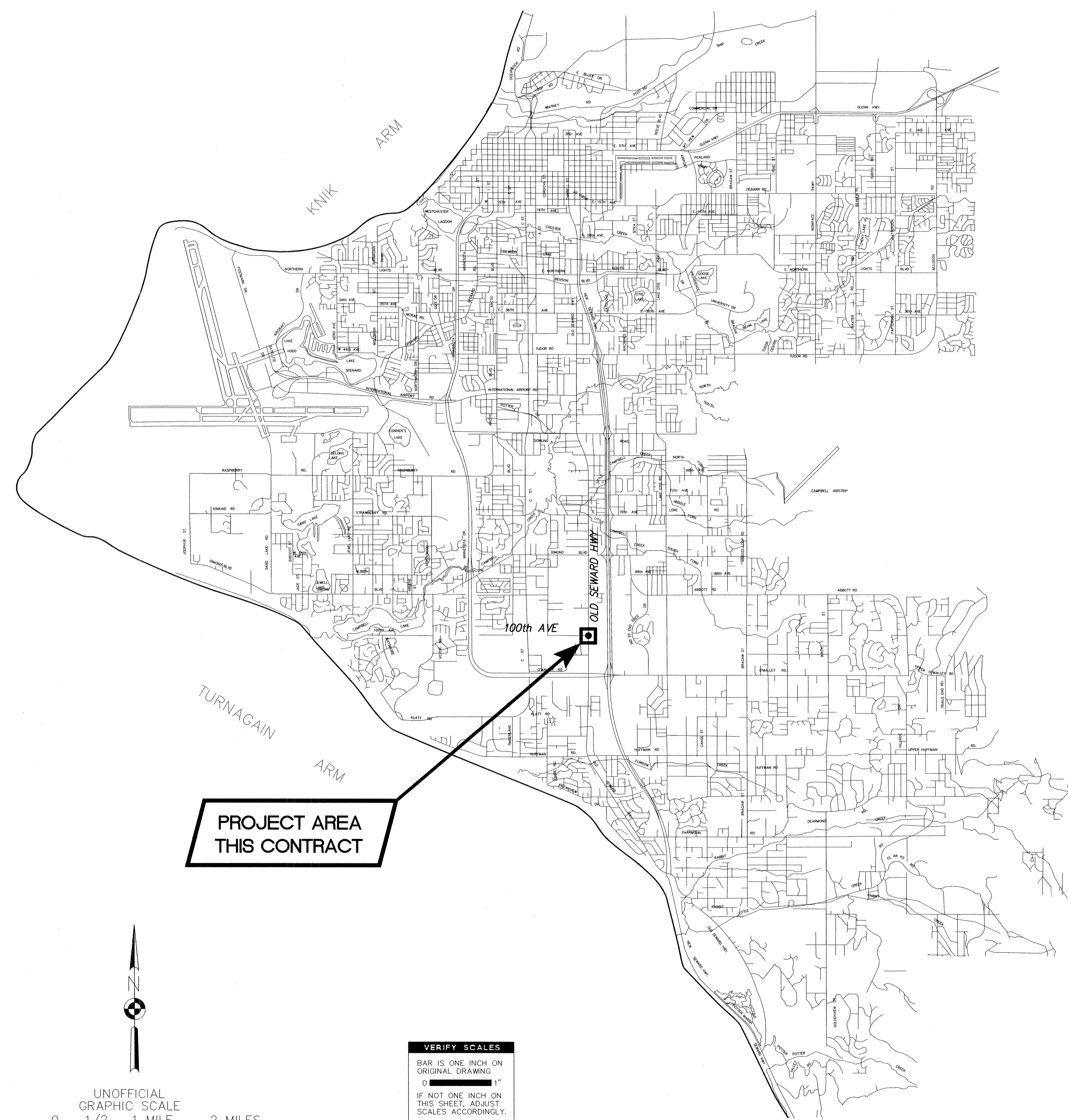




MUNICIPALITY OF ANCHORAGE
PROJECT MANAGEMENT AND
ENGINEERING DEPARTMENT

100th AVENUE AT
OLD SEWARD HIGHWAY SIGNALIZATION
Project 04-22



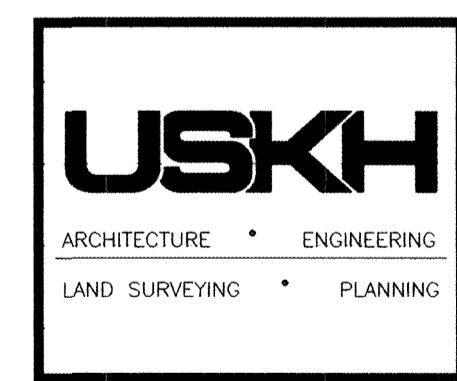
PROJECT AREA
THIS CONTRACT



UNOFFICIAL
GRAPHIC SCALE
0 1/2 1 MILE 2 MILES

VERIFY SCALES
BAR IS ONE INCH ON
ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY.

PREPARED BY:



APPROVED BY:

Mark Begich
MARK BEGICH
MAYOR

J.W. Hansen
J.W. HANSEN
DEPUTY DIRECTOR

GENERAL NOTES:

- CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE MUNICIPALITY OF ANCHORAGE STANDARD SPECIFICATIONS, STREETS-DRAINAGE-UTILITIES-PARKS, DATED 1994 HEREAFTER REFERRED TO AS M.A.S.S., AS CURRENTLY AMENDED BY THE SPECIAL PROVISIONS.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION. THE PERMITS SHALL BE MAINTAINED AT THE JOB SITE.
- STATIONING IS TO R.O.W. CENTERLINE, UNLESS OTHERWISE NOTED. DIMENSIONS ARE TO TOP BACK OF CURB (TBC), UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL MAINTAIN "REDLINE" RECORD DRAWINGS ON A CLEAN SET OF CONSTRUCTION DRAWINGS IN ACCORDANCE WITH M.A.S.S. DIVISION 65.00 CONSTRUCTION SPECIFICATIONS FOR CONSTRUCTION SURVEY. THE "REDLINES" SHALL BE KEPT CURRENT ON A DAILY BASIS AND SHALL BE AVAILABLE TO THE ENGINEER FOR INSPECTION ON THE JOB SITE. CONTRACTOR SHALL RECORD SURVEY NOTES AND SUBMIT DAILY TO THE ENGINEER.
- CONTRACTOR SHALL RECORD SURVEY NOTES FOR SUBMITTAL WITH AS-BUILT PLANS, INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD. CONTRACTOR SHALL RECORD ALL DEVIATIONS FROM THE PLANS.
- ALL CONSTRUCTION OPERATIONS REQUIRED FOR THIS PROJECT SHALL REMAIN WITHIN EXISTING M.O.A. RIGHTS-OF-WAY AND EASEMENTS, UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEER AND THE AFFECTED PROPERTY OWNER.
- LOCATIONS DEPICTED FOR THE UTILITIES AND OTHER EXISTING FEATURES ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES PRIOR TO CONSTRUCTION.
- UTILITY RELOCATES SHALL BE DONE BY OTHERS, UNLESS OTHERWISE NOTED.
- UNDERGROUND AND OVERHEAD ELECTRICAL AND TELECOMMUNICATION LINES, PEDESTALS, VAULTS, AND POLES OCCUR WITHIN THE PROJECT AREA; CONTRACTOR SHALL COORDINATE WORK ACCORDINGLY. ALL WORK IN CLOSE PROXIMITY TO EXISTING OVERHEAD AND UNDERGROUND LINES AND POLES SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL STATUTES, CODES AND GUIDELINES, AND THE ELECTRICAL FACILITY CLEARANCE REQUIREMENTS OF THE GOVERNING UTILITY. HAND DIGGING IS REQUIRED WITHIN TWO FEET OF ALL BURIED CABLES.
- CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT (ROADS, PARKING AREAS, DRIVEWAYS, ETC.) TO A LINE ONE (1) FOOT BEYOND PROPOSED IMPROVEMENTS, AND MORE IF NECESSARY, DURING THE INITIAL EXCAVATION OPERATIONS. IF EXISTING PAVEMENT HAS BEEN LIFTED, IF EDGE DOES NOT OCCUR IN UNDISTURBED MATERIAL, OR IF EDGE IS LOCATED WITHIN A TRAVEL LANE, FURTHER REMOVAL MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, TO PROVIDE A PROPER TRANSITION BETWEEN NEW AND EXISTING PAVEMENT. SAW CUTTING OF EXISTING PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "REMOVE EXISTING PAVEMENT" AND NO SEPARATE PAYMENT SHALL BE MADE.
- TACK COAT SHALL BE APPLIED TO THE SAW CUT ASPHALT FACE PRIOR TO PAVING.
- CURB & GUTTER AND SIDEWALK SHALL BE SAWCUT AT THE NEAREST JOINT AT OR BEYOND REMOVAL LIMITS OR AS DIRECTED BY THE ENGINEER. SAWCUTTING SHALL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE BID ITEM.
- STOP SIGNS IN THE PROJECT AREA, OR TEMPORARY STOP SIGNS, SHALL BE KEPT OPERATIONAL DURING CONSTRUCTION.
- THE LIMITS OF EXCAVATION SHOWN ON THE DRAWINGS ARE APPROXIMATE. ACTUAL LIMITS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- ALL WORK AND MATERIALS REQUIRED FOR REMOVING ANY LITTER OR DEBRIS WITHIN THE PROJECT LIMITS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT SHALL BE MADE.
- CONTRACTOR SHALL RESTORE DISTURBED PROPERTY TO PRECONSTRUCTION CONDITION(S), UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PAYMENT FOR RESTORING DISTURBED PROPERTY SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT SHALL BE MADE, UNLESS BID ITEMS ARE PROVIDED.
- TOPSOIL AND SEED ALL DISTURBED AREAS NOT OTHERWISE IMPROVED UNDER THIS CONTRACT. USE SCHEDULE A SEEDING MIX UNLESS SPECIFIED OTHERWISE.
- ALL ROAD FILL AND TRENCH BACKFILL SHALL BE COMPACTED TO NINETY-FIVE (95%) PERCENT OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT, BASED ON MODIFIED PROCTOR TEST VALUES.
- ALL ORGANIC MATERIAL SHALL BE REMOVED FROM THE SUB-GRADE TO A DEPTH TO BE DETERMINED BY THE ENGINEER. NO ORGANIC MATERIAL OR OTHER DELETERIOUS MATERIAL SHALL BE USED FOR BACKFILL.
- DETECTOR LOOPS SHALL BE INSTALLED IN A MINIMUM OF 4" OF LEVELING COURSE.

COMMON ABBREVIATIONS

A.C.	ASPHALT CONCRETE	R.O.W.	RIGHT-OF-WAY
AC	ASBESTOS CEMENT	RP	RADIUS POINT
A.D.A.	AMERICANS WITH DISABILITIES ACT OF 1990	RD.	ROAD
ADOT/PF	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES	RT.	RIGHT
AK D.E.C.	ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION	SAN.	SANITARY
APX.	APPROXIMATE	S.	SOUTH
ALUM.	ALUMINUM	SDMH	STORM DRAIN MANHOLE
BM	BENCH MARK	STD. DTL.	STANDARD DETAIL FOUND IN M.A.S.S.
B.O.P.	BEGINNING OF PROJECT	SE.	SOUTHEAST
BC	BRASS CAP	SSMH	SANITARY SEWER MANHOLE
BLDG.	BUILDING	SI	STREET INTERSECTION
BOP (BP)	BOTTOM OF PIPE	ST.	STREET
BV	BUTTERFLY VALVE	STA.	STATION/STATIONING
CL	CENTERLINE	SUBD.	SUBDIVISION
CI (CIP)	CAST IRON PIPE	T	TANGENT
CL	CLASS	TBC	TOP BACK OF CURB
CLR	CLEAR	TBM	TEMPORARY BENCH MARK
CMP	CORRUGATED METAL PIPE	TCP	TEMPORARY CONSTRUCTION PERMIT
C&G	CURB & GUTTER	TEL	TELEPHONE
CONST.	CONSTRUCT	TYP.	TYPICAL
CPEP	CORRUGATED POLYETHYLENE PIPE	TWLT	TWO WAY LEFT TURN
CTR.	CENTER	UG.	UNDERGROUND
D.I. (D.I.P.)	DUCTILE IRON PIPE	UTIL.	UTILITY
DTL.	DETAIL	VB	VALVE BOX
D.W.T.	DETECTABLE WARNING TILE	VC	VERTICAL CURVE
E.	EAST	VERT	VERTICAL
EB	EAST BOUND	VPI	VERTICAL POINT OF INTERSECTION
ELEC.	ELECTRIC(AL)	W.	WEST
ELEV. (EL.)	ELEVATION	WB	WEST BOUND
E.O.P.	END OF PROJECT	W/	WITH
EP	EDGE OF PAVEMENT		
ESMT.	EASEMENT		
EST.	ESTIMATED		
EX.	EXISTING		
EXIST.	EXISTING		
F.G.	FINISHED GRADE		
F.H./F.HYD.	FIRE HYDRANT		
F.&G.	FRAME AND GRATE		
F	FLOWLINE		
F.O.	FIBER OPTIC		
FND	FOUND		
F & I	FURNISH & INSTALL		
F.O.B.	FLAT ON BOTTOM		
GA.	GAUGE		
GV	GATE VALVE		
HOR	HORIZONTAL		
HDPEP	HIGH DENSITY POLYETHYLENE PIPE		
I.A.W.	IN ACCORDANCE WITH		
INV.	INVERT		
KB	KEYBOX		
LT.	LEFT		
L	LENGTH		
L.F.	LINEAR FOOT		
M.A.S.S.	MUNICIPALITY OF ANCHORAGE STANDARD SPECIFICATIONS, STREETS-DRAINAGE-UTILITIES-PARKS, 1994 AS CURRENTLY AMENDED		
MAX.	MAXIMUM		
M.H.	MANHOLE		
MIN.	MINIMUM		
M.O.A.	MUNICIPALITY OF ANCHORAGE		
MON.	MONUMENT		
N.	NORTH		
NE.	NORTHEAST		
N.T.S.	NOT TO SCALE		
NWT	NO WATER TABLE		
O.C.	ON CENTER		
PCMP	PRECOATED CORRUGATED METAL PIPE		
PC	POINT OF CURVATURE		
P.C.C.	PORTLAND CEMENT CONCRETE		
PED	PEDESTRIAN		
P	PROPERTY LINE		
PI	POINT OF INTERSECTION		
P.T.	POINT OF TANGENCY		
P.U.E.	PUBLIC UTILITY EASEMENT		
PVMT.	PAVEMENT		
R	RADIUS		
R.A.P.	RECYCLED ASPHALT PAVEMENT		
R & R	REMOVE & REPLACE		

A
XXX
DETAIL AND SHEET NUMBER FOR DETAIL

DRAWING INDEX

SHEET NO.	DRAWING
1	COVER SHEET
2	GENERAL NOTES, ABBREVIATIONS AND DRAWING INDEX
3	KEY MAP AND LEGEND
4	SURVEY CONTROL SHEET
5	RIGHT-OF-WAY AND EASEMENTS
6	DEMOLITION PLAN
7	PAVING PLAN
8	PAVING PLAN
9	SOUTHWEST CORNER DETAIL
10-11	TYPICAL SECTIONS
12-13	CURB RAMP AND CURB & GUTTER DETAILS
14	RETAINING WALL DETAILS
15-16	SIGNING AND STRIPING
17-18	SIGN SUMMARY SHEET
19	STRIPING DETAILS
20	SIGN INSTALLATION DETAILS
21	SIGN DETAILS
22	SIGNALIZATION PLAN
23	WIRING DIAGRAM
24	SIGNAL SYSTEM SUMMARY
25	LOAD CENTER SUMMARY
26	ELECTRICAL AND LIGHTING DETAILS - LIGHTING STANDARDS
27-31	ELECTRICAL AND LIGHTING DETAILS
32	45' ELECTROLIER DETAIL

CALL BEFORE YOU DIG!!

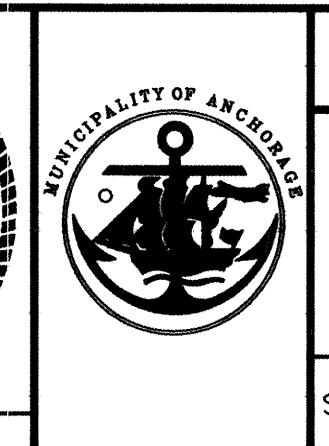
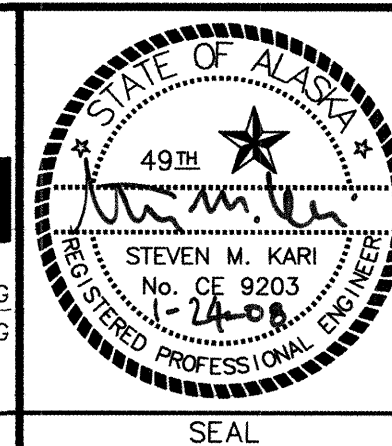
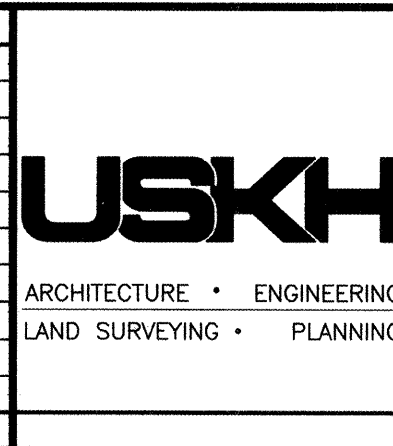
Locate Call Center of Alaska, Inc.
 Anchorage Area 278-3121
 Statewide 800-478-3121

who will notify the following:

- o Alaska DOT/PF Anchorage Streetlights
- o Alaska Fiber Star
- o Alaska Native Center
- o Alyeska Cable Company
- o Anchorage Municipal School District
- o Anchorage Public Works Department
- o Anchorage Water and Waste Water Utility
- o AT&T Alascom
- o ACS Telecommunications
- o Chugach Electric Association
- o Doss Aviation
- o Enstar Natural Gas
- o Eyecom, Inc.
- o GCI Communications
- o Homer Electric Association
- o Interior Telephone Company
- o Kenai Pipeline Services
- o Marathon Oil Company
- o Matanuska Electric Association
- o Matanuska Telephone Association
- o Mukluk Telephone Company
- o Municipal Light and Power
- o Phillips Petroleum Pipeline
- o PTI Communications
- o Rogers Cable Systems
- o Signiture Flight Support
- o Tesoro Petroleum Services
- o UNOCAL Petroleum

Alaska Railroad 265-2520
 Military Fuel Lines 552-3760
 State Storm Drains 333-2411

FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY	
DESIGN: 06-01	MOA 13	9760 Old Seward Highway	141.24'	BASE	-	-	TELEPHONE	-	-									
	MOA 16	10330 Old Seward Highway	138.76'	TOPOGRAPHY	JDE	DWH	ELECTRIC	-	-									
STAKING:				PROFILE	-	-	CABLE TV	-	-									
ASBUILT:				SANITARY SEWER	-	-	TRAFFIC SIGNAL	-	-									
				STORM SEWER	-	-	DESIGN	-	-									
CONTRACTOR:				WATER	-	-	QUANTITIES	-	-									
INSPECTOR:				GAS	-	-	MUN. FINAL CHECK	-	-									

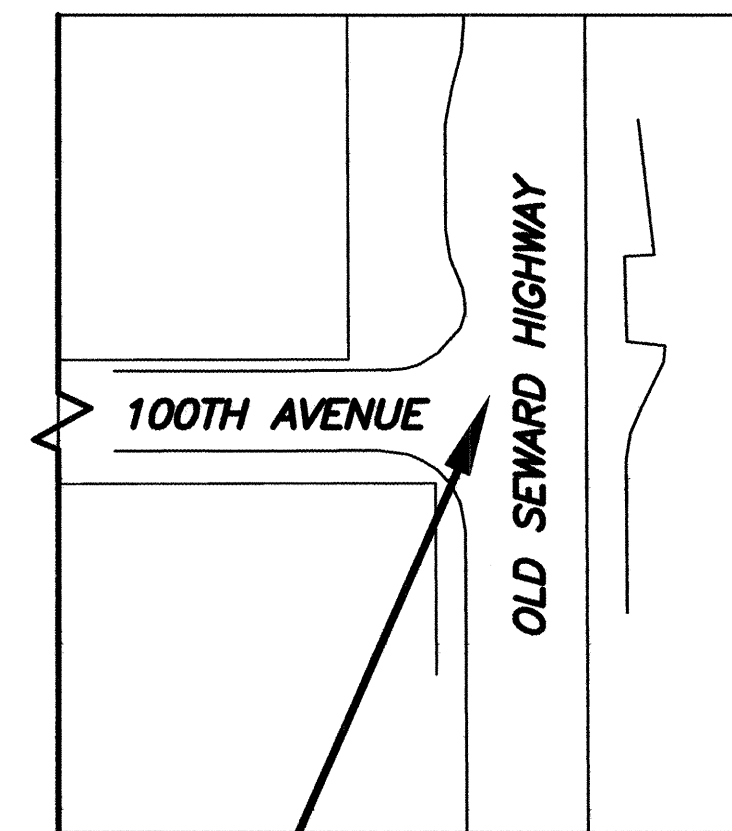


PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT

PM&E No. 100TH AVENUE AT OLD SEWARD HIGHWAY SCHEDULE
 04-22 SIGNALIZATION A&B

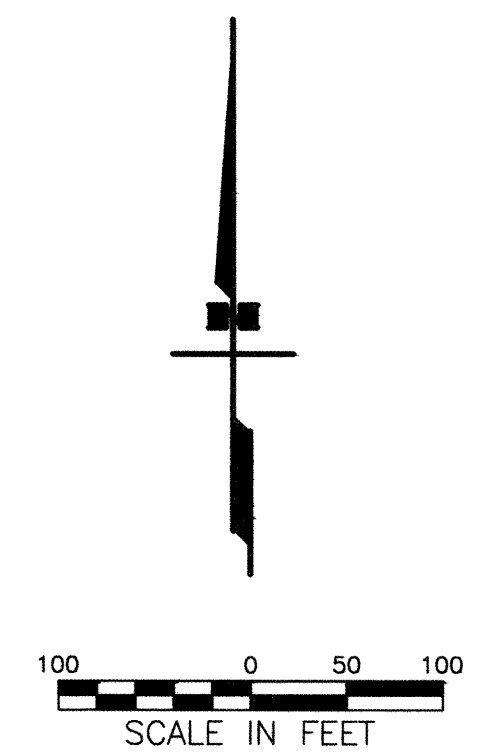
GENERAL NOTES, ABBREVIATIONS AND DRAWING INDEX

SCALE: N.T.S. DATE: JAN 2008 GRIDS: SW2430, SW2530, SW2431, SW2531 ACCT. NO. SHEET 2 of 32



SEE SHT 22
100th AVENUE/OLD SEWARD HIGHWAY
SIGNAL PLAN

KEY MAP



LEGEND

PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
---	---	CENTERLINE
---	---	PROPERTY LINE
---	---	EASEMENT LINE
---	---	SECTION LINE
---	---	UNPAVED (GRAVEL) EDGE OF ROAD
---	---	EDGE OF PAVEMENT
---	---	PAVEMENT REMOVAL
---	---	TYPE 1 CURB & GUTTER
---	---	TYPE 2 CURB & GUTTER
---	---	RADIUS TO BACK OF CURB
---	---	DRAINAGE SWALE
---	---	DRAINAGE ARROW
---	---	P.C.C. VALLEY GUTTER
---	---	DITCH
---	---	BLUFF AREA / EARTHWORK SLOPE
---	---	CULVERT
---	---	FENCE (AS NOTED)
---	---	TREE (BUSH)/SPRUCE
---	---	VEGETATION & BRUSH
---	---	GUARDRAIL
---	---	HANDRAIL

PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
○	○	STREET SIGN (1S, 2S)
○	○	TEST BORING OR TEST HOLE
□	□	MAILBOX
○	○	FINISHED FLOOR ELEVATION
○	○	POST
○	○	MISCELLANEOUS OBJECT
○	○	ROCK OR BOULDER
○	○	HOUSE OR STRUCTURE
○	○	LAKE OR POND
○	○	CONTOUR LINE
○	○	SPOT ELEVATION
○	○	IRON PIN (REBAR) / IRON PIPE
○	○	BENCHMARK
○	○	TEMPORARY BENCHMARK
○	○	BRASS CAP MONU./BLM CORNER
○	○	PK NAIL, SPIKE OR CONCRETE NAIL
○	○	ALCAP OR PLASTIC CAP
---	---	FILL SLOPE LIMITS
---	---	CUT SLOPE LIMITS
---	---	RETAINING WALL
---	---	STORM DRAIN LINE

PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
---	---	SANITARY SEWER LINE
---	---	WATER LINE
---	---	GAS LINE
---	---	UNDERGROUND ELECTRIC LINE
---	---	UNDERGROUND TELEPHONE LINE
---	---	UNDERGROUND CABLE TV
---	---	UNDERGROUND FIBER OPTIC
---	---	STORM DRAIN MANHOLE
---	---	CATCH BASIN MANHOLE
---	---	CATCH BASIN
---	---	SANITARY SEWER MANHOLE
---	---	SANITARY SEWER CLEANOUT
---	---	SEWER SERVICE CONNECTION
---	---	WATER WELL
---	---	WATERTIGHT MANHOLE
---	---	WATER KEY BOX/VALVE MARKER
---	---	WATER VALVE BOX
---	---	FIRE HYDRANT
---	---	DRY WELL
---	---	STUBOUT
---	---	CAPPED OR PLUGGED END

PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
◇	◇	GAS VALVE
◇	◇	GAS METER
◇	◇	UNDERGROUND ELECTRIC PEDESTAL
◇	◇	ELECTRICAL HANHOLE / J- BOX
◇	◇	ELECTRIC METER
◇	◇	JUNCTION BOX (TYPE I, II, & III)
◇	◇	ELECTRICAL VAULT / MANHOLE
◇	◇	LUMINAIRE
◇	◇	UTILITY POLE
◇	◇	GUY POLE
◇	◇	GUY ANCHOR
◇	◇	CONTROLLER OR ATR CABINET
◇	◇	LOAD CENTER
◇	◇	SWITCH CABINET
◇	◇	ELECTRIC TRANSFORMER
◇	◇	JOINT USE POWER & TELE. POLE
◇	◇	TELEPHONE HANDHOLE
◇	◇	UNDERGROUND TELE. PEDESTAL
◇	◇	UNDERGROUND TV PEDESTAL
---	---	ROADWAY CONDUIT

PROFILE LEGEND

EXISTING	PROPOSED	DESCRIPTION
---	---	GRADE AT C of PAVEMENT
---	---	LEFT PROPERTY LINE
---	---	RIGHT PROPERTY LINE
---	---	PIPE
---	---	EXISTING MANHOLE
---	---	EXISTING CATCHBASIN
---	---	INSULATION BOARD
---	---	WATER LEVEL

GW	WELL GRADED GRAVEL
GP	POORLY GRADED GRAVEL
GM	SILTY GRAVEL
GC	CLAYEY GRAVEL
SW	WELL GRADED SAND
SP	POORLY GRADED SAND
SM	SILTY SAND
SC	CLAYEY SAND
ML	INORGANIC SILT
CL	INORGANIC CLAY
OL	ORGANIC SILT
MH	INORGANIC SILT
CH	INORGANIC CLAY
OH	ORGANIC CLAY
PT	PEAT

FIELD BOOKS	BM NO.	LOCATION	ELEV.	DATA	DRAWN BY	CHECKED BY	DATA	DRAWN BY	CHECKED BY	REV	DATE	DESCRIPTION	BY	REV	DATE	DESCRIPTION	BY
DESIGN: 06-01	MOA 13	9760 Old Seward Highway	141.24'	BASE	---	---	TELEPHONE	---	---								
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				STORM SEWER	---	---	DESIGN	---	---								
				WATER	---	---	QUANTITIES	---	---								
CONTRACTOR:				GAS	---	---	MUN. FINAL CHECK	---	---								
INSPECTOR:																	

USKH
ARCHITECTURE • ENGINEERING
LAND SURVEYING • PLANNING

STATE OF ALASKA
49th
STEVEN M. KARI
No. CE 9203
REGISTERED PROFESSIONAL ENGINEER

MUNICIPALITY OF ANCHORAGE

PROJECT MANAGEMENT AND ENGINEERING DEPARTMENT
PM&E No. 04-22 100TH AVENUE AT OLD SEWARD HIGHWAY SIGNALIZATION SCHEDULE A&B
KEY MAP AND LEGEND
SCALE: 1"=100' DATE: JAN 2008 GRIDS: SW2430, SW2530, SW2431, SW2531 SHEET 3 of 32
ACCT. NO.