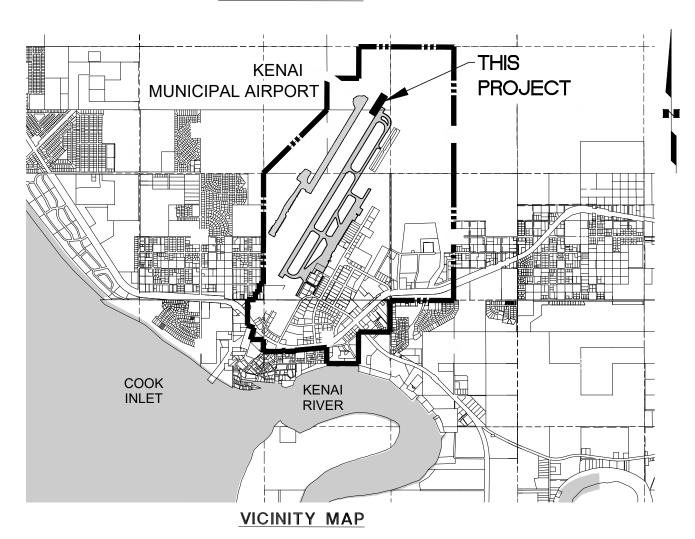


# **KENAI MUNICIPAL AIRPORT 2021 IMPROVED AIRFIELD** DRAINAGE **KENAI, ALASKA**

## LOCATION MAP



### SHEET INDEX

G1.01 G1.02 G1.03	COVER SHEET AND DRAWING INDEX CIVIL GENERAL NOTES, ABBREVIATIONS, AND LEGEND PROJECT LAYOUT PLAN
G2.00	CONSTRUCTION SAFETY & PHASING PLAN - SAFETY NOTE
G2.01	CONSTRUCTION SAFETY & PHASING PLAN - SITE PLAN
G2 O2	CONSTRUCTION SAFETY & PHASING PLAN - DETAILS

STORM DRAIN TYPICAL DETAILS







AIRPORT

KENAI MUNICIPAL

#### CIVIL GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
- THE LOCATION OF EXISTING FEATURES, SERVICE LINES, UTILITIES, ETC. IN THE DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FIELD VERIFICATION OF ALL BURIED AND OVERHEAD UTILITIES FROM THE APPROPRIATE UTILITY COMPANIES OR AUTHORITIES. THE CONTRACTOR SHALL CONTACT THE LOCATE CALL CENTER OF ALASKA, NOAA, FAA, AS WELL AS ANY NON-PARTICIPATING UTILITIES, TO FIELD LOCATE ALL UTILITIES PRIOR TO DIGGING. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO DIGGING, OTHERWISE CONTRACTOR IS RESPONSIBLE FOR ALL ADDITIONAL COSTS ASSOCIATED WITH WORKING AROUND UTILITIES DIFFERENT THAN WHAT IS SHOWN ON THE PLANS.
- 3. UTILITY LINES ARE IN CLOSE PROXIMITY TO THE PROJECT AREA. CONTRACTOR SHALL COORDINATE WORK ACCORDINGLY. ALL WORK IN CLOSE PROXIMITY TO EXISTING UTILITY LINES SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL STATUTES, CODES AND GUIDELINES, AND THE ELECTRICAL FACILITY CLEARANCE REQUIREMENTS OF THE GOVERNING UTILITY. CONTRACTOR SHALL HAND DIG WITHIN TWO FEET OF BURIED ELECTRICAL CABLE.
- THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES AND THE GENERAL REQUIREMENTS, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS, SUBCONTRACTORS, SUPPLIERS, PROPERTY, AND TRAFFIC SAFETY. THE CONTRACTOR SHALL ALSO HAVE SOLE AND COMPLETE RESPONSIBILITY OF STORM WATER MANAGEMENT. THESE REQUIREMENTS SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LAYOUT PRIOR TO PROCEEDING WITH THE WORK. ANY DISCREPANCY IN THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING
- 7. OTHER CONTRACTORS OR THE UTILITY COMPANIES MAY BE WORKING IN THE VICINITY DURING THE PROGRESS OF THIS CONTRACT'S WORK.

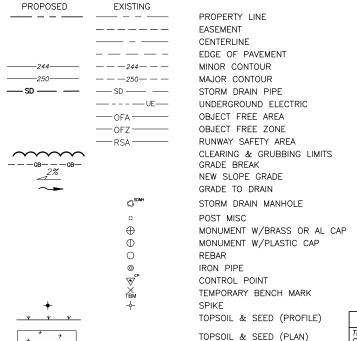
  CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER CONTRACTORS OR UTILITY COMPANIES WORKING IN THE AREA.
- TOPOGRAPHIC SURVEY INFORMATION WAS PREPARED FROM A FIELD SURVEY CONDUCTED BY HDL ENGINEERING CONSULTANTS, LLC DATED
- 9. SEE SHEET C1.01 FOR BASIS OF HORIZONTAL AND VERTICAL CONTROL.
- 10. ALL SURVEYING AND LAYOUT SHALL BE PROVIDED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL RECORD SURVEY NOTES FOR SUBMITTAL WITH RECORD DRAWINGS, INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD. CONTRACTOR SHALL RECORD DEVIATIONS FROM THE PLANS AND SUBMIT DAILY SURVEY NOTES TO THE ENGINEER
- 12. CONTRACTOR SHALL PROTECT ALL MONUMENTS AND PROPERTY CORNERS. DAMAGED/MOVED MONUMENTS AND CORNERS. WHETHER OR NOT THEY ARE SHOWN ON THE DRAWINGS, SHALL BE REPLACED AT NO ADDITIONAL COST TO THE OWNER IN ACCORDANCE WITH CURRENT ALASKA STATUTE.

- 13. ALL CONSTRUCTION ACTIVITIES, EXCAVATED MATERIAL, EQUIPMENT STORAGE. ETC. SHALL REMAIN WITHIN THE LIMITS OF THE AREA DISTURBED BY CONSTRUCTION OR AT THE IDENTIFIED STAGING AREA. CONTRACTOR SHALL MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS AT ALL TIMES.
- 14. CONTRACTOR SHALL USE ONLY APPROVED HAUL ROUTES AS SHOWN ON THE CONSTRUCTION SAFETY PHASING PLAN. CONTRACTOR SHALL MAINTAIN HAUL ROUTES AND SHALL REPAIR ANY DAMAGE TO THE ROUTE SURFACE IN ACCORDANCE WITH THE PROJECT MANUAL OR AS DIRECTED BY THE ENGINEER TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
- 15. HAUL ROUTES FOR REMOVAL AND DELIVERY OF MATERIALS SHALL UTILIZE EXISTING ROADWAYS. MUD AND DEBRIS TRACKED ONTO ROADWAYS SHALL BE PROMPTLY REMOVED. TRAFFIC LAWS ARE TO BE OBEYED AT ALL
- 16. CONTRACTOR SHALL PROVIDE ALL PERMITS WHICH ARE NOT SPECIFICALLY INDICATED AS PROVIDED BY THE OWNER IN THE SPECIFICATIONS.
- CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF OSHA AND ALL OTHER FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS PERTAINING TO THIS PROJECT. ANY WORK PERFORMED BY THE CONTRACTOR CONTRARY TO SUCH LAWS OR REGULATIONS SHALL BE AT THE CONTRACTOR'S SOLE RISK AND EXPENSE.
- 18. THE ENGINEER MAY DIRECT THE CONTRACTOR IN WRITING TO REMOVE ADDITIONAL MATERIAL BEYOND THE LIMITS OF EXCAVATION IF IT IS DETERMINED TO BE IN THE BEST INTEREST OF THE OWNER. CONTRACTOR SHALL REMOVE SAID MATERIAL AND REPLACE WITH SUITABLE MATERIAL IN ACCORDANCE WITH THE SPECIFICATIONS.
- 19. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGGERS OR OTHER DEVICES NECESSARY TO PROVIDE FOR SAFETY.
- 20. WORK AND MATERIAL REQUIRED FOR REMOVING LITTER OR DEBRIS THAT EXISTS WITHIN THE PROJECT LIMITS IS INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT SHALL BE MADE.
- 21. CONTRACTOR SHALL ESTABLISH, PROVIDE AND MAINTAIN AN EFFECTIVE STORM WATER POLLUTION PREVENTION PROGRAM IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
- 22. THE CONTRACTOR SHALL ESTABLISH, PROVIDE, AND MAINTAIN A QUALITY CONTROL PROGRAM IN ACCORDANCE WITH THE PROJECT MANUAL.
- 23. CONTRACTOR SHALL MAINTAIN "REDLINE' RECORD DRAWINGS ON A CLEAN SET OF CONSTRUCTION DRAWINGS IN ACCORDANCE WITH THE PROJECT MANUAL. THE CONTRACTOR SHALL MAINTAIN "REDLINES" CURRENT ON A DAILY BASIS WHICH SHALL BE AVAILABLE TO THE ENGINEER FOR INSPECTION ON THE JOB SITE.
- 24. CONTRACTOR SHALL RESTORE DISTURBED PROPERTY PRE-CONSTRUCTION CONDITION(S), UNLESS OTHERWISE DIRECTED BY THE ENGINEER. RESTORING DISTURBED PROPERTY IS INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
- 25. CONTRACTOR SHALL TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE IMPROVED, AS DIRECTED BY THE ENGINEER.

#### **ABBREVIATIONS**

ADEC	ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION	MAX	MAXIMUM
ADOT	ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC	ME	MATCH EXISTING
	FACILITIES	MH	MANHOLE
AFSS	KENAI FLIGHT SERVICE STATION	MIN	MINIMUM
APPROX	APPROXIMATELY	MISC	MISCELLANEOUS
ARFF	AIRCRAFT RESCUE AND FIRE FIGHTING	N	NORTH, NORTHING
ASTM	AMERICAN STANDARD TESTING MATERIALS	NE	NORTHEAST
BLK	BLOCK	NFS	NON FROST SUSCEPTIBLE
BRL	BUILDING RESTRICTION LINE	NO.	NUMBER
© ,CL	CENTERLINE	NTS	NOT TO SCALE
CF	CUBIC FOOT	O.D.	OUTER DIAMETER
CMP	CORRUGATED METAL PIPE	OHW	OVERHEAD WIRE
CONT'D	CONTINUED	OPS	AIRPORT OPERATIONS
CSPP CY	CONSTRUCTION SAFETY AND PHASING PLAN CUBIC YARDS	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
DEMO	DEMOLISH	PVMT	PAVEMENT
E	EAST, EASTING	R, RAD	RADIUS
EA	EACH	RÉQ'D	REQUIRED
EL, ELEV		RD	ROAD
ELEC	ELECTRICAL	ROW	RIGHT-OF-WAY
EOP	END OF PROJECT	R/W	RIGHT-OF-WAY
FW.	EACH WAY	ŔŤ	RIGHT
EXIST	EXISTING	S	SOUTH
FAA	FEDERAL AVIATION ADMINISTRATION	SCH	SCHEDULE
FATO	FINAL APPROACH AND TAKEOFF AREA	SD	STORM DRAIN
FG	FINISHED GRADE	SDMH	STORM DRAIN MANHOLE
FO	FIBER OPTIC, FACE OF	SF	SQUARE FOOT
FT	FEET	SPCD	SAFETY PLAN COMPLIANCE DOCUMENT
GAL	GALLON	SPEC	SPECIFICATION
GB	GRADE BREAK	ST	STREET
HDPE	HIGH DENSITY POLYETHYLENE	STA	SURVEY STATION
HEA	HOMER ELECTRICAL ASSOCIATION	SY	SQUARE YARDS
HORZ	HORIZONTAL	TCP	TRAFFIC CONTROL PLAN
HR	HOUR	TELE	TELEPHONE
IBC	INTERNATIONAL BUILDING CODE	TCE	TEMPORARY CONSTRUCTION EASEMENT
IN	INCH, INSERT	TYP	TYPICAL
INV	PIPE INVERT	T/W	TAXIWAY
LB	POUND	UNO	UNLESS NOTED OTHERWISE
LT	LEFT	VERT	VERTICAL
LF	LINEAR FEET	W	WEST
		w/	WITH

#### LEGEND (UNLESS NOTED OTHERWISE)



CALL BEFORE YOU DIG!

THE CONTRACTOR SHALL NOTIFY ALL AREA UTILITY
COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION LOCATE CALL CENTER OF ALASKA 1-800-478-3121

KENAI FLIGHT SERVICE TECH OPS 1-907-283-5270 CIVIL GENERAL NOTES, ND LEGEND G1 02

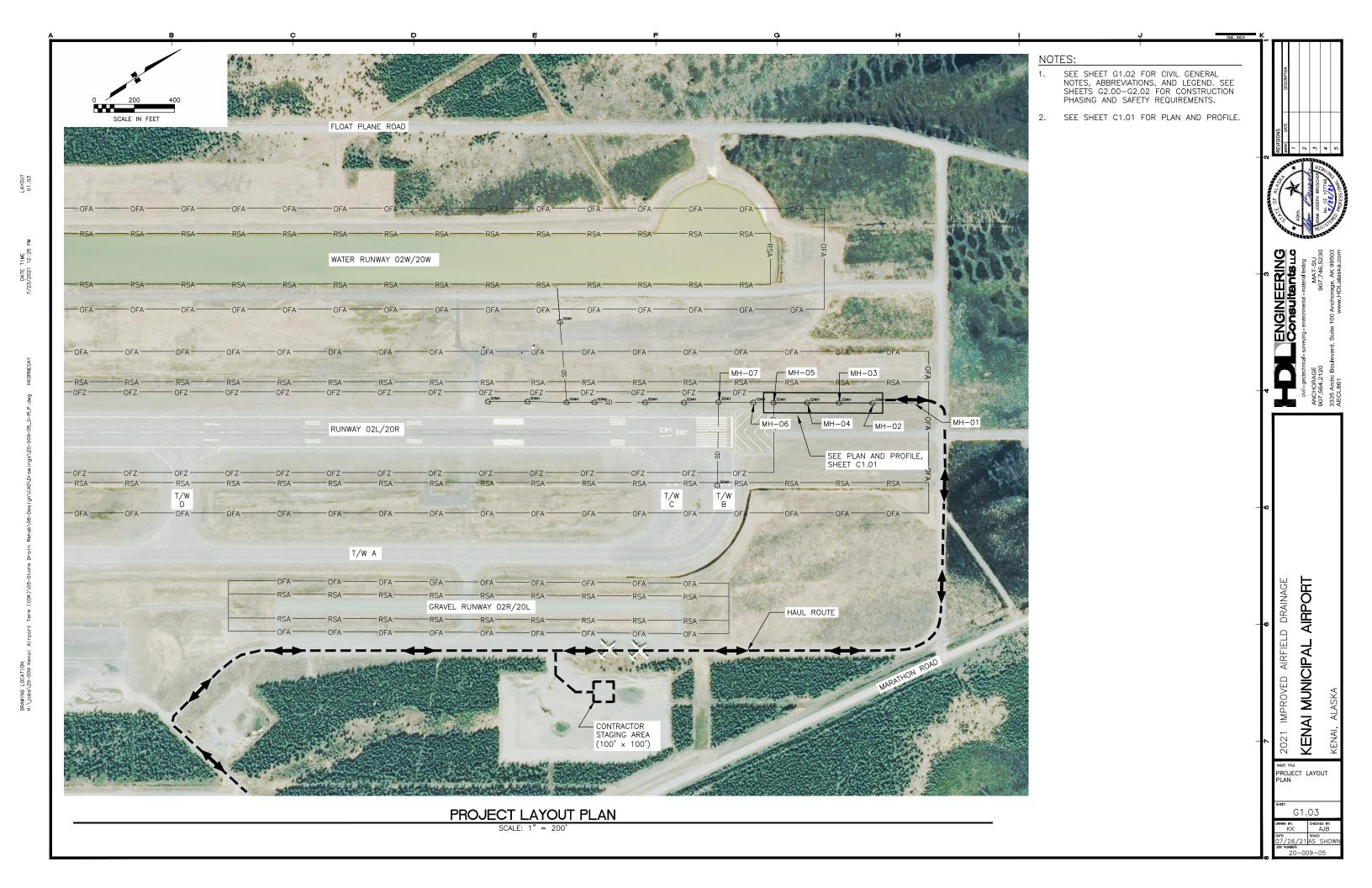
**AIRPORT** 

MUNICIPAL

ENA

DRAINAGE

RAWN BY: KK CHECKED BY: AJB



#### PROJECT GENERAL SAFETY REQUIREMENTS (ALL WORK AREAS):

- CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO AND SHALL COMPLY WITH PROJECT PLANS, SPECIFICATIONS, AND FAA ADVISORY CIRCULAR AC 150/5370-2G OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION.
- SUBMIT A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) PER FAA AC 150/5370-2G, OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION (SAFETY AC), TO THE ENGINEER FOR REVIEW. DO NOT BEGIN CONSTRUCTION ACTIVITIES UNTIL THE ENGINEER APPROVES THE SPCD IN WRITING. ALLOW 30 DAYS FOR INITIAL REVIEW. INCLUDE CONSTRUCTION SEQUENCING. IF PLAN DIFFERS FROM WHAT IS SHOWN ON THE CSPP, OR IF SUBSEQUENT CHANGES ARE MADE, SUBMIT A REVISION TO THE ENGINEER FOR APPROVAL.
- ALLOW 5 DAYS FOR REVIEW OF REVISED SPCD. MAJOR CHANGES TO THE SPCD MAY REQUIRE RE-EVALUATION BY THE FAA. SEE EXHIBIT D OF THE SUPPLEMENTAL CONDITIONS FOR THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) DOCUMENT, AND MORE INFORMATION ON THE REQUIREMENTS OF THE SAFETY AC AND SPCD. SEE SECTION 1.4.3 OF AC 150/5370-2G FOR A SUMMARIZED GENERAL LIST OF CONTRACTOR RESPONSIBILITIES REGARDING SAFETY
- WHENEVER THE PLANS OR SPECIFICATIONS CALL FOR COORDINATION, NOTIFICATION, CONTACT, OR OTHER INTERACTION WITH THE FAA, AIRPORT MANAGEMENT, MAINTENANCE AND OPERATIONS. AIRPORT SECURITY SYSTEM MAINTENANCE CONTRACTORS, AIRPORT TENANTS, AIRPORT USERS, AND LOCAL, STATE, OR FEDERAL AGENCY, GROUP, OR ASSOCIATION, OR THE GENERAL PUBLIC, SUCH ACTIVITY SHALL BE DONE IN PRESENCE OF, OR WITH THE WRITTEN APPROVAL OF THE ENGINEER. ALLOW SUFFICIENT TIME FOR COORDINATION AND APPROVALS WITHIN PROPOSED
- DELINEATE WORK AREA WITH LOW PROFILE BARRICADES. INSTALL TRAFFIC CONTROL DEVICES (FLAGGERS, SIGNAGE, BARRIERS, ETC.) AT ALL HAUL ROUTE INTERSECTIONS WITH OPEN ROADS IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED SPCD AND TRAFFIC CONTROL PLAN.
- A SAFETY MEETING SHALL BE HELD EVERY DAY PRIOR TO WORK TO DISCUSS COMMUNICATION, WORK OPERATIONS, MATERIAL HAUL, MOBILIZATION, AND ANY OTHER TOPIC RELATING TO PROJECT SAFETY. CONTRACTOR AND SUBCONTRACTORS SHALL ATTEND.
- CONTRACTOR SHALL HAVE PERSONNEL AVAILABLE BY PHONE 24 HOLIRS PER DAY 7 DAYS A WEEK, TO MAKE CORRECTIVE ACTIONS AND RESOLVE EMERGENCY/SAFETY DISCREPANCIES.
- COORDINATE START DATE WITH THE ENGINEER AT LEAST 10 DAYS PRIOR TO STARTING WORK SO THAT THE AIRPORT CAN ISSUE NOTAMS AND COORDINATE WITH TENANTS AND AIRPORT USERS. NO WORK SHALL BEGIN UNTIL ACCESS IS GRANTED BY THE AIRPORT.
- CONSTRUCTION ACTIVITIES FOR THIS PROJECT OCCUR WITHIN THE RUNWAY 02L/20R SAFETY AREA AND REQUIRES CLOSURE OF RUNWAY 02L/20R AND CONNECTING TAXIWAYS. FOLLOW PROCEDURES FOR STATUS CHANGE INCLUDED ON SHEET G2.01. IN CASE OF AN EMERGENCY OF ANY KIND, THE CONTRACTOR SHALL REMOVE CLOSURE MATERIALS AND OPEN RUNWAY FOR OPERATIONS WITHIN 15 MINUTES OF NOTIFICATION.
- 10. NO WORK WILL BE ALLOWED IN AREAS THAT ARE OPEN TO AIRCRAFT OPERATIONS.
- PROVIDE UNOBSTRUCTED ACCESS TO ALL AIRPORT OPERATIONS NEAR AND ADJACENT TO WORK AREAS. WORK PERFORMED SHALL NOT PREVENT THE UNFETTERED MOVEMENT OF AIRCRAFT AND VEHICLE TRAFFIC. MAINTAIN ACCESS TO ALL OPEN RUNWAYS, OPEN TAXIWAYS, AND OPEN APRONS, UNLESS NOTED OTHERWISE IN WORK AREA RESTRICTIONS.
- CONTRACTOR IS PROHIBITED FROM ENTERING AIRFIELD AREAS WITHOUT APPROVAL FROM THE AIRPORT MANAGER (OR DESIGNATED REPRESENTATIVE) AND PERMISSION FROM THE AIR TRAFFIC CONTROL TOWER (ATCT) (WHEN TOWER IS OPEN) AND KENAI FLIGHT SERVICE STATION (AFSS) (WHEN TOWER IS CLOSED), FOR EACH OCCURRENCE. SEE CONSTRUCTION PHASING AND SAFETY PLAN IN THE PROJECT MANUAL FOR ADDITIONAL RADIO COMMUNICATION REQUIREMENTS AND ATCT HOURS OF OPERATION.
- THE CONTRACTOR'S SAFETY MANAGER, ADDITIONAL SAFETY PERSONNEL, AND SUPERINTENDENT SHALL HAVE A 2-WAY RADIO AND CONTINUOUSLY MONITOR COMMON TRAFFIC ADVISORY FREQUENCY (CTAF, 121.3). SEE CONSTRUCTION SAFETY AND PHASING PLAN IN THE PROJECT MANUAL FOR ADDITIONAL RADIO COMMUNICATION REQUIREMENTS.
- ALL PERSONS AND EQUIPMENT WORKING WITHIN THE AIRPORT PROPERTY SHALL REMAIN IN CONSTANT RADIO CONTACT WITH THE CONTRACTOR'S SAFETY MANAGER USING A RADIO FREQUENCY OTHER THAN THE AVIATION RADIO BAND APPROVED FOR USE BY THE FEDERAL COMMUNICATIONS COMMISSION.

- CONTRACTOR SHALL KEEP ACTIVE SURFACES CLEAR OF CONSTRUCTION MATERIALS, FOREIGN OBJECTS, DIRT, GRAVEL, AND DEBRIS. REMOVE MATERIALS FROM ACTIVE PAVED SURFACES WITHIN 15 MINUTES OF VERBAL NOTICE FROM THE AIRPORT MANAGER (OR DESIGNATED REPRESENTATIVE). CONTRACTOR SHALL INSPECT THE HAUL ROUTES EVERY 4 HOURS WORK IS PERFORMED AND AT END OF EACH SHIFT. REMOVE ALL SPILLED MATERIAL.
- USE OF HAUL ROUTES AS SHOWN ON THE SAFETY PLANS IS MANDATORY. NO HAUL VEHICLES OR EQUIPMENT SHALL BE PERMITTED ON OPEN APRONS, RUNWAYS, OR TAXIWAYS. HAUL TRUCKS AND CONSTRUCTION VEHICLES MUST YIELD TO ALL ROADWAY, PEDESTRIAN, AND AIRPORT TRAFFIC. CONTRACTOR SHALL REPAIR ANY DAMAGE TO HAUL ROUTES AT NO ADDITIONAL COST TO THE OWNER
- IMMEDIATELY REMOVE ALL FOREIGN OBJECT DEBRIS (FOD) FROM ACTIVE SURFACES UPON DISCOVERY OR NOTIFICATION. FAILURE TO REMOVE FOD MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER.
- CONDUCT A JOINT INSPECTION OF AIRPORT SURFACES WITH THE ENGINEER PRIOR TO OPENING SURFACES FOR AIRCRAFT OPERATIONS. ENSURE ALL MARKINGS, LIGHTING, AND SIGNAGE ARE
- RETURN STAGING AREA, HAUL ROUTES, AND OTHER DISTURBED AREAS OUTSIDE THE LIMITS OF CONSTRUCTION TO PRE-PROJECT CONDITION UPON COMPLETION OF THE WORK.
- CONTRACTOR IS NOT PERMITTED ON ANY AIRPORT AREA OTHER THAN PUBLIC ROADS OR AREAS DESIGNATED ON THE SAFETY PLAN DRAWINGS AS A WORK AREA OR HAUL ROUTE, WITHOUT PERMISSION FROM THE AIRPORT MANAGER (OR DESIGNATED REPRESENTATIVE).
- CONTRACTOR SHALL SECURE ALL GATES OR OPEN FENCE AREAS TO MAINTAIN A SECURE PERIMETER THROUGHOUT CONSTRUCTION. ANY OPENINGS REQUIRED FOR CONSTRUCTION SHALL BE ATTENDED TO PREVENT ENTRY OF UNAUTHORIZED PERSONNEL ONTO THE AIRFIELD.
- ALL ACTIVE CONSTRUCTION AREAS SHALL BE DELINEATED WITH LOW PROFILE BARRICADES
- SIGNS, CONES, BARRIERS, AND MARKERS SHALL BE ANCHORED OR WEIGHTED TO PREVENT MOVEMENT FROM HIGH WINDS, PROPELLER BLAST, OR JET BLAST.
- THE ENGINEER MAY REQUIRE ADDITIONAL TRAFFIC CONTROL DEVICES AND SIGNAGE ALONG THE HAUI ROUTE AND AROUND THE WORK AREAS AS THE NEED ARISES DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE THIS SIGNAGE AT NO ADDITIONAL COST TO THE OWNER.
- SIGNS SHALL MEET THE REQUIREMENTS OF THE ALASKA TRAFFIC MANUAL, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AND THE ALASKA SIGN DESIGN SPECIFICATIONS.
- PREPARE A TRAFFIC CONTROL PLAN (TCP) SPECIFIC TO CONSTRUCTION ACTIVITIES AND HAUL OPERATIONS IN ACCORDANCE WITH THE PROJECT MANUAL. TCP SHALL BE APPROVED BY THE ENGINEER AND THE CITY PRIOR TO MOBILIZING TO THE SITE OR BEGINNING CONSTRUCTION
- THE CONTRACTOR SHALL PROVIDE INITIAL NOTICE TO THE ENGINEER AND FAA AT LEAST 45 DAYS PRIOR TO RUNWAY CLOSURES, RE-OPENING A CLOSED RUNWAY, OR INTERRUPTING SERVICE. COORDINATE WITH THE ENGINEER TO EMAIL AN "AIRPORT SPONSOR STRATEGIC EVENT SUBMISSION FORM", FAA 6000-226 TO 9-AJV-SEC-WSA@FAA.GOV FOR EACH EVENT.
- NO CONSTRUCTION ACTIVITY OR STAGING OF MATERIALS OR EQUIPMENT IS ALLOWED WITHIN THE RUNWAY OBJECT FREE ZONE (OFZ) WHILE THE RUNWAY IS OPEN TO AIRCRAFT
- STORAGE OF EQUIPMENT OR MATERIALS ON RUNWAYS, APRONS, TAXIWAYS, OR WITHIN RUNWAY OBJECT FREE AREAS (OFA) SHALL NOT BE ALLOWED.
- REPORT ANY SAFETY ISSUES TO THE ENGINEER UPON DISCOVERY. TAKE IMMEDIATE ACTION TO RESOLVE SAFETY ISSUES AS DIRECTED.
- CONTRACTOR SHALL PERFORM DUST MONITORING ON A DAILY BASIS AND IMMEDIATELY PROVIDE WATER FOR DUST CONTROL AS REQUIRED AND AS DIRECTED BY THE ENGINEER. DUST, SMOKE, STEAM, OR OTHER AIRBORNE PARTICULATES CAUSED BY CONTRACTOR ACTIVITIES MAY BE CONSIDERED A SAFETY VIOLATION AS DETERMINED BY THE ENGINEER. SEE SPECIFICATIONS FOR ADDITIONAL DUST CONTROL REQUIREMENTS.





**AIRPORT** DRAINAGE MUNICIPAL

KENAI

CONSTRUCTION SAFETY & PHASING SAFETY NOTES

G2 00

G2.01

DRAWN BY: CHECKED BY:

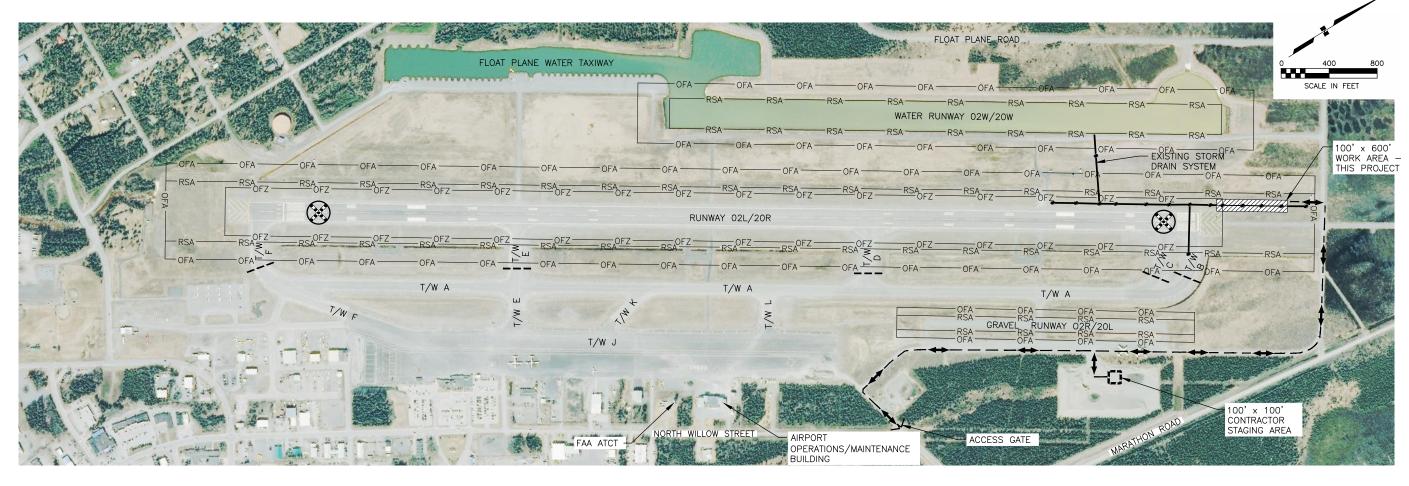
KK AJB

DATE: SCALE:

07/26/21 AS SHOWN

JOB NUMBER:

20-009-05



**LEGEND:** 

LIGHTED RUNWAY CLOSURE MARKER WHEN RUNWAY IS CLOSED

ON-SITE CONTRACTOR STAGING AREA

PROJECT AREA



TAXIWAY BARRICADE, SEE DETAIL 3 ON SHEET G2.02

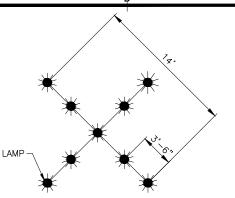
#### STATUS CHANGE PROCEDURES:

THESE PROCEDURES SHALL BE FOLLOWED FOR NIGHTTIME CLOSURE OF RUNWAY, TAXIWAYS, AND ANY TIME THE STATUS OF THE RUNWAY IS TO BE ALTERED.

- 1. CONTRACTOR NOTIFIES AIRPORT MANAGER OR DESIGNATED REPRESENTATIVE OF UPCOMING CHANGE IN AIRPORT STATUS. PROVIDE 10 DAY ADVANCED NOTICE OF FIRST CLOSURE.
- 2. AIRPORT MANAGER OR DESIGNATED REPRESENTATIVE FILES ALL NOTAMS.
- 3. CONTRACTOR ENSURES SAFETY PROCEDURES ARE FOLLOWED.
- 4. CONTRACTOR INSTALLS APPROVED SIGNAGE AND MARKINGS AS DETAILED IN APPROVED TRAFFIC CONTROL PLAN.
- 5. AIRPORT MANAGER OR DESIGNATED REPRESENTATIVE INSPECTS AND APPROVES THE SIGNAGE AND MARKINGS.
- 6. CONTRACTOR PROCEEDS WITH HIS WORK.
- CONTRACTOR SHALL REQUEST FROM AIRPORT MANAGER OR DESIGNATED REPRESENTATIVE TO TURN OFF RUNWAY 02L/20R LIGHTING AND APPROACH LIGHTING.
- 8. CONTRACTOR SHALL PERFORM WORK AND COMMUNICATE WITH VEHICLES, KENAI FLIGHT SERVICE STATION (AFSS), AND FAA AIR TRAFFIC CONTROL TOWER (ATCT) IN ACCORDANCE WITH SAFETY REQUIREMENTS IDENTIFIED IN THE PLANS, SPECIFICATIONS, AND CONTRACTOR'S SAFETY PLAN COMPLIANCE DOCUMENT (SPCD).
- 9. CONTRACTOR SHALL SECURE ALL GATES OR OPEN FENCE AREAS TO MAINTAIN SECURED PERIMETER THROUGHOUT CONSTRUCTION. ANY OPENINGS REQUIRED FOR CONSTRUCTION SHALL BE ATTENDED AT ALL TIMES TO PREVENT ENTRY OF UNAUTHORIZED PERSONNEL ONTO THE AIRFIELD.

#### **WORK AREA NOTES:**

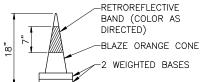
- WORK AREA SHALL BE NOT LARGER THAN THE DIMENSIONS SHOWN, CENTERED ON THE STORM DRAIN PIPE ALIGNMENT.
- NO WORK SHALL OCCUR IN THE PROJECT AREA PRIOR TO CLOSING THE ENTIRE RUNWAY, TURNING OFF RUNWAY LIGHTING AND APPROACH LIGHTING, CLOSING TAXIWAYS, AND INSTALLING RUNWAY CLOSURE MARKERS AND BARRICADES AS SHOWN APPLYS.
- CLOSE ENTIRE 02L/20R RUNWAY AND CONNECTING TAXIWAYS
  AS SHOWN ABOVE BETWEEN 11:00 PM AND 4:00 AM SUNDAY
  NIGHT THROUGH FRIDAY MORNING AND BETWEEN 11:00 PM
  AND 6:00 AM FRIDAY NIGHT THROUGH SUNDAY MORNING
  WHEN WORK IS TO BE PERFORMED IN THE WORK AREA.
- WORK IS PERMITTED IN THIS AREA BETWEEN 11:00 PM AND 4:00 AM, SUNDAY NIGHT THROUGH FRIDAY MORNING AND BETWEEN 11:00 PM AND 6:00 AM FRIDAY NIGHT THROUGH SUNDAY MORNING. EXCEPT THAT THE CONTRACTOR SHALL IMMEDIATELY REMOVE PERSONNEL AND EQUIPMENT BACK TO THE STAGING AREA DURING ANY EMERGENCY AIRPORT OPERATIONS.
- PRIOR TO OPENING THE RUNWAY, CONTRACTOR SHALL REMOVE ALL PERSONNEL, EQUIPMENT, AND MATERIALS OFF AIRPORT SURFACES AND STAGE EQUIPMENT AND MATERIALS IN THE DESIGNATED STAGING AREA OR OTHER APPROVED CONTRACTOR PROVIDED STAGING AREA OFF AIRPORT PROPERTY. RUNWAY AND TAXIWAYS SHALL BE FULLY OPERATIONAL AND CLEARED OF FOD PRIOR TO OPENING.
- AT THE END OF EACH NIGHT SHIFT, REMOVE OBSTACLES FROM OFA AND BACKFILL EXCAVATION LEVEL WITH EXISTING GROUND WITHIN THE PSA



#### NOTES:

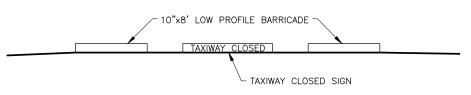
#### NOTES:

1. CONES SHALL MEET SPECIFICATION P-660.



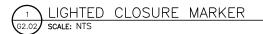
PLACED AT EACH INTERLINK TAXIWAY ENTRANCE TO RUNWAY 02L/20R DURING CLOSURES. SIGNS SHALL BE ANCHORED OR WEIGHTED TO PREVENT MOVEMENT FROM HIGH WINDS OR PROPELLER BLAST. SIGNS SHALL EXTEND NO MORE THAN 12 INCHES ABOVE THE RUNWAY SURFACE. 2. SIGNS AND LOW PROFILE BARRICADES SHALL BE SPACED NOT MORE THAN 4' APART.

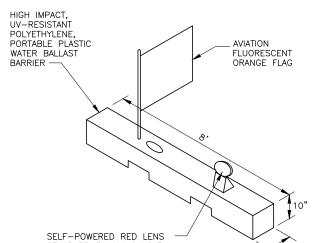
1. REFLECTIVE "TAXIWAY CLOSED" SIGNS WITH 10-INCH REFLECTIVE LETTERING SHALL BE



YTAXIWAY BARRICADE DETAIL SCALE: NTS

NOTES:

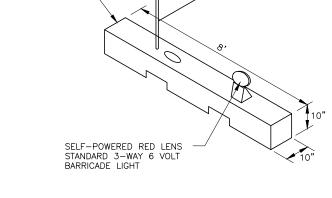




#### NOTES:

- 1. LOW PROFILE BARRICADES SHALL BE IN ACCORDANCE WITH
- POLYETHYLENE AS MANUFACTURED BY MULTI BARRIER (AR 10X96 HDPE) OR SIMILAR APPROVED EQUAL.

- 7. BARRICADES SHALL MEET SPECIFICATION P-670.



LOW PROFILE BARRICADE

G2.02 SCALE: NTS



LOW PROFILE BARRICADE LAYOUT

4' MA<u>X.</u>



G2.02 SCALE: NTS

- LIMIT OF ACTIVE

WORK AREA

- LOW PROFILE BARRICADE

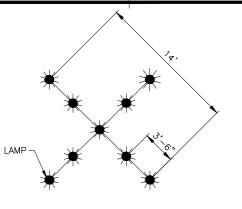
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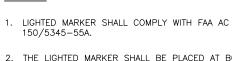
**AIRPORT** DRAINAGE AIRFIELD MUNICIPAL

KENAI CONSTRUCTION SAFETY & PHASING PLAN -DETAILS

G2.02

rawn by: KK





2. THE LIGHTED MARKER SHALL BE PLACED AT BOTH END OF CLOSED RUNWAY AS SHOWN IN THE PLANS AND DIRECTED BY THE ENGINEER.

LIGHTED MARKER SHALL BE SECURED FROM WIND EFFECTS BY THE CONTRACTOR AND AS RECOMMENDED BY THE MANUFACTURER.

4. LIGHTED MARKER SHALL BE IN PLACE AND OPERATING WHENEVER RUNWAY IS CLOSED AND REMOVED WHEN RE-OPENED.

CONE DETAIL SCALE: NTS

- FAA AC 150/5370-2G.
- 2. BARRICADE CONSTRUCTED OF HIGH IMPACT, UV-RESISTANT
- 3. EACH UNIT SHALL INCLUDE RED STANDARD 3-WAY LIGHT, 18"x18" AVIATION FLUORESCENT ORANGE FLAG AND 3M HIGH REFLECTIVE ORANGE STRIPE ON WHITE BARRICADES AND 3M HIGH REFLECTIVE WHITE STRIPE ON ORANGE
- 4. BARRICADES SHALL BE PLACED AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 5. LOW PROFILE BARRICADES SHALL BE PLACED NOT MORE THAN 4 FEET APART.
- DELIVER HAZARD BARRIERS, FLASHER UNITS, AND FLAGS TO THE PROJECT SITE IN SUFFICIENT QUANTITIES FOR PLANNED CLOSURES BEFORE COMMENCING WORK.

## HORIZONTAL CONTROL STATEMENT

THIS PROJECT IS LOCATED ENTIRELY WITHIN THE "ENA" 2020 ADJUSTMENT, A LOCAL SURFACE GRID COORDINATE SYSTEM EXPRESSED IN U.S. SURVEY FEET, DEVELOPED BY HDL ENGINEERING CONSULTANTS, LLC.

THE BASIS OF COORDINATES FOR THIS PROJECT IS THE PRIMARY AIRPORT CONTROL STATION "KENAI USCG A" (POINT NO. 551), A 9/16" STAINLESS STEEL ROD IN A 6" PVC CASE, HAVING THE FOLLOWING VALUES:

NAD 83 (2011) (EPOCH 2010.00) GEODETIC COORDINATES:

LATITUDE: 60° 34′ 40.90810″ NORTH LONGITUDE: 151° 13' 42.25535" WEST

ALASKA STATE PLANE ZONE 4, NAD83 (2011) COORDINATES:

NORTHING: 2,405,227.4193 EASTING: 1,419,497.4427

ENA 2020 COORDINATES: NORTHING: 60,000.0000 EASTING: 40.000.0000

BASIS OF BEARINGS:

0+00

94

86 85

0+00

BEARINGS ARE ALASKA STATE PLANE ZONE 4, NAD83 (2011) GRID BEARINGS FROM GPS

COORDINATES, TRANSLATE USING +2,345,347.3739 NORTH, +1,379,568.2366 EAST, AND SCALE USING 0.99995013.

#### VERTICAL CONTROL STATEMENT

THE VERTICAL DATUM FOR THIS SURVEY IS A NAVD88 (GEOID 12B) ORTHOMETRIC HEIGHT. THE BASIS OF VERTICAL CONTROL IS THE PRIMARY AIRPORT CONTROL STATION "KENAI USCG A" (POINT NO. 551), A 9/16" STAINLESS STEEL ROD IN A 6" PVC CASE, HAVING AN ELEVATION OF 96.80 FEET (29.506 METERS). THE ELEVATION WAS COMPUTED BY SUBTRACTING THE GEOID12B HEIGHT FROM THE ELLIPSOID HEIGHT PUBLISHED ON THE

A LEICA DNA10 DIGITAL LEVEL WAS USED AND THE DATA WAS PROCESSED WITH LEICA INFINITY VERSION 3.3 SOFTWARE. ALL LEVEL LOOPS CLOSED WITHIN THIRD-ORDER SPECIFICATIONS.

			STORM DRAIN	PIPE	SUMMARY		
PIPE	PIPE SIZE No. (IN)		INLET		OUTLET		SLOPE
No.	(IN)	LENGTH (FT)	LOCATION	INVERT	LOCATION	INVERT	%
P01	20	164	MH-04	87.7	MH-05	87.1	0.37
P02	18	165	MH-03	88.1	MH-04	87.7	0.24
P03	18	164	MH-02	88.5	MH-03	88.1	0.24

CTODIA DOMINI DIDE CUMMADIA

#### NOTES:

- 1. SEE SHEET G1.02 FOR CIVIL GENERAL NOTES, ABBREVIATIONS, AND LEGEND. SEE SHEETS G2.00 - G2.02 FOR CONSTRUCTION PHASING AND SAFETY
- 2. MANHOLE LAYOUT POINTS ARE TO CENTER OF STRUCTURE, TOP OF LID ELEVATIONS.
- 3. PIPE LENGTHS ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, TO
- 4. DEWATERING TRENCH EXCAVATION SHALL BE ANTICIPATED. DEWATERING SHALL BE INCIDENTAL TO INSTALLATION OF STORM DRAIN PIPE.
- 5. CONTRACTOR SHALL FINISH GRADE IN ACCORDANCE WITH TYPICAL SECTIONS SHOWN ON SHEET C2.01 AND MAINTAIN EXISTING DRAINAGE.
- 6. APPROXIMATE LOCATION OF KNOWN UTILITIES ARE SHOWN. THE LOCATION OF SOME CITY AND FAA POWER CABLES, CONTROL CABLES, AND UNDERGROUND UTILITIES ARE NOT KNOWN. CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL UTILITIES AND COORDINATE WORK WITH UTILITIES AS REQUIRED.

**AIRPORT** 

MUNICIPAL

KENAI

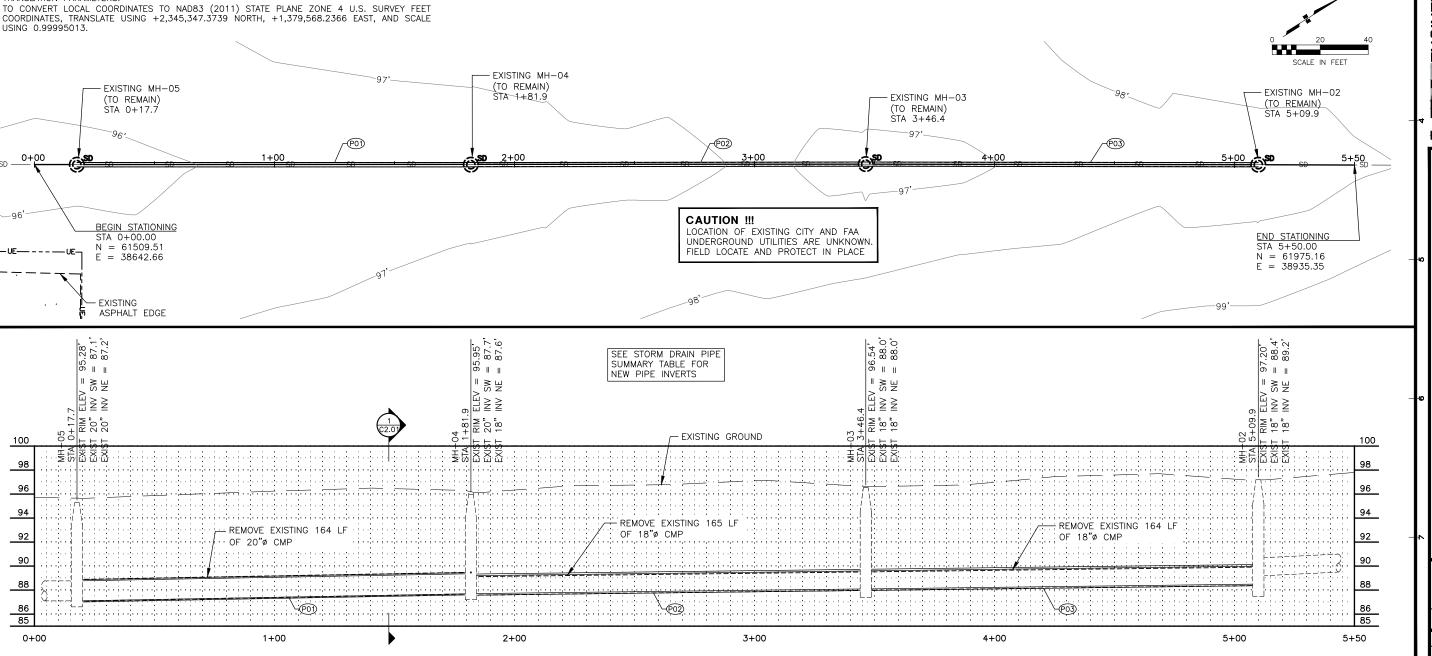
STORM DRAIN PLAN AND PROFILE

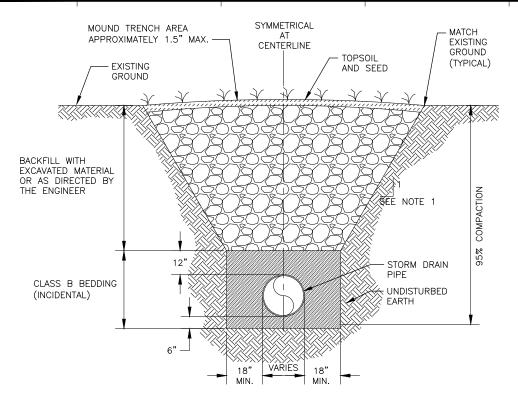
C1.01

RAWN BY: KK

DRAINAG

 $\Box$ 



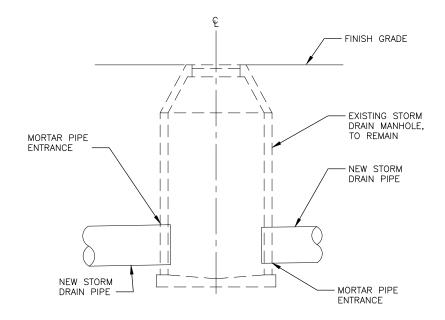


TYPICAL TRENCH SECTION

SCALE:

#### TRENCH NOTES:

- 1. TRENCH WALLS SHALL BE SLOPED OR SHORED AS REQUIRED FOR SAFETY.
- 2. ALL BEDDING AND BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY.
- 3. NO ORGANIC MATERIAL WILL BE ALLOWED IN TRENCH BACKFILL.
- 4. ANY EXCESS TRENCH EXCAVATION SHALL BE REMOVED BY CONTRACTOR AT NO ADDITIONAL COST.





DRAINAGE **AIRPORT** AIRFIELD KENAI MUNICIPAL

STORM DRAIN TYPICAL DETAILS

C2.01 DRAWN BY: CHECKED BY:
KK AJB