



US Army Corps
of Engineers
Alaska District

Public Notice of Application for Permit

KENAI FIELD OFFICE
Regulatory Division (1145)
CEPOA-RD
44669 Sterling Highway, Suite B
Soldotna, Alaska 99669-7915

PUBLIC NOTICE DATE:	August 14, 2018
EXPIRATION DATE:	September 13, 2018
REFERENCE NUMBER:	POA-2018-00268
WATERWAY:	Zolotoi Bay

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States (U.S.) as described below and shown on the enclosed project drawings.

All comments regarding this Public Notice (PN) should be sent to the address noted above. If you desire to submit your comments by email, you should send it to the Project Manager's email as listed below or to regpagemaster@usace.army.mil. All comments should include the PN reference number listed above.

All comments should reach this office no later than the expiration date of this PN to become part of the record and be considered in the decision. Please contact Andrew Gray at (907) 753-2722, by fax at (907) 420-0813, or by email at Andrew.a.gray@usace.army.mil if further information is desired concerning this notice.

APPLICANT: Aleut Community of St. Paul Island, 4270 Business Park Boulevard, Suite G-40, Anchorage, Alaska 99503

AGENT: Midnight Sun Environmental, Brian Kovol, 7941 Sandlewood Place, Anchorage, Alaska 99503

LOCATION: The project site is located within Section 25, T. 35 S., R. 135 W., Seward Meridian; Latitude 57.1208° N., Longitude 170.2880° W.; near Polovina Turnpike; in St. Paul, Alaska.

PURPOSE: The applicant's stated purpose is to provide alternative access to the residential area of St. Paul, and a flood control barrier for frequent storm surges.

PROPOSED WORK: To discharge 13,300 cubic yards (CY) of sand or unclassified fill into 0.98 acres of waters of the U.S. to construct a 1,647-linear foot long roadway which would connect Polovina Turnpike to the southern residential area on St. Paul Island. The proposed road would have two twelve-foot wide lanes, a total right-of-way width of 40-feet, and one twenty four-inch diameter culvert. All work would be performed in accordance with the enclosed plan (sheets 1-11), dated July 6, 2018.

ADDITIONAL INFORMATION: An Alaska Department of Environmental Conservation Construction General Permit and a Right-of-Way permit from the City of St. Paul are other authorizations that the applicant would be required to obtain.

APPLICANT PROPOSED MITIGATION: The applicant proposes the following mitigation measures to avoid, minimize, and compensate for impacts to waters of the U.S. from activities involving discharges of dredged or fill material.

a. Avoidance: The applicant has stated, "All practical means to avoid the impacts to wetlands have been completed. There is no practical road access alternative that avoids wetlands. A fill permit for a much larger road extension project in 1995 (Army Permit Number 4-950106) was issued. Despite receiving the permit authorization, the project was never built, and the permit expired. The new design for the project reduces the footprint from 2.3 acres of impacts to 0.98 acres of impacts."

b. Minimization: The applicant has stated, "The roadway/flood control structure would be constructed using the minimum width of fill footprint necessary to provide a stable road base. No grubbing would be conducted outside of the footprint and only the minimum clearing required for safety would be done beyond the toe of the slope. An erosion and sediment control plan would be prepared to describe the best management practices used to avoid water quality impacts to wetlands and other water bodies. The details of the erosion and sediment control plan would be completed in final design and will ensure compliance with Alaska's Pollution and Discharge Elimination System. No additional impact to wetlands or marine habitats would result from implementing the erosion and sediment control plan."

c. Compensatory Mitigation: The applicant has stated, "Although the project would result in the permanent loss of 0.98 acres of waters of the U.S., the proposed project would result in a negligible loss when taken into account in context of the entire watershed within the assessment area. There would be no measurable loss of aquatic function from the proposed work. Little past development has occurred within the review area that has resulted in the loss of waters of the U.S., and any new proposals subject to the Corps of Engineers (Corps') regulatory authority would undergo a similar review as the current proposal. The proposed work would cause only minimal direct, secondary, and cumulative impacts to waters of the U.S., including special aquatic sites, contained within the assessment area. Additionally, the proposed project incorporates controls to minimize effects, and the Department of the Army permit, if issued, would be conditioned to minimize impacts to aquatic resources. Therefore, no significant degradation of the aquatic ecosystem would occur as a result of the proposed project. The applicant has avoided and minimized to the extent practicable, the proposed

project complies with the 404(b)(1) Guidelines, and would not result in the loss of significant aquatic resources (33 CFR 320.4(r)). Therefore, no compensatory mitigation is proposed.”

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. The permit area is the footprint of the proposed road construction, to include a buffer on each side of the proposed 40-foot wide right-of-way, to account for construction activities, for a total width of 90-feet. It would extend the full length of the road, 1647-feet, and also encompass the transition area where the new road would merge with existing roads. The permit area is within the Seal Island Historic District, which is listed in the National Register of Historic Places. In addition, other listed sites are within the vicinity of the permit area. The Corps has made a No Adverse Effect determination for the proposed project because the proposed work would not directly affect any of the contributing sites to the historic district. This application is being coordinated with State Historic Preservation Office (SHPO) and the National Park Service. Any comments SHPO may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work.

ENDANGERED SPECIES: The project area is within the known or historic range of the Short-tailed Albatross (*Phoebastria diomedea*).

We have determined the described activity would have no effect on Short-tailed Albatross (*Phoebastria diomedea*), and would have no effect on any designated or proposed critical habitat, under the Endangered Species Act of 1973 (87 Stat. 844). Therefore, no consultation with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service (NMFS) is required. However, any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

There is no EFH in the project area.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a

proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This PN serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

AUTHORITY: This permit will be issued or denied under the following authorities:

(X) Discharge dredged or fill material into waters of the United States – Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

Project drawings and a Notice of Application for State Water Quality Certification are enclosed with this Public Notice.

District Commander
U.S. Army, Corps of Engineers

Enclosures

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER

Wastewater Discharge Authorization Program (WDAP) / 401 Certification

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

WDAP/401 CERTIFICATION

555 CORDOVA STREET

ANCHORAGE, ALASKA 99501-2617

PHONE: (907) 269-6285 | EMAIL: dec-401cert@alaska.gov

**NOTICE OF APPLICATION
FOR
STATE WATER QUALITY CERTIFICATION**

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

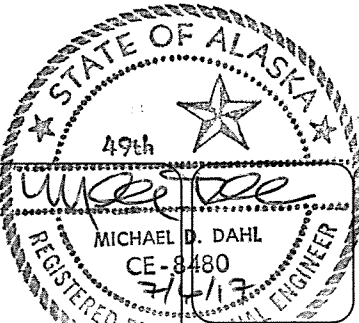
Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice (PN) Reference Number **POA-2018-00268, Zolotoi Bay**, serves as application for State Water Quality Certification from the Department of Environmental Conservation.

After reviewing the application, the Department may certify there is reasonable assurance the activity, and any discharge that might result, will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

Any person desiring to comment on the project with respect to Water Quality Certification, may submit written comments to the address above or via email to dec-401cert@alaska.gov by the expiration date of the Corps of Engineer's Public Notice. All comments should include the PN reference number listed above. Mailed comments must be postmarked on or before the expiration date of the public notice.

Disability Reasonable Accommodation Notice

The State of Alaska, Department of Environmental Conservation complies with Title II of the Americans with Disabilities Act of 1990. If you are a person with a disability who may need special accommodation in order to participate in this public process, please contact Theresa Zimmerman at 907-465-6171 or TDD Relay Service 1-800-770-8973/TTY or dial 711 within 5 days of the expiration date of this public notice to ensure that any necessary accommodations can be provided.



POLOVINA ROAD EXTENSION
FLOOD MITIGATION PROJECT
SAINT PAUL, ALASKA

- SHEET INDEX:
G-1 SITE PLAN, VICINITY PLAN AND NOTES
G-2 PROJECT SPECIFICATIONS
- C-1 ROAD SITE PLAN AND SECTIONS
C-2 DETAILS
C-3 POLOVINA EXTENSION PLAN AND PROFILE
C-4 BARTLETT - ELLERMAN PLAN AND PROFILE
C-5 CLIFFSIDE AND EAST LANDING PLAN AND PROFILE
C-6 POLOVINA EXTENSION ROAD CROSS SECTIONS
- ARD PLAT# 2013-21 SEAL BEACH SUBDIVISION

PROJECT QUANTITIES:				
	Polovina	Cliffside	Bartlett	Total
Road Length	972	150	525	1,647 feet
Net Volume	11,796	520	815	13,131 cyd
D-1 Quantity	567	88	306	961 cyd
Subbase Quantity	1,944	189	565	2,697 cyd
Unclassified Fill Qty	9,461	258	(0)	9,718 cyd
Topsoil Quantity	1,332	125	97	1,554 cyd
Culvert	70	-	102	172 feet

SCOPE OF WORK:

PROJECT EXTENDS POLOVINA TURNPIKE TO PROVIDE EMERGENCY ACCESS AND PROVIDE A FLOOD BARRIER FROM STORMS FROM THE SOUTH THE FLOOD THE "POND" AREA.

PROJECT RUNS FROM BARTLETT BOULEVARD TO CLIFFSIDE STREET WITHIN SEAL BEACH SUBDIVION (ARD PLAT # 2013-21) ROAD RIGHT-OF-WAY.

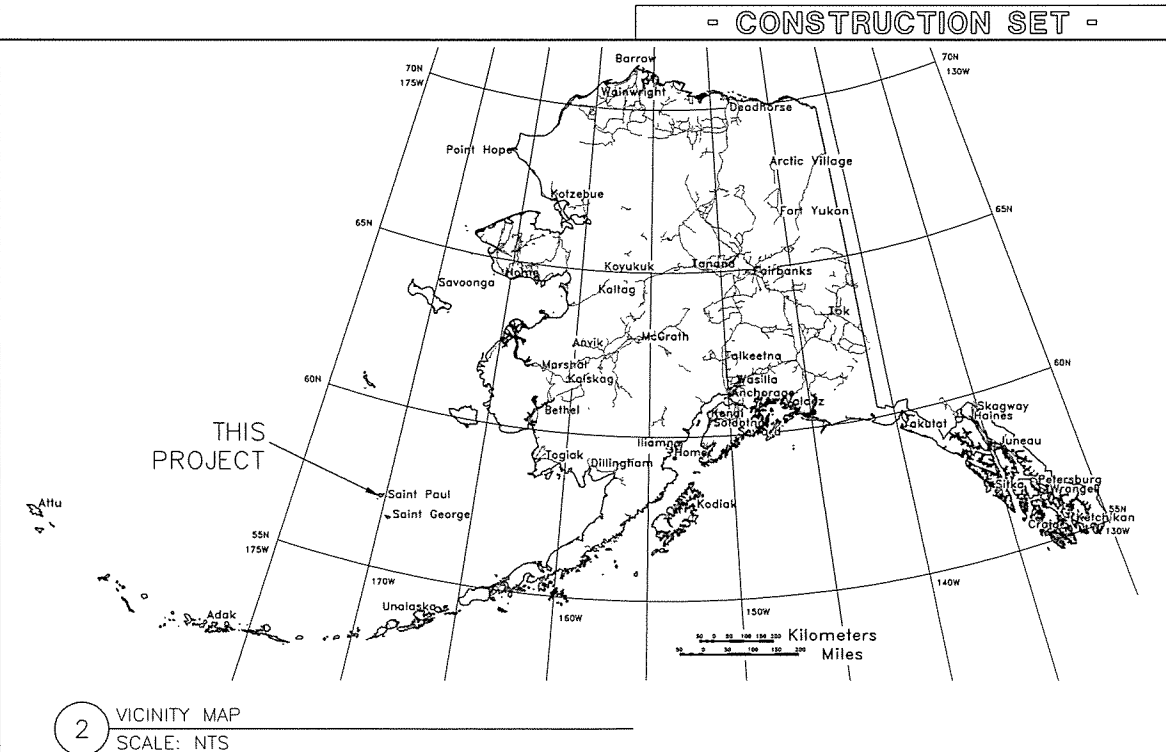
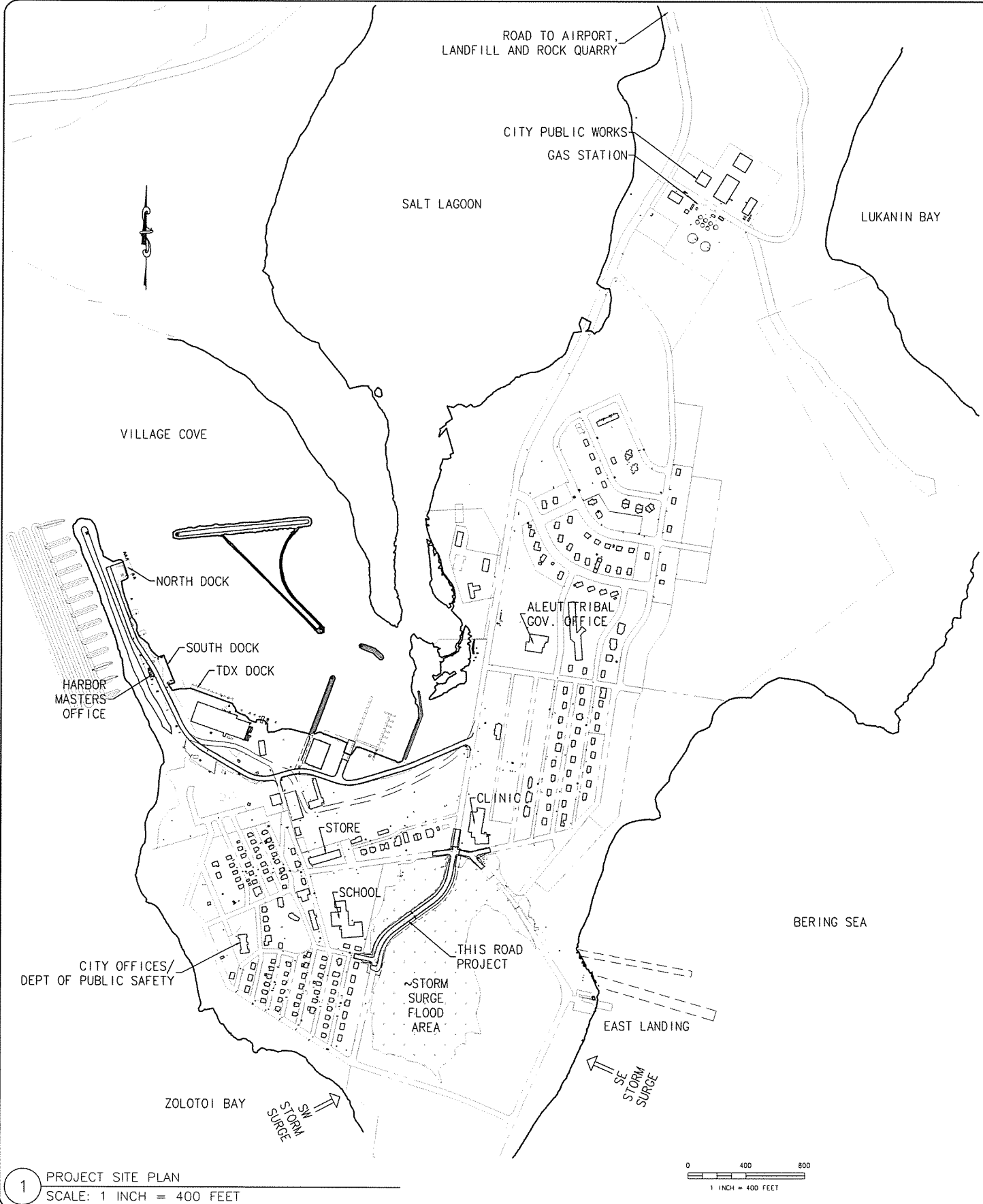
ADDITIONAL 20' WIDE ROAD/CONSTRUCTION EASEMENT ON BOTH SIDES OF THE ROAD RIGHT-OF-WAY WILL BE REQUIRED FROM ADJACENT LANDOWNER TO ALLOW FOR CONSTRUCTION OF THE ROAD EXTENSION/ FLOOD PROTECTION.

ROADWAY DESIGN SPEED IS 35 MPH.

SITE DRAINAGE FROM THE COMMUNITY DIRECTED TO NEW CULVERTS UNDER ROADWAY TO THE POND AREA THAT CURRENTLY OCCURS THROUGH SURFACE WATER FLOW ACROSS THE EXISTING ROAD AND TUNDRA.

GENERAL NOTES:

1. COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS IN CONSTRUCTION OF PROJECT.
2. COMPLETE WETLANDS DELINIATION TO DETERMINE IF CORPS PERMIT REQUIRED FOR CONSTRUCTION.
3. IF CULTURAL RESOURCES ARE INADVERTENTLY DISCOVERED AS A RESULT OF GROUND ALTERING ACTIVITIES; WORK THAT MAY DISTURB THESE RESOURCES SHOULD BE STOPPED IMMEDIATELY AND, THE STATE HISTORIC PRESERVATION OFFICE (907-269-8721) SHOULD BE CONSULTED REGARDING SIGNIFICANCE OF THE FINDS AND APPROPRIATE ACTIONS TO BE TAKEN TO AVOID, MINIMIZE OR MITIGATE ADVERSE IMPACTS. IN THE EVENT THAT HUMAN REMAINS ARE FOUND, THE ALASKA STATE TROOPERS MUST ALSO BE NOTIFIED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ROAD ACCESS ON PUBLIC ROADS DURING CONSTRUCTION. COORDINATE WITH CITY OF SAINT PAUL PUBLIC SAFETY DEPARTMENT.



POA-2018-268 Zolotoi Bay
Sheet (1-11) 6JULY2017

1 PROJECT SITE PLAN
SCALE: 1 INCH = 400 FEET

2 VICINITY MAP
SCALE: NTS

polarconsult alaska, inc.
ENERGY SYSTEMS • ENVIRONMENTAL SERVICES • ENGINEERING DESIGN
1503 WEST 33RD AVE, SUITE 310 PHONE (907) 258-5430
ANCHORAGE, ALASKA 99503 FAX (907) 258-5419

REVISIONS	
NO	DATE

SITE MAP, VICINITY MAP,
SHEET INDEX, GENERAL NOTES

POLOVINA ROAD EXTENSION / FLOOD PROTECTION
CITY OF SAINT PAUL
St. Paul, Alaska







DATE: 7/5/17
DESIGNED: MD
DRAWN: GP
CHECKED: AsNoted
SCALE: PolovinaRoadExt

Sheet
G-1
OF 2

Polovina Turnpike Extension Project

St. Paul, Alaska
Figure 1. Impacted Wetlands

Legend

-  Centerline
-  Road Right-of-Way
-  Fill Area
-  Impacted PEM1B (0.98 acres)
-  PEM1B
-  U/Ur

NWI Code and Wetland Class

PEM1B Palustrine Emergent
Persistent Saturated

U Upland

Ur Urban

Follows the National Wetlands Inventory (NWI)
Classification (Cowardin et al. 1979). All waters and
wetlands are considered jurisdictional.

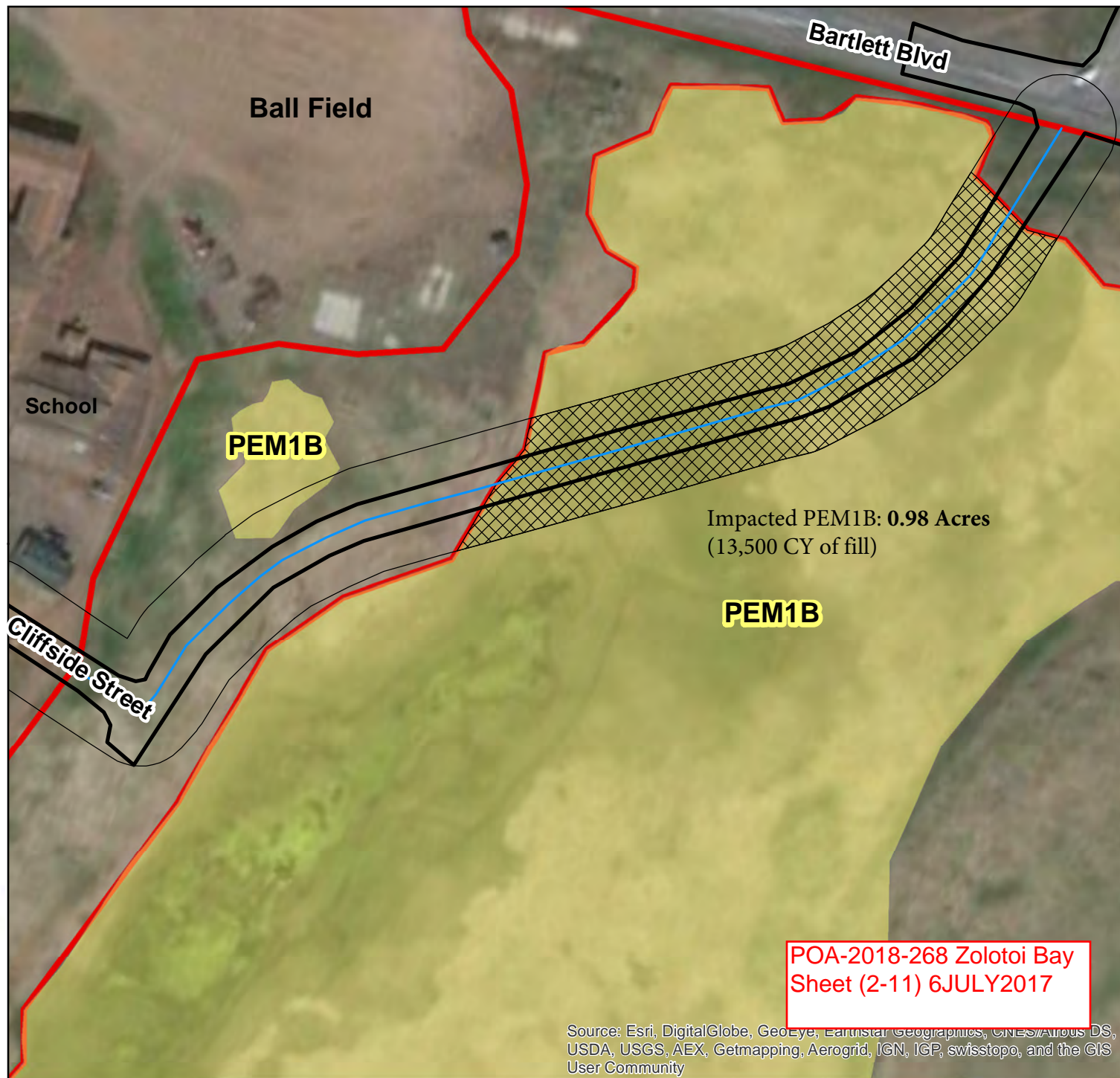


0 45 90 180
Feet



Midnight Sun Environmental, LLC
7941 Sandlewood Place
Anchorage, Alaska 99507

NAD 1983 StatePlane Alaska 4 FIPS 5004
Transverse Mercator Units: Foot US



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS,
USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS
User Community

POA-2018-268 Zolotoi Bay
Sheet (3-11) 6JULY2017

GENERAL PROJECT NOTES:

1. CONSTRUCT IN ACCORDANCE WITH THE MOST RECENTLY ADOPTED EDITIONS OF THE IBC, NESC, LOCAL UTILITIES, STATE AND MUNICIPAL CODES AND GOOD PRACTICE. OBSERVE O.S.H.A. REQUIREMENTS DURING CONSTRUCTION.
2. LOCATE ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION. COORDINATE CONSTRUCTION WITH UTILITY COMPANIES AS REQUIRED. UTILITY LOCATIONS SHOWN ARE FROM ASBUILT DRAWINGS. ACTUAL LOCATIONS MAY VARY. CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL ENCOUNTERED UTILITIES IN THE FIELD, RECORD ANY CHANGES ON THE DRAWINGS AND SUBMIT TO THE ENGINEER.
3. RESTORE TO PRE-CONTRACT CONDITION ANY PUBLIC OR PRIVATE LAND DISTURBED BY CONTRACT ACTIVITY. THIS SHALL INCLUDE ANY RESEEDING OR REVEGETATION OF EXISTING HORTICULTURE.
4. WHERE EQUIPMENT OR MATERIALS ARE NOTED ON THESE DRAWINGS AS A MANUFACTURER AND MODEL NUMBER, OTHER MANUFACTURER'S PRODUCTS THAT ARE EQUAL OR BETTER MAY BE SUBSTITUTED UPON APPROVAL BY THE ENGINEER.
5. CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTION AND IDENTIFY EXISTING UTILITIES ENCOUNTERED IN THE FIELD, AND RECORD ANY CHANGES.
6. CONTRACTOR SHALL SUPPLY AS-BUILT SURVEY OF COMPLETED ROADWAY FOR PREPARATION OF PROJECT AS-BUILT DRAWINGS.
7. EXCAVATE AND STOCKPILE ORGANIC MATERIALS UNDER ROAD PRISM FOR USE IN REVEGETATION OF SHOULDERS.

EARTHWORK:

1. NO SUBSURFACE INVESTIGATION WAS COMPLETED FOR THE DESIGN OF THE PROJECT. CUT AND FILL SLOPES ARE ASSUMED APPROPRIATE FOR THE SITE CONDITIONS AND MATERIALS AVAILABLE FOR CONSTRUCTION BASED ON OBSERVATION OF SURFACE CONDITIONS AND PRIOR PROJECTS IN THE AREA. CONTRACTOR SHALL VERIFY SOIL CONDITIONS TO DETERMINE ADEQUACY OF CUT AND FILL SLOPES SHOWN ON THE PLANS. NOTIFY ENGINEER IF SIGNIFICANT CHANGES TO THE CUT OR FILL ARE REQUIRED DUE TO SOFT OR LOOSE MATERIAL ENCOUNTERED IN THE EXCAVATIONS.
2. DISPOSE OF EXCESS EXCAVATION MATERIAL AT LOCATION APPROVED BY OWNER.
3. CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR PROJECT. SUBMIT SWPPP TO ENGINEER FOR APPROVAL.
 - a. CONTRACTOR SHALL FILE APPROVED SWPPP WITH ADEC, AND SHALL COMPLY WITH ALL TERMS OF SWPPP AND APPLICABLE ADEC REGULATIONS DURING COURSE OF PROJECT THROUGH CLOSURE OF SWPPP.
 - b. CONTRACTOR IS RESPONSIBLE FOR ALL RECORD KEEPING AND REGULAR INSPECTIONS OF SWPPP CONTROL MEASURES INSTALLED AT SITE. COORDINATE REGULAR INSPECTIONS WITH OWNER'S REPRESENTATIVE.
 - c. SWPPP WILL DESCRIBE PLAN TO CONTROL EROSION AND TRANSPORT OF MATERIAL FROM PROJECT SITE, INCLUDING WIND BLOWN DEBRIS, INCLUDING BUT NOT LIMITED TO, EROSION FENCING AND BARRIERS AND FILTRATION OR IMPOUND AND SETTLEMENT FACILITIES AS NEEDED.
4. EXCAVATE AND STOCKPILE ORGANIC MATERIALS ALONG TOP OF FILL SLOPE FOR USE IN REVEGETATION OF SIDE SLOPES.
5. EXCAVATE OVERBURDEN AS REQUIRED TO ACHIEVE FULL 24-INCH DEPTH ROAD STRUCTURAL CROSS SECTION.
6. ROAD BASE SHALL MATERIAL SHALL BE UNCLASSIFIED FILL OF SAND OR OTHER SUITABLE LOCAL MATERIAL WITH NO ORGANICS PRESENT. CONSTRUCT IN LIFTS OF 2-FOOT MAXIMUM THICKNESS AND COMPACT TO 85% MODIFIED MAXIMUM PROCTOR DENSITY (ASTM D-1557).
7. ROAD SUBBASE MATERIAL SHALL BE MINIMUM OF 18-INCHES OF 6-INCH MINUS SHOT ROCK, OR OTHER COMPENTENT GRANULAR MATERIAL WITH NO ORGANICS PRESENT. SHAPE ROAD BASE TO CROSS SECTION PROFILE SHOWN ON THE PLANS AND COMPACT TO 85% MAXIMUM MODIFIED PROCTOR DENSITY (ASTM D-1557).
8. ROAD SURFACE COURSE SHALL BE CRUSHED STONE OR CRUSHED GRAVEL, CONSISTING OF SOUND, TOUGH, DURABLE PEBBLES OR ROCK FRAGMENTS OF UNIFORM QUALITY. FREE FROM CLAY BALLS, VEGETABLE MATTER, OR OTHER DELETRIOUS MATTERS. MEET THE FOLLOWING PROPERTIES AND GRADATION:

PROPERTY	REQUIREMENT	TEST METHOD
L.A. WEAR %	45 MAX	AASHTO T 96
DEGRADATION	45 MIN.	ATM 313
FRACTURE %	70 MIN.	AASHTO TP 61
LIQUID LIMIT	35 MAX	AASHTO T 89
PLASTIC INDEX	10 MAX	AASHTO T 90
SODIUM SULFATE LOSS %	9 MAX (5 CYCLES)	AASHTO T 104

SIEVE	GRADATION	AASHTO T27/T11
1 INCH	100	PERCENT PASSING BY WEIGHT
¾ INCH	70-100	
⅜ INCH	50-80	
NO. 4	35-65	
NO. 8	20-50	
NO. 50	8-30	
NO. 200	0-6	
9. INSTALL SURFACE COURSE MATERIAL ON SHAPED ROAD BASE, OF SUFFICIENT DEPTH TO PROVIDE FULL SURFACE COURSE DEPTH AFTER COMPACTION. COMPACT TO 90% MAXIMUM MODIFIED PROCTOR DENSITY (ASTM D-1557).
11. ROAD SHOULDER WATER BARRIER MATERIAL ON EAST SIDE OF ROAD SHALL BE 2-FOOT THICK LAYER OF TOPSOIL SALVAGED FROM UNDER ROADBED. SPREAD AND TRACK ROLL SLOPES TO COMPACT.
12. IN THE EVENT ANY CONTAMINATED SOILS ARE DISCOVERED DURING EXCAVATION, CONTRACTOR SHALL BACKFILL WITH NEW "CLEAN" MATERIAL AS SPECIFIED ABOVE.

CULVERTS

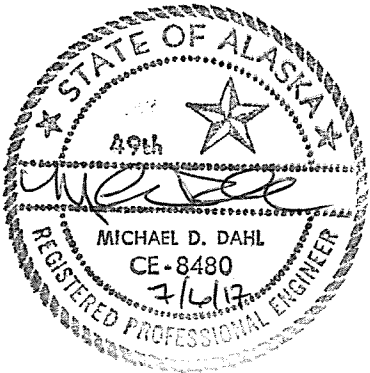
1. CULVERTS SHALL BE LOW-PRESSURE (MINIMUM 5 PSI) CORRUGATED METAL PIPE (CMP) AND APPROPRIATE FITTINGS, HARDWARE, GASKETS, AND SEALS TO ACT AS A SINGLE SYSTEM CONFORMING TO THE FOLLOWING SPECIFICATIONS AS APPROPRIATE: AASHTO ML-252, M-294 L(TYPE S), F-405, F-667; ASTM F-2306, F-2648, D-3350, F-477, AND D-3212.
2. CULVERT INTERNAL DIAMETER SHALL MEET OR EXCEED THE NOMINAL PIPE DIAMETER.
3. CULVERT SHALL BE PLACED ON A PRE-SHAPED FOUNDATION CONFORMING TO THE DEPTH AND SHAPE OF THE PIPE BOTTOM.
4. SIDEFILL SHALL BE PLACED AND COMPACTED WITH CARE UNDER PIPE HAUNCHES AND SHALL BE BROUGHT UP EVENLY AND SIMULTANEOUSLY ON BOTH SIDES OF THE PIPE TO ONE FOOT ABOVE THE TOP OF THE FULL LENGTH OF THE PIPE.
5. MINIMUM COVER SHALL BE MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF FINISH GRADE. IN ALL CASES, THE MINIMUM COVER SHALL NOT BE LESS THAN 18 INCHES.
6. PROVIDE TIDE FLEX VALVES ON ENDS OF CULVERTS DISCHARGING INTO POND AREA.

CULVERT SCHEDULE						
ROAD & STATION	NFLUENT INVERT	EFFLUENT INVERT	SKW ANGLE	DIA.	LENGTH	COMMENT
POLOVINA ~11+80	~11.0'	~10.0'	0d	24"	70'	TIDE FLEX VALVE ON POND OUTLET
POLOVINA ~17+25	~10.0'	~9.5'	5d30'	12"	54'	
ELLERMAN ~1+80	~10.0'	~9.5'	5d	12"	48'	TIDE FLEX VALVE ON POND OUTLET

NOTES:
1. FINAL CULVERT STATION, DIAMETER, LENGTH AND INVERT ELEVATIONS TO BE DETERMINED IN FIELD AFTER COMPLETION OF SITE SURVEY AND DRAINAGE DESIGN.
2. LISTED CULVERT LENGTHS ARE BARREL LENGTHS REQUIRED TO BRING CULVERT ENDS FLUSH WITH SIDE SLOPES. END ASSEMBLY DIMENSIONS ARE AS GIVEN IN D6 SHEET C2. END ASSEMBLY DIMENSIONS SHOULD BE VERIFIED PRIOR TO ORDERING CULVERT.

REVEGETATION:

1. REVEGETATE DISTURBED AREAS AND DRAINAGE SWALE WITH COMMERCIALLY AVAILABLE BERING HAIRGRASS, NATIVE SEED. INTALL AT 30 LBS/ACRE.
2. FERTILIZER SHALL BE OF COMMERCIAL GRADE, FREE FLOWING, UNIFORM IN COMPOSITION, AND SHALL CONFORM TO APPLICABLE STATE AND FEDERAL REGULATIONS. FERTILIZER SHALL CONTAIN A MINIMUM PERCENTAGE BY WEIGHT OF 10 PERCENT NITROGEN, 20 PERCENT AVAILABLE PHOSPHORIC ACID, AND 10 PERCENT POTASH. FERTILIZER SHALL BE UNIFORMLY APPLIED AT A RATE OF 300 POUNDS PER ACRE. CARE SHALL BE TAKEN TO LIMIT FERTILIZER FROM ENTERING HARBOR.



polarconsult alaska, inc.

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1503 WEST 33RD AVE, SUITE 310 ANCHORAGE, ALASKA 99503

PHONE (907) 258-2450 FAX (907) 258-2419

REVISIONS		DATE	NO.
NO.	DATE		

Drawing NOTES

Project POLOVINA ROAD EXTENSION / FLOOD PROTECTION
CITY OF SAINT PAUL
St. Paul, Alaska

DATE: 7/5/17

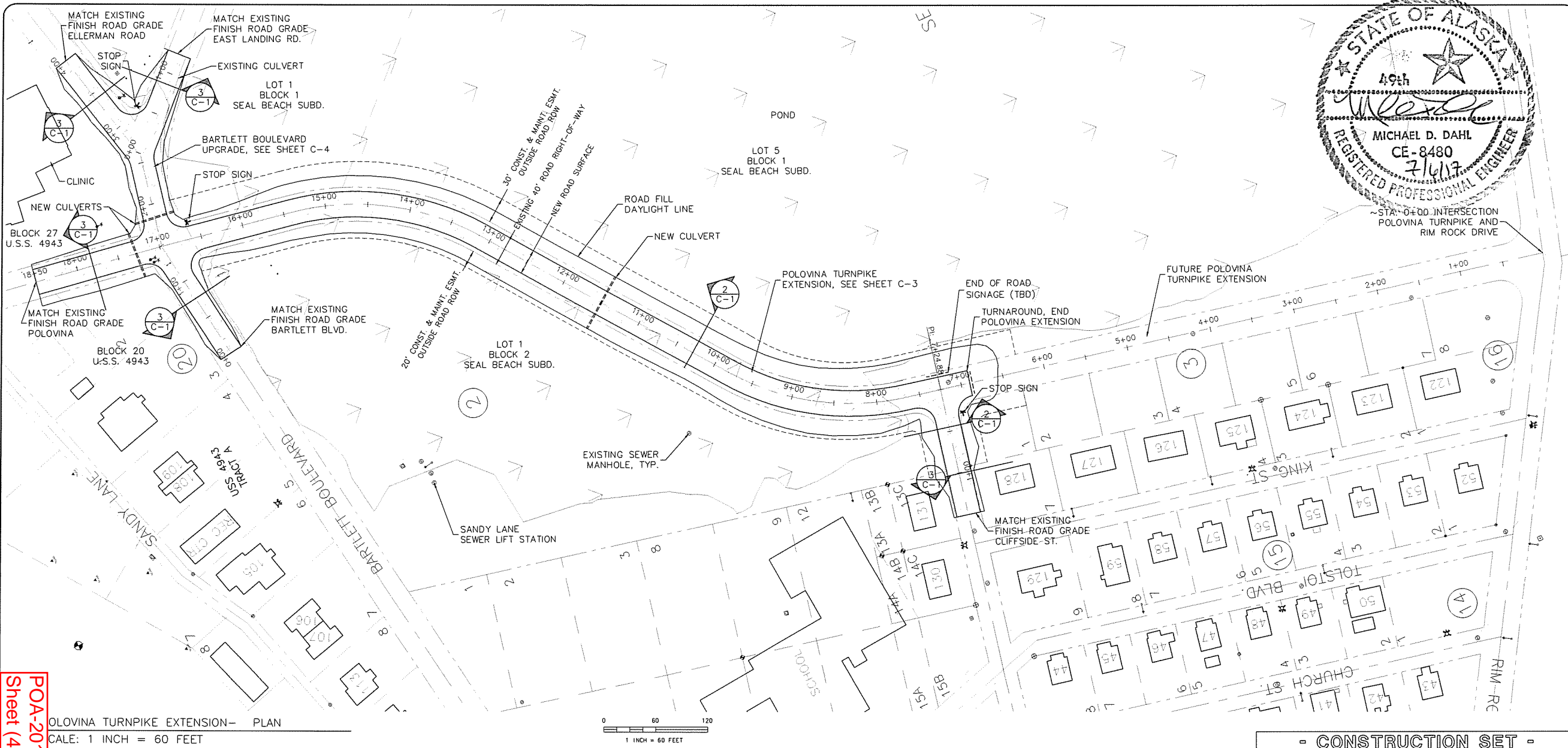
DESIGNED: MD

DRAWN: GP

CHECKED:

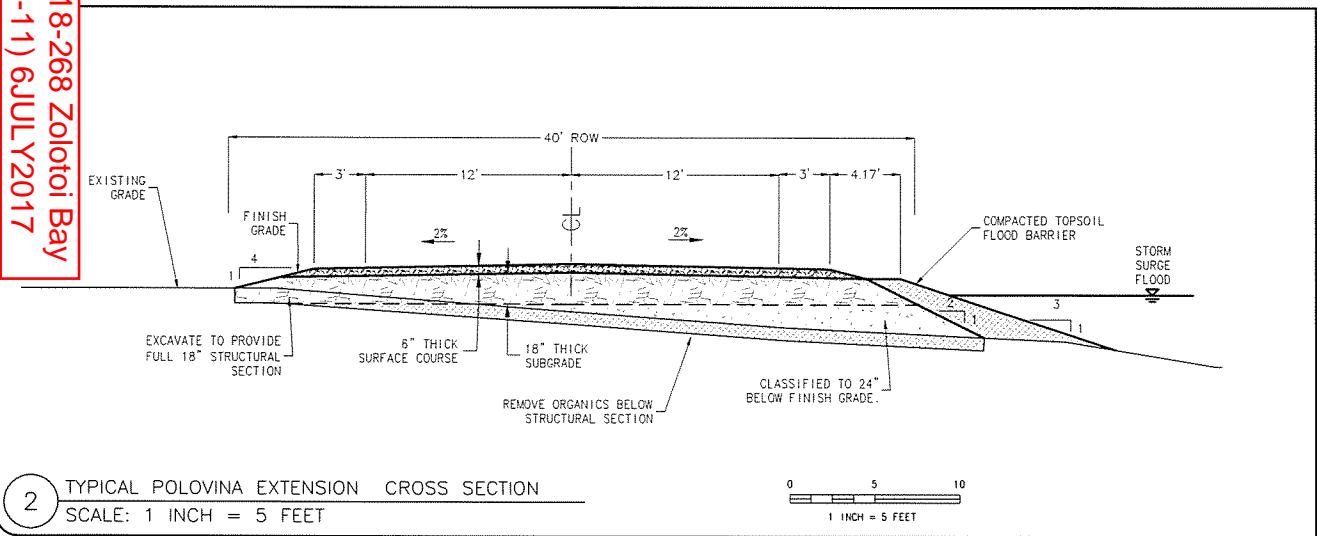
SCALE: AsNoted

FILE: PolovinaRoadExt

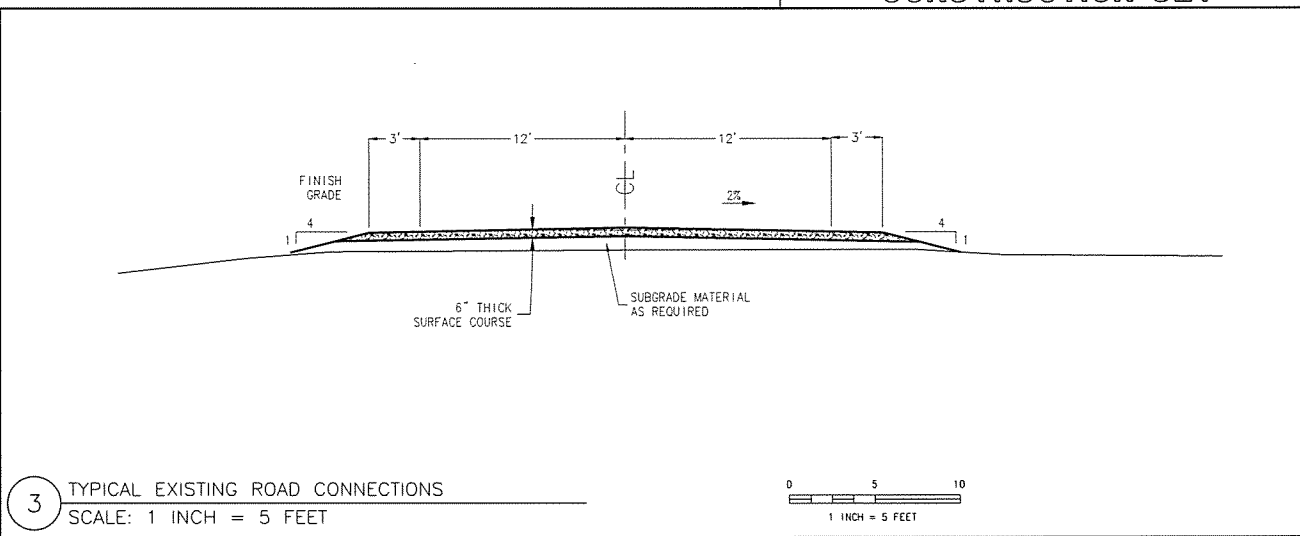


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Sheet (4-11) 6 JULY 2017

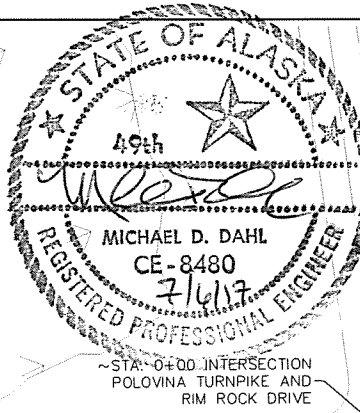
POLOVINA TURNPIKE EXTENSION- PLAN
SCALE: 1 INCH = 60 FEET



2 TYPICAL POLOVINA EXTENSION CROSS SECTION
SCALE: 1 INCH = 5 FEET



3 TYPICAL EXISTING ROAD CONNECTIONS
SCALE: 1 INCH = 5 FEET

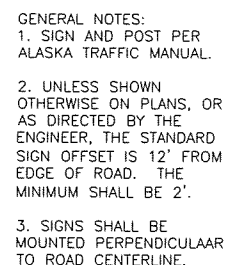


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ENERGY SYSTEMS • ENVIRONMENTAL SERVICES • ENGINEERING DESIGN
1503 WEST 33RD AVE. SUITE 310 ANCHORAGE, ALASKA 99503
PHONE (907) 258-2420 FAX (907) 258-2419

NO.	DATE	REVISIONS

SITE PLAN AND SECTIONS
POLOVINA TURNPIKE EXTENSION / FLOOD PROTECTION
CITY OF SAINT PAUL
St. Paul, Alaska

DATE: 7/5/17
DESIGNED: MD
DRAWN:
CHECKED:
SCALE: AsNoted
FILE: SNP-HwyRoad



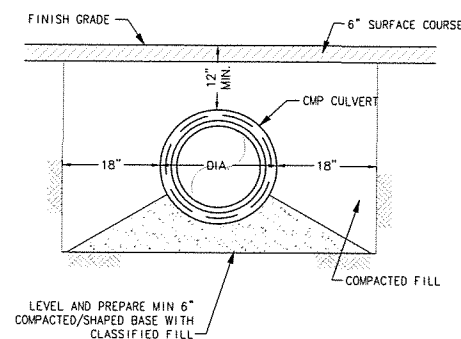
1 STOP SIGN DETAIL
SCALE: NTS

"TRD"

2 END ROAD SIGNAGE
SCALE: NTS

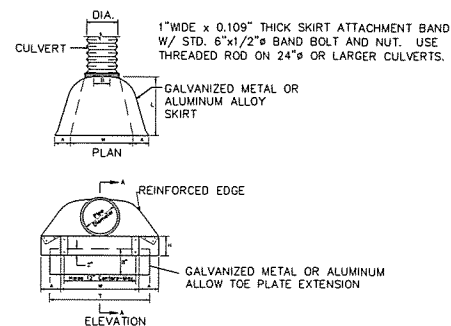
CULVERT NOTES

- 1 BEDDING AND BACKFILL SHALL CONSIST OF D-1 OR SCORIA (RED OR GRAY).
- 2 BEDDING AND BACKFILL SHALL BE COMPACTED WITH MECHANICAL TAMPER TO 95% OF MAXIMUM DENSITY OR THE SATISFACTION OF THE ENGINEER.
- 3 INSTALL CULVERT AT UNIFORM SLOPE WITH INVERT ELEVATIONS NOTED.
- 4 INSTALL CULVERT BEGINNING AT DOWNSTREAM END. LOWER PORTION SHALL BE IN CONTACT WITH THE SHAPED BEDDING THROUGHOUT ITS FULL LENGTH.
- 5 CULVERT JOINTS SHALL BE MADE WITH SEMI-CORRUGATED OR FLAT TYPE OUTSIDE BANDS WITH O-RING OR SLEEVE GASKET SEALS.
- 6 SIDEFILL SHALL BE PLACED AND COMPACTED WITH CARE UNDER HAUNCHES OF PIPE TO 1-FOOT ABOVE THE TOP OF FULL LENGTH.



5 TYPICAL CULVERT SECTION
SCALE: NTS

		ROUND PIPE											
PIPE O.D. INCHES	THICKNESS	Dimension Inches										Skiirt	Approx. Slopers
		A		B		H		L		W			
		1" Tal	Max	1" Tal	Max	1.5" Tal	Max	2" Tal	Max	2" Tal	Max		
12	0.0550 0.054	6"	9"	6"	6"	6"	6"	24"	24"	40"	1	Pc 2 1/2"	
15	0.0650 0.064	6"	9"	6"	6"	6"	26"	50"	40"	1	Pc 2 1/2"		
18	0.0650 0.064	8"	10"	6"	8"	31"	36"	45"	1	Pc 2 1/2"			
21	0.0840 0.084	8"	12"	6"	6"	35"	45"	52"	1	Pc 2 1/2"			
24	0.074 0.076	10"	14"	8"	8"	41"	48"	58"	1	Pc 2 1/2"			
30	0.075 0.079	12"	18"	9"	9"	51"	60"	70"	1	Pc 2 1/2"			
36	0.084 0.084	14"	22"	10"	10"	60"	72"	84"	2	Pc 2 1/2"			
42	0.085 0.109	16"	24"	12"	12"	69"	84"	106"	2	Pc 2 1/2"			
48	0.105 0.109	18"	28"	14"	14"	78"	96"	124"	2	Pc 2 1/2"			

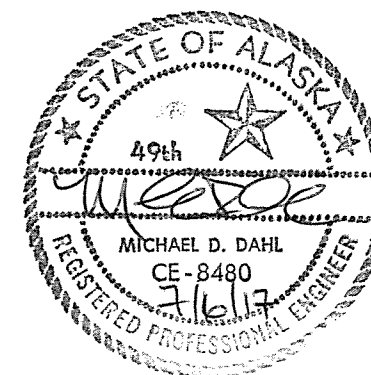


NOTES:

1. INSTALL TIDE FLEX VALVE ON CULVERT ENDS DISCHARGING INTO POND.
2. INSTALL CULVERT SKIRTS ON ALL OTHER CULVERT ENDS.
3. INSTALL TOP PLATE EXTENSIONS IF SHOWN ON PLANS. TOE PLATE EXTENSIONS SHALL BE PUNCHED WITH HOLES TO MATCH THOSE IN LIP OF SKIRT AND FASTENED WITH 3/8 INCH OR LARGER GALVANIZED NUTS AND BOLTS AND SHALL BE THE SAME GAGE AS THE END SECTION.
4. ALL 3 PIECE BODIES SHALL HAVE 12 GAGE SIDES AND 10 GAGE CENTER PANELS.

6 TYPICAL CULVERT ENDS
SCALE: NTS

- CONSTRUCTION SET -



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1503 WEST 33RD AVE, SUITE 310 PHONE (907) 258-5420
ANCHORAGE, ALASKA 99503 FAX (907) 258-5410

[illegible]

Drawing

Drawing

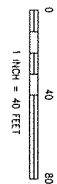
POLOVINA TURNPIKE EXTENSION / FLOOD PROTECTION
CITY OF SAINT PAUL
St. Paul, Alaska

DATE: 7/5/17
DESIGNED: MD
DRAWN:
CHECKED:
SCALE: AsNoted
FILE: PalovinaRoadExt2017

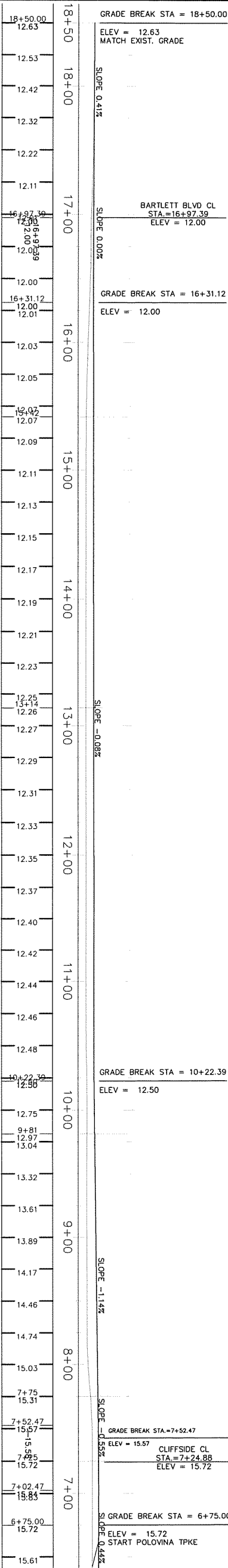
Sheet
C-2
OF 6

POA-2018-268 Zolotoi Bay
Sheet (5-11) 6JULY2017

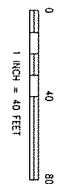
2 POLOVINA TPKE EXTENSION PROFILE
SCALE: 1 INCH = 40 FEET



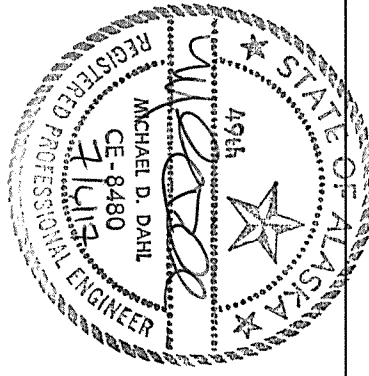
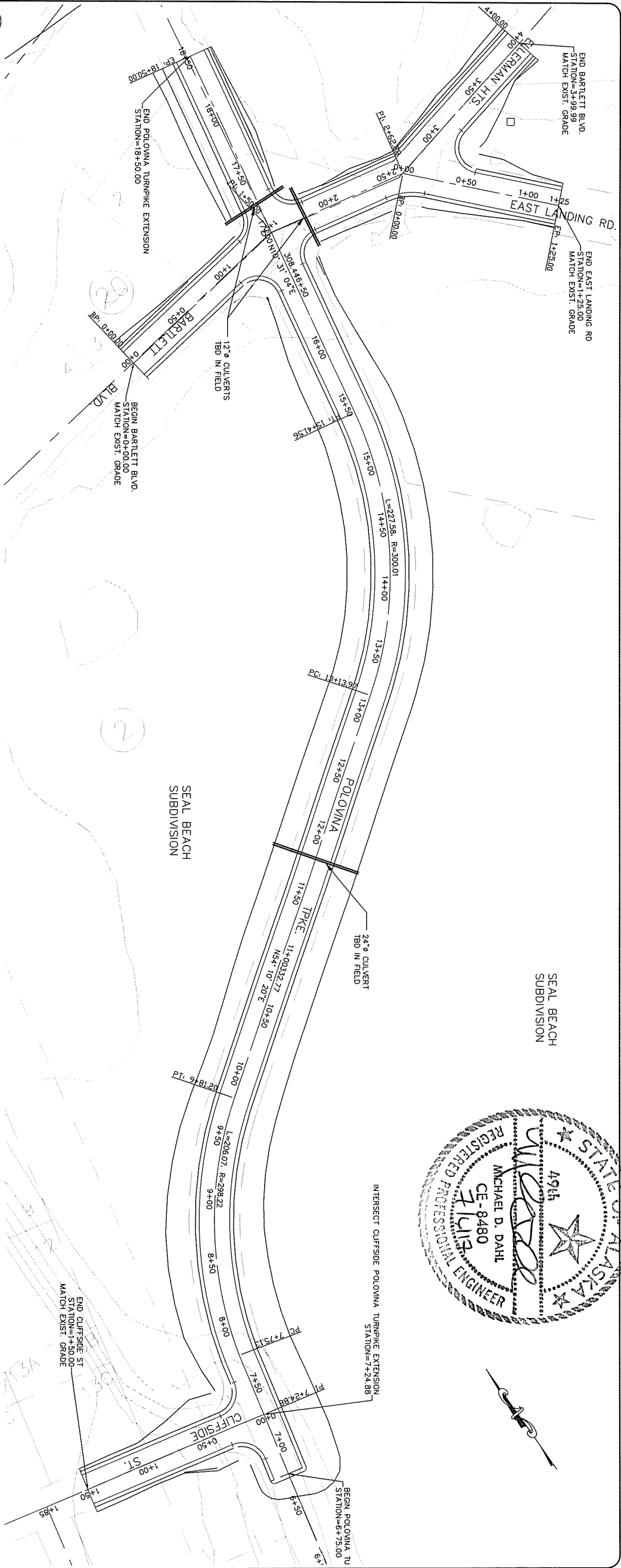
POA-2018-268 Zolotoi Bay
Sheet (6-11) 6JULY2017



1 POLOVINA TPKE EXTENSION PLAN
SCALE: 1 INCH = 40 FEET



CONSTRUCTION SET



Sheet
C-3

DATE: 7/3/17
DESIGNED: MD
DRAWN: GP
CHECKED: AS
SCALE: As Shown
FILE: 17005-PolovinaRoadExt

Drawing
PLAN AND PROFILE
POLOVINA TURNPIKE EXTENSION

Project
POLOVINA TURNPIKE EXTENSION / FLOOD PROTECTION
CITY OF SAINT PAUL
St. Paul, Alaska

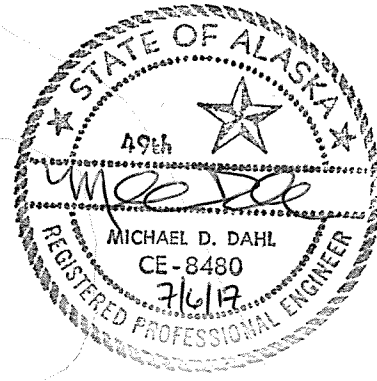
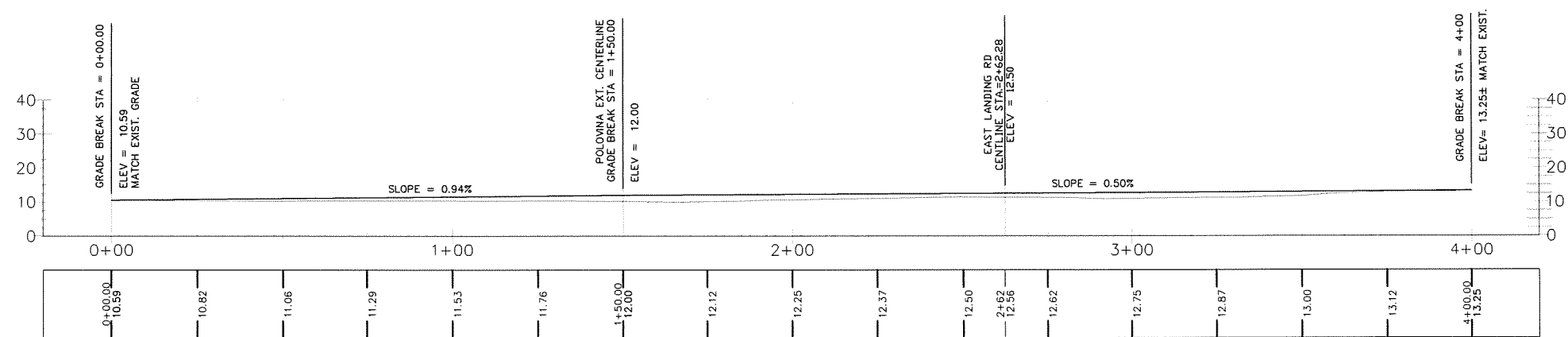
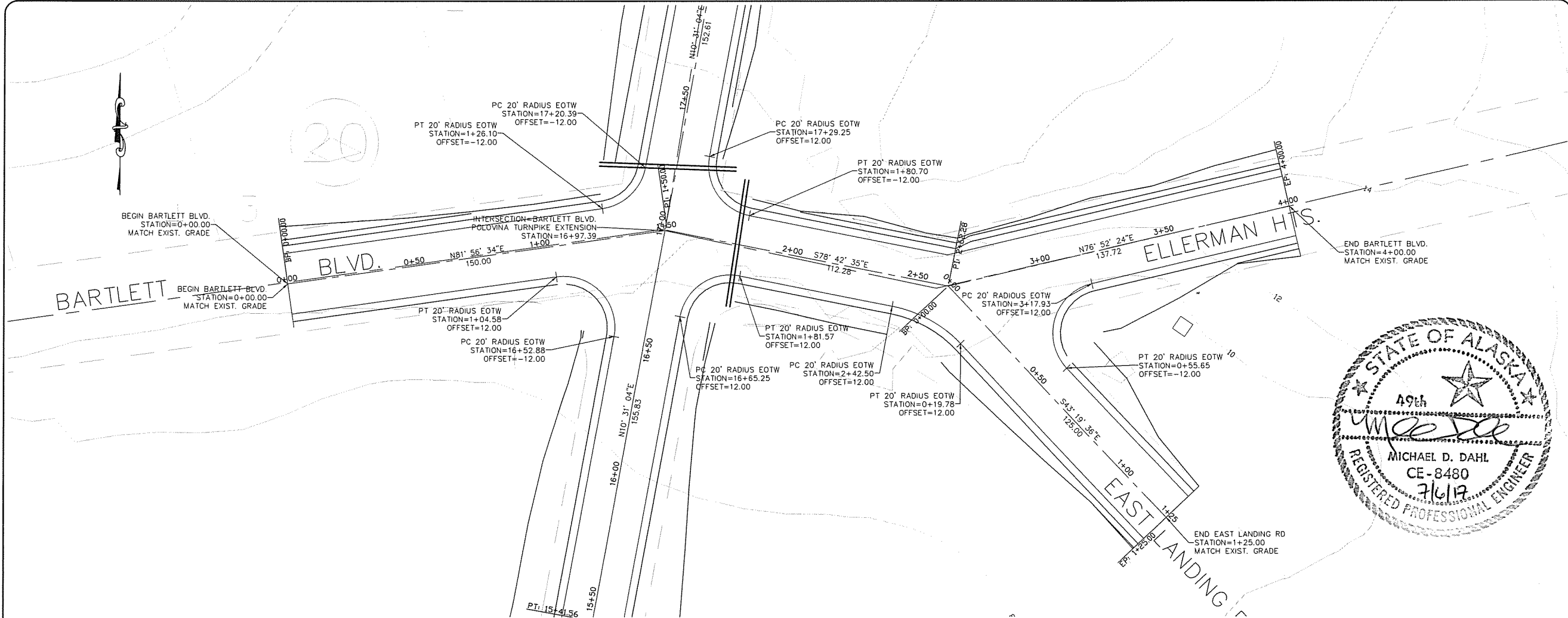
NO.	DATE	REVISIONS

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1503 WEST 33RD AVE, SUITE 310 PHONE (907) 258-2420
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POA-2018-268 Zolotoi Bay
Sheet (7-11) 6JULY2017

1 BARTLETT BLVD. - ELLERMAN HTS. RD. PLAN
SCALE: 1 INCH = 20 FEET

2 BARTLETT BLVD. - ELLERMAN HTS. RD. PROFILE
SCALE: 1 INCH = 20 FEET

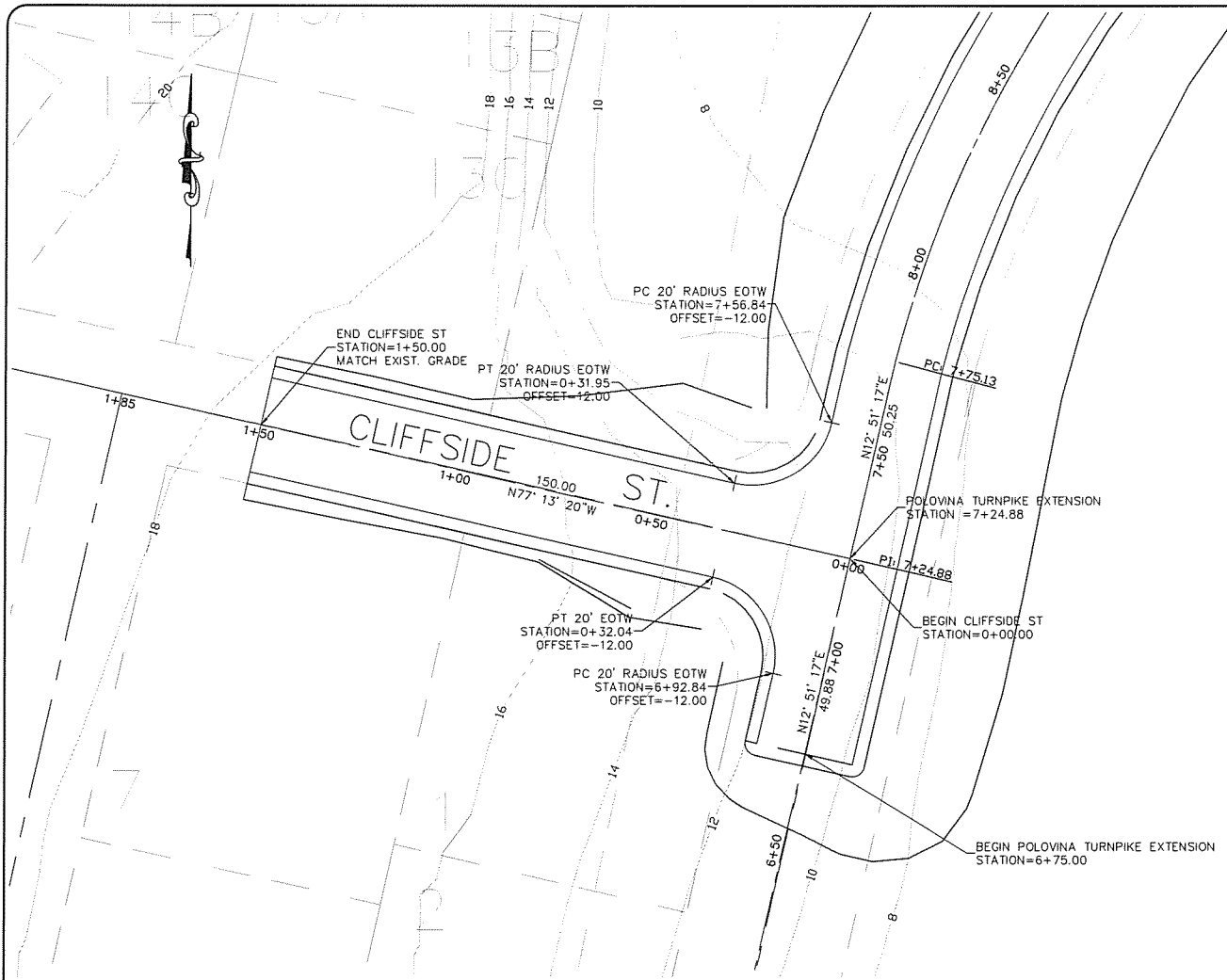


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1503 WEST 33RD AVE. SUITE 310
ANCHORAGE, ALASKA 99503
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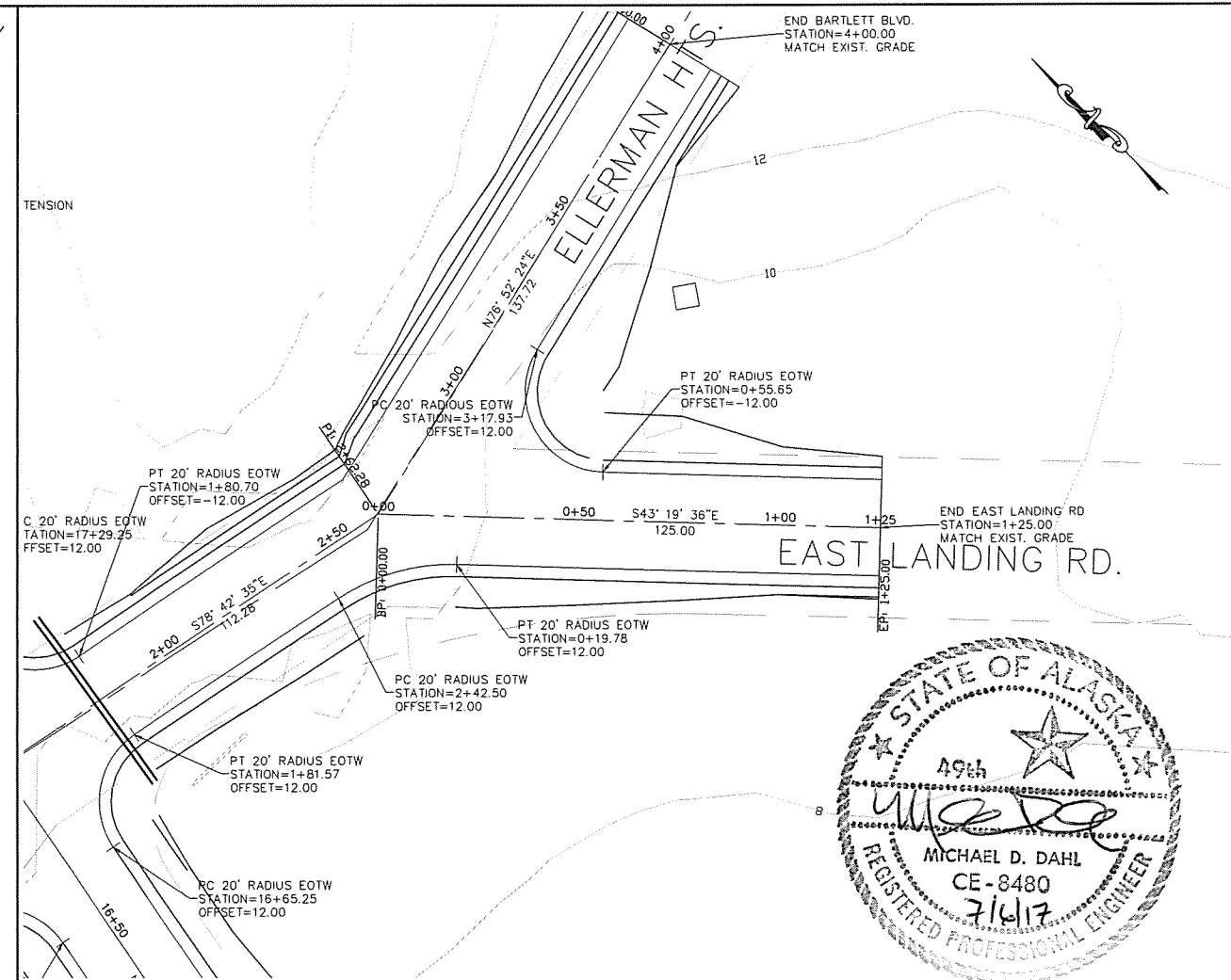
NO.	DATE	REVISIONS

BARTLETT BOULEVARD & ELLERMAN HEIGHTS ROAD
POLOVINA TURNPIKE EXTENSION / FLOOD PROTECTION
CITY OF SAINT PAUL
St. Paul, Alaska

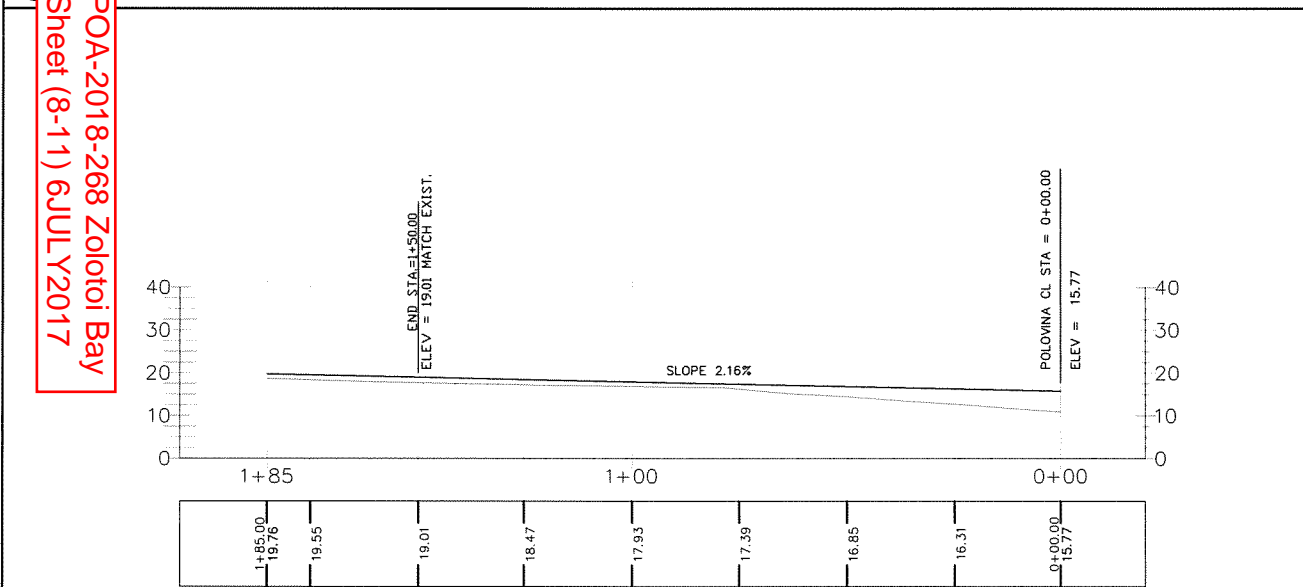
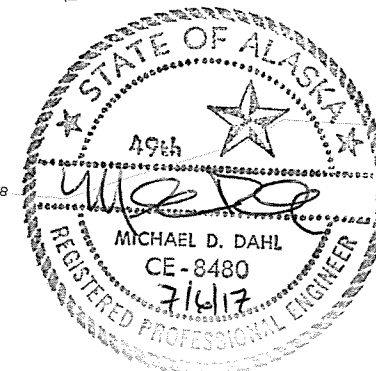
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DESIGNED: MD
DRAWN: GP
CHECKED: AsNoted
SCALE: AsNoted
FILE: 17005-PolovinaRoadExt



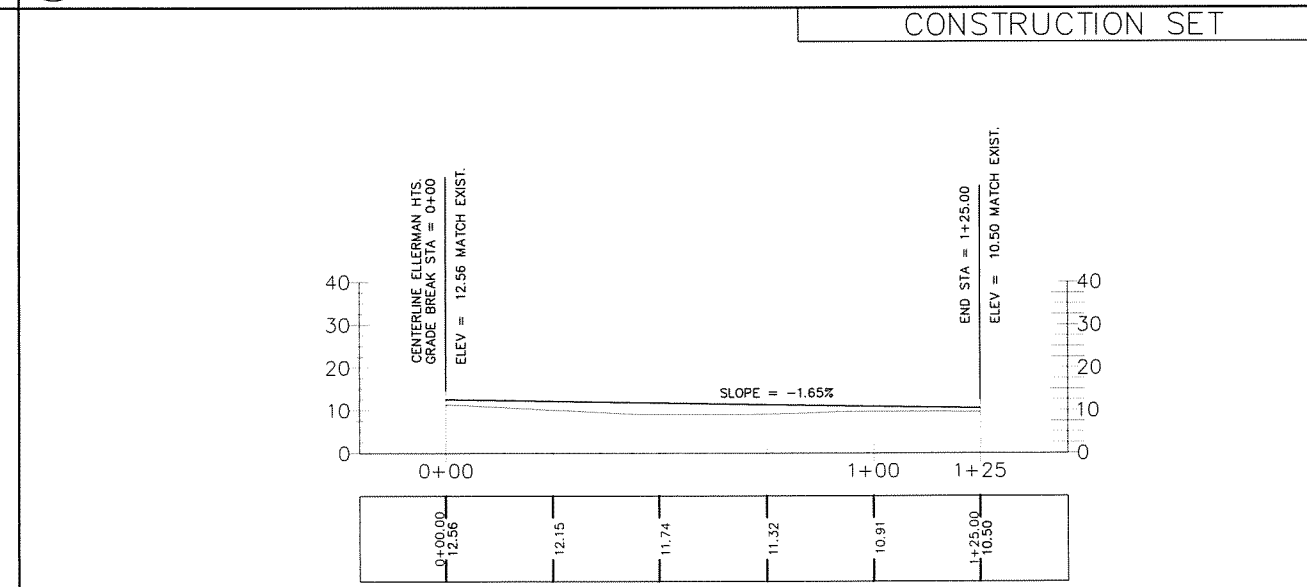
1 CLIFFSIDE ST. PLAN
SCALE: 1 INCH = 20 FEET



2 EAST LANDING RD. PLAN
SCALE: 1 INCH = 20 FEET



3 CLIFFSIDE ST. PROFILE
SCALE: 1 INCH = 20 FEET



4 EAST LANDING RD. PROFILE
SCALE: 1 INCH = 20 FEET

CONSTRUCTION SET

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ENERGY SYSTEMS • ENVIRONMENTAL SERVICES • ENGINEERING DESIGN

1003 WEST 33RD AVE, SUITE 310 PHONE (907) 256-2420
ANCHORAGE, ALASKA 99503 FAX (907) 256-2419

NO.	DATE	REVISIONS

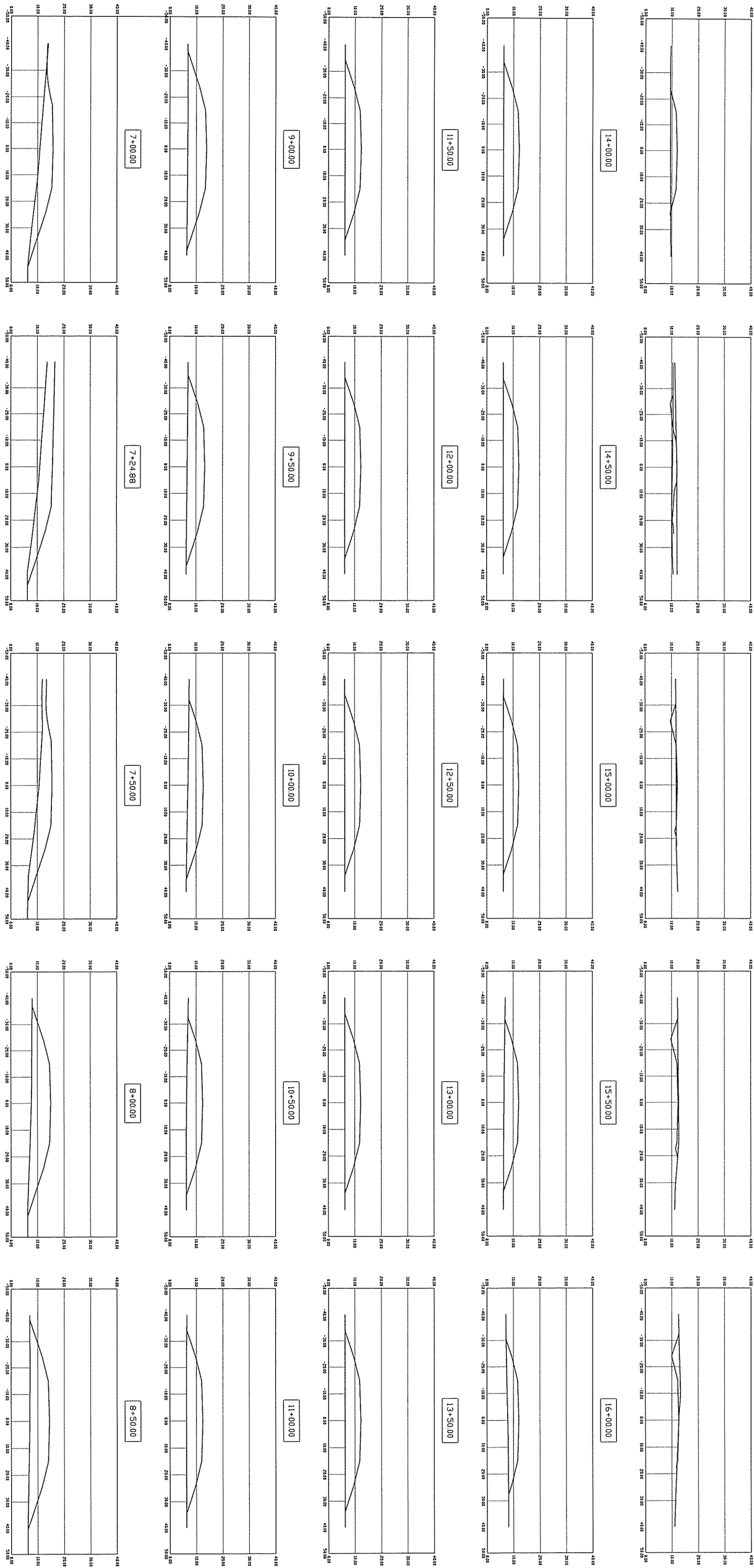
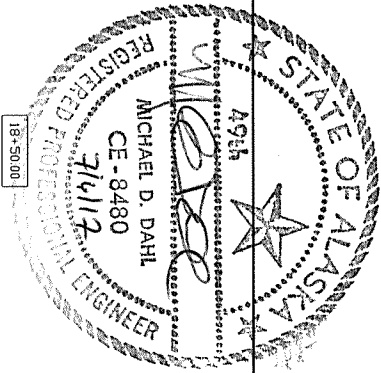
PLAN AND PROFILE
CLIFFSIDE STREET & EAST LANDING ROAD

POLOVINA TURNPIKE EXTENSION / FLOOD PROTECTION
CITY OF SAINT PAUL
St. Paul, Alaska

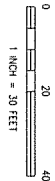
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DESIGNED: MD
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CHECKED:
SCALE: As Noted
FILE: 7005-PolovinaRoadExt

Sheet
C-5
OF 6

POA-2018-268 Zolotoi Bay
Sheet (8-11) 6JULY2017



1 POLOVINA TPKE EXT. - CROSS SECTIONS
SCALE: 1 INCH = 20 FEET



POA-2018-268 Zolotoi Bay
Sheet (9-11) 6JULY2017

CONSTRUCTION SET

C-6
Sheet
OF 6

DATE: 7/5/17
DESIGNED: MD
DRAWN: CP
CHECKED: AS
SCALE: AS NOTED
FILE: 1705-PolovinaRoadExt

Drawing
CROSS SECTIONS
POLOVINA TURNPIKE EXTENSION
Project
POLOVINA TURNPIKE EXTENSION / FLOOD CONTROL
CITY OF SAINT PAUL
St. Paul, Alaska

NO.	DATE	REVISIONS

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ENERGY SYSTEMS • ENVIRONMENTAL SERVICES • ENGINEERING DESIGN
1503 WEST 33RD AVE, SUITE 310 ANCHORAGE, ALASKA 99503
PHONE (907) 258-2420 FAX (907) 258-2410



NOTES:

1. THE BOUNDARY SURVEY WAS COMPLETED BY DHI CONSULTING ENGINEERS IN AUGUST, 2010.
2. THE ACCURACY OF THIS SURVEY IS GREATER THAN 1:5000.
3. THE EAST-NORTHEAST BOUNDARY OF SEAL BEACH SUBDIVISION IS ESTABLISHED BY MAINTAINING THE EAST LANDING ROAD RIGHT-OF-WAY WIDTH OF 40'.
4. CONVEYANCE OF LOTS WHICH ARE NOT SHOWN WITH MONUMENTS HEREON MAY BE MADE ONLY AFTER MONUMENTS REQUIRED TO LOCATE SUCH LOTS HAVE BEEN PLACED AND SHOWN ON AN AMENDED PLAT APPROVED BY THE ZONING ADMINISTRATOR AND RECORDED.

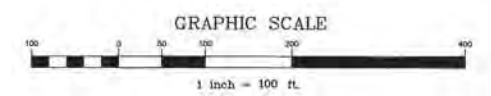
LEGEND

- ⊕ FOUND BLM MONUMENT (3 1/4" DIA. BRASS CAP)
- ⊕ FOUND COPPERWELD MONUMENT
- ⊕ FOUND 3 1/4" ALUMINUM CAP MONUMENT
- FOUND 5/8" REBAR
- FOUND IRON ROD
- ⊗ SET 2" ALUMINUM CAP ON 5/8" REBAR THIS PLAT - SEE NOTE 4
- () RECORD PER BLM U.S. SURVEY NO. 4943 FILED AUGUST 2, 1968
- [] RECORD PER PLAT 2003-3, U.S. SURVEY NO. 4943, ALASKA TRACT 'A' ST. PAUL TOWNSITE ST. PAUL TOWNSHIP LOT 11A, BLOCK 27, FILED 5/9/2003
- (C) COMPUTED
- (M) MEASURED
- FSA FINAL SETTLEMENT AGREEMENT

Property Not Subject to Taxation

SURVEYOR'S CERTIFICATE

I, Dee High, certify that I am a registered Land Surveyor in the State of Alaska, that this plat is a true and correct representation of lands surveyed by me or under my direct supervision, that the distances and bearings are shown correctly, and that all monuments are set in place as noted upon the plat as presented.



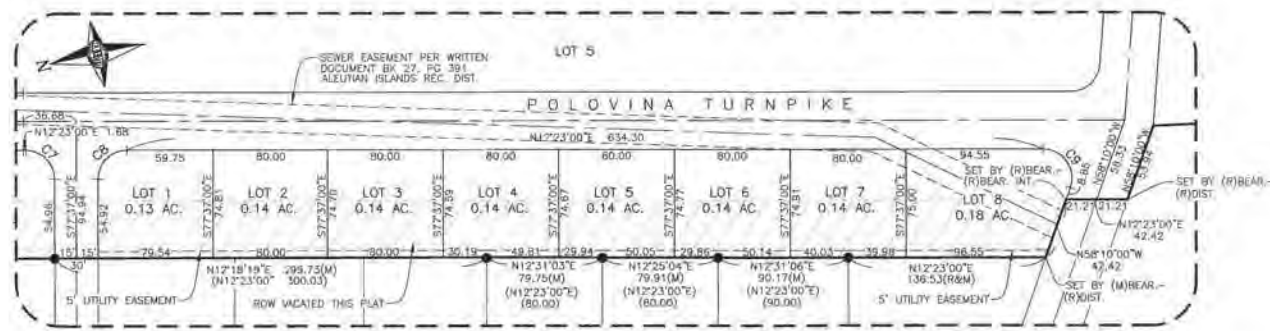
Alutian Island Recording District

DHI CONSULTING ENGINEERS
CIVIL • SURVEYING • PLANNING

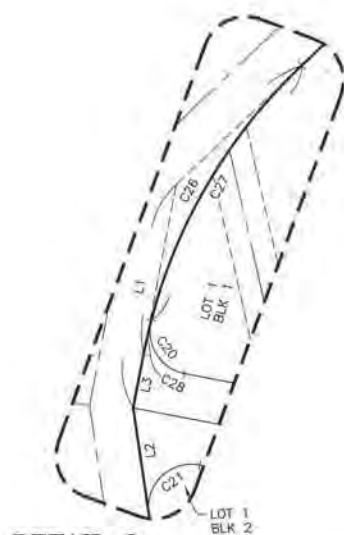
Telephone: (907)344-1385 Fax: (907)344-1383
800 E. DIMOND • SUITE 2-350, ANCHORAGE, ALASKA 99515

A PLAT OF
SEAL BEACH SUBDIVISION
LOTS 1-5, BLOCK 1; LOT 1, BLOCK 2; LOTS 1-8, BLOCK 3
AND LOTS 1 & 2, BLOCK 3
A SUBDIVISION OF
LOTS 1 & 2, BLOCK 22, U.S. SURVEY NO. 4943, ALASKA, TRACT 'A',
ST. PAUL TOWNSITE, INCLUDING THE VACATION OF THE LAKESIDE STREET R.O.W.
ALL WITHIN
SECTION 25, T35S, R132W, SEWARD MERIDIAN, ALASKA
CONTAINING 54.57 ACRES, MORE OR LESS

FILE 323 PG. 1-60	DATE 8/26/13	COMP. FILE NO. 766STP1F	SHEET 1 OF 2
SCALE 1" = 100'		W.O. 06756	EXHIBIT 16



DETAIL 1
NTS



DETAIL 2
NTS

LINE TABLE					
MEASURED LINE DATA			RECORD LINE DATA		
LINE	DIRECTION	DISTANCE	DIRECTION	DISTANCE	
L1	S 78°58'38" E	105.16	S 78°41'00" E	105.16	
L2	N 81°41'01" E	49.09			
L3	S 78°58'38" E	25.42			

CURVE TABLE						
MEASURED CURVE DATA						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	CH BEARING	DELTA
C1	320.00	242.72	127.53	236.94	S32°14'49"W	43°27'29"
C2	300.00	227.55	119.58	222.13	S32°14'49"W	43°27'29"
C3	280.00	212.38	111.59	207.32	S32°14'49"W	43°27'29"
C4	280.00	203.28	106.34	198.83	S33°10'46"W	41°35'33"
C5	300.00	217.78	113.94	213.03	S33°10'46"W	41°35'33"
C6	320.00	232.30	121.55	227.23	S33°10'46"W	41°35'33"
C7	20.00	31.42	20.00	28.28	S57°23'00"W	90°00'00"
C8	20.00	31.42	20.00	28.28	S32°37'00"E	89°00'00"
C9	20.00	38.21	28.27	32.65	S67°06'30"W	109°27'00"
C10	20.00	29.83	18.57	27.22	S30°29'30"E	89°45'00"
C11	2000.00	236.78	118.53	238.84	S89°58'30"E	08°47'00"
C12	1960.00	234.42	117.34	234.28	S89°58'30"E	08°47'00"
C13	1960.00	232.05	116.15	231.91	S89°58'30"E	08°47'00"
C14	30.00	47.20	30.07	42.47	N68°20'50"E	90°08'21"
C15	30.00	47.05	29.93	42.38	S21°39'11"E	88°51'38"
C16	320.00	59.66	29.92	59.56	S15°51'33"W	10°40'58"
C17	320.00	163.05	94.11	160.57	S37°35'18"W	32°48'31"
C18	1960.00	118.95	59.49	118.93	S71°37'41"E	03°28'38"
C19	1960.00	113.10	56.58	113.08	S88°14'11"E	03°18'22"
C20	20.00	32.88	21.52	28.50	N57°38'37"E	94°11'06"
C21	20.00	37.99	27.86	32.54	N43°54'13"W	108°50'33"
C22	250.00	237.72	128.71	228.86	S03°57'48"E	54°28'52"
C23	800.00	173.00	86.84	172.67	S37°23'56"E	1°22'26"
C24	800.00	87.01	43.55	86.97	S40°28'42"E	08°13'54"
C25	800.00	86.00	43.04	85.95	S34°16'59"E	09°09'32"
C26	250.00	154.39	79.74	151.85	S61°17'09"E	59°22'59"
C27	250.00	138.33	70.86	136.57	S59°28'45"E	51°42'02"
C28	250.00	16.06	8.03	16.06	S77°08'12"E	03°40'52"
C29	2000.00	145.56	72.81	145.53	S71°16'54"E	04°10'12"
C30	2000.00	91.22	45.62	91.22	S67°53'24"E	02°36'48"



CERTIFICATE OF OWNERSHIP & DEDICATION

I/We, hereby certify that I am/we are the Owner(s) of the property shown and described hereon and the I/we hereby adopt this plat of subdivision with my/our free consent, and dedicate all streets, alleys, walks, parks, and other open spaces to public or private use as noted.

Ron Philemonoff
Ron Philemonoff
CEO, Tanadguisiz Corp.
1600 West 33rd. Ave. Suite 220
Anchorage, AK 99503

9-23, 2013
DATE



ACKNOWLEDGMENTS

STATE OF ALASKA, ISS
Ron Philemonoff, CEO
September 23, 2013
Notary for Alaska
Acknowledged to me on
that they signed the above statement and that this
plat is their act.
this 23rd day of September, 2013.
My Commission Expires 1-22-2017

PLAT APPROVALS

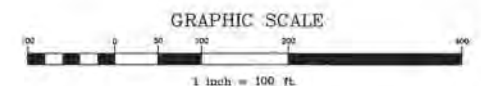
Plat approved by the City of St. Paul,

ZONING ADMINISTRATOR
Signature
09/29/13
Date

ACCEPTANCE OF DEDICATION

The City of St. Paul hereby accepts for public uses and for public purposes the real property dedicated on this plat including, but not limited to, the roads shown hereon.

Joe D.
ZONING ADMINISTRATOR
09/29/13
DATE



2013-21
Plat #
Aleutian Island
Rec Dist
9-24-2013
Date
Time 10:01 A.M.

DHI CONSULTING ENGINEERS CIVIL • SURVEYING • PLANNING Telephone: (907)344-1385 Fax: (907)344-1383 800 E. 20th Ave. • SUITE 3-500, ANCHORAGE, ALASKA 99515			
A PLAT OF SEAL BEACH SUBDIVISION LOTS 1-5, BLOCK 1; LOT 1, BLOCK 2; LOTS 1-8, BLOCK 3 AND LOTS 1 & 2, BLOCK 3 A SUBDIVISION OF LOTS 1 & 2, BLOCK 22, U.S. SURVEY NO. 4943, ALASKA, TRACT "A", ST. PAUL TOWNSITE, INCLUDING THE VACATION OF THE LAKESIDE STREET R.O.W. ALL WITHIN SECTION 25, T35S, R132W, SEWARD MERIDIAN, ALASKA CONTAINING 54.57 ACRES, MORE OR LESS			
F.B. 323 SCALE: 1" = 100'	PL. 1-60 W.D. 06765	DATE 8/26/13 COMP. FILE NO. 7665TP1F	SHEET 2 OF 2 EXHIBIT 16