNLESS OTHERWISE SHOWN.
2. DEMO AND REMOVE EXISTING BIKE PATH ASPHALT PAVING FOR NEW PARKING AREA IMPROVEMENTS.
3. THE PARKING LOT INCORPORATES A 24' MANUEVERING LANE BETWEEN THE TRAFFIC LANE AND THE PARKING STALLS.

1 C3.4 C1.8 OPTION 4 – PARKING AREA
SCALE: 1' = 20'

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1" = 20' HORZ.

STATE OF ALASKA 49TH
Micah K. Schoming
No. CE 10668
10-13-06
REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. | CONTRACTOR | CITY | STATE
Recommended: | Approved: | Date:
PRIME CONTRACTOR | RESIDENT ENGINEER

Sym.	Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File:
Drawing #:
Designed: MKS
Drawn: REH
Reviewed: MKS
Chief:
Submitted:
Chief:
Section
Branch

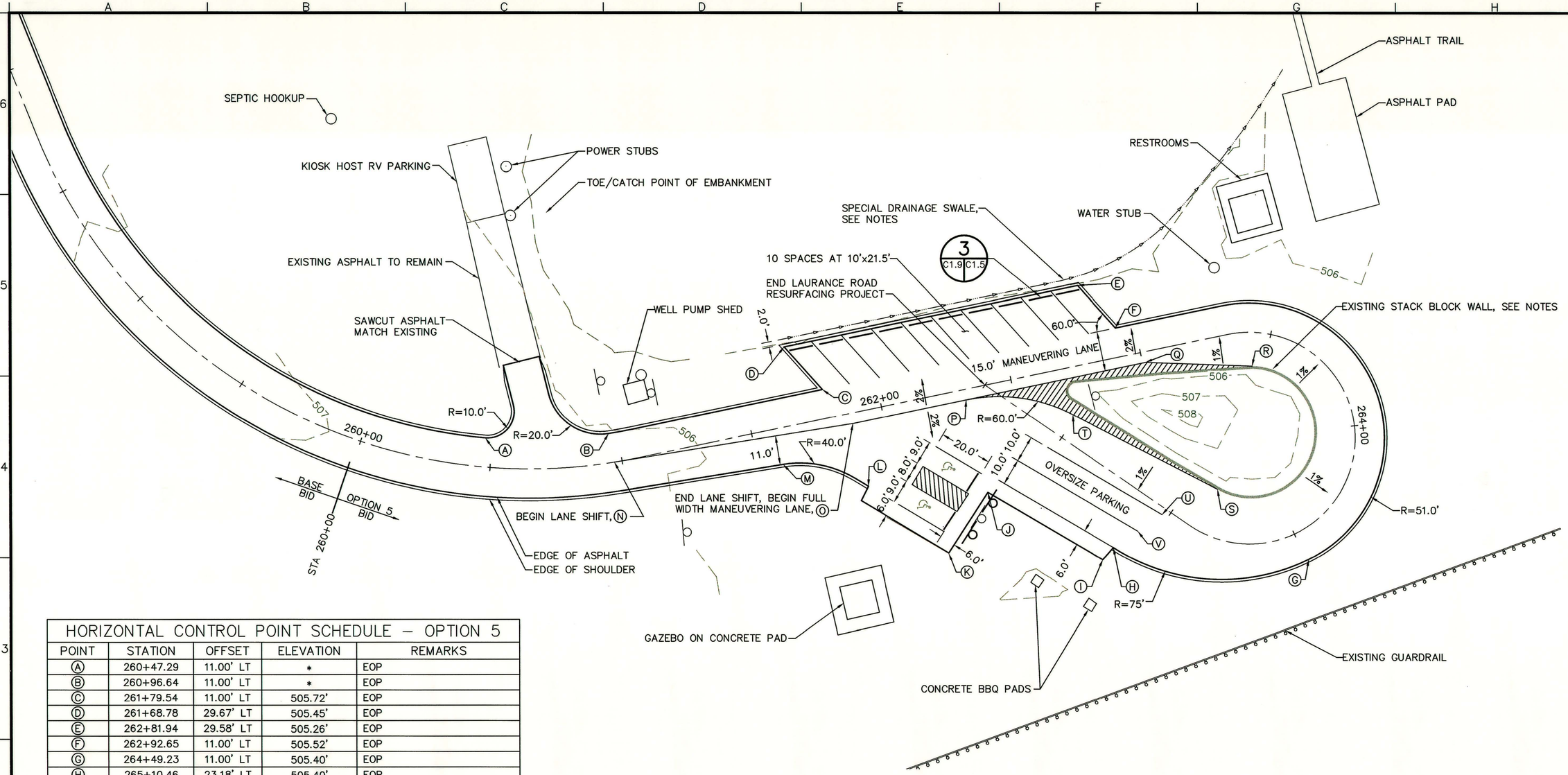
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYON NYMAN MAYER, INC.
911 W. 8TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501-3408
907 258-2520 FAX (907) 258-2526

NORTH POLE, ALASKA
LAURANCE ROAD IMPROVEMENTS
OPTION 4
PARKING AREA

Reference number:
C1.8
Sheet 14 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\Booth_Parking_Dets.DWG last saved on 10/12/2006 3:37 PM was plotted by RobC on 10/12/2006 7:18 PM



HORIZONTAL CONTROL POINT SCHEDULE – OPTION 5				
POINT	STATION	OFFSET	ELEVATION	REMARKS
A	260+47.29	11.00' LT	*	EOP
B	260+96.64	11.00' LT	*	EOP
C	261+79.54	11.00' LT	505.72'	EOP
D	261+68.78	29.67' LT	505.45'	EOP
E	262+81.94	29.58' LT	505.26'	EOP
F	262+92.65	11.00' LT	505.52'	EOP
G	264+49.23	11.00' LT	505.40'	EOP
H	265+10.46	23.18' LT	505.40'	EOP
I	265+11.14	29.25' LT	505.26'	EOP
J	265+61.34	32.81' LT	505.28'	EOP
K	262+13.56	59.20' RT	505.18'	EOP
L	261+88.99	28.34' RT	505.32'	EOP
M	261+59.26	13.67' RT	505.77'	EOP
N	260+97.07	0.00'	*	BEGIN LANE SHIFT
O	261+88.19	4.00' RT	505.91'	LANE SHIFT, FULL WIDTH
P	262+31.92	4.00' RT	505.84'	STRIPING
Q	263+01.14	4.00' RT	505.90'	STRIPING
R	263+43.40	12.79' RT	N/A	STRIPING
S	264+89.77	17.18' RT	N/A	STRIPING
T	265+51.40	9.54' RT	N/A	STRIPING
U	265+02.35	2.52' LT	N/A	STRIPING
V	265+06.31	12.86' LT	N/A	STRIPING

* HORIZONTAL CONTROL POINT NOTE:
REFER TO PLAN AND PROFILE SHEETS (C3 SERIES SHEETS) AND C1.1 FOR ASSOCIATED ELEVATIONS

NOTES:
1. CONTROL POINTS ARE TO EDGE OF ASPHALT.
2. CROSS SLOPE ROADWAY BETWEEN STATIONS 263+00 TO 265+81 AWAY FROM CENTER MEDIAN.
3. REMOVE AND DISPOSE OF EXISTING 6" CURB IN THE LOCATION WHERE THE NEW CURB IS TO BE INSTALLED.
4. EXISTING STACK BLOCK WALL IS INTENDED TO REMAIN IN PLACE. THE CONTRACTOR MAY ELECT TO REMOVE THE STACK BLOCK WALL FOR EASE OF ROADWAY CONSTRUCTION, HOWEVER, IT MUST BE RETURNED TO THE ORIGINAL LOCATION UPON CONSTRUCTION COMPLETION.
5. IMPROVEMENT OF DRAINAGE SWALE ADJACENT TO THE 10 STALL PARKING AREA MAY REQUIRE EXCAVATION OF EMBANKMENT. MAX SLOPE FOR EXCAVATION IS 2H:1V.
6. PLACE WHEEL STOPS AT BOTH ACCESSIBLE PARKING STALLS AND THE 10 STANDARD PARKING STALLS.

1 C3.5 C1.9 OPTION 5 – KIOSK AREA
SCALE: 1' = 20'

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1" = 20' HORZ.

STATE OF ALASKA 49TH
Micah Schoming
Micah K. Schoming
No. CE 10568
10-12-06
REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____ CITY ____ STATE ____
CONTRACTOR ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR ____ RESIDENT ENGINEER ____

Sym	Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File: ____ Drawing #: ____
Section ____ Branch ____
Designed: MKS
Drawn: REH
Reviewed: MKS
Chief: ____
Submitted: ____
Chief: ____

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCOK, WYMAN HAYES, INC.
911 W. 8TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501
tel (907) 258-2520 fax (907) 258-2526

NORTH POLE, ALASKA
LAURANCE ROAD IMPROVEMENTS
OPTION 5
KIOSK AREA

Reference number:
C1.9
Sheet 15 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\Booth_Parking_Dets.DWG last saved on 10/12/2006 3:37 PM was plotted by RobC on 10/12/2006 7:18 PM

SUPERELEVATION CURVES										
CURVE	RADIUS	TRANSITION IN				TRANSITION OUT				se%
		RUNOUT	RUNOFF	BEGIN RUNOUT	END RUNOFF	RUNOUT	RUNOFF	BEGIN RUNOFF	END RUNOUT	Rate
1	520.00	NC	NC	NC	NC	NC	NC	NC	NC	NC
2	510.00	NC	NC	NC	NC	NC	NC	NC	NC	NC
3	510.00	NC	NC	NC	NC	NC	NC	NC	NC	NC
4	1980.00	NC	NC	NC	NC	NC	NC	NC	NC	NC
5	870.00	NC	NC	NC	NC	NC	NC	NC	NC	NC
6	1990.00	NC	NC	NC	NC	NC	NC	NC	NC	NC
7	5720.00	NC	NC	NC	NC	NC	NC	NC	NC	NC
8	3240.00	41	47	192+80.47	193+68.47	41	47	200+68.90	201+56.90	2.3
9	200.00	NC	NC	NC	NC	NC	NC	NC	NC	NC
10	40.00	NC	NC	NC	NC	NC	NC	NC	NC	NC

NOTES:
1. 75% RUNOFF BEFORE CURVE
2. NC – NORMAL CROWN SECTION
3. RC – REMOVE ADVERSE CROWN, SUPER ELEVATE AT NORMAL CROWN SLOPE
4. POSTED SPEED LIMIT IS 45 MPH

1 SUPER ELEVATION TABLE

C3 SHTS | C2.1

SCALE: NOT TO SCALE

DRIVEWAY/APPROACH SUMMARY TABLE					
SHEET	STATION	OFFSET	TYPE	NAME	REMARKS
C3.1	15+82.80	LT	PUBLIC	BIKE PATH PARKING LOT ENTRANCE A	OPTION 1
C3.1	17+87.50	LT	PUBLIC	BIKE PATH PARKING LOT ENTRANCE B	OPTION 1
C3.1	17+42.90	RT	PUBLIC	HOST ACCESS	OPTION 1
C3.2	109+78.30	LT	PUBLIC	WELL HOUSE DRIVE	BASE BID
C3.2	111+15.49	LT	PUBLIC	SOUTH DUMP STATION	BASE BID
C3.2	113+13.13	LT	PUBLIC	NORTH DUMP STATION	BASE BID
C3.3	120+04.90	LT	PUBLIC	CHENA PROJECT OFFICE ENTRANCE	BASE BID
C3.3	165+19.94	LT	PUBLIC	CHENA RIVER/LAKES ENTRANCE	BASE BID
C3.5	235+73.88	LT	PUBLIC	RIVER PARK ENTRANCE	BASE BID
C3.5	256+00	RT	PUBLIC	OUTLET WORKS RAMP	BASE BID
C3.5	260+72.30	LT	PUBLIC	HOST ACCESS	OPTION 5

2 DRIVEWAY/APPROACH SUMMARY TABLE

C3 SHTS | C2.1

SCALE: NOT TO SCALE

SIGN SCHEDULE						
SHEET	STATION	OFFSET	DESCRIPTION	TYPE	DIRECTION	REMARKS
C4.3	109+50	LT	STOP	R1–1	FACES WEST	BASE BID
C4.3	109+50	LT	ONE WAY	R6–1R	FACES WEST	BASE BID, PLACE ON POST WITH R1–1
C4.3	111+00	LT	STOP	R1–1	FACES WEST	BASE BID
C4.3	113+60	LT	"SLOW AHEAD"	CUSTOM MADE SIGN	FACES NORTH	BASE BID
C4.5	187+00	RT		W11–2A	FACES SOUTH	OPTION 4
C4.5	187+00	RT	WILDLIFE VIEWING	CUSTOM MADE SIGN	FACES SOUTH	OPTION 4 PLACE ON POST W/ W11–2A
C4.5	189+95	LT		R7–8	FACES EAST	OPTION 4
C4.5	189+95	LT	VAN ACCESSIBLE	R7–8a	FACES EAST	OPTION 4 PLACE ON POST W/ R7–8
C4.5	194+00	LT		W11–2A	FACES NORTH	OPTION 4
C4.5	194+00	LT	WILDLIFE VIEWING	CUSTOM MADE SIGN	FACES NORTH	OPTION 4 PLACE ON POST W/ W11–2A
C4.7	262+10	RT		R7–8	FACES SOUTH	OPTION 5
C4.7	262+10	RT	VAN ACCESSIBLE	R7–8a	FACES NORTH	OPTION 5 PLACE ON POST W/ R7–8
C4.7	262+80.6	RT	ONE WAY	R6–1R	FACES SOUTHEAST	OPTION 5 PLACE ON EXISTING POST

NOTES:
1. CONTRACTOR SHALL REMOVE AND REUSE SIGNS FOR HIS CONVENIENCE. EXISTING SIGNS REMOVED FOR EASE OF CONSTRUCTION SHALL BE REINSTALLED AT THE SAME LOCATION FROM WHICH IT WAS TAKEN. REINSTALL SIGN HEIGHT ACCORDING TO TYPICAL DETAILS OR TO ORIGINAL SIGN HEIGHT FOR SIGNS NOT GOVERNED BY THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). COORDINATE WITH THE CONTRACTING OFFICER FOR SIGN TYPES AND FINAL INSTALLATION HEIGHT.
2. REPLACE SIGN SUPPORTS AS REQUIRED BY CONTRACTING OFFICER.
3. CUSTOM SIGNS WILL BE 30"X30" WARNING SIGN TYPES WITH BLACK LETTERING ON YELLOW BACKGROUND.
4. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MUTCD AND ALASKA TRAFFIC MANUAL.

3 SIGN SCHEDULE

C3 SHTS | C2.1

SCALE: NOT TO SCALE

STATE OF ALASKA 49TH Micah Schoming Micah K. Schoming No. CE 10568 10-13-06 REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS ALASKA DISTRICT

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Sym	Action	Description	Date	Appvd

Date: 10/13/06 | Dwg Scale: AS NOTED | Plot Scale: HALF SIZE | File: | Drawing #: | Section | Sheet:

Designed: MKS | Drawn: REH | Reviewed: MKS | Chief | Submit test | Chief

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC. 310 K STREET, SUITE 200 ANCHORAGE, ALASKA 99501-2040

NORTH POLE, ALASKA

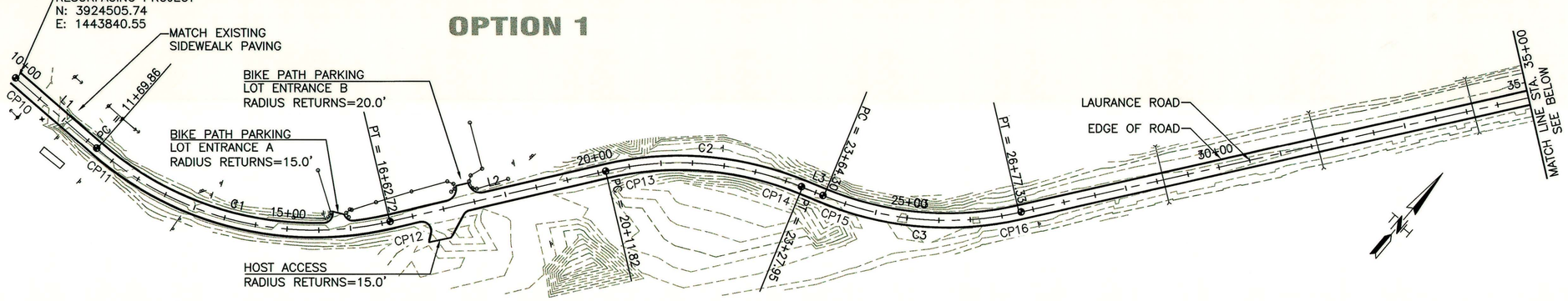
LAURANCE ROAD IMPROVEMENTS

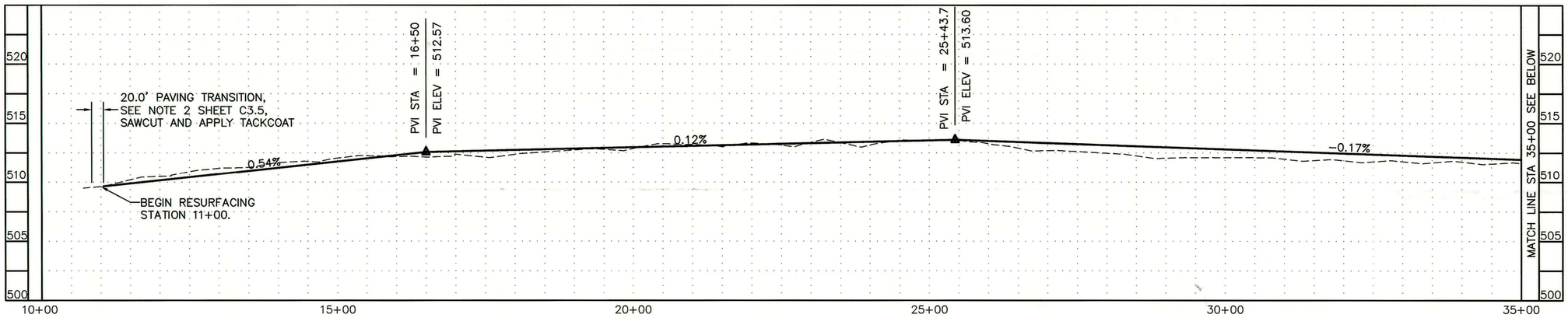
SCHEDULES

Reference number: C2.1

Sheet 16 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\7_Curve Tables.dwg last saved on 10/12/2006 3:39 PM was plotted by RobC on 10/12/2006 7:18 PM





LINE TABLE		
LINE	LENGTH	BEARING
L1	169.86	S88°48'49"E
L2	349.10	N36°52'48"E
L3	36.35	N72°23'45"E

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA ANGLE
C1	492.87	520.00	54°18'23"
C2	316.13	510.00	35°30'57"
C3	313.03	510.00	35°10'02"

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1" = 100' HORZ.
1" = 5' VERT.

STATE OF ALASKA
49TH
Micah K. Schoming
Micah K. Schoming
No. CE 10568
10-13-06
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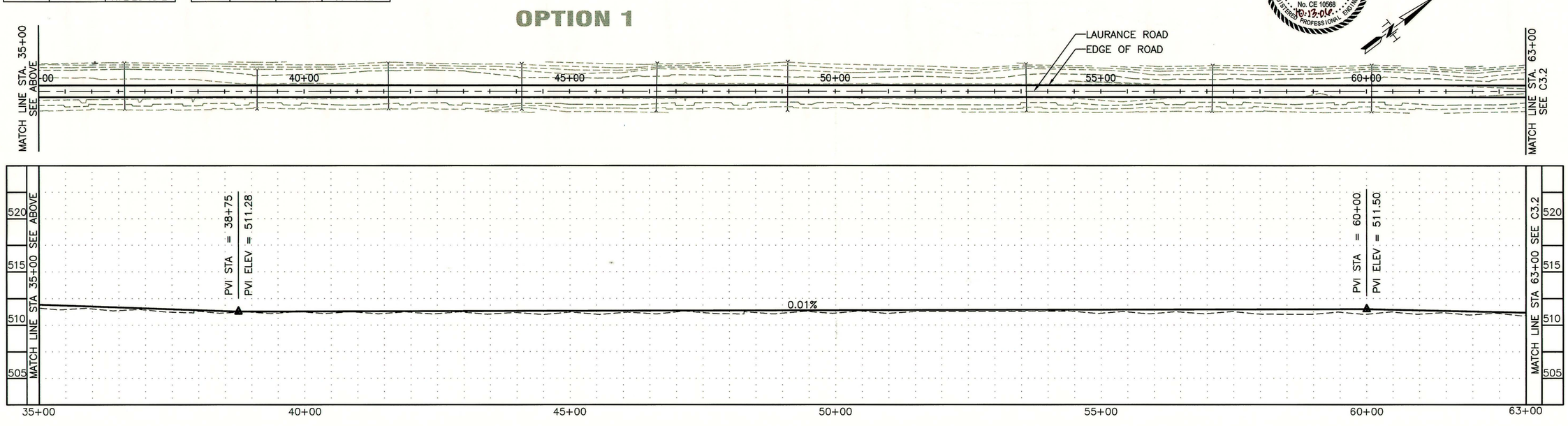

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO.
CONTRACTOR
CITY
STATE
Recommended:
Approved:
Date:
PRIME CONTRACTOR
RESIDENT ENGINEER

Sym.	Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File:
Drawing #:
Section
Branch
Designed: MKS
Drawn: REH
Reviewed: MKS
Chief:
Submitted:
Chief:

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
911 W. 8TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501
907-272-5450 FAX 907-272-9065

NORTH POLE, ALASKA
OPTIONAL BID
LAURANCE ROAD
IMPROVEMENTS
PLAN AND PROFILE

Reference number:
C3.1
Sheet 17 of 28

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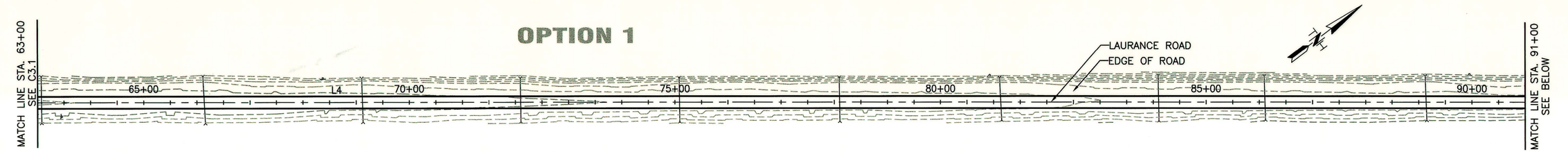
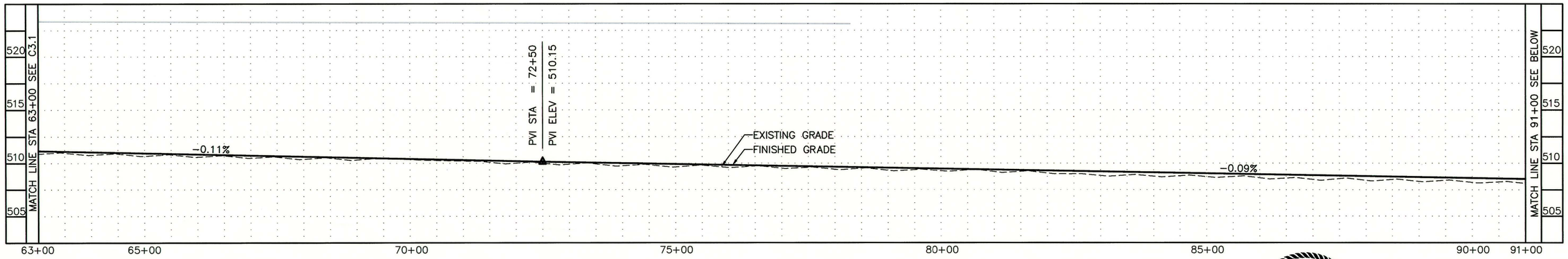


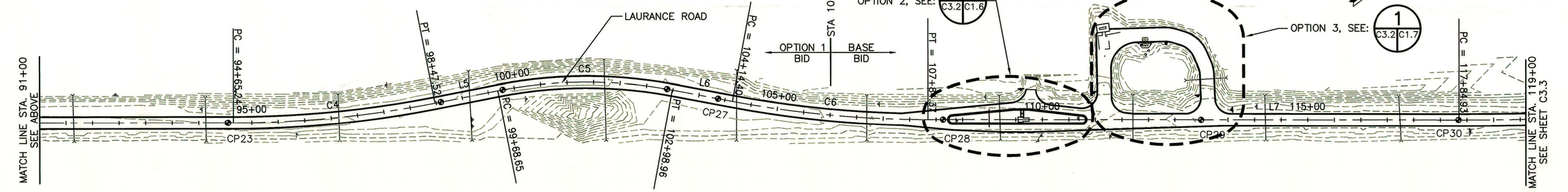


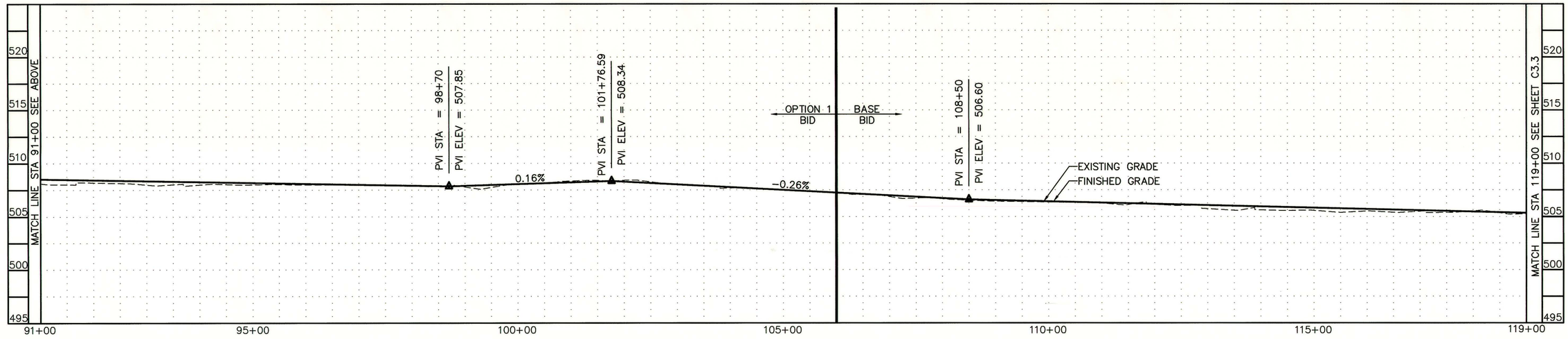
LINE TABLE		
LINE	LENGTH	BEARING
L4	6787.90	N37°13'43"E
L5	121.13	N26°09'59"E
L6	115.44	N47°55'11"E
L7	1000.56	N37°16'03"E

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA ANGLE
C4	382.28	1980.00	11°03'44"
C5	330.31	870.00	21°45'12"
C6	369.97	1990.00	10°39'08"

STATE OF ALASKA 49TH Micah K. Schoming No. CE 10568 10-13-06 REGISTERED PROFESSIONAL ENGINEER

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1" = 100' HORZ.
1" = 5' VERT.





US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____
CONTRACTOR ____
CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR RESIDENT ENGINEER

Sym	Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File: ____
Drawing #: ____
Designed: MKS
Drawn: RSH
Reviewed: MKS
Chief: ____ Section
Submitted: ____
Chief: ____ Branch

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
911 W. 8TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501
(907) 276-1287 FAX (907) 276-7569

NORTH POLE, ALASKA
OPTIONAL BID
LAURANCE ROAD IMPROVEMENTS
PLAN AND PROFILE

Reference number:
C3.2
Sheet 18 of 28

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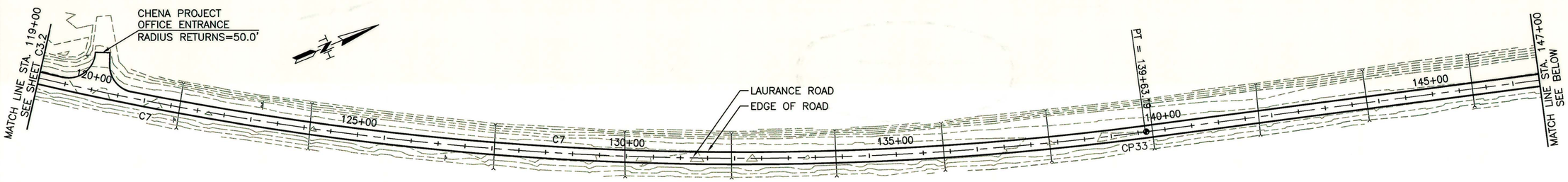
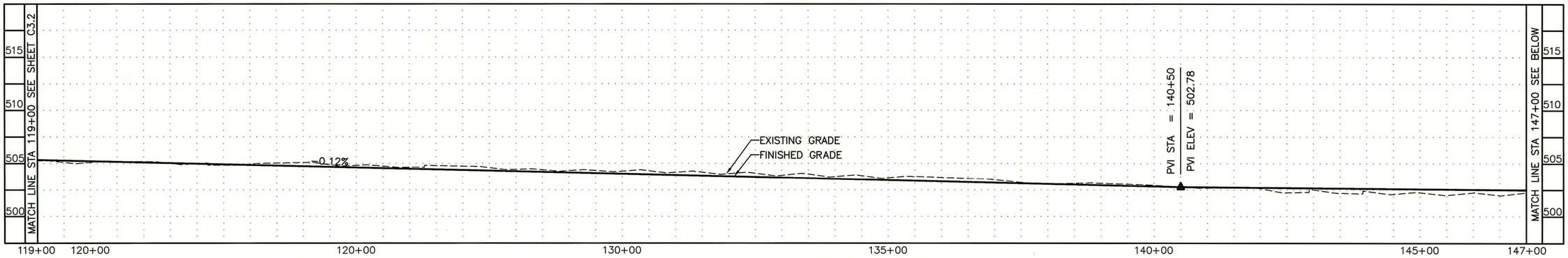


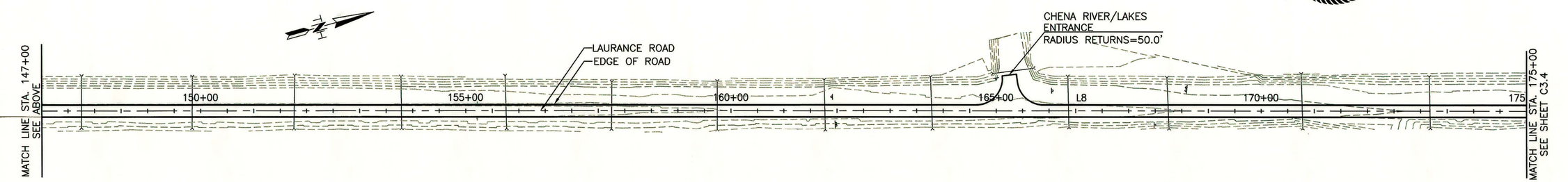


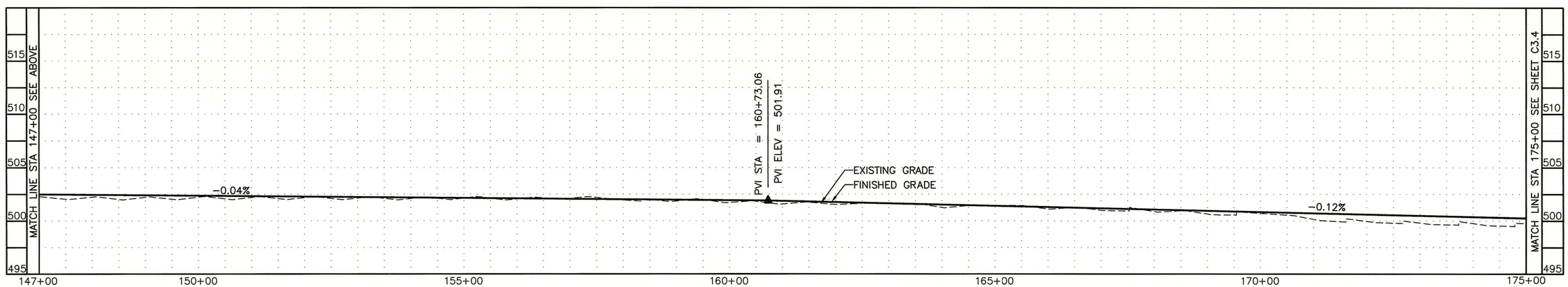
LINE TABLE		
LINE	LENGTH	BEARING
L8	5395.88	N15°26'55"E

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA ANGLE
C7	2178.26	5720.00	21°49'09"

STATE OF ALASKA
49TH
Micah Schoming
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1" = 100' HORZ.
1" = 5' VERT.





US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____ CONTRACTOR ____ CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR | RESIDENT ENGINEER

Symb	Action	Description	Date	Approved

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File: ____
Drawing #: ____
Designed: MKS
Drawn: RKC
Reviewed: MKS
Chief: ____ Section ____
Submitted: ____
Chief: ____ Branch ____

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
811 N. 5TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501
907 272-1232 FAX (907) 276-7022

NORTH POLE, ALASKA
OPTIONAL BID
LAURANCE ROAD IMPROVEMENTS
PLAN AND PROFILE

Reference number:
C3.3
Sheet 19 of 28

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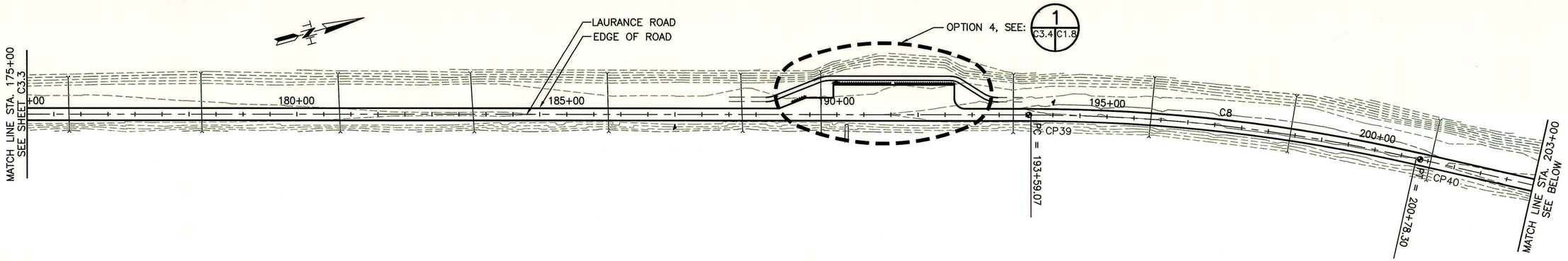
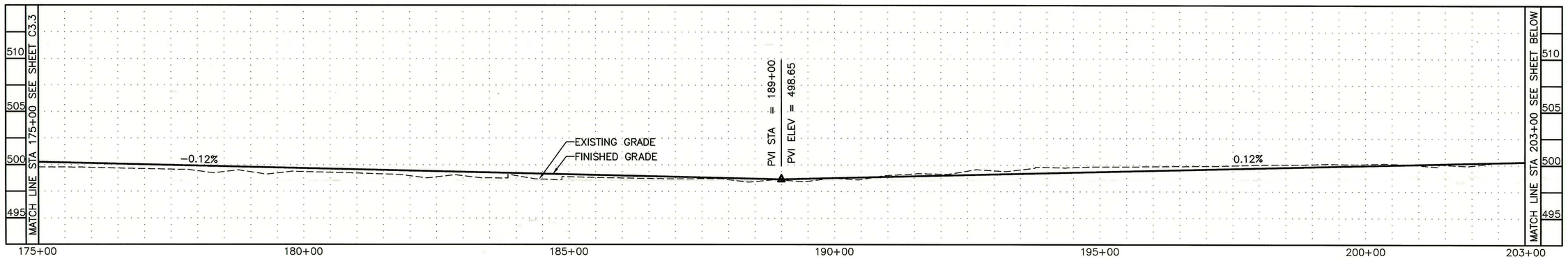
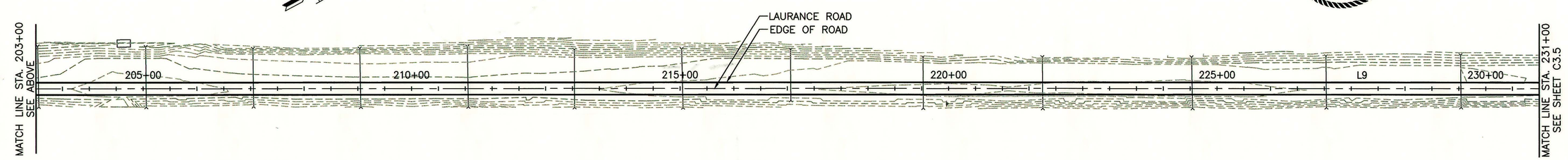
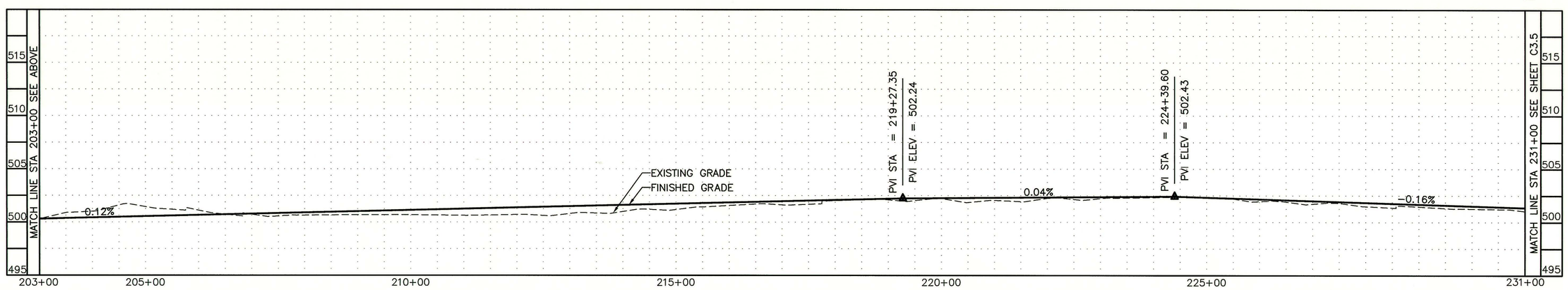




LINE TABLE		
LINE	LENGTH	BEARING
L9	5748.70	N28°10'03"E

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA ANGLE
C8	719.23	3240.00	12°43'08"





STATE OF ALASKA 49TH
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1" = 100' HORZ.
1" = 5' VERT.

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____
CONTRACTOR ____
CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
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Sym	Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
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File:
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Designed: MKS
Drawn: RJC
Reviewed: MKS
Section:
Chief:
Submitted:
Branch:
Chief:

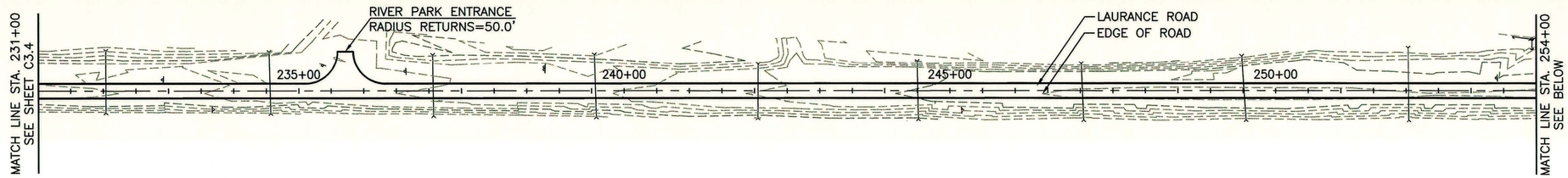
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

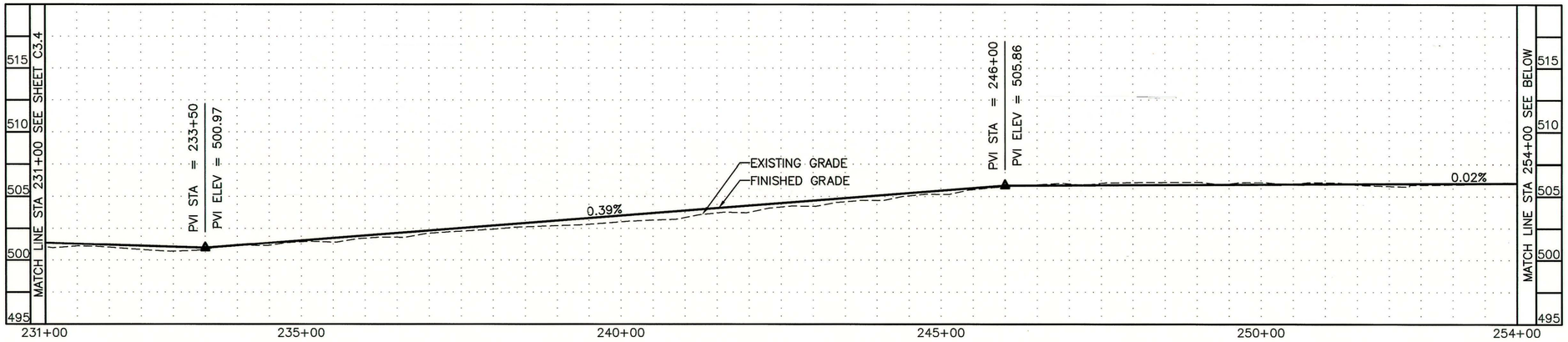
TRYON, NYMAN HAYES, INC.
711 H ST., ANCHORAGE, ALASKA 99501
PH: (907) 276-1287 FAX: (907) 276-7265

NORTH POLE, ALASKA
OPTIONAL BID
LAURANCE ROAD IMPROVEMENTS
PLAN AND PROFILE

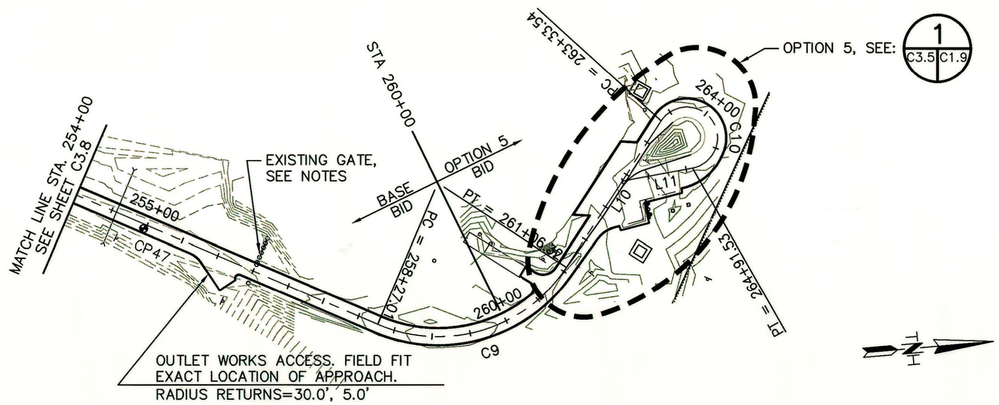
Reference number:
C3.4
Sheet 20 of 28

Drawing m:\03003.010 - L. Road\Civil_ACAD\P & P.dwg last saved on 10/12/2006 2:18 PM was plotted by RobC on 10/12/2006 7:21 PM





GRAPHIC SCALE
100 0 50 100 200
(IN FEET)
1" = 100' HORZ.
1" = 5' VERT.

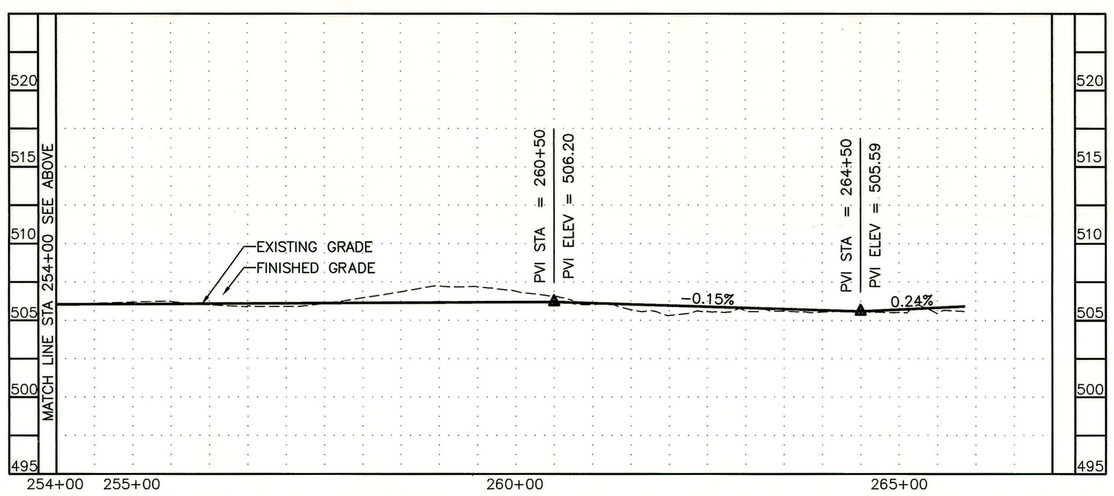


LINE TABLE		
LINE	LENGTH	BEARING
L10	227.22	N51°50'57"W
L11	93.55	S05°32'51"E

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA ANGLE
C9	279.31	200.00	80°00'59"
C10	157.99	40.00	226°18'06"

NOTES:

1. PROPOSED HORIZONTAL ALIGNMENT IS 5' WEST OF THE EXISTING ALIGNMENT AT STATION 250+00. PROPOSED HORIZONTAL ALIGNMENT TRANSITIONS BACK TO EXISTING ALIGNMENT AT STATION 200+78 AND 258+27.
2. CONTRACTOR MAY REMOVE GATE FOR EASE OF ROAD CONSTRUCTION, REPLACE GATE AFTER CONSTRUCTION TO ORIGINAL LOCATION UNLESS HORIZONTAL CHANGES TO THE ROAD HAVE BEEN MADE, THEN THE GATE OPENING SHALL BE INSTALLED TO MATCH ROADWAY. FOUNDATION OF GATE POSTS SHALL BE SIMILAR TO SIGN POST FOUNDATION DETAIL EXCEPT CONCRETE FOUNDATION SHALL BE 30" IN DIA.
3. ASPHALT SURFACING SHALL TRANSITION FROM THE SAWCUT LOCATION TO AT LEAST 20 FEET OVER TOP OF EXISTING PAVEMENT. THE TRANSITION WILL ACCOUNT FOR THE 2" OF VERTICAL ELEVATION DIFFERENCE BETWEEN THE NEW AND EXISTING ROADWAY.



US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____ CONTRACTOR ____ CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR — RESIDENT ENGINEER

Sym	Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File:
Drawing #:
Designed: MKS
Drawn: RJC
Reviewed: MKS
Chief ____ Section
Submitted: ____
Chief ____ Branch

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYON NYMAN HAYES, INC.
711 H ST., ANCHORAGE, ALASKA 99501
Tel (907) 276-1287 Fax (907) 276-7569

NORTH POLE, ALASKA

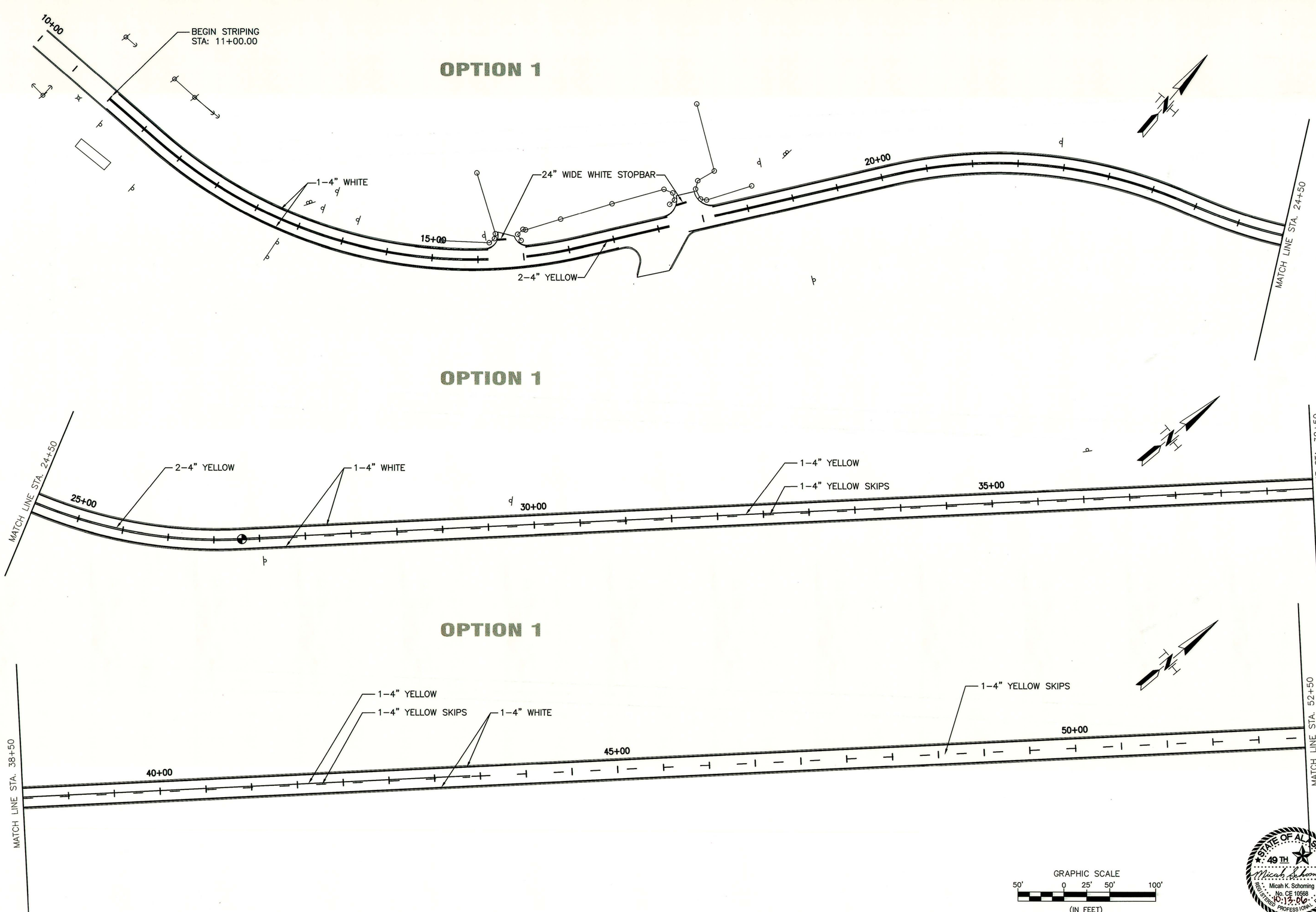
LAURANCE ROAD IMPROVEMENTS

PLAN AND PROFILE

STATE OF ALASKA
49TH
Micah K. Schoming
No. CE 10568
10/17/06
REGISTERED PROFESSIONAL ENGINEER

Reference number:
C3.5
Sheet 21 of 28

Drawing m:\03003.010 - L. Road\Civil_ACAD\P & P.dwg last saved on 10/12/2006 2:18 PM was plotted by RobC on 10/12/2006 7:22 PM



US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO.
CONTRACTOR
CITY STATE
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

Sym	Action	Description	Date	Approved

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File:
Drawing #:
Section
Branch

Designed: MKS
Drawn: FEH
Reviewed: MKS
Chief
Submitted:
Chief

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
911 E. 5TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501
TEL (907) 276-1287 FAX (907) 276-7569

NORTH POLE, ALASKA

LAURANCE ROAD IMPROVEMENTS

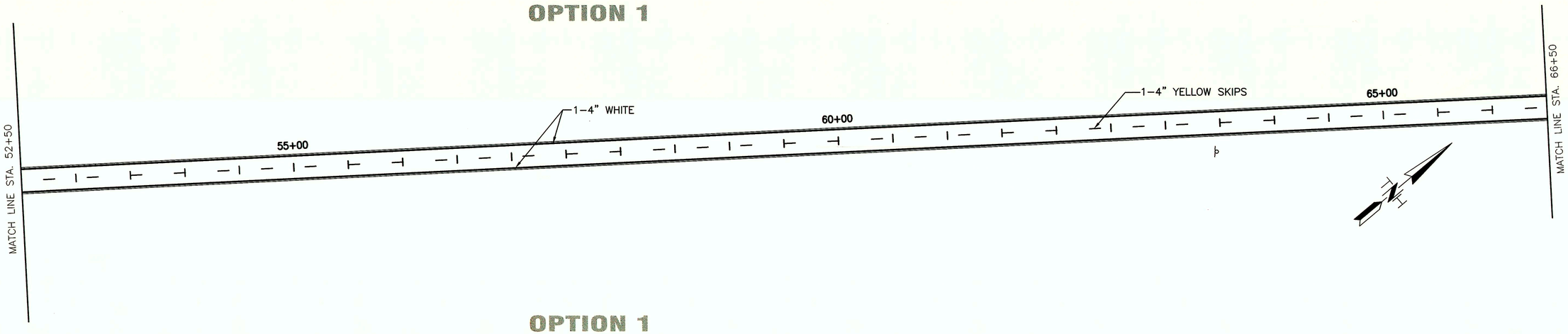
SIGNING AND STRIPING

STATE OF ALASKA
49TH
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

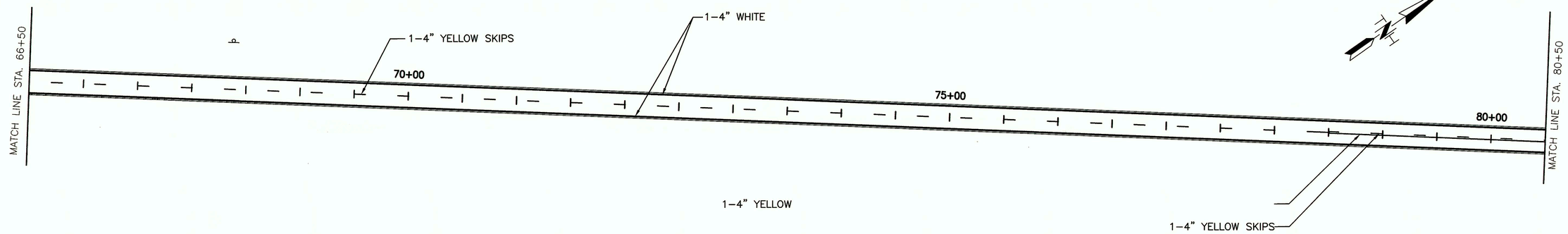
Reference number:
C4.1
Sheet 22 of 28

Drawing m:\03003.010 - L. Road\Civil_ACAD\Sign_Striping.dwg last saved on 10/12/2006 2:36 PM was plotted by RobC on 10/12/2006 7:23 PM

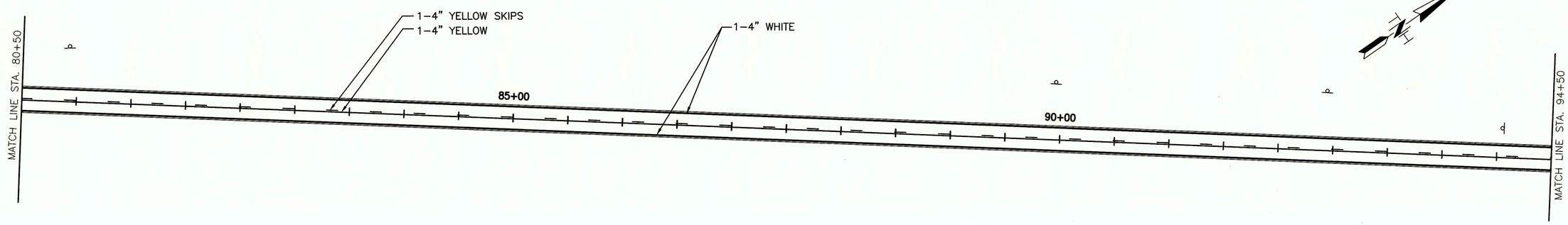
OPTION 1



OPTION 1



OPTION 1



GRAPHIC SCALE
50' 0 25' 50' 100'
(IN FEET)
SCALE: 1" = 50'

STATE OF ALASKA 49TH
Micah K. Schoming
No. CE 10568
10-12-06
REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____
CONTRACTOR ____
CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
Trial contractor ____ resident engineer ____

Grn Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File:
Section ____
Branch ____ Drawing #: ____

Designed: MKS
Drawn: RGH
Reviewed: MKS
Chief: ____
Submitted: ____
Chief: ____

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
310 K STREET, ANCHORAGE, AK 99501-2000
PH: (907) 274-8338 FAX: (907) 276-2810
E: tnh@tnhaec.com Web: www.tnhaec.com

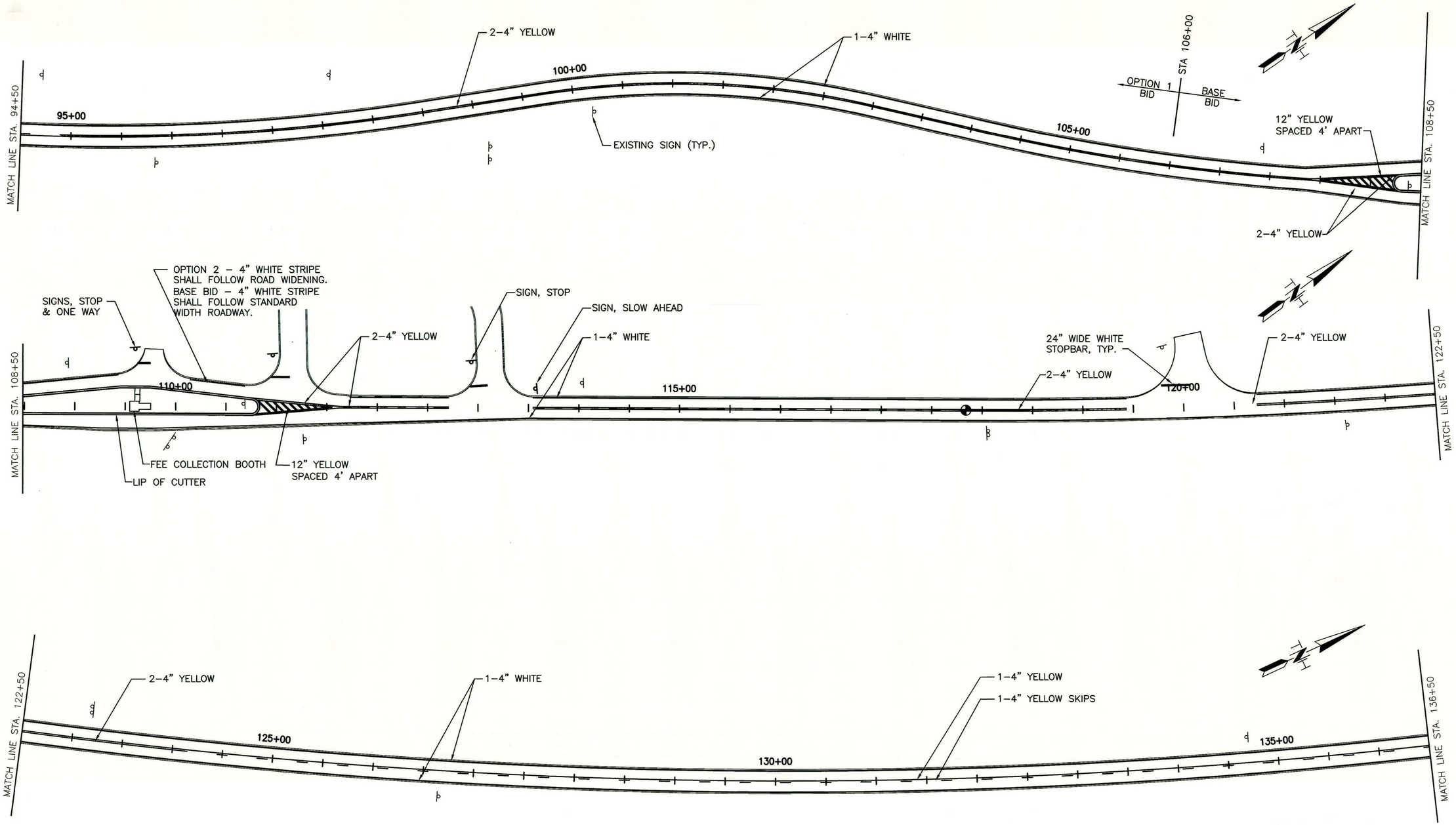
NORTH POLE, ALASKA

LAURANCE ROAD IMPROVEMENTS

SIGNING AND STRIPING

Reference number:
C4.2
Sheet 23 of 28

Drawing m:\03003.010 - L. Road\Civil_ACAD\Sign_Striping.dwg last saved on 10/12/2006 2:36 PM was plotted by RobC on 10/12/2006 7:23 PM



GRAPHIC SCALE
50' 0 25' 50' 100'
(IN FEET)
SCALE: 1" = 50'

STATE OF ALASKA 49TH Micah K. Schoming No. CE 10568 REGISTERED PROFESSIONAL ENGINEER 10-12-06

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____ CONTRACTOR ____ CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR | RESIDENT ENGINEER

Sym	Action	Description	Date	Appvd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
Section: ____ File: ____
Branch: ____ Drawing #: ____

Designed: MKS
Drawn: REH
Reviewed: MKS
Chief: ____
Submitted:
Chief: ____

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYON NYMAN HAYES, INC.
911 W. 8TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501
907 272-5488 FAX (907) 274-9493

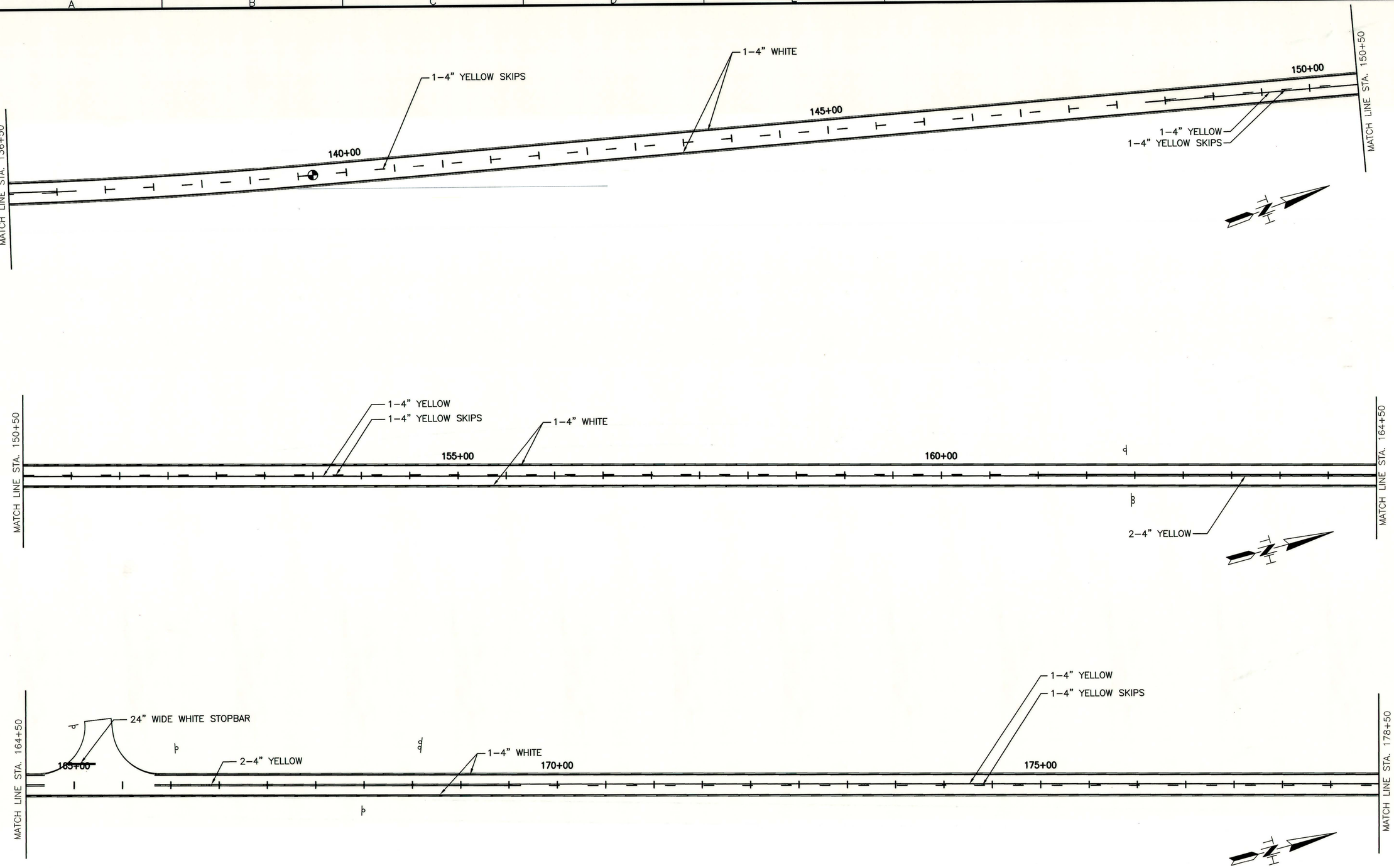
NORTH POLE, ALASKA

LAURANCE ROAD IMPROVEMENTS

SIGNING AND STRIPING

Reference number:
C4.3
Sheet 24 of 28

Drawing m:\03003.010 – L. Road\Civil_ACAD\Sign_Striping.dwg last saved on 10/12/2006 2:36 PM was plotted by RobC on 10/12/2006 7:23 PM



GRAPHIC SCALE
50' 0 25' 50' 100'
(IN FEET)
SCALE: 1" = 50'

STATE OF ALASKA 49TH
Micah K. Schoming
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO.
CONTRACTOR
CITY STATE
Recommended: Approved: Date:
PRIME CONTRACTOR RESIDENT ENGINEER

Sym	Action	Description	Date	Approd

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File:
Drawing #:
Section:
Branch:

Designed: MKS
Drawn: REH
Reviewed: MKS
Chief:
Submitted:
Chief:

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
911 W. 8TH AVENUE, SUITE 200
ANCHORAGE, ALASKA 99501
907 (907) 274-5486 FAX (907) 274-9493

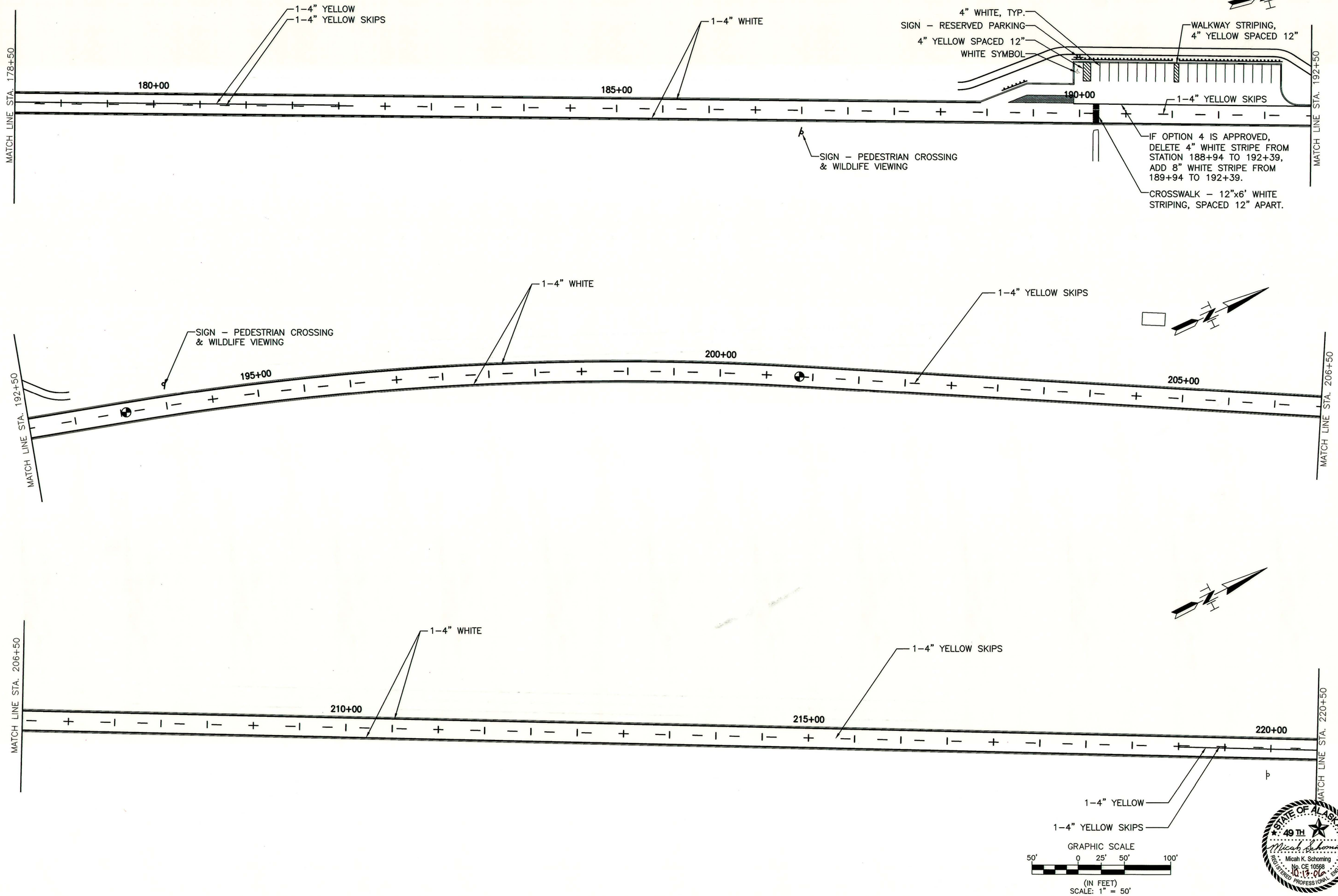
NORTH POLE, ALASKA

LAURANCE ROAD IMPROVEMENTS

SIGNING AND STRIPING

Reference number:
C4.4
Sheet 25 of 28

Drawing m:\03003.010 - L. Road\Civil_ACAD\Sign_Striping.dwg last saved on 10/12/2006 2:36 PM was plotted by RobC on 10/12/2006 7:24 PM



STATE OF ALASKA
49TH
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO.
CONTRACTOR
CITY
STATE
Recommended:
Approved:
Date:
PRIME CONTRACTOR
RESIDENT ENGINEER

Sym.	Action	Description	Date	Appvd

Date: 10/13/06
Dwg. Scale: AS NOTED
Plot Scale: HALF SIZE
Designed: MKS
Drawn: REH
Reviewed: MKS
Chief
Submitted:
Chief
Section
File:
Drawing #:
Branch

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRIVIS WYMAN MARVEL INC.
911 W. 8TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501-3408
FAX (907) 258-2520
FAX (907) 258-2521

NORTH POLE, ALASKA

LAURANCE ROAD IMPROVEMENTS

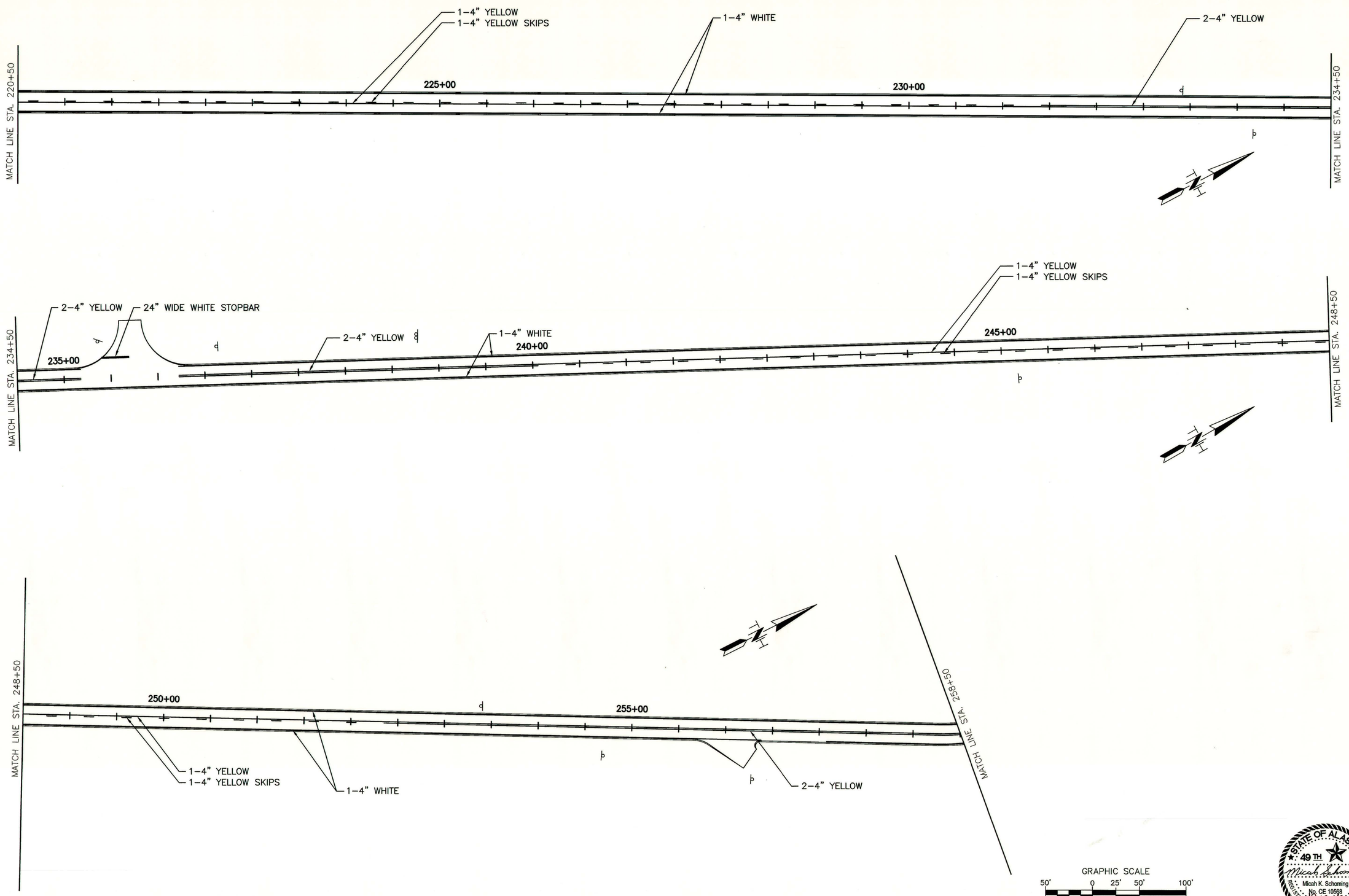
SIGNING AND STRIPING

Reference number:

C4.5

Sheet 26 of 28

Drawing m:\03003.010 - L. Road\Civil_ACAD\Sign_Striping.dwg last saved on 10/12/2006 2:36 PM was plotted by RobC on 10/12/2006 7:24 PM



GRAPHIC SCALE
50' 0 25' 50' 100'
(IN FEET)
SCALE: 1" = 50'

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____
CONTRACTOR ____
CITY ____ STATE ____
Recommended: ____ PRIME CONTRACTOR
Approved: ____ RESIDENT ENGINEER
Date: ____

Sym	Action	Description	Date	Approval

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File:
Drawing #:

Designed: MKS
Drawn: REH
Reviewed: MKS
Chief ____ Section
Submitted:
Chief ____ Branch

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

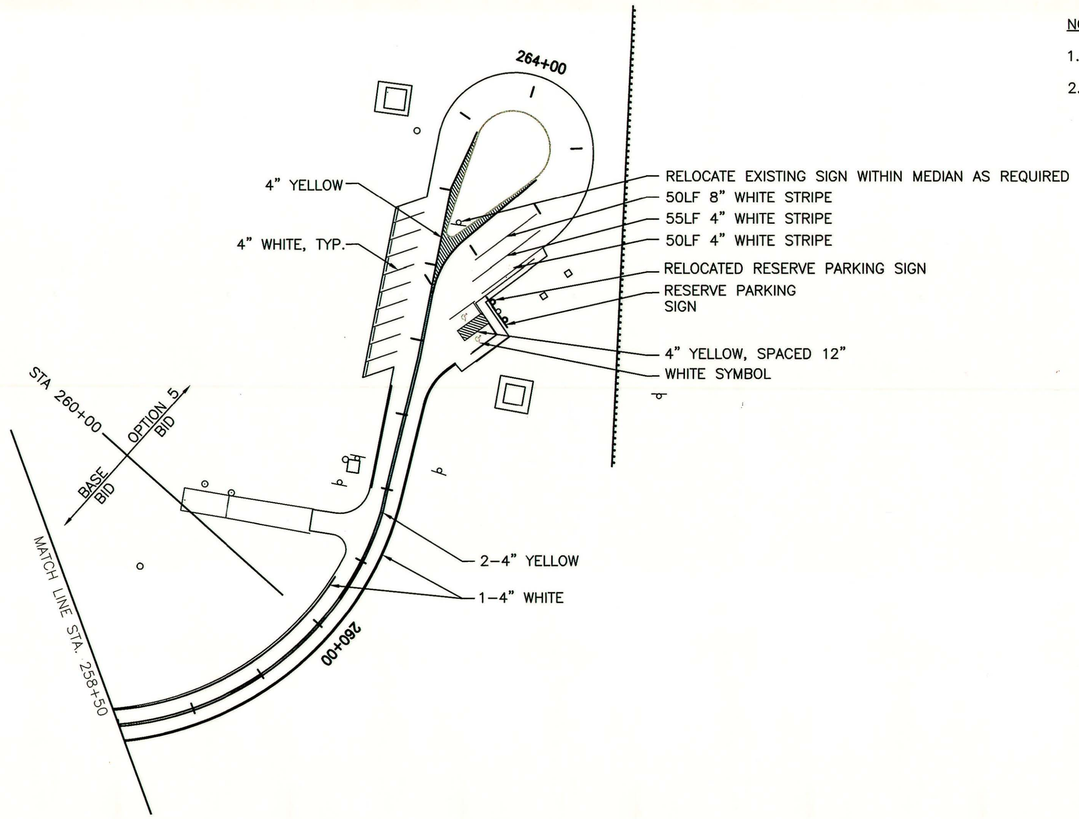
WRIGHT WYMAN MAYNE, INC.
911 W. 8TH AVENUE, SUITE 300
ANCHORAGE, ALASKA 99501-3470
TEL (907) 276-1848 FAX (907) 276-3001

NORTH POLE, ALASKA
LAURANCE ROAD IMPROVEMENTS
SIGNING AND STRIPING

STATE OF ALASKA 49TH
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

Reference number:
C4.6
Sheet 27 of 28

Drawing m:\03003.010 - L. Road\Civil_ACAD\Sign_Striping.dwg last saved on 10/12/2006 2:36 PM was plotted by RobC on 10/12/2006 7:25 PM



NOTES:

1. REFER TO SHEET C1.9 FOR MORE DETAILED INFORMATION ON KIOSK AREA SIGNING AND STRIPING.
2. WHITE SYMBOL FOR RESERVED PARKING SHALL CONFORM TO MUTCD STANDARDS.

GRAPHIC SCALE

50' 0 25' 50' 100'

(IN FEET)
SCALE: 1" = 50'

STATE OF ALASKA 49TH
Micah K. Schoming
No. CE 10568
10-13-06
REGISTERED PROFESSIONAL ENGINEER

US ARMY CORPS OF ENGINEERS
ALASKA DISTRICT

CONTRACT NO. ____ CONTRACTOR ____ CITY ____ STATE ____
Recommended: ____ Approved: ____ Date: ____
PRIME CONTRACTOR ____ RESIDENT ENGINEER ____

Sym	Action	Description	Date	Approv

Date: 10/13/06
Dwg Scale: AS NOTED
Plot Scale: HALF SIZE
File: ____
Drawing #: ____

Designed: MKS
Drawn: REH
Reviewed: MKS
Chief, ____ Section
Submitted:
Chief, ____ Branch

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
ANCHORAGE, ALASKA

TRYCK NYMAN HAYES, INC.
711 H. ST., ANCHORAGE, ALASKA 99501
PH: (907) 274-5600 FAX: (907) 276-1033

NORTH POLE, ALASKA

LAURANCE ROAD IMPROVEMENTS

SIGNING AND STRIPING

Reference number:

C4.7

Sheet 28 of 28

Drawing m:\03003.010 - L. Road\Civil_ACAD\Sign_Striping.dwg last saved on 10/12/2006 2:36 PM was plotted by RobC on 10/12/2006 7:25 PM