

Contaminated Materials Management Plan

ADEC File No. 1507.38.017

SR DM Airport Gate/
Fence Repairs/Replacement
Gustavus

State Project No. SSAPT00093

Submitted to DEC
May 24, 2022

Prepared by
DOT&PF
Southcoast Region



Purpose

This Contaminated Materials Management Plan (CMMP) provides direction for managing disturbed contaminated materials during the Alaska Department of Transportation and Public Facilities' (DOT&PF) SR DM Airport Gate/ Fence Repairs/Replacement (State Project No. SSAPT00093) at the Gustavus Airport (GST) in Gustavus, Alaska. The planned work includes replacing a 20 foot electric gate, Vehicle Gate B, at the Gustavus Airport. Attachment 1 provides regional and vicinity maps for the proposed project.

Scope

This CMMP includes procedures for the handling and storage of PFAS-contaminated material, including excavation of soil, asphalt, and concrete; transport of contaminated materials; stockpiling of contaminated materials; equipment decontamination; health and safety; and reporting procedures. The procedures contained herein do not preclude additional site- or project-specific requirements required to protect the health and safety of workers. The Contractor is responsible for performing due diligence to ensure the safety of their employees.

Procedures

In total, there will be 10 cubic yards (c.y.) of assumed¹ PFAS-contaminated material that will be above the Alaska Department of Environmental Conservation (DEC) soil migration to groundwater cleanup level found in 18 AAC 75.341. See the table below for a breakdown of estimated contaminated material:

Original Location	Material Type	Method	Qty (c.y.)
Vehicle Gate B	soil	excavation	8
Vehicle Gate B	asphalt chunks	excavation	1.5
Vehicle Gate B	concrete chunks	excavation	0.5

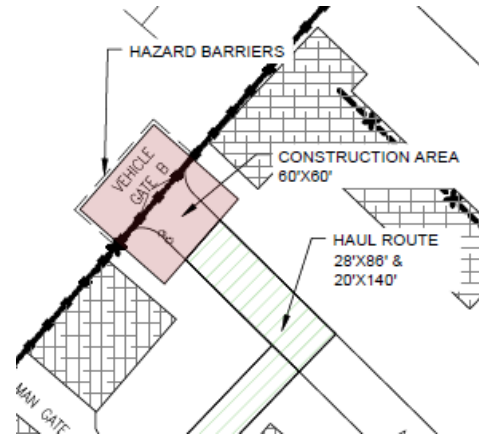
There will be three types of material produced during project work: soil, asphalt, and concrete. All three material types will be produced through excavation. See Attachment 2 for detailed project plans that show areas of excavation. All contaminated soil will either 1) be placed back where it came from at the same approximate height and depth or 2) will be stockpiled in the PFAS-contaminated material storage cell already located at the Gustavus airport near the southeastern end of runway 11/29. All contaminated asphalt and concrete will be stockpiled in the PFAS-contaminated material storage cell already located at the Gustavus airport near the southeastern end of runway 11/29.

Excavation Procedures

1. Excavation activities shall be performed in a manner that minimizes worker exposure and protects the environment from site contaminants.

¹ DOT&PF is handling all material on this project as PFAS-contaminated based on adjacent test sites and results. Those results are available here: https://dot.alaska.gov/sereg/projects/gustavus_airport/

2. The entire 60'x60' construction area around Vehicle Gate B is to be considered contaminated; see footnote above for contamination explanation. Image at right shows the Construction Area (area shaded red); Attachment 2 also includes the Construction Area and plan sheets of the work to be done there. Hazard barriers will be set up to delineate the work area from other non-work areas.
3. Soil will be excavated with an excavator. Asphalt and concrete will be sawcut, broken into chunks, and removed from the ground.
4. If excavated soil is reused, it will be returned as close to its original location as practicable. If contaminated soil that is to be returned to its original site needs to be temporarily stored, it will be placed on a lined containment area near where the material came from, covered and flagged until it can be backfilled. No contaminated soil will be moved into a zone of lesser contamination, and movement of contaminated soils will be minimized where possible.
5. Any contaminated material that will be stockpiled long-term (not in temporary stockpiles, such as soil that will be returned to its original location), will be loaded into dump trucks and transported to the PFAS-contaminated material storage cell near the end of runway 11/29.
6. All equipment leaving the PFAS-contaminated work area will be decontaminated (see [Decontamination Procedures](#) below) before driving to the stockpile area or a lesser contaminated area of the airport, if necessary. If equipment comes into contact with contaminated soil in the stockpile area, it will also be decontaminated prior to leaving the stockpile area.
7. Operators will work from the safety of their respective equipment cabs. Manual labor to excavate soils is not expected. If manual/ground labor is necessary, personnel will wear proper PPE and follow decontamination procedures.
8. Dust will be controlled by spraying all disturbed areas, stockpiles and unpaved roads with water. If borrow material is to be hauled to the project site, it shall be kept slightly moist or covered to prevent wind transport during hauling. Water trucks will be used, if necessary, to increase the soil moisture levels, and water will be reapplied as necessary to keep dust to a minimum. The minimum amount of water will be used to perform dust control. Reduced speeds will be used on un-paved areas. Material loading will be limited during high winds. Water used for dust control must be PFAS-free.
9. DOT&PF does not expect excavation dewatering to occur. If excavation dewatering is needed, the Contractor will obtain a DEC Excavation Dewatering General Permit. BMPs for dewatering in contaminated soil areas will be outlined during that process.



Decontamination Procedures

All heavy equipment used in the PFAS-contaminated work area that comes into contact with contaminated material will be brushed to remove visible soil before leaving the work area. If equipment comes into contact with contaminated material in the stockpile area, it will also be brushed to remove visible soil prior to leaving the stockpile area. Dump truck beds, unless contaminated material may fall

from the bed while driving in/through uncontaminated zones, will not be decontaminated in between contaminated loads; they will be decontaminated before hauling uncontaminated loads and at the end of each day. If hand tools are used, they will be brushed to remove visible soil as well. All decontaminated equipment will be visually inspected for residual contamination periodically to ensure decontamination procedures are effective. A vehicle/equipment wash is established at the end of runway 2/20 and/or in front of the DOT&PF building. Both areas are known AFFF deployment areas and have tested above DEC regulatory levels. Because equipment is already being decontaminated, regular washes are not required but good practice.

A decontamination station will be set up at the edge of the work area for personnel entering and exiting the area. When exiting the work area, personnel will brush any contaminated soil from their work clothes, boots, and PPE (if applicable). Any used PPE will be placed into a covered trash receptacle, and full trash bags will be disposed of as inert solid waste.

Stockpile Procedures

If PFAS-contaminated material needs to be stockpiled long-term, it will be stockpiled in the PFAS-contaminated material liner cell located on the northeast side of the main runway, Runway 11/29 (58° 25' 15" N 135° 41' 30" W; Attachment 3: Designated Fill Area). The stockpile is already established and demarcated from the Gustavus Airport Apron, Runway, Taxiway, and Pavement Rehabilitation project. The specifications for that stockpile are repeated here and are applicable for this project as well.

The PFAS-contaminated material liner cell is on DOT&PF property and is the former location of firefighting training and a known AFFF dispersal area. The site is located ~2,200' from the Airport Terminal well and ~3,400' from the NPS well. The closest surface water is ~190' from the storage site. An elevated pad was constructed under PFAS-contaminated material and liner to prevent inundation by airport-wide flooding events.

Stockpiling will meet all specifications listed in 18 AAC 75.370, in addition to the specifications listed in the CMMP developed for the Gustavus Airport Runway, Apron, and Taxiway Pavement Rehab project.

Health and Safety Procedures

Before project work begins all personnel new to site (Contractor's staff, engineering staff, inspectors, etc.) will have PFAS training conducted by a DOT&PF Environmental Impact Analyst or Regional Environmental Manager. Training will be produced by DOT&PF Environmental staff and approved by the DOT&PF Regional Environmental Manager. Any new personnel to site will be required to review the training handout produced by DOT&PF. The Contractor will keep a log of all personnel who have received training. The training will cover: introduction to PFAS compounds, potential pathways of exposure, human health effects, ecological concerns, equipment decontamination, required PPE, and proper PPE removal. Training refreshers will occur quarterly during weekly safety meetings during project construction.

PPE will be required for all personnel working on the ground in PFAS-contaminated excavation areas. PPE selection will be based on work-task requirements and potential exposure; PPE that may be required are: standard work clothes or cotton overalls; reflective, high visibility safety vest, shirt, or jacket; safety-

toe boots; safety glasses; hard hat; gloves; and disposable nitrile gloves (required for any personnel that may have dermal contact with contaminated material).

Inspections and Reporting Procedures

The PFAS-contaminated material liner cell will be inspected daily by the Contractor during work days when actively filling; during project construction, stockpiles will be inspected at least once weekly even if not actively filling that week. They will be inspected, using the Inspection Form in Attachment 4, to ensure:

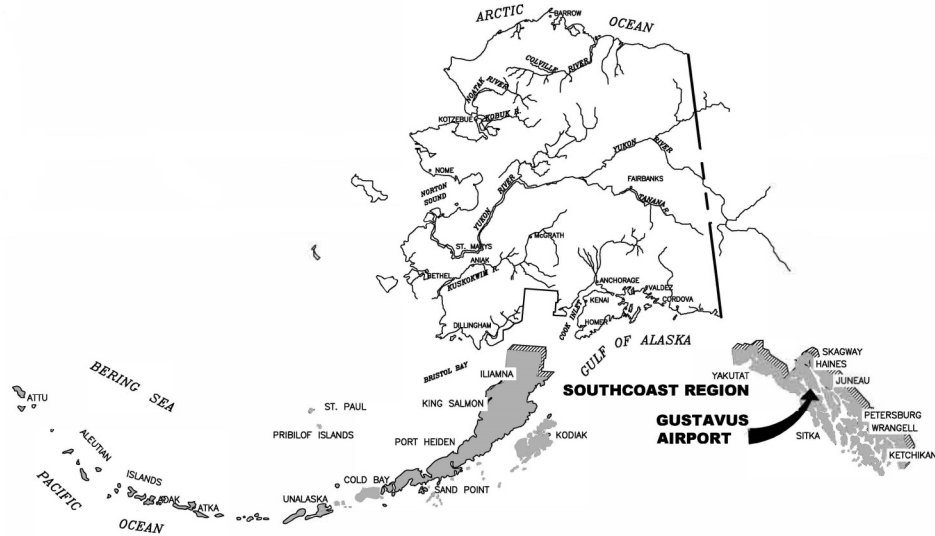
- the top liner remains intact with no holes or tears,
- excessive water is not accumulating on top of the cell or around the base of the cell,
- wattles are in place against the base of the material pile with 2’ overlap,
- ropes and sandbags holding down top liner are in good condition and functioning as intended,
- signs are in place and legible, and
- safety warning devices (traffic cones or bollards) are present and upright.

Inspections will be also recorded in an Inspection Log (see Attachment 5), which is a summary of inspections with dates and important notes, and will be submitted by the Contractor monthly during construction and at project completion to the project engineer along with Inspection Forms and photographs associated with inspections. The Contractor will also submit to the project engineer monthly during construction and at project completion a summary of all contaminated material movement (estimated quantity of each type of material in cubic yards that was placed in the stockpiles and placed back in the ground where it came from and those locations). See table below for an example. The project engineer will submit all items (Inspection Forms, photos, and material movement summary) within a week of receiving to DOT&PF Environmental and DOT&PF Statewide Aviation PFAS Program Manager Sammy Cummings who will send to DEC. DEC, DOT&PF, and the project engineer may also request to see the above items at any time during project construction as well.

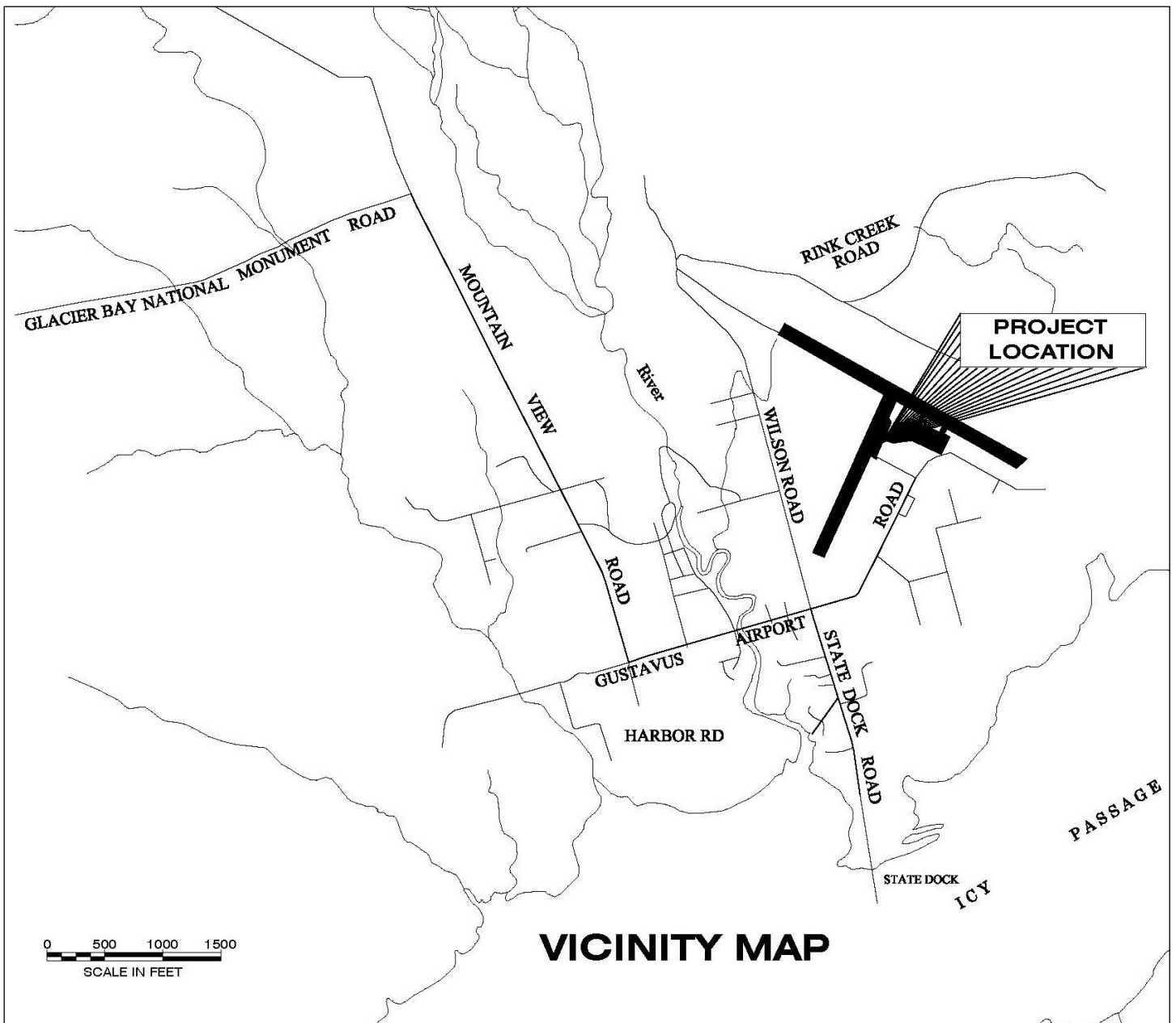
DATE	MATERIAL TYPE (soil, asphalt, or concrete)	QUANTITY (cu. yards)	FROM (area/STA or area/depth)	TO (stockpile or area/depth)
Ex: 5/25/2021	asphalt	35	Taxiway F, STA 1+00 L to STA 2+60 L	North Stockpile
Ex: 5/25/2021	soil	1	Vehicle Gate B, 5’	Temporary stockpile near Vehicle Gate B
Ex: 5/27/2021	soil	1	Temporary stockpile near Vehicle Gate B	Vehicle Gate B, 5’

Gustavus DOT&PF staff will conduct stockpile inspections during storage as outlined in the CMMP developed for the Gustavus Airport Runway, Apron, and Taxiway Pavement Rehab project. DOT&PF Statewide PFAS Program Manager will submit documentation of those inspections with photos biannually in May and October each year via email to DEC.

Attachment 1 Regional and Vicinity Maps



ALASKA SOUTHCOAST REGION LOCATION MAP



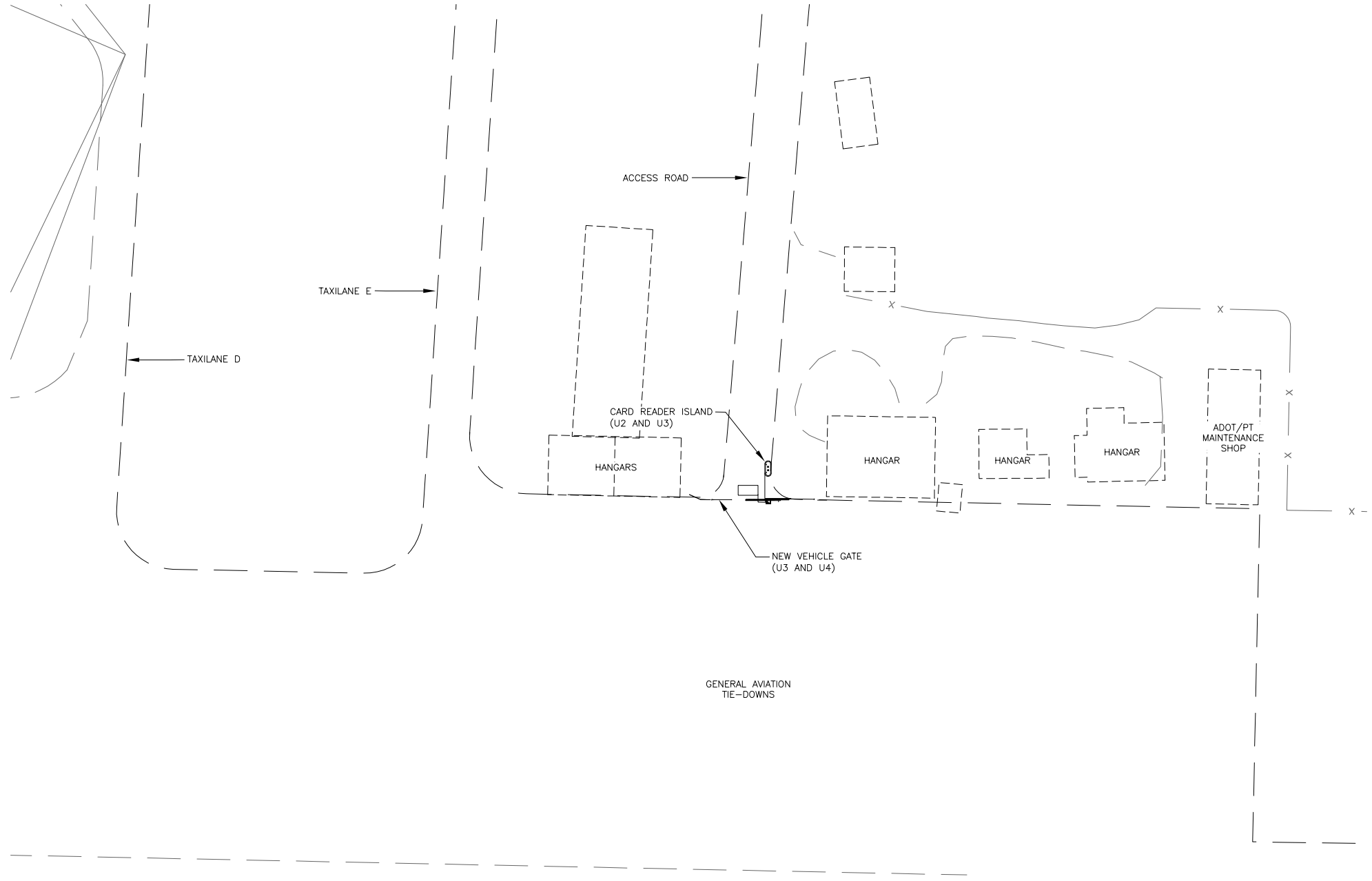
VICINITY MAP

Attachment 2

Project Plans

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SSAPTO0093	2021	U1	15

FILE: N:\Projects\1134 - State of Alaska DOT\134 GST Airport Gate Replacement\Drawings\Working\U1.dwg
 DATE: 6/30/21
 LAYOUT: U1
 DESIGNED: BCH
 CHECKED: BCH
 DRAFTED: PEL



LEGEND

ABBREVIATIONS:

- HDG HOT-DIPPED GALVANIZED
- SPD SURGE PROTECTION DEVICE
- SS STAINLESS STEEL

SHEET NOTE SYMBOLS:

- (E) EXISTING TO REMAIN
- (N) NEW

SERVICE EQUIPMENT:

- UTILITY METER

POWER:

- DOUBLE DUPLEX RECEPTACLE
- MOTOR CONNECTION

DIAGRAM SYMBOLS:

- CIRCUIT BREAKER
- CONTACT (N.O.) (c)
- FUSED DISCONNECT
- GROUND BUS
- GROUND ROD
- METER
- THERMAL OVERLOAD RELAY
- TERMINAL BLOCK

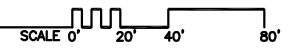
LIGHTING:

- EXTERIOR SOFFIT MOUNTED LUMINAIRE

LIGHTING CONTROLS:

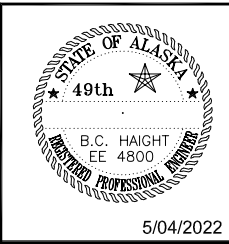
- PHOTOELECTRIC CELL

1 SITE PLAN



ELECTRICAL SHEET INDEX	
SHEET NUMBER	SHEET TITLE
U1	LEGEND, SITE PLAN
U2	DETAIL PLAN - EXISTING GATE AND CONTROLS
U3	DETAIL PLAN - NEW GATE AND CONTROLS, GATE FOUNDATION
U4	DETAILS - DETECTOR LOOP, SINGLE LINE DIAGRAM, SCHEMATIC DIAGRAM, PANEL LAYOUT

PLANS DEVELOPED BY:
 HAIGHT & ASSOCIATES
 526 MAIN ST
 JUNEAU, AK 99801
 (907) 586-9788



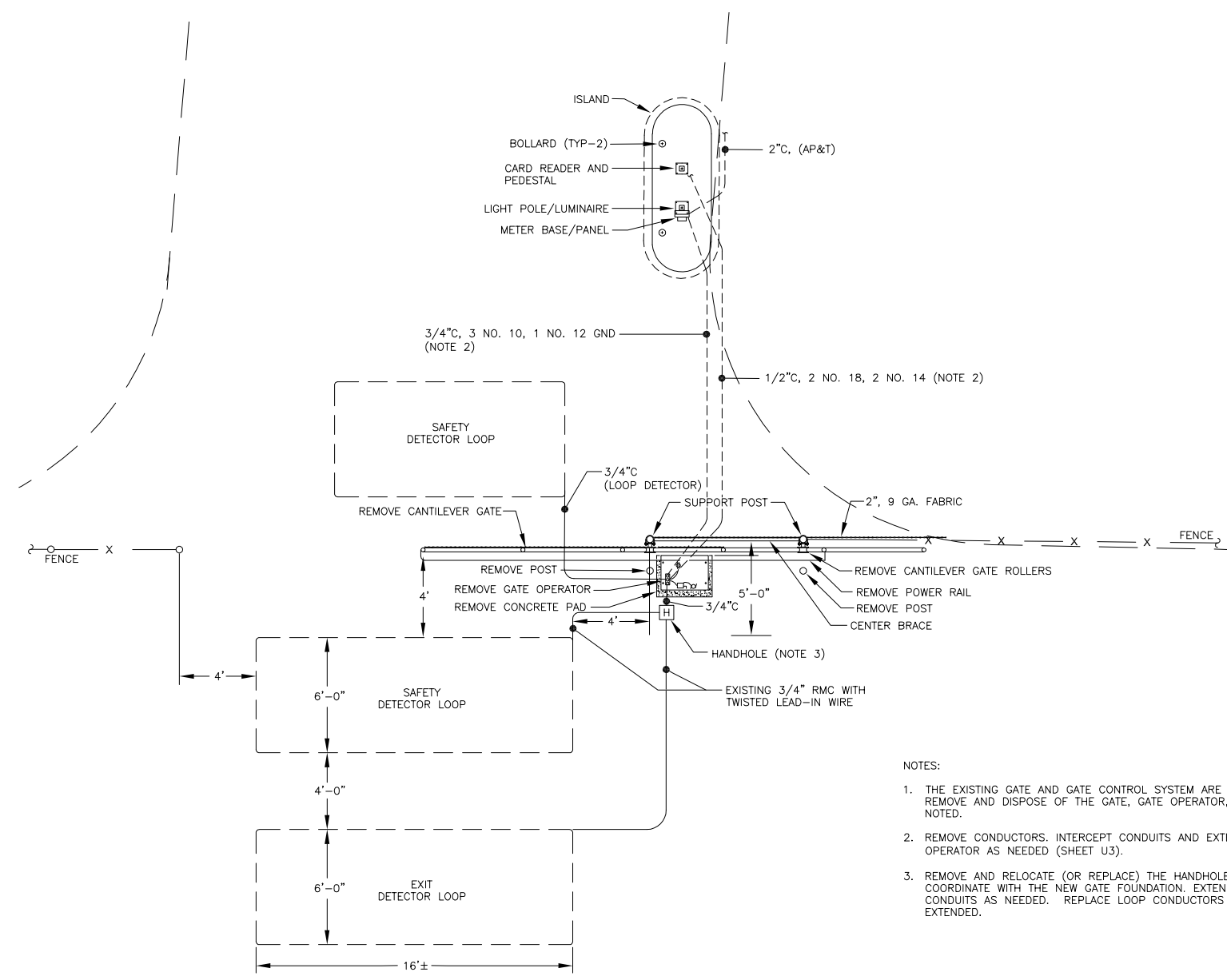
STATE OF ALASKA DEPARTMENT OF
 TRANSPORTATION
 AND PUBLIC FACILITIES
 6860 GLACIER HIGHWAY, JUNEAU, AK 99811
 (907) 465-1763

**GUSTAVUS AIRPORT GATE
 REPLACEMENT**

LEGEND, SITE PLAN

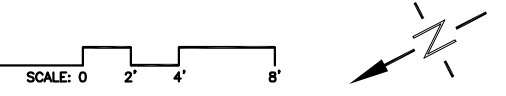
5/04/2022

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SSAPT00093	2021	U2	15



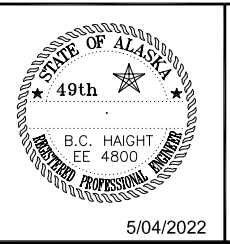
- NOTES:
1. THE EXISTING GATE AND GATE CONTROL SYSTEM ARE ILLUSTRATED. REMOVE AND DISPOSE OF THE GATE, GATE OPERATOR, AND CIRCUITS AS NOTED.
 2. REMOVE CONDUCTORS. INTERCEPT CONDUITS AND EXTEND TO NEW GATE OPERATOR AS NEEDED (SHEET U3).
 3. REMOVE AND RELOCATE (OR REPLACE) THE HANDHOLE AS NEEDED TO COORDINATE WITH THE NEW GATE FOUNDATION. EXTEND OR MODIFY LOOP CONDUITS AS NEEDED. REPLACE LOOP CONDUCTORS THAT NEED TO BE EXTENDED.

1 DETAIL PLAN - EXISTING GATE AND CONTROLS



FILE N:\Projects\H134 - State of Alaska DOT\PP\134 GST Airport Gate Replacement\Drawings\Working\U2.dwg DATE 6/30/21 LAYOUT U2 DESIGNED BCH CHECKED BCH DRAFTED PEL

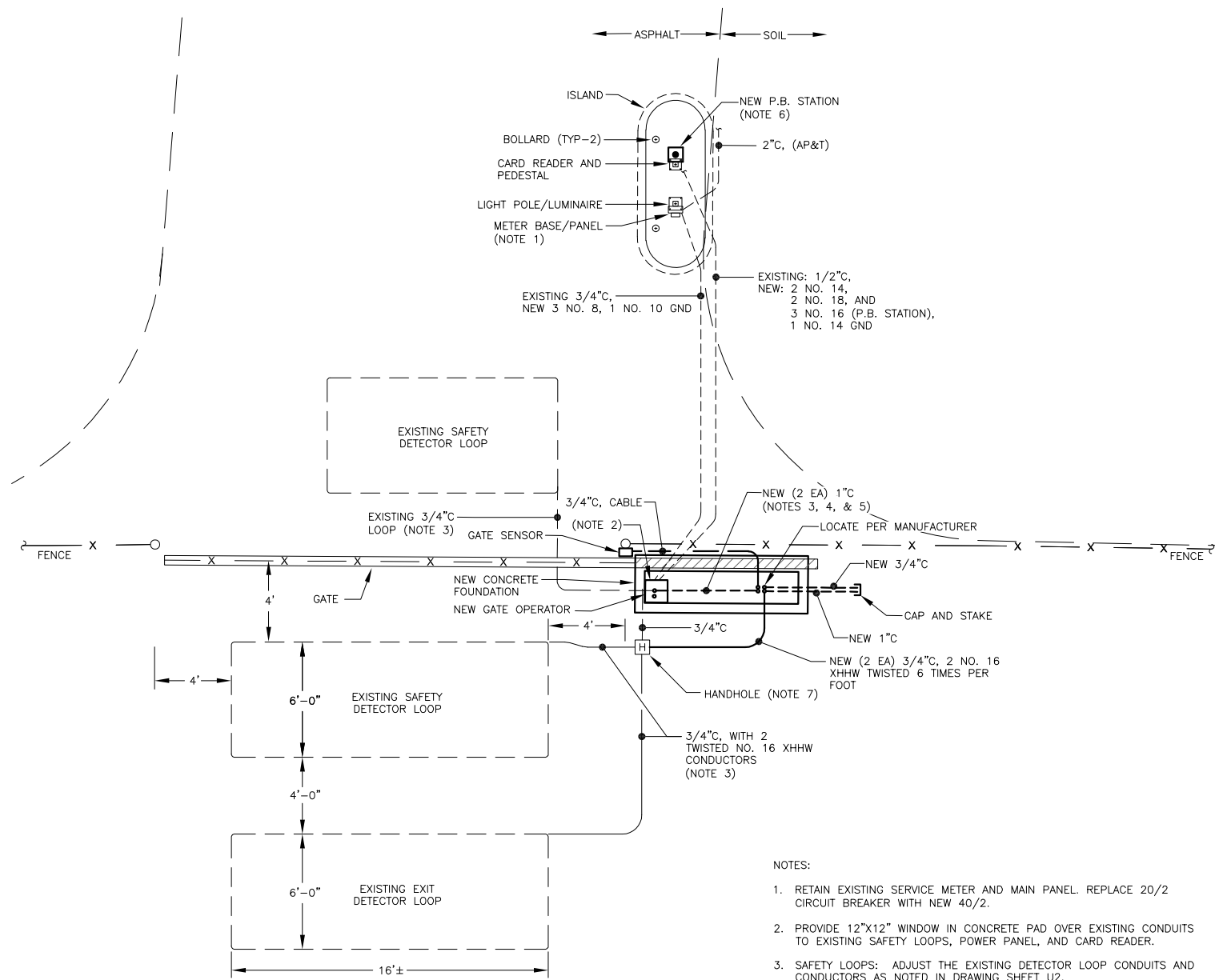
PLANS DEVELOPED BY:
 HAIGHT & ASSOCIATES
 526 MAIN ST
 JUNEAU, AK 99801
 (907) 586-9788



STATE OF ALASKA DEPARTMENT OF
 TRANSPORTATION
 AND PUBLIC FACILITIES
 6860 GLACIER HIGHWAY, JUNEAU, AK 99811
 (907) 465-1763
**GUSTAVUS AIRPORT GATE
 REPLACEMENT**
**DETAIL PLAN - EXISTING GATE
 AND CONTROLS**
 5/04/2022

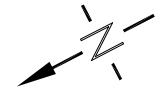
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SSAPT00093	2021	U3	15

FILE: N:\Projects\1134 - State of Alaska DOT\134 - GST Airport Gate Replacement\Drawings\Working\U3.dwg
 DATE: 6/30/21
 LAYOUT: U3
 DESIGNED: BCH
 CHECKED: BCH
 DRAFTED: PEL



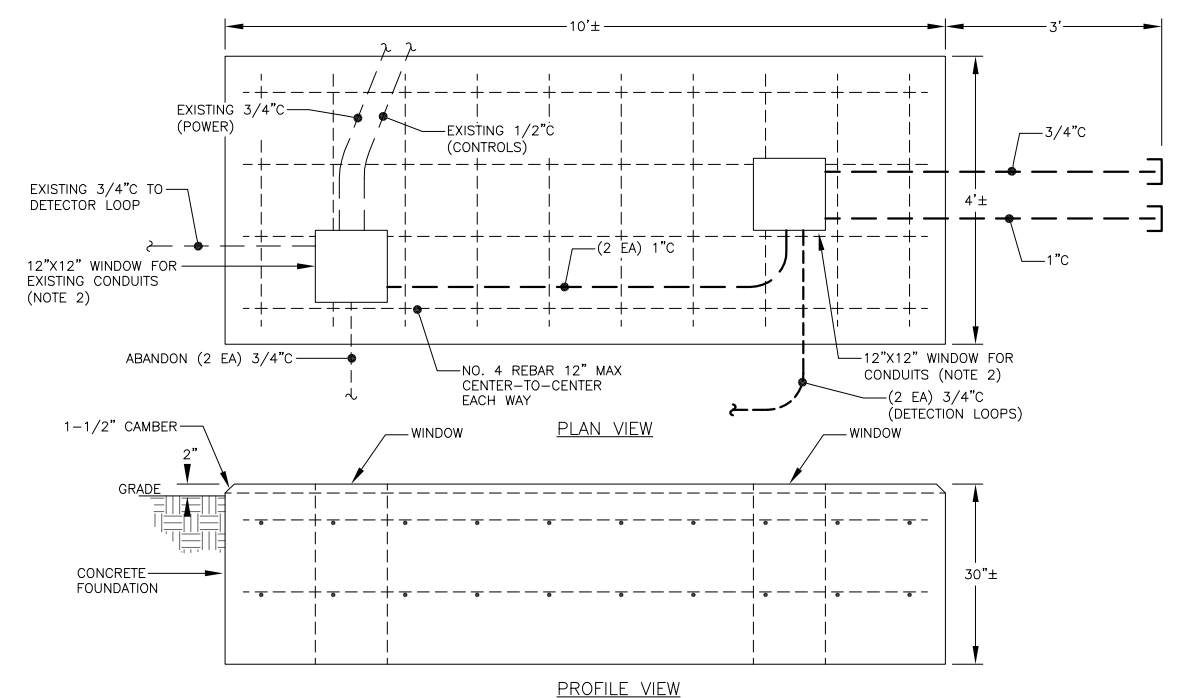
1 DETAIL PLAN - NEW GATE AND CONTROLS

SCALE: 0 2' 4' 8'



- NOTES:
1. RETAIN EXISTING SERVICE METER AND MAIN PANEL. REPLACE 20/2 CIRCUIT BREAKER WITH NEW 40/2.
 2. PROVIDE 12"x12" WINDOW IN CONCRETE PAD OVER EXISTING CONDUITS TO EXISTING SAFETY LOOPS, POWER PANEL, AND CARD READER.
 3. SAFETY LOOPS: ADJUST THE EXISTING DETECTOR LOOP CONDUITS AND CONDUCTORS AS NOTED IN DRAWING SHEET U2.
 4. POWER: EXTEND POWER CONDUCTORS TO OPERATOR USING THE NEW 1" C.
 5. CONTROLS: EXTEND CARD READER AND P.B. STATION CONDUCTORS TO OPERATOR USING THE SECOND NEW 1" C.
 6. MOUNT NEW OPERATOR P.B. STATION TO THE EXISTING CARD READER SUPPORT POST.
 7. RELOCATE OR REPLACE THE HANDHOLE AS NOTED IN DRAWING SHEET U2.

- NOTES:
1. ADJUST FOUNDATION DIMENSIONS AND REINFORCING PER GATE OPERATOR MANUFACTURER.
 2. ADJUST POSITION OF WINDOWS TO COORDINATE WITH EXISTING CONDUITS AND MANUFACTURER REQUIREMENTS. LOCATE BENEATH EQUIPMENT WHERE ACCESSIBLE.



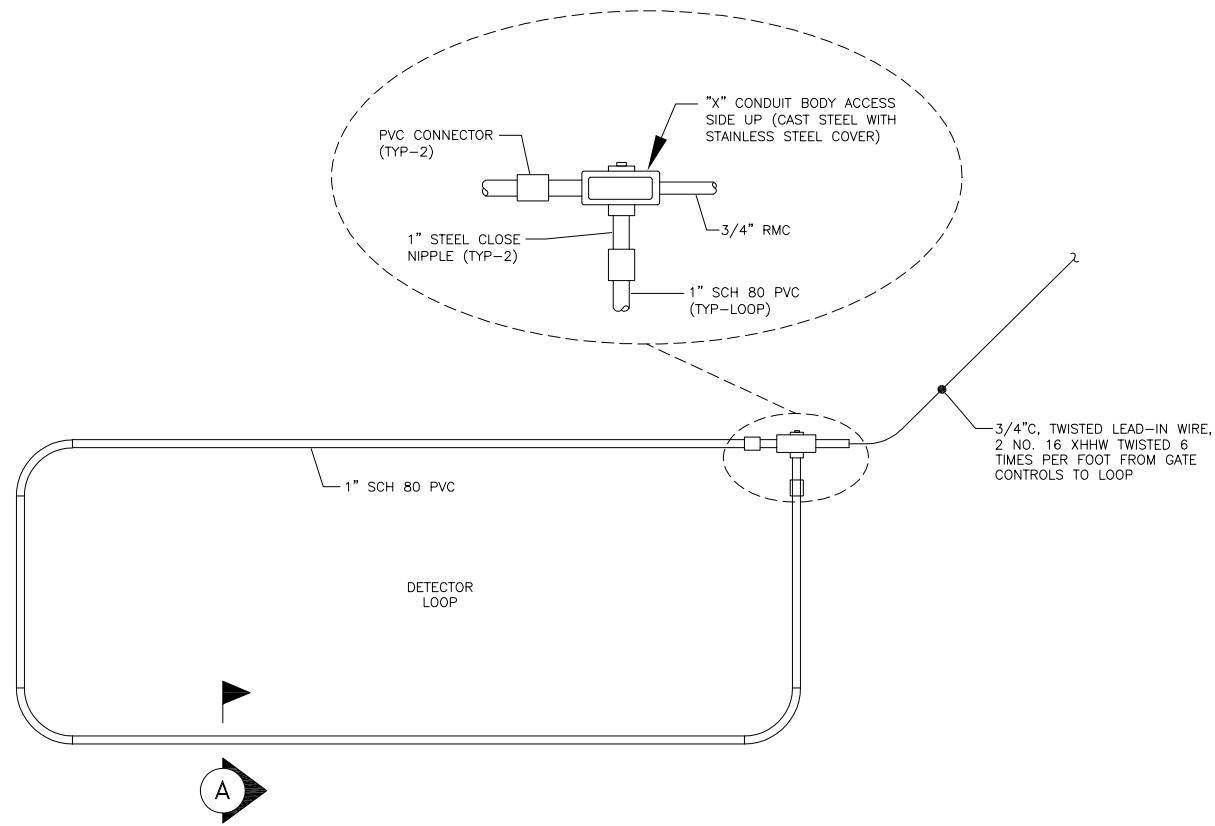
2 DETAILS - GATE OPERATOR FOUNDATION

NO SCALE

PLANS DEVELOPED BY: HAIGHT & ASSOCIATES 526 MAIN ST JUNEAU, AK 99801 (907) 586-9788	<p>5/04/2022</p>	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 6860 GLACIER HIGHWAY, JUNEAU, AK 99811 (907) 465-1763 GUSTAVUS AIRPORT GATE REPLACEMENT DETAIL PLAN - NEW GATE AND CONTROLS
---	------------------	--

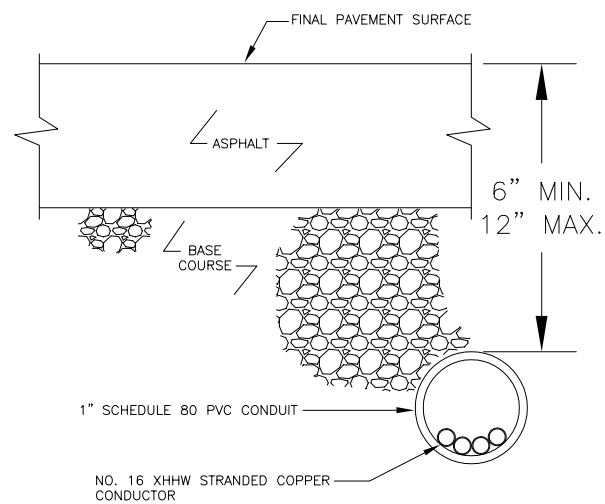
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	SSAPT00093	2021	U4	15

FILE: N:\Projects\1134 - State of Alaska DOT\1134 - GST Airport Gate Replacement\Drawings\Working\U4.dwg
 DATE: 6/30/21
 LAYOUT: U4
 DESIGNED: BCH
 CHECKED: BCH
 DRAFTED: PEL



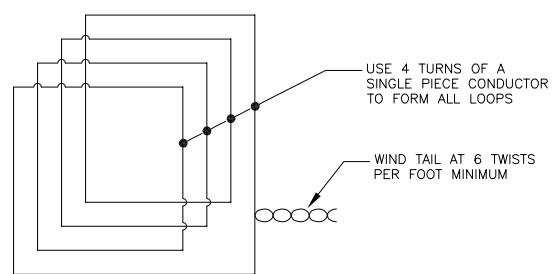
1 DETAILS - DETECTOR LOOP NO SCALE

- NOTES:
- THESE DETAILS ILLUSTRATE THE INSTALLATION FOR THE EXISTING SECURE SIDE LOOPS INSTALLED IN 2021.
 - THE CONDUCTOR FOR THE LOOP AND LEAD-IN SHALL BE CONTINUOUS WITH NO SPLICES.
 - PROVIDE CONDUCTOR CONTINUITY AND INSULATION TEST PRIOR TO INSTALLING SEALANT.



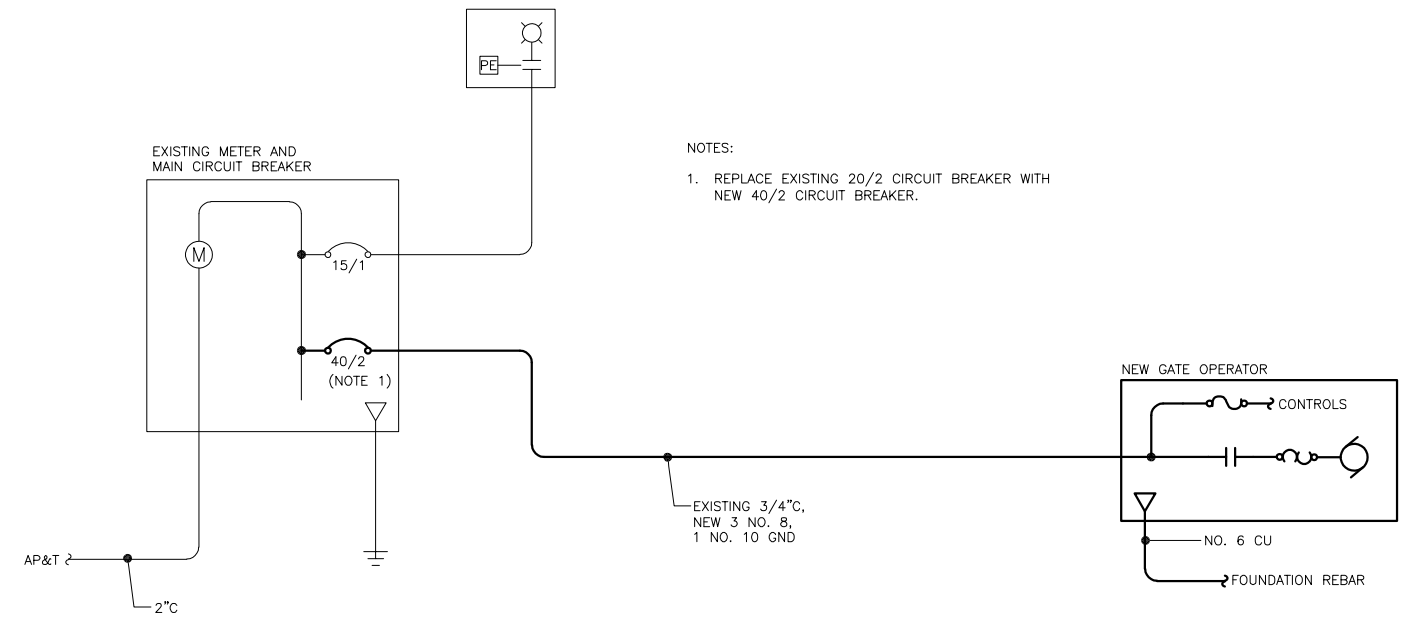
SECTION **A**

DETAILS - TYPICAL PVC CONDUIT ENCASED LOOP DETECTOR INSTALLATION

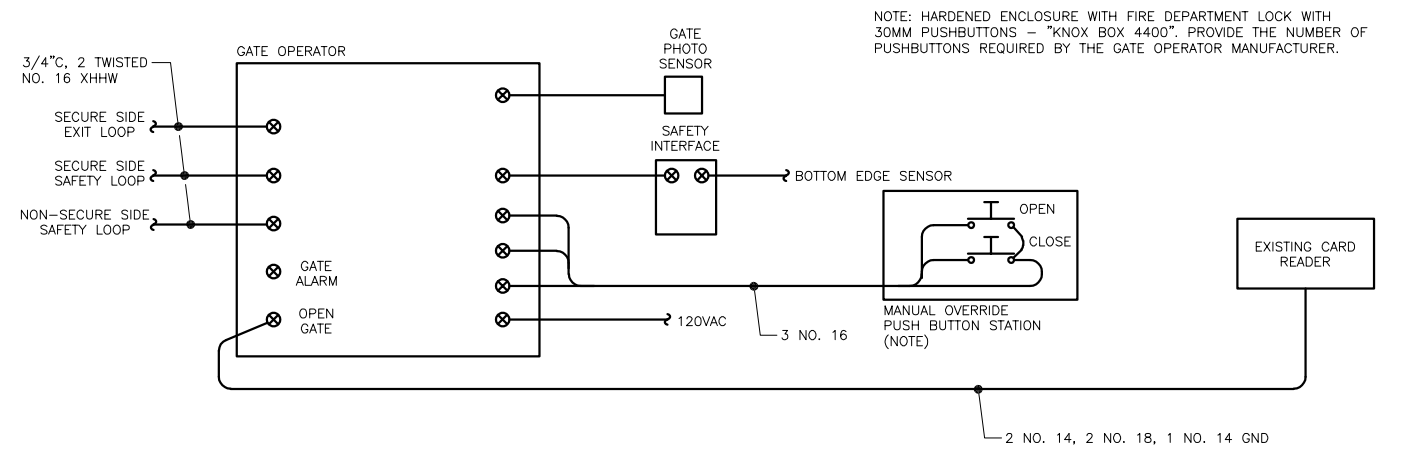


LOOP WIRING DETAIL

NO SCALE



2 SINGLE LINE DIAGRAM - POWER DISTRIBUTION NO SCALE

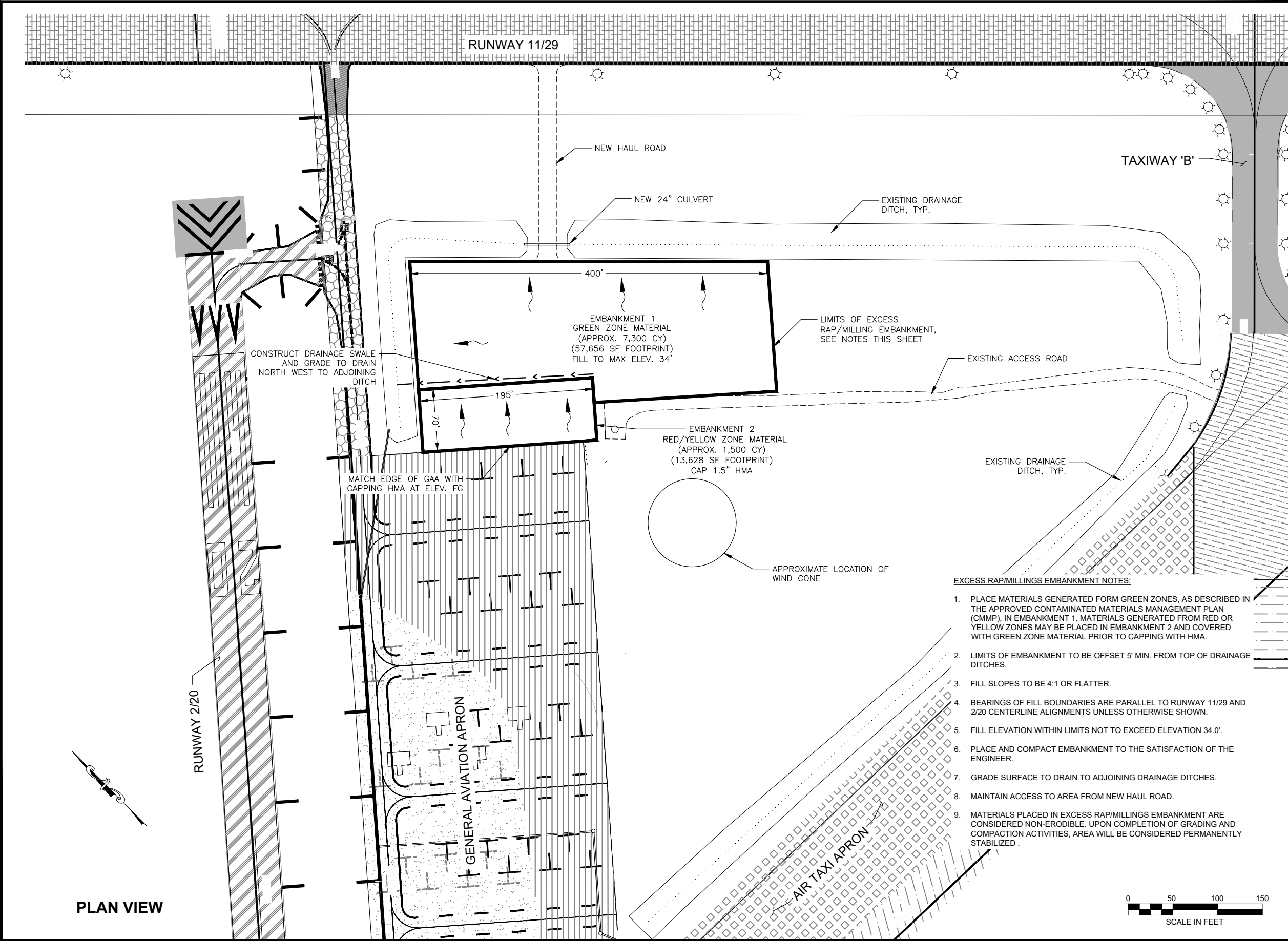


3 SCHEMATIC DIAGRAM - GATE CONTROLS NO SCALE

PLANS DEVELOPED BY: HAIGHT & ASSOCIATES 526 MAIN ST JUNEAU, AK 99801 (907) 586-9788		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 6860 GLACIER HIGHWAY, JUNEAU, AK 99811 (907) 465-1763 GUSTAVUS AIRPORT GATE REPLACEMENT DETAILS - GATE FOUNDATION SINGLE LINE DIAGRAM SCHEMATIC DIAGRAM 5/04/2022
---	--	---

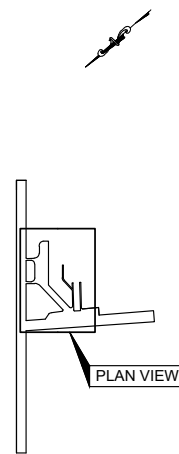
Attachment 3 Designated Fill Location

FILE C:\Users\Ethan_Roemeling\Dropbox (prohns)\Gustavus Airport\GN Project Files\F2-Design Files\prohns Files DATE 8/3/2021 9:11 LAYOUT F15 8/3/2021 9:11 DESIGNED prohns CHECKED G. Gladjo DRAFTED prohns

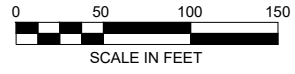


PLAN VIEW

SHEET NO.	TOTAL SHEETS	
F15	15	
STATE	YEAR	
ALASKA	2020	
PROJECT DESIGNATION		
Z675170000/ 3-02-0111-007-2020		
ADDENDUM NO.		
ATTACHMENT NO.		
REVISIONS		
NO.	DATE	DESCRIPTION



- EXCESS RAP/MILLINGS EMBANKMENT NOTES:**
1. PLACE MATERIALS GENERATED FROM GREEN ZONES, AS DESCRIBED IN THE APPROVED CONTAMINATED MATERIALS MANAGEMENT PLAN (CMMP), IN EMBANKMENT 1. MATERIALS GENERATED FROM RED OR YELLOW ZONES MAY BE PLACED IN EMBANKMENT 2 AND COVERED WITH GREEN ZONE MATERIAL PRIOR TO CAPPING WITH HMA.
 2. LIMITS OF EMBANKMENT TO BE OFFSET 5' MIN. FROM TOP OF DRAINAGE DITCHES.
 3. FILL SLOPES TO BE 4:1 OR FLATTER.
 4. BEARINGS OF FILL BOUNDARIES ARE PARALLEL TO RUNWAY 11/29 AND 2/20 CENTERLINE ALIGNMENTS UNLESS OTHERWISE SHOWN.
 5. FILL ELEVATION WITHIN LIMITS NOT TO EXCEED ELEVATION 34.0'.
 6. PLACE AND COMPACT EMBANKMENT TO THE SATISFACTION OF THE ENGINEER.
 7. GRADE SURFACE TO DRAIN TO ADJOINING DRAINAGE DITCHES.
 8. MAINTAIN ACCESS TO AREA FROM NEW HAUL ROAD.
 9. MATERIALS PLACED IN EXCESS RAP/MILLINGS EMBANKMENT ARE CONSIDERED NON-ERODIBLE. UPON COMPLETION OF GRADING AND COMPACTION ACTIVITIES, AREA WILL BE CONSIDERED PERMANENTLY STABILIZED.



STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
6860 GLACIER HWY, JUNEAU, AK 99811
907) 465-1763

GST AIRPORT APRON, RUNWAY, AND TAXIWAY PAVEMENT REHAB.
PLAN VIEW - EXCESS RAP/MILLINGS EMBANKMENT

SSAPT00093 SR DM Airport Gate/Fence Repairs/Replacement	
CMMP Attachment 4: Inspection Form	
Date of Inspection	
Time of Inspection	
Inspectors' Names	
Inspectors' Titles	
Inspectors' Contact Information	
Area's Inspected	
Describe Construction Activities:	

PPE

YES

NO

COMMENTS

All on staff PFAS Trained?			
Staff using proper PPE?			
Decontamination station set up properly with all of the correct PPE?			
PFAS PPE properly disposed of?			

EXCAVATION SITE

Excavating contaminated soil?			
Excavating contaminated asphalt?			
Contaminated material safely contained?			
Track out contained?			
Truck Tires Swept Clean?			
Equipment being properly decontaminated?			
Grinding equipment used in contaminated area? If so was it decontaminated after use?			

STOCKPILE SITE

Stockpiles 100ft from surface waters/200ft from public drinking water?			
Stockpiles properly constructed?			
Stockpiles adequately marked?			
Track out contained?			
Truck Tires Swept Clean?			
Equipment being properly decontaminated?			
Incomplete stockpiles covered during periods of inactivity?			
Wattles properly installed and intact?			

Liner intact?			
Liner properly folded over wattle?			
Stockpile cover in place and intact?			
Ropes and sandbags properly placed and in good condition?			

